

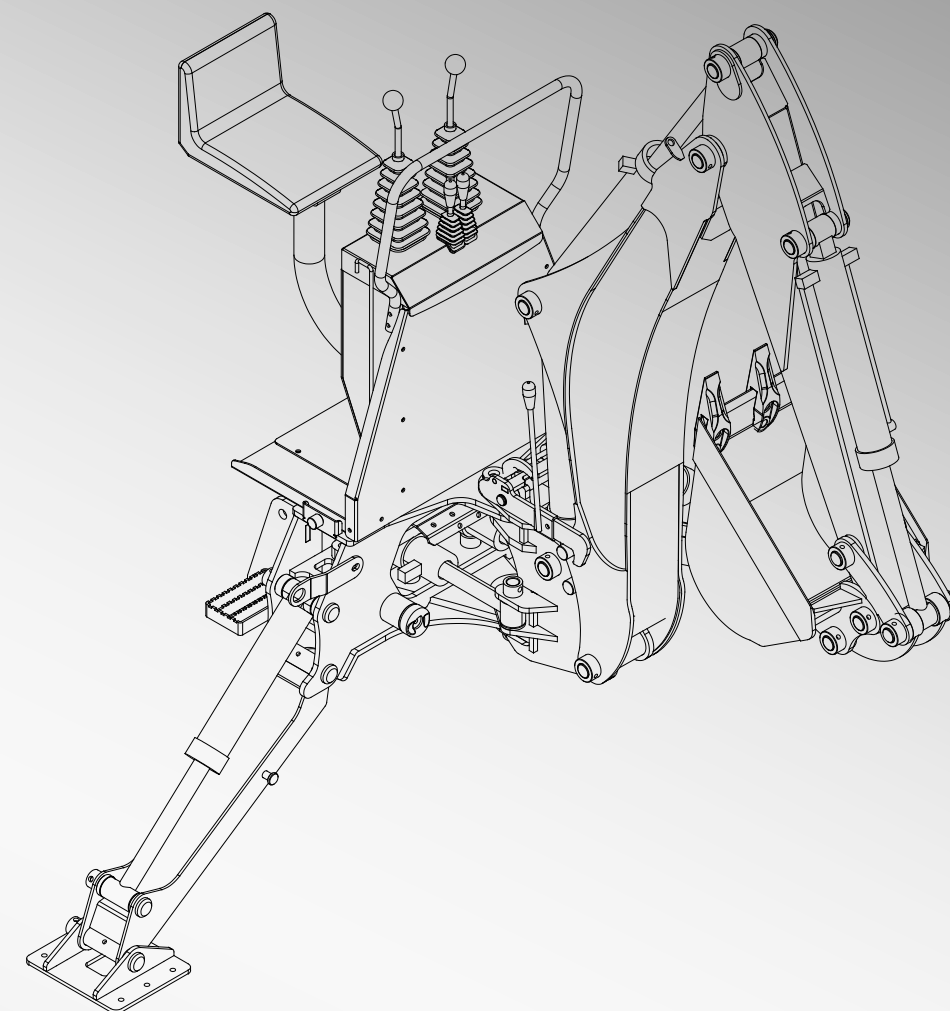
INNOVATIVE
TECHNOLOGY
PARTNER

LS BACK-HOE OPERATOR MANUAL

LB1100 SERIES

TRACTOR Model

- LB1101 : S3010
- LB1102 : G3033/G3033H, G3038/G3038H



LS Tractor

LS BACK-HOE

OPERATOR MANUAL

LB1101/LB1102

www.lstractor.com

LS TRACTOR

LS Tractor

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P/NO BT013-ME000-11

WARRANTY CONDITIONS

Warranty Coverage :

LS Mtron Tractor Division, herein referred to as LS Mtron, undertakes to replace or repair any part of a LS Mtron Backhoe 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 Backhoe 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 Backhoe.

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 Backhoes 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 Backhoe 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.

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SAFETY

Understand that your safety and the safety of other persons is measured by how you service and operate this backhoe. Know the position and operations of all controls before you they to operate. **Make sure you check all controls in all safe area before starting.**

The safety information given in this manual does not replace any safety codes, insurance needs, federal, state and local laws. Make sure your machine has the correct equipment required by your local laws and regulations.

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 backhoe 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



Before starting the engine of your tractor, make sure all operation controls are in park lock or neutral position.

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

Equip your tractor with a ROPS cab or frame for your protection. See your tractor operator's manual for correct seat belt usage.

A frequent cause of personal injury or death is persons falling off and being run over. Do not permit others to ride on your tractor. Only one person, the operator, should be on the machine when it is in operation.

Before leaving the tractor, stop the engine, put all controls in neutral, engage the parking brake and remove the key from the ignition.

When using remote hydraulic tractor valves on some tractors, the backhoe lift and dump cylinders will continue moving unless the control levers 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 the control levers.

Stop the backhoe arms gradually when lowering or lifting loads.

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"

Travel speed should be such that complete control and machine stability is maintained at all times. Where possible, avoid operation near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and on rough, slick or muddy surfaces.

Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose. Escaping hydraulic oil or diesel fuel leaking under pressure can have sufficient force to penetrate the skin and cause infection or other 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.

SAFETY

Contact with overhead power lines can cause severe electrical burn or death from electrocution.

Make sure there is enough clearance between raised equipment and overhead power lines.

Add recommended rear tire liquid weight or rear wheel weights for increased stability.

A backhoe 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.

Do not stand, walk or work under a raised backhoe or attachment unless it is securely blocked or held in position. Accidental movement of a control lever or leak in the hydraulic system could cause the backhoe to drop, or attachment to dump, causing severe injury.

Make sure all parked backhoe on stands are on a hard level surface with all safety devices engaged to prevent backhoe from falling and being damaged or injuring someone.

When using a backhoe, be alert of bucket, boom and arm position at all times.

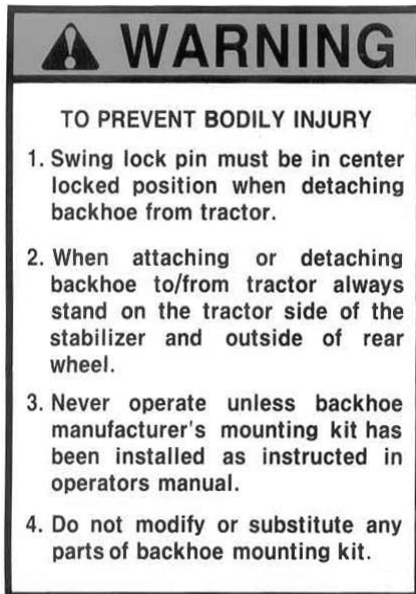
SAFETY DECALS

Safety Decal Locations

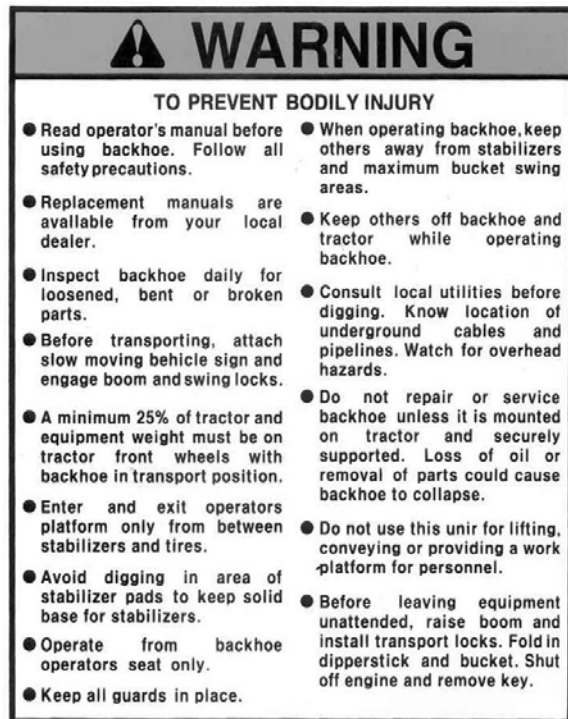
Important: Warning decals are visible when getting on backhoe. Refer to the left and right hands used in this manual, It's the position of the operator when seated in the operating position of Backhoe

Care of Safety Decals.

1. Keep safety decals clean and free of obstructing material.
2. Clean safety decals with soap and water and dry with a soft cloth.
3. 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.
4. Mount new safety decals by applying on a clean dry surface and pressing air bubbles to outside edges.



Warning BH35-0101
Location : Mainframe



Warning BH35-0102
Location : Both of mainframe sides



Warning BH35-0103
Location : Both leg cylinders



Warning BH35-0104
Location : Both side of Mainframe

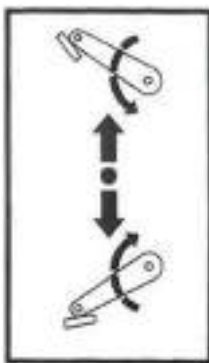
SAFETY DECALS



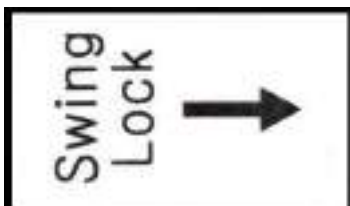
Warning BH35-0105
Location : Main valve cover



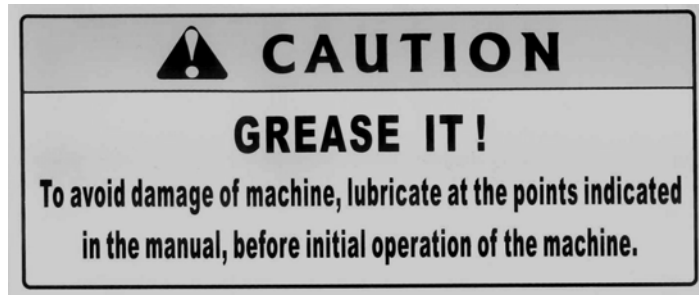
Warning BH35-0107
Location : Left side valve lever



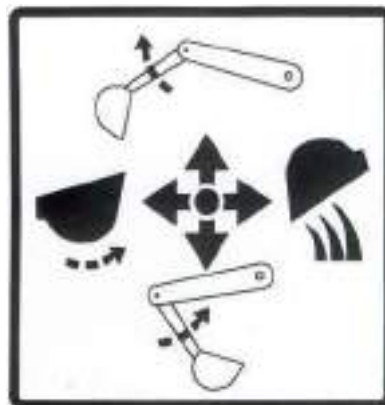
Warning BH35-0109
Location : Side of left inner lever



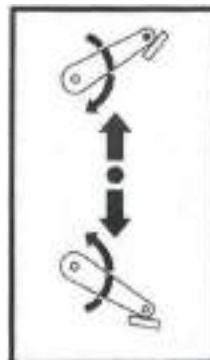
Warning BH35-0111
Location : Top of swing frame forward side



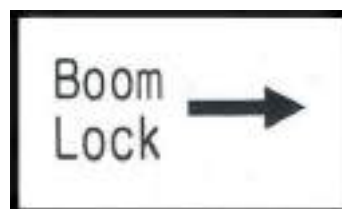
Caution BH35-0117
Location : Main valve cover



Warning BH35-0108
Location : Right side valve lever



Warning BH35-0110
Location : Side of right inner lever



Warning BH35-0112
Location : Beside of the locking hole at the boom mainframe

SAFETY DECALS

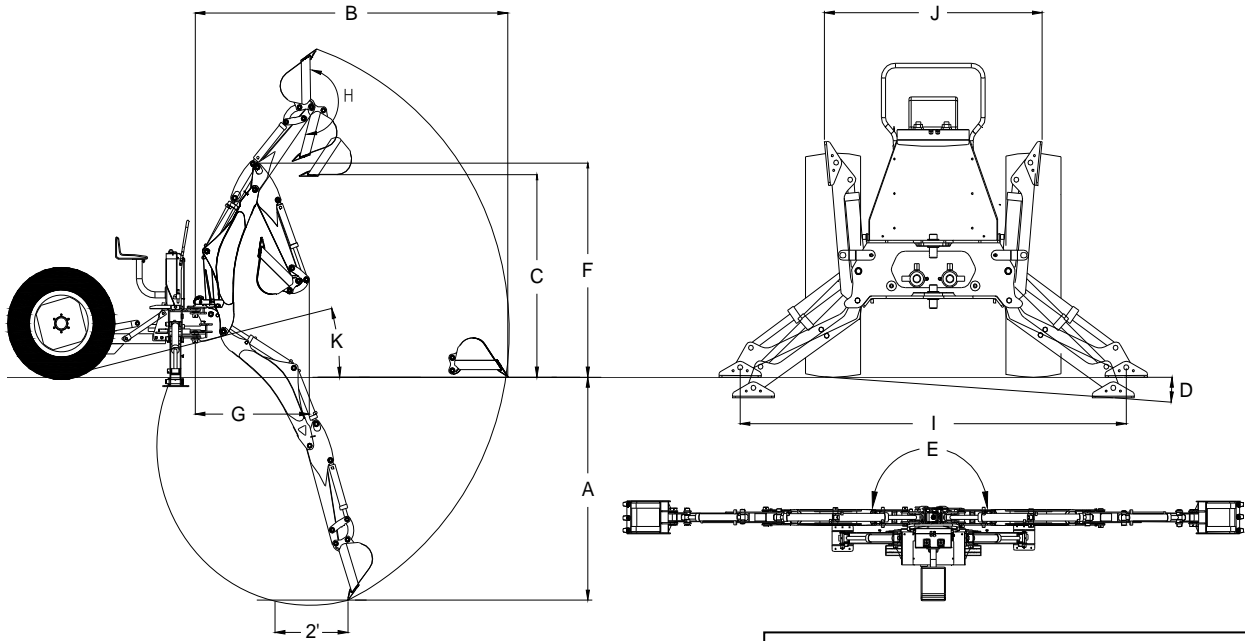


Name Plate 3104E-00010
Location : Both side of Valve Room



Loader Series 3101E-00112
Location : Boom side

BACKHOE SPECIFICATIONS



Specifications and design are subject to change without prior

Backhoe Model : **LB1100**

Tractor Model : S3010, G3033/G3033H, G3038/G3038H, XG3000series, XG3100series, XG3025

A. Digging Deth (two foot flat bottom)	1,940 mm	76.3 "
B. Reach from center line of Swing Pivot	2,875 mm	113.1 "
C. Loading Height (bucket at 60°)	1,615 mm	63.6 "
D. Maximum Leveling Angle	10 °	10 °
E. Swing Arc	180 °	180 °
F. Transport Height (maximum)	1,960 mm	77.2 "
G. Transport Overhang	1,105 mm	43.5 "
H. Bucket Rotation	180 °	180 °
I. Stabilizer Spread (down position)	1,745 mm	68.7 "
J. Stabilizer Spread (up position)	1,180 mm	46.4 "
K. Angle of Departure	21 °	21 °
Shipping Weight – Backhoe(without bucket)	470 kg	1,036 lbs
Bucket Digging Force	1,278 kg	2,817 lbs
Dipperstick Digging Force	793 kg	1,748 lbs
Operating Pressure	170 bar	2,466 psi

Cylinders	Cylinder	Bore DIA		Retracted Length		Stroke		Rod DIA	
		mm	inch	mm	inch	mm	inch	mm	inch
	Boom	70	2.756	586	23.071	384	15.118	40	1.575
	Bucket	60	2.362	535	21.063	299	11.772	35	1.378
	Dipperstick	60	2.362	524	20.630	303	11.929	35	1.378
	Swing	60	2.362	398	15.669	223	8.780	35	1.378
	Stabilizer	60	2.362	446	17.559	262	10.315	35	1.378

Buckets	Bucket	Teeth Q'TY	Struck Capacity	Heaped Capacity	Shipping Weight
	9" Bucket	3	0.73 cu. ft.	0.87 cu. ft.	46 lbs.
	12" Bucket	3	1.01 cu. ft.	1.24 cu. ft.	56 lbs.
	16" Bucket	3	1.38 cu. ft.	1.76 cu. ft.	64 lbs.
	18" Bucket	4	1.56 cu. ft.	2.02 cu. ft.	70 lbs.
	24" Bucket	5	2.11 cu. ft.	2.82 cu. ft.	94 lbs.
	36" Bucket	6	2.78 cu. ft.	4.00 cu. ft.	114 lbs.

Specifications may vary depending on tractor model, tire size and bucket used.

INTRODUCTION

The purpose of this manual is to assist you in maintaining and operating your backhoe. 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.

Backhoe Components

Terms for backhoe components have some variations throughout the industry.

Important:

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

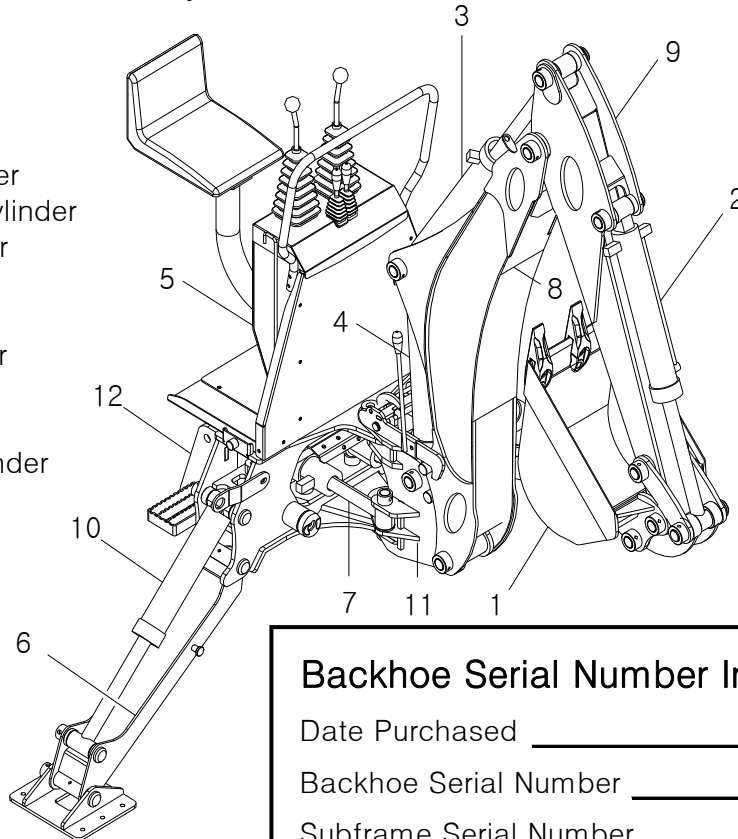
Warranty Registration

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 is located on the front of valve cover. The serial number should be recorded on the Delivery and Registration form and also below for your reference.

- 1 Bucket
- 2 Bucket Cylinder
- 3 Dipperstick Cylinder
- 4 Boom Cylinder
- 5 Console
- 6 Stabilizer
- 7 Swing Cylinder
- 8 Boom
- 9 Dipperstick
- 10 Stabilizer Cylinder
- 11 Swing Frame
- 12 Main Frame



Backhoe Serial Number Information

Date Purchased _____

Backhoe Serial Number _____

Subframe Serial Number _____

Dealer Name and Telephone Number _____

TRACTOR PREPARATION



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.

CAUTION:

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

ROPS System

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



CAUTION:

The tractor/backhoe must only be operated with all safety equipment properly installed.

Tire Inflation

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

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

Tractor Hydraulic System

Tractor operation in a backhoe 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.

Wheel Tread Settings

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

BACKHOE OPERATION



CAUTION:

The tractor/backhoe should only be operated with all safety equipment properly installed. Keep assistants or bystanders a safe distance from the equipment operating area.

Precautionary Notes

- Check below items before operating for your safety.
- Read and understand this manual to avoid accidents.
- Check the hydraulic fitting lines to be correct and set tightly.
- Maintain and repair (if it is needed) the parts or assemblies, check bolts and pins to be sure they are positioned tightly.
- Check tractor with the tractor operator's manual that it can prepared for operating.
- Warm up and operate the tractor and backhoe carefully. Purge any air in the hydraulic lines and cylinders by fully cycling all cylinders several times.
- Check hydraulic level in the tank. It should be full (Refer to the Tractor Operator's Manual).
- Do not operate the hydraulics when not seated in the backhoe operator's seat.
- Keep all assistants out of area of operation.
- Do not operate rapidly.
- Do not allow riders other than the operator to be on the tractor while operating.

Important:

Use tractor engine speed that your experience permits. At first set PTO RPM of the tractor to slow.

Do not use the boom, dipperstick, swing and stabilizers to lift, push or pull objects. Use only to maneuver and operate the bucket.

Important:

Practice quickly turning off the engine or stopping the backhoe immediately in case of an emergency situation.

Important:

Do not operate while the rear tractor wheels are off the ground by stabilizer. It is dangerous to operate the backhoe while rear wheels are off the ground.

Position vehicle so that the backhoe is as near to the pile as possible and in such a direction as to minimize the amount of tractor turning required to dump.

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 backhoe and tractor.



CAUTION: When lowering a heavy load, ease it downward slowly. Never drop a loaded attachment and "catch it hydraulically". Stopping a load after it has gained downward momentum places undue strain on the unit and may cause unnecessary damage to the backhoe or tractor or even worse, personal injury.



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 backhoe 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 backhoe or injury to personnel.

BACKHOE OPERATION

Initial Backhoe Operation

Before operating the backhoe, fully raise and lower the boom, arm, swing and stabilizers two or three times. Then raise the bucket 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 backhoe is not in use to guard against rust and contamination which may cause damage to the cylinder rods or hydraulic system.

Also, lock the swing and boom while tractor is moving and storing for an extended period of time.

Cold Weather Operation

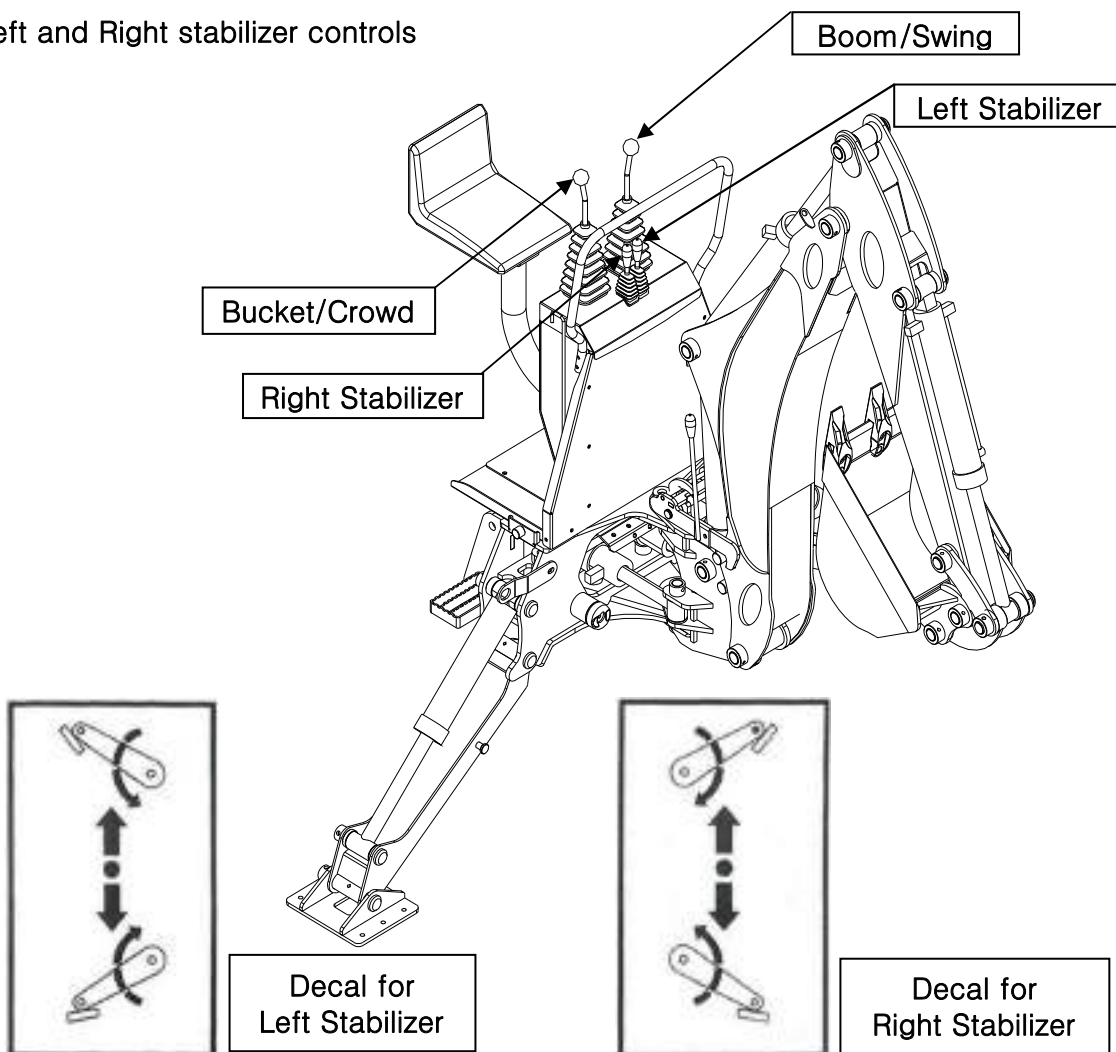
For smooth operation in cold weather, let the tractor warm up. Slowly cycle all of the cylinders several times to warm the oil in the hydraulic system. The backhoe may operate erratically until the hydraulic oil has warmed to operating temperatures.



