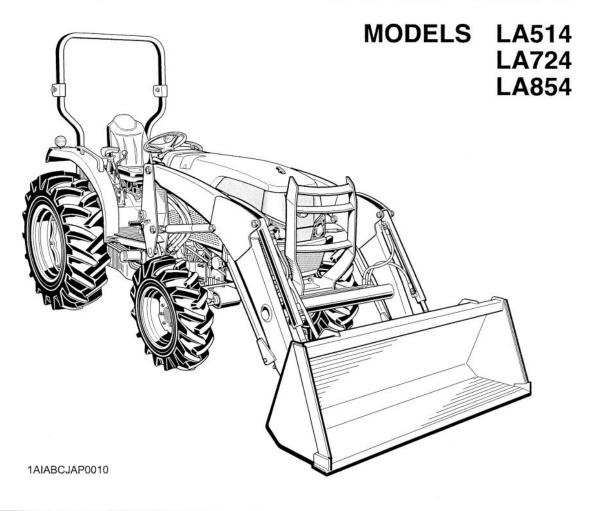
# OPERATOR'S MANUAL

# KUBOTA FRONT LOADER



READ AND SAVE THIS MANUAL

Kubota

# CONTENTS

▲ SAFE OPERATION	. 1
SERVICING OF LOADER	. 1
SPECIFICATIONSSUITABLE TRACTOR	. 2
LOADER SPECIFICATIONSBUCKET SPECIFICATIONS	3
DIMENSIONAL SPECIFICATIONS	
LOADER TERMINOLOGY	7
PRE-OPERATION CHECK	
TRANSMISSION FLUID	8
TREADREAR BALLAST	9
Liquid ballast in rear tires TIRE INFLATION	
Inflation pressure	
4 Position bucket control valve type	.11
REMOVING AIR FROM THE HYDRAULIC SYSTEM DUAL REMOTE HYDRAULIC CONTROL SYSTEM	12
Control Lever and Hydraulic Hose ConnectionsLoader / Remote Control Valve Lever	
OPERATING THE LOADER	
FILLING THE BUCKETLIFTING THE LOAD	
CARRYING THE LOAD DUMPING THE BUCKET	
LOWERING THE BUCKET	15
OPERATING WITH FLOAT CONTROLLOADING FROM A BANK	
PEELING AND SCRAPINGLOADING LOW TRUCKS OR SPREADERS FROM A PILE	
BACKFILLINGHANDLING LARGE HEAVY OBJECTS	17
VALVE LOCK	18
BUCKET LEVEL INDICATORFRONT REMOTE HYDRAULIC CONTROL SYSTEM (if equipped)	
Install the Coupler	. 19
Remote Control Coupler Connecting and Disconnecting	. 20
ATTACHING IMPLEMENTSDETACHING IMPLEMENTS	

DISMOUNTING THE LOADER	22
MAINTENANCE	
ATTACHMENTS	
Quick bucket	23
Bale spear	23
Pallet fork	
ASSEMBLE PALLET FORK	24
MAINTENANCE	25
LUBRICATION	
RE-TIGHTENING OF HARDWARE	
DAILY CHECKS	26
EVERY 50 HOURS	
Checking main frame bolt torque	
General torque specification	27
REMOVING THE LOADER	28
STORING THE LOADER	30
REINSTALLING THE LOADER	31



# SAFE OPERATION

Most loader equipment accidents can be avoided by following simple safety precautions.

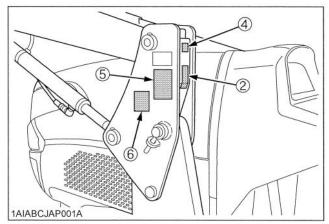
These safety precautions, if followed at all times, will help you operate your loader safely.

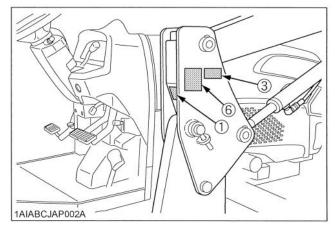
- Read and understand both the tractor and the loader operator's manuals before using the loader. Lack of knowledge can lead to accidents.
- 2. For your safety, a ROPS with a seat belt is strongly recommended by KUBOTA in almost all applications. If your tractor has a foldable ROPS, fold it down only when absolutely necessary and raise it up and lock it again as soon as possible. Do not wear the seat belt when a foldable ROPS is down or a fixed ROPS is removed. If you have any questions, consult your local KUBOTA Dealer.
  - Always use the seat belt when the tractor is equipped with a ROPS. Never use the seat belt when the tractor is not equipped with a ROPS.
- Do not lift or carry any person on the loader, in the bucket, or other attachment.
- Never allow anyone to get under the loader bucket or reach through the boom when the bucket is raised.
- Do not walk or work under a raised loader bucket or attachment unless it is securely blocked and held in position.
- 6. Do not use the loader as a jack to support the tractor for servicing or maintenance.
  - Securely support the tractor or any machine elements with stands or suitable blocking before working underneath.
  - For your safety, do not work under any hydraulically supported devices. They can settle or suddenly leak down or be accidentally lowered.
- 7. When operating the tractor on a slope, always operate up and down, never across the slope.
- 8. Operate the loader from the tractor seat only.
- For tractor stability and operator safety, rear ballast must be added to the 3-point hitch and to the rear wheels.
- 10. To increase stability adjust the rear wheels to the widest setting that is suitable for your application.
- 11. Move and turn the tractor at low speeds.
- Carry loader boom at a low position during transport.
   (You should be able to see over the bucket.)
- 13. Exercise extra caution when operating the loader with a raised bucket or attachment.
- 14. Avoid loose fill, rocks and holes. They can be dangerous for loader operation or movement.
- 15. Be extra careful when working on inclines.
- 16. Avoid overhead wires and obstacles when the loader is raised. Contacting electric lines can cause electrocution.
- 17. Allow for the loader length when making turns.
- Gradually stop the loader boom when lowering or lifting.
- 19. Use caution when handling loose or shiftable loads.

- 20. When loader work is complete, lower the loader boom to the ground, stop the engine, remove the key and lock the brakes before leaving the tractor seat.
- 21. Do not remove the loader from the tractor without an approved bucket attached.
- 22. Make sure the detached loader is on stands and on a hard, level surface.
- 23. Operate the loader only when properly seated at the controls. Do not operate from the ground.
- Visually check for hydraulic leaks and broken, missing, or malfunctioning parts.
  - Make necessary repairs before operating.
- 25. Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Do not use hands to search for suspected leaks. If injured by escaping fluid, obtain medical treatment immediately.
- 26. Before disconnecting hydraulic lines, relieve all hydraulic pressure.
- 27. Do not tamper with the relief valve setting. The relief valve is pre-set at the factory. Changing the setting can cause overloading of the loader and tractor which may result in serious personal injury.
- 28. Using loaders for handling large heavy objects, such as large round or rectangular bales, logs and oil drums is not recommended without proper handling attachments.
- 29. Handling large heavy objects can be extremely dangerous due to:
  - Danger of rolling the tractor over.
  - Danger of upending the tractor.
  - Danger of the object rolling or sliding down the loader boom onto the operator.
- 30. If you must perform this sort of work (item 29), protect yourself by :
  - Never lift the load higher than necessary to clear the ground.
  - Add rear ballast to the tractor to compensate for the load.
  - Never lift large objects with equipment that may permit them to roll back onto the operator.
  - Move slowly and carefully, avoiding rough terrain.
- 31. It is the owner's responsibility to ensure that anyone who will operate the loader read this manual first and become familiar with the safe operation of the loader.
- 32. Always wear safety goggles when servicing or repairing the machine.
- 33. When servicing or replacing pins in cylinder ends, bucket, etc., always use a brass drift and hammer. Failure to do so could result in injury from flying metal fragments.

- 34. Replace damaged or illegible safety labels. See following pages for required labels.
- 35. Do not modify the loader. Unauthorized modification may affect the function of the loader, which may result in personal injury.
- 36. Assemble, remove and reinstall the loader only as directed in this manual. Failure to do this could result in serious personal injury or death.
- 37. When operating another implement on a hillside, be sure to remove the loader to reduce the risk of rollover.
- 38. Never lift or pull a load from any point on the loader with a chain, rope, or cable. Doing so could cause a rollover or serious damage to the loader.
- 39. When the front loader is mounted on the tractor, enter and exit the operator's seat only from left side of the tractor.
- 40. Engage the loader control valve lock to prevent accidental actuation when the implement is not in use or during transport.

