

Kioti KB2365

Kioti Backhoe User's Manual

< And Parts Catalog >



Printed in KOREA. Nov. 2004

Warranty Conditions

Warranty Coverage:

Daedong-USA, Inc., Kioti Tractor Division, herein referred to as Kioti, undertakes to replace or repair any part of a Kioti 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 Kioti Backhoe to the Dealer's place of business or repair.

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

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

Warranty Provisions:

Kioti'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 Kioti Product, use those brands and grades of lubricating oils, lubricants or fuel and spare parts officially approved by Kioti.
- The Kioti 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 perform 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 Kioti 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 Kioti dealer and request repair within the applicable warranty term and (2) present evidence of purchase.
- The Warranty shall be void if the Kioti Backhoe has been altered or repaired outside of a Kioti 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 Kioti's behalf and neither party assumes any other liability in connection with Kioti's Products.
- Any dispute arising between Kioti and the Purchaser concerning the liability of Kioti under this warranty shall be subject to the laws of the State of North Carolina.

Right To Make Design and Product Changes:

Kioti reserves the right to make changes in the design and other changes in its Kioti 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 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 operate. **Make sure you check all controls in 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 Backhoe before you begin operation.

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.

	<p>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.</p>
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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 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's 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"

SAFETY PRECAUTIONS

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 injuries. If this happens 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.

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

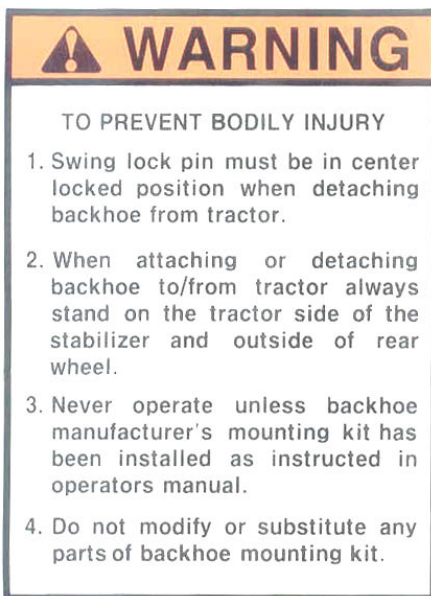
▲ SAFETY DECALS ▲

Safety Decal Locations

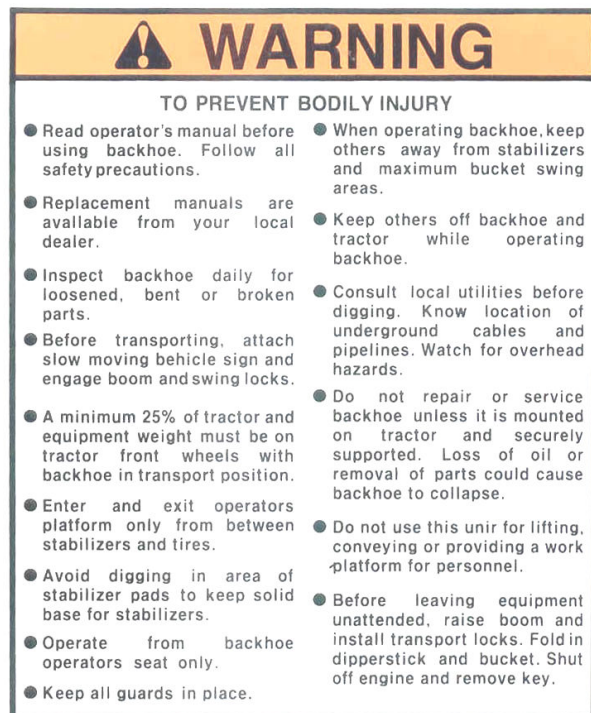
Important: Warning decals are visible when getting on backhoe. Refer to the left and right hands used in this manual, It's the position of the operator when seated in the operating position of Backhoe

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. Replace damaged or missing safety decals with new decals from your Kioti Dealer.
4. 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.
5. Mount new safety decals by applying to a clean dry surface and pressing air bubbles to outside edges.



Warning, Part No : BH35-0101
Location : Mainframe



Warning, Part No : BH35-0102
Location : Both of Mainframe sides

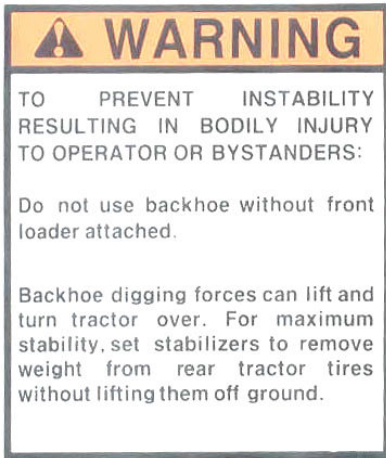


Danger, Part No : BH35-0103
Location : Both Leg Cylinders



Danger, Part No : BH35-0104
Location : Both side of Mainframe

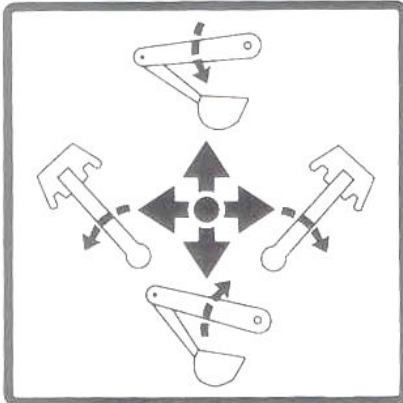
▲ SAFETY DECALS ▲



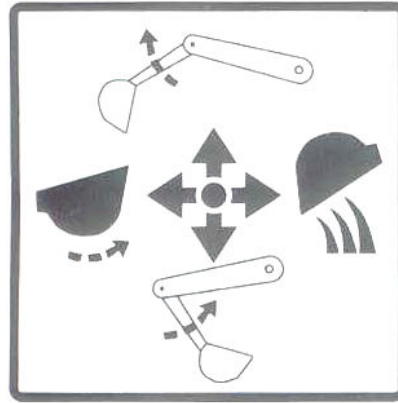
Warning, Part No : BH35-0105
Location : Main Valve Cover



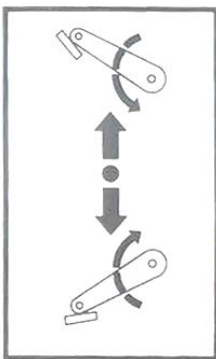
Information, Part No : BH35-0106
Location : Right Leg Guard



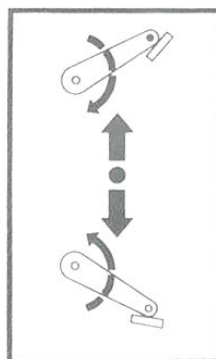
Information, Part No : BH35-0107
Location : Left side Valve Lever



Information, Part No : BH35-0108
Location : Right side Valve Lever

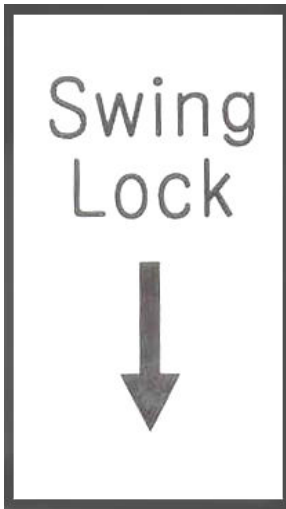


Information, Part No : BH35-0109
Location : Side of Left Inner Lever

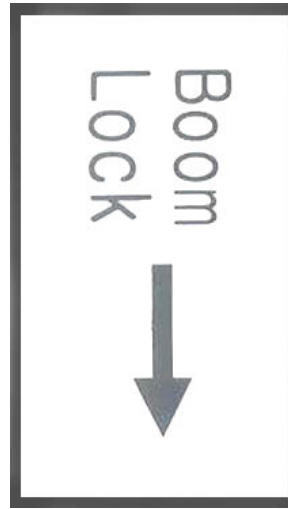


Information, Part No : BH35-0110
Location : Side of Right Inner Lever

▲ SAFETY DECALS ▲

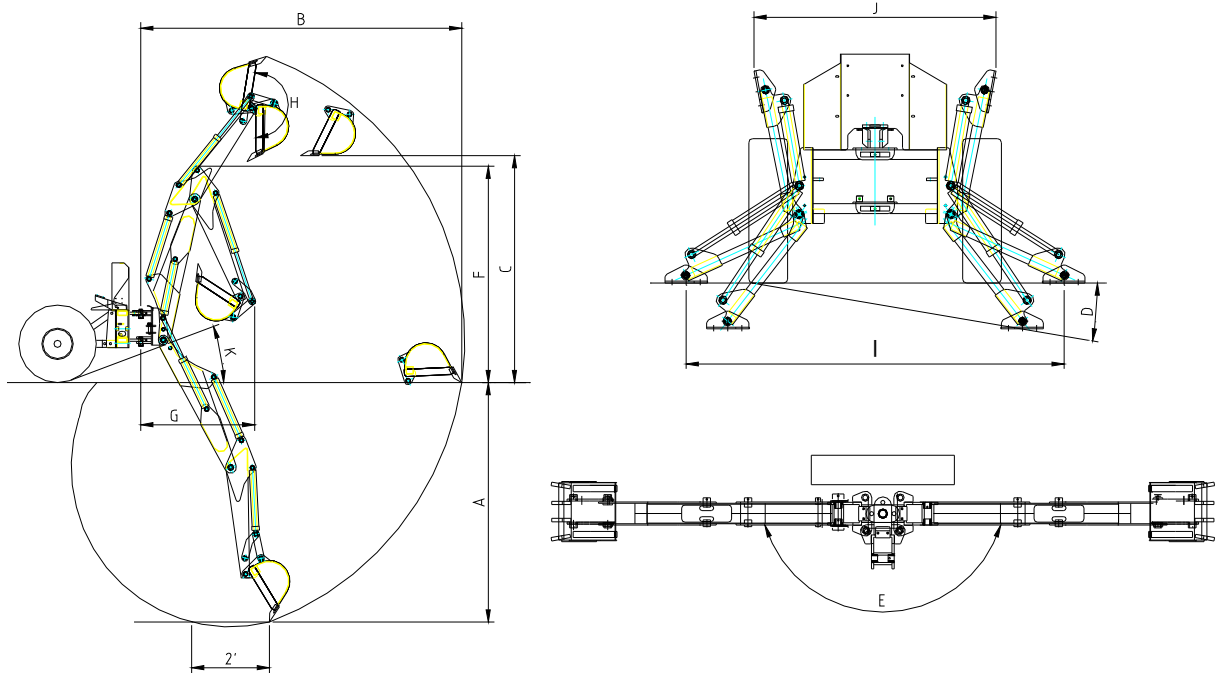


Information, Swing Lock
Part No : BH35-0111
Location : Top of Swing Frame
forward Side.



Information, Boom Lock
Part No : BH35-0112
Location : Beside of the Locking Hole
at the Boom Mainframe

Backhoe Specifications



Backhoe Model : KB2365

A. Digging Depth(two foot flat bottom)	1,940mm	76.4"
B. Reach from center line of Swing Pivot	2,680mm	105.5"
C. Loading Height(bucket at 60°)	1,615mm	63.6"
D. Maximum Leveling Angle	10°	
E. Swing Arc	180°	
F. Transport Height(maximum)	1,856mm	73.1"
G. Transport Overhang	1,105mm	43.5"
H. Bucket Rotation	180°	
I. Stabilizer Spread(down position)	1,950mm	76.8"
J. Stabilizer Spread(up position)	1,250mm	49.2"
K. Angle of Departure	21°	
Shipping Weight - Backhoe	357Kg(NET300Kg)	785lbs
Bucket Digging Force	1305Kg	2,875lbs
Dipperstick Digging Force	793Kg	1,744lbs
Operating Pressure	170bar	2,000psi

Cylinders

Cylinder	Bore DIA	Retracted Length	Stroke	Rod DIA
Boom	Ø70(2.756")	620(24.409")	425(16.733")	Ø40(1.575")
Bucket	Ø60(2.363")	615(24.213")	427(16.811")	Ø35(1.378")
Dipperstick	Ø60(2.363")	615(24.213")	427(16.811")	Ø35(1.378")
Swing	Ø60(2.363")	145(5.709")	175(6.89")	Ø35(1.378")
Stabilizer	Ø60(2.363")	446(17.559")	262(10.315")	Ø35(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

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 Kioti 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.

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 terms and conditions of the warranty on this machine are specified in the back 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 right side of backhoe mainframe. The serial number should be recorded on the Delivery and Registration form and also below for your reference.

Kioti Backhoe KB2365 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.

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.



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.

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.

BACKHOE OPERATION

We urge you to follow this advice:

1. Read and understand this manual as well 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 boom, dipperstick or bucket to drop suddenly, causing damage to the tractor or backhoe or injury to personnel.

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.

BACKHOE OPERATION

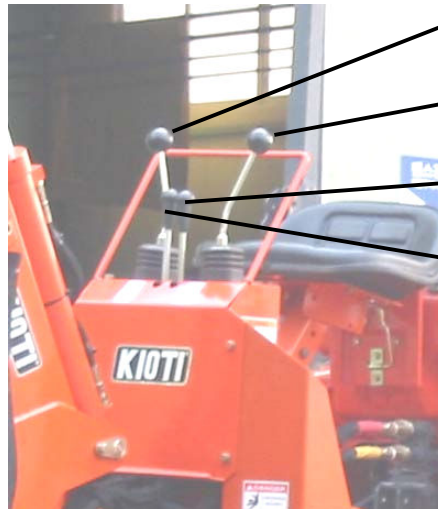
Cold Weather Operation

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

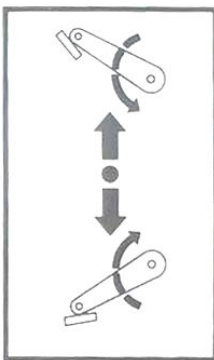


Bucket/Crowd

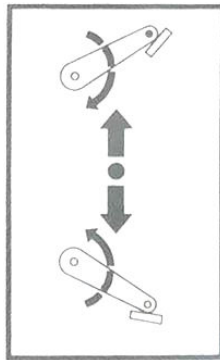
Boom/Swing

Left Stabilizer

Right Stabilizer



**Decal for
Left Stabilizer**



**Decal for
Right Stabilizer**

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

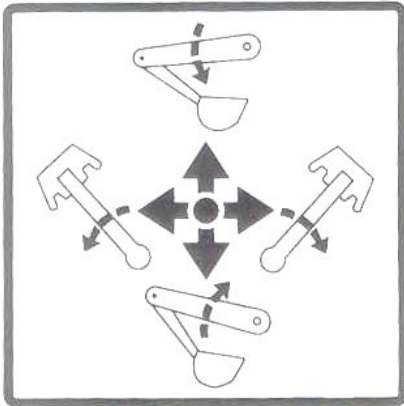
Push the right hand inner control lever, right stabilizer lowers. And pull up the lever, right stabilizer raises.

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.

BACKHOE OPERATION

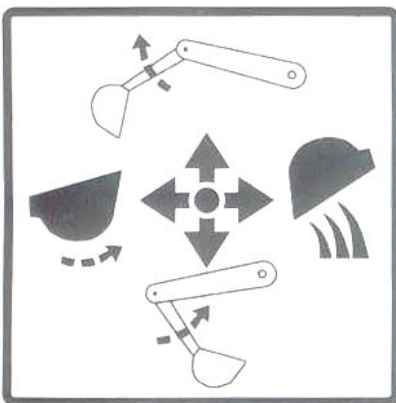
Boom and swing controls



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

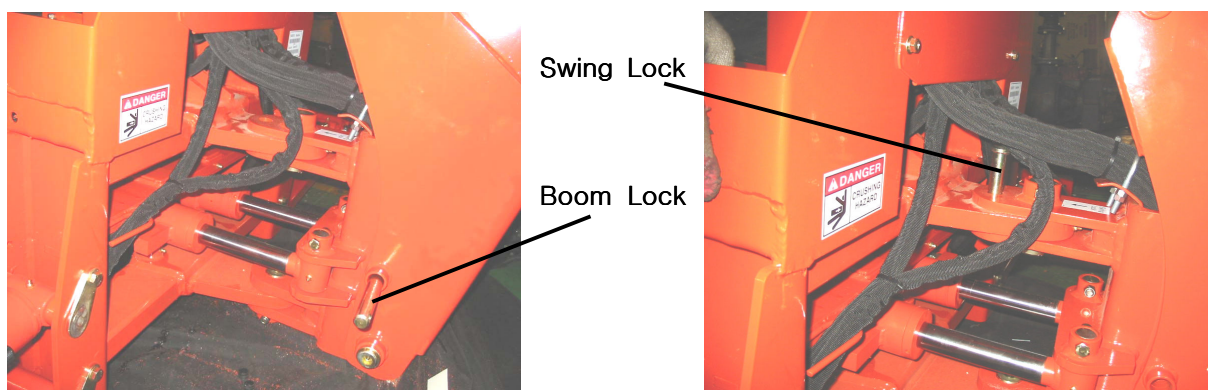


Push the right hand outer control lever, arm(dipperstick) moves away from operator, and pull back the lever, arm(dipperstick) moves toward the operator.

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.



WARNING: 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 MOUNTING

 **CAUTION:** Backhoe should be mounted on the proper subframe assembly.

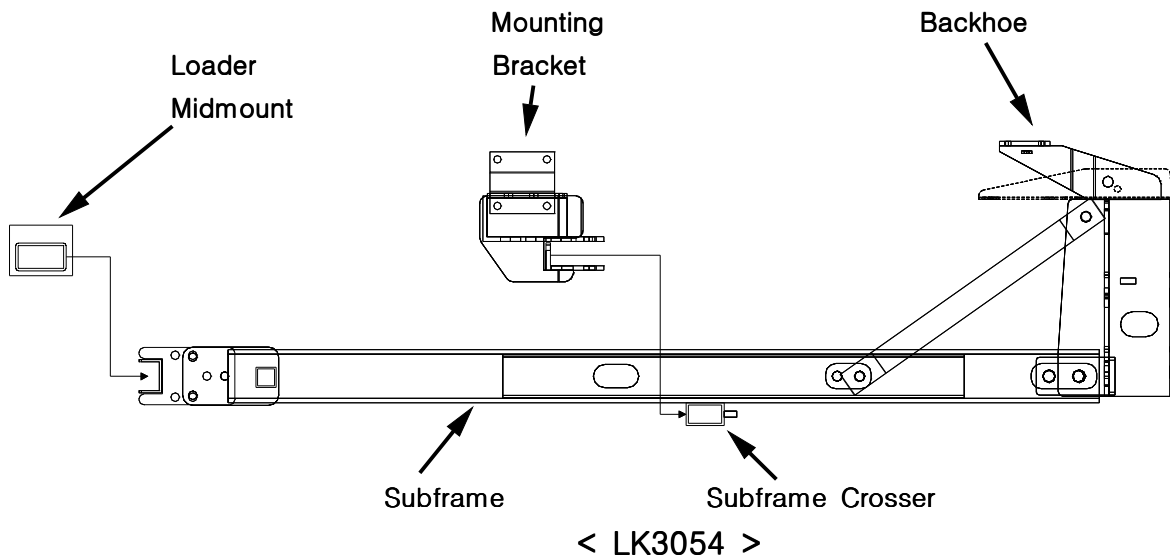
 **CAUTION:** Never store backhoe without bucket attached to the backhoe.


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.

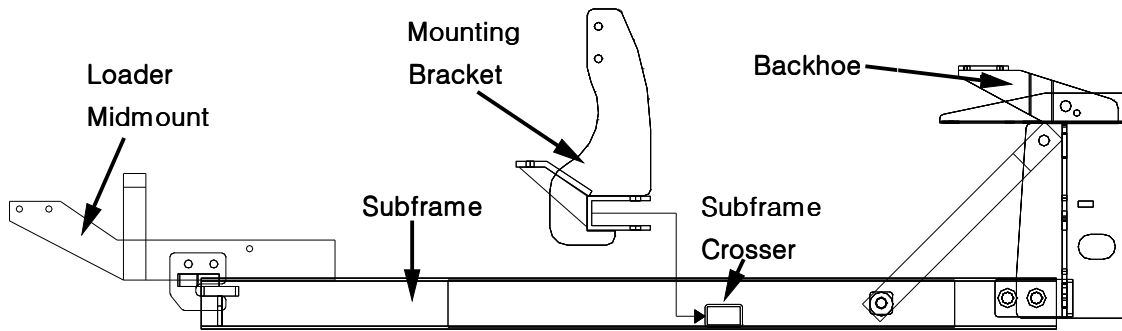
STEP 3. Store the subframe and subframe crosser horizontally with the loader midmount and mounting bracket by the backhoe control lever. Also, matching these on same level

STEP 4. Set the parking brake of the tractor, Make sure the PTO switch is in the off position.

