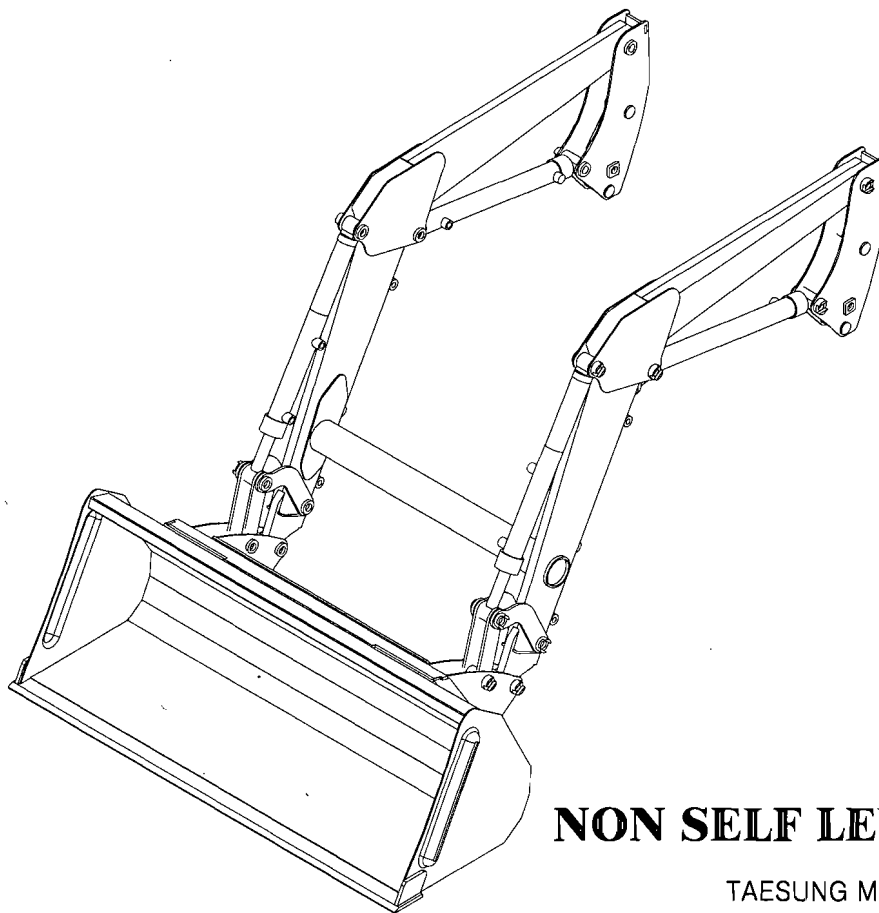


TAE SUNG

OPERATING & SAFETY MANUAL

Branson 10/20 700 SERIES FRONT END LOADER & ATTACHMENTS



NON SELF LEVING TYPE

TAESUNG MFG. CO., LTD.

Table of contents

• Introduction	1
• Specifications	2
• Safety precautions	3~5
Safety alert symbol	3
Important safety precautions	4~5
• Operation instructions and safety tips	6~10
Filling the bucket	6
Lifting the load & Rollback Carrying the load	7
Carrying the load	7
Loading from a pile	8
Dumping the bucket	8
Back Grading	8
Digging with bucket	9
Backfilling	9
Incorrect loading	10
• Attaching and Detaching loader frame arms	11~12
Detaching procedure	11~12
Attaching procedure	12
• Tool Carrier Operation	13
Tool carrier installation	13
Tool removal	13
• Lubrication and Maintenance	14
• Remote Control System	15
Mounting of Cables and Joystick Control Lever	15
Mounting of Cables to Directional Control Valve	16
Final Fitting and Operational Checks	16

INTRODUCTION

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

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

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

Important:

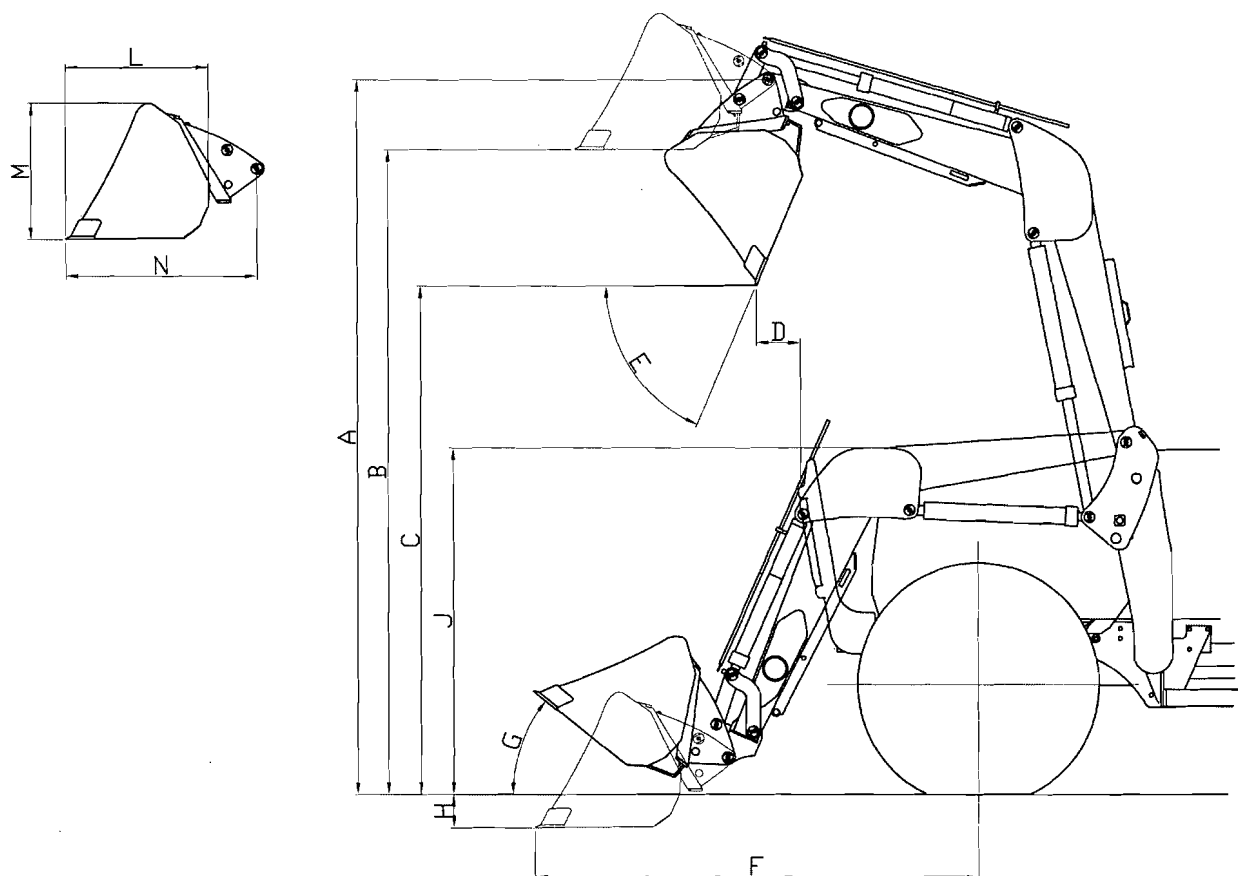
Illustrations used in this manual may not show all safety equipment that is recommended to ensure safe operation of tractor and loader. Refer to the Safety Precautions section of this manual for information concerning safety. consult your dealer for further information.

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 should be recorded on the Delivery and Registration form and also below for your reference.

SPECIFICATIONS



* Specifications shown are based on ASAE Standards.

* Specifications and design are subject to change without prior notice.

Loader Model : taesung 743

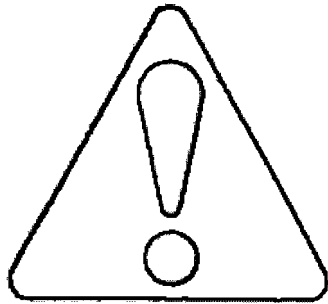
Printed : 2007-04-25

Tractor Model : Branson 10 & 20 series, PHAROS

Bucket Leveling : Non-Self level type

A. Maximum lift height to pivot pin	2,370 mm	93.3 "
B. Maximum lift height under level bucket	2,085 mm	82.1 "
C. Clearance with bucket dumped	1,550 mm	61.0 "
E. Maximum dump angle	85.0 °	85.0 °
G. Maximum rollback angle	50.0 °	50.0 °
H. Digging depth	250 mm	9.8 "
L. Bucket depth	591 mm	23.3 "
M. Bucket height	581 mm	22.9 "
N. Bucket length	801 mm	31.5 "
2. Lift capacity to maximum height-at pivot pin	924 kg	2,037 lb
3. Breakout force-at pivot pin	1,213 kgf	2,674 lb
5. Bucket width	1,574 mm	62.0 "
6. Bucket capacity	0.42 m ³	14.7 cu.ft
7. Boom cylinder	30x50x645x430ST mm	1.2x2x25.4x16.9ST "
8. Bucket cylinder	30x50x968x365ST mm	1.2x2x38.1x14.4ST "
13. Maximum pressure (Governing loader operation)	160 bar	2275.2 psi

Safety Alert Symbol



This Safety Alert Symbol means: **“ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!”**

This symbol is used to call attention to safety precautions that should be followed by the operator to avoid accidents. When you see this symbol, carefully read the message that follows and heed its advice. Failure to comply with safety precautions could result in death or serious bodily injury.

Safety Signs *Signal Words*

The signal words **DANGER, WARNING, AND CAUTION** are used on the equipment safety signs. These words are intended to alert the viewer to the existence and the degree of hazard seriousness.



This signal word indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.



This signal word indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury

It may also be used to alert against unsafe practices

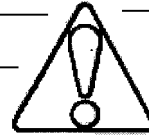


This signal word indicates a potentially hazardous situation exist which, if not avoided, may result in minor or moderate injury.

It may also be used to alert against unsafe practices.

IMPORTANT SAFETY PRECAUTIONS

This symbol is used to call attention to safety precautions that should be followed by the operator to avoid accidents. When you see this symbol, carefully read the message that follows and heed its advice. Failure to comply with safety precautions could result in death or serious bodily injury.



In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel in the operation, transport, maintenance and storage of equipment. Lack of attention to safety can result in accident, personal injury, reduction of efficiency and worst of all—loss of life. Watch for safety hazards and correct deficiencies promptly. Use the following safety precautions as a general guide to safe operations when using this machine. Additional safety precautions are used throughout this manual for specific operating and maintenance procedures. Read this manual and review the safety precautions often until you know the limitations.

THE LOADER

1. Read the loader operator's manual to learn how to operate your loader safely. Failure to do so could result in serious injury or death and equipment damage.
2. Become familiar with all the machine's controls and all the caution, warning and danger decals affixed to the machine before attempting to start or operate.
3. Improper use of a loader can cause serious injury or death.
4. Do not lift or carry anybody on the loader or in the bucket or attachment.
5. Never allow anyone to get under the loader bucket or reach through the booms when the bucket is raised.
6. Do not walk or work under a raised loader bucket or attachment unless it is securely blocked or held in position
7. Avoid overhead wires and obstacles when loader is raised. Contacting electrical lines can cause electrocution.
8. Make sure all parked loaders on stands are on a hard, level surface.
9. Use a piece of cardboard or wood rather than hands and wear eye protection when searching for hydraulic leaks.
Escaping hydraulic oil under pressure can penetrate skin. If oil is injected into skin, it must be surgically removed within a few hours by a doctor or gangrene may result.
10. Before disconnecting hydraulic lines, relieve all hydraulic pressure.
11. Do not tamper with the relief valve setting. The relief valve is pre-set at the factory. Changing the setting can cause overloading the loader and tractor and serious operator injury may result.
12. Always wear safety goggles when repairing or servicing machine.

SAFETY PRECAUTIONS CONTINUED

13. When servicing or replacing pins in cylinder ends, buckets, etc., always use a brass drift and hammer. Failure to do so could result in injury from flying fragments.
14. Replace damaged or illegible safety decals. See decal page for required decals.
15. Do not modify or alter or permit anyone else to modify or alter the loader, any of its components or any loader function without first consulting your local dealer.