#### DANGER, WARNING AND CAUTION LABELS





(1) Part No. 7J246-5643-1



TO AVOID SERIOUS INJURY OR DEATH CAUSED BY FALLING LOADS:

- 1. Load on raised bucket or fork can fall or roll back onto
- can fall or roll back onto operator causing serious injury or death.
  Use approved clamping and / or guard attachments for handling large, loose or shiftable loads such as bales, posts, sheets of plywood etc. Carry loads as low as possible.

1AIABAHAP016A

(2) Part No. 7J246-5641-1



#### TO AVOID SERIOUS INJURY OR DEATH CAUSED BY **ROLLOVERS:**

- 1. ROPS and a fastened seat belt are strongly recommended in almost all applications. Foldable ROPS should be in upright and locked position if equipped.

  2. Adjust rear wheels to the widest
- setting that is suitable for the work.
- Add recommended wheel ballast and rear weight for
- 4. DO NOT drive on steep slopes or unstable surfaces.
- 5. Carry loader arms at low position during transport.
  Move and turn tractor at slow speeds.

1AIABAHAP017A

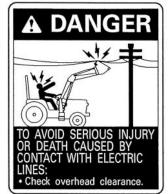
(3) Part No. 7J266-5649-2 (4) Part No. 7J246-5642-1

# CAUTION

#### TO AVOID INJURY FROM CRUSHING:

1.Do not utilize the valve lock for The valve lock is to prevent accidental actuation when ent is not in use or during

1AIABACAP077A



1AIABAHAP018A

(5) Part No. 7J246-5645-1

# CAUTION

#### TO AVOID PERSONAL **INJURY:**

- 1. Observe safety precautions in loader and tractor Operator's Manual. Operate the loader from
- Operate the loader from tractor seat only. Keep children, others and livestock away when operating loader and tractor. Avoid holes, loose ground, and rocks which may cause tracter livester the death of the seat of the seat
- tractor / loader to tip.
  Make sure approved bucket
  is attached before removing loader from tractor.
- When parking or storing, choose flat and hard ground. Lower the bucket to the ground, set brakes and remove key before leaving tractor.
- Before disconnecting hydraulic lines, relieve all hydraulic pressure.

1AIABAHAP019A

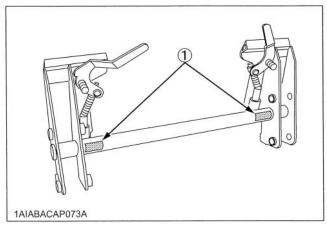
(6) Part No. 7J246-5644-2 (Both sides)

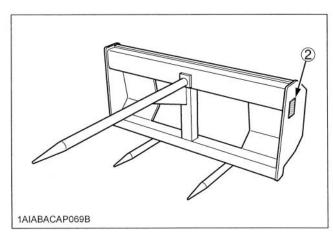


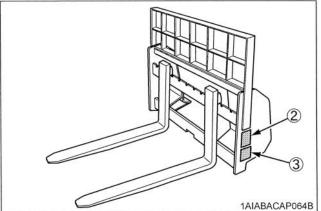
- 1. DO NOT stand or work under raised loader or bucket.
- 2. DO NOT use loader as jack for servicing.
- 3. DO NOT use loader as a work platform.

  4. NEVER connect chain, cable or rope to loader bucket while operating loader.

1AIABAHAP020A







(1) Part No. 75585-3619-3

# **ACAUTION** TO AVOID PERSONAL INJURY Both handles must be placed in the fully locked position before operating the loader. Verify quick attach mounting plates are fully seated in the implement mounting saddle. 3. Verify both latching pins are completely engaged in the base of the implement. (A): HANDLES (B): SADDLE (C): MOUNTING PLATES

1AIABBPAP0250

(2) Part No. 7J246-5643-1



- Load on raised bucket or fork can fall or roll back onto operator causing serious injury or death.
   Use approved clamping and / or guard attachments for handling large, loose or shiftable loads such as bales, posts, sheets of plywood etc.
   Carry loads as low as possible.

1AIABACAP075A

(3) Part No. 7J266-3923-2



1AIABACAP076B

#### CARE OF DANGER, WARNING AND CAUTION LABELS

- 1. Keep danger, warning and caution labels clean and free from obstructing material.
- 2. Clean danger, warning and caution labels with soap and water, dry with a soft cloth.
- 3. Replace damaged or missing danger, warning and caution labels with new labels from your local KUBOTA Dealer.
- 4. If a component with danger, warning and caution label (s) affixed is replaced with new part, make sure new label (s) is (are) attached in the same location (s) as the replaced component.
- 5. Mount new danger, warning and caution labels by applying on a clean dry surface and pressing any bubbles to outside edge.

# **SERVICING OF LOADER**

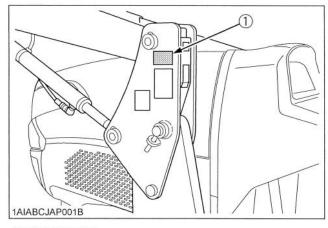
Your dealer is interested in your new loader and has the desire to help you get the most value from it. After reading this manual thoroughly, you will find that you can do some of the regular maintenance yourself.

However, when in need of parts or major service, be sure to see your KUBOTA Dealer.

For service, contact the KUBOTA Dealership from which you purchased your loader or your local KUBOTA Dealer. When in need of parts, be prepared to give your dealer the loader serial number.

Locate the serial numbers now and record them in the space provided.

KUBO <sup>*</sup>	TA LOADER
Model	•
Serial Number	
Date of Purchase	
Name of Dealer	
(To be filled in by purch	naser)



(1) Serial number

# **SPECIFICATIONS**

# **SUITABLE TRACTOR**

LA514:L3240,3540 LA724:L3240,3540,3940 LA854:L4240,4740,5040,5240,5740

# LOADER SPECIFICATIONS

LOADER MODEL		LA514	LA724	LA854
TRACTOR MODEL		L3540	L3940	L5740
WHEEL BASE(WB)	mm (in)	1805 (71.1)	1895 (74.6)	1915 (75.4)
FRONT TIRES		7-16	8.3-16	9.5-16
REAR TIRES		12.4-24	14.9-24	14.9-26
DOOM CYLINDED	BORE mm (in)	45 (1.77)	50 (1.97)	60 (2.36)
BOOM CYLINDER	STROKE mm (in)	476 (18.7)	502 (19.8)	496 (19.5)
BLICKET CYLINDED	BORE mm (in)	45 (1.77)	50 (1.97)	55 (2.17)
BUCKET CYLINDER	STROKE mm (in)	476 (18.7)	465 (18.3)	469 (18.5)
CONTROL VALVE 4 Position bucket (STANDARD PART OF TRACTOR) 4 Position bucket control valve type Power Beyond Circuit				
RATED FLOW L/m (GPM)		31.5 (8.3) 37 (9.8)		(9.8)
MAXIMUM PRESSURE MPa (kg/cm², psi)		17.7 (180,2560)	18.1 (18	35,2630)
NET WEIGHT(APPROXIMATE)	kg (lbs.)	405 (893)	530 (1168)	590 (1300)

# **BUCKET SPECIFICATIONS**

LOADER MO	DEL	LA514		LA724	,LA854
MODEL		SQUARE 66"	ROUND 66" HD	SQUARE 72"	ROUND 72" HD
TYPE		RIGID	RIGID	RIGID	RIGID
WIDTH	mm (in.)	1675 (66)		1830 (72)	
DEPTH (L)	mm (in.)	458 (18)	440 (17.3)	547 (21.5)	477 (18.8)
HEIGHT (M)	mm (in.)	562 (22.1)	580 (22.8)	570 (22.4)	608 (23.9)
LENGTH (N)	mm (in.)	502 (19.8)	531 (20.9)	652 (25.7)	630 (24.8)
CAPACITY	STRUCK m³ (CU.FT.)	0.23 (8.1)		0.31 (10.9)	
CAFACITT	HEAPED m³ (CU.FT.)	0.28	(9.9) 0.37 (13.1)		(13.1)
WEIGHT	kg (lbs.)	112 (247)	122 (269)	146(322)	164 (362)

