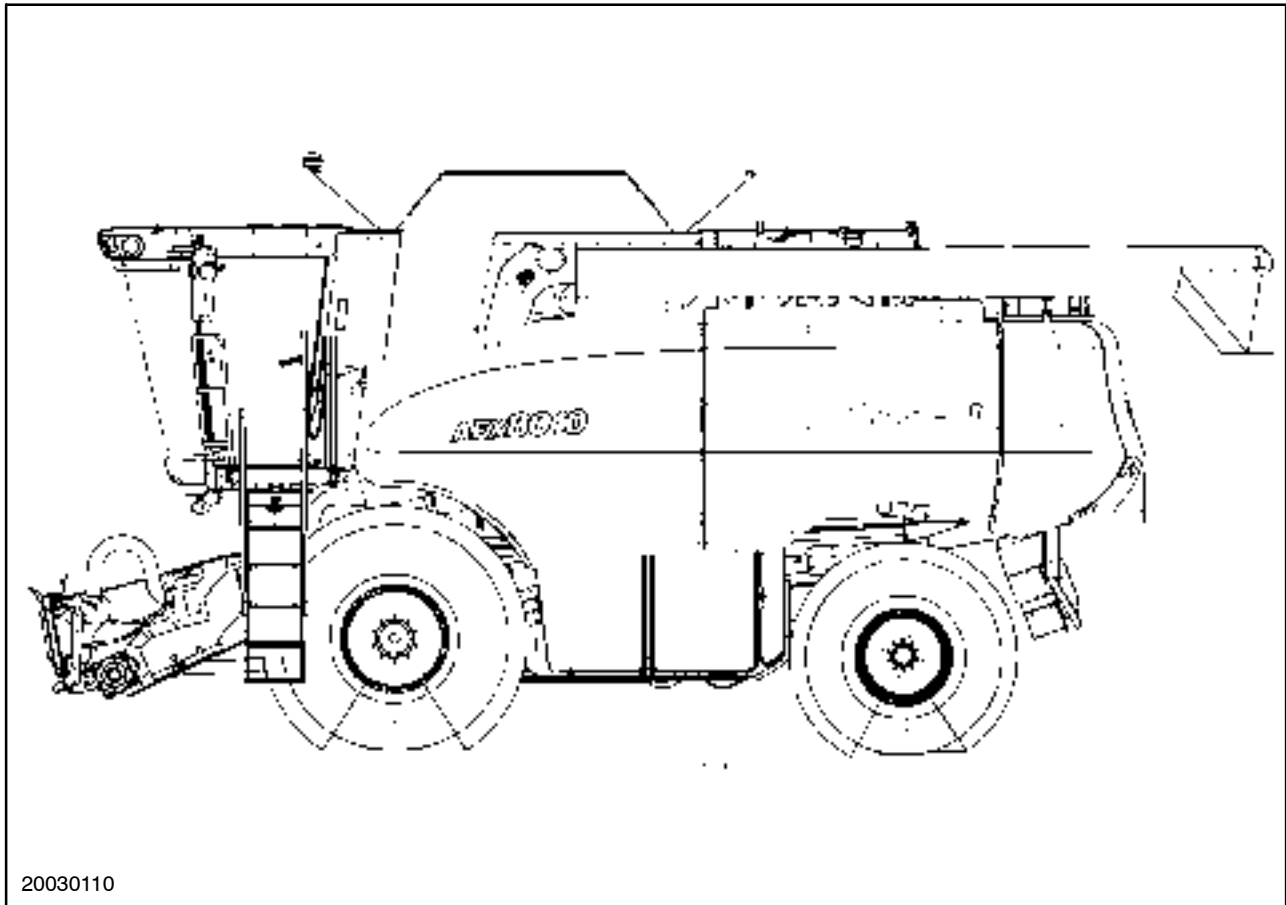


## Electrical Power System - General Information (A.30.A)

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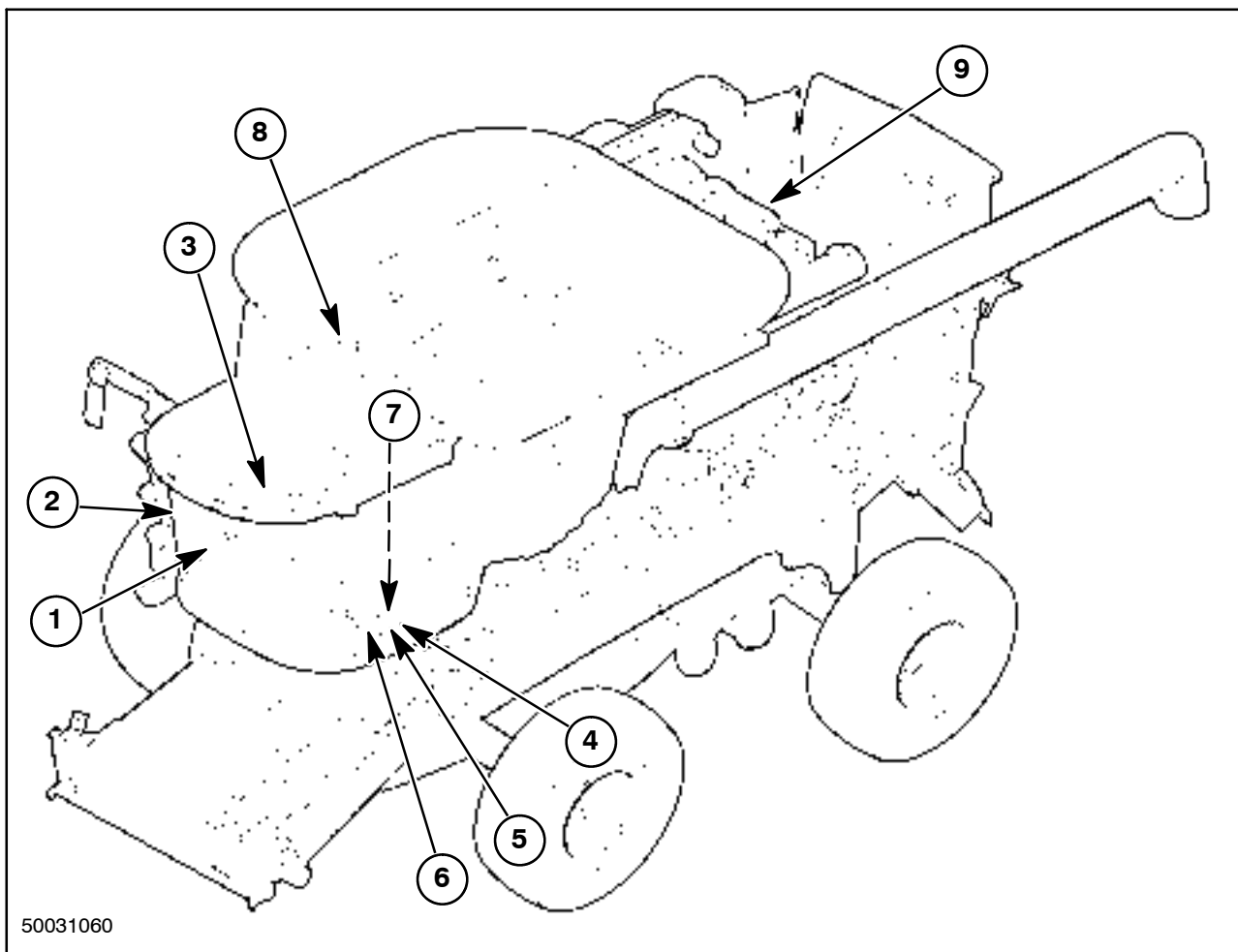
## DESCRIPTION OF OPERATION



1

The AFX combines use the latest technology in electronics to provide excellent reliability and serviceability, and to provide enhanced functionality. The system consists of several electronic modules, along with conventional copper wiring to all devices and sensors. The electronic modules are connected together using a special twisted copper wire pair, that allows the modules to communicate with each other using Controller Area Network (CAN) technology. This technology allows the modules to perform many functions through the use of shared input and output resources, thus minimizing sensors and wiring components on the combine.

All of the modules communicate information from the combine sensors, switches and operator controls to each other and to the Universal Display Plus, and then drive the appropriate outputs, such as solenoids and actuators. The operator instructs the electronic modules what to do, the modules interpret the commands, and direct the combine sub systems to complete the functions as required. In addition, the modules check for faults and display or store this information as required for reference in servicing. The modules also provide built-in diagnostics, allowing the technician to monitor activity, or test devices directly through the modules.



2

The AFX combine is equipped with a minimum of 7 electronic modules, and may be equipped with as many as 9 modules, depending on the configuration and options installed. These modules are:

Universal Display Plus Module, 1; provides the main display of information for the operator.

Shaft Speed Monitor (SSM), 2, provides the display for shaft speed alarms, and for fuel level and coolant temp gauges.

Right Hand Module (RHM), 3; most operator inputs, including from the propulsion handle (MFH), are fed into this module, which then reports this information to the other modules in the network for action.

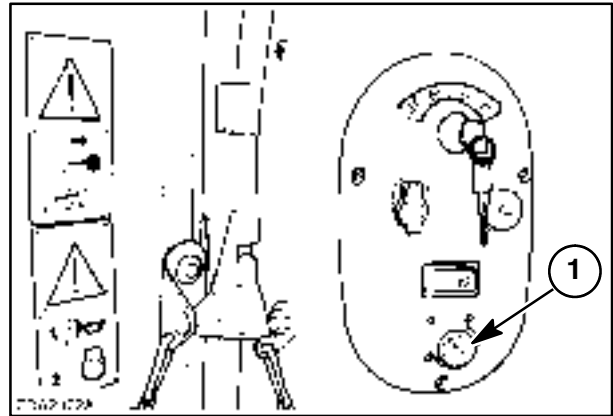
Chassis Control Modules CCM1, 4, CCM2, 5 and CCM3, 6; these modules drive most of the actuators and solenoids, and monitor most of the sensors and switches on the combine.

YMIU Module, 7, [optional] is installed and used to control certain options on the combine, such as the precision farming devices.

Differential GPS module, 8, [optional] is available with some precision farming systems, and provides location data to be recorded with the harvest data for mapping purposes.

Engine Control Unit (ECU), 9, is installed to provide enhanced engine control and performance.

A Diagnostic and Maintenance (DAM) connector, 1, allows the Electronic Service Tool (EST) to be connected to the network, in order to load new operating software into the modules, and to provide more detailed testing and diagnostic abilities.



## INTRODUCTION TO TROUBLESHOOTING

### Fault Codes and Fault Finding

Troubleshooting and fault finding of the electrical system should always be carried out in a logical and planned sequence. Many apparent faults associated with electronic components are often hastily diagnosed and result in the replacement of expensive components. An extra few minutes confirming the apparent fault will result in a more positive and cost effective repair.

The AFX combines have a built in diagnostic capabilities to assist the operator and service technician to identify and locate the source of electrical system concerns. The Universal Display Plus monitor is used to indicate, in coded format, any malfunction detected in the electrical and electronic systems. Two different coded formats are used to indicate concerns; alarms and errors.

An alarm is an indication of some mechanical condition on the vehicle, and alerts the operator to perform necessary maintenance, or to change operating conditions to correct the alarm condition. Examples of alarms would be to indicate an engine overheat condition, blocked filters, or improper control operation. Alarms are not used to indicate faults with electrical circuits.

An error is an indication of a fault with an electrical circuit or component, and alerts the operator that the circuit or component is no longer functioning. Examples of error messages include open circuits, shorts to ground, or short to high voltage. These errors are typically the result of wire harness damage, or sensor misadjustment or failure.

When investigating an electrical concern, the first step is to fully understand the problem. Get a clear description of the concern from the operator, and if possible, operate the vehicle to confirm the problem.

Once the problem is clearly identified, use the "Diag" screens of the Universal Display Plus monitor to determine if any alarm or error messages exist that relate to the problem. If related error messages are found, diagnostic screens showing voltage, current or frequencies for that specific circuit are available to assist in pinpointing the source of the problem. In most cases, circuit testing may be accomplished using only the on-board diagnostic capabilities. Diagnostic procedures for each error code are detailed in this manual.

Where the fault finding procedure requires checks for continuity, a visual inspection of the wiring should be made prior to conducting any test to ensure that obvious 'mechanical' damage has not occurred to the harness or connectors.

In some cases, use of a multimeter will be necessary to locate the source of the fault. A good quality multimeter, capable of measuring voltage, current, and resistance of at least 20,000 ohms, is an essential item to perform fault finding.

**IMPORTANT:** Use of powered test lights or any 12 volt source to test or activate electrical circuits may result in internal failure of the computer modules. Never apply a 12 volt source directly to a solenoid or other device to prevent damage to the combine electrical system.

When using a multimeter, it is good practice to select a high range and work downwards to avoid damaging the instrument. Refer to the Operator's manual supplied with the meter, and to the 'Basic Multimeter Use' section of this chapter for further details.

**IMPORTANT:** Care should be taken when using the multimeter. Use the instrument only as instructed to avoid damage to the internal elements of the microprocessors on the combine. When checking the continuity of wiring, sensors or switches, it is necessary to isolate the combine modules and ensure the key switch is turned off to prevent possible further damage. The key switch should only be switched on and the combine modules connected where specifically instructed in the fault finding procedure.

During fault finding, it will often be necessary to uncouple connectors for inspection, or to provide access for testing. When using the combine on-board diagnostics, uncoupling connectors as directed in the fault finding procedures will often be necessary to locate the source of the fault. Unless specifically noted, connectors should not be back-probed using test spoons or other tools, to prevent damage to the connector and wire seals.



**Never couple or uncouple electrical connectors while the engine is running, to prevent machine damage and personal injury due to electrical shock.**



**To avoid personal injury, never attempt to access electrical connectors under the cab while the engine is running. Accidental contact with the feeder angle sensor or inappropriate access to the electrical circuits to the modules may cause the feeder to move unexpectedly, resulting in personal injury or death.**

**IMPORTANT:** The under-cab connectors to the chassis control modules (CCM's) do not normally need to be accessed for diagnostic purposes. Repeated coupling and uncoupling of these connectors will result in seal and connector damage, causing electrical circuit failures.

If it is found necessary to clean the connectors a contact spray should be used. DO NOT USE ANY OTHER METHOD FOR CLEANING TERMINALS. Do not use a cleaner that contains Trichloro-ethylene, this solvent will damage the plastic body of the connector.

## WIRING HARNESS REPAIRS

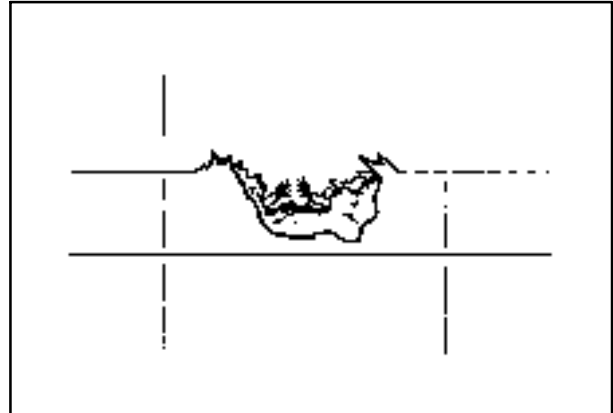
### Temporary Wiring Harness Repair

The following method to repair wiring is a temporary expedient only. Wiring should be replaced as soon as possible. Do not attempt to repair the wire on any system sensors as these are sealed and should only be replaced with a new component.

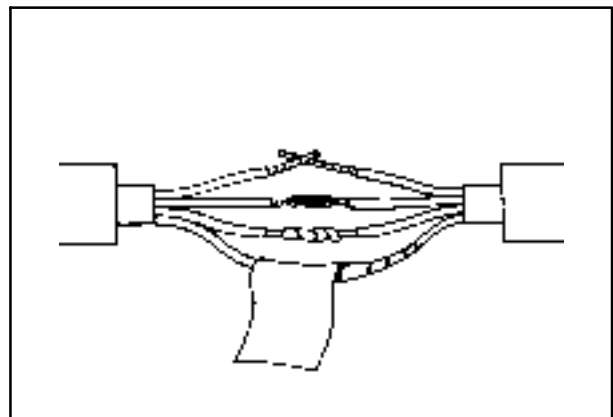
**NOTE:** When conducting a cable repair it is important that only *RESIN CORED SOLDER* is used. Use of other types of solder may result in further cable damage.

To carry out a temporary repair, proceed as follows:-

1. Locate damaged portion of cable then cut away outer protective cover on both sides of the damaged area.
2. Peel back the cable from both ends of the damaged area and carefully cut away the inner cable cover at the damaged area and strip about 13 mm (1/2") of insulation from the wires. Do not cut away any wire strands.
3. Using a suitable solvent, clean about 2 inches (50 mm) from each cover end. Clean the grey cable cover and the individual leads.
4. Twist two bare leads together for each damaged lead, then solder the leads using resin cored solder. Tape each repaired lead with vinyl insulation tape.

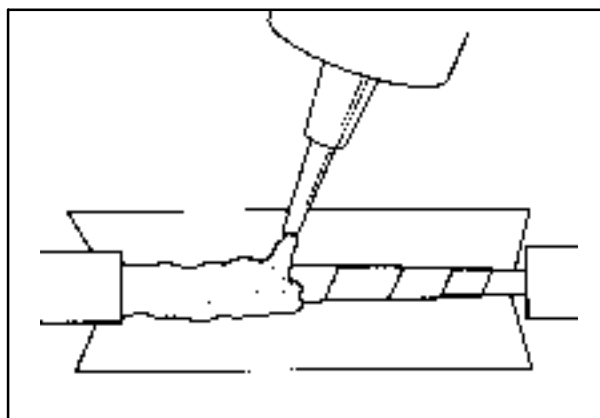


4



5

5. Wind a layer of vinyl insulation tape up to the grey cable cover at each end of the repair section. Make a paper trough, then apply silicon rubber compound (non hardening sealant) over the repaired section up to the cover ends. Sufficient sealant must be used to fill the ends of the cut away area.



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6. Allow the compound to cure then cover the area with insulating tape taking the tape well over each end of the repair. An overlap of at least 50 mm (2 inches) of tape at each end is necessary.
7. Check to ensure the repair is satisfactory and secure the repaired cable so that repeat damage is avoided.

**NOTE:** This is a temporary repair only. Ensure the damaged cable is replaced as soon as possible to prevent ingress of water or chemicals.



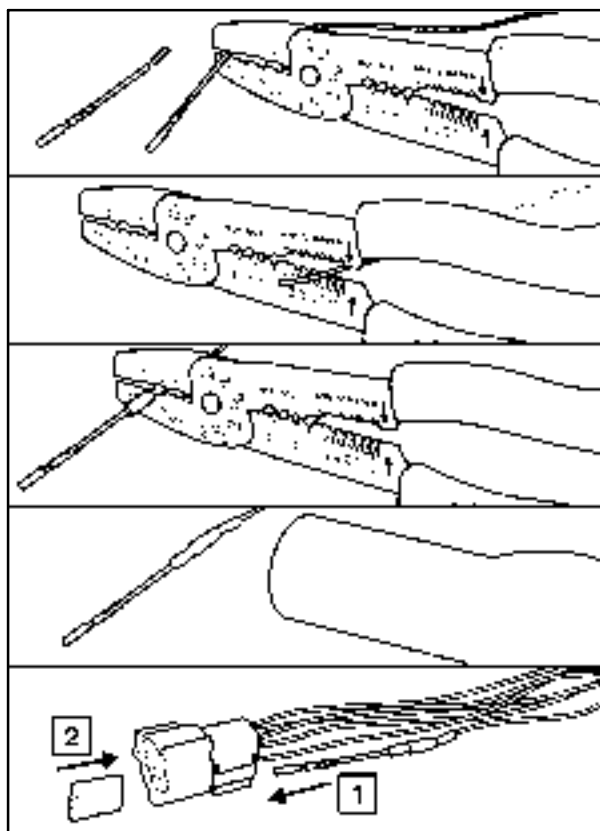
7

### Harness Wire Replacement

If a wire within the harness is found to be beyond repair or is open circuit, a jumper wire may be installed as a temporary repair until such time when a new harness assembly can be installed. Use the following procedure to install an additional wire:

1. Locate the faulty wire using the procedures described in the fault code charts.
2. Disconnect the affected connectors.
3. If fitted carefully roll back the seal between the connector and harness outer covering.
4. Remove the pins from the connector blocks of the affected wire using the appropriate removal tool found in the harness repair kit.

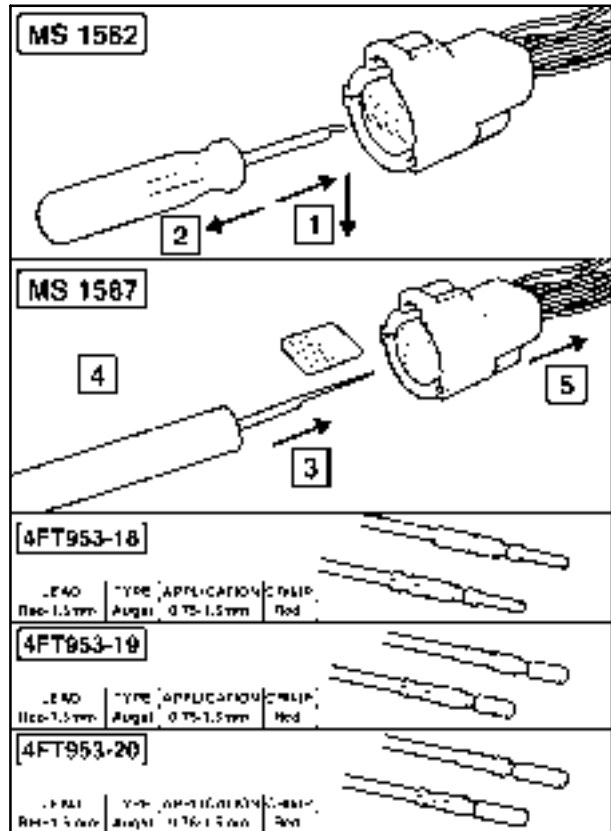
**NOTE:** Use the instructions supplied with the kit to ensure correct pin removal.



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5. From the harness repair kit select the correct pin for the connectors. Obtain locally the correct cross-sectional size wire and measure out the length required by following the harness routing.
6. Join the new wire to the new pins as described in the harness repair kit and install one of the pins into its connector.
7. If possible attempt to run the new wire within the existing harness outer covering, if this is not possible run the wire along the harness, securing regularly with suitable ties. With the wire correctly routed install the second terminal into its connector block. Replace the connector seal if removed.
8. To ensure that the repair has been effective check for continuity of the new wire using a suitable multi-meter.

**NOTE:** This is a temporary repair only. Ensure the damaged cable is replaced as soon as possible to prevent ingress of water or chemicals.





## THE DIGITAL MULTI-METER

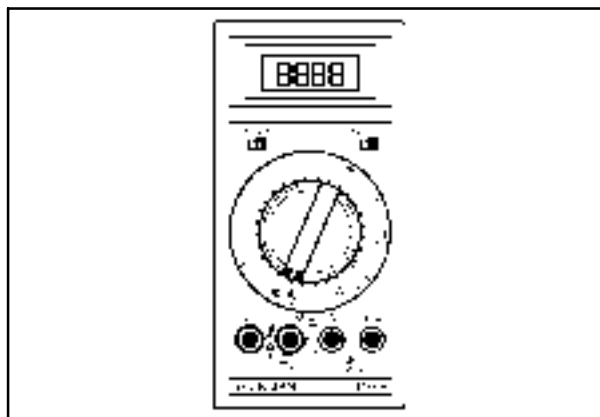
**NOTE:** This section is only intended as a general guide to using a digital multimeter.

Always refer to the manufacturer's operators manual for correct operation.

A multimeter is an electronic measuring device. The different types of measurement that can be made depend upon the make and model of the multimeter. Most types of multimeter have the capacity to measure:

- Current (A) ac or dc
- Resistance ( $\Omega$ )
- Voltage (V) ac or dc
- Continuity (Buzz test)

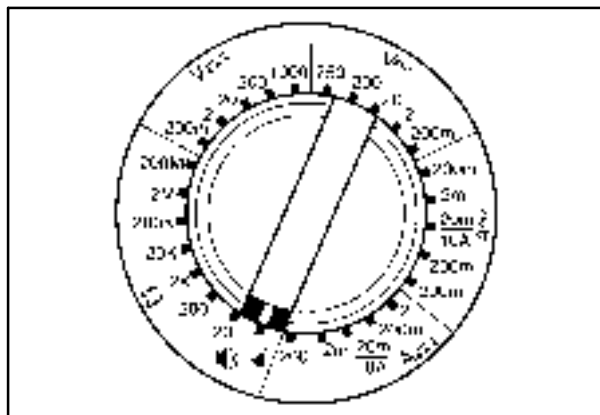
More expensive multimeters have other functions, such as the capacity to measure frequency (Hz) and test diodes.



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### General Operation:

Before proceeding with a test, decide on what is going to be measured (Voltage, Current etc.). Rotate the dial until the pointer is within the relevant zone. Within each zone there are different scales. The scale that is selected will represent the maximum value that the multimeter will read. Always select a scale which is greater than the value that you intend to measure. If you are unsure of the value to be measured, always select the highest scale and then reduce the scale once you have an idea of the measured value.



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### Why are there different scales ?

The closer that the scale is to the measured value, the more accurate the reading will be

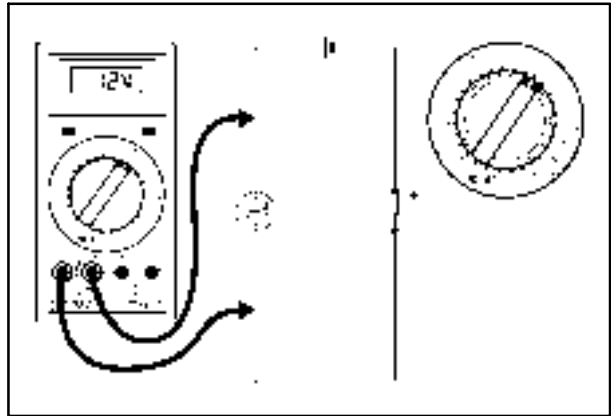
e.g. If measuring the voltage of a battery with the scale set at 200V, the display may read 12V. However, if the scale was set to 20V the display may read a more accurate reading of 12.27V.

Giga	G	1,000,000,000	$10^9$
Mega	M	1,000,000	$10^6$
Kilo	K	1,000	$10^3$
milli	m	0.001	$10^{-3}$
micro	$\mu$	0.000 001	$10^{-6}$
nano	n	0.000 000 001	$10^{-9}$
pico	p	0.000 000 000 001	$10^{-12}$

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Measuring Voltage (Volts):

Set the range dial to either ac or dc volts. Connect the Black test probe to the "COM" terminal and the Red test probe to the "V/Ω" terminal. Place the test probes across the component to be measured with the circuit complete (closed). Read off the display value.

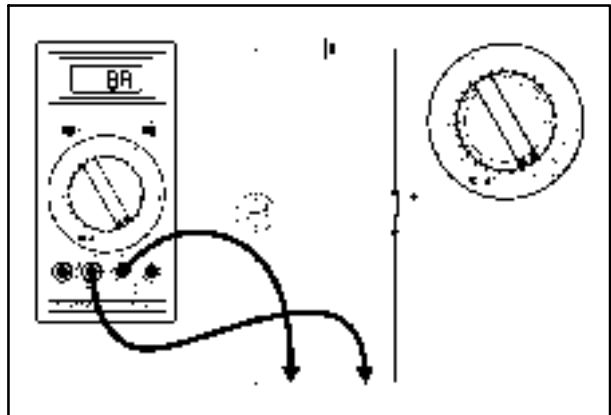


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Measuring Current (Amps):

Set the range dial to either ac or dc current. When measuring current up to 2 amps, connect the Red test probe to the "A" terminal. When measuring current up to 10 amps, connect the Red test probe to the 10 "A" terminal. Always connect the Black test probe to the "COM" terminal. When taking measurement of current, always break the circuit and connect the multi meter in series with the circuit. Read off the display value.

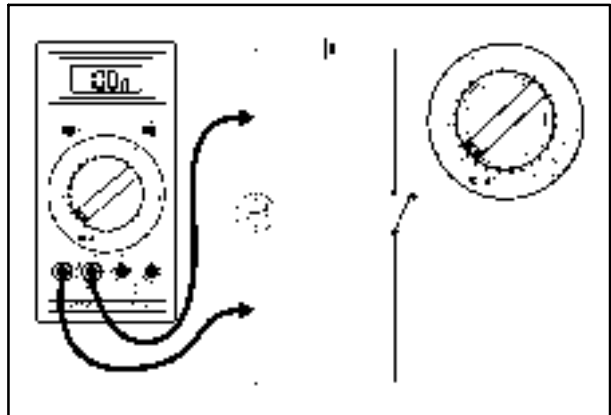
**NOTE:** For protection, multi meters are usually fused at 10A.



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Measuring Resistance (Ohms):

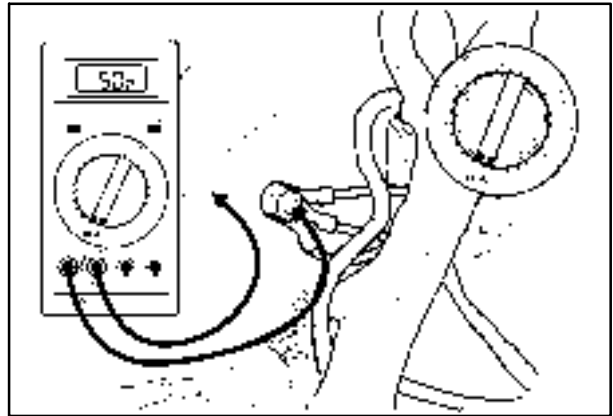
Set the range dial to the desired Q position. Connect the Red test probe to the "V/Ω" terminal. Connect the Black test probe to the "COM" terminal. If the resistance being measured is connected in a circuit, then turn off the power to the circuit. Connect the test probes to the measuring point and read off the display value.



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**Continuity (Buzzer) test:**

Set the range dial to the “Buzz” position. Connect the Red test probe to the “V/ $\Omega$ ” terminal. Connect the Black test probe to the “COM” terminal. Connect the test probes to the measuring point. In general, if the resistance is less than  $50\Omega$  then the buzzer will sound, indicating continuity.

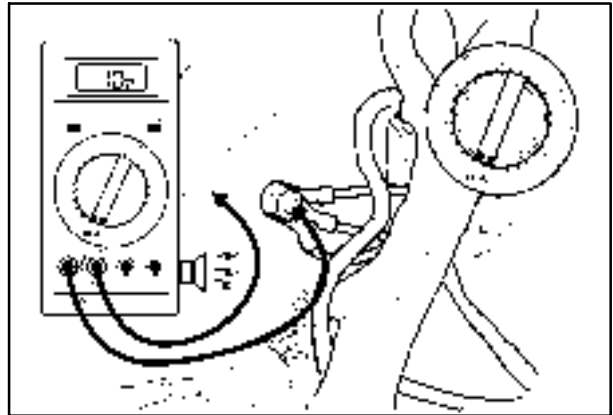


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Note: Buzzers on different multi meters will sound at different ohmic values, depending on the quality of the meter. This can often be misleading. For example, when checking a corroded earth point, a poor quality multi meter may buzz at  $150\Omega$ , indicating continuity and no problem. When using a higher quality multi meter for the same test, it would not buzz due to the high resistance. When carrying out such tests, we should always check the value of resistance as well as listening out for the buzz.

A good connection gives low resistance.

A bad connection gives high resistance.



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**SUMMARY:**

When measuring -

**Voltage (V):**

Connect across the component with the circuit closed.

**Current (A):**

Connect in series with the circuit. Circuit closed.

**Resistance ( $\Omega$ ):**

Connect across the component with the circuit open.

**Continuity (Buzz):**

Connect the meter across the component with the circuit open. (Always check the value of resistance as well!!!)

## ELECTRICAL TEST PROCEDURES

Four electrical tests will be required to properly troubleshoot electrical concerns on the combine.

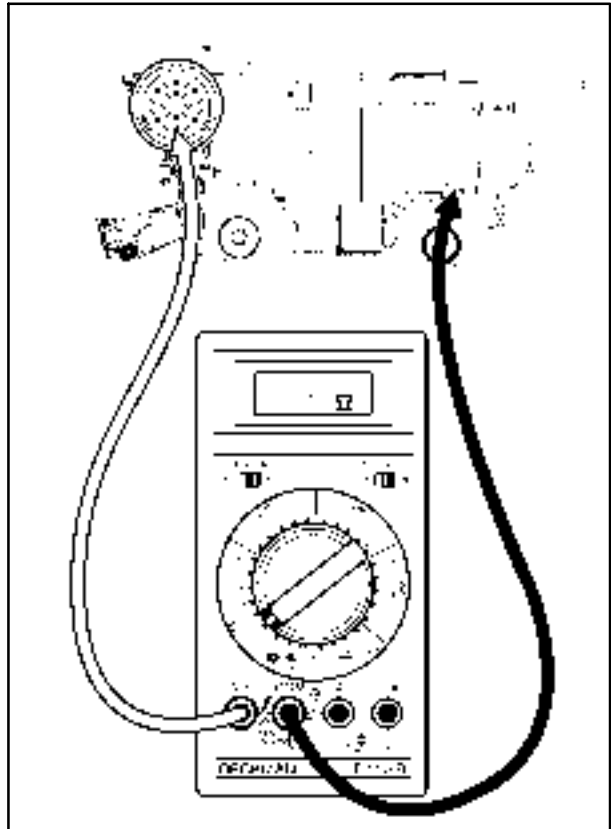
Each test is described in detail. Ensure that all steps are reviewed and followed when testing.

1. Continuity Test, Short to ground
2. Voltage measurement, short to 12 volts
3. Resistance test for components
4. Continuity test, Open circuits

### ELECTRICAL TEST PROCEDURE 1: CONTINUITY TEST - SHORT TO GROUND

#### CONDITIONS FOR PERFORMING TESTS:

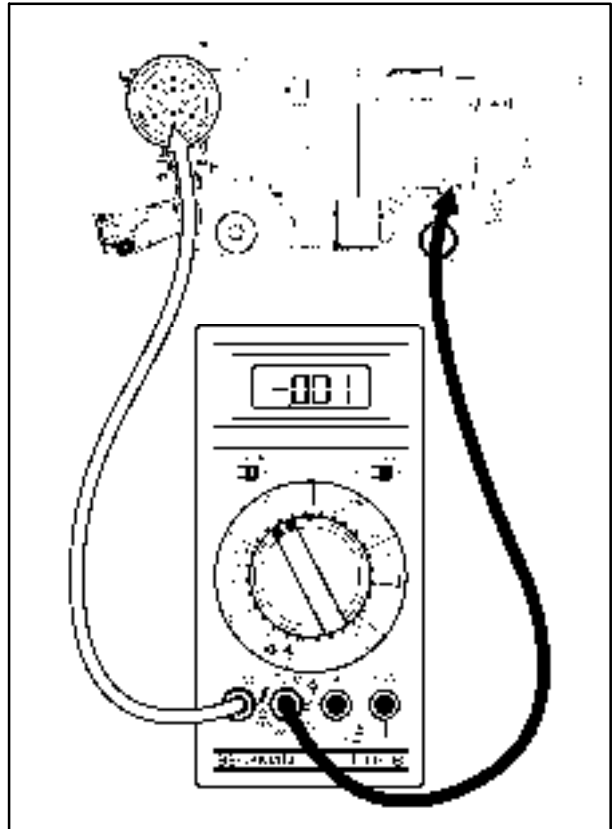
1. Power OFF, Keyswitch OFF, (sometimes battery disconnected or fuse pulled out if specified in procedure).
2. Connectors at each end or ends of circuit disconnected to prevent false readings.
3. Set meter to measure resistance or ohms, and measure circuit resistance. Use black lead to make contact with a plated metal part on the chassis such as a jump start post if fitted. Make sure the surface of the part is not corroded. Use the red meter lead to touch the connector pins, one pin at a time, and avoid contact with the case of metal connectors.
4. Determine if measured resistance falls within guidelines specified in the procedure. 3 to 4 ohms indicates a direct short to chassis ground and must be located and repaired. Higher resistances usually indicate circuit paths through modules, and that an additional connector needs to be disconnected to perform the test. More than 100K ohms indicates that the circuit is free of shorts to ground.



**ELECTRICAL TEST PROCEDURE 2: VOLTAGE MEASUREMENT OR SHORT TO POSITIVE SUPPLY VOLTS**

**CONDITIONS FOR PERFORMING SHORT TO POSITIVE SUPPLY TESTS:**

1. Keyswitch ON (sometimes OFF, if specified in procedure).
2. Connectors at sensor, switch or potentiometer end disconnected. All other connectors must be reconnected to perform test.
3. Set meter to measure DC VOLTS, and measure circuit voltage as illustrated. Use the red meter lead to touch the connector pins, one pin at a time, and avoid contact with the case of metal connectors. Use the black lead to make contact with a plated metal part on the chassis such as a jump start post if fitted. Make sure the surface of the part is not corroded.
4. Determine if measured voltage falls within guidelines specified in the procedure.

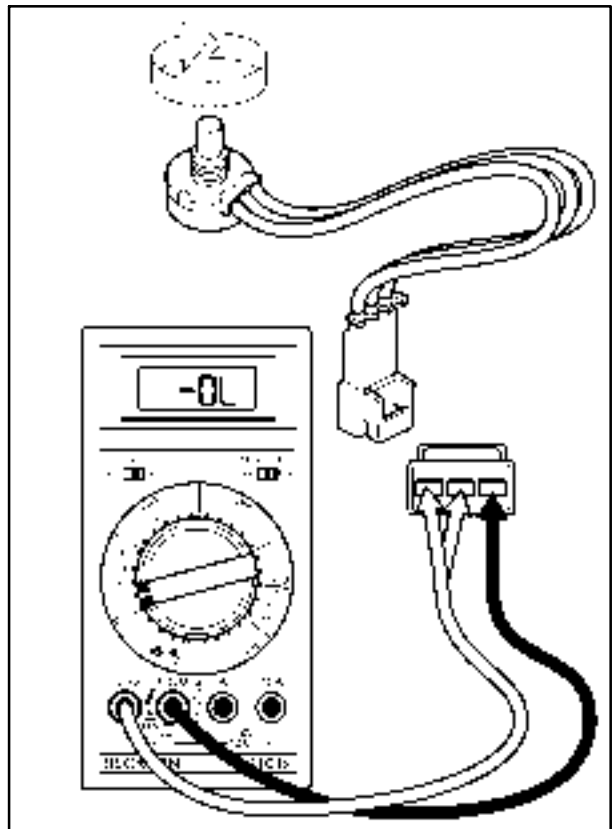


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**ELECTRICAL TEST PROCEDURE 3: RESISTANCE TEST FOR ELECTRICAL PARTS**

**CONDITIONS FOR PERFORMING RESISTANCE TEST**

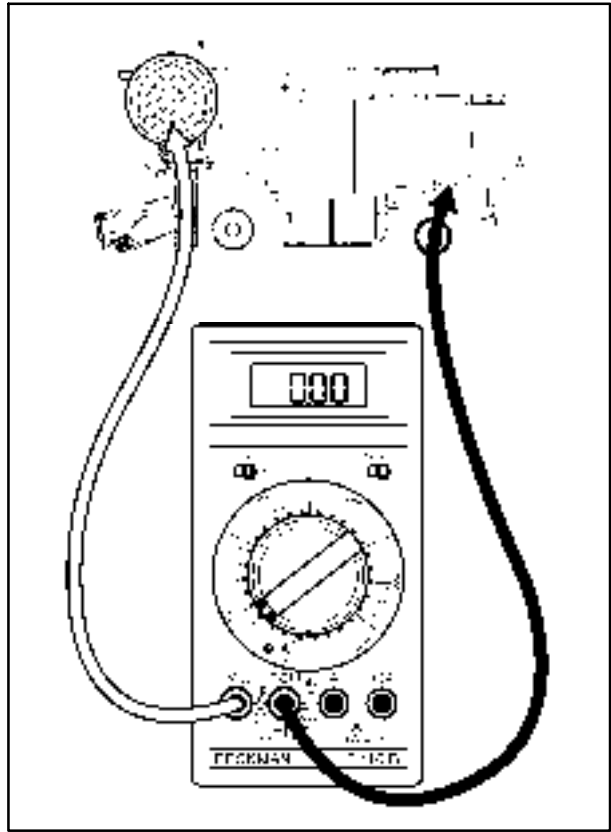
1. Disconnect part by unplugging electrical connectors to expose the part assembly connector for testing.
2. Set electrical meter to measure resistance or Ohms and insert test probes into connector terminals specified in procedure. When checking potentiometers, measure from wiper terminal to each of the other terminals while TURNING THE POT SHAFT. This will ensure no open spots escape detection. When checking rocker or rotary switches, actuate the switch while measuring for opens and shorts.
3. Compare measured values to values specified in the fault code procedures. Allow plus or minus 5 percent of range tolerance for all measurements.



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**ELECTRICAL TEST PROCEDURE 4:  
CONTINUITY TEST - CHECK FOR OPEN  
CIRCUITS****CONDITIONS FOR PERFORMING CONTINUITY  
TESTS:**

1. Keyswitch OFF (sometimes disconnect battery or pull fuses).
2. Connectors at both ends of the circuit disconnected. All other connectors must be reconnected to perform test.
3. Set meter to measure resistance or ohms, and measure circuit resistance as illustrated. Use the red meter lead to touch the connector pins, one pin at a time, and avoid contact with the case of metal connectors. Use the black lead to make contact with the connector pin at the other end of the circuit. Avoid contact with other pins in the connector and the connector case, if it is metal.
4. Determine if measured resistance falls within guidelines specified in the procedure. If the resistance is no more than 3 to 4 ohms, the circuit is continuous. More resistance usually indicates dirty or corroded terminals in connectors, and 100K ohms or greater indicates an open circuit.



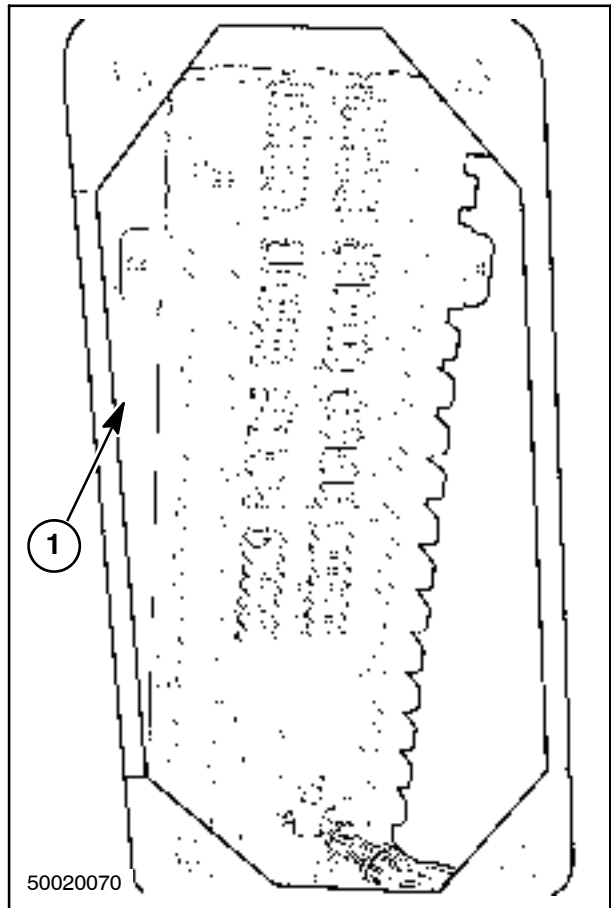
**CIRCUIT COMPONENTS - BASIC DESCRIPTION AND TESTING**

**FUSES**

Fuses protect circuits with thin pieces of metal and wire which heat up and melt to open up the circuit when too much current flows through them. The combine fuse panel, 1, is located in the left rear corner of the cab, behind a removable panel.

Fuses are used to protect the circuit from overload. This can occur in the event of a short circuit or by connecting equipment which demands a current greater than the circuit is designed to carry.

There are several types of fuses, but they all consist of a metal conductor which is capable of carrying a limited current. If the specified current is exceeded then the metal conductor will overheat, causing it to melt and break. This will in turn cause an open circuit.

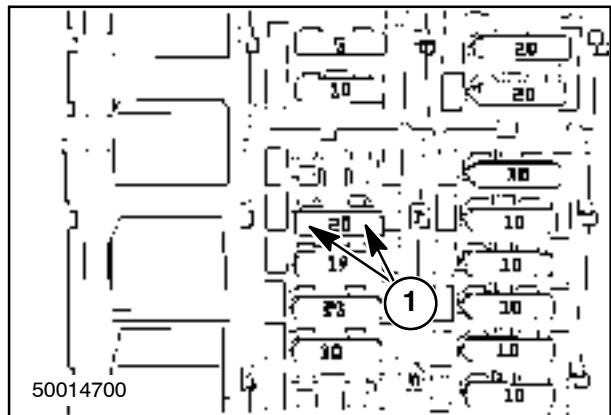


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The rating of the fuse relates to the current that the fuse can carry continuously.

If a fuse blows, it must be replaced with a fuse of the correct rating, and if it blows again, then the cause must be investigated.

A fuse may be tested by checking continuity across the fuse on the two exposed terminals, 1.

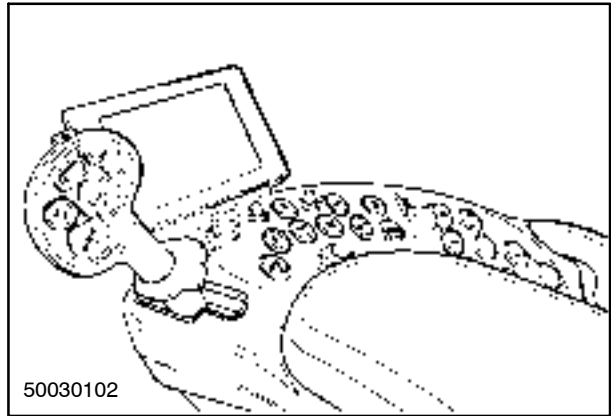


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**SWITCHES**

Switches are a vital part of an electric circuit, providing a method of controlling the circuit itself. One switch can control a number of different circuits at the same time. This is achieved by having several separate connections and/or multi-connector switches (several switch positions').

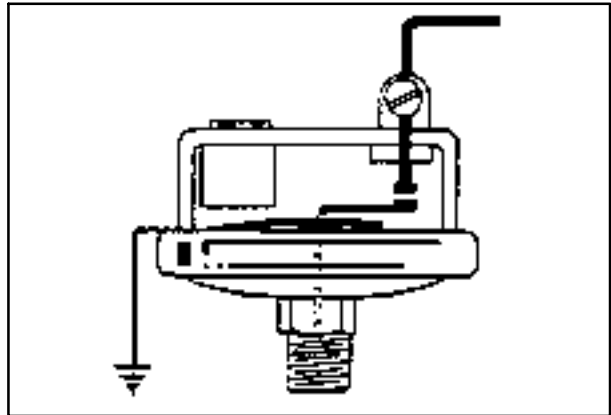
There are several types of switches, and they may incorporate a warning light.



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Switches can be as simple as that used to turn on an implement lamp or as complex as the ones used to operate the starting and lighting systems. Checking the operation of switches is usually just a matter of testing for power going into the switch and for power leaving the switch at the appropriate contacts when the switch is operated.

One of the most common type of switches is the pressure switch, a switch opened or closed by a fluid pressure. An example of this type of switch is the charge pressure switch, a simple on/off device that opens (or closes) when oil pressure rises or lowers past a preset value.

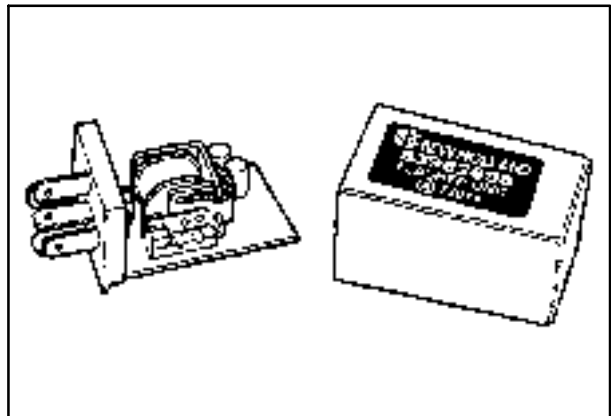


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**FLASHERS**

Flashers work automatically to interrupt and connect the flow of current.

In the flasher, a heating element warms a bimetallic strip. The strip bends, breaking contact with the power source. When it cools, the bimetallic strip once again makes contact and the process begins again.



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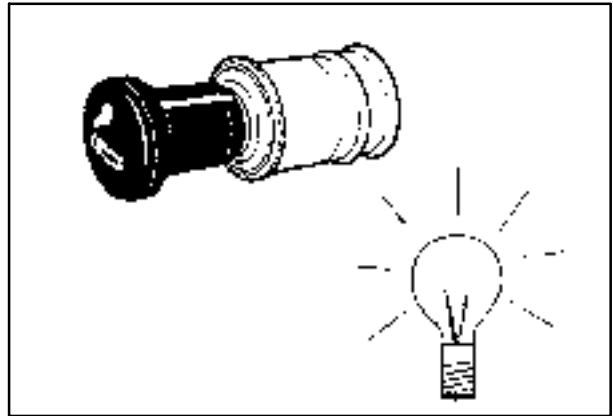


**RESISTANCE DEVICES**

A number of electrical components alter or make use of electricity through their resistance to current flow. Resistors are components which are generally used to regulate the supply of voltage and current to other electrical components.

In some cases, the purpose of resistance in an electrical circuit is to provide light or heat. Lamps and cigar lighters are examples. Lamps convert electricity into light, and cigar lighters convert it into heat. Both lamps and lighters make use of the same physical principle, that is Ohms Law.

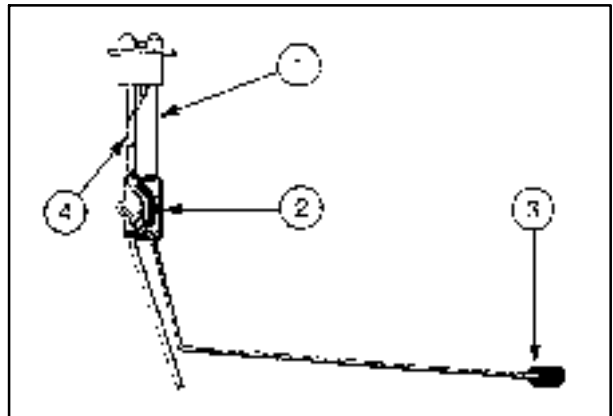
The engine grid heater and heated cab mirrors are other examples of resistance devices designed to convert electricity into heat.



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**FLUID LEVEL SENDER**

It operates by varying resistance through the movement of a float. An example is the fuel level sender.

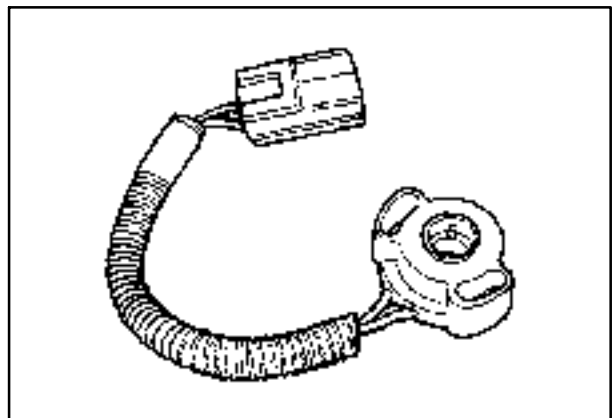


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**POTENTIOMETERS**

Potentiometers are variable resistors which are dependant on mechanical movement, i.e. Lateral float movement, to vary the resistance of the component and therefore alter the output voltage.

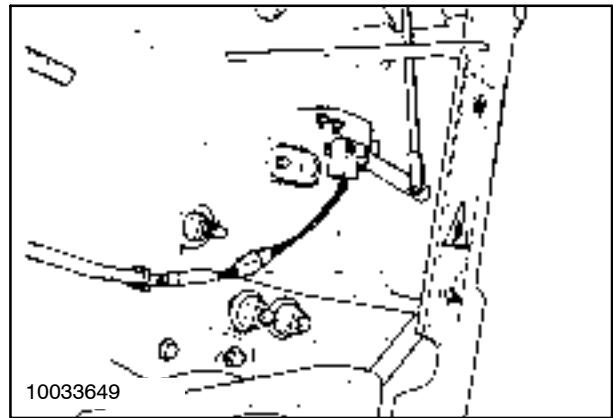
In order to verify the correct operation of a potentiometer, the resistance should be measured at the minimum and maximum positions and a smooth and continuous change of resistance should be observed between. As the resistance varies with temperature, the test specifications are usually given at 20 °C.



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### POTENTIOMETER ADJUSTMENT

When installing potentiometers, it is important to ensure that they do not bottom out in either direction, to prevent damage. Most potentiometers have slotted mounting holes to allow some adjustment. Before tightening the mounting hardware, operate the attaching linkage fully in both directions to confirm proper potentiometer positioning.



## ELECTROMAGNETIC DEVICES

In general, they use the magnetic field created by flowing current to move metal parts within the components.

## RELAYS

The relay is an electromagnetic switch that uses a small amount of current to switch a larger amount on and off.

When the operator closes a switch, current flows through the relay's control circuit. In this circuit there are windings surrounding an iron core which is fixed in place.

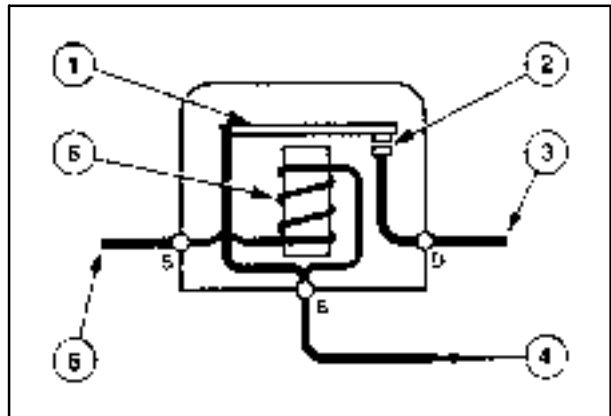
Current turns the iron core into an electromagnet. The core then attracts an arm which has a contact point on it. When the point on the arm contacts the stationary point, current flows through the power circuit.

Relays are basically electrically operated switches. They are used to switch a circuit on/off in similar way to a manual switch.

Two circuits are connected to the relay:

- A work circuit, which is switched on/off by the relay, and provides the supply for the equipment to be operated, i.e., bulbs, solenoids, etc.;
- A control circuit, switched on/off by manual switches, used to operate the relay.

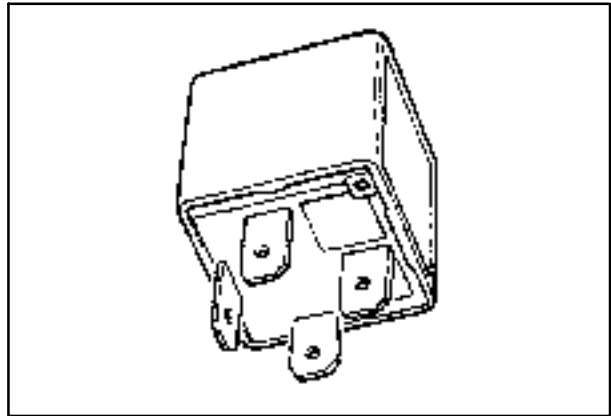
The part of the relay which is connected to the control circuit consists of the winding of an electro-magnet. When the control circuit is switched off, the contacts are kept apart by a return spring. When the control circuit is switched on, a current flows through the coil and a magnetic force is produced. This force, which is stronger than the spring pressure, pulls the contacts of the relay together, causing the work circuit to operate.



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A switch-relay system has two main advantages over a simple switch:

- The current that flows through the switch is not the same as all the current requested by the equipment to be operated, but usually by a smaller current: this allows the usage of smaller and less expensive switches;
- The distance from the supply, to the equipment, can be made as short as possible to minimize voltage drop.

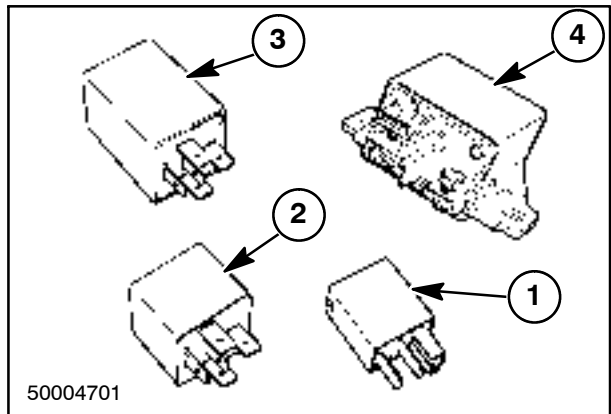


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There are five styles of relays used on the AFX combine. The micro relay, 1, is the most commonly used relay, and is used on all but two locations on the fuse panel in the cab. One mini relay, 2, is used in the top left position of the fuse panel in the cab, while a time delay relay, 3, is used in the top right position of the fuse panel for controlling the cab interior light and side lights. The fourth style of relay is the start relay, 4, which is located in the engine compartment. The fifth style of relay is the grid heater relay (not shown) located on the engine.

On the relay cover there are 4 or 5 terminal markings:

- 3 or 30: input terminal direct from battery positive, normally live.
- 2 or 85: winding output terminal, usually to ground.
- 1 or 86: winding input terminal.
- 4 or 87: output terminal for normally closed contact.
- 5 or 87a: output terminal for normally open contact.



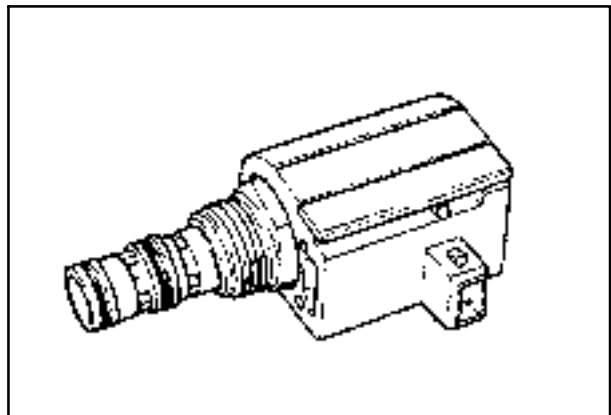
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### SOLENOIDS

Solenoids work in much the same way as relays, except that the iron core is not fixed in place. As a result, the windings in the control circuit cause the iron core to move.

In the starting system, for example, the movement of this core is used to send large amounts of current to the starter motor.

A solenoid is basically a winding around an iron core. In the centre of the core there is a plunger which is free to move through the core. When an electrical current passes through the winding an electro-magnetic force is produced which causes the plunger to move through the core. If the current is switched off, the magnetic force is stopped and the plunger is returned by a spring.



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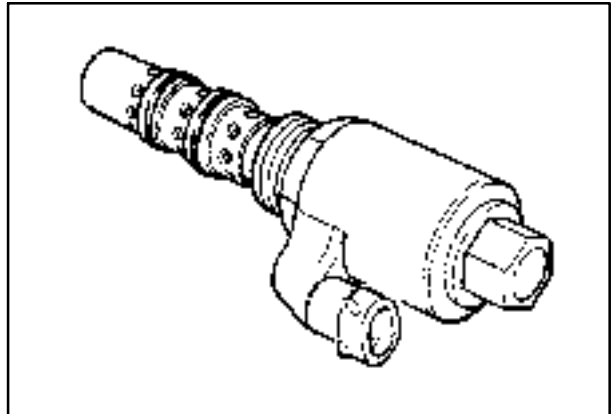
The solenoid plunger may have different uses: the most common are moving a hydraulic spool or a mechanical lever.

The MOST COMMON FAULTS that can occur are:

- Short circuit winding: if a section of the winding allows the current to pass directly from positive (+) to negative (-) terminals without passing through the winding, this will cause the relevant circuit fuse to blow.
- Broken winding: causing an open circuit, it will not allow the current to pass through the winding, so the solenoid will not operate.
- Seized plunger (and/or connected components): the solenoid will only move the plunger if all components are free to move.

### **PWM SOLENOID VALVES**

Whenever it is necessary to provide proportional control to the solenoid valves, it is much better to use a principle of operation called pulse width modulation (PWM). PWM is a variable DC voltage signal that is used to control the solenoid valves. The voltage signal is pulsed on and off many times a second (at a constant frequency of 500 Hz) at a constant supply voltage of 12 V.



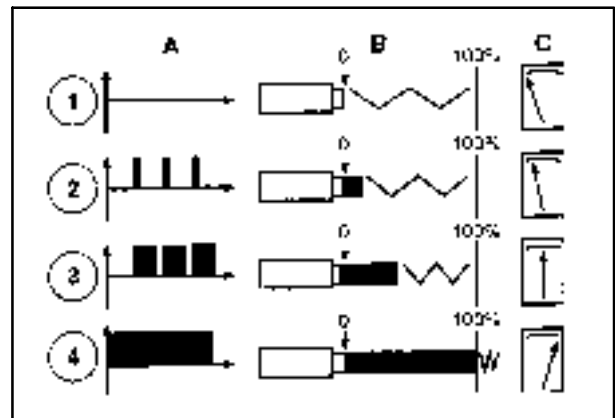
The CCM modules contain transistors that are supplied with a constant input voltage which is switched on and off to achieve the variable input range. In this way the control module is able to limit the armature movement, so the hydraulic output flow of the solenoid is proportional to the average DC voltage. The lower voltage also allows the solenoid to operate with less residual magnetism and so the entire circuit will operate smoother.

The variable DC voltage signal level is determined by varying the duration of the ON pulse relative to the OFF pulse. The ratio between the ON time and the cycle time is called duty cycle and is stated as a percentage of one complete cycle.

Diagrams, 1 to 3, show the normal operating range of the PWM valve, and diagram 4, shows the initial 12V programming and fill time only. The diagrams in column A show the voltage signal that is sent to the valve, whereas column B shows the relevant spring pressure and column C the reading on a voltmeter connected to the solenoid valve.

Diagram, 1, shows the OFF position: no signal is directed to the valve, which means no spring pressure in the valve at all and results in a zero voltage reading. Increasing the duty cycle causes some pressure to be made on the circuit (Diagram 2), which results in a voltmeter reading increase. Diagram, 3, shows the maximum signal that is used during the normal activity of the valve: its duty cycle is around 0.5, which results in a spring pressure for the half of its run and in an indication of a 6 volt average DC current.

The electrical circuit to the solenoids can be checked by using a digital or analogue DC voltmeter, which will indicate the average voltage readings.



## SENSORS

A sensor is the primary component of a measurement chain that converts the input variable (temperature, capacitance, reluctance) into a signal suitable for measurement. The relationship between the input variable and the measured signal is a characteristic of the sensor.

In the above mentioned measurement chain the signal is filtered and treated in order to adapt it to its use. It consists of three elements: the sensor itself; the converter, which converts the output signal from the sensor (in most of the cases into an electric signal); and the conditioner, which transforms the output signal from the converter in the most suitable form. Generally the term sensor indicates the entire measurement chain.

### TEMPERATURE SENSORS

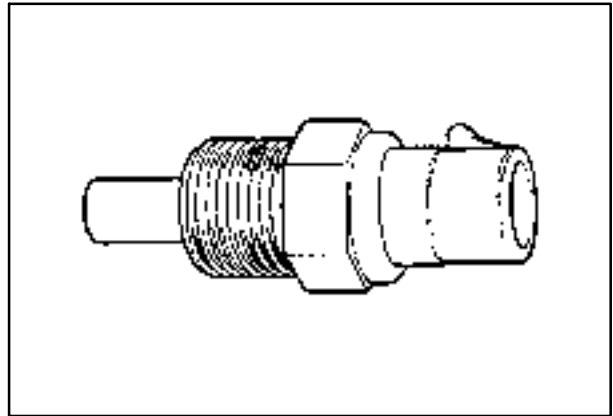
Generally based on a simple circuit with a thermistor. A thermistor is a resistor that changes its resistance according to the temperature.

There are two groups of thermistors: NTC (Negative Temperature Coefficient) and PTC (Positive Temperature Coefficient). In the first case the higher the temperature, the lower is the resistance, and for the PTC the higher the temperature, the higher the resistance. The NTC are often used as sensors to indicate temperature change in fluids, such as the engine coolant fluid.

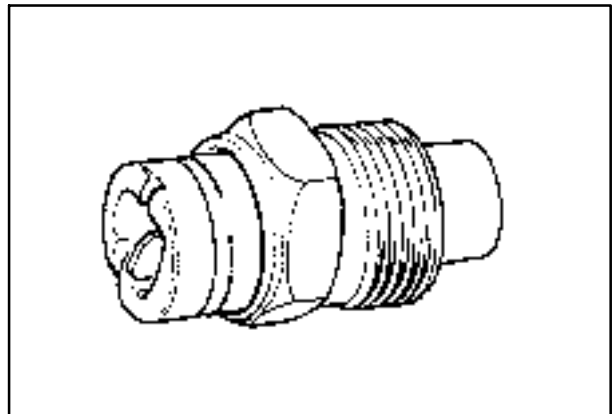
An example of these type of senders is the coolant temperature sender. The changes in its resistance (which varies with temperature) are relayed to the Universal Display Plus monitor, which operates the bargraph and the warning indicators accordingly.

### PRESSURE SENDER

A pressure sender receives a supply signal and it varies it according to the (oil) pressure. An example is the oil pressure sender, which receives a 5 volt signal and varies it according to the oil pressure. The appropriate module keeps track of these variations and changes its readouts and warnings accordingly.



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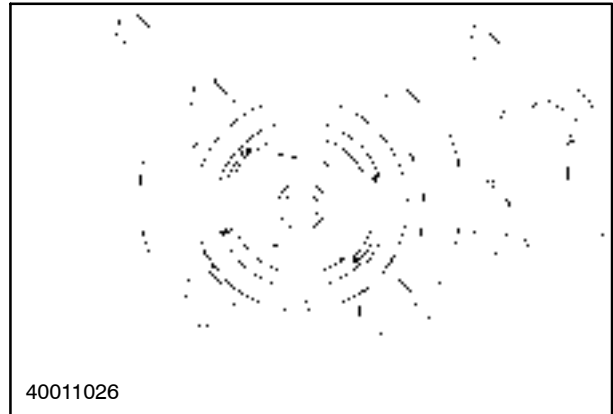


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**SPEED AND POSITION SENSORS**

Most of the speed and position sensors used on the AFX combine are a 2-wire sensing device designed to work with a switching amplifier circuit in the module the sensor is attached to. The operation of this sensor is similar to that of a variable resistor, which changes its impedance as metal approaches the sensor. When no metal is being sensed, the sensor is in a low impedance state. When metal approaches the sensor, the impedance increases. The varying impedance results in a current flow change that the module detects, and converts into a frequency for speed sensing or position monitoring.

When installing a new sensor, adjust the sensor to obtain a clearance of 3 mm (1/8") to the target metal.



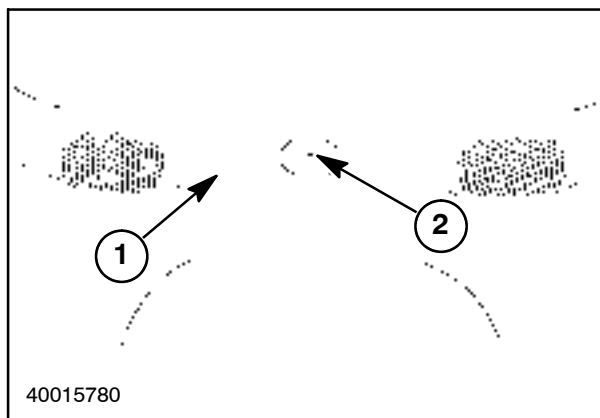


## CAB ELECTRICAL CONNECTORS X002 AND X003

Connectors X002 and X003 are the main connectors from the Cab Main (CM) Harness to the Cab Roof (CR) harness. The connectors are located in the upper left rear corner of the cab along with the Cab Roof Ground. Removal of the rear speaker panel is required to gain access to the connectors for troubleshooting and cab roof removal.

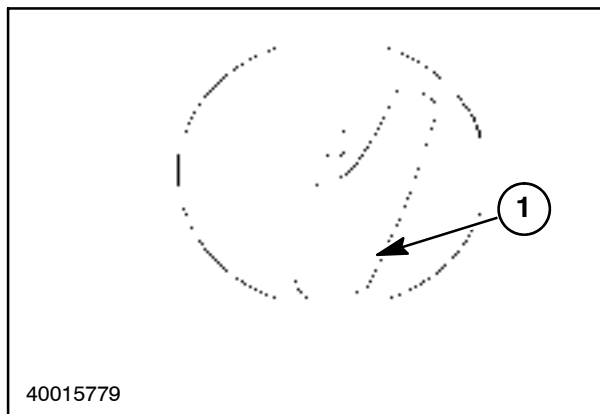
### REMOVAL OF REAR SPEAKER PANEL

1. The rear speaker panel, 1, is located at the upper rear of the interior of the cab. Clothing hanger, 2, is the first item to be removed.



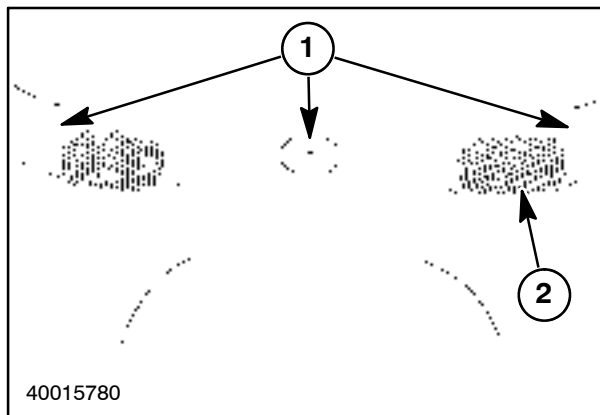
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2. Using a flat bladed screwdriver or knife, pry the screw cover, 1, from the hanger. Turn out the two screws holding the hanger in place. Store the hanger and screws in a suitable location.



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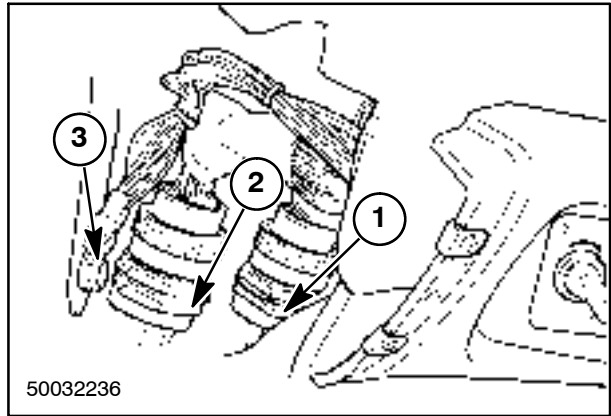
3. Turn out seven screws, 1, from panel, 2. Allow the panel to hang inside the cab.



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**Connector Locations**

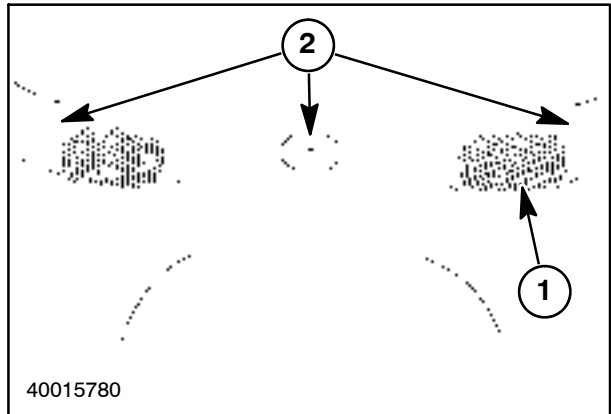
1. Connector X002
2. Connector X003
3. Cab Roof Ground



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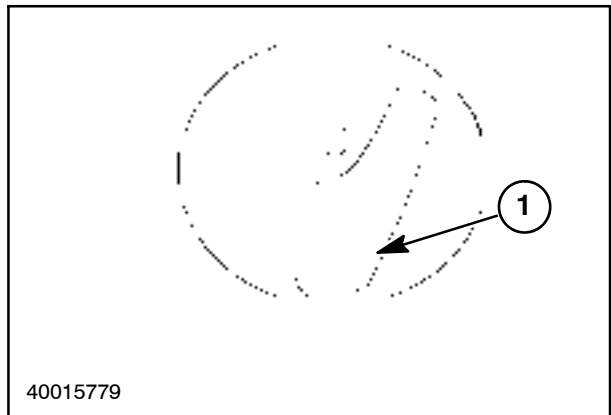
**INSTALLATION OF REAR SPEAKER PANEL**

1. Set rear panel, 1, into place and secure to the headliner and cab roof using the seven screws, 2.



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2. Install the hanger using two screws. Push the cover, 1, into place.

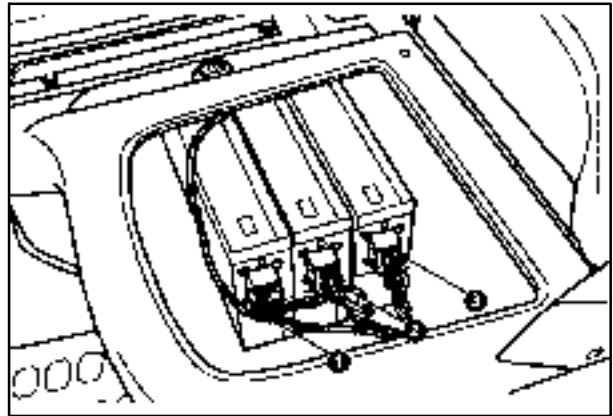


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### ELECTRONIC MODULES (CCM's)

The electronic modules are the "black boxes" that provide control on many of the functions of the combine. These functions may vary according to the options that are fitted on the combine.

Inside these "black boxes" there is a processor, the "thinking part" of the module, and inside some of them there is one or more memories, which may allow the module to store calibration values, the configuration of the vehicle (which optional tools or devices have been installed) and the error codes.

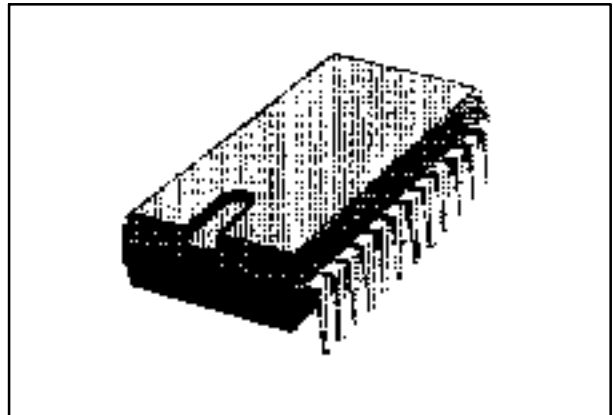


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A processor has a series of pins, which are electrical contacts. There are three main types of pins: for the inputs of the signals, for the outputs and for the processor supply.

The processor, the memories and the link between them form the hardware of the module, its "physical" part.

Then some software is needed, to handle the communication between the processor and the memories and to manage the various signals going into and out of the processor. The software is designed to operate in a different way for every module, and is called functional code.



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The electronic modules are often blamed as responsible for most of the problems of the modern vehicles, while they are for certain among the most protected parts of the vehicle. In fact, the pins of the module are protected against spikes (high pulses) of current, and the signals are filtered by the hardware and by the software in input and in output to give the best handling of information.

**CCM POWER AND GROUND SUPPLIES**

Each CCM module has two main power supplies. Keep Alive power is supplied to the module at interior connector pin 1, while the main power supply is provided from the key switch at the interior connector pin 4. The module will shutdown if the voltage drops below 9V or exceeds 18V on either of these two circuits. Key switch power is also used to supply the 5V and 8V regulators for voltage outputs to sensors and potentiometers.

Each CCM module has three main ground wires to provide a ground path for all sensors and most valve outputs. These three ground wires are linked together internally, but provide a solid ground path for the module. The module may continue to function if

one or two of these ground wires are broken, but sensor reading and other functions may become erratic.

Some circuits on the CCM's provide their own power supply through the engaging switch. This ensures that if power is ever lost through the switch into the module, the output from the module is immediately disengaged. These circuits are the ground speed hydrostat circuit (power supplied through the S22 Neutral switch), thresher engage and feeder engage circuits.

H-bridge circuits in the modules are used to power high current draw components, such as motors and actuators, and have their own dedicated power supplies and grounds, as listed in the charts below.

**CCM1**

Power Supply	Ground	Components Affected
X018 pin 1 (F39)		Keep Alive power
X018 pin 4 (F38, key switch)		Main power; all potentiometers, speed & position sensors
	X018 pin 8, X019 pins 12 & 18	Main module grounds
X020 pins 29 & 30 (F22)	X020 pins 9 & 10	Shoe Leveling Actuator M-03
X020 pin 7 (F24)	X020 pin 16	None
X019 pin 11 (F24)	X019 pin 3	Concave Clearance actuator M-04 Grain Bin Covers actuator M-12
X019 pin 2 (F43)		Chaff Spreader valve L-28 Head Raise L-11 Head Lower L-12 Cleaning Fan Valve L-44
X019 pin 9 (F43)		Backup Alarm H-08 Brake Limiting Valve L-32 Rear Wheel Assist valve L-26
X020 pin 11 (F44)		Head Tilt CW L-18 Head Tilt CCW L-19 2 Speed Powered Rear Axle L-54/L-55 Header Height Accumulator L-06 Feeder Ring to Frame Brake L-50

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**CCM2**

Power Supply	Ground	Components Affected
X015 pin 1 (F39)		Keep Alive power
X015 pin 4 (F38, key switch)		Main power; all potentiometers, speed & position sensors
	X015 pin 8, X016 pins 12 & 18	Main module grounds
X017 pins 29 & 30 (F25)	X017 pins 9 & 10	Transmission Shift motor M-02
X017 pin 7 (F23)	X017 pin 16	Draper Header Solenoid L-53
X016 pin 11 (F23)	X016 pin 3	None
X016 pin 2 (F36)		Unload Tube Clutch L-08 Park Brake Disengage valve L-10
X016 pin 9 (F37)		Unload Tube In valve L-03 Unload Tube Out valve L-04
X017 pin 11 (F36)		Reel Fore valve L-16 Reel Aft valve L-15 Reel Up valve L-14 Reel Down valve L-13 Reel Drive valve L-17 Pressure Release valve L-05 Jammer valve L-43

**CCM3**

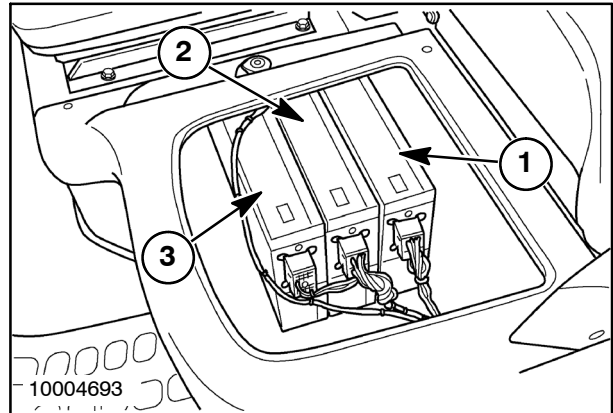
Power Supply	Ground	Components Affected
X012 pin 1 (F39)		Keep Alive power
X012 pin 4 (F38, key switch)		Main power; all potentiometers, speed & position sensors
	X012 pin 8, X013 pins 12 & 18	Main module grounds
X014 pins 29 & 30 (F25)	X014 pins 9 & 10	None
X014 pin 7 (F27)	X014 pin 16	None
X013 pin 11 (F27)	X013 pin 3	Upper Sieve actuator M-08 Lower Sieve actuator M-07
X013 pins 2 (F47)		Bypass Unit Engage output M-28 (PF moisture sensor auger)
X013 pins 9 (F47)		Vertical Knives R K-42 Vertical Knives L K-43
X014 pin 11 (F47)		Rotor Ring to Frame Brake L-46

## COMBINE CONTROL MODULE (CCM) REMOVAL AND INSTALLATION

The CCM's are located under the storage box of the instructional seat. The instructional seat must be removed to access the CCM's. The CCM's should be disconnected from the harness before removing. The harness connectors are located under the cab floor.

### CCM IDENTIFICATION

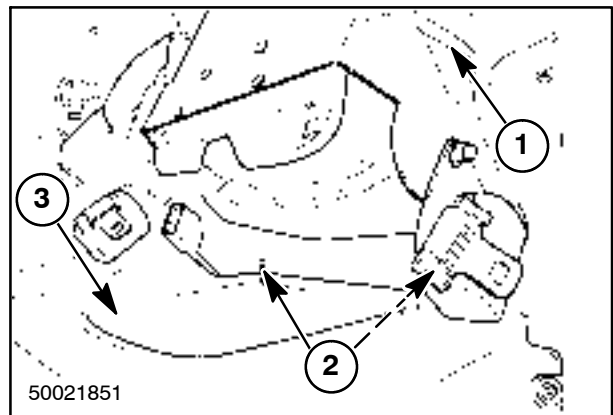
ITEM	DESCRIPTION
1.	CCM 1
2.	CCM 2
3.	CCM 3 (If equipped)



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### INSTRUCTIONAL SEAT REMOVAL

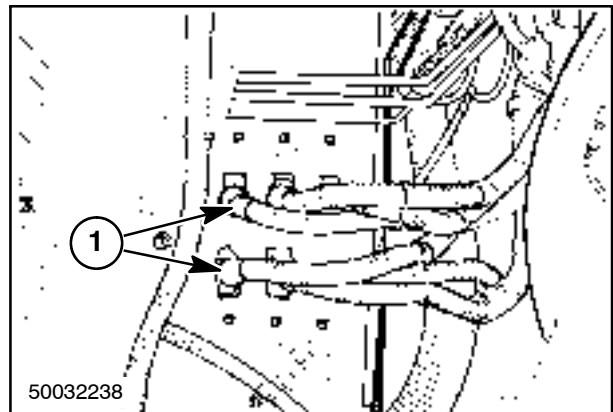
1. Raise bottom cushion and attach strap 1.
2. Loosen two bolts, 2, at bottom of seat back.
3. Lift seat back assembly up and forward to remove from rear of cab.
4. Remove storage box 3.



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### REMOVAL OF CCM

The connectors, 1, are located under the cab floor left of the center line of the combine.



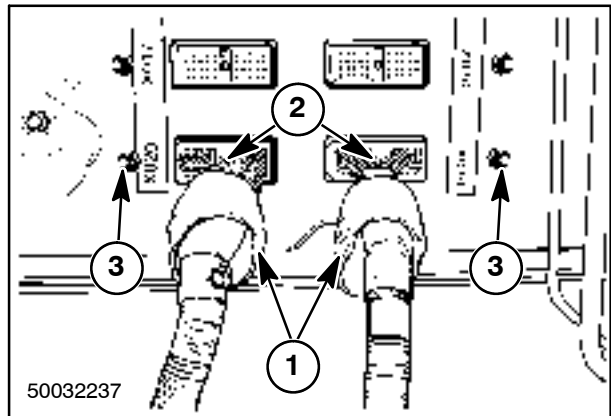
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**To remove CCM Module:**

1. Peel back connector boots, 1.

**IMPORTANT:** Before removing, if connectors are not marked, label the connections for proper installation.

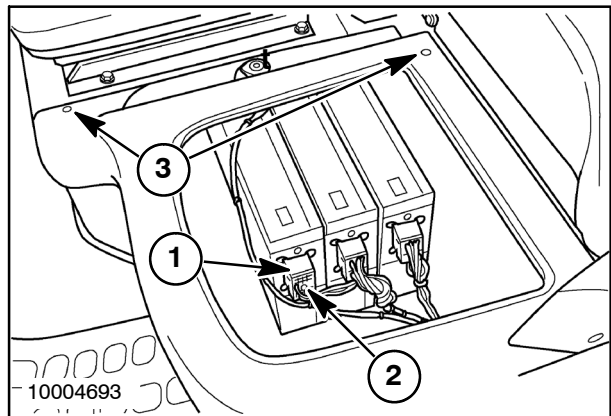
2. Unthread the captured connector screws, 2, and remove connectors.
3. Remove the two mounting nuts and lock washers, 3.



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4. To disconnect connector, 1, unthread captured screw, 2.
5. Carefully remove module from combine.

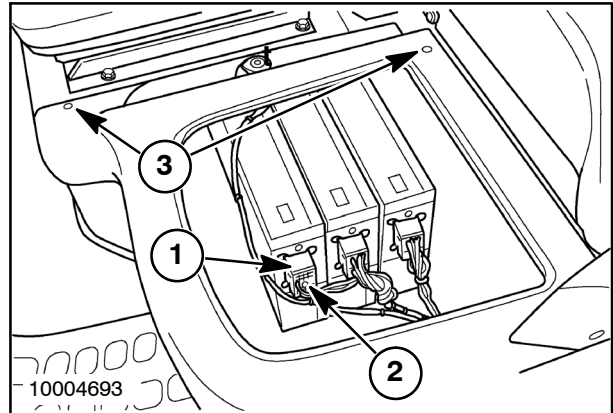
**NOTE:** It may be necessary to remove the seven screws, 3, from the base of the instructional seat to provide clearance to remove the CCM.



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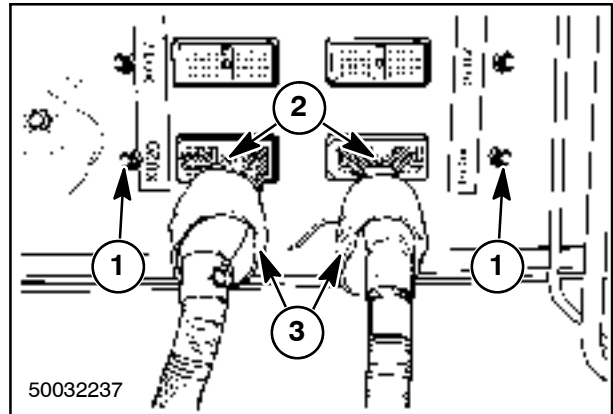
## CCM INSTALLATION

1. Inspect the gaskets that seal the connector slots in the cab floor for signs of deterioration, replace as required.
2. Place the CCM mounting studs through the floor of the cab. Connect the appropriate connector, 1, to the CCM. Tighten captured screw, 2, to secure connector to CCM.



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3. Install lock washers and thread nuts, 1, onto mounting studs of CCM. Tighten nuts to standard torque.
4. Inspect the seals on the connectors, clean or replace as required.
5. Install the connector with the corresponding decal on the underside of the cab floor. Thread in captured screw of connector, 2, and tighten to standard torque.
6. Fold protective boots, 3, around connectors.



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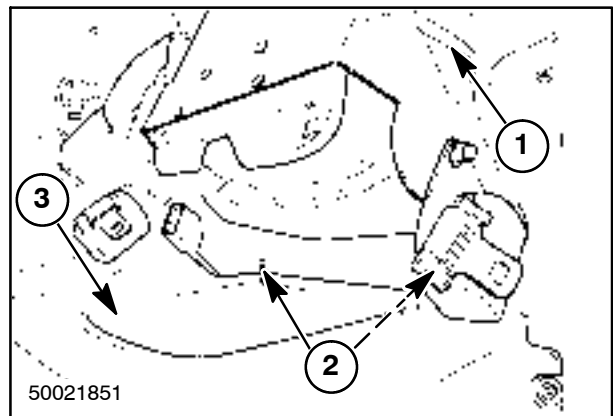
## SOFTWARE INSTALLATION

**IMPORTANT:** The CCM must be loaded with software.

Refer to the AFX Combine Electronic Service Tool User's Guide for software download instructions.

## INSTRUCTIONAL SEAT INSTALLATION

1. Tighten the seven screws that secure the base of the instructional seat to the cab frame.
2. Insert the storage box, 3.
3. Slide seat onto the 4 bolts by pushing the seat back and downward against the rear of the cab. Make sure the top two bolts fit into the notches on the seat back.
4. Tighten two bolts, 2, at the bottom of the seat back.
5. Release the strap, 1, on the seat cushion.