CAUTION:

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

Left and Right stabilizer controls



Push the left hand inner control lever, left stabilizer lowers. And pull up the lever, left stabilizer raises.

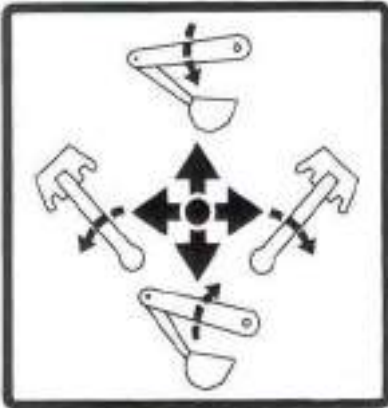
BACKHOE OPERATION

Push the right hand inner control lever, right stabilizer lowers. And pull up the lever, right stabilizer raises.

Do not dig near the stabilizers to avoid possible accident.

Do not lift the tractor rear wheels by stabilizers. Also, be sure the stabilizers are seated on hard ground to support. The backhoe/tractor.

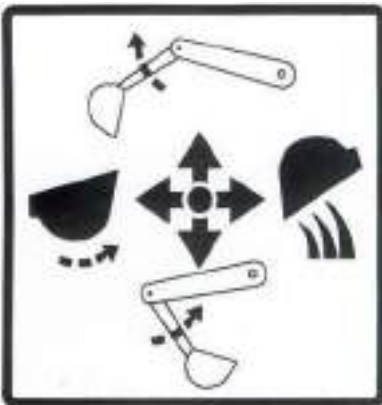
Boom and swing controls



Push the left hand outer control lever, boom moves down, and pull back the lever, boom moves up. Also, pushing the lever fully forward into the detent position, allows the boom to float. In the float position, the boom can drift up or down without pressure.

Move the left hand outer control lever to the left, boom swings to the left. Move lever right, backhoe boom swing moves to the right.

Bucket and crowd controls

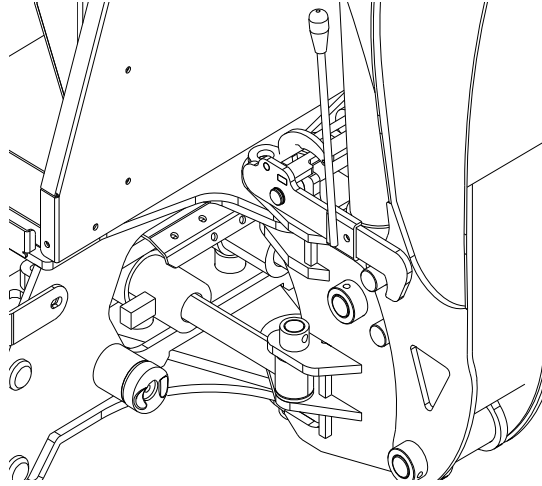


Push the right hand outer control lever, arm(dipperstick) moves away from operator, and pull back the lever, arm(dipperstick) moves toward the operator.

Move the right hand outer control lever to the left, bucket curls in. Move lever right, bucket extends out from operator.

These two levers (Boom and swing control lever, Bucket and crowd control lever) provide four simultaneous operations. Both experience and practice are needed to eliminate excess motion and increase operating efficiency.

BACKHOE OPERATION



Swing Lock and Boom Lock

When transporting or dismounting backhoe, you must lock the backhoe's swing and boom. Position boom straight back and drop pin through holes in swing frame and boom. When not in use, store pin in hole provided on swing frame and boom.

Observe the following safety warnings when working with your new backhoe/tractor.



CAUTION:

When using a backhoe, be aware of bucket and boom location at all times. When raising a arm(dipperstick) with bucket rolled forward, material can spill onto non target area causing injury to assistant or damage other objects.



CAUTION:

Do not dig near stabilizers. Ground under stabilizers could collapse. Make all movements slow and gradual when practicing operation.



CAUTION:

Operate from backhoe operators seat only. Pay attention, be ready to stop, immediately in case of an emergency.



CAUTION:

To help prevent roll-over, adjust the rear wheels to their widest setting to maximize stability. Refer to your Tractor Operator's Manual for recommendations.

BACKHOE REMOVAL



CAUTION:

Move the backhoe to flat, firm and wide place to remove the equipment.



CAUTION:

Do not allow to be removed without bucket and stabilizers. Also, Dump the remaining material from the bucket to empty.



WARNING:

Use other lifting equipment to remove when the backhoe has damage.

STEP 1.

Move the tractor to backhoe storage place.

STEP 2.

Use the inner two levers to lower the stabilizers until they contact to the ground. Use the boom and dipperstick control lever to raise the boom & dipperstick completely.

STEP 3.

Center the boom and then lock the swing with lock pin.

STEP 4.

Using the control levers, position the dipperstick vertically, curl the bucket until its bottom is level with the ground, and lower the boom until bottom of the bucket rests on the ground.

STEP 5.

Remove pins that secure the backhoe. Subframe in the mounting brackets on the tractor.

STEP 6.

Using both the stabilizer and boom controls, set the backhoe subframe horizontally to relieve the weight of the backhoe from the mounting brackets of the tractor.

STEP 7.

Move the tractor forward slowly until the backhoe subframe disengages of the mounting brackets.

STEP 8.

Lower the backhoe mainframe to the ground by raising stabilizers and boom. Use the wood plate or block if necessary.

STEP 9.

Turn off the tractor engine. Relieve hydraulic pressure by actuating all the control levers in each direction, then disconnect the backhoe hose couplers from the tractor hydraulic couplers.



CAUTION:

Remove the backhoe on firm level ground. Also, Do not allow the other person in the area.



CAUTION:

Be careful to avoid injury during removal of the backhoe.



CAUTION:

The hydraulic oil is dangerous for skin or eyes. Wash the skin and seek medical service if it is necessary.

BACKHOE MOUNTING



CAUTION:

Backhoe should be mounted on the proper subframe assembly.



CAUTION:

Never store backhoe without bucket attached to the backhoe.

STEP 1.

Attach the loader midmount and mounting bracket to the tractor by fit the bolts and nuts.

STEP 2.

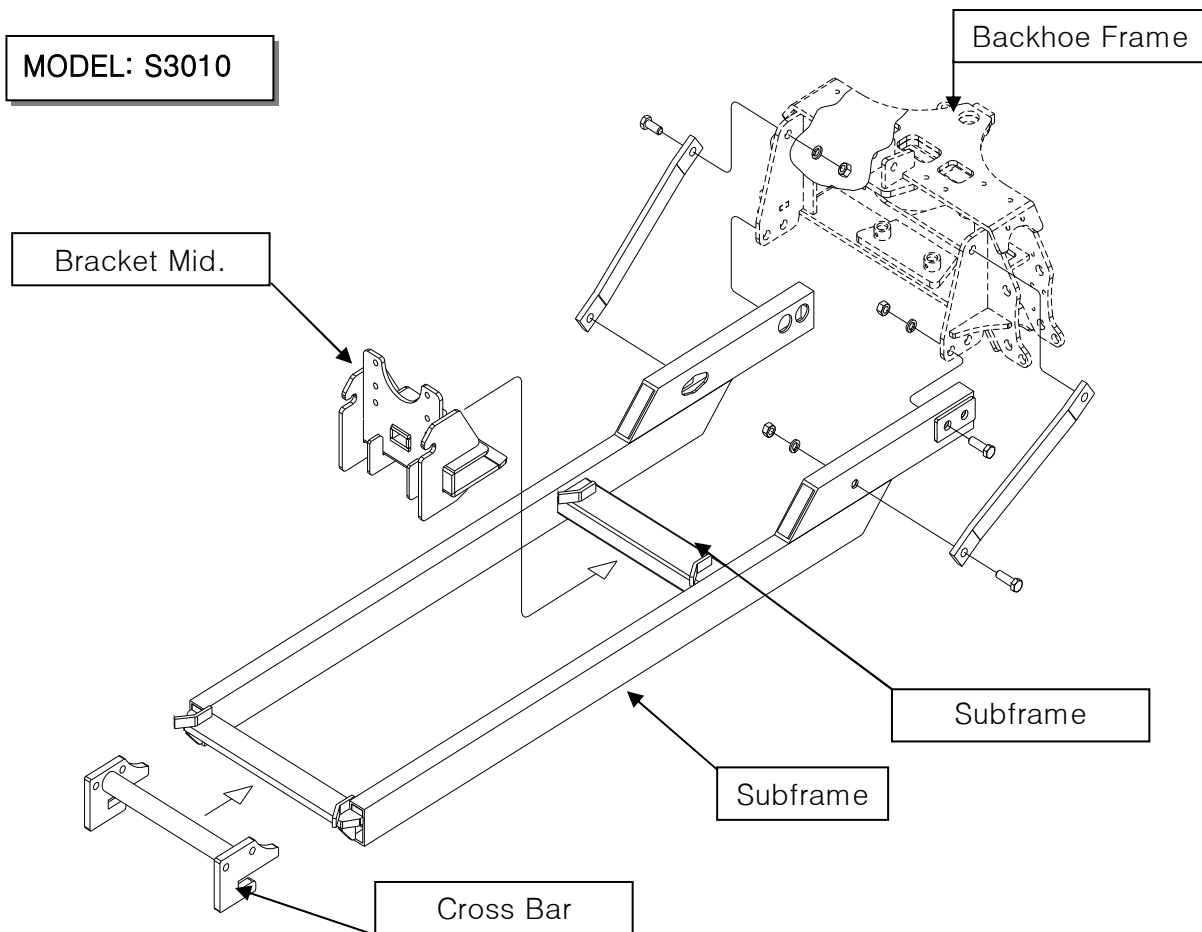
Back tractor slowly toward the backhoe parallel to subframe assembly, until the couplers on the backhoe hoses are able to connect with the hose kit hydraulic couplers or tractor auxiliary couplers located rear of the tractor. Then, put the couplers to connected.

STEP 3.

Store the subframe and subframe crosser horizontally with the loader midmount and mounting bracket by the backhoe control lever. Also, matching these on same level

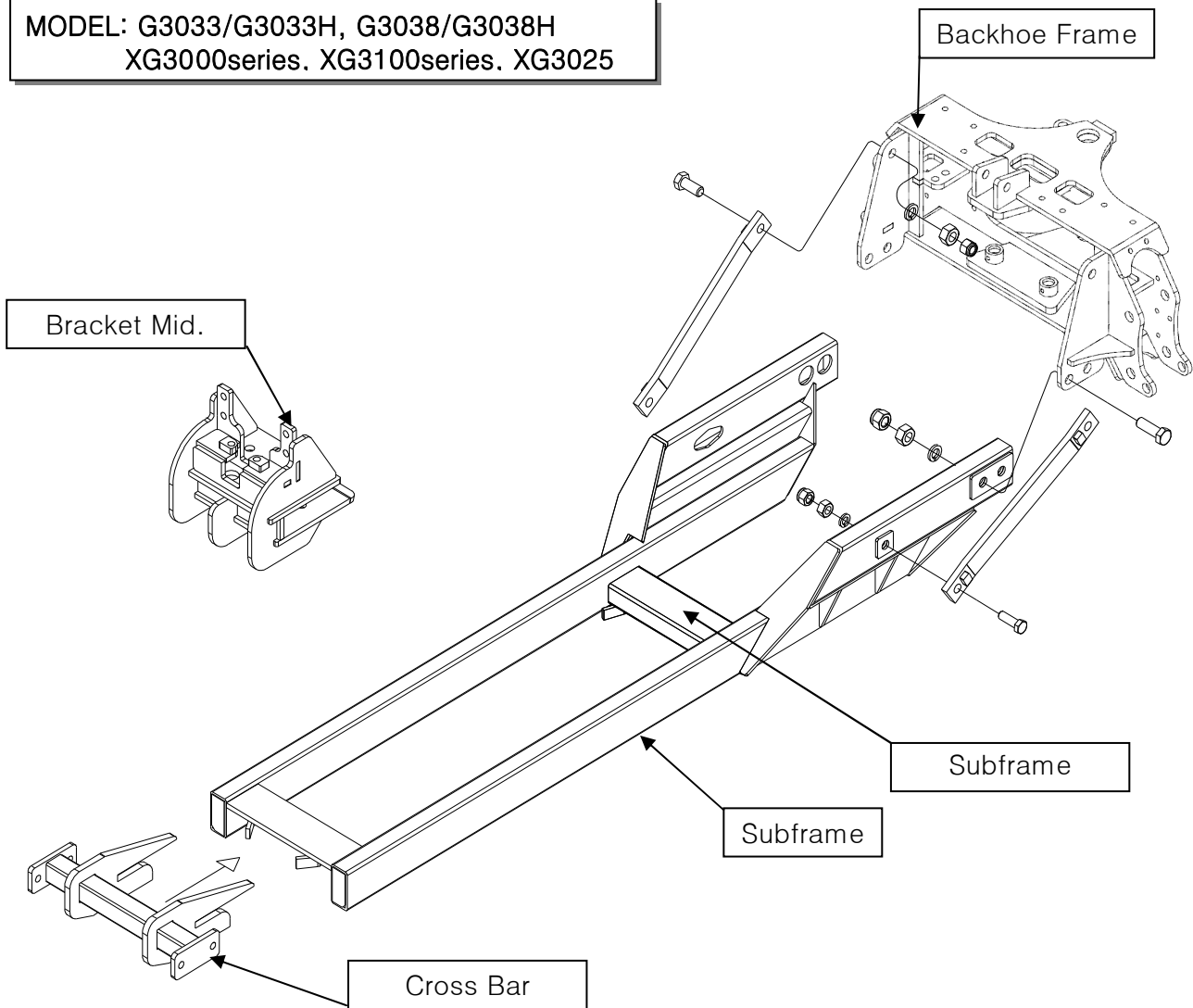
STEP 4.

Set the parking brake of the tractor, Make sure the PTO switch is in the off position



BACKHOE MOUNTING

MODEL: G3033/G3033H, G3038/G3038H
XG3000series. XG3100series. XG3025



CAUTION:

This is the Backhoe's Operator's manual for Safety Precautions and Tractor Preparations.

STEP 5.

Move the tractor to put the subframe front side into the loader midmount slowly. Set the subframe crosser parallel to the mounting bracket by using the backhoe control levers to lower the stabilizers and boom to raise the subframe.

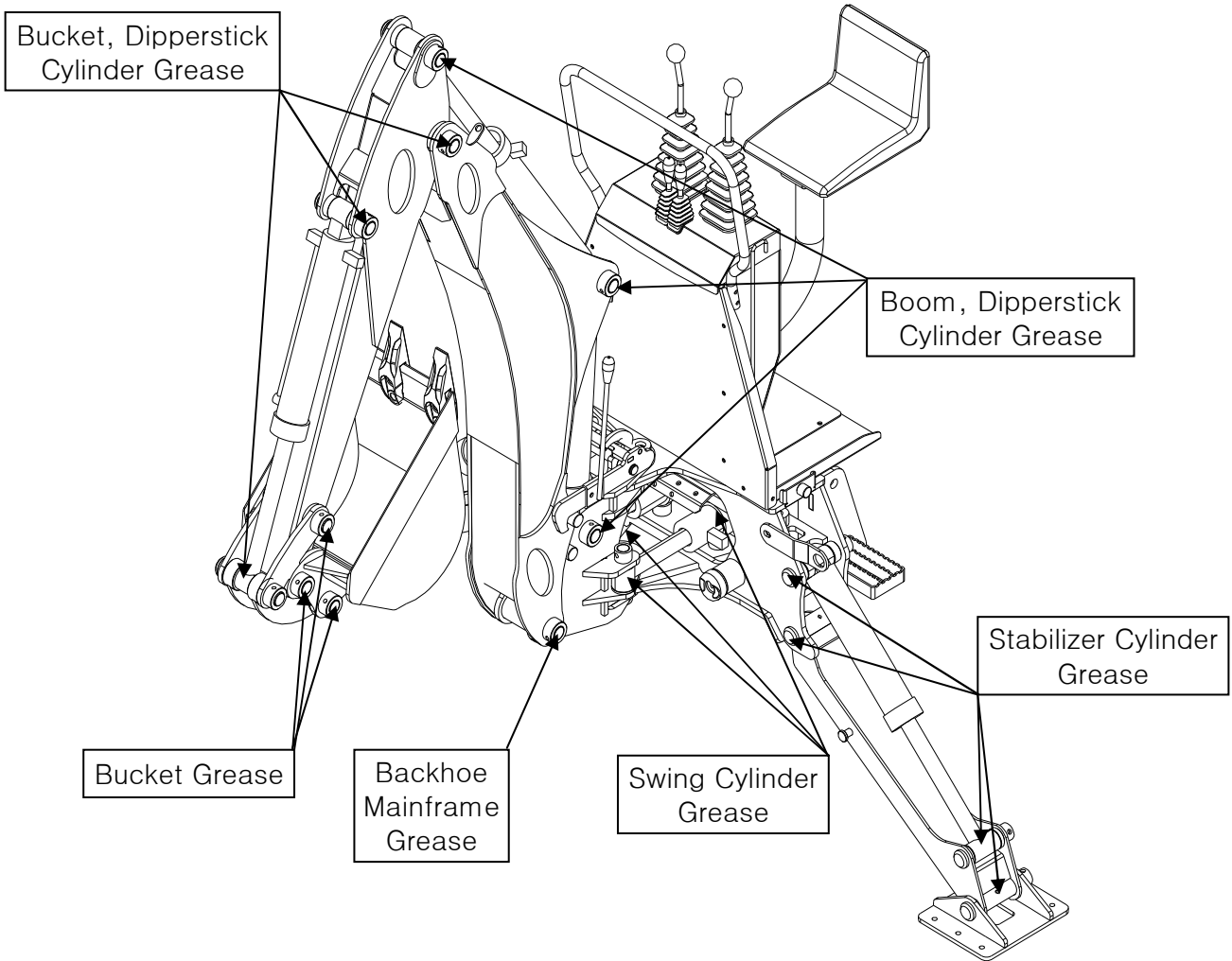
STEP 6.

Release the parking brake of tractor, move the tractor rearward very carefully until the subframe is fully engaged in both mounting devices on the tractor.

STEP 7.

Install the Mounting Bracket Pins into the holes. Raise the boom and stabilizers from the ground.

LUBRICATION AND MAINTENANCE



ITEM	SERVICE	SERVICE INTERVAL
Hydraulic System Oil Level	Replace	As specified in Tractor Operator's Manual
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
Backhoe Pivot Points	Lubricate	Daily/10 hours
Backhoe Hydraulic Lines, Hoses, Connections	Check for leaks, wear	Daily/10 hours
Boom, Dipperstick, Swing 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
Friction of All pins	Check, replace if necessary	Daily/10 hours
Backhoe mount hardware	Check visually	Daily/10 hours
Bolts and Nut release	Re-torque	Every 25 hours

LUBRICATION AND MAINTERNANCE



CAUTION:

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

Important:

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



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 backhoe if the fittings are leaking or if the hoses are damaged. A sudden line burst could cause the boom, dipperstick or bucket to drop suddenly, causing damage to the tractor or backhoe or injury to personnel.



CAUTION:

Operate the backhoe from the operator seat only.



CAUTION:

Do not stand or walk under a raised backhoe. Accidental movement of control lever or leak in hydraulic system could cause boom or dipperstick 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 backhoe should be on the ground and bucket fully retracted(all cylinders in retracted position).

Grease all backhoe 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 backhoe/material. Unequal rear tire inflation can result in bucket not being level to the ground.

TROUBLE SHOOTING

This Trouble Shooting Chart is provided for reference to possible backhoe 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
Swing, Boom, Dipperstick 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.
	Backhoe control valve or tractor main relief valve stuck open.	Check system pressure. Repair or replace relief valve. Refer to the Tractor Operator's Manual
	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.
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 appearance 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 move of Cylinders (Noisy operation of cylinders)	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 backhoe operation.
	Excessive weight in bucket. Material weight exceeds maximum specified backhoe capacity.	Reduce material load. (Digging 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.
	Boom, Dipperstick or Bucket 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.
Hydraulic Oil viscosity too heavy or Incorrect oil	Check oil number and viscosity, Refill correct hydraulic oil.	
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.
	Bucket, Boom and Dipperstick 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".