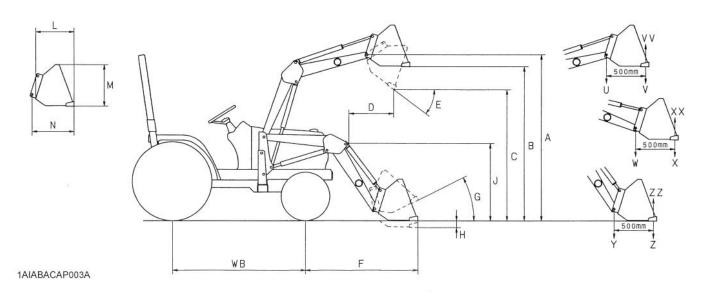
LOADER MODEL		LA514,LA724,LA854	A514,LA724,LA854 LA724,LA8		LA514,LA724,LA854
MODEL		SQUARE 66"	SQUARE 72"	ROUND 72" HD	SQUARE 72" LIGHT MATERIAL
TYPE		QUICK ATTACH	QUICK ATTACH	QUICK ATTACH	QUICK ATTACH
WIDTH	mm (in.)	1.) 1675 (66) 1830 (72)		(72)	
DEPTH (L)	mm (in.)	458 (18)	547 (21.5)	477 (18.8)	607 (23.9)
HEIGHT (M)	mm (in.)	562 (22.1)	570 (22.4)	608 (23.9)	570 (22.4)
LENGTH (N)	mm (in.)	544 (21.4)	630 (24.8)	610 (24)	691 (27.2)
CAPACITY	STRUCK m³ (CU.FT.)	0.23 (8.1)	0.31 (10.9)		0.36 (12.7)
CAFACITY	HEAPED m³ (CU.FT.)	0.28 (9.9)	28 (9.9) 0.37 (13.1)		0.45 (16.0)
WEIGHT	kg (lbs.)	120 (265)	150 (331)	180 (397)	136 (300)

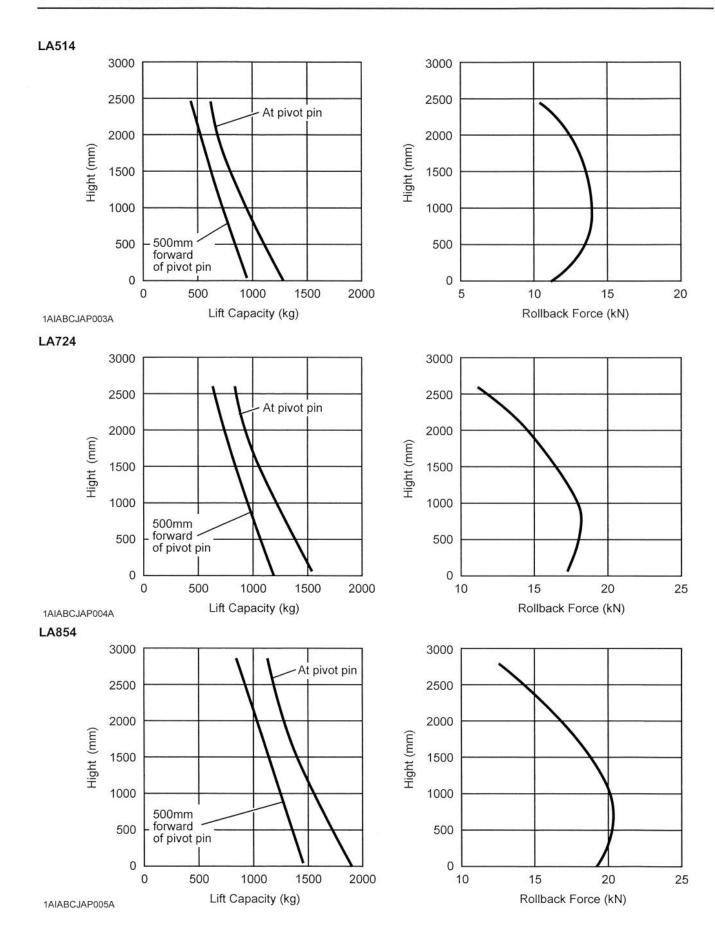
# **DIMENSIONAL SPECIFICATIONS**

	LOADER MODEL		LA514	LA724	LA854
	TRACTOR MODEL		L3540	L3940	L5740
Α	MAX. LIFT HEIGHT (TO BUCKET PIVOT PIN)	mm (in.)	2449 (96.4)	2597 (102.2)	2863 (112.7)
В	MAX. LIFT HEIGHT UNDER LEVEL BUCKET	mm (in.)	2275 (89.6)	2395 (94.3)	2659 (104.7)
С	CLEARANCE WITH BUCKET DUMPED	mm (in.)	1987 (78.2)	1995 (78.5)	2255 (88.8)
D	REACH AT MAX. LIFT HEIGHT (DUMPING REACH)	mm (in.)	593 (23.3)	561 (22.1)	570 (22.4)
Ε	MAX. DUMP ANGLE	deg.	41	45	
F	REACH WITH BUCKET ON GROUND	mm (in.)	1568 (61.7)	1763 (69.4)	1919 (75.6)
G	BUCKET ROLL-BACK ANGLE	deg.	30	41	42
Н	DIGGING DEPTH	mm (in.)	126 (5.0)	122 (4.8)	177 (7.0)
J	OVERALL HEIGHT IN CARRYING POSITION	mm (in.)	1285 (50.6)	1380 (54.3)	1410 (55.5)

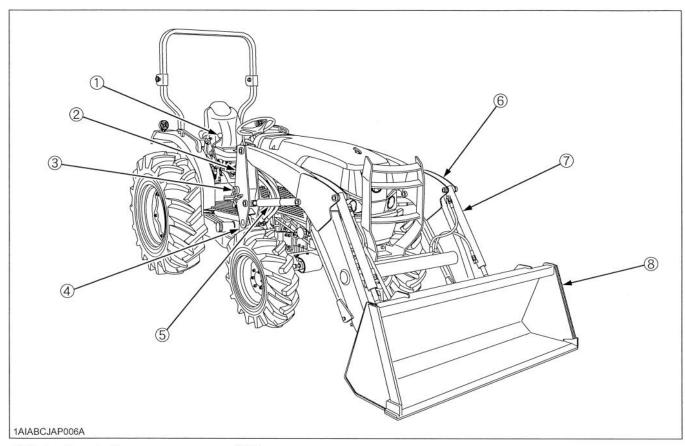
# **OPERATIONAL SPECIFICATIONS**

	LOADER MODEL		LA514	LA724	LA854
	TRACTOR MODEL		L3540	L3940	L5740
	LIFT CAPACITY (BUCKET BOTTOM MID POINT)	kg (lbs.)	510 (1124)	720 (1587)	850 (1874)
U	LIFT CAPACITY (BUCKET PIVOT PIN, MAX. HEIGHT)	kg (lbs.)	613 (1351)	846 (1865)	1129 (2489)
٧	LIFT CAPACITY (500mm FORWARD, MAX. HEIGHT)	kg (lbs.)	463 (1020)	642 (1415)	852 (1878)
W	IIFT CAPACITY (BUCKET PIVOT PIN, 1500mm HEIGHT)	kg (lbs.)	798 (1759)	1054 (2324)	1405 (3097)
Χ	LIFT CAPACITY (500mm FORWARD, 1500mm HEIGHT)	kg (lbs.)	633 (1395)	845 (1863)	1138 (2509)
Υ	BREAKOUT FORCE (BUCKET PIVOT PIN)	N (lbs.)	12611 (27802)	15141 (3404)	18662 (4195)
Z	BREAKOUT FORCE (500mm FORWARD)	N (lbs.)	9571 (2151)	11670 (2623)	14533 (3267)
VV	BUCKET ROLL-BACK FORCE AT MAX. HEIGHT	N (lbs.)	10846 (2438)	11229 (2524)	12249 (2754)
XX	BUCKET ROLL-BACK FORCE AT 1.5M	N (lbs.)	13808 (3104)	16407 (3688)	18966 (4264)
ZZ	BUCKET ROLL-BACK FORCE AT GROUND LEVEL	N (lbs.)	11885 (2672)	17475 (3928)	19476 (4378)
	RAISING TIME	sec.	2.7	3.2	4.2
	LOWERING TIME	sec.	2.2	2.0	2.8
	BUCKET DUMPING TIME	sec.	1.3	1.3	1.8
	BUCKET ROLLBACK TIME	sec.	1.6	1.9	2.3





# LOADER TERMINOLOGY



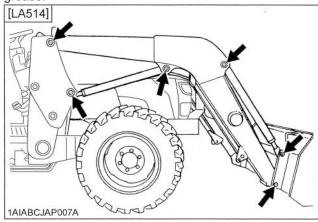
- (1) Hydraulic control lever
- (2) Side frame
- (3) Mounting pin
- (4) Main frame
- (5) Boom cylinder

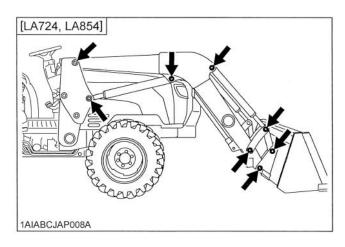
- (6) Boom
- (7) Bucket cylinder (8) Bucket

# PRE-OPERATION CHECK

## LUBRICATION

Lubricate all grease fittings with SAE multipurpose grease.