OPERATING THE LOADER

1. It is the loader owner's responsibility to instruct and have a person read operator's manual, safety decals and become familiar with machine controls before allowing them to operate loader.
2. Do not allow children to operate the loader.
3. Before starting or operating the equipment, make a walk around inspection and check for loose or damaged components. Correct any deficiency before starting.
4. Keep the area of operation clear of all persons, particularly small children. The operator should cease operation whenever anyone comes within the operating area.
5. Operate the loader from the "Operator's Seat Only."
6. Exercise caution when operating the loader with a raised loaded bucket.
7. Avoid loose fill, rocks and holes. They can be dangerous for loader operation or movement.
8. Be extra careful when working on inclines.
9. Allow for the loader length when making turns.
10. Stop the loader arms gradually when lowering or lifting.
11. Use caution when handling loose or shift able loads.
12. Carry loader arms at a low position during transport.
13. Lower loader arms, stop engine, and lock brakes before leaving the tractor seat.
14. Operate the loader controls only when properly seated at the controls.
15. Do not use loader for handling large, heavy objects such as logs, oil drums, etc.
16. Handling large, heavy objects is dangerous due to:
 - *Possibility of rolling the tractor over.
 - *Possibility of upending the tractor.
 - *Possibility of the object rolling or sliding down the loader arms onto the operator.

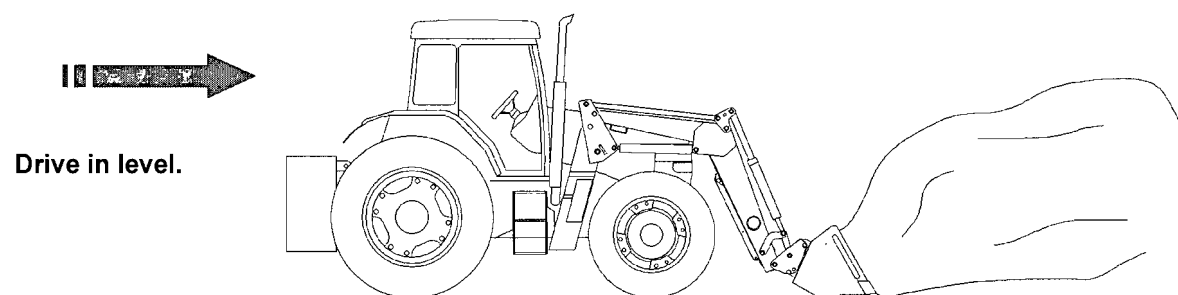
OPERATING INSTRUCTIONS and SAFETY TIPS

Operating Front Wheel Assist Tractor

When operating the loader/tractor unit with front wheel assist engaged, to enable an even transmission loading, it is recommended that a rear linkage counterweight be fitted.

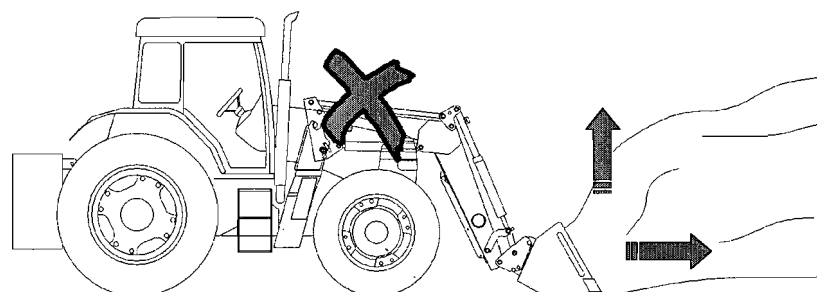
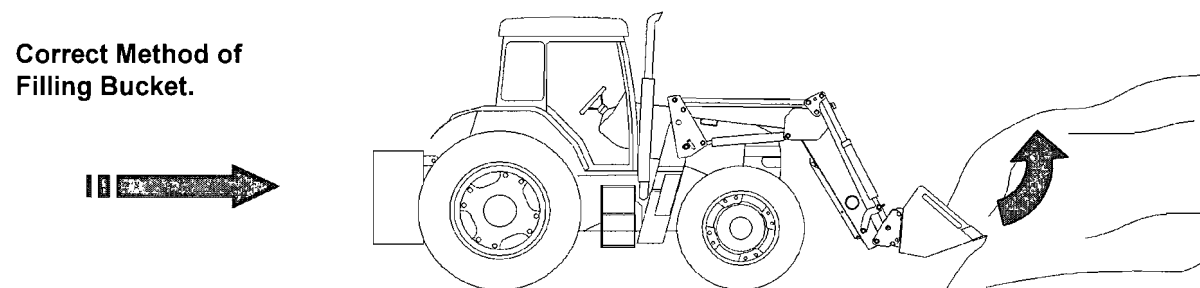
Filling The Bucket

Approach and enter the pile with a level bucket.



For optimum performance move the control lever(s) to direct pressure to both the lift and crowd cylinders, effectively lifting and rolling the bucket back.

The combined action of the lift and crowd cylinders increase loading efficiency, whereas a level bucket (throughout the lifting cycle) creates more resistance against bucket lifting and increases the break-out force required.



NOTE : Overfilling the bucket in heavy or packed material may cause the loader to stall. If loader stalls, back up or reduce the amount of material to be handled.

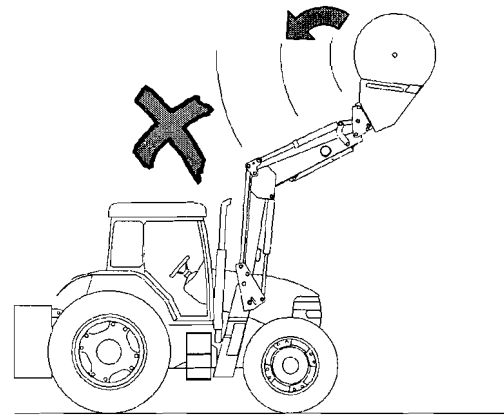
Lifting the Load & Rollback

DANGER - Avoid serious injury or death from falling objects.

Your Front End Loader is fitted with a Mechanical Level Lift System, when operated correctly you will avoid any chance of rollback.

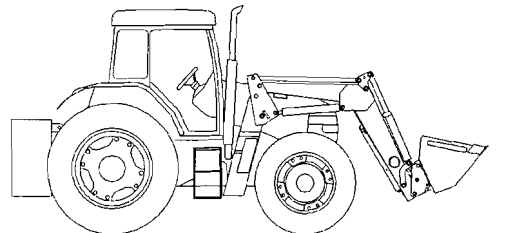
DO NOT handle round bales unless loader is equipped with an approved bale handling attachment. Otherwise the bale can fall (rollback) onto the operator or bystanders as loader is raised.

Never lift a load while the tractor is in motion. As a competent operator you should travel to the point where load is to be raised, cease all motion, raise the load as required to clear stock pile or vehicle, then travel the final distance with care and load or unload attachment. The same applies when moving away from a stock pile or vehicle, reverse until loader clears obstruction, cease all motion, lower loader to travel height then proceed to reverse away looking in the direction of travel at all times.

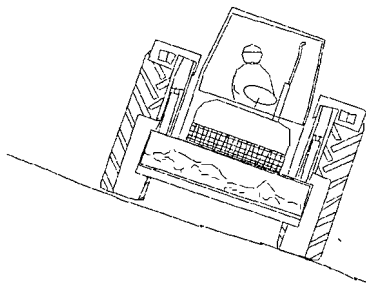


Carrying The Load

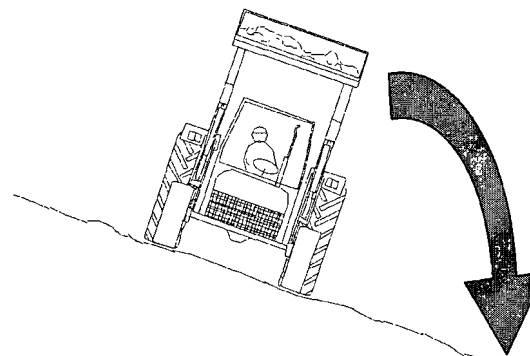
For maximum stability and visibility, carry the attachment as low as conditions allow, irrespective of whether the attachment is loaded or empty. When traveling with a load, **do not exceed 8 kph**.



When operating the loader on a hill or slope, maximize tractor stability by keeping the centre of gravity of the attachment as low as possible. Ensure a counterweight is fitted and rear wheel track has been set to the widest practical position. Likewise, in case a wheel drops in a rut when transporting a load, keep the attachment as low as possible to avoid rollover. **Travel slowly.**



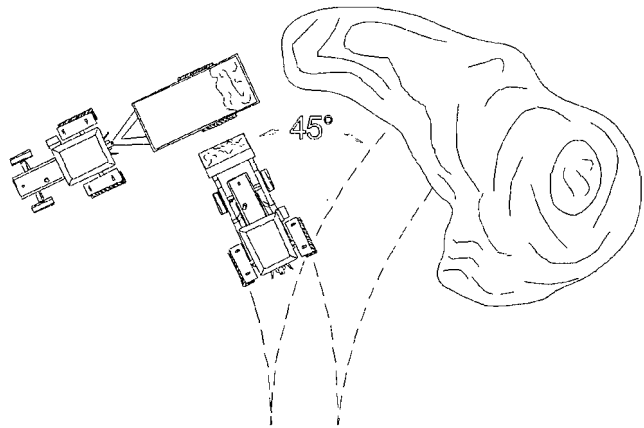
Safe Centre of Gravity of Load



Unsafe High Centre of Gravity of Load

Loading From A Pile

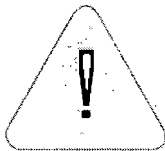
To increase loading efficiency, minimize the angle of turn and length of run between the pile and the vehicle. Always keep the working area clean to maintain a level platform, prevent tyre damage and speed up loading cycle. Carry loaded bucket just above ground and only raise the loader when reaching the vehicle.



Dumping The Bucket

Lower a heavy load slowly. Stopping a heavy loader suddenly after it has gained downward momentum may result in damage to the loader/tractor unit.

When dumping a load into a vehicle, lift the bucket high enough to clear the side of the vehicle and move the tractor in as close as possible before dumping the bucket. After dumping, back away from the vehicle until loader is clear, lower loader to travel height then proceed to reverse away looking in the direction of travel.

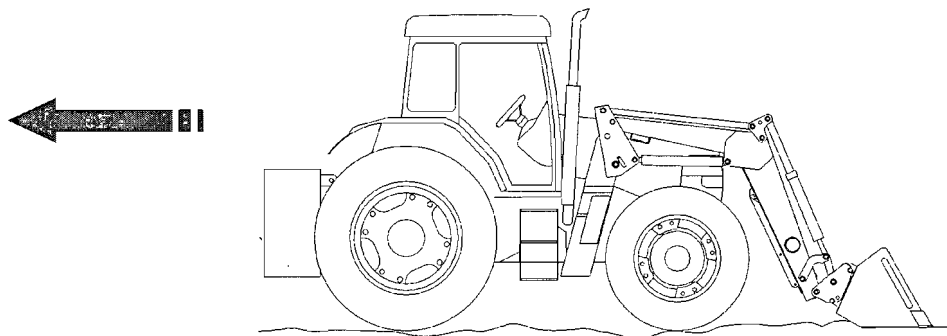


CAUTION!

Do not use the "float" position of the hydraulic control valve to lower the loader. Loss of control results and the loader boom arms will fall due to its own weight.