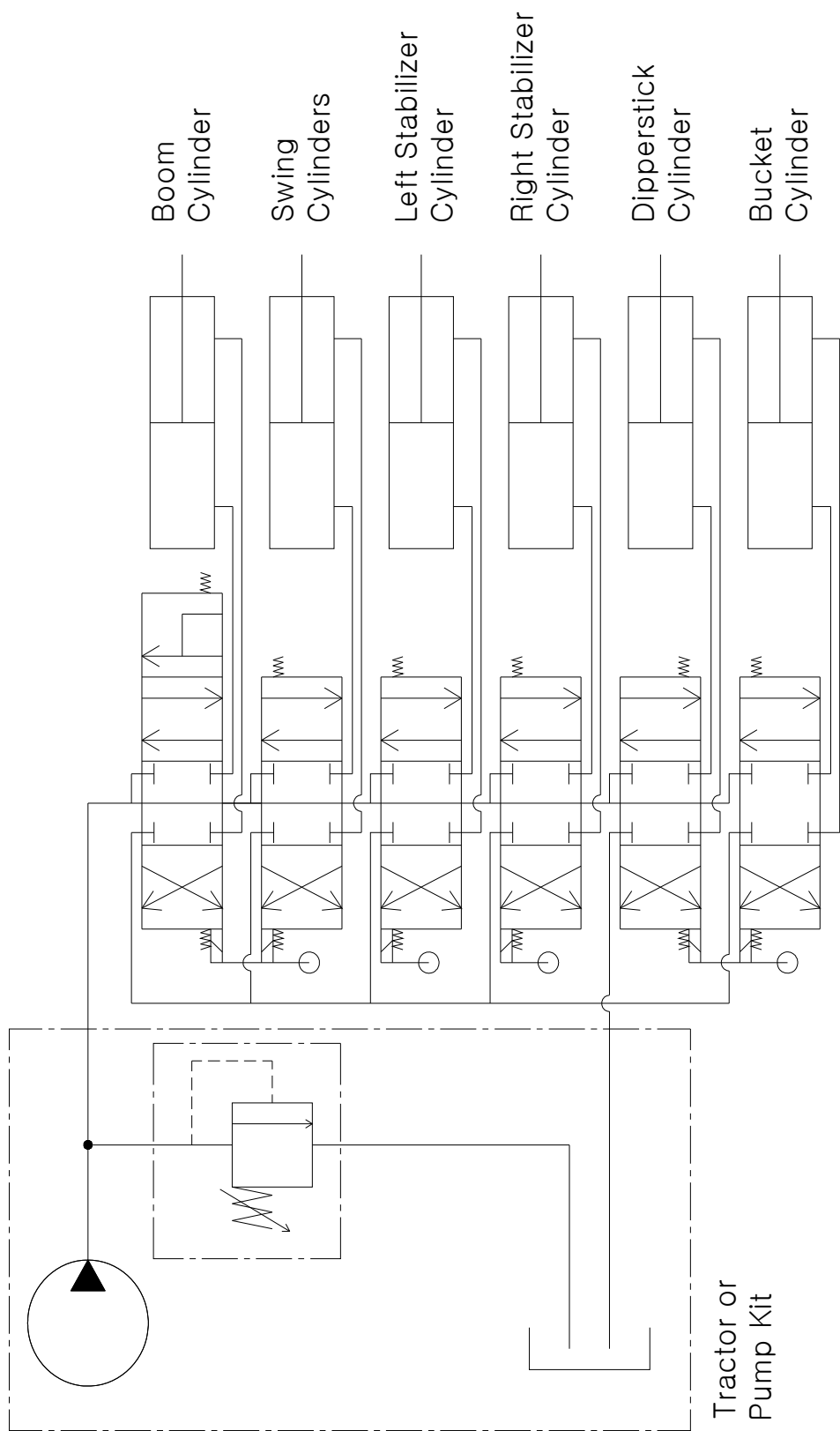
TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
System relief valve squeals.	Hydraulic Oil viscosity too heavy or Incorrect oil	Check oil number and viscosity, Refill correct hydraulic oil.
	Excessive load in bucket. Weight exceeds specified backhoe 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.
Backhoe drops with control valve spool in "centered" position (no external oil leakage evident.) Note: A gradual drop over an extended period of time is a normal condition.	Cylinder piston assembly leakage.	Check cylinders for leakage.
	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.
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.

HYDRAULIC SYSTEM SCHEMATIC



TORQUE TIGHTENING CHART

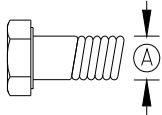
MINIMUM HARDWARE TIGHTENING TORQUES IN FOOT POUNDS (NEWTON-METERS) FOR NORMAL ASSEMBLY APPLICATIONS

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)



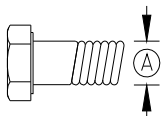
SAE Grade 5
(3 Radial Dashes)



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 Bolt Head
Identification
Metric
Grade 8.8



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.

Parts 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.

Instructions

1. GROUP NAME

: Detail classification name for parts.

2. SECTION NAME

: Classification name for parts.

3. COMPONENTS





: The components of an assembly are identified by a bracket.

4. NO.

: Reference numbers are assigned to parts in the figure.

INTERCHANGEABILITY

: Indicates the interchangeability of parts due to design change

	<p>Indicates that a new part can be used instead of an old part when you order this part, please order new part.</p>
	<p>indicates that either parts can be used.</p>
	<p>indicates that either parts can not be used.</p>
 <p>~4265-99999 5265-00001~</p>	<p>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.</p>

★ Due to our policy of continuously improving products, The information contained herein is subject to change without notice.

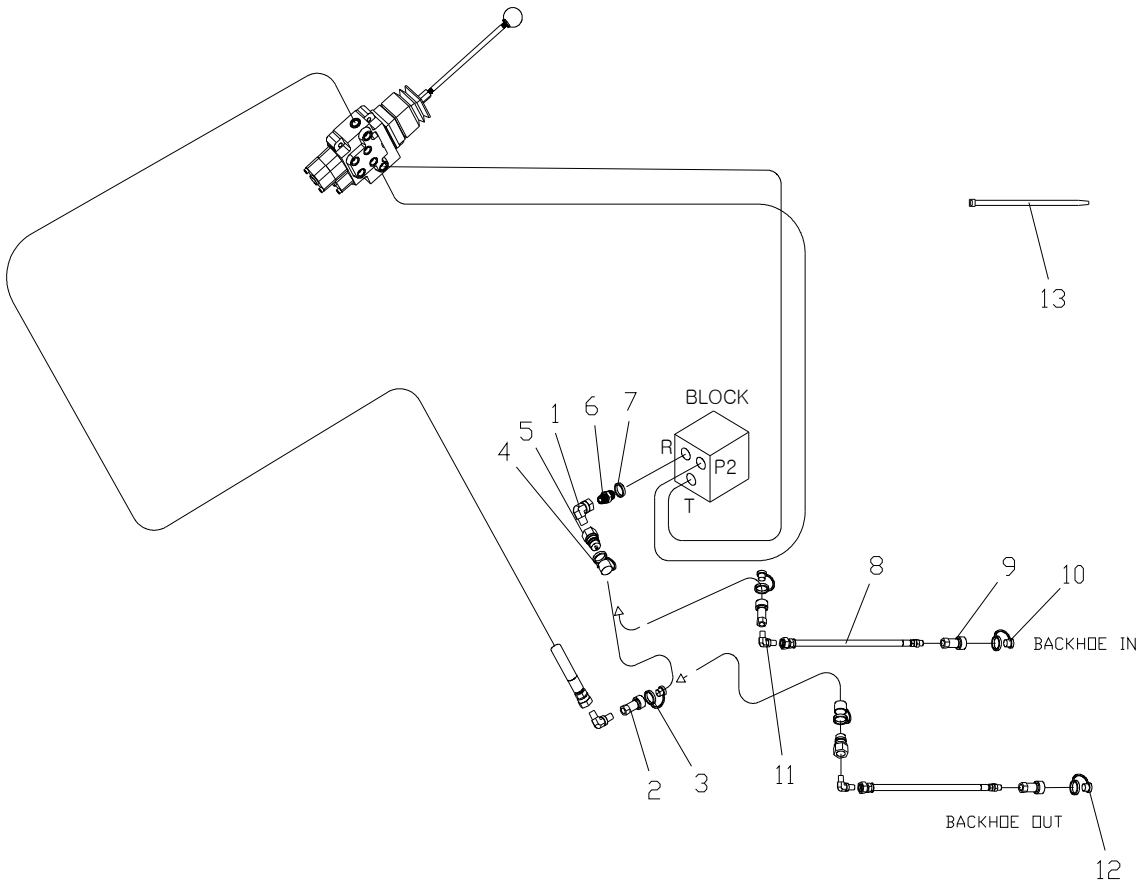


Note : The Hydraulic Control valve installed in this Backhoe is stipulated on the Name Plate.

H : HANIL AV 80/6

HOSE KIT

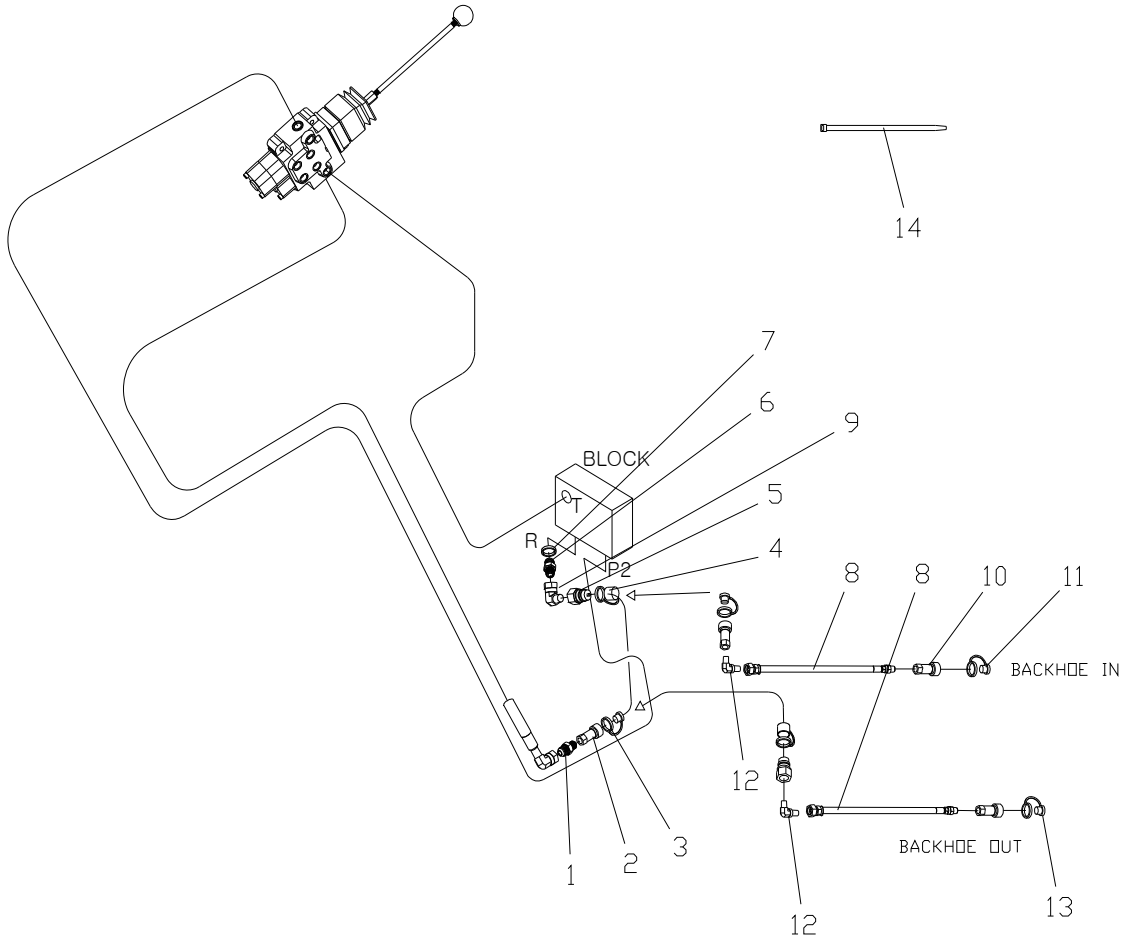
-G3033/G3033H, G3038/G3038H



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230959	802L2-T46F9-4S	NIPPLE, PT3/8×3/4-16UNF, SWIVEL 90°	1		
2	40228721	80420-T3360	QUICK COUPLER, PT3/8" FEMALE	2		
3	40230676	8043W-03300	DUST-CAPS, 3/8" WHITE MALE	2		
4	40228729	8044W-03300	DUST-CAP, 3/8" WHITE FEMALE	2		
5	40228720	80410-T3360	QUICK COUPLER, PT3/8" MALE	2		
6	40230961	802N0-T46P6-32	NIPPLE, PF1/2, O-RING×PT3/8	1		wrong spec.
	40228718	802N2-P63F9-42	NIPPLE, PF1/2, O-RING×3/4-16UNF, HOSE	1		
7	40228757	81301-BP018	O-RING, 1BP18	1		
8	40230975	80620-02012	BACKHOE HOSE ASS'Y, 4(3/4-16UNF)-1(P1/2) 1700L(3/8)	2		
9	40230968	80420-T1130	QUICK COUPLER, PT1/2 FEMALE	2		
10	40230970	8043W-01100	DUST-PLUG, 1/2" WHITE MALE	1		
11	40228715	802L2-T46F9-40	NIPPLE, PT3/8×3/4-16UNF, HOSE 90°	3		
12	40230969	8043K-01100	DUST-PLUG, 1/2" BLACK MALE	1		
13	40228698	50120-M540K	CABLE TIE, 540mm BLACK	5		
	40228758	99400-00001	TEFRON TAPE	1		

HOSE KIT

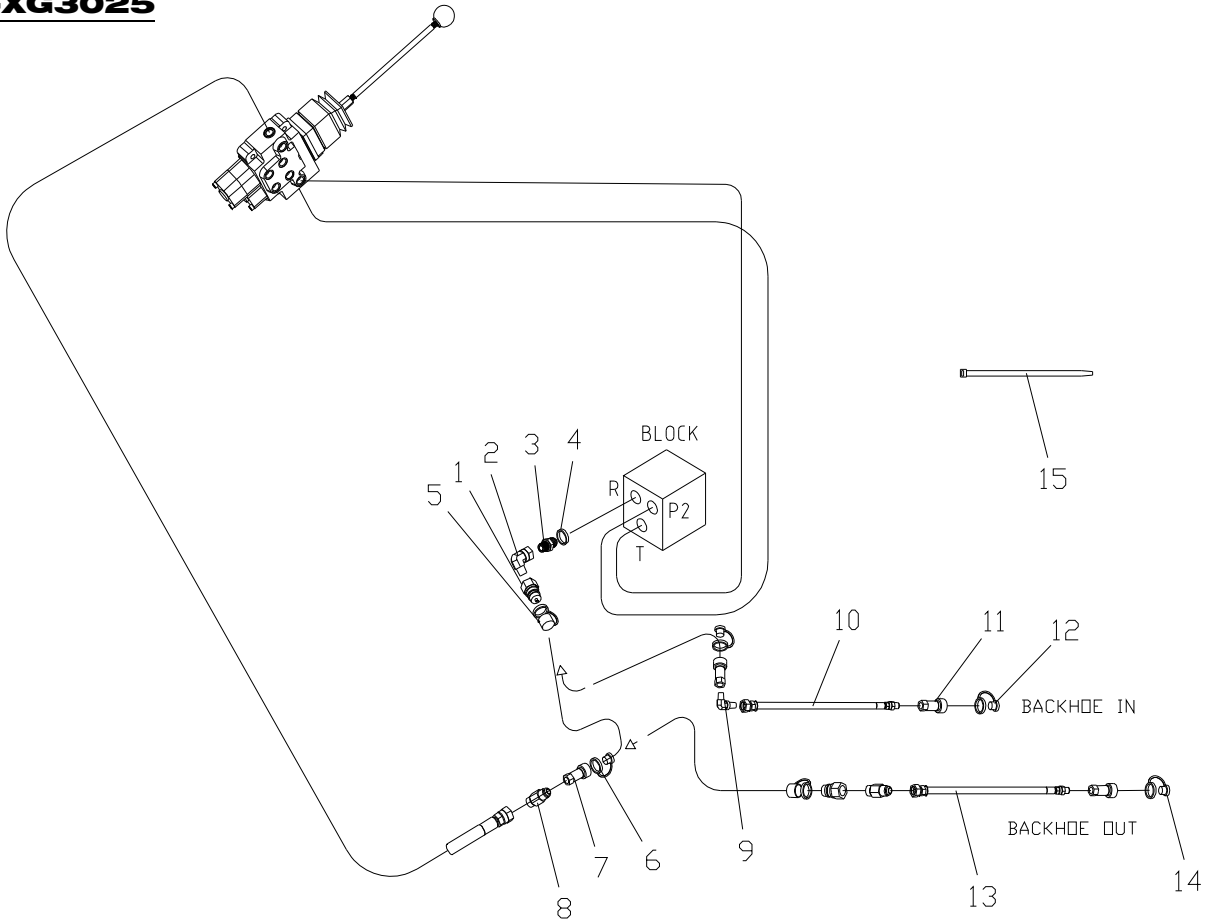
-S3010



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230965	802N2-T46F9-40	NIPPLE, PT3/8×3/4-16UNF, HOSE	1		
2	40228721	80420-T3360	QUICK COUPLER, PT3/8" FEMALE	2		
3	40230676	8043W-03300	DUST-CAPS, 3/8" WHITE MALE	2		
4	40228729	8044W-03300	DUST-CAP, 3/8" WHITE FEMALE	2		
5	40228720	80410-T3360	QUICK COUPLER, PT3/8" MALE	2		
6	40230964	802N2-P46F9-4M	NIPPLE, PF3/8,COPPER×3/4-16UNF (69L)	1		
7	40228652	103C0-C0330	WASHER-COPPER, 3/8"	1		
8	40230976	80620-02013	HOSE ASS'Y, 4(3/4-16UNF)-1(P1/2) 700L(3/8)	2		
9	40230959	802L2-T46F9-4S	NIPPLE, PT3/8×3/4-16NUF, SWIVEL 90°	1		
10	40230968	80420-T1130	QUICK COUPLER, PT1/2 FEMALE	2		
11	40230970	8043W-01100	DUST-PLUG, 1/2" WHITE MALE	1		
12	40228715	802L2-T46F9-40	NIPPLE, PT3/8×3/4-16UNF, HOSE 90°	1		
13	40230969	8043K-01100	DUST-PLUG, 1/2" BLACK MALE	1		
14	40228698	50120-M540K	CABLE TIE, 540mm BLACK	5		
15	40228758	99400-00001	TEFRON TAPE	1		

HOSE KIT

-XG3025

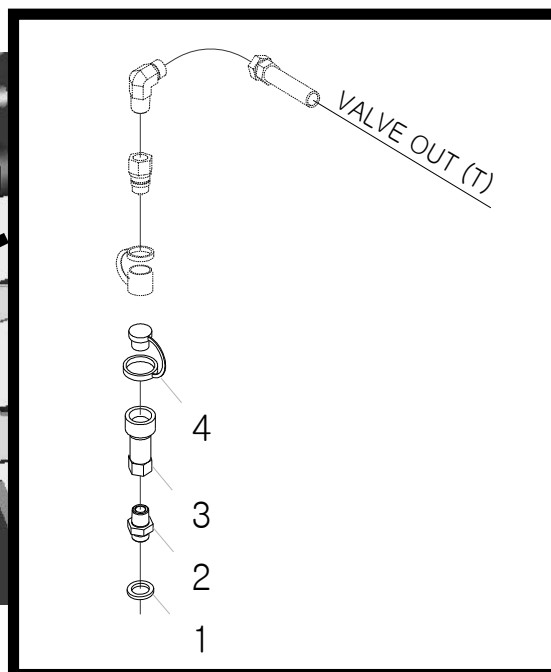
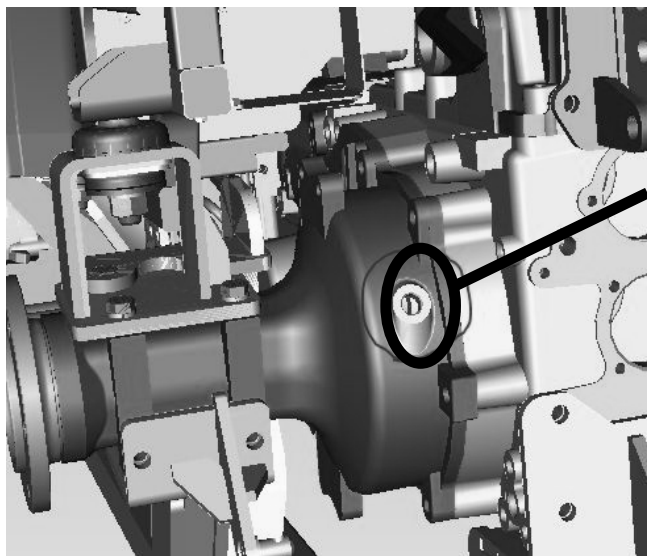


REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40228720	80410-T3360	QUICK COUPLER, PT3/8" MALE	2		
2	40230959	802L2-T46F9-4S	NIPPLE, PT3/8×3/4-16UNF, SWIVEL 90°	1		
3	40228718	802N2-P63F9-42	NIPPLE, PF1/2, O-RING×3/4-16UNF, HOSE	1		
4	40228757	81301-BP018	O-RING, 1BP18	1		
5	40228729	8044W-03300	DUST-CAP, 3/8" WHITE FEMALE	2		
6	40230676	8043W-03300	DUST-PLUG, 3/8" WHITE MALE	2		
7	40228721	80420-T3360	QUICK COUPLER, PT3/8" FEMALE	2		
8	40230965	802N2-T46F9-40	NIPPLE, PT3/8×3/4-16UNF, HOSE	2		
9	40228715	802L2-T46F9-40	NIPPLE, PT3/8×3/4-16UNF, HOSE 90°	1		
10	40230975	80620-02012	HOSE ASS'Y, 4(3/4-16UNF)-1(P1/2) 1700L(3/8)	1		
11	40230968	80420-T1130	QUICK COUPLER, PT1/2 FEMALE	2		
12	40230970	8043W-01100	DUST-PLUG, 1/2" WHITE MALE	1		
13	40340571	80620-02027	HOSE ASS'Y, 4(3/4-16UNF)-1(P1/2) 1250L(3/8)	1		
14	40230969	8043K-01100	DUST-PLUG, 1/2" BLACK MALE	1		
15	40228698	50120-M540K	CABLE TIE, 540mm BLACK	5		
-	40228758	99400-00001	TEFRON TAPE	1		