### TRANSMISSION FLUID

Check the tractor transmission fluid level. Add fluid if necessary. Refer to the tractor operator's manual for instructions and proper fluid. Repeat this check after purging air from the system. At that time, it will be necessary to add transmission fluid.

#### IMPORTANT:

 To check the tractor transmission fluid level, lower the bucket to the ground and lower the 3 point hitch.

#### TREAD

1. Set front tread as follows.

	Front Tread		
	2WD	4WD	
L3240	1310mm (51.6 in)	Front axle is not adjustable.	

#### **IMPORTANT:**

- Setting tread wider than recommended may cause premature failure of front axle components due to excessive stress.
- 2. For better stability, set the rear tread as follows depending on the requirements of the work being done.

	Rear Tread
L3240 L3540	1200mm (47.2 in.) or more
L3940 L4240 L4740	1285mm (50.6 in.) or more
L5040 L5240 L5740	1325mm (52.2 in.) or more

### **REAR BALLAST**



#### CAUTION

To avoid personal injury:

 For tractor stability and operator's safety, rear ballast should be added to the rear of the tractor in the form of 3-point counter weight and rear wheel ballast. The amount of rear ballast will depend on the application.

Impleme	ent as Counter Weight
6' Box Scraper	Approx. 450 kg (990 lbs.)
Rotary Tiller	Approx. 240 kg (530 lbs.)
Back Hoe	Approx. 770 kg (1690 lbs.)

#### ■Liquid ballast in rear tires

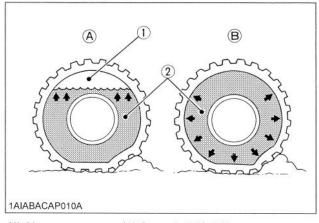
Water and calcium chloride solution provides a safe and economical ballast. Used properly, it will not damage tires, tubes or rims. The addition of calcium chloride is recommended to prevent the water from freezing. Use of this method of weighting the wheels has full approval of the tire manufacturers. See your tire dealer for this service.

Liquid weight per tire (75 Percent filled)

Tire sizes	12.4-24	420/70-24	14.9-24
Slush free at -10 °C (14 °F) Solid at -30 °C (-22 °F) [Approx. 1 kg (2 lbs.) CaCl₂ per 4 L (1 gal.) of water]	130 kg (285 lbs.)	195 kg (430 lbs.)	205 kg (450 lbs.)
Slush free at -24 °C (-11 °F) Solid at -47 °C (-52 °F) [Approx. 1.5 kg (3.5 lbs.) CaCl₂ per 4 L (1 gal.) of water]	135 kg (295 lbs.)	205 kg (450 lbs.)	215 kg (475 lbs.)
Slush free at -47 ℃ (-52 ℉) Solid at -52 ℃ (-62 ℉) [Approx. 2.25 kg (5 lbs.) CaCl₂ per 4 L (1 gal.) of water]	145 kg (320 lbs.)	220 kg (485 lbs.)	225 kg (495 lbs.)
Tire sizes	17.5L-24	14.9-26	13.6-28
Slush free at -10 °C (14 °F) Solid at -30 °C (-22 °F) [Approx. 1 kg (2 lbs.) CaCl₂ per 4 L (1 gal.) of water]	235 kg (515 lbs.)	215 kg (475 lbs.)	185 kg (405 lbs.)
Slush free at -24 °C (-11 °F ) Solid at -47 °C (-52 °F ) [Approx. 1.5 kg (3.5 lbs.) CaCl₂ per 4 L (1 gal.) of water]	250 kg (550 lbs.)	225 kg (495 lbs.)	200 kg (441 lbs.)
Slush free at -47 °C (-52 °F) Solid at -52 °C (-62 °F) [Approx. 2.25 kg (5 lbs.) CaCl₂ per 4 L (1 gal.) of water]	265 kg (585 lbs.)	235 kg (515 lbs.)	215 kg (475 lbs.)

#### IMPORTANT:

 Do not fill tires with water or solution more than 75% of full capacity (to the valve stem level at 12 o'clock position).



- (1) Air
- (2) Water
- (A) Correct: 75% Full Air compresses like a cushion
- (B) Incorrect: 100% Full Water can not be compressed

#### NOTE:

 When mounting a heavy rear implement, liquid in the tires may not be required.

#### **IMPORTANT:**

 Do not add liquid ballast or any other weights to the front tires.

### TIRE INFLATION

Insure that the tractor tires are properly inflated. Refer to the tractor operator's manual for optional tires.

#### ■Inflation pressure

	Tire sizes	Inflation Pressure			
	12.4-24, 4PR	140 kPa (1.4 kgf/cm², 20 psi)			
	13.6-28, 4PR	150 kPa (1.5 kgf/cm², 22 psi)			
	14.9-24, 4PR	140 kPa (1.4 kgf/cm², 20 psi)			
	14.9-26, 4PR	140 kPa (1.4 kgf/cm², 20 psi)			
Rear	41/18LL x 16.1, 6PR	70 kPa (0.7 kgf/cm², 10 psi)			
	355/80-D20, 4PR	100 kPa (1.0 kgf/cm², 14 psi)			
	44 x 18-20, 6PR	170 kPa (1.7 kgf/cm², 24 psi)			
	420/70-24, 6PR	140 kPa (1.4 kgf/cm², 20 psi)			
	17.5L-24, 6PR	140 kPa (1.4 kgf/cm², 20 psi)			
	6.00-16, 4PR	220 kPa (2.2 kgf/cm², 32 psi)			
	7.2-16, 4PR	150 kPa (1.5 kgf/cm², 22 psi)			
	8.3-16, 4PR	150 kPa (1.5 kgf/cm², 22 psi)			
	9.5-16, 4PR	205 kPa (2.1 kgf/cm², 30 psi)			
Front	27 x 8.50-15, 4PR	85 kPa (8.5 kgf/cm², 12 psi)			
	27 x 10.50-15, 4PR	85 kPa (8.5 kgf/cm², 12 psi)			
	29 x 12.50-15, 4PR	140 kPa (1.4 kgf/cm², 20 psi)			
	10-16.5, 6PR	140 kPa (1.4 kgf/cm², 20 psi)			
	7.5L-15, 6PR	220 kPa (2.2 kgf/cm², 32 psi)			

## **TEST OPERATION**



#### **CAUTION**

To avoid serious personal injury:

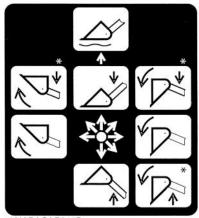
- Keep engine speed at low idle during the test operation.
- Escaping hydraulic fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury.

Before disconnecting lines, be sure to relieve all pressure.

Before applying pressure to the system, be sure all connections are tight and that lines, tubes 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, see a doctor at once. Serious infection or allergic reaction will develop if proper medical treatment is not administered immediately.



1AIABACAP011B

#### NOTE

 When the lever is at each corner position marked by asterisk (\*), boom and bucket cylinders work at the same time. However, the blank position (Raise & Roll back) is not recommended for scooping because of insufficient lift force.

To begin a test operation, slightly move the control lever from the "N" position. Slowly raise the loader boom just enough for the bucket to clear the ground when fully dumped. Slowly work through the dump and roll back cycles.

#### IMPORTANT:

 If the boom or bucket does not work in the directions indicated on the label, lower the bucket to the ground, stop the engine, and relieve all hydraulic pressure. Recheck and correct all hydraulic connections.

#### ■4 Position bucket control valve type

This control valve has two stage dump positions. The first dump position by moving the lever to the right features greater speed for dumping.

The second dump position (to further right) is the "Regular" dump position. It has good power and control for dumping precisely. This position should be used when operating another implement with this control valve. These two positions are separated by a "Feel" position for your convenience.

# REMOVING AIR FROM THE HYDRAULIC SYSTEM

Repeat raising and lowering the boom and bucket operations until all the air is removed from the system and the system responds properly.

#### IMPORTANT:

 Do not move the control lever into the float position when the bucket is off the ground.

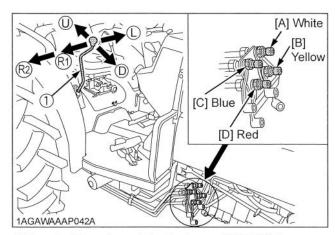
# DUAL REMOTE HYDRAULIC CONTROL SYSTEM

The tractor is equipped with the double-acting 2-segment hydraulic control valve for front loader.