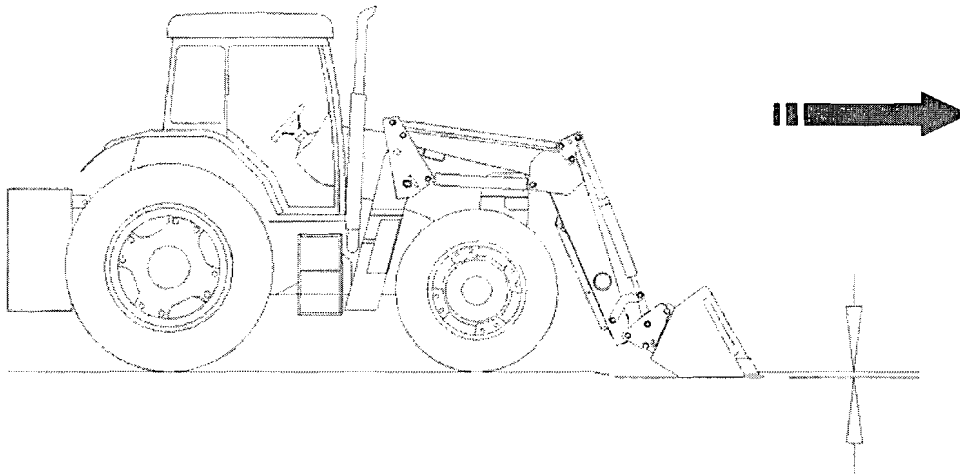
Back Grading

To back grade the work surface orientate the bucket so that the bottom of the bucket is horizontal to ground line, using the heel of the bucket to move material while the bottom creates a smooth flat surface. This can be done with the bucket loaded (using weight of bucket) and the lift circuit in float allowing loader frame arms to maintain bucket contact to work area while tractor travels over uneven ground. Alternately with the bucket flat but empty you can apply slight down pressure with loader frame arms.



Digging With Bucket

Adjust bucket to level position and lower frame arms to the ground. Drive forward and tilt the bucket forward making it penetrate the ground, once the cut has been started roll the bucket back to the level position and at the same time lower the frame arms, use the bucket cylinders to adjust and maintain a cut 50~70mm deep, move forward until bucket is full and crowd bucket back, continue this sequence until total required depth is reached. Wheel spin will be avoided if the cut is not too deep, but within reason the nature of the soil will determine the depth of cut that can be taken.



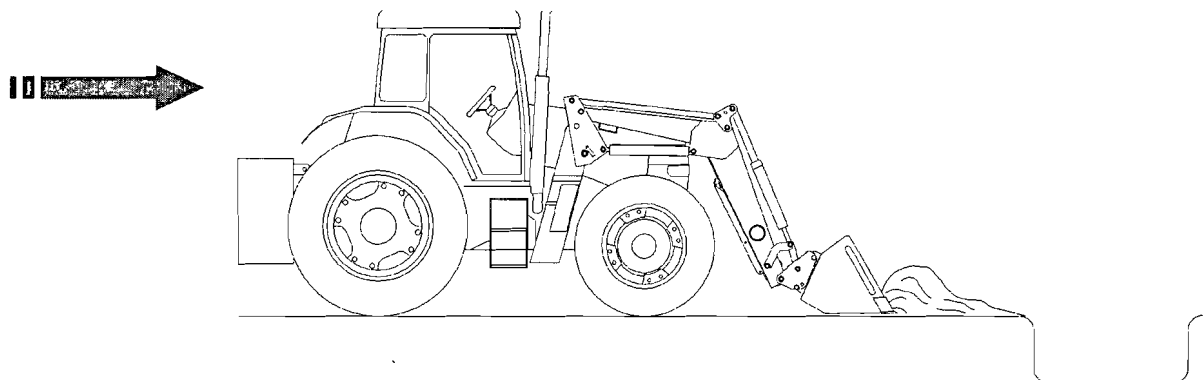
CAUTION!



Check underground utility locations before digging. To help prevent bodily injury or death, do not leave the operator's seat if any part of the loader comes into contact with cables. Back away from the cable before getting off the tractor. Call the relevant authorities.

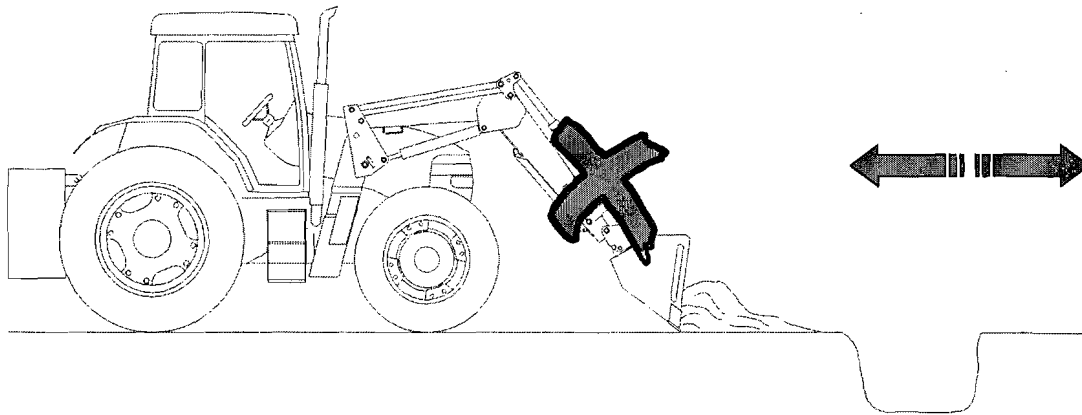
Backfilling

Approach the pile with bucket bottom level and flat on ground.



Leave any dirt in the bucket as dumping on each pass wastes time.

Do not use the bucket in the dump position for backfilling or back grading, as this will impose severe shock loading on the bucket cylinders, top link bars and allows excess wear to the cutting edge. Using the bucket in this position also makes it more difficult to maintain a level surface.

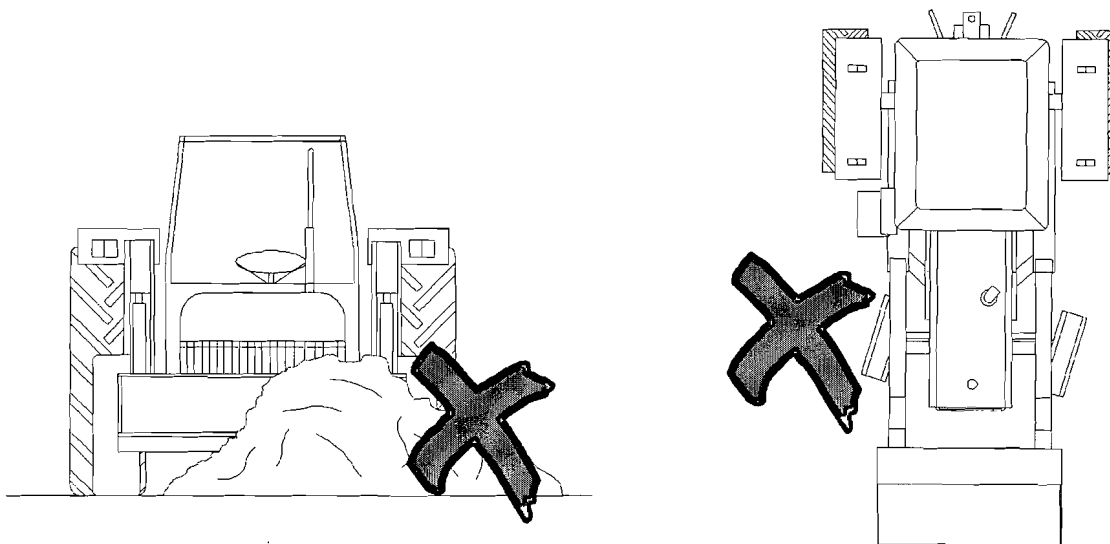


Incorrect Loading

Avoid side loads to the tractor, mounting kit and loader frame.

Do not drive in forwards or reverse with the front wheels turned when an attachment is touching the ground. This could result in damage to the Front End Loader.

Avoid heavy off-centre loading of the attachment.



Avoid these loading conditions when using your Front End Loader

ATTACHING AND DETACHING LOADER FRAME ARMS

Attaching and detaching a Tae-Sung Loader is a simple, quick, one-man operation using two simple latch-pins to securely lock the loader frame arms to the tractor mounting kit. The following steps are designed to assist in this operation.

Detaching Procedure

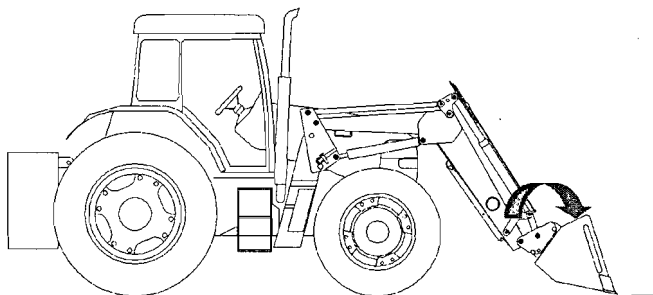


CAUTION!

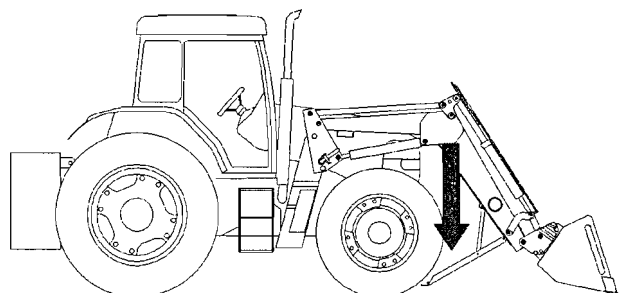
To prevent personal injury or death from falling loader, always detach on a hard, level surface. Loader must be fitted with an earthmoving bucket.

Place the tractor on a hard, level surface and ensure that a bucket is fitted to the loader. Care should always be taken to be aware of people in the area and to give adequate clearance for reversing & manoeuvring.

- STEP 1: Dump bucket approximately 15° and lower loader Frame arms so that bucket cutting edge is just above ground.

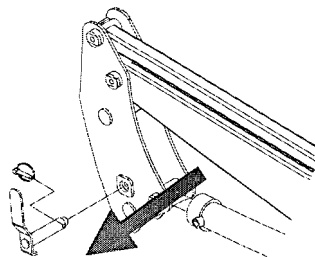


- STEP 2: Lower the frame stands by pulling them out of their mounts, remove "R" clip from inner stay raising into locking position and securing using the same "R" clip. (Ensure that both frame stands are set equal in length, once inner stays have been adjusted for your tractor future adjustment should not be required.)

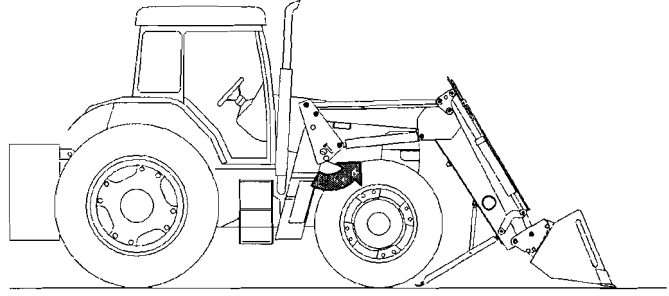


- STEP 3: Remove Ring-Pins located above Latch-Pins.

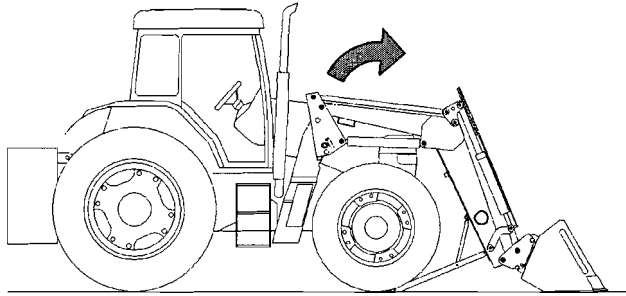
- STEP 4: Remove Latch-Pins.



STEP 5: Lower loader frame arms to ground and completely close *lift* cylinders. (This will disengage the lower locking pins of the top posts from the mounting kit).