HOSE KIT

-XG3000series, XG3100series

* When hydraulic auxiliary is installed on tractor



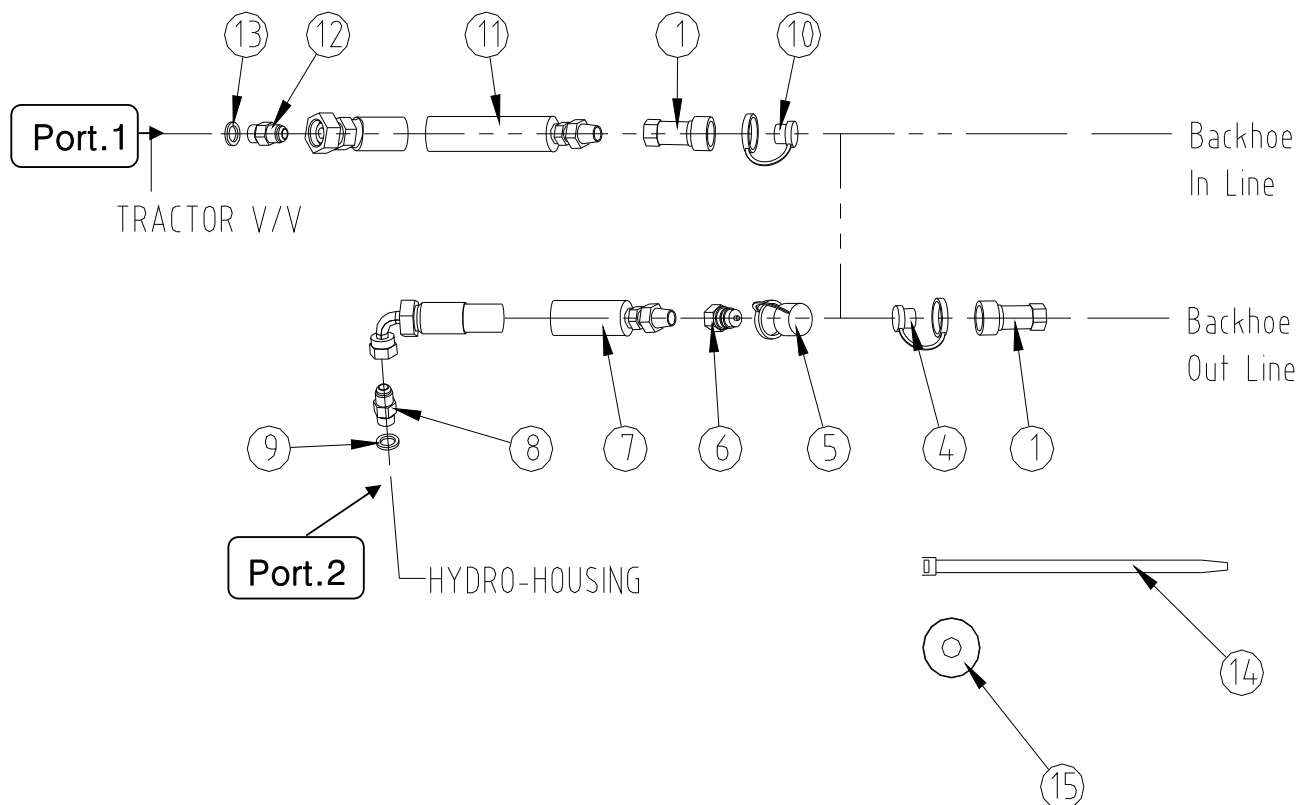
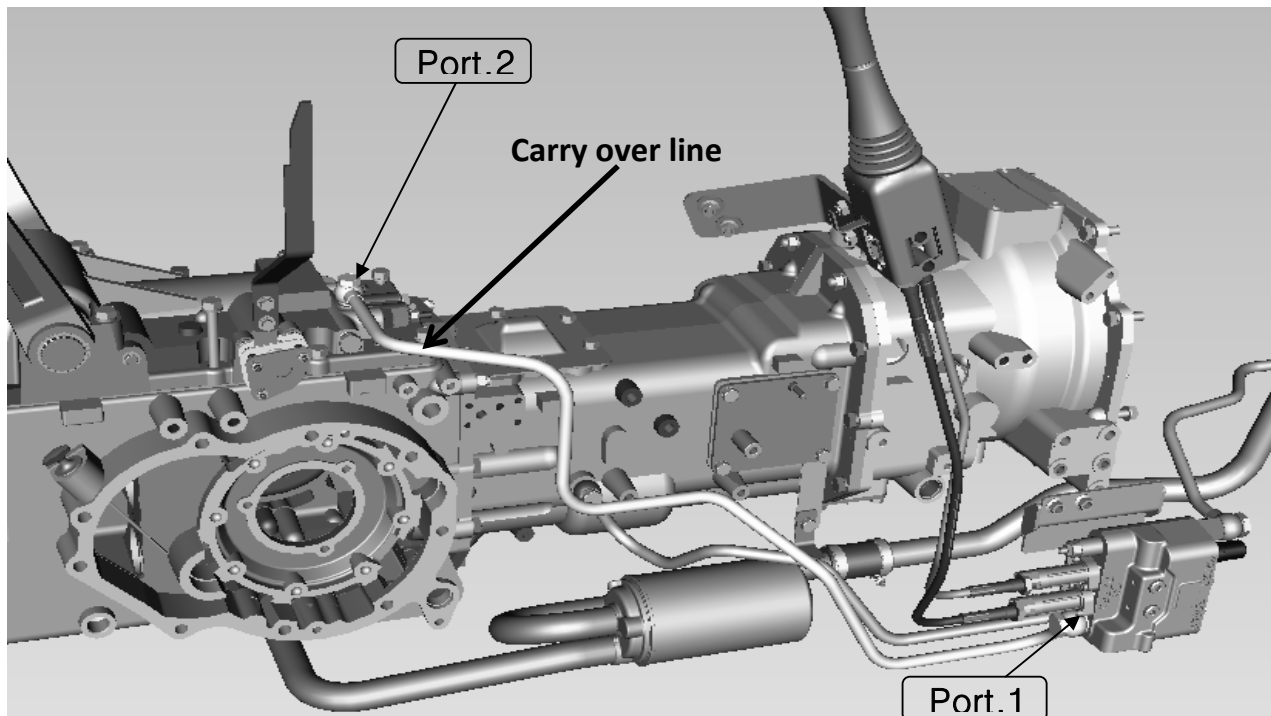
※REF 3,4 are interchangeable with kit from the tractor which the hydraulic auxiliary are not installed.

REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40286936	103C0-M0200	WASHER-COPPER, M20	1		
2	40286939	802N2-T63M3-41	NIPPLE, M20-1.5P, COPPER × PT1/2	1		
3	40230968	80420-T1130	QUICK COUPLER, PT1/2 FEMALE	-		
4	40230969	8043K-01100	DUST-PLUG, 1/2" BLACK MALE	-		

HOSE KIT

-XG3000series, XG3100series

* When hydraulic auxiliary is not installed on tractor



* After removal of the carry over line connect each ports as shown in figure.

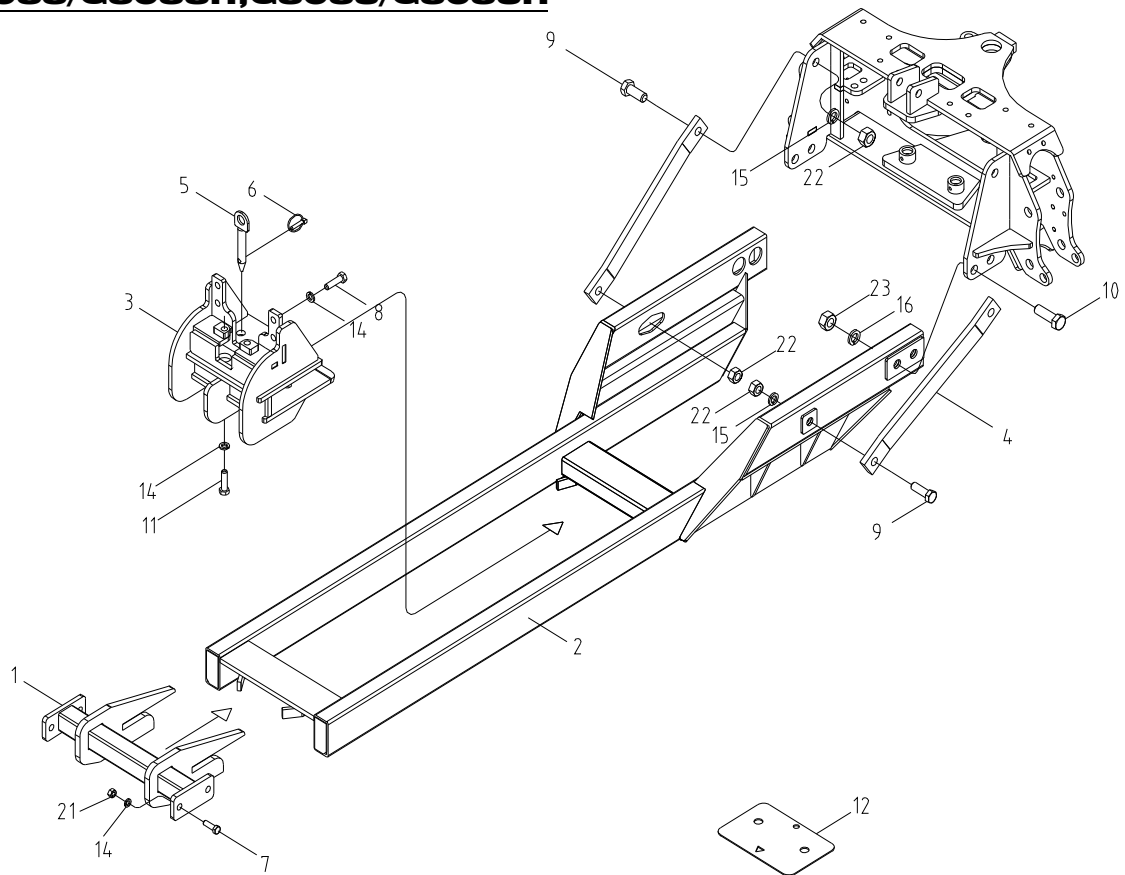
HOSE KIT

-XG3000series, XG3100series

REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40230968	80420-T1130	QUICK COUPLER, PT1/2" FEMALE	2		
4	40230969	8043K-01100	DUST PLUG, 1/2 BLACK MALE	1		
5	40230971	8044K-01100	DUST CAP, 1/2 BLACK FEMALE	1		
6	40230967	80410-T1130	QUICK COUPLER, PT1/2" MALE	1		
7	40326738	80620-07018	HOSE ASS'Y, 904(3/4-16UNF)x1(P1/2) 800L (3/8)	1		
8	40228716	802N2-P46F9-41	NIPPLE, 3/4-16UNF HOSE x PF3/8 COPPER	1		
9	40228654	103E1-C0380	SEAL BOND, 3/8"	1		
10	40230970	8043W-01100	DUSE PLUG, 1/2 WHITE MALE	1		
11	40326739	80620-02021	HOSE ASS'Y, 4(3/4-16UNF)x1(P1/2) 1600L (3/8)	1		
12	40326740	802N2-F94P6-31	NIPPLE, 3/4-16UNF HOSE x PF1/2 COPPER	1		
13	40228653	103E1-C0110	SEAL BOND 1/2"	1		
14	40228698	50120-M540K	CABLE TIE, 540mm BLACK	4		
15	40228758	99400-00001	TEFLON TAPE	1		

SUBFRAME ASSEMBLY

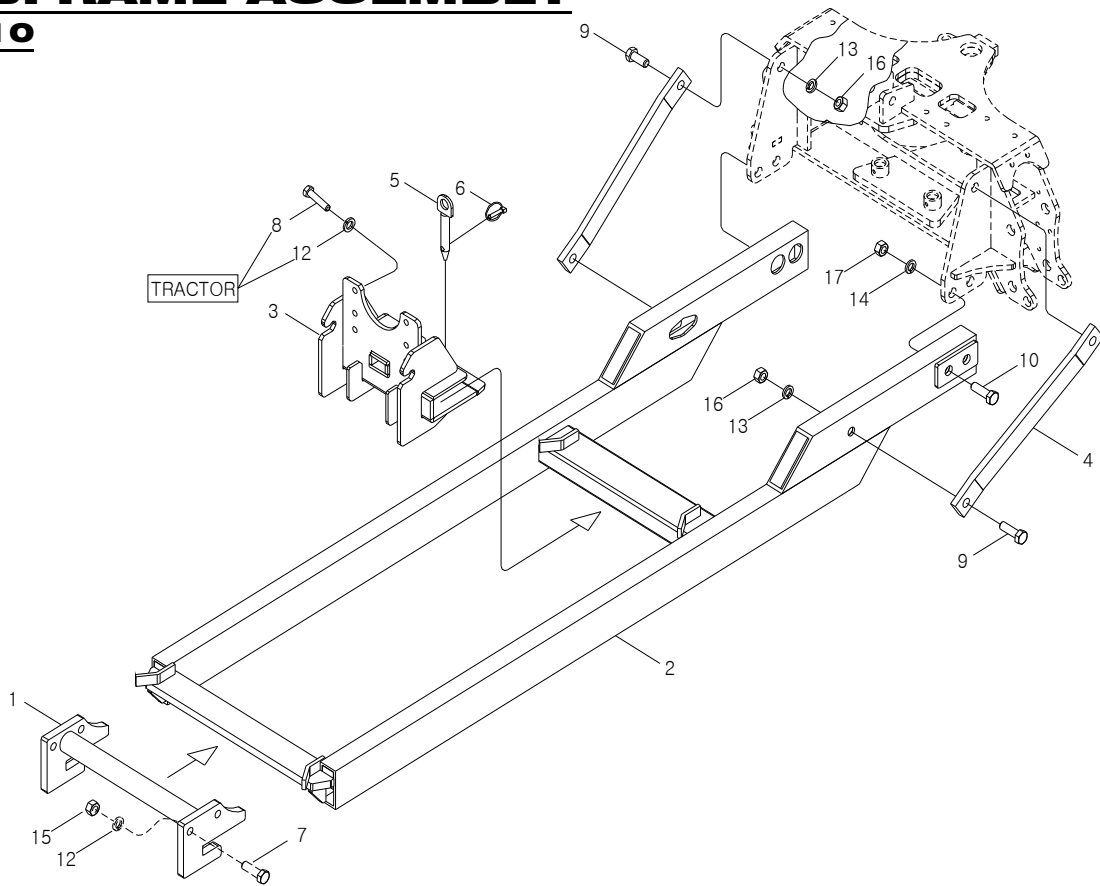
-G3033/G3033H,G3038/G3038H



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
0	40256025	FTS75-00000	FRAME ASS'Y-SUB	1		
	40320336	FTS75-00000-04	FRAME ASS'Y-SUB	1	←	2014.12.15~
1	40256023	FTS75-10100	BAR-CROSS W.A.	1		
	40320337	FTS75-10100-01	BAR-CROSS W.A.	1	←	2014.12.15~
2	40256024	FTS71-10200-01	RAIL W.A.	1		
	40286940	FTS78-11200	RAIL W.A.	1	←	2014.12.15~
3	40256022	FTS71-10400	BRACKET_MID W.A.	1		
4	40231116	DK05-0101-02	BRACE	2		
5	40230905	14132-20120	PIN	2		
6	40228656	14021-10000	RING-PIN, $\phi 10$	2		
7	40228623	10191-M1406-60	HEX.BOLT-HT, M14-2.0P 60L	4		
8	40230601	10191-M1406-40	HEX.BOLT-HT, M14-2.0P 40L	4		
9	40230894	10191-M2007-70	HEX.BOLT-HT, M20-2.5P 70L	4		
10	40230895	10191-M2207-70	HEX.BOLT-HT, M22-2.5P 70L	4		
11	40230893	10191-M1406-55	HEX.BOLT-HT, M14-2.0P 55L	2		
12	40264330	FTS71-10501	SPACER	1		2011.06.01 ~ 2012.05.08
14	40228643	10316-M1400	WASHER-SPRING, M14	10		
15	40228645	10316-M2000	WASHER-SPRING, M20	4		
16	40230899	10316-M2200	WASHER-SPRING, M22	4		
21	40228637	10261-M1406	HEX.NUT-HT, M14-2.0P	4		
22	40228639	10261-M2007	HEX.NUT-HT, M20-2.5P	4		
23	40230898	10261-M2207	HEX.NUT-HT, M22-2.5P	4		

SUBFRAME ASSEMBLY

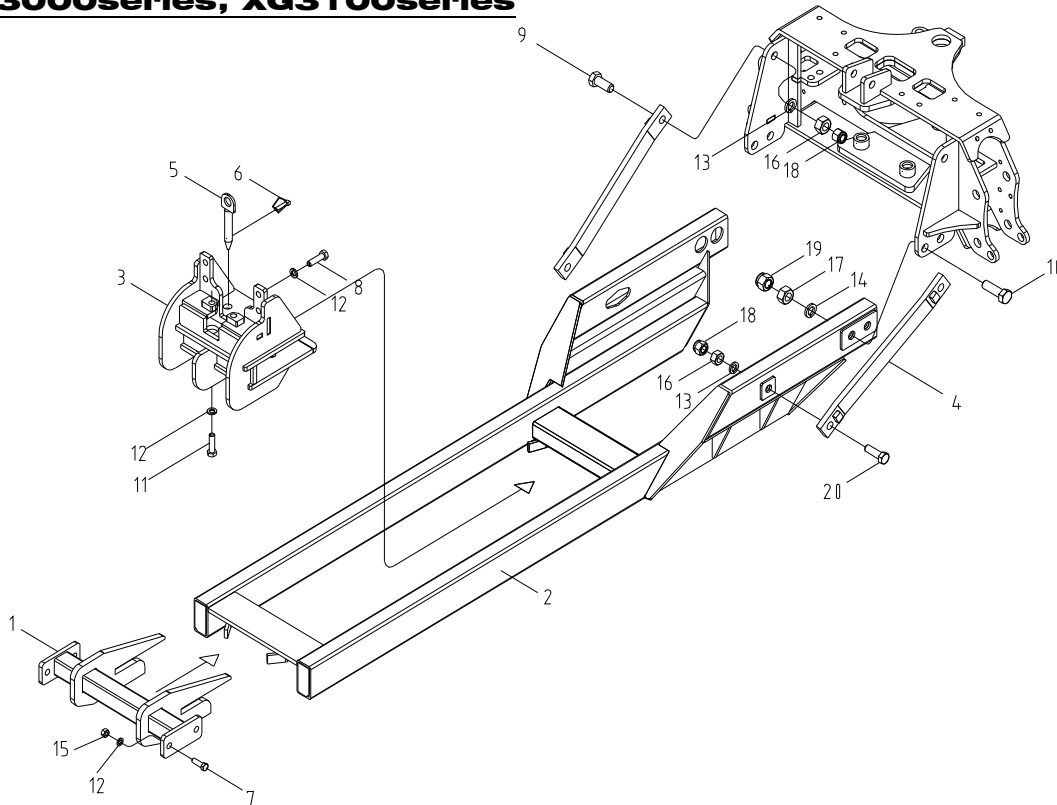
-S3010



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
0	40231122	FTS70-00000	SUBFRAME ASS'Y	1		
1	40231123	FTS70-10100	CROSS BAR W.A.	1		
2	40231124	FTS70-10200	RAIL W.A.	1		
3	40231125	FTS70-10300	BRACKET_MID W.A.	1		
	40256021	FTS70-10300-01	BRACKET_MID W.A.	1	←	2010.06.25~
4	40231116	DK05-0101-02	BRACE	2		
5	40230905	14132-20120	PIN	2		
6	40230904	14021-1000	RING PIN	2		
7	40228623	10191-M1406-60	HEX.BOLT-HT, M14-2.0P 60L	4		
8	40230601	10191-M1406-40	HEX.BOLT-HT, M14-2.0P 40L	6		
9	40230894	10191-M2007-70	HEX.BOLT-HT, M20-2.5P 70L	4		
10	40230895	10191-M2207-70	HEX.BOLT-HT, M22-2.5P 70L	4		
12	40228643	10316-M1400	WASHER-SPRING, M14	10		
13	40228645	10316-M2000	WASHER-SPRING, M20	4		
14	40230899	10316-M2200	WASHER-SPRING, M22	4		
15	40228637	10261-M1406	HEX.NUT-HT, M14-2.0P	4		
16	40228639	10261-M2007	HEX.NUT-HT, M20-2.5P	4		
17	40230898	10261-M2207	HEX.NUT-HT, M22-2.5P	4		

SUBFRAME ASSEMBLY

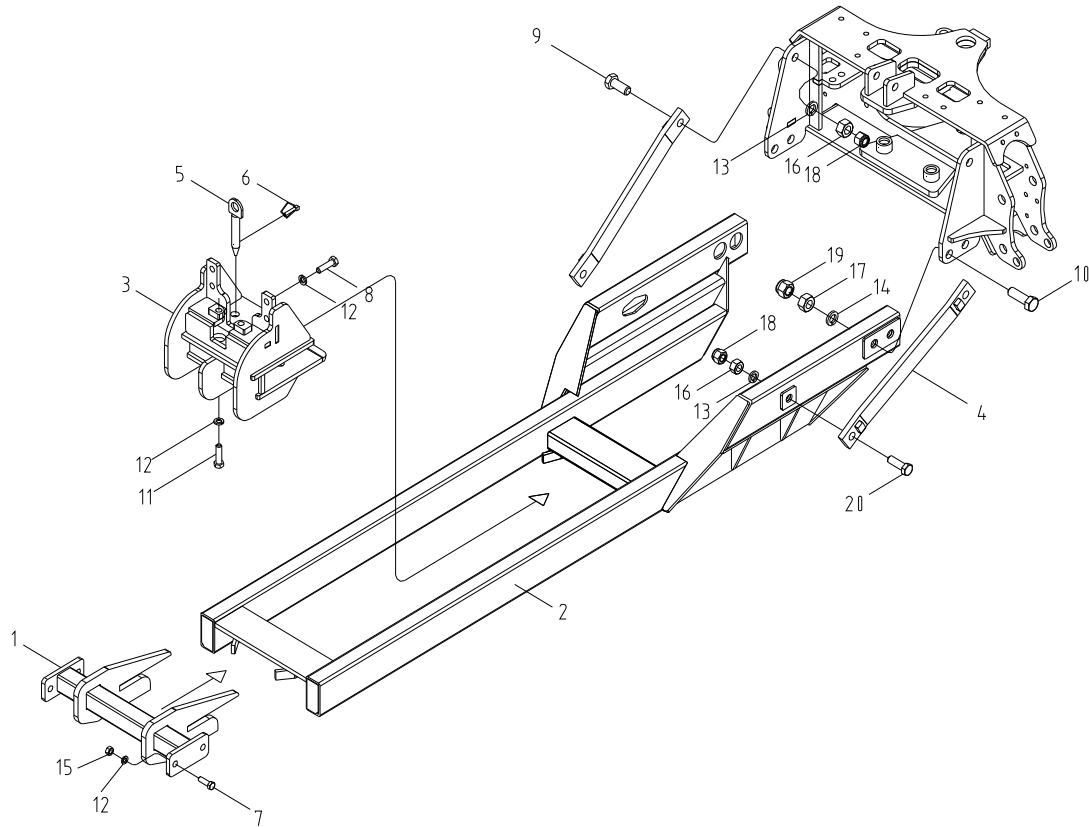
-XG3000series, XG3100series



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
0	40324621	FTS87-00000	FRAME ASS'Y-SUB	1		
	40342995	FTS87-00000-03	FRAME ASS'Y-SUB	1	←	2016.03.15~
1	40324622	FTS87-11100	BAR-CROSS W.A.	1		
2	40286940	FTS78-11200	RAIL W.A.	1		
3	40256022	FTS71-10400	BRACKET_MID W.A.	1		
4	40286935	LDS04-2131A-03	BRACE	2		
	40342997	FTS88-41000	BRACE	2	←	2016.03.15~
5	40230905	14132-20120	PIN	2		
6	40228656	14021-10000	RING-PIN, $\varnothing 10$	2		
7	40228623	10191-M1406-60	HEX.BOLT-HT, M14-2.0P 60L	4		
8	40230601	10191-M1406-40	HEX.BOLT-HT, M14-2.0P 40L	4		
9	40230894	10191-M2007-70	HEX.BOLT-HT, M20-2.5P 70L	4		
	40343000	10191-M2007-80	HEX.BOLT-HT, M20-2.5P 80L	2	←	2016.03.15~
10	40230895	10191-M2207-70	HEX.BOLT-HT, M22-2.5P 70L	4		
	40343501	10191-M2207-80	HEX.BOLT-HT, M22-2.5P 80L	4	←	2016.03.15~
11	40230893	10191-M1406-55	HEX.BOLT-HT, M14-2.0P 55L	2		
12	40228643	10316-M1400	WASHER-SPRING, M14	10		
13	40228645	10316-M2000	WASHER-SPRING, M20	4		
14	40230899	10316-M2200	WASHER-SPRING, M22	4		
15	40228637	10261-M1406	HEX.NUT-HT, M14-2.0P	4		
16	40228639	10261-M2007	HEX.NUT-HT, M20-2.5P	4		
17	40230898	10261-M2207	HEX.NUT-HT, M22-2.5P	4		
18	40343502	1021N-M2007	NUT-SELFLOCK,M20-2.5P	4		2016.03.15~
19	40343503	1021N-M2207	NUT-SELFLOCK,M22-2.5P	4		2016.03.15~
20	40343504	10191-M2007-90	HEX.BOLT-HT, M20-2.5P 90L	2		2016.03.15~