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**Wiring harness - Detailed view (A.30.A.88 - C.10.A.50)**

AFX8010

<b>Connector Reference Table</b>		
<b>Connector ID</b>	<b>Description</b>	<b>Connector Part Number</b>
X001	Cab main (CM) harness to Right hand console (RC) harness	
X002	Cab main (CM) harness to cab roof (CR) harness	
X003	Cab main (CM) harness to cab roof (CR) harness	
X004	Cab main (CM) harness to main frame (MF) harness	373358A1 (MF)
X005	Cab main (CM) harness to main frame (MF) harness	
X006	Cab main (CM) harness to A/C harness	
X007	Front frame (FF) harness to feeder (FE) harness	
X008	Main frame (MF) harness to front frame (FF) harness	373357A1 (MF), 374973A1 (FF)
X009	Main frame (MF) harness to grain tank (GT) harness	
X010	Main frame harness to engine harness	
X011	Main frame (MF) harness to gearbox (GB) harness	291661A1 (MF) 374973A1 (GB)
X012	Cab main harness to CCM3	
X013	Expansion harness to CCM3	225414C1
X014	Expansion harness to CCM3	225414C1
X015	Cab frame harness to CCM2	
X016	Main frame harness to CCM2	225414C1
X017	Front frame harness to CCM2	225414C1
X018	Cab main harness to CCM1	
X019	Main frame harness to CCM1	225414C1
X020	Front frame harness to CCM1	225414C1
X021	Front frame harness to feeder valve stack	319148A1
X022	Main frame harness to valve stack	225389C1
X023	Front frame harness to lower frame harness	
X024	Main frame (MF) harness to straw hood (SW) front harness	373357A1 (MF) 374973A1 (SW)
X025	Expansion (EX) harness to straw hood (SW) harness	291659A1 (EX) 373356A1 (SW)
X026	Right console harness to right hand module	
X027	Right console harness to right hand module	
X028	Propulsion handle harness to right hand module	
X030	Right console harness to right hand module	
X031	Cab main harness to front frame (FF) harness	373356A1 (FF)
X032	Feeder harness to header harness	
X033	Cab main harness to steering column harness	
X034	Main frame harness to expansion harness	225388C1 (MF) 225389C1 (EX)
X034A	Main frame harness to expansion harness	225389C1 (MF) 225388C1 (EX)
X036	Cab roof harness to outer roof (OR) harness	291662A1 (OR)
X048	Right console harness to gear select switch S-24	

Connector Reference Table		
Connector ID	Description	Connector Part Number
X055	Right console harness to separator engage switch S-30	245432C1
X056	Right console harness to feeder engage switch S-31	245432C1
X057	Right hand console harness to ground speed potentiometer R-04	245432C1
X058	Right console harness to audio alarm	
X059	Right console harness to propulsion handle	280458A1
X064	Cab main harness to adapter display harness	
X065	diagnostic and maintenance	
X066	Cab main harness to cold start indicator E-36	
X067	Cab main harness to accessory socket J-06	
X068	Cab main harness to key switch S-02	
X069	Cab main harness to lighter R-08	
X070	Cab main harness to lighter backlight R-08	
X071	Straw hood (SW) harness to straw hood rear harness	291661A1 (SW)
X072	Straw hood harness to lower frame rear harness	
X073	Cab main harness to seat switch S-05/S-66	
X074	Cab main harness to seat	
X075	Cab main harness to accessory outlet J-08	
X076	Cab main harness to accessory outlet J-08	
X077	Cab main harness to cab ground 3	
X081	Feeder harness to lateral tilt potentiometer R-02	276424A1
X084	Lower frame harness to LH brake wear switch S-55	
X085	Lower frame harness to RH brake wear switch S-56	
X087	Lower frame harness to ground speed potentiometer	225316C1
X088	Lower frame harness to shoe leveling actuator M-03	182081A1
X089	Lower frame harness to cleaning fan RPM B-16	225295C1
X091	Lower frame harness to hydrostat motor temp B-46	
X092	Lower frame harness to pressure release L-05	245482C1
X093	Lower frame harness to Trans shift position B-37	225351C1
X094	Lower frame harness to transmission shift motor M-02	182069A1
X098	Gearbox harness to low control pressure B-35	198456A1
X100	Gearbox harness to ground speed hydrostat L-23	245486C1
X103	Gearbox harness to hyd oil reservoir temp B-18	194788A1
X104	Gearbox harness to hydraulic reservoir level S-33	245482C1
X105	Grain tank harness to unload tube light harness	
X106	Straw hood rear harness to LH rear work light E-27	
X107	Grain tank harness to grain bin 3/4 full S-28	
X108	Grain tank harness to grain tank light E-30	
X109	Grain tank harness to grain tank full S-29	
X110	Straw hood rear harness to RH rear work light E-28	
X111	Outer roof harness to LH mirror & side light jumper harness	225351C1
X112	Outer roof harness to LH cab outer work light E-15	
X113	Outer roof harness to LH front beacon light	

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

Connector Reference Table		
Connector ID	Description	Connector Part Number
X114	Outer roof harness to LH cab mid work light E-19	225316c1
X115	Outer roof harness to LH cab inner work light E-17	
X116	Outer roof harness to wiper motor M-25	239451A1
X117	Outer roof harness to RH cab inner work light E-18	
X118	Outer roof harness to RH cab mid work light E-20	
X119	Outer roof harness to RH front beacon light E-32	225316C1
X120	Outer roof harness to RH cab outer work light E-16	
X121	Outer roof harness to RH mirror and side light jumper harness	225351C1
X122	Cab roof harness to rear right Speaker H-06	
X123	Cab roof harness to rear left speaker H-04	
X124	Cab roof harness to cab roof ground 4	
X125	Cab roof harness to tank extension switch S-42	
X126	cab roof harness to mirror adjust switch S-27	
X127	Cab roof harness to mirror heat switch S-19	
X128	Cab roof harness to HVAC A=09/A-20	
X129	Cab roof harness to dome light E-34	
X130	Cab roof harness to beacon light switch S-41	
X131	Cab roof harness to rear work light switch S-44	
X132	Cab roof harness to front work light switch S-43	
X133	Cab roof harness to splice block C W-03	
X134	Cab roof harness to washer switch S-38	
X135	Cab roof harness to wiper switch S-20	
X136	Cab roof harness to left front speaker H-05	
X137	Cab roof harness to LH door switch S-40	
X138	Cab roof harness to console light E-35	
X139	Cab roof harness to front right speaker H-07	
X141	Cab roof harness - Future option	
X142	Cab roof harness - Future option	
X149	Air conditioning harness to cab temp sensor B-26	
X150	Air conditioning harness to evaporator temp sensor B-28	
X151	Air conditioning harness to water valve	
X152	Air conditioning harness to main blower harness	
X155	Main blower (manual) M-17 Ground	
X156	Main Blower	
X157	Main blower (manual) M-17 Med	
X158	Main blower (manual) M-17 low	
X159	Cab roof harness - Future option	
X160	Main frame harness to LH front hazard light	225295C1
X161	Main frame harness to LH front service socket J-02	877291R1
X163	Main frame harness to LH lower work light E-23	237661A1
X164	Main frame harness to LH road light (EU) E-13	261702C1
X165	Main frame harness to RH front hazard light	225295C1
X166	Main frame harness to RH Service socket J-01	877291R1

<b>Connector Reference Table</b>		
<b>Connector ID</b>	<b>Description</b>	<b>Connector Part Number</b>
X168	Main frame harness to RH lower work light E-24	237661A1
X169	Main frame harness to RH road light (EU) E-14	261702C1
X170	Main frame harness to lateral inclination B-02	225295C1
X171	Main frame harness to wiper washer motor M-24	
X172	Main frame harness to horn H-02	259097A1
X173	Main frame harness to brake pressure S-39	259097A1
X174	Main frame harness to feeder angle R-03	276424A1
X175	Main frame harness to front frame ground 2	
X177	gearbox harness to rotor RPM B-01	225295C1
X178	Cab roof harness to switch bypass fuses F-64 or mirror select switch S-57	
X181	Main frame harness to sieve shake RPM B-56	225316C1
X182	Main frame harness to clean grain elevator RPM B-08	225316C1
X183	Main frame harness to fuel pump M-23	182069A1
X184	Main frame harness to fuel level R-01	225316C1
X186	Main frame harness to tailing RPM B-39	225316C1
X188	Main frame harness to right rotor loss B-20	225316C1
X189	Concave extension harness to concave position	291719A1
X190	Concave extension harness to concave clearance motor M-04	182069A1
X191	Main frame harness to Left rotor loss B-19	225316C1
X192	Iveco Harness to ECU connector 'A'	
X193	Engine harness to ECU connector 'B'	
X194	Engine harness to engine service socket J-05	877291R1
X195	Main frame harness to tank extensions harness	239451A1
X197	Engine harness to Iveco harness	
X199	Engine harness to start relay K-36	
X200	Engine harness to start relay K-36	
X202	Engine harness to air filter switch S-61	291718A1
X205	Engine harness to 24V starter M-29	
X211	Engine harness to grid heater relay K-39	
X213	Engine harness to alternator G-01	
X215	Engine harness to A/C clutch L-07	245480C1
X216	Engine harness to A/C high pressure S-47	292549A1
X217	A/C harness to A/C low pressure (ATC) S-77	
X218	Main frame harness to flip up lighting harness	225316C1 (MF)
X221	Precision farming harness to moisture sensor B-12	225351C1
X222	Precision farming harness to sample motor M-28	239451A1
X223	Precision farming harness to yield sensor B-57	225350C1
X225	Straw hood front harness to upper sieve rear adjust S-35	276426A1
X226	Straw hood front harness to lower sieve rear adjust S-46	276426A1
X227	Lower frame rear harness to upper sieve actuator M-06	
X228	Lower frame rear harness to lower sieve actuator M-07	
X231	Straw hood front harness to rear frame ground 1	

Connector Reference Table		
Connector ID	Description	Connector Part Number
X232	Lower frame harness to sieves loss B-21	
X233	Lower frame harness to rear wheel assist L-26	
X234	Straw hood harness to sieve light front E-37	237661A1
X235	Straw hood front harness to chaff spreader L-28	225316C1
X236	Straw hood front harness to LH side service socket J-04	877291R1
X237	Straw hood front harness to sieve light switch S-54	24582C1
X238	Straw hood front harness to PTO box filter bypass S-34	245482C1
X239	Straw hood front harness to returns filter bypass S-32	245482C1
X240	Straw hood rear harness to spreader position B-11	225316C1
X242	Straw hood rear harness to LH flashing lamp (NA) E-07	
X244	Straw hood rear harness to unload tube cradle B-38	225316C1
X245	Straw hood rear harness to RH flashing lamp (NA) E-08	
X247	Straw hood rear harness to rear beacon light E-33	225316C1
X248	Straw hood rear harness to back up alarm H-08	
X251	Straw hood rear harness to rear ladder B-22	225316C1
X252	Straw hood rear harness to RH side service socket J-03	877291R1
X255	Steering column harness to flasher module	
X256	Cab main harness to road light switch S-26	
X257	Steering column harness to turn indicator E-09	
X258	Steering column harness to high beam indicator E-10	
X259	Steering column harness to hazard switch S-25	
X279	Main frame harness to header lift pressure B-29	
X284	Feeder harness to feeder RPM B-14	
X285	Straw hood front harness to trailer outlet J-09	
X286	Engine harness to 24v start relay	
X287	Outer roof harness to German third mirror	
X288	Tank extension harness to covers closed B-47	
X289	Tanks Extensions harness to covers motor M-12	
X293	Lower frame harness to 2 speed powered rear axle	
X294	Lower frame harness to LH brake wear switch S-55	
X295	Lower frame harness to RH brake wear switch S-56	
X296	Cab roof harness to dome light E-34	
X297	LH mirror & side light jumper harness to LH side work light E-25	
X298	RH mirror & side lighth jumper harness to RH side work light E-26	
X299	Straw hood rear harness to LH brake / tail lamp (NA) E-11	
X300	Straw hood rear harness to RH brake / tail lamp (NA) E-12	
X301	Straw hood rear harness to LH rear flashing lamp (EU) E-05	
X302	Straw hood rear harness to RH rear flashing lamp (EU) E-06	
X311	Iveco harness to engine oil temperature B-03	
X314	Cab roof harness to radio A-04	
X315	Cab roof harness to radio A-04	
X319	Adapter display harness to ICDU A-02	

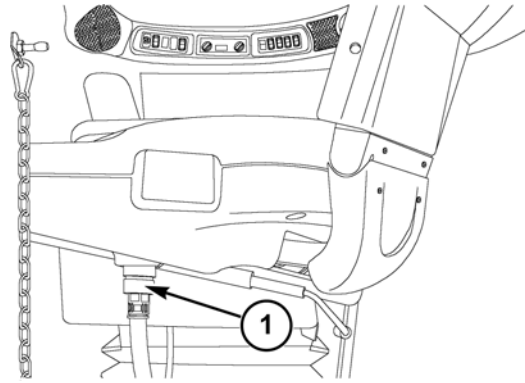
<b>Connector Reference Table</b>		
<b>Connector ID</b>	<b>Description</b>	<b>Connector Part Number</b>
X320	Adapter display harness to shaft speed monitor A-03	
X321	Main frame harness to GPS antenna A-11	
X322	Unload tube light harness to unload tube light E-29	
X327	Cab main harness to brake fluid level switch S-49	
X328	Cab main harness to brake fluid level switch S-49	
X329	Main frame harness to brake limiting L-32	
X330	Engine harness to air filter resistor R-15	
X331	Flip up lighting harness to flip up low beam relay K-40	
X332	Flip up lighting harness to flip up high beam relay K-41	
X333	Flip up lighting harness to LH flip up road light E-47	
X334	Flip up lighting harness to RH flip up road light E-48	
X335	Flip up lighting harness to LH road light E-13	
X336	Flip up lighting harness to RH road light E-14	
X337	Iveco harness to engine oil harness B-52	
X338	Iveco harness to fuel filter switch S-62	
X339	Under shield lighting harness to under shield light switch S-63	
X340	Engine lighting harness to engine light switch S-64	
X342	Main frame harness to under shield lighting harness	
X343	Straw hood rear harness to engine lighting harness	
X345	Under shield lighting harness to LH front shield light E-42	
X346	Under shield lighting harness to LH rear shield light E-43	
X347	Under shield lighting harness to RH front shield light E-44	
X348	Under shield lighting harness to RH rear shield light E-45	
X349	Engine lighting harness to engine light E-46	
X362	RH license plate lamp (EU) E-57	
X363	LH license plate lamp (EU) E-58	
X368	Main frame harness to park brake pressure B-53	
X369	Iveco harness to engine flywheel RPM B-05	
X370	Iveco harness to engine camshaft B-07	
X371	Iveco harness to boost pressure B-23	
X372	Iveco harness to fuel temperature B-36	
X373	Iveco harness to coolant temperature B-44	
X374	Iveco harness to air temperature B-54	
X375	Iveco harness to engine brake L-33	
X376	Iveco harness to fuel actuator 1 L-34	
X377	Iveco harness to fuel actuator 2 L-35	
X378	Iveco harness to fuel actuator 3 L-36	
X379	Iveco harness to fuel actuator 4 L-37	
X380	Iveco harness to fuel actuator 5 L-38	
X381	Iveco harness to fuel actuator 6 L-39	
X383	Straw hood rear harness to spreader RPM B-55	
X386	Right console harness to front switch panel A-13	
X387	Right console harness to rear switch panel A-18	

<b>Connector Reference Table</b>		
<b>Connector ID</b>	<b>Description</b>	<b>Connector Part Number</b>
X388	Right console harness to engine throttle Potentiometer R-21	
X396	Main blower harness to blower speed control (ATC) A-14	
X397	Air conditioning harness to ATC control module A-15	
X398	Air conditioning harness to ATC control module A-15	
X399	Main frame harness to PTO box lube pressure B-60	
X400	Right console harness to feeder engage diodes D-01	
X401	Gearbox harness to feeder engine to ring clutch L-47	
X402	Gearbox harness to feeder pump swash solenoids L-48/L-49	
X403	Gearbox harness to feeder ring to frame brake L-50	
X404	Right console harness to header speed potentiometer R-18	
X405	Right console harness to resistor module R-23	
X406	Right console harness to reel speed potentiometer R-22	
X408	Gearbox harness to rotor pump swash solenoids L-40/L-41	
X409	Gearbox harness to rotor ring to frame brake :-46	
X410	Gearbox harness to rotor engine to ring clutch L-45	
X411	Main frame harness to chopper RPM B-10	
X412	Expansion harness to YMIU module A-12	
X417	Outer roof harness to LH HID field light E-60	
X418	Outer roof harness to RH HID field light E-61	
X428	Gearbox harness to rotor hydrostat RPM B-58	
X438	Expansion harness to YMIU module A-12	
X439	Engine harness to coolant level switch S-67	
X442	Expansion harness to precision farming harness; Bypass motor / Yield sensor	
X443	Expansion harness to precision farming harness; Moisture sensor	
X444	Main frame harness to fan drive solenoid L-44	
X445	Main frame harness to tailing volume R-24	
X446	Adapter display harness to cab CAN termination R-17	
X447	Straw hood front harness to sieve light rear E-59	
X449	Gearbox harness to unload tube clutch L-08	
X450	Gearbox harness to beater/chopper clutch L-22	
X451	Air conditioning harness (manual) to A/C low pressure S-48	
X452	Air conditioning harness (manual) to freeze switch S-76	
X453	Air conditioning harness (manual) to freeze switch S-76	
X456	Main frame harness to concave extension harness	
X457	Main frame harness to park brake disengage L-10	
X470	Air conditioning harness to separator blower M-18	
X471	Iveco harness to injector harness	

# Wiring harness - Component diagram (A.30.A.88 - C.20.A.71)

AFX8010

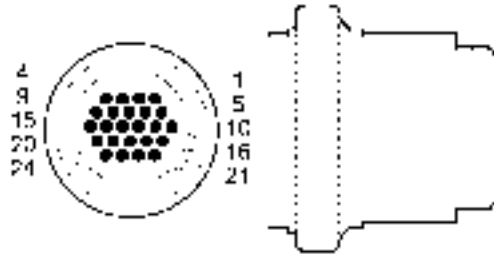
## Connector X001 - Cab Main Harness to Right Console Harness



40031029A4 1

**Bottom of right hand console**

1. Connector X001



AMP\_206837-1 2



AMP\_206838-1 3

Cavity	Circuit ID	Description
1	1212 (YE)	Separator switch S-30 to CCM3 J1-17
2	051 (RD)	Fuse F-39 to RHM X026 pin 13
3	108 (OR)	Fuse F-48 to console switches
4	open	
5	open	
6	127 (YE)	CAN High
7	128 (GN)	CAN Low
8	129 (YE)	CAN High



Cavity	Circuit ID	Description
9	130 (GN)	CAN Low
10	135 (RD)	CAN Tx to RHM X026 pin 12
11	136 (BK)	CAN Rx to RHM X026 pin 3
12	122 (BK)	Splice block C, W-03 to ground 3
13	147 (YE)	Separator switch S-30 to CCM2 J1-7 & CCM3 J1-7
14	open	
15	112 (YE)	Feeder Engage switch S-31 to CCM1 J1-7
16	open	
17	113 (YE)	Neutral switch S-22 to CCM2 J1-17
18	093 (WH)	Neutral switch S-22 to Neutral Start relay K-23
19	225 (YE)	Feeder Engage Diodes D-01 to CCM1 J1-17
20	1211 (YE)	Feeder Engage switch S-31 to Feeder Disengage relay K-19
21	open	
22	open	
23	open	
24	open	

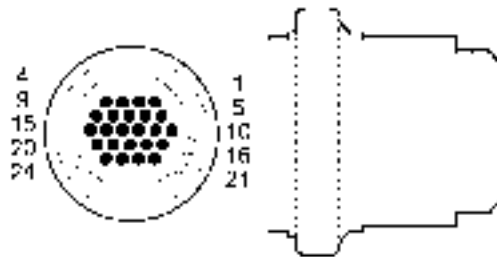
**Connector X002 - Cab Main Harness to Cab Roof Harness**



50032236A4 4

**Top left rear corner of cab, behind speaker**

1. Connector X002
2. Connector **X003**



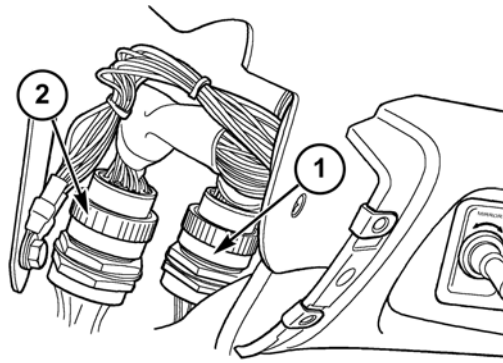
AMP\_206837-1 5



AMP\_206838-1 6

Cavity	Circuit ID	Description
1	045 (OR)	Fuse F-49 to HVAC & light switches
2	058 (PU)	Fuse F-06 to LH Outer Cab light E-15
3	072 (PU)	Side work light relay K-35 to RH side work light E-26
4	059 (PU)	Fuse F-07 to RH Outer Cab light E-16
5	open	
6	048 (RD)	Fuse F-35 to Radio A-04 memory
7	063 (PU)	Header work lights relay K-22 to Cab mid work lights E-19, E-20
8	079 (PU)	Fuse F-09 to washer and mirror switches
9	081 (OR)	Fuse F-11 to Radio A-04
10	082 (OR)	Fuse F-12 to future options (right side DIN slots)
11	083 (OR)	Fuse F-13 to accessory socket J-07
12	166 (YE)	Beacon light switch S-41 to CCM2 J1-2
13	167 (YE)	Tank extensions switch S-42 to CCM2 J1-3
14	272 (OR)	Wiper relay K-06 to wiper switch S-20
15	170 (YE)	Rear work lights switch S-44 to CCM1 J1-15
16	171 (YE)	Front work lights switch S-43 to CCM1 J1-3
17	278 (WH)	Washer switch S-38 to wiper washer motor M-24
18	232 (PU)	CCM2 J1-11 to splice block C, W-03 (backlighting)
19	965 (RD)	Fuse F-52 to dome light E-34
20	076 (PU)	Timed side work light relay K-34 to LH side work light E-25
21	579 (PU)	Beacon light relay K-29 to front beacon lights E-31, E-32
22	open	
23	open	
24	open	

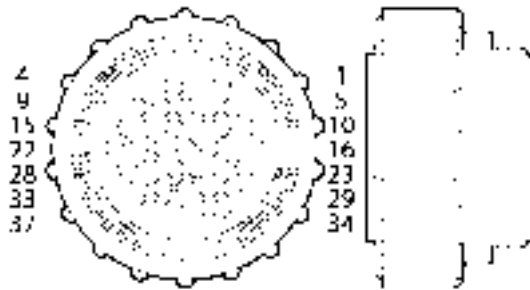
**Connector X003 - Cab Main Harness to Cab Roof Harness**



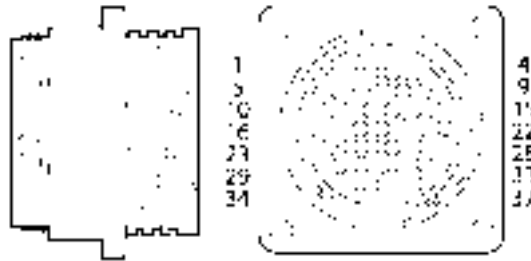
50032236A4 7

**Top left rear corner of cab, behind speaker**

1. Connector **X002**
2. Connector **X003**



AMP\_206150-1 8



AMP\_206151 9

Cavity	Circuit ID	Description
1	131 (YE)	CAN High
2	132 (GN)	CAN Low
3	900 (WH)	HVAC module to A/C Clutch relay K-10
4	137 (YE)	CAN High
5	902 (WH)	HVAC module to Separator Blower relay K-09
6	138 (GN)	CAN Low
7	904 (WH)	HVAC module to main blower relay low K-11
8	905 (WH)	HVAC module to main blower relay med K-12
9	906 (WH)	HVAC module to main blower relay high K-13

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

Cavity	Circuit ID	Description
10	907 (BL)	HVAC module to ATC control module A-15 (ATC) / A/C low pressure switch S-48 and Freeze switch S-76 (MAN)
11	908 (YE)	HVAC module to ATC control module A-15 (ATC) / A/C low pressure switch S-48 and Freeze switch S-76 (MAN)
12	909 (BL)	HVAC module to ATC control module A-15
13	910 (YE)	HVAC module - not used
14	911 (BL)	HVAC module to ATC control module A-15
15	912 (YE)	HVAC module to ATC control module A-15
16	913 (BL)	HVAC module to ATC control module A-15, temperature sensors, and A/C low pressure switch
17	914 (YE)	HVAC module to ATC control module A-15
18	939 (YE)	HVAC module - not used
19	934 (BL)	HVAC module to A/C high pressure switch S-47
20	917 (YE)	HVAC module to A/C high pressure switch S-47
21	918 (BK)	HVAC module to ATC control module A-15
22	919 (YE)	HVAC module to ATC control module A-15
23	920 (OR)	HVAC module to ATC control module A-15
24	978 (PU)	Road lights relay K-27 to cab inner work lights E-17, E-18 - low beam
25	922 BK)	HVAC module to cab ground 3 (ATC) / water valve M-16 (MAN)
26	923 (YE)	HVAC module to ATC control module A-15 (ATC) / water valve M-16
27	924 (OR)	HVAC module to ATC control module A-15 (ATC) / water valve M-16
28	open	
29	open	
30	981 (PU)	Road lights relay K-27 to cab inner work lights E-17, E-18 -high beam
31	967 (YE)	Time delay relay K-20 to LH door switch S-40
32	open	
33	open	
34	open	
35	open	
36	open	
37	open	

**Connector X004 - Cab Main Harness to Main Frame Harness**



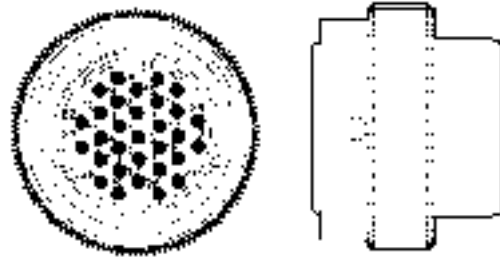
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**Left rear corner of cab, near park brake valve**

1. Connector X004



DE\_HDP24-24-31P 11

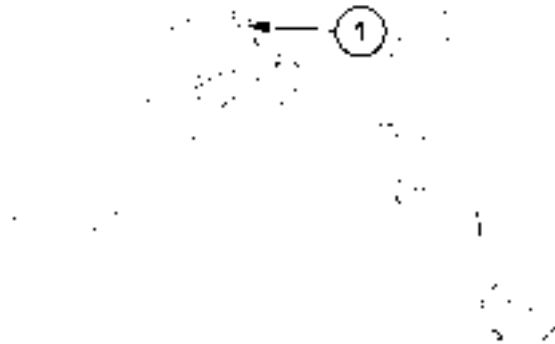


DE\_HDP26-24-31S 12

Cavity	Circuit ID	Description
1	032 (OR)	Fuse F-43 to CCM1 J2-2
2	033 (OR)	Fuse F-43 to CCM1 J2-9
3	1159 (WH)	not used
4	035 (OR)	Fuse F-47 to YMIU A-12 and sample motor M-28
5	036 (OR)	Fuse F-47 to CCM3 J2-2 & J2-9
6	037 (OR)	Fuse F-36 to CCM2 J2-2
7	1214 (RD)	Fuse F-34 to Under shield light switch S-63
8	039 (OR)	Fuse F-37 to CCM2 J2-9
9	065 (PU)	Lower work lights relay K-30 to lower work lights E-23, E-24 and grain tank light E-30
10	067 (PU)	Rear work lights relay K-31 to rear work lights E-27, E-28
11	068 (RD)	Fuse F-15 to service sockets J-01, J-02, J-03, J-04, J-05
12	578 (PU)	Beacon light relay K-29 to rear beacon light E-33
13	875 (BL)	Feeder disengage relay K-19 to CCM1 J2-40
14	1210 (BL)	Feeder disengage relay K-19 to Feeder Engine to Ring clutch L-47
15	077 (PU)	Unload tube light relay K-32 to unload tube light E-29
16	078 (PU)	Brake lights relay K-33 to brake lights E-05/E-06/E-11/E-12 and trailer outlet J-09
17	827 (YE)	ECU X193 pin 13 to DAM connector X065 pin E
18	193 (WH)	Road light switch S-26 to horn H-02
19	856 (WH)	Fuel pump relay K-07 to Fuel pump M-23
20	814 (WH)	CCM2 J1-12 to cold start indicator E-36
21	604 (OR)	Fuse F-14 to sieve light switch S-54
22	243 (PU)	Flasher module A-05 to LH flashing lamp E-07
23	244 (PU)	Flasher module A-05 to RH flashing lamp E-08

Cavity	Circuit ID	Description
24	808 (YE)	ECU power relay K-14 to ECU X193 pin 27
25	809 (WH)	ECU power relay K-14 to ECU X193 pins 3 & 4
26	525 (WH)	Not used
27	821 (WH)	Not used
28	829 (WH)	Not used
29	523 (WH)	Concave / covers relay K-16 to CCM1 J2-21
30	695 (WH)	Concave / covers relay K-16 to covers motor M-12
31	696 (WH)	Concave / covers relay K-16 to concave clearance motor M-04

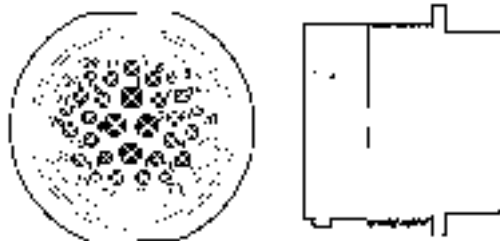
**Connector X005 - Cab Main Harness to Main Frame Harness**



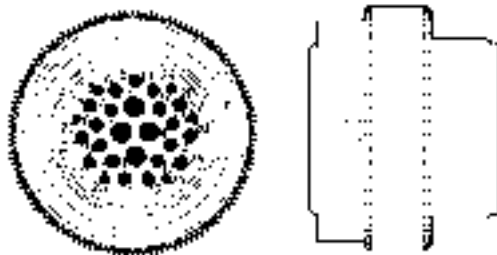
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**Left rear corner of cab, near park brake valve**

1. Connector X005



DE\_HDP24-24-29P 14

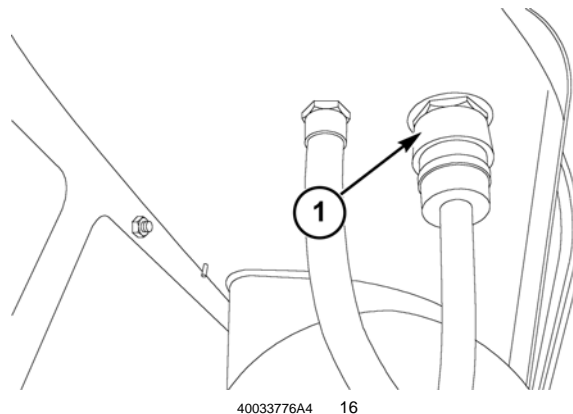


DE\_HDP26-24-29S 15

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

Cavity	Circuit ID	Description
1	025 (RD)	Fuse F-23 to CCM2 J2-11
2	026 (RD)	Fuse F-24 to CCM1 J2-11
3	030 (RD)	Fuse F-26 to CCM3 J3-29 & 30
4	031 (RD)	Fuse F-27 to CCM3 J2-11 & J3-7
5	013 (OR)	Fuse F-45 to Feeder RPM B-14, Rotor Hydrostat RPM B-58, Cleaning Fan RPM B-16, Spreader RPM B-55 & GPS Antenna A-11
6	092 (WH)	Neutral start relay K-23 to start relay K-36
7	176 (PU)	Fuse F-21 to RH marker lights E-04, E-49, E-53, E-12, E-06 & trailer outlet J-09
8	177 (PU)	Fuse F-20 to LH marker lights E-03, E-50, E-54, E-39, E-11, E-05 & trailer outlet J-09
9	178 (WH)	A/C clutch relay K-10 to A/C clutch L-07
10	186 (PU)	High beam relay K-04 to road lights E-13, E-14 (EU only)
11	196 (PU)	Flasher module A-05 to RH flashing lamps E-02, E-04, E-06, E-51 & trailer outlet J-09
12	200 (PU)	Flasher module A-05 to LH flashing lamps E-01, E-03, E-05, E-52 & trailer outlet J-09
13	237 (PU)	Low beam relay K-05 to road lights E-13, E-14 (EU only)
14	278 (WH)	Washer switch S-38 to wiper washer motor M-24
15	786 (WH)	Upper / lower sieve relay K-18 to CCM3 J2-21
16	790 (WH)	Upper / lower sieve relay K-18 to lower sieve actuator M-07
17	792 (WH)	Upper / lower sieve relay K-18 to upper sieve actuator M-06
18	open	
19	1215 (RD)	Fuse F-34 to engine light switch S-64
20	839 (WH)	CCM2 J1-12 to cold start indicator E-36
21	open	
22	open	
23	open	
24	open	
25	859 (OR)	Key switch S-02 to ECU X193 pin 15
26	open	
27	915 (YE)	Not used
28	916 (BL)	HVAC module to A/C high pressure switch S-47
29	917 (YE)	HVAC module to A/C high pressure switch S-47

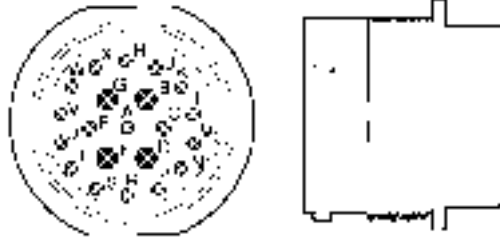
**Connector X006 - Cab Main Harness to A/C Harness**



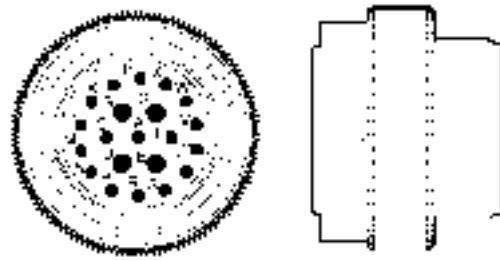
40033776A4 16

**Left rear corner of cab, outside under shelf**

1. Connector X006



DE\_HDP24-24-21P 17



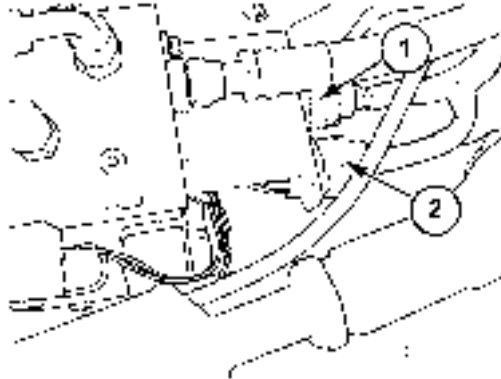
DE\_HDP26-24-21S 18

Cavity	Circuit ID	Description
A	907 (BL)	HVAC module A-20 to ATC control module A-15 (ATC) / A/C low pressure switch S-48 and Freeze switch S-76 (MAN)
B	926 (WH)	Separator blower relay K-09 to separator blower M-18
C	908 (YE)	HVAC module A-20 to ATC control module A-15 (ATC) / A/C low pressure switch S-48 and Freeze switch S-76 (MAN)
D	928 (WH)	Main blower relay low K-11 to main blower M-17 (MAN) / not used (ATC)
E	929 (WH)	Main blower relay med K-12 to main blower M-17 (MAN) / not used (ATC)
F	909 (BL)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
G	946 (WH)	Main blower relay high to main blower M-34 and blower speed control A-14 (ATC) / main blower M-17 (MAN)
H	910 (YE)	not used
J	911 (BL)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
K	912 (YE)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
L	913 (BL)	HVAC module A-20 to ATC control module A-15, temperature sensors, and A/C low pressure switch (ATC) / not used (MAN)
M	914 (YE)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
N	918 (BK)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
P	919 (YE)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
R	920 (OR)	HVAC module A-20 to ATC control module A-15 (ATC) / not used (MAN)
S	922 (BK)	HVAC module A-20 to cab ground 3 (ATC) / water valve M-16 (MAN)
T	923 (YE)	HVAC module A-20 to ATC control module A-15 (ATC) / water valve M-16 (MAN)



Cavity	Circuit ID	Description
U	924 (OR)	HVAC module A-20 to ATC control module A-15 (ATC) / water valve M-16 (MAN)
V	1584 (YE)	not used
W	1583 (BL)	not used
X	open	

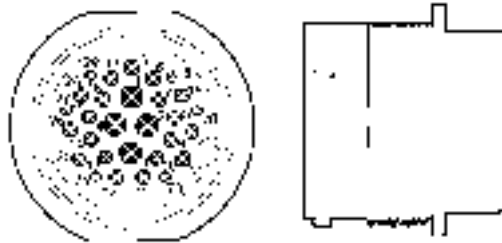
**Connector X007 - Front Frame Harness to Feeder Harness**



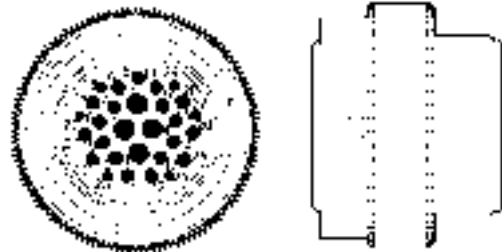
10031037A5 19

**Behind feeder valve manifold on left side of feeder**

1. Connector X007
2. Connector X021



DE\_HDP24-24-29P 20

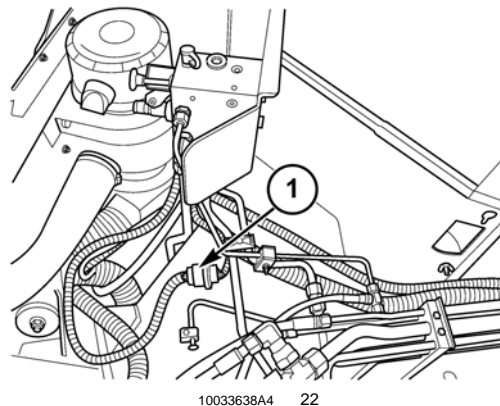


DE\_HDP26-24-29S 21

Cavity	Circuit ID	Description
1	open	
2	open	
3	712 (WH)	CCM2 J3-8 to draper header solenoid L-53

Cavity	Circuit ID	Description
4	1223 (PK)	CCM2 J3-24 to header type module R-20
5	613 (PU)	Flasher module A-05 to LH header flashing light E-01 (NA only)
6	618 (PU)	Flasher module A-05 to RH header flashing light E-02 (NA only)
7	489 (YE)	Feeder RPM B-14 to CCM1 J3-14
8	open	
9	open	
10	open	
11	open	
12	749 (BL)	Sensor ground to CCM1 J3-18
13	750 (BL)	Header type module R-20 to CCM2 J3-18
14	open	
15	738 (YE)	Left height/tilt R-12 to CCM1 J3-24
16	739 (YE)	Right height/tilt R-13 to CCM1 J3-22
17	741 (YE)	Lateral tilt pot R-02 to CCM1 J3-17
18	752 (PU)	Road light switch S-26 to header marker lights E-40, E-41 (EU only)
19	711 (GY)	CCM2 J3-6 to draper header solenoid L-53
20	1103 (YE)	Center height/tilt R-19 to CCM1 J3-34
21	776 (BK)	Ground path for flip up road light relays K-40, K-41
22	757 (PK)	CCM1 J3-26 to lateral float pot R-02 and height/tilt sensors R-12, R-13, R-19
23	open	
24	open	
25	767 (BK)	Header lights to frame ground 2
26	1260 (OR)	Fuse F-45 to feeder RPM B-14
27	1116 (YE)	CCM2 J3-26 to header type module R-20
28	1201 (BK/WH)	Feeder RPM B-14 to battery clean ground
29	1102 (YE)	not used

**Connector X008 - Main Frame Harness to Front Frame Harness**

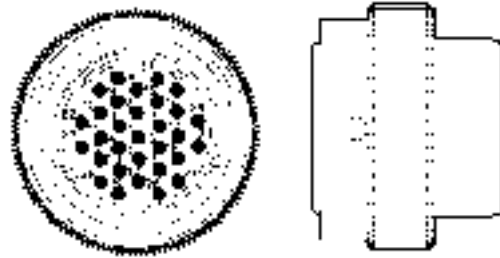


**Left front corner of main frame**

1. Connector X008



DE\_HDP24-24-31P 23



DE\_HDP26-24-31S 24

Cavity	Circuit ID	Description
1	759 (WH)	CCM1 J3-4 to header height accumulator L-06
2	1119 (BL)	CCM2 J3-12 to signal valve L-43
3	722 (YE)	CCM1 J3-25 to header lift pressure B-29
4	open	
5	1503 (YE)	CCM1 J2-26 to brake wear switches S-55, S-56 and brake fluid level switch S-49
6	415 (YE)	Spreader position B-11 to CCM1 J3-37
7	1197 (YE)	Park brake pressure B-53 to CCM2 J3-34
8	485 (YE)	Unload cradle B-38 to CCM1 J3-36
9	1053 (WH)	CCM1 J3-15 to Feeder Ring to Frame clutch L-50
10	1051 (WH)	CCM1 J3-21 to feeder pump swash minus L-48
11	879 (GY)	CCM2 J3-21 to ground speed hydrostat L-23
12	880 (WH)	CCM2 J3-31 to ground speed hydrostat L-23
13	555 (BL)	CCM1 J2-10 to lateral tilt solenoids L-18, L-19
14	open	
15	613 (PU)	Flasher module A-05 to LH header flashing lamp E-01 (NA only)
16	618 (PU)	Flasher module A-05 to RH header flashing lamp E-02 (NA only)
17	open	
18	1205 (OR)	Fuse F-45 to Feeder RPM B-14 and Cleaning Fan RPM B-16
19	open	
20	open	
21	open	
22	881 (BL)	CCM2 J3-35 to ground speed hydrostat L-23
23	1050 (WH)	CCM1 J3-31 to feeder pump swash plus L-49
24	1201 (BK/WH)	Feeder RPM B-14 to battery clean ground

Cavity	Circuit ID	Description
25	open	
26	open	
27	435 (YE)	Covers closed B-47 to CCM1 J3-38
28	open	
29	776 (BK)	Ground path for flip up road light relays K-40, K-41
30	1164 (YE)	Tailing volume R-24 to CCM2 J3-22
31	open	

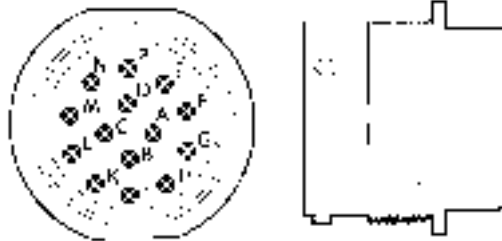
**Connector X009 - Main Frame Harness to Grain Tank Harness**



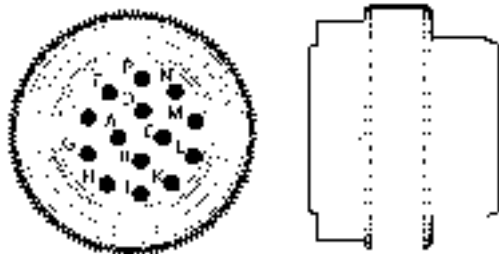
10010900A5 25

**Front left corner of grain bin and left rear corner of cab**

- Connector X009



DE\_HDP24-18-14P 26

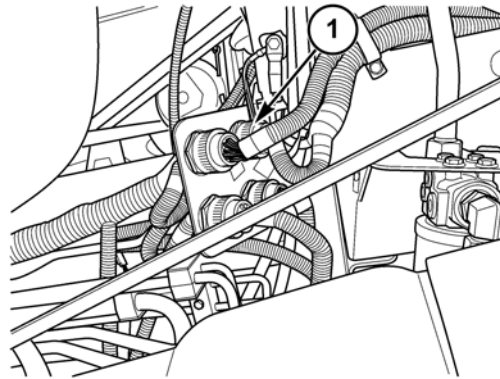


DE\_HDP26-18-14S 27

Cavity	Circuit ID	Description
A	open	
B	open	

Cavity	Circuit ID	Description
C	open	
D	077 (PU)	Unload tube light relay K-32 to unload tube light E-29
E	400 (YE)	Grain bin 3/4 full S-28 to CCM2 J2-22
F	open	
G	440 (PK)	CCM2 J2-31 to grain bin 3/4 full S-28
H	443 (BL)	Grain bin full S-29 to CCM2 J2-14
J	646 (PU)	Lower work lights relay K-30 to grain tank light E-30
K	668 (BK)	Grain tank and unload tube lights to frame ground 2
L	open	
M	open	
N	open	
P	530 (PU)	Road light switch S-26 to unload tube marker light E-39 (France only)

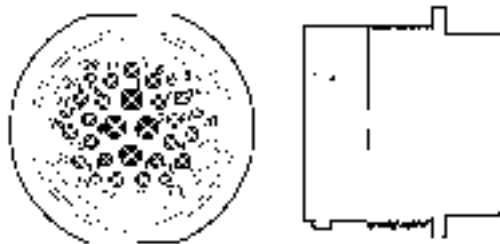
**Connector X010 (GREEN) - Main Frame Harness to Engine Harness**



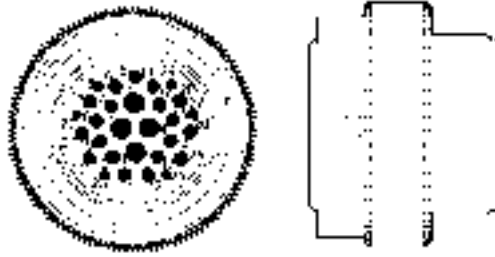
10033642A4 28

**Left side of frame, in front of PTO gearbox**

1. Connector X010



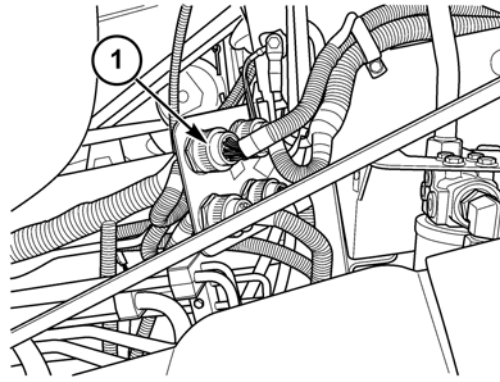
DE\_HDP24-24-29P 29



DE\_HDP26-24-29S 30

Cavity	Circuit ID	Description
1	open	
2	open	
3	open	
4	open	
5	092 (WH)	Neutral start relay K-23 to start relay K-36
6	419 (YE)	Engine oil pressure B-52 to CCM2 J2-33
7	814 (WH)	CCM2 J1-12 to cold start indicator E-36
8	420 (YE)	Air filter switch S-61 / air filter resistor R-15 to CCM2 J2-29
9	421 (YE)	Not used
10	504 (YE)	Engine oil temp B-03 to CCM2 J2-27
11	178 (WH)	A/C clutch relay K-10 to A/C clutch L-07
12	650 (RD)	Fuse F-15 to engine service socket J-05
13	463 (PK)	CCM2 J2-31 to engine oil pressure B-52 and air filter resistor R-15
14	468 (BL)	CCM2 J2-14 to engine oil temp B-03, fuel filter switch S-62, engine oil pressure B-52 and air filter switch S-61
15	open	
16	open	
17	827 (YE)	ECU X193 pin 13 to DAM connector X065 pin E
18	429 (YE)	Fuel filter switch S-62 to CCM2 J2-24
19	819 (YE)	CAN High
20	839 (WH)	CCM2 J1-12 to cold start indicator E-36 [NOTE: Wire is 814 (WH) on engine side of connector]
21	820 (GN)	CAN Low
22	916 (BL)	HVAC module to A/C high pressure switch S-47
23	859 (OR)	Key switch S-02 to ECU X193 pin 15
24	1216 (YE)	Coolant level switch S-67 to CCM1 J2-39
25	917 (YE)	HVAC module to A/C high pressure switch S-47
26	808 (YE)	ECU power relay K-14 to ECU X193 pin 27
27	1159 (WH)	Not used
28	809 (WH)	ECU power relay K-14 to ECU X193 pins 3 & 4
29	1202 (BK/WH)	Not used

**Connector X011 (YELLOW) - Main Frame Harness to Gearbox Harness**



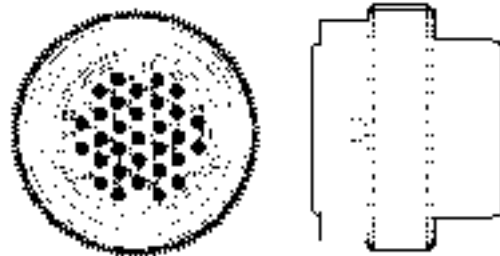
10033642B4 31

**Left side of frame, in front of PTO gearbox**

1. Connector X011



DE\_HDP24-24-31P 32

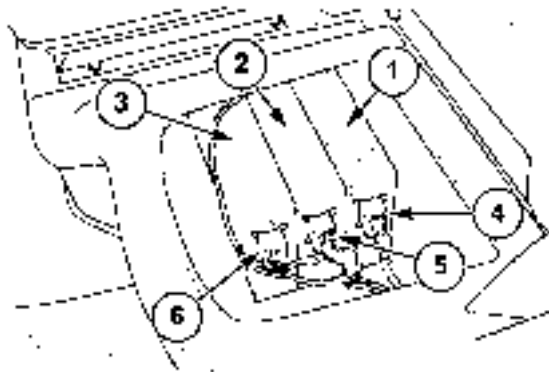


DE\_HDP26-24-31S 33

Cavity	Circuit ID	Description
1	1047 (WH)	CCM3 J3-21 to rotor pump swash minus L-41
2	1046 (WH)	CCM3 J3-31 to rotor pump swash plus L-40
3	424 (YE)	Hydraulic reservoir level S-33 to CCM2 J2-39
4	1048 (WH)	CCM3 J2-30 to rotor engine to ring gear clutch L-45
5	446 (YE)	Hydraulic reservoir temperature B-18 to CCM1 J2-24
6	open	
7	881 (BL)	CCM2 J3-35 to ground drive hydrostat L-23
8	488 (BL)	CCM1 J2-14 to hydraulic oil reservoir temperature B-18
9	1051 (WH)	CCM1 J3-21 to feeder pump swash minus L-48
10	1053 (WH)	CCM1 J3-15 to feeder ring to frame clutch L-50
11	1210 (BL)	Feeder disengage relay K-19 to Feeder Engine to Ring clutch L-47

Cavity	Circuit ID	Description
12	876 (WH)	CCM1 J2-30 to feeder engine to ring clutch L-47
13	877 (BL)	CCM2 J2-40 to beater / chopper clutch L-22
14	878 (WH)	CCM2 J2-30 to beater / chopper clutch L-22
15	879 (GY)	CCM2 J3-21 to ground speed hydrostat L-23
16	880 (WH)	CCM2 J3-31 to ground speed hydrostat L-23
17	1081 (BK/WH)	Clean ground for rotor RPM B-01 and rotor hydrostat RPM B-58
18	568 (WH)	CCM2 J2-4 to unload tube clutch L-08
19	601 (BL)	CCM2 J2-20 to unload tube clutch L-08
20	open	
21	486 (PK)	CCM2 J2-31 to low control pressure B-35
22	683 (BL)	CCM2 J2-14 to low control pressure B-35
23	1050 (WH)	CCM1 J3-31 to feeder pump swash plus L-49
24	1255 (OR)	Fuse F-45 to rotor RPM B-01 and rotor hydrostat RPM B-58
25	1069 (YE)	Rotor hydrostat RPM B-58 to CCM3 J3-14
26	1062 (BL)	CCM3 J2-40 to rotor engine to ring clutch L-45
27	1049 (WH)	CCM3 J3-3 to rotor ring to frame clutch L-46
28	1065 (BL)	CCM3 J2-10 to rotor pump swash plus L-40 & rotor pump swash minus L-41
29	1261 (YE)	Rotor RPM B-01 to CCM2 J2-37 and CCM3 J3-13
30	422 (YE)	Not used
31	423 (YE)	Low control pressure B-35 to CCM2 J2-19

**Connector X012 - Cab Main Harness to CCM3**

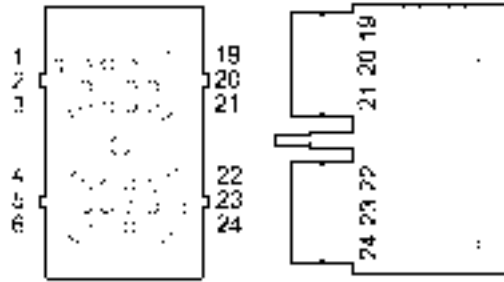


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**Inside cab, underneath instructional seat (remove storage bin)**

1. CCM1
2. CCM2
3. CCM3
4. Connector **X018**
5. Connector **X015**
6. Connector X012

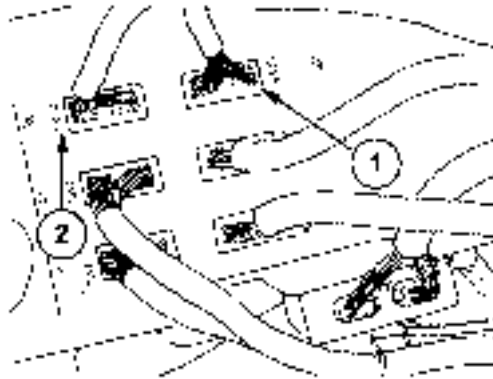




DE\_DRC16-24S 35

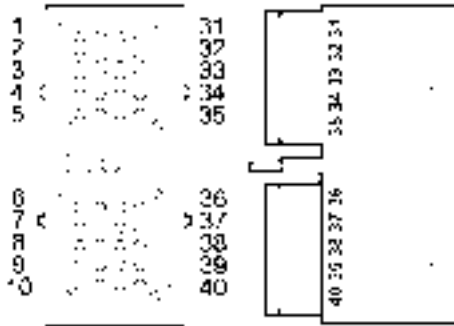
Cavity	Circuit ID	Description
1	049 (RD)	Keep alive power from fuse F-39
2	open	
3	open	
4	101 (OR)	Power from key switch S-02
5	open	
6	787 (WH)	Output to upper / lower sieve relay K-18
7	1061 (YE)	Signal from separator engage S-30
8	217 (BK)	To cab ground 3
9	open	
10	open	
11	open	
12	open	
13	134 (GN)	CAN low
14	133 (YE)	CAN high
15	open	
16	open	
17	1212 (YE)	Signal from separator engage S-30
18	open	
19	open	
20	open	
21	open	
22	open	
23	open	
24	open	

**Connector X013 (WHITE) - Expansion Harness to CCM3**



10033631C5 36

1. Connector X013 (WHITE)
2. Connector **X014** (DARK GREY)

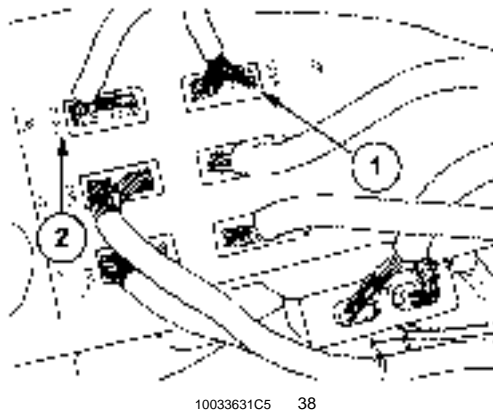


DE\_DRC16-40S 37

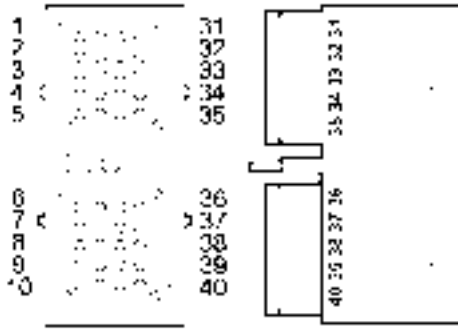
Cavity	Circuit ID	Description
1	785 (GY)	Output to upper sieve actuator M-06 and lower sieve actuator M-07
2	505 (OR)	Power from fuse F-47
3	520 (BK)	To frame ground 2
4	open	
5	open	
6	open	
7	771 (WH)	Output to LH vertical knife relay K-43
8	772 (WH)	Output to RH vertical knife relay K-42
9	506 (OR)	Power from fuse F-47
10	1065 (BL)	Reference ground from rotor pump swash plus L-40 & rotor pump swash minus L-41
11	511 (RD)	Power from fuse F-27
12	690 (BK)	To frame ground 2
13	837 (WH)	Output to sample motor M-28
14	439 (BL)	Reference ground from upper sieve actuator M-06 and lower sieve actuator M-07
15	open	
16	open	
17	540 (YE)	Signal from upper sieve rear adjust S-35
18	691 (BK)	To frame ground 2
19	476 (YE)	Signal from lower sieve actuator M-07

Cavity	Circuit ID	Description
20	open	
21	786 (RD)	Output to upper / lower sieve relay K-18
22	475 (YE)	Signal from upper sieve actuator M-06
23	open	
24	open	
25	838 (YE)	Signal to sample motor M-28
26	open	
27	open	
28	open	
29	open	
30	1048 (WH)	Output to rotor engine to ring clutch L-45
31	1196 (PK)	Output to upper sieve actuator M-06 and lower sieve actuator M-07
32	open	
33	open	
34	539 (YE)	Signal from upper sieve rear adjust S-35
35	542 (YE)	Signal from lower sieve rear adjust S-46
36	open	
37	open	
38	open	
39	541 (YE)	Signal from lower sieve rear adjust S-46
40	1062 (BL)	Reference ground from rotor engine to ring clutch L-45

**Connector X014 (DARK GREY) - Expansion Harness to CCM3**



1. Connector **X013** (WHITE)
2. Connector X014 (DARK GREY)

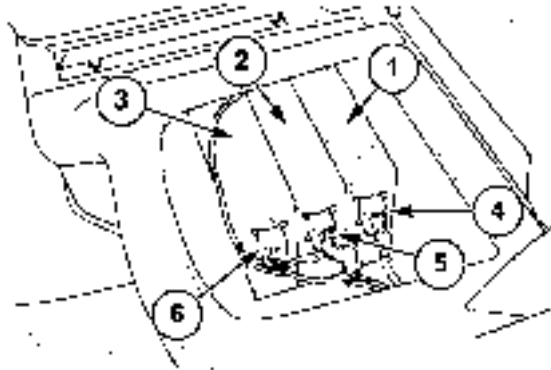


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Cavity	Circuit ID	Description
1	open	
2	open	
3	1049 (WH)	Output to rotor ring to frame clutch L-46
4	open	
5	open	
6	open	
7	512 (RD)	Power from fuse F-27
8	open	
9	536 (BK)	To frame ground 2
10	537 (BK)	To frame ground 2
11	1099 (OR)	Power from fuse F-47
12	open	
13	1068 (YE)	Signal from rotor RPM B-01
14	1069 (YE)	Signal from rotor hydrostat RPM B-58
15	open	
16	521 (BK)	To frame ground 2
17	open	
18	open	
19	open	
20	open	
21	1047 (WH)	Output to rotor pump swash minus L-41
22	open	
23	open	
24	open	
25	open	
26	open	
27	open	
28	open	
29	534 (RD)	Power from fuse F-26
30	535 (RD)	Power from fuse F-26
31	1046 (WH)	Output to rotor pump swash plus L-40
32	open	
33	open	
34	open	

Cavity	Circuit ID	Description
35	open	
36	open	
37	open	
38	open	
39	open	
40	open	

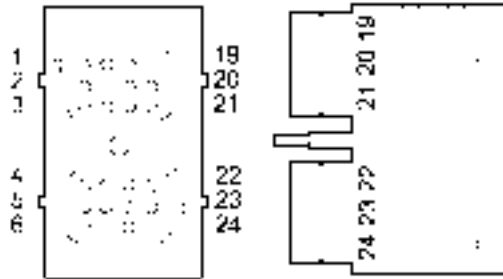
**Connector X015 - Cab Frame Harness to CCM2**



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**Inside cab, underneath instructional seat (remove storage bin)**

1. CCM1
2. CCM2
3. CCM3
4. Connector **X018**
5. Connector X015
6. Connector **X012**

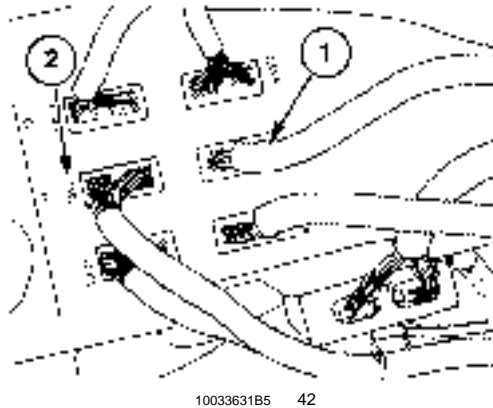


DE\_DRC16-24S 41

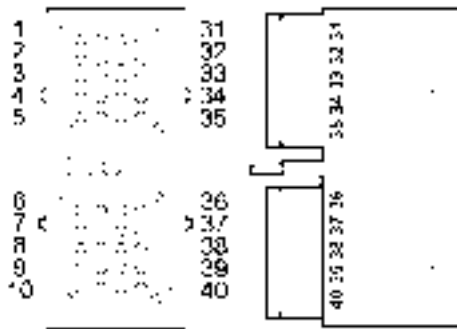
Cavity	Circuit ID	Description
1	050 (RD)	Keep alive power from fuse F-39
2	166 (YE)	Signal from beacon light switch S-41
3	167 (YE)	Signal from tank extensions switch S-42
4	100 (OR)	Power from key switch S-02
5	204 (YE)	Output to flasher module A-05
6	502 (WH)	Not used
7	111 (YE)	Signal from separator engage S-30
8	216 (BK)	To cab ground 3

Cavity	Circuit ID	Description
9	168 (YE)	Signal from seat switches S-05 & S-66
10	open	
11	231 (PU)	Output to splice block C, W03 for backlighting
12	839 (WH)	Output to cold start indicator E-36
13	132 (GN)	CAN Low
14	131 (YE)	CAN High
15	1209 (PU)	Signal from hazard switch S-25
16	open	
17	113 (YE)	Signal from neutral switch S-22
18	183 (WH)	Output to brake lights relay K-33
19	134 (GN)	CAN Low
20	133 (YE)	CAN High
21	090 (OR)	Signal from key switch S-02 (start)
22	open	
23	open	
24	182 (WH)	Output to beacon light relay K-29

**Connector X016 (RED) - Main Frame Harness to CCM2**



1. Connector X016 (RED)
2. Connector X017 (YELLOW)

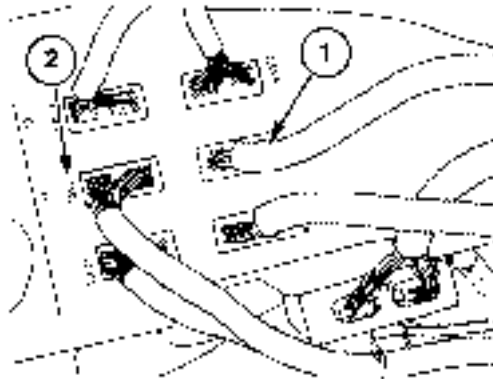


Cavity	Circuit ID	Description
1	open	
2	037 (OR)	Power from fuse F-36

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

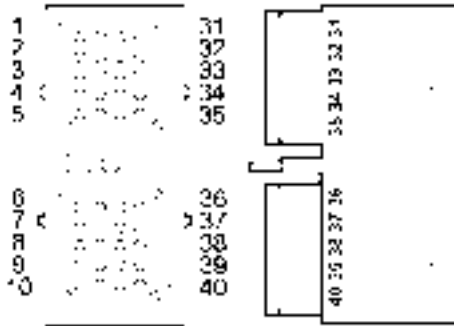
Cavity	Circuit ID	Description
3	514 (BK)	To frame ground 2
4	568 (WH)	Output to unload tube clutch L-08
5	open	
6	574 (WH)	Output to unload tube in L-03
7	open	
8	open	
9	039 (OR)	Power from fuse F-37
10	open	
11	025 (RD)	Power from fuse F-23
12	688 (BK)	To frame ground 2
13	open	
14	465 (BL)	Reference ground from sensors
15	572 (WH)	Output to park brake disengage L-10
16	573 (WH)	Output to unload tube out L-04
17	427 (YE)	Signal from fuel level R-01
18	689 (BK)	To frame ground 2
19	423 (YE)	Signal from low control pressure B-35
20	601 (BL)	Output to unload tube clutch L-08
21	open	
22	400 (YE)	Signal from grain bin 3/4 full S-28
23	746 (GN)	CAN Low
24	429 (YE)	Signal from fuel filter switch S-62
25	410 (YE)	Signal from left rotor loss B-19
26	402 (YE)	Signal from right rotor loss B-20
27	504 (YE)	Signal from engine oil temperature B-03
28	414 (YE)	Signal from spreader RPM B-55
29	420 (YE)	Signal from air filter switch S-61
30	878 (WH)	Output to beater / chopper clutch L-22
31	459 (PK)	Reference voltage to sensors
32	744 (YE)	CAN High
33	419 (YE)	Signal from engine oil pressure B-52
34	418 (YE)	Signal from brake pressure S-39
35	open	
36	421 (YE)	Not used
37	416 (YE)	Signal from rotor RPM B-01
38	413 (YE)	Signal from chopper RPM B-10
39	424 (YE)	Signal from hydraulic reservoir level S-33
40	877 (BL)	Reference ground from beater / chopper clutch L-22

**Connector X017 (YELLOW) - Front Frame Harness to CCM2**



10033631B5 44

- 1. Connector **X016** (RED)
- 2. Connector X017 (YELLOW)



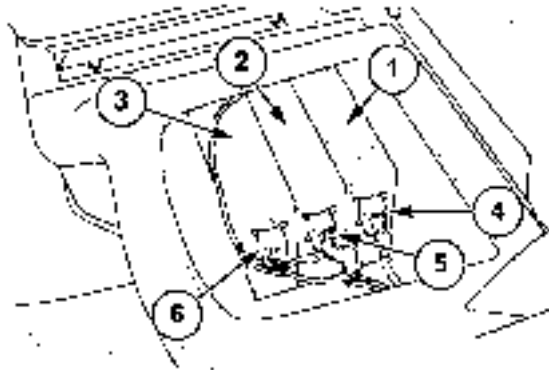
DE\_DRC16-40S 45

Cavity	Circuit ID	Description
1	560 (WH)	Output to reel fore L-16
2	556 (WH)	Output to reel drive L-17
3	558 (WH)	Output to reel up L-14
4	557 (WH)	Output to reel down L-13
5	559 (WH)	Output to reel aft L-15
6	711 (GY)	Output to draper header solenoid L-53
7	028 (RD)	Power from fuse F-23
8	712 (WH)	Output to draper header solenoid L-53
9	516 (BK)	To frame ground 2
10	517 (BK)	To frame ground 2
11	038 (OR)	Power from fuse F-36
12	1119 (WH))	Output to signal valve L-43
13	open	
14	403 (YE)	Signal from ground speed RPM B-17
15	575 (WH)	Output to pressure release L-05
16	515 (BK)	To frame ground 2
17	open	
18	766 (BL)	Reference ground from sensors
19	526 (GY)	Output to transmission shift motor M-02
20	527 (GY)	Output to transmission shift motor M-02



Cavity	Circuit ID	Description
21	879 (GY)	Output to ground speed hydrostat L-23
22	1164 (YE)	Signal from tailing volume R-24
23	open	
24	1116 (WH)	Output to header type module R-20
25	open	
26	1223 (PK)	Output to header type module R-20
27	409 (YE)	Signal (4th) from transmission shift position B-37
28	407 (YE)	Signal (N) from transmission shift position B-37
29	507 (RD)	Power from fuse F-25
30	508 (RD)	Power from fuse F-25
31	880 (WH)	Output to ground speed hydrostat L-23
32	open	
33	open	
34	1197 (YE)	Signal from park brake pressure B-53
35	881 (BL)	Reference ground from ground speed hydrostat L-23
36	405 (YE)	Signal (1st) from transmission shift position B-37
37	406 (YE)	Signal (2nd) from transmission shift position B-37
38	408 (YE)	Signal (3rd) from transmission shift position B-37
39	528 (WH)	Output to transmission shift motor M-02
40	529 (WH)	Output to transmission shift motor M-02

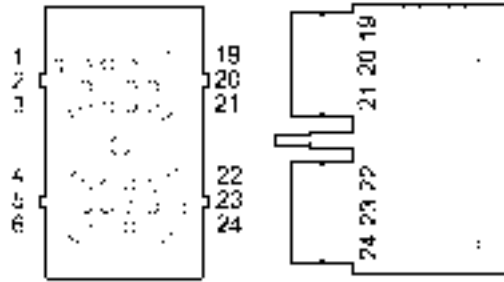
**Connector X018 - Cab Main Harness to CCM1**



10004693A5 46

**Inside cab, underneath instructional seat (remove storage bin)**

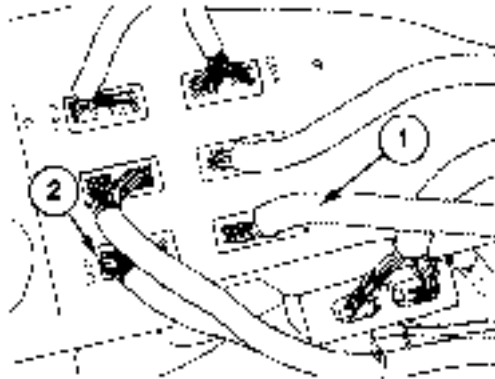
1. CCM1
2. CCM2
3. CCM3
4. Connector X018
5. Connector **X015**
6. Connector **X012**



DE\_DRC16-24S 47

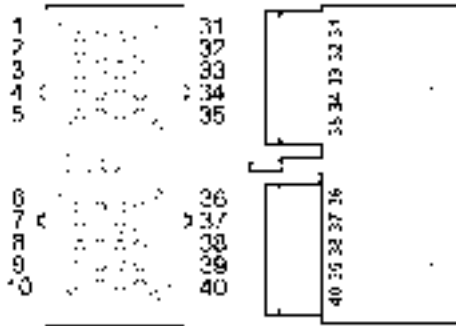
Cavity	Circuit ID	Description
1	052 (RD)	Keep alive power from fuse F-39
2	198 (PU)	Signal (L turn) from road light switch S-26
3	171 (YE)	Signal from work light switch S-43
4	099 (OR)	Power from key switch S-02
5	117 (WH)	Output to road lights relay K-27, header work lights relay K-22 and lower work light relay K-30
6	692 (WH)	Output to concave / covers relay K-16
7	112 (YE)	Signal from feeder engage S-31
8	215 (BK)	To cab ground 3
9	194 (PU)	Signal (R turn) from road light switch S-26
10	open	
11	190 (WH)	Output to cab roof work lights relay K-01 and distance work lights relay K-21
12	181 (WH)	Output to unload tube light relay K-32
13	138 (GN)	CAN Low
14	137 (YE)	CAN High
15	170 (YE)	Signal from rear work light switch S-44
16	open	
17	225 (YE)	Signal from feeder engage diodes D-01
18	184 (WH)	Output to rear work lights relay K-31
19	130 (GN)	CAN Low
20	129 (YE)	CAN High
21	212 (OR)	Signal (marker) from road light switch S-26
22	open	
23	107 (BK)	Ground for power relays K-24, K-25 & K-26 (Reverse polarity protection)
24	180 (WH)	Output to side work light relay K-35

**Connector X019 (BLUE) - Main Frame Harness to CCM1**



10033631A5 48

1. Connector X019 (BLUE)
2. Connector **X020** (GREEN)

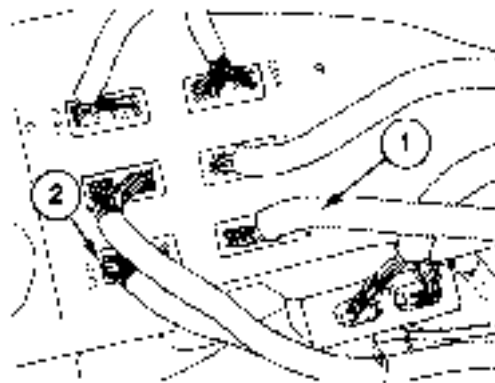


DE\_DRC16-40S 49

Cavity	Circuit ID	Description
1	522 (GY)	Output to concave clearance motor M-04 and covers motor M-12
2	032 (OR)	Power from fuse F-43
3	513 (BK)	To frame ground 2
4	1112 (WH)	Output to header raise L-11
5	1113 (WH)	Output to header lower L-12
6	452 (WH)	Output to back up alarm H-08
7	1504 (WH)	Output to brake limiting L-32
8	open	
9	033 (OR)	Power from fuse F-43
10	555 (BL)	Reference ground from lateral tilt L-18 & L-19
11	026 (RD)	Power from fuse F-24
12	686 (BK)	To frame ground 2
13	1161 (WH)	Output to fan drive solenoid L-44
14	460 (BL)	Reference ground from sensors
15	576 (WH)	Output to chaff spreader L-28
16	569 (WH)	Output to rear wheel assist L-26
17	570 (YE)	Signal from rear ladder B-22
18	687 (BK)	To frame ground 2
19	411 (YE)	Signal from concave position R-06
20	1114 (BL)	Reference ground from header raise L-11 & header lower L-12

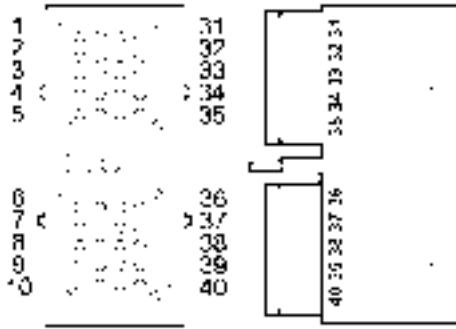
Cavity	Circuit ID	Description
21	523 (WH)	Output to concave / covers relay K-16
22	740 (YE)	Signal from feeder angle R-03
23	open	
24	446 (YE)	Signal from hydraulic oil reservoir temperature B-18
25	431 (YE)	Signal from sieves loss B-21
26	1503 (YE)	Signal from brake wear switches S-55 & S-56, and brake fluid level switch S-49
27	422 (YE)	Not used
28	450 (YE)	Signal from clean grain elevator RPM B-08
29	1284 (YE)	Signal from PTO box lube pressure B-60
30	876 (WH)	Output to feeder engine to ring clutch L-47
31	453 (PK)	Reference voltage to sensors
32	open	
33	430 (YE)	Signal from lateral inclination B-02
34	447 (YE)	Signal from returns filter bypass S-32
35	448 (YE)	Signal from PTO box filter bypass S-34
36	open	
37	441 (YE)	Signal from tailing RPM B-39
38	1162 (YE)	Signal from sieve shake RPM B-56
39	1216 (YE)	Signal from coolant level switch S-67
40	875 (BL)	Reference ground from feeder E to R clutch L-47 through feeder disengage relay K-19

**Connector X020 (GREEN) - Front Frame Harness to CCM1**



10033631A5 50

1. Connector **X019** (BLUE)
2. Connector **X020** (GREEN)

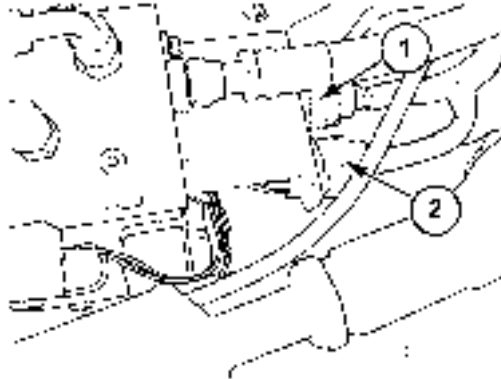


DE\_DRC16-40S 51

Cavity	Circuit ID	Description
1	548 (WH)	Output to lateral tilt CCW L-19
2	549 (WH)	Output to lateral tilt CW L-18
3	762 (WH)	Output to 2 speed powered rear axle RH L-54 & LH L-55
4	759 (WH)	Output to header height accumulator L-06
5	open	
6	open	
7	open	
8	open	
9	702 (BK)	To frame ground 2
10	703 (BK)	To frame ground 2
11	034 (OR)	Power from fuse F-44
12	open	
13	404 (YE)	Signal from cleaning fan RPM B-16
14	489 (YE)	Signal from feeder RPM B-14
15	1053 (WH)	Output to feeder ring to frame clutch L-50
16	704 (BK)	To frame ground 2
17	741 (YE)	Signal from lateral tilt pot R-02
18	501 (BL)	Reference ground from sensors
19	705 (GY)	Output to shoe leveling actuator M-03
20	706 (GY)	Output to shoe leveling actuator M-03
21	1051 (WH)	Output to feeder pump swash minus L-48
22	739 (YE)	Signal from right height / tilt R-13
23	1102 (YE)	Not used
24	738 (YE)	Signal from left height / tilt R-12
25	722 (YE)	Signal from header lift pressure B-29
26	726 (PK)	Reference voltage to sensors
27	open	
28	743 (YE)	Not used
29	700 (RD)	Power from fuse F-22
30	701 (RD)	Power from fuse F-22
31	1050 (WH)	Output to feeder pump swash plus L-49
32	721 (YE)	Signal from shoe leveling actuator M-03
33	773 (YE)	Signal from hydrostat motor temperature B-46
34	1103 (YE)	Signal from center height / tilt R-19

Cavity	Circuit ID	Description
35	open	
36	485 (YE)	Signal from unload cradle B-38
37	415 (YE)	Signal from spreader position B-11
38	435 (YE)	Signal from covers closed B-47
39	708 (WH)	Output to shoe leveling actuator M-03
40	709 (WH)	Output to shoe leveling actuator M-03

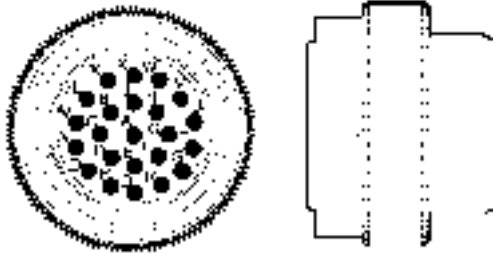
**Connector X021 - Front Frame Harness to Feeder Valve Stack**



10031037A5 52

**Behind feeder valve manifold on left side of feeder**

1. Connector **X007**
2. Connector X021

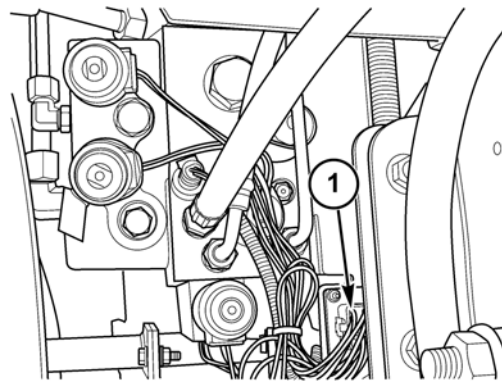


DE\_HDP26-24-23S 53

Cavity	Circuit ID	Description
A	open	
B	open	
C	open	
D	open	
E	556 (WH)	CCM2 J3-2 to reel drive L-17
F	585 (BK)	Reel drive L-17 to frame ground 2
G	549 (WH)	CCM1 J3-2 to lateral tilt CW L-18
H	554 (BL)	Lateral tilt CW L-18 to CCM1 J2-10
J	548 (WH)	CCM1 J3-1 to lateral tilt CCW L-19
K	553 (BL)	Lateral tilt CCW L-19 to CCM1 J2-10
L	558 (WH)	CCM2 J3-3 to reel up L-14
M	587 (BK)	Reel up L-14 to frame ground 2

Cavity	Circuit ID	Description
N	557 (WH)	CCM2 J3-4 to reel down L-13
O	586 (BK)	Reel down L-13 to frame ground 2
P	560 (WH)	CCM2 J3-1 to reel fore L-16
Q	589 (BK)	Reel fore L-16 to frame ground 2
R	559 (WH)	CCM2 J3-5 to reel aft L-15
S	588 (BK)	Reel aft L-15 to frame ground 2
T	open	
U	open	
V	open	
W	open	
X	open	

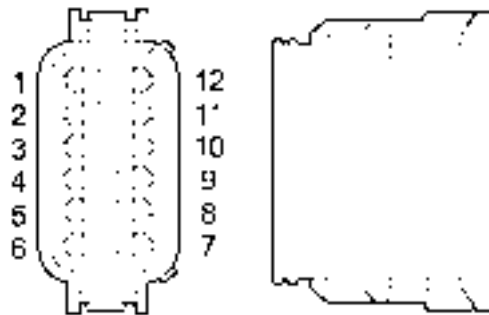
**Connector X022 - Main Frame Harness to Valve Stack**



10031033A4 54

**Left side of main frame, behind main frame valve assembly**

1. Connector X022



DEU\_DT06-12S 55

Cavity	Circuit ID	Description
1	1119 (WH)	CCM2 J3-12 to signal valve L-43
2	574 (WH)	CCM2 J2-6 to unload tube in L-03
3	573 (WH)	CCM2 J2-16 to unload tube out L-04
4	1112 (WH)	CCM1 J2-4 to header raise L-11
5	1113 (WH)	CCM1 J2-5 to header lower L-12
6	1117 (BK)	Header raise L-11 to CCM1 J2-20
7	1118 (BK)	Header lower L-12 to CCM1 J2-20
8	1121 (BK)	Signal valve L-43 to frame ground 2

Cavity	Circuit ID	Description
9	599 (BK)	Unload tube in L-03 to frame ground 2
10	598 (BK)	Unload tube out L-04 to frame ground 2
11	759 (WH)	CCM1 J3-4 to header height accumulator L-06
12	760 (BK)	Header height accumulator L-06 to frame ground 2

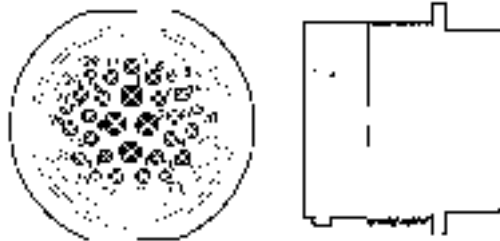
**Connector X023 - Front Frame Harness to Lower Frame Harness**



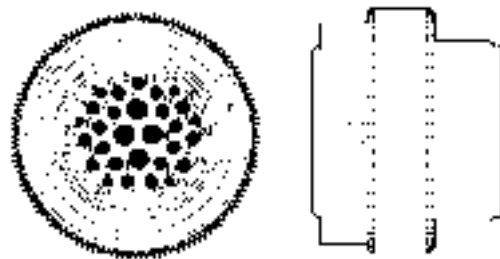
10031038A5 56

**Left side of front axle, below feeder pivot**

- Connector X023



DE\_HDP24-24-29P 57



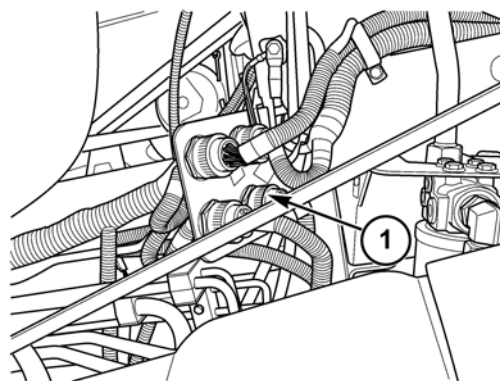
DE\_HDP26-24-29S 58

Cavity	Circuit ID	Description
1	707 (GY)	CCM1 J3-19/20 to shoe leveling actuator M-03
2	710 (WH)	CCM1 J3-39/40 to shoe leveling actuator M-03
3	715 (GY)	CCM2 J3-19/20 to transmission shift motor M-02
4	716 (WH)	CCM2 J3-39/40 to transmission shift motor M-02



Cavity	Circuit ID	Description
5	042 (BL)	Ground speed RPM B-17 and transmission shift position B-37 reference ground to CCM2 J3-18
6	403 (YE)	Ground speed RPM B-17 to CCM2 J3-14
7	404 (YE)	Cleaning fan RPM B-16 to CCM1 J3-13
8	405 (YE)	Transmission shift position B-37 (1st) to CCM2 J3-36
9	406 (YE)	Transmission shift position B-37 (2nd) to CCM2 J3-37
10	407 (YE)	Transmission shift position B-37 (N) to CCM2 J3-28
11	408 (YE)	Transmission shift position B-37 (3rd) to CCM2 J3-38
12	409 (YE)	Transmission shift position B-37 (4th) to CCM2 J3-27
13	575 (WH)	CCM2 J3-15 to pressure release L-05
14	434 (YE)	Brake wear switches S-55 & S-56 to CCM1 J2-26
15	721 (YE)	Shoe leveling actuator M-03 to CCM1 J3-32
16	723 (BL)	Shoe leveling actuator M-03, cleaning fan RPM B-16 and hydrostat motor temp B-46 reference ground to CCM1 J3-18
17	727 (PK)	CCM1 J3-26 to shoe leveling actuator M-03
18	1259 (OR)	Fuse F-45 to cleaning fan RPM B-16
19	open	
20	open	
21	762 (WH)	CCM1 J3-3 to 2 speed powered rear axle L-54 & L-55
22	open	
23	open	
24	open	
25	765 (BK)	Pressure release L-05 and 2 speed powered rear axle L-54 & L-55 to frame ground 2
26	773 (YE)	Hydrostat motor temp B-46 to CCM1 J3-33
27	open	
28	835 (YE)	Not used
29	836 (BK)	Brake wear switches S-55 & S-56 to frame ground 2

**Connector X024 (RED) - Main Frame Harness to Straw Hood Front Harness**



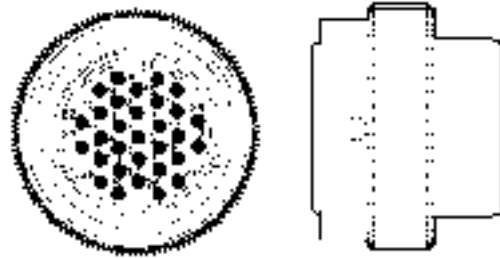
10033642C4 59

**Left side of frame, in front of PTO gearbox**

1. Connector X024



DE\_HDP24-24-31P 60

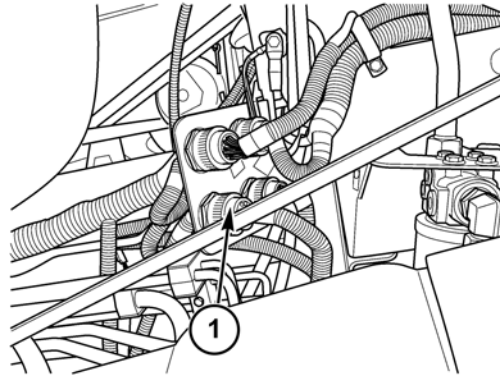


DE\_HDP26-24-31S 61

Cavity	Circuit ID	Description
1	1254 (OR)	Fuse F-45 to spreader RPM B-55
2	078 (PU)	Brake lights relay K-33 to brake lights E-05/E-06/E-11/E-12 and trailer outlet J-09
3	414 (YE)	Spreader RPM B-55 to CCM2 J2-28
4	415 (YE)	Spreader position B-11 to CCM1 J3-37
5	431 (YE)	Sieves loss B-21 to CCM1 J2-25
6	open	
7	447 (YE)	Returns filter bypass S-32 to CCM1 J2-34
8	448 (YE)	PTO box filter bypass S-34 to CCM1 J2-35
9	243 (PU)	Flasher module A-05 to LH flashing lamp E-07
10	244 (PU)	Flasher module A-05 to RH flashing lamp E-08
11	461 (BL)	Reference ground from sensors to CCM1 J2-14
12	492 (BL)	Spreader RPM B-55 reference ground to CCM2 J2-14
13	452 (BL)	CCM1 J2-6 to back up alarm H-08
14	485 (YE)	Unload cradle B-38 to CCM1 J3-36
15	569 (WH)	CCM1 J2-16 to rear wheel assist L-26
16	570 (YE)	Rear ladder B-22 to CCM1 J2-17
17	576 (WH)	CCM1 J2-15 to chaff spreader L-28
18	open	
19	578 (PU)	Beacon light relay K-29 to rear beacon light E-33
20	614 (PU)	Flasher module A-05 to LH flashing lamps E-05 & trailer outlet J-09
21	617 (PU)	Flasher module A-05 to RH flashing lamps E-06 & trailer outlet J-09
22	open	
23	open	
24	067 (PU)	Rear work lights relay K-31 to rear work lights E-27 & E-28

Cavity	Circuit ID	Description
25	1215 (RD)	Fuse F-34 to engine light switch S-64
26	open	
27	open	
28	604 (OR)	Fuse F-14 to sieve light switch S-54
29	625 (PU)	Fuse F-20 to LH marker lights E-11, E-05 & trailer outlet J-09
30	626 (PU)	Fuse F-21 to RH marker lights E-12, E-06 & trailer outlet J-09
31	649 (RD)	Fuse F-15 to side service sockets J-03 & J-04

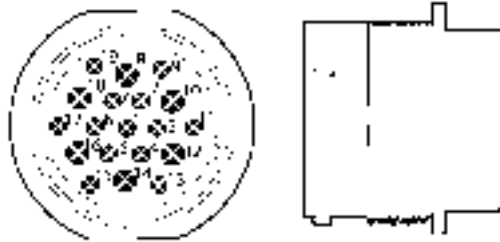
**Connector X025 (BLUE) - Expansion Harness to Straw Hood Harness**



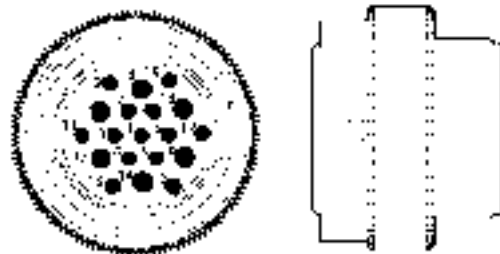
10033642D4 62

**Left side of frame, in front of PTO gearbox**

- 1. X025



DE\_HDP24-24-19P 63

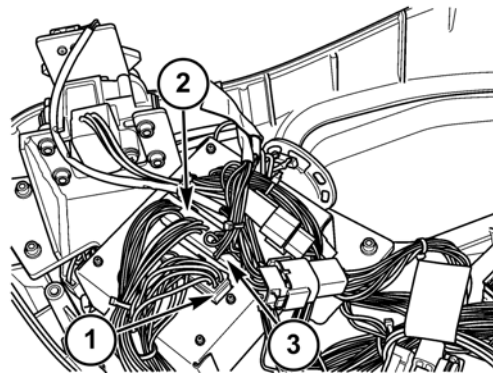


DE\_HDP26-24-19S 64

Cavity	Circuit ID	Description
1	683 (PK)	CCM3 J2-31 to sieve actuators M-06 & M-07
2	439 (BL)	Sieve actuators M-06 & M-07 reference ground to CCM3 J2-14

Cavity	Circuit ID	Description
3	475 (YE)	Upper sieve actuator to CCM3 J2-22
4	476 (YE)	Lower sieve actuator M-07 to CCM3 J2-19
5	open	
6	539 (YE)	Upper sieve rear adjust S-35 to CCM3 J2-34
7	540 (YE)	Upper sieve rear adjust S-35 to CCM3 J2-17
8	open	
9	541 (YE)	Lower sieve rear adjust S-46 to CCM3 J2-39
10	open	
11	542 (YE)	Lower sieve rear adjust S-46 to CCM3 J2-35
12	open	
13	551 (BK)	Lower sieve rear adjust S-46 to frame ground 2
14	785 (GY)	CCM3 J2-1 to upper sieve actuator M-06 and lower sieve actuator M-07
15	790 (WH)	Upper / lower sieve relay K-18 to lower sieve actuator M-07
16	open	
17	792 (WH)	Upper / lower sieve relay K-18 to upper sieve actuator M-06
18	1253 (PK)	Not used
19	550 (BK)	Upper sieve rear adjust S-35 to frame ground 2

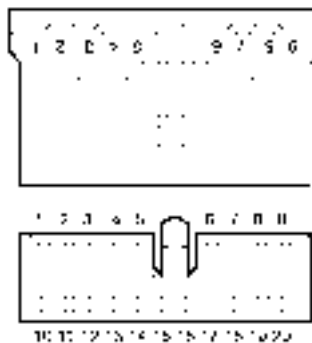
**Connector X026 - Right Console Harness to Right Hand Module**



10031051C4 65

**Inside right hand console**

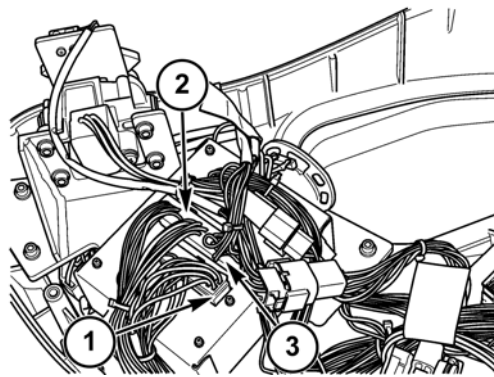
1. Connector X026
2. Connector **X027**
3. Connector **X028**



AMP\_O-174952-1 66

Cavity	Circuit ID	Description
1	130 (GN)	CAN Low
2	129 (YE)	CAN High
3	136 (BK)	RS232 - RX
4	098 (OR)	Power from fuse F-48
5	089 (OR)	Power from Fuse F-48
6	320 (BL)	Reference ground from ground speed pot R-04, engine throttle pot R-21, gear select S-24 and resistor module R-23
7	open	
8	open	
9	open	
10	128 (GN)	CAN Low
11	127 (YE)	CAN High
12	135 (RD)	RS232 - TX
13	051 (RD)	Keep alive power from fuse F-39
14	open	
15	389 (BK)	To cab ground 3
16	316 (PK)	Reference voltage to ground speed pot R-04, engine throttle pot R-21, gear select S-24 and resistor module R-23
17	open	
18	388 (BK)	Audio alarm H-01 ground
19	376 (WH)	Output to audio alarm H-01
20	352 (BK)	To cab ground 3

**Connector X027 - Right Console Harness to Right Hand Module**



**Inside right hand console**

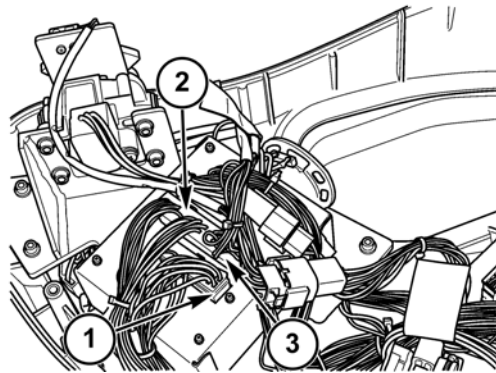
1. Connector **X026**
2. Connector **X027**
3. Connector **X028**



AMP\_173853 68

Cavity	Circuit ID	Description
1	381 (YE)	Signal from ground speed pot R-04
2	open	
3	1093 (WH)	Signal from header speed pot R-18
4	364 (BK)	To cab ground 3
5	356 (BK)	To cab ground 3
6	304 (YE)	Signal from HHC fine adjust S-06 (+)
7	303 (YE)	Signal from HHC fine adjust S-06 (-)
8	1257 (PU)	Output to on the road switch S-12 (lamp)
9	1013 (WH)	Signal from reel speed pot R-22
10	1014 (WH)	Signal from throttle speed pot R-21
11	391 (YE)	Signal from gear select S-24
12	open	
13	1282 (PU)	Output to rear wheel assist HI / LO S-11 (lamp)
14	1012 (WH)	Output to header height mode 2 S-68 (lamp)
15	1094 (PU)	Output to reel speed mode S-08 (lamp)
16	353 (PU)	Output to header height mode 1 S-04 (lamp)
17	1281 (PU)	Output to header mode switch S-69 (lamp)
18	1256 (PU)	Output to rear wheel assist S-10 (lamp)

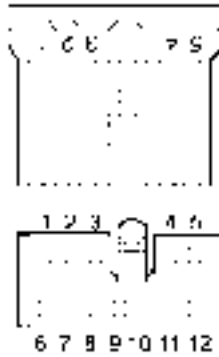
**Connector X028 - Propulsion Handle Harness to Right Hand Module**



10031051C4 69

**Inside right hand console**

1. Connector **X026**
2. Connector **X027**
3. Connector **X028**



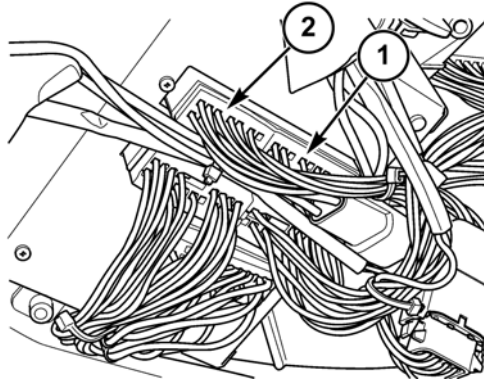
AMP\_O-173851-1 70

Cavity	Circuit ID	Description
1	WH	Unload circuits - common
2	GN	Header tilt right
3	open	
4	RD	Unload engage / reel raise
5	PK	Header tilt left / reel fore
6	GY	Header circuits - common
7	PU	Reel circuits, emergency stop - common
8	BL	Emergency stop
9	YE	Header resume / unload swing in / reel aft
10	OR	Header raise
11	BK	Header lower / unload swing out / reel lower
12	open	

**NOTE:** Use the following table to determine the correct pin combinations for each switch on the propulsion handle. The propulsion handle circuits contain diodes, so the multimeter test leads must be connected to the proper pins as indicated in the table.

