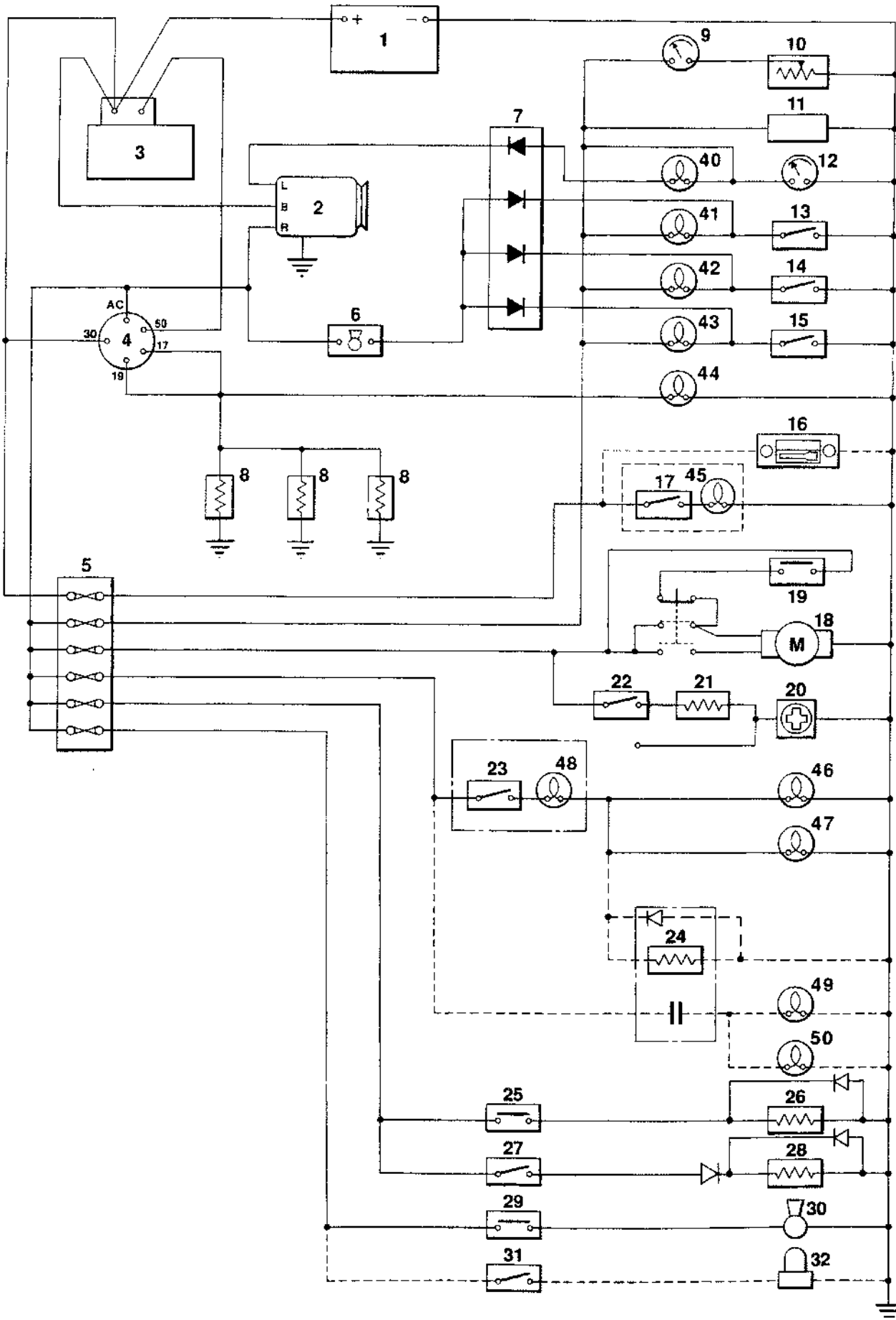


CIRCUIT DIAGRAM

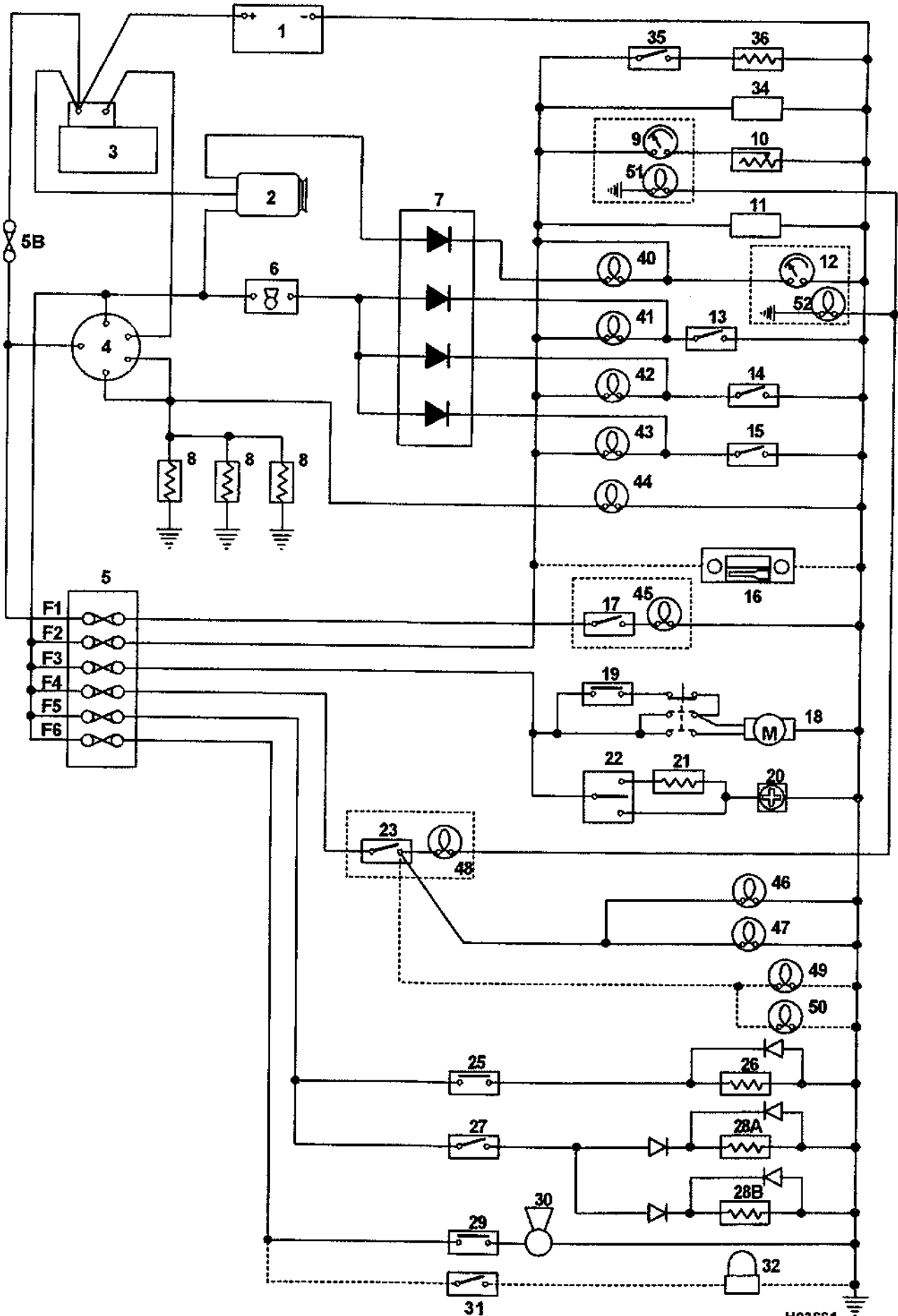


CIRCUIT DIAGRAM 803 to M665736*Main Components**

- 1 Battery
- 2 Alternator
- 3 Starter Motor
- 4 Starter Switch
- 5 Fuse Block
- 6 Warning Buzzer
- 7 Diode Bank
- 8 Glow Plugs
- 9 Fuel Gauge
- 10 Fuel Gauge Sender
- 11 Fuel Solenoid
- 12 Hourmeter
- 13 Engine Oil Pressure Switch
- 14 Engine Coolant Temperature Switch
- 15 Blocked Air Filter Switch
- 16 Radio - Optional
- 17 Interior Light Switch
- 18 Windscreen Wiper Motor
- 19 Wiper Motor Parking Switch
- 20 Heater Motor
- 21 Resistor
- 22 Heater Switch
- 23 Working Light Switch
- 24 Lamp Solenoid - Optional
- 25 Seat Microswitch
- 26 Servo Supply Solenoid
- 27 Control Lever Switch
- 28 Swing Solenoid
- 29 Horn Switch
- 30 Horn
- 31 Beacon Light Switch - Optional
- 32 Beacon - Optional