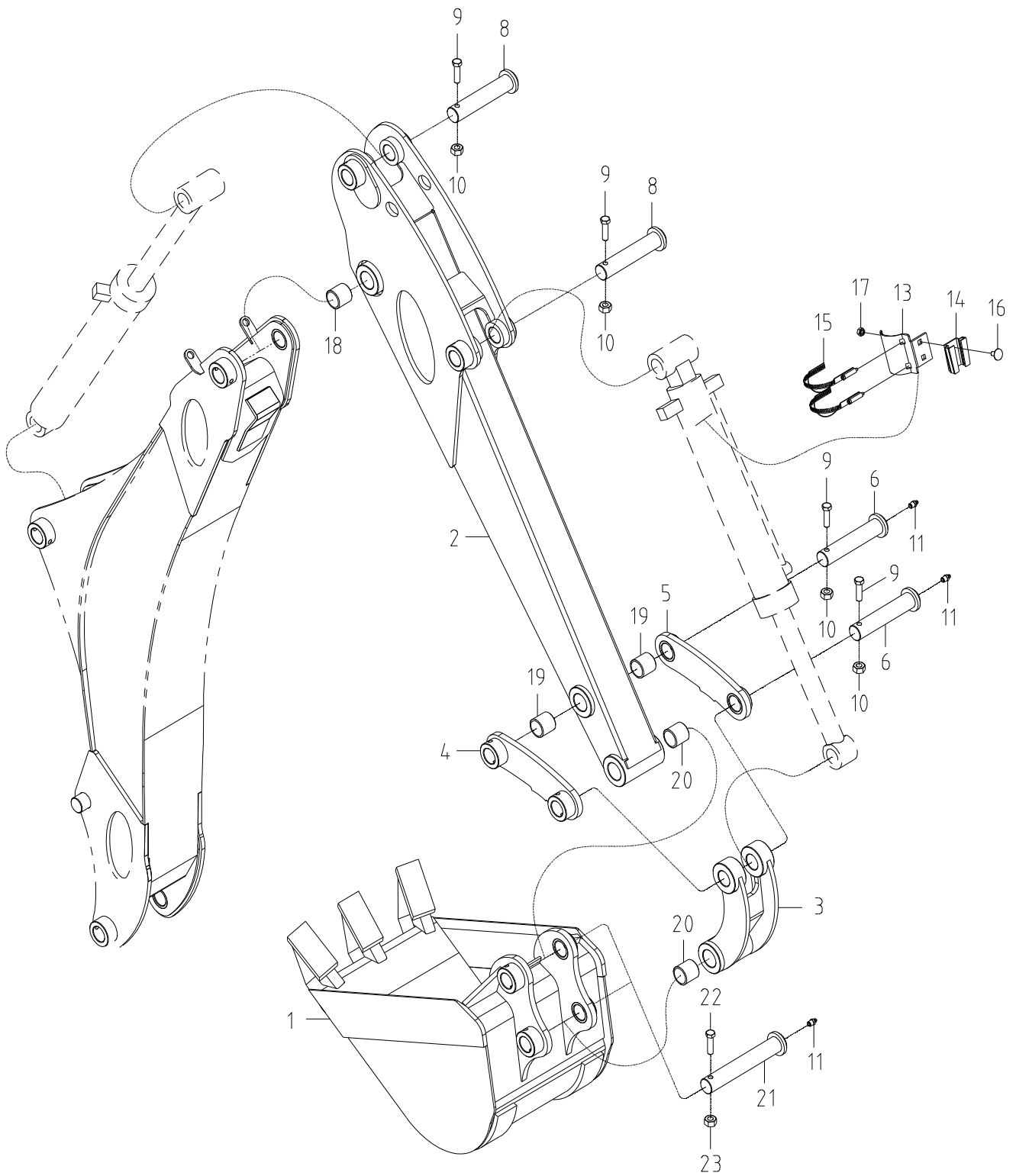
SUBFRAME ASSEMBLY

-XG3000series, XG3100series, XG3025



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
0	40342996	FTS88-00000-01	FRAME ASS'Y-SUB	1		
1	40324622	FTS87-11100	BAR-CROSS W.A.	1		
2	40286940	FTS78-11200	RAIL W.A.	1		
3	40256022	FTS71-10400	BRACKET_MID W.A.	1		
4	40342997	FTS88-41000	BRACE	2		
5	40230905	14132-20120	PIN	2		
6	40228656	14021-10000	RING-PIN, $\varnothing 10$	2		
7	40228623	10191-M1406-60	HEX.BOLT-HT, M14-2.0P 60L	4		
8	40230601	10191-M1406-40	HEX.BOLT-HT, M14-2.0P 40L	4		
9	40343000	10191-M2007-80	HEX.BOLT-HT, M20-2.5P 80L	2		
10	40343501	10191-M2207-80	HEX.BOLT-HT, M22-2.5P 80L	4		
11	40230893	10191-M1406-55	HEX.BOLT-HT, M14-2.0P 55L	2		
12	40228643	10316-M1400	WASHER-SPRING, M14	10		
13	40228645	10316-M2000	WASHER-SPRING, M20	4		
14	40230899	10316-M2200	WASHER-SPRING, M22	4		
15	40228637	10261-M1406	HEX.NUT-HT, M14-2.0P	4		
16	40228639	10261-M2007	HEX.NUT-HT, M20-2.5P	4		
17	40230898	10261-M2207	HEX.NUT-HT, M22-2.5P	4		
18	40343502	1021N-M2007	NUT-SELFLOCK,M20-2.5P	4		
19	40343503	1021N-M2207	NUT-SELFLOCK,M22-2.5P	4		
20	40343504	10191-M2007-90	HEX.BOLT-HT, M20-2.5P 90L	2		

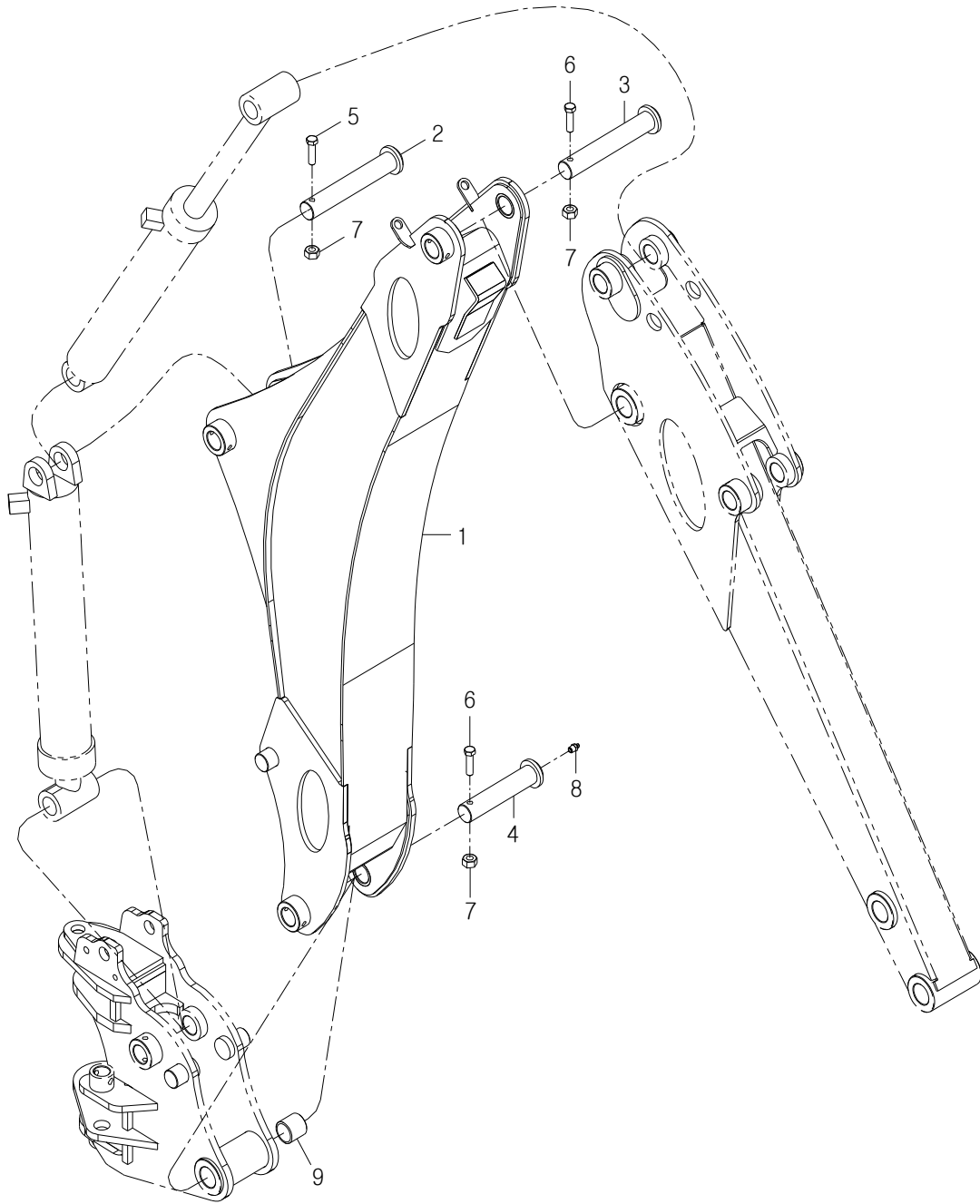
BUCKET, DIPPERSTICK ASSEMBLY



BUCKET, DIPPERSTICK ASSEMBLY

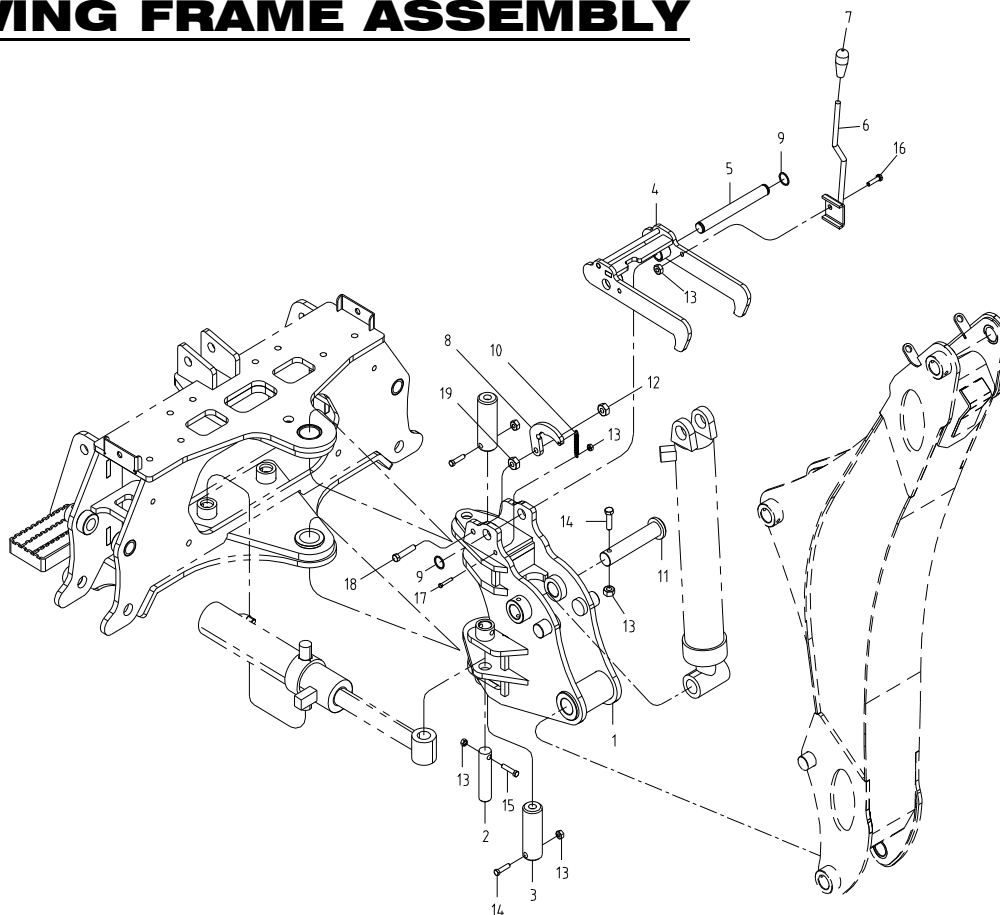
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40231071	BT664-23100-01	BUCKET ASS'Y, 9	1		
	40231072	BT664-23200-01	BUCKET ASS'Y, 12	1		
	40231074	BT664-23400-02	BUCKET ASS'Y, 18	1		
	40231075	BT664-23500-02	BUCKET ASS'Y, 24	1		
	40231076	BT664-23600-02	BUCKET ASS'Y, 36	1		
2	40231056	BT200-22100	DIPPERSTICK ASS'Y	1		
3	40231079	BT664-25100	LINK ASS'Y	1		
4	40231078	BT664-24200-02	LINK-RH	1		
5	40231077	BT664-24100-02	LINK-LH	1		
6	40231094	BT664-71600-01	PIN, ø30-195.5L	2		
8	40231092	BT664-71400-02	PIN, ø30-154.5L	2		
9	40230880	10121-M0803-60	HEX.BOLT, M8-1.25P 60L	4		
10	40230896	1021N-M0803	NUT-SELFLOCK, M8-1.25P	4		
11	40228707	802G0-T1900	NIPPLE,GREASE, 1/8"	4		
13	40231037	BH11-0116	SOCKET BRACKET	1		
14	40231036	BH11-0115	SOCKET	1		
15	40228698	50120-M540K	CABLE TIE, 540mm BLACK	2		
16	40228607	10121-M0803-50	HEX.BOLT, M8-1.25P 50L	2		
17	40228629	10211-M0803	HEX.NUT, M8-1.25P	2		
18	40230979	83040-4440D	BUSHING, 404440	2		
19	40230978	83030-3440D	BUSHING, 303440	2		
20	40230907	2010-3025	BUSHING, 252830	4		
21	40231097	BT664-72000	PIN, ø25-195.5L	2		
22	40230884	10121-M1004-60	HEX.BOLT, M10-1.5P 60L	2		
23	40228634	1021N-M1004	NUT-SELFLOCK, M10-1.5P	2		

BOOM ASSEMBLY



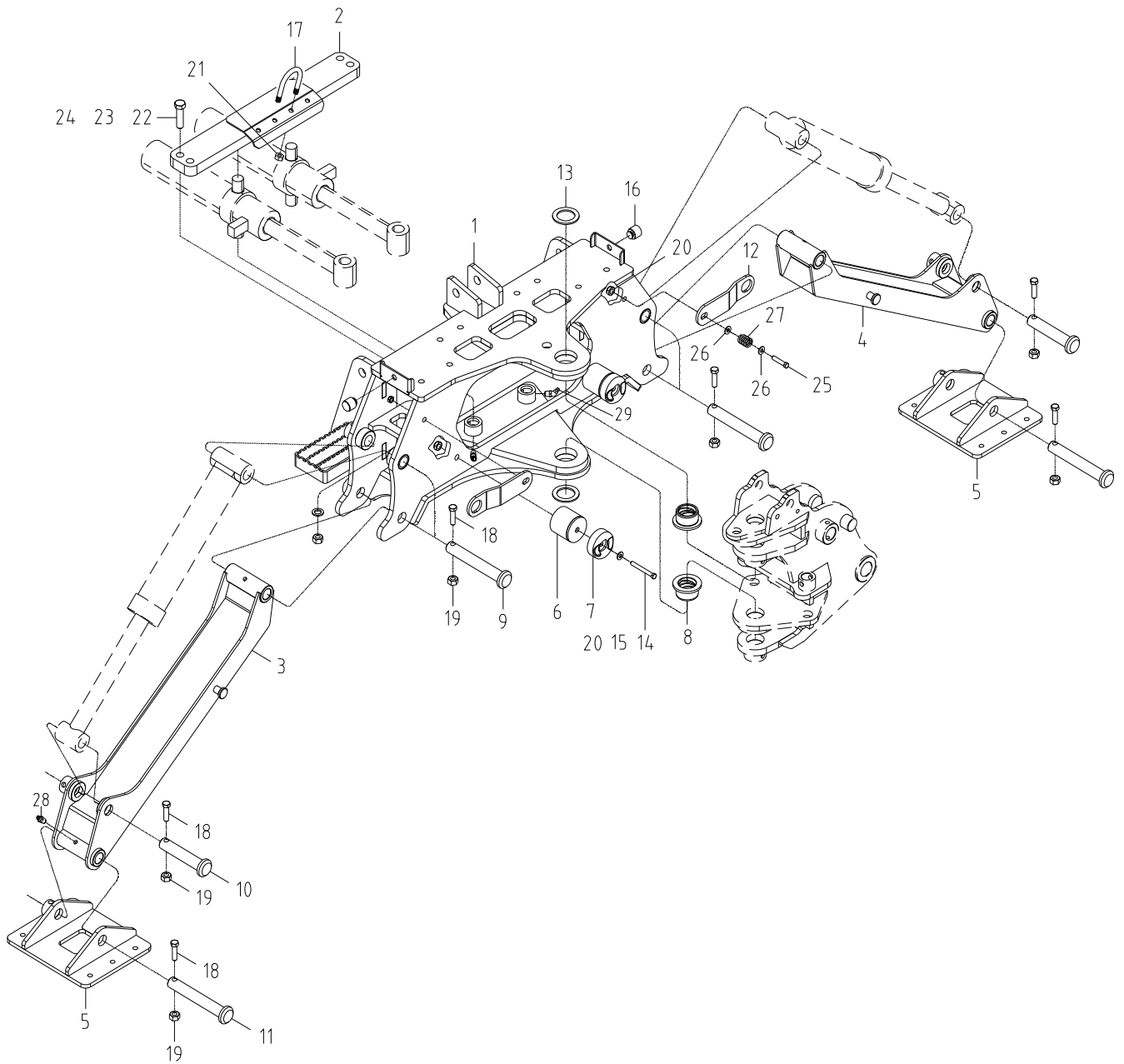
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40231114	BT673-21100	BOOM ASS'Y	1		
2	40231095	BT664-71700	PIN, $\varnothing 30-176.5L$	1		
3	40231096	BT664-71900-01	PIN, $\varnothing 40-185.5L$	1		
4	40231093	BT664-71500-01	PIN, $\varnothing 40-185.5L$	1		
5	40230880	10121-M0803-60	HEX.BOLT, M8-1.25P 60L	1		
6	40230881	10121-M0803-70	HEX.BOLT, M8-1.25P 70L	2		
7	40230896	1021N-M0803	NUT-SELFLOCK, M8-1.25P	3		
8	40228707	802G0-T1900	NIPPLE,GREASE, 1/8"	1		
9	40230979	83040-4440D	BUSHING, 404440	2		

SWING FRAME ASSEMBLY



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40231080	BT664-31000-03	SWING FRAME ASS'Y	1		
2	40231106	BT664-74100	SWING CYL.PIN, $\varnothing 25 \times 118L$	2		
3	40231098	BT664-72100-03	PIN, $\varnothing 40-117L$	2		
4	40231099	BT664-72200-02	LOCK	1		
	40343506	BTS08-20100	LOCK	1	←	2016.03.15~
5	40231101	BT664-72400	PIN, $\varnothing 22-190L$	1		
6	40231100	BT664-72300	HANDLE SET	1		
	40343507	BTS08-30100	HANDLE SET	1	←	2016.03.15~
7	40231031	BC04-5100	PLASTIC BALL	1		
8	40231102	BT664-72500	LOCK	1		
9	40230946	6002-0122	SNAP RING, C22	2		
10	40231055	BN06-0108	SPRING	1		
11	40231092	BT664-71400-02	PIN, $\varnothing 30-154.5L$	1		
12	40228634	1021N-M1004	NUT-SELFLOCK, M10-1.5P	1		
13	40230896	1021N-M0803	NUT-SELFLOCK, M8-1.25P	6		
14	40230880	10121-M0803-60	HEX.BOLT, M8-1.25P 60L	3		
15	40228607	10121-M0803-50	HEX.BOLT, M8-1.25P 50L	2		
16	40230878	10121-M0803-25	HEX.BOLT, M8-1.25P 25L	1		
17	40230879	10121-M0803-35	HEX.BOLT, M8-1.25P 35L	1		
18	40229894	10121-M1004-35	HEX.BOLT, M10-1.5P 35L	1		
19	40228630	10211-M1004	HEX.NUT, M10-1.5P	1		

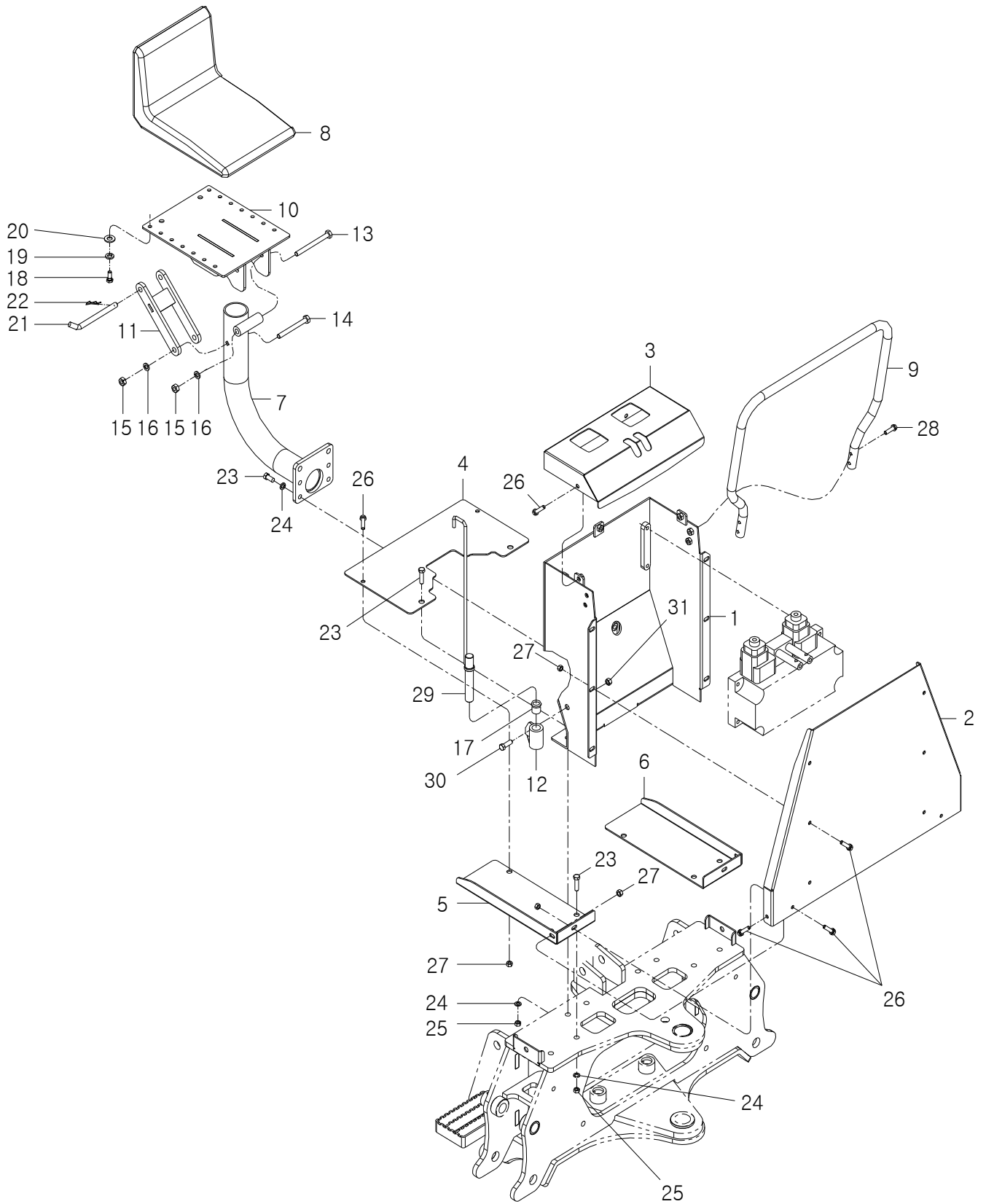
MAINFRAME ASSEMBLY



MAINFRAME ASSEMBLY

REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40231069	BT664-11000-05	MAIN FRAME ASS'Y	1		
2	40231065	BT651-52100-01	CROSS BAR	1		
3	40231088	BT664-62100-02	STABILIZER ASS'Y-RH	1		
4	40231086	BT664-61100-02	STABILIZER ASS'Y-LH	1		
5	40231087	BT664-61200	FOOT PLATE	2		
6	40231064	BT651-31600	BRACKET-CUSHION	2		
7	40230876	1002-B004	CUSHION	2		
8	40231066	BT651-75110-03	BUSHING, 405030	2		
9	40231089	BT664-71100	PIN, ø25-171L	4		
10	40231090	BT664-71200	PIN, ø25-139L	2		
11	40231091	BT664-71300	PIN, ø25-175L	2		
12	40231104	BT664-72800-02	STABILIZER LOCK	2		
13	40231105	BT664-73120	WASHER	2		
14	40230885	10121-M1004-90	HEX.BOLT, M10-1.5P 90L	2		
15	40228641	10316-M1000	WASHER-SPRING, M10	2		
16	40230877	1002-B005	RUBBER STOP	2		
17	40231035	BH09-0117	U-BOLT, ø40,5/16-18	1		
18	40228607	10121-M0803-50	HEX.BOLT, M8-1.25P 50L	8		
19	40230896	1021N-M0803	NUT-SELFLOCK, M8-1.25P	8		
20	40228634	1021N-M1004	NUT-SELFLOCK, M10-1.5P	4		
21	40230901	1202-0361	HEX.NUT, 5/16	4		
22	40230888	10121-M1606-60	HEX.BOLT, M16-2.0P 60L	4		
23	40228644	10316-M1600	WASHER-SPRING, M16	4		
24	40228636	1021N-M1606	NUT-SELFLOCK, M16-2.0P	4		
25	40230883	10121-M1004-50	HEX.BOLT, M10-1.5P 50L	2		
26	40228647	10321-M1000	WASHER-PLAIN, M10	4		
27	40231034	BH07-0113	SPRING	2		
28	40230956	802G0-11900	NIIPPLE GREASE, PT1/8	8		
29	40230957	802G1-11900	NIIPPLE GREASE, PT1/8 45°	9		