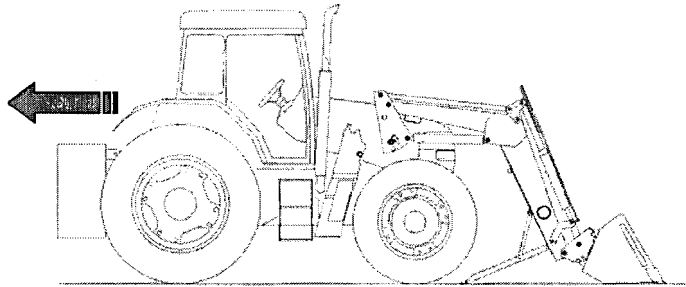


STEP 6: Slightly crowd the bucket back which will raise the back of the loader frame arms disengaging the top locking pins of the top post from the mounting kit. With loader frame arms just clear of mounting kit stop crowding bucket. Place the tractor in neutral with the park brake disengaged for this operation. (If loader frame arms don't come loose tractor may have to be carefully driven 2-3 cm forward, or check adjustment of frame stands.)



STEP 7: Turn off tractor; operate loader controls to relieve hydraulic pressure. Then disconnect hydraulic hoses and place dust caps onto quick-couplings.

STEP 8: Reverse the tractor carefully until it is completely free of the loader.



NOTE! Make sure that the hydraulic hoses don't get caught on the tractor.

Attaching Procedure

STEP 1: Carefully drive tractor between loader frame arms.

STEP 2: Reconnect hydraulic hoses ensuring that they are connected correctly by matching the dust cap colours.

STEP 3: Slightly dump bucket to lower the back of the loader frame arms until the top locking pins engage into the mounting kit. (Reverse STEP 6 *Detaching Procedure*)

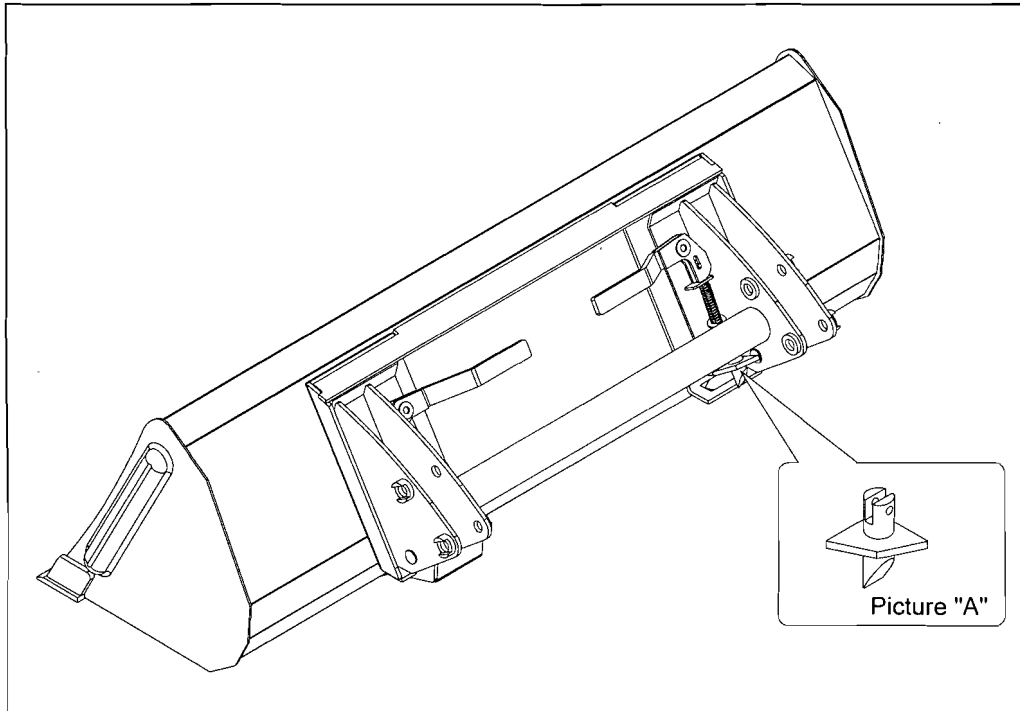
STEP 4: Operate control lever in the raise direction to extend lift cylinders, as cylinders extend the lower locking pins will engage into the mounting kit and loader frame arms will raise, stop the lifting operation with the bucket approximately 1 metre off the ground.

STEP 5: Replace Latch-pins and Ring-pins.

STEP 6: Fold away inner stays and raise frame stands pushing firmly into mounts.

NOTE: A small amount of grease applied to the contacting surfaces between the top posts and the mounting kit will assist attaching and detaching of loader frame arms.

TOOL CARRIER OPERATION



NOTE

- Position loader and tool such as quick attach bucket, bale spear, lift fork ETC on hard level surface.

1. Tool carrier installation :

Adjust the boom to make the tool carrier top is a little lower than tool's upper socket. Tip the tool Carrier down a little so that the top of the tool carrier will contact the tool first. Move the tractor gently forward to tool until top of tool carrier contact the tool base. Lift the boom and carrier a little up so that the top of carrier can hook the tool.

Do not lift the boom too much to avoid the tool off the ground.

Roll back the carrier until the whole surface of carrier and tool touched each other. Turn the lock lever of carrier to lock position. If you can not turn lever to the lock position then push the tool side by side align the holes of tool and taper pins of carrier and try to turn the lever again.

Be sure to check the taper pins of carrier inserted securely into the holes of tools.

The tapered surface of taper pin should contact with the edge of hole of tool as shown in the picture "A".

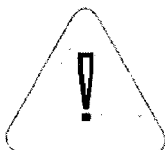
2. Tool removal :

Adjust the boom cylinder and bucket cylinder until the bottom surface of tool touched the ground.

Turn the lock lever of carrier to unlock position. Tip the carrier down until top of carrier freed from the upper socket of tool. Back the tractor up slowly.

LUBRICATION AND MAINTENANCE

CAUTION!



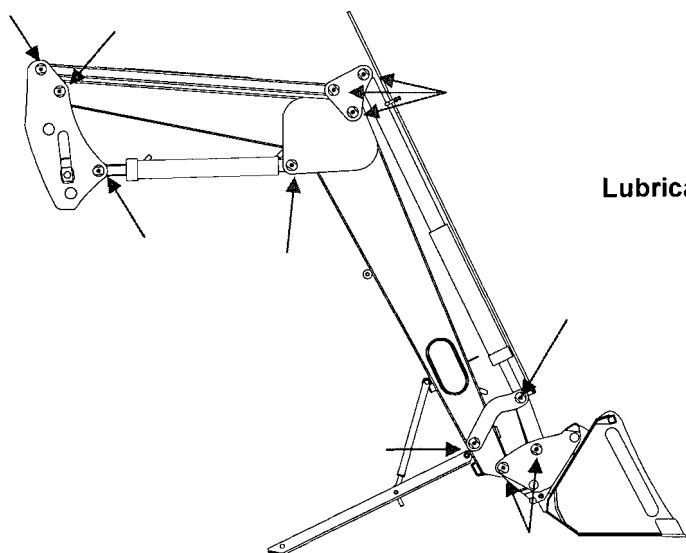
Before servicing the unit and performing maintenance stop the tractor, lower the loader to the ground, set the parking brake, disengage the Power Take Off and all power drives, shut off the tractor engine and remove the ignition key.

Lubrication

Lubrication is one of the most important aspects of service, as it increases the loader life by decreasing the friction between moving parts. Lubrication should be carried out on a daily basis or every 8 hours under normal operating conditions, and more often under extreme conditions.

Lubrication fittings (in the form of grease nipples) are located at all pivot points on the loader. These fittings are one-way valves through which a lubricant (grease) can be supplied to a bearing via the use of a grease gun.

To ensure complete lubrication of the pivot pins, lower the loader to rest the attachment on the ground, stop the engine and release the hydraulic pressure in the cylinders. Use a good grade of lubricant/grease that is suitable for general-purpose application. Remove all dirt from the lubrication point before greasing and remember to wipe off excess grease after lubricating.



Lubrication Points on a "700" Series Loader.

No. Per side = 11

Total = 22

Remote Control System

Mounting of Cables and Joystick Control Lever

Before fitting cables to the joystick control lever, the cables must be fed through the floor of the tractor.

Refer to Figure 1 for reference to following installation points on fitting cables to joystick control lever.

- To connect cables to joystick control lever start by loosening the rubber boot (D) from the housing.
- Loosen the two screws (G) so as to not obstruct fitting of cables into collar. Also loosen fixed pivot post (C) by loosening lock screw (I).
- Feed ball end of cables (A & B) through housing and guide them into the seat of the yoke (E). The ball joints can be lubricated with petroleum jelly or the like.
- Draw the cables back into the housing and secure fixed pivot post (C) by tightening lock screw (I).
- Secure cables (A & B) using the screws (G) to locate and lock into locking grooves (F).
- Use the locking arm (H) to lock the joystick in the vertical neutral position. Replace rubber boot (D) onto housing.
- If the joystick control lever is to be mounted from the side, or the housing needs to be rotated 90° CCW, then spacer (J) needs to be moved and cut shorter to suit. Ensure to adjust joystick handle orientation to suit changes.

NOTE: It is important that the joystick control lever housing is mounted with the fixed pivot post (C) placed in the right rear corner (as shown in Figure 1 Option 1) with locking arm (H) at the back of the housing, or, if the joystick control lever housing must be mounted from the side (or rotated 90° CCW) the fixed pivot post (C) must be placed in the left rear corner (or locking arm (H) to the left hand side of the housing Option 2). This will ensure that the float function of the directional control valve can only be actuated when moving the joystick in the fully forward position.

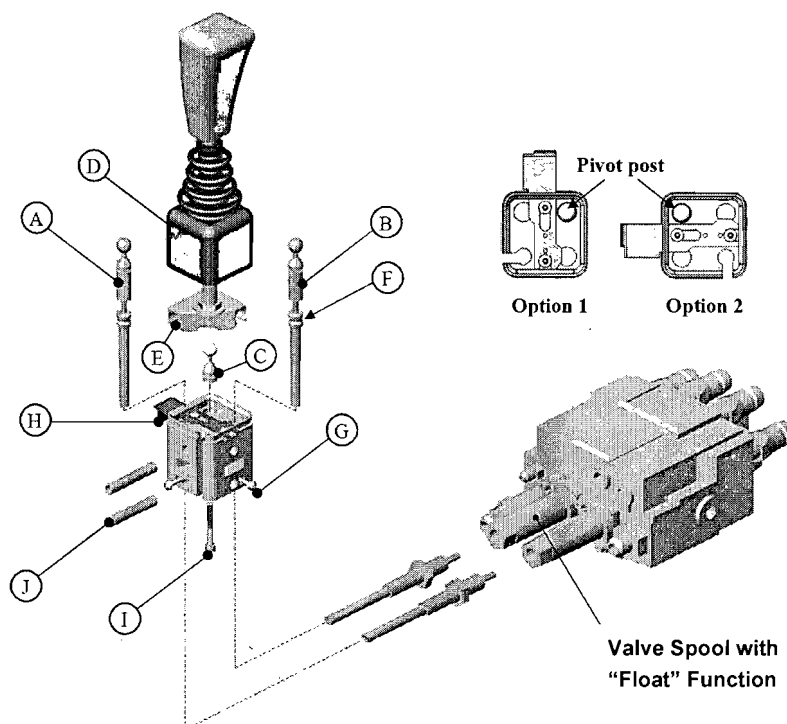


Figure 1 Cable Mounting to Joystick Control Lever

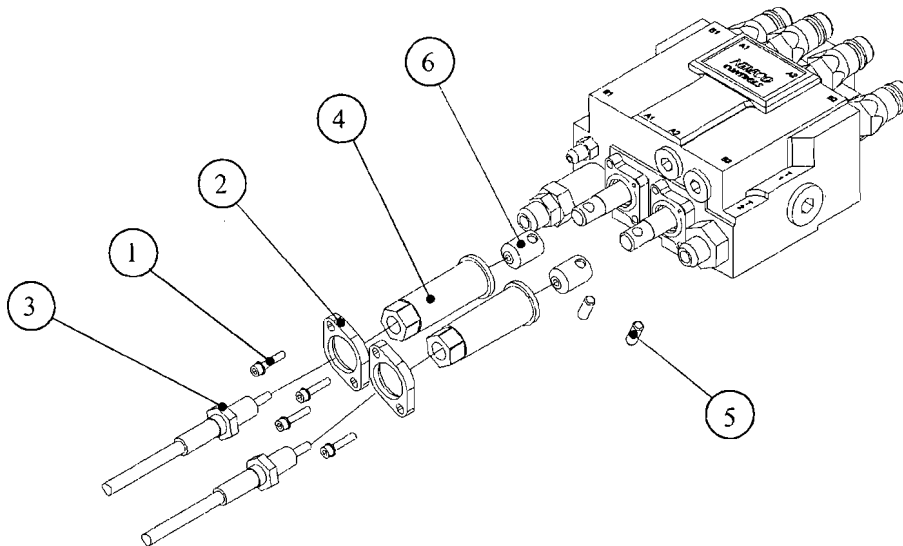


Figure 2 Cable Mounting to Directional Control Valve

Mounting of Cables to Directional Control Valve

Refer to **Figure 2** for reference to following installation points on fitting cables to directional control valve.