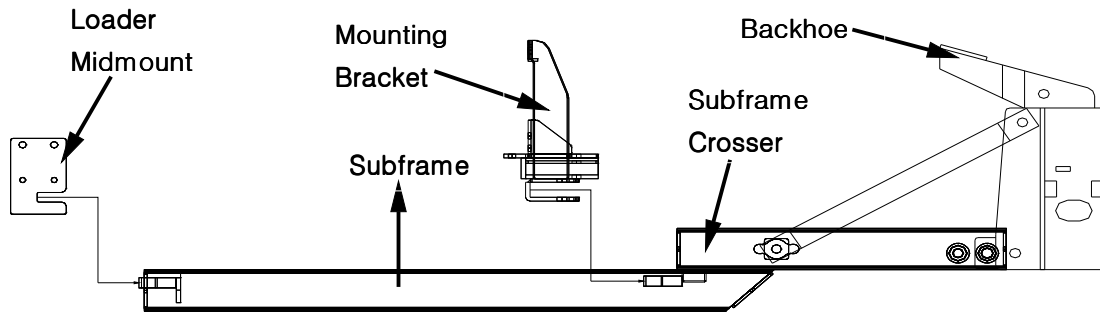


 **CAUTION:** This is the Backhoe's Operator's manual for Safety Precautions and Tractor Preparations.

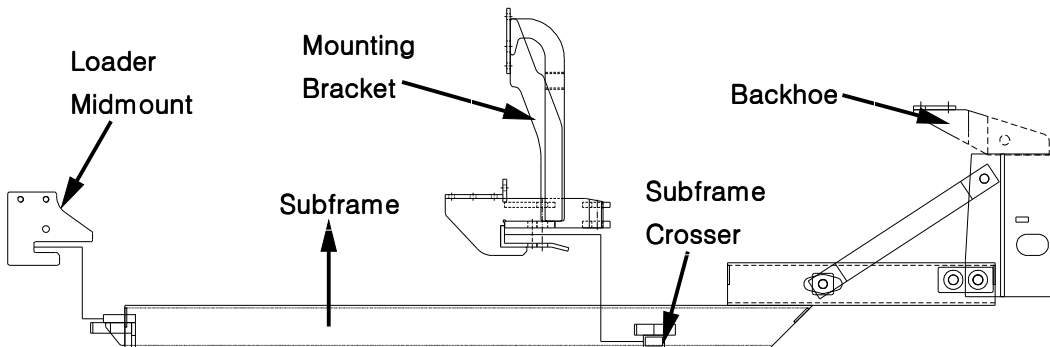
BACKHOE MOUNTING



< LB194 >



< CK20 >





< CK25/30 >

- 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.

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.

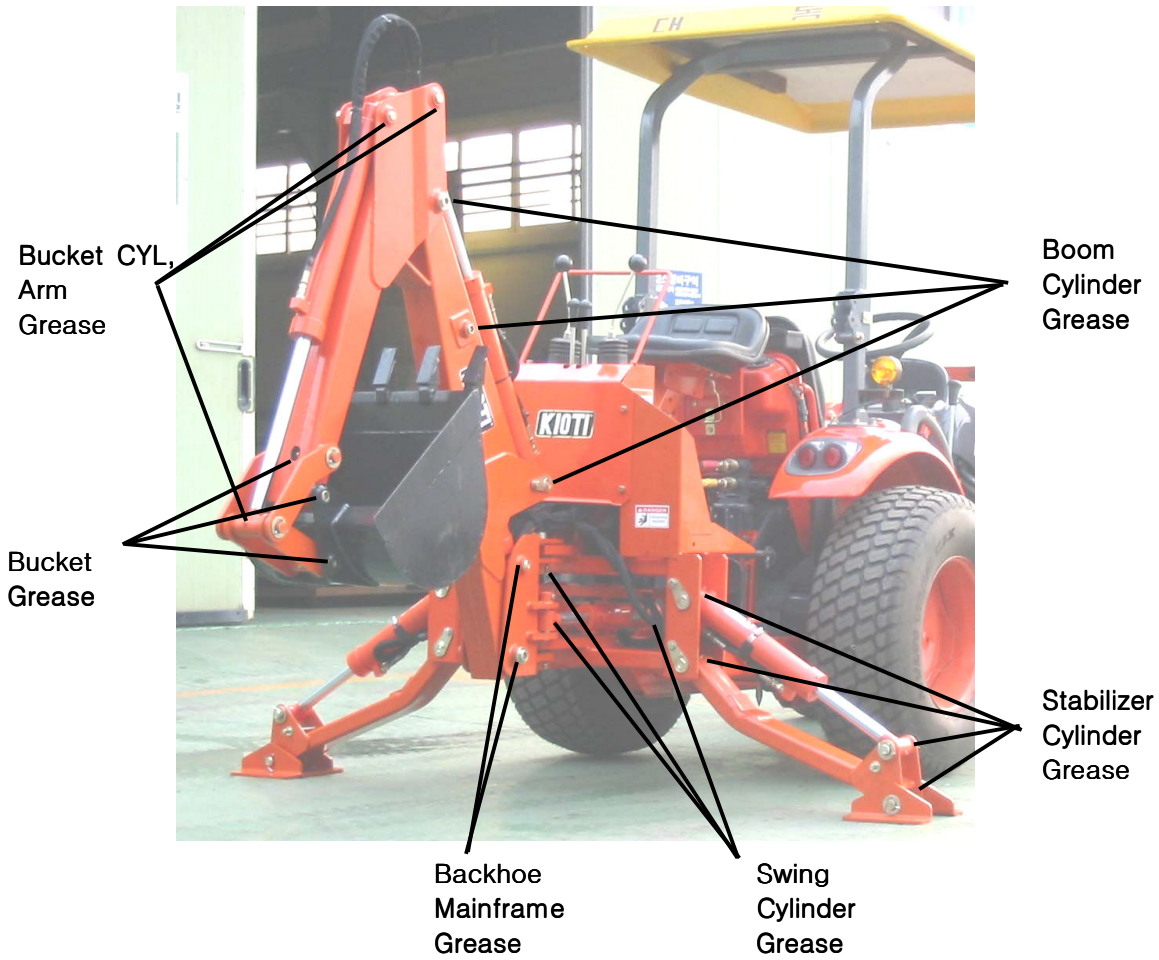
STEP 9. Turn off the tractor engine. Relieve hydraulic pressure by actuating all the control levers in each direction, then disconnect the backhoe hose couplers from the tractor hydraulic couplers.

 **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.

LUBRICATION AND MAINTENANCE



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
Backhoe Pivot Points	Lubricate	Daily/10 hours
Backhoe Hydraulic Lines, Hoses, Connections	Check for leaks, wear	Daily/10 hours
Boom, Arm, 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 MAINTENANCE



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.

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
Cylinders operate in wrong direction relative to control valve lever position.	Hydraulic hoses connected incorrectly.	Correct hydraulic hose connections.
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.
	Hydraulic Oil viscosity too heavy or Incorrect oil	Check oil number and viscosity, Refill correct hydraulic oil.
	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/tubeline) 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.	

TROUBLE SHOOTING

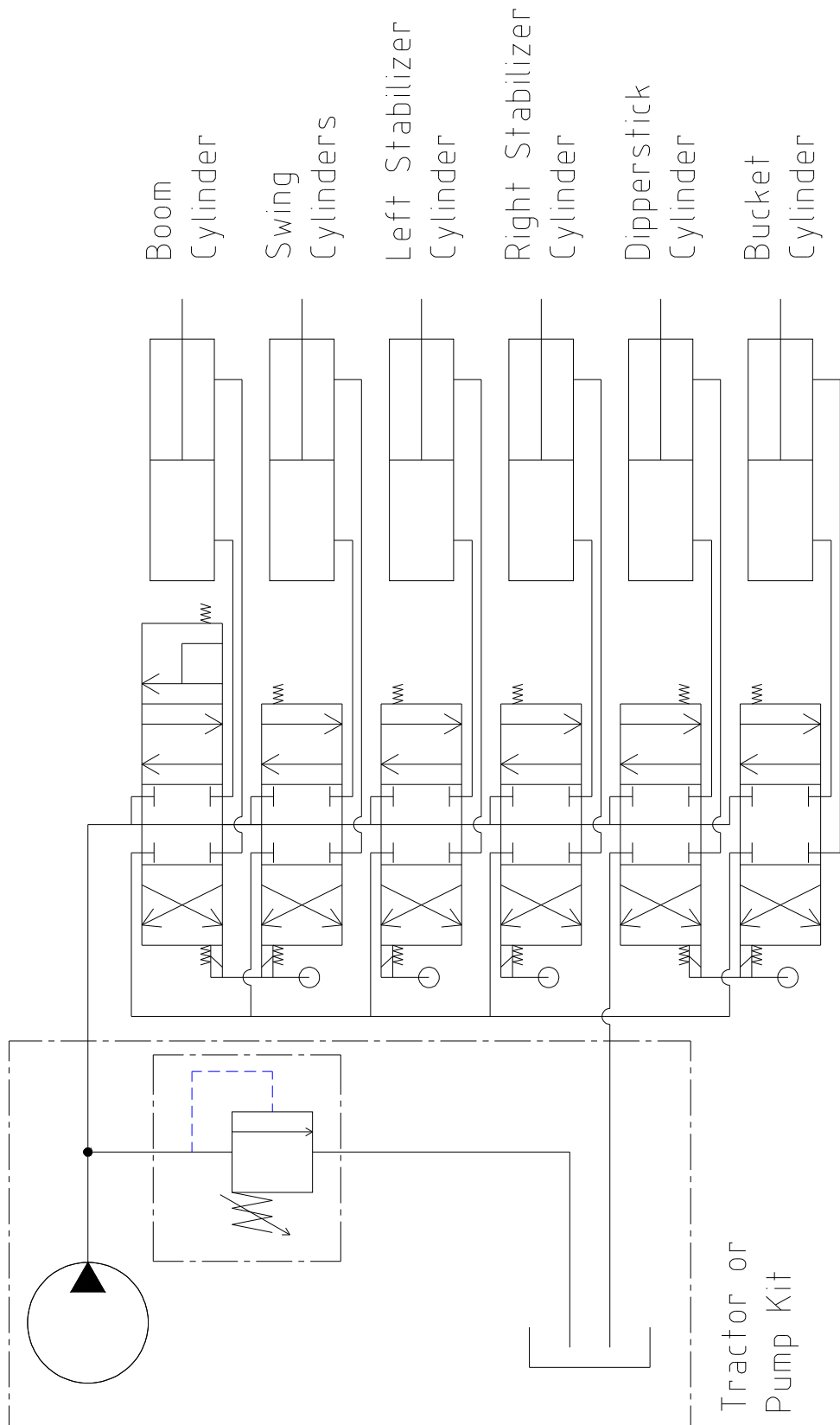
PROBLEM	POSSIBLE CAUSE	CORRECTION
Inadequate lifting capacity	Engine R.P.M. too slow.	Increase engine R.P.M.
	Excessive load. Material loading exceeds specified backhoe capacity.	Reduce Load.
	Relief valve setting below specifications.	Check and reset relief valve setting as needed.
	Bucket, Boom and Dipperstick cylinder piston assembly leakage.	Check cylinders for leakage. Repair as needed.
	Control valve leaking internally	Replace control valve and recheck operation.
	Hydraulic pump defective.	Refer to "Hydraulic Pump Capacity Inadequate".
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.
System relief valve squeals.	Cold Hydraulic Fluid.	Allow hydraulic fluid to warm up to operating temperature.
	Hydraulic Oil viscosity too heavy or Incorrect oil	Check oil number and viscosity, Refill correct hydraulic oil.
	Excessive load in bucket. Loading 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.

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
Backhoe drops with 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.
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 cylinders extended.	Excessive shock load on cylinders during transport.	Replace defective parts. Review and observe proper and safe operational practices.

HYDRAULIC SYSTEM SCHEMATIC

AUXILIARY HYDRAULIC VALVE PACKAGE



TORQUE TIGHTENING CHART

Note: Use these torques, unless special torques are specified. Values are for UNF thread fasteners, plated or unplated as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphide or other extreme pressure lubricant is used.

SAE Grade No.	2				5				8*			
Bolt head identification (see note 1)												
Bolt size	LB FT		Nm		LB FT		Nm		LB FT		Nm	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1/4	5	6	7	8	9	11	12	15	12	15	16	20
5/16	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	20	23	27	31	35	42	48	57	45	54	61	73
7/16	30	35	41	47	54	64	73	87	70	84	95	114
1/2	45	52	61	70	80	96	109	130	110	132	149	179
9/16	65	75	88	102	110	132	149	179	160	192	217	260
5/8	95	105	129	142	150	180	203	244	220	264	298	358
3/4	150	185	203	251	270	324	366	439	380	456	515	618
7/8	160	200	217	271	400	480	542	651	600	720	814	976
1	250	300	339	406	580	696	787	944	900	1080	1220	1464
1 1/8					800	880	1085	1193	1280	1440	1736	1953
1 1/4					1120	1240	1519	1681	1820	2000	2468	2712
1 3/8					1460	1680	1980	2278	2380	2720	3227	3688
1 1/2					1940	2200	2631	2983	3160	3560	4285	4827

Note 1: Bolt head identification marks as per grade. Manufacturing marks will vary.

*Thick nuts must be used with Grade 8 bolt

METRIC FASTENER (ISO) TORQUE CHART

Note: Use these torques, unless special torques are specified. Values are UNC and UNF thread fasteners, plated or unplated as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphite or other extreme pressure lubricant is used

ISO Class No.	8.8				10.9				12.9			
Bolt head identification (see note 1)												
Bolt Size	Nm		LB FT		Nm		LB FT		Nm		LB FT	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
M4	3	4	2	3	4	5	3	4	Because of the low ductility of these fasteners, the torque range is to be determined individually for each application. As a general rule, the torque ranges specified for grade 10.9 fasteners can be used satisfactorily on 12.9 fasteners. *M14 is not a preferred size.			
M5	6.5	8	5	6	9.5	11	7	8				
M6	10.5	12	8	9	15	17.5	11	13				
M8	26	31	19	23	37	43	27	32				
M10	52	61	38	45	73	87	54	64				
M12	90	107	66	79	125	150	93	112				
*M14	144	172	106	127	200	245	149	179				
M16	217	271	160	200	310	380	230	280				
M20	434	515	320	380	610	730	450	540				
M24	675	815	500	600	1050	1275	780	940				
M30	1250	1500	920	1100	2000	2400	1470	1770				
M36	2175	2600	1600	1950	1120	1240	1519	1681				

Note 1: Bolt head identification marks as per grade. Manufacturing mark will vary.

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.

Interchangeability

Indicates the interchangeability of parts due to design change.

← OLD Indicates that a new part can be used instead of an old part
— NEW when you order this part, please order new part

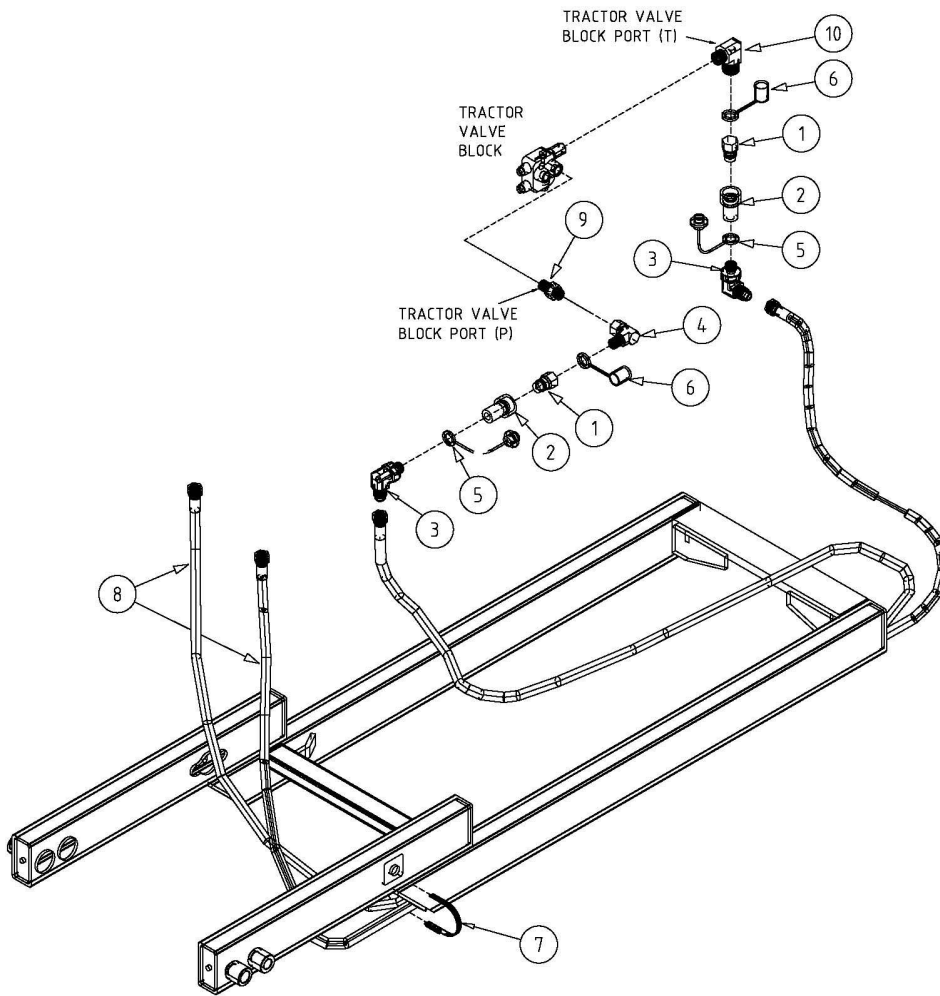
← Indicates that either parts can be used.
←

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



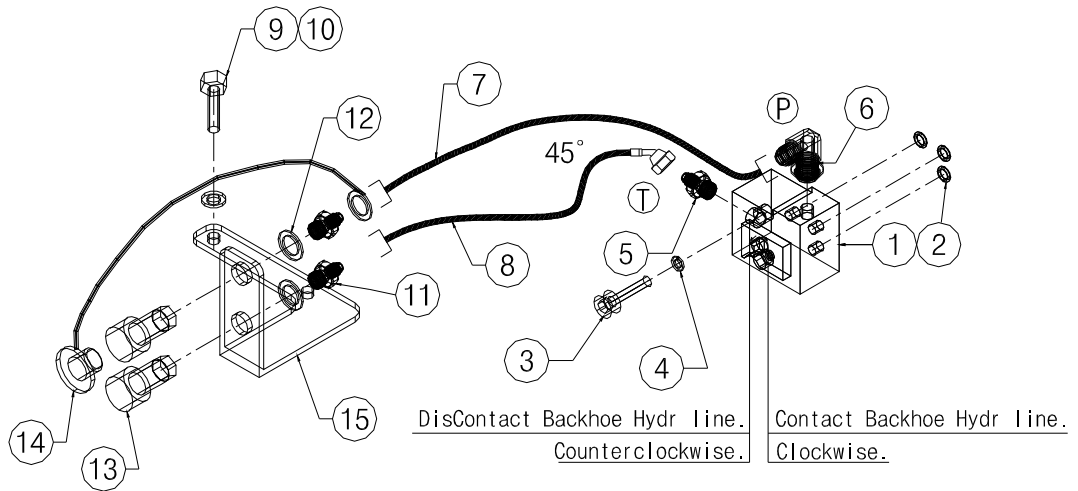
N : NIMCO CV-556
NM : NIMCO MONO BLOCK CV126
D : DINOIL DNC65/6
H : HANIL AV 80/6

HOSE KIT (CK20) UPDATED(09.26.2005)



REF	DESCRIPTION	SPECIFICATION	PART No.	Q' ty	INTERCHANGE ABILITY
	Hose Kit		HC01-0100-P	1	
1	Quick Coupler	PF3/8" male, O-ring	0001-1006	2	
2	Quick Coupler	PF3/8" Female, O-ring	0001-1005	2	
3	Nipple	PT3/8 X PS3/8 , O-Ring	6004-0105	2	<div style="display: flex; align-items: center;"> <div style="border-left: 1px solid black; border-bottom: 1px solid black; width: 10px; height: 10px; margin-right: 5px;"></div> <div style="margin-left: 5px;"> <p>← OLD</p> <p>NEW</p> <p><small>(02.10.2004)</small></p> </div> </div>
	Fitting Elbow	PF3/8, O-Ring X 3/4 -16UNF 90°	6007-1823	2	
4	Adapter Elbow , Swivel Nut	PF3/8, O-Ring X 9/16 -18UNF 90°	6003-0402	1	
5	Dust Plug	3/8 male	0001-1004	2	
6	Dust Cap	3/8 Female	0001-1003	2	
7	Hose Band	10"	8001-B010	4	
8	Hose	4(3/8)*4(3/8) 2850L	HC01-0100	2	
9	Nipple	PF3/8, O-Ring X 9/16-18UNF	6004-0103	1	
10	Adapter Elbow	PT1/4-PF3/8, O-Ring	6003-0409	1	

HOSE KIT (CK25/30)



REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
1	Valve Block		DM01-0100	1	 P/No. Revision 01.19.2006
	Valve Block		DM07-0100	1	
2	O-Ring	P12	5003-1012	3	
3	Socket Bolt	M10X1.25PX50L	1001-103A	2	
4	Spring Washer	∅ 10	1003-1010	2	
5	Nipple	PF3/8, O-Ring X 3/4 -16UNF	6004-0105	1	
6	Fitting Elbow	PF3/8, O-Ring X 3/4 -16UNF 90°	6007-1823	1	
7	Hose	3/8X4X4X550L	DM06-0100	1	
8	Hose	3/8X454X4X675L	DM06-0200	1	
9	Hex Head Bolt	M10X1.25PX25L	1000-1035	2	
10	Spring Washer	∅ 10	1003-1010	2	
	Quick Coupler Ass'y	No.11 ~ No.15	DM05-0100	1	
11	Nipple	PT1/2 X 3/4-16UNF	6003-0408	2	
12	Flate Washer	∅20X3.2T	1004-0020	2	
13	Quick Coupler	PT1/2" Female	0001-1009	2	
14	Dust Plug	1/2" male	0001-1012	2	
15	Bracket	6T	DM05-0101	1	