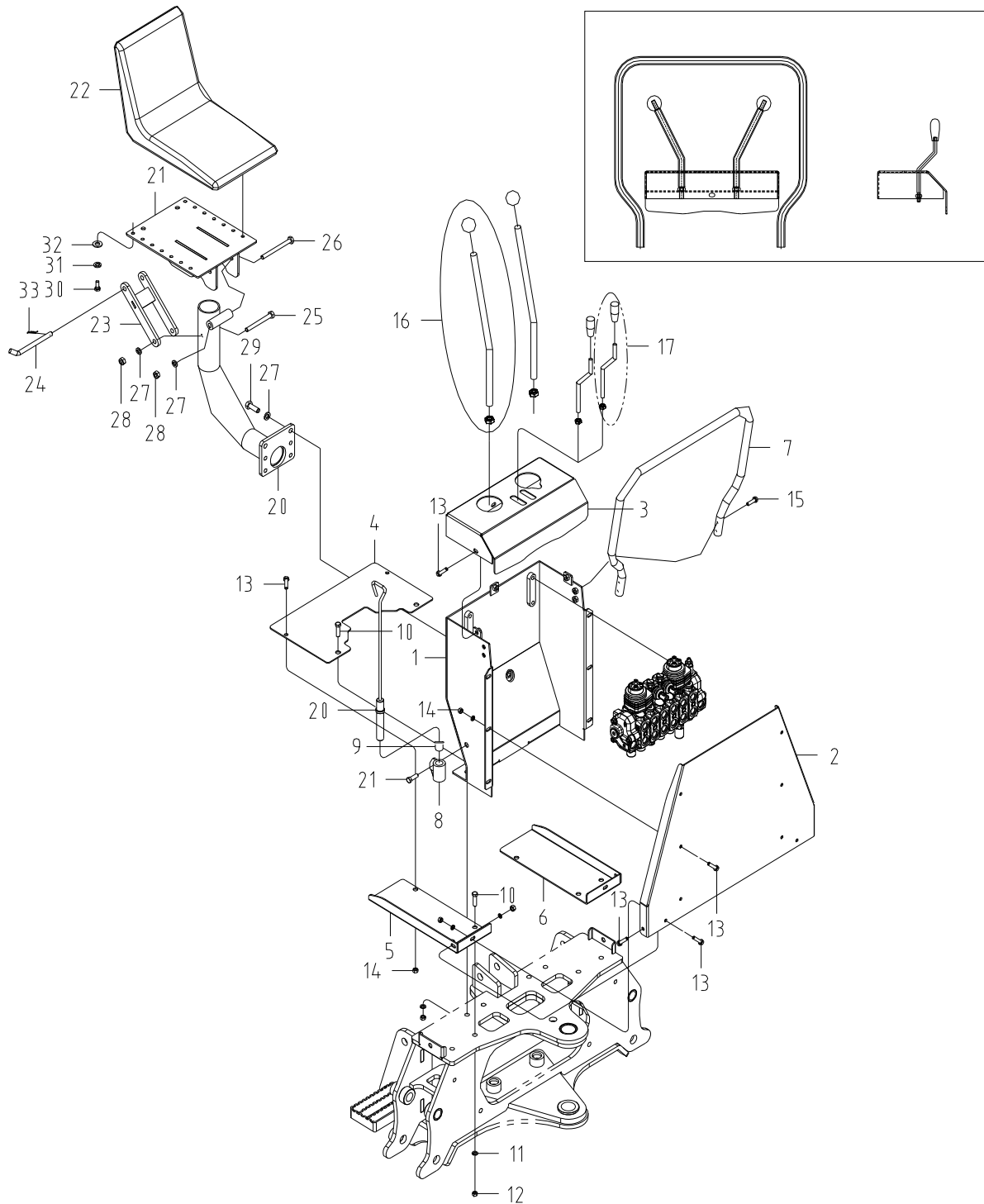
SEAT, CONTROL ASSEMBLY(HANIL)



SEAT, CONTROL ASSEMBLY(HANIL)

REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40231070	BT664-12000H	VALVE ROOM W.A.	1		
2	40231059	BT651-12210-03	FRONT COVER	1		
3	40231085	BT664-54101H	TOP COVER	1		
4	40231062	BT651-12240	FOOT PLATE - CENTER	1		
5	40231061	BT651-12230-01	FOOT PLATE - RH	1		
6	40231060	BT651-12220-01	FOOT PLATE - LH	1		
7	40231081	BT664-41110-01	SUPPORT SEAT	1		
8	40231138	V-2400	SEAT	1		
9	40231063	BT651-12410-01	GUIDE BAR	1		
10	40256413	BTA02-20200	PLATE, SEAT	1		
11	40231083	BT664-41130-01	LINK ASS'Y	1		
12	40231053	BN03-0400-01	SWING PIN HANGER	1		
13	40230887	10121-M120E-B0	HEX.BOLT, M12-1.75P 110L	1		
14	40230886	10121-M120E-A0	HEX.BOLT, M12-1.75P 100L	1		
15	40228635	1021N-M1205	NUT-SELFLOCK, M12-1.75P	2		
16	40228642	10316-M1200	WASHER-SPRING, M12	2		
17	40231054	BN03-0403	M/C BOSS	1		
18	40230900	1200-0364	HEX.BOLT-HT, 5/16-18 3/4"	4		
19	40230903	1204-0301	WASHER-SPRING, 5/16	4		
20	40230902	1203-0301	WASHER-PLAIN, 5/16	4		
21	40231084	BT664-41150	PIN, \varnothing 12	1		
22	40228655	14011-03000	R-PIN, \varnothing 3	1		
23	40230892	10191-M1205-30	HEX.BOLT-HT, M12-1.75P 30L	8		
24	40228642	10316-M1200	WASHER-SPRING, M12	8		
25	40228631	10211-M1205	HEX.NUT, M12-1.75P	4		
26	40230889	1012S-M0803-25	BOLT-SEM'S, M8-1.25P 25L	15		
27	40228629	10211-M0803	HEX.NUT, M8-1.25P	12		
28	40230890	1012S-M0803-40	BOLT-SEM'S, M8-1.25P 40L	4		
29	40231103	BT664-72600	SWING PIN	1		
30	40230882	10121-M1004-40	HEX.BOLT, M10-1.5P 40L	1		
31	40228630	10211-M1004	HEX.NUT, M10-1.5P	1		

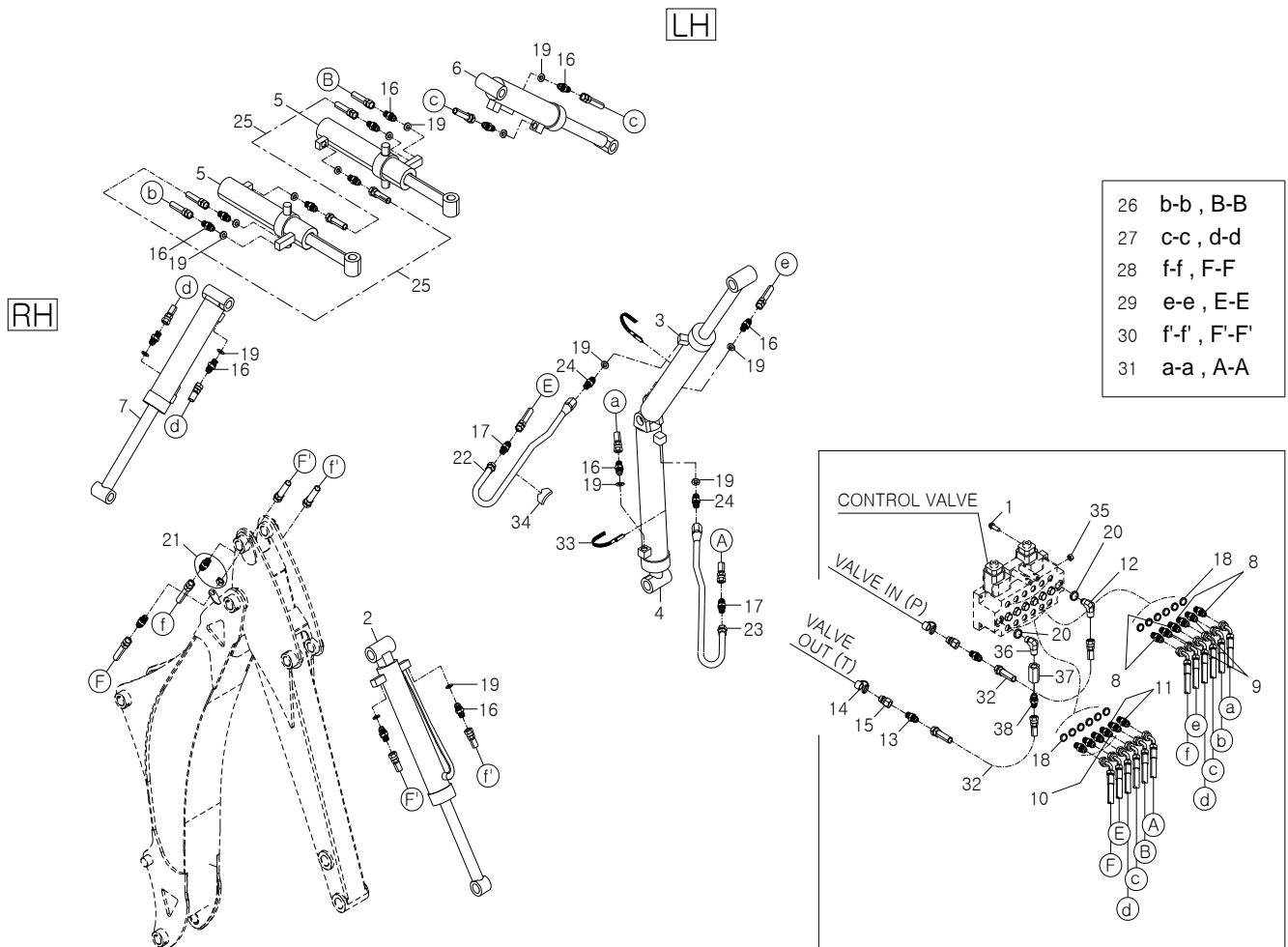
SEAT, CONTROL ASSEMBLY(WALVOIL)



SEAT, CONTROL ASSEMBLY(WALVOIL)

REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40294001	BTV02-20200	VALVE ROOM W.A.	1	┌	
	40343508	BTV08-20200	VALVE ROOM W.A.	1	←	2016.03.15~
2	40294002	BTV02-20301	COVER, FRONT	1		
3	40294003	BTV02-40102-01	TOP COVER	1		
4	40231062	BT651-12240	FOOT PLATE - CENTER	1		
5	40231061	BT651-12230-01	FOOT PLATE - RH	1		
6	40231060	BT651-12220-01	FOOT PLATE - LH	1		
7	40294004	BTV02-70001P	GUIDE BAR	1		
8	40231053	BN03-0400-01	SWING PIN HANGER	1		
9	40231054	BN03-0403	M/C BOSS	1		
10	40230892	10191-M1205-30	HEX.BOLT-HT, M12-1.75P 30L	6		
11	40228642	10316-M1200	WASHER-SPRING, M12	6		
12	40228631	10211-M1205	HEX.NUT, M12-1.75P	6		
13	40230889	1012S-M0803-25	BOLT-SEM'S, M8-1.25P 25L	15		
14	40228629	10211-M0803	HEX.NUT, M8-1.25P	12		
15	40230890	1012S-M0803-40	BOLT-SEM'S, M8-1.25P 40L	4		
16	40294005	BTV02-31000	BOOT LEVER ASS'Y	2	┌	
	40343509	BTV08-31000	BOOT LEVER ASS'Y	2	←	2016.03.15~
17	40294006	BTV02-32000	HAND LEVER	2	┌	
	40343510	BTV08-32000	HAND LEVER	2	←	2016.03.15~
18	40231103	BT664-72600	SWING PIN	1		
19	40230882	10121-M1004-40	HEX.BOLT, M10-1.5P 40L	1		
20	40231081	BT664-41110-01	SUPPORT SEAT	1		
21	40256413	BTA02-20200	PLATE, SEAT	1		
22	40231138	V-2400	SEAT	1		
23	40231083	BT664-41130-01	LINK ASS'Y	1		
24	40231084	BT664-41150	PIN, \varnothing 12	1		
25	40255401	10121-M1205-A0	HEX.BOLT, M12-1.75P 100L	1		
26	40230887	10121-M120E-B0	HEX.BOLT, M12-1.75P 110L	1		
27	40228642	10316-M1200	WASHER-SPRING, M12	6		
28	40228635	1021N-M1205	NUT-SELFLOCK, M12-1.75P	2		
29	40228615	10191-M1205-35	HEX.BOLT-HT, M12-1.75P 35L	4		
30	40230900	1200-0364	HEX.BOLT-HT, 5/16-18 3/4"	4		
31	40228640	10316-M0800	WASHER-SPRING, M8	4		
32	40228646	10321-M0800	WASHER-PLAIN, M8	4		
33	40228655	14011-03000	R-PIN, \varnothing 3	1		

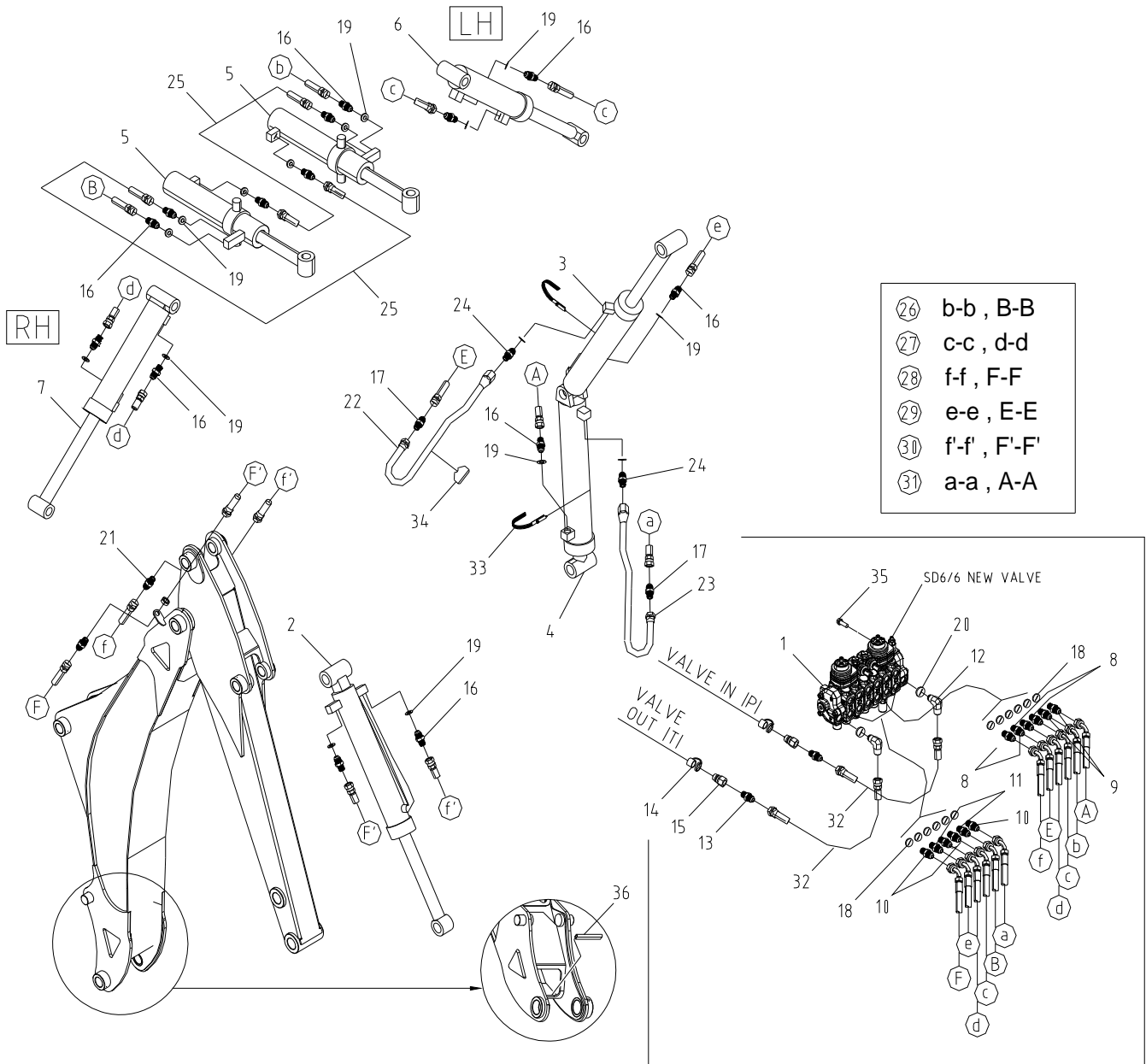
HOSE FITTING ASSEMBLY(HANIL)



HOSE FITTING ASSEMBLY(HANIL)

REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230891	1012S-M0803-50	BOLT-SEM'S, M8-1.25P 50L	4		
2	40230928	226702	BUCKET CYLINDER ASSEMBLY	1		
3	40230925	226701	DIPPERSTICK CYLINDER ASSEMBLY	1		
4	40230931	226703	BOOM CYLINDER ASSEMBLY	1		
5	40230918	225806	SWING CYLINDER ASSEMBLY	2		
6	40230910	224304	STABILIZER CYLINDER ASSEMBLY-LH	1		
7	40230913	224305	STABILIZER CYLINDER ASSEMBLY-RH	1		
8	40230948	6003-0204	ADAPTER LONG, 1/2-20UNF×3/4-16UNF, O-RING	4		
9	40230949	6003-0205	ORIFICE LONG, 1/2-20UNF×3/4-16UNF, O-RING	2		
10	40230947	6003-0203	ADAPTER SHORT, 1/2-20UNF×3/4-16UNF, O-RING	4		
11	40230950	6003-0206	ORIFICE SHORT, 1/2-20UNF×3/4-16UNF, O-RING	2		
12	40230951	6003-0302	ADAPTER ELBOW, 3/4-16UNF×7/8-14UNF, O-RING 90°	2		
13	40230952	6003-0408	NIPPLE, PT1/2×3/4-16UNF	2		
14	40230971	8044K-01100	DUST-CAP, 1/2" BLACK FEMALE	2		
15	40230967	80410-T1130	QUICK COUPLER, PT1/2 MALE	2		
16	40230953	6004-0205	NIPPLE, PF1/4, O-RING×1/2-20UNF	16		
17	40230962	802N1-F67F7-50	NIPPLE, 9/16-18UNF×1/2-20UNF	2		
18	40230943	5004-0034	O-RING, AS568 #908, AS568 #908	12		
19	40230700	81300-0P011	O-RING, P11	16		
20	40230944	5004-0078	O-RING, AS568 #910, AS568 #910	2		
21	40231109	BT664-83100	NIPPLE KIT, 1/2-20UNF×1/2-20UNF, NUT	2		
22	40294007	BT500-01000	PIPE ASS'Y	1		
23	40294008	BT500-02000	PIPE ASS'Y	1		
24	40230963	802N1-P26F7-52	ADAPTER, PF1/4×9/16-18UNF	2		
25	40231038	BH30-0100	HOSE ASS'Y, 1/4×4×4×550L	2		
26	40231039	BH30-0200	HOSE ASS'Y, 1/4×904×4×950L	2		
27	40231040	BH30-0300	HOSE ASS'Y, 1/4×904×4×1300L	4		
28	40231110	BT664-83120	HOSE ASS'Y, 1/4×904×4×2500L	2		
29	40231111	BT664-83130	HOSE ASS'Y, 1/4×904×4×2530L	2		
30	40231112	BT664-83140	HOSE ASS'Y, 1/4×4×4G/W×900L	2		
31	40231113	BT664-83150	HOSE ASS'Y, 1/4×904×4×1850L	2		
32	40230977	80630-01010	HOSE ASS'Y, 4(7/8-14UNF)-4(7/8-14UNF) 2100L(1/2)	2		
33	40228698	50120-M540K	CABLE TIE, 540mm BLACK	3		
34	40231115	COM02-11101	FIX, PIPE	2		
35	40230896	1021N-M0803	NUT-SELFLOCK, M8-1.25P	4		
36	40230958	802L0-T63FA-32	NIPPLE, PT1/2×7/8-14UNF, O-RING 90°	1		
37	40230955	801K1-13000	CHECK VALVE, PT1/2-0.5K	1		
38	40230966	802N3-T63FA-30	NIPPLE, PT1/2×7/8-14UNF, HOSE	1		