- With the directional control valve already fixed to the mounting kit, remove the socket head cap screws (1) along with the sleeve retainer (2) and sleeve (4).
- Remove cable-connecting cup (6) from end of cable and feed sleeve retainer over end of cable. Then screw lock nut (3) and sleeve (4) onto cable end until they can be slid over cable. Refit cable connecting cup (6) to end of cable.
- Slide cable-connecting cup (6) over spool end and secure with pin (5). To ensure correct lever movement connect the control cable on the left of the housing (A) to the lift/lower/float function spool of the valve.
- Screw sleeve (4) onto cable end and tighten by hand until the slack has been taken up, slide sleeve retainer (2) into position and tighten socket head cap screws (1). Slide lock nut (3) onto cable end and tighten.
- Release locking arm (H) and check that the joystick control lever always returns to the neutral position, except when lever is moved completely forward into the float position, the joystick should remain locked in this position until intentionally pulled back to neutral.

Final Fitting and Operational Checks

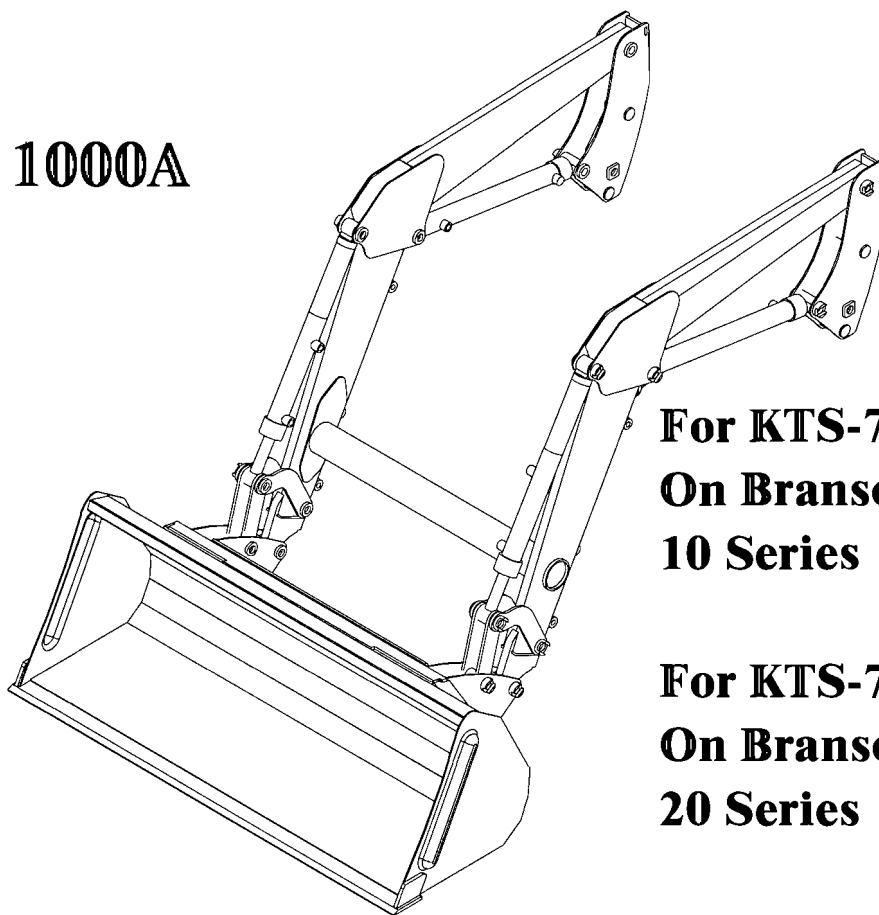
With all the components of the Front End Loader installed carry out the following steps to ensure correct fitment and operation has been achieved.

- Start tractor and ensure that all loader movements correspond to the intended control lever action.
- When fitted to tractor remote valves remote levers are moved forward to lower frame arms or dump bucket, float function only available on frame arm lowering circuit, when pulled backwards loader frame arms raise or crowds bucket.
- When fitted with directional control valve the loader frame arms will lower when joystick is moved forward, pushing joystick fully forward the frame arms will be in float, moving joystick back will raise frame arms, moving joystick to the right will dump bucket and moving joystick to the left will crowd the bucket.

