LS LOADER

OPERATOR MANUAL

LL5102

www.lstractor.com

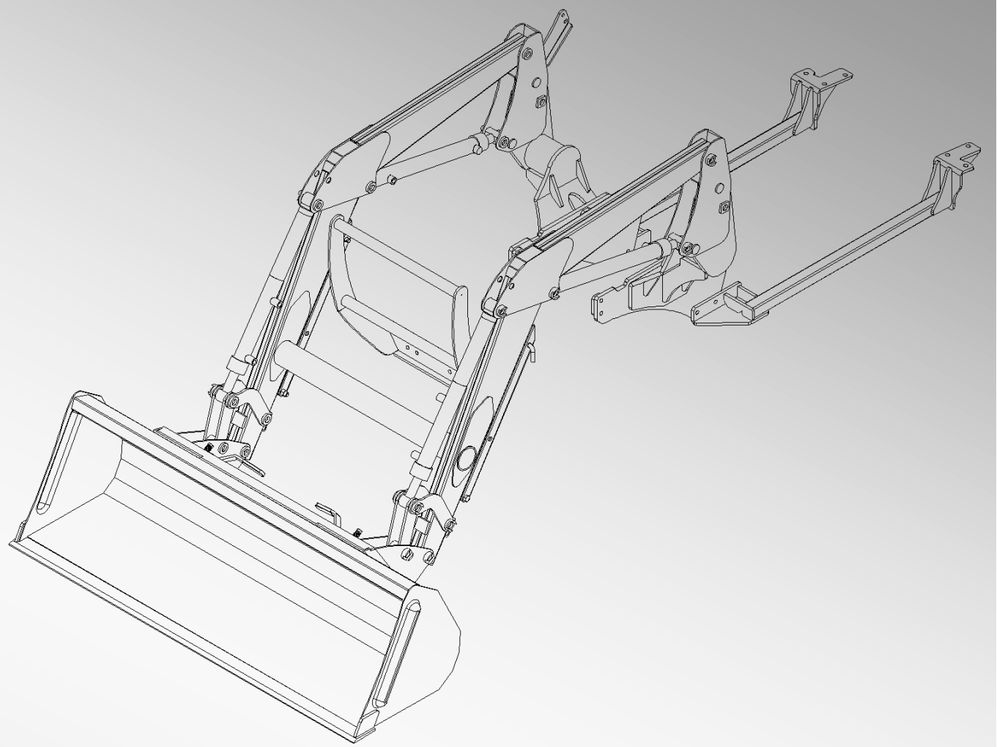
LS TRACTOR

INNOVATIVE
TECHNOLOGY
PARTNER

LS LOADER
OPERATOR MANUAL

LL5104

NON-SELF LEVELING TYPE
TRACTOR Model
• K5047



LS Tractor

LS Tractor USA LLC.

PO Box 70, Battleboro, NC 27809
Tel : 252-984-0700
Fax : 252-984-0701

www.lstractor.com
www.lstractorusa.com

P/NO FT624-MEN00-01

WARRANTY CONDITIONS

Warranty Coverage :

LS Mtron Tractor Division, herein referred to as LS Mtron, undertakes to replace or repair any part of a LS loader where damage has been proven to be caused by defects in material or workmanship.

This Warranty is valid for a period of 1 year from the date of the original retail sale. Parts replaced or repaired under the terms of this Warranty are guaranteed only until the original warranty expires. Warranty only applies to the original purchaser.

It is further understood and agreed that the defect should be immediately reported to the Selling Dealer. The Selling Dealer will generally perform Warranty repairs or replacements and the Purchaser shall deliver the LS Mtron Loader to the Dealer's place of business or repair.

The obligation of LS Mtron to the Purchaser under this Warranty is limited to the repair or replacement of defective parts by an authorized LS Mtron dealer. Repair or replacement in accordance with this Warranty shall constitute fulfillment of all liabilities of LS Mtron and the Selling Dealer in respect to LS Mtron Loaders.

There are no warranties beyond those which expressly appear herein. Any implied warranty of merchantability or fitness for a particular purpose is specifically exclude here from.

Warranty Provisions :

LS Mtron's liability under this warranty is subject to the observance by the Purchaser of the following provisions:

▶ The purchaser shall at all times in the operation of any LS Mtron Product, use those brands and grades of lubricating oils, lubricants or fuel and spare parts officially approved by LS Mtron.

▶ The LS Mtron Loaders shall have been used in accordance with the procedures specified in the Operator's Manual. This Warranty does not extend to damage resulting from misapplication, abuse, misuse, failure to preform maintenance, negligence, fire, accidents or changes or faulty mounting carried out by the Purchaser. When making a Warranty exchange of parts, the Purchaser shall compensate LS Mtron for the time that the parts have been used if they have been exposed to extreme wear.

▶ Compensation is not paid for physical harm, deadlock, resulting damages or other losses.

▶ To obtain warranty service, the Purchaser must (1) report the product defect to an authorized LS Mtron dealer and request repair within the applicable warranty term and (2) present evidence of purchase.

▶ The Warranty shall be void if the LS Mtron Loader has been altered or repaired outside of a LS Mtron dealership or travel of dealer personnel to customer location for Warranty repair. The customer shall also pay any premium for overtime labor requested by the customer.

▶ Temporary repairs or additional costs due to the work being performed after normal working hours will not be compensated.

▶ The above warranty is in lieu of all other warranties on LS Mtron's behalf and neither party assumes any other liability in connection with LS Mtron's Products.

Right To Make Design and Product Changes :

LS Mtron reserves the right to make changes in the design and other changes in its LS Mtron Products at any time without incurring any obligation with respect to any product previously ordered, sold or shipped.

PLEASE NOTE :

Make sure all potential operators of the this equipment review this manual and all safety messages contained within

This safety symbol indicates important safety messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.

Table of Contents

SAFETY PRECAUTIONS

Most tractor and/or loader equipment accidents can be avoided by following simple safety precautions. The safety information given in this manual does not replace safety codes, insurance requirements, federal, state, and local laws. Make sure your machine has the correct equipment required by your local laws and regulations. Understand that your safety and the safety of other persons are measured by how you service and operate this loader.
Know the position and operations of all controls before you try to operate. Make sure you check all controls in a safe area before starting.
Read this manual completely and thoroughly and make sure you understand all controls. All equipment has a limit. Make sure you are aware of the stability and load characteristics of this loader before you begin operation.

This safety alert symbol indicates important safety messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.

SAFETY PRECAUTIONS

READ MANUALS AND DECALS

- Read and understand both the tractor and the loader Operator Manuals and all decals before using the loader.
- Lack of knowledge can lead to accidents.
- It is the loader owner's responsibility to make sure anyone operating the loader reads and understands this manual first before operating the machine.
- Follow all safety, operating, and service instructions.
- Replace damaged or illegible safety labels. See following pages for required labels.

ROPS AND SEAT BELT

- Equip your tractor with an approved rollover-protective structure (ROPS) or ROPS Cab and seat belt for your protection.
- ROPS (Roll-Over Protective Structures) and seat belt equipped tractors are recommended for operator use in all loader operations.
- Operater should wear safety hard hat, safety glasses, safety shoes, and other PPE. Avoid wearing loose clothing or jewelry that may catch in moving parts.
- Use seat belt as specified by tractor/ROPS manufacturer.

YOURSELF

- Do not stand, walk, or work under a raised loader bucket or attachment unless it is securely blocked and held in position.
- Operate controls only when properly seated in the operator's seat.
- Only one person, the operator, should be on the machine when it is in operation.
- Accidental movement of valve handle/handles or leak in the hydraulic system could cause the loader to drop, or attachment to dump, causing severe injury.

OTHERS

- Do not allow anyone in loader work area, under raised loader, or to reach through the loader boom when the bucket or attachment is raised.
- A frequent cause of personal injury or death is persons falling off and being run over. Inadvertent movement of the loader or attachment could result in serious injury or death.
- Do not permit others to ride on your tractor. loader, bucket, or any attachment.
- Do not lift or carry anyone on buckets, forks, probes, or any other portion of the loader or loader attachments.
- Do not allow children or unqualified persons to operate equipment.

SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

PREPERATION

- Move the wheels to the tractor manufacturer's widest recommended settings to increase stability.
- For better stability, always use a tractor equipped with a wide front axle, never use a tractor equipped with a tricycle type front axle.
- Add rear ballast or rear weight to the tractor to compensate for the load and increase stability.
- Add recommended rear trie liquid weight or rear wheel weights for increased stability.
- Do not modify, alter, or permit anyone else to modify or alter the loader, any of its components, or any loader function without first consulting a Mahindra dealer.
- Assemble, remove, and reinstall the loader only as directed in this manual. Failure to do this could result in serious personal injury or death.
- The loader may shift during shipping and handling, making it unstable on the pallet. Support loader with an overhead hoist or other suitable means prior to removing bands or attaching straps securing loader to pallet. Failure do so could result in accidental tip-over of the loader that could cause serious injury to you and/or bystanders.

BEFORE OPERATION

- Before starting the engine of your tractor, make sure all operating controls are in park lock or neutral position.
- Be certain lights and safety markings, as provided by the tractor manufacturer, are clean and operating when transporting the tractor/loader on public roads. Be certain that the Slow Moving Vehicle (SMV) emblem is visible. Check with local law enforcement for specific requirements.

OPERATION

- Add wheel ballast and/or rear weight to counterbalance tractor/loader for stability at maximum loader capacity.
- Additional counterweight requirements will vary with loader attachments and equipment application.
- Move and turn the tractor at low speeds.
- Carry loader boom at a low position during normal operation.
- Never travel at high speeds with bucket loaded.
- Use caution when operating the loader with a raised bucket or attachment.
- Avoid driving over loose fill, rocks, holes, or anything that may be dangerous for loader operation or movement.
- Allow for the loader length when making turns.
- Use caution when handing loose or unstable loads.
- Gradually stop the loader boom when lowering or lifting loads.
- When using remote hydraulic tractor valves on some tractors, the loader lift and dump cylinders will continue moving unless the valve handle/handles are manually returned to neutral, or until relief pressure is reached at the ends of piston strokes. Observe the bucket movement and maintain control with valve handle/handles.
- Travel speed should be such that complete control and machine stability is maintained at all times. Where possible, avoid operating near ditches, embankments, and holes. Reduce speed when turning, crossing slopes, and on rough, slick or muddy surfaces.
- A loader attachment should be transported in a low position at slow ground speeds. Make turns slowly and use the tractor brakes cautiously. A loaded attachment in the raised position alters the center of gravity location of the machine and increases the possibility of mishaps.
- Be careful during loading, transporting, and stacking to minimize rolling bales and tractor tip over.
- Do not use buckets, forks, or other attachments without bale retaining devices.
- Operate the tractor and loader such that complete control and machine stability is maintained at all times.
- When using a loader, be alert of bucket or attachment position at all times. Loader in raised position with bucket or attachment rolled back can dump material onto tractor causing damage or injury to tractor and/or operator.

SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

LARGE HEAVY OBJECTS

- Never use loader for handling large heavy objects, such as large round or rectangular bales, logs, and oil drums unless loader is equipped with attachment that is designed to handle such objects.
- Handling large heavy objects can be extremely dangerous due to danger of rolling the tractor over.
- Handling large heavy objects can be extremely dangerous due to danger of upending the tractor.
- Handling large heavy objects can be extremely dangerous due to danger of the object rolling or sliding down the loader boom onto the operator.
- If you must handle large heavy objects, protect yourself by using caution, moving slowly, and avoiding bumps and rough ground.
- If you must handle large heavy objects, protect yourself by never lifting load higher than necessary to clear the ground.
- If you must handle large heavy objects, protect yousrelf by adding rear ballast to the tractor to compensate for weight of load.
- If you must handle large heavy objects, protect yourself by never lifting large heavy objects that may roll or fall on the operator.
- Never lift any load from any point of the loader with a chain, rope or cable unless loader is equipped with a Factory approved attachment that was designed and built for this type of lifting. Always follow lifting instructions included with these attachments.
- Use only Factory bale probe or bale retaining devise handler attachment when handling round bales.
- Do not handle large square bales without a retaining device handler attachment.
- Do not use buckets, forks ,or other attachments without bale retaining devices.
- Do not use loader for handling large, heavy objects such as logs, tanks, etc.

SLOPES

- Stay off of slopes too steep for safe operation.
- Shift down before you start up or down a hill with a heavy load. Avoid "free wheeling".
- Use extreme caution when operating on a slope.
- Always operate up and down the slope, never across the slope.

ELECTRICAL

- Avoid contact with overhead wires, power lines,and obstacles when loader bucket or attachment is raised.
- Electrocution from power lines can occur with or without contact.
- Check for underground utilities before digging below grade level.
- Contact with overhead power lines can cause severe electrical burns or death from electrocution. Make sure there is enough clearance between raised equipment and overhead power lines.

HYDRAULIC

- Do not tamper with the relief valve setting. This will void warranty and could cause damage to loader and/or tractor.
- Pouring hydraulic fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Do not use HANDS to search for suspected leaks. If injured by escaping fluid, obtain medical treatment immediately.
- Visuslly check for hydraulic leaks and broken, missing or malfunctioning parts. Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose. Escaping hydraulic fluid or diesel fuel leaking under pressure can have sufficient force to penetrate the skin and cause serious infection or other personal injury. If injured by leaking fluid, seek medical attention immediately.
- To prevent personal injury, relieve all pressure before disconnecting fluid lines.
- Before applying hydraulic pressure, make sure all hydraulic connections are tight and components are in good condition.
- Be sure to purge all the air from the hydraulic system before attempting to raise or lower this machine.

SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

- When using remote hydraulic tractor valves on some tractors, the loader lift and dump cylinders will continue moving unless the valve handle/handles are manually returned to neutral, or until relief pressure is reached at the ends of piston strokes. Observe the bucket or attachment movement and maintain control with valve handle/handles.

- Raised loader or boom can fall due to hydraulic system failure.
- To avoid serious injury or death: Block up or securely support loader and boom before working underneath.
- To avoid serious injury or death: Purge all air from hydraulic system before attempting to raise or lower loader or boom.
- To avoid serious injury or death: Stand clear if lowering or raising loader or boom.
- Do not use hand or skin to check for hydraulic leaks. Use cardboard or wood. Wear eye protection.
- High pressure oil leaks can penetrate skin causing serious injury and gangrene. Consult a physician immediately.
- Lower the loader or boom and release hydraulic pressure before loosening fittings.

AFTER OPERATION

- Before leaving the tractor seat, lower attachment or loader boom to ground, stop engine, lock parking brakes, put all controls in neutral, relieve hydraulic pressure, and remove key before leaving operator's seat.
- Before disconnecting hydraulic lines, relieve all hydraulic pressure.
- Make sure all parked loaders on stands are on a hard level surface with all safety devices engaged to prevent loader from falling and being damaged or injuring someone.
- Always park loader with bucket attached to loader.
- When a front loader is mounted on the tractor, enter and exit the operator's seat only from left side of the tractor.
- Always park loader with a Factory attachment attached to the loader.
- Special care should be taken to park or store attachments with points or sharp edges in a safe manner.
- Make sure all parked loaders are on a hard level surface. Engage all safety devices to prevent loader from falling and being damaged or injuring someone. Do not repair loader if it is not mounted on the tractor. Loss of hydraulic fluid or removal of parts could cause loader to collapse resulting in injury.

REPAIR

- Visually check for hydraulic leaks and broken, missing, or malfunctioning parts. Make necessary repairs before operation.
- To keep mounting kit hardware from loosening during loader operation, hardware must be torqued to specifications notes in operator manual.
- Always wear safety goggles when servicing or repairing the machine.
- When servicing or replacing pins in cylinder ends, bucket, etc, always use a brass drift and hammer. Failure to do so could result in injury from flying metal fragments.
- Never tow from any point of the loader with a chain, rope, or cable. Doing so could cause a roll over or serious damage to the loader.

SAFETY DECALS

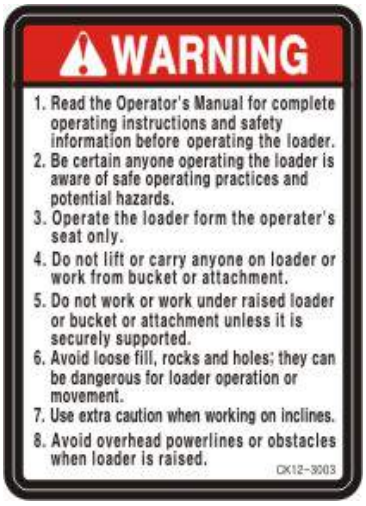
Safety Decal Loacations

Important:
Warning decal 3102E-00001, located on the left hand Mid-mount and Warning Decal 3102E-00002, 3102E-00003 located on the loader right hand Mid-Mount are visible when getting on tractor.

Care of Safety Decals.

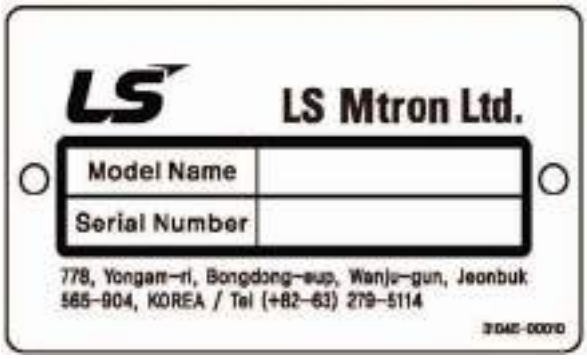
▶ Keep safety decals clean and free of obstructing material.
▶ Clean safety decals with soap and water and dry with a soft cloth.
▶ If a component with a safety decal(s) affixed is replaced with a new part, make sure new safety decal(s) are attached in the same location(s) as the replaced components.
▶ Mount new safety decals by applying on a clean dry surface and pressing air bubbles to outside edges.

Warning 3102E-



Warning 3102E-

Warning 3102E-



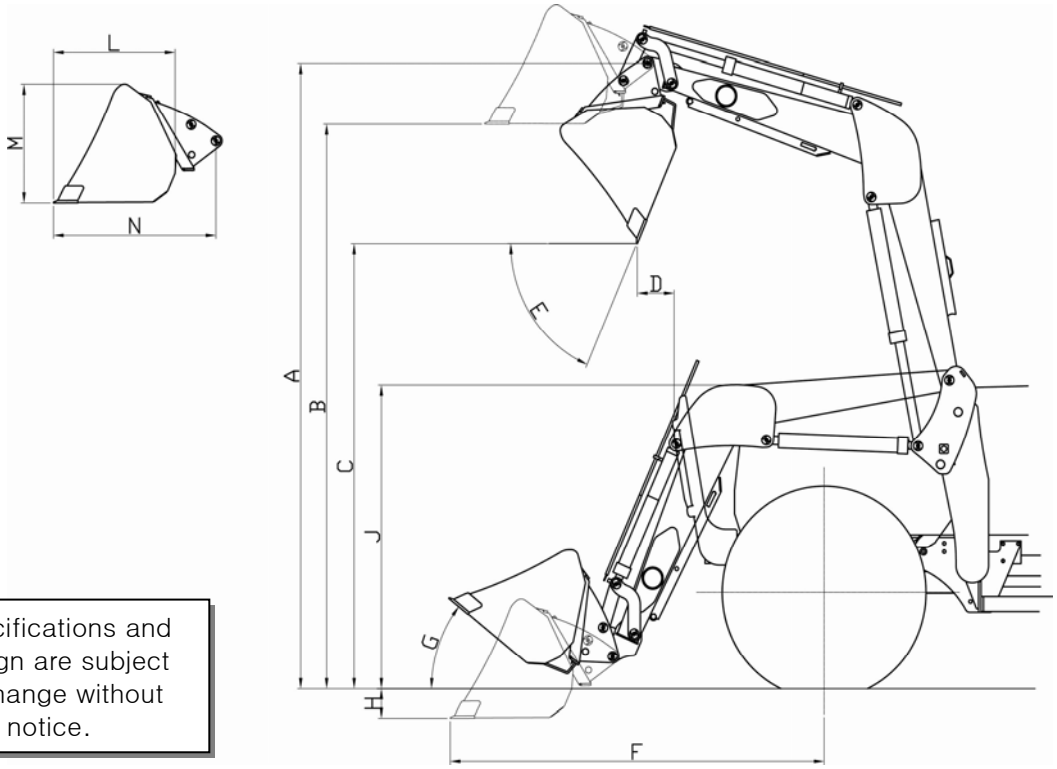
3104E-00010

3101E-00435

3101E-00436

3103E-00013

LOADER SPECIFICATION



Specifications and design are subject to change without prior notice.

* Specifications shown are based on ASAE Standards.

Loader Model : LL5104
Tractor Model : K5047

with out self leveling type

A.	Maximum Lift Height	2,805	mm	110.4	"
B.	Clearance with Attachment Level	2,520	mm	99.2	"
C.	Clearance with Attachment Dumped	1,974	mm	77.7	"
D.	Reach at Maximum Height	515	mm	20.3	"
E.	Maximum Dump Angle	59	°	59	°
F.	Reach with Attachment on Ground	1,806	mm	71.1	"
G.	Attachment Rollback Angle	42	°	42	°
H.	Digging Depth Below Grade	100	mm	3.9	"
J.	Overall Height in Carry Position	1,467	mm	57.8	"
L.	Depth of Attachment (to back of inner shell)	592	mm	23.3	"
M.	Height of Attachment	581	mm	22.9	"
N.	Depth of Attachment (to pivot pin)	800	mm	31.5	"

Loader Total Weight	580	kg	1276.0	lb
Weight of Boom Assembly	380	kg	836.0	lb
Weight of Mounting Frame	200	kg	440.0	lb
Lift Capacity to Full Height at Pivot Pins	1,396	kgf	3,078	lb
Breakout Force at Ground Level, Pivot Pins	2,443	kgf	5,387	lb
Rated Flow (Tractor System)	36.5	ℓ/min.	9.6	gpm
Lift Cylinder	35x65x700x480ST	mm	1.4x2.6x27.6x18.8ST	"
Bucket Cylinder	35x60x730x370ST	mm	1.4x2.4x28.7x14.6ST	"
Attachment used for specification	1,828	mm	72	"
Hydraulic System	Tractor pump w/loader control valve			

-Standard : Bucket Level indicator

INTRODUCTION

The purpose of this manual is to assist you in maintaining and operating your loader. Read it carefully, it furnishes information and instructions that will help you achieve years of dependable performance. Some information may be general in nature due to unknown and varying conditions. However, through experience and these instructions, you should be able to develop operating procedures suitable to your particular situation.

"Right" and "Left" as used throughout this manual are determined by facing the direction the machine will travel when in use.

The photos, illustrations and data used in this manual are current at the time of printing, but due to possible in-line production changes, your machine may vary slightly in detail. The manufacturer reserves the right to redesign the machine as may be necessary without notification.

▶ Important:

Illustrations used in this manual may not show all safety equipment that is recommended to ensure safe operation of tractor and loader. Refer to the Safety Precautions section of this manual for information concerning safety. consult your dealer for further information.

▶ Warranty Registration

The Delivery and Warranty Registration forms must be filled out and signed to validate your warranty protection. The items on the form under "I hereby Acknowledge" should be read and understood. The terms and conditions of the warranty on this machine are specified in the front of this manual.

▶ Serial Number and Location

The serial number is important information about the machine and it may be necessary to know it before obtaining the correct replacement part. The serial number plate is located on the LH(left hand) inside of front area of boom. The serial number should be recorded on the Delivery and Registration form and also below for your reference.

LS Mtron LL5104 Loader Serial Number Information

LOADER SERIAL NUMBER _____

DATE PURCHASED _____

DEALER NAME _____

AND TELEPHONE NUMBER _____

TRACTOR PREPARATION

Rear Counterweight

CAUTION:
Add recommended rear tire liquid weight, rear wheel or rear ballast for increased stability.

CAUTION:
Do not exceed the manufacturer's rating for maximum gross vehicle weight. Refer to Operator's Manual or ROPS serial plate provided with tractor.

The use of adequate counterweight to counter balance for maximum loader capacity is required for safe loader operation.

Weight added to rear of the tractor provides better traction and easier, more efficient loader operation. The tractor can be counter weighted by filling rear tires with liquid calcium solution and/or by the installation of rear wheel weights.

Additional counterweight requirements will vary with loader attachments and equipment applications. Additional weight can be added by installation of Three Point Hitch mounted ballast.

CAUTION:
Certain specific conditions may not permit safe use of loader at loader rating or may require more careful restricted operation at the rated load.

Refer to Tractor Operator's Manual for specific recommendations on counterweight tractor.

▶ ROPS System
The tractor must be equipped with an approved ROPS System to ensure adequate operator's protection.

▶ Tractor Hydraulic System
Tractor operation in a loader application significantly increase demands on the tractor Hydraulic System. Check the tractor Hydraulic system fluid level daily. Refer to your tractor Operator's Manual maintenance section for instructions regarding tractor hydraulic system maintenance.

Adhere to recommendation in your Tractor Operator's Manual concerning hydraulic fluid and filter specifications, and change intervals.

CAUTION:
The tractor/loader must only be operated with all safety equipment properly installed.

▶ TRACTOR TIRES
Selection of tires(size, profile, tread type) should be restricted to tire recommendations as specified by LS Mtron.

▶ Tire Inflation
Front tires must be maintained at the maximum recommended inflation to maintain normal tire profile with the added weight of loader/material.

Rear tires must be maintained at equal pressure within the recommended tire inflation range. Unequal rear tire inflation can prevent loader attachment from contacting the ground across its full width.

▶ Wheel Tread Settings
Tractor front wheel tread setting must be restricted to wheel tread spacing recommended in the tractor Operator's Manual.

▶ Front Counterweight
Use of front counterweight is not recommended when tractor is being used in a loader application. Front counterweight adds unnecessary front axle load in loader applications.

LOADER OPERATION

CAUTION:
The tractor/loader should only be operated with all safety equipment properly installed.

▶ Precautionary Notes
Do not lower the edge of the bucket too low for loading. Keep the bottom of the bucket level with the ground when loading.
▶ Important: Do not use the bucket for pushing down material with bucket cylinders partially extended. Damage to the cylinders may result.
▶ Important: Do not operate bucket cylinders without bucket, it may damage to the bucket cylinders.
▶ Important:
Do not tip bucket cutting edge down(fully extended bucket cylinders) during backfilling/ backgrading operations.
▶ Important:
Operation with front tractor wheels off the ground is not recommended.

Position vehicle to be loaded as near the pile as possible and in such a direction as to minimize the amount of tractor turning required to dump.

Do not lower the loader with the tractor engine shut off.

Keep the unit clean and perform regular service. Observe safety messages whenever cleaning, servicing, or lubricating.

We urge you to follow this advice:
1. Read and understand this manual as well as the Tractor Operator's Manual.
2. Remember and observe the Safety Precautions brought to your attention in this manual, the tractor manual and on the machinery itself.
3. Use good common sense in the everyday operation of this unit.
   Safety recommendations can never be all-inclusive and you are responsible for watching out for and avoiding unsafe conditions.
4. Never exceed the limits of a piece of machinery. If its ability to do a job or to do so safely is in question, don't try it.
5. Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new loader and tractor.