Switch	+ Pin	- Pin
Head raise	10	6
Head lower	11	6
Head tilt left	5	6
Head tilt right	2	6
Header resume	9	6
Unload swing out	11	1
Unload swing in	9	1
Unload engage	4	1
Reel raise	4	7
Reel lower	11	7
Reel fore	5	7
Reel aft	9	7
Emergency stop	8	7

**Connector X029 - Right Console Harness to Right Hand Module**



10031052A4 71

**Inside right hand console**

1. Connector X029
2. Connector **X030**

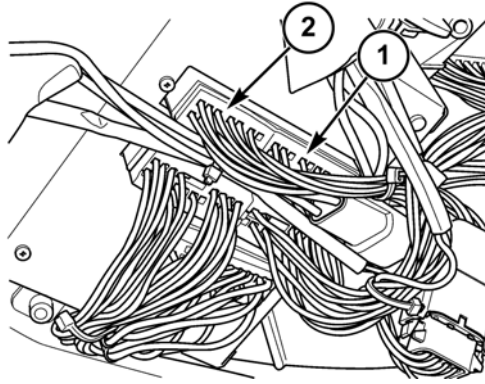


AMP\_173853 72

Cavity	Circuit ID	Description
1	335 (YE)	Signal from park brake S-09 (off)
2	1008 (WH)	Signal from header mode switch S-69
3	1010 (WH)	Signal from header height mode 1 S-04
4	open	
5	326 (YE)	Signal from feeder engage S-31
6	337 (YE)	Signal from rear wheel assist HI / LO S-11
7	230 (YE)	Signal from vertical knives S-51 (both)
8	1122 (WH)	Signal from separator engage S-30
9	334 (YE)	Signal from park brake S-09 (ON)
10	1009 (WH)	Signal from reel speed mode S-08
11	open	
12	1011 (WH)	Signal from header height mode 2 S-68
13	open	
14	325 (YE)	Not used
15	229 (YE)	Signal from vertical knives S-51 (right)
16	339 (YE)	Signal from on the road switch S-12
17	336 (YE)	Signal from rear wheel assist S-10
18	324 (YE)	Not used



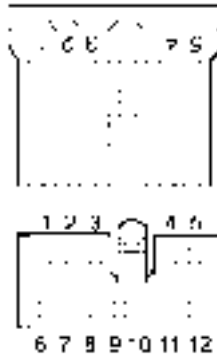
**Connector X030 - Right Console Harness to Right Hand Module**



10031052A4 73

**Inside right hand console**

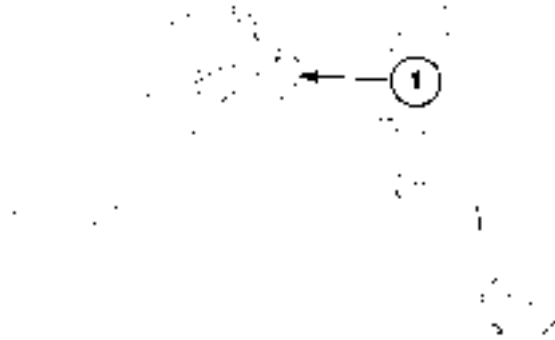
1. Connector **X029**
2. Connector X030



AMP\_O-173851-1 74

Cavity	Circuit ID	Description
1	342 (YE)	Signal from lower sieve S-14 (decrease)
2	341 (YE)	Signal from upper sieve S-13 (increase)
3	347 (YE)	Signal from concave clearance S-16 (increase)
4	348 (YE)	Signal from rotor speed S-17 (decrease)
5	open	
6	343 (YE)	Signal from lower sieve S-14 (increase)
7	340 (YE)	Signal from upper sieve S-13 (decrease)
8	346 (YE)	Signal from concave clearance S-16 (decrease)
9	344 (YE)	Signal from fan speed S-15 (decrease)
10	345 (YE)	Signal from fan speed S-15 (increase)
11	349 (YE)	Signal from rotor speed S-17 (increase)
12	open	

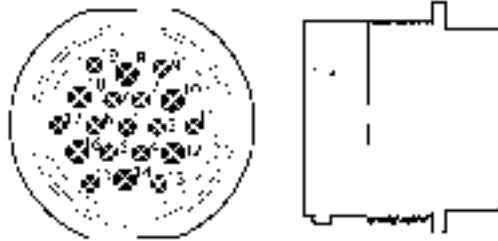
**Connector X031 - Cab Main Harness to Front Frame Harness**



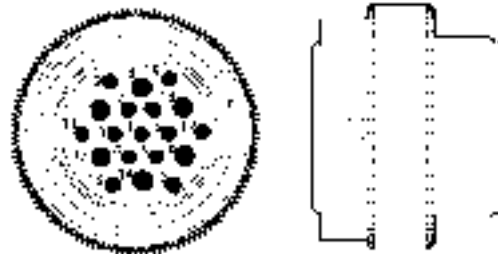
40033777C5 75

**Left rear corner of cab, near park brake valve**

1. Connector X031



DE\_HDP24-24-19P 76

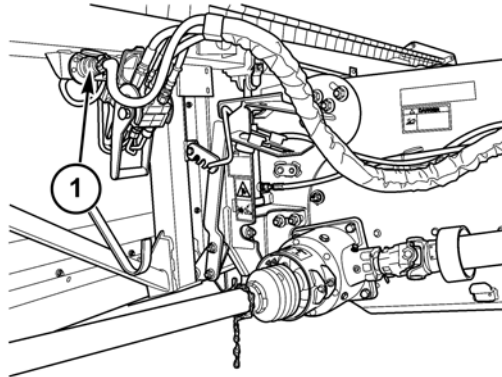


DE\_HDP26-24-19S 77

Cavity	Circuit ID	Description
1	034 (OR)	Fuse F-44 to CCM1 J3-11
2	038 (OR)	Fuse F-36 to CCM2 J3-11
3	027 (RD)	Not used
4	028 (RD)	Fuse F-23 to CCM2 J3-7
5	1501 (YE)	Brake fluid level switch S-49 to CCM1 J2-26
6	752 (PU)	Fuse F-21 to header marker lights E-40 & E-41 (EU)
7	580 (OR)	Not used
8	714 (WH)	Not used
9	768 (WH)	Not used
10	719 (WH)	Not used
11	open	

Cavity	Circuit ID	Description
12	763 (WH)	Not used
13	open	
14	029 (RD)	Fuse F-25 to CCM2 J3-29/30
15	open	
16	024 (RD)	Fuse F-22 to CCM1 J3-29/30
17	open	
18	open	
19	open	

**Connector X032 - Feeder Harness to Header Harness**



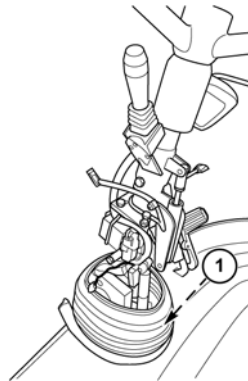
10031256A4 78

- Connector X032

Cavity	Circuit ID	Description
1	738 (YE)	Left height / tilt R-12 to CCM1 J3-24
2	739 (YE)	Right height / tilt R-13 to CCM1 J3-22
3	1102 (YE)	Not used
4	1103 (YE)	Center height / tilt R-19 to CCM1 J3-34
5	848 (PK)	CCM1 J3-26 to height / tilt sensors R-12, R-13 & R-19 (5 volt ref)
6	847 (BL)	Height / tilt sensors R-12, R-13 & R-19 reference ground to CCM1 J3-18
7	open	
8	open	
9	open	
10	open	
11	open	
12	1223 (PK)	CCM2 J3-26 to header type module R-20 (5 volt ref)
13	750 (BL)	Header type module R-20 reference ground to CCM2 J3-18
14	open	
15	open	
16	open	
17	open	
18	open	
19	open	
20	712 (WH)	CCM2 J3-8 to draper header solenoid L-53
21	776 (BK)	Ground path for flip up road light relays K-40, K-41
22	613 (PU)	Flasher module A-05 to LH header flashing light E-01 (NA only)

Cavity	Circuit ID	Description
23	849 (PK)	Not used
24	752 (PU)	Road light switch S-26 to header marker lights E-40, E-41 (EU only)
25	846 (BL)	Not used
26	711 (GY)	CCM2 J3-6 to draper header solenoid L-53
27	1116 (YE)	Header type module R-20 to CCM2 J3-24
28	618 (PU)	Flasher module A-05 to RH header flashing light E-02 (NA only)
29	open	
30	767 (BK)	Header lights to frame ground 2
31	open	

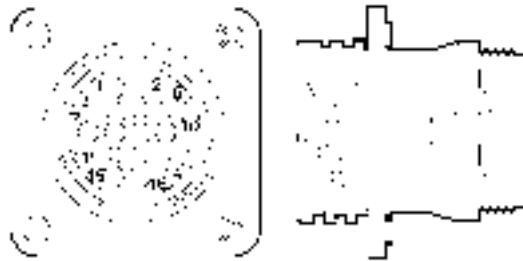
**Connector X033 - Cab Main Harness to Steering Column Harness**



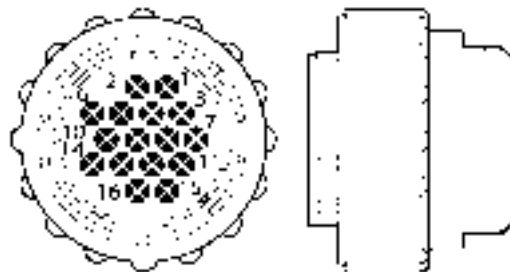
10010914A4 79

**Base of steering column, behind cover**

1. Connector X033



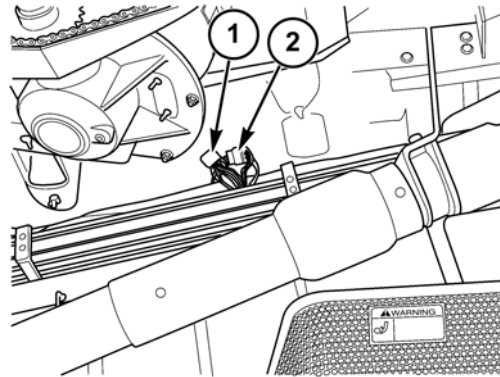
AMP\_206036-1 80



AMP\_206037-1 81

Cavity	Circuit ID	Description
1	054 (RD)	Fuse F-56 to hazard switch S-25
2	1209 (PU)	Hazard switch S-25 to CCM2 J1-15
3	open	
4	043 (YE)	Road light switch S-26 to high beam indicator E-10
5	open	
6	201 (PU)	Road light switch S-26 to flasher module A-05
7	196 (PU)	Flasher module A-05 to RH flashing lamps E-02, E-04, E-06, E-51 & trailer outlet J-09
8	197 (PU)	Road light switch S-26 to flasher module A-05
9	200 (PU)	Flasher module A-05 to LH flashing lamps E-01, E-03, E-05, E-52 & trailer outlet J-09
10	204 (YE)	CCM2 J1-5 to flasher module A-05 (ISO/NASO)
11	open	
12	219 (BK)	Flasher module A-05, indicator lamps E-09 & E-10 and hazard switch S-25 to cab ground 3
13	243 (PU)	Flasher module A-05 to LH flashing lamp E-07
14	244 (PU)	Flasher module A-05 to RH flashing lamp E-08
15	open	
16	open	

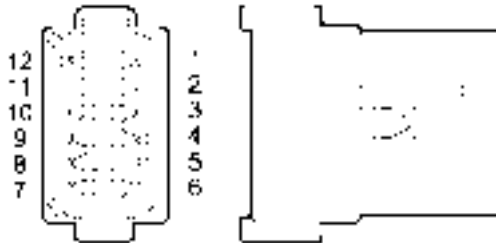
**Connector X034 - Main Frame Harness to Expansion Harness**



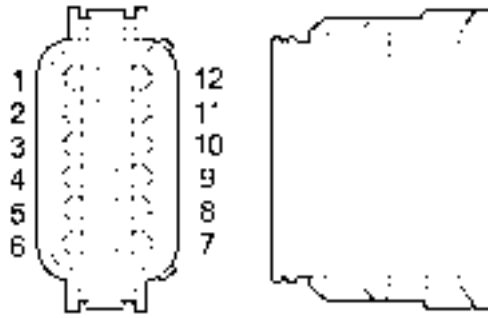
10033635A4 82

**Left side of main frame, below grain tank**

1. Connector X034
2. Connector **X034A**



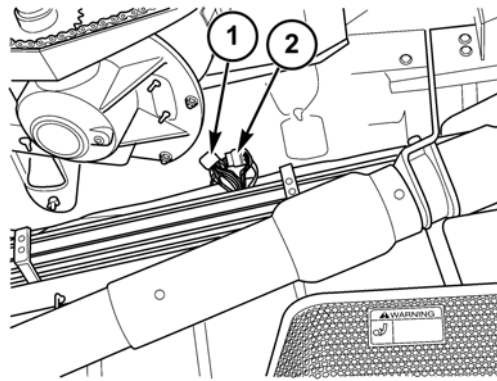
DEU\_DT04-12P 83



DEU\_DT06-12S 84

Cavity	Circuit ID	Description
1	030 (RD)	Fuse F-26 to CCM3 J3-29/30
2	031 (RD)	Fuse F-27 to CCM3 J2-11 & J3-7
3	035 (OR)	Fuse F-47 to YMIU module A-12 and sample motor M-28
4	036 (OR)	Fuse F-47 to CCM3 J2-2, J2-9 & J3-11
5	786 (RD)	CCM3 J2-21 to upper / lower sieve relay K-18
6	790 (WH)	Upper / lower sieve relay K-18 to lower sieve actuator M-07
7	792 (WH)	Upper / lower sieve relay K-18 to upper sieve actuator M-06
8	open	
9	open	
10	open	
11	819 (YE)	CAN High
12	820 (GN)	CAN Low

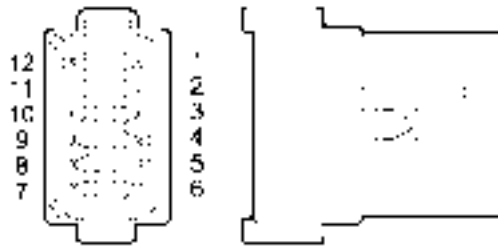
**Connector X034A - Main Frame Harness to Expansion Harness**



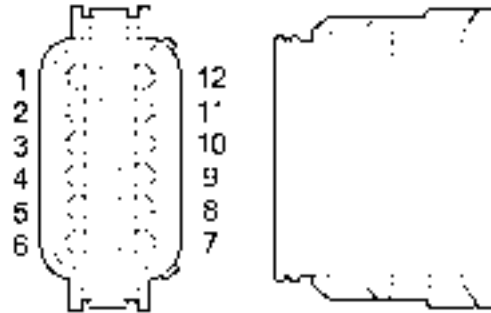
10033635A4 85

**Left side of main frame, below grain tank**

1. Connector **X034**
2. Connector X034a



DEU\_DT04-12P 86



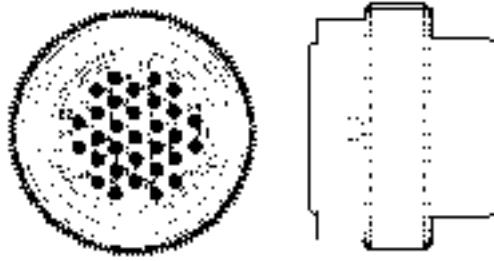
DEU\_DT06-12S 87

Cavity	Circuit ID	Description
1	1065 (BL)	CCM3 J2-10 to rotor pump swash plus L-40 & rotor pump swash minus L-41
2	1233 (BK/WH)	YMIU module A-12 to battery clean ground
3	1047 (WH)	CCM3 J3-21 to rotor pump swash minus L-41
4	1046 (WH)	CCM3 J3-31 to rotor pump swash plus L-40
5	1048 (WH)	CCM3 J2-30 to rotor engine to ring clutch L-45
6	open	
7	1069 (YE)	Rotor hydrostat RPM B-58 to CCM3 J3-14
8	1062 (BL)	CCM3 J2-40 to rotor engine to ring clutch L-45
9	1049 (WH)	CCM3 J3-3 to rotor ring to frame clutch L-46
10	1068 (YE)	Rotor RPM B-01 to CCM3 J3-13
11	1230 (YE)	CAN High
12	1231 (GN)	CAN Low

**Connector X036 - Cab Roof Harness to Outer Roof Harness**



DE\_HDP24-24-31P 88

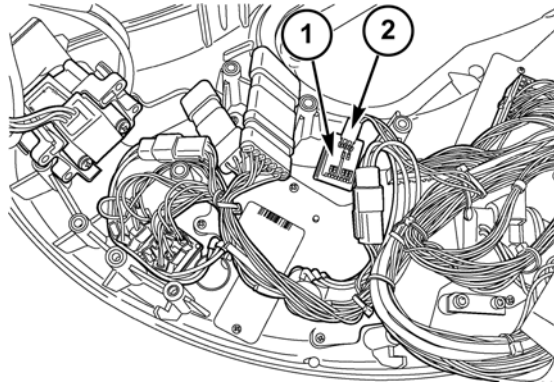


DE\_HDP26-24-31S 89

Cavity	Circuit ID	Description
1	058 (PU)	Cab roof work lights relay K-01 to LH cab outer work light E-15
2	059 (PU)	Cab roof work lights relay K-01 to RH cab outer work light E-16
3	open	
4	063 (PU)	Header work lights relay K-22 to cab mid work lights E-19 & E-20
5	072 (PU)	Side work light relay K-35 to RH side work light E-26
6	076 (PU)	Timed side work light relay K-34 to LH side work light E-25
7	579 (PU)	Beacon light relay K-29 to front beacon lights E-31 & E-32
8	245 (BK)	HID field lights E-60 & E-61 to work light switch S-43
9	open	
10	262 (BK)	LH cab outer work light E-15 and LH cab mid work light E-19 to cab roof ground 4
11	266 (BK)	RH cab outer work light E-16 and RH cab mid work light E-20 to cab roof ground 4
12	295 (BK)	Side work lights E-25/26, mirror heat R-10/11/14 and cab inner work lights E-17/18 to cab roof ground 4
13	665 (BK)	Front beacon lights E-31 & E-32 to cab roof ground 4
14	280 (BK)	Wiper motor M-25 to cab roof ground 4
15	275 (WH)	Wiper switch S-20 to wiper motor M-25
16	open	
17	open	
18	931 (OR)	Mirror heat switch S-19 to mirror heat R-10, R-11 & R-14
19	955 (WH)	Switch bypass fuses F-64 OR Mirror select switch S-57 (Germany) to RH mirror up / down M-19
20	963 (WH)	Mirror select switch S-57 to German mirror up / down M-30
21	962 (WH)	Switch bypass fuses F-64 OR Mirror select switch S-57 (Germany) to RH mirror in / out M-20
22	958 (WH)	Mirror adjust switch S-27 to LH mirror up / down M-21
23	959 (WH)	Mirror adjust switch S-27 to LH mirror in / out M-22
24	964 (WH)	Mirror select switch S-57 to German mirror in / out M-31
25	961 (GY)	LH mirror M-21/22 to mirror adjust switch S-27
26	954 (GY)	RH mirror M-19/20 and German mirror M-30/31 to mirror adjust switch S-27
27	978 (PU)	Road lights relay K-27 to cab inner work lights E-17 & E-18 (low beam)
28	981 (PU)	Road lights relay K-27 to cab inner work lights E-17 & E-18 (high beam)
29	210 (PU)	Header work lights relay K-22 to HID field lights E-60 & E-61
30	open	



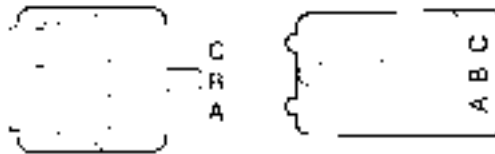
**Connector X048 - Right Console Harness to Gear Select Switch S-24**



50031061B4 90

**Inside right hand console**

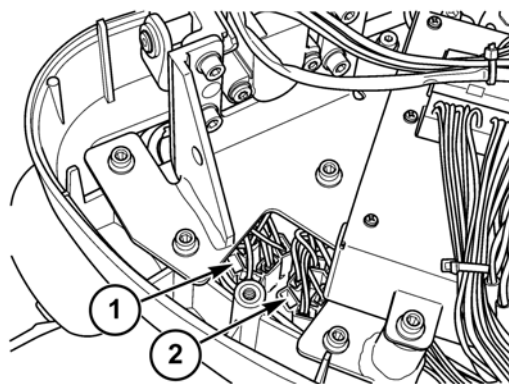
1. Gear select switch S-24
2. Connector X048



JST\_VHR-3N 91

Cavity	Circuit ID	Description
1	1016 (PK)	5 volt reference from RHM X026 pin 16
2	391 (YE)	Signal to RHM X027 pin 11
3	1015 (BL)	Ground to RHM X026 pin 6

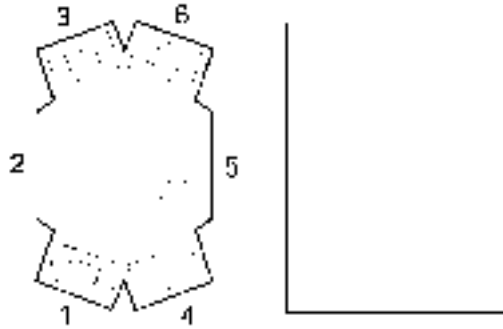
**Connector X055 - Right Console Harness to Separator Engage S-30**



10031050A4 92

**Inside right hand console**

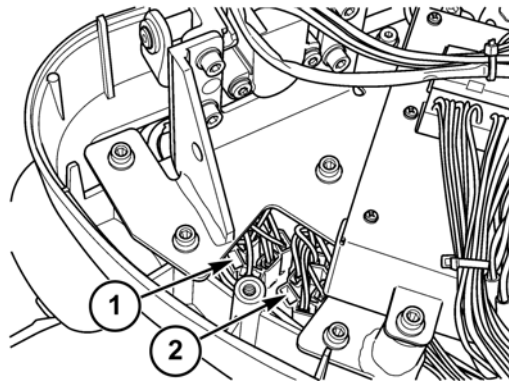
1. Connector X055 to Separator Engage switch S-30
2. Connector **X056** to Feeder Engage switch S-31



PAC\_8911352 93

Cavity	Circuit ID	Description
1	1122 (WH)	Signal to RHM X029 pin 8 (deslug)
2	110 (OR), 300 (OR)	Power from fuse F-48 (110-OR), supply to neutral switch S-22 (300-OR)
3	302 (YE), 1212 (YE)	Signal to feeder engage S-31 (302-YE), signal to CCM3 J1-17 (1212-YE)
4	plug	
5	110 (OR), 1180 (OR)	Power from fuse F-48 (1180-OR), jumper to pin 2 (110-OR)
6	147 (YE)	Signal to CCM2 J1-7 and CCM3 J1-7

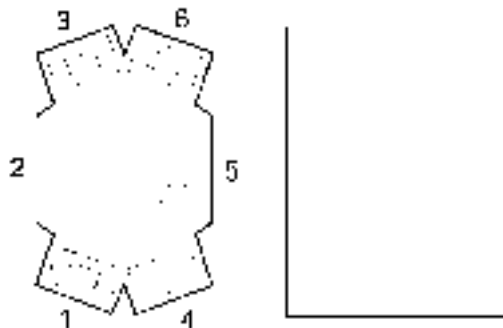
**Connector X056 - Right Console Harness to Feeder Engage S-31**



10031050A4 94

**Inside right hand console**

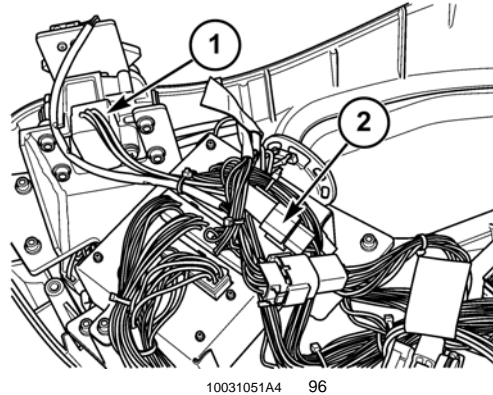
1. Connector **X055** to Separator Engage switch S-30
2. Connector **X056** to Feeder Engage switch S-31



PAC\_8911352 95

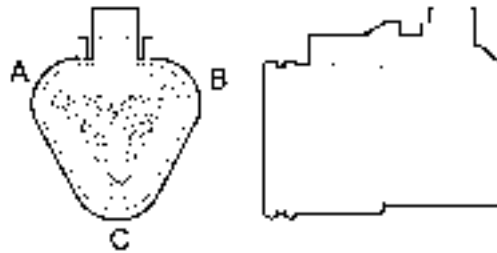
Cavity	Circuit ID	Description
1	326 (YE), 1244 (YE)	Signal to RHM X029 pin 5 (326-YE)[reverse], signal to feeder engage diodes D-01 (1244-YE)
2	358 (OR)	Power from fuse F-48
3	1211 (YE)	Signal to feeder disengage relay K-19
4	plug	
5	302 (YE)	Power from separator engage S-30
6	112 (YE), 1243 (YE)	Signal to CCM1 J1-7 (112-YE), signal to feeder engage diodes D-01 (1243-YE)

**Connector X057 - Right Console Harness to Ground Speed Pot R-04**



Inside right hand console

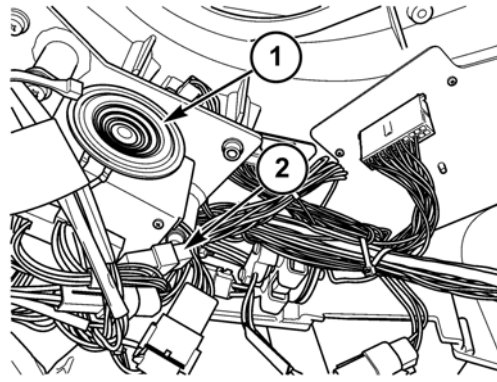
1. Ground speed potentiometer R-04
2. Connector X057



DEUTSCH\_DT06-3S 97

Cavity	Circuit ID	Description
A	1030 (PK)	5 volts from RHM X026 pin 16
B	1029 (BL)	Reference ground to RHM X026 pin 6
C	381 (YE)	Signal to RHM X027 pin 11

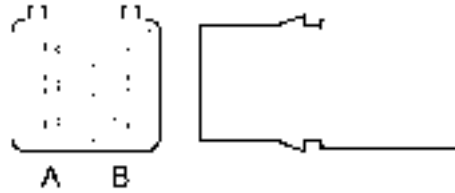
**Connector X058 - Right Console Harness to Audio Alarm H-01**



10031053A4 98

**Inside right hand console**

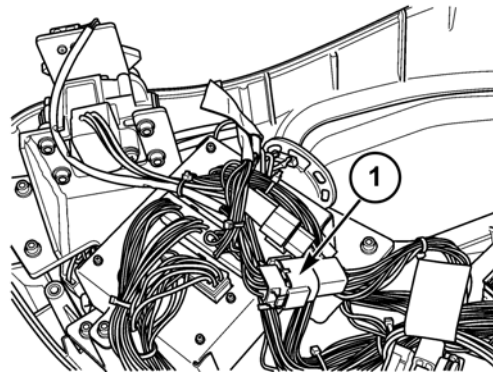
1. Audio alarm H-01
2. Connector X058



AMP\_180923 99

Cavity	Circuit ID	Description
A	388 (BK)	To RHM X026 pin 18
B	376 (WH)	To RHM X026 pin 19

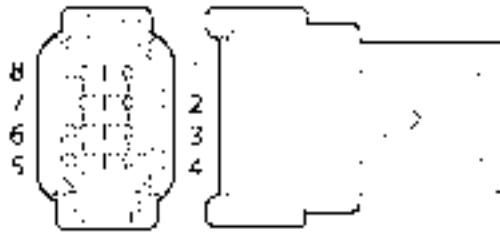
**Connector X059 - Right Console Harness to Propulsion Harness**



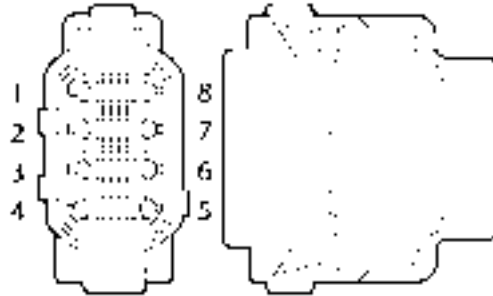
10031051B4 100

**Inside right hand console**

1. Connector X059



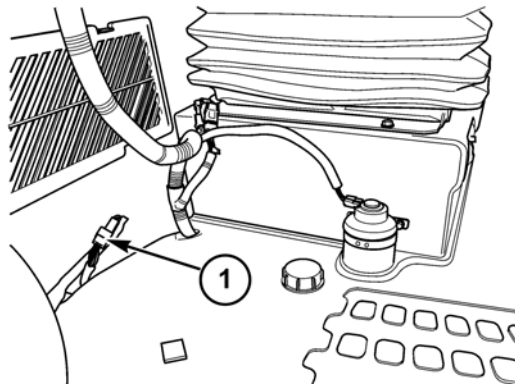
DEU\_DTM04-8P 101



DEU\_DTM06-8S 102

Cavity	Circuit ID	Description
1	1027 (PU)	Power from fuse F-48
2	1031 (BK)	To cab ground 3
3	300 (OR)	Power from fuse F-48
4	093 (WH)	Neutral switch S-22 to neutral start relay K-23
5	113 (YE)	Neutral switch S-22 to CCM2 J1-17
6	open	
7	open	
8	open	

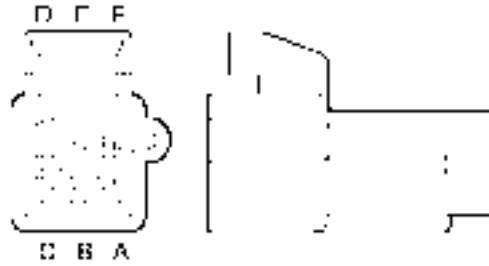
**Connector X064 - Cab Main Harness to Adapter Display Harness**



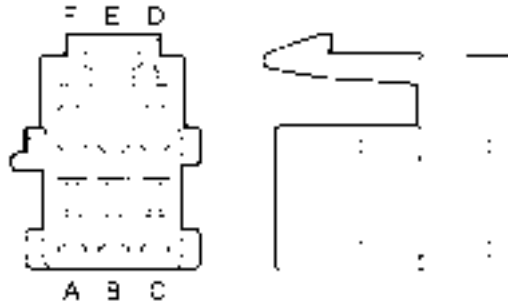
10031048A4 103

**Right side of cab floor, under right hand console**

1. Connector X064



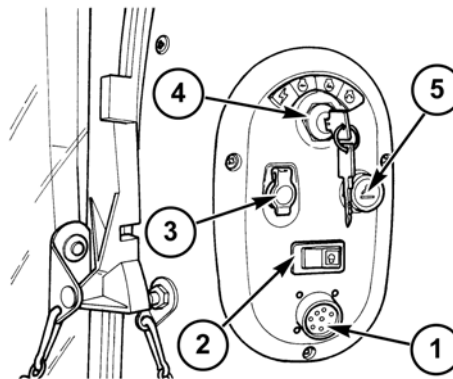
PAC\_12064763 104



PAC\_12064762 105

Cavity	Circuit ID	Description
A	143 (YE)	CAN High
B	open	
C	097 (OR)	Power from key switch S-02
D	057 (RD)	Keep alive power from fuse F-39
E	144 (GN)	CAN Low
F	145 (BK)	To cab ground 3

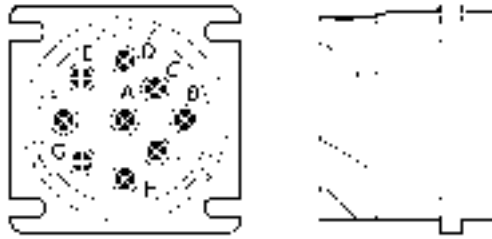
**Connector X065 - Diagnostic and Maintenance (DAM) Connector**



20021822A4 106

**Right rear cab post**

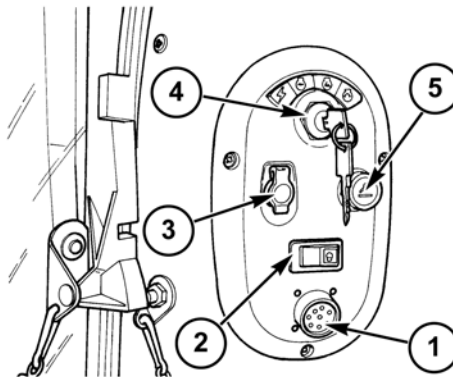
1. Connector X065
2. Cold start indicator lamp E-36 (connector X066)
3. Accessory socket J-08 (connector X067)
4. Key switch S-02 (connector X068)
5. Cigar lighter R-08 (connectors X069 & X070)



DE\_HD10-9-1939P 107

Cavity	Circuit ID	Description
A	146 (BK)	To cab ground 3
B	142 (RD)	Power from fuse F-39
C	271 (YE)	CAN High
D	270 (GN)	CAN Low
E	827 (YE)	Signal from ECU A-01 X193 pin 13
F	135 (RD)	RS232 TX from RHM X026 pin 12
G	136 (BK)	RS232 RX from RHM X026 pin 3
H	open	
J	open	

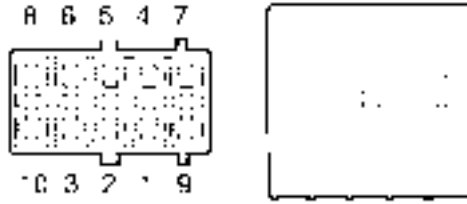
**Connector X066 - Cab Main Harness to Cold Start Indicator E-36**



20021822A4 108

**Right rear cab post**

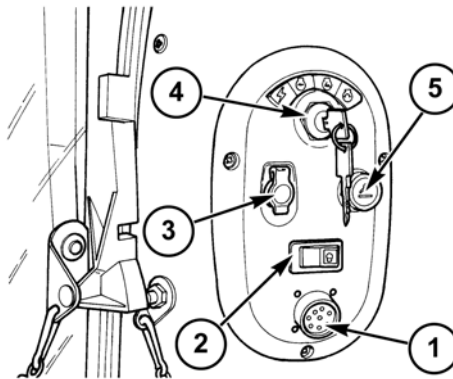
1. Connector **X065**
2. Cold start indicator lamp E-36 (connector X066)
3. Accessory socket J-08 (connector **X067**)
4. Key switch S-02 (connector **X068**)
5. Cigar lighter R-08 (connectors **X069** & **X070**)



EATON\_25-13936 109

Cavity	Circuit ID	Description
1	open	
2	1002 (OR)	Not used
3	1159 (WH)	Not used
4	open	
5	open	
6	open	
7	814 (WH)	Signal from CCM2 J1-12
8	open	
9	294 (BK)	To cab ground 3
10	open	

**Connector X067 - Cab Main Harness to Accessory Socket J-06**

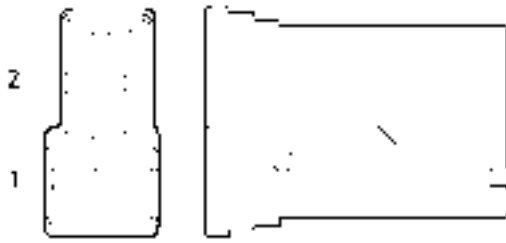


20021822A4 110

**Right rear cab post**

1. Connector **X065**
2. Cold start indicator lamp E-36 (connector **X066**)
3. Accessory socket J-08 (connector X067)
4. Key switch S-02 (connector **X068**)
5. Cigar lighter R-08 (connectors **X069** & **X070**)

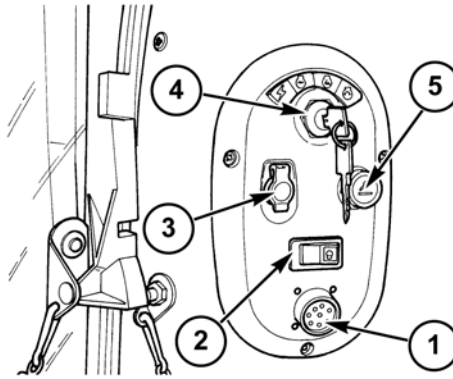




AMP\_926522 111

Cavity	Circuit ID	Description
1	151 (BK)	To cab ground 3
2	084 (OR)	Power from fuse F-08

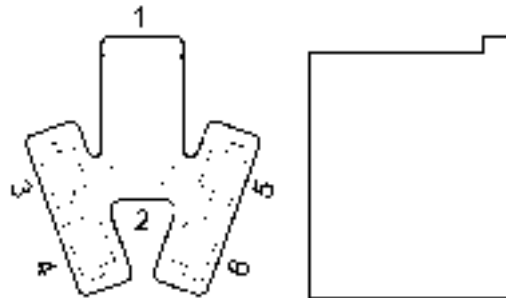
**Connector X068 - Cab Main Harness to Key Switch S-02**



20021822A4 112

**Right rear cab post**

1. Connector **X065**
2. Cold start indicator lamp E-36 (connector **X066**)
3. Accessory socket J-08 (connector **X067**)
4. Key switch S-02 (connector X068)
5. Cigar lighter R-08 (connectors **X069** & **X070**)

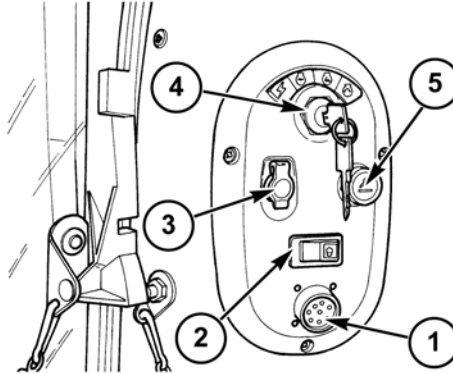


PAC\_02984017 113

Cavity	Circuit ID	Description
1	053 (RD)	Power from fuse F-38
2	091 (OR)	Output to neutral start relay K-23 and CCM2 J1-21 (start)
3	open	

Cavity	Circuit ID	Description
4	123 (OR)	Output to wiper relay K-06, accessory 1 relay K-08 and accessory 2 relay K-03
5	859 (OR)	Output to ECU A-01 X193 pin 15
6	096 (OR)	Output to CCM's, SSM, ICDU, and power relays K-24, K-25 & K-26

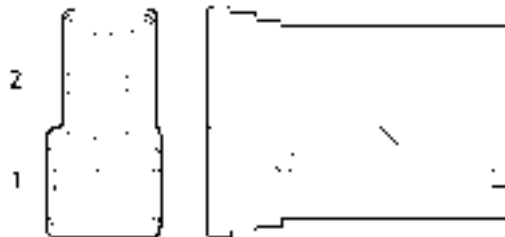
**Connector X069 - Cab Main Harness to Lighter R-08**



20021822A4 114

**Right rear cab post**

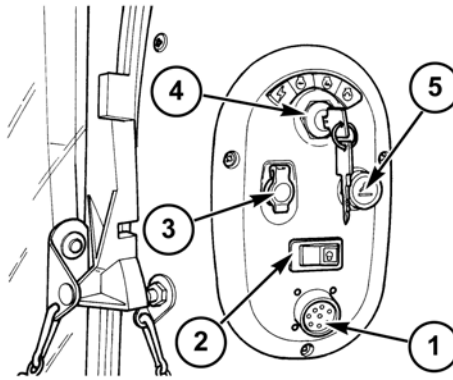
1. Connector **X065**
2. Cold start indicator lamp E-36 (connector **X066**)
3. Accessory socket J-08 (connector **X067**)
4. Key switch S-02 (connector **X068**)
5. Cigar lighter R-08 (connectors X069 & **X070**)



AMP\_926522 115

Cavity	Circuit ID	Description
1	152 (BK)	To cab ground 3
2	085 (RD)	Power from fuse F-05

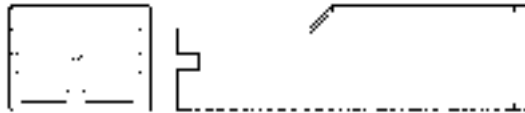
**Connector X070 - Cab Main Harness to Lighter Backlight R-08**



20021822A4 116

**Right rear cab post**

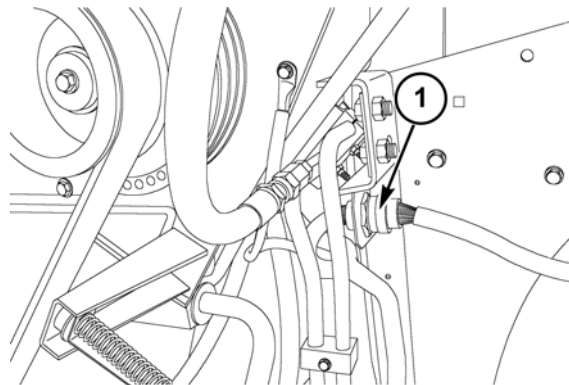
1. Connector **X065**
2. Cold start indicator lamp E-36 (connector **X066**)
3. Accessory socket J-08 (connector **X067**)
4. Key switch S-02 (connector **X068**)
5. Cigar lighter R-08 (connectors **X069** & X070)



AMP\_154719 117

Cavity	Circuit ID	Description
3	206 (PU)	Signal from CCM2 J1-11

**Connector X071 - Straw Hood Harness to Straw Hood Rear Harness**



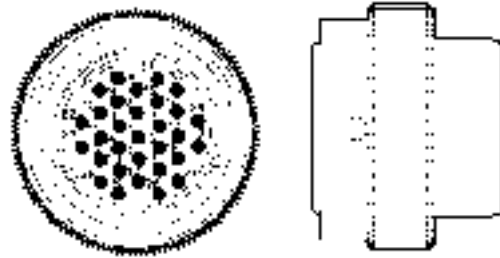
40031058A4 118

**Left rear side of main frame, below PFC pump**

1. Connector X071



DE\_HDP24-24-31P 119

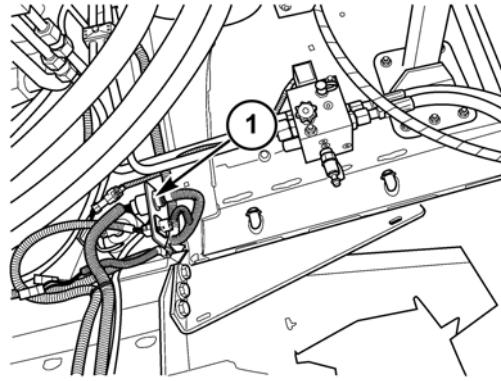


DE\_HDP26-24-31S 120

Cavity	Circuit ID	Description
1	1215 (RD)	Fuse F-34 to engine light switch S-64
2	1248 (BK)	Engine light E-46 to frame ground 1
3	481 (BL)	Rear ladder B-22 reference ground to CCM1 J2-14
4	492 (BL)	Spreader RPM B-55 reference ground to CCM2 J2-14
5	1254 (OR)	Fuse F-45 to spreader RPM B-55
6	414 (YE)	Spreader RPM B-55 to CCM2 J2-28
7	open	
8	open	
9	415 (YE)	Spreader position B-11 to CCM1 J3-37
10	open	
11	570 (YE)	Rear ladder B-22 to CCM1 J2-17
12	482 (BL)	Spreader position B-11 reference ground to CCM1 J2-14
13	678 (RD)	Fuse F-15 to RH side service socket J-03
14	452 (WH)	CCM1 J2-6 to back up alarm H-08
15	open	
16	open	
17	243 (PU)	Flasher module A-05 to LH flashing lamp E-07 (NA)
18	412 (PU)	Fuse F-20 to LH marker lights E-11, E-05
19	619 (PU)	Flasher module A-05 to LH rear flashing lamp E-05
20	629 (PU)	Brake lights relay K-33 to LH brake lights E-05/E-11
21	421 (PU)	Fuse F-21 to RH marker lights E-12, E-06
22	578 (PU)	Beacon light relay K-29 to rear beacon light E-33
23	244 (PU)	Flasher module A-05 to RH flashing lamp E-08 (NA)
24	622 (PU)	Flasher module A-05 to RH flashing lamp E-06

Cavity	Circuit ID	Description
25	630 (PU)	Brake lights relay K-33 to RH brake lights E-06/E-12
26	478 (BK)	Back up alarm H-08 and rear beacon light E-33 to rear frame ground 1
27	628 (BK)	Flashing lamps E-05/E-06/E-07/E-08, brake / tail lamps E-11/E-12 and RH side service socket J-03 to frame ground 1
28	067 (GY)	Rear work lights relay K-31 to rear work lights E-27 & E-28
29	672 (BK)	Rear work lights E-27 & E-28 to frame ground 1
30	444 (BL)	Unload cradle B-38 reference ground to CCM1 J2-14
31	485 (YE)	Unload cradle B-38 to CCM1 J3-36

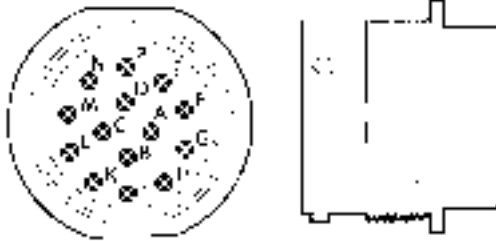
**Connector X072 - Straw Hood Harness to Lower Frame Rear Harness**



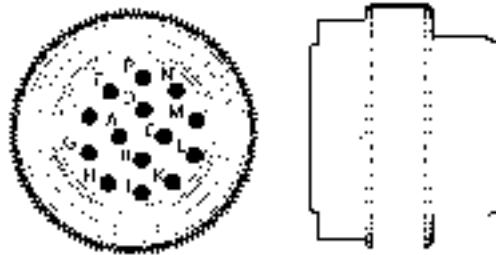
10033639A4 121

**Left rear side of main frame , below PFC pump**

- Connector X072



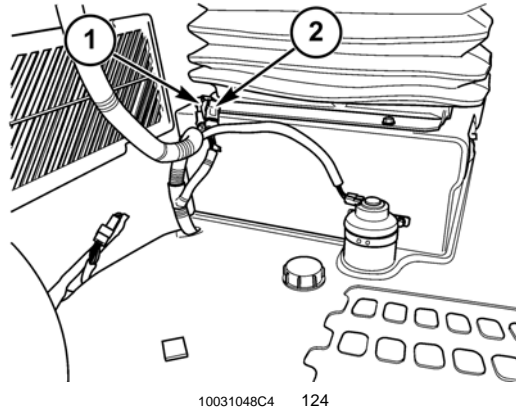
DE\_HDP24-18-14P 122



DE\_HDP26-18-14S 123

Cavity	Circuit ID	Description
A	569 (WH)	CCM1 J2-16 to rear wheel assist L-26
B	602 (BK)	Rear wheel assist L-26 to frame ground 1
C	494 (BL)	Sieves loss B-21 reference ground to CCM1 J2-14
D	431 (YE)	Sieves loss to CCM1 J2-25
E	793 (PK)	CCM3 J2-31 to upper sieve actuator M-06
F	795 (BL)	Upper sieve actuator reference ground to CCM3 J2-14
G	475 (YE)	Upper sieve actuator M-06 to CCM3 J2-22
H	792 (WH)	Upper / lower sieve relay K-18 to upper sieve actuator M-06
J	791 (GY)	CCM3 J2-1 to upper sieve actuator M-06
K	794 (PK)	CCM3 J2-31 to lower sieve actuator M-07
L	796 (BL)	Lower sieve actuator M-07 to CCM3 J2-14
M	476 (YE)	Lower sieve actuator M-07 to CCM3 J2-19
N	790 (WH)	Upper / lower sieve relay K-18 to lower sieve actuator M-07
P	789 (GY)	CCM3 J2-1 to lower sieve actuator M-07

**Connector X073 - Cab Main Harness to Seat Switch S-05/S-66**

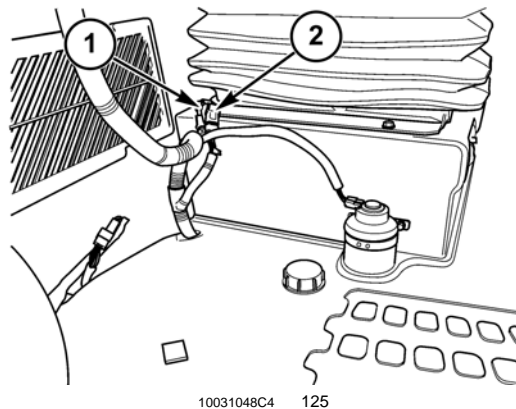


Right rear corner of cab floor, below right hand console

- 1.
- 2.

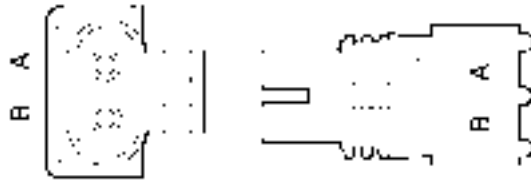
Cavity	Circuit ID	Description
A	046 (OR)	Power from fuse F-49
B	168 (YE)	Signal to CCM2 J1-9

**Connector X074 - Cab Main Harness to Seat**



**Right rear corner of cab floor, below right hand console**

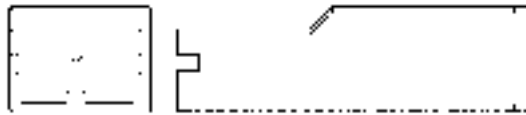
- 1.
- 2.



PAC\_12015792 126

Cavity	Circuit ID	Description
A	080 (OR)	Fuse F-16 to seat adjust switch S-45
B	164 (BK)	Seat pump motor M-26 to cab ground 3

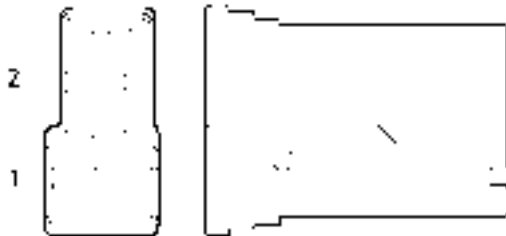
**Connector X075 - Cab Main Harness to Accessory Outlet J-08**



AMP\_154719 127

Cavity	Circuit ID	Description
3	247 (PU)	Signal from CCM2 J1-11

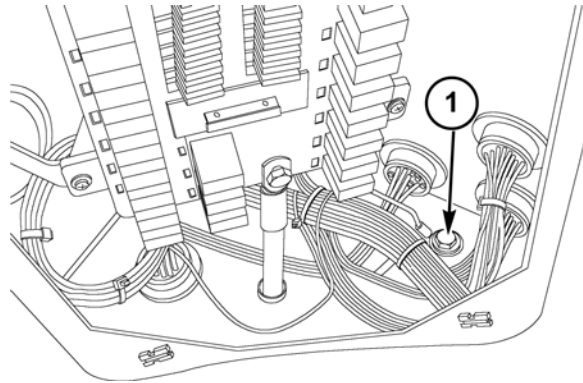
**Connector X076 - Cab Main Harness to Accessory Outlet J-08**



AMP\_926522 128

Cavity	Circuit ID	Description
1	153 (BK)	To cab ground 3
2	086 (OR)	Power from fuse F-08

**Connector X077 - Cab Main Harness to Cab Ground 3**



40033796A4 129

**Left rear corner of cab, below fuse panel**

1. Connector X077

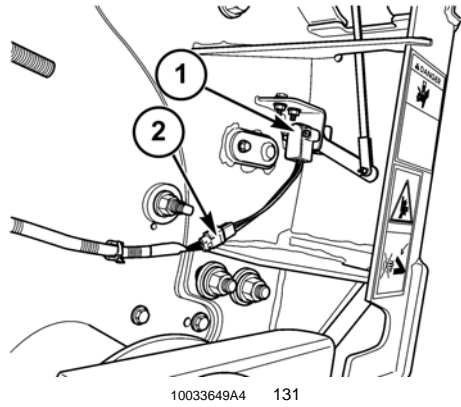


RING\_TERMINAL 130

Cavity	Circuit ID	Description
	116 (BK)	Monitors, CCM's, DAM, RHM, Flasher module A-05, front switch panel A-13, rear switch panel A-18
	156 (BK)	Relays K-01 to K-05
	160 (BK)	Relays K-19 to K-23, K-27 to K-29
	161 (BK)	Relays K-30 to K-35
	945 (BK)	Relays K-06 to K-10
	151 (BK)	Accessory socket J-06
	152 (BK)	Lighter R-08
	153 (BK)	Accessory outlet J-08
	164 (BK)	Seat pump motor M-26
	294 (BK)	Cold start indicator E-36
	788 (BK)	Relays K-11 to K-13, K-15 to K-18



**Connector X081 - Feeder Harness to Lateral Tilt Pot R-02**



**Right front corner of feeder**

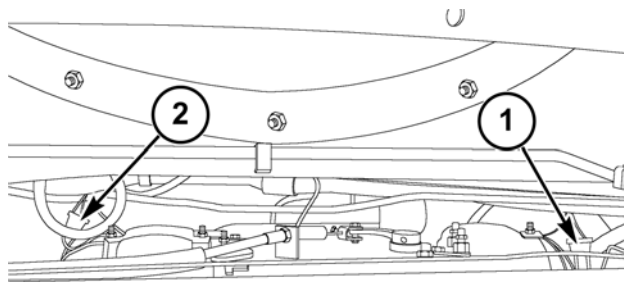
1. Lateral tilt potentiometer R-02
2. Connector X081



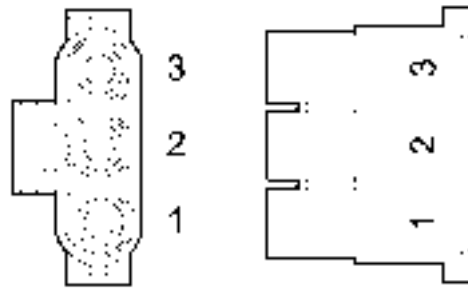
DEU\_DTM06-3S 132

Cavity	Circuit ID	Description
1	1170 (PK)	5 volts from CCM1 J3-26
2	741 (YE)	Signal to CCM1 J3-17
3	745 (BL)	Reference ground to CCM1 J3-18

**Connector X084 - Lower Frame Harness to LH Brake Wear Switch S-55**



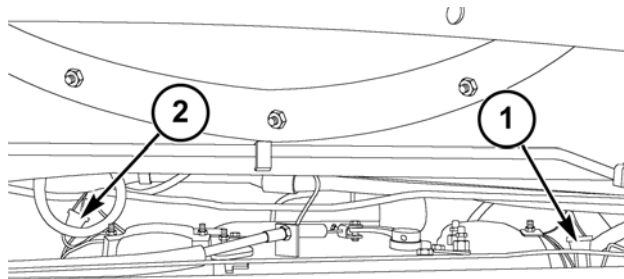
1. Connector X084
2. Connector **X085**



AMP\_794412-1 134

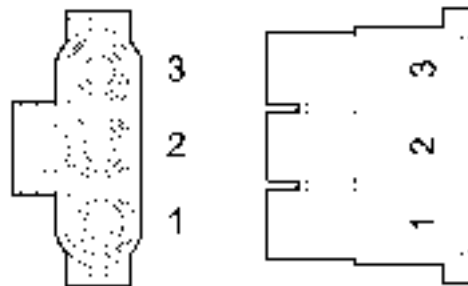
Cavity	Circuit ID	Description
1	607 (YE)	Signal to CCM1 J2-26
2	open	
3	843 (YE)	Signal to CCM1 J2-26

**Connector X085 - Lower Frame Harness to RH Brake Wear Switch S-56**



40033771A4 135

1. Connector **X084**
2. Connector X085



AMP\_794412-1 136

Cavity	Circuit ID	Description
1	835 (YE)	Signal to CCM1 J2-26
2	open	
3	844 (YE)	Signal to CCM1 J2-26

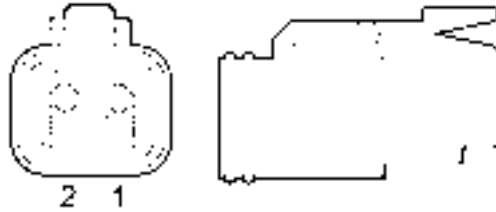
**Connector X087 - Lower Frame Harness to Ground Speed RPM B-17**



40034843A5 137

**Top of ground drive transmission**

1. Ground speed RPM sensor B-17
2. Connector X087



DEUTSCH\_DT06-2S 138

Cavity	Circuit ID	Description
1	717 (BL)	Reference ground to CCM2 J3-18
2	403 (YE)	Signal to CCM2 J3-14

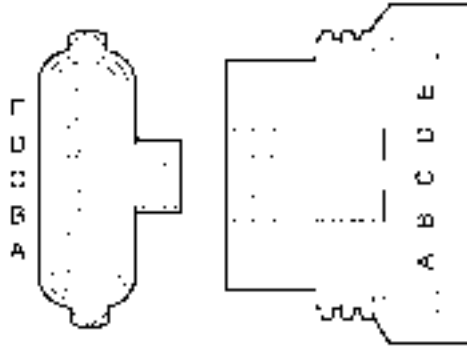
**Connector X088 - Lower Frame Harness to Shoe Leveling Actuator M-03**



40033773A5 139

**Right front corner of cleaning shoe, inside frame**

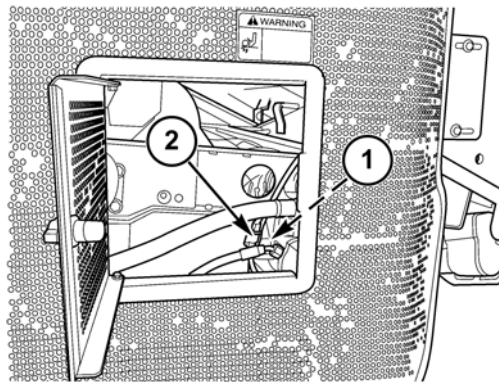
1. Shoe levelling actuator M-03
2. Connector X088



PAC\_12084891 140

Cavity	Circuit ID	Description
A	727 (PK)	5 volts from CCM1 J3-26
B	724 (BL)	Reference ground to CCM1 J3-18
C	721 (YE)	Signal to CCM1 J3-32
D	710 (WH)	To CCM1 J3-39/40
E	707 (GY)	To CCM1 J3-19/20

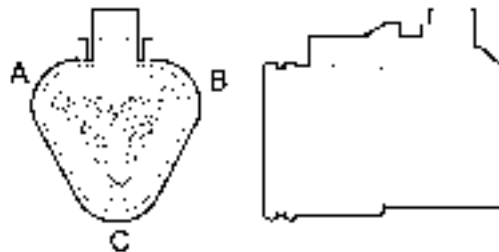
**Connector X089 - Lower Frame Harness to Cleaning Fan RPM B-16**



10033654A4 141

**Right side of main frame at cleaning fan drive**

1. Cleaning fan RPM sensor B-16
2. Connector X089

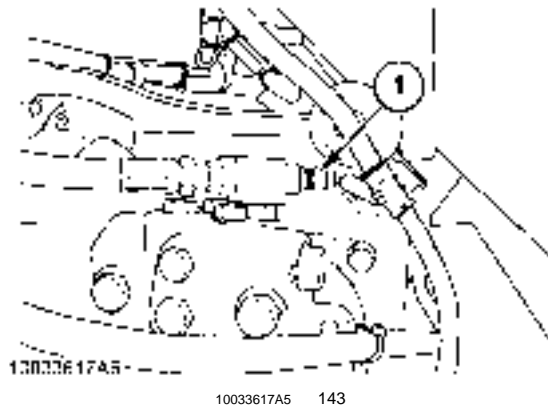


DEUTSCH\_DT06-3S 142

Cavity	Circuit ID	Description
A	1259 (OR)	Power from fuse F-45

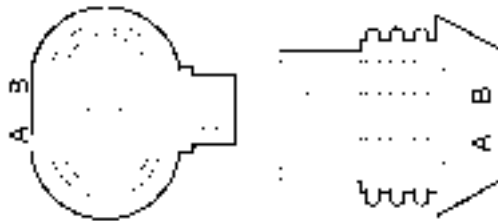
Cavity	Circuit ID	Description
B	404 (YE)	Signal to CCM1 J3-13
C	718 (BL)	Reference ground to CCM1 J3-18

**Connector X091 - Lower Frame Harness to Hydrostat Motor Temp B-46**



**Left side of main frame, on top of hydrostat ground drive motor**

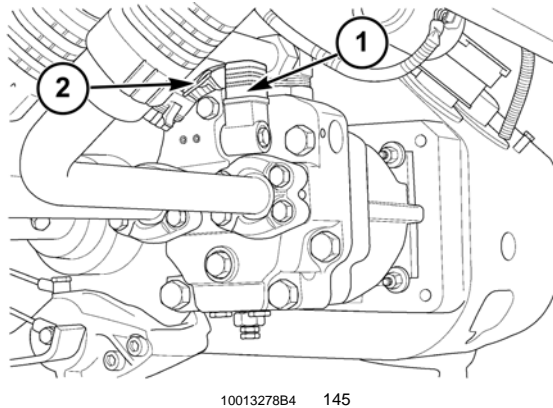
1. Connector X091



PAC\_12162193 144

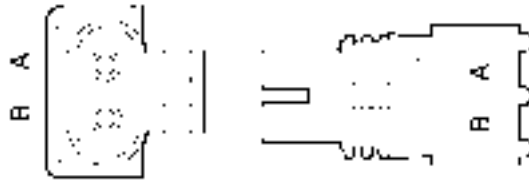
Cavity	Circuit ID	Description
A	774 (BL)	Reference ground to CCM1 J3-18
B	773 (YE)	Signal to CCM1 J3-33

**Connector X092 - Lower Frame Harness to Pressure Release L-05**



**Left side of main frame, on hydrostat motor**

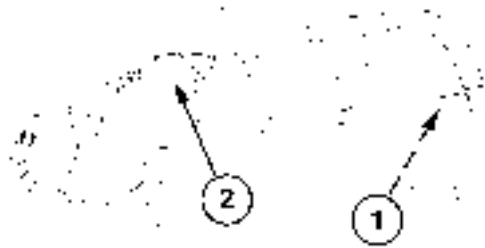
1. Pressure release solenoid L-05
2. Connector X092



PAC\_12015792 146

Cavity	Circuit ID	Description
A	575 (WH)	Signal from CCM2 J3-15
B	606 (BK)	To frame ground 2

**Connector X093 - Lower Frame Harness to Trans Shift Position B-37**



10004664A5 147

**Top rear of ground drive transmission**

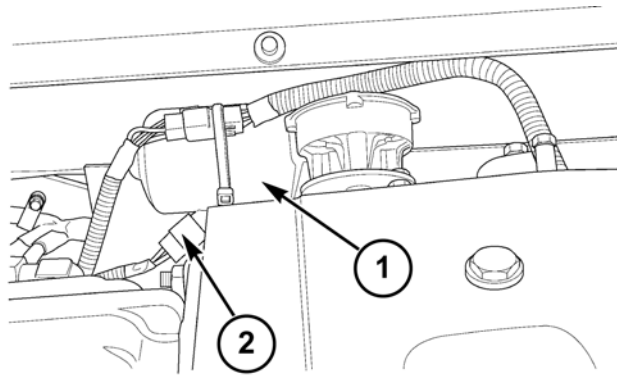
1. Transmission shift position sensor B-37
2. Connector X093



DEUTSCH\_DT06-6S 148

Cavity	Circuit ID	Description
1	407 (YE)	Signal (N) to CCM2 J3-28
2	405 (YE)	Signal (1st) to CCM2 J3-36
3	406 (YE)	Signal (2nd) to CCM2 J3-37
4	408 (YE)	Signal (3rd) to CCM2 J3-38
5	409 (YE)	Signal (4th) to CCM2 J3-27
6	426 (BL)	Reference ground to CCM2 J3-18

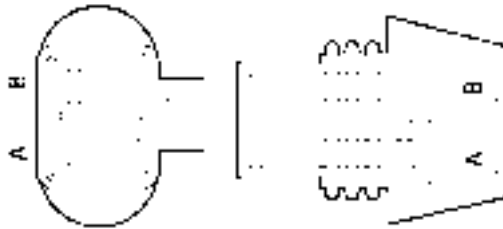
**Connector X094 - Lower Frame Harness to Transmission Shift Motor M-02**



10004664B4 149

**Top rear of ground drive transmission**

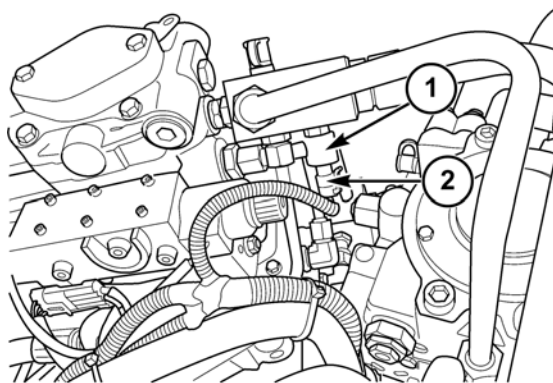
1. Transmission shift motor M-02
2. Connector X094



PAC\_15300027 150

Cavity	Circuit ID	Description
A	716 (WH)	Signal from CCM2 J3-39/40
B	715 (GY)	Signal from CCM2 J3-19/20

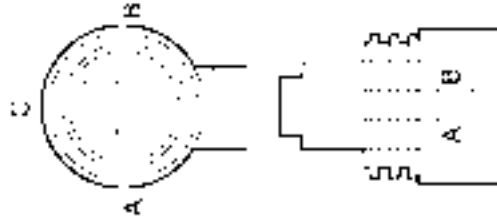
**Connector X098 - Gearbox Harness to Low Control Pressure B-35**



10033637A4 151

**Top of PTO gearbox, next to feeder drive hydrostat pump**

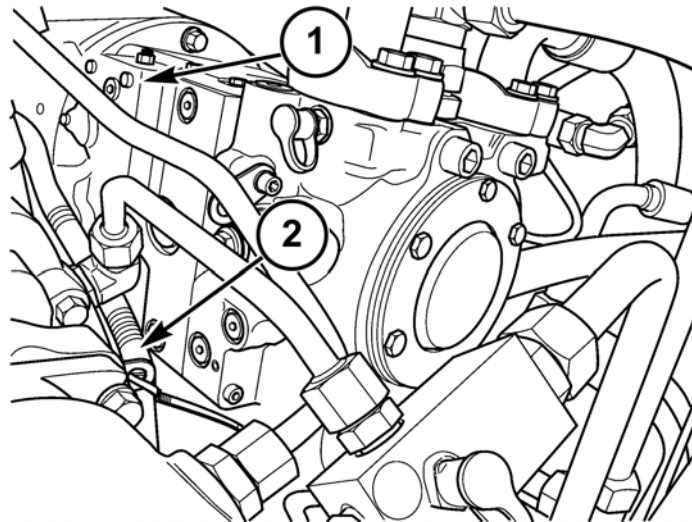
1. Low control pressure sensor B-35
2. Connector X098



PAC\_12065287 152

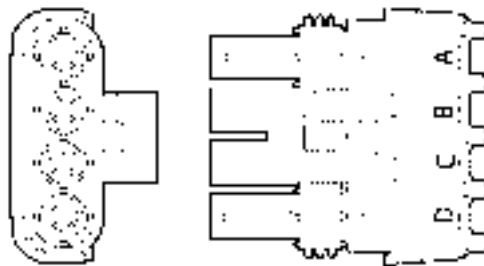
Cavity	Circuit ID	Description
A	683 (BL)	Reference ground to CCM2 J2-14
B	486 (PK)	5 volts from CCM2 J2-31
C	423 (YE)	Signal to CCM2 J2-19

**Connector X100 - Gearbox Harness to Ground Speed Hydrostat L-23**



10033623B4 153

1. Ground drive hydrostat control valve L-23
2. Connector X100



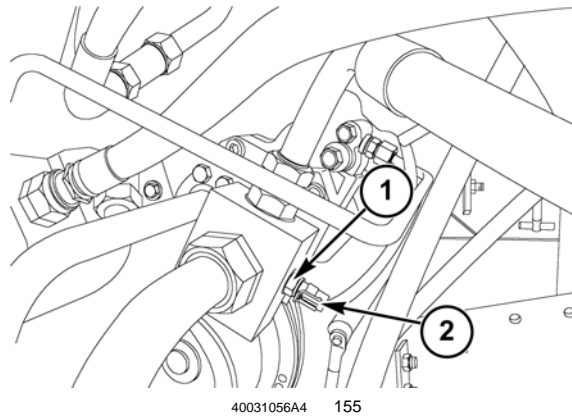
PAC\_12015797 154

Cavity	Circuit ID	Description
A	879 (GY)	CCM2 J3-21 to hydrostat coil "B"
B	886 (BL)	Reference ground to CCM2 J3-35



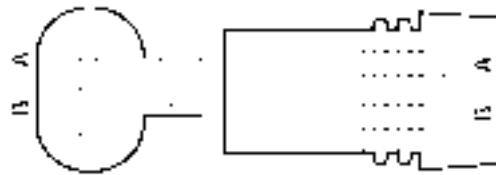
Cavity	Circuit ID	Description
C	887 (BL)	Reference ground to CCM2 J3-35
D	880 (WH)	CCM2 J3-31 to hydrostat coil "A"

**Connector X103 - Gearbox Harness to Hyd Oil Reservoir Temp B-18**



**Lower rear corner of PTO gearbox, at PFC pump inlet manifold**

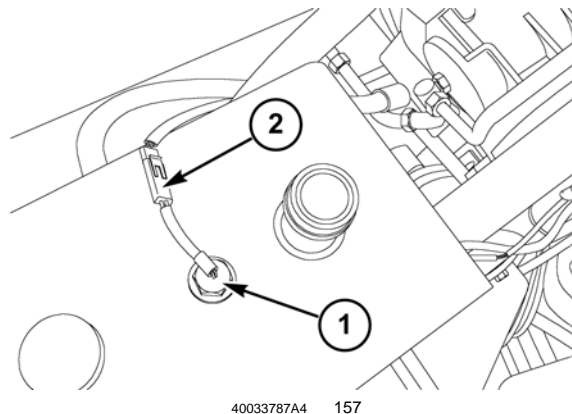
1. Hydraulic oil reservoir temperature sensor B-18
2. Connector X103



PAC\_15336024 156

Cavity	Circuit ID	Description
A	480 (BL)	Reference ground to CCM1 J2-14
B	446 (YE)	Signal to CCM1 J2-24

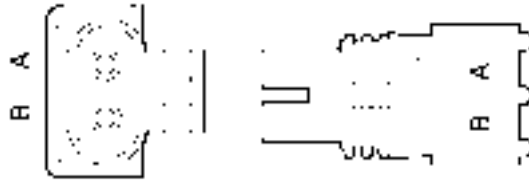
**Connector X104 - Gearbox Harness to Hydraulic Reservoir Level S-33**



**Top of hydraulic reservoir**

1. Hydraulic reservoir level sensor S-33

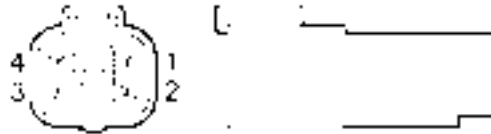
2. Connector X104



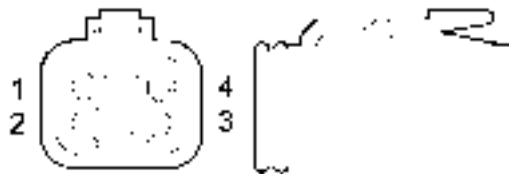
PAC\_12015792 158

Cavity	Circuit ID	Description
A	487 (BK)	To frame ground 1
B	424 (YE)	Signal to CCM2 J2-39

**Connector X105 - Grain Tank Harness to Unload Tube Light Harness**



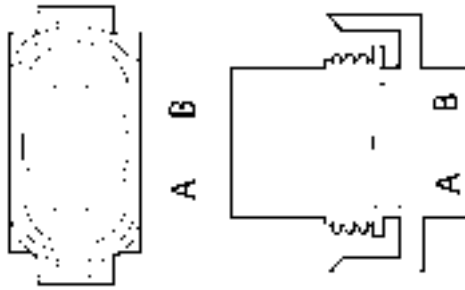
DEUTSCH\_DT04-4P 159



DEUTSCH\_DT06-4S 160

Cavity	Circuit ID	Description
1	077 (PU)	Unload tube light relay K-32 to unload tube light E-29
2	669 (BK)	Unload tube light E-29 to frame ground 2
3	530 (PU)	Unload tube marker light (FR) E-39 to frame ground 2
4	531 (BK)	Fuse F-20 to unload tube marker light (FR) E-39

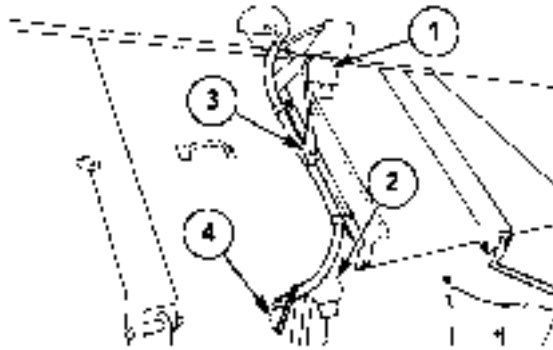
**Connector X106 - Straw Hood Rear Harness to LH Rear Work Light E-27**



PAC\_12124819 161

Cavity	Circuit ID	Description
A	652 (PU)	Signal from rear work lights relay K-31
B	661 (BK)	To frame ground 1

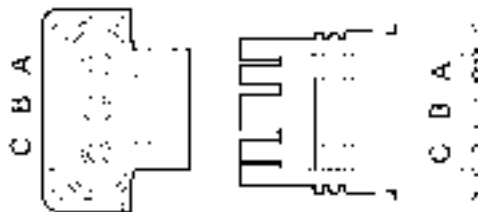
**Connector X107 - Grain Tank Harness to Grain Bin 3/4 Full S-28**



10030023A5 162

**Front wall and extension of grain bin**

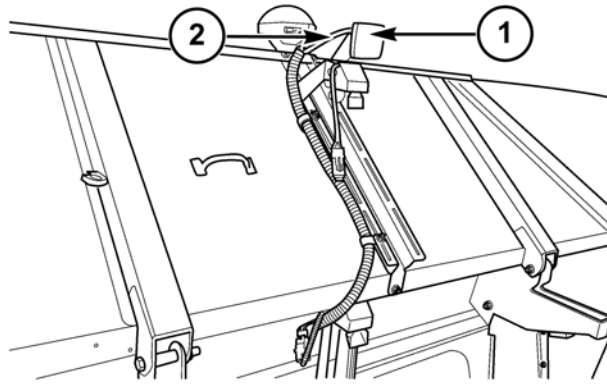
1. Grain bin full switch S-29
2. Grain bin 3/4 full switch S-29
3. Connector **X109**
4. Connector X107



PAC\_12015793 163

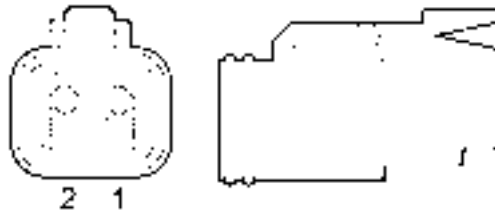
Cavity	Circuit ID	Description
A	440 (PK)	5 volts from CCM2 J2-31
B	445 (YE)	Signal to grain bin full S-29
C	400 (YE)	Signal to CCM2 J2-22

**Connector X108 - Grain Tank Harness to Grain Tank Light E-30**



**Front extension of grain tank**

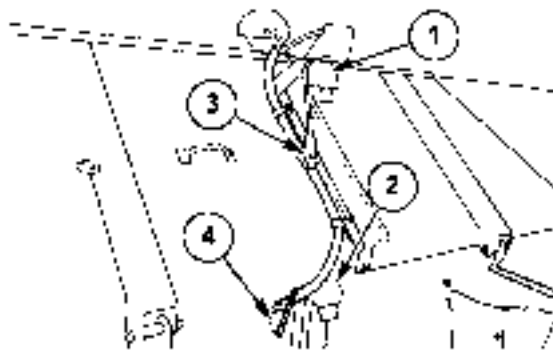
1. Grain tank light E-30
2. Connector X108



DEUTSCH\_DT06-2S 165

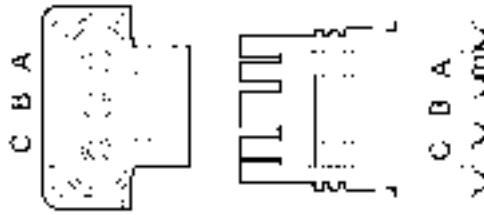
Cavity	Circuit ID	Description
1	646 (PU)	Signal from lower work lights relay K-30
2	681 (BK)	To frame ground 2

**Connector X109 - Grain Tank Harness to Grain Tank Full S-29**



**Front wall and extension of grain bin**

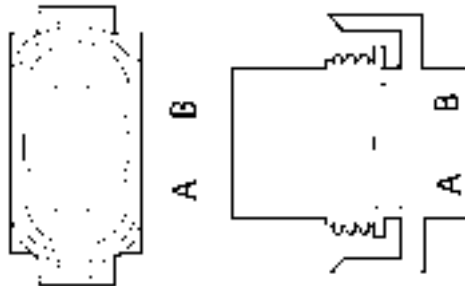
1. Grain bin full switch S-29
2. Grain bin 3/4 full switch S-29
3. Connector X109
4. Connector **X107**



PAC\_12015793 167

Cavity	Circuit ID	Description
A	443 (BL)	Reference ground to CCM2 J2-14
B	445 (YE)	Signal from grain bin 3/4 full S-28
C	open	

**Connector X110 - Straw Hood Rear Harness to RH Rear Work Light E-28**



PAC\_12124819 168

Cavity	Circuit ID	Description
A	653 (PU)	Signal from rear work lights relay K-31
B	662 (BK)	To frame ground 1

**Connector X111 - Outer Roof Harness to LH Mirror & Side Light Jumper Harness**



DEUTSCH\_DT06-6S 169

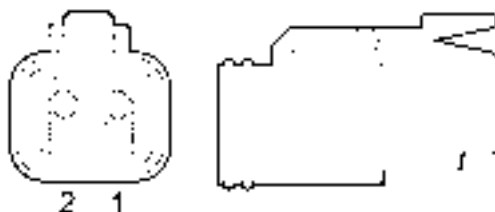
Cavity	Circuit ID	Description
1	959 (WH)	Mirror adjust switch S-27 to LH mirror in / out M-22
2	961 (GY)	Mirror adjust switch S-27 to LH mirror motors M-21 & M-22
3	935 (OR)	Mirror heat switch S-19 to LH mirror heat R-11

Cavity	Circuit ID	Description
4	958 (WH)	Mirror adjust switch S-27 to LH mirror up / down M-21
5	076 (PU)	Side work light relays K-34 & K-35 to LH side work light E-25
6	671 (BK)	To cab roof ground 4

**Connector X112 - Outer Roof Harness to LH Cab Outer Work Light E-15**

Cavity	Circuit ID	Description
A	058 (PU)	Signal from cab roof work lights relay K-01
B	259 (BK)	To cab roof ground 4

**Connector X113 - Outer Roof Harness to LH Front Beacon Light E-31**



DEUTSCH\_DT06-2S 170

Cavity	Circuit ID	Description
1	663 (PU)	Signal from beacon light relay K-29
2	666 (BK)	To cab roof ground 4

**Connector X114 - Outer Roof Harness to LH Cab Mid Work Light E-19**

Cavity	Circuit ID	Description
A	260 (BK)	To cab roof ground 4
B	252 (PU)	Signal from header work lights relay K-22

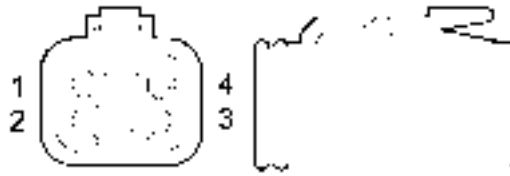
**Connector X115 - Outer Roof Harness to LH Cab Inner Work Light E-17**



AMP\_172615 171

Cavity	Circuit ID	Description
A	1157 (PU)	Power from road lights relay K-27 pin 4 (low beam)
B	1249 (PU)	Power from road lights relay K-27 pin 5 (high beam)
C	261 (BK)	To cab roof ground 4

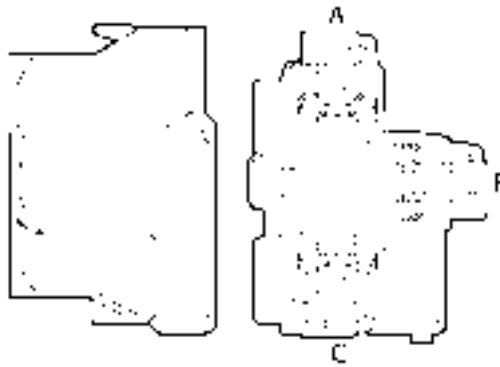
**Connector X116 - Outer Roof Harness to Wiper Motor M-25**



DEUTSCH\_DT06-4S 172

Cavity	Circuit ID	Description
1	open	
2	open	
3	275 (WH)	Signal from wiper switch S-20
4	280 (BK)	To cab roof ground 4

**Connector X117 - Outer Roof Harness to RH Cab Inner Work Light E-18**



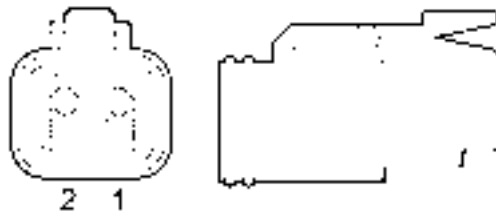
AMP\_172615 173

Cavity	Circuit ID	Description
A	1156 (PU)	Power from road lights relay K-27 pin 4 (low beam)
B	1250 (PU)	Power from road lights relay K-27 pin 5 (high beam)
C	265 (BK)	To cab roof ground 4

**Connector X118 - Outer Roof Harness to RH Cab Mid Work Light E-20**

Cavity	Circuit ID	Description
A	263 (BK)	To cab roof ground 4
B	253 (PU)	Signal from header work lights relays K-22

**Connector X119 - Outer Roof Harness to RH Front Beacon Light E-32**



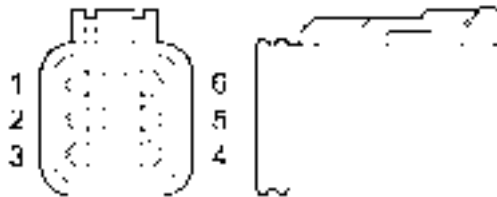
DEUTSCH\_DT06-2S 174

Cavity	Circuit ID	Description
1	664 (PU)	Signal from beacon light relay K-29
2	667 (BK)	To cab roof ground 4

**Connector X120 - Outer Roof Harness to RH Cab Outer Work Light E-16**

Cavity	Circuit ID	Description
A	059 (PU)	Signal from cab roof work lights relay K-01
B	264 (BK)	To cab roof ground 4

**Connector X121 - Outer Roof Harness to RH Mirror & Side Light Jumper Harness**

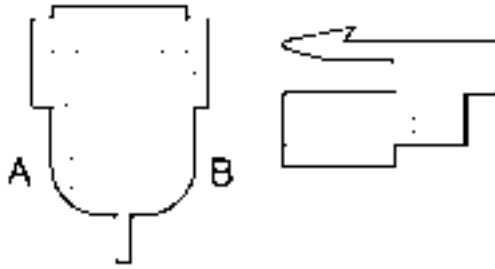


DEUTSCH\_DT06-6S 175

Cavity	Circuit ID	Description
1	962 (WH)	Switch bypass fuses F-64 OR mirror select switch S-57 to RH mirror in / out M-20
2	956 (GY)	Mirror adjust switch S-27 to RH mirror motors M-19 & M-20
3	932 (OR)	Mirror heat switch S-19 to RH mirror heat R-10
4	955 (WH)	Switch bypass fuses F-64 OR mirror select switch S-57 to RH mirror up / down M-19
5	072 (PU)	Side work light relays K-34 & K-35 to RH side work light E-26
6	670 (BK)	RH side work light E-26 to cab roof ground 4



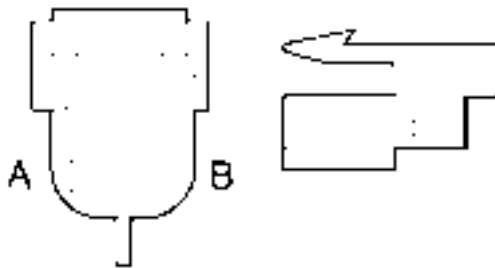
**Connector X122 - Cab Roof Harness to Rear Right Speaker H-06**



PAC\_12052832 176

Cavity	Circuit ID	Description
A	979 (BL)	Ground to radio A-04 X315 pin 2
B	974 (WH)	Signal from radio A-04 X315 pin 1

**Connector X123 - Cab Roof Harness to Rear Left Speaker H-04**



PAC\_12052832 177

Cavity	Circuit ID	Description
A	982 (BL)	Ground to radio A-04 X315 pin 8
B	975 (WH)	Signal from radio A-04 X315 pin 7

**Connector X124 - Cab Roof Harness to Cab Roof Ground 4**



50032236B4 178

**Top left rear corner of cab, behind speaker**

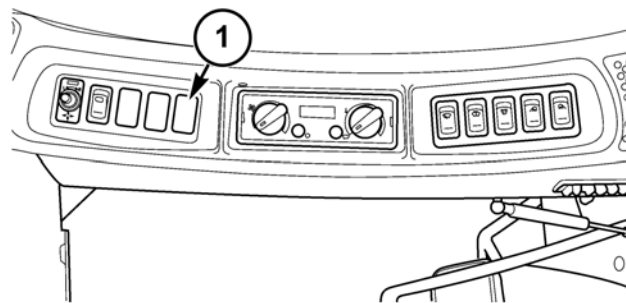
1. Connector X124



RING\_TERMINAL 179

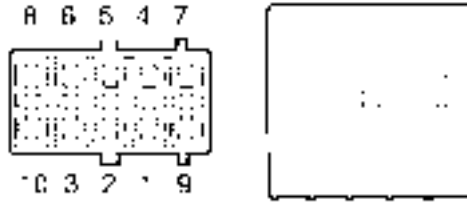
Cavity	Circuit ID	Description
	280 (BK)	Wiper motor M-25
	281 (BK)	Transceiver outlet J-07
	282 (BK)	Future option
	299 (BK)	Backlighting ground from work light switches S43/44, wiper switch S-20, beacon switch S-41 and washer switch S-38
	246 (BK)	Not used
	262 (BK)	LH outer & mid work lights E-15 & E-19
	269 (BK)	Console light E-35
	665 (BK)	Beacon lights E-31/32
	925 (BK)	Outer HID lights E-60/61 through work light switch S-43
	266 (BK)	RH outer & mid work lights E-16 & E-20
	295 (BK)	Mirror heaters R-10/11/14 and side lights E-25/26
	854 (BK)	Future option
	855 (BK)	Future option
	947 (BK)	Backlighting ground from tank extension switch S-42, mirror adjust switch S-27, mirror heat switch S-19, dome light E-34 and HVAC control panel A-09

**Connector X125 - Cab Roof Harness to Tank Extensions Switch S-42**



10031047F4 180

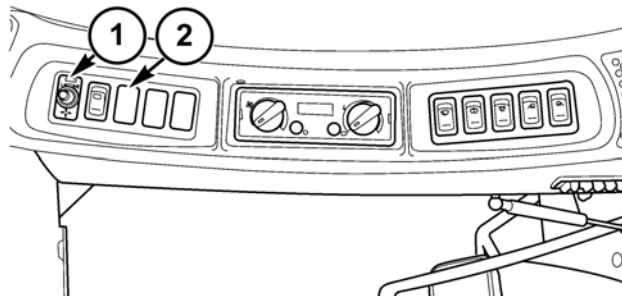
1. Tank extension switch (connector X125)