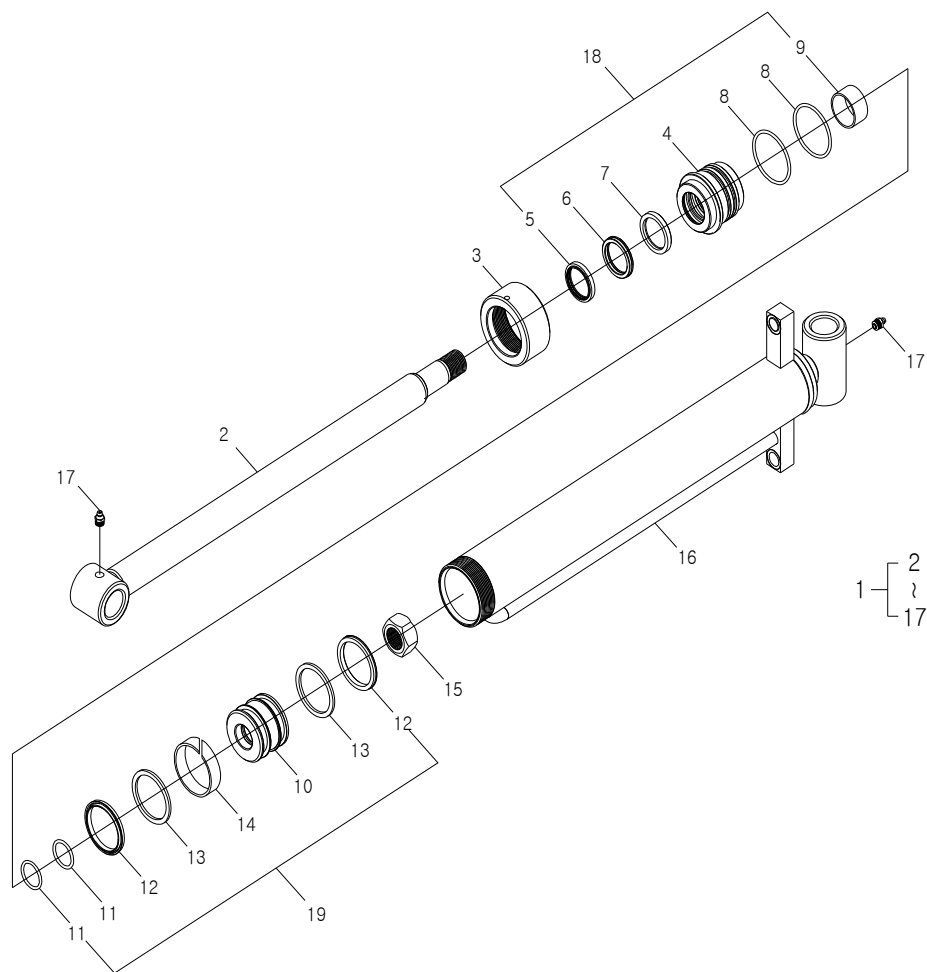
HOSE FITTING ASSEMBLY(WALVOIL)



HOSE FITTING ASSEMBLY(WALVOIL)

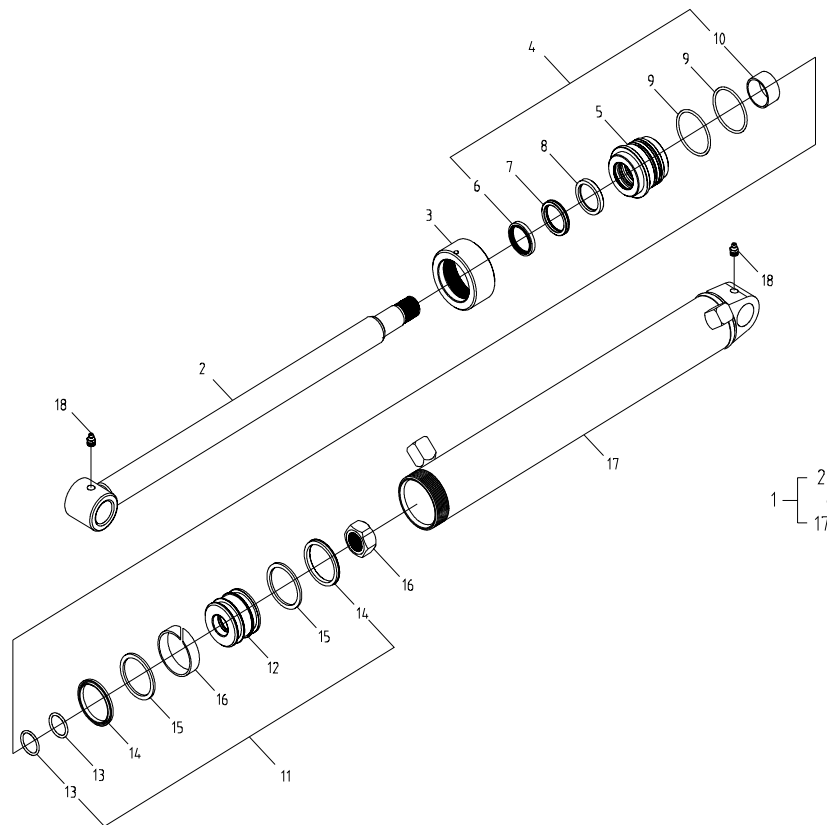
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40294009	8WKEXP2124	VALVE, WALVOIL SD6/6	1		
2	40230928	226702	BUCKET CYLINDER ASSEMBLY	1		
3	40230925	226701	DIPPERSTICK CYLINDER ASSEMBLY	1		
	40340572	22L101	DIPPERSTICK CYLINDER ASSEMBLY	1	←	2016.03.15~
4	40230931	226703	BOOM CYLINDER ASSEMBLY	1		
5	40230918	225806	SWING CYLINDER ASSEMBLY	2		
6	40230910	224304	STABILIZER CYLINDER ASSEMBLY-LH	1		
7	40230913	224305	STABILIZER CYLINDER ASSEMBLY-RH	1		
8	40230948	6003-0204	ADAPTER LONG, 1/2-20UNF×3/4-16UNF, O-RING	4		
9	40230949	6003-0205	ORIFICE LONG, 1/2-20UNF×3/4-16UNF, O-RING	2		
10	40230947	6003-0203	ADAPTER SHORT, 1/2-20UNF×3/4-16UNF, O-RING	4		
11	40230950	6003-0206	ORIFICE SHORT, 1/2-20UNF×3/4-16UNF, O-RING	2		
12	40294010	802L3-FA3FA-32	ADAPTER ELBOW, 7/8-14UNF,HOSE×7/8-14UNF, O-RING 90°	2		
13	40230966	802N3-T63FA-30	NIPPLE, PT1/2×7/8-14UNF, HOSE	2		
14	40230971	8044K-01100	DUST-CAP, 1/2" BLACK FEMALE	2		
15	40230967	80410-T1130	QUICK COUPLER, PT1/2 MALE	2		
16	40230953	6004-0205	NIPPLE, PF1/4, O-RING×1/2-20UNF	14		
17	40230962	802N1-F67F7-50	NIPPLE, 9/16-18UNF×1/2-20UNF	2		
18	40230943	5004-0034	O-RING, AS568 #908, AS568 #908	12		
19	40230701	81301-BP011	O-RING, 1BP11	16		
20	40230944	5004-0078	O-RING, AS568 #910, AS568 #910	2		
21	40231109	BT664-83100	NIPPLE KIT, 1/2-20UNF×1/2-20UNF, NUT	2		
22	40294007	BT500-01000	PIPE ASS'Y	1		
23	40294008	BT500-02000	PIPE ASS'Y	1		
24	40230963	802N1-P26F7-52	ADAPTER, PF1/4×9/16-18UNF	2		
25	40231038	BH30-0100	HOSE ASS'Y, 1/4×4×4×550L	2		
	40343511	80611-01003	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 550L(1/4)	2	←	2016.03.15~
26	40231039	BH30-0200	HOSE ASS'Y, 1/4×904×4×950L	2		
	40343512	80611-05006	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 950L(1/4)	2	←	2016.03.15~
27	40231040	BH30-0300	HOSE ASS'Y, 1/4×904×4×1300L	4		
	40343513	80611-05009	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 1300L(1/4)	4	←	2016.03.15~
28	40231110	BT664-83120	HOSE ASS'Y, 1/4×904×4×2500L	2		
	40343515	80611-05034	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 2450L(1/4)	2	←	2016.03.15~
29	40231111	BT664-83130	HOSE ASS'Y, 1/4×904×4×2530L	2		
	40343516	80611-05033	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 2480L(1/4)	2	←	2016.03.15~
30	40231112	BT664-83140	HOSE ASS'Y, 1/4×4×4G/W×900L	2		
31	40294011	80610-05030	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 1890L(1/4)	2		
	40343514	80611-05030	HOSE ASS'Y, 904(1/2-20UNF)-4(1/2-20UNF) 1890L(1/4)	2	←	2016.03.15~
32	40230977	80630-01010	HOSE ASS'Y, 4(7/8-14UNF)-4(7/8-14UNF) 2100L(1/2)	2		
	40343517	80631-01010	HOSE ASS'Y, 4(7/8-14UNF)-4(7/8-14UNF) 2100L(1/2)	2	←	2016.03.15~
33	40228698	50120-M540K	CABLE TIE, 540mm BLACK	3		
34	40231115	COM02-11101	FIX, PIPE	2		
35	40230889	1012S-M0803-25	BOLT-SEM'S, M8-1.25P 25L	4		
36	40343523	BT005-H0002	PVC glass Metal Seal	1		2016.03.15~

BUCKET CYLINDER ASSEMBLY



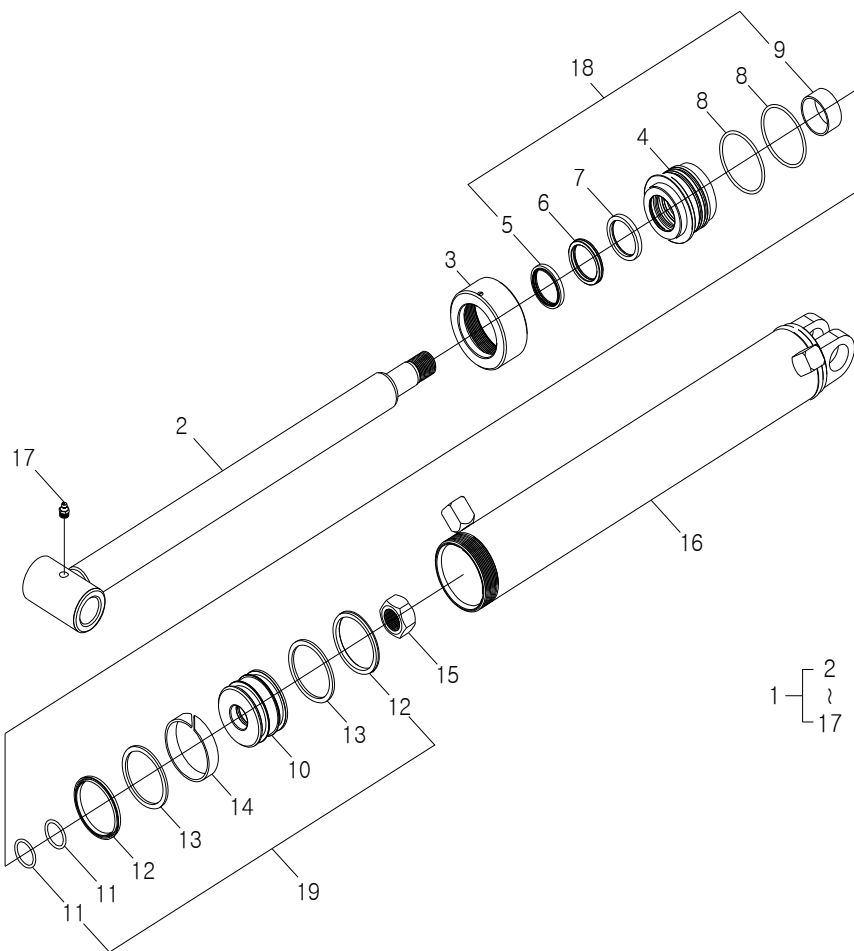
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230928	226702	BUCKET CYLINDER ASSEMBLY	1		
2	40230929	226702-R	ROD ASS'Y	1		
3	40228867	OC60-7037	CAP OUTER, $\phi 60-70-37L$	1		
4	40228827	IC60-3555	COVER INNER, $\phi 60 \times 35 \times 55L$	1		
5	40228766	DSSD-R035	DUST,SDR, $35 \times 43 \times 5/6.5$	1		
6	40228884	UPSK-Y035	PACKING U, SKY, SKY 35-45-6	1		
7	40228880	UPIS-I035	PACKING U, ISI, 35-45-6	1		
8	40228872	OR1B-G055	O-RING, 1BG55	2		
9	40228768	DU03-5020	BUSHING DU, $35 \times 39 \times 20$	1		
10	40228876	PI60-2746	PISTON, $\phi 60-27-46L$	1		
11	40228870	OR1B-G027	O-RING, 1BG27	2		
12	40228882	UPOS-I060	PACKING U, OSI, 60-50-6	2		
13	40228878	TRBR-0060	RING-BACKUP, 60-50-3	2		
14	40228886	WEWR-0060	WEARING, WR, 60-55-15	1		
15	40228864	NTP0-U100-C	NUT, 1-14UN	1		
16	40230930	226702-T	TUBE ASS'Y	1		
17	40231134	GNIT-018I	NIPPLE,GREASE, 1/8"	2		
18	40228823	IA60-3555	SEAL KIT HEAD, NO.3~8	1		
19	40228874	PA60-2746	PISTON ASS'Y, NO.9~13	1		

DIPPERSTICK CYLINDER ASSEMBLY



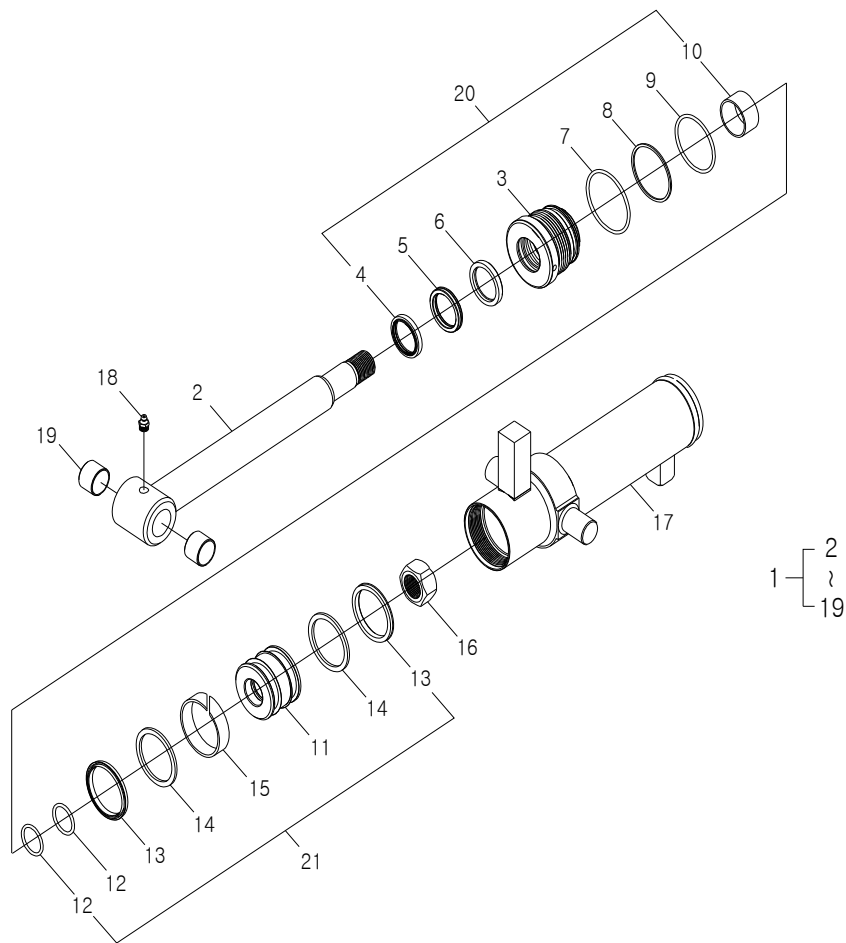
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40340572	22L101	DIPPERSTICK CYLINDER ASSEMBLY	1		
2	40340573	22L101-R	ROD ASS'Y	1		
3	40340574	3AE-0006	CAP OUTER $\varnothing 60 \times \varnothing 75 \times 37L$	1		
4	40340575	22L101-RC	COVER INNER ASS'Y	1		
5	40340576	3CN-065-002	COVER INNER $\varnothing 65 \times \varnothing 35 \times 55L$	1		
6	40340577	9DT-SDR-035	Dust Seal SDR 35x43x5/6.5	1		
7	40340578	9ST-SKY-035	U-Packing SKY 35x45x6	1		
8	40340579	9ST-ISI-035	U-Packing ISI 35x45x6	1		
9	40340580	9RB-G0600T	O-Ring 1BG60	2		
10	40340581	9BU-03530	DU-Bush 35x30	1		
11	40340582	22L101-P	PISTON ASS'Y	1		
12	40340583	3PU-065-001	PISTON $\varnothing 65 \times \varnothing 27 \times 46L$	1		
13	40340584	9ST-OSI-065	U-Packing OSI 65x55x6	2		
14	40340585	9US-05506503	Back up-Ring 55x65x3	2		
15	40340586	9RB-G0270T	O-Ring 1BG27	2		
16	40340587	9WH-06006515	Wear-Ring $\varnothing 60 \times \varnothing 65 \times 15L$	1		
17	40340588	9NT-000002	NUT, 1-14UN	1		
18	40340589	22L101-T	TUBE ASS'Y	1		
19	40231134	GNIT-018I	NIPPLE,GREASE, 1/8"	2		

BOOM CYLINDER ASSEMBLY



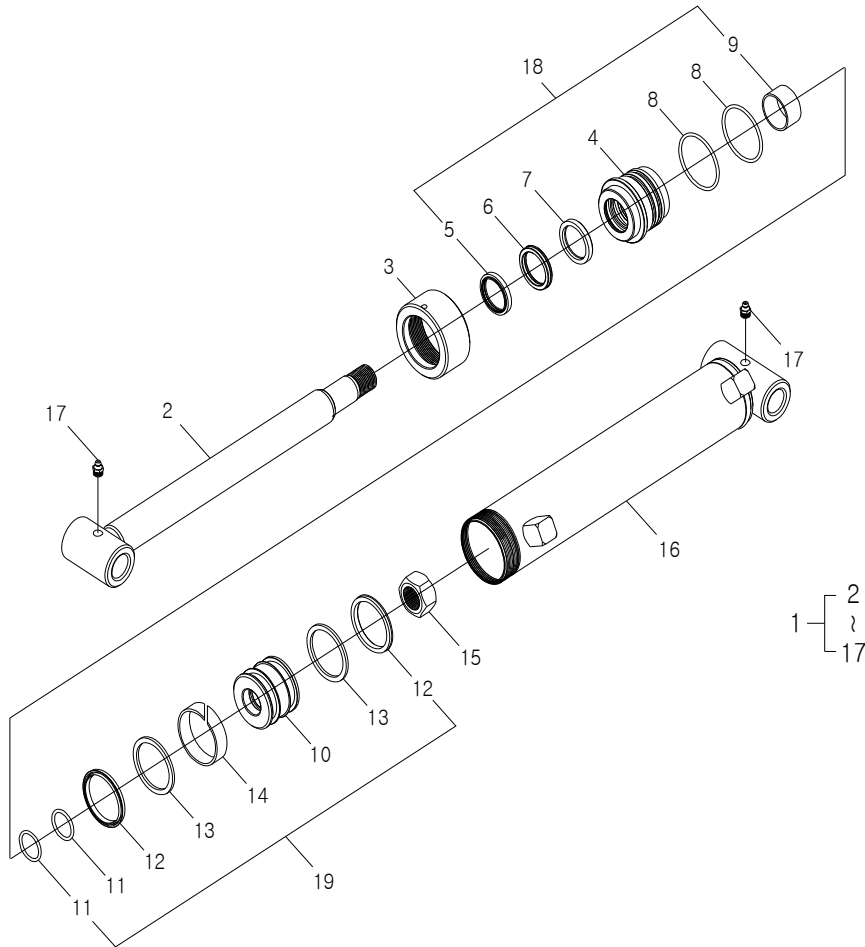
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230931	226703	BOOM CYLINDER ASSEMBLY	1		
2	40230932	226703-R	ROD ASS'Y	1		
3	40230859	OC70-8037	CAP, OUTER, $\phi 70-80-37L$	1		
4	40230766	IC70-4055	COVER, INNER, $\phi 70-40-55L$	1		
5	40230710	DSSD-R040	DUST, SDR, 40-48-5/6.5	1		
6	40230872	UPSK-Y040	PACKING, U, SKY, 40-50-6	1		
7	40230869	UPIS-I040	PACKING, U, ISI, G55	1		
8	40230861	OR1B-G065	O-RING, 1BG65, 1BG65	2		
9	40230711	DU04-0020	BUSHING, DU, 40-44-20	1		
10	40230865	PI70-2746	PISTON, $\phi 70-27-46L$	1		
11	40228870	OR1B-G027	O-RING, 1BG27	2		
12	40230871	UPOS-I070	PACKING, U, OSI, 70-60-6	2		
13	40230868	TRBR-0070	BACKUP RING, 70-60-3	2		
14	40231139	WERY-T070	WEARING, RYT, 70-65-15	1		
15	40228864	NTP0-U100-C	NUT, 1-14UN	1		
16	40230933	226703-T	TUBE ASS'Y	1		
17	40231134	GNIT-018I	NIPPLE, GREASE, 1/8"	1		
18	40230764	IA70-4055	SEAL KIT HEAD, NO.3~8	1		
19	40230863	PA70-2746	SEAL KIT PISTON, NO.9~13	1		

SWING CYLINDER ASSEMBLY



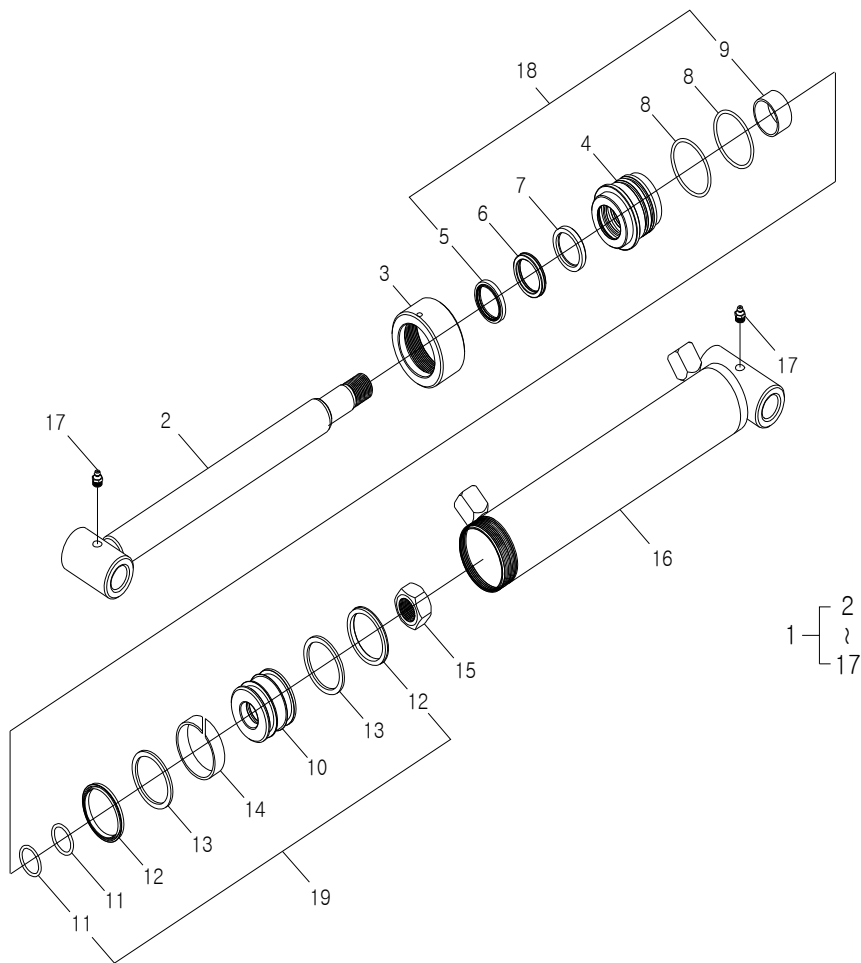
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230918	225806	SWING CYLINDER ASSEMBLY	1		
2	40230919	225806-R	ROD ASS'Y	1		
3	40231033	BC60-3555	HEAD, $\phi 60-35-55L$	1		
4	40228766	DSSD-R035	DUST,SDR, 35 \times 43 \times 5/6.5	1		
5	40228884	UPSK-Y035	PACKING U, SKY, SKY 35-45-6	1		
6	40228880	UPIS-I035	PACKING U, ISI, 35-45-6	1		
7	40231137	TRBR-G055	BACKUP RING, G55	1		
8	40231135	OR00-G060	O-RING, G60, G60	1		
9	40228872	OR1B-G055	O-RING, 1BG55	1		
10	40228768	DU03-5020	BUSHING DU, 35 \times 39 \times 20	1		
11	40228876	PI60-2746	PISTON, $\phi 60-27-46L$	1		
12	40228870	OR1B-G027	O-RING, 1BG27	2		
13	40228882	UPOS-I060	PACKING U, OSI, 60-50-6	2		
14	40228878	TRBR-0060	RING-BACKUP, 60-50-3	2		
15	40228886	WEWR-0060	WEARING, WR, 60-55-15	1		
16	40228864	NTP0-U100-C	NUT, 1-14UN	1		
17	40230920	225806-T	TUBE ASS'Y	1		
18	40231134	GNIT-018I	NIPPLE,GREASE, 1/8"	1		
19	40231117	DU02-5020	BUSHING DU, 25-28-20	2		
20	40230980	BA60-3555	SEAL KIT HEAD, NO.3~10	1		
21	40231136	PA60-2746-S	SEAL KIT PISTON, NO.11~15	1		