CAUTION: When lowering a heavy load, ease it downward slowly. Never drop a

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CAUTION: Before disconnecting hydraulic lines, relieve all hydraulic pressure.
Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin causing serious personal injury. If injured by escaping hydraulic oil seek medical attention immediately.

CAUTION: Do not operate the loader if the fittings are leaking or if the hoses are damaged. A sudden line burst would cause the mainframe to drop suddenly, causing damage to the tractor or loader or injury to personnel.

▶ Initial Loader Operation
Before operating the loader, fully raise and lower the boom two or three times. Then raise the bucket approximately four(4) feet above the ground and cycle the bucket cylinders three times. Lower the bucket to the ground. Check the tractor hydraulic oil and the correct oil level.

CAUTION:
Before leaving the machine, stop the engine, remove the key, place all controls in neutral, and either set the parking brake or place tractor in park as equipped.

Always keep cylinders in a retracted position when the loader is not in use to guard against rust and contamination which may cause damage to the cylinder rods or hydraulic system.

▶ Cold Weather Operation
For smooth operation in cold weather, let the tractor warm up. Slowly cycle the lift and bucket cylinders several times to warm the oil in the hydraulic system. The loader may operate erratically until the hydraulic oil has warmed to operating temperatures.

LOADER OPERATION

CAUTION:
Operate controls only when seated in the operator's seat.

▶ Loading Bucket
For the most efficient loading, slowly drive the tractor straight into the material to be loaded and increase speed only after contact has been made. Roll the attachment back a small amount and slowly lift to break away the material. As the load increase, continue rolling the attachment back so as to get the maximum load. Remove the top levels first when loading from large piles of material. When bucket is full, raise loader so the bucket is clear of material and slowly back out of the pile.

▶ Dumping Bucket
When in the dump area slowly drive the tractor forward and raise the loader at the same time. Raise the loader to the height needed to dump the bucket. Make sure to keep a level bucket position to prevent spilling from the bucket. Dump the bucket, and keep all movements smooth.

▶ Transporting a Loaded Bucket
Transport material with the bucket as low as possible to prevent spilling and keep maximum stability. The loader must be in a position that will not block the operators' vision. a loaded bucket must not be transported in the upright position or at excessive speed.

Observe the following safety warning when transporting a loaded bucket.

CAUTION:
When using a loader, be aware of bucket location at all times. When raising a loader with bucket rolled back, material can dump onto tractor causing damage to tractor or injury to operator.

WARNING:
Contact with overhead power lines can cause severe electrical burns or death from electrocution. Make sure there is clearance between raised equipment and over head power lines.

CAUTION:
Stop the loader arms gradually when lowering or lifting.

WARNING:
A loaded Bucket should be transported in a low position at low ground speeds. Make turns slowly and use the tractor brakes cautiously. A full bucket in the raised position alters the center of gravity location of the machine and increases the possibility of accidents.

CAUTION:
Do not stand, walk or work under a raised loader unless it is securely blocked or held in position. Accidental movement of a control lever or leak in th hydraulic system could cause the loader to drop, or attachment to dump, resulting in serious injury or death.

▶ Scraping
When scraping, the Boom lever must be used to keep the bucket on the ground horizontally. The bucket must be kept level to the ground during scraping operations.

▶ Backfilling/Backgrading
When "Backfilling" or "Backgrading", position the bucket so it is level on the ground. Do not dump material from bucket following each pass, as additional weight of material in bucket will assist in "Backgrading" and increases loader efficiency during "Backfilling".

▶ Controlled Rate of Loader Functions
By "feathering" the control lever, reduced operational speeds can be controlled. This action controls the position of the valve spool in the valve body and regulates flow of oil to/from cylinders. It is important utilize this operational practice when lowering loader boom when the bucket is loaded with material.

LOADER REMOVAL

CAUTION:
Never park loader without bucket attached to the loader.

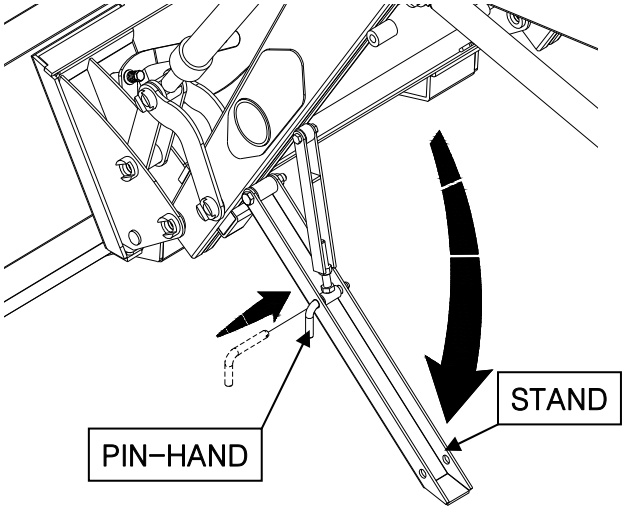
CAUTION:
Never allow weight of tractor to be put on parking leg when removing loader.

▶ Park the tractor and loader on hard level surface.

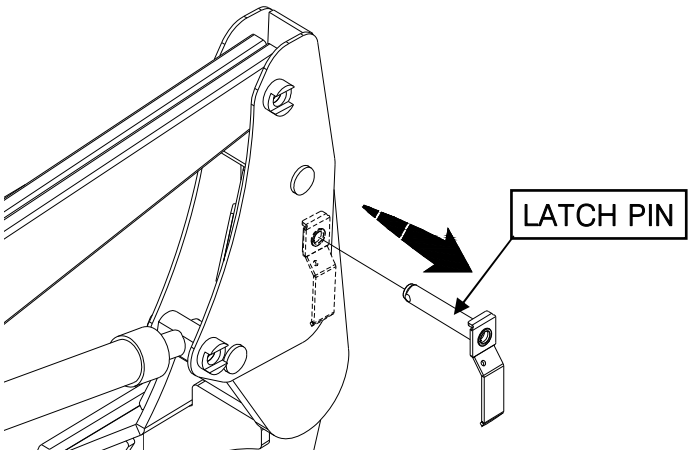
▶ Raise the boom until the bucket is about 2 feet off the ground.

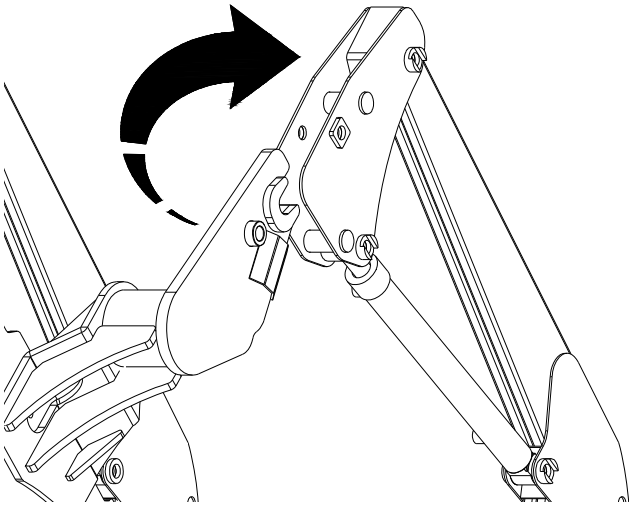
▶ Set the parking legs with pin-hand and Keeper.

▶ Lower the boom until the Parking legs make contact on the ground.
Tip the bucket until the bucket cutting edge touch the ground.



▶ Remove the latch pin while move the control lever back and forth slightly to make the latch pin easy.



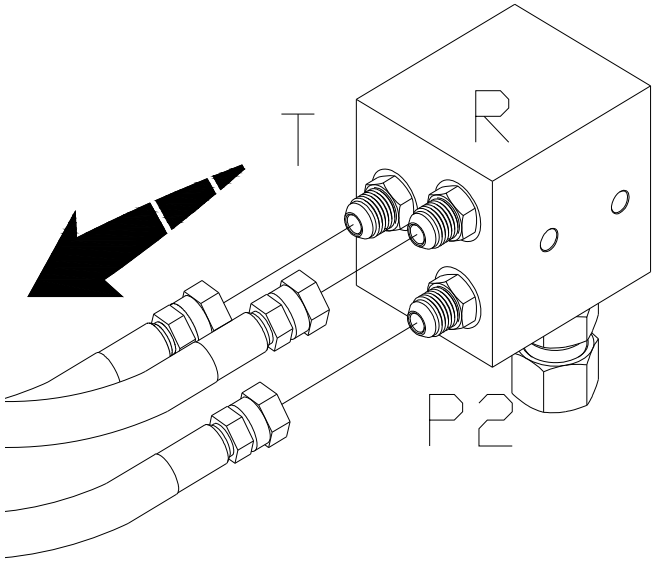


▶ Pull the control lever to raise the loader until the post.
Adjust the bucket until the bottom surface of bucket touch the ground.

▶ Move the tractor backword slowly and stop to avoid the hydraulic hoses being tighten.

▶ Stop the engine and move the control lever back and forth, left and right several times to reduce the hydraulic pressure in the hoses.

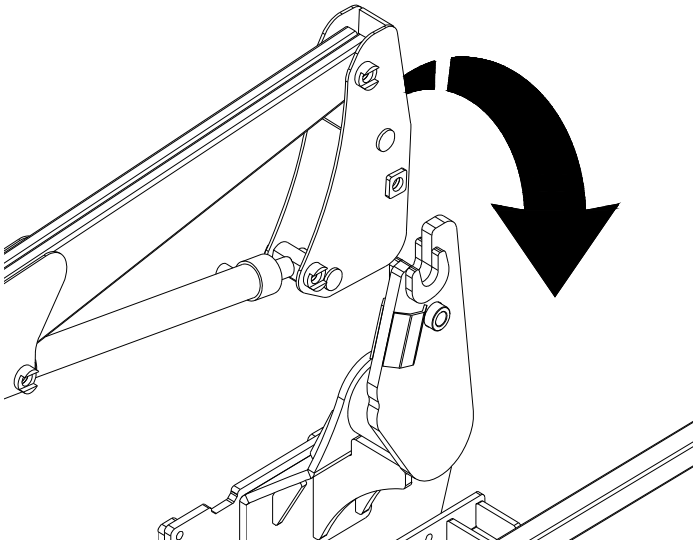
▶ Disconnect the quick couplers on the hydraulic hoses.



LOADER MOUNTING

⚠ CAUTION:

Never allow weight of tractor to be put on parking leg when mounting loader.

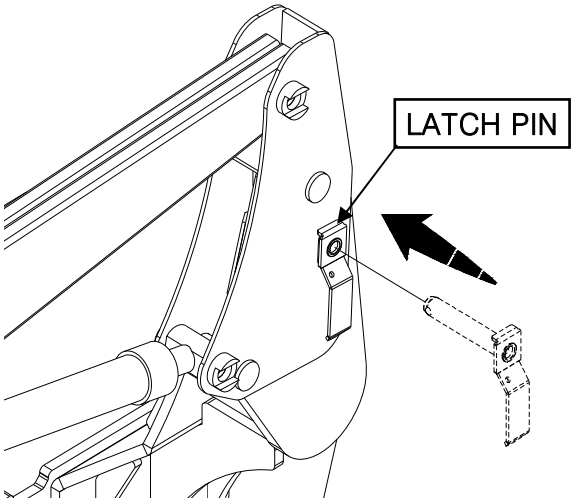


▶ Carefully drive the tractor into the loader to a position where the hydraulic hoses(Quick coupler) can be connected to the control valve block.

▶ Stop the engine and move the control lever back and forth, Left and right several times to reduce the pressure in the hydraulic hoses.
Connect the hydraulic couplers match the color code rings.

▶ Start the engine and move the boom and bucket to adjust the height of post.

Be sure to check the pin welded of post is slightly higher than the hook on mounting frame.



▶ Move the tractor forward to put the post into the mounting frame. Stop the tractor

When the hook is right over the pin.
Lower the mounting frame with moving the boom and bucket until it hooked securely each other.

▶ Align the latch pin holes with moving the bucket and boom.
Insert the latch pins.
Rubber hammer can be used to put the pin in if needed.

▶ Remove pin and keeper holding the parking legs and return to storage position.
Make secure by using pin and keeper.

LUBRICATION AND MAINTERNANCE

CAUTION:

Do not perform and service or maintenance Operations with loader raised off the ground. For additional access to tractor components remove loader.

▶ **Important:**

Lower the loader to the ground and relieve pressure in loader hydraulic lines prior to performing any service or maintenance operations on the tractor or loader.

CAUTION:

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, be sure all connections are tight and that lines, pipes and hoses are not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood rather than your hands to search for suspected leaks. If injured by escaping fluid, seek medical attention immediately. Serious infection or reaction can develop if correct medical treatment is not administered immediately.

Refer to "Lubrication and Maintenance Chart" for quick reference to Maintenance Operations.

CAUTION:

Do not operate the loader if the fittings are leaking or if the hoses are damaged. A sudden line burst could cause the mainframe to drop suddenly, causing damage to the tractor or loader or injury to personnel.

CAUTION:

Operate the loader from the tractor seat only.

CAUTION:

Do not stand or walk under a raised loader. Accidental movement of control lever or leak in hydraulic system could cause mainframe to drop, causing severe injury.

Check the tractor hydraulic system as outlined in the Tractor Operator's Manual.