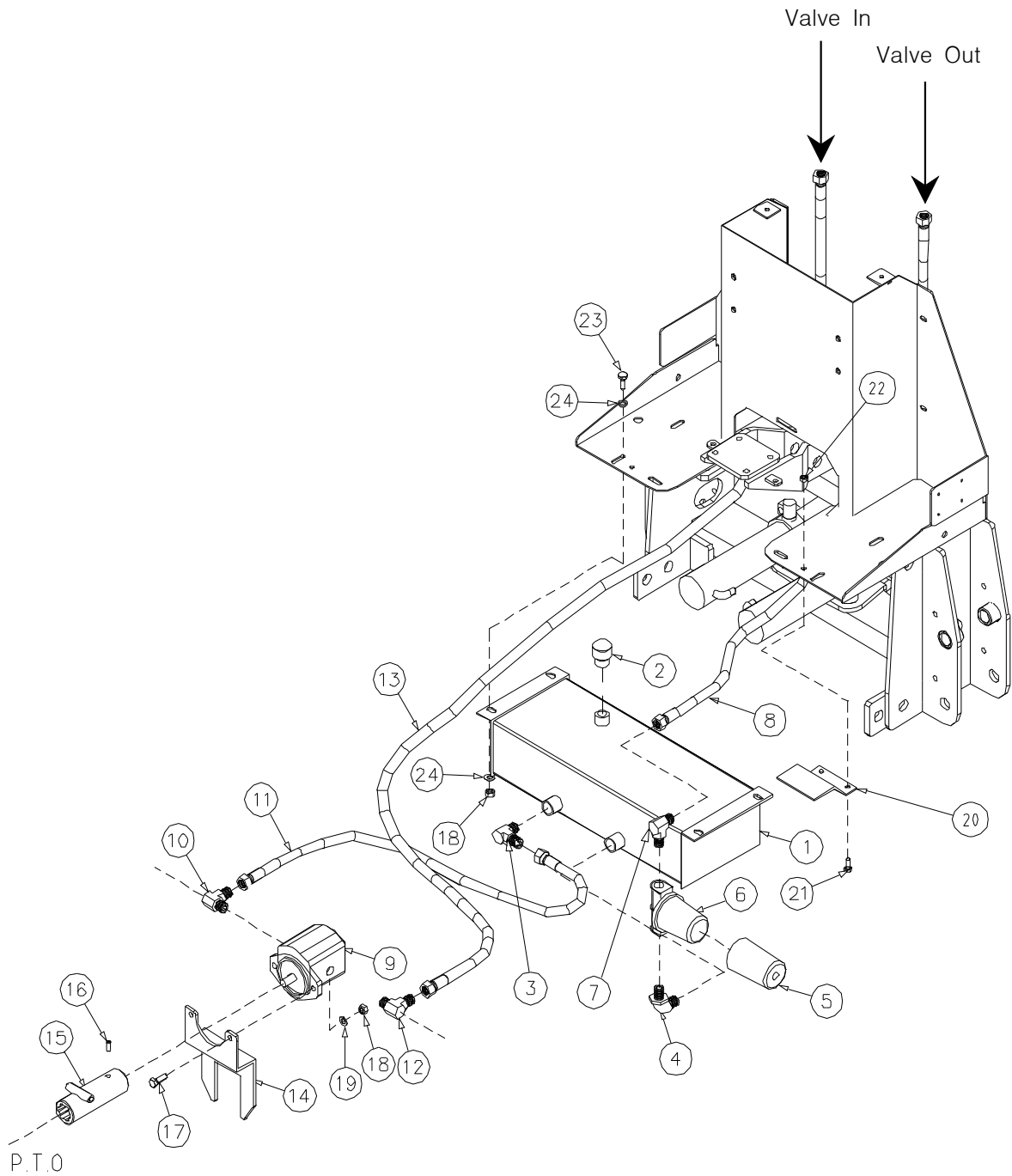


The tractor equipped with
"Quick Coupling Device"
does not require Hose Kit.

Valve Block

Disassemble Hydr. Cylinder cover
(Tractor Seat Right)

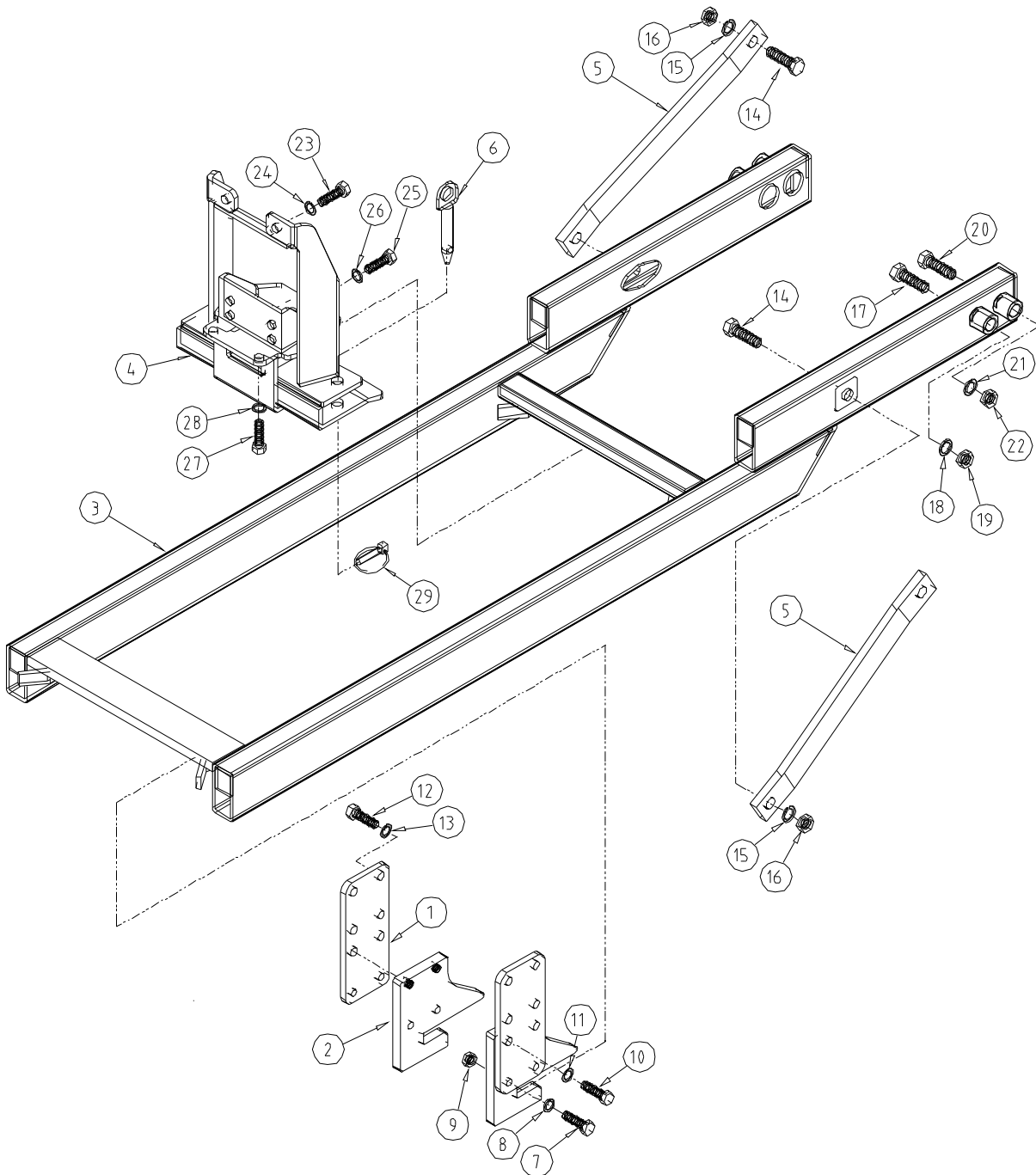
PUMP KIT(LB1914, LK3054)-IMPROVEMENT(2005, 03, 18)



PUMP KIT(LB1914, LK3054)-IMPROVEMENT(2005.03.18)

ITEM	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Pump Kit Ass'y		PK01-0100-P	1	← OLD
	Pump Kit Ass'y		PK01-0100-PA	1	— NEW(05.10.2004)
1	Tank Ass'y		PK01-0100	1	
2	Breather	PF 1/2	5001-B101	1	
3	Adapter Elbow	PT3/4*7/8-14UNF	6003-0305	1	← OLD
	Adapter Elbow	PT3/4*1-1/16UN, 90 °	6003-0307	1	— NEW(05.10.2004)
4	Adapter Elbow	PT3/4*PT3/4, 90 °	6003-0304	1	
5	Filter Element		PK01-0202	1	
6	Filter Head		PK01-0201	1	
7	Adapter Elbow	PT3/4*7/8-14UNF,90 °	6003-0305	1	
8	Hose	4(7/8-14UNF)*4(3/4-16UNF) 760L	PK01-1200	1	
9	Pump		PK02-0100	1	← OLD
	Pump		AS25-93110	1	— NEW(05.10.2004)
10	Adapter Elbow	PT1/2-PF3/4	6003-0303	1	← OLD
	Adapter Elbow	PF 1, 0-ring * 1-1/16UN, 90 °	6003-0303-A	1	— NEW(05.10.2004)
11	Hose	4(1/2")*4(3/4")760L	PK01-1100	1	← OLD
	Hose	4(1-1/16UN)*4(1-1/16UN)760L	PK01-1100-A	1	— NEW(05.10.2004)
12	Adapter Elbow	PT1/2*7/8-14UNF	6003-0306	1	← OLD
	Adapter Elbow	PF3/4, 0-ring * 7/8-14UNF 90 °	6003-0306-A	1	— NEW(05.10.2004)
13	Hose	4(7/8-14UNF)*4(3/4-16UNF)1320L	PK01-1300	1	
14	Bracket	6T	PK01-0601	1	← OLD
	Bracket	6T	PK01-0601-A	1	— NEW(05.10.2004)
15	PT0 Adapter		PK04-0100	1	NEW PART(05.10.2004)
16	Set Screw	M5-0.8P	1002-0833	1	NEW PART(05.10.2004)
	Set Screw	M5-0.8P	1401-0532	1	— P/No. Revision 02.03.2006
17	Hex Head Bolt	M10-1.5P 35L	1000-1057	2	
18	Hex Head Nut	M10-1.5P Lock	1002-1053	6	
19	Spring Washer	∅ 10	1003-1010	2	NEW PART(05.10.2004)
20	Guard	3.2T	PK01-0501	1	← OLD
	Guard	3.2T	PK01-0501-A	1	— NEW(05.10.2004)
21	Hex Head Bolt	M8-1.25P 25L	1000-0835	2	
22	Hex Head Nut	M8-1.25P Lock	1002-0833	2	
23	Hex Head Bolt	M10-1.5P 30L	1000-1056	4	
24	Washer Flat	∅ 10	1004-0010	8	

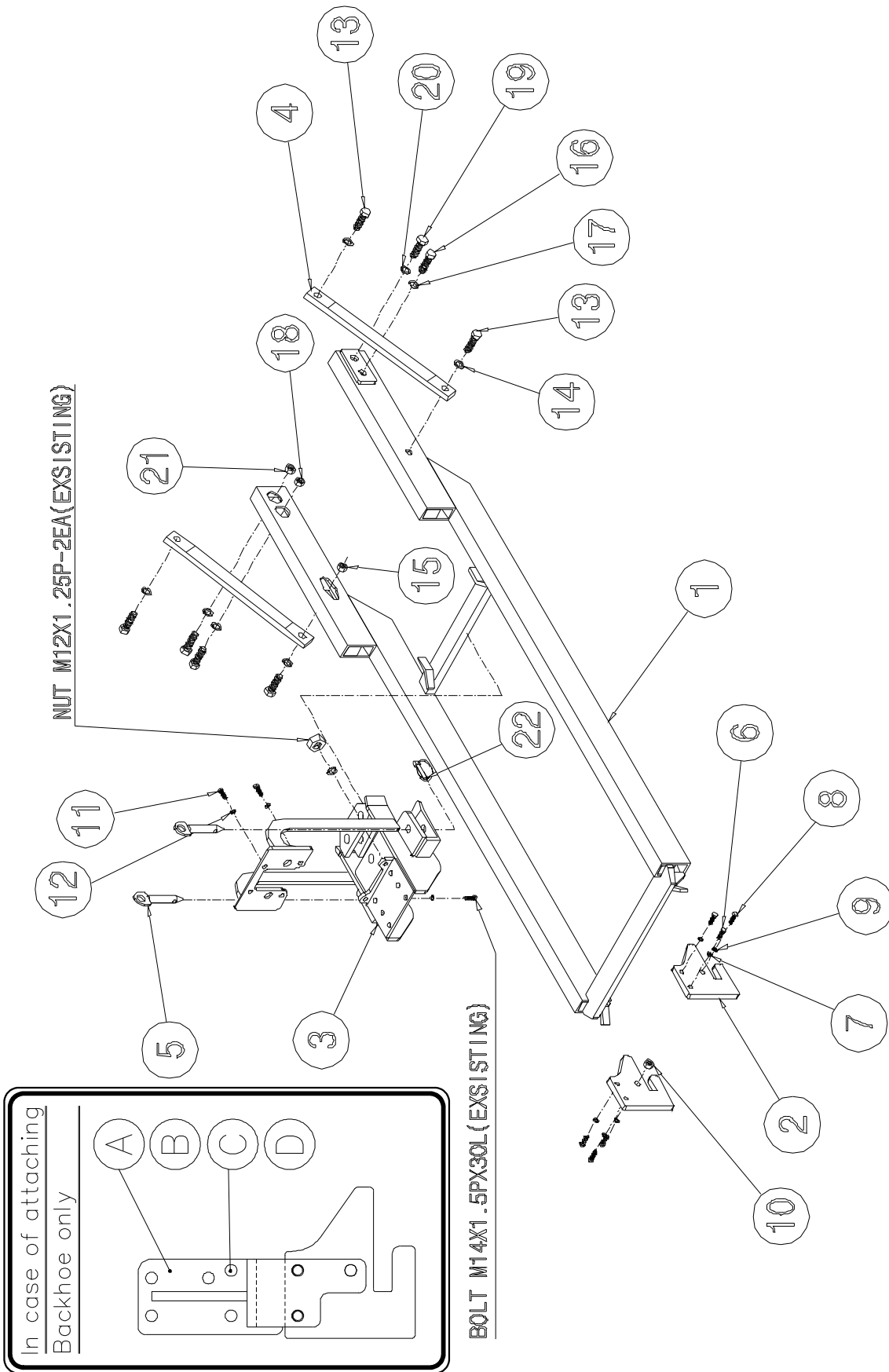
SUBFRAME(CK20) ASSEMBLY



SUBFRAME(CK20) ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
1	Side Bracket	12T	DK01-0107	2	← OLD
	Side Bracket	12T	DK01-0101	2	— NEW(06.14.2004)
2	Hook Frame	19T	DK01-0100	2	← OLD
	Hook Frame	19T	DK01-0102	2	— NEW(06.14.2004)
3	F Subframe		DK02-0200	1	← OLD
	Rail Ass'y		DK02-0100	1	— NEW(06.14.2004)
4	R Subframe		DK01-0300	1	← OLD
	R Subframe		DK03-0100	1	— NEW(06.14.2004)
5	Brace	16T	SB01-0100	2	← OLD
	Brace	16T	DK05-0101	2	— NEW(06.14.2004)
6	Pin	∅20-130L	1002-1053	2	← OLD
	Pin	∅20-120L	DK04-0100	2	— NEW(06.14.2004)
7	Hex Head Bolt	M12-1.25P 50L	1001-123A	4	
8	Spring Washer	∅12	1003-0012	4	
9	Hex Head Nut	M12-1.25P	1002-1232	4	
10	Hex Head Bolt	M14-1.5P 30L	1001-1456	4	
11	Spring Washer	∅14	1003-0014	4	
12	Hex Head Bolt	M14-1.5P 40L	1001-1458	8	
13	Spring Washer	∅14	1003-0014	8	
14	Hex Head Bolt	M20-2.5P 60L	1001-208C	4	
15	Spring Washer	∅20	1003-0020	4	
16	Hex Head Nut	M20-2.5P	1002-2082	4	
17	Hex Head Bolt	M22-2.5P 80L	1001-228G	2	
18	Spring Washer	∅22	1003-0022	2	
19	Hex Head Nut	M22-2.5P	1002-2282	2	
20	Hex Head Bolt	M22-2.5P 90L	1001-228I	2	
21	Spring Washer	∅22	1003-0022	2	
22	Hex Head Nut	M22-2.5P	1002-2282	2	
23	Hex Head Bolt	M14-1.5P 45L	1001-1459	2	
24	Spring Washer	∅14	1003-0014	2	
25	Hex Head Bolt	M14-1.5P 30L	1001-1456	4	
26	Spring Washer	∅14	1003-0014	4	
27	Hex Head Bolt	M14-1.5P 35L	1001-1457	2	
28	Spring Washer	∅14	1003-0014	2	
29	Ring Pin	∅10	1008-1001	2	

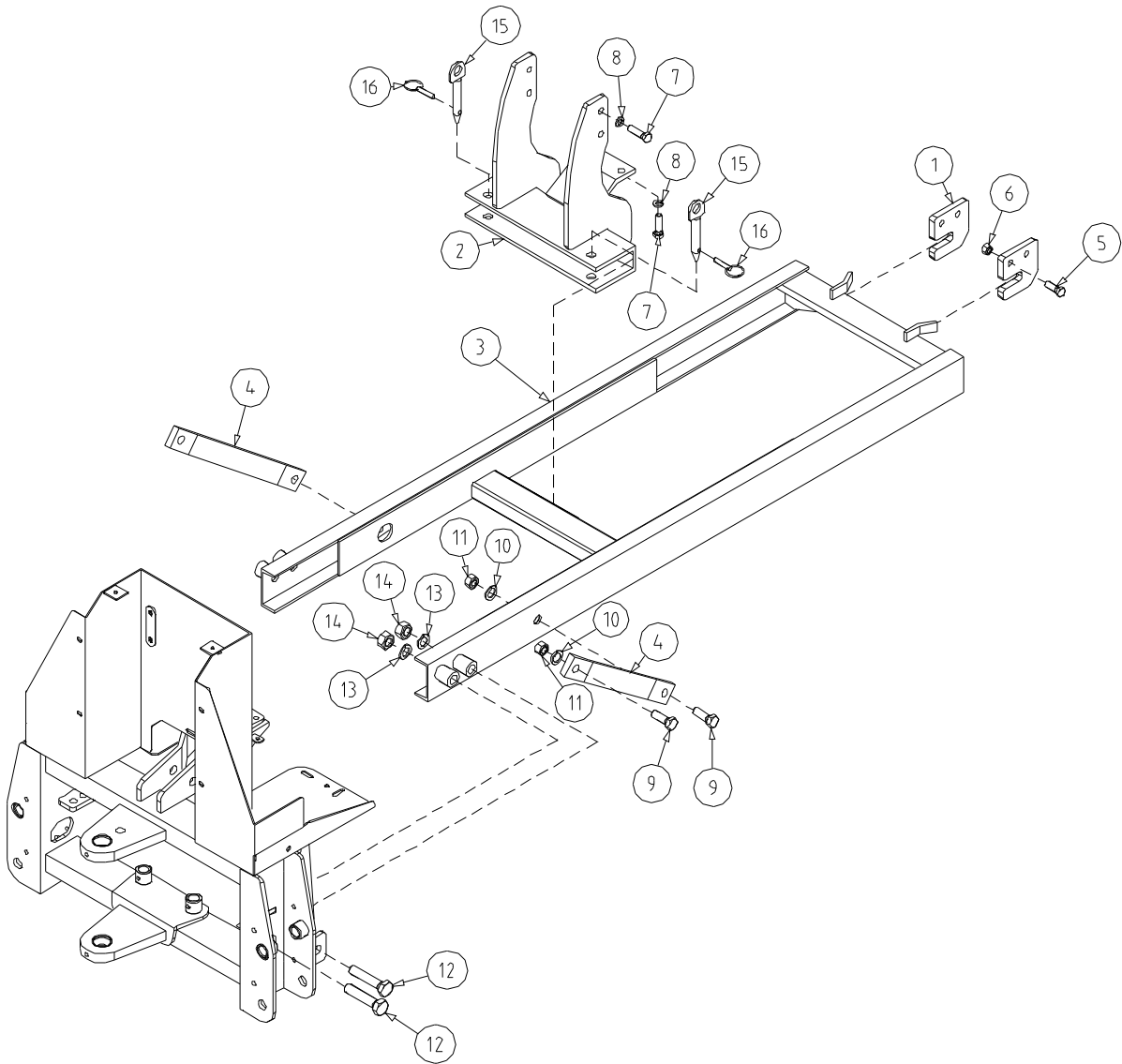
SUBFRAME (CK25/30) ASSEMBLY



SUBFRAME (CK25/30) ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
1	Rail Ass'y		DM02-0100	1	
2	Hook Frame	19T	DM01-0100	2	
3	R Subframe		DM03-0100	1	← OLD
	R Subframe		DM03-0100-A	1	← NEW(06.18.2004)
4	Brace	16T	DK05-0101	2	
5	Pin	∅20-120L	DK04-0100	2	
6	Hex Head Bolt	M14-1.5P 35L	1001-1457	4	
7	Spring Washer	∅ 14	1003-0014	4	
8	Hex Head Bolt	M14-1.5P 45L	1001-1459	2	
9	Spring Washer	∅ 14	1003-0014	2	
10	Hex Head Nut	M14-1.5P	1002-1452	2	
11	Hex Head Bolt	M12-1.25P 35L	1001-1237	4	
12	Spring Washer	∅ 12	1003-0012	4	
13	Hex Head Bolt	M20-2.5P 60L	1001-208C	4	
14	Spring Washer	∅20	1003-0020	4	
15	Hex Head Nut	M20-2.5P	1002-2082	4	
16	Hex Head Bolt	M22-2.5P 60L	1001-228C	2	
17	Spring Washer	∅22	1003-0022	2	
18	Hex Head Nut	M22-2.5P	1002-2282	2	
19	Hex Head Bolt	M22-2.5P 65L	1001-228D	2	
20	Spring Washer	∅22	1003-0022	2	
21	Hex Head Nut	M22-2.5P	1002-2282	2	
22	Ring Pin	∅10	1008-1001	2	
A	Side Bracket LH		DM04-0100	1	
B	Side Bracket RH		DM04-0200	1	
C	Hex Head Bolt	M14-1.5P 30L	1001-1456	10	
D	Spring Washer	∅ 14	1003-0014	10	