Lamps

- 40 Alternator Warning
- 41 Engine Oil Pressure Warning
- 42 Engine Coolant Temperature Warning
- 43 Blocked Air Filter Warning
- 44 Glowplug Warning
- 45 Interior
- 46 Boom
- 47 Slew/Skirt
- 48 Switch Illumination
- 49 Cab Roof - Optional
- 50 Cab Roof - Optional



H03661

***CIRCUIT DIAGRAM 802.7 M747001 on,
803 M666001 on, New 803 M765001 on and 804
M734001 on.**

Main Components

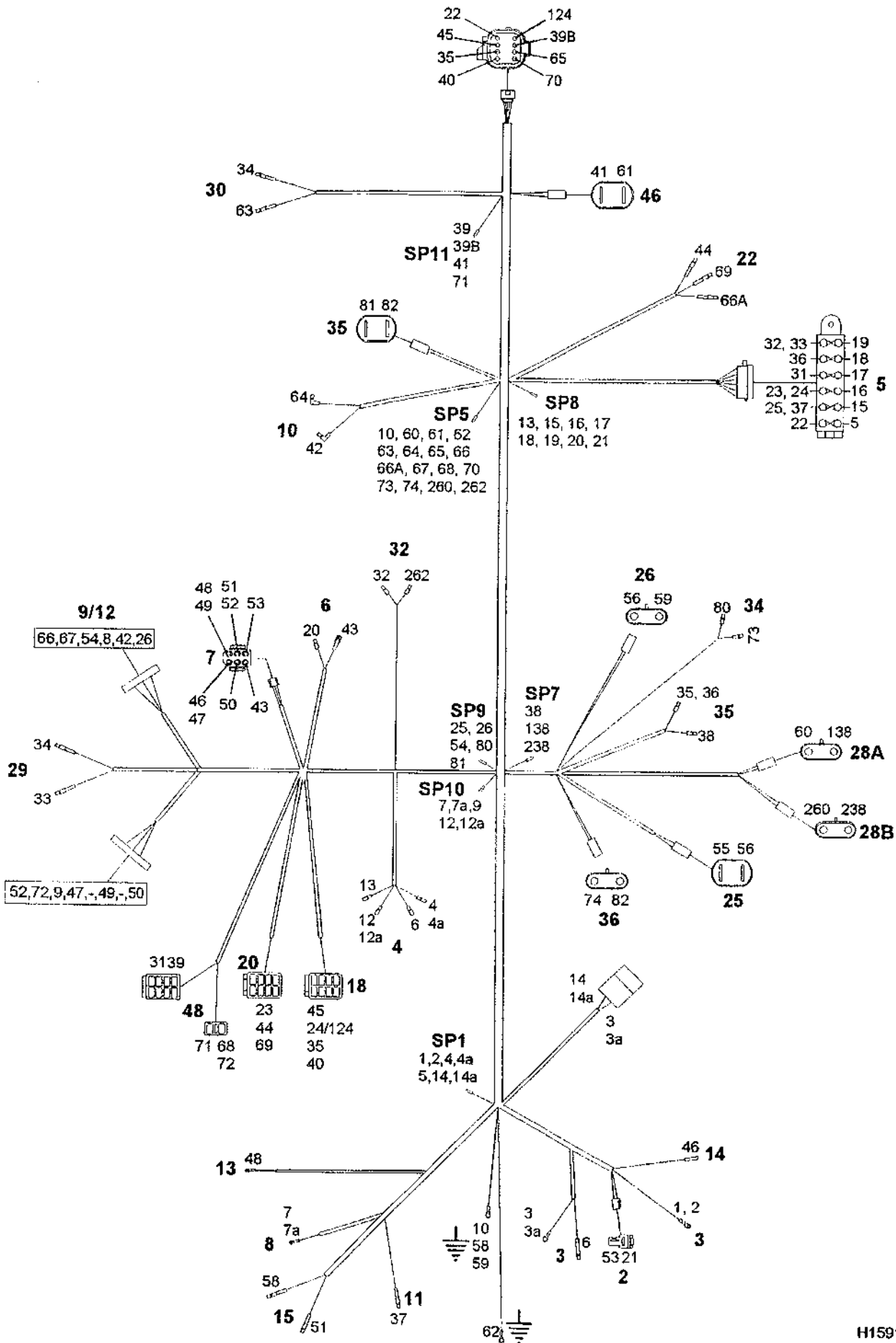
- 1 Battery
- 2 Alternator
- 3 Starter Motor
- 4 Starter Switch
- 5 Fuse Block
- *5B** 50 amp Main Harness Fuse
- 6 Warning Buzzer
- 7 Diode Bank
- 8 Glow Plugs
- 9 Fuel Gauge
- 10 Fuel Gauge Sender
- 11 Fuel Solenoid
- 12 Hourmeter
- 13 Engine Oil Pressure Switch
- 14 Engine Coolant Temperature Switch
- 15 Blocked Air Filter Switch
- 16 Radio - Optional
- 17 Interior Light Switch
- 18 Windscreen Wiper Motor
- 19 Wiper Motor Parking Switch
- 20 Heater Motor
- 21 Resistor
- 22 Heater Switch
- 23 Working Light Switch
- 25 Seat Microswitch
- 26 Servo Supply Solenoid
- *27** Slew/Swing Switch
- 28A Swing Solenoid
- 28B Swing Solenoid
- 29 Horn Switch
- 30 Horn
- *31** Low hydraulic oil temperature sender (804 m/cs only)
- 32 Beacon
- 34 Cigarette Lighter
- 35 Two Speed Switch
- 36 Two Speed Solenoid