To apply the hydraulic power take-off for general attachments, keep the following point in mind.

#### ■Control Lever and Hydraulic Hose Connections

Connect the control lever in its specified direction and the hydraulic hoses to their specified ports.



(1) Loader / Remote control valve lever (R) "RIGHT"

- (L) "LEFT"
- (U) "UP"
- (D) "DOWN"

Pressure · Returning 4 Hydraulic outlet ports of first segment

Lever		UP		DOWN	
Port	[A]	In	<b>←</b>	Out	<b>→</b>
POIL	[B]	Out	<b>→</b>	ln	-

Hydraulic outlet ports of second segment

Lever		RIGHT		LEFT	
Dort	[C]	In	-	Out	<b>─</b>
Port	[D]	Out	→	In	-

#### **IMPORTANT:**

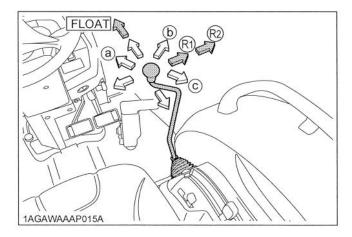
To avoid damage of the attachments:

- Do not connect attachments through the hydraulic motor to the [C] and [D] ports. If the control lever is moved to the Regeneration position (R1), the seals on the hydraulic motor will be damaged.
- This control valve is provided with the Regeneration position. When the [C] and [D] ports are used to take off hydraulic power for the hydraulic cylinder, be sure to connect the [C] port to the "Head-End" side port of the hydraulic cylinder.
- Make the following connections when using this valve to take off hydraulic power for the hydraulic cylinder.

Colored Coupler	Hydraulic Cylinder port
[B: Yellow], [C: Blue]	Head-End side
[A: White], [D: Red]	Rod-End side

#### ■ Loader / Remote Control Valve Lever

- 1. Before moving the lever, make sure that the hydraulic hoses for attachments are connected.
- 2. Move the lever diagonally (a, b, c shown in the figure), and the first and second segments can be controlled at once.



#### NOTE:

- Move the lever to the "FLOAT" position, and it will be held there by the detent mechanism. To use the valve as a floating valve with detents, connect the hydraulic hoses to ports [A] and [B].
- When taking off hydraulic power from port [D], the flow rate can be adjusted in two stages with the lever. The flow rate is high at position (R1) and low at position (R2). Move the lever to position (R1) or (R2) depending on the attachment in use.

# **OPERATING THE LOADER**

The loader should be operated with the tractor engine speed depending on the application and the operator's level of experience. Excessive speeds are dangerous, and may cause bucket spillage and unnecessary strain on the tractor and loader.

When operating in temperatures below -1  $^{\circ}$ C (30  $^{\circ}$ F), run the tractor engine below 1200 rpm until the oil temperature exceeds -1  $^{\circ}$ C (30  $^{\circ}$ F).

The following text and illustrations offer suggested loader and tractor operating techniques.



#### CAUTION

To reduce the possibility of roll over:

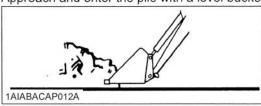
 It is not recommended that the loader be attached when operating another implement on a hillside.

#### **IMPORTANT:**

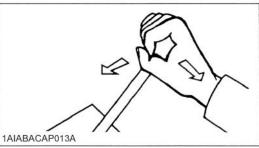
 When operating the loader in rough terrain, remove the mower to avoid damage to the mower.

### FILLING THE BUCKET

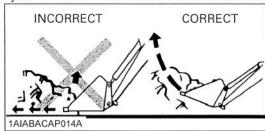
Approach and enter the pile with a level bucket.



Ease control lever toward you and then back to rollback and lift the bucket.



The rollback and lifting of the bucket will increase efficiency because a level bucket throughout the lifting cycle resists bucket lift and increases breakaway effort.

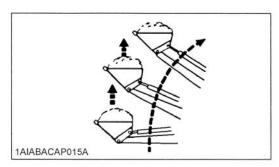


#### NOTE:

 Do not be concerned if the bucket is not completely filled during each pass. Maximum productivity is determined by the amount of material loaded in a given period of time. Time is lost if two or more attempts are made to fill the bucket on each pass.

# LIFTING THE LOAD

When lifting the load, keep the bucket positioned to avoid spillage.





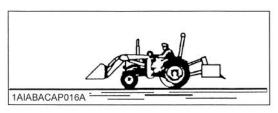
#### WARNING

To avoid serious personal injury:

- Do not attempt to lift bucket loads in excess of the loader capacity.
- Before raising the bucket to full height, make sure the tractor is on level ground. If not, it may tip over, even if the tractor is not moving.

# CARRYING THE LOAD

Position the bucket just below the level of the tractor hood for maximum stability and visibility, whether the bucket is loaded or empty.



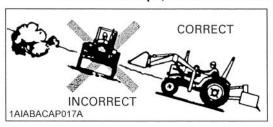
Use extreme care when operating the loader on a slope. Keep the bucket as low as possible. This keeps the bucket and tractor center of gravity low and will provide maximum tractor stability.



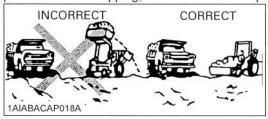
#### WARNING

To avoid serious personal injury:

- Be extra careful when working on inclines.
- When operating on a slope, always operate up and down the slope, never across the slope.

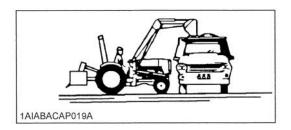


When transporting a load, keep the bucket as low as possible to avoid tipping, in case a wheel drops in a rut.



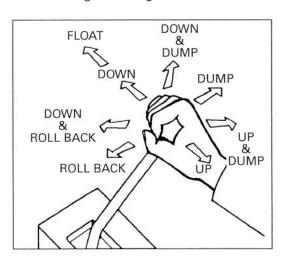
# **DUMPING THE BUCKET**

Lift the bucket just high enough to clear the side of the vehicle. Move the tractor in as close to the side of the vehicle as possible, then dump the bucket.



# LOWERING THE BUCKET

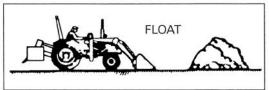
After the bucket is dumped, back away from the vehicle while lowering and rolling back the bucket.



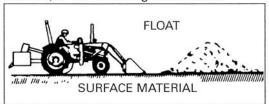
# **OPERATING WITH FLOAT CONTROL**

During operation on hard surface, keep the bucket level and put the lift control in the float position to permit the bucket to float on the working surface.

If hydraulic down pressure is exerted on the bucket it will wear faster than normal.

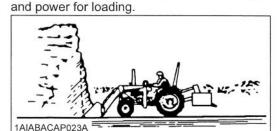


The float position will also avoid mixing of surface material with stockpile material. The float position will reduce the chance of surface gouging while removing snow or other material, or when working with a blade.



# LOADING FROM A BANK

Choose a forward gear that provides a safe ground speed





#### WARNING

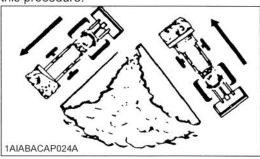
To avoid serious personal injury:

- · Be extra careful when working on inclines.
- When operating on a slope, always operate up and down the slope, never across the slope.

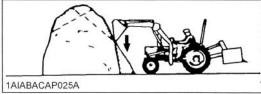
#### NOTE:

 Loader lift and break-away capacity diminish as loading height is increased.

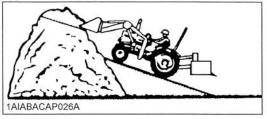
Side cutting is a good technique for cutting down a big pile. Wheel width should not exceed the bucket width for this procedure.



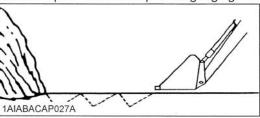
If the pile sides are too high and liable to cause cave-in, use the loader to break down the sides until a slot can be cut over the top.



Another method for large dirt piles is to build a ramp to approach to the pile.

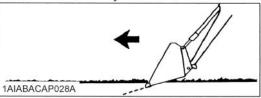


It is important to keep the bucket level when approaching a bank or pile. This will help avoid gouging the work area.

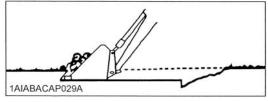


### PEELING AND SCRAPING

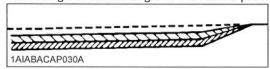
Use a slight bucket down angle, travel forward, and hold the lift control forward to start the cut. Make a short cut and break-out cleanly.