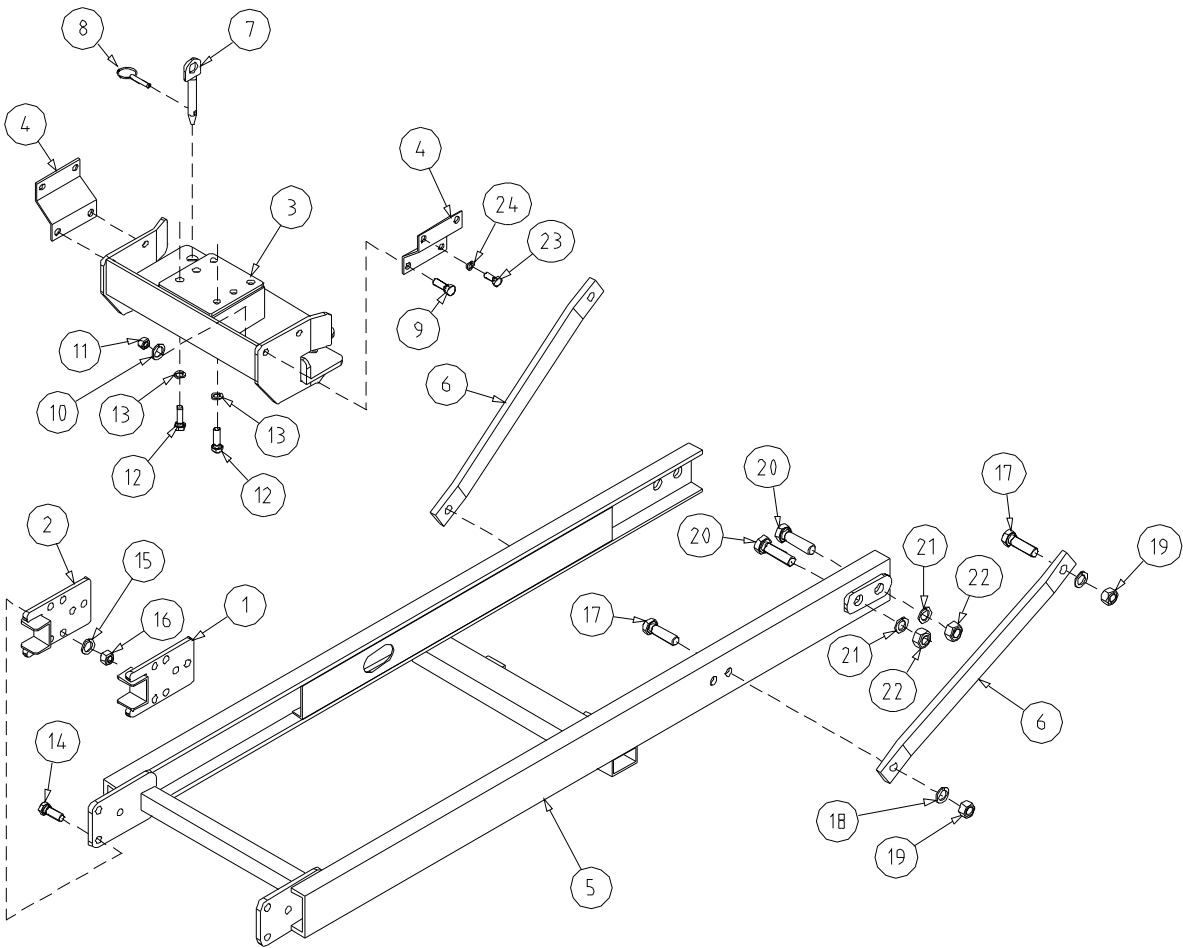
SUBFRAME(LB1914) ASSEMBLY



SUBFRAME(LB1914) ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
1	F Subframe		DB01-0300	2	← OLD
	F Subframe		DB01-0101	2	— NEW(06.14.2004)
2	R Subframe		DB01-0200	1	← OLD
	R Subframe		DB02-0100	1	— NEW(06.14.2004)
3	Subframe		DB01-0100	1	← OLD
	Rail Ass'y		DB03-0100	1	— NEW(06.14.2004)
4	Brace	16T	SB02-0100	2	← OLD
	Brace	16T	DB04-0101	2	— NEW(06.14.2004)
5	Hex Head Bolt	M14-1.5P 40L	1001-1458	4	
6	Hex Head Nut	M14-1.5P Lock	1002-1453	4	
7	Hex Head Bolt	M14-1.5P 50L	1001-145A	6	
8	Spring Washer	∅ 14	1003-1014	6	
9	Hex Head Bolt	M20-2.5P 70L	1001-208E	4	← OLD
	Hex Head Bolt	M20-2.5P 65L	1001-208D	4	— NEW(06.14.2004)
10	Spring Washer	∅ 20	1003-0020	4	
11	Hex Head Nut	M20-2.5P	1002-2082	8	← OLD
	Hex Head Nut	M20-2.5P	1002-2082	4	— NEW(06.14.2004)
12	Hex Head Bolt	M22-2.5P 100L	1001-228K	4	← OLD
	Hex Head Bolt	M22-2.5P 95L	1001-228J	4	— NEW(06.14.2004)
13	Spring Washer	∅ 22	1003-0022	4	
14	Hex Head Nut	M22-2.5P	1002-2282	4	
15	Pin	∅ 20-130L	DB01-0500	2	← OLD
	Pin	∅ 20-120L	DK04-0100	2	— NEW(06.14.2004)
16	Ring Pin	∅ 10	1008-1001	2	

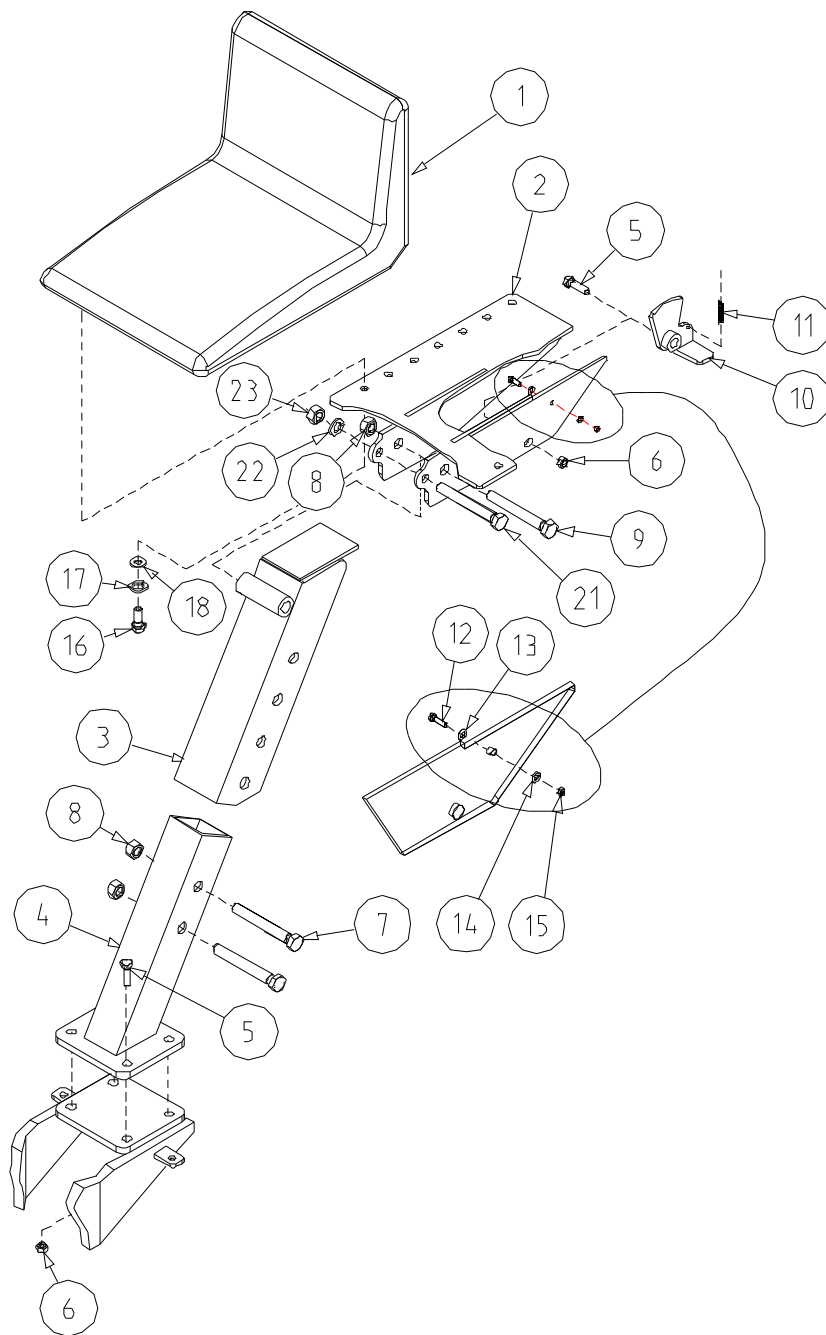
SUBFRAME(LK3054) ASSEMBLY



SUBFRAME(LK3054) ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Subframe(LK3054) Ass'y	No1~24	DL00-0100	1	
1	F Subframe		DL01-0300	1	← OLD
	FL Subframe		DL01-0100	1	— NEW(06.14.2004)
2	F Subframe		DL01-0300	1	← OLD
	FR Subframe		DL01-0200	1	— NEW(06.14.2004)
3	R Subframe		DL01-0200	1	← OLD
	R Subframe		DL02-0100	1	— NEW(06.14.2004)
4	Side Bracket		DL01-0206	2	← OLD
	Side Bracket		DL02-0201	2	— NEW(06.14.2004)
5	Subframe		DL01-0100	1	← OLD
	Rail Ass'y		DL03-0100	1	— NEW(06.14.2004)
6	Brace	16T	SB03-0100	2	← OLD
	Brace	16T	DD04-0101	2	— NEW(06.14.2004)
7	Pin	∅20-130L	DL01-0500	2	← OLD
	Pin	∅20-120L	DK04-0100	2	— NEW(06.14.2004)
8	Ring Pin	∅10	1008-1001	2	
9	Hex Head Bolt	M14-1.5P 40L	1001-1458	4	← OLD
	Hex Head Bolt	M14-1.5P 35L	1001-1457	4	— NEW(06.14.2004)
10	Spring Washer	∅14	1003-0014	4	
11	Hex Head Nut	M14-1.5P Lock	1002-1453	4	← OLD
	Hex Head Nut	M14-1.5P	1002-1452	4	— NEW(06.14.2004)
12	Hex Head Bolt	M14-1.5P 45L	1001-1459	6	
13	Spring Washer	∅14	1003-0014	6	
14	Hex Head Bolt	M16-1.5P 45L	1001-1659	6	
15	Spring Washer	∅16	1003-0016	6	
16	Hex Head Nut	M16-1.5P Lock	1002-1653	6	← OLD
	Hex Head Nut	M16-1.5P	1002-1652	6	— NEW(06.14.2004)
17	Hex Head Bolt	M20-2.5P 70L	1001-208E	4	← OLD
	Hex Head Bolt	M20-2.5P 65L	1001-208D	4	— NEW(06.14.2004)
18	Spring Washer	∅20	1003-0020	4	
19	Hex Head Nut	M20-2.5P	1002-2082	4	
20	Hex Head Bolt	M22-2.5P 80L	1001-228G	4	← OLD
	Hex Head Bolt	M22-2.5P 65L	1001-228D	4	— NEW(06.14.2004)
21	Spring Washer	∅22	1003-0022	4	
22	Hex Head Nut	M22-2.5P	1002-2282	4	
23	Hex Head Bolt	M12-1.25P 30L	1001-1236	4	
24	Spring Washer	∅12	1003-0012	4	

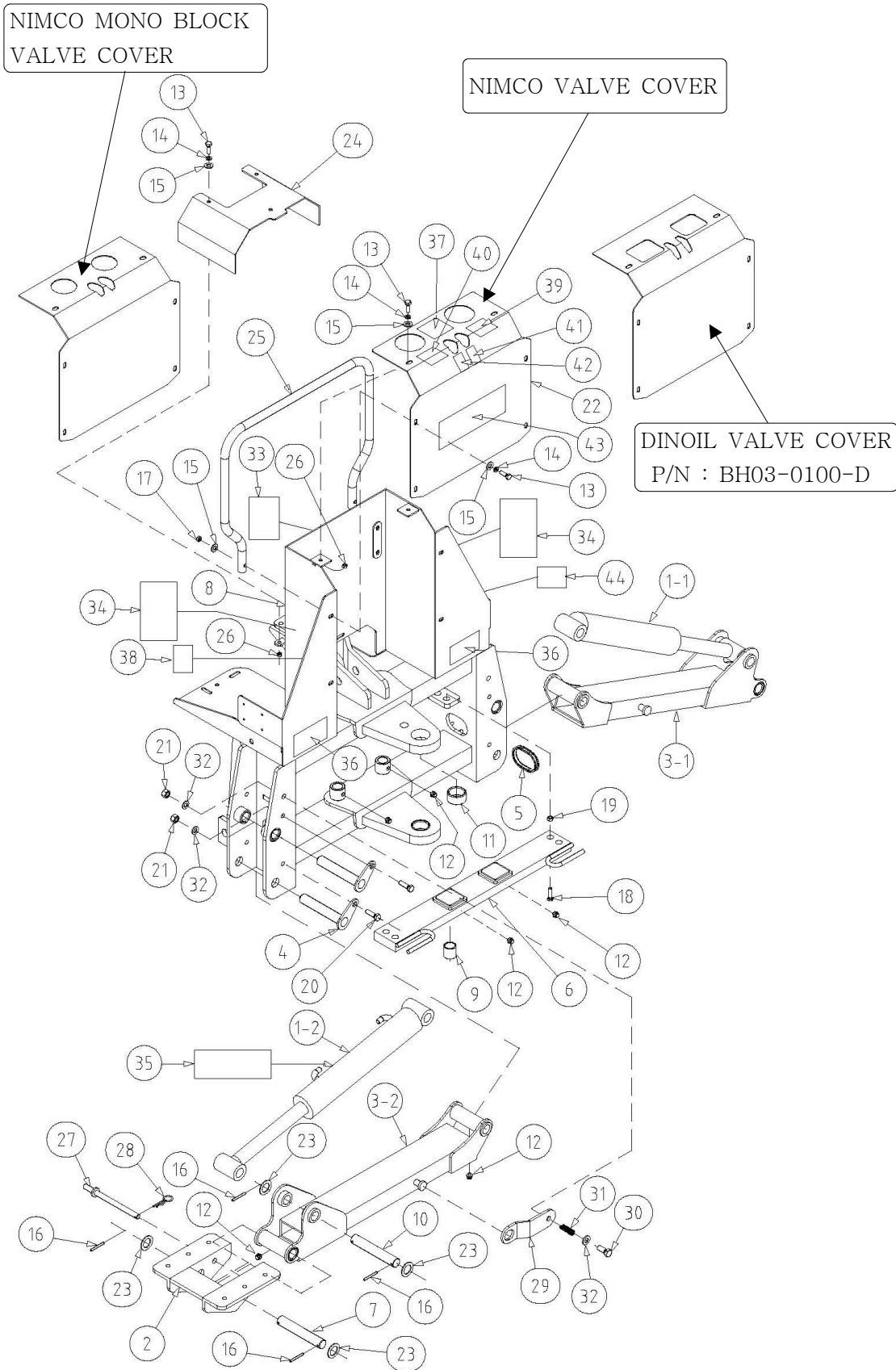
SEAT ASSEMBLY (UPDATED 04.06.16)



SEAT ASSEMBLY (UPDATED 04.06.16)

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Seat Support Ass'y		BH06-0100-P	1	
1	Seat		V-2400	1	
2	Seat Plate		BH06-0100	1	OLD(30504121  ~30504150) NEW
	Seat Plate		BH06-0100-A	1	
3	Upper Post		BH06-0200	1	
4	Lower Post		BH06-0300	1	
5	Hex Head Bolt	M10-1.5P 30L	1000-1056	5	
6	Hex Head Nut , Lock	M10-1.5P	1002-1053	5	
7	Hex Head Bolt	M12-1.75P 80L	1000-126G	2	
8	Hex Head Nut , Lock	M12-1.75P	1002-1263	3	
9	Hex Head Bolt	M12-1.75P 95L	1000-126J	1	
10	Latch Plate	4.5T	BH06-0104	1	
11	Spring	3kg	BH06-0106	1	
12	Hex Head Bolt	M5-0.8P 12L	BN06-0103	1	
13	Flat Washer	∅5	1004-0005	1	
14	Spring Washer	∅5	1003-0005	1	
15	Hex Head Nut	M5-0.8P	1002-0611	1	
16	Hex Head Bolt	5/16-18 20L	1200-0364	4	
17	Spring Washer	∅5/16	1204-0301	4	
20	Washer Flat	∅5/16	1203-0301	4	
21	Hex Head Bolt	M10-1.5P 90L	1000-1051	1	
22	Spring Washer	∅10	1003-0010	1	
23	Hex Head Nut	M10-1.5P	1002-1051	1	

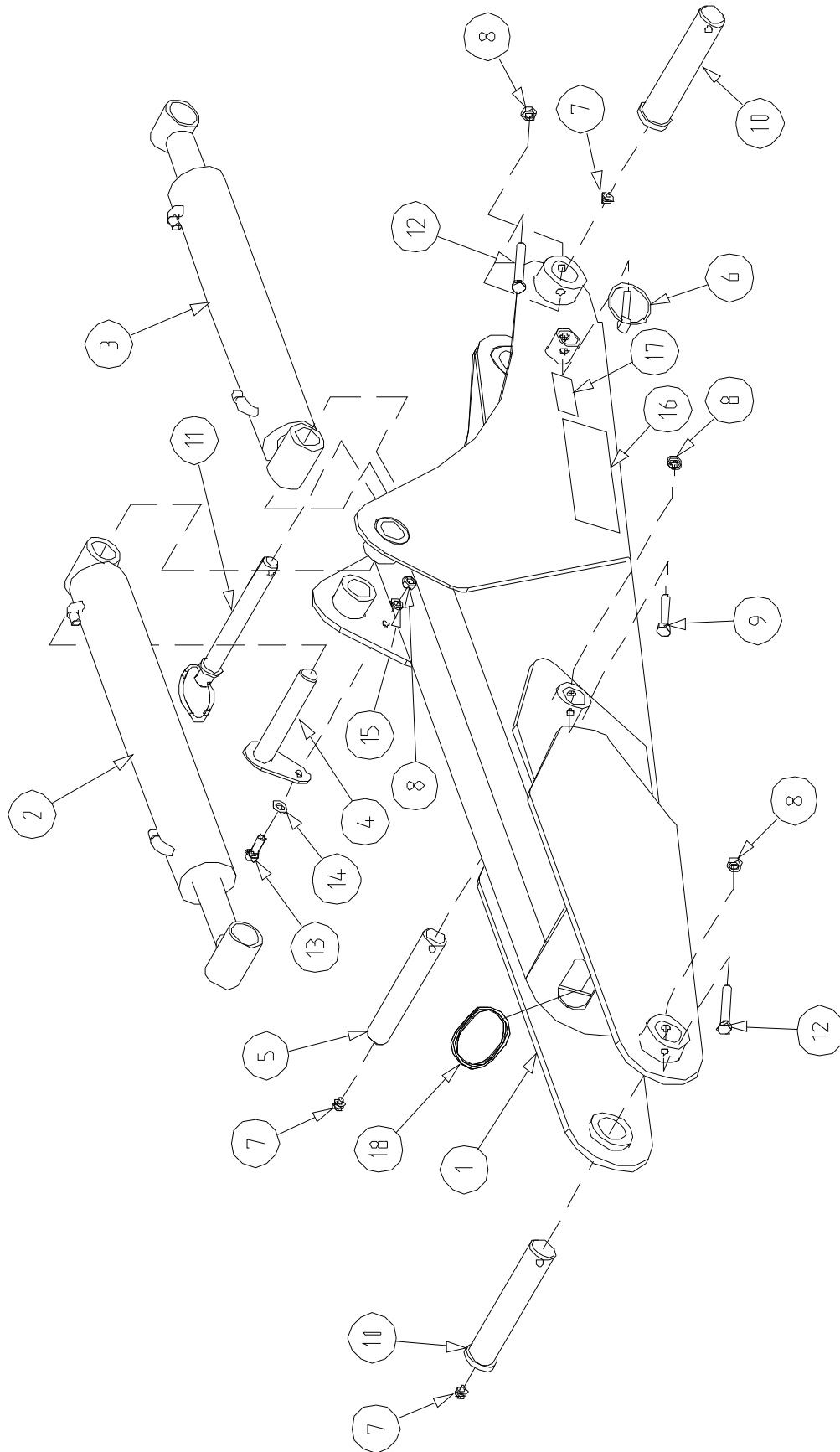
MAINFRAME ASSEMBLY (UPDATED 05.12.26)