***Note 1:** Later harnesses with the 50A fuse may be fitted to earlier machines.

***Note 2:** If the glow plugs are changed to the later fast acting type, the harness **MUST** also be upgraded to the later fused type.

Lamps

- 40 Alternator Warning
- 41 Engine Oil Pressure Warning
- 42 Engine Coolant Temperature Warning
- 43 Blocked Air Filter Warning
- 44 Glowplug Warning
- 45 Interior
- 46 Boom
- *47** Mainframe working (if fitted)
- 48 Working Light Switch
- 49 Cab Roof - Optional
- 50 Cab Roof - Optional
- 51 Fuel Gauge
- 52 Hourmeter
- *53** Low hydraulic temperature warning (804 m/cs only)



H15910

***HARNESS KEY 802.7 M747001 on,
803 M666001 on, New 803 M765001 on and 804
M734001 on**

- | | | | |
|-----|--|-----|--|
| 1 | Starter Motor Feed to SP1 | 46 | Engine Coolant Temperature Switch to Diode Connector |
| 2 | Starter Motor Feed to SP1 | 47 | Engine Coolant Warning Lamp to Diode Connector |
| 3 | Starter Solenoid to SP1 | 48 | Engine Coolant Pressure Switch to Diode Connector |
| 4 | Ignition Switch to SP1 | 49 | Engine Coolant Pressure Warning to Diode Connector |
| 5 | Fuse Block to SP1 | 50 | Alternator Warning Lamp to Diode Connector |
| 6 | Ignition Switch to Solenoid | 51 | Blocked Air Filter Switch to Diode Connector |
| 7 | Glow Plug to SP10 | 52 | Blocked Air Filter Warning Lamp to Diode Connector |
| 8 | Glow Plug to SP10 | 53 | Alternator to Diode Connector |
| 9 | Glow Plug Warning Lamp to SP10 | 54 | Hour Meter to Alternator Warning Lamp |
| 10 | Earth to SP5 | *55 | Slew/Swing Switch to Seat Micro Switch |
| 12 | Ignition Switch to SP10 | 56 | Seat Micro Switch to Servo Supply Solenoid |
| 13 | Ignition Switch to SP8 | *57 | Slew/Skirt Lamp to SP11 (if fitted) |
| 14 | Ignition Switch to SP8 | 58 | Blocked Air Filter Switch to Earth |
| 15 | Fuse Block to SP8 | 59 | Servo Supply to SP5 |
| 16 | Fuse Block to SP8 | 60 | Swing Solenoid to SP5 |
| 17 | Fuse Block to SP8 | 61 | Boom Lamp to SP5 |
| 18 | Fuse Block to SP8 | *62 | Slew/Skirt Lamp to SP5 (if fitted) |
| 19 | Fuse Block to SP8 | 63 | Horn to SP5 |
| 20 | Warning Buzzer to SP8 | 64 | Fuel Gauge Sender to SP5 |
| 21 | Alternator to SP8 | 65 | Cab Connector to SP5 |
| 22 | Fuse Block to Cab Connector | 66 | Hour Meter to SP5 |
| 23 | Fuse Block to Blower Motor | 66A | Heater to SP5 |
| 24 | Fuse Block to Wiper Motor | 67 | Fuel Gauge to Hour Meter |
| 25 | Fuse Block to SP9 | 68 | Fuel Gauge to Boom Lamp Warning System |
| 26 | Fuel Gauge to SP9 | 69 | Heater to Blower Motor |
| 27 | Engine Coolant Temperature Warning Lamp to SP9 | 70 | Cab Connector to SP5 |
| 28 | Engine Oil Pressure Warning Lamp to SP9 | 71 | Boom Lamp Warning System to Boom Lamp Relay |
| 29 | Alternator Warning Lamp to SP9 | 72 | Glow Plug to Boom Lamp Warning System |
| 30 | Blocked Air Filter Warning Lamp to SP9 | 73 | Cigarette Lighter to SP5 |
| 31 | Boom Lamps To Fuse Block | 74 | 2 - Speed Solenoid to SP5 |
| 32 | Fuse Block to Beacon Feed | 80 | Cigarette Lighter to SP9 |
| 33 | Fuse Block to Beacon Feed | 81 | 2 - Speed Switch to SP9 |
| 34 | Horn to Horn Switch | 82 | 2 - Speed Switch to 2 - Speed Solenoid |
| 35 | Wiper Motor to Cab Connector | 124 | Cab Connector to Wiper Motor |
| *36 | Fuse Block to Slew/Swing Switch | 138 | Swing Solenoid to SP7 |
| 37 | Fuse Block to Fuel Solenoid | 238 | Swing Solenoid to SP7 |
| *38 | Slew/Swing Switch to SP11 | 260 | Swing Solenoid to SP7 |
| 39 | Boom lamps to SP11 | 262 | Beacon Feed to SP5 |
| 39B | SP11 to Cab Connector | | |
| 40 | Wiper to Cab Connector | | |
| 41 | Boom Lamps to SP11 | | |
| 42 | Fuel Gauge to Fuel Gauge Sender | | |
| 43 | Diode Connector to Warning Buzzer | | |
| 44 | Blower Motor to Heater | | |
| 45 | Windscreen Wiper Motor to Cab Connector | | |