With the bucket level, start a cut at the notch approximately 2 in. deep. Hold the depth by feathering the bucket control to adjust the cutting edge up or down. When the front tires enter the notch, adjust the boom cylinder to maintain proper depth.

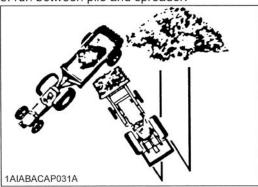


Make additional passes until the desired depth is reached. During each pass, use only the bucket control while at working depth. This will allow you to concentrate on controlling the bucket angle to maintain a precise cut.

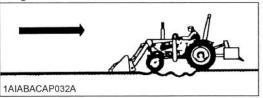


# LOADING LOW TRUCKS OR SPREADERS FROM A PILE

For faster loading, minimize the angle of turn and length of run between pile and spreader.

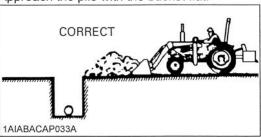


Backgrade occasionally with a loaded bucket to keep the work surface free of ruts and holes. Also, hold the lift control forward so the full weight of the bucket is scraping the ground. Use the heel of the bucket

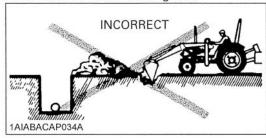


# **BACKFILLING**

Approach the pile with the bucket flat.



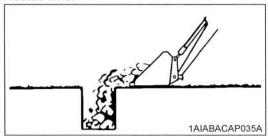
Poor operating methods will move less dirt and make it more difficult to hold a level grade.



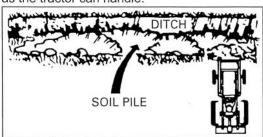
#### **IMPORTANT:**

 Do not use the bucket in the dumped position for bulldozing. As shown above, this method will impose severe shock loads on the dump-linkage, the bucket cylinders, and the tractor.

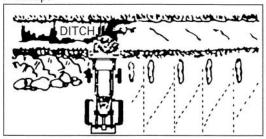
Leave dirt in the bucket because dumping on each pass wastes time.



Operate at right angles to the ditch. Taking as big a bite as the tractor can handle.



Leave dirt which drifts over the side of the bucket for final cleanup.



Pile dirt on the high side for easier backfilling on a slope.



### HANDLING LARGE HEAVY OBJECTS



#### **DANGER**

To avoid serious personal injury or death:

- Handling large, heavy objects can be dangerous due to:
  - (A)Danger of rolling the tractor over.
  - (B)Danger of upending the tractor.
  - (C)Danger of the object rolling or sliding down the loader boom onto the operator.
- If you must perform the above work, protect yourself by:
  - (A)Not lifting the load higher than necessary to clear the ground when moving.
  - (B)Adding rear ballast to the tractor to compensate for the load.
  - (C)Not lifting large objects with equipment that does not have an anti-rollback device.
  - (D)Moving slowly and carefully.
  - (E)Avoiding rough terrain.
  - (F)Keeping transport distance as short as possible and carry the load as low as possible during transport.

### **VALVE LOCK**



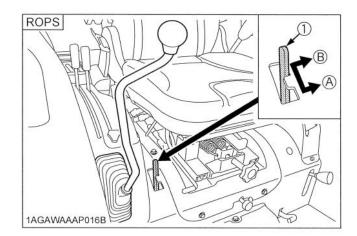
#### CAUTION

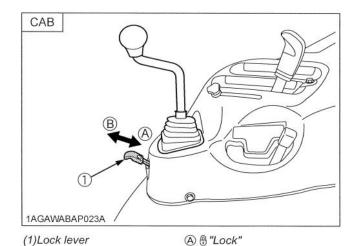
To avoid injury from crushing:

- Do not utilize the valve lock for tractor maintenance or repair.
- The valve lock is to prevent accidental actuation when implement is not in use or during transport.

The control valve is equipped with a valve lock feature. The control valve is locked in the neutral position.

The lock is not intended and will not prevent a leak down of the implement during the period of storage.

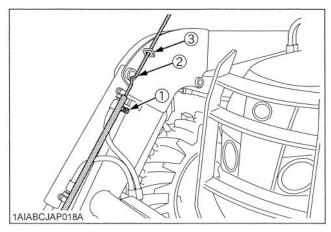




® ⊕ "Unlock"

## **BUCKET LEVEL INDICATOR**

Depending on the front attachment, loosen the indicator rod lock bolt and readjust the indicator rod length.



- (1) Bolt
- (2) Indicator rod
- (3) Guide, Indicator rod

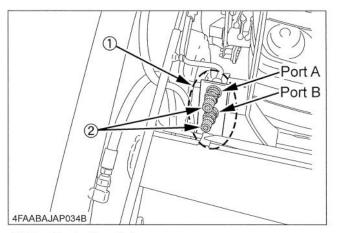
# FRONT REMOTE HYDRAULIC CONTROL SYSTEM (if equipped)

This system can be used for the front mounted hydraulic implement.

Provides hydraulic oil to the front outlet directly.

#### ■Install the Coupler

- 1. Remove the cap from the front hydraulic outlet.
- 2. Install the hydraulic quick coupler as required.



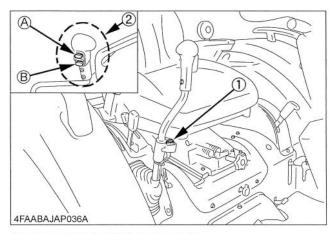
- (1) Front hydraulic outlet
- (2) Hydraulic quick coupler (Not included in this kit)

#### **■**Control Switch

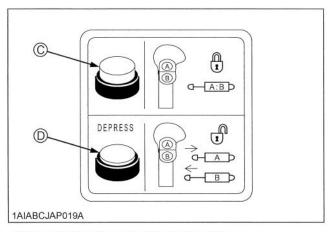
Front hydraulic valve main switch
 Push the front hydraulic valve main switch (1) to
 engage the front hydraulic valve.
 A light on the switch will illuminate to indicate that the

A light on the switch will illuminate to indicate that the front hydraulic valve is on, and to enable the activation switch (2).

- 2. Activation switch
  - (1) When pressing the "A" button, hydraulic oil will come out of the port A and return through the port B as long as the switch is pressed.
  - (2) When pressing the "B" button hydraulic oil will come out of the port B and return through the port A as long as the switch is pressed.
- 3. Push the front hydraulic valve main switch again to disengage the front hydraulic valve, and the light of the front hydraulic valve main switch will turn off.



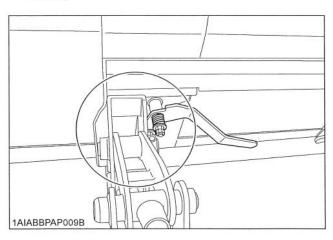
- (1) Front hydraulic valve main switch
- (2) Activation switch



- (C) Front hydraulic valve main switch "OFF"
- (D) Front hydraulic valve main switch "ON"

#### IMPORTANT:

 While a front mounted hydraulic implement is used, make sure the hydraulic hose is routed out of contact with the left and right bucket links. (Keep the hose from running over within the circled zone in the figure below.)





### CAUTION

To avoid personal injury:

 Valve lock does not lock out switch operated third-function hydraulics, which are active when the key switch and the front hydraulic valve main switch are ON.

### ■ Remote Control Coupler Connecting and Disconnecting



#### CAUTION

To avoid personal injury:

- Stop the engine and relieve pressure before connecting or disconnecting lines.
- Do not use your hand to check for leaks.

#### Relieve Hydraulic Pressure

1. Move the key switch to the "RUN" position.

#### NOTE:

- Don't start the engine.
- 2. Push the front hydraulic valve main switch "ON".
- 3. Press the activation switch A and B several times.
- 4. Push the front hydraulic valve main switch "OFF".
- 5. Turn the key switch to the "OFF" position.

#### Connecting

- 1. Clean both couplers.
- 2. Remove dust plugs.
- 3. Insert the implement coupler to the tractor hydraulic coupler.
- 4. Pull the implement coupler slightly to make sure couplers are firmly connected.

#### Disconnecting

- 1. Lower the implement first to the ground to release hydraulic pressure in the hoses.
- 2. Clean the couplers.
- 3. Press the "Activation switch" a couple of times to relieve hydraulic pressure.
  - Pull the hose straight from the hydraulic coupler to release it
- 4. Clean oil and dust from the coupler, and then replace the dust plugs.