MAINFRAME ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY	
1-1	Stabilizer Cylinder Ass'y LH		BH17-0100L-B	1		
1-2	Stabilizer Cylinder Ass'y RH		BH17-0100R-B	1		
2	Foot Plate		BH08-0100	2	← OLD(30504121 ~30504150)	
	Foot Plate		BH08-0100-A	2	OLD	
	Foot Plate		BH08-0100-B	2	NEW(31229107~)	
	Stabilizer Ass'y		BH07-0100	2	← OLD(30504121 ~30504150)	
	Stabilizer Ass'y		BH07-0100-A	2	OLD	
3-1	Stabilizer Ass'y LH		BH07-0100L-B	1	NEW(31229107~)	
3-2	Stabilizer Ass'y RH		BH07-0100R-B	1	NEW(31229107~)	
4	Pin	∅25-150L	BH01-0121	4		
5	Hose Trim	9T-205L	8003-B109	2		
6	Cross Bar		BH05-0100	1		
7	Pin	∅25-160L	BH07-0108	2		
8	Mainframe Ass'y		BH01-0100	1		
9	Bushing	25*32 32L	BH05-0102	2		
10	Pin	∅25-150L	BH07-0107	2		
11	Bushing	38*48 25L	BH01-0114	2	← OLD	
	Bushing	38*48 25L	BH01-0114-A	2	NEW(40430001~)	
12	Grease Nipple	PT 1/8"	4001-0001	8		
13	Hex Head Bolt	M8-1.25P 25L	1000-0835	8		
14	Spring Washer	∅8	1003-1008	8		
15	Washer Flat	∅8	1004-0008	12		
16	Cotter Pin	∅5	1008-0001	8		
	Spring Pin	∅5	1008-3002	8		
17	Hex Head Nut , Lock	M8-1.25P	1002-0833	4		
18	Hex Head Bolt(HT)	M16-2.0P 60L	1001-167C	4		
19	Hex Head Nut , Lock	M16-2.0P	1002-1673	4		
20	Hex Head Bolt	M10-1.5P 25L	1000-1055	4		
21	Hex Head Nut , Lock	M10-1.5P	1002-1053	6		
22	Front Cover	NIMCO VALVE	3.2T	BH03-0100	1	
		NIMCO MONO BLOCK VALVE	3.2T	BH03-0100-NM	1	
		DINOIL VALVE	3.2T	BH03-0100-D	1	
		HANIL VALVE	2.3T	BH03-0100-H	1	
23	Washer Flat	3.2T	BH01-0120	8		
24	Bracket Cover	3.2T	BH02-0100	1		
25	Guide Bar		BH04-0100-A	1		
26	Hex Head Nut	M8-1.25P	1002-0831	4		
27	Pin	∅13-190L	BH08-0103	2		
28	R-Pin	∅3	1008-2002	2		
29	Lock, Stabilizer	6T	BH07-0111	2		
30	Hex Head Bolt	M12-1.25P 30L	1001-1236	2	← OLD	
	Hex Head Bolt	M10-1.5P 45L	1000-1059	2	NEW(31229107~)	
31	Spring	1Kg	BH07-0113	2		
32	Flat Washer	∅10	1004-0010	8		
33	Decal , Warning Bodily Injury		BH35-0101	1		
34	Decal , Warning Bodily Injury		BH35-0102	2		
35	Decal , Crushing Hazard		BH35-0103	2		
36	Decal , Danger Crushing Hazard		BH35-0104	2		
37	Decal , Warning Prevent Instability		BH35-0105	1		
38	Decal, Universal One Call		BH35-0106	1		
39	Decal , Operation		BH35-0107	1		
40	Decal , Operation		BH35-0108	1		
41	Decal , Operation		BH35-0109	1		
42	Decal , Operation		BH35-0110	1		
43	Decal , KIOTI		CK12-3004	1		
44	Name Plate		CK12-5001	1		
45	Decal, Bar Code		BH35-0114	1		

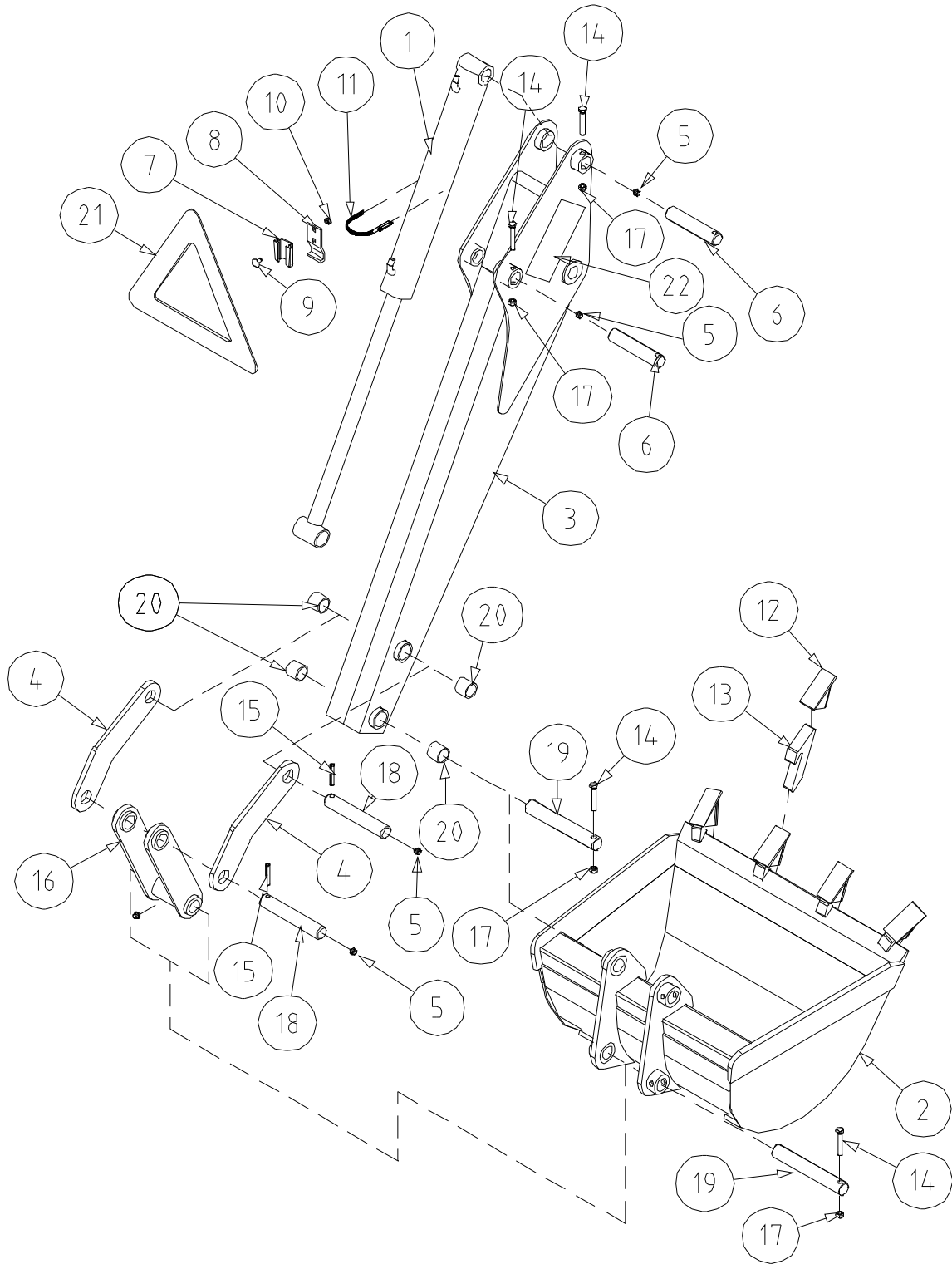
BOOM ASSEMBLY



BOOM ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q' ty	INTERCHANGE ABILITY
1	Boom Ass'y		BH10-0100	1	← OLD
	Boom Ass'y		BH10-0100-A	1	— NEW ₍₃₁₂₂₉₁₀₇₋₎
2	Dipperstick Cylinder Ass'y		BH15-0100-B	1	
3	Boom Cylinder Ass'y		BH14-0100-B	1	
4	Pin	∅25-150L	BH10-0121	1	← OLD
	Pin , Anti Rotation	∅25-150L	BH10-0121-A	1	— NEW ₍₃₁₂₂₉₁₀₇₋₎
5	Pin	∅25-186L	BH10-0120	1	
6	Ring Pin	∅10	1008-1001	1	
7	Grease Nipple	PT 1/8"	4001-0001	3	
8	Hex Head Nut , Lock	M10-1.5P	1002-1053	5	
9	Hex Head Bolt(HT)	M10-1.5P 50L	1001-105A	2	
10	Pin	∅32-186L	BH10-0118	2	
11	Pin	∅22-186L	BH10-0119	1	← OLD
	Pin	∅22-190L	BH10-0119-A	1	— NEW ₍₃₀₈₁₁₀₀₁₋₎
12	Hex Head Bolt(HT)	M10-1.5P 60L	1001-105C	2	
13	Hex Head Bolt	M10-1.5P 30L	1000-1056	1	
14	Flat Washer	∅10	1004-0010	1	
15	Spring Washer	∅10	1003-0010	1	
16	Decal , KB2365		BH35-4000	2	
17	Decal , Boom Lock		BH35-0112	1	
18	Hose Trim	6T-213L	8003-B106	1	

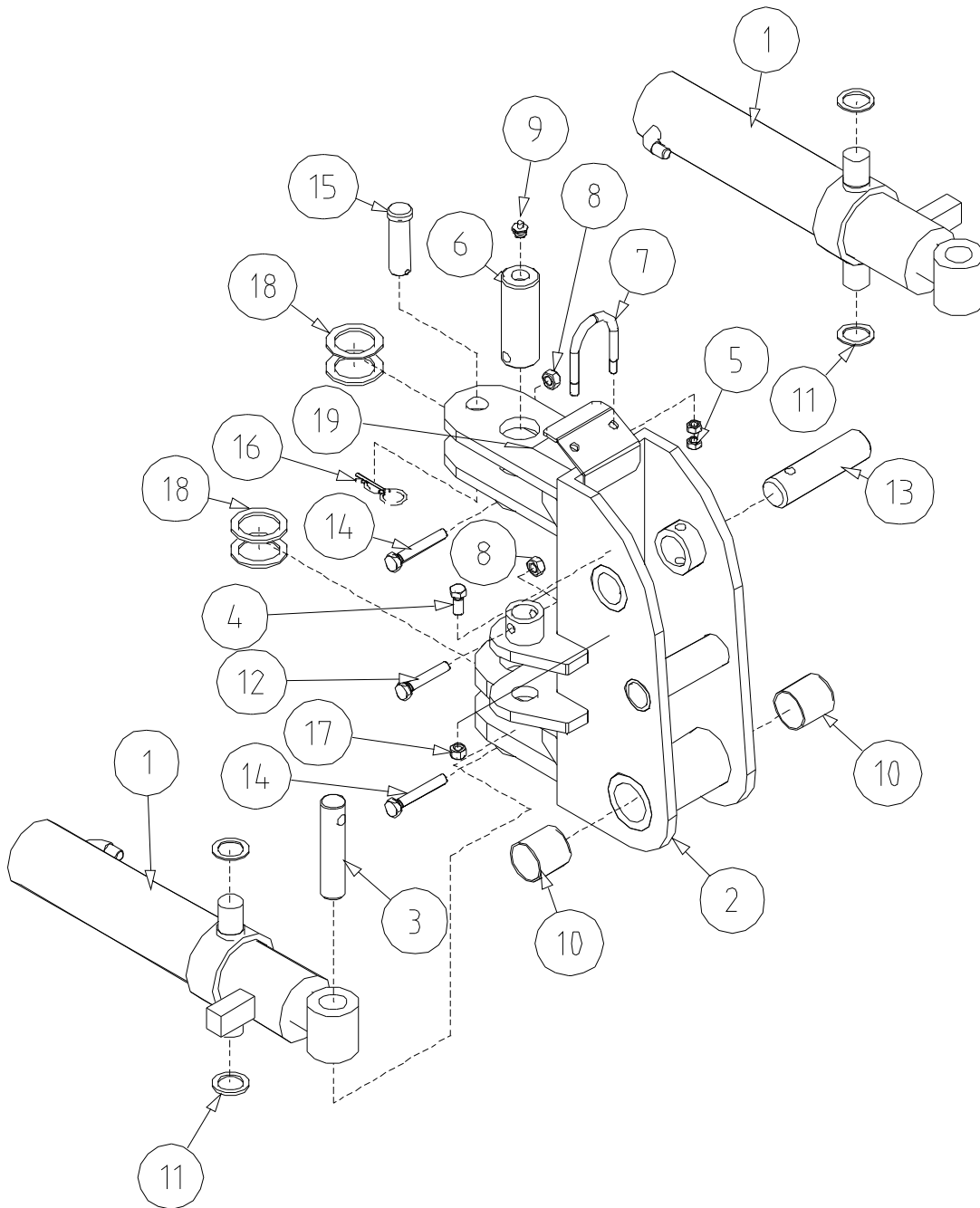
BUCKET, DIPPERSTICK ASSEMBLY



BUCKET, DIPPERSTICK ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	9" Bucket Ass'y	No2, 13, 14	BH20-0100-P	1	
	12" Bucket Ass'y	No2, 13, 14	BH20-0200-P	1	
	16" Bucket Ass'y	No2, 13, 14	BH20-0300-P	1	
	18" Bucket Ass'y	No2, 13, 14	BH20-0400-P	1	
	24" Bucket Ass'y	No2, 13, 14	BH20-0500-P	1	
	36" Bucket Ass'y	No2, 13, 14	BH20-0600-P	1	
1	Bucket Cylinder Ass'y		BH16-0100-B	1	
2	9" Bucket	3 Tooth	BH20-0100	1	
2	12" Bucket	3 Tooth	BH20-0200	1	
2	16" Bucket	3 Tooth	BH20-0300	1	
2	18" Bucket	4 Tooth	BH20-0400	1	
2	24" Bucket	5 Tooth	BH20-0500	1	
2	36" Bucket	6 Tooth	BH20-0600	1	
3	Dipperstick Ass'y		BH11-0100	1	
4	Link Plate	12T	BH12-0101	2	
5	Grease Nipple	PT 1/8"	4001-0001	5	
6	Pin	∅25-135L	BH11-0112	2	
7	Socket	2.3T	BH11-0115	1	
8	Socket Bracket	4.5T	BH11-0116	1	
9	Bolt	M8-1.25P 20L	1301-0834	2	
10	Hex Head Nut	M8-1.25P	1002-0831	2	
11	Hose Band	10"	8001-B010	1	
12	Tooth		BH20-0111	5	
13	Shank	28T	BH20-0110	5	
14	Hex Head Bolt(HT)	M10-1.5P 50L	1001-105A	4	
15	Spring Pin	∅10	1008-3003	2	
16	Link Ass'y		BH13-0100	1	
17	Hex Head Nut	M10-1.5P Lock	1002-1053	4	
18	Pin	∅25-178L	BH12-0102	2	
19	Pin	∅25-203L	BH13-0104	2	
20	Du Bush	25*28 30L	2010-3025	4	
21	Reflash Plate		BH11-0117	1	
22	Decal , K10TI		CK12-3004	2	

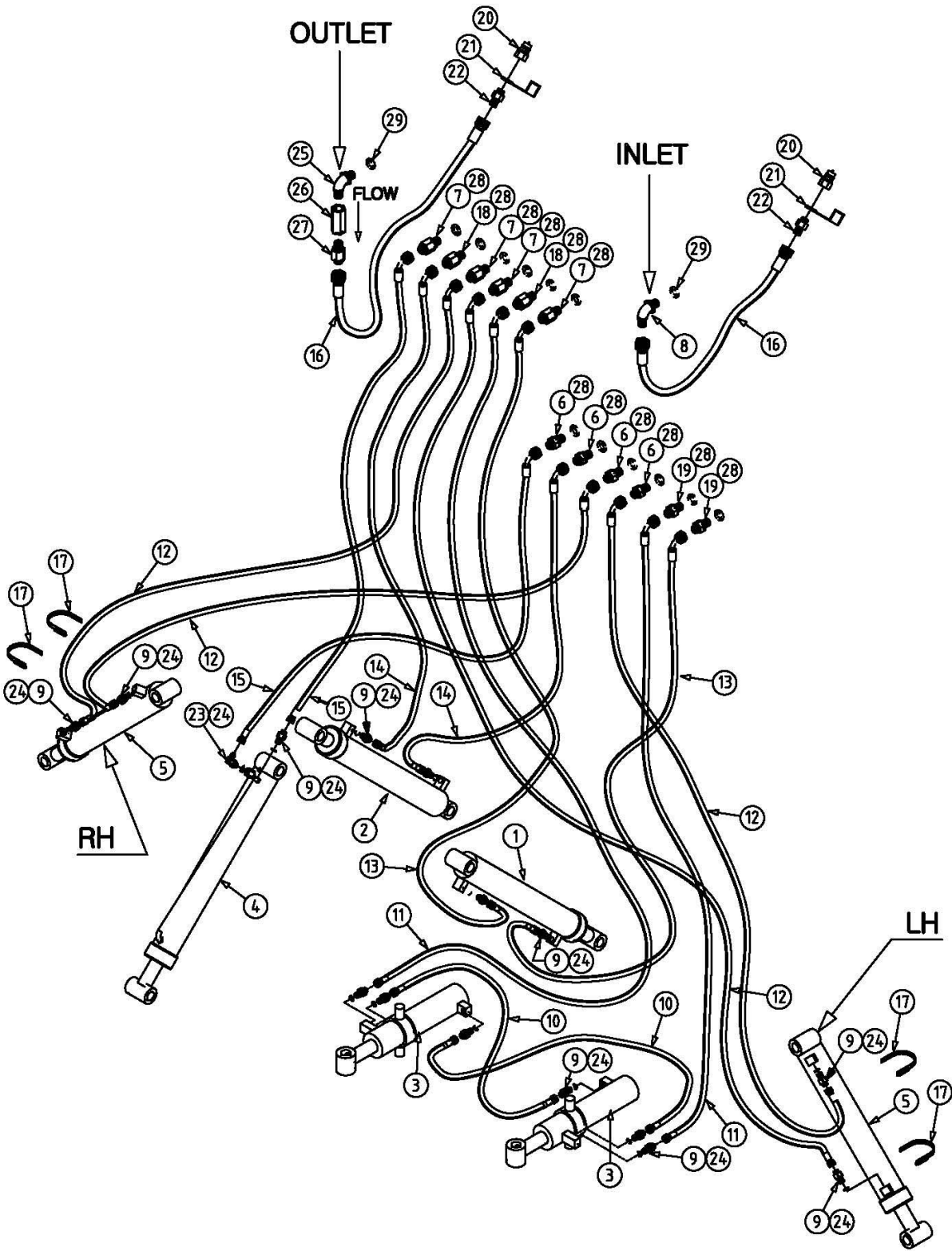
SWING ASSEMBLY



SWING ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q' ty	INTERCHANGE ABILITY
1	Swing Cylinder Ass'y		BH18-0100-B	2	
2	Swing Frame Ass'y		BH09-0100	1	
3	Pin	∅25-117L	BH09-0114	2	
4	Hex Head Bolt(HT)	M8-1.25P 50L	1001-083A	1	
5	Hex Head Nut	5/16-18	1202-0361	4	
6	Pin	∅38-96L	BH09-0113	2	← OLD
	Pin	∅38-108L	BH09-0113-A	2	NEW(41123001-)
7	U-Bolt	∅40, 5/16-18	BH09-0117	1	
8	Hex Head Nut	M10-1.5P Lock	1002-1053	4	
9	Grease Nipple	PT 1/8"	4001-0001	2	
10	Du Bush	32*36 40L	2010-4032	2	
11	Washer Flat(∅25)	3.2T	BH01-0120	4	
12	Hex Head Bolt(HT)	M10-1.5P 50L	1001-105A	2	
13	Pin	∅25-115L	BH09-0116	1	
14	Hex Head Bolt(HT)	M10-1.5P 60L	1001-105C	2	
15	Pin	∅20-73L	BH09-0115	1	
16	R-Pin	∅3	1008-2002	1	
17	Hex Head Nut	M8-1.25P Lock	1002-0833	1	
18	Washer Flat(∅38)	3.2T	BH01-0121	4	P/No. Revise
	Washer Flat(∅38)	3.2T	1004-0038	4	
19	Decal , Swing Lock		BH35-0111	1	