Index

Alternator	-Removal and Fitting	5/8 - 1
	-Dismantling and Assembly	8/3 - 2
	-Inspection and Test	8/3 - 3
Battery	-Inspection and Test	8/2 - 1
Body and Framework	-General Description	4/1 - 1
Boom	-Dismantling, Inspection and Assembly	4/5 - 1
Bucket	-Dismantling and Assembly	4/2 - 1
Bucket, Ram Pivot and Linkage	-Dismantling, Inspection and Assembly	4/3 - 1
Control Mechanism	-Dismantling, Inspection and Assembly	4/6 - 3
Dipper	-Dismantling, Inspection and Assembly	4/4 - 1
*Kingpost	-Removal and Replacement	4/7 - 2
Upper Structure	-Dismantling and Assembly	4/6 - 1
Circuits		
Electrics		8/10 - 2
*Main Harness - 802.7/803 M666001 on & M765001 on and 804		8/10 - 6
Electrics		
Technical Data		8/1 - 1
Engine		
	-Technical Data	5/1 - 1
	-Removal and Fitting	1/9 - 2
Camshaft	-Removal, Inspection and Fitting	5/14 - 1
Coolant	-Draining and Fitting	5/7 - 1
Crankshaft	-Removal, Dismantling, Inspection and Assembly	5/15 - 1
Cylinder Head	-Removal, Inspection and Fitting	5/10 - 1
Fan Belt	-Removal, Inspection and Fitting	5/7 - 4
Fuel Injectors	-Removal and Dismantling	5/5 - 6
	-Assembly, Adjustment and Fittings	5/5 - 7
Fuel Injection Pump	-Removal and Fitting	5/5 - 4
Fuel Injection Timing	-Checking and Adjustment	5/5 - 5
Fuel Lift Pump	-Removal, Inspection and Fitting	5/5 - 2
Fuel System	-Bleeding	5/5 - 8
Idler Gear and Oil Pump	-Removal, Dismantling, Inspection and Fitting	5/13 - 1
Oil	-Draining and Filling	5/2 - 1
*Oil Cooler	-Removal and Fitting	5/2 - 3
Oil Pressure Relief Valve	-Removal and Fitting	5/3 - 1
Oil Pump	-Removal and Fitting	5/4 - 1
Piston and Connecting Rods	-Removal, Inspection and Fitting	5/11 - 1
Timing Gear Case	-Removal and Fitting	5/12 - 1
Water Pump/Thermostat Housing	-Removal, Inspection and Fitting	5/7 - 2
Filters		
Air	-Renew Elements	5/6 - 1
Engine	-Renew Element	5/2 - 2
Fuel	-Renew Element	5/5 - 1
Hydraulic	-Renew Element	2/3 - 1