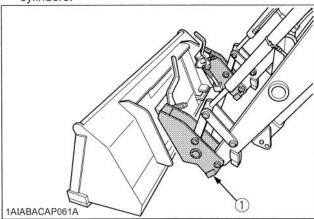
#### NOTE :

 Your local KUBOTA Dealer can supply parts to adapt couplers to hydraulic hoses.

# ATTACHING IMPLEMENTS

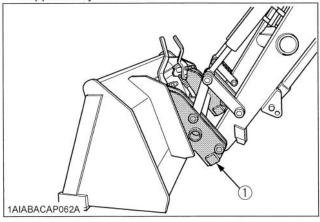
#### NOTE:

- Implements should be located on a flat, firm surface when attaching and detaching them from the Quick Hitch.
- To mount an implement, pull the handles of the quick hitch latching pins to the unlatched position. The quick hitch handles must be all the way up to ensure that the latching pins are fully retracted.
- Position the tractor squarely in front of the implement and tilt the quick hitch forward with the bucket cylinders.



(1) Quick hitch

- 3. Ease the quick hitch mounting plate into the saddle of the implement.
- 4. Without raising the implement from the ground, roll the quick hitch back using the bucket cylinders and raise the boom slightly. The back of the implement should rest flat against the front of the quick hitch mounting plate and the weight of the implement should be supported by the loader.



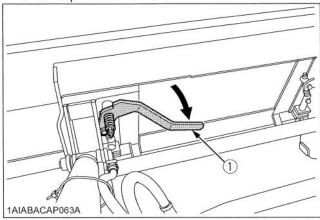
(1) Quick hitch



### CAUTION

TO AVOID PERSONAL INJURY OR MACHINE DAMAGE:

- DO NOT RAISE IMPLEMENT COMPLETELY OFF THE GROUND AT THIS POINT. THE IMPLEMENT COULD SWING OFF THE QUICK HITCH.
- 5. When the implement is properly seated in the saddle and against the front of the quick hitch mounting plate, turn off the engine and set the parking brake. Push the quick hitch handles to the fully latched position. Verify both latching pins are completely engaged in the base of the implement.



(1) Quick hitch handle

You are now ready to use the attached implement. All compatible implements attach and detach using the same method.



#### CAUTION

TO AVOID PERSONAL INJURY OR MACHINE DAMAGE:

- NEVER OPERATE OR TRANSPORT IMPLEMENTS WHICH ARE NOT ATTACHED COMPLETELY.
- ALWAYS REPLACE DAMAGED HARDWARE IMMEDIATELY.

### **DETACHING IMPLEMENTS**

- Detaching implements is done in the reverse of attaching implements. The procedure is below.
- 2. Lower the implement to ground level with the implement slightly in the rolled back position. Stop the engine and set the parking brake.
- 3. Pull the quick hitch handles to the unlatched position to release the latching pins.
- 4. While sitting in the tractor operator's seat, start the engine and slowly move the loader control lever to the "DUMP" position until the implement is pushed away slightly from the Quick Hitch.
- 5. Lower the loader boom so that the quick hitch mounting plate clears the implement saddle.
- 6. Back away from the implement slowly.
- If an implement is not going to be attached to the quick hitch immediately, push the handles of the quick attach to the locked position to prevent damage to the handle assembly.

# DISMOUNTING THE LOADER



### **CAUTION**

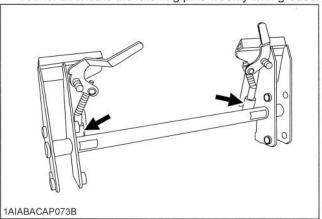
To avoid machine damage or personal injury:

Remove loader from tractor only when an approved loader bucket is attached.

Follow instructions provided in this operator's manual removing loader from the tractor.

### **MAINTENANCE**

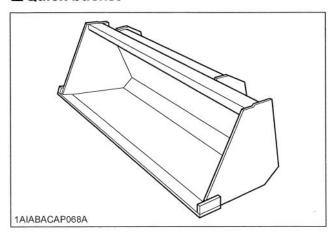
- Implements are secured to the quick hitch with an over center latching system. It is important that these parts are kept clean, lubricated and free from debris.
- 2. Keep the latching pins and latching handles free from debris. Lubricate the latching pins weekly with grease.



- Keep the latching handles tight. If the handles become loose, tighten the hex nut slightly to remove any play from the handles.
- 4. Clean the saddle, at the top of the implement, and the latching pin holes of any dirt and debris before mounting an implement to the quick hitch.

### **ATTACHMENTS**

#### ■Quick bucket



-SQUARE 66"
WIDTH
1675mm (66in.)
STRUCK CAPACITY
0.23 cu.m. (8.1cu.ft.)

APPLICABLE LOADER MODEL LA514,LA724,LA854

-SQUARE 72" WIDTH

1830mm (72in.)

STRUCK CAPACITY

0.31cu.m. (10.9cu.ft.)

APPLICABLE LOADER MODEL

LA724,LA854

-ROUND 72"HD

**WIDTH** 

1830mm (72in.)

0.31cu.m. (10.9cu.ft.)

STRUCK CAPACITY

APPLICABLE LOADER MODEL

LA724,LA854

-SQUARE 72" LIGHT MATERIAL

WIDTH

1830mm (72in.)

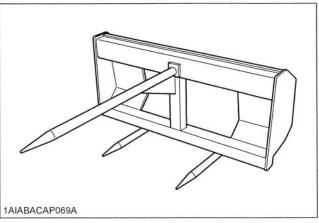
STRUCK CAPACITY

0.36cu.m. (12.7cu.ft)

APPLICABLE LOADER MODEL

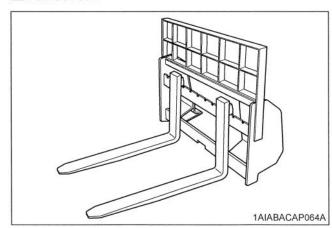
LA514,LA724,LA854

#### ■Bale spear



**OVERALL HEIGHT** 524mm (20.63in.) **OVERALL WIDTH** 1149mm (45.24in.) OVERALL LENGTH (INCLUDING MAIN SPEAR) 1376mm (54.17in.) USEABLE LENGTH OF MAIN SPEAR 1008mm (39.69in.) USEABLE LENGTH OF SPEAR 2 356mm (14.02in.) MAXIMUM DIAMETER OF MAIN SPEAR 51mm (2.00in.) DIAMETER OF SPEAR 2 32mm (1 1/4in.) WEIGHT OF IMPLEMENT 74kg (163lbs)

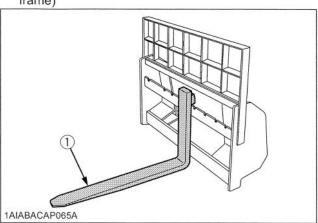
#### ■ Pallet fork



LOADER MODEL RATED CAPACITY
LA513, LA514, TL500 800 LBS.
LA723, LA724 1000 LBS.
LA853, LA854 1300 LBS.

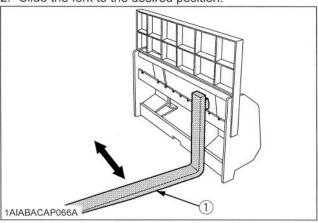
# ASSEMBLE PALLET FORK

 Install the fork to the middle of the frame. (fit the lower hook of the fork to the center notch of the frame)



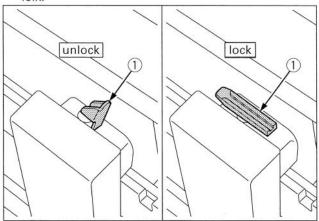
(1) Fork

2. Slide the fork to the desired position.



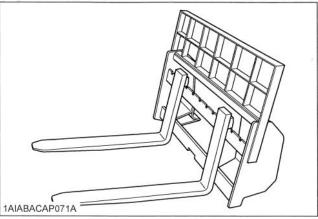
(1) Fork

3. Push the lock lever and slide the fork slightly until the lock pin engages with one of the notches to lock the folk.



(1) Lock lever

The other fork can be installed using the same procedures.



# **MAINTENANCE**



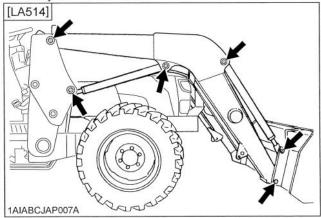
# **CAUTION**

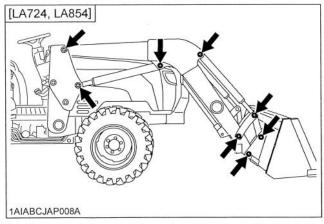
To avoid personal injury:

 Be sure to check and service the tractor on a flat place with the bucket on the ground, engine shut off, the key removed and the parking brake on.