EATON\_25-13936 181

Cavity	Circuit ID	Description
1	open	
2	124 (OR)	Power from fuse F-49
3	167 (YE)	Signal to CCM2 J1-3
4	open	
5	open	
6	open	
7	284 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	
9	298 (BK)	To cab roof ground 4
10	open	

**Connector X126 - Cab Roof Harness to Mirror Adjust Switch S-27**



10031047E4 182

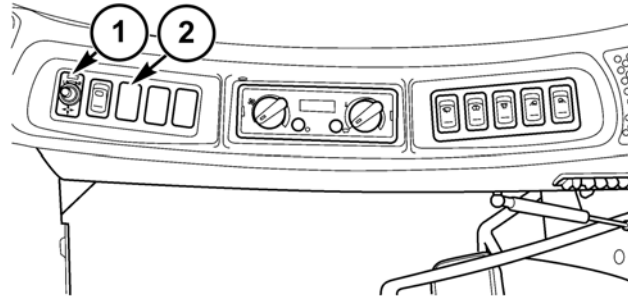
1. Mirror adjust switch (connector X126)
2. Mirror heat switch S-19 (connector X127)



PAC\_12045688 183

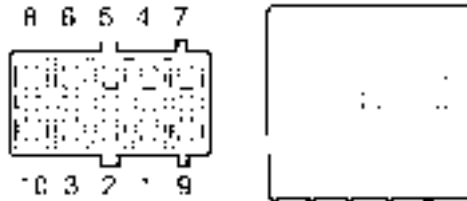
Cavity	Circuit ID	Description
A	949 (BK)	To cab roof ground 4
B	959 (WH)	Output to LH mirror in / out M-22
C	961 (GY)	Output to LH mirror motors M-21/22
D	958 (WH)	Output to LH mirror up / down M-21
E	957 (WH)	Output to RH mirror up / down M-19
F	954 (GY)	Output to RH mirror motors M-19/20
G	960 (WH)	Output to RH mirror in / out M-20
H	274 (OR)	Power from fuse F-09

**Connector X127 - Cab Roof Harness to Mirror Heat Switch S-19**



10031047E4 184

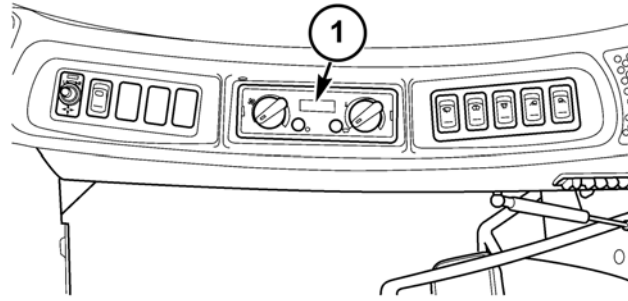
1. Mirror adjust switch S-27 (connector X126)
2. Mirror heat switch S-19 (connector X127)



EATON\_25-13936 185

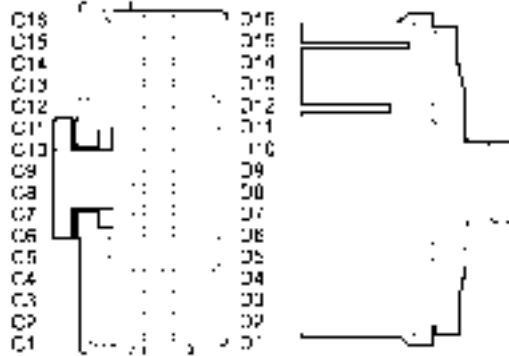
Cavity	Circuit ID	Description
1	open	
2	953 (OR)	Power from fuse F-09
3	931 (OR)	Output to mirror heat R-10/11/14
4	open	
5	open	
6	open	
7	285 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	
9	950 (BK)	To cab roof ground 4
10	open	

**Connector X128 - Cab Roof Harness to HVAC A-09/A-20**



10031047D4 186

- 1. HVAC module (connector X128)

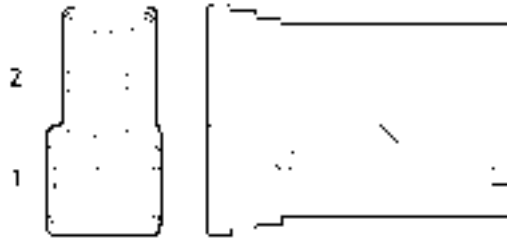


PAC\_12110207 187

Cavity	Circuit ID	Description
C1	972 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
C2	901 (OR)	Power from fuse F-49
C3	900 (WH)	Output to A/C clutch relay K-10
C4	902 (WH)	Output to separator blower relay K-09
C5	open	
C6	open	
C7	904 (WH)	Output to main blower relay low K-11
C8	905 (WH)	Output to main blower relay med K-12
C9	906 (WH)	Output to main blower relay high K-13
C10	907 (BL)	Reference ground for A/C low pressure S-48 and freeze switch S-76
C11	908 (YE)	Signal from A/C low pressure S-48 and freeze switch S-76
C12	909 (BL)	To ATC control module A-15
C13	910 (YE)	Not used
C14	911 (BL)	To ATC control module A-15
C15	912 (YE)	To ATC control module A-15
C16	913 (BL)	Reference ground for cab temp sensor B-26, evaporator temp sensor B-28 and A/C low pressure S-77 (ATC)
D1	914 (YE)	To ATC control module A-15
D2	939 (YE)	Not used
D3	934 (BL)	Reference ground for A/C high pressure S-47
D4	917 (YE)	Signal from A/C high pressure S-47
D5	918 (BK)	To ATC control module A-15
D6	919 (YE)	To ATC control module A-15

Cavity	Circuit ID	Description
D7	920 (OR)	To ATC control module A-15
D8	open	
D9	922 (BK)	To cab ground 3
D10	923 (YE)	To ATC control module A-15
D11	924 (OR)	To ATC control module A-15
D12	open	
D13	open	
D14	921 (BK)	To cab roof ground 4
D15	open	
D16	open	

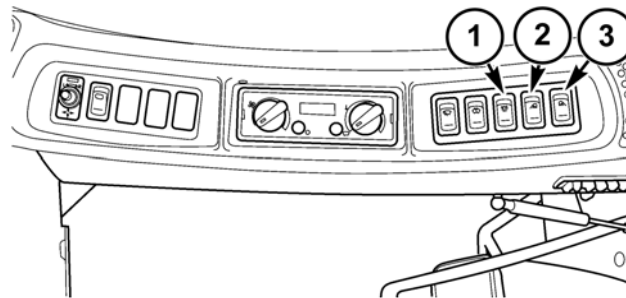
**Connector X129 - Cab Roof Harness to Dome Light E-34**



AMP\_926522 188

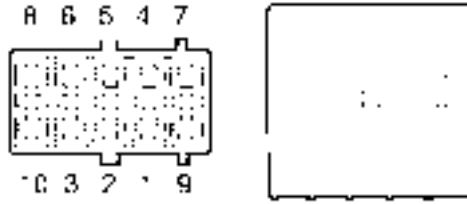
Cavity	Circuit ID	Description
1	971 (BK)	To cab roof ground 4
2	865 (YE), 967 (YE)	Signal to LH door switch S-40, jumper from time delay module K-20

**Connector X130 - Cab Roof Harness to Beacon Light Switch S-41**



10031047B4 189

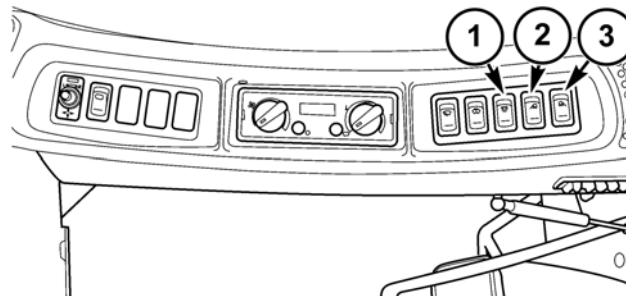
1. Beacon light switch S-41 (connector X130)
2. Rear work lights switch S-44 (connector **X131**)
3. Front work lights switch S-43 (connector **X132**)



EATON\_25-13936 190

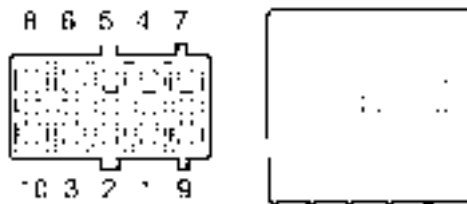
Cavity	Circuit ID	Description
1	open	
2	172 (OR)	Power from fuse F-49
3	166 (YE)	Signal to CCM2 J1-2
4	open	
5	open	
6	open	
7	283 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	
9	297 (BK)	To cab roof ground 4
10	open	

**Connector X131 - Cab Roof Harness to Rear Work Light Switch S-44**



10031047B4 191

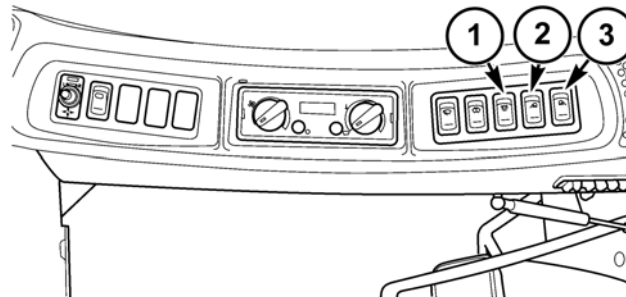
1. Beacon light switch S-41 (connector **X130**)
2. Rear work lights switch S-44 (connector X131)
3. Front work lights switch S-43 (connector **X132**)



EATON\_25-13936 192

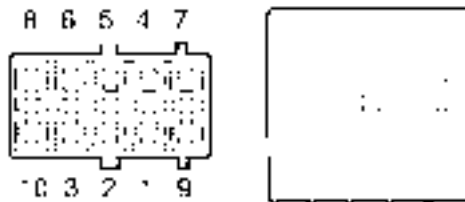
Cavity	Circuit ID	Description
1	open	
2	239 (OR)	Power from fuse F-49
3	170 (YE)	Signal to CCM1 J1-15
4	open	
5	open	
6	open	
7	233 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	
9	223 (BK)	To cab roof ground 4
10	open	

**Connector X132 - Cab Roof Harness to Work Light Switch S-43**



10031047B4 193

1. Beacon light switch S-41 (connector **X130**)
2. Rear work lights switch S-44 (connector **X131**)
3. Front work lights switch S-43 (connector **X132**)



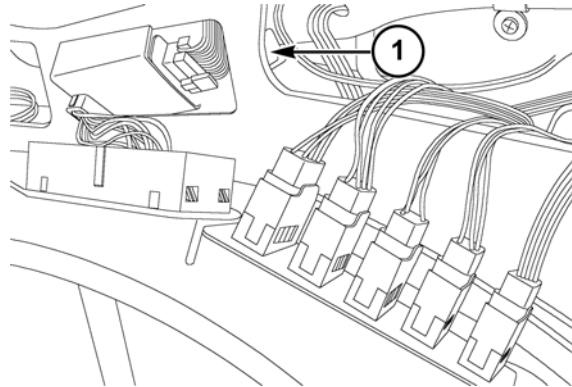
EATON\_25-13936 194

Cavity	Circuit ID	Description
1	open	
2	240 (OR)	Power from fuse F-49
3	171 (YE)	Signal to CCM1 J1-3
4	open	
5	245 (BK)	Ground from outer HID lights E-60/61
6	925 (BK)	To cab roof ground 4
7	235 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	



Cavity	Circuit ID	Description
9	224 (BK)	To cab roof ground 4
10	open	

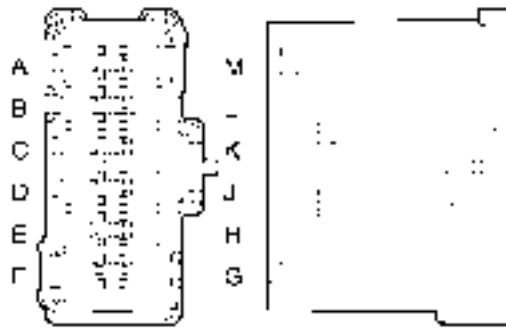
**Connector X133 - Cab Roof Harness - Splice Block C W-03**



40033801A4 195

**Left side cab roof, behind HVAC module**

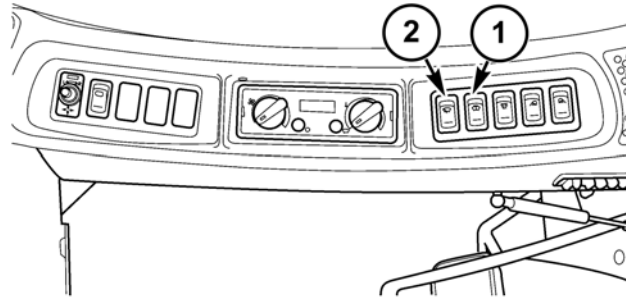
1. Connector X133



PAC\_15305291 196

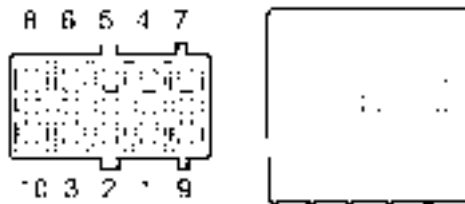
Cavity	Circuit ID	Description
A	175 (PU)	To console light E-35
B	232 (PU)	Backlight power from CCM2 J1-11
C	233 (PU)	To rear work light switch S-44
D	235 (PU)	To work light switch S-43
E	273 (PU)	To wiper switch S-20
F	283 (PU)	To beacon light switch S-41
G	284 (PU)	To tank extensions switch S-42
H	285 (PU)	To mirror heat switch S-19
J	286 (PU)	To washer switch S-38
K	open	
L	open	
M	972 (PU)	To HVAC control panel A-09

**Connector X134 - Cab Roof Harness to Washer Switch S-38**



10031047C4 197

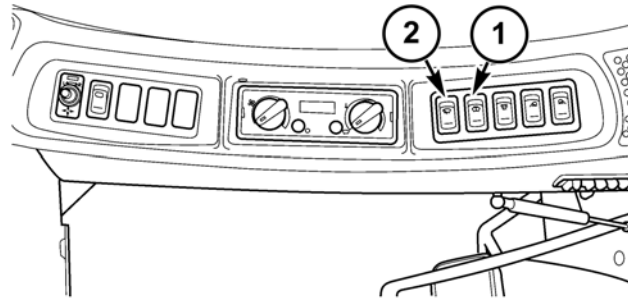
1. Washer switch S-38 (connector X134)
2. Wiper switch S-20 (connector X135)



EATON\_25-13936 198

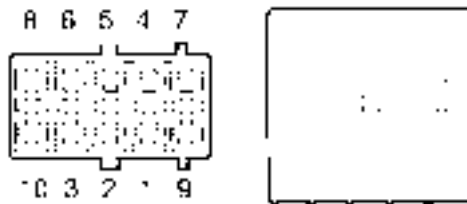
Cavity	Circuit ID	Description
1	open	
2	279 (OR)	Power from fuse F-09
3	278 (WH)	Output to wiper washer motor M-24
4	open	
5	open	
6	open	
7	286 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	
9	951 (BK)	To cab roof ground 4
10	open	

**Connector X135 - Cab Roof Harness to Wiper Switch S-20**



10031047C4 199

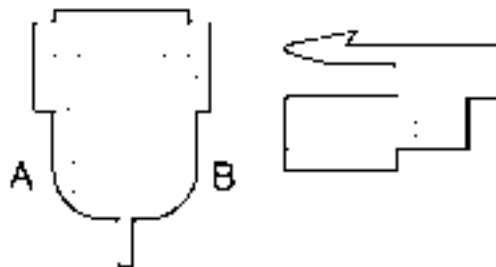
- 1.
- 2.



EATON\_25-13936 200

Cavity	Circuit ID	Description
1	276 (WH)	Not used
2	272 (OR)	Power from wiper relay K-06
3	275 (WH)	Output to wiper motor M-25
4	open	
5	open	
6	277 (WH)	Not used
7	273 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
8	open	
9	296 (BK)	To cab roof ground 4
10	open	

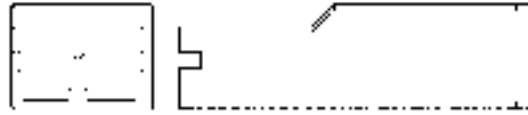
**Connector X136 - Cab Roof Harness to Front Left Speaker H-05**



PAC\_12052832 201

Cavity	Circuit ID	Description
A	983 (BL)	Ground to radio A-04 X315 pin 6
B	977 (WH)	Signal from radio A-04 X315 pin 5

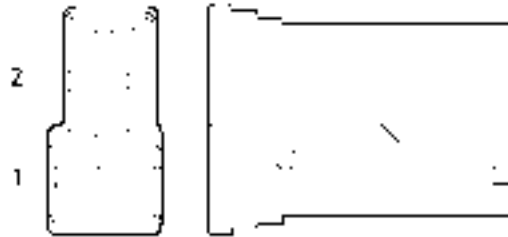
**Connector X137 - Cab Roof Harness to LH Door Switch S-40**



AMP\_154719 202

Cavity	Circuit ID	Description
1	865 (YE)	Signal wire from dome light E-34 and time delay module K-20

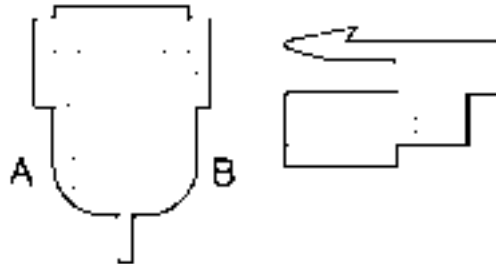
**Connector X138 - Cab Roof Harness to Console Light E-35**



AMP\_926522 203

Cavity	Circuit ID	Description
1	175 (PU)	Backlighting from CCM2 J1-11 through splice block C, W-03
2	269 (BK), 973 (BK)	From radio A-04 X314 pin 8 (973 BK) to cab roof ground 4 (269 BK)

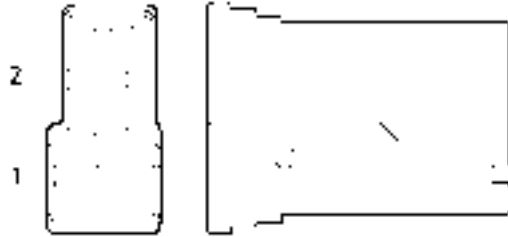
**Connector X139 - Cab Roof Harness to Front Right Speaker H-07**



PAC\_12052832 204

Cavity	Circuit ID	Description
A	980 (BL)	Ground to radio A-04 X315 pin 4
B	976 (WH)	Signal from radio A-04 X315 pin 3

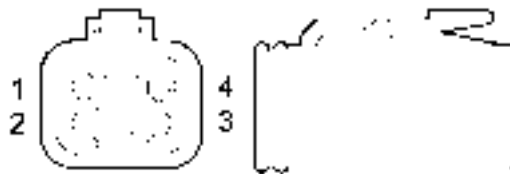
**Connector X141 - Cab Roof Harness - Future Option**



AMP\_926522 205

Cavity	Circuit ID	Description
1	281 (BK)	To cab roof ground 4
2	083 (OR)	Power from fuse F-13

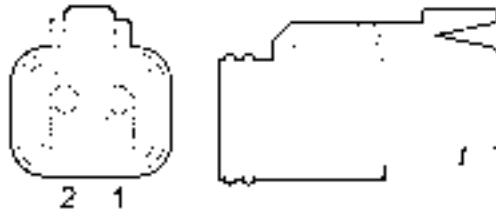
**Connector X142 - Cab Roof Harness to Future Option**



DEUTSCH\_DT06-4S 206

Cavity	Circuit ID	Description
1	903 (OR)	Power from fuse F-12
2	999 (YE)	CAN High
3	282 (BK)	To cab roof ground 4
4	996 (GN)	CAN Low

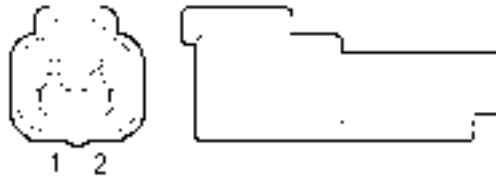
**Connector X149 - Air Conditioning Harness to Cab Temp Sensor B-26**



DEUTSCH\_DT06-2S 207

Cavity	Circuit ID	Description
1	952 (BL)	To ATC control module A-15 X397 pin 2C
2	913 (YE)	To HVAC control panel A-20 X128 pin C16

**Connector X150 - Air Conditioning Harness to Evaporator Temp Sensor B-28**

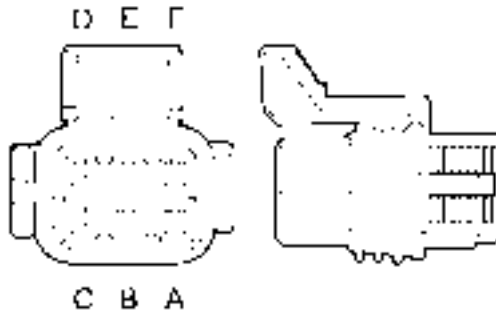


DEUTSCH\_DT04-2P 208

Cavity	Circuit ID	Description
1	951 (BL)	To ATC control module A-15 X397 pin 1B
2	913 (YE)	To HVAC control panel A-20 X128 pin C16

**Connector X151 - Air Conditioning Harness to Water Valve**

Water Valve M-16 (manual)

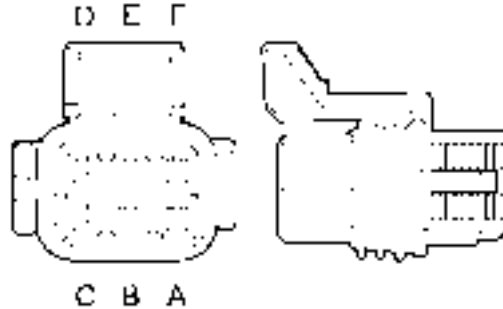


PAC\_12052848 209

Cavity	Circuit ID	Description
A	924 (OR)	To HVAC control panel A-09 X128 pin D11
B	open	

Cavity	Circuit ID	Description
C	922 (BK)	To HVAC control panel A-09 X128 pin D10
D	923 (YE)	To HVAC control panel A-09 X128 pin D9
E	open	
F	open	

Water Valve M-33 (ATC)



PAC\_12052848 210

Cavity	Circuit ID	Description
A	956 (BL)	To ATC control module A-15 X398 pin L
B	open	
C	957 (BL)	To cab ground 3
D	955 (BL)	To ATC control module A-15 X397 pin 2E
E	open	
F	open	

**Connector X152 - Air Conditioning Harness to Main Blower Harness**

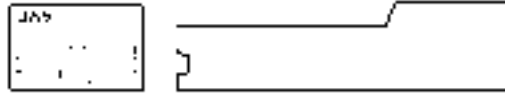
Manual HVAC System

Cavity	Circuit ID	Description
1	928 (YE)	Main blower relay low K-11 to main blower (manual) M-17
2	929 (OR)	Main blower relay med K-12 to main blower (manual) M-17
3	946 (RD)	Main blower relay high K-13 to main blower (manual) M-17
4	948 (BK)	Main blower (manual) M-17 to cab ground 3

ATC System

Cavity	Circuit ID	Description
1	946 (RD)	Main blower relay high K-13 to main blower (ATC) M-34 and blower speed control A-14
2	948 (BK)	Blower speed control A-14 to cab ground 3
3	953 (YE)	ATC control module A-15 X397 pin 1F to blower speed control A-14
4	open	

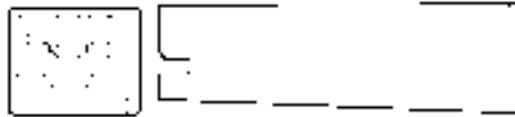
**Connector X155 - Main Blower (Manual) M-17 Ground**



AMP\_154509 211

Cavity	Circuit ID	Description
	948 (BK)	To cab ground 3

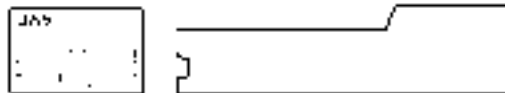
**Connector X156 - Main Blower**



AMP\_172076 212

Main Blower (Manual) M-17 High

Cavity	Circuit ID	Description
	946 (RD)	Power from Main blower relay high K-13



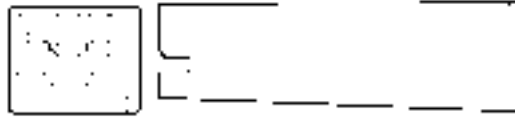
AMP\_154509 213

Main Blower M-34

Cavity	Circuit ID	Description
	946 (RD)	Power from main blower relay high K-13 and blower speed control A-14
	958 (BK)	To blower speed control A-14



**Connector X157 - Main Blower (Manual) M-17 Med**



AMP\_172076 214

Cavity	Circuit ID	Description
	929 (OR)	Power from main blower relay med K-12

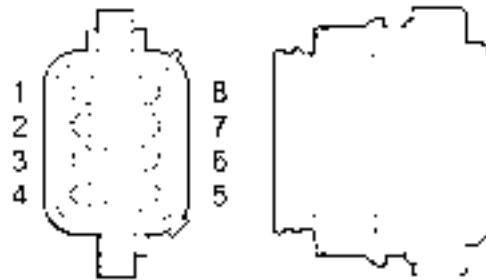
**Connector X158 - Main Blower (Manual) M-17 Low**



AMP\_172076 215

Cavity	Circuit ID	Description
	928 (YE)	Power from main blower relay low K-11

**Connector X159 - Cab Roof Harness to Future Option**

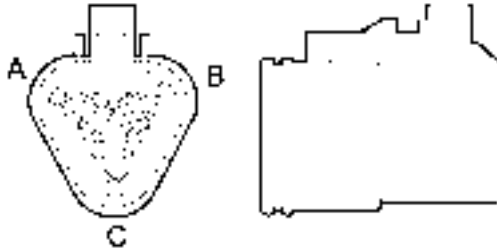


DEUTSCH\_DT06-8S 216

Cavity	Circuit ID	Description
1	831 (RD)	Power from fuse F-35
2	807 (YE)	CAN High
3	open	
4	open	
5	805 (OR)	Power from fuse F-12

Cavity	Circuit ID	Description
6	854 (BK)	To cab roof ground 4
7	806 (GN)	CAN Low
8	855 (BK)	To cab roof ground 4

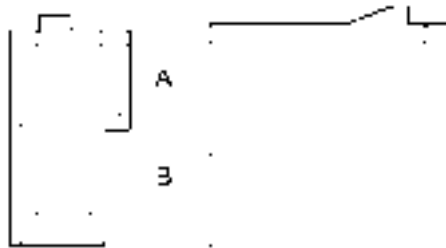
**Connector X160 - Main Frame Harness to LH Front Hazard Light**



DEUTSCH\_DT06-3S 217

Cavity	Circuit ID	Description
A	624 (PU)	Fuse F-20 to LH marker lights E-03, E-50 or E-54
B	615 (PU)	Flasher module A-05 to LH flashing lamps E-03 or E-52
C	620 (BK)	To front frame ground 2

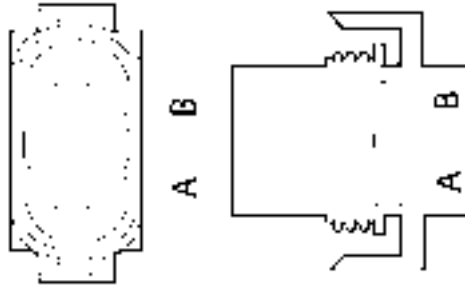
**Connector X161 - Main Frame Harness to LH Front Service Socket J-02**



PAC\_2973781 218

Cavity	Circuit ID	Description
A	656 (BK)	To front frame ground 2
B	647 (RD)	Power from fuse F-15

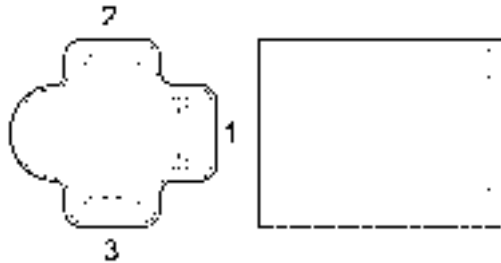
**Connector X163 - Main Frame Harness to LH Lower Work Light E-23**



PAC\_12124819 219

Cavity	Circuit ID	Description
1	644 (PU)	Power from lower work lights relay K-30
2	654 (BK)	To front frame ground 2

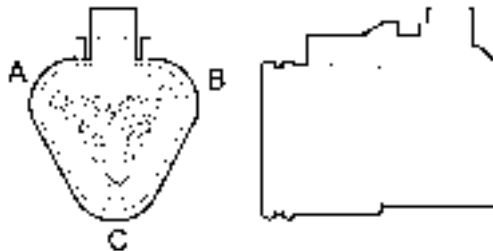
**Connector X164 - Main Frame Harness to LH Road Light (EU) E-13**



PAC\_08917857 220

Cavity	Circuit ID	Description
A	640 (PU)	Power from high beam relay K-04
B	638 (PU)	Power from low beam relay K-05
C	642 (BK)	To front frame ground 2

**Connector X165 - Main Frame Harness to RH Front Hazard Light**

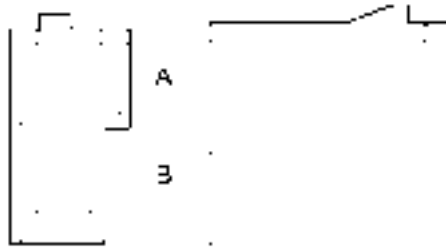


DEUTSCH\_DT06-3S 221

Cavity	Circuit ID	Description
A	627 (PU)	Fuse F-21 to RH marker lights E-04, E-49 or E-53

Cavity	Circuit ID	Description
B	616 (PU)	Flasher module A-05 to RH flashing lamps E-04 or E-51
C	621 (BK)	To front frame ground 2

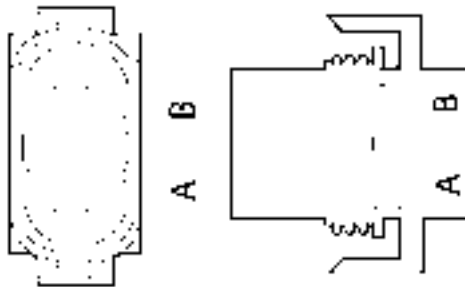
**Connector X166 - Main Frame Harness to RH Front Service Socket J-01**



PAC\_2973781 222

Cavity	Circuit ID	Description
A	660 (BK)	To front frame ground 2
B	651 (RD)	Power from fuse F-15

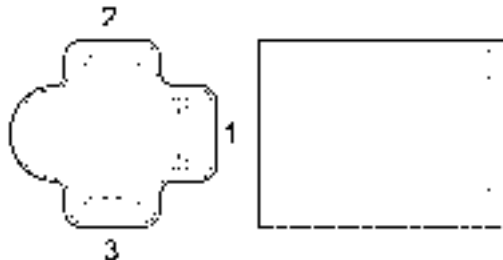
**Connector X168 - Main Frame Harness to RH Lower Work Light E-24**



PAC\_12124819 223

Cavity	Circuit ID	Description
1	645 (PU)	Power from lower work lights relay K-30
2	655 (BK)	To front frame ground 2

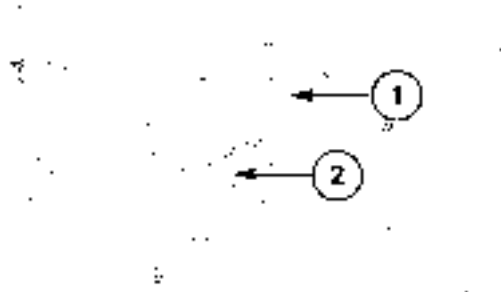
**Connector X169 - Main Frame Harness to RH Road Light (EU) E-14**



PAC\_08917857 224

Cavity	Circuit ID	Description
A	641 (PU)	Power from high beam relay K-04
B	639 (PU)	Power from low beam relay K-05
C	643 (BK)	To front frame ground 2

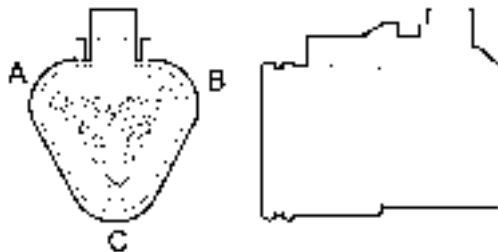
**Connector X170 - Main Frame Harness to Lateral Inclination B-02**



40033772A5 225

**Underneath cab, right front corner**

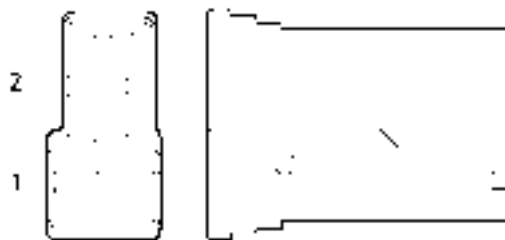
1. Lateral Inclination sensor B-02
2. Connector X170



DEUTSCH\_DT06-3S 226

Cavity	Circuit ID	Description
1	451 (PK)	5 volts from CCM1 J2-31
2	462 (BL)	Reference ground to CCM1 J2-14
3	430 (YE)	Signal to CCM1 J2-33

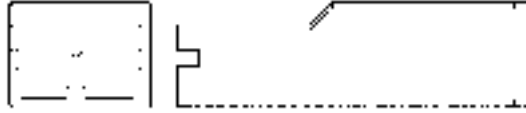
**Connector X171 - Main Frame Harness to Wiper Washer Motor M-24**



AMP\_926522 227

Cavity	Circuit ID	Description
1	449 (BK)	To front frame ground 2
2	278 (WH)	Power from washer switch S-38

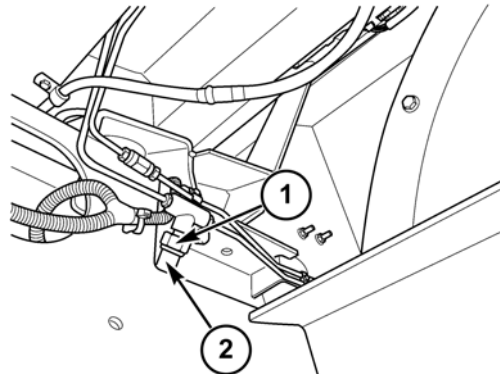
**Connector X172 - Main Frame Harness to Horn H-02**



AMP\_154719 228

Cavity	Circuit ID	Description
	193 (WH)	Power from road light switch S-26
	631 (BK)	To front frame ground 2

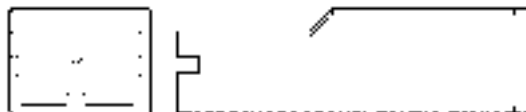
**Connector X173 - Main Frame Harness to Brake Pressure S-39**



10033636A4 229

**Under cab platform, right side**

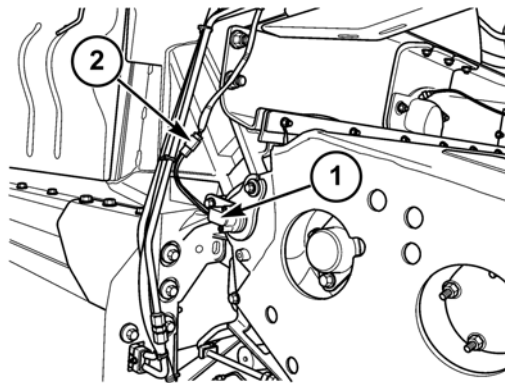
1. Brake pressure switch S-39
2. Connector X173



AMP\_154719 230

Cavity	Circuit ID	Description
	418 (YE)	Signal to CCM2 J2-34
	497 (BK)	To front frame ground 2

**Connector X174 - Main Frame Harness to Feeder Angle R-03**



**Right side feeder pivot**

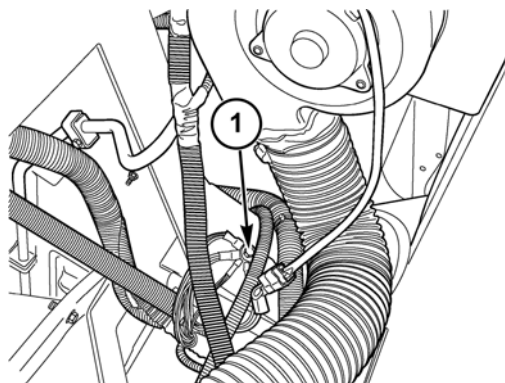
1. Feeder angle potentiometer R-03
2. Connector X174



DEU\_DTM06-3S 232

Cavity	Circuit ID	Description
1	751 (PK)	5 volts from CCM1 J2-31
2	740 (YE)	Signal to CCM1 J2-22
3	756 (BL)	Reference ground to CCM1 J2-14

**Connector X175 - Main Frame Harness to Front Frame Ground 2**



50031062A4 233

**Left side of main frame, behind left rear cab mount**

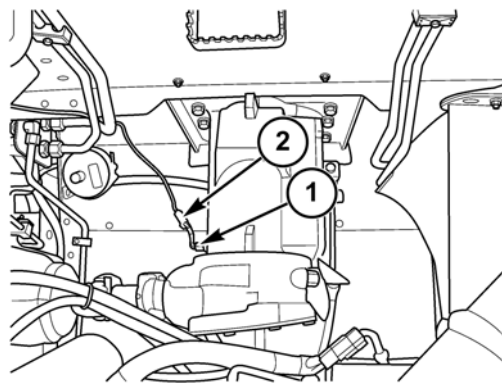
1. Connector X175 to front frame ground #2



RING\_TERMINAL 234

Cavity	Circuit ID	Description
	246 (BK)	Wiper washer motor M-24, brake pressure S-39 and brake limiting L-32
	668 (BK)	Grain tank and unload tube lights
	676 (BK)	LH hazard, road and lower work lights, LH service socket J-02
	677 (BK)	RH hazard, road and lower work lights, horn H-02 and RH service socket J-01
	1192 (BK)	Fan drive solenoid L-44
	583 (BK)	CCM1 J2-3, J2-12 & J2-18
	584 (BK)	CCM2 J2-3, J2-12 & J2-18
	845 (BK)	Fuel pump M-23
	600 (BK)	Unload tube in L-03, unload tube out L-04, header height accumulator L-06 and signal valve L-43
	605 (BK)	Park brake disengage L-10
	1247 (BK)	Undershield lighting

**Connector X177 - Gearbox Harness to Rotor RPM B-01**

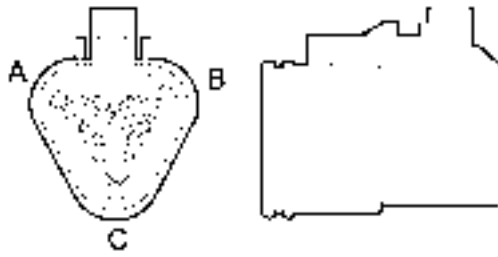


10033632A4 235

**Left side of rotor drive gearbox**

1. Rotor RPM sensor B-01
2. Connector X177

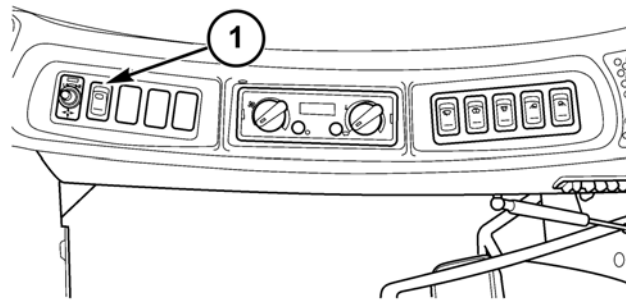




DEUTSCH\_DT06-3S 236

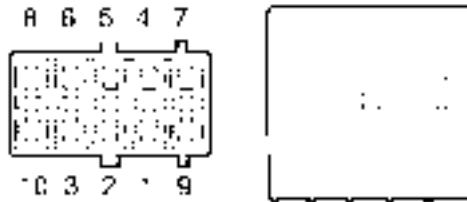
Cavity	Circuit ID	Description
A	1262 (OR)	Power from fuse F-45
B	1261 (YE)	Signal to CCM2 J2-37 and CCM3 J3-13
C	1264 (BK/WH)	Battery clean ground 6

**Connector X178 - Cab Roof Harness to Switch Bypass Fuses F-64 or Mirror Select Switch S-57**



10031047A4 237

1. Connector X178

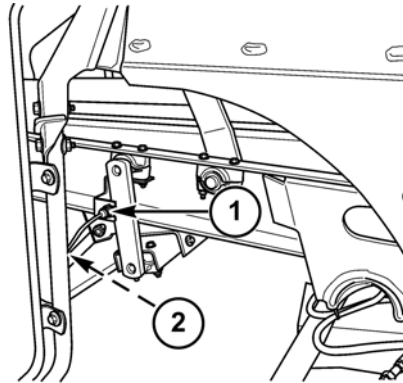


EATON\_25-13936 238

Cavity	Circuit ID	Description
1	963 (WH)	Output to German mirror up / down M-30
2	957 (WH)	Input from mirror adjust switch S-27
3	955 (WH)	Output to RH mirror up / down M-19
4	964 (WH)	Output to German mirror in / out M-31
5	960 (WH)	Input from mirror adjust switch S-27
6	962 (WH)	Output to RH mirror in / out M-20
7	open	
8	open	

Cavity	Circuit ID	Description
9	open	
10	open	

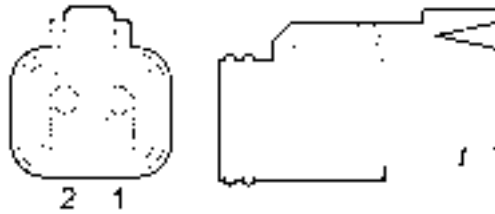
**Connector X181 - Main Frame Harness to Sieve Shake RPM B-56**



10033651A4 239

**Left side of main frame, in front of rear axle**

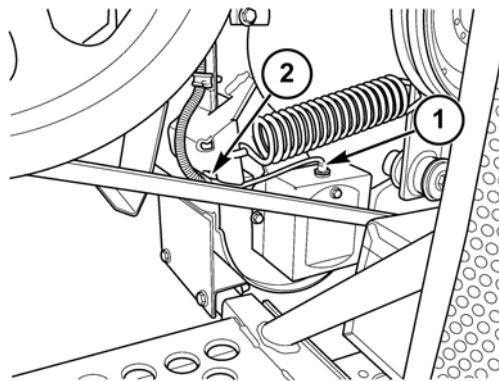
1. Sieve shake RPM sensor B-56
2. Connector X181



DEUTSCH\_DT06-2S 240

Cavity	Circuit ID	Description
1	1191 (BL)	Reference ground to CCM1 J2-14
2	1162 (YE)	Signal to CCM1 J2-38

**Connector X182 - Main Frame Harness to Clean Grain Elevator RPM B-08**

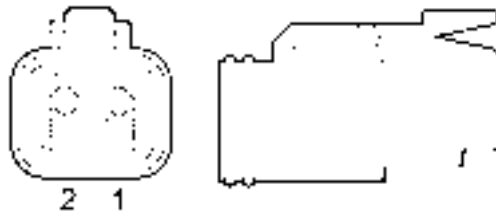


10031036A4 241

**Left side of main frame, behind cleaning fan**

1. Clean grain elevator RPM sensor B-08

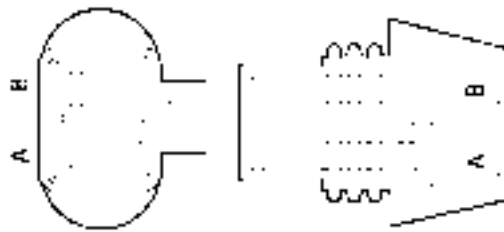
2. Connector X182



DEUTSCH\_DT06-2S 242

Cavity	Circuit ID	Description
1	491 (BL)	Reference ground to CCM1 J2-14
2	450 (YE)	Signal to CCM1 J2-28

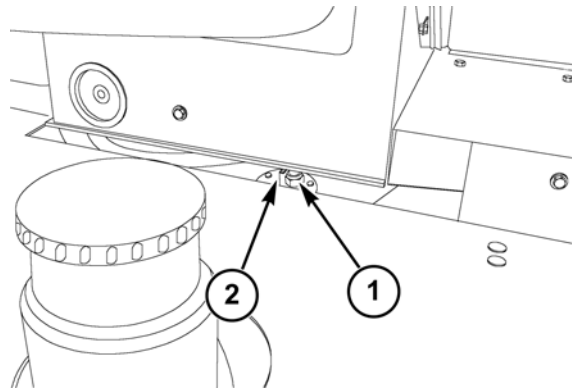
**Connector X183 - Main Frame Harness to Fuel Pump M-23**



PAC\_15300027 243

Cavity	Circuit ID	Description
1	856 (WH)	Power from fuel pump relay K-07
2	845 (BK)	To engine ground 5

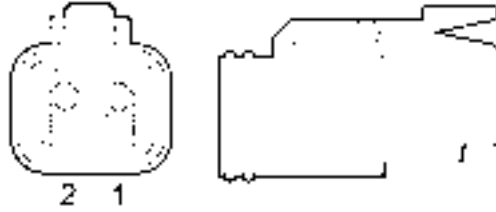
**Connector X184 - Main Frame Harness to Fuel Level R-01**



40031055A4 244

**Engine platform, under radiator housing**

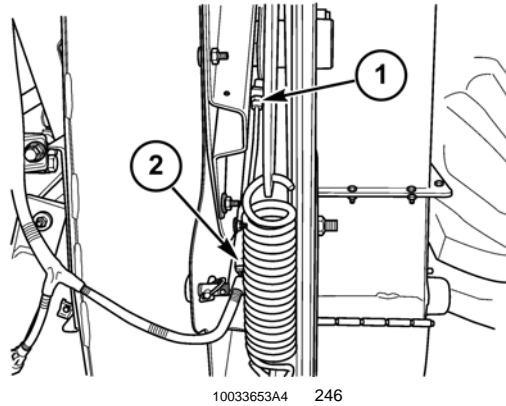
1. Fuel level sensor R-01
2. Connector X184



DEUTSCH\_DT06-2S 245

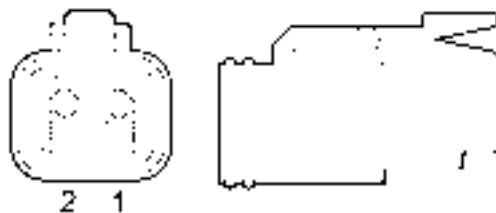
Cavity	Circuit ID	Description
1	467 (BL)	Reference ground to CCM2 J2-14
2	427 (YE)	Signal to CCM2 J2-17

**Connector X186 - Main Frame Harness to Tailing RPM B-39**



**Right side of main frame**

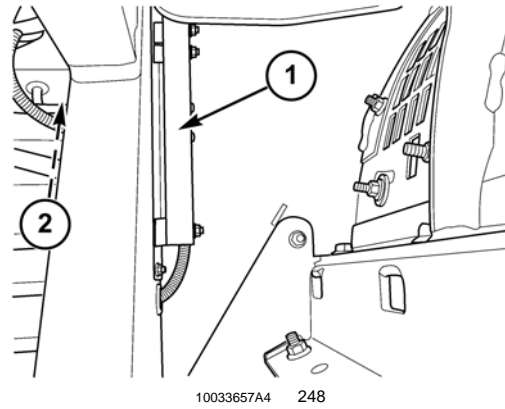
1. Tailings RPM sensor B-39
2. Connector X186



DEUTSCH\_DT06-2S 247

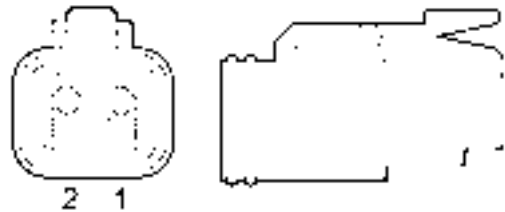
Cavity	Circuit ID	Description
1	442 (BL)	Reference ground to CCM1 J2-14
2	441 (YE)	Signal to CCM1 J2-37

**Connector X188 - Main Frame Harness to Right Rotor Loss B-20**



**Right side, inside rear of threshing area**

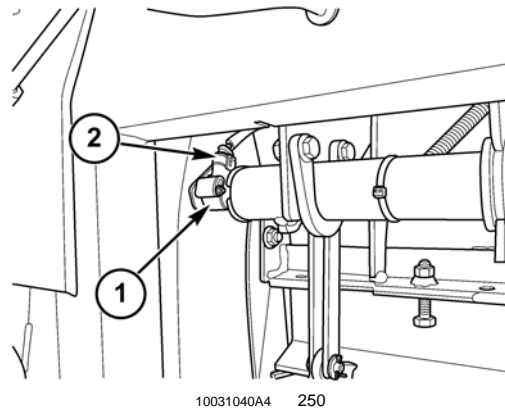
1. Right rotor loss sensor B-20
2. Connector X188



DEUTSCH\_DT06-2S 249

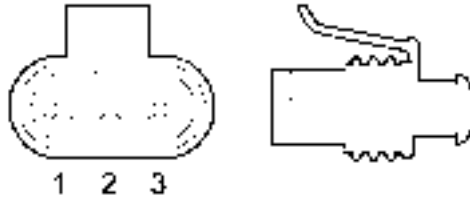
Cavity	Circuit ID	Description
1	458 (BL)	Reference ground to CCM2 J2-14
2	402 (YE)	Signal to CCM2 J2-26

**Connector X189 - Concave Extension Harness to Concave Position R-06**



**Left side of main frame, inside threshing area**

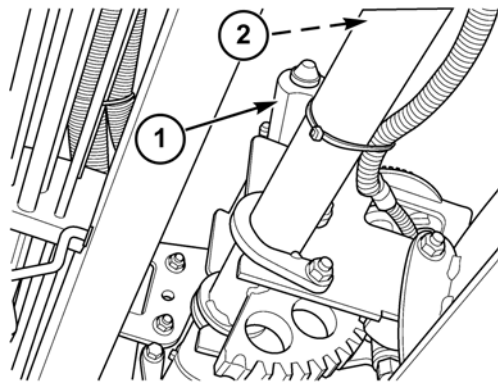
1. Concave position potentiometer R-06
2. Connector X189



AMP\_282087 251

Cavity	Circuit ID	Description
1	498 (PK)	5 volts from CCM1 J2-31
2	411 (YE)	Signal to CCM1 J2-19
3	456 (BL)	Reference ground to CCM1 J2-14

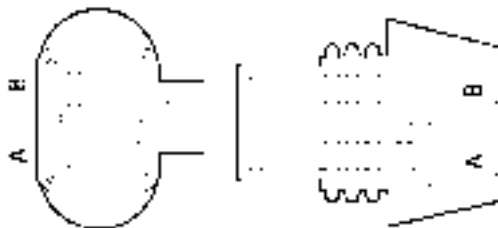
**Connector X190 - Concave Extension Harness to Concave Clearance Motor M-04**



10031039A4 252

**Left side of main frame, inside threshing area**

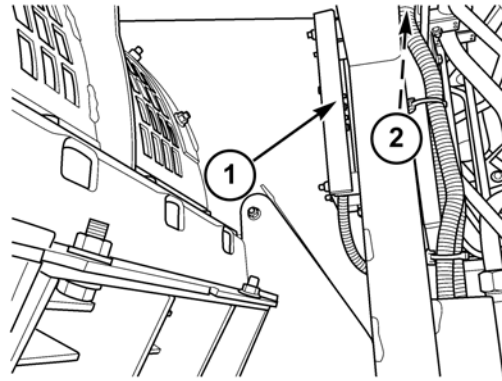
1. Concave clearance motor M-04
2. Connector X190



PAC\_15300027 253

Cavity	Circuit ID	Description
1	694 (GY)	Signal from CCM1 J2-1
2	695 (WH)	Signal from CCM1 J2-21 through concave / covers relay K-16

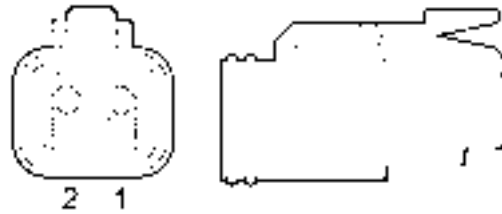
**Connector X191 - Main Frame Harness to Left Rotor Loss B-19**



10031034A4 254

**Left side of main frame, inside threshing area**

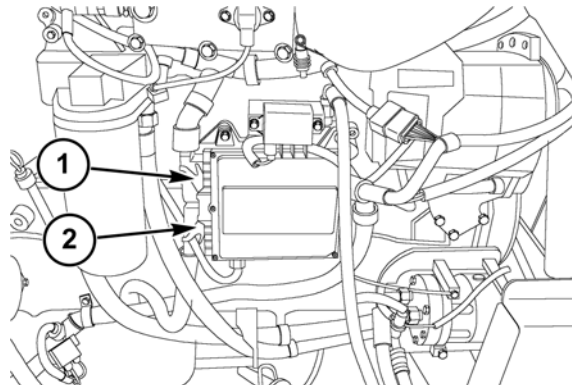
1. Left rotor loss sensor B-19
2. Connector X191



DEUTSCH\_DT06-2S 255

Cavity	Circuit ID	Description
1	457 (BL)	Reference ground to CCM2 J2-14
2	410 (YE)	Signal to CCM2 J2-25

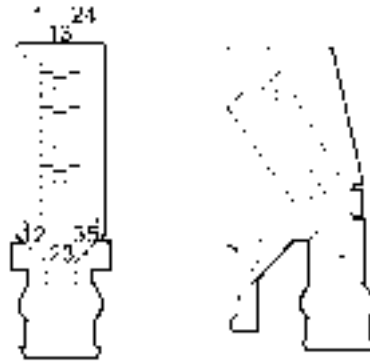
**Connector X192 - Iveco Harness to ECU Connector "A"**



40033791A4 256

**Rear of engine**

1. Connector X192
2. Connector **X193**



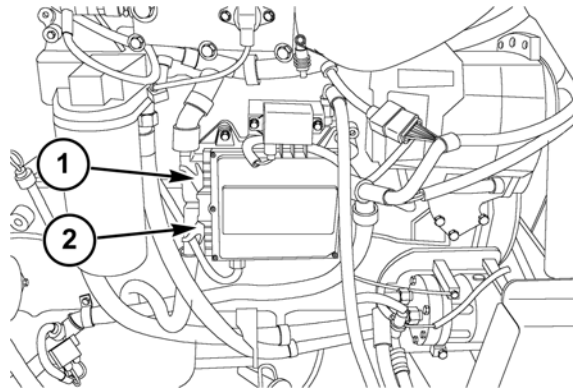
BOSCH\_1-928-401 257

Cavity	Circuit ID	Description
1	WH	Engine flywheel RPM B-05
2	WH	Engine camshaft RPM B-07
3	BN	Engine brake L-33
4	BK	Air temperature B-54
5	PK	Coolant temperature B-44
6	WH/RD	Fuel temperature B-36
7	open	
8	open	
9	open	
10	open	
11	OR/BK	Fuel temperature B-36
12	GN	Signal from boost pressure B-23
13	BK	Engine flywheel RPM B-05
14	BK	Engine camshaft RPM B-07
15	open	
16	open	
17	WH	Boost pressure B-23
18	BN	Engine brake L-33
19	open	
20	open	
21	OR	Air temperature B-54
22	YE	Coolant temperature B-44
23	RD	Boost pressure B-23
24	RD	Common for fuel actuators 1, 3 & 5, L-34/36/38
25	BK	Common for fuel actuators 2, 4 & 6, L-35/37/39
26	BL	Fuel actuator 2 L-35
27	GY	Fuel actuator 4 L-37
28	PU	Fuel actuator 6 L-39
29	open	
30	open	
31	open	
32	BL	Engine brake L-33
33	GN	Fuel actuator 5 L-38



Cavity	Circuit ID	Description
34	YE	Fuel actuator 3 L-36
35	WH	Fuel actuator 1 L-34

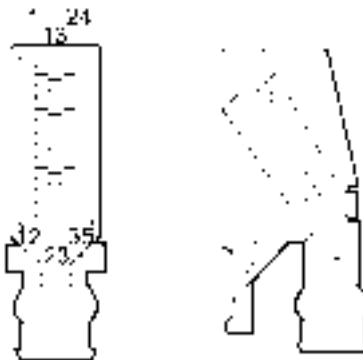
**Connector X193 - Engine Harness to ECU Connector "B"**



40033791A4 258

**Rear of engine**

1. Connector **X192**
2. Connector **X193**



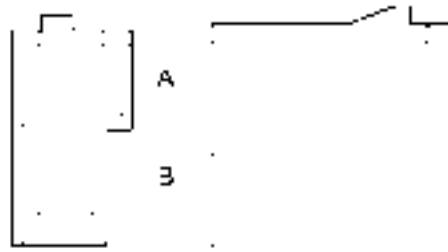
BOSCH\_1-928-401 259

Cavity	Circuit ID	Description
1	815 (BK)	To engine ground 5
2	816 (BK)	To engine ground 5
3	810 (WH)	Power from ECU power relay K-14
4	811 (WH)	Power from ECU power relay K-14
5	open	
6	open	
7	open	
8	open	
9	open	
10	822 (WH)	Ground for grid heater relay K-39
11	820 (GN)	CAN Low
12	819 (YE)	CAN High
13	827 (BK)	To DAM connector X065 pin E
14	open	
15	859 (OR)	Power from key switch S-02
16	open	

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

Cavity	Circuit ID	Description
17	open	
18	open	
19	open	
20	open	
21	open	
22	open	
23	open	
24	open	
25	open	
26	open	
27	808 (YE)	Ground path for ECU power relay K-14
28	open	
29	open	
30	open	
31	open	
32	open	
33	open	
34	open	
35	open	

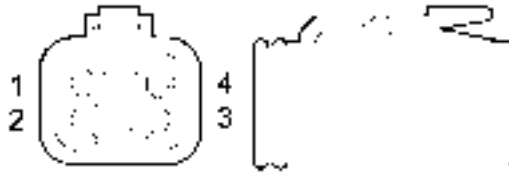
**Connector X194 - Engine Harness to Engine Service Socket J-05**



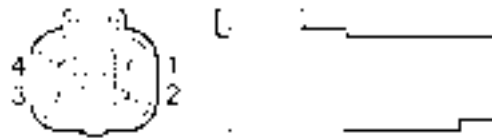
PAC\_2973781 260

Cavity	Circuit ID	Description
A	659 (BK)	To engine ground 5
B	650 (RD)	Power from fuse F-15

**Connector X195 - Main Frame Harness to Tank Extensions Harness**



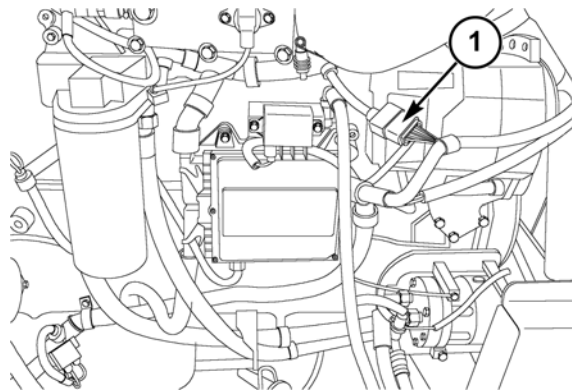
DEUTSCH\_DT06-4S 261



DEUTSCH\_DT04-4P 262

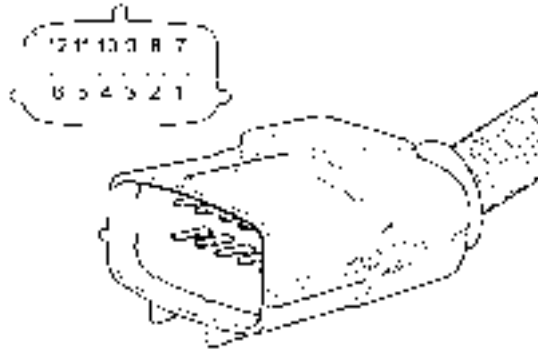
Cavity	Circuit ID	Description
1	435 (YE)	Covers closed B-47 to CCM1 J3-38
2	454 (BL)	Covers closed B-47 reference ground to CCM1 J2-14
3	693 (GY)	CCM1 J2-1 to covers motor M-12
4	696 (WH)	CCM1 J2-21 through concave / covers relay K-16 to covers motor M-12

**Connector X197 - Engine Harness to Iveco Harness**

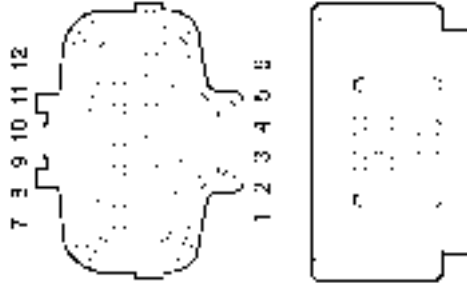


40033791E4 263

1. Connector X197



AMP\_174663 264



AMP\_174661-2 265

Cavity	Circuit ID	Description
1	852 (BL) [BN - Iveco]	Fuel filter switch S-62 reference ground to CCM2 J2-14
2	open [PU - Iveco]	Not used
3	open [OR - Iveco]	Not used
4	853 (BL) [BN - Iveco]	Engine oil pressure B-52 reference ground to CCM2 J2-14
5	490 (PK) [OR - Iveco]	CCM2 J2-31 5 volt reference to engine oil pressure B-52
6	419 (YE) [OR - Iveco]	Engine oil pressure B-52 to CCM2 J2-33
7	open [BL - Iveco]	Not used
8	open [BN - Iveco]	Not used
9	504 (YE) [BL - Iveco]	Engine oil temp B-03 to CCM2 J2-27
10	850 (BL) [BN - Iveco]	Engine oil temp B-03 reference ground to CCM2 J2-14
11	open [BL - Iveco]	Not used
12	429 (YE) [RD - Iveco]	Fuel filter switch S-62 to CCM2 J2-24

**Connector X199 - Engine Harness to Start Relay K-36**



RING\_TERMINAL 266

Cavity	Circuit ID	Description
	092 (WH)	Power from neutral start relay K-23
	800 (BK)	To engine ground 5

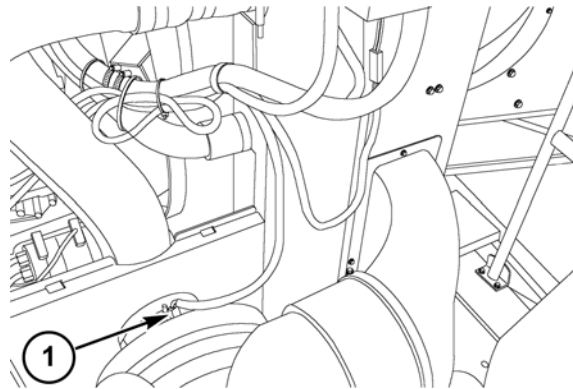
**Connector X200 - Engine Harness to Start Relay K-36**



RING\_TERMINAL 267

Cavity	Circuit ID	Description
	801 (RD)	Power from rear battery G-03 through 24V start relay K-38
	804 (WH)	Power to 24V start relay K-38

**Connector X202 - Engine Harness to Air Filter Switch S-61**

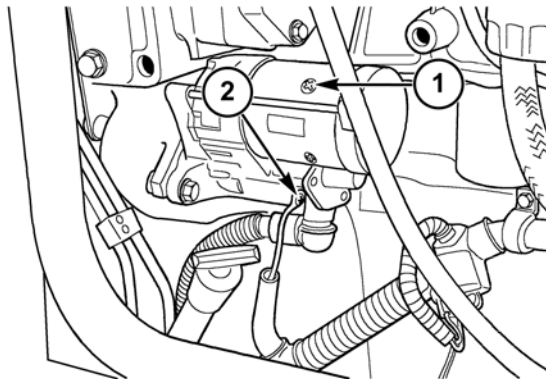


40033786A4 268

1. Connector X202

Cavity	Circuit ID	Description
1	851 (BL)	Reference ground to CCM2 J2-14
2	864 (YE)	5 volts from CCM2 J2-31, signal to CCM2 J2-29

**Connector X205 - Engine Harness to 24V Starter M-29**



50030161B4 269

**Rear of engine**

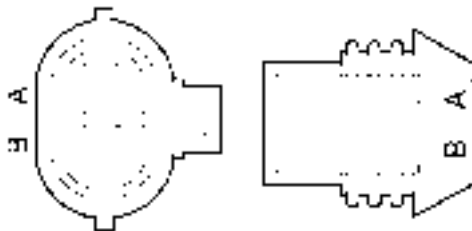
1. 24V starter motor M-29
2. Connector X205



RING\_TERMINAL 270

Cavity	Circuit ID	Description
	834 (WH/BK)	Power from 24V start relay K-38

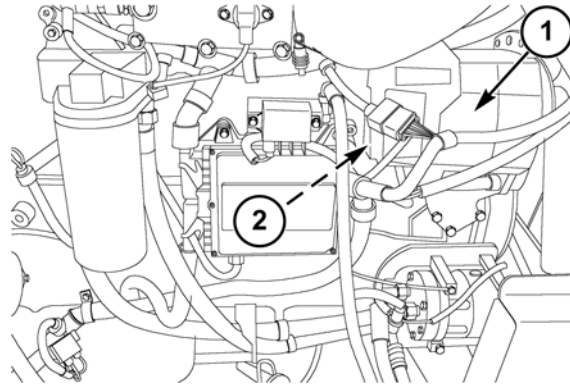
**Connector X211 - Engine Harness to Grid Heater Relay K-39**



AMP\_282080-1 271

Cavity	Circuit ID	Description
1	818 (WH)	Power from ECU power relay K-14
2	822 (BK)	Ground to ECU A-01 X193 pin 10

**Connector X213 - Engine Harness to Alternator G-01**



40033791C4 272

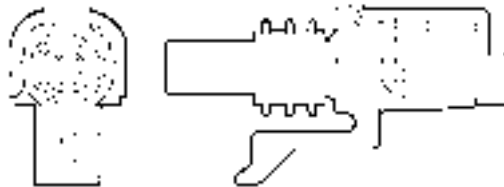
1. Alternator G-01
2. Connector X213



RING\_TERMINAL 273

Cavity	Circuit ID	Description
	803 (BK)	To engine ground 5

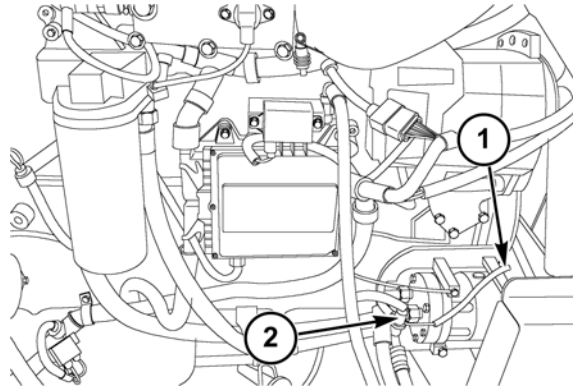
**Connector X215 - Engine Harness to A/C Clutch L-07**



PAC\_12015791 274

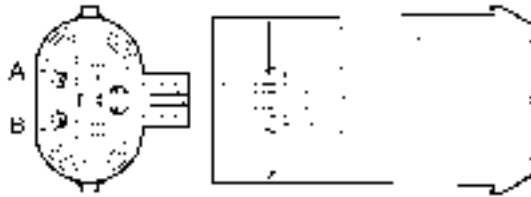
Cavity	Circuit ID	Description
A	178 (WH)	Power from A/C clutch relay K-10
ring	1218 (BK)	To engine ground 5

**Connector X216 - Engine Harness to A/C High Pressure S-47**



40033791F4 275

1. Connector X216
2. A/C high pressure switch S-47



PAC\_12065863 276

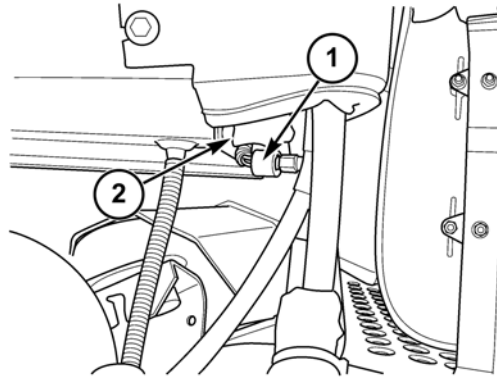


RING\_TERMINAL 277

Cavity	Circuit ID	Description
1	917 (YE)	Signal to HVAC Control Panel X128 pin D-4
2	916 (BL)	Reference ground to HVAC Control Panel X128 pin D-3



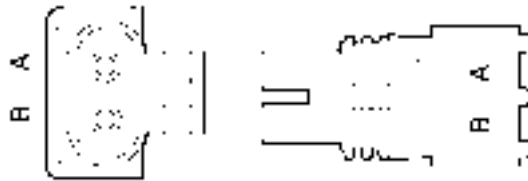
**Connector X217 - A/C Harness to A/C Low Pressure (ATC) S-77**



10031042A4 278

**Right rear corner outside of cab**

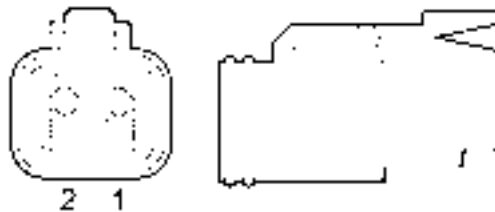
1. A/C low pressure switch S-77
2. Connector X217



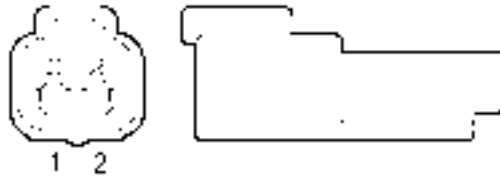
PAC\_12015792 279

Cavity	Circuit ID	Description
A	913 (YE)	Reference ground to HVAC control panel A-20 X128 pin C16
B	950 (BL)	Signal to ATC control module A-15 X397 pin 1C

**Connector X218 - Main Frame Harness to Flip-Up Lighting Harness**



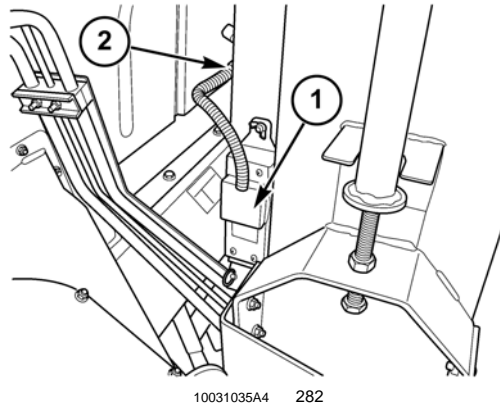
DEUTSCH\_DT06-2S 280



DEUTSCH\_DT04-2P 281

Cavity	Circuit ID	Description
1	637 (PU)	RH marker lights fuse F-21 to flip up road light relays K-40, K-41
2	776 (BK)	To front frame ground 2

**Connector X221 - Precision Farming Harness to Moisture Sensor B-12**



**Right side of main frame, inside face of clean grain elevator housing**

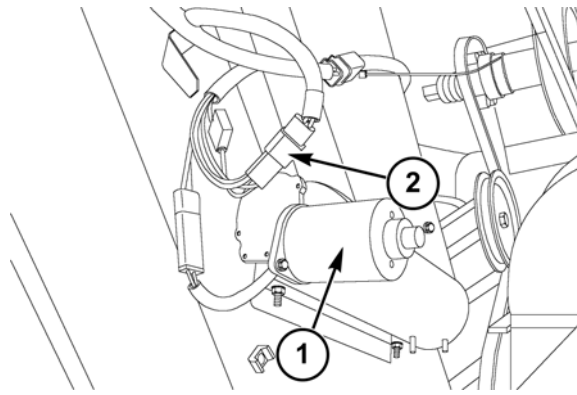
1. Moisture sensor B-12
2. Connector X221



DEUTSCH\_DT06-6S 283

Cavity	Circuit ID	Description
1	699 (OR)	Power from YMIU module A-12 X412 pin 1
2	565 (BK)	Ground to YMIU module A-12 X412 pin 12
3	593 (YE)	Sensor (+) to YMIU module A-12 X412 pin 2
4	594 (YE)	Sensor (-) to YMIU module A-12 X412 pin 3
5	595 (YE)	Moisture temp to YMIU module A-12 X412 pin 4
6	open	

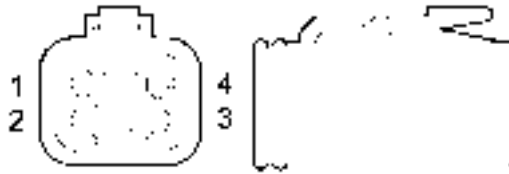
**Connector X222 - Precision Farming Harness to Sample Motor M-28**



40033785A4 284

**Right side of main frame, inside face of clean grain elevator housing**

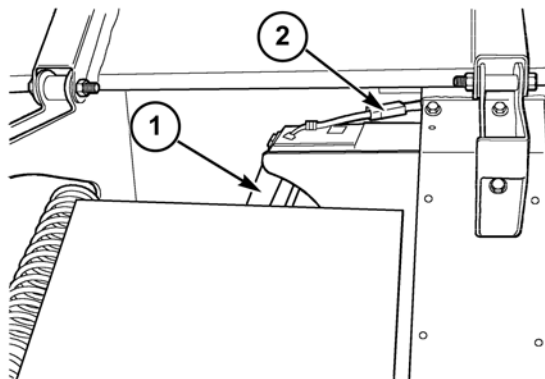
1. Sample motor M-28
2. Connector X222



DEUTSCH\_DT06-4S 285

Cavity	Circuit ID	Description
1	682 (OR)	Power from fuse F-47
2	564 (BK)	To front frame ground 2
3	838 (YE)	Signal to CCM3 J2-25
4	837 (WH)	Power from CCM3 J2-13

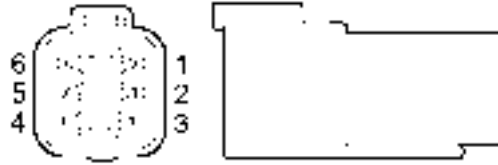
**Connector X223 - Precision Farming Harness to Yield Sensor B-57**



50030167A4 286

**Inside grain tank, top of clean grain elevator housing**

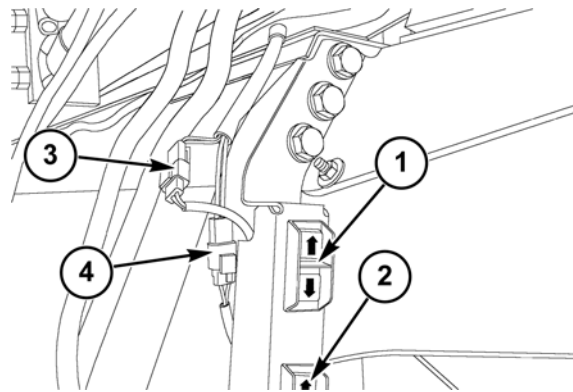
1. Yield sensor B-57
2. Connector X223



DEUTSCH\_DT04-6P 287

Cavity	Circuit ID	Description
1	552 (WH/RD)	Power from YMIU module A-12 X412 pin 6
2	698 (WH/YE)	Signal (+) to YMIU module A-12 X412 pin 8
3	563 (WH)	Signal (-) to YMIU module A-12 X412 pin 7
4	1235 (WH/BK)	Ground to YMIU module A-12 X412 pin 9
5	open	
6	open	

**Connector X225 - Straw Hood Front Harness to Upper Sieve Rear Adjust S-35**



40033782A4 288

**Left rear corner of main frame**

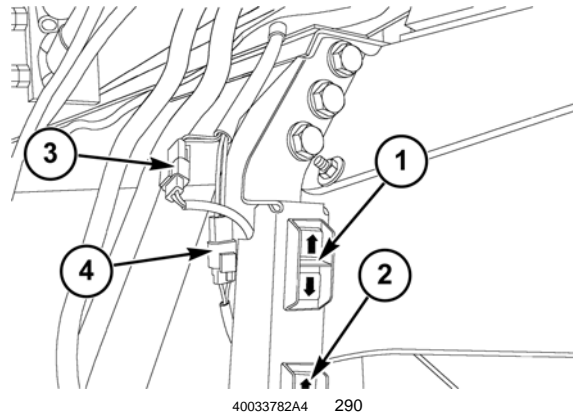
1. Upper sieve rear adjust switch S-35
2. Lower sieve rear adjust switch S-46
3. Connector X225
4. Connector **X226**



DEU\_DTM04-3P 289

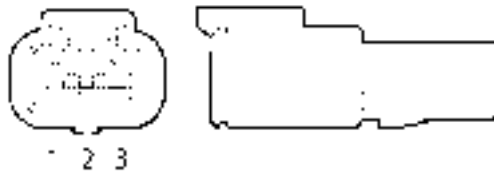
Cavity	Circuit ID	Description
1	540 (YE)	Signal (close) to CCM3 J2-17
2	550 (BK)	To front frame ground 2
3	539 (YE)	Signal (open) to CCM3 J2-34

**Connector X226 - Straw Hood Front Harness to Lower Sieve Rear Adjust S-46**



**Left rear corner of main frame**

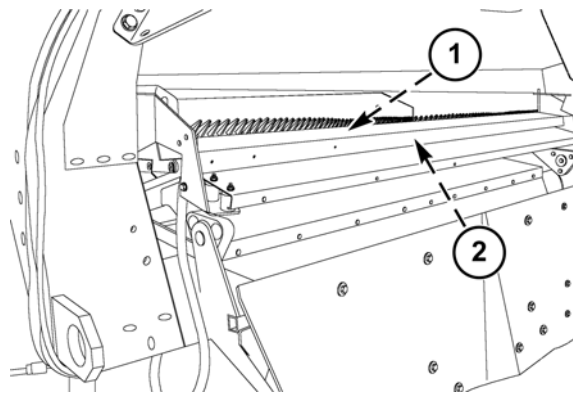
1. Upper sieve rear adjust switch S-35
2. Lower sieve rear adjust switch S-46
3. Connector **X225**
4. Connector X226



DEU\_DTM04-3P 291

Cavity	Circuit ID	Description
1	542 (YE)	Signal (close) to CCM3 J2-35
2	551 (BK)	To front frame ground 2
3	541 (YE)	Signal (open) to CCM3 J2-39

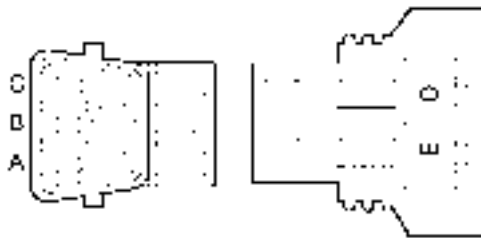
**Connector X227 - Lower Frame Rear Harness to Upper Sieve Actuator M-06**



40031059B4 292

**Rear of cleaning shoe**

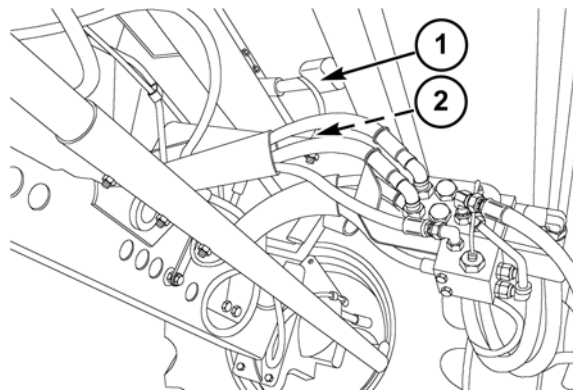
1. Upper sieve actuator motor M-06
2. Connector X227 (under sieve loss sensor)



PAC\_12146045 293

Cavity	Circuit ID	Description
A	793 (PK)	5 volts from CCM3 J2-31
B	795 (BL)	Reference ground to CCM3 J2-14
C	475 (YE)	Signal to CCM3 J2-22
D	792 (WH)	Power from CCM3 J2-21 through upper / lower sieve relay K-18
E	791 (GY)	Power from CCM3 J2-1

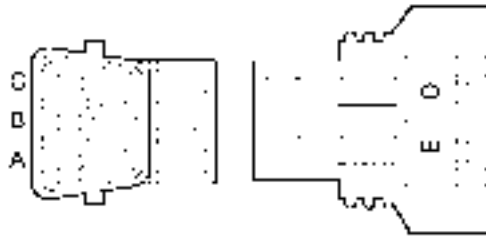
**Connector X228 - Lower Frame Rear Harness to Lower Sieve Actuator M-07**



40033803A4 294

**Under cleaning shoe, in front of rear axle**

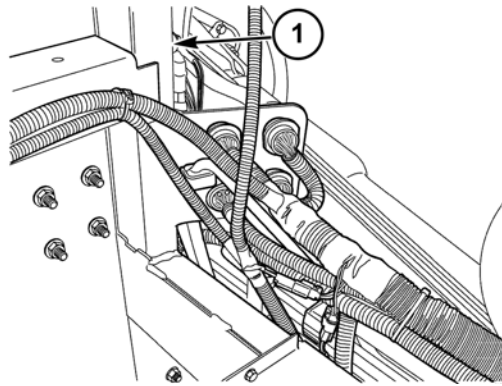
1. Lower sieve actuator M-07
2. Connector X228



PAC\_12146045 295

Cavity	Circuit ID	Description
A	793 (PK)	5 volts from CCM3 J2-31
B	796 (BL)	Reference ground to CCM3 J2-14
C	476 (YE)	Signal to CCM3 J2-19
D	790 (WH)	Power from CCM3 J2-21 through upper / lower sieve relay K-18
E	789 (GY)	Power from CCM3 J2-1

**Connector X231 - Straw Hood Front Harness to Rear Frame Ground 1**



50031063B4 296

1. Connector X231

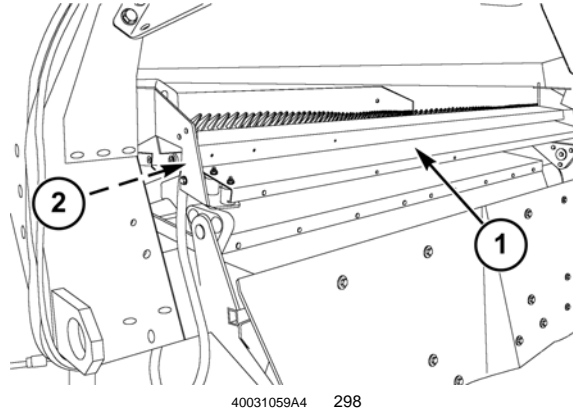


RING\_TERMINAL 297

Cavity	Circuit ID	Description
	478 (BK)	Back up alarm H-08 and rear beacon light E-33
	479 (BK)	Returns filter bypass S-32, PTO box filter bypass S-34, rear wheel assist L-26, chaff spreader L-28, sieve light front E-37 and trailer outlet J-09
	628 (BK)	Flashing lamps E-05/E-06/E-07/E-08, brake / tail lamps E-11/E-12 and RH side service socket J-03

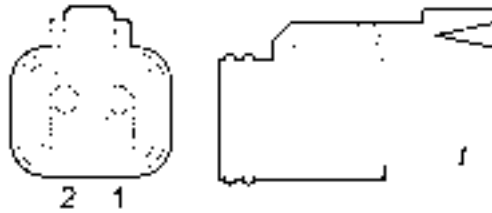
Cavity	Circuit ID	Description
	657 (BK)	LH side service socket J-04
	672 (BK)	Rear work lights E-27 & E-28
	1195 (BK)	Sieve light rear E-59
	1248 (BK)	Engine light E-46

**Connector X232 - Lower Frame Rear Harness to Sieves Loss B-21**



**Rear of cleaning shoe**

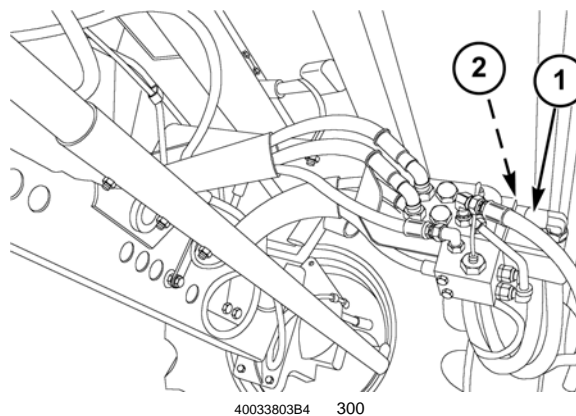
1. Sieve loss sensor B-21
2. Connector X232



DEUTSCH\_DT06-2S 299

Cavity	Circuit ID	Description
1	494 (BL)	Reference ground to CCM1 J2-14
2	431 (YE)	Signal to CCM1 J2-25

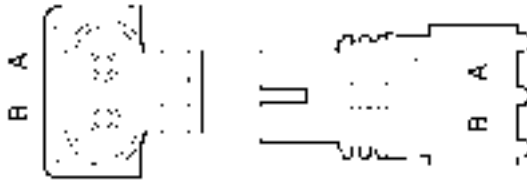
**Connector X233 - Lower Frame Rear Harness to Rear Wheel Assist L-26**





**Under cleaning shoe, in front of rear axle**

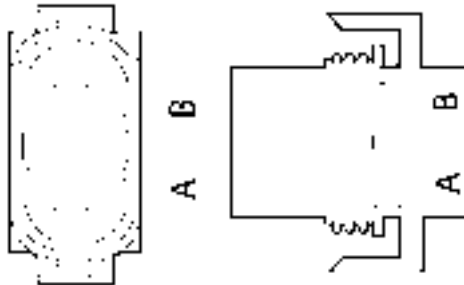
1. Rear wheel assist valve L-26
2. Connector X233



PAC\_12015792 301

Cavity	Circuit ID	Description
A	569 (WH)	Power from CCM1 J2-16
B	602 (BK)	To rear frame ground 1

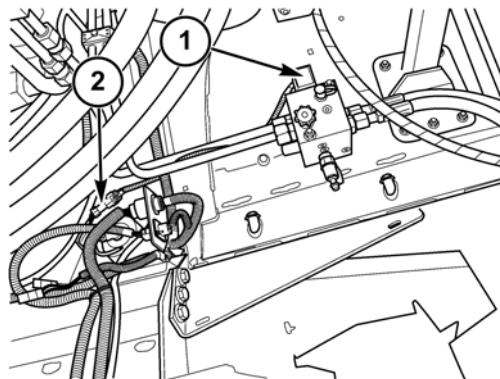
**Connector X234 - Straw Hood Front Harness to Sieve Light Front E-37**



PAC\_12124819 302

Cavity	Circuit ID	Description
A	1194 (PU)	Power from sieve light switch S-54
B	611 (BK)	To rear frame ground 1

**Connector X235 - Straw Hood Front Harness to Chaff Spreader L-28**

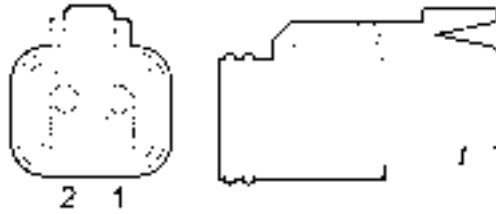


10033639C4 303

**Left rear of main frame, above rear axle**

1. Chaff spreader valve L-28

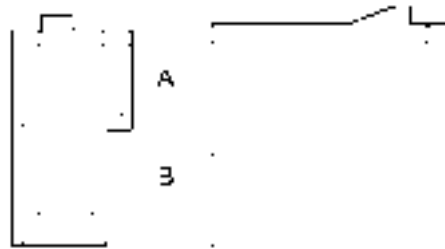
2. Connector X235



DEUTSCH\_DT06-2S 304

Cavity	Circuit ID	Description
1	576 (WH)	Power from CCM1 J2-15
2	577 (BK)	To rear frame ground 1

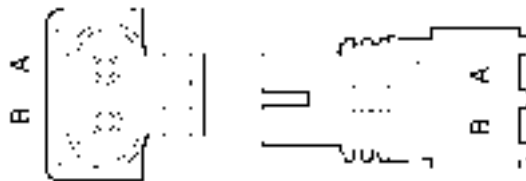
**Connector X236 - Straw Hood Front Harness to LH Side Service Socket J-04**



PAC\_2973781 305

Cavity	Circuit ID	Description
A	657 (BK)	To rear frame ground 1
B	648 (RD)	Power from fuse F-15

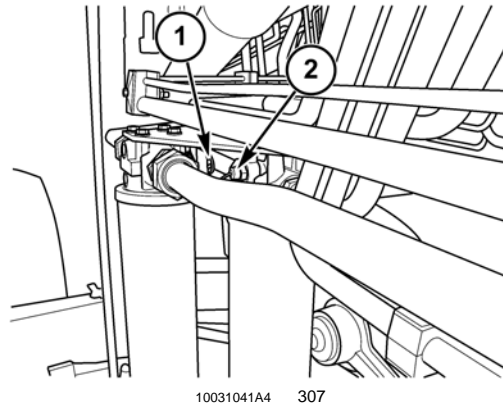
**Connector X237 - Straw Hood Front Harness to Sieve Light Switch S-54**



PAC\_12015792 306

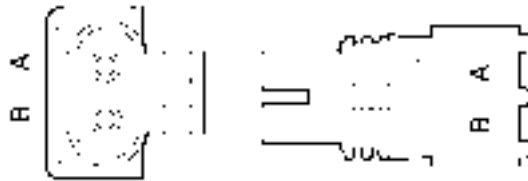
Cavity	Circuit ID	Description
A	604 (OR)	Power from fuse F-14
B	610 (PU)	Output to sieve lights E-37 & E-59

**Connector X238 - Straw Hood Front Harness to PTO Box Filter Bypass S-34**



**Left side of main frame, below PTO gearbox**

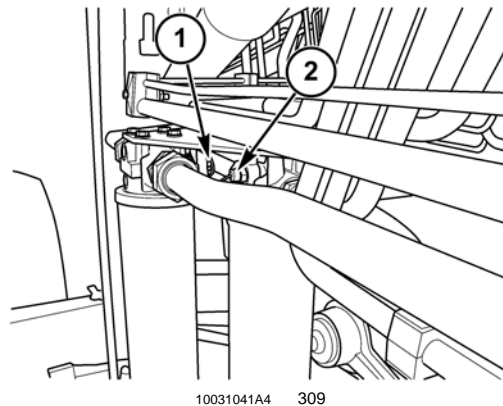
1. Connector **X239**
2. Connector X238



PAC\_12015792 308

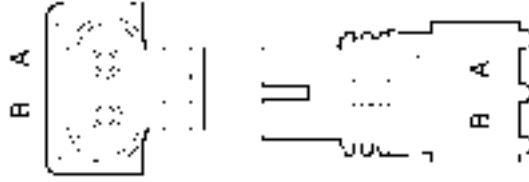
Cavity	Circuit ID	Description
A	484 (BK)	To rear frame ground 1
B	448 (YE)	Signal to CCM1 J2-35