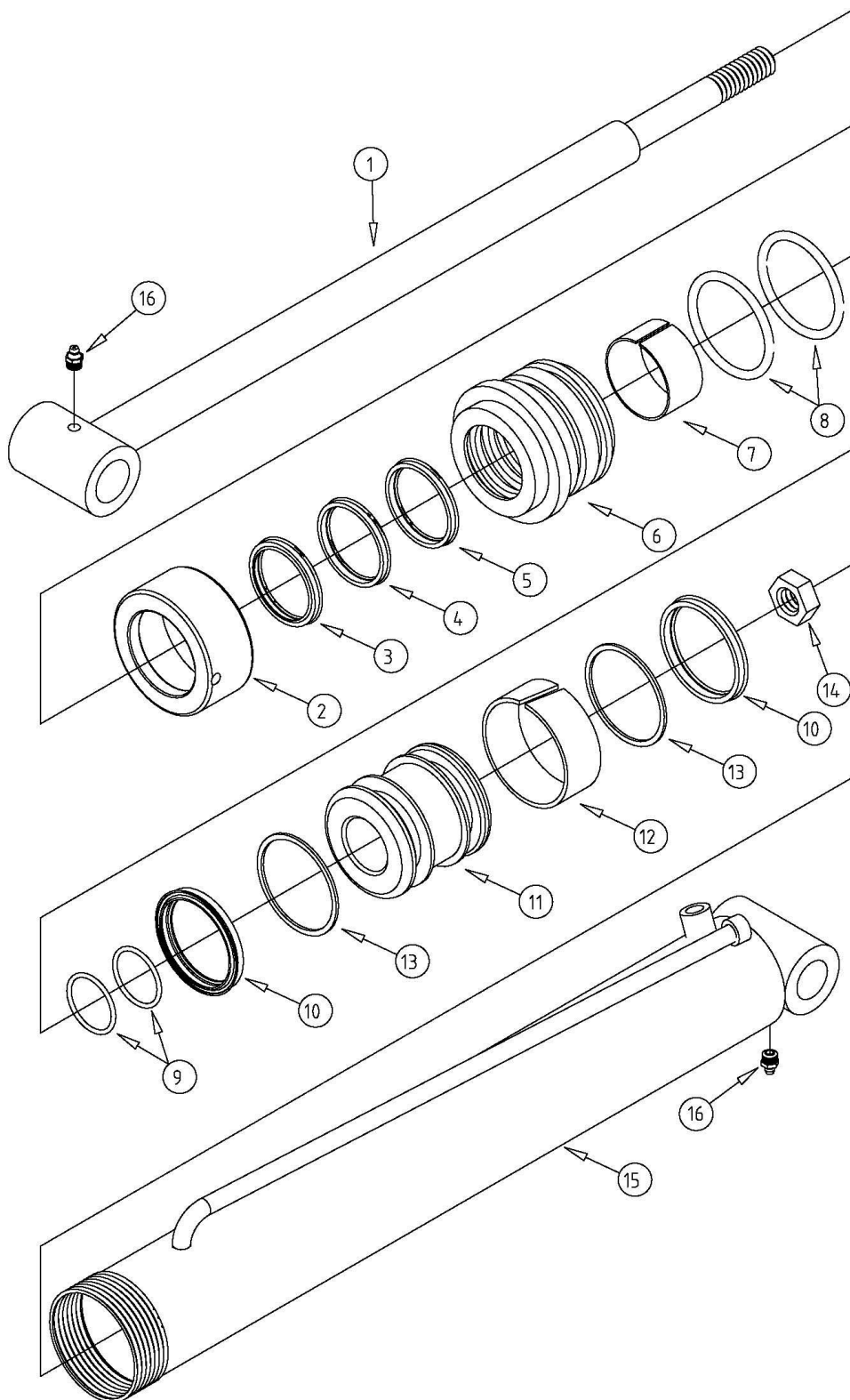
HOSE FITTING ASSEMBLY (UPDATED 06.15.2006)



HOSE FITTING ASSEMBLY (UPDATED 06.15.2006)

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
1	Boom Cylinder Ass'y		BH14-0100-B	1	
2	Dipperstick Cylinder Ass'y		BH15-0100-B	1	
3	Swing Cylinder Ass'y		BH18-0100-B	2	
4	Bucket Cylinder Ass'y		BH16-0100-B	1	
5	Stabilizer Cylinder Ass'y LH		BH17-0100L-B	1	
	Stabilizer Cylinder Ass'y RH		BH17-0100R-B	1	
	Hose Fitting Kit	No.6~24	BH30-0100-P	1	
6	Adapter , Short	1/2-20UNF(1/4)X3/4-1 6UNF , O-Ring	6003-0203	4	
7	Adapter , Long	1/2-20UNF(1/4)X3/4-1 6UNF , O-Ring	6003-0204	4	
8	Adapter Elbow	3/4-16UNF(3/8)X7/8-1 4UNF, O-Ring 90 °	6003-0302	1	Decreased 2->1 (60531001~)
9	Nipple	1/2-20UNF(1/4)X9/16- 18UNF, O-Ring	6004-0102	4	← OLD
		PF(1/4) O-Ring X 1/2-20UNF	6004-0205	15	NEW (51022001~)
10	Hose (Swing to Swing)	4(1/4)*4(1/4) 550L	BH30-0100	2	
11	Hose (Swing to Valve)	904(1/4)*4(1/4)950L	BH30-0200	2	
12	Hose (Stabilizer)	904(1/4)*4(1/4)1300L	BH30-0300	4	
13	Hose (Boom)	904(1/4)*4(1/4)1750L	BH30-0400	2	
14	Hose (Dipperstick)	904(1/4)*4(1/4)2400L	BH30-0500	2	
15	Hose (Bucket)	904(1/4)*4(1/4)2750L	BH30-0600	2	
16	Hose (Valve In,Out)	4(3/8)*4(3/8)1600L	BH30-0700	2	
17	Hose Band	10"	8001-B010	10	
18	Orifice , Long	1/2-20UNF(1/4)X3/4-1 6UNF , O-Ring	6003-0205	2	
19	Orifice , Short	1/2-20UNF(1/4)X3/4-1 6UNF , O-Ring	6003-0206	2	
20	Quick Coupler	PT 3/8 male	0001-1001	2	← OLD
		PT 1/2 male	0001-1010	2	NEW
21	Dust Cap	1/2 Female	0001-1011	2	
22	Nipple	PT(1/2)X3/4-16UNF	6003-0408	2	
23	Elbow , O-Ring	PF(1/4)X1/2-20UNF 90 °	6004-0202	1	
24	O-Ring	P11	5004-0014	16	
25	Adapter Elbow	PT(3/8)X7/8-14UNF, O-Ring 90 °	802L0-T46FA-32	1	NEW(60531001~)
26	Check Valve	3/8-0.3bar	801K1-12000	1	NEW(60531001~)
27	Nipple	PT(3/8)X3/4-16UNF	802N2-T63F9-40	1	NEW(60531001~)
28	O-Ring	AS568 #908	5004-0034	12	
29	O-Ring	AS568 #910	5004-0078	2	

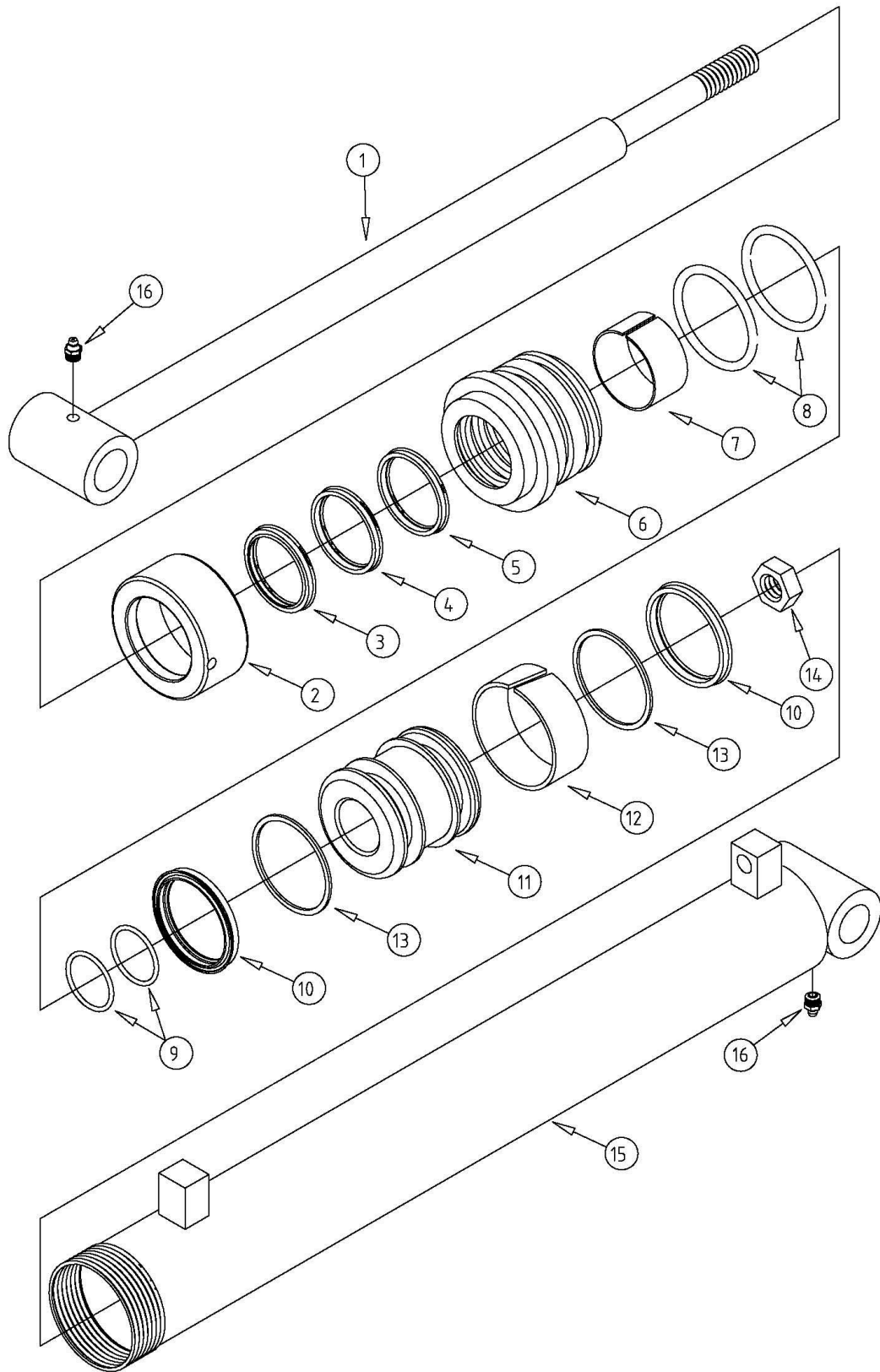
BUCKET CYLINDER ASSEMBLY



BUCKET CYLINDER ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Bucket Cylinder Ass'y		BH16-0100	1	← OLD
	Bucket Cylinder Ass'y		BH16-0100-A	1	OLD(40430001~)
	Bucket Cylinder Ass'y		BH16-0100-B	1	NEW(51022001~)
1	Rod Ass'y	∅ 35	BH16-0101	1	← OLD
			BH16-0101-A	1	NEW(40430001~)
2	Cover		BH15-0102	1	
	Seal Kit , Head	No3~No8	BH15-0100-P	1	
3	Dust Seal	35*43*5/6.5	5000-M701	1	
4	Retainer(Rubber)	35*45*6	5001-M701	1	
5	Retainer(Urethane)	35*45*6	5002-M701	1	
6	Head		BH15-0103	1	
7	Du Bush	35*20	5003-M701	1	
8	O-Ring	G55	5003-0055	2	
	Seal Kit , Piston	No9~No13	BH15-0200-P	1	
9	O-Ring(LBG-20)	27.4*3.1t	5004-M701	2	
10	Retainer	50*60*6	5005-MA01	2	
11	Piston		BH15-0104	1	
12	Packing Bush	55*60*15	5006-MB01	1	
13	Backup Ring	50*60*3	5007-MA01	2	
14	Hex Head Nut	1"-8UNC	1202-OAA3	1	← OLD
		1"-14UNF	1202-OAA3-A	1	NEW(40430001~)
15	Tube Ass'y	60*70*5	BH16-0105	1	← OLD
			BH16-0105-A	1	NEW(51022001~)
16	Grease Nipple	PT 1/8"	4001-0001	2	

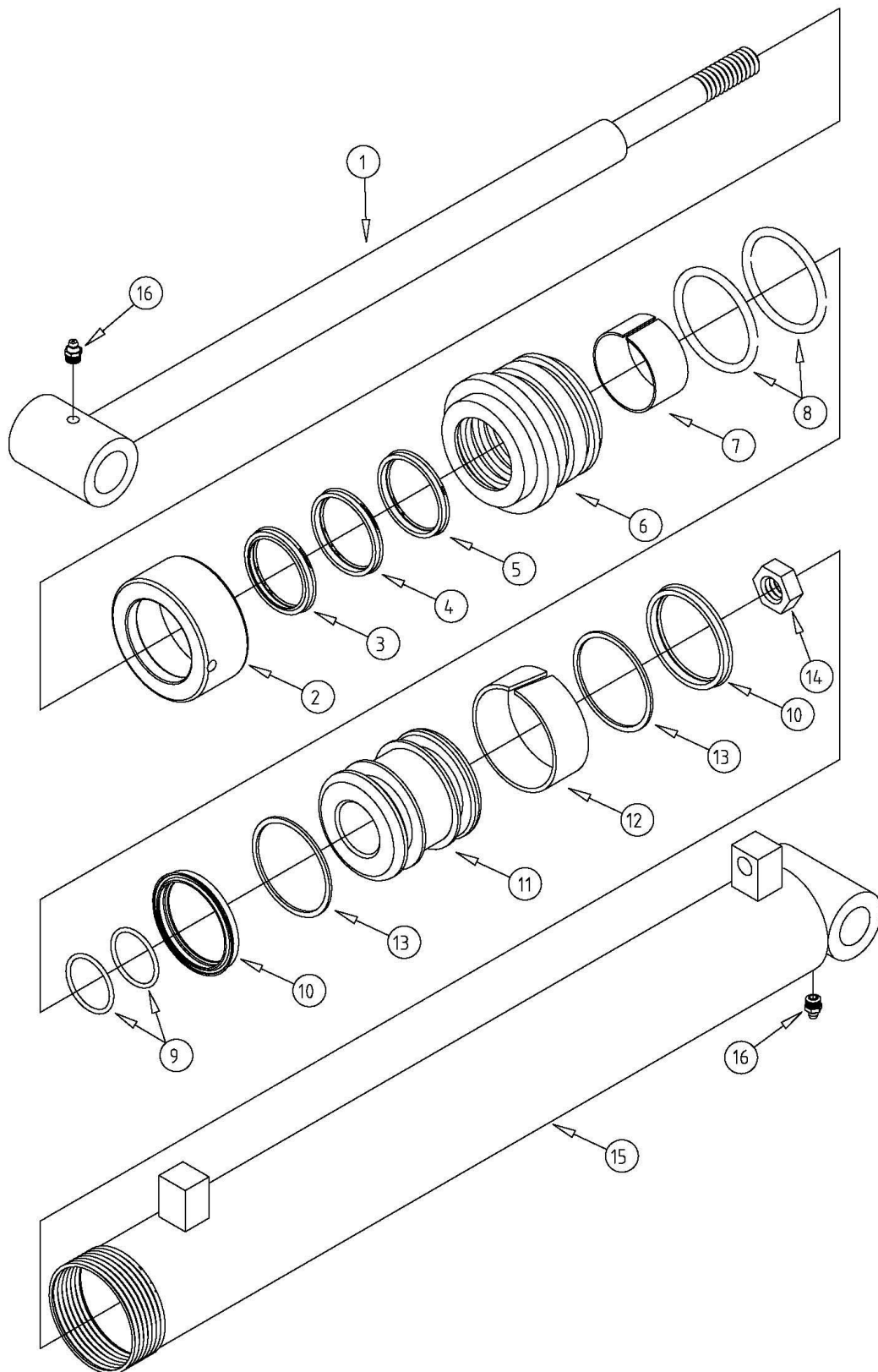
BOOM CYLINDER ASSEMBLY



BOOM CYLINDER ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Boom Cylinder Ass'y		BH14-0100	1	← OLD
			BH14-0100-A	1	— OLD(40430001~)
			BH14-0100-B	1	— NEW(51022001~)
1	Rod Ass'y	∅40	BH14-0101	1	← OLD
			BH14-0101-A	1	— NEW(40430001~)
2	Cover		BH14-0102	1	
	Seal Kit , Head	No3~No8	BH14-0100-P	1	
3	Dust Seal	40*48*5/6.5	5000-M801	1	
4	Retainer(Rubber)	40*50*6	5001-M801	1	
5	Retainer(Urethane)	40*50*6	5002-M801	1	
6	Head		BH14-0103	1	
7	Du Bush	40*20	5003-M801	1	
8	O-Ring	G65	5003-0065	2	
	Seal Kit , Piston	No9~No13	BH14-0200-P	1	
9	O-Ring(LBG-20)	27.4*3.1t	5004-M701	2	
10	Retainer	60*70*6	5005-MC01	2	
11	Piston		BH14-0104	1	
12	Packing Bush	65*70*15	5006-MD01	1	
13	Backup Ring	60*70*3	5007-MC01	2	
14	Hex Head Nut	1"-8UNC	1202-OAA3	1	← OLD
		1"-14UNF	1202-OAA3-A	1	— NEW(40430001~)
15	Tube Ass'y	70*80*5	BH14-0105	1	← OLD
			BH14-0105-A	1	— NEW(51022001~)
16	Grease Nipple	PT 1/8"	4001-0001	2	

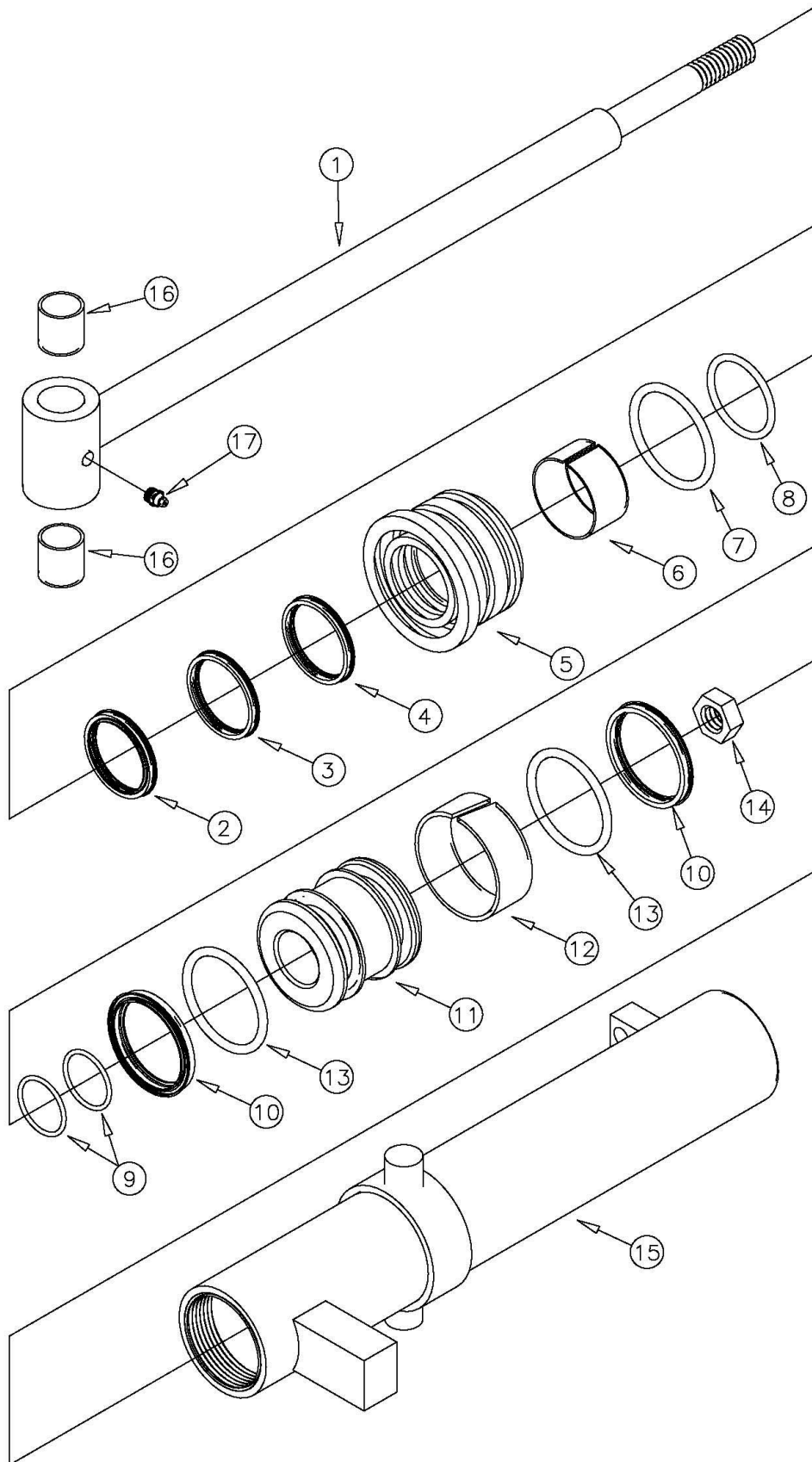
DIPPERSTICK CYLINDER ASSEMBLY



DIPPERSTICK CYLINDER ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Dipperstick Cylinder Ass'y		BH15-0100	1	← OLD
			BH15-0100-A	1	— OLD(40430001~)
			BH15-0100-B	1	— NEW(51022001~)
1	Rod Ass'y	∅35	BH15-0101	1	← OLD
			BH15-0101-A	1	— NEW(40430001~)
2	Cover		BH15-0102	1	
	Seal Kit , Head	No3~No8	BH15-0100-P	1	
3	Dust Seal	35*43*5/6.5	5000-M701	1	
4	Retainer(Rubber)	35*45*6	5001-M701	1	
5	Retainer(Urethane)	35*45*6	5002-M701	1	
6	Head		BH15-0103	1	
7	Du Bush	35*20	5003-M701	1	
8	O-Ring	G55	5003-0055	2	
	Seal Kit , Piston	No9~No13	BH15-0200-P	1	
9	O-Ring(LBG-20)	27.4*3.1t	5004-M701	2	
10	Retainer	50*60*6	5005-MA01	2	
11	Piston		BH15-0104	1	
12	Packing Bush	55*60*15	5006-MB01	1	
13	Backup Ring	50*60*3	5007-MA01	2	
14	Hex Head Nut	1"-8UNC	1202-OAA3	1	← OLD
		1"-14UNF	1202-OAA3-A	1	— NEW(40430001~)
15	Tube Ass'y	60*70*5	BH15-0105	1	← OLD
			BH15-0105-A	1	— NEW(51022001~)
16	Grease Nipple	PT 1/8"	4001-0001	2	