Note:

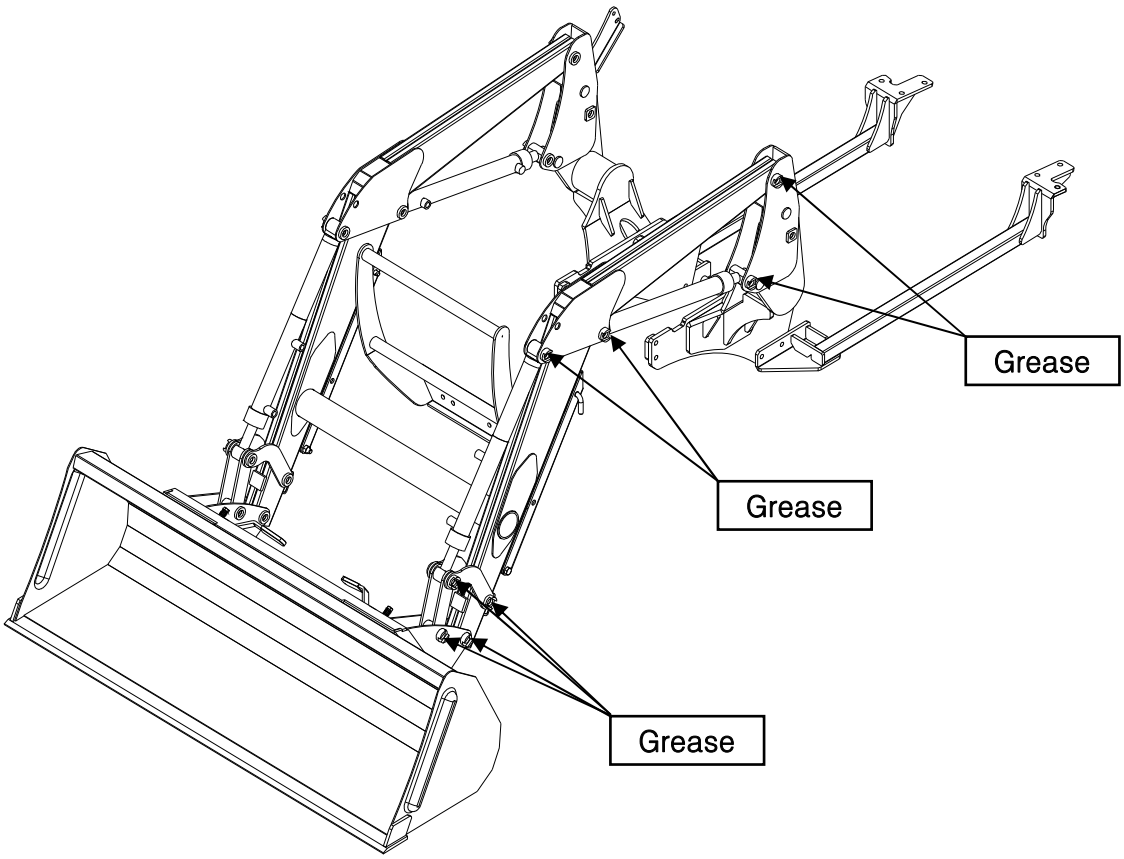
When checking hydraulic system oil level, the loader should be on the ground and bucket fully retracted(all cylinders in retracted position).

Grease all loader pivot points daily(10 hours). Refer to Tractor Operator's Manual for lubricant recommendations.

Inspect hydraulic hoses, connections, control valve and cylinders for evidence of leakage.

Tractor tires should be maintained at maximum recommended inflation to maintain normal tire profile with added weight of loader/material. Unequal rear tire inflation can result in bucket not being level to the ground.

LUBRICATION AND MAINTERNANCE



ITEM	SERVICE	SERVICE INTERVAL
Hydraulic System Oil Level	Check	Daily/10 hours
Hydraulic System Oil/Filter	Replace	As specified in Tractor Operator's Manual
Tire Inflation	Check	Weekly/50 hours
Loader Pivot Points	Lubricate	Daily/10 hours
Loader Hydraulic Lines, Hoses, Connections	Check for leaks, wear	Daily/10 hours
Lift and Bucket cylinder rod packings	Check for seepage, service as needed	Daily/10 hours
Pivot pin bolts and dust covers	Check, replace if missing	Daily/10 hours
Mid-Mount latch and linch pins	Check, replace if necessary	Daily/10 hours
Loader mount hardware	Check visually	Daily/10 hours
Loader mount hardware	Re-torque	Every 25 hours

TROUBLE SHOOTING

This Trouble Shooting Chart is provided for reference to possible loader operational problems.

Determine the problem that best describes the operational problem being experienced and eliminate the possible causes as listed by following the correction procedures.

PROBLEM	POSSIBLE CAUSE	CORRECTION
Lift and Bucket Cylinders	Low hydraulic fluid level.	Check and replenish hydraulic fluid.
	Hydraulic hoses connected improperly.	Check and correct hydraulic hose connections.
	Hydraulic hoses to/from control valve blocked	Check for damage(kinked) hoses, etc.
	Loader control valve or tractor main relief valve stuck open.	Check system pressure. Repair or replace relief valve.
	Low system pressure supplied from hydraulic pump.	Check system pressure.
		Repair or replace pump.
	Control valve linkage broken.	Inspect. Repair as required.
	Quick disconnect coupler(s) are not fully connected or "Flow Check"	Check coupler connections.
		Replace coupler(s) if necessary.
	Hydraulic hose or tubeline blockage.	Check for evidence of damage to hoses or tubelines that would block flow of oil between cylinders and control valve.
	Cylinder piston assembly defective(not sealing)	Check cylinders for internal leakage as described in service section under cylinder leakage tests.
	control valve blockage.	Inspect for blockage. Disassemble valve if necessary.
Lift and/or Bucket Cylinders operate in wrong direction relative to control valve lever position.	Hydraulic hoses connected incorrectly.	Correct hydraulic hose connections.
Aeration of Hydraulic Fluid(Generally indicated by foamy apperance of fluid).	Low hydraulic fluid level.	Check and refill hydraulic system to proper level.
	Air leaking into suction side of hydraulic pump.	Check for loose or defective connections between reservoir and hydraulic pump.
	Hydraulic fluid foaming due to improper hydraulic oil usage.	Refer to Tractor Operator's Manual and replace hydraulic oil using recommended hydraulic oil.

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
Slow or erratic lift	Low hydraulic fluid level.	Check and replenish hydraulic fluid.
	Cold hydraulic fluid.	Allow hydraulic system to warm up to operating temperature.
	Engine R.P.M. too slow(hydraulic pump R.P.M. too slow).	Increase engine speed to obtain satisfactory loader operation.
	Excessive weight in bucket. Material weight exceeds maximum specified loader capacity.	Reduce material load.
	Control valve linkage binding/defective.	Check control valve linkage and repair if worn/defective.
	Aeration of hydraulic fluid	Refer to "Aeration of Hydraulic Fluid".
	Quick disconnect coupler restriction or coupler "Flow checks"	Check coupler connections. Repair or replace.
	Hydraulic hose or tubeline restriction(hoses/tubline) kinked or pinched.	Check hoses and tubelines for evidence of restriction.
	Lift cylinder piston assembly leakage.	Check cylinders for leakage. Repair as needed.
	Relief valve erratic or set below specifications.	Check and reset relief valve. Setting as needed.
	Control valve leaking internally.(hypassing fluid within valve).	Replace control valve and recheck operation.
	Inadequate hydraulic pump capacity.	Refer to "Hydraulic Pump Capacity Inadequate"
Inadequate lifting capacity	Engine R.P.M. too slow.	Increase engine R.P.M.
	Excessive load - material weight exceeds specified loader capacity.	Reduce Load.
	Relief valve setting below specifications.	Check and reset relief valve setting as needed.
	Lift cylinder piston assembly leakage.	Check cylinders for leakge. Repair as needed.
	Control valve leaking internally	Replace control valve and recheck operation.
	Hydraulic pump defective.	Refer to "Hydraulic Pump Capacity Inadequate".

TROUBLE SHOOTING

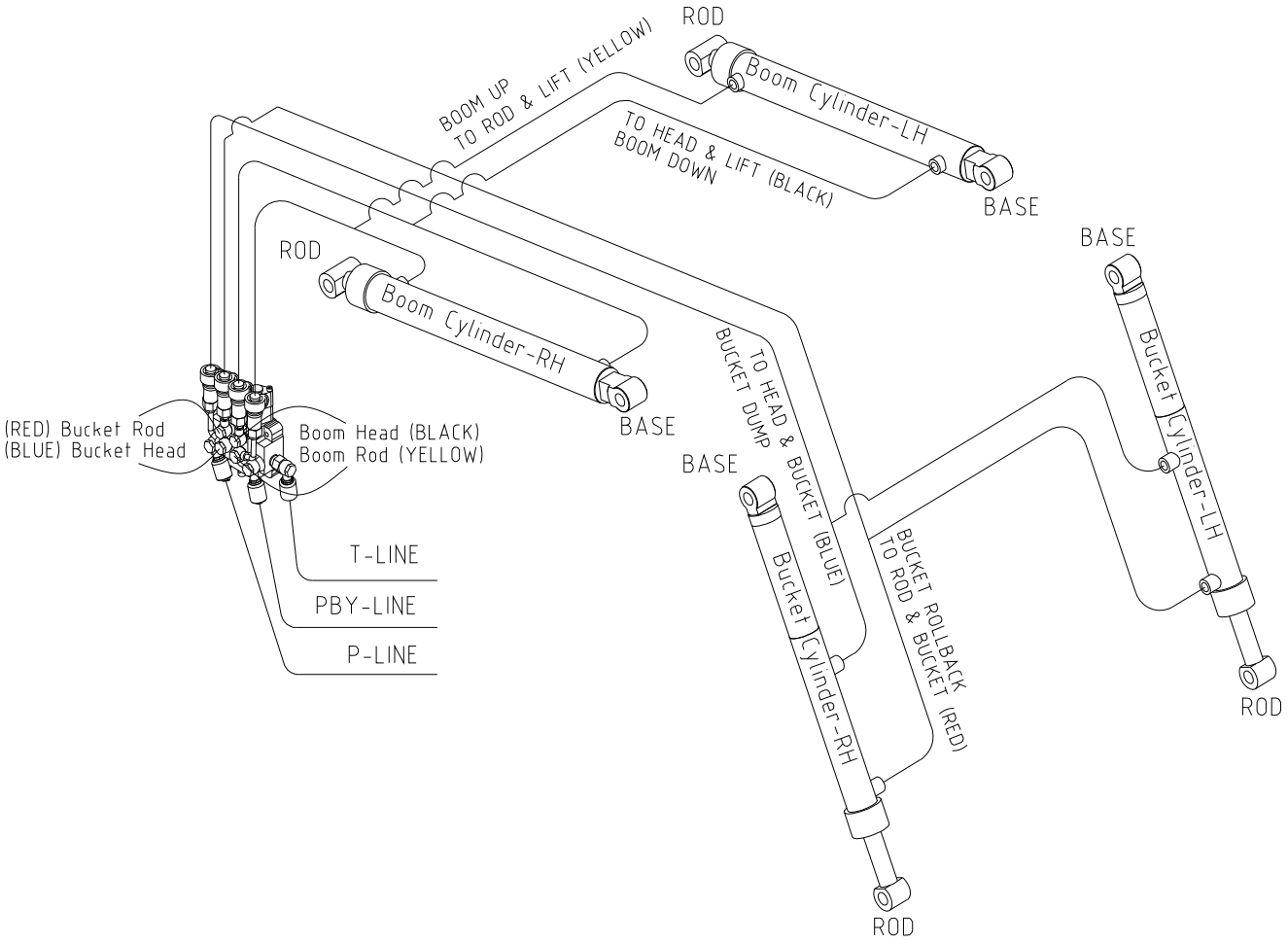
PROBLEM	POSSIBLE CAUSE	CORRECTION
System relief valve squeals.	Cold Hydraulic Fluid.	A low hydraulic fluid to warm up to operating temperature.
	Excessive load in bucket. Weight exceeds specified loader capacity.	Reduce load.
	Relief valve setting below specifications.	Check and reset valve setting as needed.
	Hydraulic hose, tubeline or quick disconnect coupler restriction.	Check for evidence of restriction in hydraulic oil flow. Repair or replace defective components.
Loader drops with control valve spool in "centered" position (no external oil leakage evident.)	Cylinder piston assembly leakage.	Check cylinders for leakage.
Note: A gradual drop over an extended period of time is a normal condition.	Control valve internal leakage.	Replace control valve and recheck.
Control valve spool(s) will not return to centered position.	Control lever linkage binding.	Determine origin of binding and repair.
	Control valve spool centering is broken.	Replace centering spring.
	Control valve spool binding in valve body spool bore.	Disassemble valve for inspection and repair.
External hydraulic fluid leakage.	Loose hydraulic connection.	Tighten loose connections.
	Defective hydraulic hose, tubeline, adapter fitting or adapter fitting o-ring.	Check for origin of oil leak and replace defective part.
	Control valve o-rings defective.	Replace defective o-rings.
	Control valve spool or body damaged or worn.	Replace control valve.
	Cylinder rod packing set leakage.	Check cylinders for leakage. Repair as needed.