**Connector X239 - Straw Hood Front Harness to Returns Filter Bypass S-32**



**Left side of main frame, below PTO gearbox**

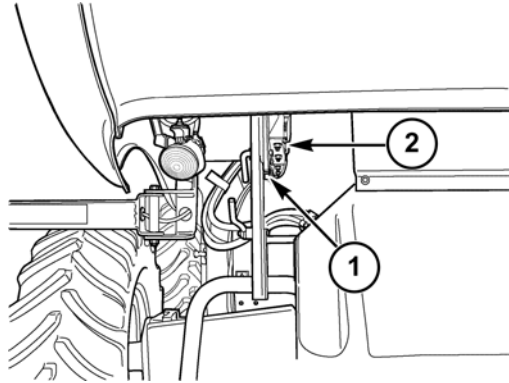
1. Connector X239
2. Connector **X238**



PAC\_12015792 310

Cavity	Circuit ID	Description
A	603 (BK)	To rear frame ground 1
B	447 (YE)	Signal to CCM1 J2-34

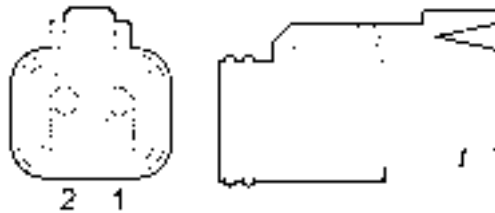
**Connector X240 - Straw Hood Rear Harness to Spreader Position B-11**



50031032A4 311

**Left rear corner**

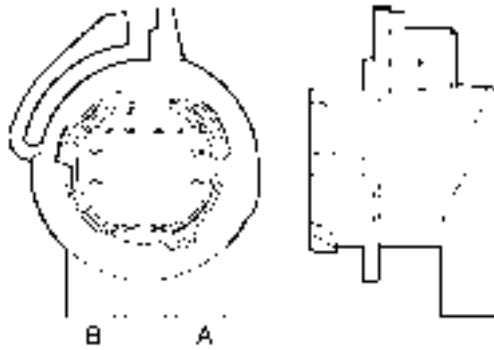
1. Spreader position sensor B-11
2. Connector X240



DEUTSCH\_DT06-2S 312

Cavity	Circuit ID	Description
1	482 (BL)	Reference ground to CCM1 J2-14
2	415 (YE)	Signal to CCM1 J3-37

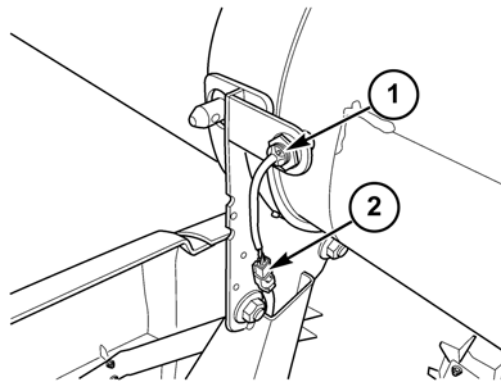
**Connector X242 - Straw Hood Rear Harness to LH Flashing Lamp (NA) E-07**



PAC\_12160393 313

Cavity	Circuit ID	Description
A	243 (PU)	Power from flasher module A-05 X255 pin 10
B	679 (BK)	To rear frame ground 1

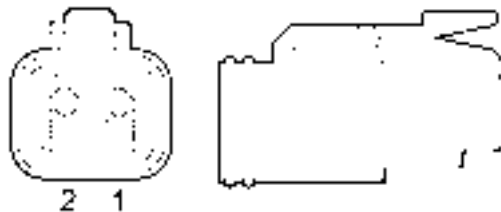
**Connector X244 - Straw Hood Rear Harness to Unload Cradle B-38**



10033644A4 314

**Upper left rear corner (accessible from engine platform)**

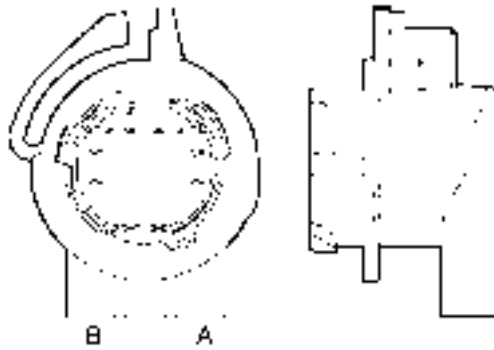
1. Unload cradle sensor B-38
2. Connector X244



DEUTSCH\_DT06-2S 315

Cavity	Circuit ID	Description
1	444 (BL)	Reference ground to CCM1 J2-14
2	485 (YE)	Signal to CCM1 J3-36

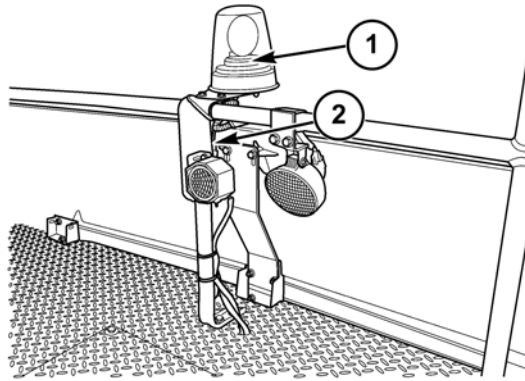
**Connector X245 - Straw Hood Rear Harness to RH Flashing Lamp (NA) E-08**



PAC\_12160393 316

Cavity	Circuit ID	Description
A	244 (PU)	Power from flasher module A-05 X255 pin 11
B	680 (BK)	To rear frame ground 1

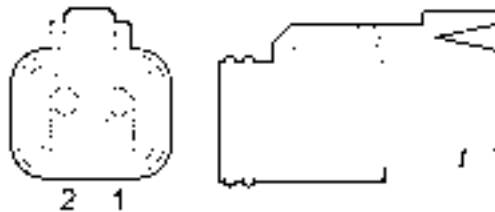
**Connector X247 - Straw Hood Rear Harness to Rear Beacon Light E-33**



10033643C4 317

**Rear of engine platform**

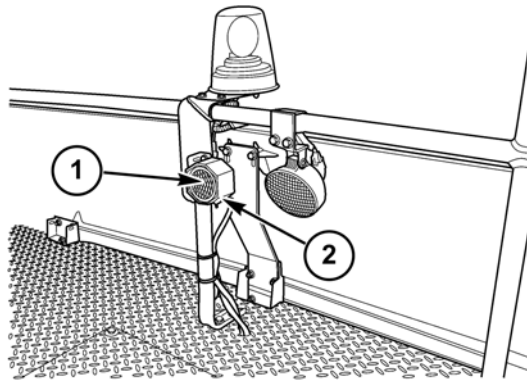
1. Rear beacon light E-33
2. Connector X247



DEUTSCH\_DT06-2S 318

Cavity	Circuit ID	Description
1	578 (PU)	Power from beacon light relay K-29
2	623 (BK)	To rear frame ground 1

**Connector X248 - Straw Hood Rear Harness to Back Up Alarm H-08**



**Rear of engine platform**

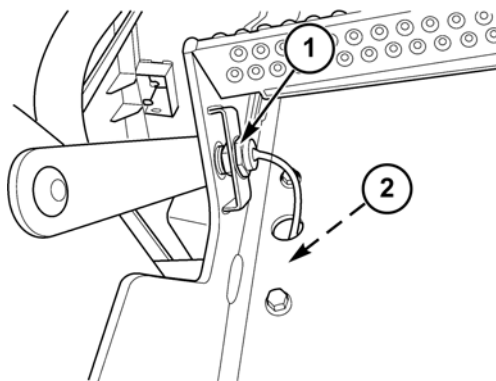
1. Back up alarm H-08
2. Connector X248



RING\_TERMINAL 320

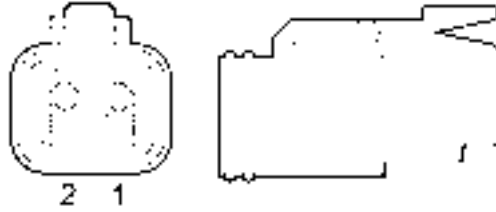
Cavity	Circuit ID	Description
	452 (WH)	Power from CCM1 J2-6
	478 (BK), 623 (BK)	To rear frame ground 1 (478 BK), ground from rear beacon light E-33 (623 BK)

**Connector X251 - Straw Hood Rear Harness to Rear Ladder B-22**



**Right rear corner of combine**

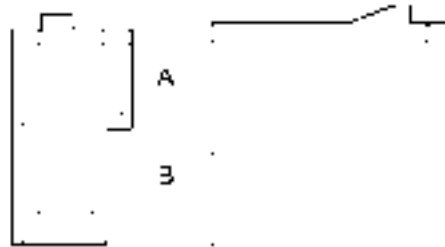
1. Rear ladder sensor B-22
2. Connector X251



DEUTSCH\_DT06-2S 322

Cavity	Circuit ID	Description
1	481 (BL)	Reference ground to CCM1 J2-14
2	570 (YE)	Signal to CCM1 J2-17

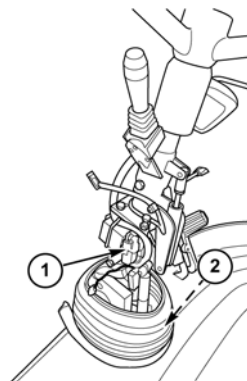
**Connector X252 - Straw Hood Rear Harness to RH Side Service Socket J-03**



PAC\_2973781 323

Cavity	Circuit ID	Description
1	658 (BK)	To rear frame ground 1
2	678 (RD)	Power from fuse F-15

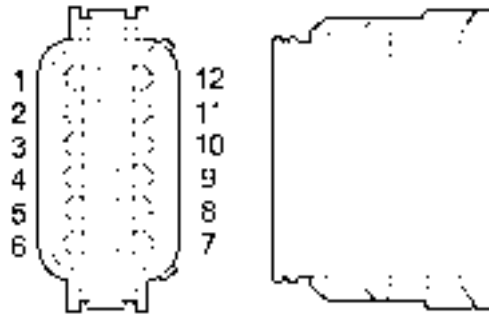
**Connector X255 - Steering Column Harness to Flasher Module A-05**



10010914B4 324

1. Connector X255
2. Connector **X033**

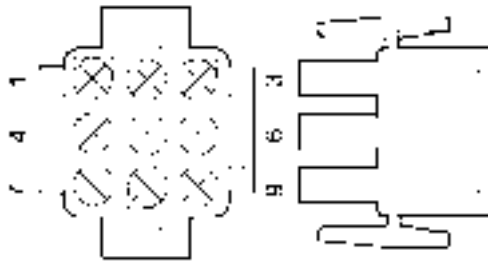




DEU\_DT06-12S 325

Cavity	Circuit ID	Description
1	102 (RD)	Power from fuse F-56
2	179 (PU)	Signal from hazard switch S-25
3	199 (PU)	Output to LH flashing lamps E-01, E-03, E-05, E-52 & trailer outlet J-09
4	195 (PU)	Output to RH flashing lamps E-02, E-04, E-06, E-51 & trailer outlet J-09
5	208 (PU)	Output to high beam indicator E-10
6	141 (BK)	To cab ground 3
7	201 (PU)	Signal (right turn) from road light switch S-26
8	197 (PU)	Signal (left turn) from road light switch S-26
9	204 (PU)	Signal (ISO/NASO) from CCM2 J1-5
10	243 (PU)	Output to LH flashing lamp E-07
11	244 (PU)	Output to RH flashing lamp E-08
12	open	

**Connector X256 - Cab Main Harness to Road Light Switch S-26**

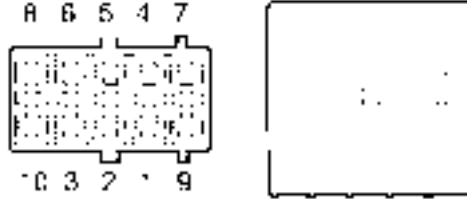


AMP\_1-480706-O 326

Cavity	Circuit ID	Description
1	173 (OR)	Output to CCM1 J1-21, fuses F-20 & F-21, LH marker lights (E-03, E-50, E-54, E-39, E-11, E-05), RH marker lights (E-04, E-49, E-53, E-12, E-06) & trailer outlet J-09
2	203 (PU)	Output (right turn) to CCM1 J1-9 and flasher module A-05 X255 pin 7
3	202 (PU)	Output (left turn) to CCM1 J1-2 and flasher module A-05 X255 pin 8
4	218 (YE)	Output to high beam relay K-04 and high beam indicator E-10
5	213 (OR)	Power from fuse F-49
6	055 (OR)	Power from key switch S-02 (IGN)
7	169 (YE)	Output to low beam relay K-05

Cavity	Circuit ID	Description
8	214 (RD)	Power from fuse F-51
9	193 (WH)	Output to horn H-02

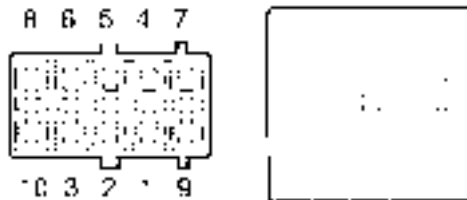
**Connector X257 - Steering Column Harness to Turn Indicator E-09**



EATON\_25-13936 327

Cavity	Circuit ID	Description
1	open	
2	open	
3	open	
4	open	
5	open	
6	open	
7	140 (PU)	Power from flasher module A-05 X255 pin 3
8	open	
9	209 (BK)	To cab ground 3
10	139 (PU)	Power from flasher module A-05 X255 pin 4

**Connector X258 - Steering Column Harness to High Beam Indicator E-10**

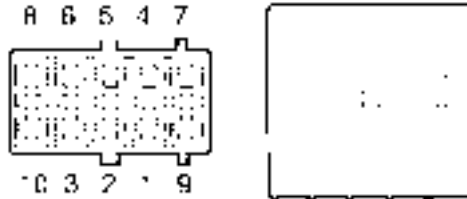


EATON\_25-13936 328

Cavity	Circuit ID	Description
1	open	
2	open	
3	open	
4	open	
5	open	
6	open	

Cavity	Circuit ID	Description
7	208 (PU)	Power from flasher module A-05 X255 pin 5
8	open	
9	221 (BK)	To cab ground 3
10	043 (PU)	Power from road light switch S-26

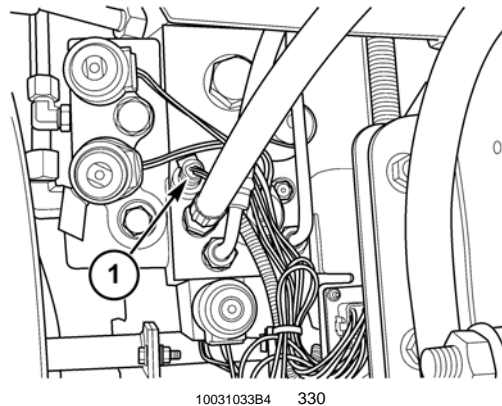
**Connector X259 - Steering Column Harness to Hazard Switch S-25**



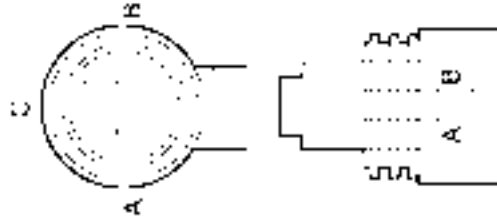
EATON\_25-13936 329

Cavity	Circuit ID	Description
1	open	
2	040 (RD)	Power from fuse F-56
3	207 (PU)	Signal to CCM2 J1-15 and flasher module A-05 X255 pin 2
4	open	
5	open	
6	open	
7	open	
8	open	
9	220 (BK)	To cab ground 3
10	open	

**Connector X279 - Main Frame Harness to Header Lift Pressure B-29**



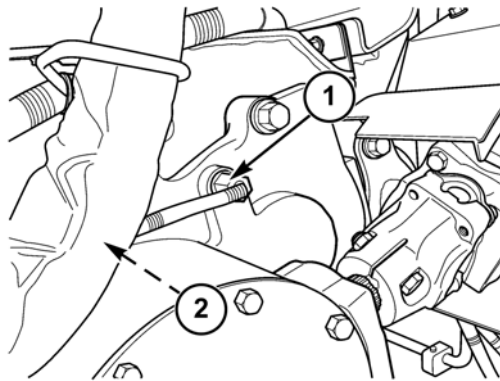
1. Connector X279



PAC\_12065287 331

Cavity	Circuit ID	Description
A	725 (BL)	Reference ground to CCM1 J2-14
B	728 (PK)	5 volts from CCM1 J2-31
C	722 (YE)	Signal to CCM1 J3-25

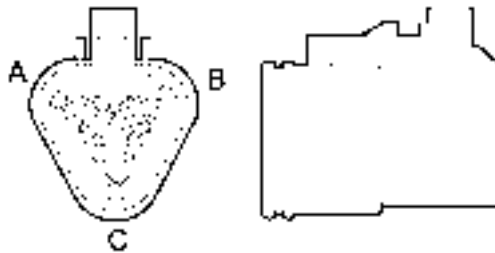
**Connector X284 - Feeder Harness to Feeder RPM B-14**



10033648A4 332

**Left side of feeder, near pivot**

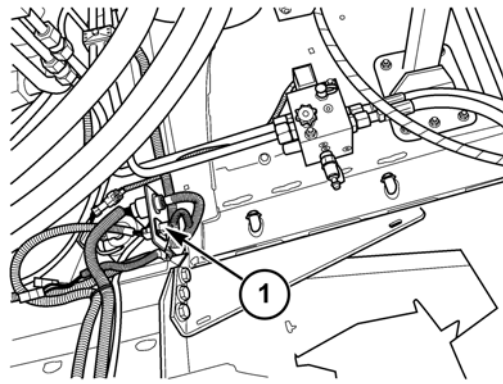
1. Feeder RPM sensor B-14
2. Connector X284



DEUTSCH\_DT06-3S 333

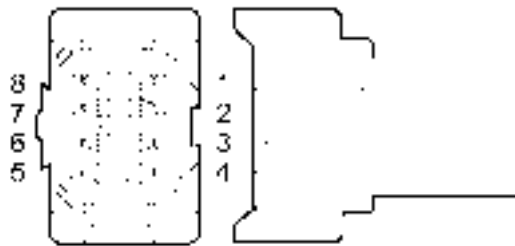
Cavity	Circuit ID	Description
A	1260 (OR)	Power from fuse F-45
B	489 (YE)	Signal to CCM1 J3-14
C	1201 (BK/WH)	To battery clean ground 6

**Connector X285 - Straw Hood Front Harness to Trailer Outlet J-09**

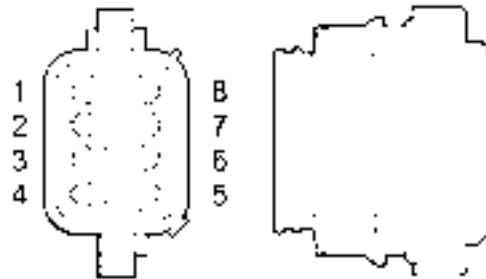


10033639B4 334

- 1. Connector X285



DEUTSCH\_DT04-8P 335



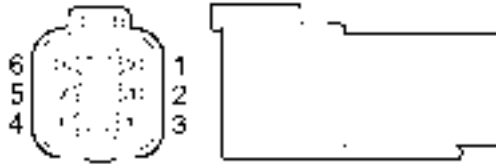
DEUTSCH\_DT06-8S 336

Cavity	Circuit ID	Description
1	997 (PU)	Power from brake lights relay K-33
2	992 (PU)	Power from flasher module A-05 X255 pin 3 (left flashing)
3	993 (PU)	Power from flasher module A-05 X255 pin 4 (right flashing )
4	994 (PU)	Power from road light switch S-26 (left marker)
5	995 (PU)	Power from road light switch S-26 (right marker)
6	998 (BK)	To rear frame ground 1
7	open	
8	open	

**Connector X286 - Engine Harness to 24V Start Relay K-38**

Terminal	Circuit ID	Description
30	802 (RD)	Output to alternator G-01
50	834 (WH/BK)	Output to 24V starter M-29
50a	804 (WH)	Signal from start relay K-36
51	801 (RD)	Output to start relay K-36

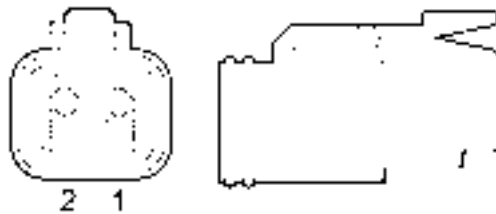
**Connector X287 - Outer Roof Harness to German Third Mirror**



DEUTSCH\_DT04-6P 337

Cavity	Circuit ID	Description
1	964 (WH)	Mirror select switch S-57 to German mirror in / out M-31
2	966 (GY)	German mirror motors M-30/31 to mirror adjust switch S-27
3	862 (OR)	Mirror heat switch S-19 to RH German mirror heat R-14
4	963 (WH)	Mirror select switch S-57 to German mirror up / down M-30
5	open	
6	863 (BK)	To cab roof ground 4

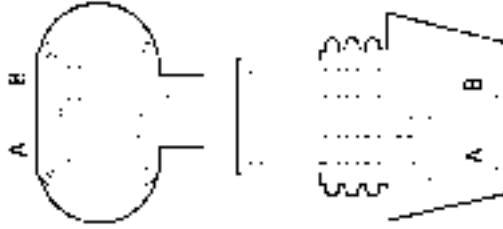
**Connector X288 - Tank Extensions Harness to Covers Closed B-47**



DEUTSCH\_DT06-2S 338

Cavity	Circuit ID	Description
1	454 (BL)	Reference ground to CCM1 J2-14
2	435 (YE)	Signal to CCM1 J3-38

**Connector X289 - Tanks Extensions Harness to Covers Motor M-12**



PAC\_16300027 339

Cavity	Circuit ID	Description
A	696 (WH)	Power from CCM1 J2-21 through concave / covers relay K-16
B	693 (GY)	Power from CCM1 J2-1

**Connector X293 - Lower Frame Harness to 2 Speed Powered Rear Axle**

Cavity	Circuit ID	Description
A	762 (WH)	Output from CCM1 J3-3 to 2 speed powered rear axle solenoids L54/55
B	764 (BK)	To front frame ground 2

**Connector X294 - Lower Frame Harness to LH Brake Wear Switch S-55**



RING\_TERMINAL 340

Cavity	Circuit ID	Description
	866 (BK)	To front frame ground 2

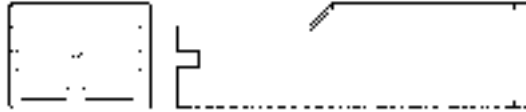
**Connector X295 - Lower Frame Harness to RH Brake Wear Switch S-56**



RING\_TERMINAL 341

Cavity	Circuit ID	Description
	867 (BK)	To front frame ground 2

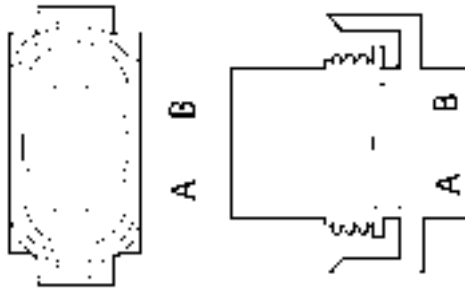
**Connector X296 - Cab Roof Harness to Dome Light E-34**



AMP\_154719 342

Cavity	Circuit ID	Description
1	965 (RD)	Power from fuse F-52

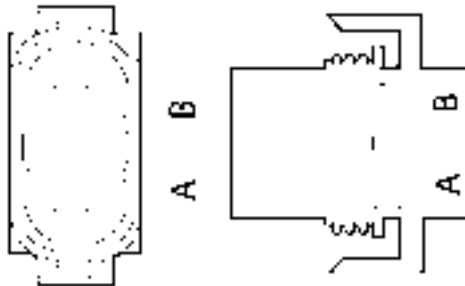
**Connector X297 - LH Mirror & Side Light Jumper Harness to LH Side Work Light E-25**



PAC\_12124819 343

Cavity	Circuit ID	Description
A	(GN)	Power from side work light relays K-34 & K-35
B	(BK)	To cab roof ground 4

**Connector X298 - RH Mirror & Side Light Jumper Harness to RH Side Work Light E-26**

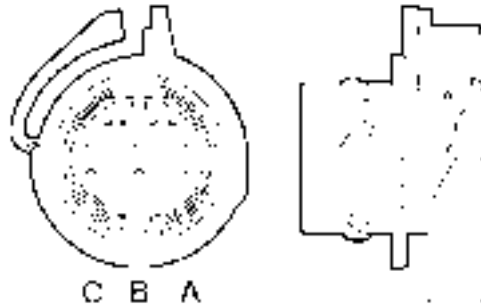


PAC\_12124819 344



Cavity	Circuit ID	Description
A	(GN)	Power from side work light relays K-34 & K-35
B	(BK)	To cab roof ground 4

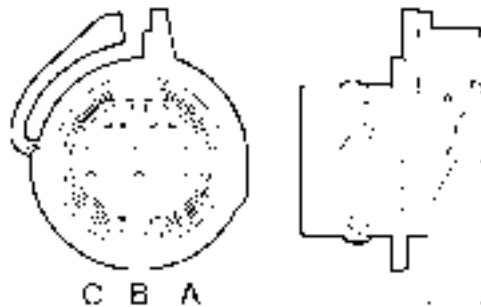
**Connector X299 - Straw Hood Rear Harness to LH Brake / Tail Lamp (NA) E-11**



PAC\_12160395 345

Cavity	Circuit ID	Description
A	1270 (PK)	Power from brake lights relay K-33
B	1266 (PK)	Power from road light switch S-26 through fuse F-20
C	1274 (BK)	To rear frame ground 1

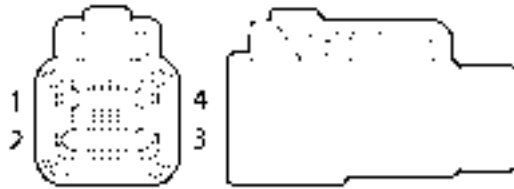
**Connector X300 - Straw Hood Rear Harness to RH Brake / Tail Lamp (NA) E-12**



PAC\_12160395 346

Cavity	Circuit ID	Description
A	1268 (PK)	Power from brake lights relay K-33
B	1272 (PK)	Power from road light switch S-26 through fuse F-21
C	1275 (BK)	To rear frame ground 1

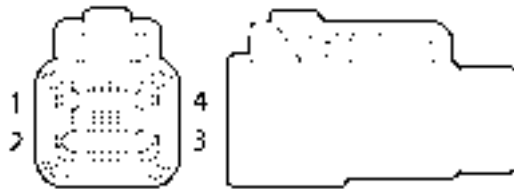
**Connector X301 - Straw Hood Rear Harness to LH Rear Flashing Lamp (EU) E-05**



DEU\_DTM06-4S 347

Cavity	Circuit ID	Description
1	619 (PU)	Power from flasher module A-05 X255 pin 3
2	1267 (PK)	Power from road light switch S-26 through fuse F-20
3	1271 (PK)	Power from brake lights relay K-33
4	634 (BK)	To rear frame ground 1

**Connector X302 - Straw Hood Rear Harness to RH Rear Flashing Lamp (EU) E-06**



DEU\_DTM06-4S 348

Cavity	Circuit ID	Description
1	622 (PU)	Power from flasher module A-05 X255 pin 4
2	1273 (PK)	Power from road light switch S-26 through fuse F-21
3	1269 (PK)	Power from brake lights relay K-33
4	635 (BK)	To rear frame ground 1

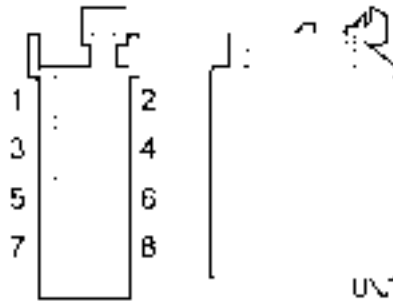
**Connector X311 - Iveco Harness to Engine Oil Temperature B-03**



CONN\_X311 349

Cavity	Circuit ID	Description
A	BL	Signal to CCM2 J2-27
B	BN	Reference ground to CCM2 J2-14

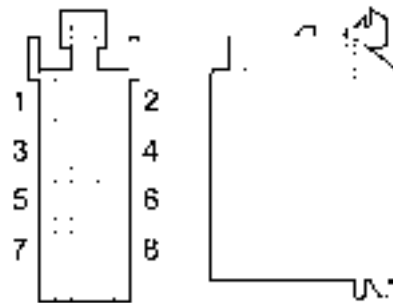
**Connector X314 - Cab Roof Harness to Radio A-04**



AMP\_962189-1 350

Cavity	Circuit ID	Description
1	open	
2	open	
3	open	
4	830 (RD)	Power from fuse F-35
5	open	
6	open	
7	081 (OR)	Power from fuse F-11
8	973 (BK)	To cab roof ground 4

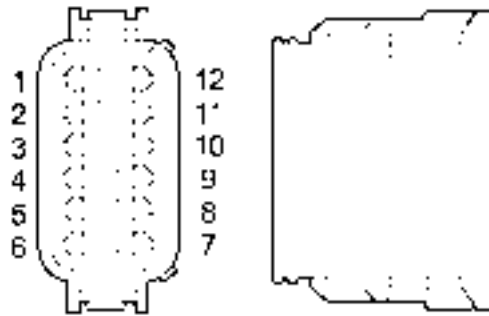
**Connector X315 - Cab Roof Harness to Radio A-04**



AMP\_962191-1 351

Cavity	Circuit ID	Description
1	974 (WH)	Output to rear right speaker H-06
2	979 (BL)	Ground for rear right speaker H-06
3	976 (WH)	Output to front right speaker H-07
4	980 (BL)	Ground for front right speaker H-07
5	977 (WH)	Output to front left speaker H-05
6	983 (BL)	Ground for front left speaker H-05
7	975 (WH)	Output to rear left speaker H-04
8	982 (BL)	Ground for rear left speaker H-04

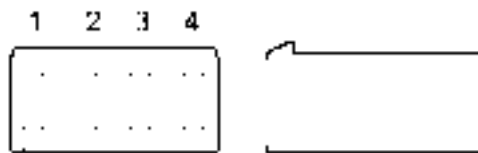
**Connector X319 - Adapter Display Harness to ICDU A-02**



DEU\_DT06-12S 352

Cavity	Circuit ID	Description
1	1188 (OR)	Power from key switch S-02
2	057 (RD)	Power from fuse F-39
3	1189 (BK)	To cab ground 3
4	open	
5	open	
6	open	
7	1172 (GN)	CAN Low
8	1171 (YE)	CAN High
9	open	
10	open	
11	open	
12	open	

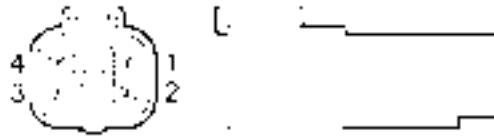
**Connector X320 - Adapter Display Harness to Shaft Speed Monitor A-03**



AMP\_640250 353

Cavity	Circuit ID	Description
1	1186 (BK)	To cab ground 3
2	1185 (OR)	Power from key switch S-02
3	1182 (YE)	CAN High
4	1183 (GN)	CAN Low

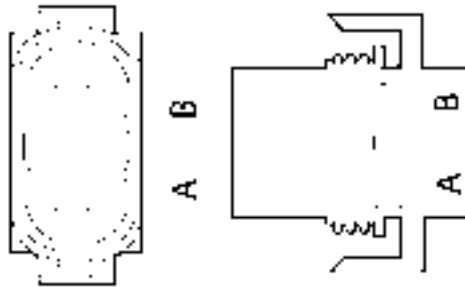
**Connector X321 - Main Frame Harness to GPS Antenna A-11**



DEUTSCH\_DT04-4P 354

Cavity	Circuit ID	Description
1	1238 (OR)	Power from fuse F-45
2	1240 (YE)	CAN High
3	1239 (BK/WH)	To battery clean ground 6
4	1241 (GN)	CAN Low

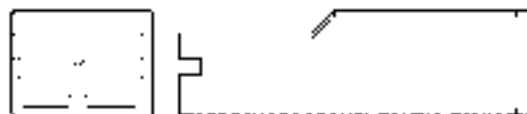
**Connector X322 - Unload Tube Light Harness to Unload Tube Light E-29**



PAC\_12124819 355

Cavity	Circuit ID	Description
A	077 (WH)	Power from unload tube light relay K-32
B	669 (BK)	To front frame ground 2

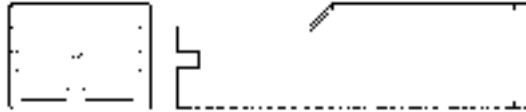
**Connector X327 - Cab Main Harness to Brake Fluid Level Switch S-49**



AMP\_154719 356

Cavity	Circuit ID	Description
1	1501 (YE)	Signal to CCM1 J2-26

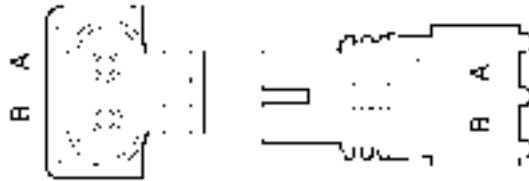
**Connector X328 - Cab Main Harness to Brake Fluid Level Switch S-49**



AMP\_154719 357

Cavity	Circuit ID	Description
1	122 (BK), 1502 (BK)	Ground from splice block C, W-03 (122 BK), to cab ground 3

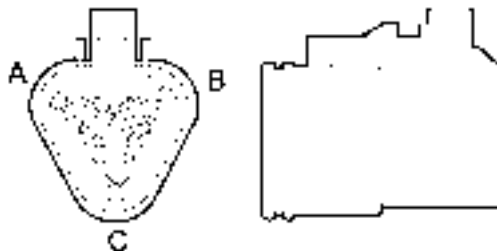
**Connector X329 - Main Frame Harness to Brake Limiting L-32**



PAC\_12015792 358

Cavity	Circuit ID	Description
A	1504 (WH)	Power from CCM2 J2-7
B	1505 (BK)	To front frame ground 2

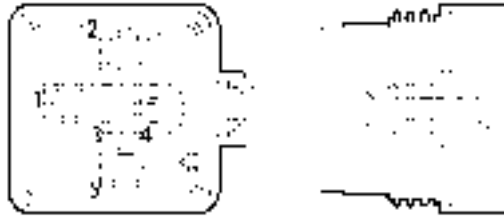
**Connector X330 - Engine Harness to Air Filter Resistor R-15**



DEUTSCH\_DT06-3S 359

Cavity	Circuit ID	Description
A	860 (YE)	Signal to air filter switch S-61 and CCM2 J2-29
B	469 (PK)	5 volts from CCM2 J2-31
C	open	

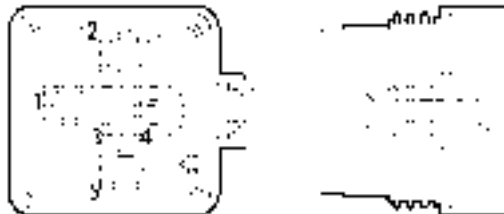
**Connector X331 - Flip Up Lighting Harness to Flip Up Low Beam Relay K-40**



PAC\_12065685 360

Cavity	Circuit ID	Description
1	1509 (PU)	Power from road light switch S-26 though fuse F-21
2	1510 (BK)	To front frame ground 2 through header connector X032
3	1518 (PU)	Power from low beam relay K-05 through road light connectors X164 & X169
4	1515 (PU)	Output to road lights E-13 & E-14
5	1512 (PU)	Output to flip up road lights E-47 & E-48

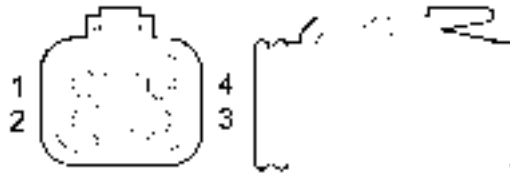
**Connector X332 - Flip Up Lighting Harness to Flip Up High Beam Relay K-41**



PAC\_12065685 361

Cavity	Circuit ID	Description
1	1507 (PU)	Power from road light switch S-26 though fuse F-21
2	1511 (BK)	To front frame ground 2 through header connector X032
3	1527 (PU)	Power from high beam relay K-04 through road light connectors X164 & X169
4	1524 (PU)	Output to road lights E-13 & E-14
5	1521 (PU)	Output to flip up road lights E-47 & E-48

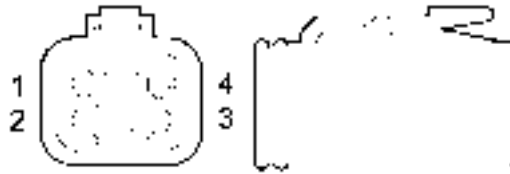
**Connector X333 - Flip Up Lighting Harness to LH Flip Up Road Light E-47**



DEUTSCH\_DT06-4S 362

Cavity	Circuit ID	Description
1	1513 (PU)	Power from flip up low beam relay K-40
2	1523 (PU)	Power from flip up high beam relay K-41
3	1530 (BK)	To front frame ground 2 through road light connectors X164 & X169
4	1508 (PU)	Power from road light switch S-26 though fuse F-21

**Connector X334 - Flip Up Lighting Harness to RH Flip Up Road Light E-48**



DEUTSCH\_DT06-4S 363

Cavity	Circuit ID	Description
1	1514 (PU)	Power from flip up low beam relay K-40
2	1522 (PU)	Power from flip up high beam relay K-41
3	1531 (BK)	To front frame ground 2 through road light connectors X164 & X169
4	1506 (PU)	Power from road light switch S-26 though fuse F-21

**Connector X335 - Flip Up Lighting Harness to LH Road Light E-13**

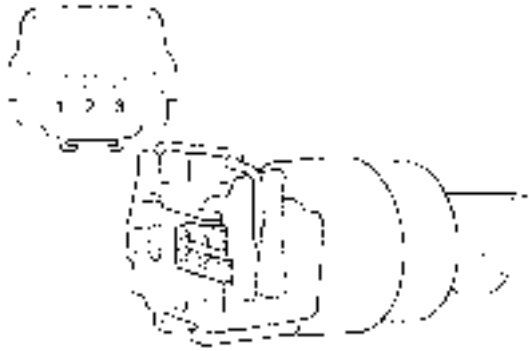
Cavity	Circuit ID	Description
A	1525 (PU)	Power from flip up high beam relay K-41
B	1516 (PU)	Power from flip up low beam relay K-40
C	1532 (BK)	To front frame ground 2 through road light connectors X164 & X169

**Connector X336 - Flip Up Lighting Harness to RH Road Light E-14**

Cavity	Circuit ID	Description
A	1526 (PU)	Power from flip up high beam relay K-41
B	1517 (PU)	Power from flip up low beam relay K-40
C	1535 (BK)	To front frame ground 2 through road light connectors X164 & X169



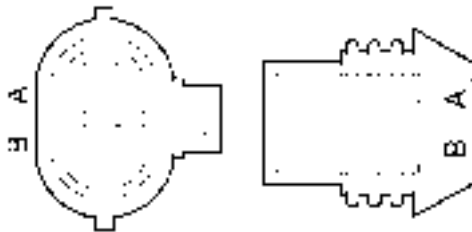
**Connector X337 - Iveco Harness to Engine Oil Harness B-52**



AMP\_282729 364

Cavity	Circuit ID	Description
A	BN	Reference ground to CCM2 J2-14
B	OR	5 volts from CCM2 J2-31
C	OR	Signal to CCM2 J2-33

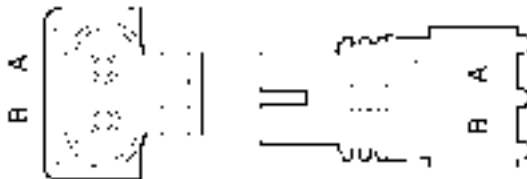
**Connector X338 - Iveco Harness to Fuel Filter Switch S-62**



AMP\_282080-1 365

Cavity	Circuit ID	Description
1	RD	Signal to CCM2 J2-24
2	BN	Reference ground to CCM2 J2-14

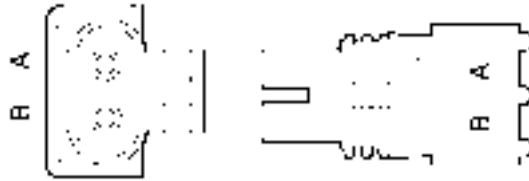
**Connector X339 - Under Shield Lighting Harness to Under Shield Light Switch S-63**



PAC\_12015792 366

Cavity	Circuit ID	Description
A	1214 (RD)	Power from fuse F-34
B	2004 (PU)	Power to under shield lights E-42/3/4/5

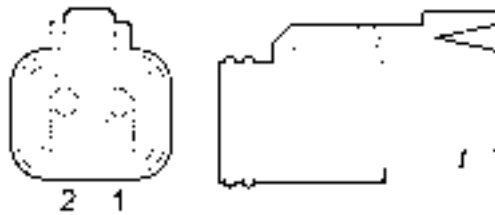
**Connector X340 - Engine Lighting Harness to Engine Light Switch S-64**



PAC\_12015792 367

Cavity	Circuit ID	Description
A	1215 (PU)	Power from fuse F-34
B	2009 (PU)	Power to engine light E-46

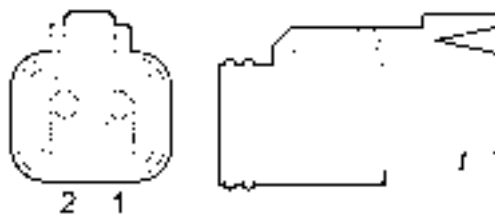
**Connector X342 - Main Frame Harness to Under Shield Lighting Harness**



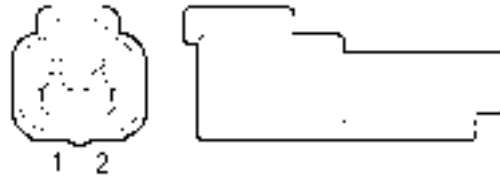
DEUTSCH\_DT06-2S 368

Cavity	Circuit ID	Description
1	1214 (RD)	Power from fuse F-34 to under shield light switch S-63
2	1247 (BK)	To front frame ground 2

**Connector X343 - Straw Hood Rear Harness to Engine Lighting Harness**



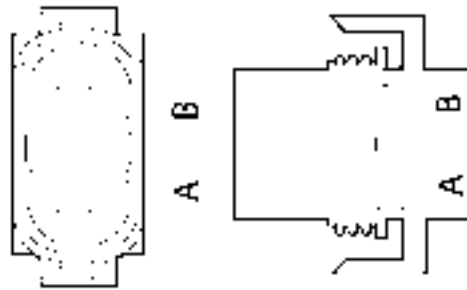
DEUTSCH\_DT06-2S 369



DEUTSCH\_DT04-2P 370

Cavity	Circuit ID	Description
1	1215 (RD)	Power from fuse F-34 to engine light switch S-64
2	1248 (BK)	To rear frame ground 1

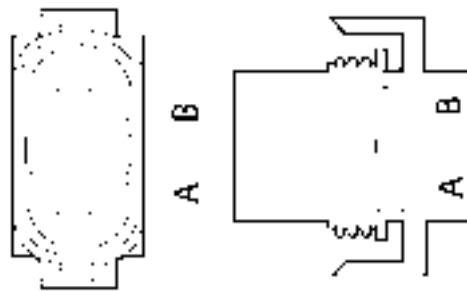
**Connector X345 - Under Shield Lighting Harness to LH Front Shield Light E-42**



PAC\_12124819 371

Cavity	Circuit ID	Description
A	2005 (PU)	Power from under shield light switch S-63
B	2017 (BK)	To front frame ground 2

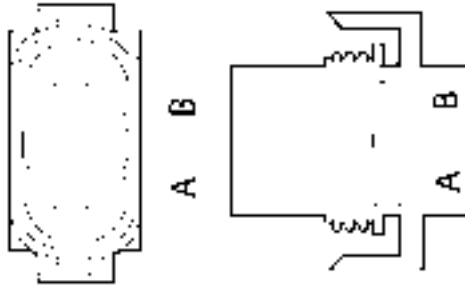
**Connector X346 - Under Shield Lighting Harness to LH Rear Shield Light E-43**



PAC\_12124819 372

Cavity	Circuit ID	Description
A	2006 (PU)	Power from under shield light switch S-63
B	2016 (BK)	To front frame ground 2

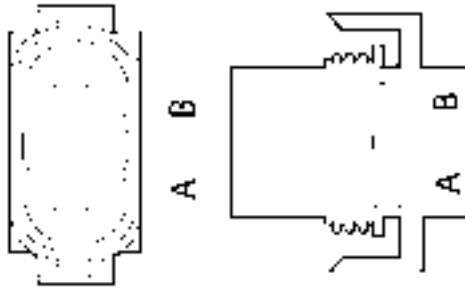
**Connector X347 - Under Shield Lighting Harness to RH Front Shield Light E-44**



PAC\_12124819 373

Cavity	Circuit ID	Description
A	2012 (PU)	Power from under shield light switch S-63
B	2018 (BK)	To front frame ground 2

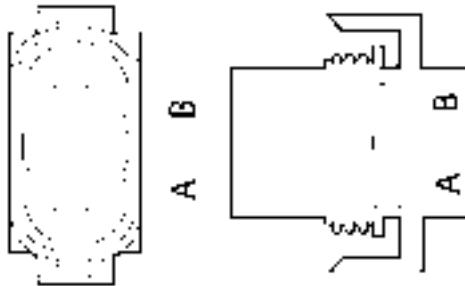
**Connector X348 - Under Shield Lighting Harness to RH Rear Shield Light E-45**



PAC\_12124819 374

Cavity	Circuit ID	Description
A	2011 (PU)	Power from under shield light switch S-63
B	2019 (BK)	To front frame ground 2

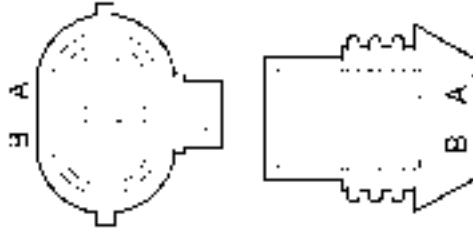
**Connector X349 - Engine Lighting Harness to Engine Light E-46**



PAC\_12124819 375

Cavity	Circuit ID	Description
A	2009 (PU)	Power from engine light switch S-64
B	1248 (BK)	To rear frame ground 1

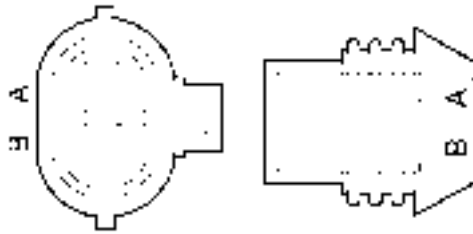
**Connector X362 - RH License Plate Lamp (EU) E-57**



AMP\_282080-1 376

Cavity	Circuit ID	Description
1	(PU)	Power from road light switch S-26 through fuse F-21
2	(BK)	To rear frame ground 1

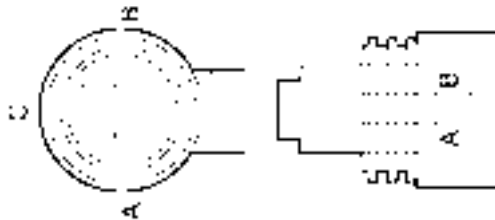
**Connector X363 - LH License Plate Lamp (EU) E-58**



AMP\_282080-1 377

Cavity	Circuit ID	Description
1	(PU)	Power from road light switch S-26 through fuse F-21
2	(BK)	To rear frame ground 1

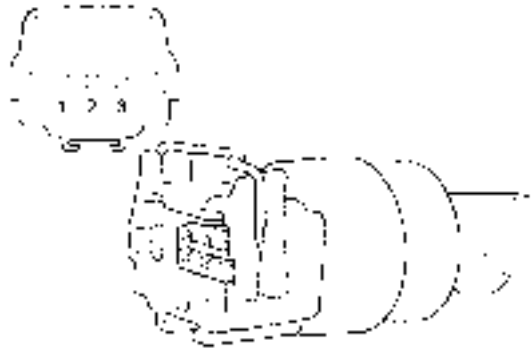
**Connector X368 - Main Frame Harness to Park Brake Pressure B-53**



PAC\_12065287 378

Cavity	Circuit ID	Description
A	1198 (BL)	Reference ground to CCM2 J2-14
B	1199 (PK)	5 volts from CCM2 J2-31
C	1197 (YE)	Signal to CCM2 J3-34

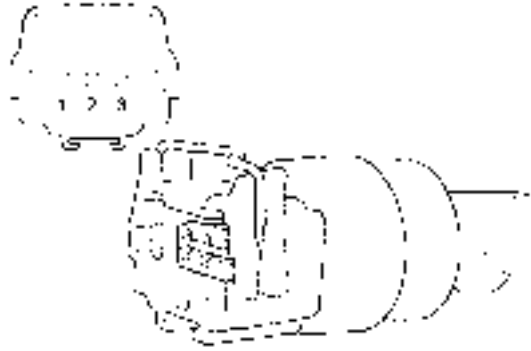
**Connector X369 - Iveco Harness to Engine Flywheel RPM B-05**



AMP\_282729 379

Cavity	Circuit ID	Description
A	BK	To ECU A-01 X192 pin 13
B	WH	To ECU A-01 X192 pin 1
C	BN	Drain wire for shielding

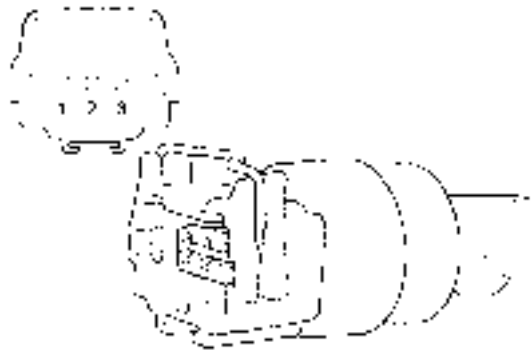
**Connector X370 - Iveco Harness to Engine Camshaft RPM B-07**



AMP\_282729 380

Cavity	Circuit ID	Description
A	WH	To ECU A-01 X192 pin 2
B	BK	To ECU A-01 X192 pin 14
C	BN	Drain wire for shielding

**Connector X371 - Iveco Harness to Boost Pressure B-23**



AMP\_282729 381

Cavity	Circuit ID	Description
A	GN	To ECU A-01 X192 pin 12
B	RD	To ECU A-01 X192 pin 23
C	WH	To ECU A-01 X192 pin 17

**Connector X372 - Iveco Harness to Fuel Temperature B-36**



CONN\_X311 382

Cavity	Circuit ID	Description
1	WH/RD	To ECU A-01 X192 pin 6
2	OR/BK	To ECU A-01 X192 pin 11

**Connector X373 - Iveco Harness to Coolant Temperature B-44**



CONN\_X311 383

Cavity	Circuit ID	Description
1	PK	To ECU A-01 X192 pin 5
2	YE	To ECU A-01 X192 pin 22

**Connector X374 - Iveco Harness to Air Temperature B-54**

Cavity	Circuit ID	Description
1	OR	To ECU A-01 X192 pin 21
2	BK	To ECU A-01 X192 pin 4

**Connector X375 - Iveco Harness to Engine Brake L-33**

Cavity	Circuit ID	Description
1	OR	To ECU A-01 X192 pin 32
2	BN	To ECU A-01 X192 pins 3 & 18

**Connector X376 - Iveco Harness to Fuel Actuator 1 L-34**

Cavity	Circuit ID	Description
		To ECU A-01 X192 pin 35
		To ECU A-01 X192 pin 24

**Connector X377 - Iveco Harness to Fuel Actuator 2 L-35**

Cavity	Circuit ID	Description
		To ECU A-01 X192 pin 26
		To ECU A-01 X192 pin 25

**Connector X378 - Iveco Harness to Fuel Actuator 3 L-36**

Cavity	Circuit ID	Description
		To ECU A-01 X192 pin 34
		To ECU A-01 X192 pin 24

**Connector X379 - Iveco Harness to Fuel Actuator 4 L-37**

Cavity	Circuit ID	Description
		To ECU A-01 X192 pin 27
		To ECU A-01 X192 pin 25

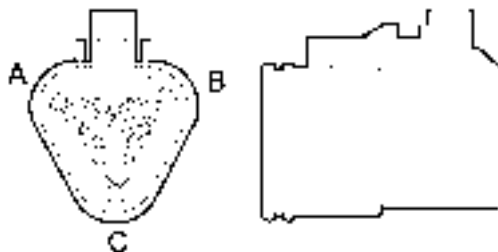
**Connector X380 - Iveco Harness to Fuel Actuator 5 L-38**

Cavity	Circuit ID	Description
		To ECU A-01 X192 pin 33
		To ECU A-01 X192 pin 24

**Connector X381 - Iveco Harness to Fuel Actuator 6 L-39**

Cavity	Circuit ID	Description
		To ECU A-01 X192 pin 28
		To ECU A-01 X192 pin 25

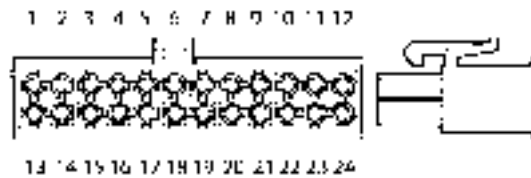
**Connector X383 - Straw Hood Rear Harness to Spreader RPM B-55**



DEUTSCH\_DT06-3S 384

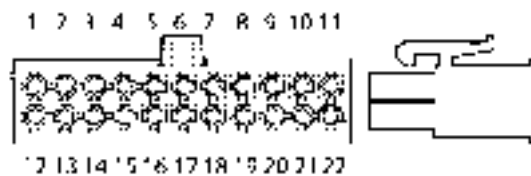
Cavity	Circuit ID	Description
A	1254 (OR)	Power from fuse F-45
B	414 (YE)	Signal to CCM2 J2-28
C	492 (BL)	Reference ground to CCM2 J2-14



**Connector X386 - Right Console Harness to Front Switch Panel A-13**

AMP\_770587 385

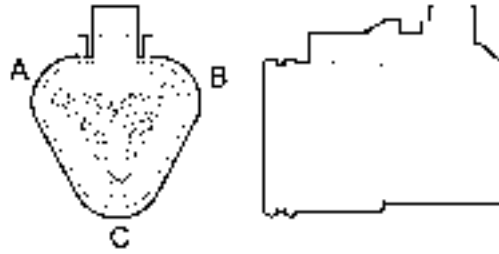
Cavity	Circuit ID	Description
1	1028 (PU)	Power from fuse F-48 (backlighting)
2	346 (YE)	Concave clearance S-16 (-) to RHM X030 pin 8
3	347 (YE)	Concave clearance S-16 (+) to RHM X030 pin 3
4	345 (YE)	Fan speed S-15 (+) to RHM X030 pin 10
5	1281 (PU)	RHM X027 pin 17 to header mode switch S-69 (LED)
6	339 (YE)	On the road switch S-12 to RHM X029 pin 16
7	1257 (PU)	RHM X027 pin 8 to on the road switch S-12 (LED)
8	1011 (WH)	Header height mode 2 S-68 to RHM X029 pin 12
9	353 (PU)	RHM X027 pin 16 to header height mode 1 S-04 (LED)
10	303 (YE)	HHC fine adjust S-06 (-) to RHM X027 pin 7
11	334 (YE)	Park brake switch S-09 (ON) to RHM X029 pin 9
12	open	
13	349 (YE)	Rotor speed S-17 (+) to RHM X030 pin 11
14	1123 (OR)	Power from fuse F-48
15	1175 (BK)	To cab ground 3
16	348 (YE)	Rotor speed S-17 (-) to RHM X030 pin 4
17	344 (YE)	Fan speed S-15 (-) to RHM X030 pin 9
18	1008 (WH)	Header mode switch S-69 to RHM X029 pin 2
19	1094 (PU)	RHM X027 pin 15 to reel speed mode S-08 (LED)
20	1009 (WH)	Reel speed mode S-08 to RHM X029 pin 10
21	1010 (WH)	Header height mode 1 S-04 to RHM X029 pin 3
22	304 (YE)	HHC fine adjust S-06 (+) to RHM X027 pin 6
23	1012 (YE)	RHM X027 pin 14 to header height mode 2 S-68 to RHM X027 pin 14
24	335 (YE)	Park brake switch S-09 (OFF) to RHM X029 pin 1

**Connector X387 - Right Console Harness to Rear Switch Panel A-18**

AMP\_770586 386

Cavity	Circuit ID	Description
1	open	
2	open	
3	open	
4	230 (YE)	Vertical knives S-51 (both) to RHM X029 pin 7
5	1283 (PU)	Power from fuse F-48 (backlighting)
6	1125 (BK)	To cab ground 3
7	341 (YE)	Upper sieve S-13 (+) to RHM X030 pin 2
8	325 (YE)	Not used
9	340 (YE)	Upper sieve S-13 (-) to RHM X030 pin 7
10	343 (YE)	Lower sieve S-14 (+) to RHM X030 pin 6
11	342 (YE)	Lower sieve S-14 (-) to RHM X030 pin 1
12	open	
13	229 (YE)	Vertical knives S-51 (right) to RHM X029 pin 15
14	1177 (OR)	Power from fuse F-48
15	336 (YE)	Rear wheel assist S-10 to RHM X029 pin 17
16	337 (YE)	Rear wheel assist Hi / Low S-11 to RHM X029 pin 6
17	1256 (PU)	RHM X027 pin 18 to rear wheel assist S-10 (LED)
18	1126 (BK)	To cab ground 3
19	1282 (PU)	RHM X027 pin 13 to rear wheel assist Hi / Low S-11 (LED)
20	open	
21	open	
22	324 (YE)	Not used

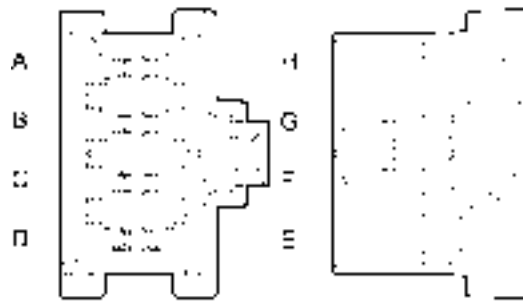
**Connector X388 - Right Console Harness to Engine Throttle Pot R-21**



DEUTSCH\_DT06-3S 387

Cavity	Circuit ID	Description
A	1025 (BL)	Reference ground to RHM X026 pin 6
B	1014 (WH)	Signal to RHM X027 pin 10
C	1026 (PK)	5 volts from RHM X026 pin 16

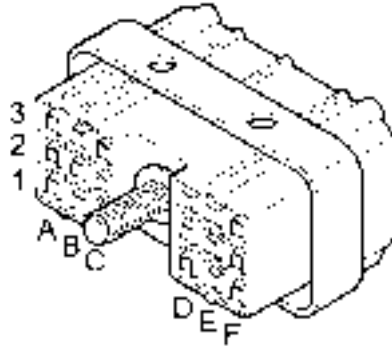
**Connector X396 - Main Blower Harness to Blower Speed Control (ATC) A-14**



PAC\_12110626 388

Cavity	Circuit ID	Description
A	946 (RD)	Power from main blower relay high K-13
B	958 (BK)	Ground for main blower (ATC) M-34
C	948 (BK)	To cab ground 3
D	953 (YE)	Signal from ATC control module A-15
E	open	
F	948 (BK)	To cab ground 3
G	958 (BK)	Ground for main blower (ATC) M-34
H	open	

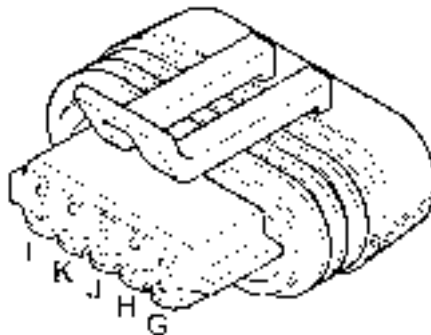
**Connector X397 - Air Conditioning Harness to ATC Control Module A-15**



ATC\_X397 389

Cavity	Circuit ID	Description
1A	911 (YE)	To HVAC control panel A-20 X128 pin C-14
1B	951 (BL)	To evaporator temp sensor B-28
1C	950 (BL)	To A/C low pressure S-77
1D	910 (BL)	To HVAC control panel A-20 X128 pin C-12
1E	912 (YE)	To HVAC control panel A-20 X128 pin C-15
1F	953 (YE)	To blower speed control A-14 X396 pin D
2A	920 (YE)	To HVAC control panel A-20 X128 pin D-7
2B	918 (YE)	To HVAC control panel A-20 X128 pin D-5
2C	952 (BL)	To cab temp sensor B-26
2D	914 (YE)	To HVAC control panel A-20 X128 pin D-1
2E	955 (YE)	To water valve M-33
2F	954 (BK)	To cab ground 3
3A	954 (BK)	To cab ground 3
3B	954 (BK)	To cab ground 3
3C	954 (BK)	To cab ground 3
3D	924 (OR)	To HVAC control panel A-20 X128 pin D-11
3E	922 (BK)	To cab ground 3
3F	913 (YE)	HVAC control panel A-20, cab temp sensor B-26, evaporator temp sensor B-28 and A/C low pressure S-77

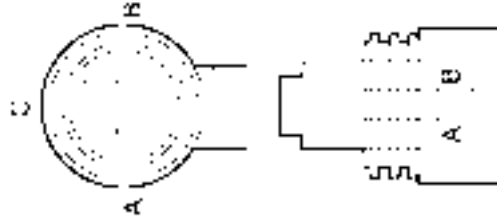
**Connector X398 - Air Conditioning Harness to ATC Control Module A-15**



ATC\_X398 390

Cavity	Circuit ID	Description
G	923 (YE)	To HVAC control panel A-20 X128 pin D-10
H	907 (RD)	To HVAC control panel A-20 X128 pin C-10
J	908 (BK)	To HVAC control panel A-20 X128 pin C-11
K	919 (YE)	To HVAC control panel A-20 X128 pin D-6 (splice to cab ground 3 for display temp in degrees C)
L	956 (OR)	To water valve M-33

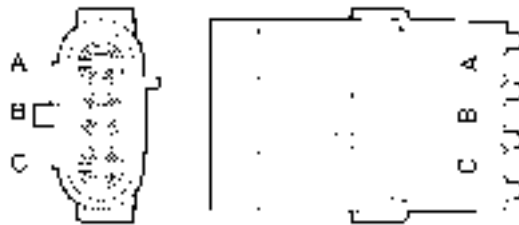
**Connector X399 - Main Frame Harness to PTO Box Lube Pressure B-60**



PAC\_12065287 391

Cavity	Circuit ID	Description
A	1285 (BL)	Reference ground to CCM1 J2-14
B	1286 (PK)	5 volts from CCM1 J2-31
C	1284 (YE)	Signal to CCM1 J2-29

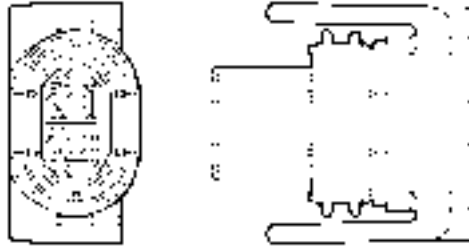
**Connector X400 - Right Console Harness to Feeder Engage Diodes D-01**



PAC\_12010717 392

Cavity	Circuit ID	Description
A	1243 (YE)	Signal from feeder engage S-31 (pin 6)
B	225 (YE)	Signal to CCM1 J1-17
C	1244 (YE)	Signal from feeder engage S-31 (pin 1)

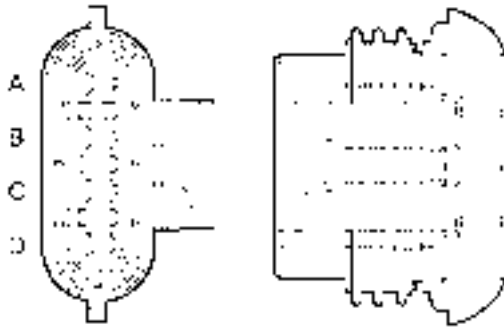
**Connector X401 - Gearbox Harness to Feeder Engine to Ring Clutch L-47**



PAC\_12162215 393

Cavity	Circuit ID	Description
A	876 (WH)	Power from CCM1 J2-30
B	1210 (BL)	Power from CCM1 J2-40 through feeder disengage relay K-19

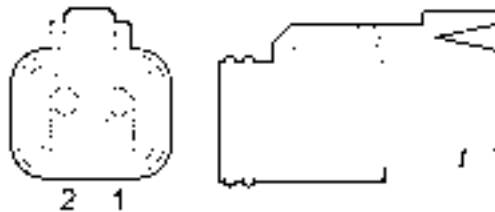
**Connector X402 - Gearbox Harness to Feeder Pump Swash Solenoids L-48/L-49**



PAC\_12186568 394

Cavity	Circuit ID	Description
A	1050 (WH)	CCM1 J3-31 output to feeder pump swash plus L-49
B	1057 (BL)	Feeder pump swash plus L-49 to rear frame ground 1
C	1051 (WH)	CCM1 J3-21 output to feeder pump swash minus L-48
D	1058 (BL)	Feeder pump swash minus L-48 to rear frame ground 1

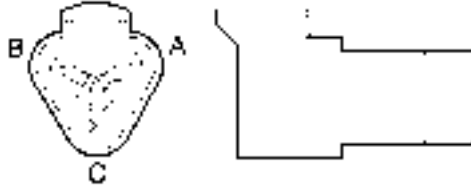
**Connector X403 - Gearbox Harness to Feeder Ring to Frame Brake L-50**



DEUTSCH\_DT06-2S 395

Cavity	Circuit ID	Description
1	1053 (WH)	Power from CCM1 J3-15
2	1056 (BK)	To rear frame ground 1

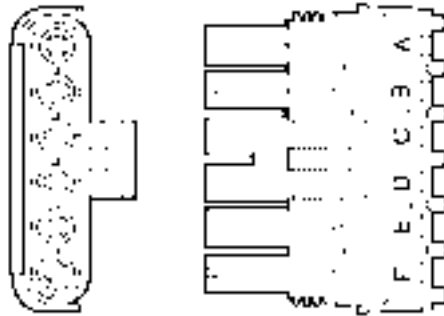
**Connector X404 - Right Console Harness to Header Speed Pot R-18**



DEUTSCH\_DT04-3P 396

Cavity	Circuit ID	Description
A	1023 (PK)	Power from RHM X026 pin 16 through resistor module R-23
B	1093 (WH)	Signal to RHM X027 pin 3
C	1024 (BL)	Reference ground to RHM X026 pin 6 through resistor module R-23

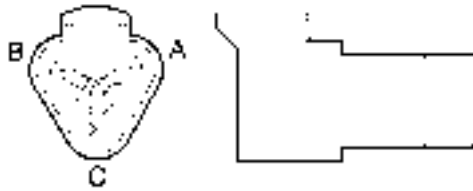
**Connector X405 - Right Console Harness to Resistor Module R-23**



PAC\_12015799 397

Cavity	Circuit ID	Description
A	1024 (BL)	Reference ground from header speed pot R-18 to RHM X026 pin 6
B	1020 (BL)	Reference ground from reel speed pot R-22 to RHM X026 pin 6
C	1044 (BL)	Reference ground to RHM X026 pin 6
D	1023 (PK)	Reference power from RHM X026 pin 16 to header speed pot R-18
E	1019 (PK)	Reference power from RHM X026 pin 16 to reel speed pot R-22
F	1045 (PK)	Reference power from RHM X026 pin 16

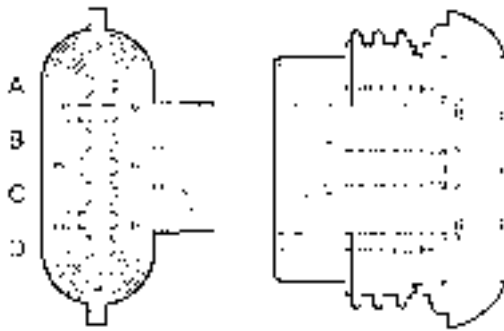
**Connector X406 - Right Console Harness to Reel Speed Pot R-22**



DEUTSCH\_DT04-3P 398

Cavity	Circuit ID	Description
A	1019 (PK)	Power from RHM X026 pin 16 through resistor module R-23
B	1013 (WH)	Signal to RHM X027 pin 9
C	1020 (BL)	Reference ground to RHM X026 pin 6 through resistor module R-23

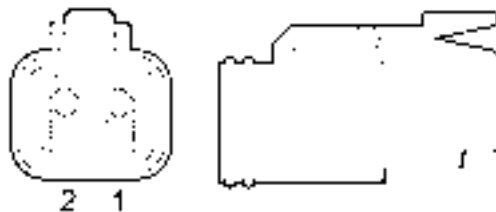
**Connector X408 - Gearbox Harness to Rotor Pump Swash Solenoids L-40/L-41**



PAC\_12186568 399

Cavity	Circuit ID	Description
A	1046 (WH)	CCM3 J3-31 output to rotor pump swash plus L-40
B	1067 (BL)	Rotor pump swash plus L-40 reference ground to CCM3 J2-10
C	1047 (WH)	CCM3 J3-21 output to rotor pump swash minus L-41
D	1066 (BL)	Rotor pump swash minus L-41 reference ground to CCM3 J2-10

**Connector X409 - Gearbox Harness to Rotor Ring to Frame Brake L-46**

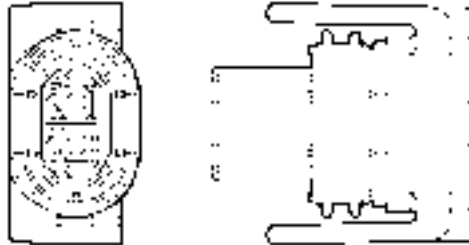


DEUTSCH\_DT06-2S 400



Cavity	Circuit ID	Description
1	1049 (WH)	Power from CCM3 J3-3
2	1063 (BK)	To rear frame ground 1

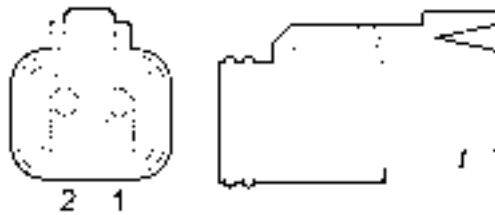
**Connector X410 - Gearbox Harness to Rotor Engine to Ring Clutch L-45**



PAC\_12162215 401

Cavity	Circuit ID	Description
A	1048 (WH)	Power from CCM3 J2-30
B	1062 (BL)	Reference ground to CCM3 J2-40

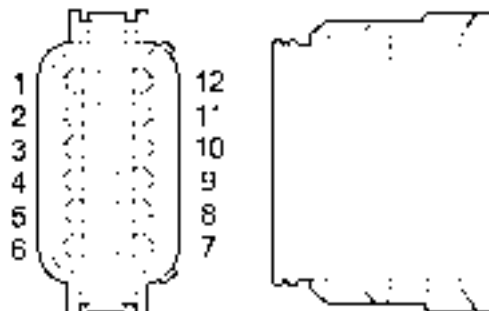
**Connector X411 - Main Frame Harness to Chopper RPM B-10**



DEUTSCH\_DT06-2S 402

Cavity	Circuit ID	Description
1	632 (BL)	Reference ground to CCM2 J2-14
2	413 (YE)	Signal to CCM2 J2-38

**Connector X412 - Expansion Harness to YMIU Module A-12**



DEU\_DT06-12S 403

Cavity	Circuit ID	Description
1	699 (OR)	Output to moisture sensor B-12
2	593 (YE)	Signal from moisture sensor B-12
3	594 (YE)	Signal from moisture sensor B-12
4	595 (YE)	Signal from moisture sensor B-12
5	open	
6	552 (WH/RD)	Output to yield sensor B-57
7	563 (WH)	Signal from yield sensor B-57
8	698 (WH/YE)	Signal from yield sensor B-57
9	1235 (WH/BK)	Ground for yield sensor B-57
10	open	
11	open	
12	565 (BK)	Ground for moisture sensor B-12

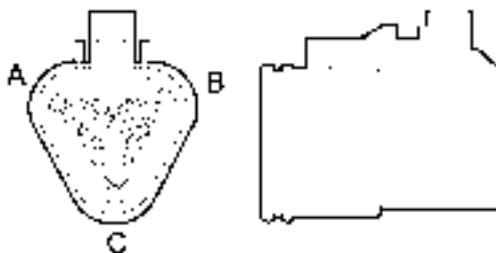
**Connector X417 - Outer Roof Harness to LH HID Field Light E-60**

Cavity	Circuit ID	Description
A	1280 (BK)	To cab roof ground through work light switch S-43
B	1278 (PU)	Power from header work lights relay K-22

**Connector X418 - Outer Roof Harness to RH HID Field Light E-61**

Cavity	Circuit ID	Description
A	1279 (BK)	To cab roof ground through work light switch S-43
B	1277 (PU)	Power from header work lights relay K-22

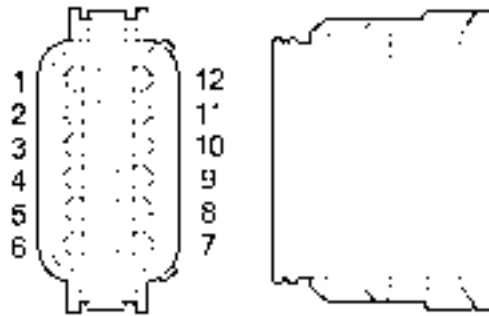
**Connector X428 - Gearbox Harness to Rotor Hydrostat RPM B-58**



DEUTSCH\_DT06-3S 404

Cavity	Circuit ID	Description
A	1263 (OR)	Power from fuse F-45
B	1069 (YE)	Signal to CCM3 J3-14
C	1265 (BK/WH)	To battery clean ground 6

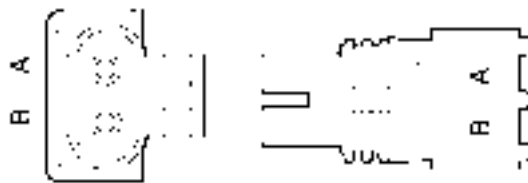
**Connector X438 - Expansion Harness to YMIU Module A-12**



DEU\_DT06-12S 405

Cavity	Circuit ID	Description
1	1251 (YE)	CAN High
2	1252 (GN)	CAN Low
3	open	
4	open	
5	open	
6	open	
7	open	
8	open	
9	open	
10	1232 (OR)	Power from fuse F-47
11	open	
12	1287 (BK/WH)	To battery clean ground 6

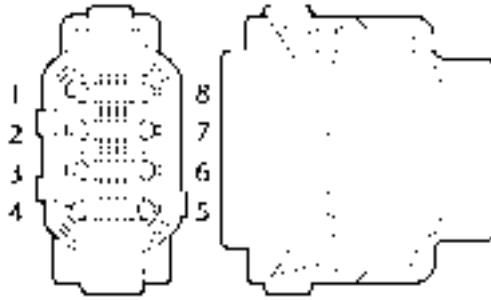
**Connector X439 - Engine Harness to Coolant Level Switch S-67**



PAC\_12015792 406

Cavity	Circuit ID	Description
A	1216 (YE)	Signal to CCM1 J2-39
B	1217 (BK)	To engine ground 5

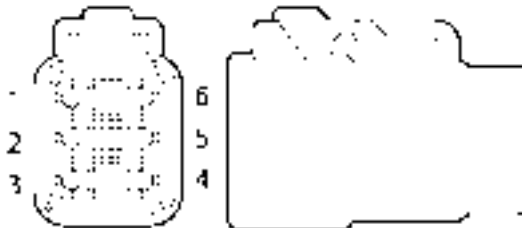
**Connector X442 - Expansion Harness to Precision Farming Harness**



DEU\_DTM06-8S 407

Cavity	Circuit ID	Description
1	682 (OR)	Power from fuse F-47 to sample motor M-28
2	564 (BK)	Sample motor M-28 to front frame ground 2
3	838 (YE)	Sample motor M-28 signal to CCM3 J2-25
4	837 (WH)	CCM3 J2-13 output to sample motor M-28
5	552 (WH/RD)	YMIU module A-12 power to yield sensor B-57
6	698 (WH/YE)	Yield sensor B-57 X223 pin 2 signal (+) to YMIU module A-12 X412 pin 8
7	563 (WH)	Yield sensor B-57 X223 pin 3 signal (-) to YMIU module A-12 X412 pin 7
8	1235 (WH/BK)	Yield sensor X223 pin 4 ground to YMIU module A-12 X412 pin 9

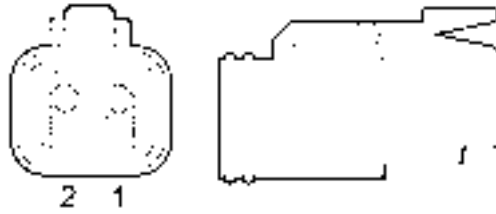
**Connector X443 - Expansion Harness to Precision Farming Harness**



DEU\_DTM06-6S 408

Cavity	Circuit ID	Description
1	699 (OR)	YMIU module A-12 X412 pin 1 power to moisture sensor B-12 X221 pin 1
2	565 (BK)	Moisture sensor B-12 X221 pin 2 ground to YMIU module A-12 X412 pin 12
3	593 (YE)	Moisture sensor B-12 (+) to YMIU module A-12 X412 pin 2
4	594 (YE)	Moisture sensor B-12 (-) to YMIU module A-12 X412 pin 3
5	595 (YE)	Moisture sensor B-12 temp to YMIU module A-12 X412 pin 4
6	Drain wire (BK)	Yield sensor B-57 harness shield wire to battery clean ground 6

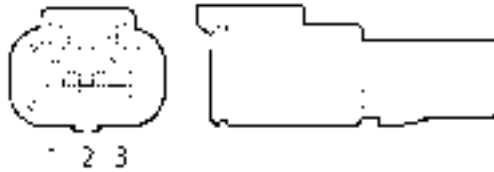
**Connector X444 - Main Frame Harness to Fan Drive Solenoid L-44**



DEUTSCH\_DT06-2S 409

Cavity	Circuit ID	Description
1	1161 (WH)	Power from CCM1 J2-13
2	1192 (BK)	To front frame ground 2

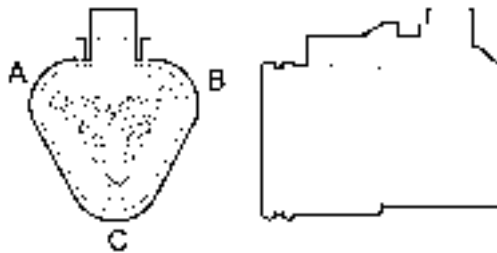
**Connector X445 - Main Frame Harness to Tailing Volume R-24**



DEU\_DTM04-3P 410

Cavity	Circuit ID	Description
1	1200 (PK)	5 volts from CCM2 J2-31
2	1164 (YE)	Signal to CCM2 J3-22
3	1190 (BL)	Reference ground to CCM2 J2-14

**Connector X446 - Adapter Display Harness to Cab CAN Termination R-17**

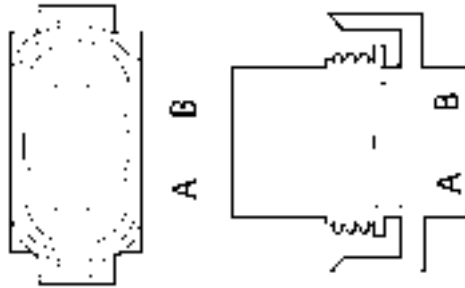


DEUTSCH\_DT06-3S 411

Cavity	Circuit ID	Description
A	1208 (GN)	CAN Low

Cavity	Circuit ID	Description
B	1207 (YE)	CAN High
C	open	

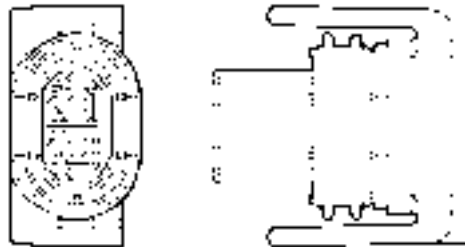
**Connector X447 - Straw Hood Front Harness to Sieve Light Rear E-59**



PAC\_12124819 412

Cavity	Circuit ID	Description
A	1193 (PU)	Power from sieve light switch S-54
B	1195 (BK)	To rear frame ground 1

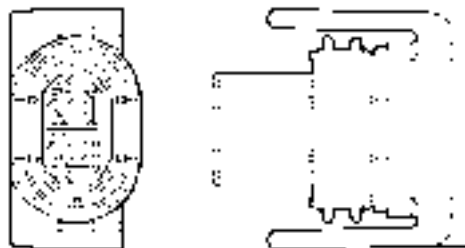
**Connector X449 - Gearbox Harness to Unload Tube Clutch L-08**



PAC\_12162215 413

Cavity	Circuit ID	Description
A	568 (WH)	Power from CCM2 J2-4
B	601 (BL)	Reference ground to CCM2 J2-20

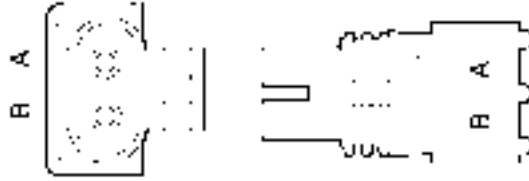
**Connector X450 - Gearbox Harness to Beater / Chopper Clutch L-22**



PAC\_12162215 414

Cavity	Circuit ID	Description
A	878 (WH)	Power from CCM2 J2-30
B	877 (BL)	Reference ground to CCM2 J2-40

**Connector X451 - Air Conditioning Harness (manual) to A/C Low Pressure S-48**



PAC\_12015792 415

Cavity	Circuit ID	Description
A	908 (BK)	To HVAC control panel A-09 X128 pin C-11
B	950 (BL)	To freeze switch S-76

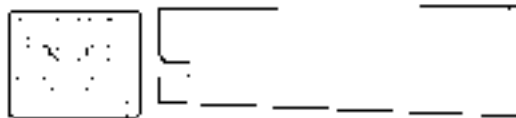
**Connector X452 - Air Conditioning Harness (manual) to Freeze Switch S-76**



AMP\_172076 416

Cavity	Circuit ID	Description
	950 (BL)	To A/C low pressure S-48

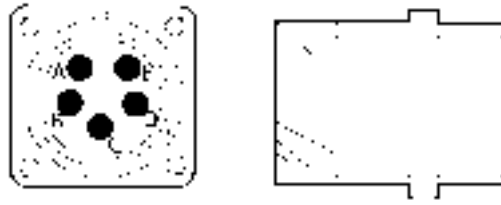
**Connector X453 - Air Conditioning Harness (manual) to Freeze Switch S-76**



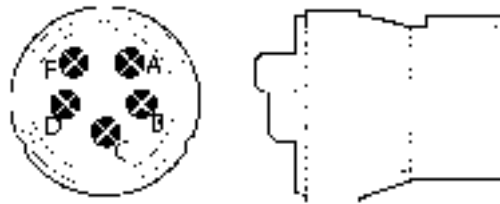
AMP\_172076 417

Cavity	Circuit ID	Description
	907 (RD)	To HVAC control panel A-09 X128 pin C-10

**Connector X456 - Main Frame Harness to Concave Extension Harness**



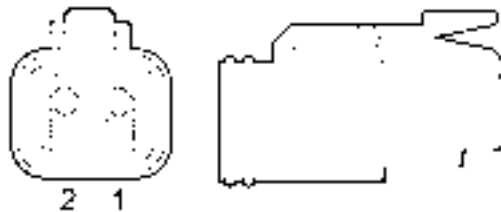
DEU\_HD10-5-16P 418



DEU\_HD16-5-16S 419

Cavity	Circuit ID	Description
1	694 (GY)	CCM1 J2-1 to concave clearance motor M-04
2	695 (WH)	CCM1 J2-21 through concave / covers relay K-16 to concave clearance motor M-04
3	498 (PK)	CCM1 J2-31 power to concave position R-06
4	456 (BL)	Concave position R-06 reference ground to CCM1 J2-14
5	411 (YE)	Concave position R-06 signal to CCM1 J2-19

**Connector X457 - Main Frame Harness to Park Brake Disengage L-10**



DEUTSCH\_DT06-2S 420



Cavity	Circuit ID	Description
1	572 (WH)	Power from CCM2 J2-15
2	605 (BK)	To front frame ground 2

**Connector X470 - Air Conditioning Harness to Separator Blower M-18**

Cavity	Circuit ID	Description
A	926 (RD)	Power from separator blower relay K-09
B	933 (BK)	To cab ground 3

**Connector X471 - Iveco Harness to Injector Harness**



VE\_VPT08-16-10S 421

Cavity	Circuit ID	Description
A	WH	ECU A-01 X192 pin 35 to fuel actuator 1 L-34
B	YE	ECU A-01 X192 pin 34 to fuel actuator 3 L-36
E	GN	ECU A-01 X192 pin 33 to fuel actuator 5 L-38
F	RD	ECU A-01 X192 pin 24 to fuel actuators 1, 3 & 5, L-34/36/38
G	BL	ECU A-01 X192 pin 26 to fuel actuator 2 L-35
H	PU	ECU A-01 X192 pin 28 to fuel actuator 6 L-39
I	BN	ECU A-01 X192 pins 3 & 18 to engine brake L-33
L	OR	ECU A-01 X192 pin 32 to engine brake L-33
M	GY	ECU A-01 X192 pin 27 to fuel actuator 4 L-37
N	BK	ECU A-01 X192 pin 25 to fuel actuators 2, 4 & 6, L-35/37/39

**WIRING HARNESS - READING ELECTRICAL SCHEMATICS**

**INTRODUCTION**

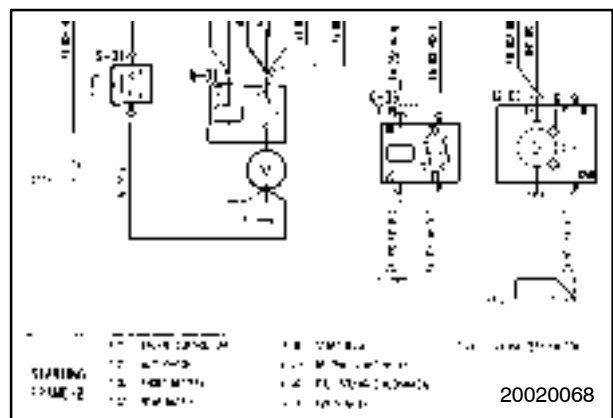
The electrical schematic index is organized into groupings of components. Each component on the combine is assigned a unique alpha-numeric code that is used in all documentation, and uniquely identifies that component. To locate a specific component in the schematic, use the chart below to determine the label prefix for that component type, and look in that component group in the index to determine which frame the component is located on.

Label Prefix	Component Type
A	Modules
B	Sensors
E	Lights, Lamps
F	Fuses
G	Alternator, batteries
H	Horns, speakers
J	Power Outlets
K	Relays
L	Solenoids
M	Motors, actuators
R	Potentiometers
S	Switches
W	Splice blocks

**Schematic Frames**

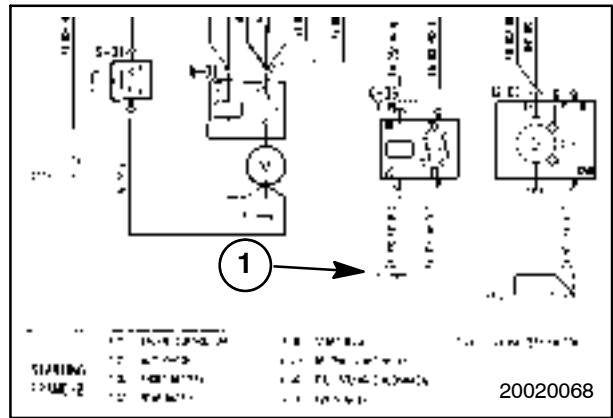
The electrical schematic is divided into page-sized frames, and are numbered sequentially. The schematic frames are ordered by system, as follows:

- Starting Fr 1
- Engine Fr 2 - 5
- Drives Fr 7 - 9
- Hydraulic Fr 10
- Header Fr 11 - 14
- Feeder Fr 15
- Thresher Fr 16, 17
- Cleaning Fr 19 - 21
- Unload Fr 22
- Trash Fr 23
- Precision Fr 24
- Distribution Fr 25 - 31
- Lighting Fr 33 - 43
- Accessory Fr 44 - 45
- HVAC Fr 46 - 48



To accurately determine the location of a particular circuit, use the index to locate circuits by component label.

A table following each frame lists all devices shown on that frame, with their label. In most cases, circuits are contained completely within the frame. However, in some cases, wires can cross frame borders to the previous or next frame.



2

Power runs across the top of each frame, while grounds generally occur at the bottom. Labels are used to identify the power supply on the power wires at the top of the frame. The top wire label "B +12V" indicates this wire is directly supplied by the batteries, while the wires below are supplied by the K26 and K24 relays respectively.

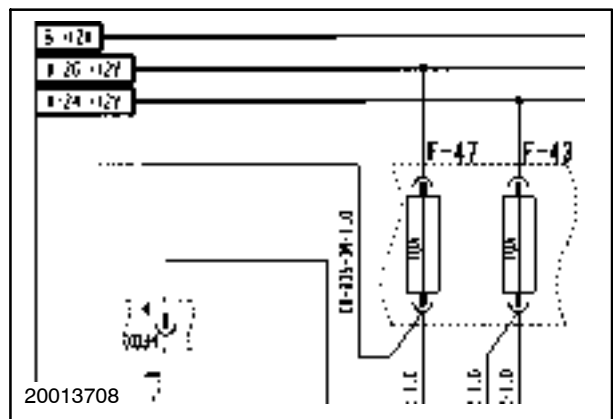
Grounds are identified with a circled number, 1, Figure 2, which indicates a specific ground location on the combine. An absence of this circled number indicates that the device is grounded locally.

There are five grounding locations on the combine, as listed.

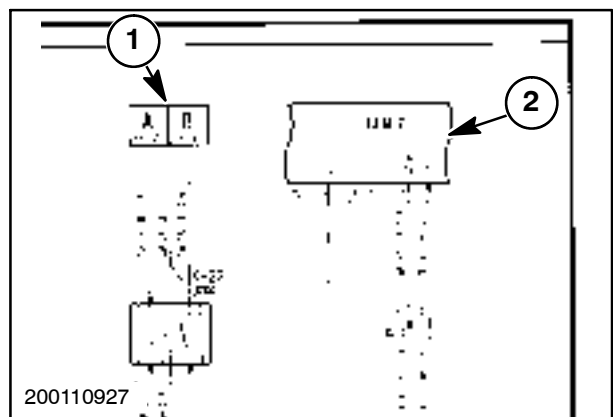


A minimal number of jumpers, 1, are used to extend circuits to other frames in the schematic. These jumpers are shown as a wire terminating in a square box, with a letter-identifier and a frame number that the wire is jumping to. To continue following the circuit, flip to the identified frame number, and look for a jumper box with the same letter-identifier.

Connectors in the schematic are shown as a dotted box around a component, or around connections in a wire, in the case of an inline connector between harnesses. The connector number will be identified in one corner of the box.