TAE SUNG

KTS-743L/744L Front End Loader

1000A



**For KTS-743L
On Branson Tractors
10 Series**

**For KTS-744L
On Branson Tractors
20 Series**

NON SELF LEVING TYPE

Parts Catalogue

CONTENTS

MAIN FRAME ASSEMBLY 1010

HYDRAULIC PIPING 2010

HYDRAULIC VALVE 3010

QUICK ATTACHMENT 4010

BUCKET 5010

MOUNTING FRAME ASS'Y-10 SERIES 6010

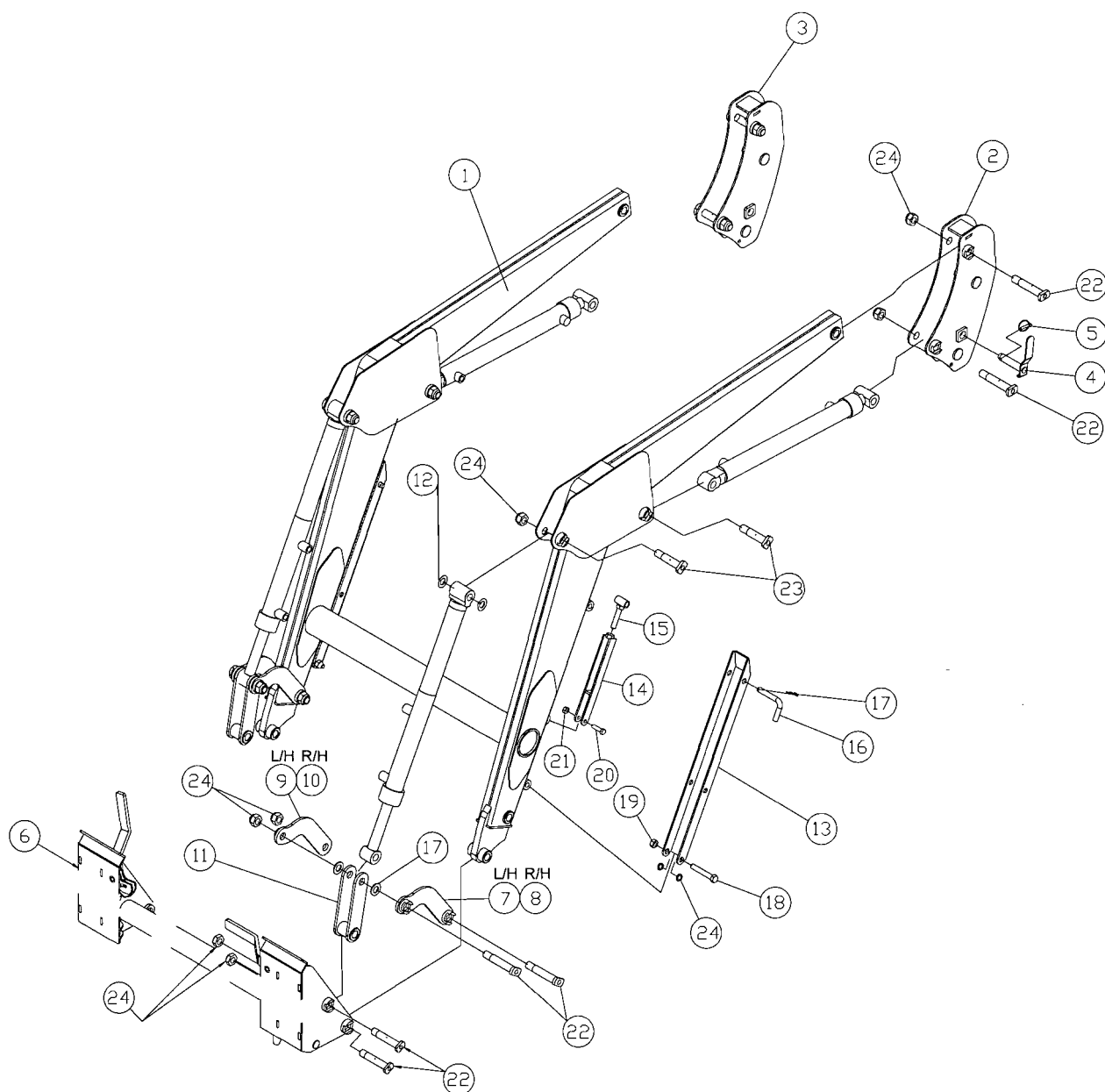
MOUNTING FRAME ASS'Y-20 SERIES 7010

BOOM CYLINDER 8010

BUCKET CYLINDER-LH 8020

BUCKET CYLINDER-RH 8030

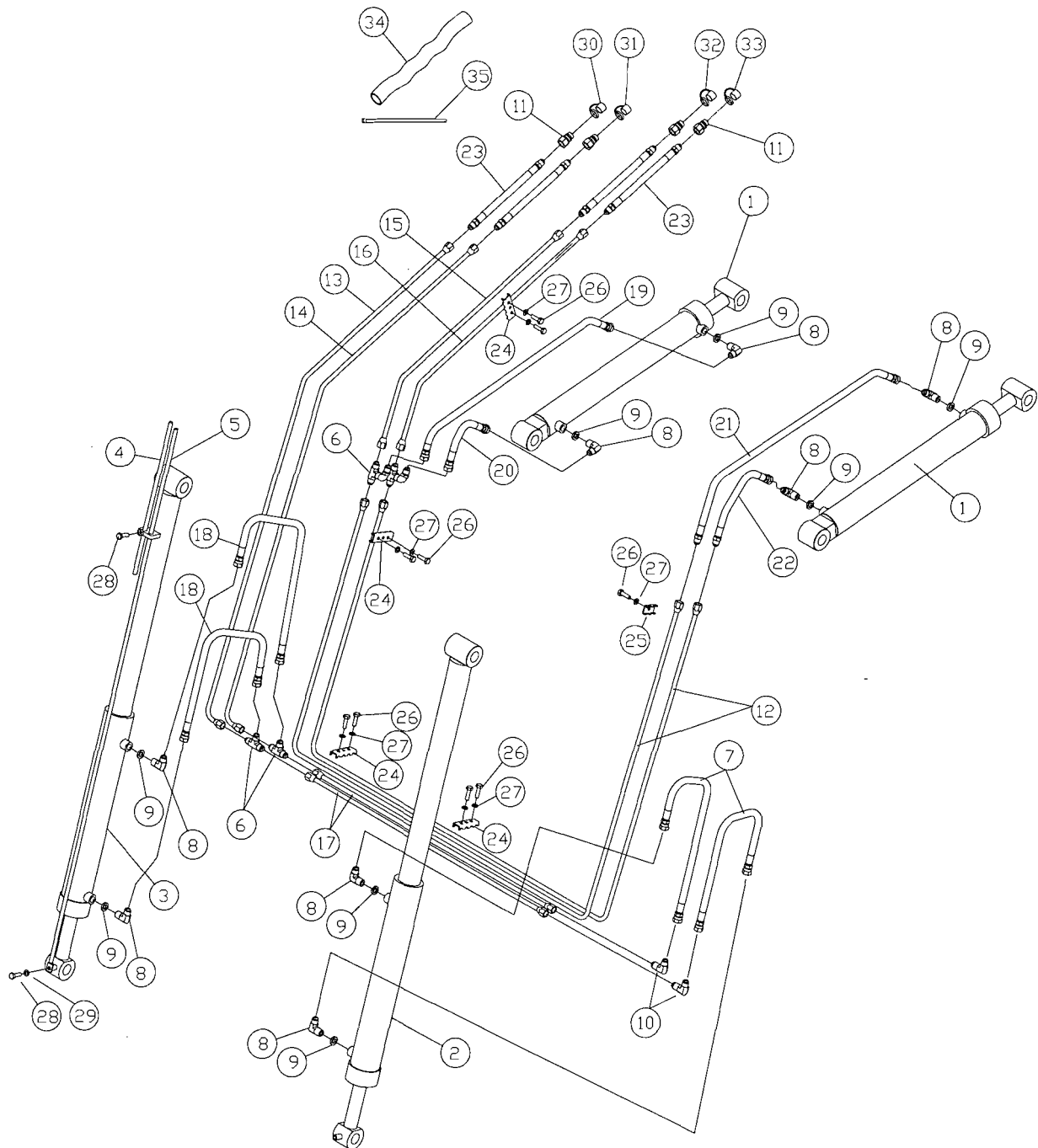
MAIN FRAME ASSEMBLY



MAIN FRAME ASSEMBLY

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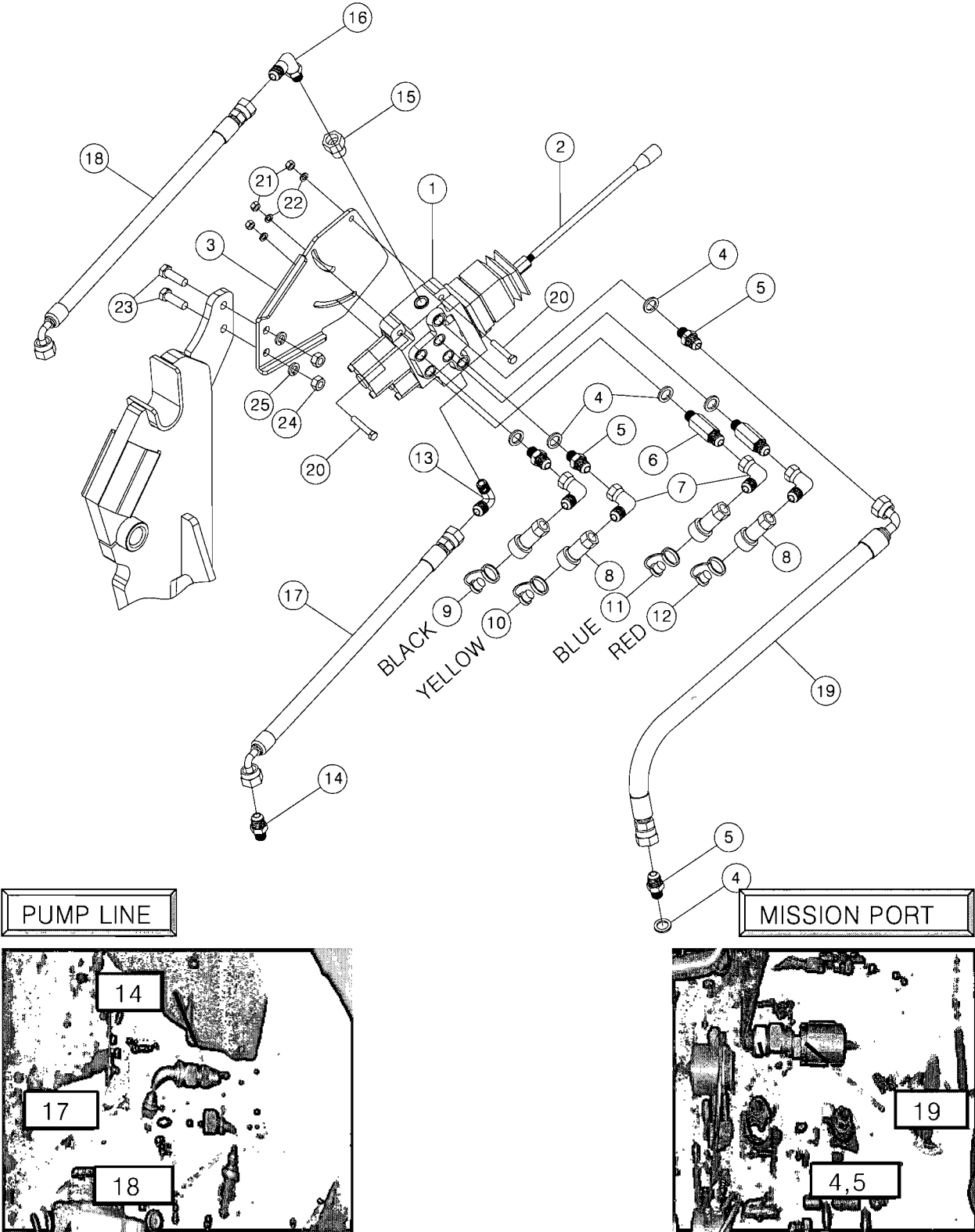
HYDRAULIC PIPING



HYDRAULIC PIPING

REF.NO	PART.NO	DESCRIPTION	QTY		I.C	REMARK
			743	744		
1	225503	CYLINDER ASS'Y, BOOM	2	2		
2	225501	CYLINDER ASS'Y, BUCKET-LH	1	1		
3	225502	CYLINDER ASS'Y, BUCKET-RH	1	1		
4	LTL26-81201	BAR, GAUGE-SHORT	1	1		
5	LTS21-83202	BAR, GAUGE-LONG	1	1		
6	802H1-F94F9-40	NIPPLE, h TYPE 3/4-16UNF	4	4		
7	LKM10-81630	HOSE ASS'Y, 4(3/8)x4(3/8)x700L	2	2		
8	6007-1823	NIPPLE, PF3/8 O-RINGx3/4-16UNF 90°	8	8		
9	S4810-0P140	O-RING, 1BP14	8	8		
10	802L2-F94F9-40	NIPPLE, 3/4-16UNFx3/4-16UNF 90°	2	2		
11	80410-T3360	QUICK COUPLER, PT3/8 MALE	4	4		
12	LTS19-83510	PIPE ASS'Y	2	2		
13	LTS19-83520	PIPE ASS'Y	1	1		
14	LTS19-83530	PIPE ASS'Y	1	1		
15	LTS19-83540	PIPE ASS'Y	1	1		
16	LTS19-83550	PIPE ASS'Y	1	1		
17	LTS19-83560	PIPE ASS'Y	2	2		
18	LTS21-81630-01	HOSE ASS'Y, 454(3/8)x4(3/8)x700L	2	2		
19	LTS21-81610-01	HOSE ASS'Y, 4(3/8)x4(3/8)x1000L	1	1		
20	LTS21-81620-01	HOSE ASS'Y, 4(3/8)x4(3/8)x400L	1	1		
21	LTS21-81640-01	HOSE ASS'Y, 4(3/8)x1(3/4-16UNF)x1000L	1	1		
22	LTS21-81650-01	HOSE ASS'Y, 4(3/8)x1(3/4-16UNF)x400L	1	1		
23	LTS21-81660-01	HOSE ASS'Y, 1(3/4-16UNF)x1(PT3/8)x1500L	4	4		
24	LTS26-81801	CLAMP	4	4		
25	LTS26-81802	CLAMP	1	1		
26	S1053-50835	BOLT-HEX	9	9		
27	S4013-50080	WASHER-SPRING	9	9		
28	S1053-51035	BOLT-HEX	2	2		
29	S4013-50100	WASHWE-SPRING	1	1		
30	8044R-03300	DUST CAP, 3/8 RED	1	1		
31	8044B-03300	DUST CAP, 3/8 BLUE	1	1		
32	8044Y-03300	DUST CAP, 3/8 YELLOW	1	1		
33	8044K-03300	DUST CAP, 3/8 BLACK	1	1		
34	50135-1200K	WEBBING, 90-1200L	1	1		
35	50120-M270K	CABLE TIE	3	3		

HYDRAULIC VALVE

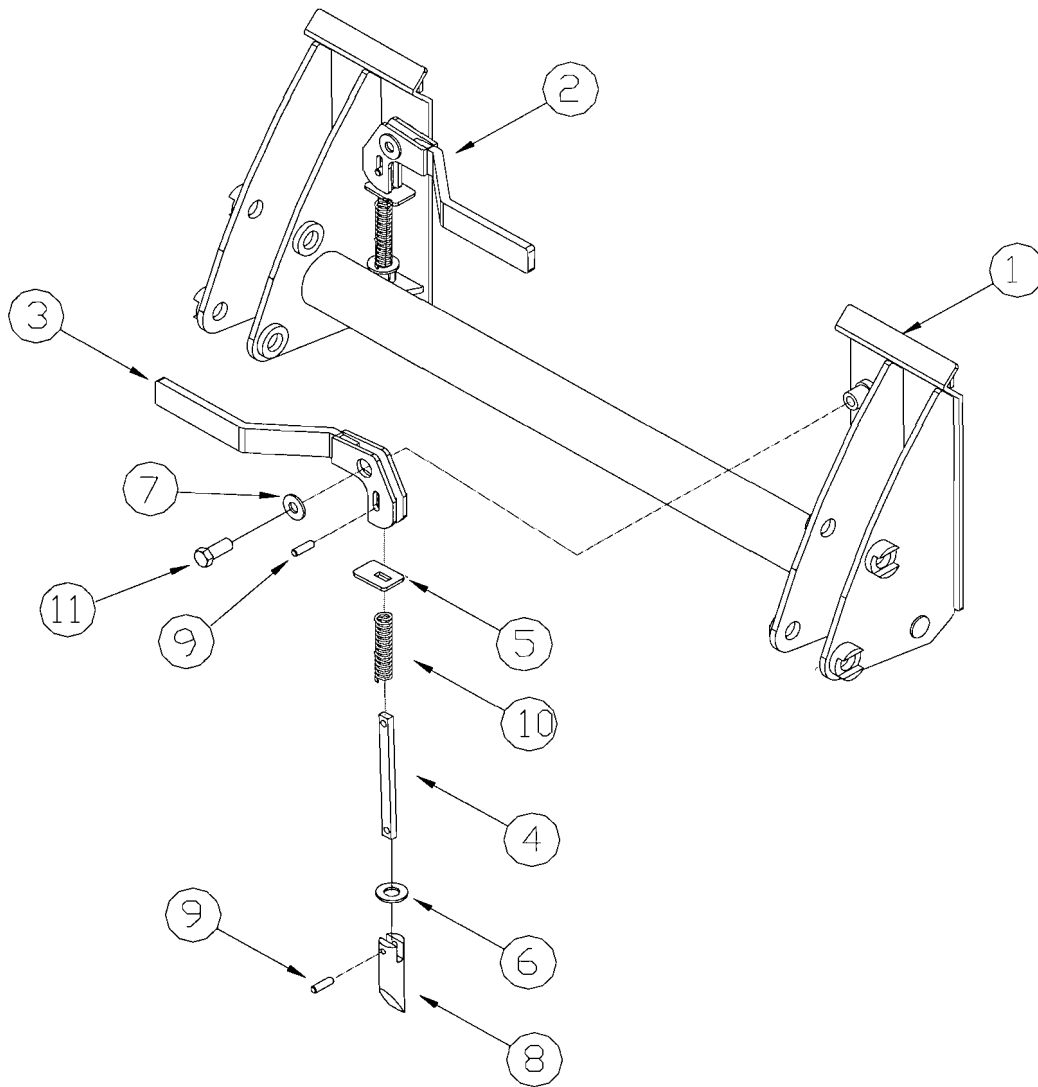


PUMP LINE

MISSION PORT

5.