STABILIZER CYLINDER ASSEMBLY-LH



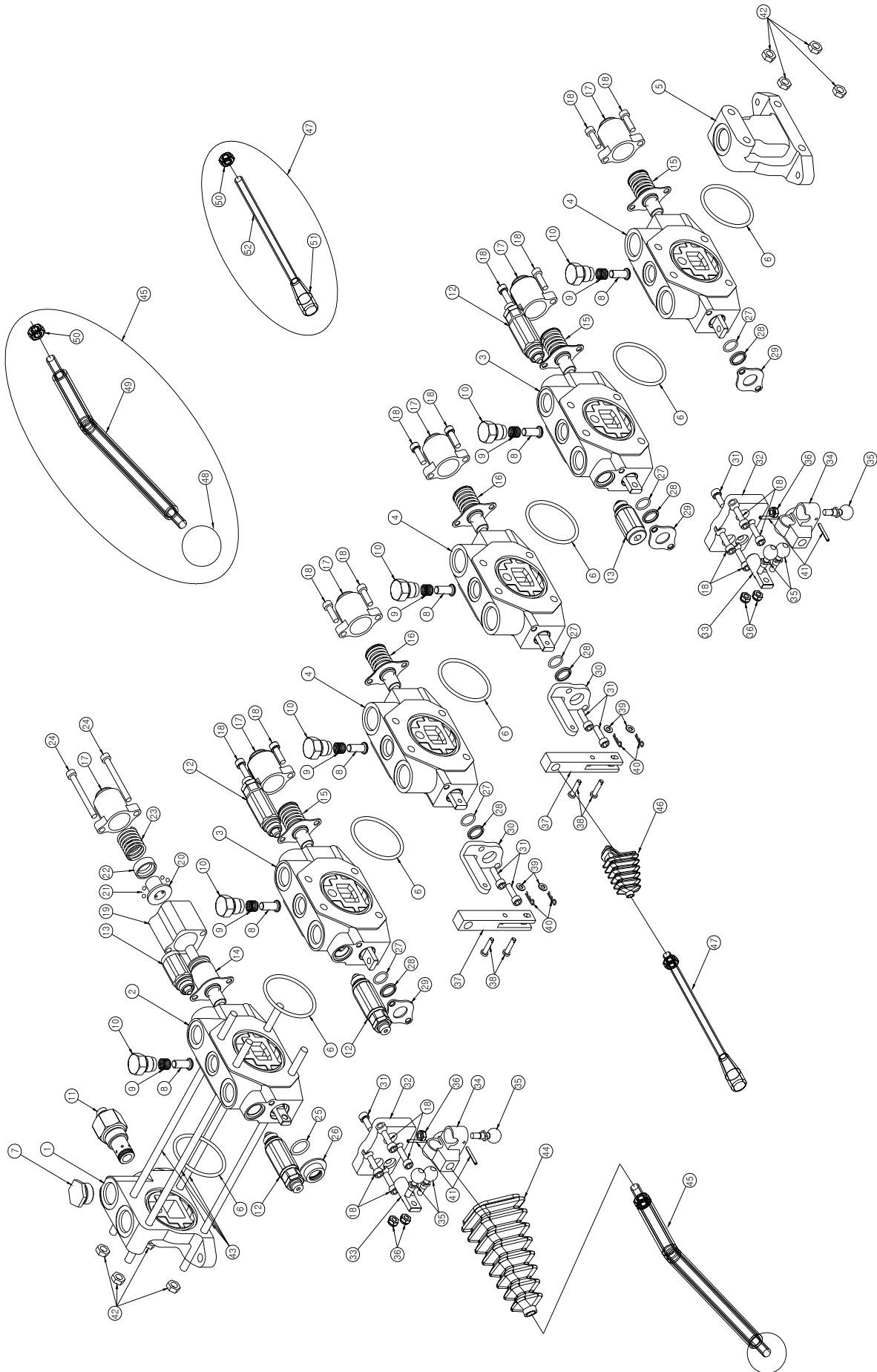
REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230910	224304	STABILIZER CYLINDER ASSEMBLY-LH	1		
2	40230911	224304-R	ROD ASS'Y	1		
3	40228867	OC60-7037	CAP OUTER, $\phi 60-70-37L$	1		
4	40228827	IC60-3555	COVER INNER, $\phi 60 \times 35 \times 55L$	1		
5	40228766	DSSD-R035	DUST,SDR, $35 \times 43 \times 5/6.5$	1		
6	40228884	UPSK-Y035	PACKING U, SKY, SKY 35-45-6	1		
7	40228880	UPIS-I035	PACKING U, ISI, 35-45-6	1		
8	40228872	OR1B-G055	O-RING, 1BG55	2		
9	40228768	DU03-5020	BUSHING DU, $35 \times 39 \times 20$	1		
10	40228876	PI60-2746	PISTON, $\phi 60-27-46L$	1		
11	40228870	OR1B-G027	O-RING, 1BG27	2		
12	40228882	UPOS-I060	PACKING U, OSI, 60-50-6	2		
13	40228878	TRBR-0060	RING-BACKUP, 60-50-3	2		
14	40228886	WEWR-0060	WEARING, WR, 60-55-15	1		
15	40228864	NTP0-U100-C	NUT, 1-14UN	1		
16	40230912	224304-T	TUBE ASS'Y	1		
17	40231134	GNIT-018I	NIPPLE,GREASE, 1/8"	2		
18	40228823	IA60-3555	SEAL KIT HEAD, NO.3~8	1		
19	40228874	PA60-2746	PISTON ASS'Y, NO.9~13	1		

STABILIZER CYLINDER ASSEMBLY-RH



REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40230913	224305	STABILIZER CYLINDER ASSEMBLY-RH	1		
2	40230914	224305-R	ROD ASS'Y	1		
3	40228867	OC60-7037	CAP OUTER, $\phi 60-70-37L$	1		
4	40228827	IC60-3555	COVER INNER, $\phi 60 \times 35 \times 55L$	1		
5	40228766	DSSD-R035	DUST,SDR, $35 \times 43 \times 5/6.5$	1		
6	40228884	UPSK-Y035	PACKING U, SKY, SKY 35-45-6	1		
7	40228880	UPIS-I035	PACKING U, ISI, 35-45-6	1		
8	40228872	OR1B-G055	O-RING, 1BG55	2		
9	40228768	DU03-5020	BUSHING DU, $35 \times 39 \times 20$	1		
10	40228876	PI60-2746	PISTON, $\phi 60-27-46L$	1		
11	40228870	OR1B-G027	O-RING, 1BG27	2		
12	40228882	UPOS-I060	PACKING U, OSI, 60-50-6	2		
13	40228878	TRBR-0060	RING-BACKUP, 60-50-3	2		
14	40228886	WEWR-0060	WEARING, WR, 60-55-15	1		
15	40228864	NTP0-U100-C	NUT, 1-14UN	1		
16	40230915	224305-T	TUBE ASS'Y	1		
17	40231134	GNIT-018I	NIPPLE,GREASE, 1/8"	2		
18	40228823	IA60-3555	SEAL KIT HEAD, NO.3~8	1		
19	40228874	PA60-2746	PISTON ASS'Y, NO.9~13	1		

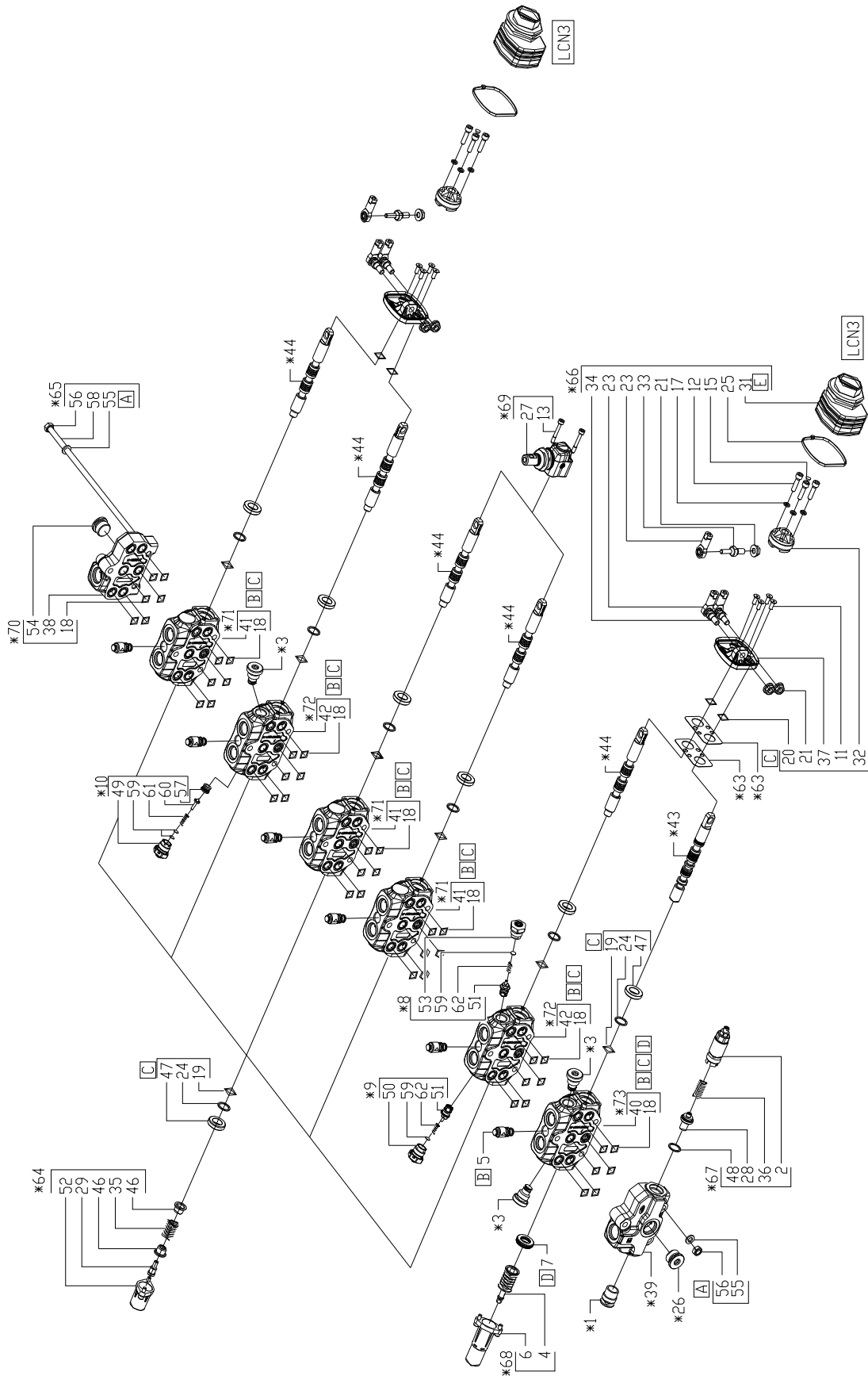
CONTROL VALVE ASSEMBLY-HANIL AV 80/6



CONTROL VALVE ASSEMBLY-HANIL AV 80/6

REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
0	40230982	BC04-0000-P	CONTROL VALVE ASS'Y	1		
1	40230983	BC04-0100	BLOCK-BA TYPE(INLET)	1		
2	40230984	BC04-0200	BLOCK-HB TYPE(BOOM)	1		
3	40230985	BC04-0300	BLOCK-HA TYPE	2		
4	40230986	BC04-0400	BLOCK-EA TYPE	3		
5	40230987	BC04-0500	BLOCK-GB TYPE (OUTLET)	1		
6	40230988	BC04-0600	O-RING	7		
7	40230989	BC04-0700	PLUG ASS'Y	1		
8	40230990	BC04-0800	POPPET-CHECK	6		
9	40230991	BC04-0900	SPRING-CHECK	6		
10	40230992	BC04-1000	PLUG-CHECK ASS'Y	6		
11	40230993	BC04-1100	M.R.V.ASS'Y	1		
12	40230994	BC04-1200	O.R.V.ASS'Y	4		
13	40230995	BC04-1300	A.C.V.ASS'Y	2		
14	40230996	BC04-1400	SPOOL ASS'Y-FLOAT	1		
15	40230997	BC04-1500	SPOOL ASS'Y-STD	3		
16	40230998	BC04-1600	SPOOL ASS'Y-STABILIZER	2		
17	40230999	BC04-1700	RETURN CAP	6		
18	40231000	BC04-1800	WRENCH BOLT	18		
19	40231001	BC04-1900	HOUSING-DETENT	1		
20	40231002	BC04-2000	SOCKET-DETENT	1		
21	40231003	BC04-2100	BALL-DETENT	4		
22	40231004	BC04-2200	SLEEVE-DETENT	1		
23	40231005	BC04-2300	SPRING-RETURN	1		
24	40231006	BC04-2400	WRENCH BOLT	2		
25	40231007	BC04-2500	O-RING	1		
26	40231008	BC04-2600	SEAL KIT ASS'Y-FLOAT	1		
27	40231009	BC04-2700	O-RING	5		
28	40231010	BC04-2800	DUST WIPER	5		
29	40231011	BC04-2900	SEAL PLATE	3		
30	40231012	BC04-3000	BRACKET-STABILIZER	2		
31	40231013	BC04-3100	WRENCH BOLT	6		
32	40231014	BC04-3200	BRACKET-JOINT	2		
33	40231015	BC04-3300	SUPPORT-JOINT	2		
34	40231016	BC04-3400	BLOCK-JOINT	2		
35	40231017	BC04-3500	SUPPORT-BALL	6		
36	40231018	BC04-3600	NYLON NUT	6		
37	40231019	BC04-3700	LEVER-STABILIZER	2		
38	40231020	BC04-3800	PIN	4		
39	40231021	BC04-3900	WASHER-PIN	4		
40	40231022	BC04-4000	SNAP PIN	4		
41	40231023	BC04-4100	SPRING PIN	4		
42	40231024	BC04-4200	NUT	8		
43	40231025	BC04-4300	TIE BOLT	4		
44	40231026	BC04-4400	BOOT , CONTROL	2		
45	40231027	BC04-4500	HAND LEVER	2		
46	40231028	BC04-4600	BOOT , CONTROL	2		
47	40231029	BC04-4700	HAND LEVER	2		
48	40230981	BC01-2400	PLASTIC BALL	2		
49	40231030	BC04-4900	LEVER STICK	2		
50	40228630	10211-M1004	HEX.NUT, M10-1.5P	4		
51	40231031	BC04-5100	PLASTIC BALL	2		
52	40231032	BC04-5200	LEVER STICK	2		

CONTROL VALVE ASSEMBLY-WALVOL SD 6/6



CONTROL VALVE ASSEMBLY-WALVOL SD 6/6

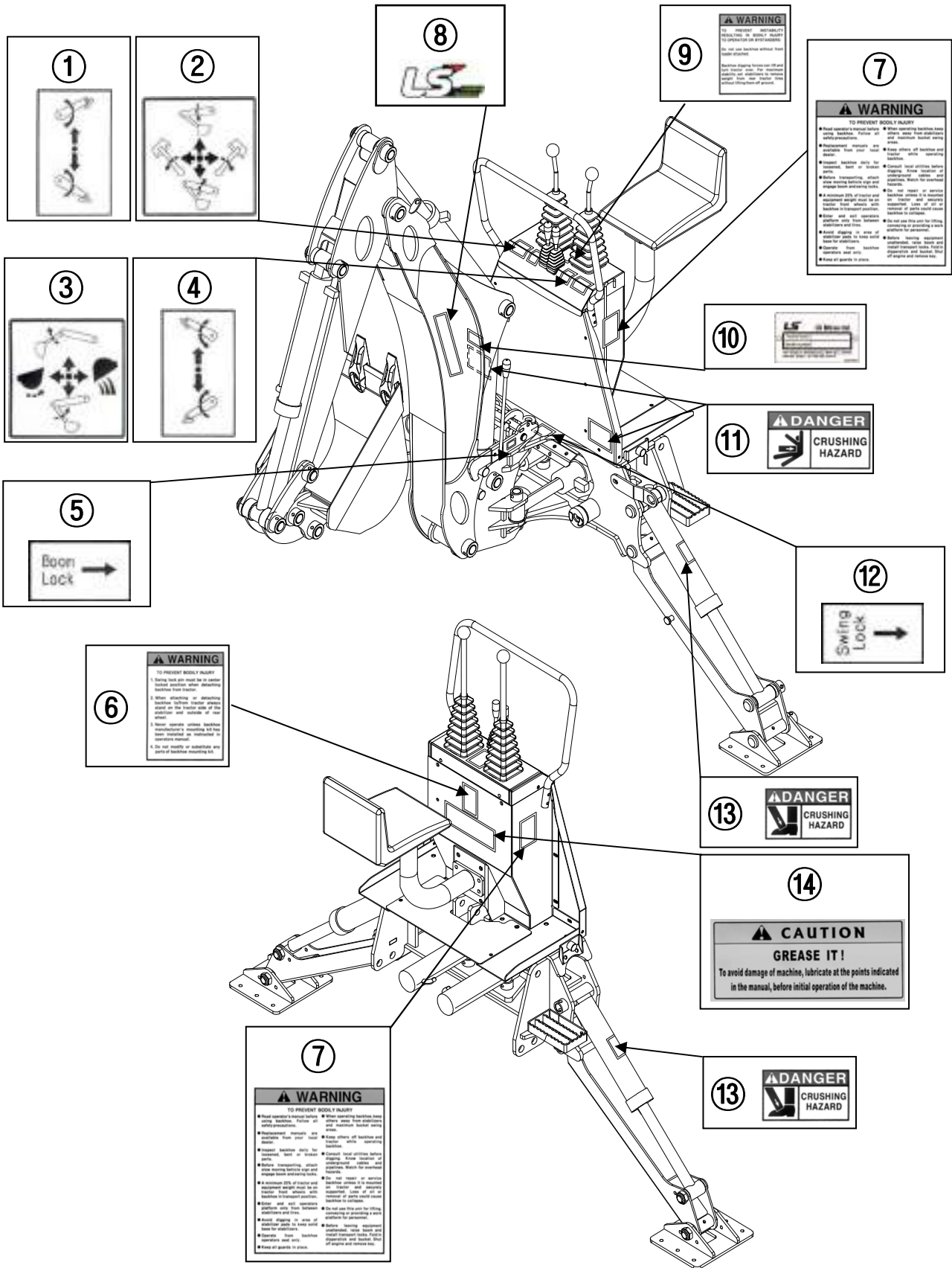
REF.NO	LS PART.NO	PART.NO	DESCRIPTION	QTY	I.C	SERIAL OR DATE
1	40308224	YTAP623282-H	PLUG SV/VMP5	1		* Order code for spare parts
3	40308222	XTAP524280	PLUG P3T/SD6	3		* Order code for spare parts
8	40308217	KEXPE0000033	VALVE KIT U(G3)/SD6	1		* Order code for spare parts
9	40308213	5KIT306113-W	VALVE KIT U(G3)/SD6	1		* Order code for spare parts
10	40308212	5KIT206113A-W	VALVE KIT P(G3)/SD5-SD6	1		* Order code for spare parts
39	40307884	3FIA106800-H	COVER-INLET FE/SD6-SAE10	1		* Order code for spare parts
43	40307880	3CU2243130	SPPOOL 5BY(13QN)/SD6	1		* Order code for spare parts
44	40307879	3CU2210130	SPPOOL 1/SD6	5		* Order code for spare parts
54	40307896	3XTAP826160-K	PLUG TCEI SAE 10	2		* Order code for spare parts
63	40324627	3GUA167050	GASKET	2		* Order code for spare parts
64	40324628	5V08105001-H	END-CAP KIT	1		* Order code for spare parts
65	40324629	5TIR108311-H	TIE ROD KIT SD6/6	1		* Order code for spare parts
66	40324630	5CLO306101-W	LCN KIT 2 TYPE / 3 TYPE	1		* Order code for spare parts
67	40324631	5KIT105213	MRV	1		* Order code for spare parts
68	40324632	5V13405020	CONTROL KIT	1		* Order code for spare parts
69	40324633	5LEV105000-H	LEVER KIT	1		* Order code for spare parts
70	40324634	612305007	FIANCATA FS SD6/RD-SAE10	1		* Order code for spare parts
71	40324635	5EL1068010	KIT ELEMENT SD6/QH-SAE8	3		* Order code for spare parts
72	40324636	5EL1068001	KIT ELEMENTO SD6/P-SAE8	2		* Order code for spare parts
73	40324637	5EL1068205A	KIT ELEMENTO SD6/P-SAE8/5BY(13QN)	1		* Order code for spare parts

DECALS



CAUTION :

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



Refer to category "Safety decals"

DECALS

REF. NO	LS PART NO	PART NO	DESCRIPTION	QTY	I.C	REMARK
1	40231049	BH35-0110	DECAL-WARNING	1		
2	40231046	BH35-0107	DECAL-WARNING	1		
3	40231047	BH35-0108	DECAL-WARNING	1		
4	40231048	BH35-0109	DECAL-WARNING	1		
5	40231051	BH35-0112	DECAL-WARNING	1		
6	40231041	BH35-0101	DECAL-WARNING	1		
7	40231042	BH35-0102	DECAL-WARNING	2		
8	40230647	3101E-00112	DECAL-LS	1		
9	40231045	BH35-0105	DECAL-WARNING	1		
10	40230653	3104E-00010	NAME PLATE	1		
11	40231044	BH35-0104	DECAL-DANGER	2		
12	40231050	BH35-0111	DECAL-WARNING	1		
13	40231043	BH35-0103	DECAL-DANGER	2		
14	40231052	BH35-0117	DECAL-WARNING	1		