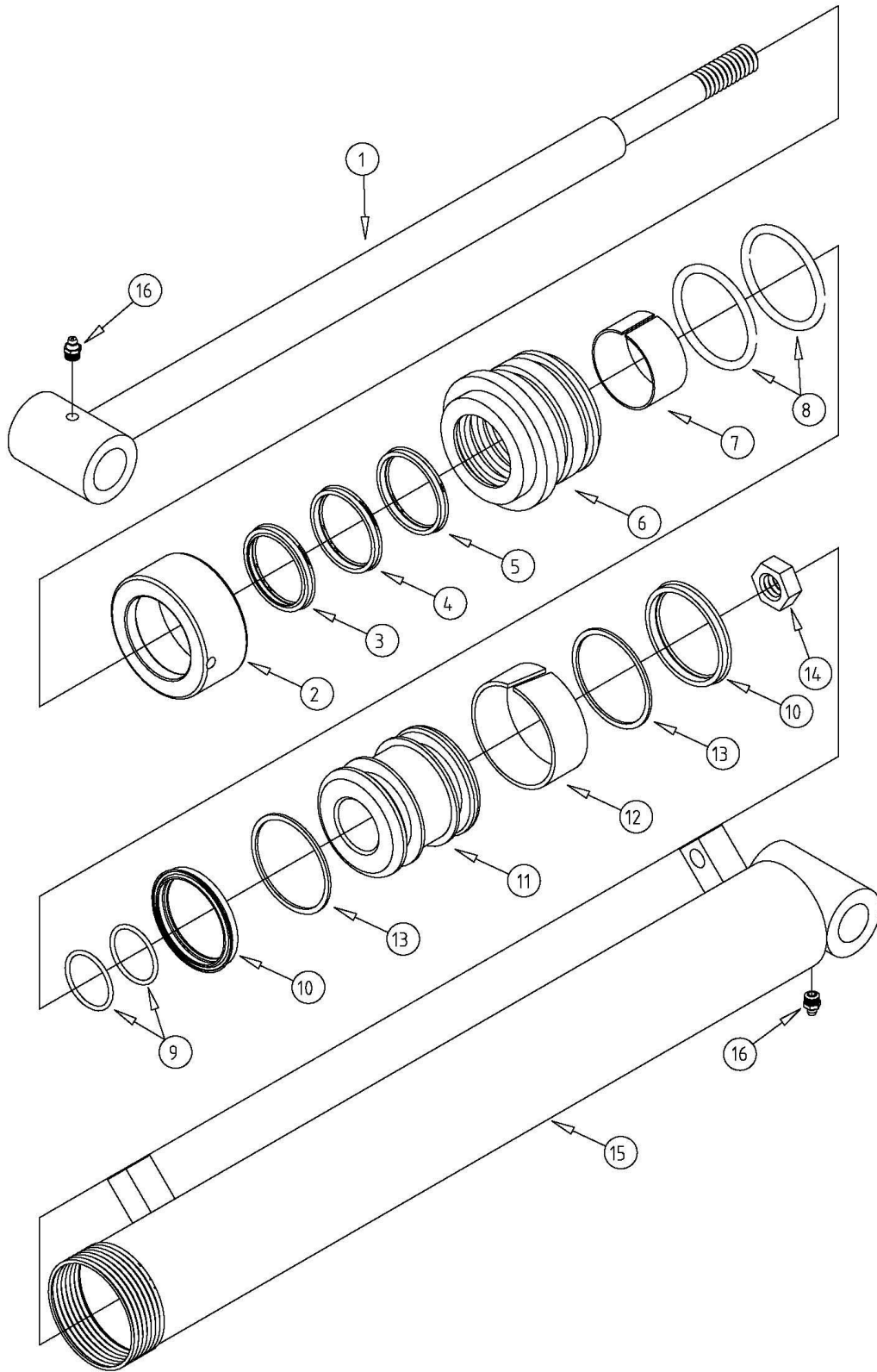
SWING CYLINDER ASSEMBLY



SWING CYLINDER ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Swing Cylinder Ass'y		BH18-0100	2	← OLD
			BH18-0100-A	2	— OLD(40430001~)
			BH18-0100-B	2	— NEW(51022001~)
1	Rod Ass'y	∅35	BH18-0101	2	← OLD
			BH18-0101-A	2	— NEW(40430001~)
	Seal Kit , Head	No2~No8	BH18-0100-P	2	
2	Dust Seal	35*43*5/6.5	5000-M701	2	
3	Retainer(Rubber)	35*45*6	5001-M701	2	
4	Retainer(Urethane)	35*45*6	5002-M701	2	
5	Head		BH18-0102	2	
6	Du Bush	35*20	5003-M701	2	
7	O-Ring	G60	5003-0060	2	
8	O-Ring	G55	5003-0055	2	
	Seal Kit , Piston	No9~No13	BH18-0200-P	2	
9	O-Ring(LBG-20)	27.4*3.1t	5004-M701	4	
10	Retainer	50*60*6	5005-MA01	4	
11	Piston		BH18-0103	2	
12	Packing Bush	55*60*15	5006-MB01	2	
13	Backup Ring	50*60*3	5007-MA01	4	
14	Hex Head Nut	1"-8UNC	1202-0AA3	2	← OLD
		1"-14UNF	1202-0AA3-A	2	— NEW(40430001~)
15	Tube Ass'y	60*70*5	BH18-0104	2	← OLD
			BH18-0104-A	2	— NEW(51022001~)
16	Du Bush	25*20	5003-M501	4	
17	Grease Nipple	PT 1/8"	4001-0001	2	

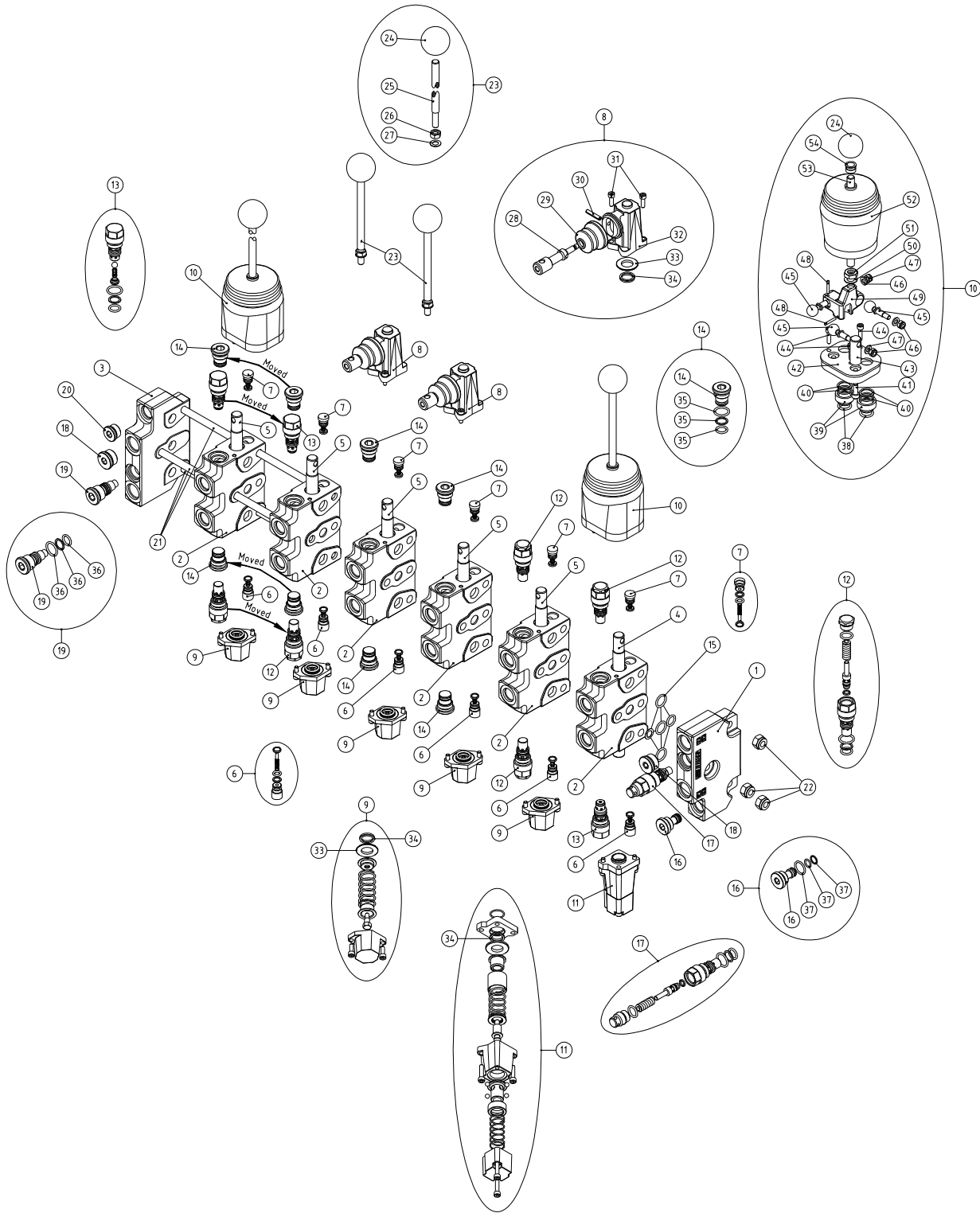
STABILIZER CYLINDER ASSEMBLY



STABILIZER CYLINDER ASSEMBLY

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Stabilizer Cylinder Ass'y LH		BH17-0100L	1	← OLD
			BH17-0100L-A	1	— OLD(40430001~)
			BH17-0100L-B	1	— NEW(51022001~)
	Stabilizer Cylinder Ass'y RH		BH17-0100R	1	← OLD
			BH17-0100R-A	1	— OLD(40430001~)
			BH17-0100R-B	1	— NEW(51022001~)
1	Rod Ass'y	∅35	BH17-0101	2	← OLD
			BH17-0101-A	2	— NEW(40430001~)
2	Cover		BH15-0102	2	
	Seal Kit , Head	No3~No8	BH15-0100-P	2	
3	Dust Seal	35*43*5/6.5	5000-M701	2	
4	Retainer(Rubber)	35*45*6	5001-M701	2	
5	Retainer(Urethane)	35*45*6	5002-M701	2	
6	Head		BH15-0103	2	
7	Du Bush	35*20	5003-M701	2	
8	O-Ring	G55	5003-0055	4	
	Seal Kit , Piston	No9~No13	BH15-0200-P	2	
9	O-Ring(LBG-20)	27.4*3.1t	5004-M701	4	
10	Retainer	50*60*6	5005-MA01	4	
11	Piston		BH15-0104	2	
12	Packing Bush	55*60*15	5006-MB01	2	
13	Backup Ring	50*60*3	5007-MA01	4	
14	Hex Head Nut	1"-8UNC	1202-OAA3	2	← OLD
		1"-14UNF	1202-OAA3-A	2	— NEW(40430001~)
15	Tube Ass'y LH	60*70*5	BH17-0105L	1	← OLD
	Tube Ass'y RH	60*70*5	BH17-0105R	1	
	Tube Ass'y LH	60*70*5	BH17-0105L-A	1	— NEW(51022001~)
	Tube Ass'y RH	60*70*5	BH17-0105R-A	1	
16	Grease Nipple	PT 1/8"	4001-0001	4	

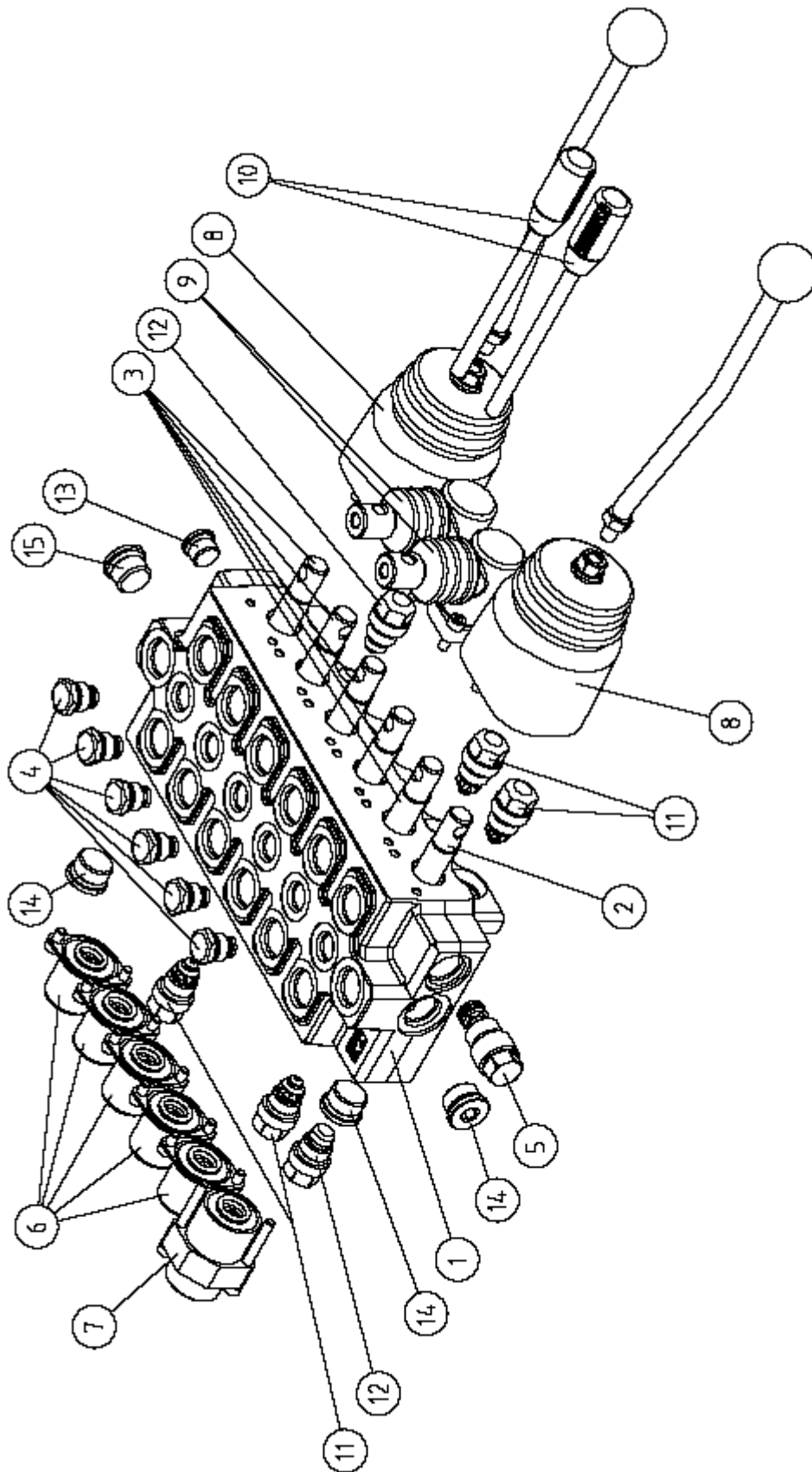
CONTROL VALVE (NIMCO CV-556)



CONTROL VALVE ASSEMBLY (NIMCO CV-556)

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Control Valve Ass'y		BC01-0100-P	1	
1	Inlet Body		BC01-0100	1	
2	Work Section Body		BC01-0200	6	
3	Outlet Body		BC01-0300	1	
4	Float Spool		BC01-0400	1	
5	Double Acting Spool		BC01-0500	5	
6	Load Hold Check A-Side Ass'y		BC01-0600	6	
7	Load Hold Check B-Side Ass'y		BC01-0700	6	
8	Enclosed Lever S5 Ass'y		BC01-0800	2	
9	Spool Control 9 Ass'y		BC01-0900	5	
10	Mech. Joystick Ass'y		BC01-1000R BC01-1000L	1 1	
11	Spool Control 11 Ass'y		BC01-1100	1	
12	Port Relief Valve Ass'y		BC01-1200	4	
13	Anti Cav. Valve Ass'y		BC01-1300	2	
14	Port Relief Cav. Plug Ass'y		BC01-1400	6	
15	Section Sealings		BC01-1500	7	
16	Unload Cav. Plug Ass'y		BC01-1600	1	
17	Main Relief Valve Ass'y		BC01-1700	1	
18	SAE #10 Plug		BC01-1800	2	
19	Main Relief Cav. Plug Ass'y		BC01-1900	1	
20	SAE #8 Plug		BC01-2000	1	
21	Tie Rods		BC01-2100	3	
22	Tie Rods Locking Nuts		BC01-2200	3	
23	Hand Lever		BC01-2300	2	
24	Plastic Ball	∅40	BC01-2400	4	
25	Lever Stick	L=160	BC01-2500	2	← OLD
	Lever Stick	L=160	BC01-2500-A	2	← NEW(40715001~)
26	Nut	M8-1.25P	1002-0831	2	← OLD
	Nut	M10-1.5P	1002-1051	2	← NEW(40715001~)
27	Washer Flat	∅10	1004-0010	2	
28	Link Pin		BC01-0801	2	
29	Rubber Boot		BC01-0802	2	
30	Spring Pin	∅5	1008-3005	2	
31	Socket Head Bolt	M5-0.8P 15L	1302-0513	4	
32	Housing		BC01-0803	2	
33	Washer		BC01-0804	7	
34	Spool Sealing		BC01-1001	8	
35	Port Relief Cav. Plug Seal Kit		BC01-1400-P	6	
36	Main Relief Cav. Plug Seal Kit		BC01-1900-P	1	
37	Unload Cav. Plug Seal Kit		BC01-1600-P	1	
38	O-ring	17.1x1.6-70	1000-0000	4	
39	Guidence		BC01-1011	4	
40	Mech. Joystick Seal Kit		BC01-1000-P	2	
41	Socket Head Bolt	M6-1.0P 15L	1302-0623	2	
42	Base Plate (Right & Left)		BC01-1002	2	
43	Joint Foundation Pin		BC01-1003	2	
44	Socket Head Bolt	M5-0.8P 20L	1302-0514	6	
45	Ball Screw		BC01-1004	6	
46	Nut	M6-1.0P	1002-0621	6	
47	Washer		BC01-1005	6	
48	Spring Pin	∅3	1008-3004	4	
49	Right H. Joint(& Left)		BC01-1006R	1	
			BC01-1006L	1	
50	Washer		1004-0010	1	
51	Nut	M10-1.5P	1002-1051	2	
52	Rubber Boot		BC01-1008	2	
53	Lever	L=170	BC01-1009	2	← OLD
	Lever	L=270	BC01-1009-A	2	← NEW(40715001~)
54	Rubber Boot Guide		BC01-1010	2	

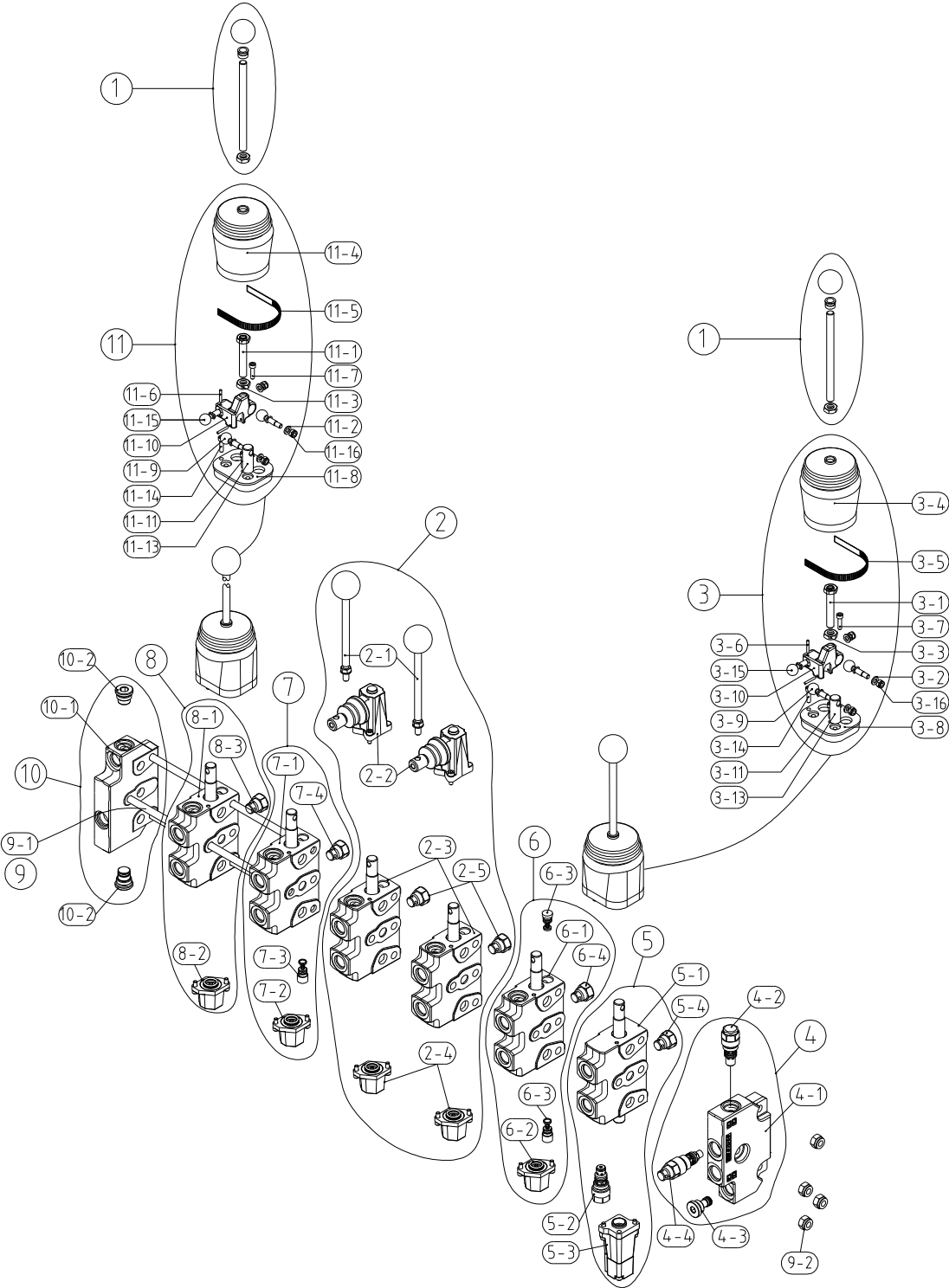
CONTROL VALVE ASSEMBLY (NIMCO MONO BLOCK CV126)