3

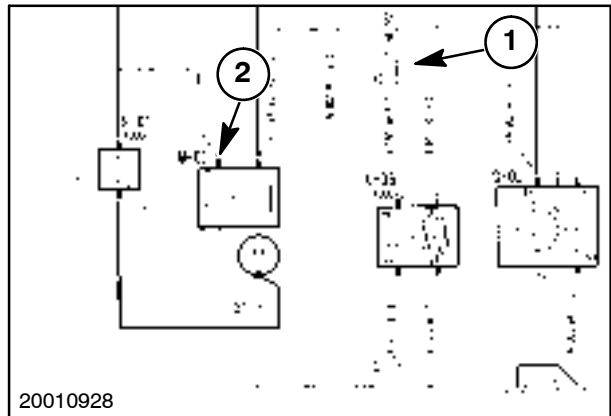


4

If only part of the connector is shown, a wavy dotted line, 1, will be shown at one or both ends of the box to indicate that part of the connector is missing, and located in another frame of the schematic. The connectors will identify pins or sockets in each connector.

Bolted connections, 2, such as to batteries or alternators, will not have a dotted box surrounding the connection.

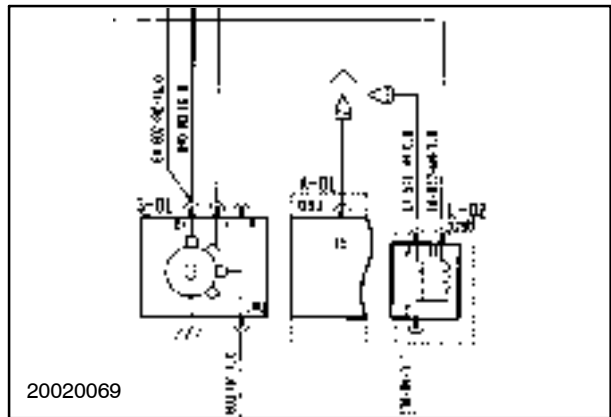
In most cases, an entire component is shown on a single frame of the schematic. In some cases, however, the component (typically a computer module), 2, Figure 4, may be shown on several frames of the schematic. If only part of the component is shown, a solid wavy line will be shown at one, or both ends of the component to indicate part of the component is missing, and is located in another frame of the schematic.



5

### Machine Options

In some cases, the wiring may have slight differences from one machine to another, depending on the specific options that are installed. In these cases, the schematic will show a reverse arrow head on one wire, with two or more arrow heads available to “plug in”. These arrow heads have a number in them to identify the specific option or configuration they represent. The arrow head options are listed at the bottom of the Index frame for reference.



6

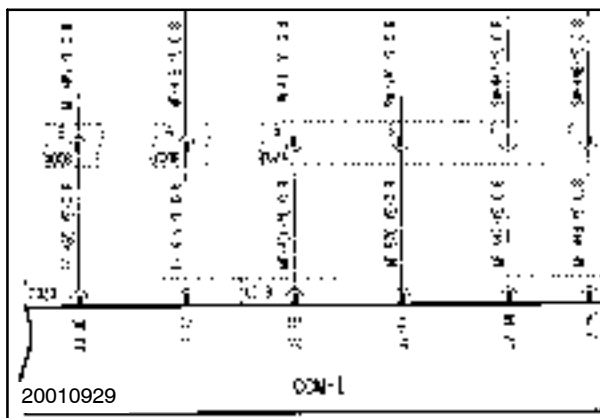
The options used in the schematic are:

- |   |                           |   |                          |
|---|---------------------------|---|--------------------------|
|  | BASE UNIT WITH MANUAL A/C |  | EUROPEAN BASE UNIT       |
|  | BASE UNIT WITH MANUAL ATC |  | NORTH AMERICAN BASE UNIT |

**Harnesses**

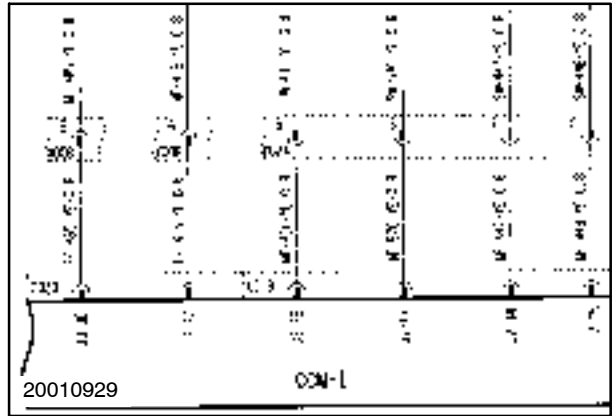
A two digit alpha code is assigned to each harness used on the combine (with the exception of two or three wire jumper harnesses). This label is used on each wire on the schematic to identify which harness any given wire is located in. The harness codes are:

Code	Harness
MF	Main Frame
FF	Front Frame
LF	Lower Frame
CM	Cab Main
RC	Right Hand Console
SC	Steering Column
CR	Cab Roof
OR	Outer Roof
AC	HVAC
FE	Feeder
GT	Grain Tank
GB	Gearbox
EN	Engine
EX	Expansion
SW	Straw Hood, Front
SH	Straw Hood, Rear
LR	Lower Frame Rear
PF	Precision Farming
AD	Adapter, Display
JP	Jumper
FC	Flip-Up Lighting
UL	Undershield Lighting
UE	Undershield Lighting, Engine
CC	Concave Clearance
TL	Unload Tube Light
HH	Header



All wires in the schematic are labeled to indicate the specific harness they are in, the circuit number, the wire color (see chart below), and the wire size, indicated in square mm cross-section. On the combine, the appropriate circuit number is printed on each wire approximately every 50 mm (2") to identify it.

Wire Size Chart	
Square mm	AWG
0.5	20
0.8	18
1.0	16
2.0	14
3.0	12
5.0	10
8.0	8



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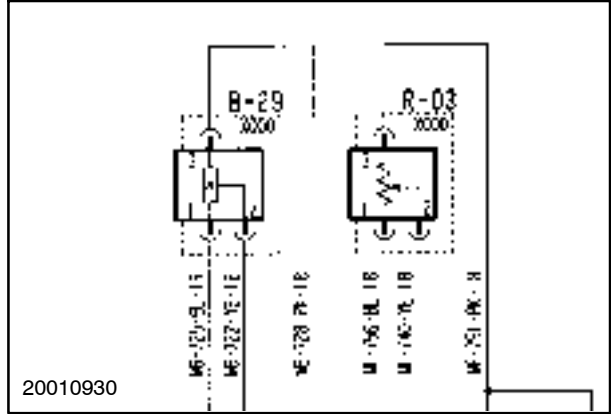
In addition, the wire colors used identify the function of the wire, depending on the type of component that the wire is connected to. The following wire colors are used for the CR combine wiring harnesses:

Color	Color Code	Function
Black	BK	Ground, Chassis
Blue	BL	Printed Circuit Ground
White	WH	Increasing Actuation
Gray	GY	Decreasing Actuation
Orange	OR	Power After Ignition
Yellow	Y	Signal Wires
Red	RD	Battery Voltage
Purple	P	Lighting
Pink	K	Reference Voltage
Black w/ White tracer	BK/WH	Clean Ground

The following tables identify the specific wiring colors and functions, as well as the standard connector location for each wire type for each component group.

**Sensors**

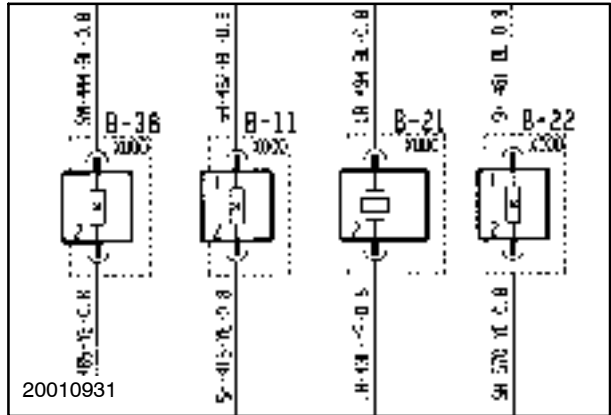
3 Wire Sensors (eg. Potentiometers)		
Signal	Pin	Harness Wire Color
Power	1 or A	Pink
Ground	2 or B	Blue
Signal	3 or C	Yellow



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2 Wire Sensors (eg. Speed Sensors)		
Signal	Pin	Harness Wire Color
Ground	1 or A	Blue
Power	2 or B	Yellow

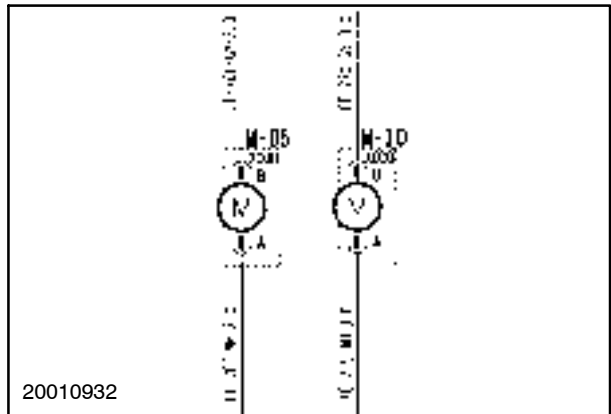


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**Actuators**

Linear Actuators (eg. Shoe)		
Signal	Pin	Harness Wire Color
Increase	1 or A	White
Decrease	2 or B	Gray

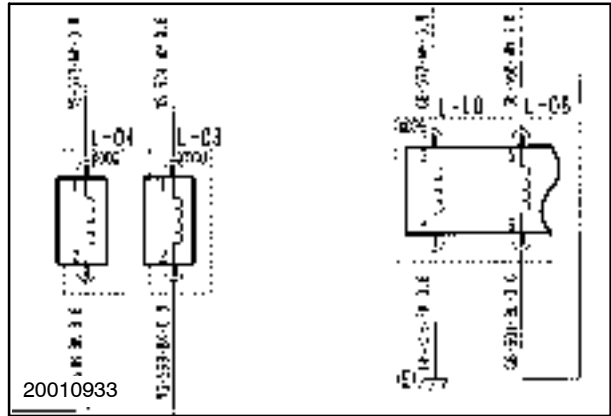


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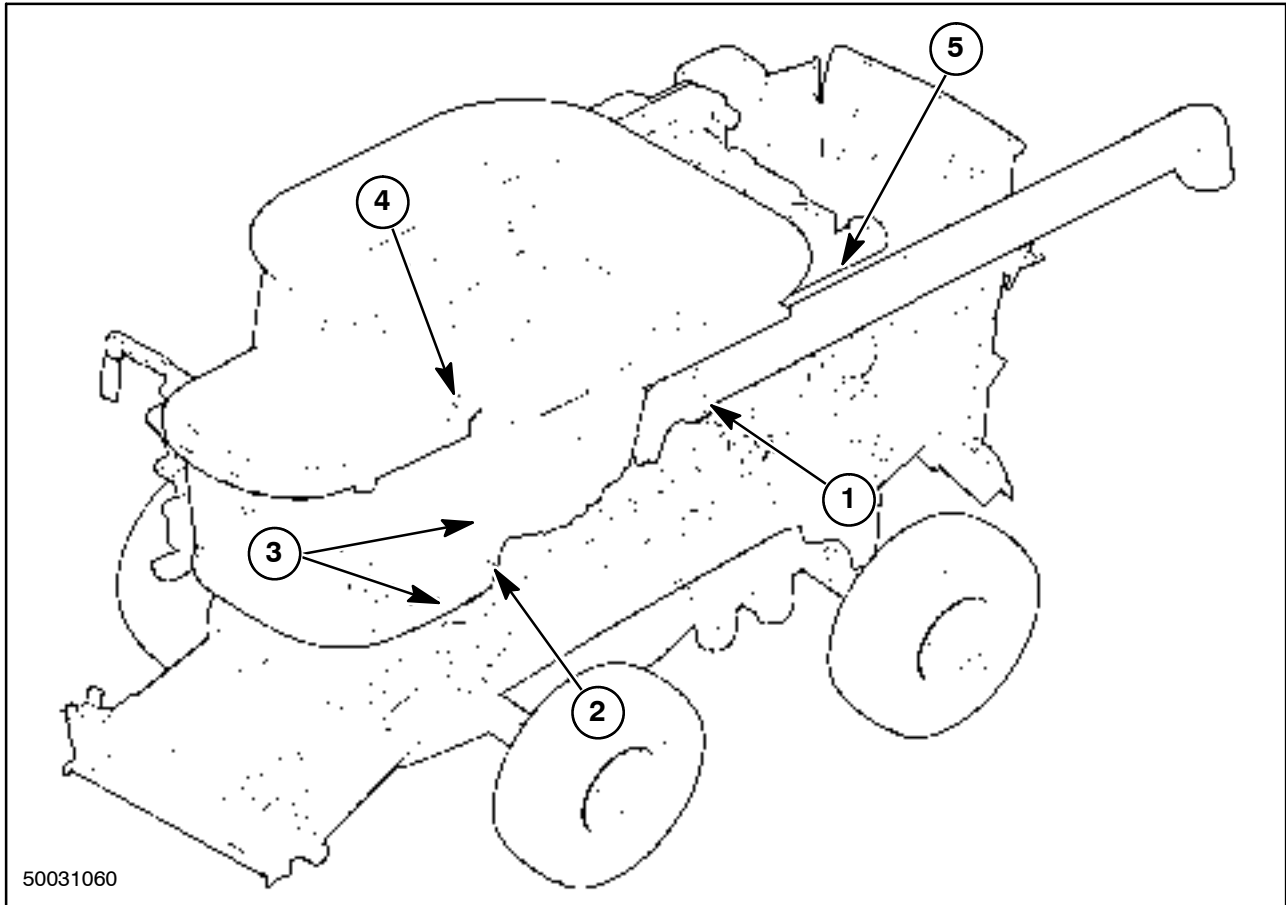
<b>Solenoids w/Current Sensing (eg. Header Raise/Lower)</b>		
<b>Signal</b>	<b>Pin</b>	<b>Harness Wire Color</b>
High Side	1 or A	White
Current Sense	2 or B	Blue

<b>Solenoids w/o Current Sensing (eg. Reel Fore)</b>		
<b>Signal</b>	<b>Pin</b>	<b>Harness Wire Color</b>
High Side	1 or A	White
Low Side	2 or B	Black





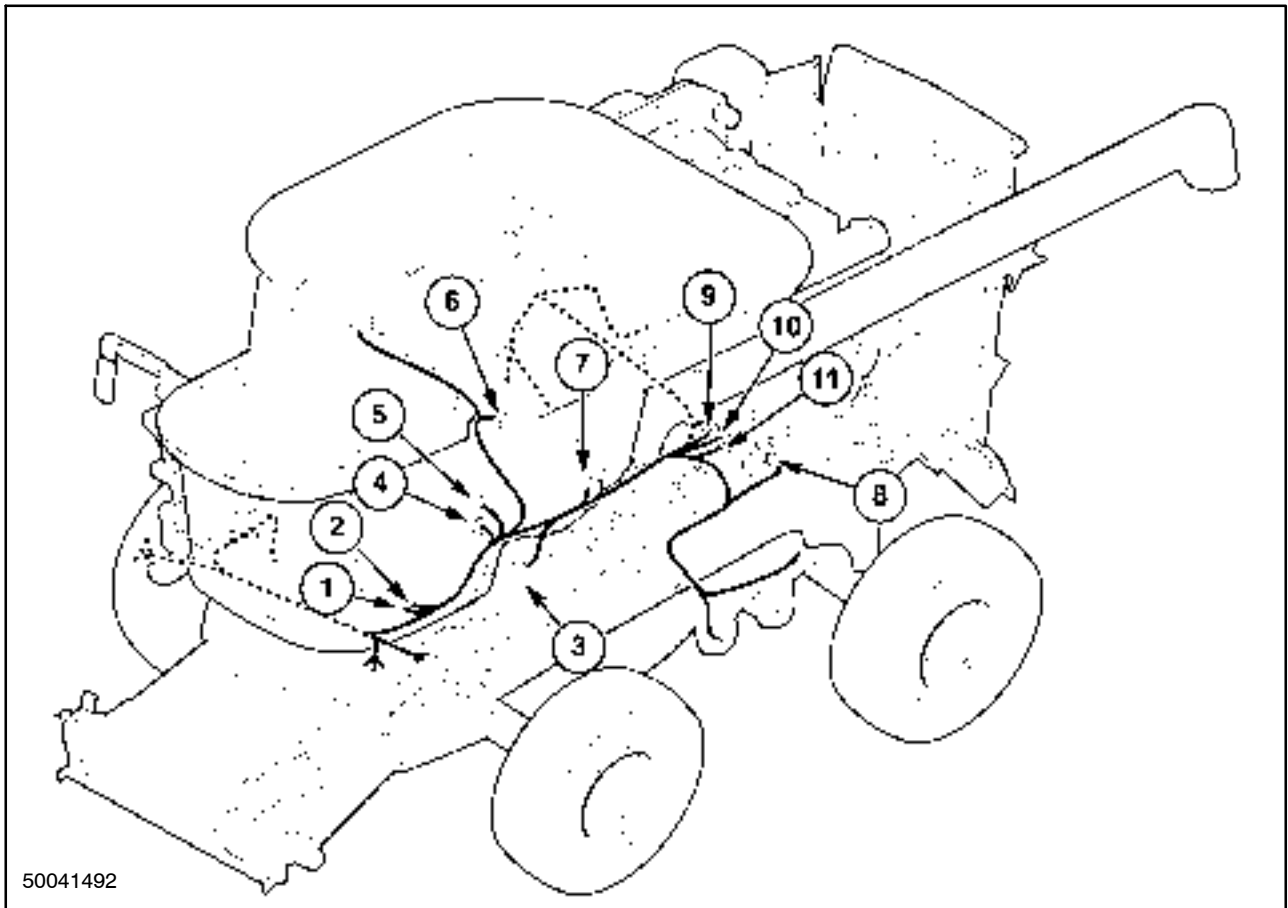
**HARNES ROUTING**



**Ground Locations**

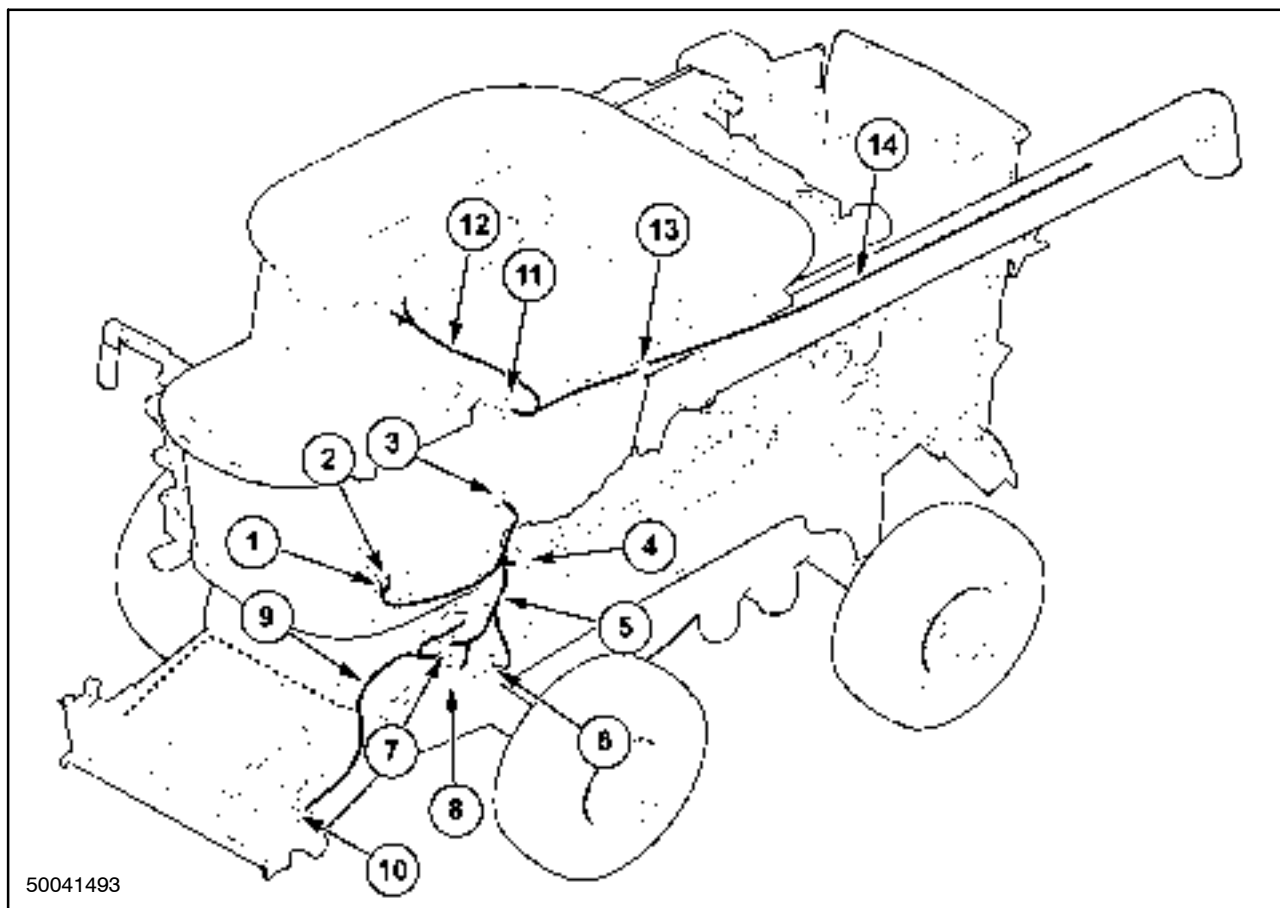
1. Rear Frame Ground
2. Front Frame Ground
3. Cab Floor Ground
4. Cab Roof Ground
5. Engine Frame Ground (left rear mount)

**NOTE:** Cab Floor Ground is shown as two locations. Upper location on rear deck is main ground point. Location at bottom attaches ground strap from cab to front frame ground, 2.



**Main Frame (MF) Wire Harness**

1. Connector X016, CCM2 - J2
2. Connector X019, CCM1 - J2
3. Connector X008 to Front Frame harness
4. Connector X004 to Cab Main harness
5. Connector X005 to Cab Main harness
6. Connector X009 to Grain Tank harness
7. Connector X034, X034A to Expansion harness
8. Connector X022 to Main Stack Valves
9. Connector X010 to Engine harness
10. Connector X011 to Gearbox harness
11. Connector X024 to Straw Hood

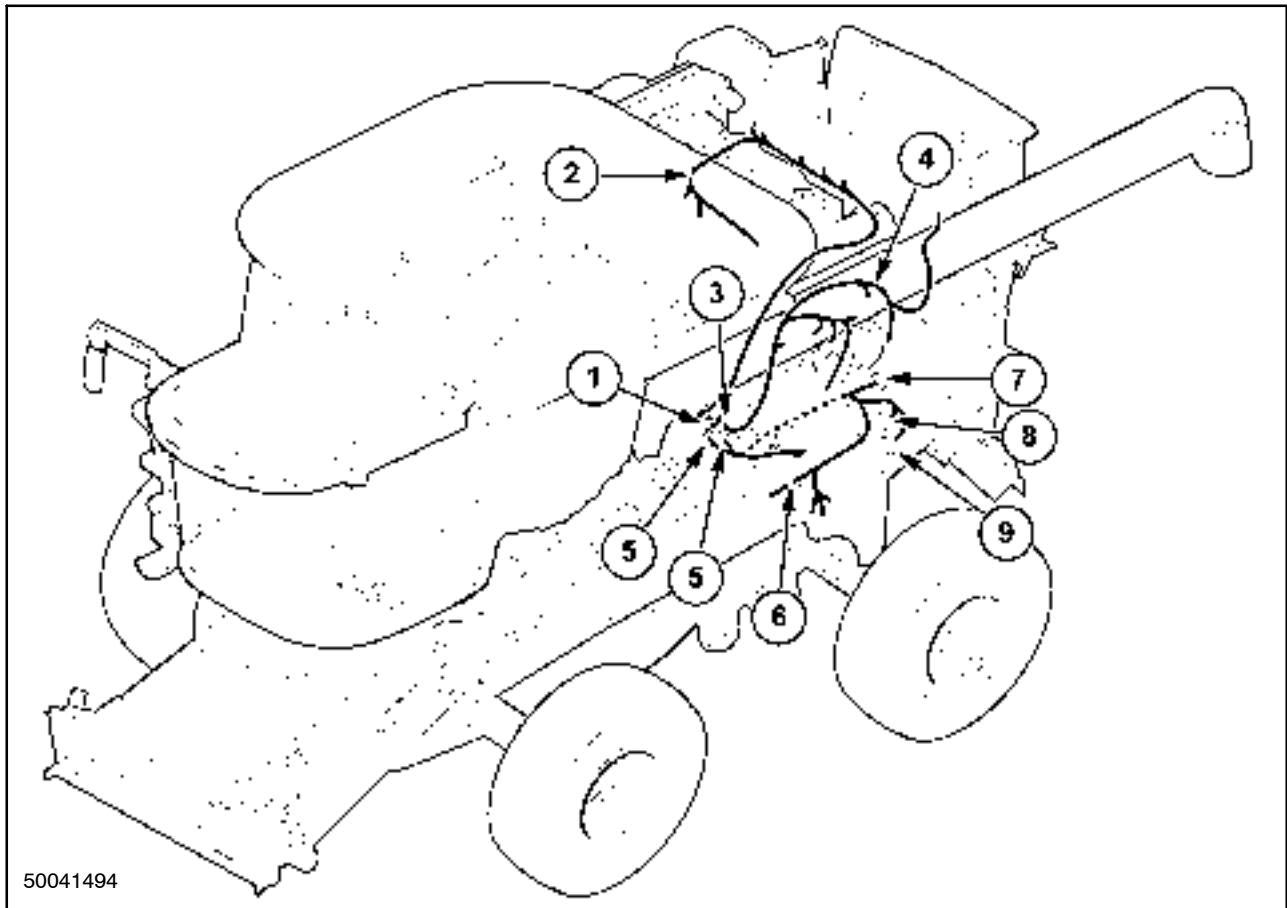


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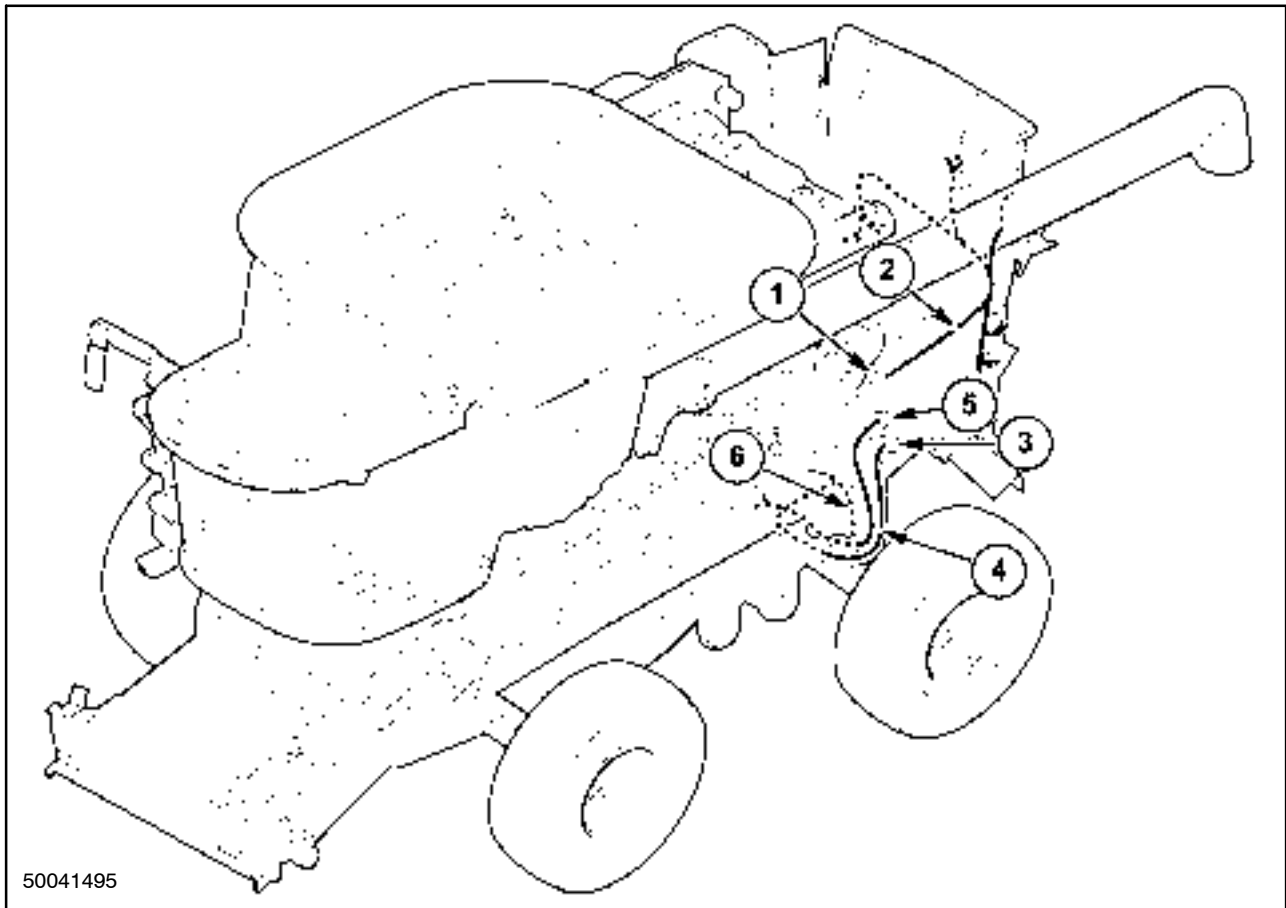
**Front Frame (FF), Feeder (FE) Grain Tank (GT) and Tube Light (TL) Wire Harnesses**

1. Connector X017, CCM2 - J3
2. Connector X020, CCM1 - J3
3. Connector X031 to Cab Main harness
4. Connector X008 to Main Frame harness
5. Front Frame (FF) wire harness
6. Connector X023 to Lower Frame harness
7. Connector X007 to Feeder harness
8. Connector X021 to Feeder Valves harness
9. Feeder (FE) wire harness
10. Connector X032 to Header harness
11. Connector X009 to Main Frame harness
12. Grain Tank (GT) harness
13. Connector X105 to Tube Light harness
14. Tube Light (TL) harness



**Engine (EN), Gearbox (GB) and Straw Hood Front (SW) Wire Harnesses**

1. Connector X010 to Engine harness
2. Engine (EN) wire harness
3. Connector X011 to Gearbox harness
4. Gearbox (GB) wire harness
5. Connectors X024 and X025 to Straw Hood Front harness
6. Straw Hood Front (SW) harness
7. Connector X071 to Straw Hood Rear harness
8. Connector X072 to Lower Frame Rear harness
9. Connector X285 to Trailer harness

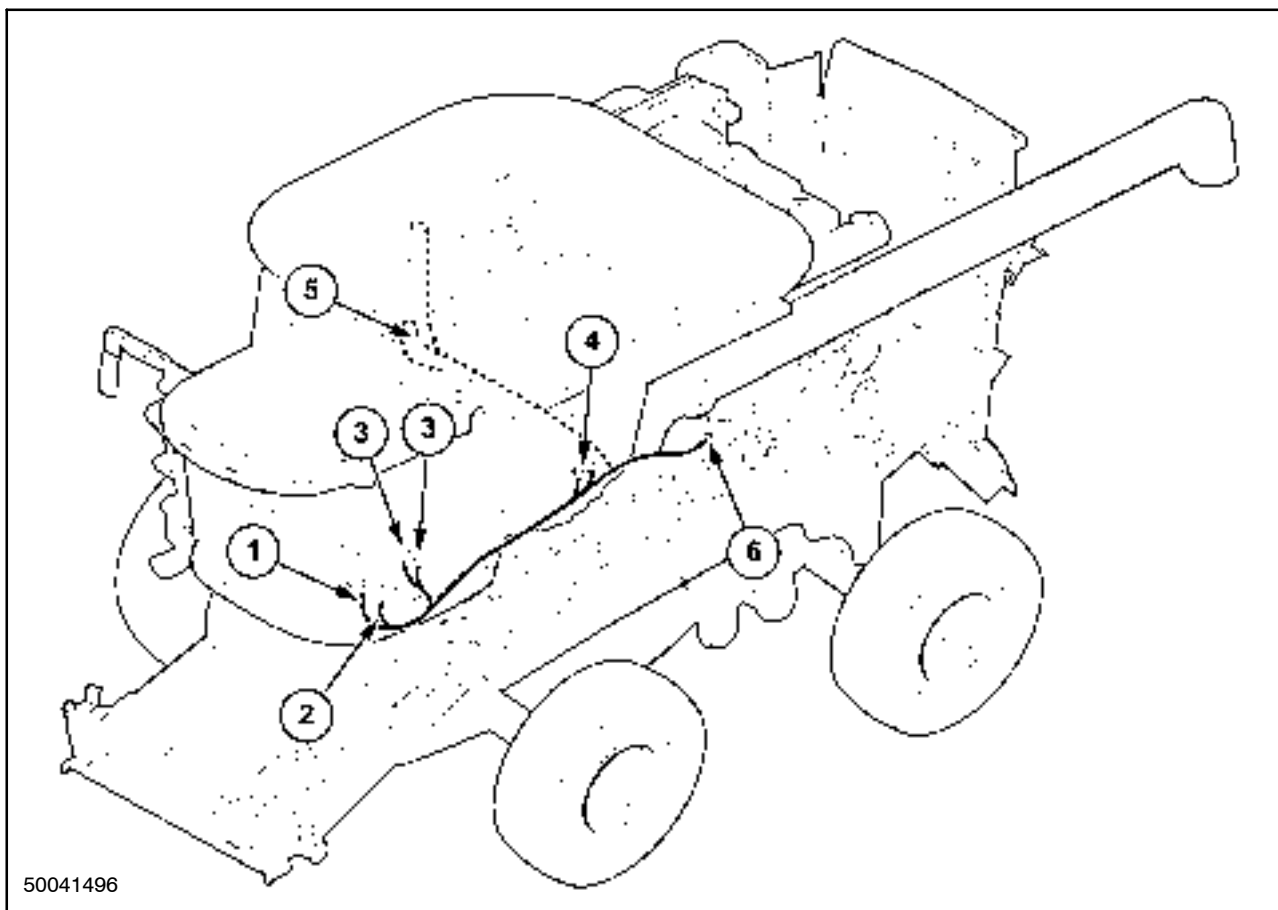


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**Straw Hood Front (SW) and Straw Hood Rear (SH) Wire Harnesses**

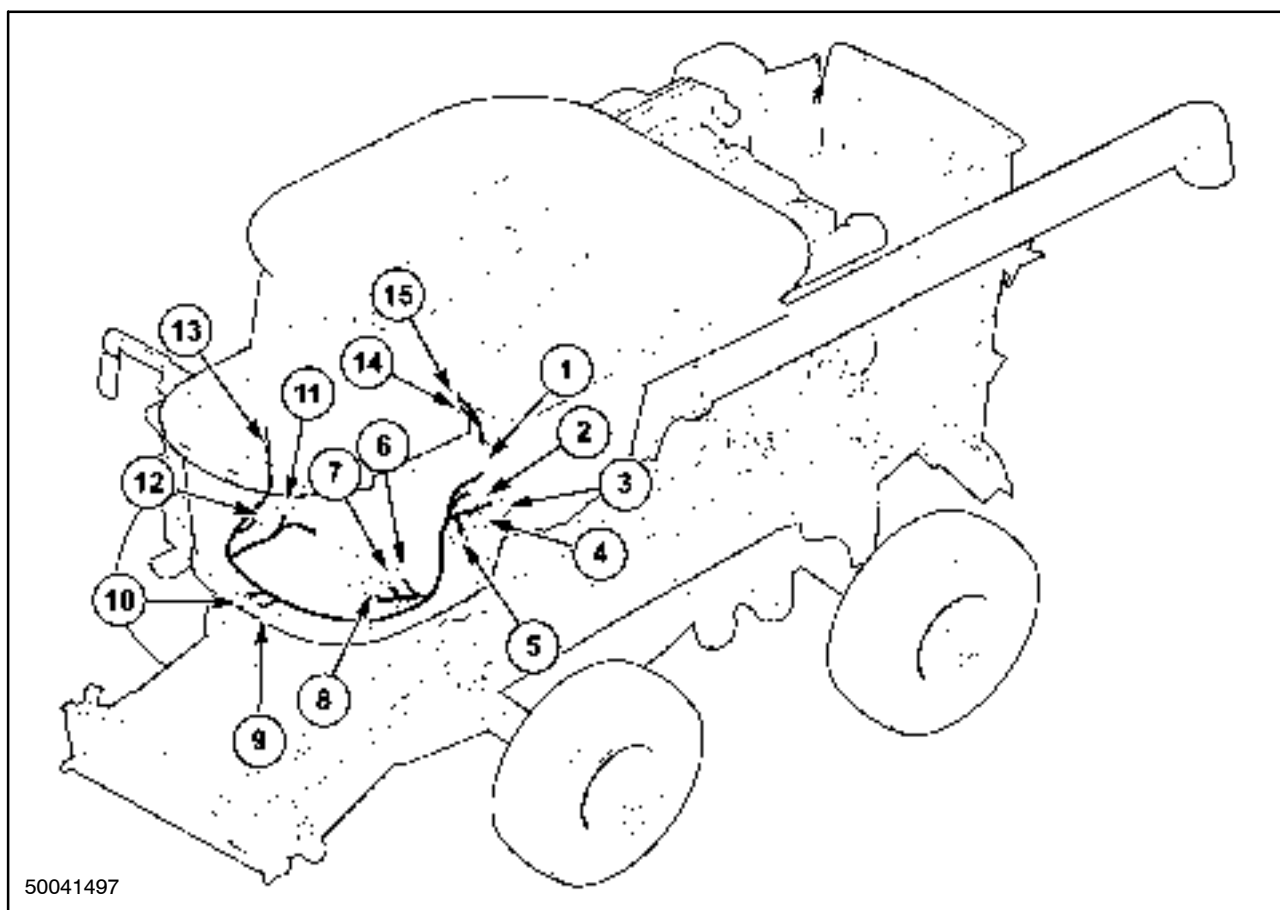
1. Connector X071 to Straw Hood Front harness
2. Straw Hood Rear (SH) wire harness
3. Connector X285 to Straw Hood Front harness
4. Trailer (JP) harness
5. Connector X072 to Lower Frame Rear harness
6. Lower Frame Rear (LR) harness



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**Expansion (EX), Grain Tank (GT) and Unload Tube Light Wire Harnesses**

1. Connector X014, CCM3 - J3
2. Connector X013, CCM3 - J2
3. Connectors X412 and X438 to YMIU Module
4. Connectors X034, X034A to Main Frame harness
5. Connectors X442 and X443 to Precision Farming harness
6. Connector X025 to Straw Hood Front harness

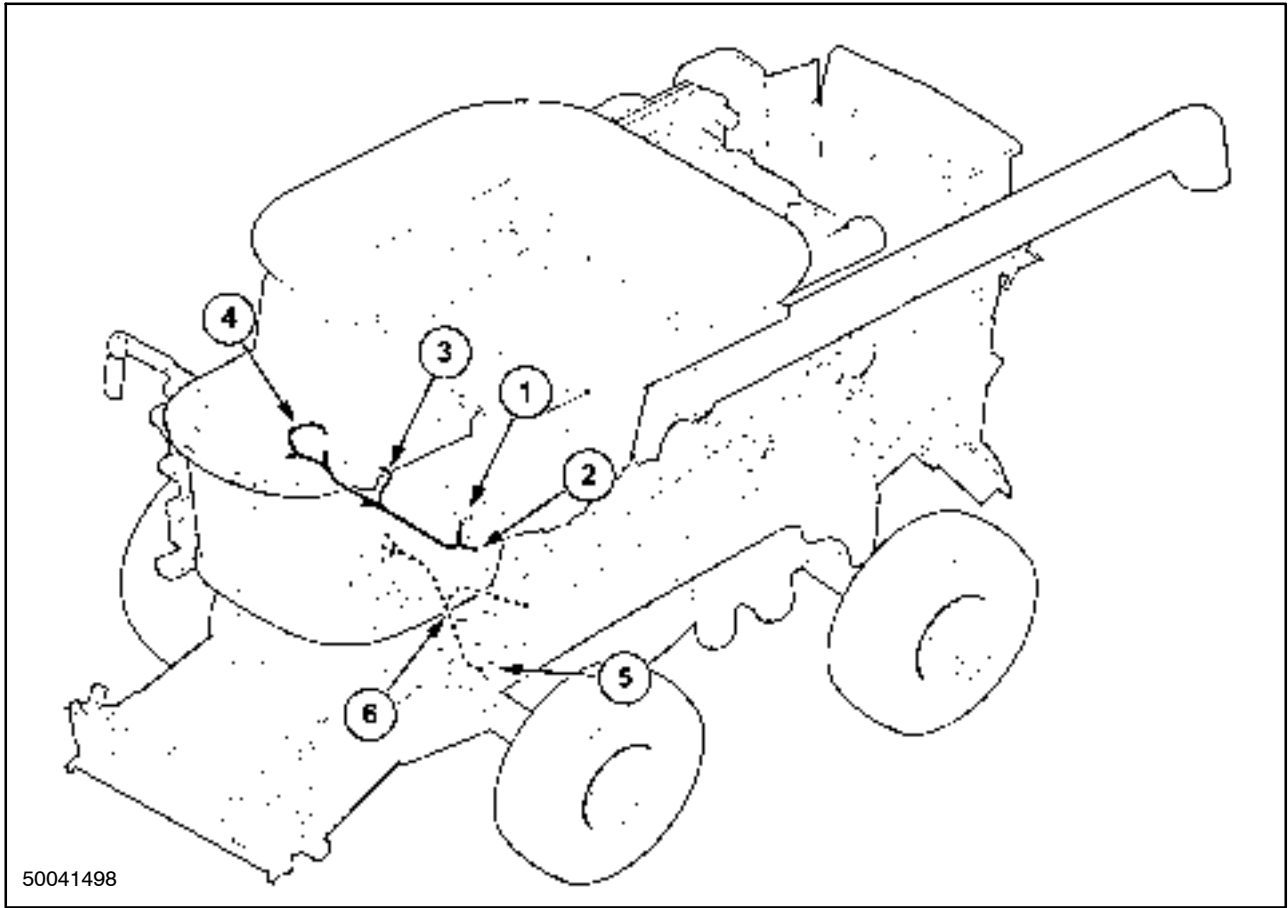


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**Cab Main (CM) Wire Harness**

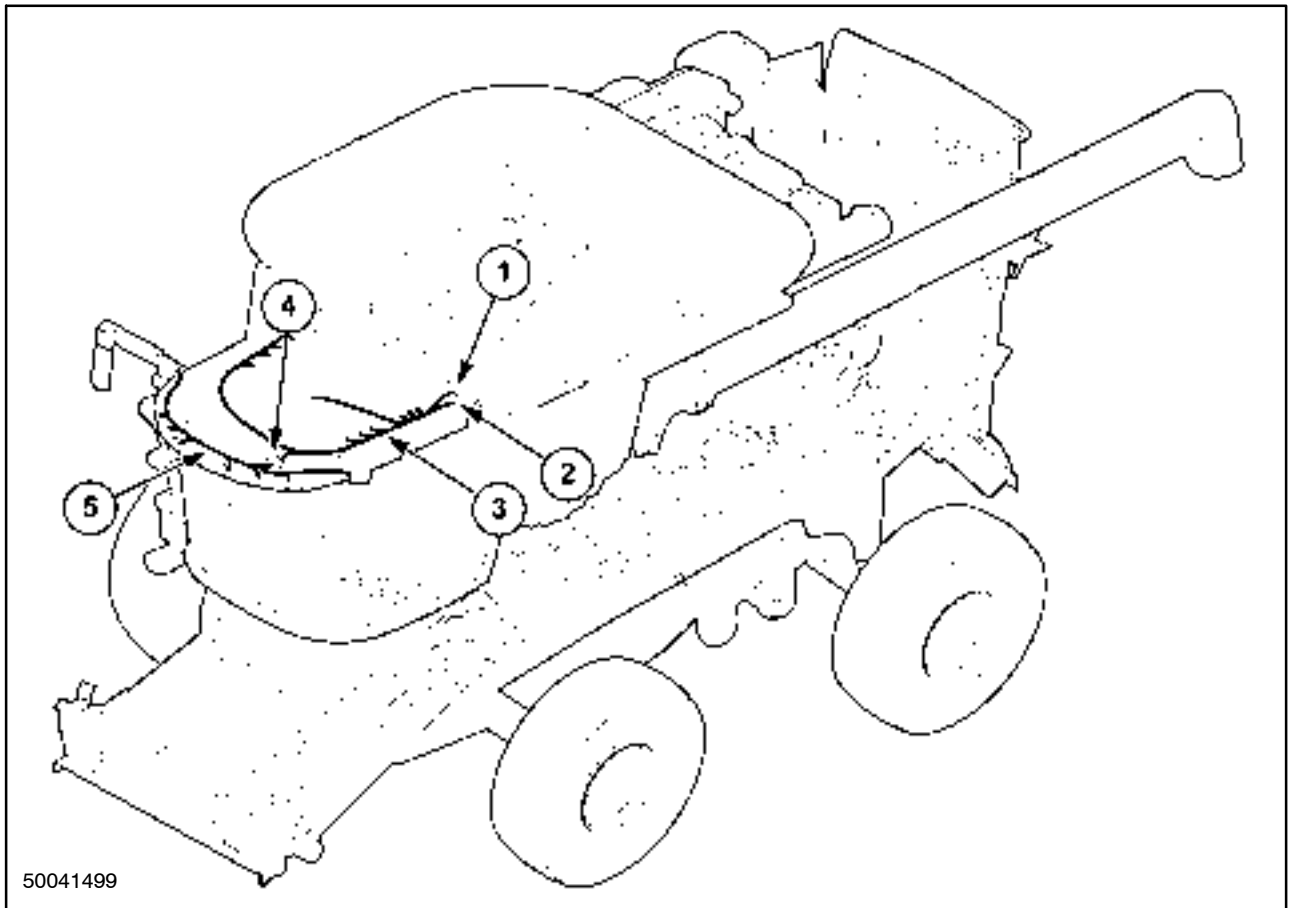
1. Fuse Panel
2. Connector X005 to Main Frame harness
3. Connector X031 to Front Frame harness
4. Connector X004 to Main Frame harness
5. Connector X006 to HVAC harness
6. Connector X018, CCM1 - J1
7. Connector X015, CCM2 - J1
8. Connector X012, CCM3 - J1
9. Connector X033 to Steering Column harness
10. Connector X256 to Road Light switch (S26)
11. Connector X001 to RH Console
12. Connector X064 to Adapter Display harness
13. To Start Panel
14. Connector X002 to Cab Roof harness
15. Connector X003 to Cab Roof harness



**Lower Frame (LF) and HVAC (AC) Wire Harnesses**

1. Connector X006 to Cab Main harness
2. To separator blower fan
3. HVAC (AC) wire harness
4. To cab blower fan
5. Connector X023 to Front Frame harness
6. Lower Frame (LF) harness





**Outer Roof (OR) and Cab Roof (CR) Wire Harnesses**

1. Connector X003 to Cab Main harness
2. Connector X002 to Cab Main harness
3. Cab Roof (CR) harness
4. Connector X036 to Outer Roof harness
5. Outer Roof (OR) harness

**Wiring harness - Electrical schema index (A.30.A.88 - C.20.G.40)**

AFX8010

Electronics				
Code	Name	Connector	Frame	System
A-01	Iveco Engine Control Unit	X192, X193	Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Engine
A-02	Universal Display Plus	X319	Wiring harness - Electrical schematic frame 30 (A.30.A.88 - C.20.E.30)	Distribution
A-03	Shaft Speed Monitor (SSM)	X320	Wiring harness - Electrical schematic frame 30 (A.30.A.88 - C.20.E.30)	Distribution
A-04	Radio	X314, X315	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
A-05	Flasher Module	X255	Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
A-09	HVAC Control Panel (Manual)	X128	Wiring harness - Electrical schematic frame 47 (A.30.A.88 - C.20.E.47)	HVAC
A-11	GPS Antenna	X321	Wiring harness - Electrical schematic frame 31 (A.30.A.88 - C.20.E.31)	Precision
A-12	YMIU Module	X412, X438	Wiring harness - Electrical schematic frame 24 (A.30.A.88 - C.20.E.24)	Precision
A-13	Front Switch Panel	X386	Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	
A-14	Blower Speed Control (ATC)	X396	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC
A-15	ATC Control Module	X397, X398	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC
A-17	Propulsion Handle	X028	Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	
A-18	Rear Switch Panel	X387	Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	
A-20	HVAC Control Panel (ATC)	X128	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC

Sensors				
Code	Name	Connector	Frame	System
B-01	Rotor RPM	X177	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
B-02	Lateral Inclination	X170	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-03	Engine Oil Temperature	X311	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
B-05	Engine Flywheel RPM	X369	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
B-07	Engine Camshaft RPM	X370	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
B-08	Clean Grain Elevator RPM	X182	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-10	Chopper RPM	X411	Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)	Trash
B-11	Spreader Position	X240	Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)	Trash

<b>Sensors</b>				
<b>Code</b>	<b>Name</b>	<b>Connector</b>	<b>Frame</b>	<b>System</b>
B-12	Moisture Sensor	X221	Wiring harness - Electrical schematic frame 24 (A.30.A.88 - C.20.E.24)	Precision
B-14	Feeder RPM	X284	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
B-16	Cleaning Fan RPM	X089	Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
B-17	Ground Speed RPM	X087	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
B-18	Hydraulic Oil Reservoir Temperature	X103	Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)	Hydraulic
B-19	Left Rotor Loss	X191	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-20	Right Rotor Loss	X188	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-21	Sieves Loss	X232	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-22	Rear Ladder	X251	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
B-23	Boost Pressure	X371	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
B-26	Cab Temperature Sensor (ATC)	X149	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC
B-28	Evaporator Temperature Sensor (ATC)	X150	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC
B-29	Header Lift Pressure	X279	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
B-32	PTO Box Temperature		Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Thresher
B-35	Low Control Pressure	X098	Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)	Hydraulic
B-36	Fuel Temperature	X372	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
B-37	Transmission Shift Position	X093	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
B-38	Unload Cradle	X244	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
B-39	Tailings RPM	X186	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-44	Coolant Temperature	X373	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
B-46	Hydrostat Motor Temperature	X091	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
B-47	Covers Closed	X288	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
B-52	Engine Oil Pressure	X337	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
B-53	Park Brake Pressure	X368	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
B-54	Air Temperature	X374	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine

Sensors				
Code	Name	Connector	Frame	System
B-55	Spreader RPM	X383	Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)	Trash
B-56	Sieve Shake RPM	X181	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning
B-57	Yield Sensor	X223	Wiring harness - Electrical schematic frame 24 (A.30.A.88 - C.20.E.24)	Precision
B-58	Rotor Hydrostat RPM	X428	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
B-59	Water in Fuel		Wiring harness - Electrical schematic frame 05 (A.30.A.88 - C.20.E.05)	Engine
B-60	PTO Box Lube Pressure	X399	Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)	Hydraulic

Diode Assembly				
Code	Name	Connector	Frame	System
D-01	Feeder Engage Diodes	X400	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder

Lights				
Code	Name	Connector	Frame	System
E-01	LH Header Flashing Lamp		Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-02	RH Header Flashing Lamp		Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-03	LH Front Hazard Lamp	X160 (NA), X357 (EU)	Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-04	RH Front Hazard Lamp	X165 (NA), X356 (EU)	Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-05	LH Rear Flashing Lamp (EU)	X301	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
E-06	RH Rear Flashing Lamp (EU)	X302	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
E-07	LH Flashing Lamp (NA)	X242	Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-08	RH Flashing Lamp (NA)	X245	Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-09	Turn Indicator	X257	Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-10	High Beam Indicator	X258	Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-11	LH Brake / Tail Lamp (NA)	X299	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
E-12	RH Brake / Tail Lamp (NA)	X300	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
E-13	LH Road Light (EU)	X164	Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
E-14	RH Road Light (EU)	X169	Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
E-15	LH Cab Outer Work Light	X112	Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting

Lights				
Code	Name	Connector	Frame	System
E-16	RH Cab Outer Work Light	X120	Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
E-17	LH Cab Inner Work Light	X117	Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
E-18	RH Cab Inner Work Light	X117	Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
E-19	LH Cab Mid Work Light	X114	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
E-20	RH Cab Mid Work Light	X118	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
E-23	LH Lower Work Light	X163	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
E-24	RH Lower Work Light	X168	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
E-25	LH Side Work Light	X297	Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
E-26	RH Side Work Light	X298	Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
E-27	LH Rear Work Light	X106	Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
E-28	RH Rear Work Light	X110	Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
E-29	Unload Tube Light	X322	Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
E-30	Grain Tank Light	X108	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
E-31	LH Front Beacon Light	X113	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
E-32	RH Front Beacon Light	X119	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
E-33	Rear Beacon Light	X247	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
E-34	Dome Light	X129, X296	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
E-35	Console Light	X138	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
E-36	Cold Start Indicator	X066	Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Lighting
E-37	Sieve Light Front	X234	Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
E-39	Unload Tube Marker Light (France)		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-40	Header LH Marker Light (EU)		Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-41	Header RH Marker Light (EU)		Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
E-42	LH Front Shield Light	X345	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
E-43	LH Rear Shield Light	X346	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting

Lights				
Code	Name	Connector	Frame	System
E-44	RH Front Shield Light	X347	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
E-45	RH Rear Shield Light	X348	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
E-46	Engine Light	X349	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
E-47	LH Flip Up Road Light	X333	Wiring harness - Electrical schematic frame 37 (A.30.A.88 - C.20.E.37)	Lighting
E-48	RH Flip Up Road Light	X334	Wiring harness - Electrical schematic frame 37 (A.30.A.88 - C.20.E.37)	Lighting
E-49	RH Position Marker Lamp (EU)		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-50	LH Position Marker Lamp (EU)		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-51	RH Flashing Lamp (EU)		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-52	LH Flashing Lamp (EU)		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-53	RH Front Austria Marker Lamp		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-54	LH Front Austria Marker Lamp		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
E-57	RH License Plate Lamp (EU)	X362	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
E-58	LH License Plate Lamp (EU)	X363	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
E-59	Sieve Light Rear	X447	Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
E-60	LH HID Field Light	X417	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
E-61	RH HID Field Light	X418	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting

Fuses				
Code	Name	Connector	Frame	System
F-01	ECU Power Fuse		Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Starting
F-02	Accessory 2 Fuse		Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
F-03	Accessory 1 Fuse		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
F-04	Wiper Fuse		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
F-05	Cigar Lighter Fuse		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
F-06	LH Outer Road / Work Lights Fuse		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
F-07	RH Outer Road / Work Lights Fuse		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting

Fuses				
Code	Name	Connector	Frame	System
F-08	Accessory Outlet Fuse		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
F-09	Washer / Mirror Fuse		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
F-10	Cold Start Fuse (Not Used)		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
F-11	Radio Fuse		Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
F-12	Future Option		Wiring harness - Electrical schematic frame 30 (A.30.A.88 - C.20.E.30)	
F-13	Transceiver Power Fuse (Not Used)		Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	
F-14	Service Lights Fuse		Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
F-15	Service Sockets Fuse		Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
F-16	Seat Pump Fuse		Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
F-17	Separator Blower Fuse		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
F-18	Main Blower Fuse		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
F-19	A/C Clutch Fuse		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
F-20	LH Marker / Tail Lights Fuse		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
F-21	RH Marker / Tail Lights Fuse		Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)	Lighting
F-22	Shoe Leveling Motor Fuse		Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
F-23	Not Used		Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	
F-24	Concave / Covers Fuse		Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Thresher
F-25	Transmission Shift Fuse		Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
F-26	Not Used		Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	
F-27	Sieve Fuse		Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)	Cleaning
F-28	Fuel Pump Fuse		Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Engine
F-29	Inner Road / Work Lights Fuse		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
F-30	Mid Work Lights Fuse		Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
F-31	Outer Road / Work Lights Fuse		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
F-32	High Beam Fuse (EU)		Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting

Fuses				
Code	Name	Connector	Frame	System
F-33	Low Beam Fuse (EU)		Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
F-34	Under Shield Lights		Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
F-35	Radio Memory Fuse		Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
F-36	CCM-2A Fuse		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
F-37	CCM-2B Fuse		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
F-38	Key Switch Fuse		Wiring harness - Electrical schematic frame 29 (A.30.A.88 - C.20.E.29)	Distribution
F-39	Memory (KAPWR)		Wiring harness - Electrical schematic frame 29 (A.30.A.88 - C.20.E.29)	Distribution
F-40	CCM-1 Power Fuse		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
F-41	CCM-2 Power Fuse		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
F-42	CCM-3 / Cab Power Fuse		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
F-43	CCM-1A Fuse		Wiring harness - Electrical schematic frame 26 (A.30.A.88 - C.20.E.26)	Distribution
F-44	CCM-1B Fuse		Wiring harness - Electrical schematic frame 26 (A.30.A.88 - C.20.E.26)	Distribution
F-45	GPS Antenna Fuse		Wiring harness - Electrical schematic frame 26 (A.30.A.88 - C.20.E.26)	Distribution
F-46	Not Used		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	
F-47	CCM-3 Fuse		Wiring harness - Electrical schematic frame 24 (A.30.A.88 - C.20.E.24)	Distribution
F-48	RH Console Fuse		Wiring harness - Electrical schematic frame 25 (A.30.A.88 - C.20.E.25)	Distribution
F-49	Cab Fuse		Wiring harness - Electrical schematic frame 27 (A.30.A.88 - C.20.E.27)	Distribution
F-50	Side / Tube Lights Fuse		Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
F-51	Horn / Marker Lights Fuse		Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
F-52	Dome / Brake Lights Fuse		Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
F-53	Beacon Lights Fuse		Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
F-54	Lower Work Lights Fuse		Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
F-55	Rear Work Lights Fuse		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
F-56	Hazard Lights Fuse		Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
F-64	Switch Bypass Fuses	X178	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Lighting



Generators				
Code	Name	Connector	Frame	System
G-01	Alternator		Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
G-02	Front Battery		Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
G-03	Rear Battery		Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting

Audio				
Code	Name	Connector	Frame	System
H-01	Audio Alarm	X058	Wiring harness - Electrical schematic frame 25 (A.30.A.88 - C.20.E.25)	Distribution
H-02	Horn	X172	Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
H-04	Rear Left Speaker	X123	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
H-05	Front Left Speaker	X136	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
H-06	Rear Right Speaker	X122	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
H-07	Front Right Speaker	X139	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
H-08	Back Up Alarm	X248	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive

Outlets				
Code	Name	Connector	Frame	System
J-01	RH Front Service Socket	X166	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
J-02	LH Front Service Socket	X161	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
J-03	RH Side Service Socket	X252	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
J-04	LH Side Service Socket	X236	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
J-05	Engine Service Socket	X194	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
J-06	Accessory Socket	X067	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
J-07	Not Used	X141	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
J-08	Accessory Outlet	X075, X076	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
J-09	Trailer Outlet	X285	Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)	Lighting
J-10	Diagnostic Outlet	X065	Wiring harness - Electrical schematic frame 29 (A.30.A.88 - C.20.E.29)	Distribution

Relays				
Code	Name	Connector	Frame	System
K-01	Outer Road / Work Lights Relay		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
K-02	Light Control Relay		Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
K-03	Accessory 2 Relay		Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
K-04	High Beam Relay (EU)		Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
K-05	Low Beam Relay (EU)		Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
K-06	Wiper Relay		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
K-07	Fuel Pump Relay		Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Engine
K-08	Accessory 1 Relay		Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
K-09	Separator Blower Relay		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
K-10	A/C Clutch Relay		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
K-11	Main Blower Relay Low		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
K-12	Main Blower Relay Medium		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
K-13	Main Blower Relay High		Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
K-14	ECU Power Relay		Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Starting
K-15	Not Used		Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	
K-16	Concave / Covers Relay		Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Thresher
K-17	Not Used		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	
K-18	Upper / Lower Sieve Relay		Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)	Cleaning
K-19	Feeder Disengage Relay		Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
K-20	Time Delay Module		Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
K-21	Inner Road Lights Relay		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
K-22	Mid Work Lights Relay		Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
K-23	Neutral Start Relay		Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
K-24	CCM-1 Power Relay		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
K-25	CCM-2 Power Relay		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution

Relays				
Code	Name	Connector	Frame	System
K-26	CCM-3 / Cab Power Relay		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	Distribution
K-27	Inner Work Lights Relay		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
K-28	Not Used		Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)	
K-29	Beacon Lights Relay		Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
K-30	Lower Work Lights Relay		Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
K-31	Rear Work Lights Relay		Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)	Lighting
K-32	Unload Tube Light Relay		Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
K-33	Brake Lights Relay		Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
K-34	Side Exit Lights Relay		Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
K-35	Side Work Lights Relay		Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
K-36	Start Relay	X199, X200	Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
K-38	24V Start Relay	X286	Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
K-39	Grid Heater Relay	X211	Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Starting
K-40	Flip Up Low Beam Relay	X331	Wiring harness - Electrical schematic frame 37 (A.30.A.88 - C.20.E.37)	Lighting
K-41	Flip Up High Beam Relay	X332	Wiring harness - Electrical schematic frame 37 (A.30.A.88 - C.20.E.37)	Lighting
K-42	RH Vertical Knife Relay (Opt)		Wiring harness - Electrical schematic frame 14 (A.30.A.88 - C.20.E.14)	Header
K-43	LH Vertical Knife Relay (Opt)		Wiring harness - Electrical schematic frame 14 (A.30.A.88 - C.20.E.14)	Header

Solenoids				
Code	Name	Connector	Frame	System
L-03	Unload Tube In	X022	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
L-04	Unload Tube Out	X022	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
L-05	Pressure Release	X092	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
L-06	Header Height Accumulator	X022	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
L-07	A/C Clutch	X215	Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
L-08	Unload Tube Clutch	X449	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload

<b>Solenoids</b>				
<b>Code</b>	<b>Name</b>	<b>Connector</b>	<b>Frame</b>	<b>System</b>
L-10	Park Brake Disengage	X457	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
L-11	Header Raise	X022	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
L-12	Header Lower	X022	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
L-13	Reel Down	X021	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
L-14	Reel Up	X021	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
L-15	Reel Aft	X021	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
L-16	Reel Fore	X021	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
L-17	Reel Drive	X021	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
L-18	Lateral Tilt CW	X021	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
L-19	Lateral Tilt CCW	X021	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
L-22	Beater / Chopper Clutch	X450	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
L-23	Ground Speed Hydrostat	X100	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
L-26	Rear Wheel Assist	X233	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
L-28	Chaff Spreader	X235	Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)	Trash
L-32	Brake Limiting	X329	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
L-33	Engine Brake	X375	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-34	Fuel Actuator 1	X376	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-35	Fuel Actuator 2	X377	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-36	Fuel Actuator 3	X378	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-37	Fuel Actuator 4	X379	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-38	Fuel Actuator 5	X380	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-39	Fuel Actuator 6	X381	Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)	Engine
L-40	Rotor Pump Swash Minus	X408	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
L-41	Rotor Pump Swash Plus	X408	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
L-43	Jammer Solenoid	X022	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header

Solenoids				
Code	Name	Connector	Frame	System
L-44	Fan Drive Solenoid	X444	Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
L-45	Rotor Engine To Ring Clutch	X410	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
L-46	Rotor Ring To Frame Brake	X409	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
L-47	Feeder Engine To Ring Clutch	X401	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
L-48	Feeder Pump Swash Minus	X402	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
L-49	Feeder Pump Swash Plus	X402	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
L-50	Feeder Ring To Frame Brake	X403	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
L-53	Draper Header Solenoid		Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
L-54	2 Speed Rear Wheel Assist RH		Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
L-55	2 Speed Rear Wheel Assist LH		Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive

Motors				
Code	Name	Connector	Frame	System
M-02	Transmission Shift Motor	X094	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
M-03	Shoe Leveling Actuator	X088	Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
M-04	Concave Clearance Motor	X190	Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Thresher
M-06	Upper Sieve Actuator	X227	Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)	Cleaning
M-07	Lower Sieve Actuator	X228	Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)	Cleaning
M-12	Covers Motor	X289	Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Unload
M-16	Water Valve (manual)	X151	Wiring harness - Electrical schematic frame 47 (A.30.A.88 - C.20.E.47)	HVAC
M-17	Main Blower (manual)	X155, X156, X157, X158	Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
M-18	Separator Blower	X470	Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
M-19	RH Mirror Up / Down	X121	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
M-20	RH Mirror In / Out	X121	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
M-21	LH Mirror Up / Down	X111	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
M-22	LH Mirror In / Out	X111	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory

Motors				
Code	Name	Connector	Frame	System
M-23	Fuel Pump	X183	Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Starting
M-24	Wiper Washer Motor	X171	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
M-25	Wiper Motor	X116	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
M-26	Seat Pump Motor	X074	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
M-28	Sample Motor	X222	Wiring harness - Electrical schematic frame 24 (A.30.A.88 - C.20.E.24)	Precision
M-29	24V Starter	X205	Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
M-30	German Mirror Up / Down	X287	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
M-31	German Mirror In / Out	X287	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
M-33	Water Valve (ATC)	X151	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC
M-34	Main Blower (ATC)	X156	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC

Resistive				
Code	Name	Connector	Frame	System
R-01	Fuel Level	X184	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
R-02	Lateral Tilt Pot	X081	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
R-03	Feeder Angle Pot	X174	Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
R-04	Ground Speed Pot	X057	Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	Drive
R-06	Concave Position	X189	Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Thresher
R-08	Cigar Lighter	X069, X070	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
R-09	Engine Grid Heater	X211	Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)	Starting
R-10	RH Mirror Heat	X121	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
R-11	LH Mirror Heat	X111	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
R-12	LH Header Height / Tilt		Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
R-13	RH Header Height / Tilt		Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
R-14	German Mirror Heat	X287	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
R-15	Air Filter Resistor	X330	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine

Resistive				
Code	Name	Connector	Frame	System
R-17	Cab CAN Termination	X446	Wiring harness - Electrical schematic frame 30 (A.30.A.88 - C.20.E.30)	Distribution
R-18	Header Speed Pot	X404	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
R-19	Center Header Height / Tilt		Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)	Header
R-20	Header Type Module		Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
R-21	Engine Throttle Pot	X388	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
R-22	Reel Speed Pot	X406	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
R-23	Resistor Module	X405	Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)	Header
R-24	Tailing Volume	X445	Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)	Cleaning

Switches				
Code	Name	Connector	Frame	System
S-02	Key Switch	X068	Wiring harness - Electrical schematic frame 29 (A.30.A.88 - C.20.E.29)	Distribution
S-03	Propulsion Handle	X059	Wiring harness - Electrical schematic frame 25 (A.30.A.88 - C.20.E.25)	Distribution
S-04	Header Height Mode 1		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-05	Seat Switch	X073	Wiring harness - Electrical schematic frame 27 (A.30.A.88 - C.20.E.27)	Distribution
S-06	HHC Fine Adjust		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-08	Reel Speed Mode		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-09	Park Brake		Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	Drive
S-10	Rear Wheel Assist		Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	Drive
S-11	Rear Wheel Assist Hi / Low		Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	Drive
S-12	Road Mode Switch		Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	Drive
S-13	Upper Sieve		Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
S-14	Lower Sieve		Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
S-15	Fan Speed		Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)	Cleaning
S-16	Concave Clearance		Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)	Thresher
S-17	Rotor Speed		Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher

Switches				
Code	Name	Connector	Frame	System
S-19	Mirror Heat Switch	X127	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
S-20	Wiper Switch	X135	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
S-22	Neutral Switch	X059	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
S-23	Spread Pattern		Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)	Trash
S-24	Gear Select	X048	Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)	Drive
S-25	Hazard Switch	X259	Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)	Lighting
S-26	Road Light Switch	X256	Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)	Lighting
S-27	Mirror Adjust Switch	X126	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
S-28	Grain Bin 3/4 Full	X107	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
S-29	Grain Bin Full	X109	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
S-30	Separator Engage	X055	Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)	Thresher
S-31	Feeder Engage	X056	Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
S-32	Returns Filter Bypass	X239	Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)	Hydraulic
S-33	Hydraulic Reservoir Level	X104	Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)	Hydraulic
S-34	PTO Box Filter Bypass	X238	Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)	Hydraulic
S-35	Upper Sieve Rear Adjust	X225	Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)	Cleaning
S-38	Washer Switch	X134	Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)	Accessory
S-39	Brake Pressure	X173	Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)	Drive
S-40	LH Door Switch	X137	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
S-41	Beacon Light Switch	X130	Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)	Lighting
S-42	Tank Extensions Switch	X125	Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)	Unload
S-43	Work Light Switch	X132	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
S-44	Rear Work Light Switch	X131	Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)	Lighting
S-45	Seat Adjust Switch	X074	Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)	Accessory
S-46	Lower Sieve Rear Adjust	X226	Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)	Cleaning

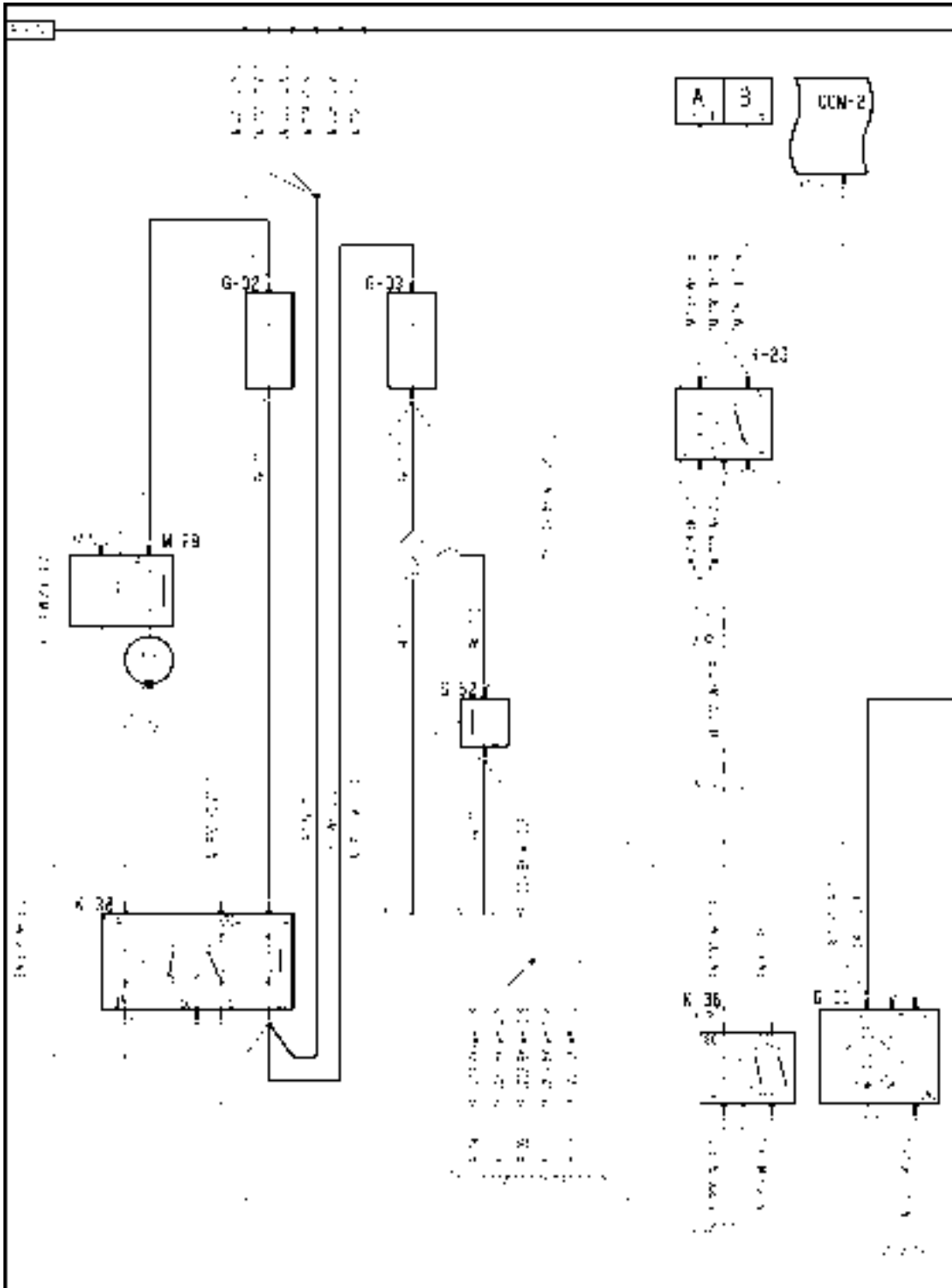


Switches				
Code	Name	Connector	Frame	System
S-47	A/C High Pressure	X216	Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)	HVAC
S-48	A/C Low Pressure (manual)	X451	Wiring harness - Electrical schematic frame 47 (A.30.A.88 - C.20.E.47)	HVAC
S-49	Brake Fluid Level Switch	X327, X328	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
S-51	Vertical Knives		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-52	Battery Switch (EU)		Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)	Starting
S-54	Sieve Light Switch	X237	Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)	Lighting
S-55	LH Brake Wear Switch	X084, X294	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
S-56	RH Brake Wear Switch	X085, X295	Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)	Drive
S-57	Mirror Select Switch	X178	Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)	Accessory
S-61	Air Filter Switch	X202	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
S-62	Fuel Filter Switch	X338	Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)	Engine
S-63	Under Shield Light Switch	X339	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
S-64	Engine Light Switch	X340	Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)	Lighting
S-66	Second Seat Switch	X073	Wiring harness - Electrical schematic frame 27 (A.30.A.88 - C.20.E.27)	Distribution
S-67	Coolant Level Switch	X439	Wiring harness - Electrical schematic frame 05 (A.30.A.88 - C.20.E.05)	Engine
S-68	Header Height Mode 2		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-69	Header Mode Switch		Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)	Feeder
S-70	Header Position Switch		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-71	Header Resume Switch		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-72	Unload Swing Switch		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-73	Unload Engage Switch		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-74	Reel Position Switch		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-75	Emergency Stop Switch		Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)	Header
S-76	A/C Freeze Switch (manual)	X452, X453	Wiring harness - Electrical schematic frame 47 (A.30.A.88 - C.20.E.47)	HVAC
S-77	A/C Low Pressure (ATC)	X217	Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)	HVAC

Splice Blocks				
Code	Name	Connector	Frame	System
W-03	Splice Block C	X133	Wiring harness - Electrical schematic frame 27 (A.30.A.88 - C.20.E.27)	Distribution

# Wiring harness - Electrical schematic frame 01 (A.30.A.88 - C.20.E.01)

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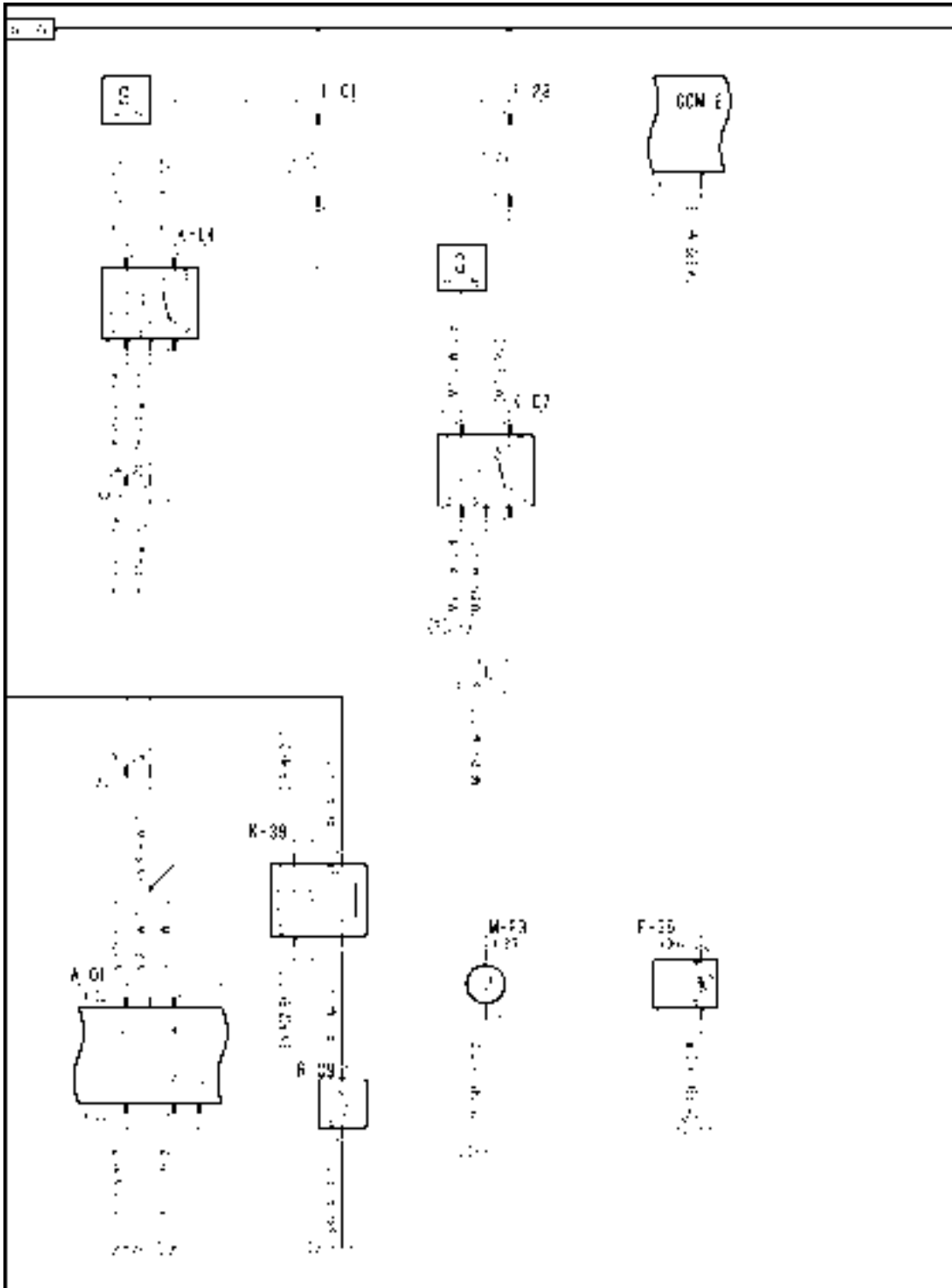
**FRAME 1 - STARTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

G-01 Alternator	G-02 Front Battery	G-03 Rear Battery
K-23 Neutral Start Relay	K-36 Start Relay	K-38 24V Start Relay
M-29 24V Starter	S-52 Battery Switch (EU)	7 = European Base Unit
	8 = North American Base Unit	

# Wiring harness - Electrical schematic frame 02 (A.30.A.88 - C.20.E.02)

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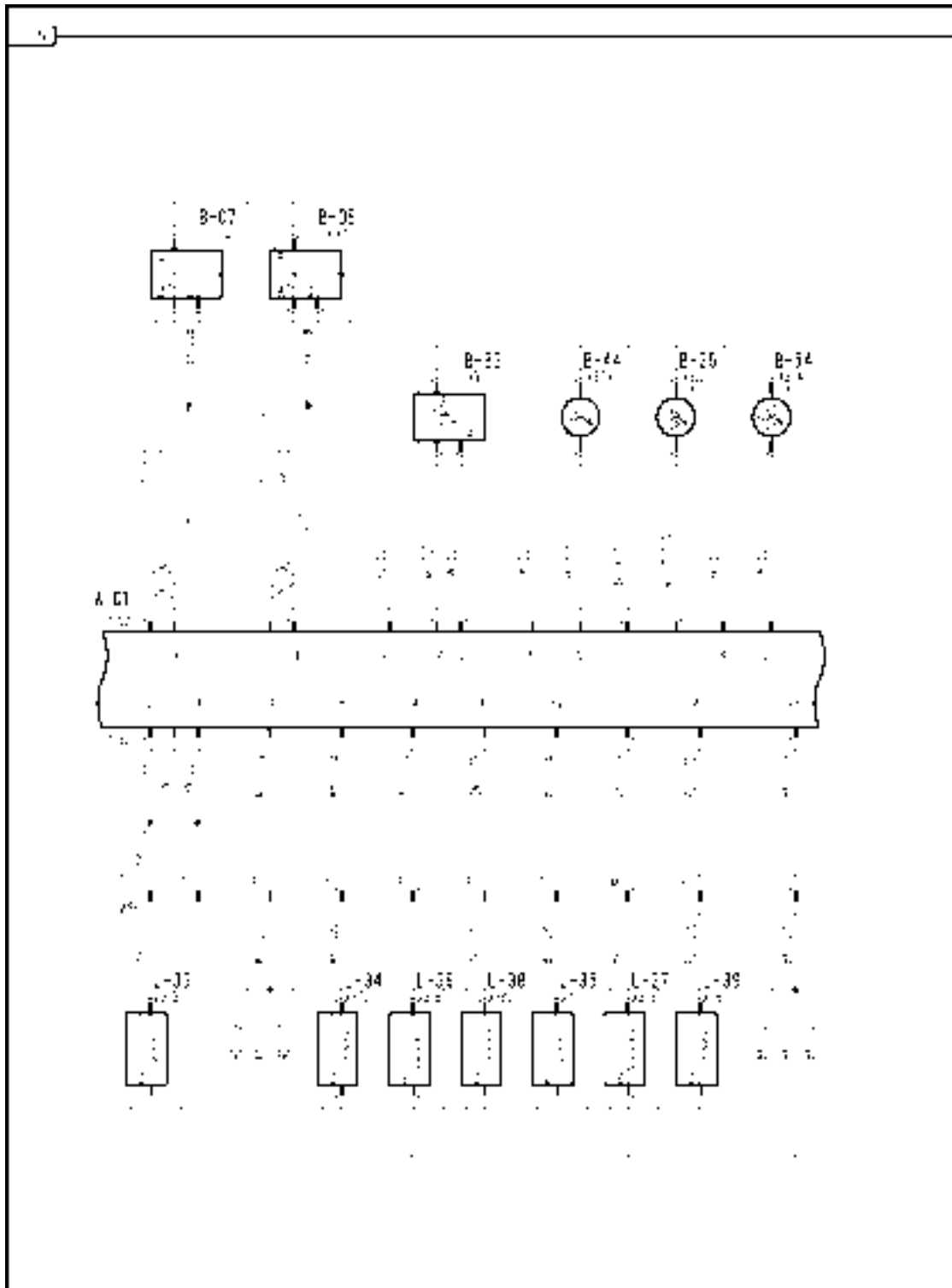
## FRAME 2 - ENGINE

## DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-01 Iveco ECU	E-36 Cold Start Indicator	F-01 ECU Power Fuse
F-28 Fuel Pump Fuse	K-07 Fuel Pump Relay	K-14 ECU Power Relay
K-39 Grid Heater Relay	M-23 Fuel Pump	R-09 Engine Grid Heater

# Wiring harness - Electrical schematic frame 03 (A.30.A.88 - C.20.E.03)

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## FRAME 3 - ENGINE

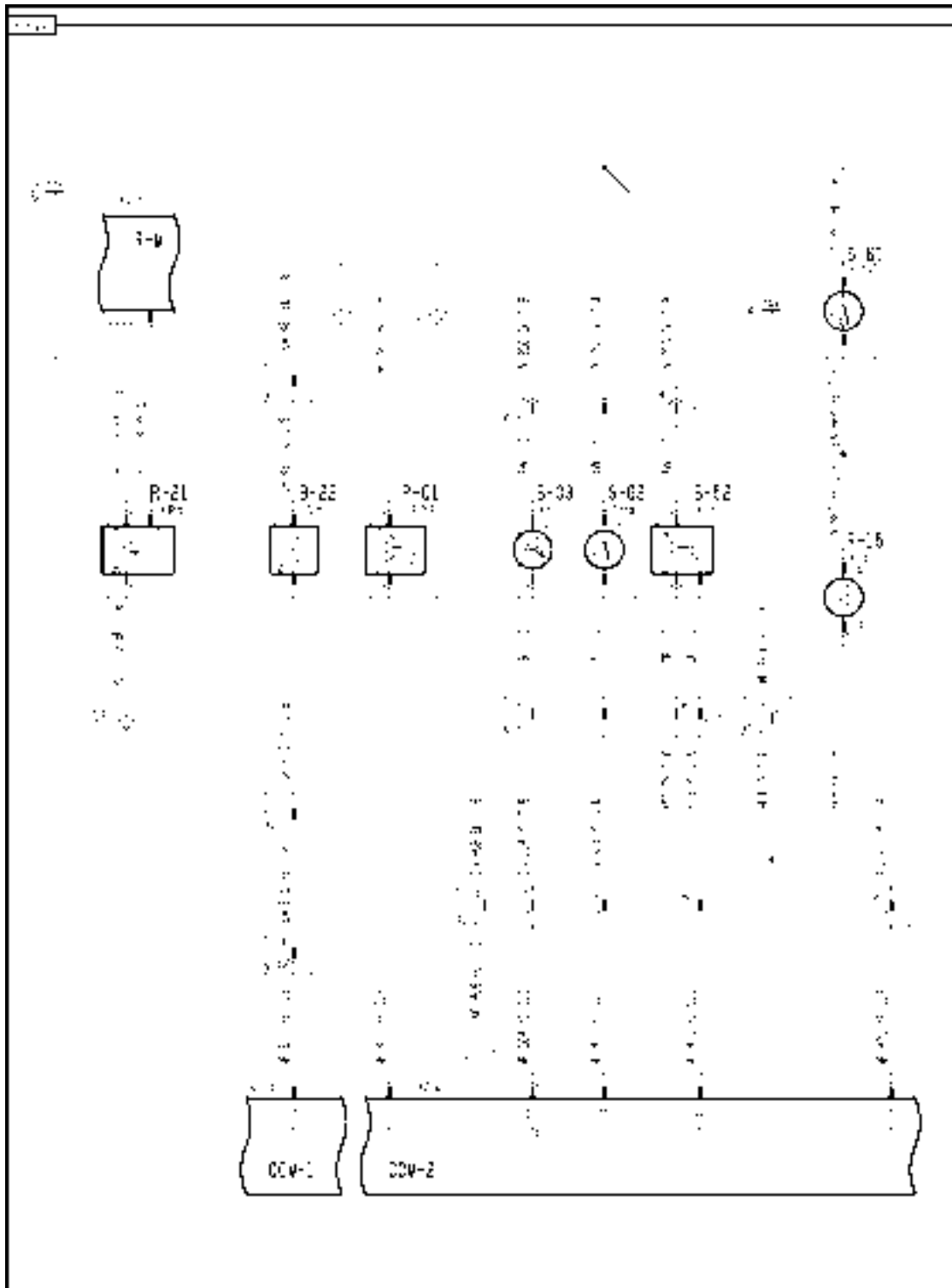
DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-01 Iveco ECU	B-05 Engine Flywheel RPM	B-07 Engine Camshaft RPM
B-23 Boost Pressure	B-36 Fuel Temperature	B-44 Coolant Temperature
B-54 Air Temperature	L-33 Engine Brake	L-34 Fuel Actuator 1
L-35 Fuel Actuator 2	L-36 Fuel Actuator 3	L-37 Fuel Actuator 4
L-38 Fuel Actuator 5	L-39 Fuel Actuator 6	



# Wiring harness - Electrical schematic frame 04 (A.30.A.88 - C.20.E.04)

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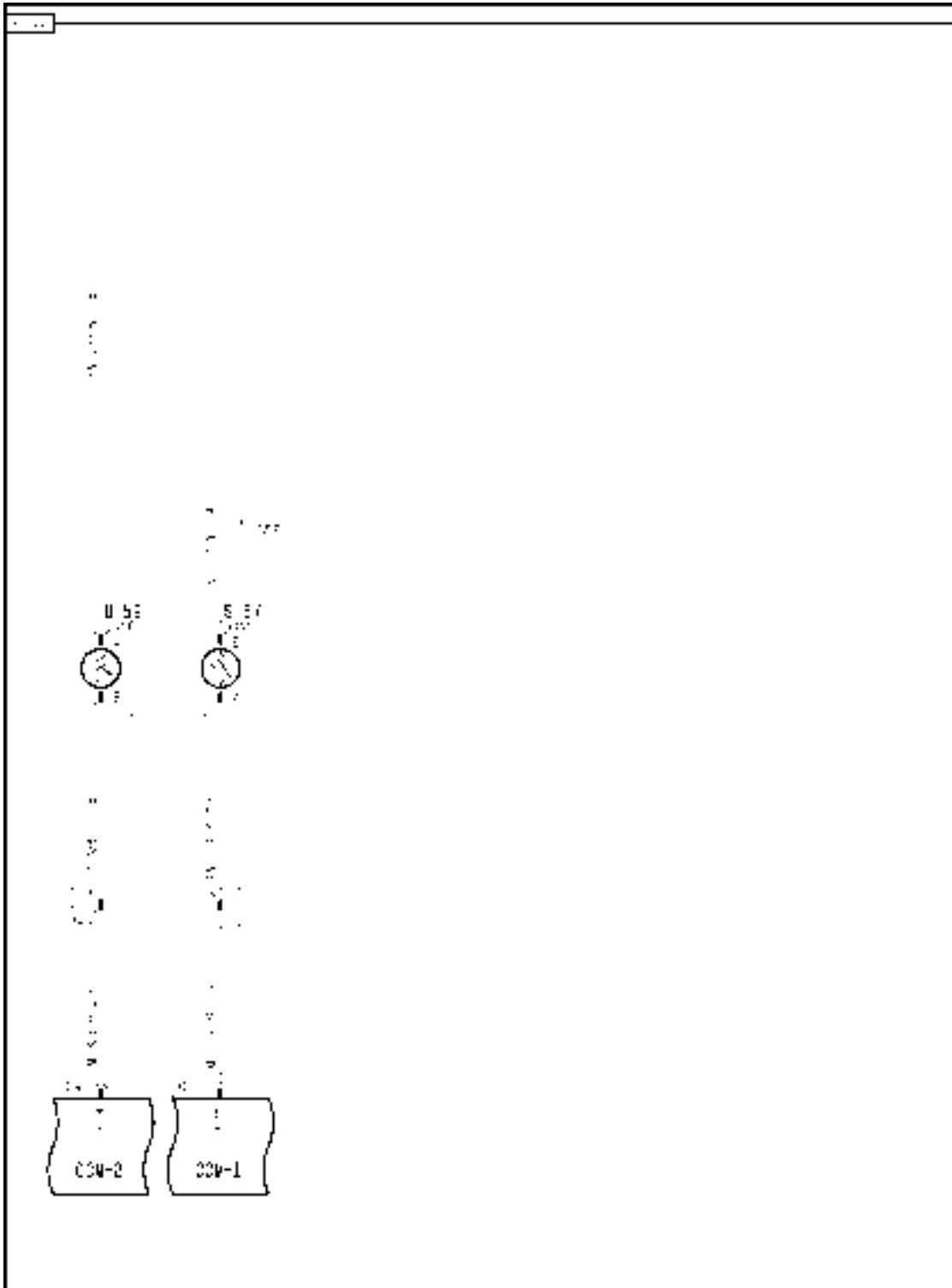
## FRAME 4 - ENGINE

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-03 Engine Oil Temperature	B-22 Rear Ladder	B-52 Engine Oil Pressure
R-01 Fuel Level	R-15 Air Filter Resistor	R-21 Engine Throttle Potentiometer
S-61 Air Filter Switch	S-62 Fuel Filter Switch	