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
Hydraulic pump capacity inadequate.	Cold hydraulic fluid.	Allow hydraulic fluid to warm up to operating temperature.
	Engine R.P.M. too slow.	Increase engine R.P.M.
	Low hydraulic fluid supply.	Refer to Tractor Operator's Manual for service recommendations.
	Hydraulic hose restriction.	Check for evidence of restriction in hydraulic hoses.
	Hydraulic pump defective.	Refer to Tractor Operator's Manual for recommended service procedures. Replace hydraulic pump if determined to be defective.
Lift cylinder rod bend when lift cylinders extended.	Excessive shock load on lift cylinders during transport.	Replace defective parts. Review and observe proper and safe operational practices.
Bucket cutting edge wear is uneven side to side	Bucket is not level to ground.	Check rear tire inflation and adjust to level bucket to ground.
Bucket cutting edge wear rate is excessive. (Wear rate is even across full width of bucket).	Incorrect operational practices. Excessive down pressure placed on bucket when being used on hard abrasive surfaces.	Refer to operation-scraping section for correct operating procedures. Utilize float position.
Note: Extensive use of bucket on concrete or asphalt surfaces will accelerate wear rate of bucket cutting edge.	Bucket wear pads worn.	Replace wear pads.

HYDRAULIC SYSTEM SCHEMATIC

AUXILIARY HYDRAULIC VALVE PACKAGE

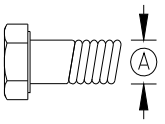


TORQUE TIGHTENING CHART

MINIMUM HARDWARE TIGHTENING TORQUES IN FOOT POUNDS (NEWTON-METERS) FOR NORMAL ASSEMBLY APPLICATIONS

Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.
Fasteners must always be replaced with the same grade as specified in the manual parts list.
Always use the proper tool for tightening hardware : SAE or SAE hardware and Metric for metric hardware.
Make sure fastener threads are clean and you start thread engagement properly.

INCH HARDWARE



SAE SERIES TORQUE CHART

SAE Bolt Head Identification

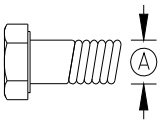
SAE Grade 2 (No Dashes)

SAE Grade 5 (3 Radial Dashes)

SAE Grade 8 (6 radial Dashes)

Ⓐ Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m
1/4"	7/16"	6	8	10	13	14	18
5/16"	1/2"	12	17	19	26	27	37
3/8"	9/16"	23	31	35	47	49	67
7/16"	5/8"	36	48	55	75	78	106
1/2"	3/4"	55	75	85	115	120	163
9/16"	13/16"	78	106	121	164	171	232
5/8"	15/16"	110	149	170	230	240	325
3/4"	1-1/8"	192	261	297	403	420	569
7/8"	1-5/16"	306	416	474	642	669	907
1"	1-1/2"	467	634	722	979	1020	1383

METRIC HARDWARE



METRIC SERIES TORQUE CHART

Metric Grade 8.8

Metric Bolt Head Identification

Metric Grade 10.9

Ⓐ Diameter & Thread Pitch (Millimeters)	Wrench Size	COARSE THREAD				FINE THREAD				Ⓐ Diameter & Thread Pitch (Millimeters)
		MARKING ON HEAD				MARKING ON HEAD				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
		N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	10mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21mm	109	80	151	111	116	87	163	120	14 x 1.5
16 x 2.0	24mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

PART ILLUSTRATIONS

GENERAL INFORMATION

Illustrations

The individual parts in their normal relationship to each other. Reference numbers are used in the illustrations. These numbers correspond to those in the "Number" column and are followed by the quantity required and description.

Directional Reference

"Right hand" and "left hand" sides are determined by standing at the rear of the unit and facing in the direction of forward travel.

Part Order

Orders must give the complete description, correct part number, the total amount required, the product model, all the necessary serial numbers, the method of shipment and the shipping address.

Istructions

▶ GROUP NAME
: Detail classiflcation name for parts.

▶ SECTION NAME
:Classiflcation name for parts.

▶ COMPONENTS
: The components of an assembly are identifled by a bracket.

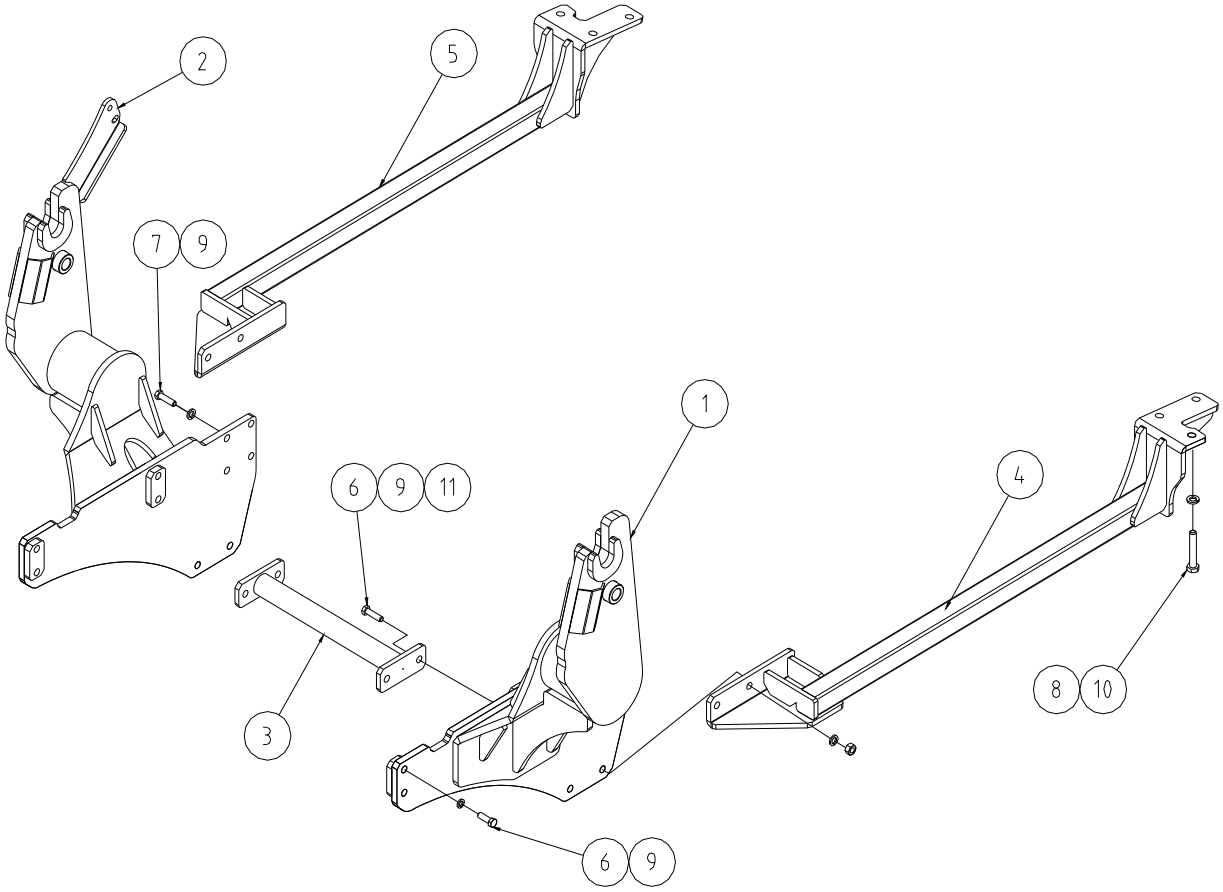
▶ NO.
: Reference numbers are assiqned to parts in the figure.

INTERCHANGEABILITY
: Indicates the interchangeabillty of parts due to design change

	Indicates that a new part can be used instead of an old part when you order this part, plese order new part.
	indicates that either parts can be used.
	indicates that either parts can not be used.
 ~4265-99999 5265-00001~	indicates that a part has a serial number break. When you order this part, please order a part according to the serial number of the Loader.

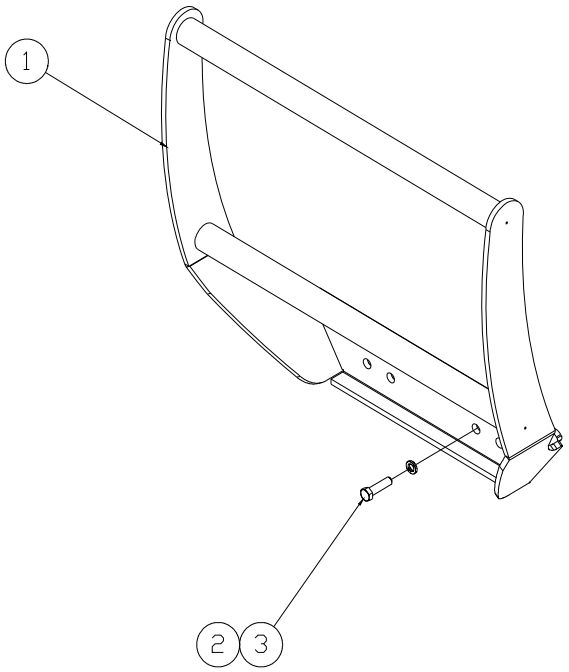
★ Due to our policy of continuously improving products, The information contained herein is subject to change withour notice

MOUNTING FRAME ASSEMBLY



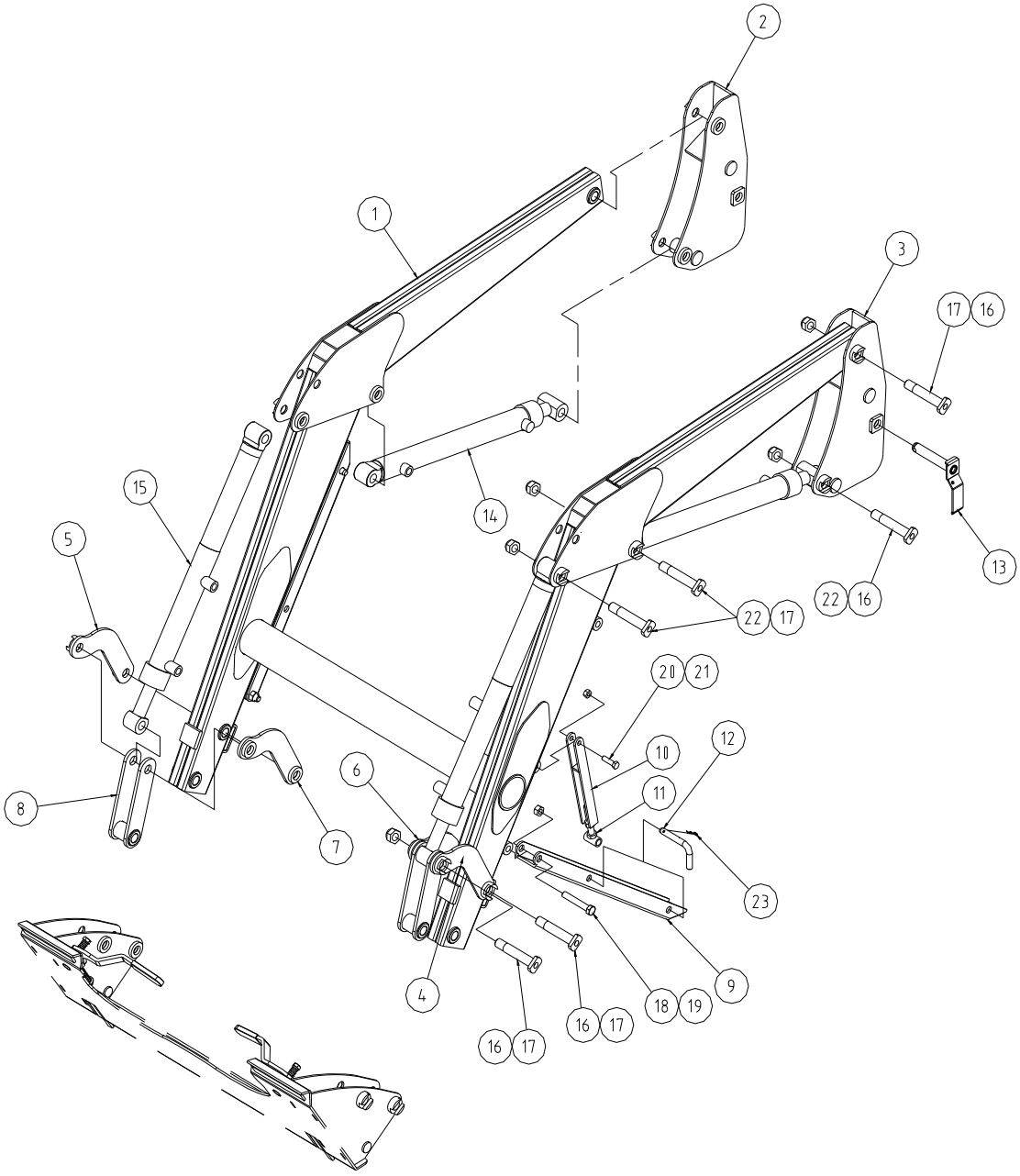
REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40287460	FT624-11100	MOUNTING FRAME-LH	1		
2	40287461	FT624-11200	MOUNTING FRAME-RH	1		
3	40287462	FT624-11300	CROSS BAR	1		
4	40287463	FT624-11400	REAR FRAME-LH	1		
	40300799	FT624-11400-01	REAR FRAME-LH	1	◀	2013.11.01~
5	40287464	FT624-11500	REAR FRAME-RH	1		
	40300800	FT624-11500-01	REAR FRAME-RH	1	◀	2013.11.01~
6	40228623	10191-M1406-60	HEX. BOLT-HT, M14-2.0P 60L	12		
7	40228622	10191-M1406-45	HEX. BOLT-HT, M14-2.0P 45L	8		
8	40287421	10191-M1604-50	HEX. BOLT-HT, M16-1.5P 50L	6		
9	40228643	10316-M1400	WASHER-SPRING, M14	20		
10	40228644	10316-M1600	WASHER-SPRING, M16	6		
11	40228637	10261-M1406	HEX. NUT-HT, M14-2.0P	4		