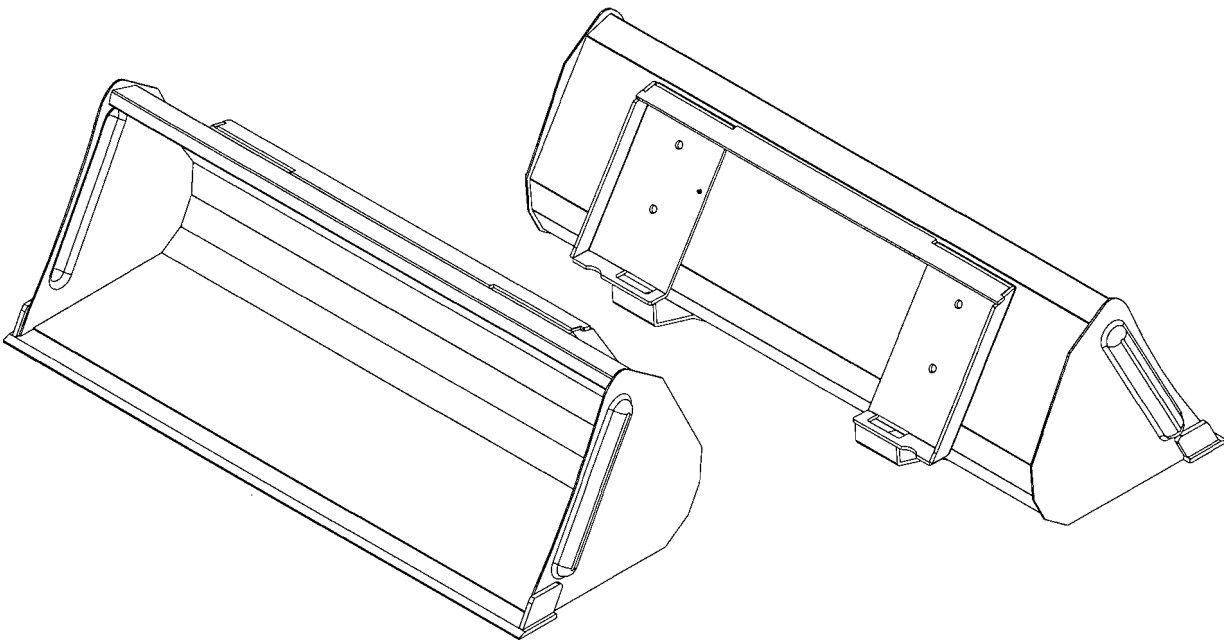
QUICK ATTACHMENT



QUICK ATTACHMENT

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BUCKET

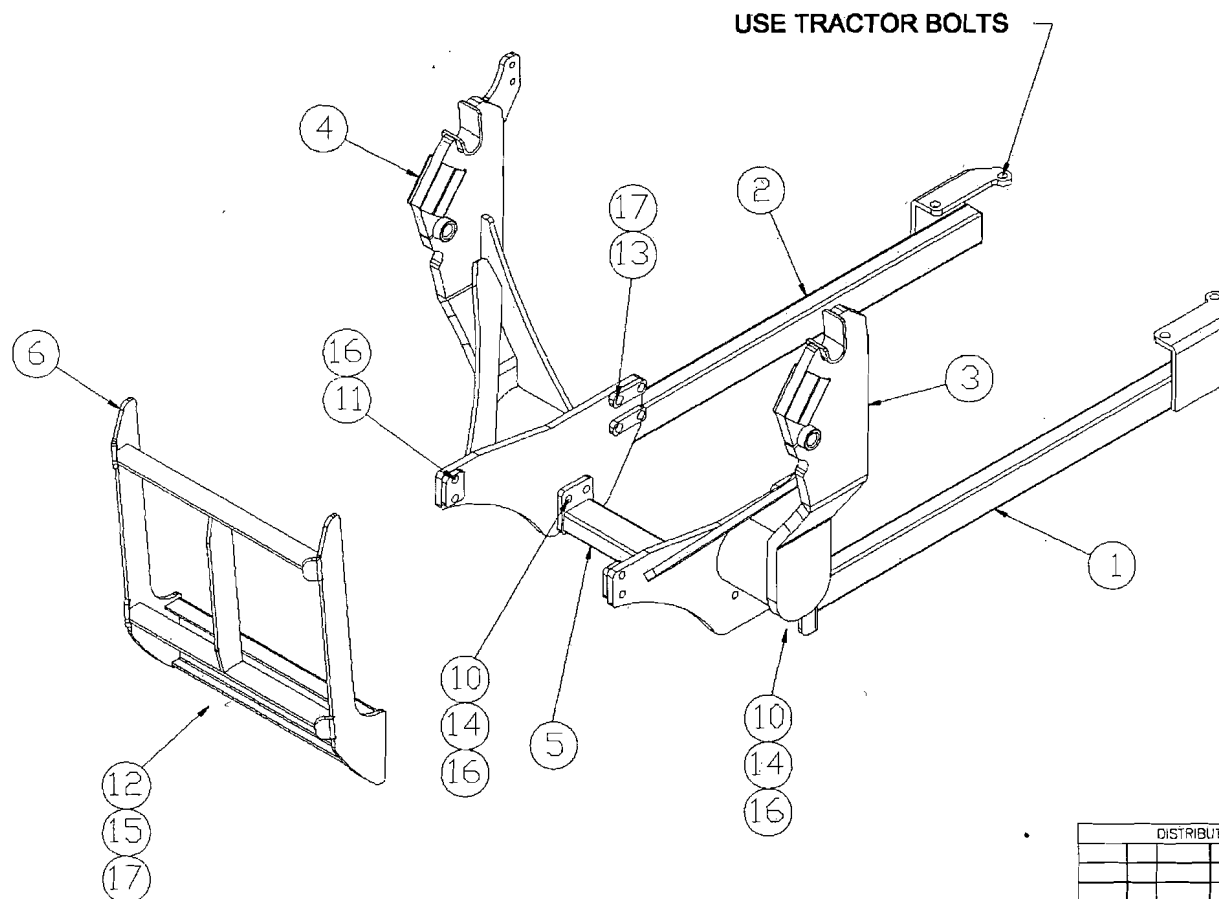


BUCKET

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MOUNTING FRAME ASS'Y-10 SERIES

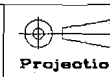
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1	LKM10-11110	MOUNTING FRAME W.A-REAR L/H	1	
2	LKM10-11120	MOUNTING FRAME W.A-REAR R/H	1	
3	LKM20-11300	MOUNTING FRAME W.A-FRONT L/H	1	
4	LKM20-11400	MOUNTING FRAME W.A-FRONT R/H	1	
5	LKM20-11500	CROSS BAR W.A	1	
6	LKM20-21300	GRILLE W.A	1	
10	S1056-51450	BOLT-HEX	8	M14x2.0x50
11	S1056-51460	BOLT-HEX	4	M14x2.0x60
12	S1056-51650	BOLT-HEX	6	M16x2.0x50
13	S1056-51660	BOLT-HEX	8	M16x2.0x60
14	S2056-50140	NUT-HEX	8	M14x2.0
15	S2056-50160	NUT-HEX	6	M16x2.0
16	S4513-50140	WASHER-SPRING	12	M14
17	S4513-50160	WASHER-SPRING	14	M16



DISTRIBUTION		WEIGHT		Kg	
		FORMAT		A3	
REGISTRATION		CODE			
DATE		CHECK			
TAE SUNG 주식회사태성공업 TAE SUNG MFG CO.,LTD.					
DESCRIPTION					
MOUNTING FRAME					
BRANSON 10 Series					
Name		Date		Signature	
SLO, JUN-10		2005. 1. 10		S J H	
Checked by					
Approved by		JH		2005. 1. 11	
SCALE		PART NUMBER_REV.			
N / S		LKM10-10000			

REV.	MODIFICATION	DATE	DRAWN BY	CHECKED BY
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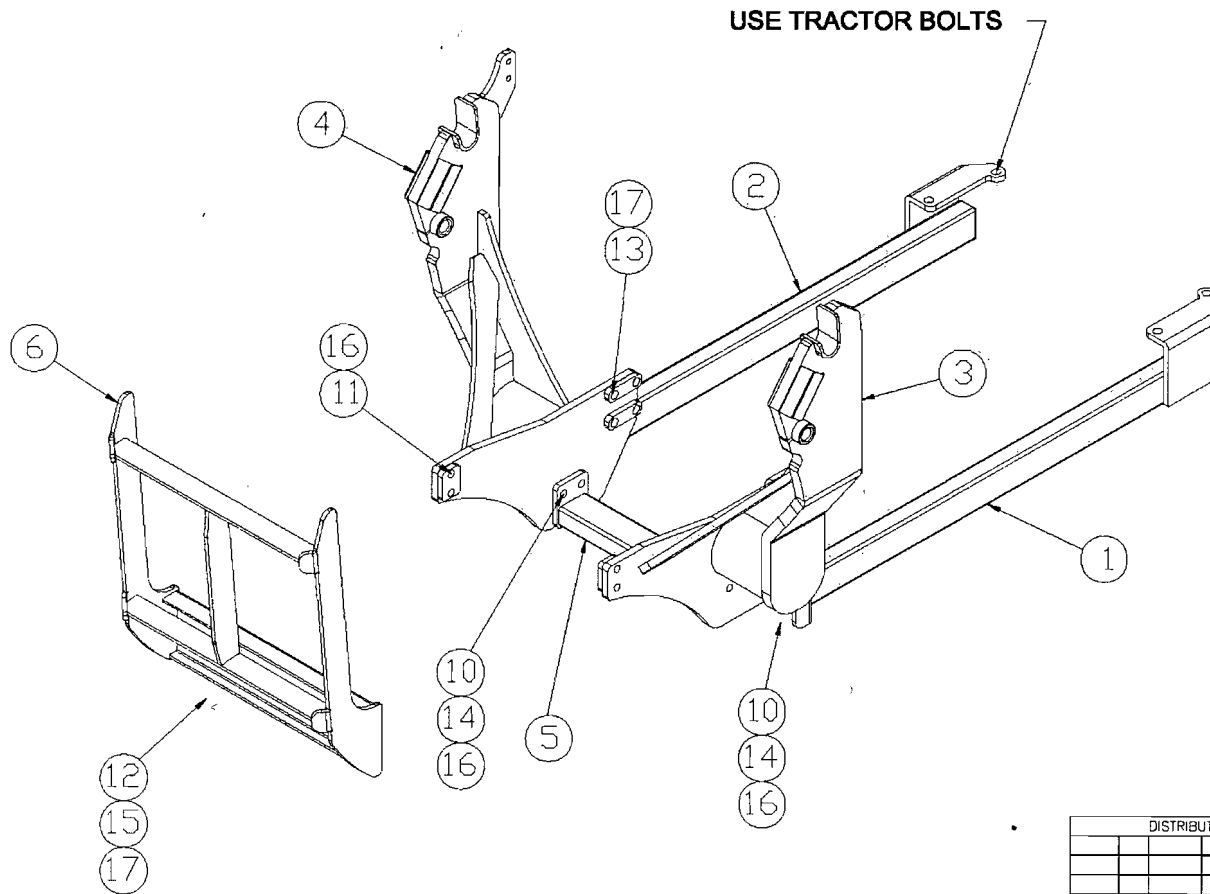
CAD
Manual
Modification
Not Permitted



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MOUNTING FRAME ASS'Y-20 SERIES