CONTROL VALVE ASSEMBLY (NIMCO MONO BLOCK CV126)

REF	DESCRIPTION	PART No.	Q'ty	INTERCHANGE ABILITY
	Control Valve Ass'y	BC02-0000-P	1	
1	Valve Body	BC02-0100	1	
2	Double Acting Floatspool 3S	BC02-0200	1	
3	Double Acting Spool 1S	BC02-0300	5	
4	Load Holding Check Valve	BC02-0400	6	
5	Main Relief Valve	BC02-0500	1	
6	Spool Control 9	BC02-0600	5	
7	Spool Control 11	BC02-0700	1	
8	Spool Control S6-RF	BC02-0800	2	
9	Spool Control S5	BC02-0900	2	
10	Hand Lever for S5 L=175mm	BC02-1000	2	
11	Port Relief Valve	BC02-1100	4	
12	Anti Cavitation Valve	BC02-1200	2	
13	Plug SAE #6 with sealing	BC02-1300	1	
14	Plug SAE #8 with sealing,P1,P3,T3	BC02-1400	3	
15	Plug SAE #10 with sealing,T1	BC02-1500	1	
16	Plastic Plug SAE #8,A+B,P2,T2	BC02-1600	14	

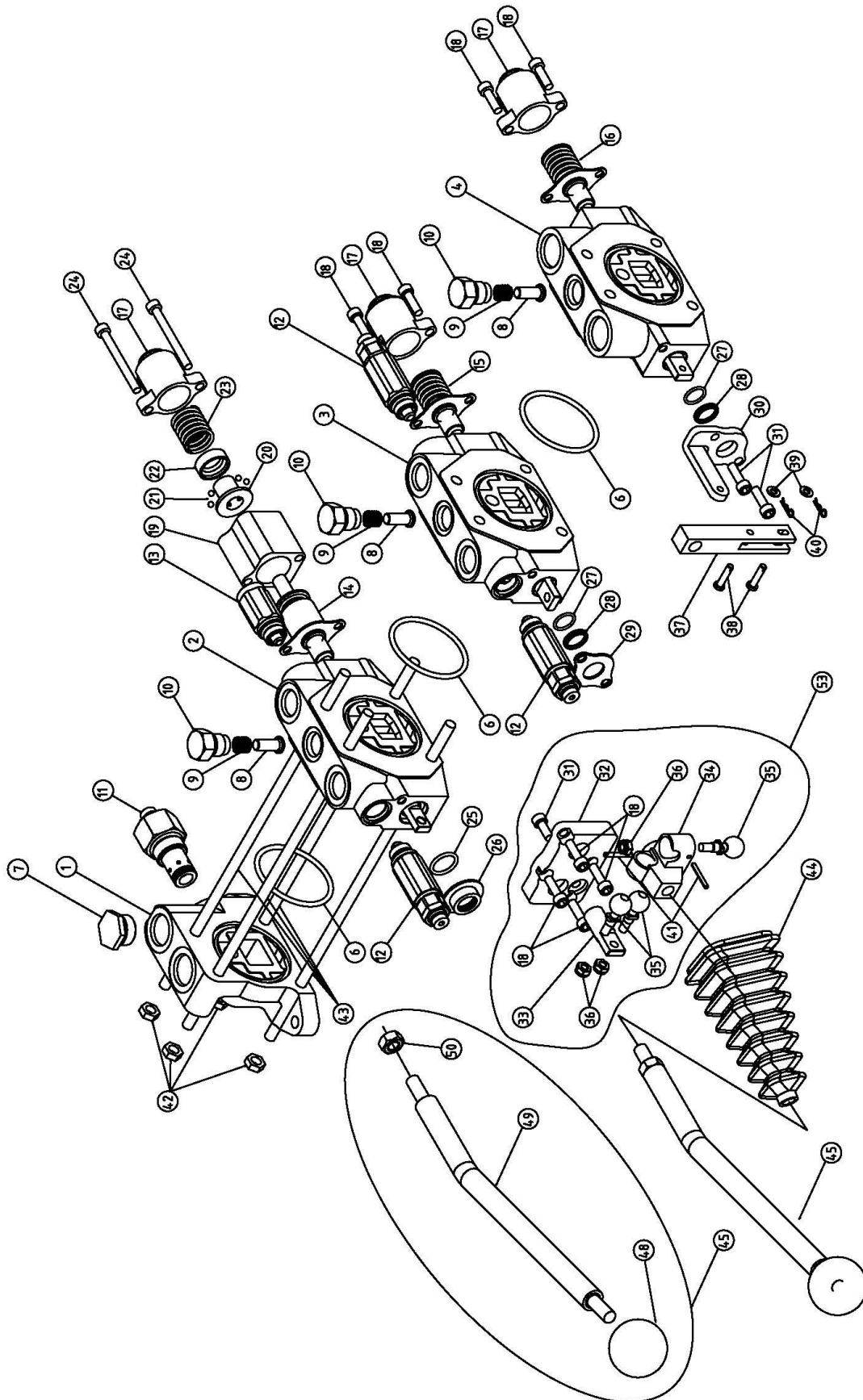
CONTROL VALVE ASSEMBLY (DINOIL DNC65/6)



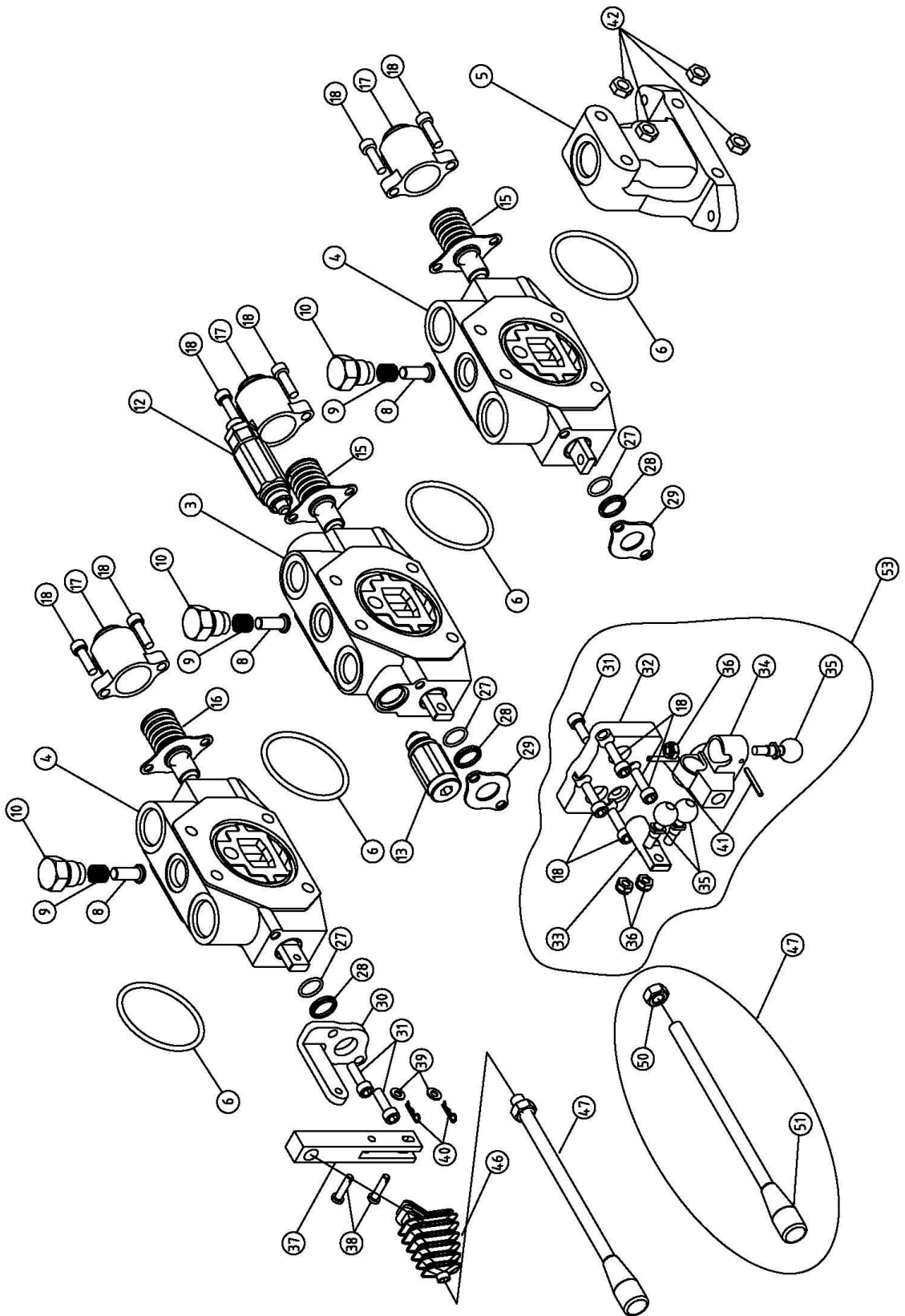
CONTROL VALVE ASSEMBLY (DINOIL DNC65/6)

REF	DESCRIPTION	PART No.	Q'ty	INTERCHANGE ABILITY
	Control Valve Ass'y	BC03-0000-P	1	
1	LEVER KIT M10x250mm 23° BENDED AT 85MM	BC03-0100	2	
2	ELEMENT DNC65 3/4-16SAE A1 VLAB TAPP	BC03-0200	2	
2-1	LEVER KIT M10x210mm	BC03-0201	2	
2-2	KIT HOUSING LEVER DINOIL P.40-42 2HOLE OUT CENTER	BC03-0202	2	
2-3	ELEMENT DNC65 3/4 SAE WITH AUXILIARY CARTRIDGE MANUFA	BC03-0203	2	
2-4	ALUMINUM END CAP OF SPOOL CONTROL	BC03-0204	2	
2-5	NO RETURN CARTRIDGE FOR DNC 40-50-65	BC03-0205	2	
3	JOYSTICK FOR DNC65 P.40	BC03-0300	1	
3-1	CONNECTOR FOR JOYSTICK	BC03-0301	1	
3-2	GROOVER WASHER D8 Zn	BC03-0302	3	
3-3	NUT M12 LOW UNI 5589 Zn	BC03-0303	1	
3-4	HOOD FOR JOYSTICK +	BC03-0304	1	
3-5	CABLE TIE, PLASTIC	BC03-0305	1	
3-6	TAPERED SCREW 8X16 UNI 5933 ZNC	BC03-0306	2	
3-7	DRAWING SCREW M8X16 HEAD D.11	BC03-0307	1	
3-8	JOYSTICK PLATE P.40 WITH PIVOT UP-LEFT	BC03-0308	1	
3-9	PIN FOR JOYSTICK PIVOT	BC03-0309	1	
3-10	TRIANGULAR PLATE FOR DNC120	BC03-0310	1	
3-11	SCREW TE 6X10 UNI 5737 8.8 ZNC	BC03-0311	1	
3-12	APPENDIX FOR JOYSTICK	BC03-0312	1	
3-13	ROD END CONNECTOR, SWIVEL, JOYSTICK M8	BC03-0313	3	
3-14	SCREW TCCE 6X10 UNI 5931 8.8 ZNC	BC03-0314	1	
3-15	LONG PIVOT WITHOUT SEGGER	BC03-0315	1	
3-16	NUT M8 LOW UNI 5589 Zn	BC03-0316	3	
3-17	PIVOT WITHOUT SEGGER	BC03-0317	1	
4	INLET COVER DNC65 1/2 G Z(150) WITH SOCKET FOR P1	BC03-0400	1	
4-1	BODY OF INLET COVER DNC50 P ON UP, P ON SIDE, PLUGGED	BC03-0401	1	
4-2	GRAIN RELIEF MAX PRESSURE CARTRIDGE(SET. 150)	BC03-0402	1	
4-3	PLUG REPLACING RELIEF VALVE	BC03-0403	1	
4-4	SOCKET FOR UPPER P 7/8-14SAE	BC03-0404	1	
5	ELEMENT DNC65 3/4-16SAE N7 VCAVLB(170) WITHOUT HOUSING	BC03-0500	1	
5-1	BODY OF ELEMENT DNC65 N7 3/4-16 SAE	BC03-0501	1	
5-2	PRESSURE LIMITER CARTRIDGE DNC50(SET. 170)	BC03-0502	1	
5-3	ALUMINUM END CAP OF SPOOL CONTROL	BC03-0503	1	
5-4	NO RETURN CARTRIDGE FOR DNC 40-50-65	BC03-0504	1	
6	ELEMENT DNC65 3/4-16SAE A1VLAB(150) WITHOUT HOUSING LEVER	BC03-0600	1	
6-1	ELEMENT DNC65 3/4SAE WITH AUXILIARY CARTRIDGE MANUFA	BC03-0601	1	
6-2	ALUMINUM END CAP OF SPOOL CONTROL	BC03-0602	1	
6-3	RELIEF, WORK PORT VLF 150 BAR	BC03-0603	2	
6-4	NO RETURN CARTRIDGE FOR DNC 40-50-65	BC03-0604	1	
7	ELEMENT DNC65 3/4-16SAE A1VCAVLB(170) WITHOUT HOUSING	BC03-0700	1	
7-1	ELEMENT DNC65 3/4SAE WITH AUXILIARY CARTRIDGE MANUFA	BC03-0701	1	
7-2	ALUMINUM END CAP OF SPOOL CONTROL	BC03-0702	1	
7-3	CARTRIDGE VLF DNC50(SET. 170)	BC03-0703	1	
7-4	NO RETURN CARTRIDGE FOR DNC 40-50-65	BC03-0704	1	
8	ELEMENT DNC65 3/4-16SAE A1 VLAB PLUGGED WITHOUT HOUSING	BC03-0800	1	
8-1	ELEMENT DNC65 3/4SAE WITH AUXILIARY CARTRIDGE MANUFA	BC03-0801	1	
8-2	ALUMINUM END CAP OF SPOOL CONTROL	BC03-0802	1	
8-3	NO RETURN CARTRIDGE FOR DNC 40-50-65	BC03-0803	1	
9	KIT 4 Tie-rod L.334MM NUT&SHORT M8	BC03-0900	1	
9-1	KIT Tie-rod L.334MM WITH NUT M8	BC03-0901	4	
9-2	NUT M8 HIGH UNI 5587 CLASS 8.8 Zn	BC03-0902	4	
10	OUTLET COVER DNC65 7/8-14SAE TT1. T PLUGGED	BC03-1000	1	
10-1	BODY OF OUTLET COVER DNC65 7/8SAE MANUFACTURING	BC03-1001	1	
10-2	ASSEMBLY PLUG OUTLET COVER DNC65	BC03-1002	2	
11	JOYSTICK KIT P.40	BC03-1100	1	
11-1	CONNECTOR FOR JOYSTICK	BC03-0301	1	
11-2	GROOVER WASHER D8 Zn	BC03-0302	3	
11-3	NUT M12 LOW UNI 5589 Zn	BC03-0303	1	
11-4	HOOD FOR JOYSTICK +	BC03-0304	1	
11-5	CABLE TIE, PLASTIC	BC03-0305	1	
11-6	TAPERED SCREW 8X16 UNI 5933 ZNC	BC03-0306	2	
11-7	DRAWING SCREW M8X16 HEAD D.11	BC03-0307	1	
11-8	PLATE HOOD HOLDER	BC03-1101	1	
11-9	SHORT PIVOT WITH SEGGER	BC03-1102	1	
11-10	PLATE SPHERE PIVOT HOLDER	BC03-1103	1	
11-11	SCREW TE 6X10 UNI 5737 8.8 ZNC	BC03-0311	1	
11-12	APPENDIX FOR JOYSTICK	BC03-0312	1	
11-13	ROD END CONNECTOR, SWIVEL, JOYSTICK M8	BC03-0313	3	
11-14	SCREW TCCE 6X10 UNI 5931 8.8 ZNC	BC03-0314	1	
11-15	LONG PIVOT WITHOUT SEGGER	BC03-0315	1	
11-16	NUT M8 LOW UNI 5589 Zn	BC03-0316	3	
11-17	PIVOT WITHOUT SEGGER	BC03-0317	1	

CONTROL VALVE ASSEMBLY (HANIL AV 80/6)




CONTROL VALVE ASSEMBLY (HANIL AV 80/6)



CONTROL VALVE ASSEMBLY (HANIL AV 80/6)

REF	DESCRIPTION	SPECIFICATION	PART No.	Q'ty	INTERCHANGE ABILITY
	Control Valve Ass'y		BC04-0000-P	1	
1	BLOCK ; BA TYPE(INLET)	UNF 7/8-14	BC04-0100	1	
2	BLOCK ; HB TYPE(BOOM)	UNF 3/4-16	BC04-0200	1	
3	BLOCK ; HA TYPE	UNF 3/4-16	BC04-0300	2	
4	BLOCK ; EA TYPE	UNF 3/4-16	BC04-0400	3	
5	BLOCK ; GB TYPE (OUTLET)	UNF 7/8-14	BC04-0500	1	
6	O-RING	AS568-228	BC04-0600	7	
7	PLUG ASS'Y	UNF 7/8-14	BC04-0700	1	
8	POPPET ; CHECK		BC04-0800	6	
9	SPRING ; CHECK		BC04-0900	6	
10	PLUG-CHECK ASS'Y	PF 3/8	BC04-1000	6	
11	M.R.V. ASS'Y	150kgf/cm ² , 351pm	BC04-1100	1	
12	O.R.V. ASS'Y	170kgf/cm ² , 351pm	BC04-1200	4	
13	A.C.V. ASS'Y		BC04-1300	2	
14	SPOOL ASS'Y ; FLOAT		BC04-1400	1	
15	SPOOL ASS'Y ; STD		BC04-1500	3	
16	SPOOL ASS'Y ; STABILIZER		BC04-1600	2	
17	RETURN CAP		BC04-1700	6	
18	WRENCH BOLT	M6-1.0P 20L	BC04-1800	18	
19	HOUSING ; DETENT		BC04-1900	1	
20	SOCKET ; DETENT		BC04-2000	1	
21	BALL ; DETENT	P 5/32"	BC04-2100	4	
22	SLEEVE ; DETENT		BC04-2200	1	
23	SPRING ; RETURN		BC04-2300	1	
24	WRENCH BOLT	M6-1.0P 60L	BC04-2400	2	
25	O-RING	1B-P18	BC04-2500	1	
26	SEAL KIT ASS'Y ; FLOAT		BC04-2600	1	
27	O-RING	1A-P15	BC04-2700	5	
28	DUST WIPER		BC04-2800	5	
29	SEAL PLATE		BC04-2900	3	
30	BRACKET ; STABILIZER		BC04-3000	2	
31	WRENCH BOLT	M6-1.0P 15L	BC04-3100	6	
32	BRACKET ; JOINT		BC04-3200	2	
33	SUPPORT ; JOINT		BC04-3300	2	
34	BLOCK ; JOINT		BC04-3400	2	
35	SUPPORT ; BALL	M6-1.0P	BC04-3500	6	
36	NYLON NUT	M6-1.0P	BC04-3600	6	
37	LEVER ; STABILIZER		BC04-3700	2	
38	PIN		BC04-3800	4	
39	WASHER ; PIN		BC04-3900	4	
40	SNAP PIN		BC04-4000	4	
41	SPRING PIN	P3.0-L25L	BC04-4100	4	
42	NUT	M8-1.25P	BC04-4200	8	
43	TIE BOLT	M8-1.25P 326L	BC04-4300	4	
44	BOOT , CONTROL		BC04-4400	2	
45	HAND LEVER		BC04-4500	2	
46	BOOT , CONTROL		BC04-4600	2	
47	HAND LEVER		BC04-4700	2	
48	PLASTIC BALL	∅40	BC01-2400	2	
49	LEVER STICK		BC04-4900	2	
50	NUT	M10-1.5P	1002-1051	4	
51	PLASTIC BALL		BC04-5100	2	
52	LEVER STICK		BC04-5200	2	
53	JOYSTICK KIT		BC04-5300	2	

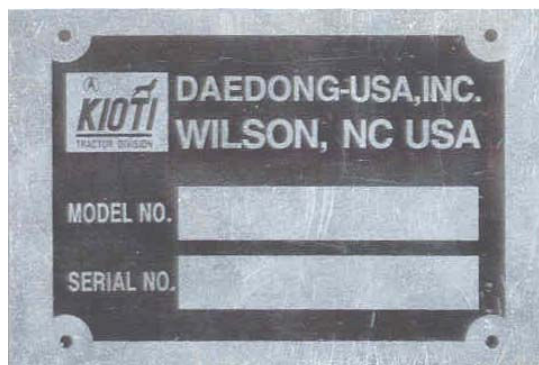
DECALS

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



Logo, Part No : CK12-3004

Location : Both side of Boom Arm



Information, Name Plate

Part No : CK12-5001

Location : Right Side of the Backhoe Mainframe.



Information, Bar Code

Part No : BH35-0114

Location : Left Side of the Backhoe Mainframe.



Logo, Part No : BH35-4000

Location : Both side of Boom arm

NOTE : Refer to category "Safety decals"