GRILL ASSEMBLY



REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40287465	FT624-11600	GRILL W.A.	1		
2	40228619	10191-M1404-40	HEX.BOLT-HT, M14-1.5P 40L	4	↵	
	40253705	10191-M1404-50	HEX.BOLT-HT, M14-1.5P 50L	4	←	2013.11.14~
3	40228643	10316-M1400	WASHER-SPRING, M14	4		

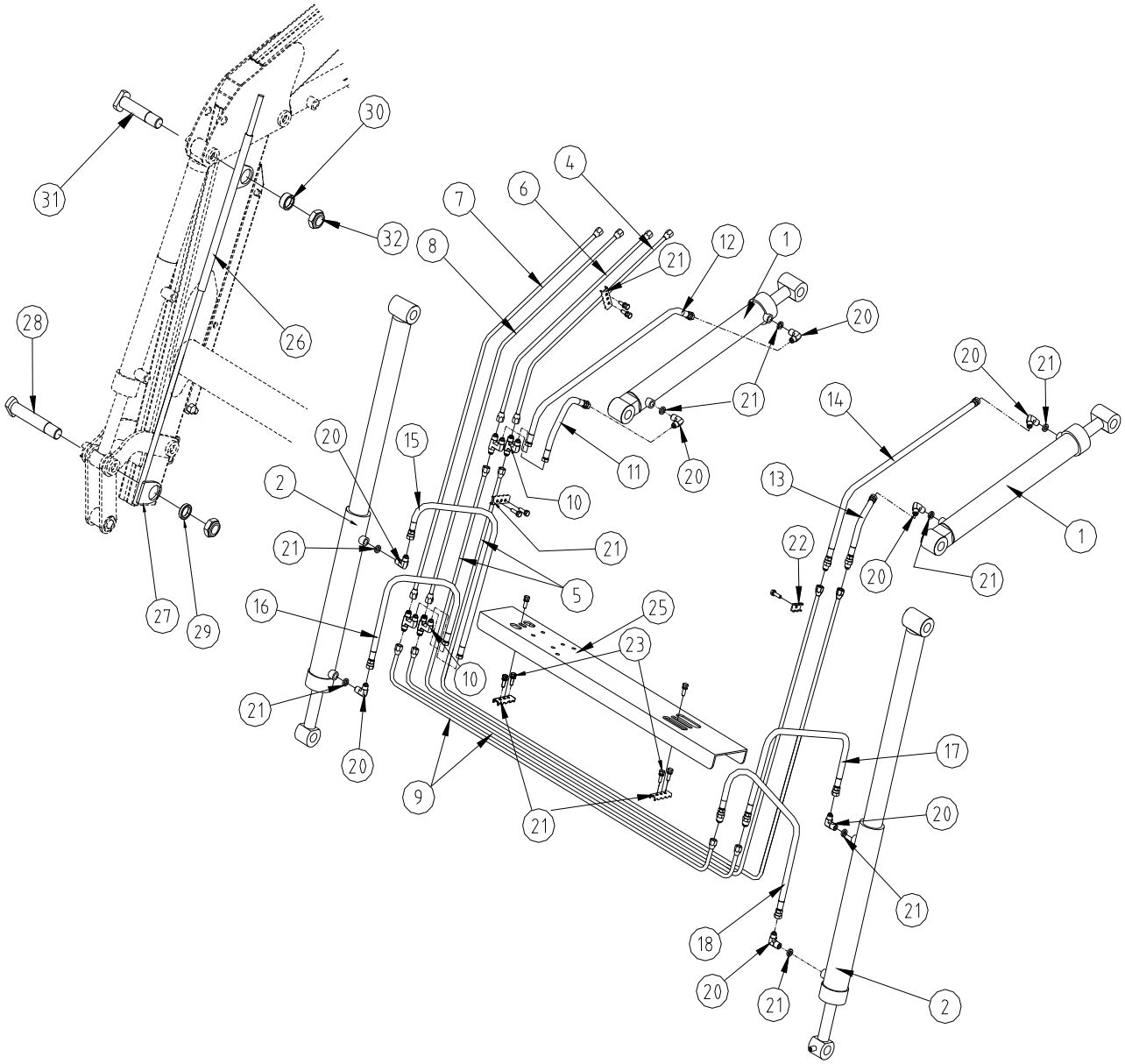
BOOM ASSEMBLY (NON SELF-LEVEL TYPE)



BOOM ASSEMBLY (NON SELF-LEVEL TYPE)

REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40287476	LTE63-12100-03	BOOM W.A.	1		
2	40287477	LTE63-31300-02	POST W.A. RH	1		
3	40287478	LTE63-31400-02	POST W.A. LH	1		
4	40228854	LTS19-51310	LINK W.A.-BUCKET	1		
5	40228855	LTS19-51320	LINK W.A.-BUCKET	1		
6	40228856	LTS19-51330	LINK W.A.-BUCKET	1		
7	40228857	LTS19-51340	LINK W.A.-BUCKET	1		
8	40228836	LTF63-51410	LINK W.A.	2		
9	40228859	LTS19-61111-01	STAND	2		
10	40228860	LTS19-61120-01	STAND W.A.	2		
11	40228862	LTS21-61130	BOLT W.A.	2		
12	40228839	LTL26-61201	PIN-HAND, Ø16-110L H67.5	2		
13	40230842	LTS19-31500	PIN W.A., ⌀25-106.3L	2		
14	40287426	22D701	BOOM CYL.ASSY , Φ35*Φ65*700L (ST480)	2		
15	40287423	226103	BUCKET CYL.ASSY , Φ35*Φ60*730L (ST370)	2		
16	40228661	14124-25130-N	PIN-ASS'Y, M24-1.5P 130L	7		
17	40228633	1021M-M2404	NUT-SELFLOCK, M24-1.5P	12		
18	40230604	10191-M160F-90	HEX. BOLT-HT, M16-2.0P 90L	4		
19	40228636	1021N-M1606	NUT-SELFLOCK, M16-2.0P	4		
20	40228617	10191-M1205-50	HEX. BOLT-HT, M12-1.75P 50L	2		
21	40228635	1021N-M1205	NUT-SELFLOCK, M12-1.75P	2		
22	40228660	14124-25110-N	PIN, Ø25-110L	3		
23	40228655	14011-03000	PIN-R, Ø3	2		

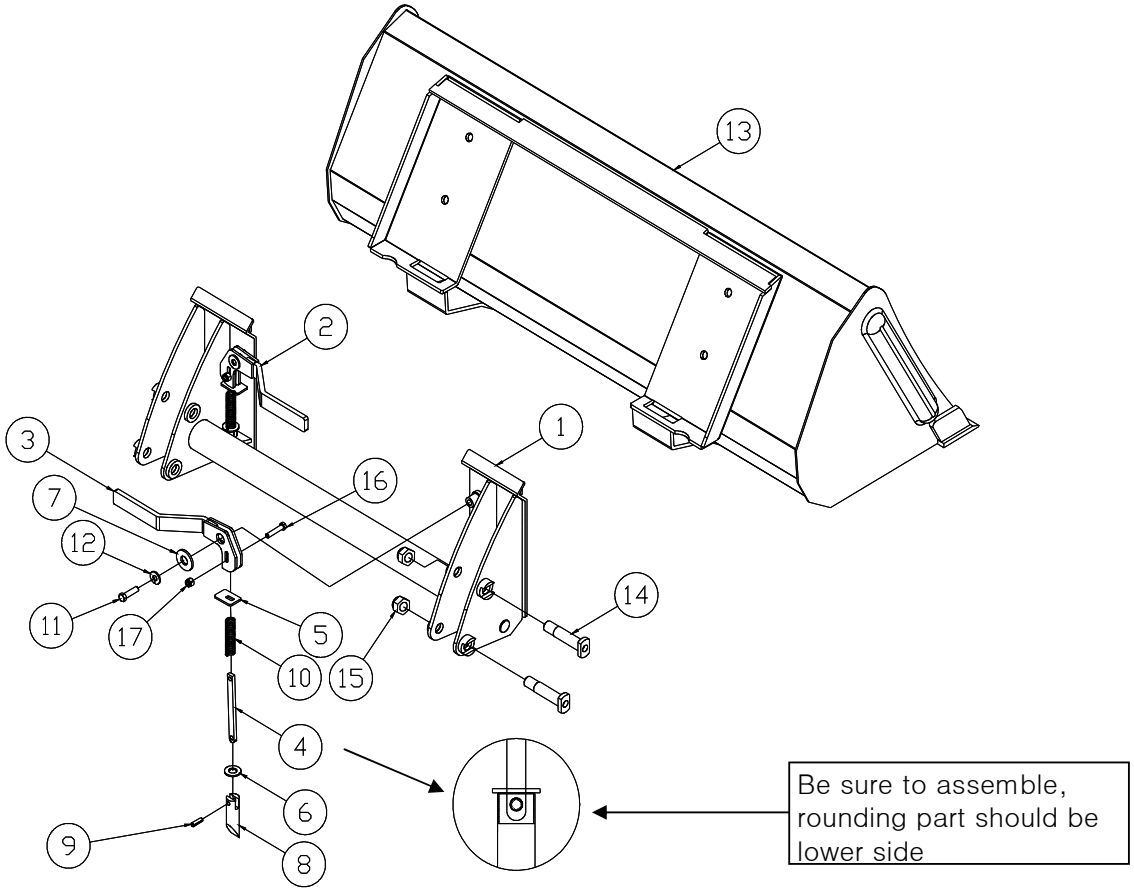
HYDRAULIC PIPING



HYDRAULIC PIPING

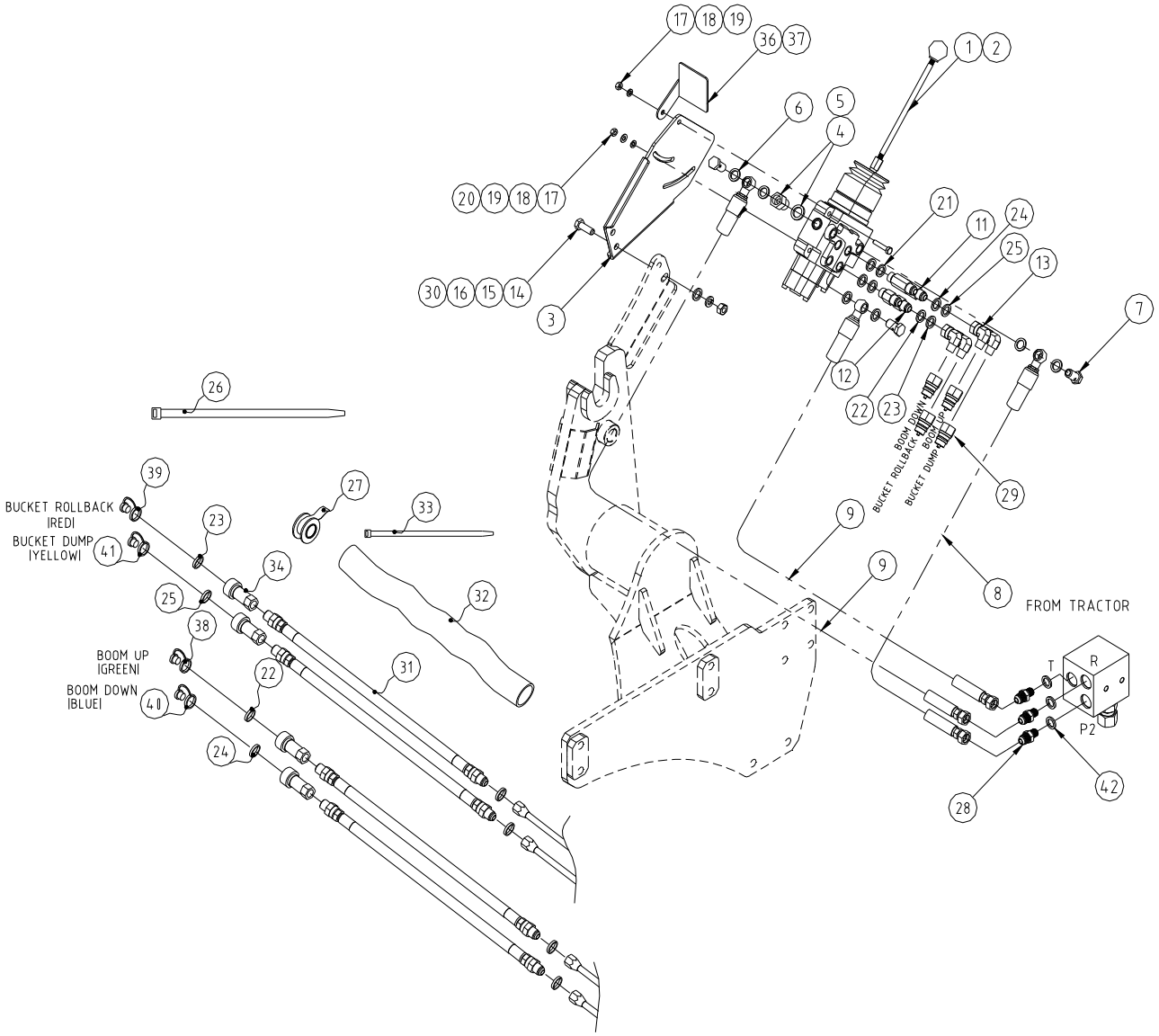
REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40287426	22D701	BOOM CYL.ASSY , Φ35*Φ65*700L (ST480)	2		
2	40287423	226103	BUCKET CYL.ASSY , Φ35*Φ60*730L (ST370)	2		
4	40287470	FTE40-HP100	PIPE ASS'Y	1		
5	40287471	FTE40-HP200	PIPE ASS'Y	2		
6	40287472	FTE40-HP300	PIPE ASS'Y	1		
7	40287473	FTE40-HP400	PIPE ASS'Y	1		
8	40287474	FTE40-HP500	PIPE ASS'Y	1		
9	40287475	FTE40-HP600	PIPE ASS'Y	2		
10	40230663	802H1-F94F9-40	NIPPLE, H-TYPE 3/4-16UNF, HOSE	4		
11	40228736	80620-01027	HOSE ASSY, 4(3/4-16UNF)-4(3/4-16UNF) 450L(3/8)	1		
12	40230680	80620-01026	HOSE ASS'Y, 4(3/4-16UNF)x4(3/4-16UNF) 850L(3/8	1		
13	40228740	80620-03011	HOSE ASSY, 4(3/4-16UNF)-2(3/4-16UNF) 450L(3/8)	1		
14	40230685	80620-03010	HOSE ASS'Y, 4(3/4-16UNF)x2(3/4-16UNF) 850L(3/8	1		
15	40230679	80620-01025	HOSE ASS'Y, 4(3/4-16UNF)-4(3/4-16UNF) 500L(3/8	1		
16	40228735	80620-01024	HOSE ASSY, 4(3/4-16UNF)-4(3/4-16UNF) 700L(3/8)	1		
17	40287438	80620-03009	HOSE ASSY, 1(3/4-16UNF)-4(3/4-16UNF) 500L(3/8)	1		
18	40244646	80620-03008	HOSE ASSY 1(3/4-16UNF)-4(3/4-16UNF) 700L(3/8)	1		
20	40228711	802L2-F94P4-62	NIPPLE, 3/4-16UNF,HOSExPF3/8,O-RING 90°	8		
21	40248378	81300-0P014	O-RING	8		
22	40228840	LTL26-81801	CLAMP	4		
23	40228841	LTL26-81802	CLAMP	1		
24	40228612	1012S-M0803-35	BOLT-SEM'S, M8-1.25P 35L	11		
25	40272717	LTS19-17801-03	Cover, Pipe	1		
26	40286945	FT414-70200	BAR, GUAGE-SHORT, Ø17.3-2.3T-1110L	1		
27	40287469	FTE40-70200	BAR, GUAGE-LONG,⌀12x985L	1		
28	40230616	14124-25138-N	PIN, Ø25-138L	1		
29	40282263	FT416-70103-W	BUSH	1		
30	40287459	FT416-70104-W	BUSH	1		
31	40228661	14124-25130-N	PIN-ASS'Y, M24-1.5P 130L	1		
32	40228633	1021M-M2404	NUT-SELFLOCK, M24-1.5P	2		