# Wiring harness - Electrical schematic frame 05 (A.30.A.88 - C.20.E.05)

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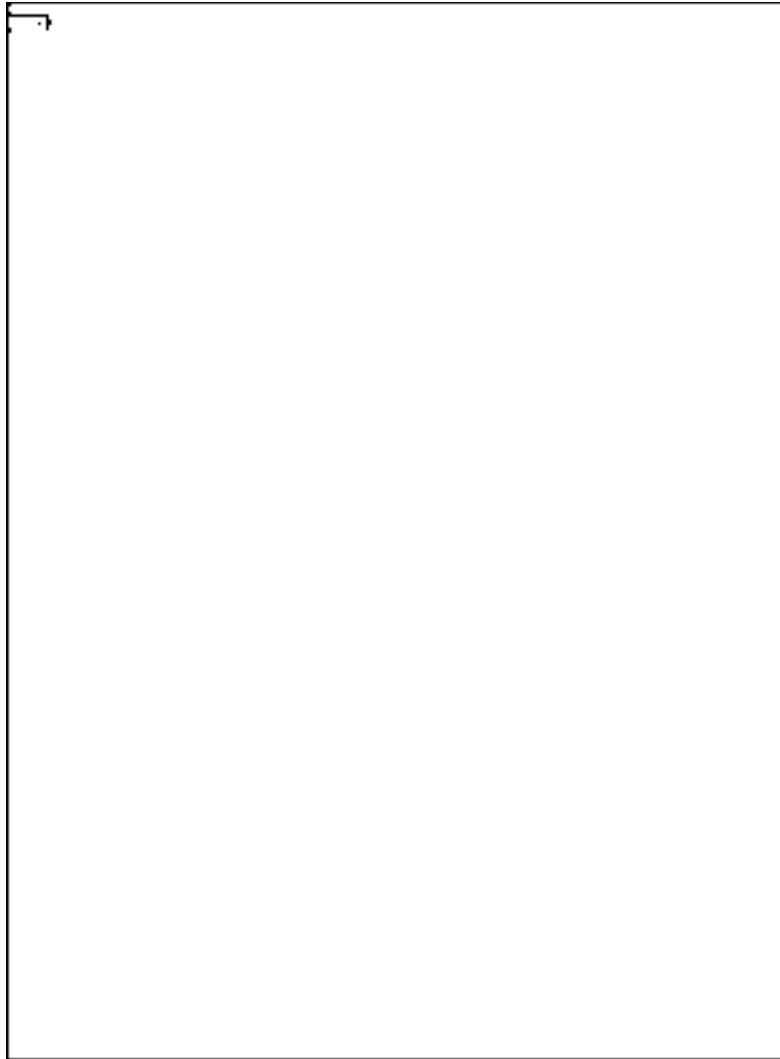
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## FRAME 5 - ENGINE

B-59 Water in Fuel	S-67 Coolant Level Switch	
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# Wiring harness - Electrical schematic frame 06 (A.30.A.88 - C.20.E.06)

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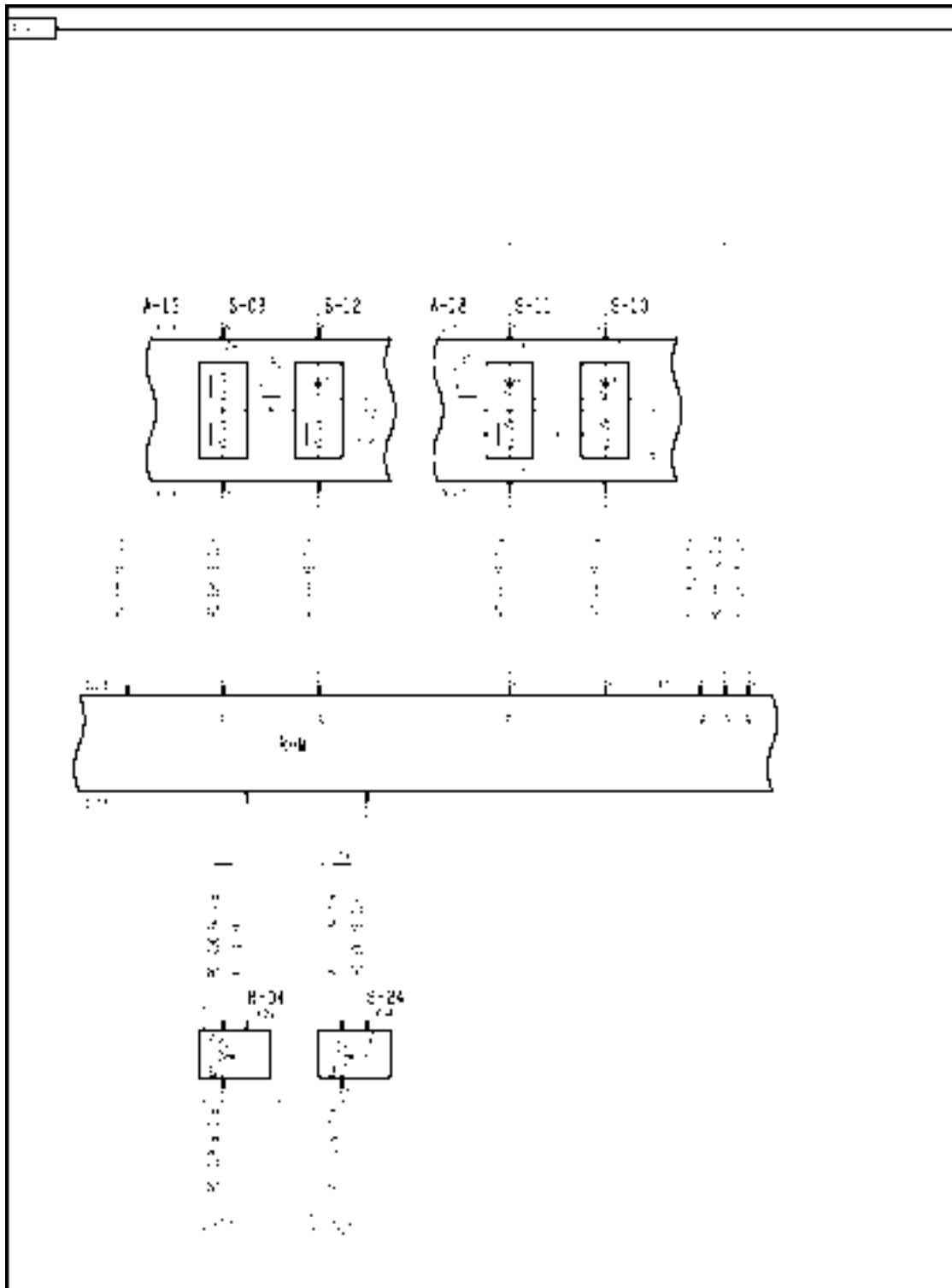
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**FRAME 6 - BLANK**

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# Wiring harness - Electrical schematic frame 07 (A.30.A.88 - C.20.E.07)

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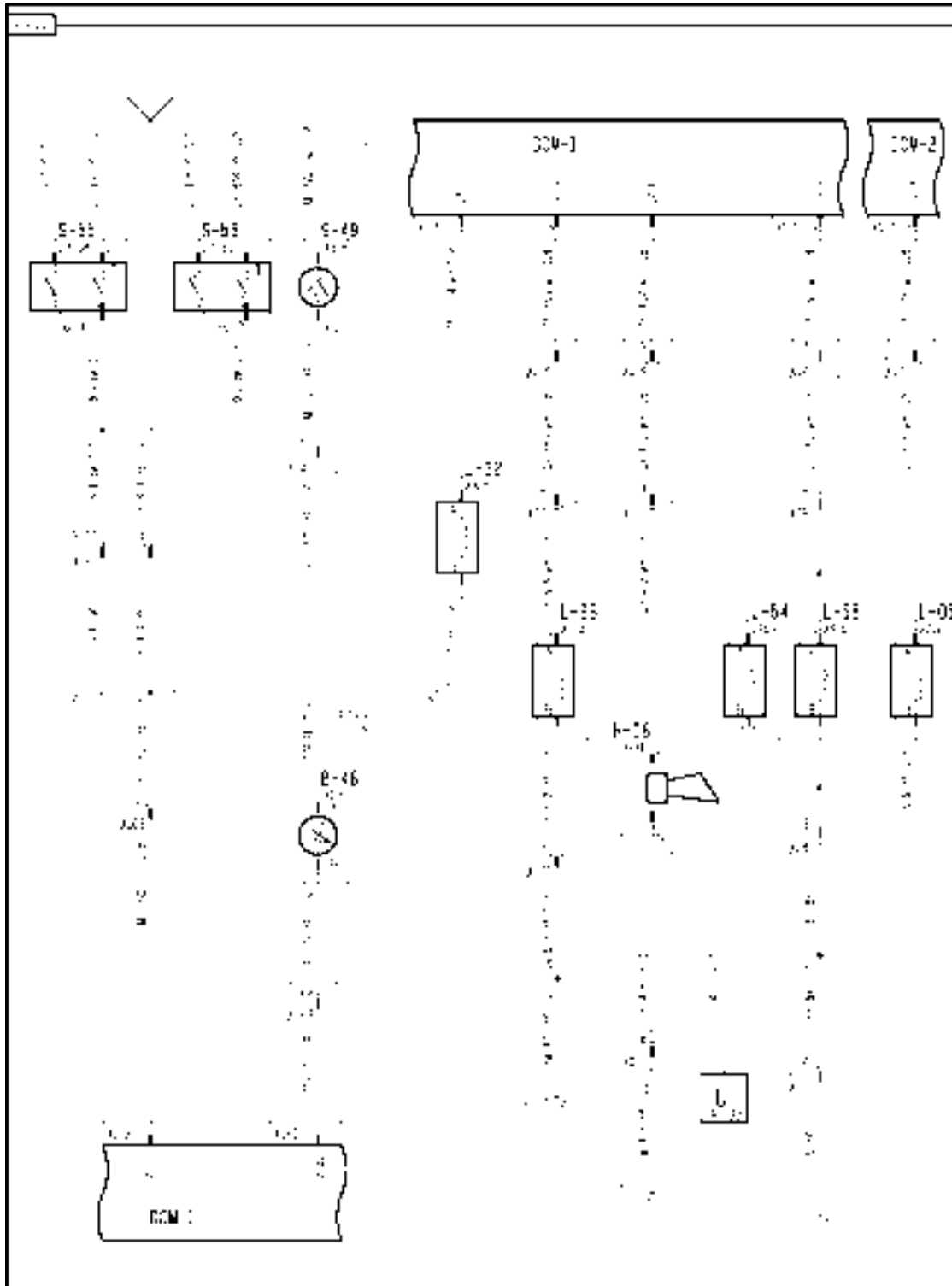
## FRAME 7 - DRIVES

## DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	A-18 Rear Switch Panel	R-04 Ground Speed Potentiometer
S-09 Park Brake	S-10 Rear Wheel Assist	S-11 Rear Wheel Assist Hi/Low
S-12 Road Mode Switch	S-24 Gear Select	

# Wiring harness - Electrical schematic frame 08 (A.30.A.88 - C.20.E.08)

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## FRAME 8 - DRIVES

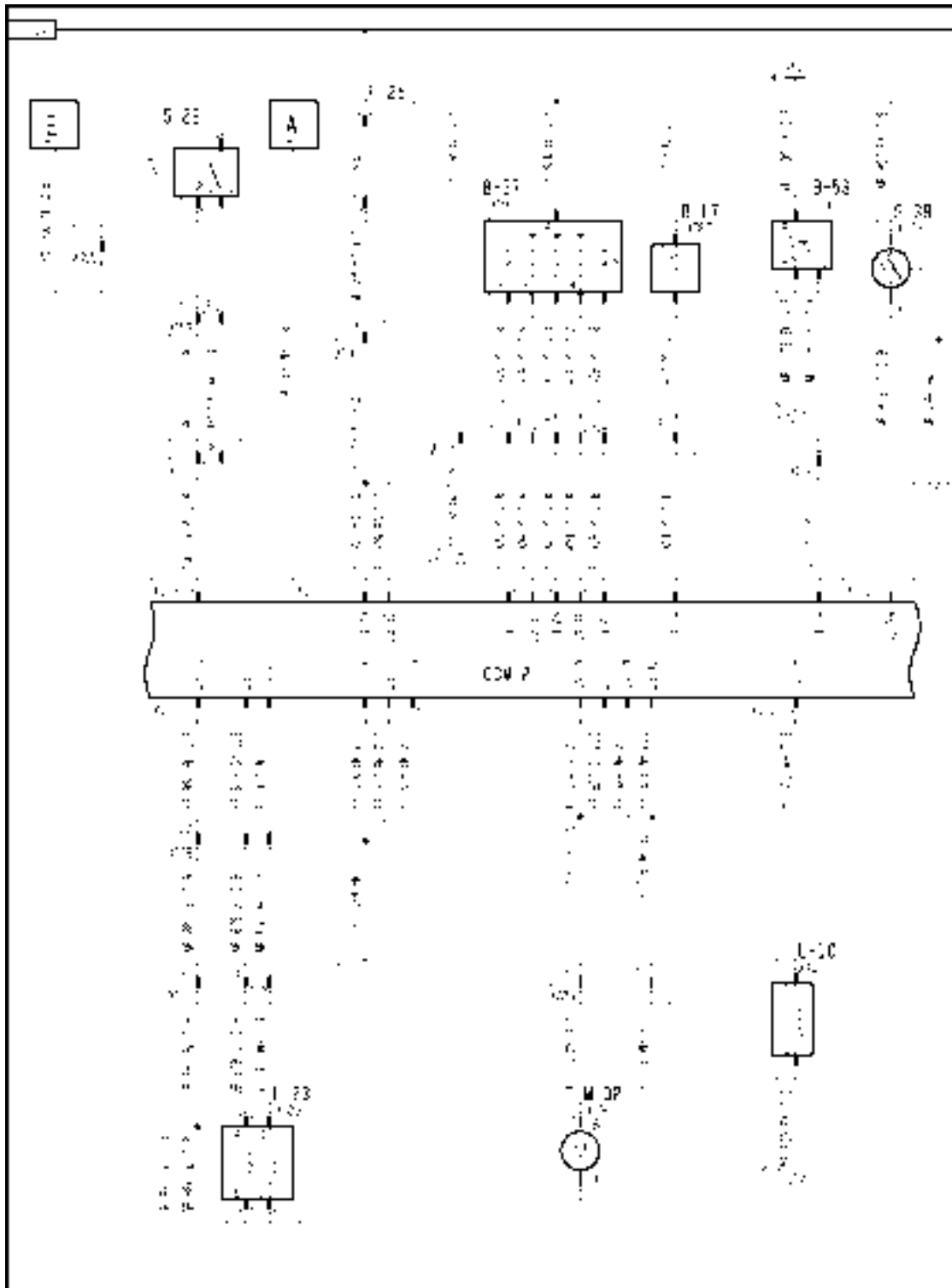


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-46 Hydrostat Motor Temperature	H-08 Back Up Alarm	L-05 Pressure Release
L-26 Rear Wheel Assist	L-32 Brake Limiting	L-54 2 Speed Powered Rear Axle RH
L-55 2 Speed Powered Rear Axle LH	S-49 Brake Fluid Level Switch	S-55 LH Brake Wear Switch
	S-56 RH Brake Wear Switch	

# Wiring harness - Electrical schematic frame 09 (A.30.A.88 - C.20.E.09)

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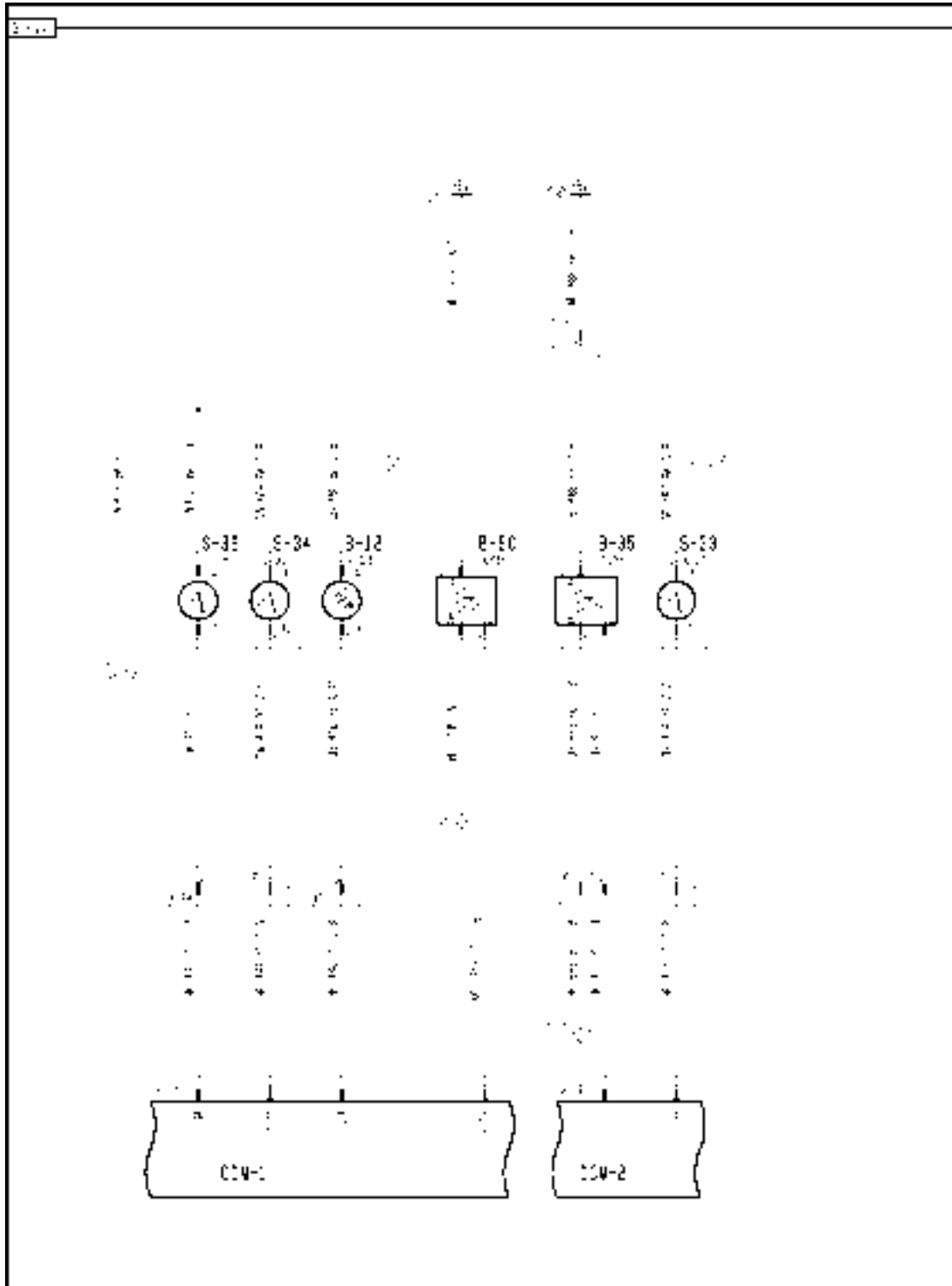
## FRAME 9 - DRIVES

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-17 Ground Speed RPM	B-37 Transmission Shift Position	B-53 Park Brake Pressure
F-25 Transmission Shift Fuse	L-10 Park Brake Disengage	L-23 Ground Speed Hydrostat
M-02 Transmission Shift Motor	S-22 Neutral Switch	S-39 Brake Pressure

# Wiring harness - Electrical schematic frame 10 (A.30.A.88 - C.20.E.10)

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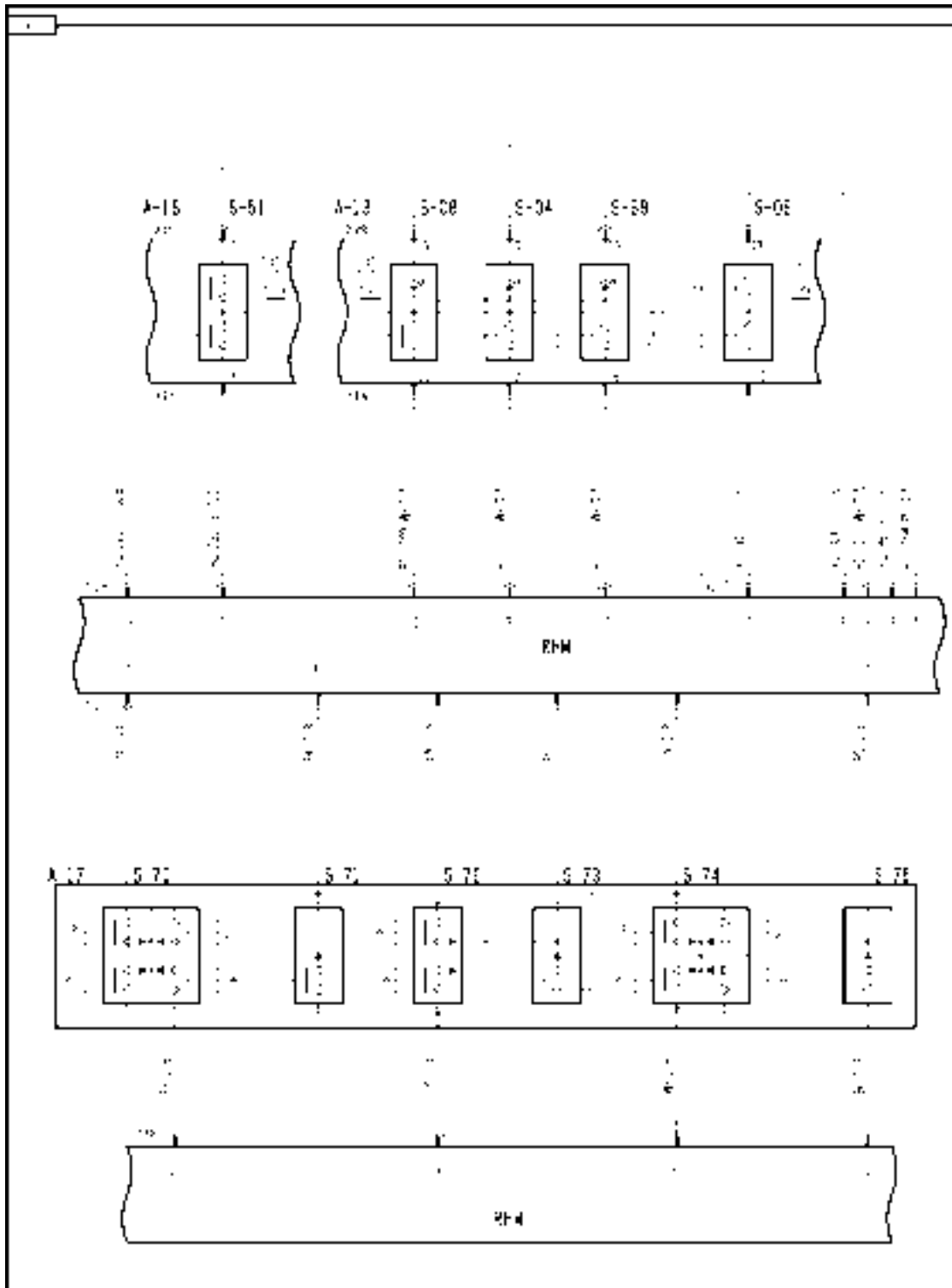
**FRAME 10 - HYDRAULIC**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-18 Hydraulic Oil Reservoir Temperature	B-35 Low Control Pressure	B-60 PTO Box Lube Pressure
S-32 Returns Filter Bypass	S-33 Hydraulic Reservoir Level	S-34 PTO Box Filter Bypass

# Wiring harness - Electrical schematic frame 11 (A.30.A.88 - C.20.E.11)

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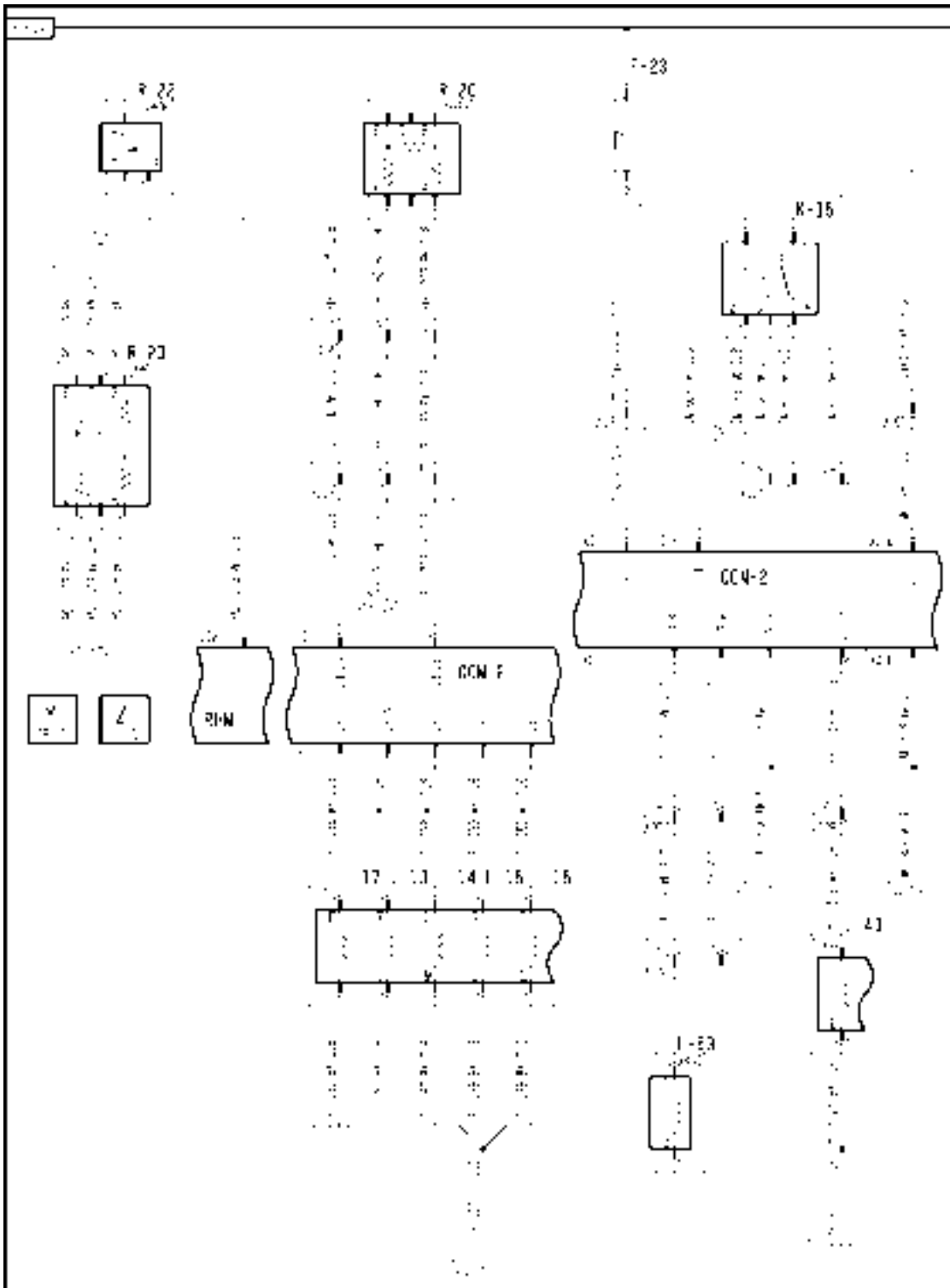
**FRAME 11 - HEADER**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	A-18 Rear Switch Panel	A-17 Propulsion Handle
S-04 Header Height Mode 1	S-06 Header Height Control Fine Adjust	S-08 Reel Speed Mode
S-51 Vertical Knives	S-68 Header Height Mode 2	S-70 Header Position
S-71 Header Resume	S-72 Unload Swing	S-73 Unload Engage
S-74 Reel Position	S-75 Emergency Stop	

# Wiring harness - Electrical schematic frame 12 (A.30.A.88 - C.20.E.12)

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**FRAME 12 - HEADER**

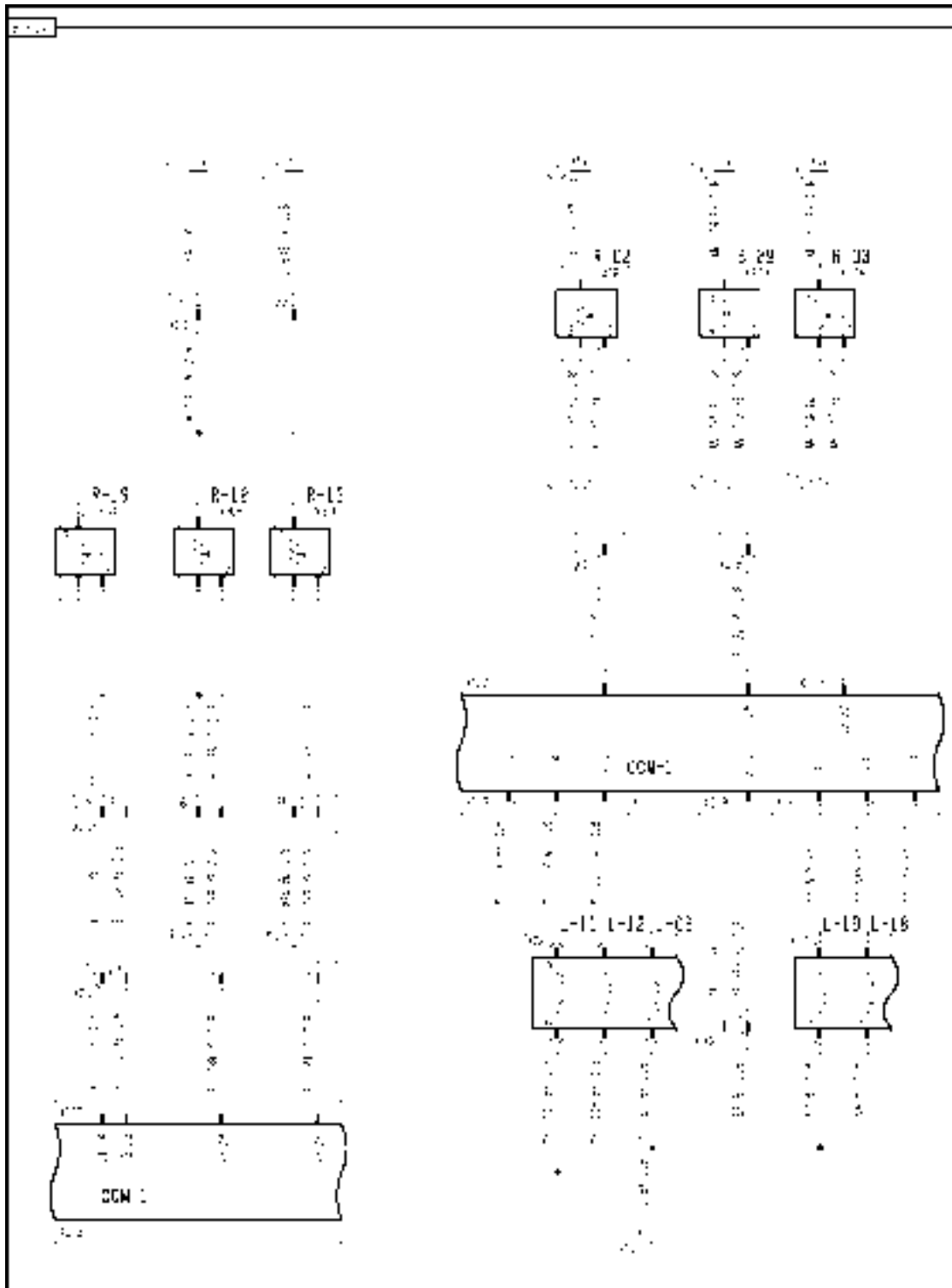


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

F-23 Not Used	K-15 Not Used	L-13 Reel Down
L-14 Reel Up	L-15 Reel Aft	L-16 Reel Fore
L-17 Reel Drive	L-43 Jammer Valve	L-53 Draper Header Solenoid
R-20 Header Type Module	R-22 Reel Speed Potentiometer	R-23 Resistor Module

# Wiring harness - Electrical schematic frame 13 (A.30.A.88 - C.20.E.13)

AFX8010



AFXSCHM13-04 1

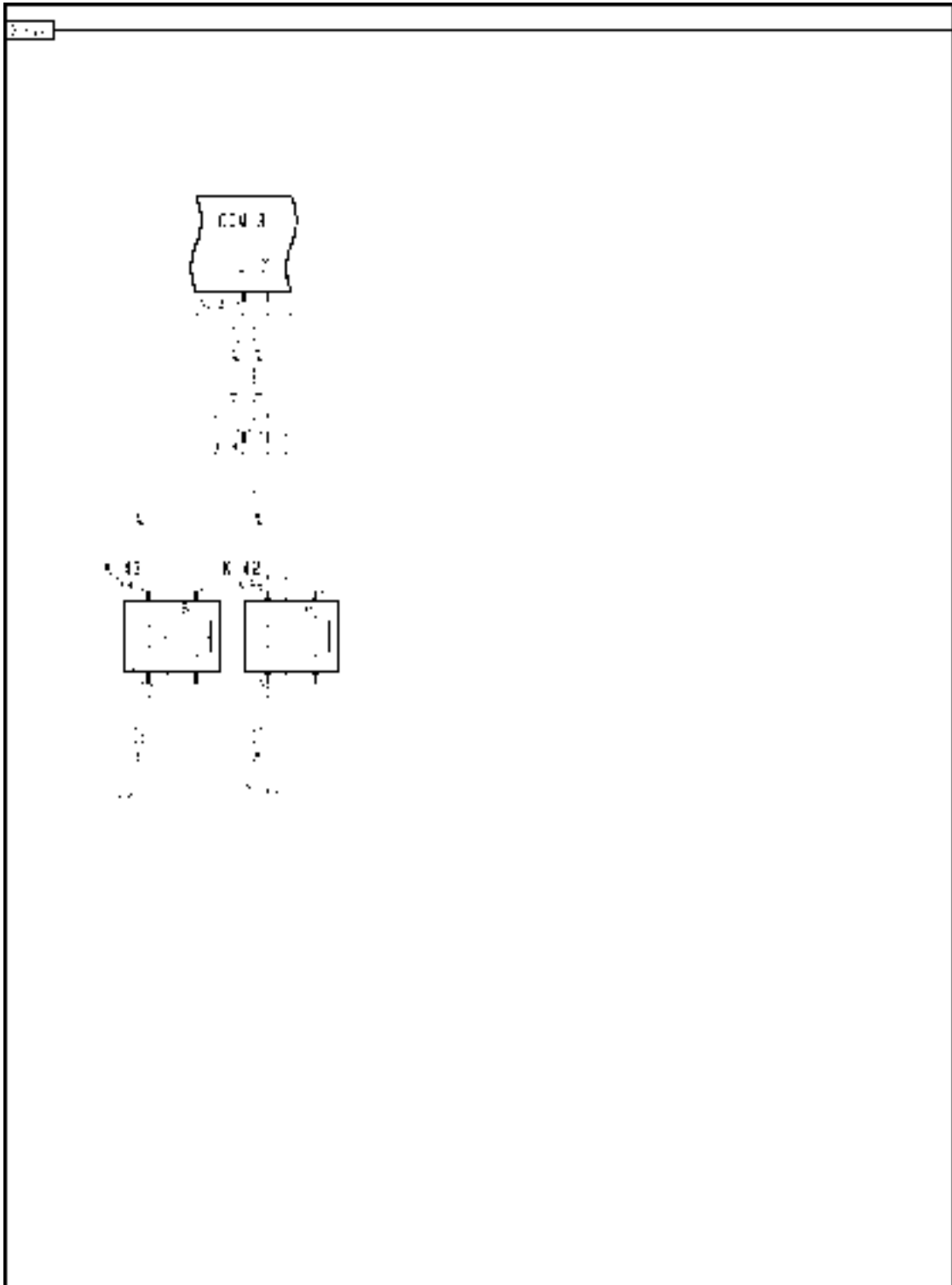
**FRAME 13 - HEADER**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-29 Header Lift Pressure	L-06 Header Height Accumulator	L-11 Header Raise
L-12 Header Lower	L-18 Lateral Tilt CW	L-19 Lateral Tilt CCW
R-02 Lateral Tilt Potentiometer	R-03 Feeder Angle	R-12 Left Height/Tilt
R-13 Right Height/Tilt	R-19 Center Height/Tilt	

# Wiring harness - Electrical schematic frame 14 (A.30.A.88 - C.20.E.14)

AFX8010



AFXSCHEM14-04 1

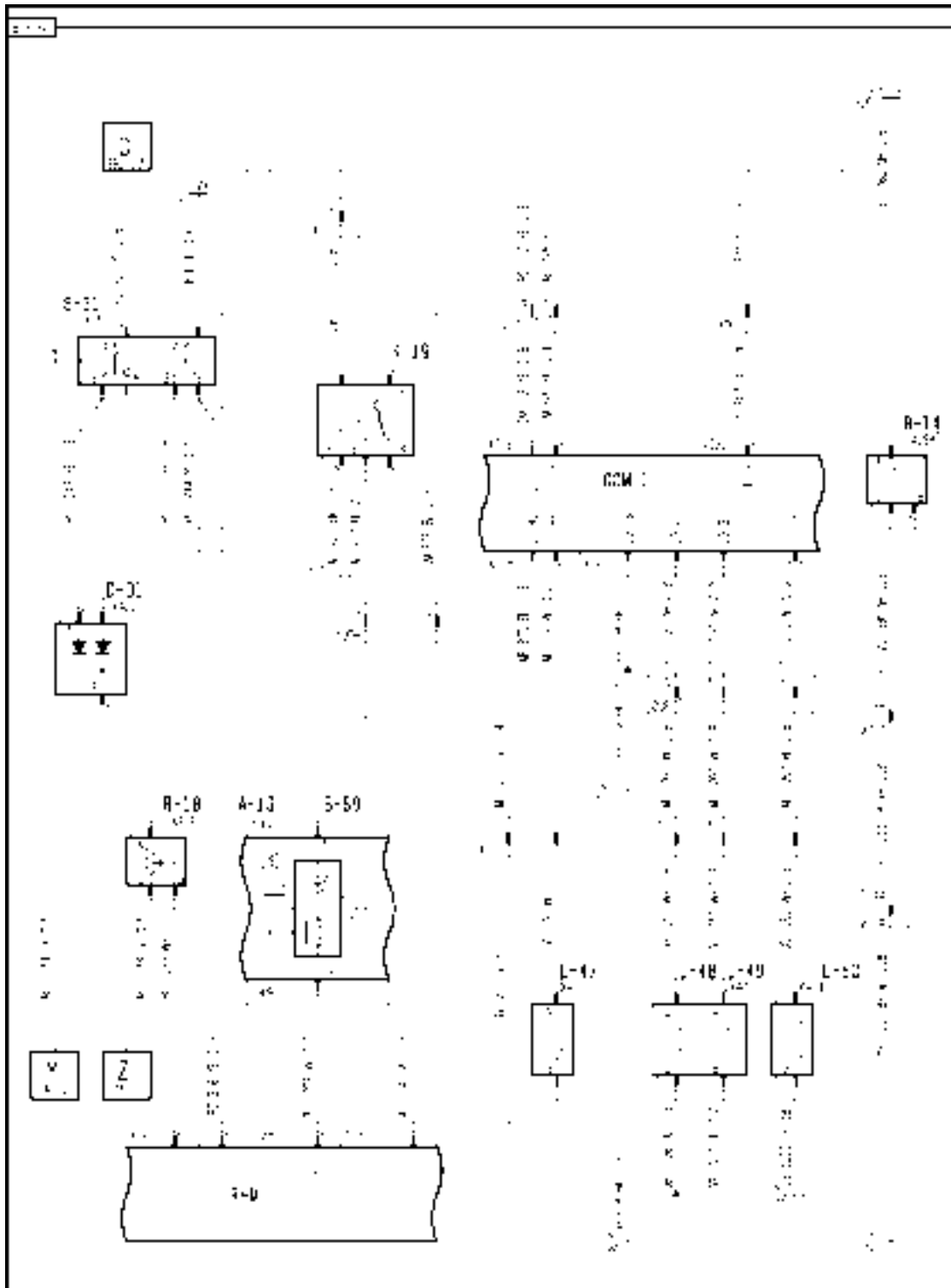
**FRAME 14 - HEADER**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

K-42 RH Vertical Knife Relay (Optional)	K-43 LH Vertical Knife Relay (Optional)	
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# Wiring harness - Electrical schematic frame 15 (A.30.A.88 - C.20.E.15)

AFX8010



AFXSCHEM15-04 1

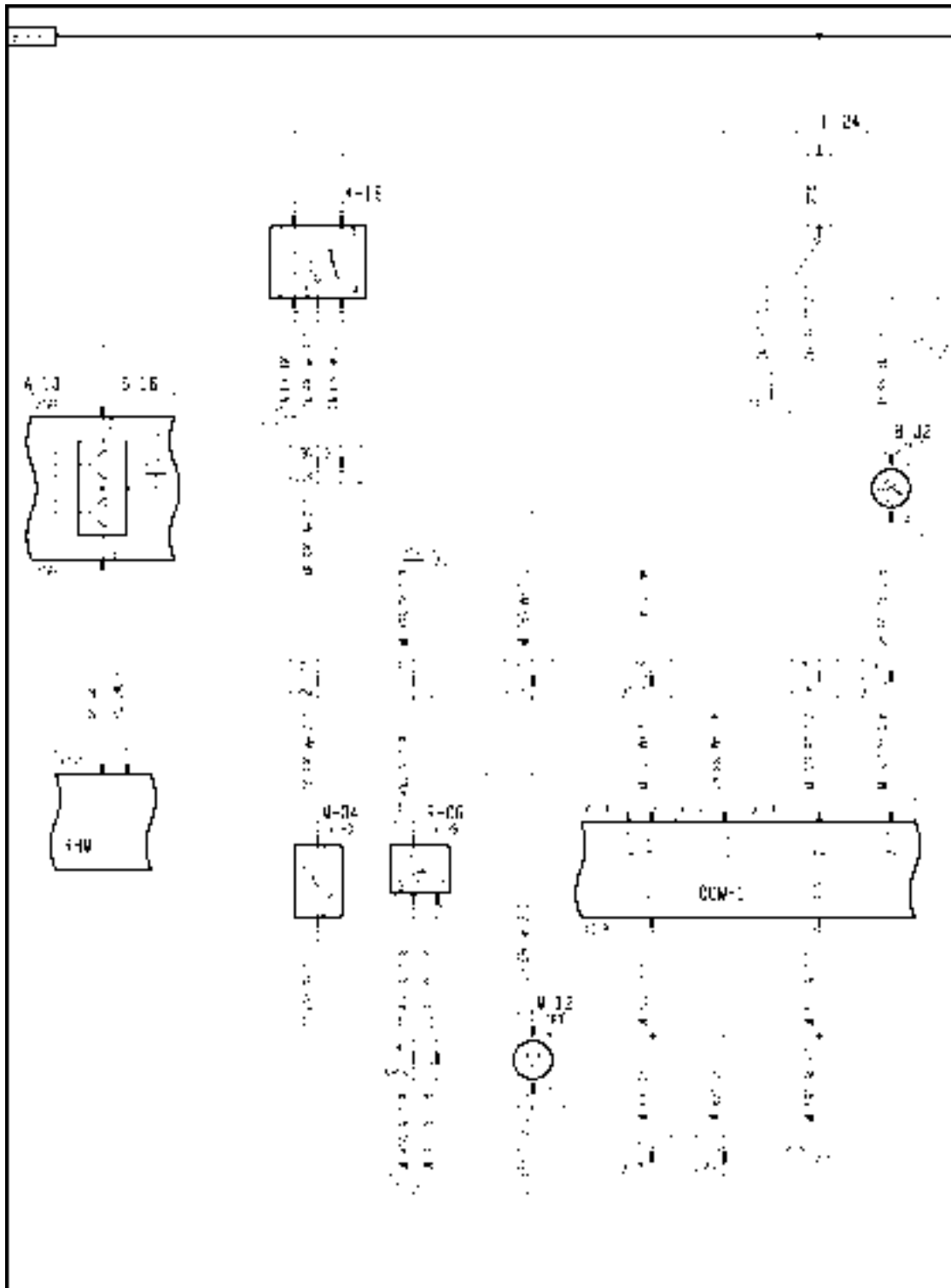
**FRAME 15 - FEEDER**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	B-14 Feeder RPM	D-01 Feeder Engage Diodes
K-19 Feeder Disengage	L-47 Feeder Engine To Ring Clutch	L-48 Feeder Pump Swash Minus
L-49 Feeder Pump Swash Plus	L-50 Feeder Ring To Frame Brake	R-18 Header Speed Potentiometer
S-31 Feeder Engage	S-69 Header Mode Switch	

# Wiring harness - Electrical schematic frame 16 (A.30.A.88 - C.20.E.16)

AFX8010



AFXSCHEM16-04 1

**FRAME 16 - THRESHER**

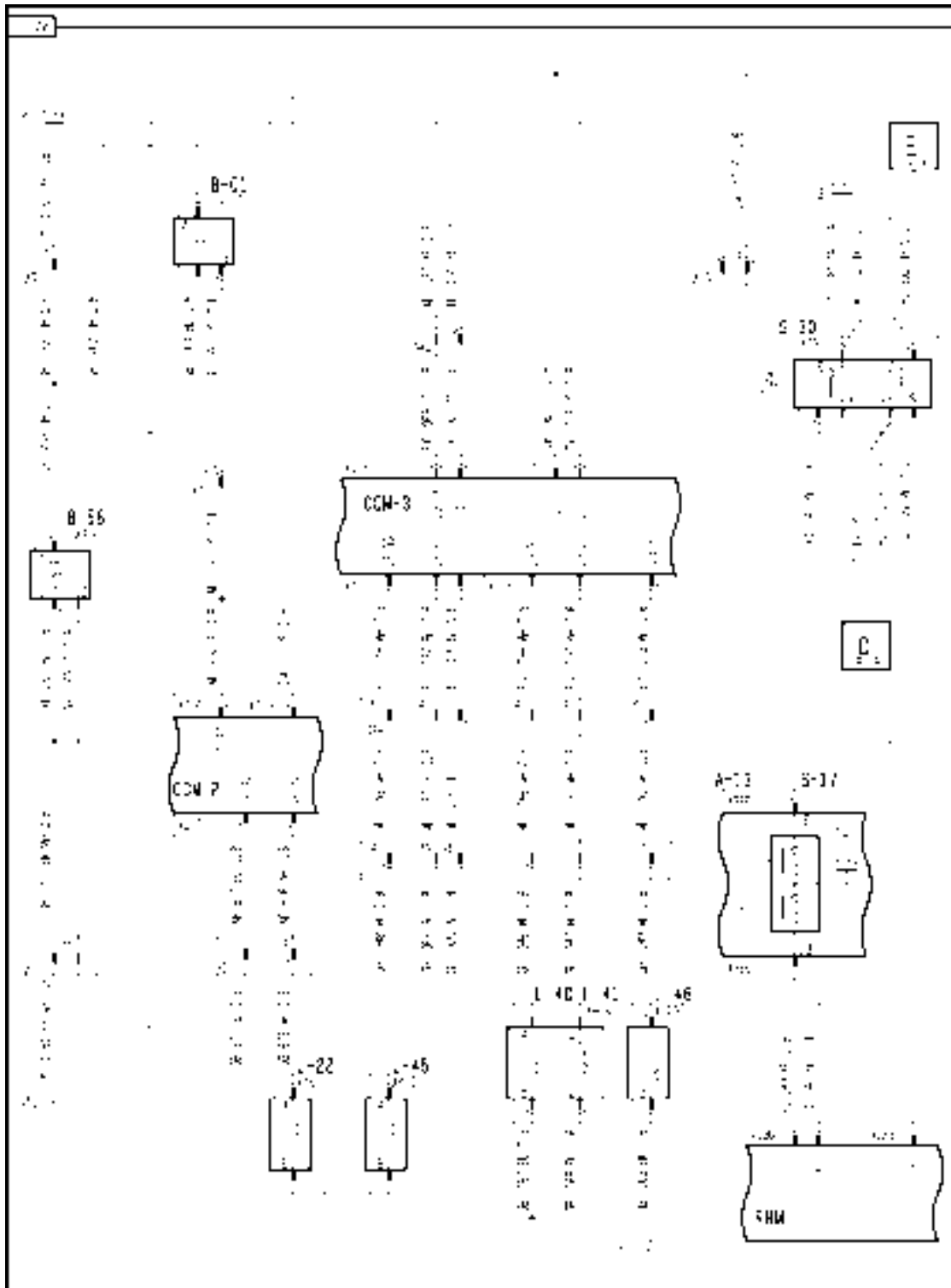


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	B-32 PTO Box Temperature	F-24 Concave / Covers Fuse
K-16 Concave / Covers Relay	M-04 Concave Clearance Motor	M-12 Covers Motor
R-06 Concave Position	S-16 Concave Clearance	

# Wiring harness - Electrical schematic frame 17 (A.30.A.88 - C.20.E.17)

AFX8010



AFXSCHEM17-04 1

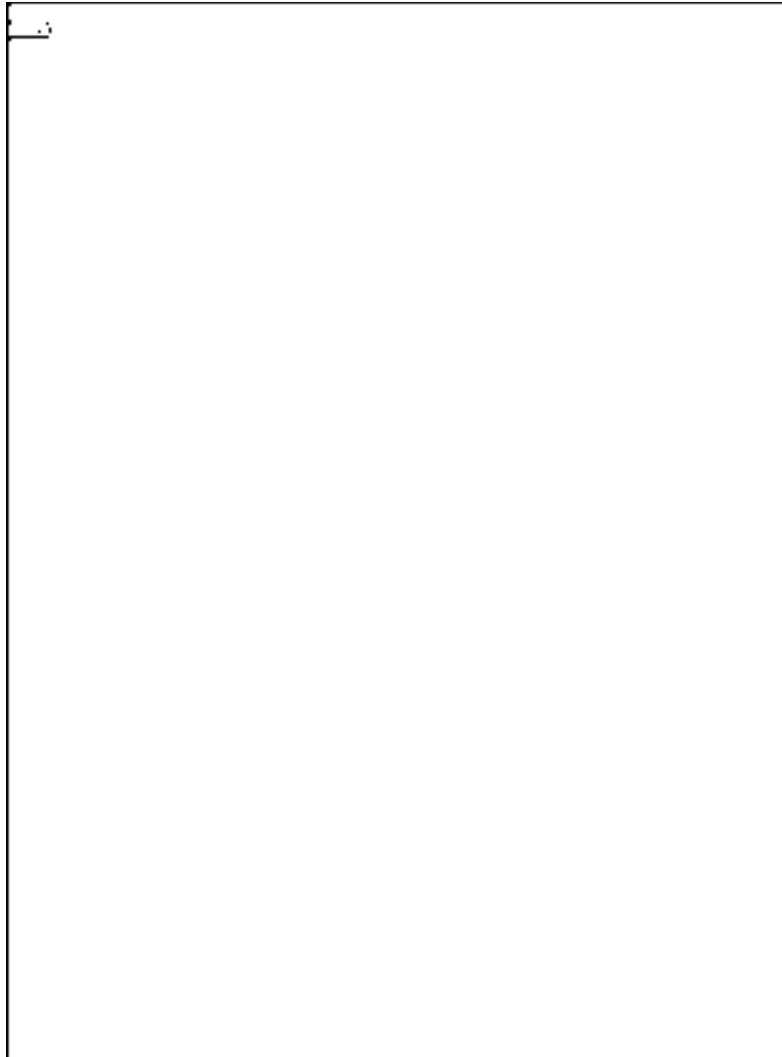
**FRAME 17 - THRESHER**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	B-01 Rotor RPM	B-58 Rotor Hydrostat RPM
L-22 Beater / Chopper Clutch	L-40 Rotor Pump Swash Plus	L-41 Rotor Pump Swash Minus
L-45 Engine to Ring Clutch	L-46 Ring to Frame Brake	S-17 Rotor Speed
S-30 Separator Engage		

# Wiring harness - Electrical schematic frame 18 (A.30.A.88 - C.20.E.18)

AFX8010



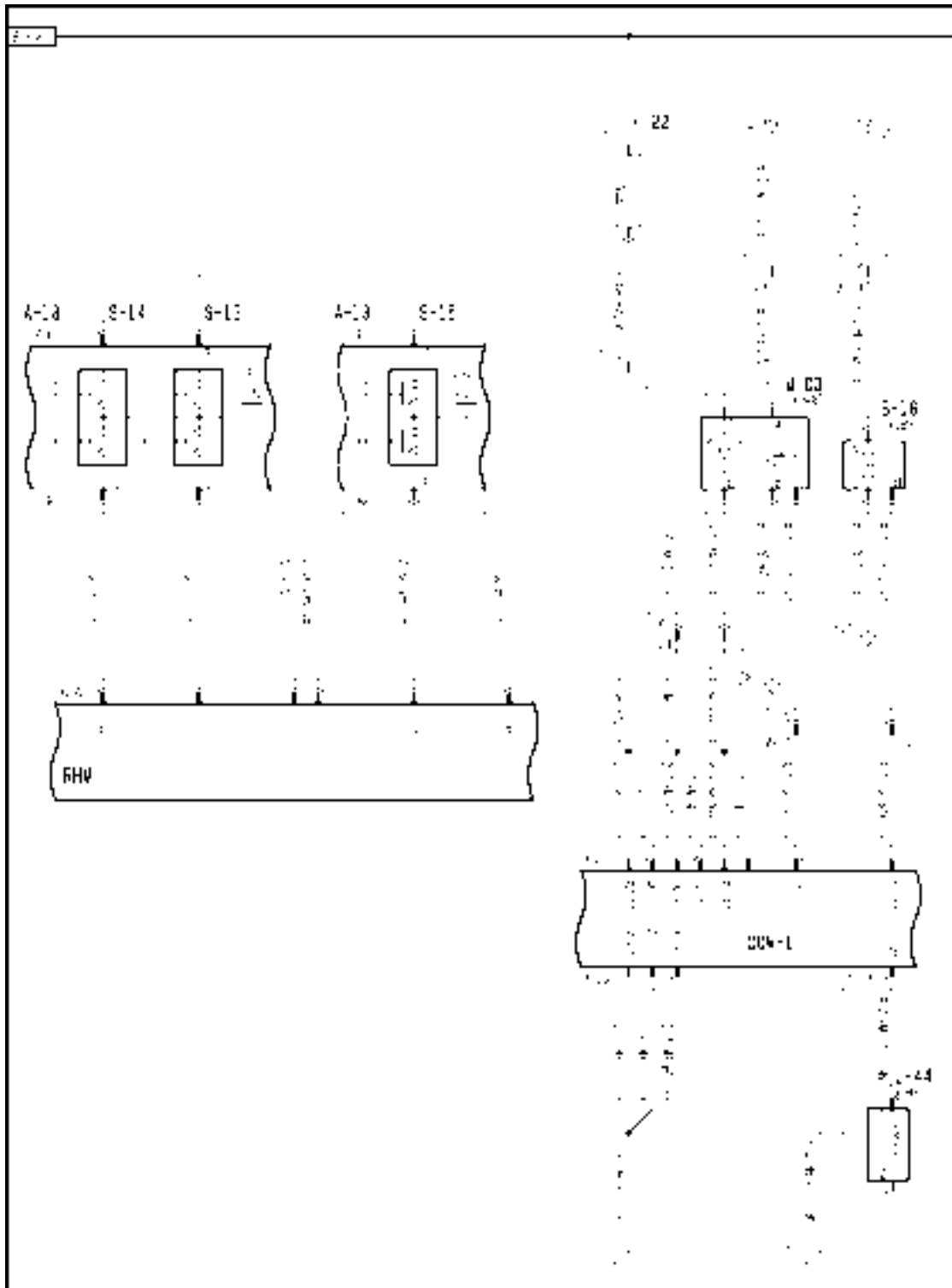
AFXSCHEM18-04 1

**FRAME 18 - BLANK**

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# Wiring harness - Electrical schematic frame 19 (A.30.A.88 - C.20.E.19)

AFX8010



AFXSCHEM19-04 1

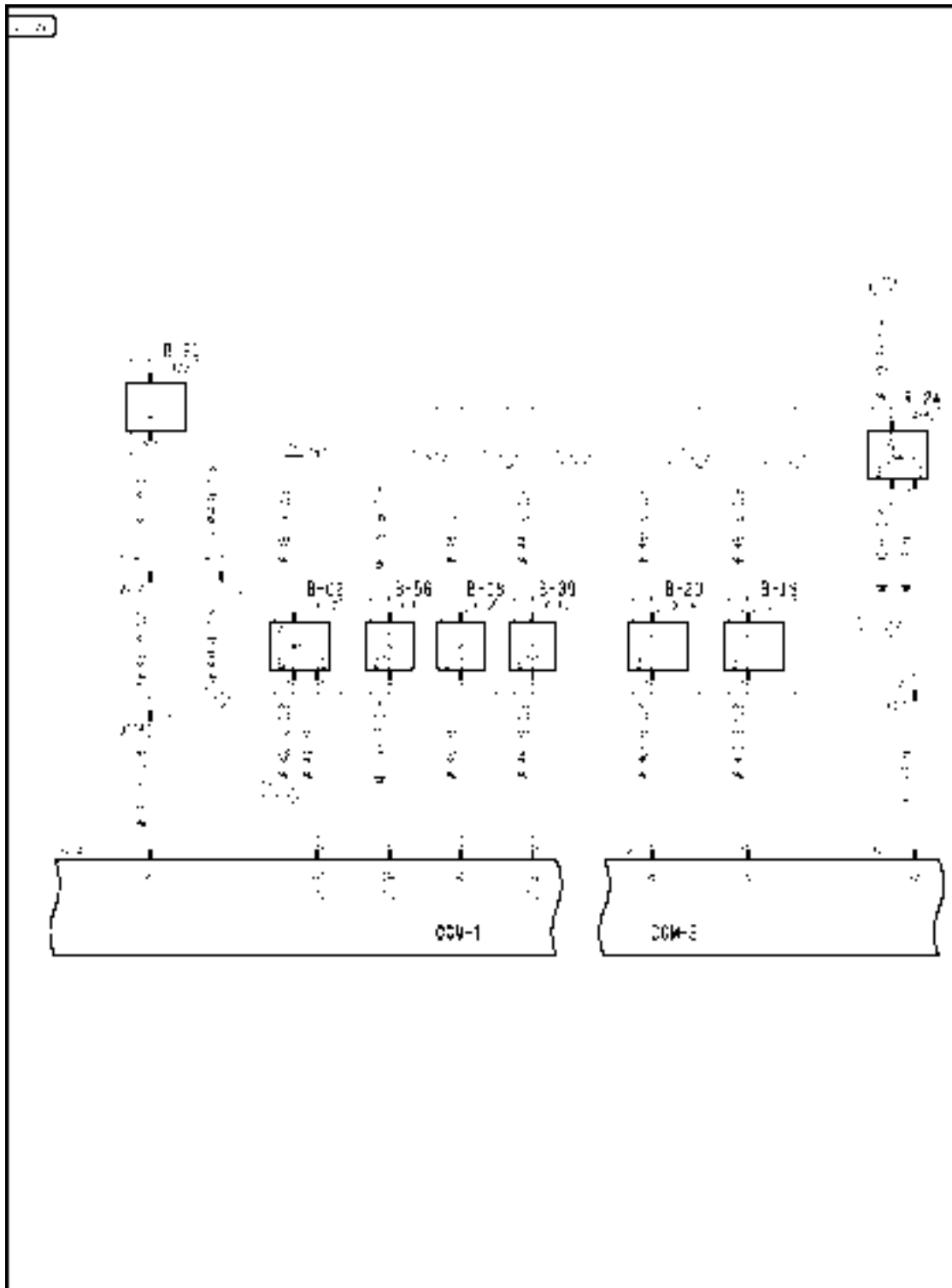
**FRAME 19 - CLEANING**

## DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	A-18 Rear Switch Panel	B-16 Cleaning Fan RPM
F-22 Shoe Levelling Motor Fuse	M-03 Shoe Levelling Actuator	L-44 Fan Drive Solenoid
S-13 Upper Sieve	S-14 Lower Sieve	S-15 Fan Speed

# Wiring harness - Electrical schematic frame 20 (A.30.A.88 - C.20.E.20)

AFX8010



AFXSCHEM20-04 1

## FRAME 20 - CLEANING

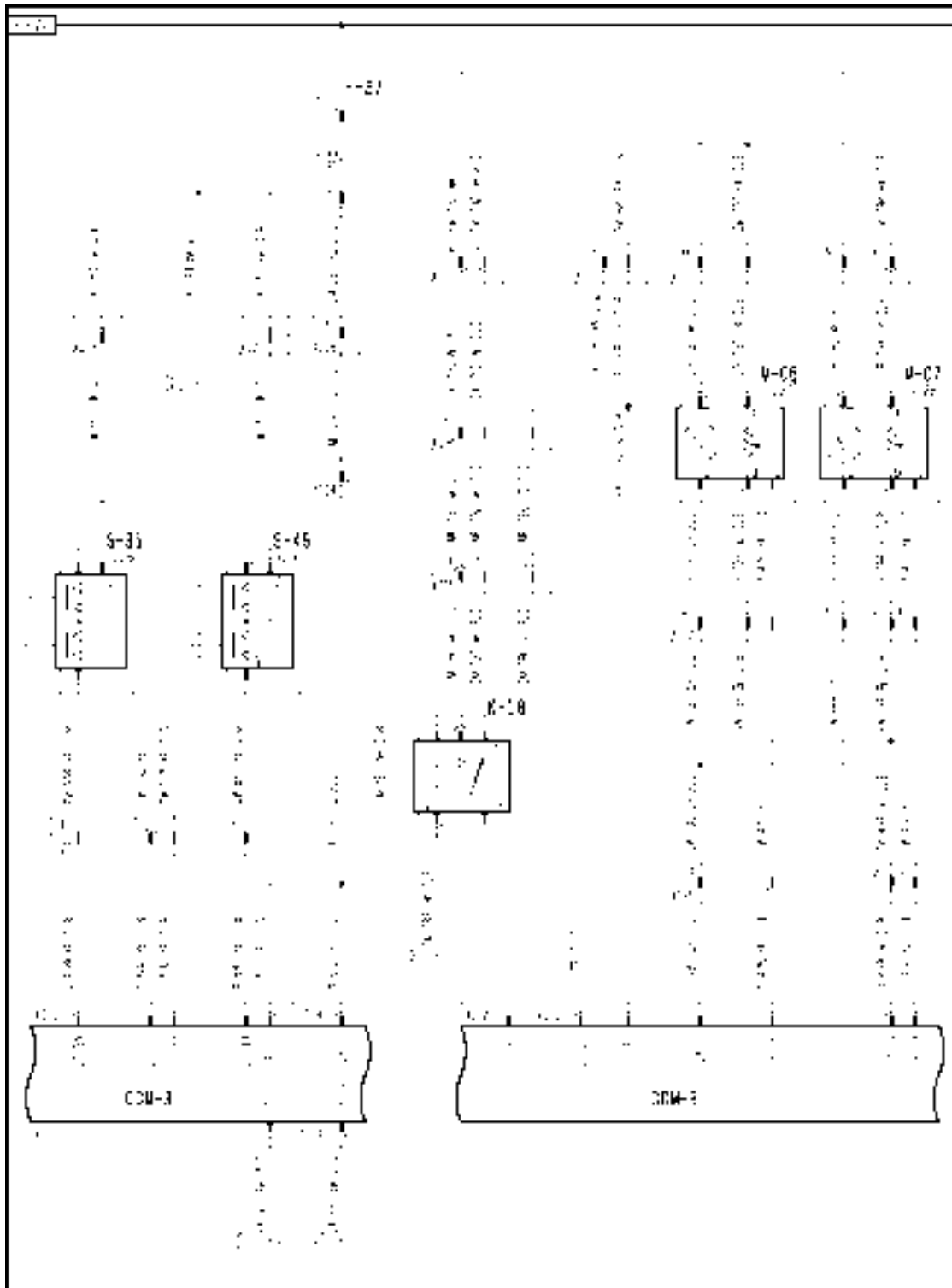
DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-02 Lateral Inclination	B-08 Clean Grain Elevator RPM	B-19 Left Rotor Loss
B-20 Right Rotor Loss	B-21 Sieves Loss	B-39 Tailings RPM
B-56 Sieve Shake RPM	R-24 Tailings Volume	



# Wiring harness - Electrical schematic frame 21 (A.30.A.88 - C.20.E.21)

AFX8010



AFXSCHEM21-04 1

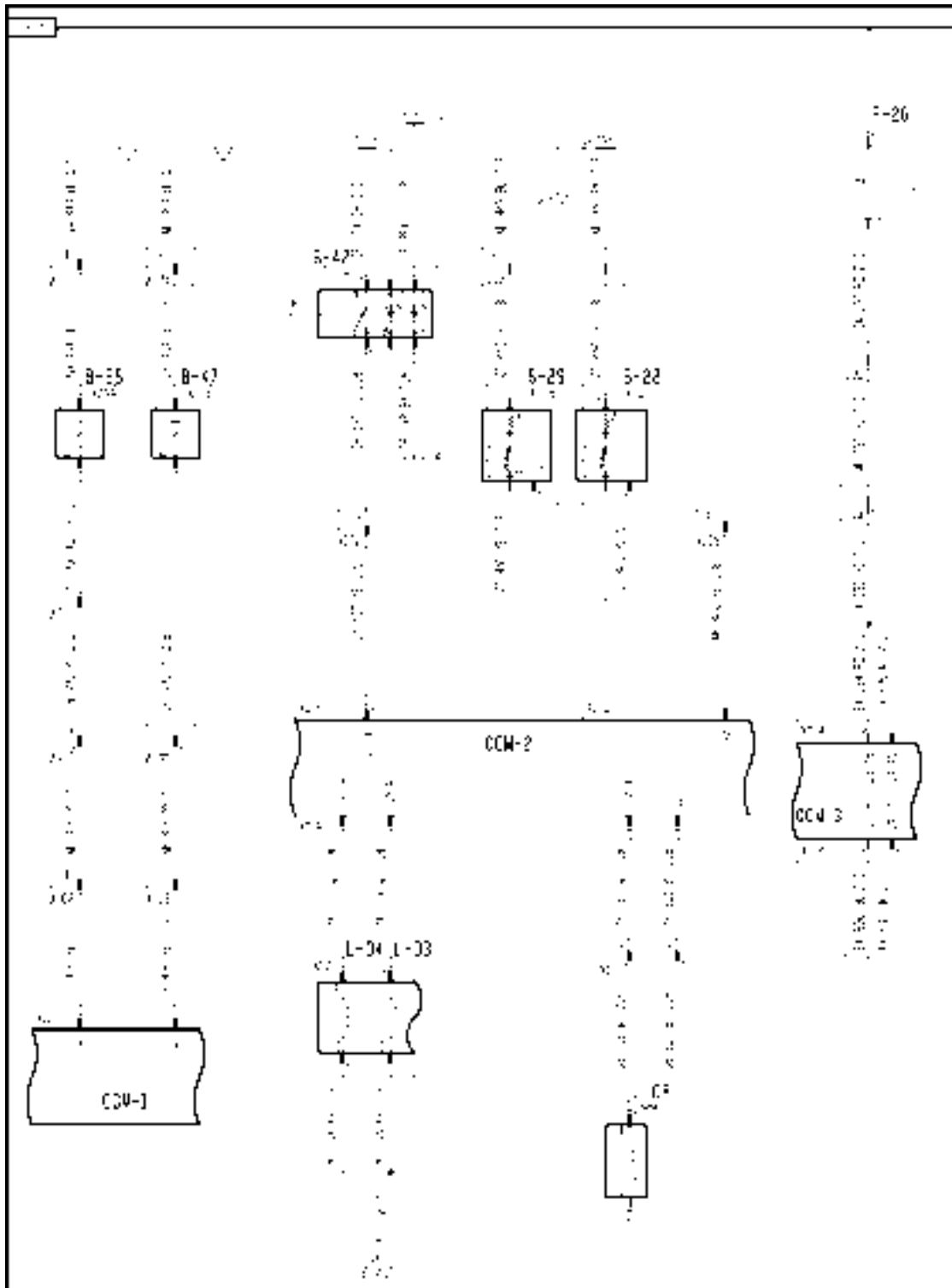
**FRAME 21 - CLEANING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

F-27 Sieve Fuse	K-18 Upper / Lower Sieve Relay	M-06 Upper Sieve Actuator
M-07 Lower Sieve Actuator	S-35 Upper Sieve Rear Adjust	S-46 Lower Sieve Rear Adjust

# Wiring harness - Electrical schematic frame 22 (A.30.A.88 - C.20.E.22)

AFX8010



AFXSCH22-04 1

**FRAME 22 - UNLOAD**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

B-38 Unload Cradle	B-47 Covers Closed	F-26 Not Used
L-03 Unload Tube In	L-04 Unload Tube Out	L-08 Unload Tube Clutch
S-28 Grain Bin 3/4 Full	S-29 Grain Bin Full	S-42 Tank Extensions Switch

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# Wiring harness - Electrical schematic frame 23 (A.30.A.88 - C.20.E.23)

AFX8010



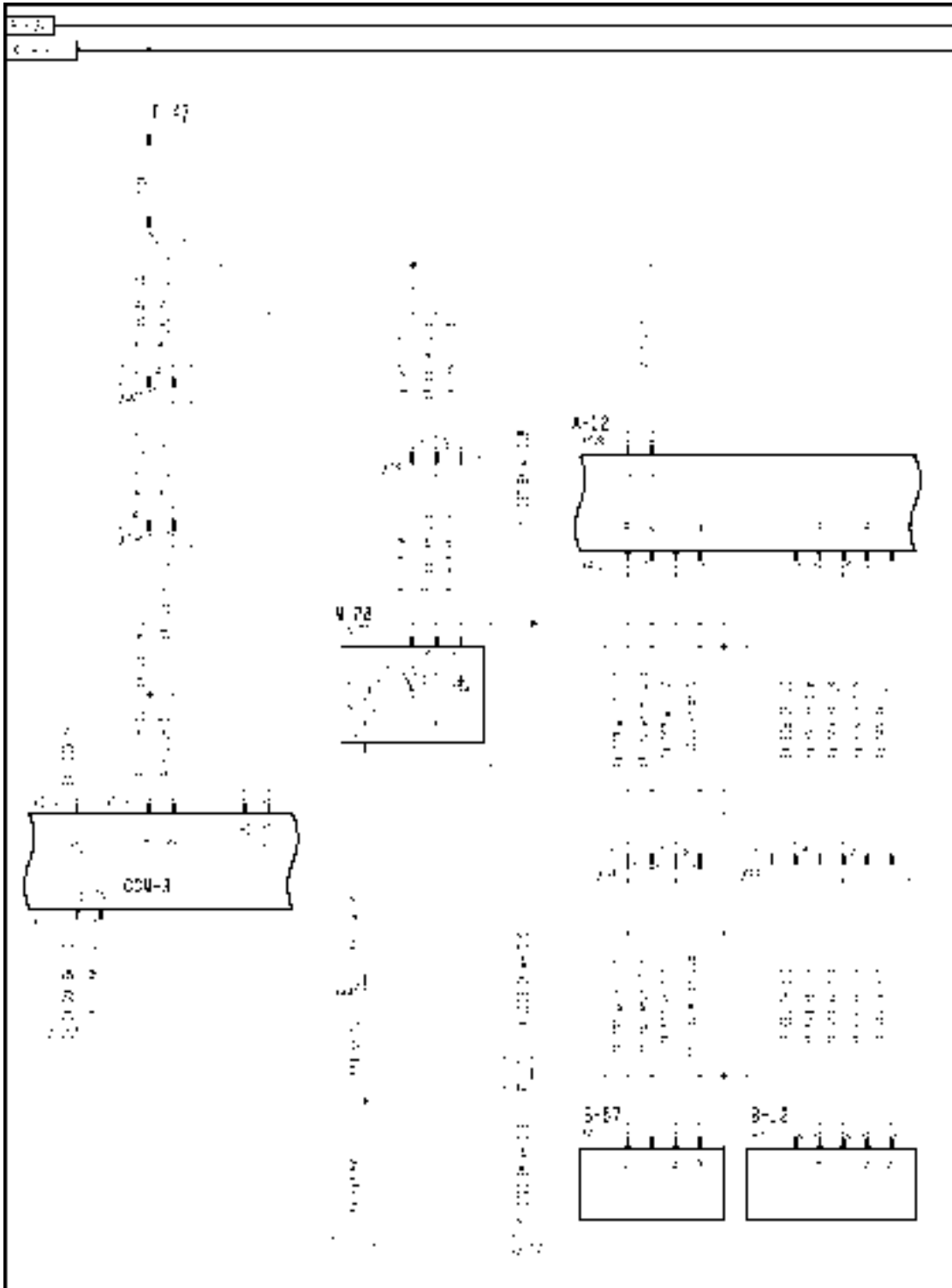
AFXSCHEM23-04 1  
**FRAME 23 - TRASH**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-18 Rear Switch Panel	B-10 Chopper RPM	B-11 Spreader Position
B-55 Spreader RPM	L-28 Chaff Spreader	S-23 Spread Pattern

# Wiring harness - Electrical schematic frame 24 (A.30.A.88 - C.20.E.24)

AFX8010



AFXSCHEM24-04 1

**FRAME 24 - PRECISION**

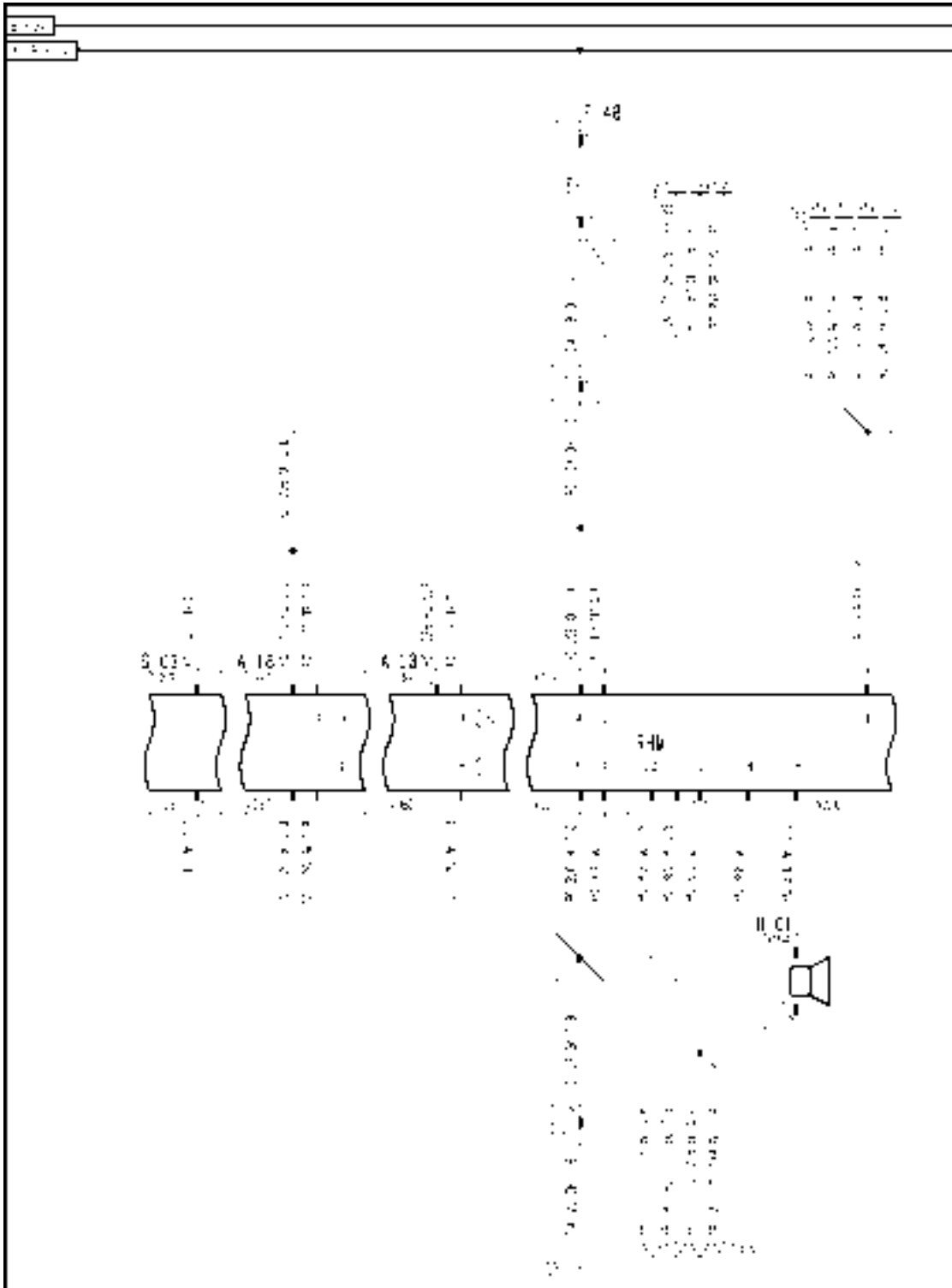
DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-12 YMIU Module	B-12 Moisture Sensor	B-57 Yield Sensor
F-47 CCM3 Fuse	M-28 Sample Motor	



# Wiring harness - Electrical schematic frame 25 (A.30.A.88 - C.20.E.25)

AFX8010



AFXSCHEM25-04 1

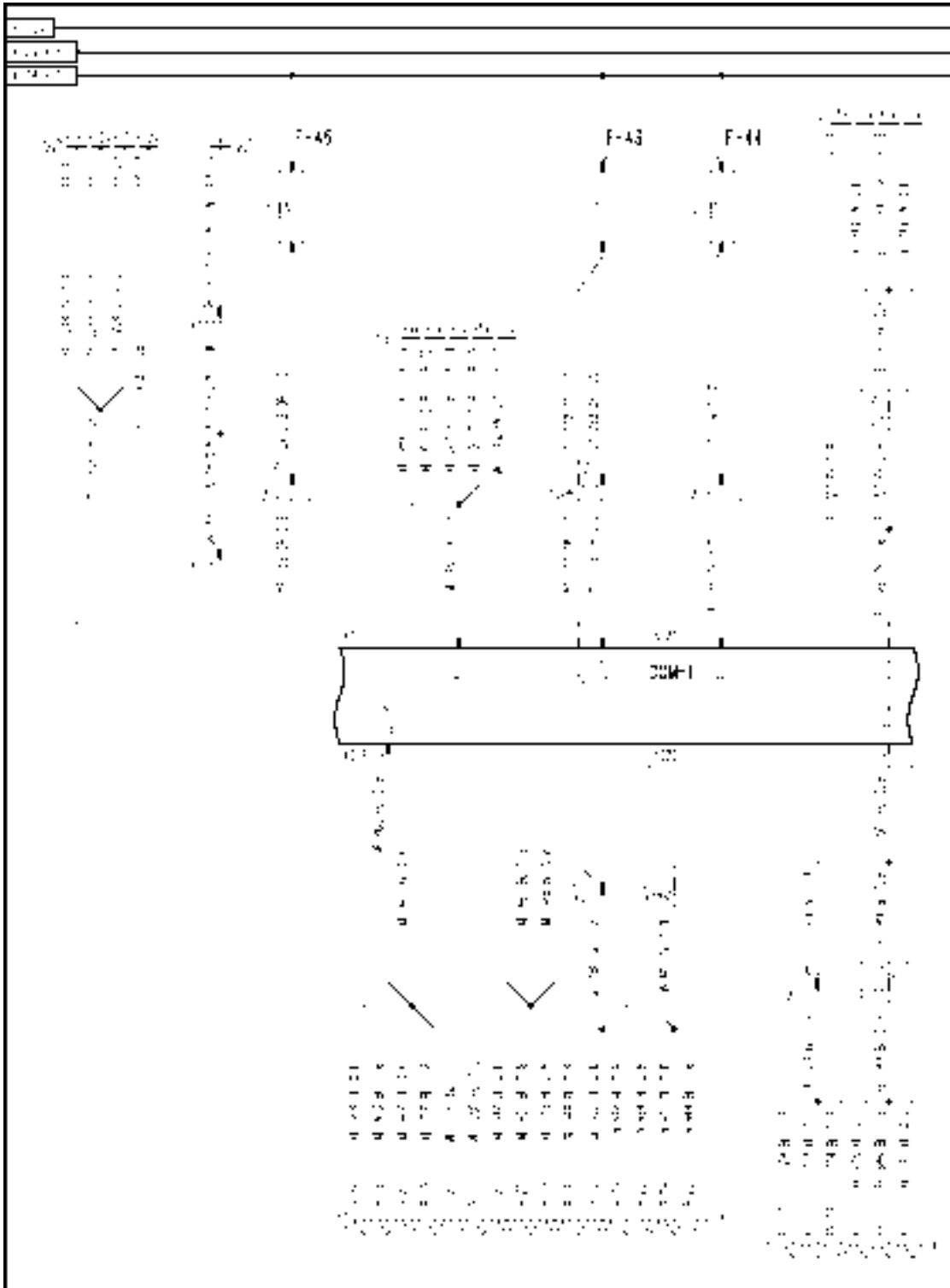
**FRAME 25 - DISTRIBUTION**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-13 Front Switch Panel	A-18 Rear Switch Panel	F-48 RH Console Fuse
H-01 Audio Alarm	S-03 Propulsion Handle	

# Wiring harness - Electrical schematic frame 26 (A.30.A.88 - C.20.E.26)

AFX8010



AFXSCHEM26-04 1

**FRAME 26 - DISTRIBUTION**

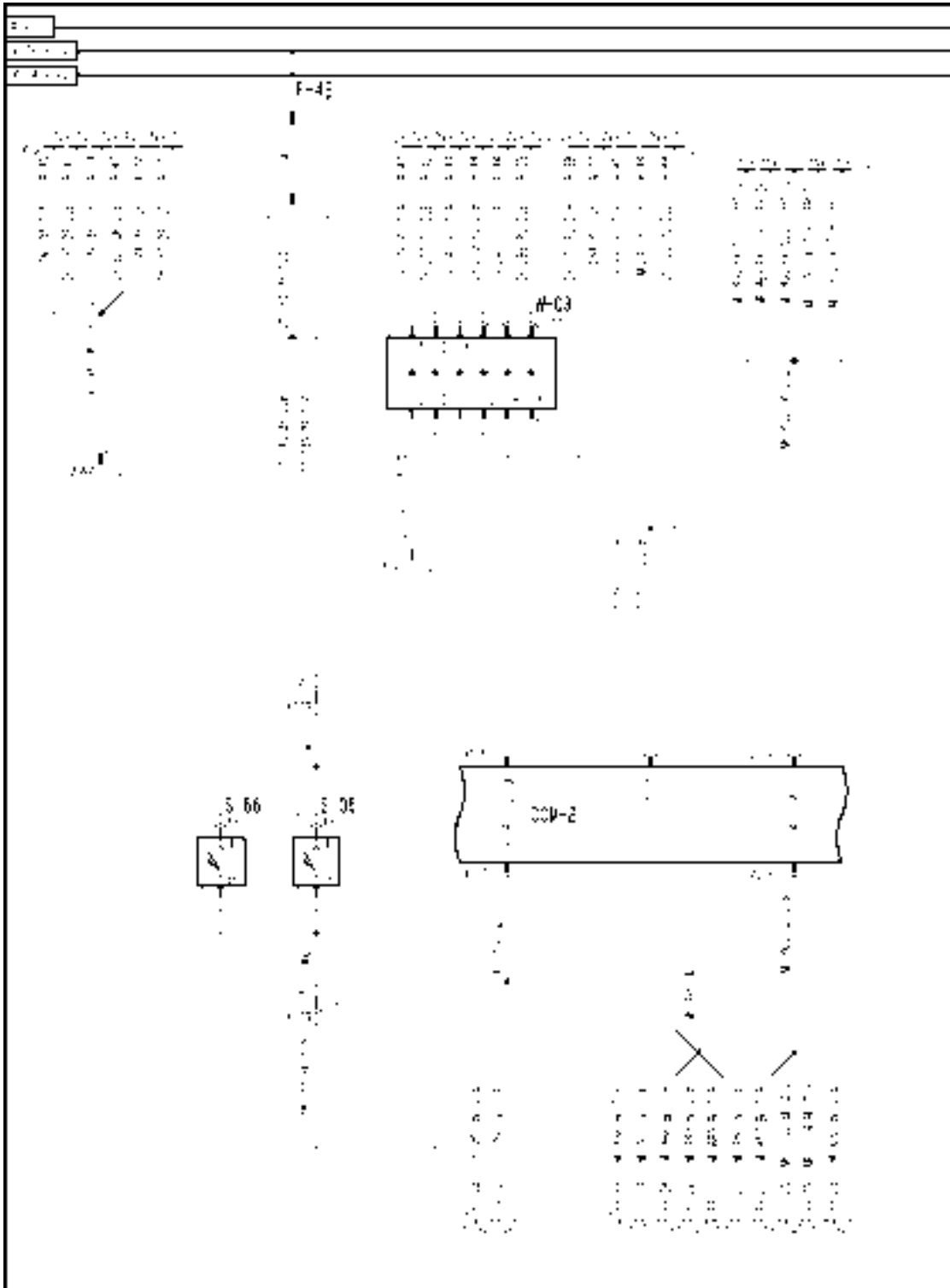
F-43 CCM1a Fuse

F-44 CCM1b

F-45 GPS Antenna Fuse

# Wiring harness - Electrical schematic frame 27 (A.30.A.88 - C.20.E.27)

AFX8010



AFXSCHEM27-04 1

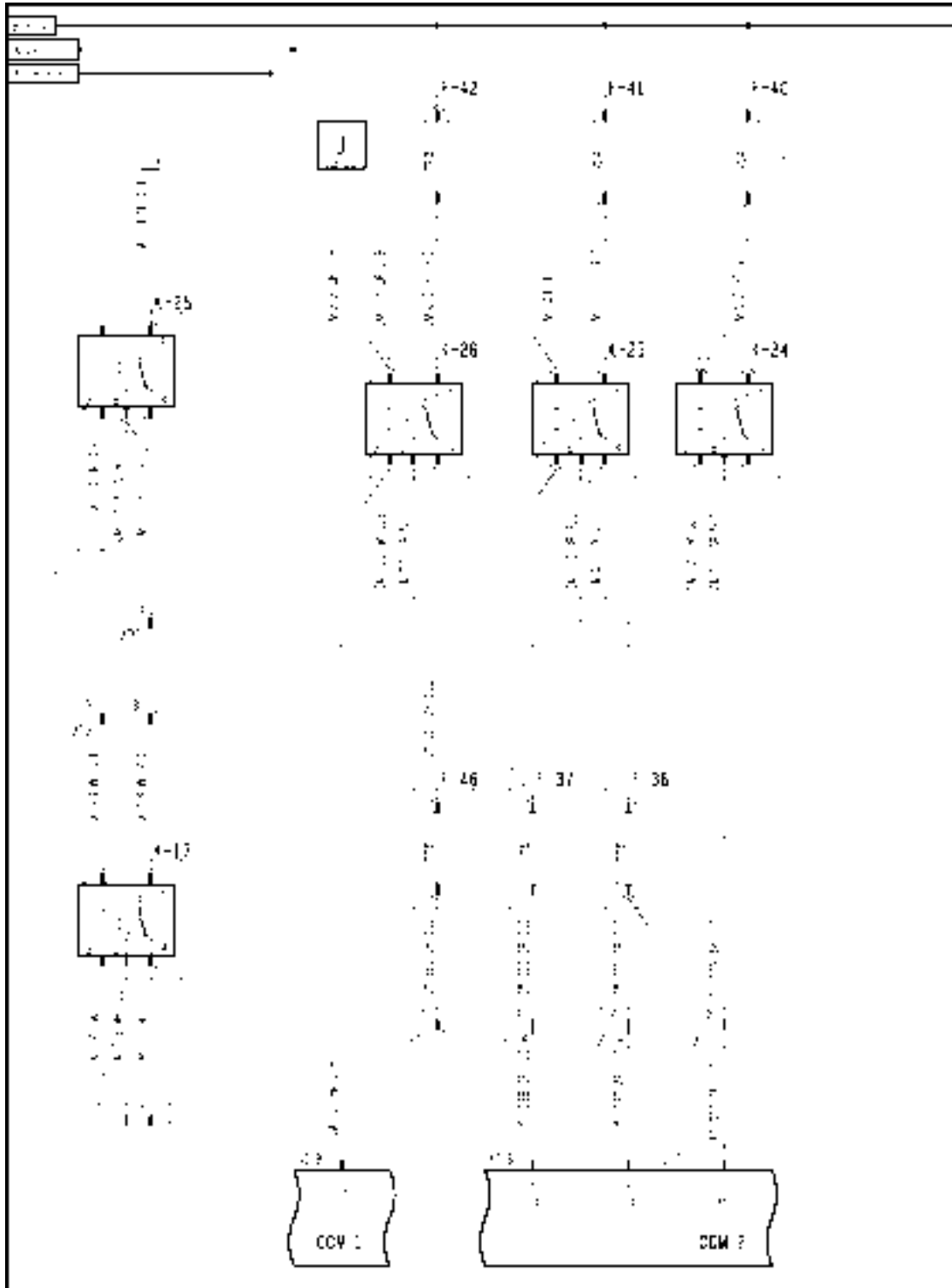
**FRAME 27 - DISTRIBUTION**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

F-49 Cab Fuse	S-05 Seat Switch	S-66 Second Seat Switch
	W-03 Splice Block C (backlighting)	