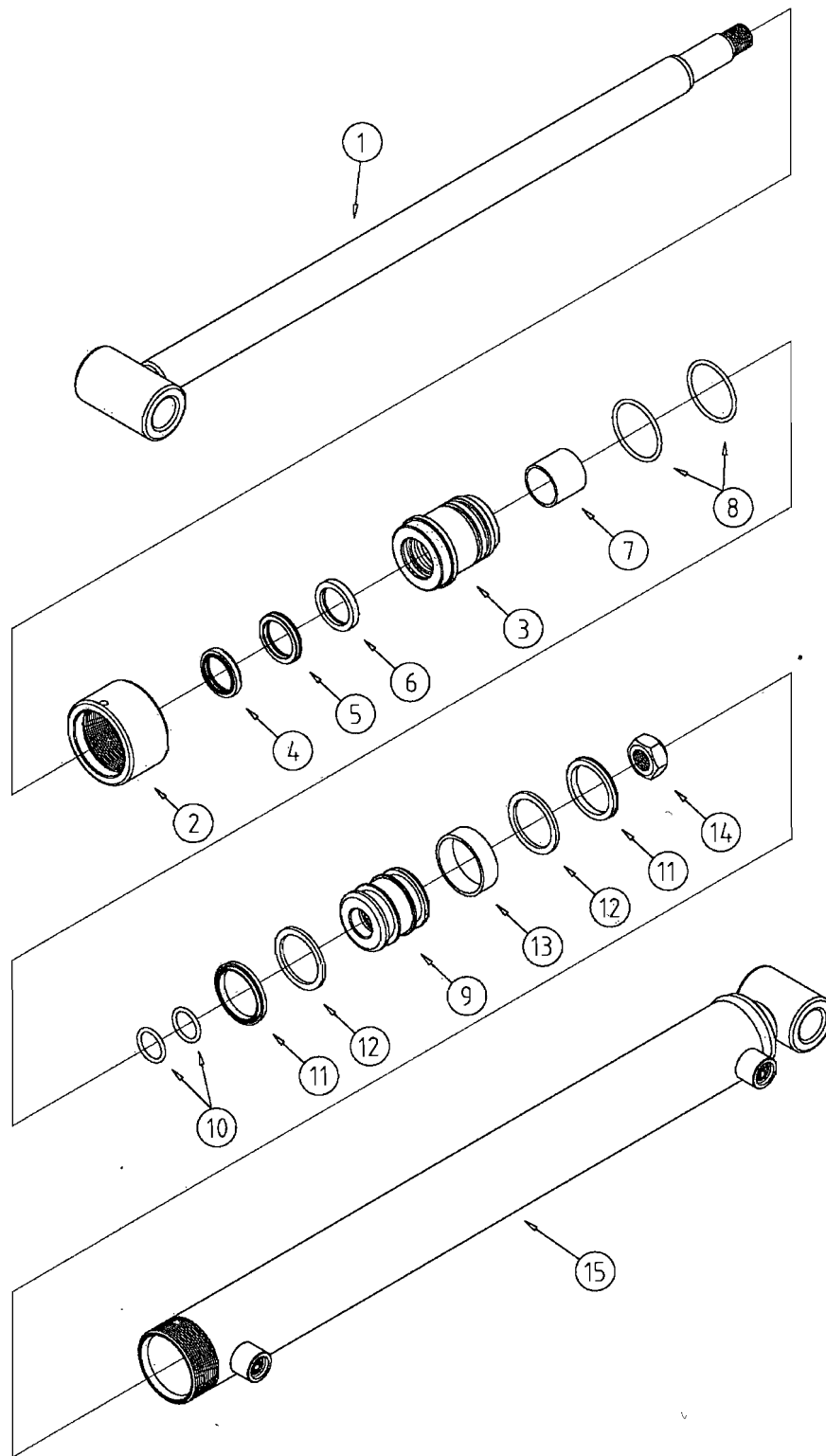
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1	LKM20-11110	MOUNTING FRAME W.A-REAR L/H	1	
2	LKM20-11120	MOUNTING FRAME W.A-REAR R/H	1	
3	LKM20-11300	MOUNTING FRAME W.A-FRONT L/H	1	
4	LKM20-11400	MOUNTING FRAME W.A-FRONT R/H	1	
5	LKM20-11500	CROSS BAR W.A	1	
6	LKM20-21300	GRILLE W.A	1	
10	S1056-51450	BOLT-HEX	8	M14x2.0x50
11	S1056-51460	BOLT-HEX	4	M14x2.0x60
12	S1056-51650	BOLT-HEX	6	M16x2.0x50
13	S1056-51660	BOLT-HEX	8	M16x2.0x60
14	S2056-50140	NUT-HEX	8	M14x2.0
15	S2056-50160	NUT-HEX	6	M16x2.0
16	S4513-50140	WASHER-SPRING	12	M14
17	S4513-50160	WASHER-SPRING	14	M16



DISTRIBUTION		WEIGHT		TAE SUNG 주식회사태성공업 TAE SUNG MFG CO.,LTD.	
TOTAL		Kg			
REGISTRATION		CODE		DESCRIPTION	
DATE		CHECK		MOUNTING FRAME BRANSON 20 Series	
CAD Manual Modification Not Permitted		Projection		Name: SED, JUN-HO Date: 2005. 1. 10 Signature: S J H Checked by: JUN, Date: 2005. 1. 11 Jf.	
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REV.	MODIFICATION	DATE	DRAWN BY	CHECKED BY
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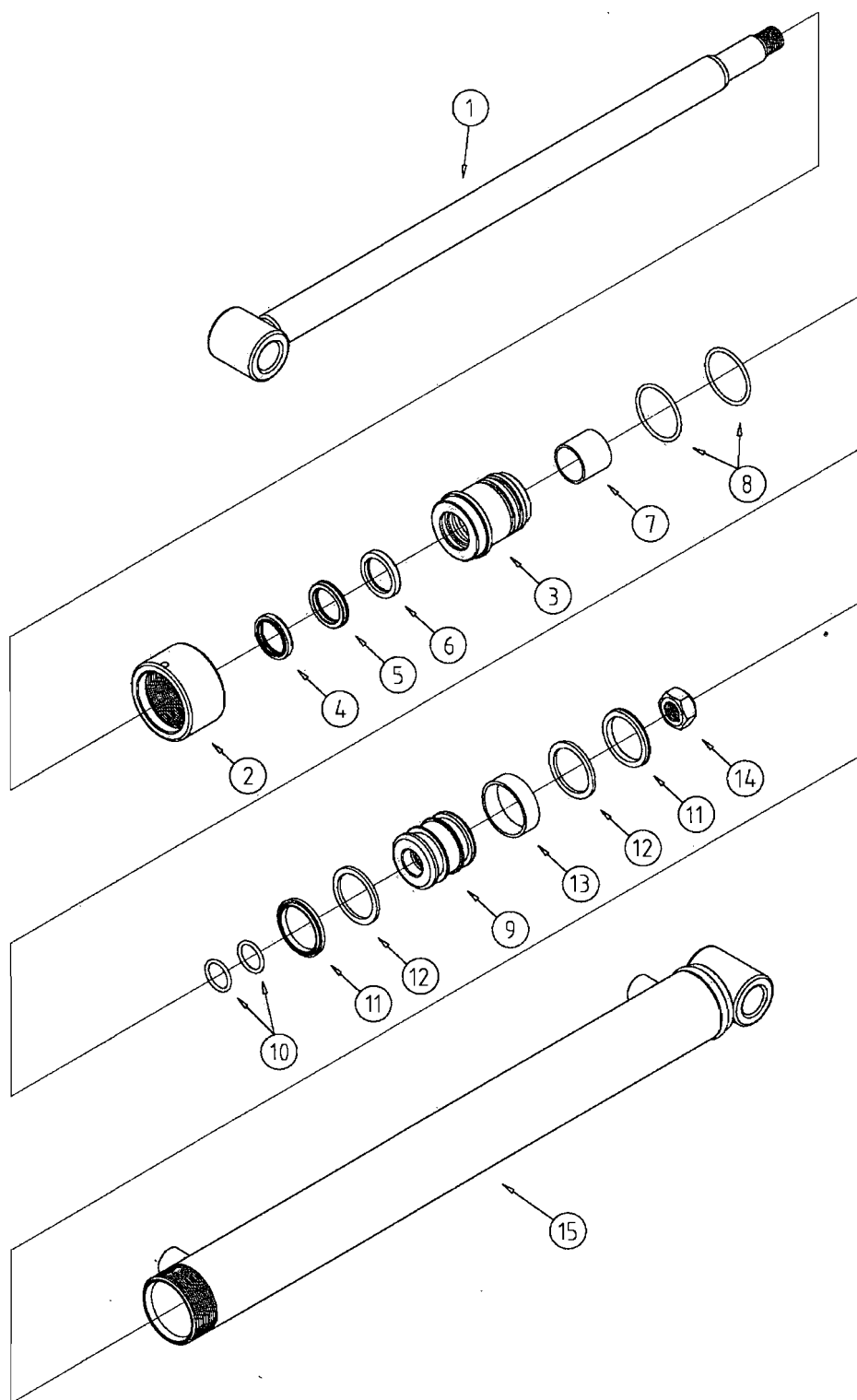
BOOM CYLINDER



5

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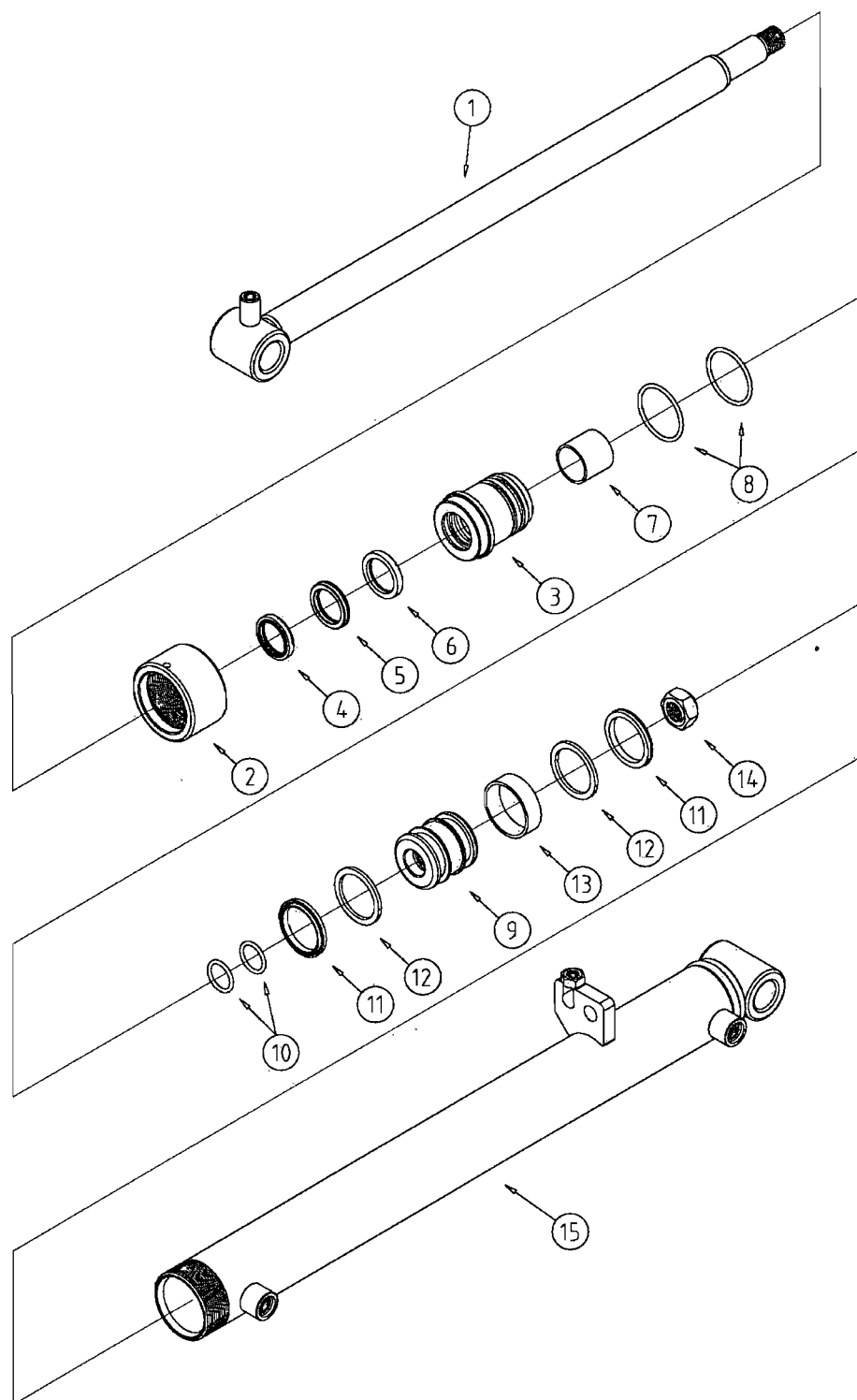
BUCKET CYLINDER-LH



5

[illegible]

BUCKET CYLINDER-RH



BUCKET CYLINDER-RH

[illegible]