Quick Attachment Bucket - BOBCAT TYPE



REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
-	40286964	LTS21-46000-04	QUICK ATTA. ASS'Y	1		
1	40272719	LTS21-46100-02	QUICK ATTA. W.A.	1		
2	40286958	LTS21-46200-03	HANDLE-LH	1		
3	40286959	LTS21-46300-03	HANDLE-RH	1		
4	40230849	LTS21-46401-01	PIN LINK	2		
5	40230850	LTS21-46402	PLATE GUIDE	2		
6	40230851	LTS21-46403	WASHER #1	2		
7	40230852	LTS21-46404	WASHER #2	2		
8	40230853	LTS21-46405	PIN, Ø31.5-112L	2		
9	40230615	14031-10030	SPRING PIN, Ø10-30L	4		
10	40230854	LTS21-46407	SPRING, I.D20x130L	2		
11	40228621	10191-M1406-35	HEX. BOLT-HT, M14-2.0P 35L	2		
12	40228643	10316-M1400	WASHER-SPRING, M14	2		
13	40286949	FTBB6-72000	Bucket W.A.-BOBCAT(72")	1		
14	40230616	14124-25138-N	PIN, Ø25-138L	4		
15	40228633	1021M-M2404	NUT-SELFLOCK, M24-1.5P	4		
16	40229894	10121-M1004-35	HEX.BOLT, M10-1.5P 35L	2		
17	40228634	1021N-M1004	NUT-SELFLOCK, M10-1.5P	2		

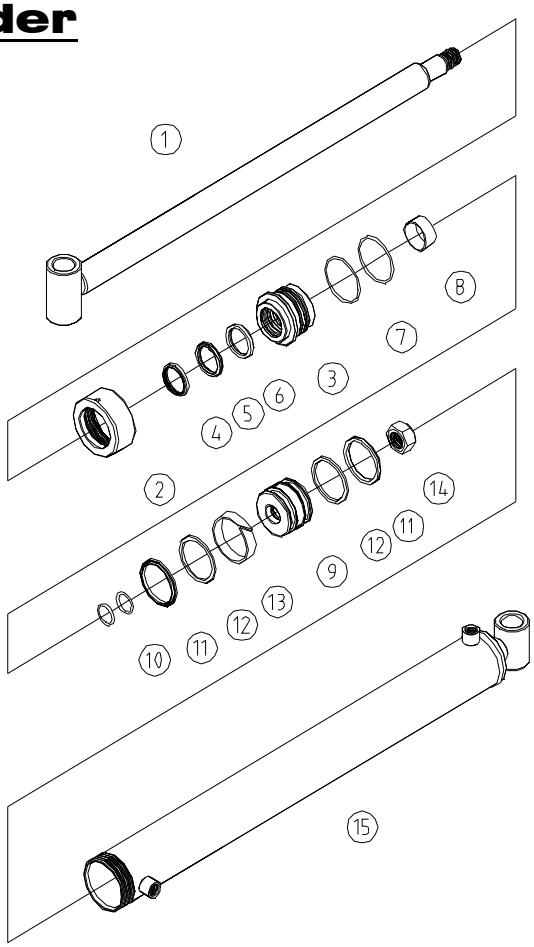
Hydraulic Connecting



Hydraulic Connecting

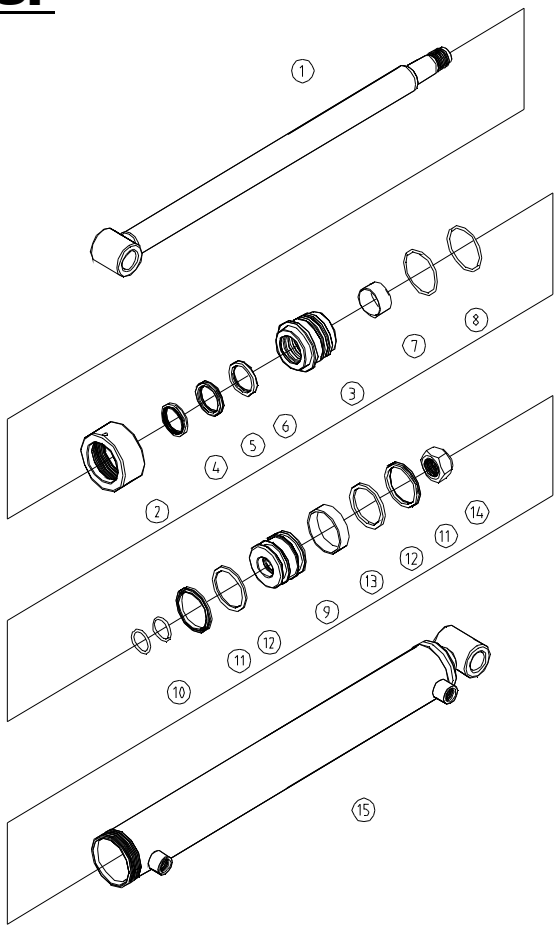
REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40287435	801Z1-80000	CONTROL VALVE	1		
2	40264310	801Z1-80J00	LEVER-VALVE	1		
3	40287466	FT624-V0001	VALVE BRACKET	1		
4	40287436	801Z1-82101	CARRY OVER	1		
5	40228653	103E1-C0110	SEAL BOND, 1/2"	1		
6	40228654	103E1-C0380	SEAL BOND, 3/8"	6		
7	40228731	805BB-1P460	NIPPLE, PF3/8	3		
8	40287441	80620-06026	HOSE , 4(3/4-16UNF)-BENZO(PF3/8) 1150L(3/8)	1		
9	40287440	80620-06014	HOSE , 4(3/4-16UNF)-BENZO(PF3/8) 1250L(3/8)	2		
11	40230964	802N2-P46F9-4M	NIPPLE, PF3/8 COPPER x 3/4-16UNF (69L)	2		
12	40228716	802N2-P46F9-41	NIPPLE, PF3/8, COPPERx3/4-16UNF, HOSE	2		
13	40230959	802L2-T46F9-4S	NIPPLE, PT3/8x3/4-16NUF, SWIBEL 90°	4		
14	40229895	10121-M1205-30	HEX. BOLT, M12xP1.75xL30	2		
15	40228642	10316-M1200	WASHER-SPRING, M12	2		
16	40228631	10211-M1205	HEX. NUT, M12x1.75P	2		
17	40229893	10121-M0803-65	HEX. BOLT, M8-1.25P 65L	3		
18	40228640	10316-M0800	WASHER-SPRING, M8	3		
19	40228629	10211-M0803	HEX. NUT, M8-1.25P	3		
20	40228646	10321-M0800	WASHER-PLAIN, M8	2		
21	40228652	103C0-C0330	WASHER-COPPER, 3/8"	4		
22	40287434	50120-M103G	CABLE TIE 4"-GREEN	3		
23	40230655	50120-M103R	CABLE TIE-RED	3		
24	40230654	50120-M103B	CABLE TIE-BLUE	3		
25	40230657	50120-M103Y	CABLE TIE-YELLOW	3		
26	40228698	50120-M540K	CABLE TIE, 540mm BLACK	3		
27	40228758	99400-00001	TEFRON TAPE	1		
28	40228718	802N2-P63F9-42	NIPPLE, PF1/2, O-RINGx3/4-16UNF, HOSE	3		
29	40228720	80410-T3360	QUICK COUPLER,MALE, PT3/8"	4		
30	40228648	10321-M1200	WASHER-PLAIN, M12	1		
31	40287439	80620-04006	HOSE ASS'Y , 1(PT3/8)-2(3/4-16UNF) 1000L(3/8)	4		
32	40228699	50135-0700K	WEBBING, 700L	1		
33	40228697	50120-M270K	CABLE TIE, 270mm BLACK	2		
34	40228721	80420-T3360	QUICK COUPLER,FEMALE, PT3/8"	4		
36	40228843	LTM25-11702	DECAL TAB	1		
37	40287433	3103E-00009	STICKER	1		
38	40287437	8043G-03300	DUST PLUG, GREEN 3/8"	1		
39	40228722	8043B-03300	CAP-DUST,MALE, 3/8" BLUE MALE	1		
40	40228724	8043R-03300	CAP-DUST,MALE, 3/8" RED MALE	1		
41	40228725	8043Y-03300	CAP-DUST,MALE, 3/8" YELLOW MALE	1		
42	40228755	81300-0P018	O-RING, 1/2"	1		

Boom Cylinder



REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
-	40287426	22D701	BOOM CYL.ASSY , Φ35*Φ65*700L (ST480)	2		
1	40287427	22D701-R	ROD ASS'Y	1		
2	40248811	0C65-7540	CAP OUTER	1		
3	40248810	IC65-3565	COVER INNER	1		
4	40228766	DSSD-R035	DUST,SDR, 35x43x5/6.5	1		
5	40228884	UPSK-Y035	PACKING U, SKY, SKY 35x45x6	1		
6	40228880	UPIS-I035	PACKING U, ISI, 35x45x6	1		
7	40248812	0R1B-G060	O-RING	2		
8	40228769	DU03-5030	BUSHING DU, 35x39x30	1		
9	40248814	PI65-2746	PISTON	1		
10	40228870	0R1B-G027	O-RING, 1BG27	2		
11	40248816	UP0S-I065	PACKING-U	2		
12	40248815	TRBR-0065	RING-BACKUP	2		
13	40248817	WEWR-0065	WEARING	1		
14	40228864	NTP0-U100-C	NUT, 1-14UN	1		
15	40287428	22D701-T	TUBE ASS'Y	1		
			,			