# Wiring harness - Electrical schematic frame 28 (A.30.A.88 - C.20.E.28)

AFX8010



AFXSCHEM28-04 1

**FRAME 28 - DISTRIBUTION**

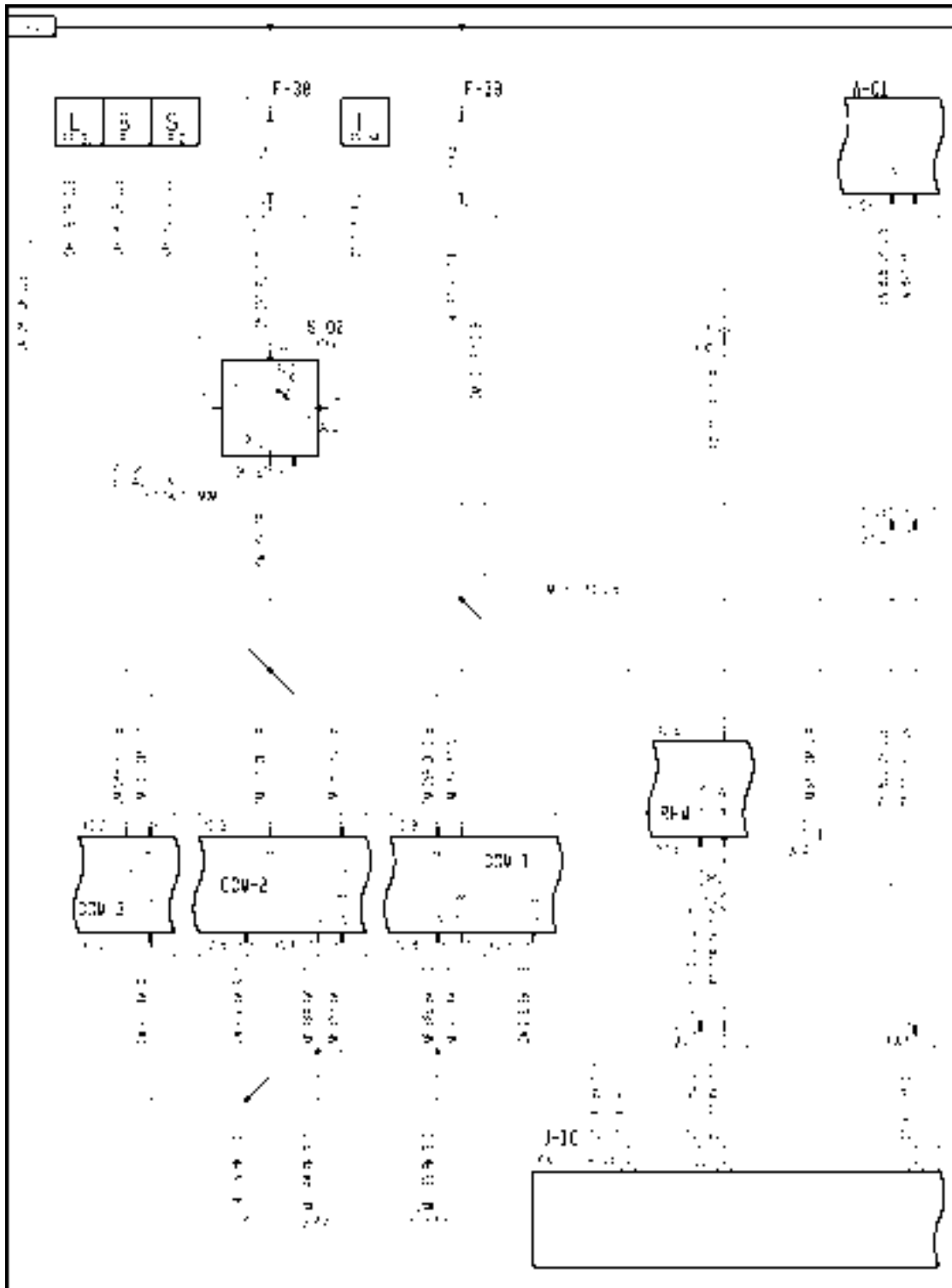
DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

F-36 CCM2a Fuse	F-37 CCM2b Fuse	F-40 CCM1 Power Fuse
F-41 CCM2 Power Fuse	F-42 CCM3, Cab Power Fuse	F-46 Not Used
K-17 Not Used	K-24 CCM1 Power Relay	K-25 CCM2 Power Relay
K-26 CCM3, Cab Power Relay	K-28 Not Used	



# Wiring harness - Electrical schematic frame 29 (A.30.A.88 - C.20.E.29)

AFX8010



AFXSCHEM29A-04 1

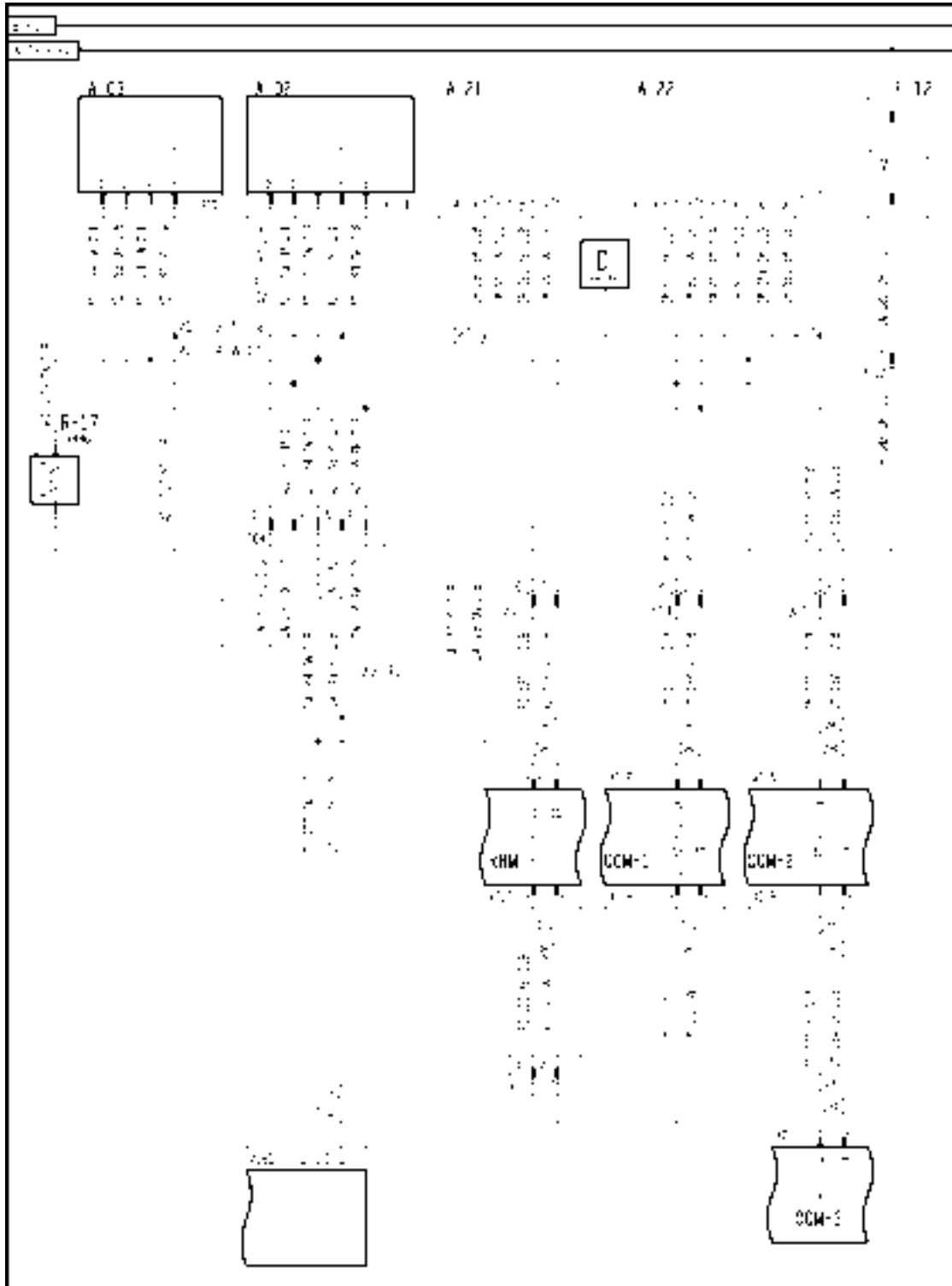
**FRAME 29 - DISTRIBUTION**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-01 Iveco ECU	F-38 Key Switch Fuse	F-39 Memory (KAPwr)
J-10 Diagnostic Outlet	S-02 Key Switch	

# Wiring harness - Electrical schematic frame 30 (A.30.A.88 - C.20.E.30)

AFX8010



AFXSCHEM30-04 1

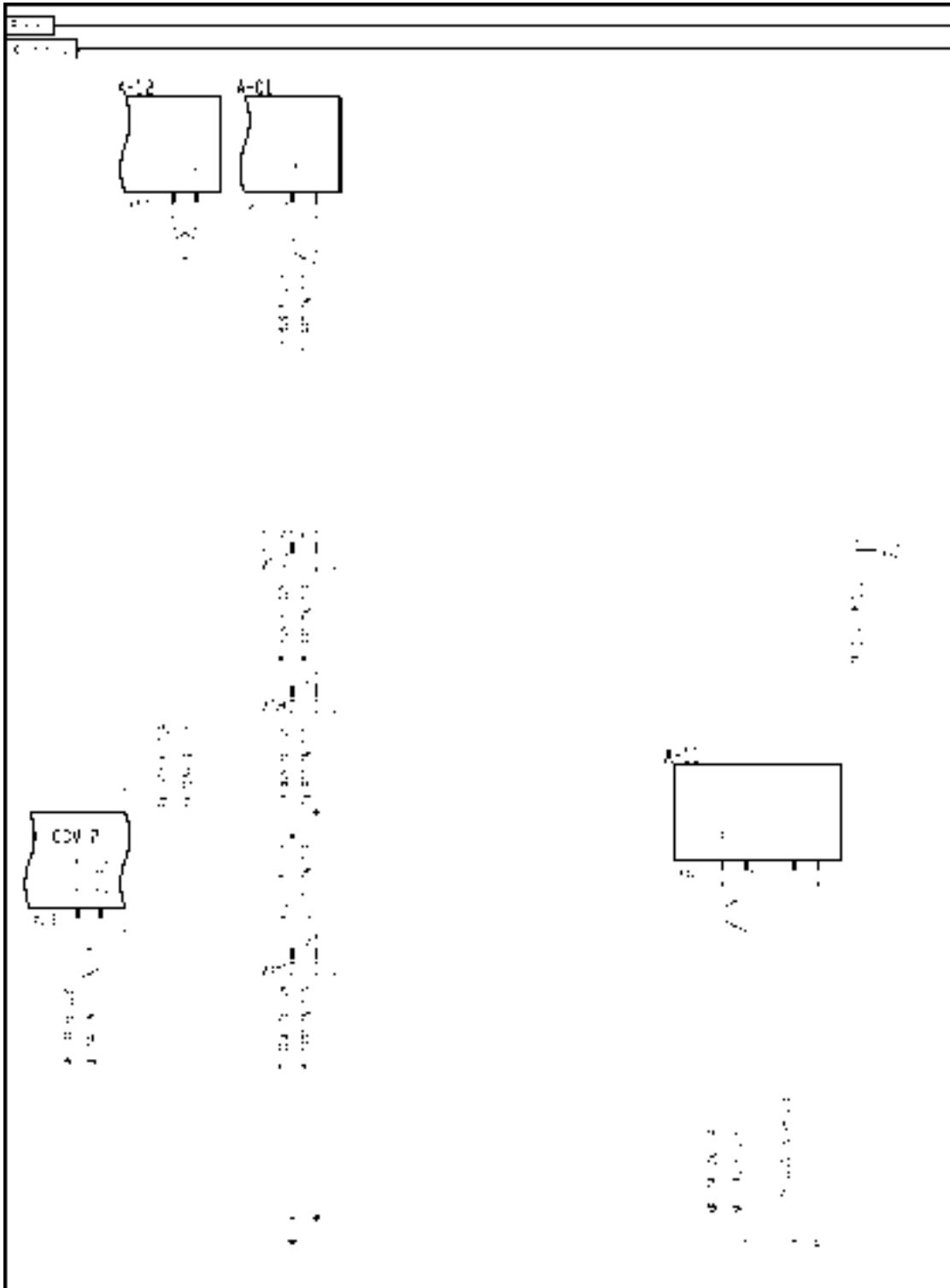
**FRAME 30 - DISTRIBUTION**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-02 Universal Display Plus	A-03 Shaft Speed Monitor	A-21 Future Option
A-22 Future Option	F-12 Future Option	R-17 Cab CAN Termination

# Wiring harness - Electrical schematic frame 31 (A.30.A.88 - C.20.E.31)

AFX8010



AFXSCHEM31A-04 1

**FRAME 31 - DISTRIBUTION**

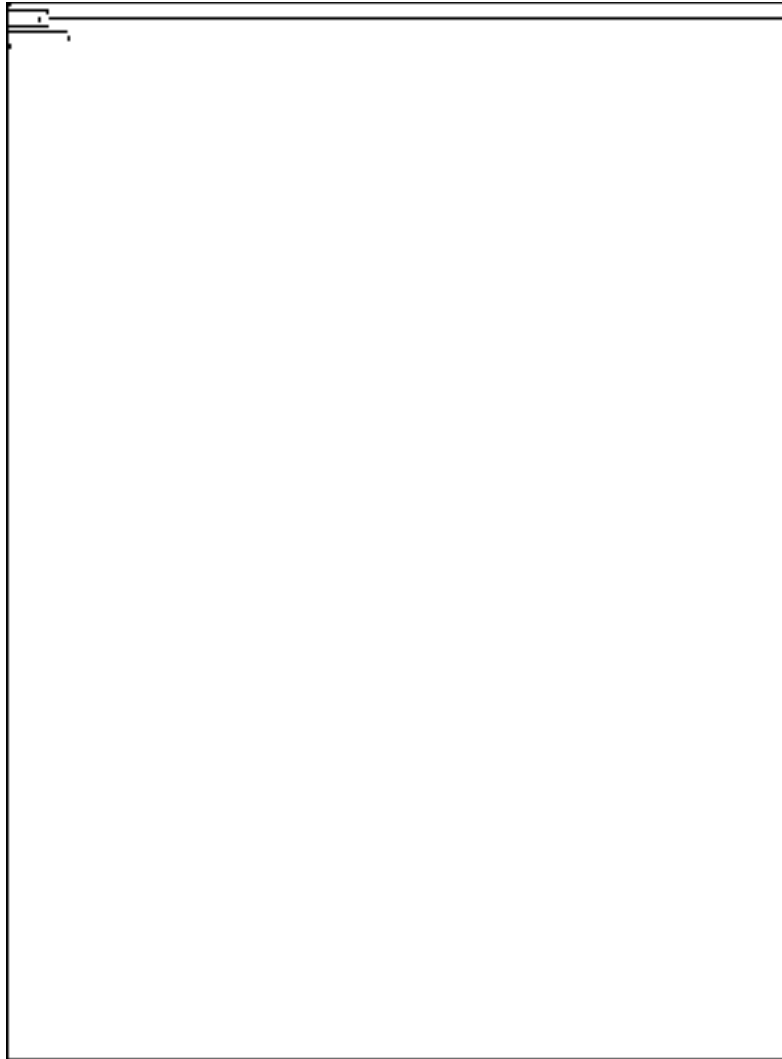
A-01 Iveco ECU

A-11 GPS Module

A-12 YMIU Module

# Wiring harness - Electrical schematic frame 32 (A.30.A.88 - C.20.E.32)

AFX8010

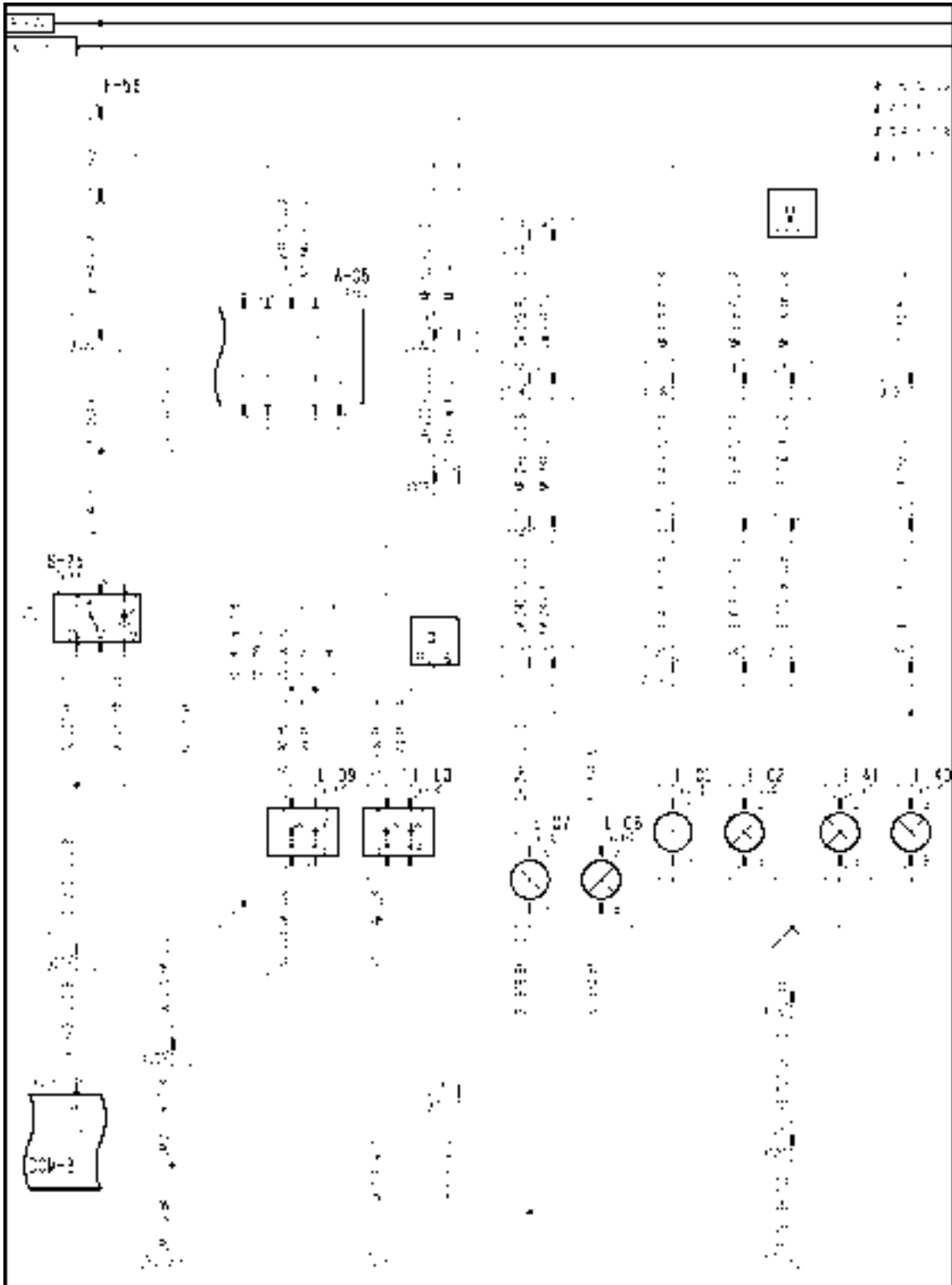


AFXSCHEM32-04 1  
**FRAME 32 - BLANK**

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# Wiring harness - Electrical schematic frame 33 (A.30.A.88 - C.20.E.33)

AFX8010



AFXSCHEM33-04 1

**FRAME 33 - LIGHTING**

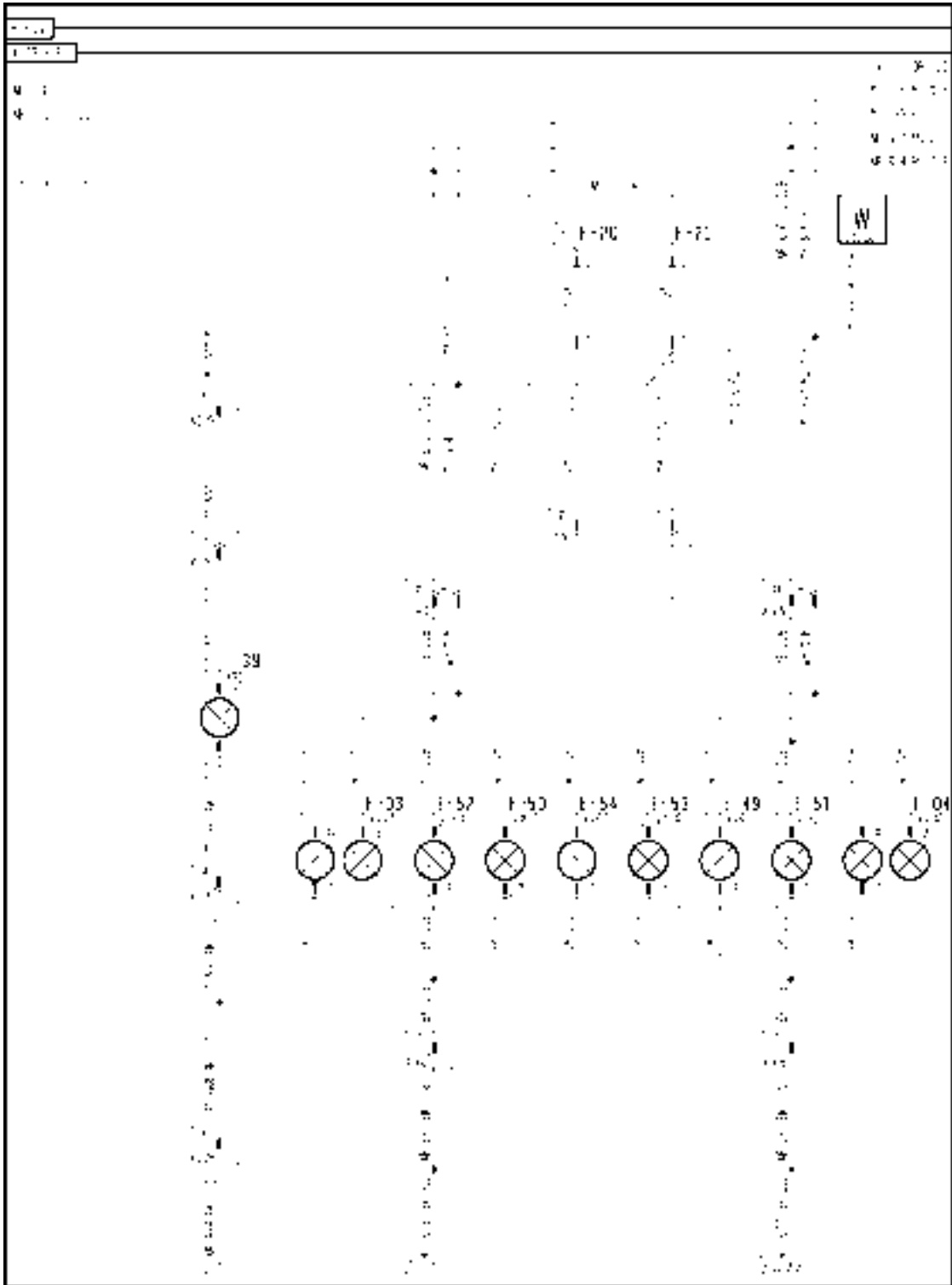


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-05 Flasher Module	E-01 LH Header Flashing Lamp (NA)	E-02 RH Header Flashing Lamp (NA)
E-07 LH Flashing Lamp (NA)	E-08 RH Flashing Lamp (NA)	E-09 Turn Indicator
E-10 High Beam Indicator	E-40 Header LH Marker Light (EU)	E-41 Header RH Marker Light (EU)
F-56 Hazard Lights Fuse	S-25 Hazard Switch	

# Wiring harness - Electrical schematic frame 34 (A.30.A.88 - C.20.E.34)

AFX8010



AFXSCHM34-04 1

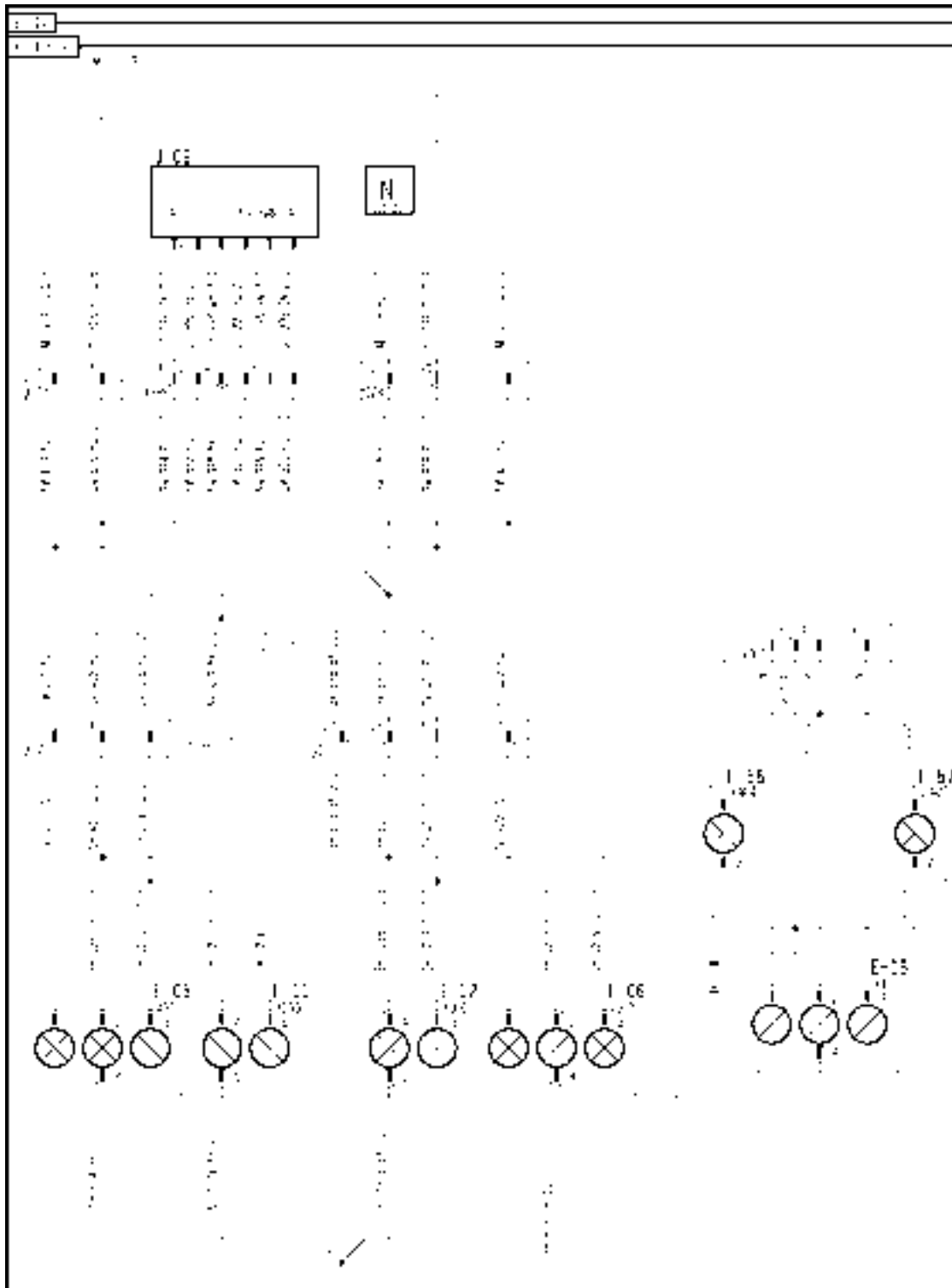
**FRAME 34 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-03 LH Front Hazard Lamp	E-04 RH Front Hazard Lamp	E-39 Unload Tube Marker Light (France)
E-49 RH Position Marker Lamp (EU)	E-50 LH Position Marker Lamp (EU)	E-51 RH Flashing Lamp (EU)
E-52 LH Flashing Lamp (EU)	E-53 RH Front Austria Marker Lamp	E-54 LH Front Austria Marker Lamp
F-20 LH Marker / Tail Lights Fuse	F-21 RH Marker / Tail Lights Fuse	

# Wiring harness - Electrical schematic frame 35 (A.30.A.88 - C.20.E.35)

AFX8010



AFXSCHEM35-04 1

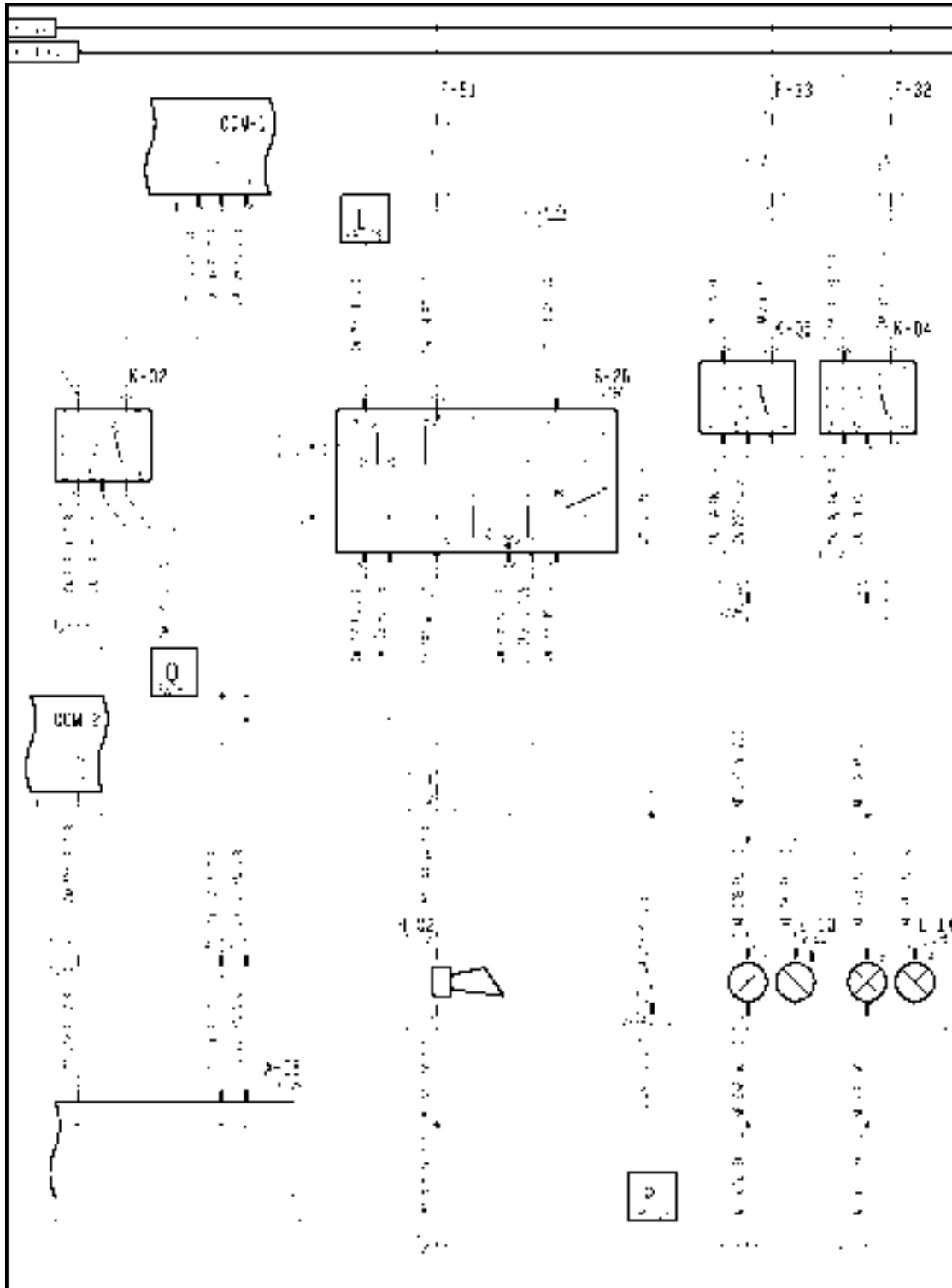
**FRAME 35 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-05 LH Rear Flashing Lamp (EU)	E-06 RH Rear Flashing Lamp (EU)	E-11 LH Brake / Tail Lamp (NA)
E-12 RH Brake / Tail Lamp (NA)	E-57 RH License Plate Lamp (EU)	E-58 LH License Plate Lamp (EU)
	J-09 Trailer Outlet	

# Wiring harness - Electrical schematic frame 36 (A.30.A.88 - C.20.E.36)

AFX8010



AFXSCHEM36-04 1

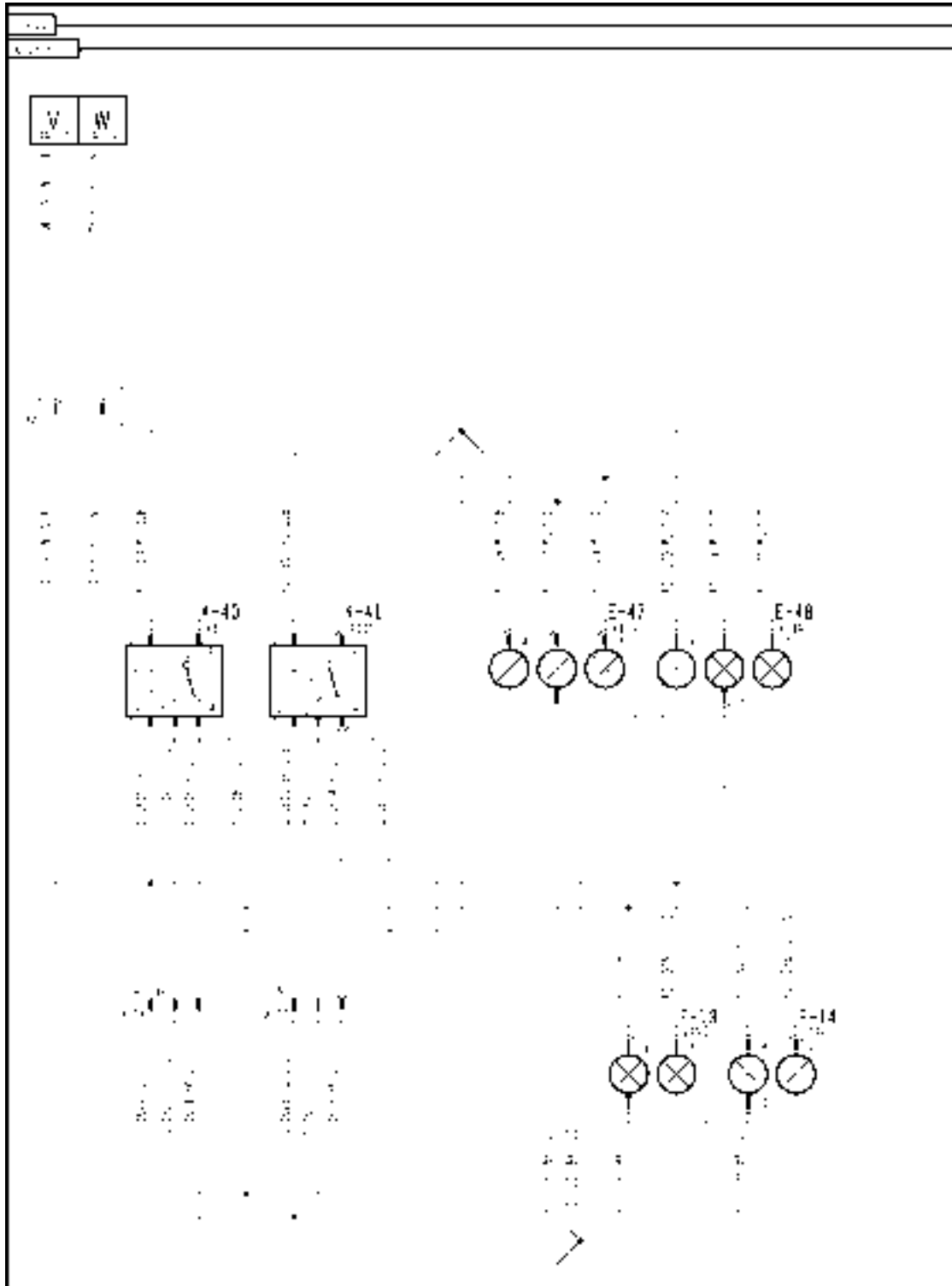
**FRAME 36 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-05 Flasher Module	E-13 LH Road Light (EU)	E-14 RH Road Light (EU)
F-32 High Beam Fuse	F-33 Low Beam Fuse (EU)	F-51 Horn, Marker Lights Fuse
H-02 Horn	K-02 Light Control Relay	K-04 High Beam Relay (EU)
K-05 Low Beam Relay (EU)	S-26 Road Light Switch	

# Wiring harness - Electrical schematic frame 37 (A.30.A.88 - C.20.E.37)

AFX8010



AFXSCH37-04 1

**FRAME 37 - LIGHTING**

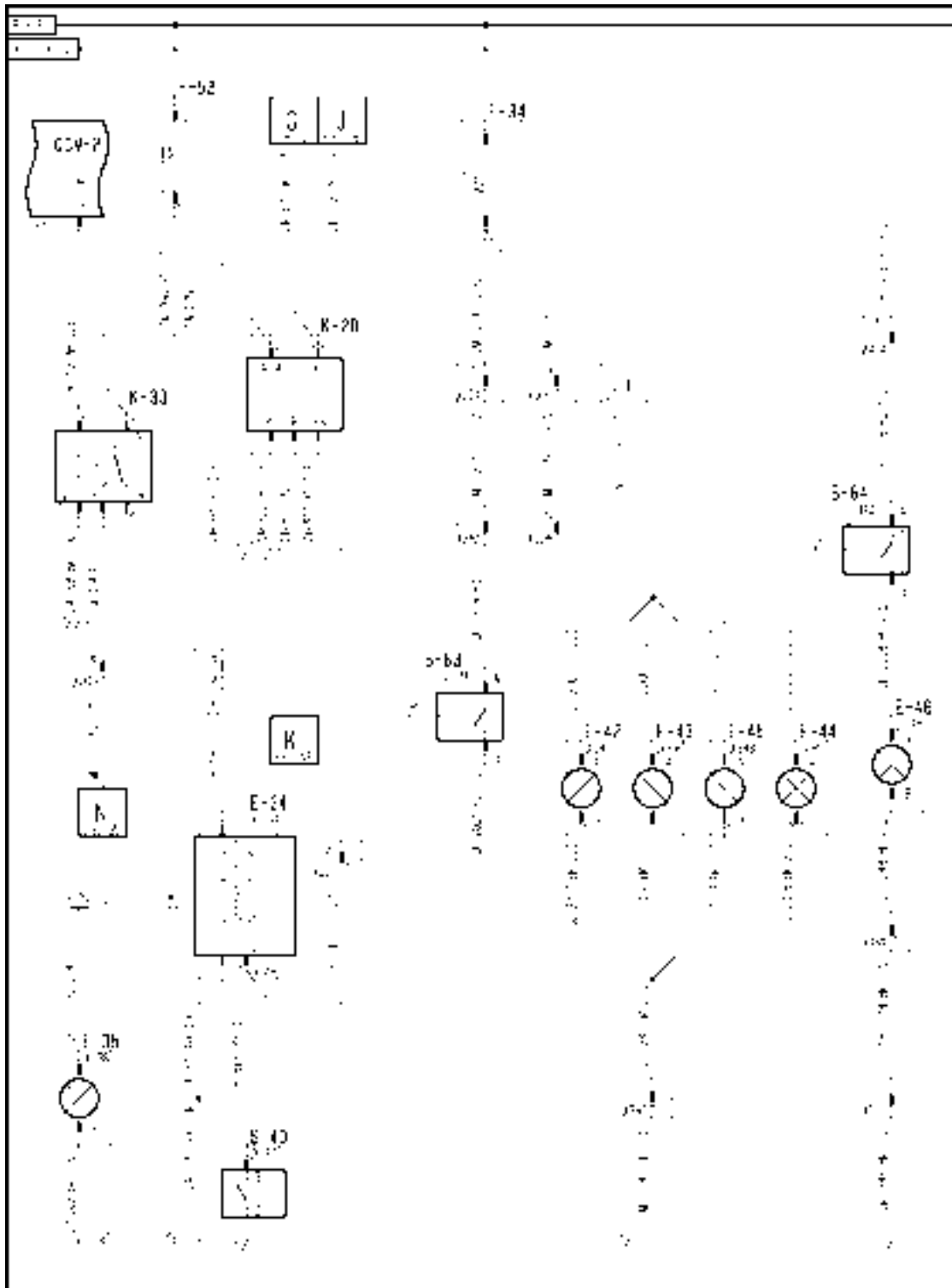


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-13 LH Road Light (EU)	E-14 RH Road Light (EU)	E-47 LH Flip Up Road Light
E-48 RH Flip Up Road Light	K-40 Flip Up Low Beam Relay	K-41 Flip Up High Beam Relay

# Wiring harness - Electrical schematic frame 38 (A.30.A.88 - C.20.E.38)

AFX8010



AFXSCHEM38-04 1

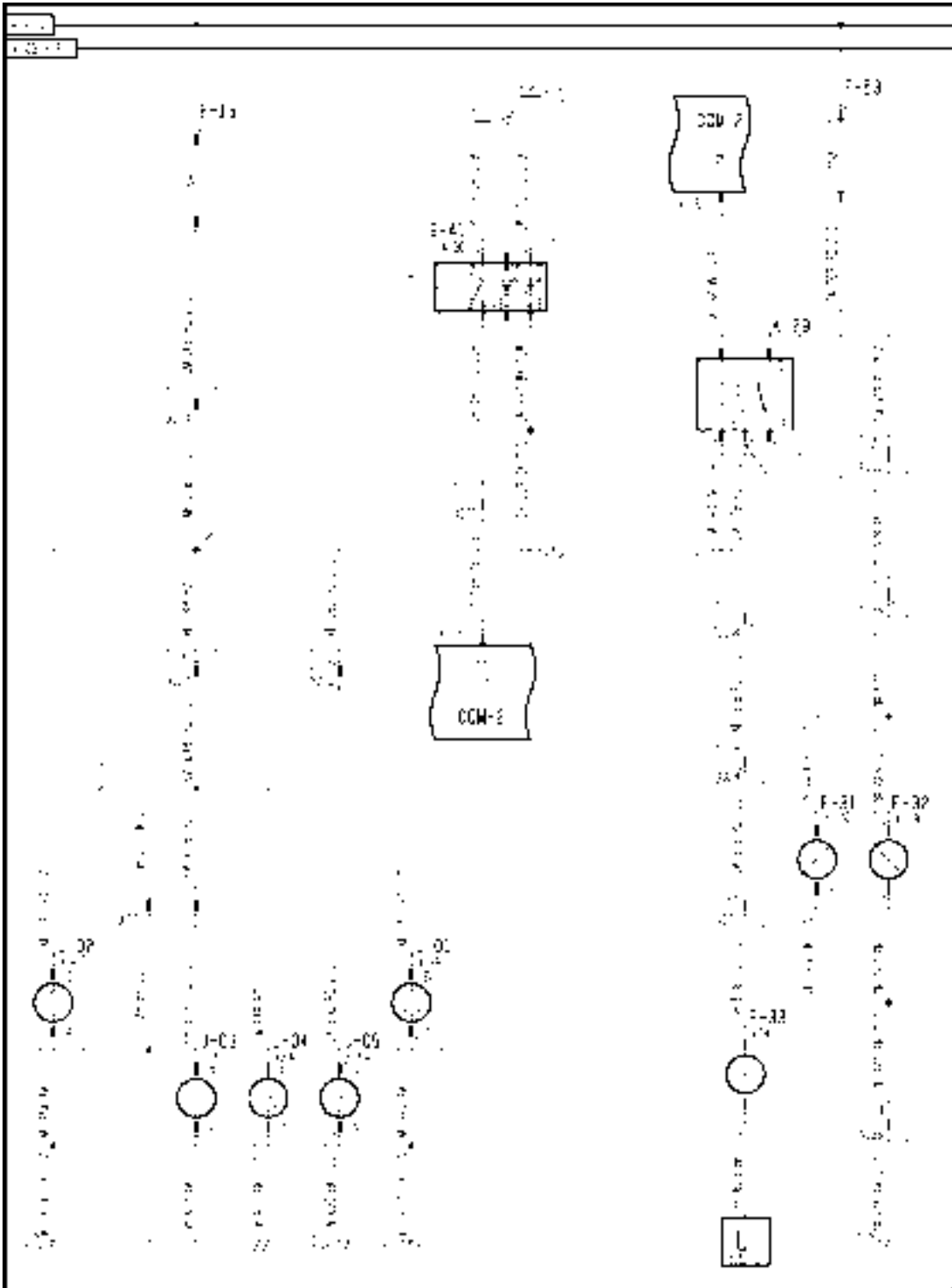
**FRAME 38 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-34 Dome Light	E-35 Console Light	E-42 LH Front Shield Light
E-43 LH Rear Shield Light	E-44 RH Front Shield Light	E-45 RH Rear Shield Light
E-46 Engine Light	F-34 Under Shield Lights Fuse	F-52 Dome / Brake Lights Fuse
K-20 Time Delay Module	K-33 Brake Lights Relay	S-40 LH Door Switch
S-63 Under Shield Light Switch	S-64 Engine Light Switch	

# Wiring harness - Electrical schematic frame 39 (A.30.A.88 - C.20.E.39)

AFX8010



AFXSCHEM39-04 1

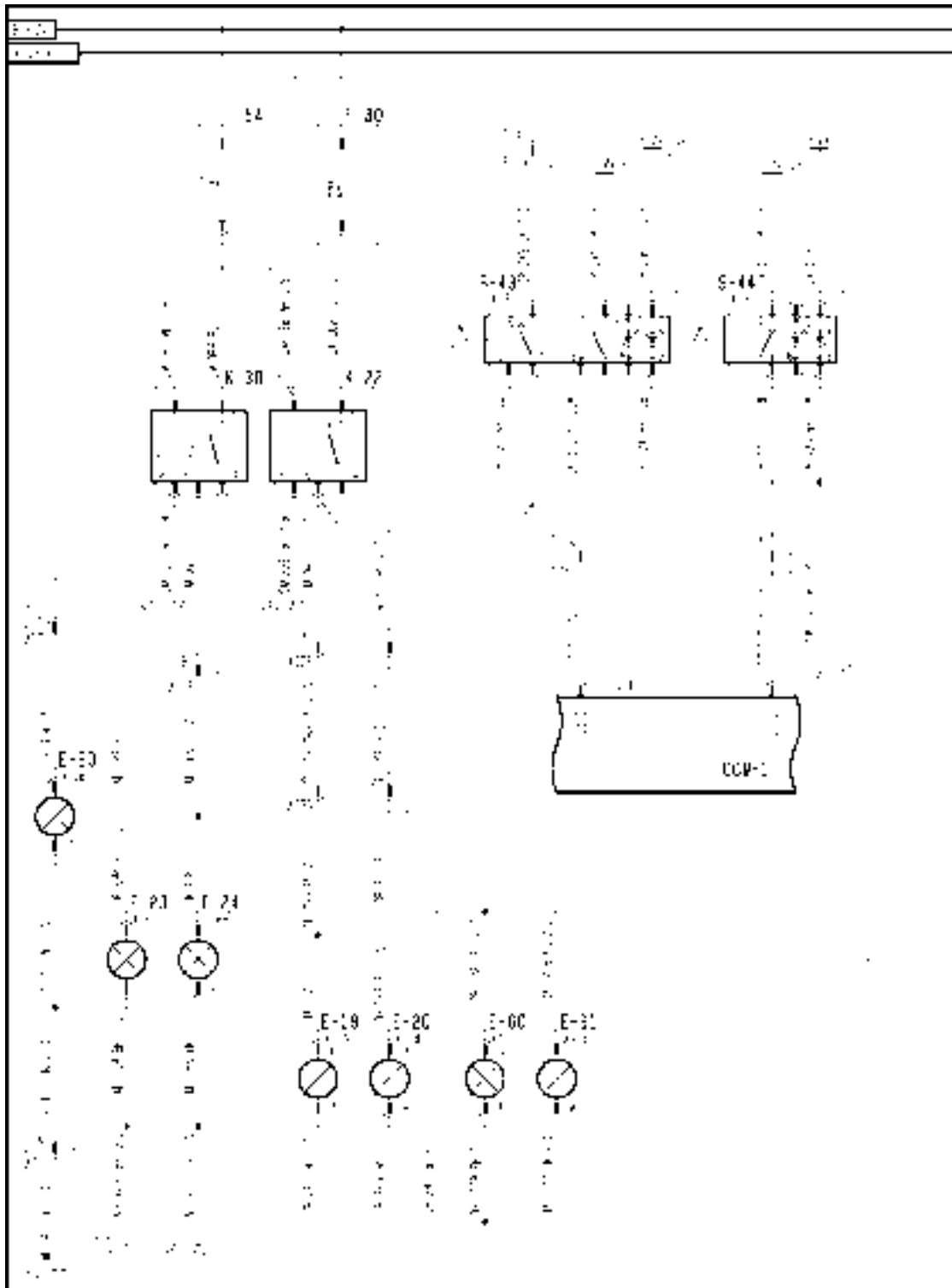
**FRAME 39 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-31 LH Front Beacon Light	E-32 RH Front Beacon Light	E-33 Rear Beacon Light
F-15 Service Sockets Fuse	F-53 Beacon Light Fuse	J-01 RH Front Service Socket
J-02 LH Front Service Socket	J-03 RH Side Service Socket	J-04 LH Side Service Socket
J-05 Engine Service Socket	K-29 Beacon Light Relay	S-41 Beacon Light Switch

# Wiring harness - Electrical schematic frame 40 (A.30.A.88 - C.20.E.40)

AFX8010



AFXSCHEM40-04 1

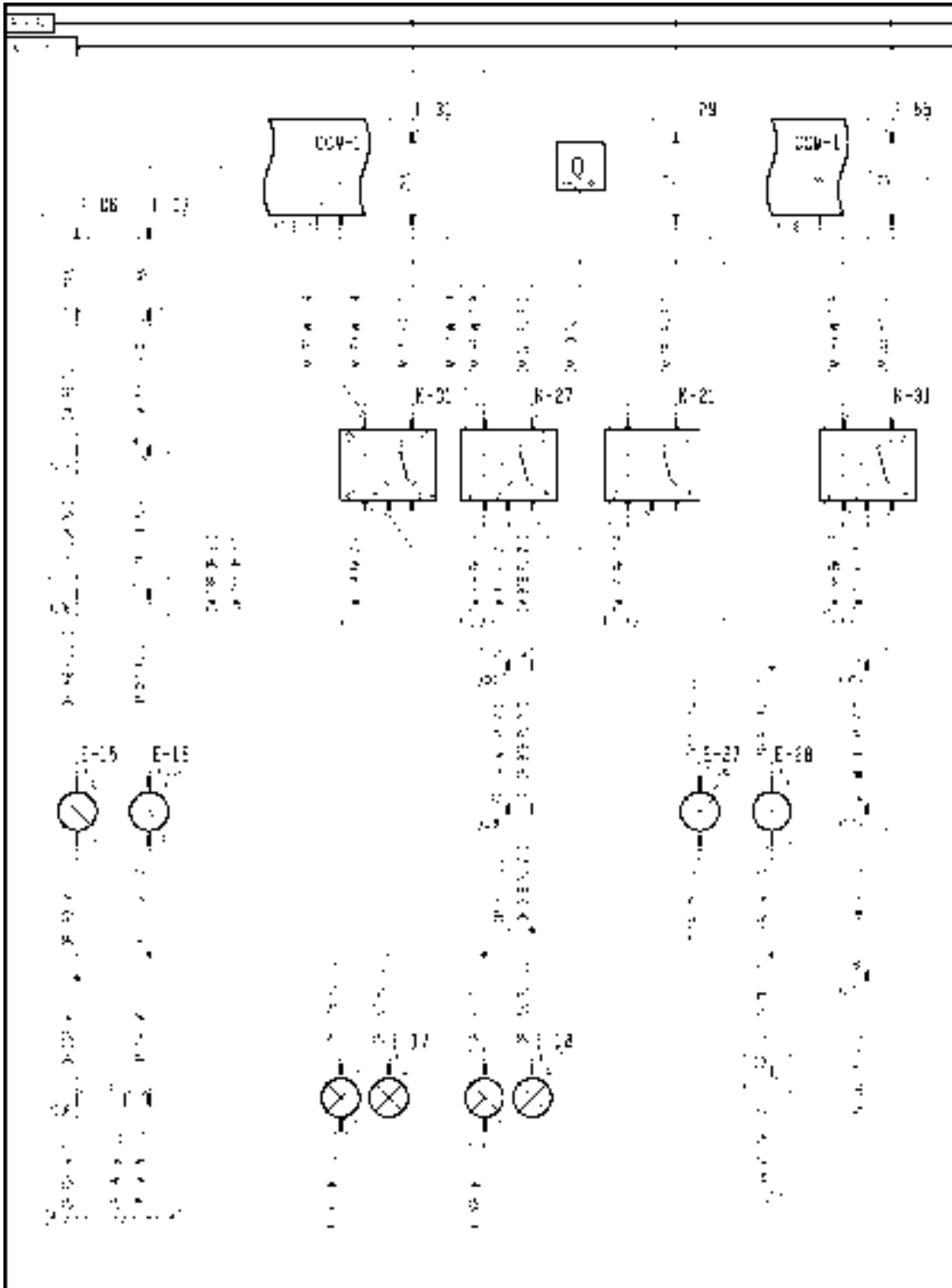
**FRAME 40 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-19 LH Cab Mid Work Light	E-20 RH Cab Mid Work Light	E-23 LH Lower Work Light
E-24 RH Lower Work Light	E-30 Grain Tank Light	E-60 LH HID Field Light
E-61 RH HID Field Light	F-30 Mid Work Lights Fuse	F-54 Lower Work Lights Fuse
K-22 Header Work Lights Relay	K-30 Lower Work Lights Relay	S-43 Work Light Switch
	S-44 Rear Work Light Switch	

# Wiring harness - Electrical schematic frame 41 (A.30.A.88 - C.20.E.41)

AFX8010



AFXSCHEM41-04 1  
**FRAME 41 - LIGHTING**

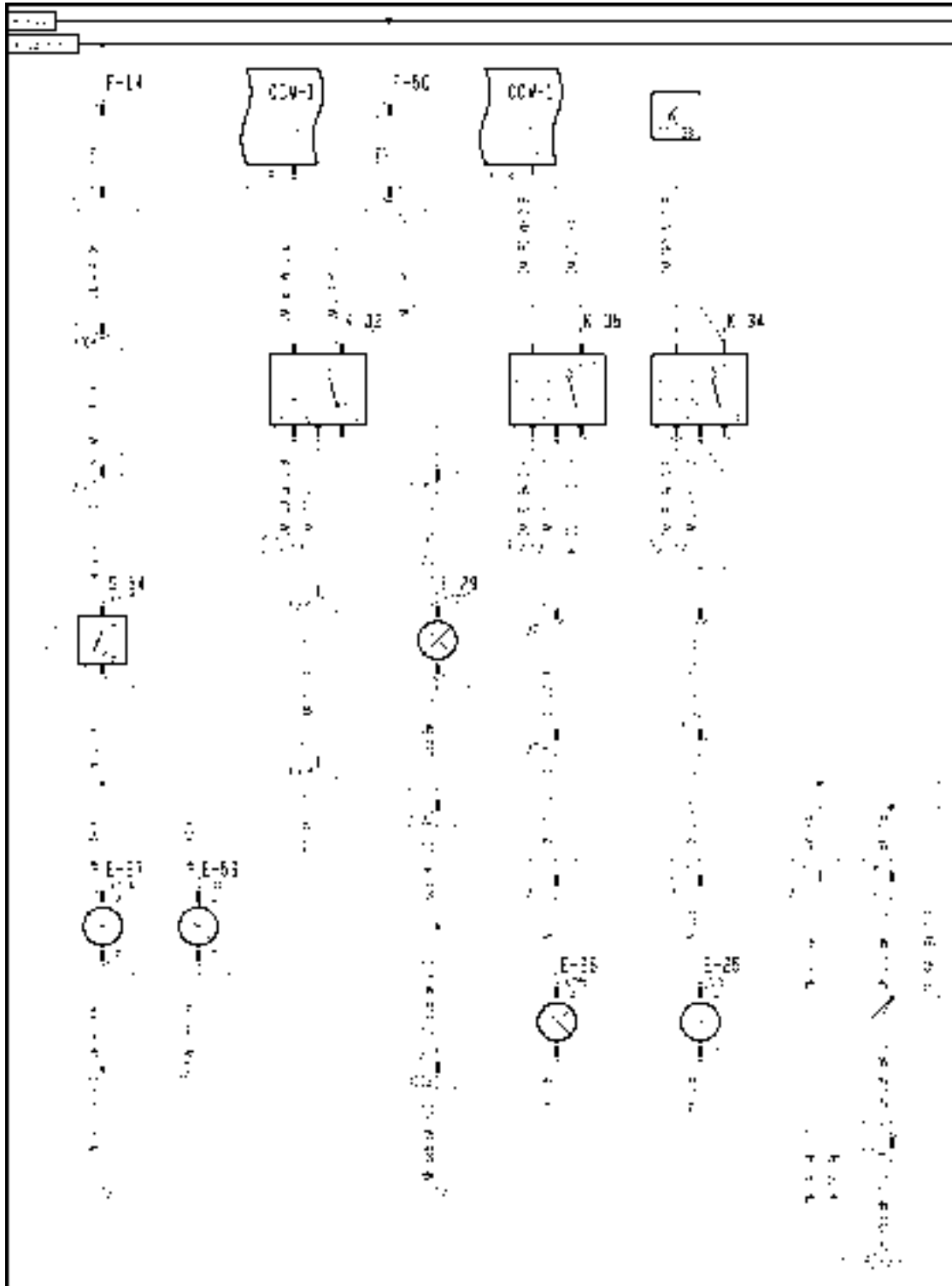


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-15 LH Cab Outer Work Light	E-16 RH Cab Outer Work Light	E-17 LH Cab Inner Work Light
E-18 RH Cab Inner Work Light	E-27 LH Rear Work Light	E-28 RH Rear Work Light
F-06 LH Outer Road/Work Lights Fuse	F-07 RH Outer Road/Work Lights Fuse	F-29 Inner Road/Work Lights Fuse
F-31 Outer Road/Work Lights Fuse	F-55 Rear Work Lights Fuse	K-01 Outer Road/Work Lights Relay
K-21 Inner Road Lights Relay	K-27 Inner Work Lights Relay	K-31 Rear Work Lights Relay

# Wiring harness - Electrical schematic frame 42 (A.30.A.88 - C.20.E.42)

AFX8010



AFXSCHEM42-04 1

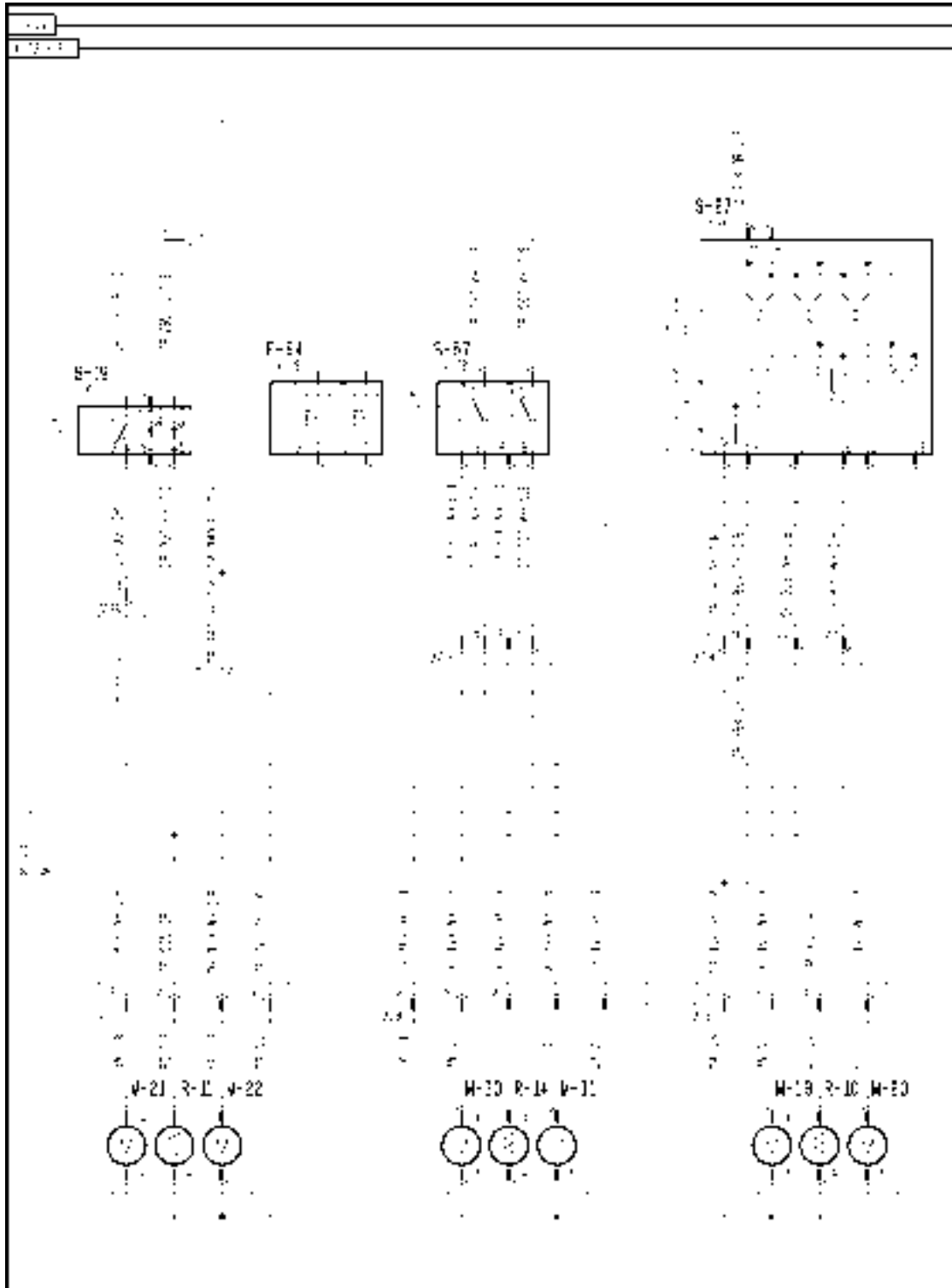
**FRAME 42 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

E-25 LH Side Work Light	E-26 RH Side Work Light	E-29 Unload Tube Light
E-37 Sieve Light Front	E-59 Sieve Light Rear	F-14 Service Lights Fuse
F-50 Side / Tube Lights Fuse	K-32 Unload Tube Light Relay	K-34 Timed Side Work Light Relay
K-35 Side Work Light Relay	S-54 Sieve Light Switch	

# Wiring harness - Electrical schematic frame 43 (A.30.A.88 - C.20.E.43)

AFX8010



AFXSCHEM43-04 1

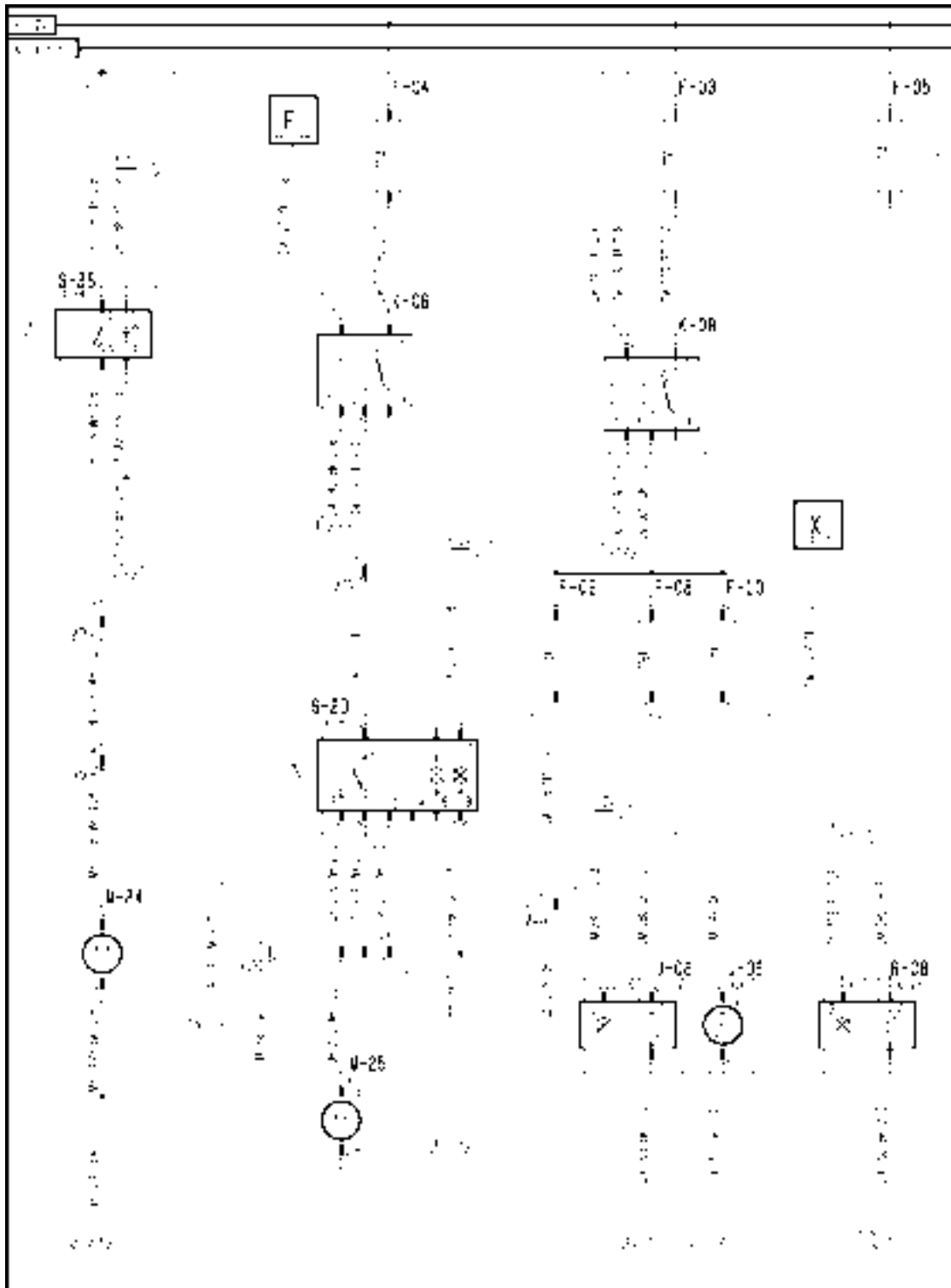
**FRAME 43 - LIGHTING**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

F-64 Switch Bypass Fuses	M-19 RH Mirror Up / Down	M-20 RH Mirror In / Out
M-21 LH Mirror Up / Down	M-22 Mirror In / Out	M-30 German Mirror Up / Down
M-31 German Mirror In / Out	R-10 RH Mirror Heat	R-11 LH Mirror Heat
R-14 RH German Mirror Heat	S-19 Mirror Heat Switch	S-27 Mirror Adjust Switch
	S-57 Mirror Select Switch	

# Wiring harness - Electrical schematic frame 44 (A.30.A.88 - C.20.E.44)

AFX8010



AFXSCHEM44-04 1

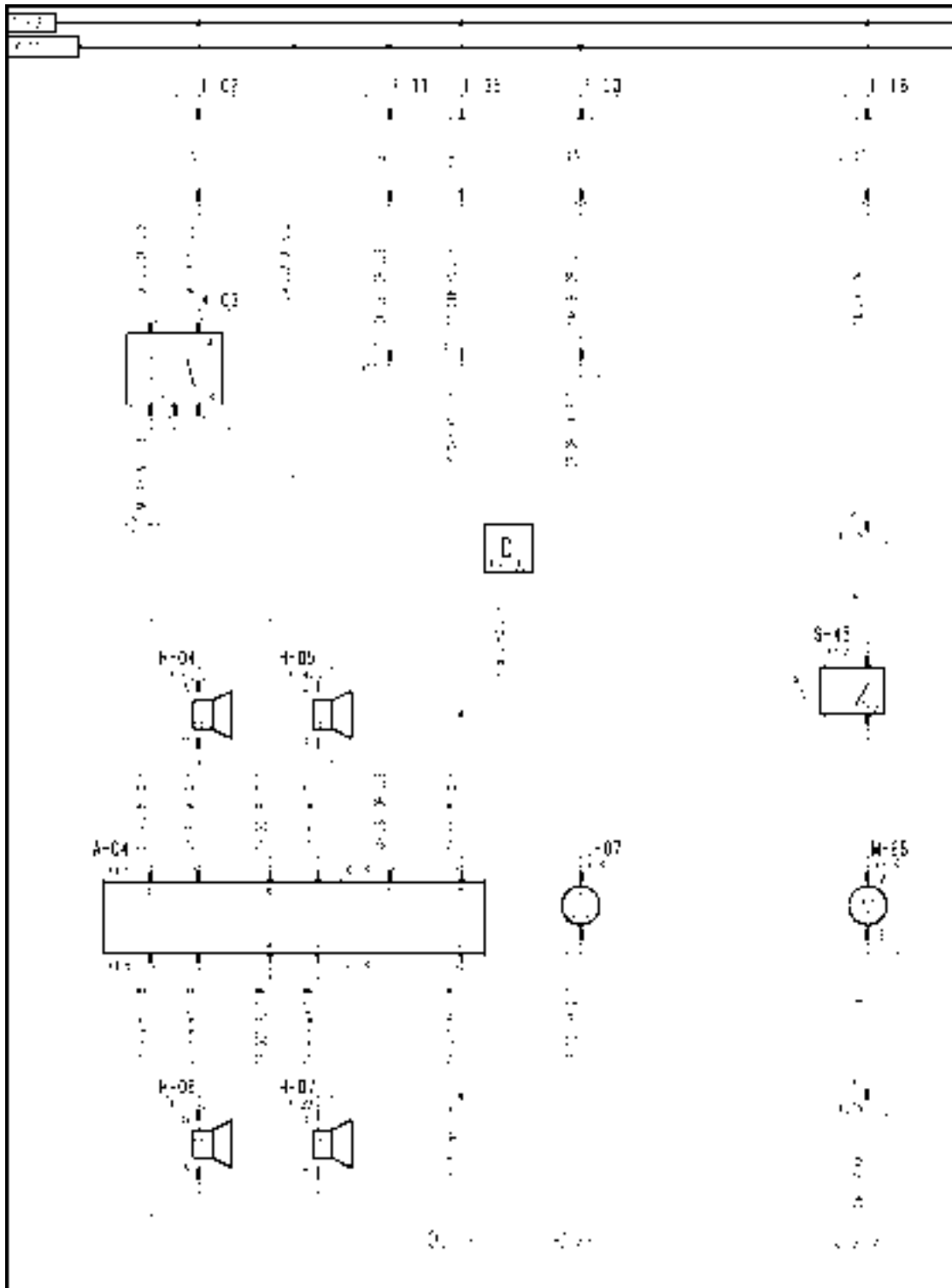
## FRAME 44 - ACCESSORY

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

F-03 Accessory 1 Fuse	F-04 Wiper Fuse	F-05 Cigar Lighter Fuse
F-08 Accessory Outlet Fuse	F-09 Washer / Mirror Fuse	F-10 Not Used
J-06 Accessory Socket	J-08 Accessory Outlet	K-06 Wiper Relay
K-08 Accessory 1 Relay	M-24 Wiper Washer Motor	M-25 Wiper Motor
R-08 Cigar Lighter	S-20 Wiper Switch	S-38 Washer Switch

# Wiring harness - Electrical schematic frame 45 (A.30.A.88 - C.20.E.45)

AFX8010



AFXSCHEM45-04 1

## FRAME 45 - ACCESSORY

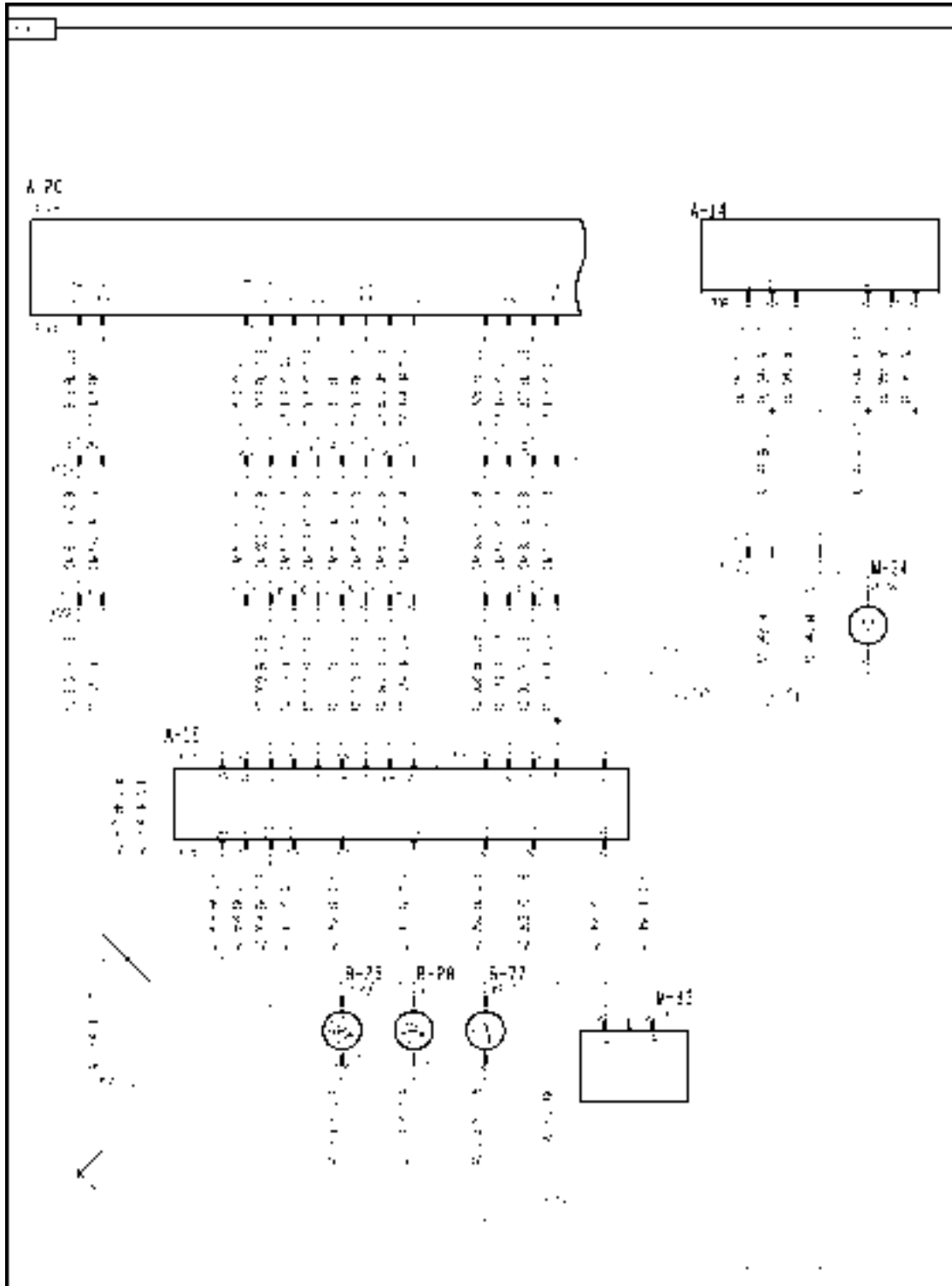


DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-04 Radio	F-02 Accessory 2 Fuse	F-11 Radio Fuse
F-13 Transceiver Fuse	F-16 Seat Pump Fuse	F-35 Radio Memory Fuse
H-04 Rear Left Speaker	H-05 Front Left Speaker	H-06 Rear Right Speaker
H-07 Front Right Speaker	J-07 Not Used	K-03 Accessory 2 Relay
M-26 Seat Pump Motor	S-45 Seat Adjust Switch	

# Wiring harness - Electrical schematic frame 46 (A.30.A.88 - C.20.E.46)

AFX8010



AFXSCHEM46-04 1

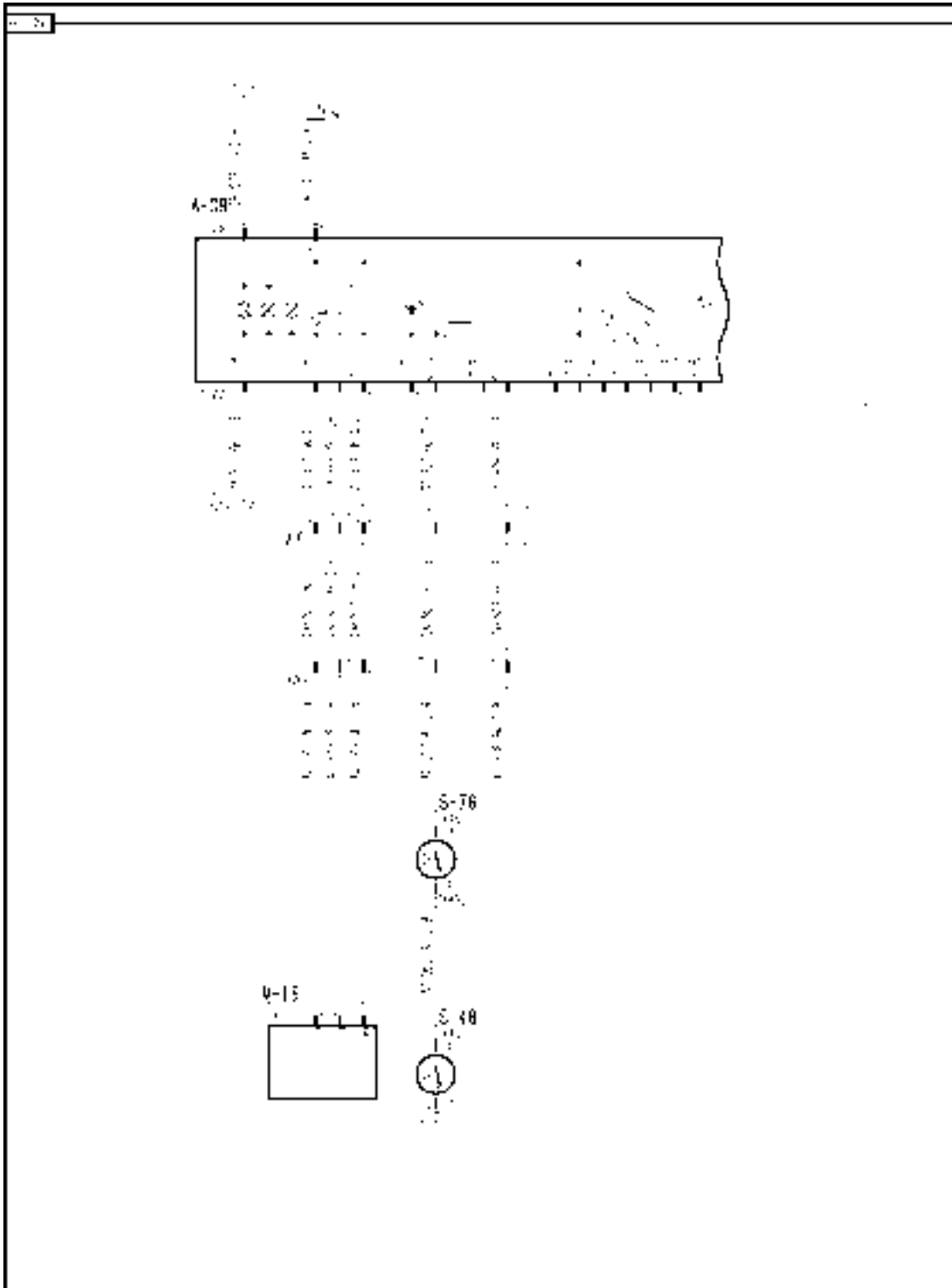
**FRAME 46 - HVAC (ATC)**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-14 Blower Speed Control (ATC)	A-15 ATC Control Module	A-20 HVAC Control Panel (ATC)
B-26 Cab Temperature Sensor (ATC)	B-28 Evaporator Temperature Sensor (ATC)	M-34 Main Blower (ATC)
M-33 Water Valve (ATC)	S-77 A/C Low Pressure (ATC)	
*1) connect wire 919 to ground for display temperature in Celsius		

# Wiring harness - Electrical schematic frame 47 (A.30.A.88 - C.20.E.47)

AFX8010



AFXSCHEM47-04 1

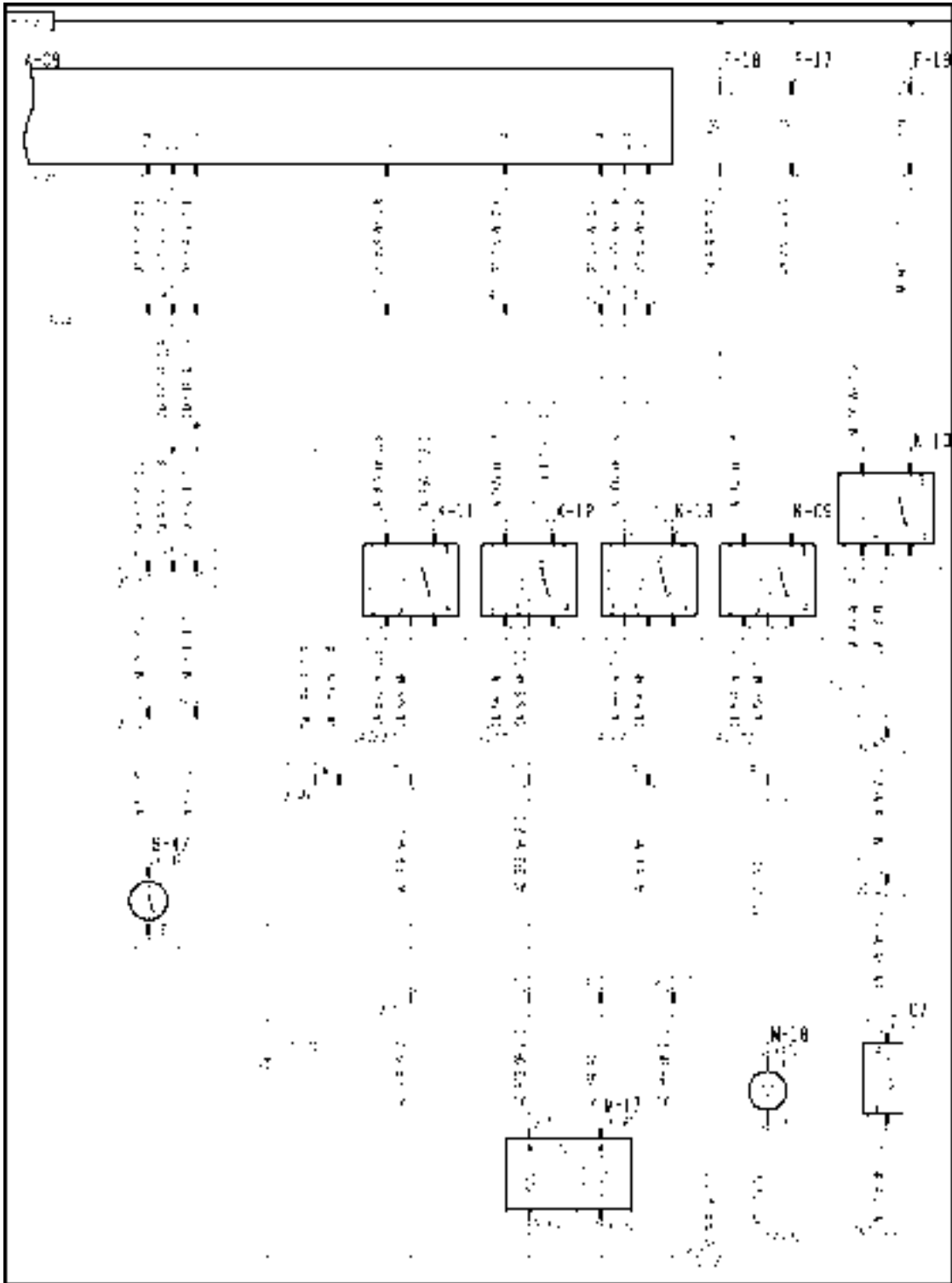
**FRAME 47 - HVAC (MAN)**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

A-09 HVAC Control Panel (manual)	M-16 Water Valve (manual)	S-48 A/C Low Pressure (manual)
	S-76 Freeze Switch (manual)	

# Wiring harness - Electrical schematic frame 48 (A.30.A.88 - C.20.E.48)

AFX8010



AFXSCHEM48-04 1

**FRAME 48 - HVAC (BOTH)**

DISTRIBUTION SYSTEMS - ELECTRICAL POWER SYSTEM

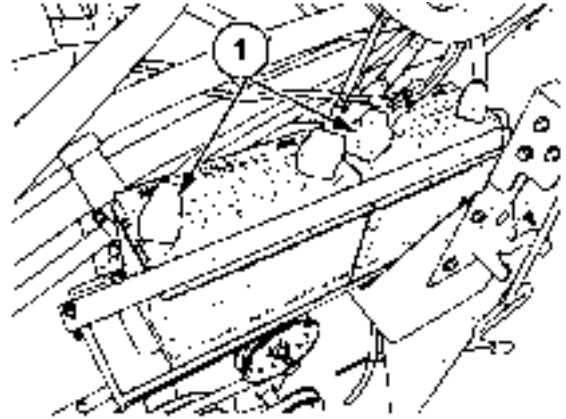
A-09 HVAC Control Panel	F-17 Separator Blower Fuse	F-18 Main Blower Fuse
F-19 A/C Clutch Fuse	K-09 Separator Blower Relay	K-10 A/C Clutch Relay
K-11 Main Blower Relay Low	K-12 Main Blower Relay Medium	K-13 Main Blower Relay High
L-07 A/C Clutch	M-17 Main Blower (manual)	M-18 Separator Blower
S-47 A/C High Pressure	3 = Base Unit with Manual A/C	4 = Base Unit with ATC

## Battery - Disconnect (A.30.A.83 - F.10.A.11)

AFX8010

1. To temporarily disconnect the batteries to weld or work on the machine, disconnect the negative terminals **(1)** only.

**IMPORTANT:** If jumping or charging the batteries, only use the battery to the right when facing. Failure to do so can cause damage to equipment.



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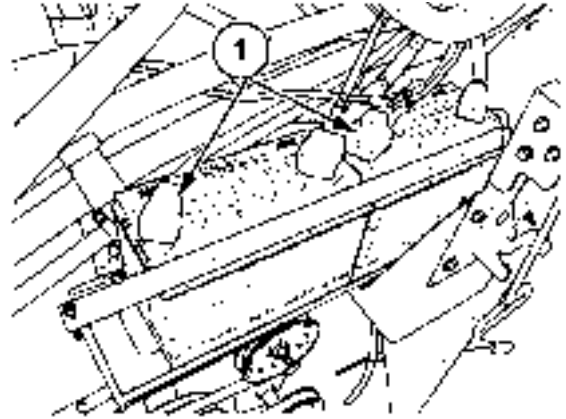


## Battery - Replace (A.30.A.83 - F.10.A.30)

AFX8010

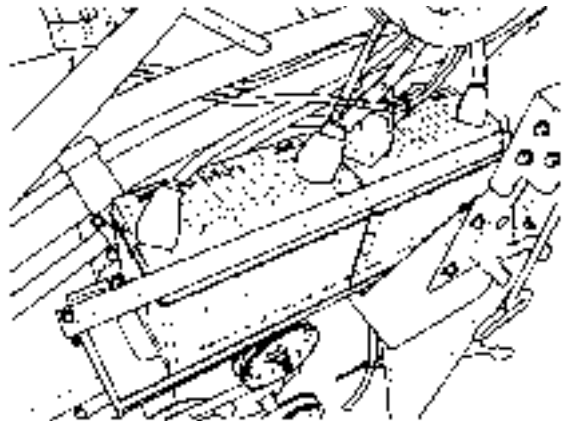
1. To replace the two **12 volts** batteries in the machine start by disconnecting the negative battery terminals **(1)**.

**NOTE:** Use only OEM recommended 12 volt batteries when replacing with the proper cranking amps. Failure to do so may result in component failure.



10035350A5 1

2. Remove the positive terminals from the batteries.
3. Loosen the bolts on the battery hold down clamp, and remove the clamp from the batteries.



10035350 2

4. Remove the batteries from the machine and replace with new batteries.

**IMPORTANT:** Note that the batteries are heavy, so use caution when handling.

5. Install the new batteries onto the tray with the negative terminals to the left, or the negative terminals to the front of the machine. connect the positive terminals first. Then connect the negative terminals.

**IMPORTANT:** Always connect the positive terminals first to prevent sparks if accidently grounded to the machine.

6. Install the battery hold down bar across the tops of the batteries. Tighten the bar bolts until the batteries are snug, but be careful to not overtighten the bolts as damage to the battery cases may occur.

## Alternator - Problem solving (A.30.A.82 - G.40.A.30)

AFX8010

### OPERATION

The Alternator (B+) connector **X213** is connected to the battery via terminal B+ on the Starter Motor and is grounded to the engine through connector **X213**.

The Alternator is self exciting and does not require an excitation circuit. Charging system output is controlled by an integral voltage regulator/brush assembly. The regulator is set to 14.2 volt regulation. The Alternator is temperature compensated so that output will drop as the Alternator warms up.

### TROUBLESHOOTING

Before troubleshooting the charging system, make sure that the following conditions are met:

1. The batteries are fully charged and all connections are clean and tight.
2. Transmission in neutral or park.
3. Check all connectors for full installation, loose, corroded, pushed out, or bent terminals.

**NOTE:** The batteries must be fully charged and all connections clean and tight. Use a multi-meter (DVOM) for these tests. For battery testing and service, see the battery section in the service manual.

**IMPORTANT:** Do not use a self-powered test light for any of the following tests. Use of a self-powered test light may cause damage to the components of this system.



### WARNING



**M980 - Before performing any of the electrical tests, be sure all operating controls are in neutral or park lock position. This will eliminate accidental movement of the machine or start-up of power driven equipment.**

Problem	Possible Cause	Correction
System not charging or Charging poorly. Battery goes dead.	Alternator Belt slipping or failed	Replace alternator belt. Inspect tensioner assembly.
	B+ Circuit	<b>Alternator - Testing (A.30.A.82 - G.40.A.20)</b>
	Alternator	<b>Alternator - Testing (A.30.A.82 - G.40.A.20)</b>
System overcharging	Alternator	<b>Alternator - Testing (A.30.A.82 - G.40.A.20)</b>

## Alternator - Testing (A.30.A.82 - G.40.A.20)

AFX8010

N°	Test Point	Expected Result	Other Result (Possible Cause)
1	Transmission in "Park" Start Engine and set to <b>1200 RPM</b> . Measure voltage at battery.	<b>12.8 - 14.5 volts</b> If good reading, charging system is operating properly.	High resistance between battery and B+ terminal at Alternator. Go to test <b>2</b>
2	Place Negative Lead of multimeter to battery positive terminal and positive terminal to starter B+ terminal. Check voltage.	Less than <b>0.4 volts</b> If good reading, Go to test <b>3</b>	High Resistance between Battery and starter B+ terminal. Repair/replace wiring as needed.
3	Attach positive lead of multimeter to B+ terminal of alternator and negative lead to starter B+ terminal. Read voltage.	Less than <b>0.4 volts</b> If good reading, Go to test <b>4</b>	High Resistance in circuit 802 (RD). Repair/replace wiring as needed.

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N°	Test Point	Expected Result	Other Result (Possible Cause)
4	Measure for <b>12 volts</b> at the B+ terminal of the Alternator while turning on various loads on and off (lights, heater, fan, etc.)	Voltage varies between <b>12.8 - 14.5 volts</b> in response to load applied. If good reading, charging system is operating properly.	Alternator Go to test <b>5</b>
5	Stop Engine, Key switch in OFF position. Measure resistance between alternator housing and engine ground.	Less than <b>1 ohms</b> . If good reading, repair or replace Alternator.	High resistance on circuit 803 (BK) from Alternator to engine ground. Clean surfaces at Alternator and engine block. Ensure that all mountings are clean and tight.