Index

ii

ii

Gearboxes	-General Description	6/1 - 1
	-Technical Data	6/1 - 1
Slew	-Dismantling and Assembly	6/7 - 2
	*-Removal and Replacement	6/7 - 1
	-Operation	6/3 - 1
*Slew Brake	-Dismantling and Assembly	6/7 - 6
Slew Oil	-Check, Drain and Refill	6/5 - 1
Track	-Dismantling and Assembly	6/6 - 1
	-Operation	6/2 - 1
Track Oil	-Check, Drain and Refill	6/4 - 1
General	-Lubricants and Capacities	1/1 - 1
	-Engine Lubrication Chart	1/1 - 2
	Torque Settings	1/1 - 3
	-Hydraulic Fittings	1/1 - 5
	-Service Schedules	1/2 - 1
	-Greasing	1/3 - 1
	-Fuel System	1/1 - 6
	-Coolant Mixtures	1/1 - 7
Hydraulics	-Technical Data	2/1 - 1
Auxiliary Relief Valves	-Removal, Dismantling, Inspection and Assembly	2/15 - 1
	-Pressure Testing	2/19 - 3
Control Valve	-Locations	2/12 - 1
	-Removal, Dismantling, Inspection & Assembly	2/12 - 3
Fluid Level	-Check	2/3 - 1
Main Relief Valve	-Removal, Dismantling, Inspection and Assembly	2/14 - 1
	-Pressure Testing	2/18 - 1
*Oil Cooler	-Removal and Replacement	2/21 - 1
*Pump	-Operation	2/4 - 1
	*-Flow Testing	2/7 - 1
	*-Removal and Replacement	2/7 - 3
	*-Dismantling, Inspection and Assembly (802.7/803)	2/7 - 7
	*-Dismantling, Inspection and Assembly (804)	2/7 - 9
Rams	-Removal and Replacement	2/16 - 1
	-Dismantling and Assembly	2/16 - 4
	-Inspection and Clearances	2/16 - 8
Rotary Coupling	-Dismantling and Assembly	2/17 - 1
Slew Brake Valve	-Dismantling and Assembly	2/9 - 7
Slew Crossline Relief	-Pressure Testing	2/19 - 5
Servo Circuit	-Description	2/2 - 6
Servo Hand Control Circuits	-Description	2/2 - 6
Servo Hand Controller	-Removal and Replacement	2/20 - 1
*Servo Relief Valve	-Removal, Dismantling and Assembly	2/14 - 4
	-Pressure Testing	2/19 - 4

Index

iii

iii

Motors		
Slew	-Fault Finding	2/11 - 1
	-Operation	2/6 - 1
*803 To M665736	-Removal, Dismantling and Assembly	2/9 - 1
*802.7/803 M666001 on and 804	-Removal and Replacement	2/10 - 1
*Track Motor Valve	-Removal, Dismantling and Assembly	2/8 - 1
	-Fault Finding	2/8 - 3
	-Operation	2/5 - 2
Options		
*Hand Controllers (803 to M665736))	-3CX Option	3/2 - 2
*Hand Controllers (802.7, 803 M666001 & 765001on and 804)	-ISO to 3CX Control Conversion	3/3 - 2
Starter Motor		
	-Assembly and Adjustment	8/4 - 4
	-Dismantling	8/4 - 2
	-Inspection	8/4 - 3
	-Fitting	8/4 - 5
	-Removing	8/4 - 1
Track and Running Gear		
	-General Description	7/1 - 1
Converting Tracks		7/2 - 4
Driven Sprocket	-Dismantling, Inspection and Assembly	7/5 - 1
Idler and Recoil Unit	-Dismantling and Inspection	7/4 - 2
	-Assembly	7/4 - 3
Rubber Tracks	-Removing and Fitting	7/2 - 3
Steel Tracks	-Removing and Fitting	7/2 - 2
Tracks	-Cleaning and Inspection	7/2 - 1
Track Rollers	-Dismantling and Assembly	7/3 - 2
	-Removing and Fitting	7/3 - 1
Track Tensioning		7/2 - 3