Bucket Cylinder

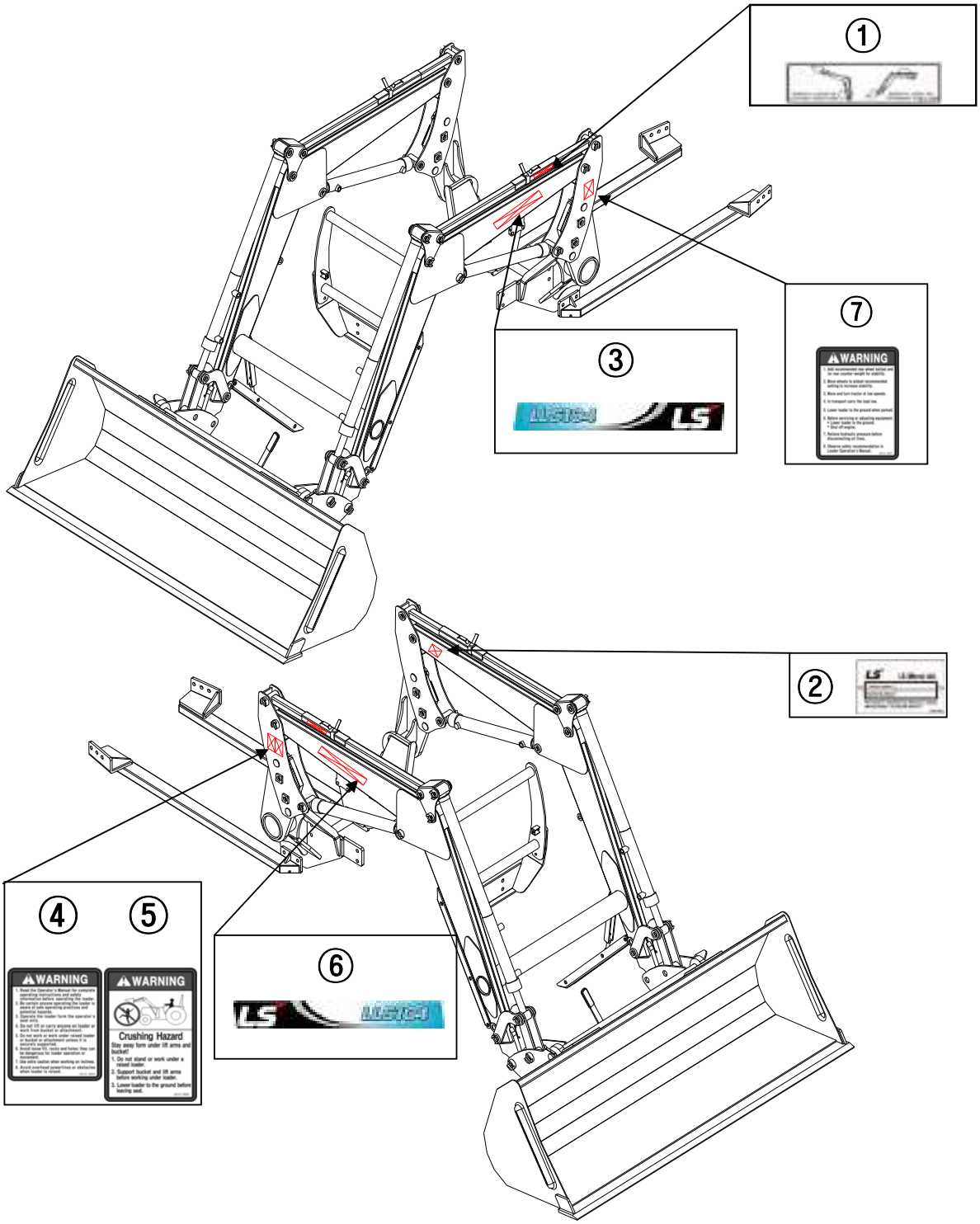


REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
-	40287423	226103	BUCKET CYL.ASSY , Φ35*Φ60*730L (ST370)	2		
1	40287424	226103-R	ROD ASS'Y	1		
2	40228868	0C60-7040	CAP OUTER, Ø60x70x40L	1		
3	40228828	IC60-3565	COVER INNER, Ø60x35x65L	1		
4	40228766	DSSD-R035	DUST,SDR, 35x43x5/6.5	1		
5	40228884	UPSK-Y035	PACKING U, SKY, SKY 35x45x6	1		
6	40228880	UPIS-I035	PACKING U, ISI, 35x45x6	1		
7	40228769	DU03-5030	BUSHING DU, 35x39x30	1		
8	40228872	0R1B-G055	O-RING, 1BG55	2		
9	40228876	PI60-2746	PISTON, Ø60x27x46L	1		
10	40228870	0R1B-G027	O-RING, 1BG27	2		
11	40228882	UP0S-I060	PACKING U, 0SI, 60x50x6	2		
12	40228878	TRBR-0060	RING-BACKUP, 60x50x3	2		
13	40228886	WEWR-0060	WEARING, WR, 60x55x15	1		
14	40228864	NTP0-U100-C	NUT, 1-14UN	1		
15	40287425	226103-T	TUBE ASS'Y	1		

DECALS

CAUTION :

Read and refer to the Tractor Operation Manual or Decals on the Tractor. and Loader Decals on as shown.



Refer to category "Safety decals"

DECALS

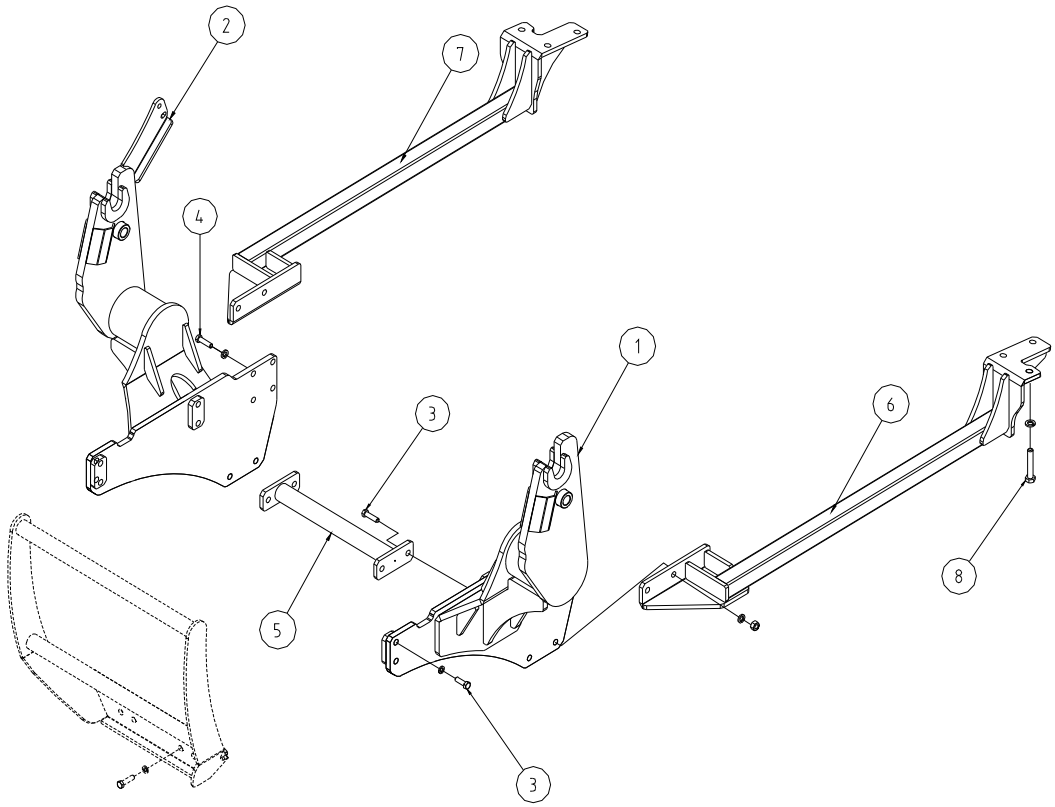
REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40286951	3103E-00013	DECAL, SAFETY LOCK	2		
2	40230653	3104E-00010	NAME PLATE	1		
3	40287429	3101E-00435	DECAL,MODEL-LL5104(LH)	1		
4	40286953	3102E-00002	DECAL, WARNING	1		
5	40286954	3102E-00003	DECAL, WARNING	1		
6	40287430	3101E-00436	DECAL,MODEL-LL5104(RH)	1		
7	40286952	3102E-00001	DECAL, WARNING	1		

LOADER INSTALLATION

◈ Position the loader on a hard level surface. The more level the surface the easier the loader is to install.

▶ IMPORTANT: Do not tighten any hardware until all components are attached onto the tractor.

CAUTION: Lift and support all loader components safely.



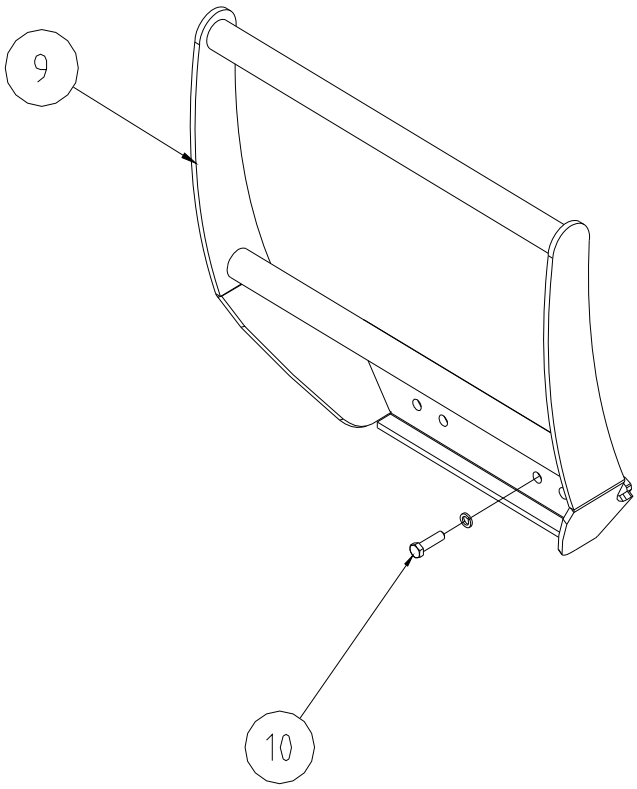
▶ Using a hoist, install Mounting Frame LH/RH.

(1) Mounting Frame LH – 1EA
(2) Mounting Frame RH – 1EA
(3) Hex. Bolt – HT M14x2.0Px60L, HT 12.9 – 12EA
Washer Spring M14 – 12EA
Hex Nut – HT M14x2.0P – 4EA
(4) Hex. Bolt – HT M14x2.0Px45L, HT 12.9 – 8EA
Washer Spring M14 – 8EA

▶ Install Under Cross Bar And Rear Frame LH/RH.

(5) Under Cross Bar – 1EA
(6) Rear Frame LH – 1EA
(7) Rear Frame RH – 1EA
(8) Hex. Bolt – HT M16x1.5Px50L, HT 12.9 – 6EA
Washer Spring M16 – 6EA

LOADER INSTALLATION



▶ Install Grille Guard

(9) Grille W.A. – 1EA

(10) Hex. Bolt – HT M14x1.5Px40L – 4EA
Washer Spring M14 – 4EA

Verify that all mounting kit hardware has been torqued as specified before installing loader.

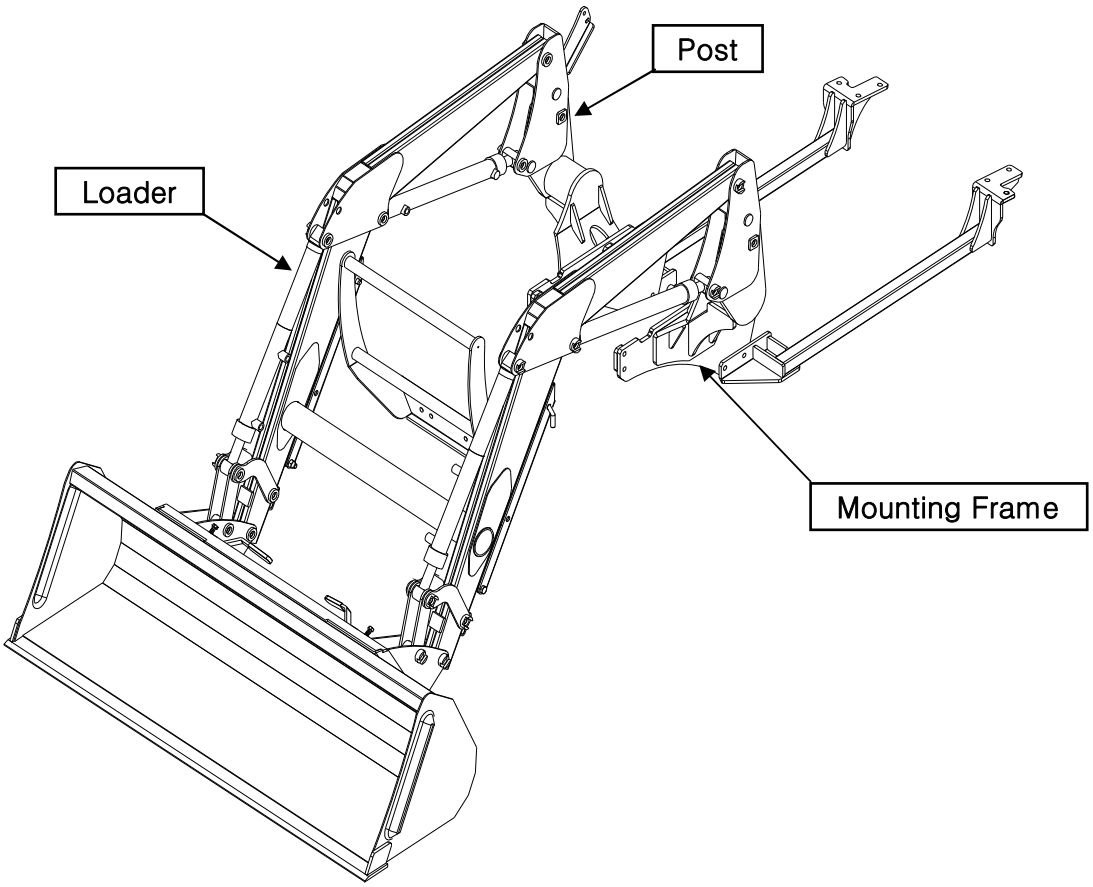
▶ Identify hardware size and grade.

▶ Refer to Torque Chart, page 24 and find correct torque for your hardware size and grade.

▶ Torque hardware to this specification unless otherwise specfied.

▶ IMPORTANT NOTE: To keep mounting kit hardware from loosening during loader operation, hardware must be torque to specifications.

LOADER INSTALLATION



▶ Install Boom Ass'y.

Hang the groove on the pin located on Mounting Frame.