### LUBRICATION

 Lubricate all grease fittings every 10 hours of operation. Also, lubricate joints of control lever linkage every 10 hours. High quality grease designating "extreme pressure" and containing Molybdenum disulfide is recommended. This grease may specify "Moly EP" on its label.





 Daily before operation, check the tractor hydraulic fluid level. If low, add as described in the tractor's operator's manual. Also change the filter element and the hydraulic fluid as recommended in the tractor's operator's manual.

# RE-TIGHTENING OF HARDWARE

After 20 to 30 hours of initial loader operation, re-tighten all mounting bolts and nuts to the required torque value as follows.

Sequence	Location	Bolt/Nut	Required Torque N-m (kgf-m, ft-lbs)
1	Main frames (Front axle frame)	M16 bolts	226 (23, 166)
2	Main frames (Rear brackets)	M16 nuts	226 (23, 166)

### **DAILY CHECKS**

- Before the day's operation, visually check to see if the hardware and their bolts and nuts are tight enough.
- 2. With the engine off and the bucket on the ground, inspect all hoses for cuts or wear. Check for signs of leaks and make sure all fittings are tight.

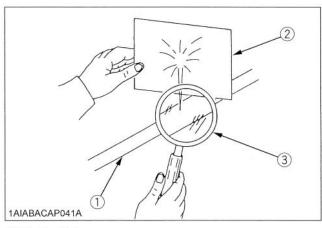


#### WARNING

To avoid serious personal injury:

 Escaping hydraulic fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury. Before disconnecting lines, be sure to relieve all pressure.

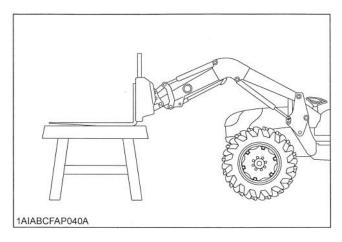
Before applying pressure to the system, be sure all connections are tight and that lines, tubes, and hoses are not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than your hands, to search for suspected leaks.



- (1) Hydraulic line
- (2) Cardboard
- (3) Magnifying glass

If injured by escaping fluid, see a doctor at once. Serious infection or allergic reaction will develop if proper medical treatment is not administered immediately.

- When removing the engine side covers, be careful not to touch hot loader cylinders.
   Allow all surfaces to cool before performing maintenance.
- Before servicing the loader or the tractor, be sure to place the loader boom in contact with the ground. If the loader boom must be raised during service or maintenance, support the boom as shown in the figure.



# **EVERY 50 HOURS**

■Checking main frame bolt torque

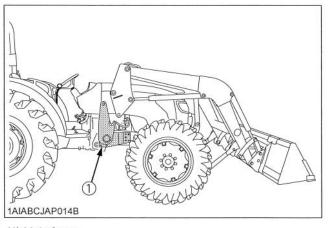


#### **CAUTION**

To avoid personal injury:

- Never operate front loader with a loose main frame
- Any time bolts and nuts are loosened, retighten to specified torque.
- Check all bolts and nuts frequently and keep them tight.

Check main frame bolts and nuts regularly especially when new. If they are loose, tighten them as follows.

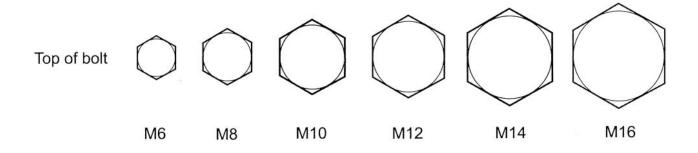


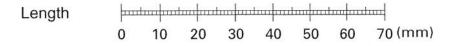
(1) Main frame

Tightening torque: 226 N-m (23 kgf-m, 166 ft-lbs)

# ■General torque specification

American standard screws, bolts and nuts with UNC or UNF threads					Metric ca	ap screws	8.8
SAE grade No.		SAE GR.5	SAE GR.8	property class		8.8 Approx. SAE GR 5	
1/4	(N-m) (kgf-m) (ft-lbs)	11.7 to 15.8 1.19 to 1.61 8.6 to 11.6	16.3 to 19.8 1.66 to 2.02 12.0 to 14.6	M6	(N-m) (kgf-m) (ft-lbs)	9.8 to 1 1.0 to 1 7.2 to 8	1.1
5/16	(N-m) (kgf-m) (ft-lbs)	23.1 to 27.8 2.35 to 2.83 17.0 to 20.5	32.5 to 39.3 3.31 to 4.01 24.0 to 29.0	M8	(N-m) (kgf-m) (ft-lbs)	23.6 to 2 2.4 to 2 17.4 to 2	2.8
3/8	(N-m) (kgf-m) (ft-lbs)	47.5 to 57.0 4.84 to 5.81 35.0 to 42.0	61.0 to 73.2 6.22 to 7.46 45.0 to 54.0	M10	(N-m) (kgf-m) (ft-lbs)	48.1 to 5 4.9 to 5 35.5 to 4	5.7
1/2	(N-m) (kgf-m) (ft-lbs)	108.5 to 130.2 11.06 to 13.28 80.0 to 96.0	149.2 to 179.0 15.21 to 18.25 110.0 to 132.0	M12	(N-m) (kgf-m) (ft-lbs)	77.5 to 9 7.9 to 9 57.2 to 9	9.2
9/16	(N-m) (kgf-m) (ft-lbs)	149.2 to 179.0 15.21 to 18.25 110.0 to 132.0	217.0 to 260.4 22.13 to 26.55 160.0 to 192.0	M14	(N-m) (kgf-m) (ft-lbs)	124 to 2 12.6 to 2 91.5 to 2	15.0
5/8	(N-m) (kgf-m) (ft-lbs)	203.4 to 244.1 20.74 to 24.89 150.0 to 180.0	298.3 to 358.0 30.42 to 36.51 220.0 to 264.0	M16	(N-m) (kgf-m) (ft-lbs)	196 to 2 20.0 to 2 145 to	23.0





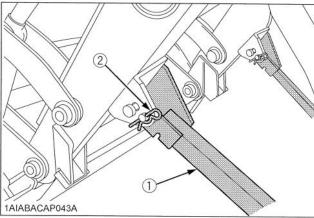
# **REMOVING THE LOADER**



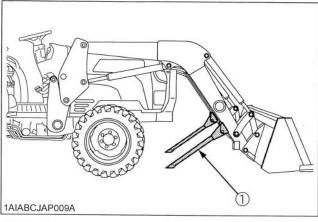
#### CAUTION

To avoid personal injury:

- Make sure an approved bucket is attached before removing the loader from the tractor.
- For removing the loader, choose flat and hard ground, preferably concrete.
- If the ground surface is soft, place suitable planks on the ground for the bucket and stands.
- When starting the engine or using the hydraulic control valve, always sit in the operator's seat.
- Make sure the bucket and stands are at ground level.
- 1. Raise the boom until the stands can be rotated.
- 2. Stop the engine.
- Remove the spring pins holding the stands to the boom.
- 4. Rotate the stands until the pin on the stand and hole in the boom are aligned.
  - Then slide the stands outward and insert the spring pin as shown.



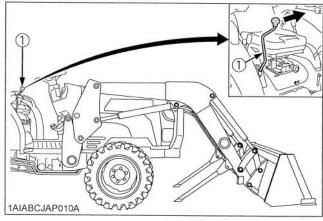
- (1) Stand
- (2) Spring pin
- 5. Start the engine and run at idle.
- 6. Dump the bucket approximately 20 degrees.
- 7. Lower the boom and raise the front wheels slightly.



(1) Stand

#### IMPORTANT:

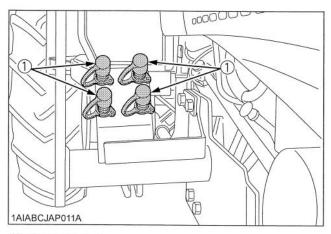
- Lift the weight off the front wheels with the bucket. Do not attempt to lift them with the stands.
- 8. Stop the engine.
- 9. Remove the mounting pins from the loader main frame and hold them on boom.
- 10. Start the engine and run at idle. Slowly move the hydraulic control lever to rollback position to raise the loader side frames up and out of the receivers of the main frames as shown.



(1) Hydraulic control lever

- 11. Stop the engine.
- 12. Slowly release all hydraulic pressure by moving the hydraulic control lever in all directions.
- 13. Disconnect the four hoses with quick couplers at the control valve and place them on the right side of the boom.

14. Place the protective caps and plugs on the quick coupler ends.

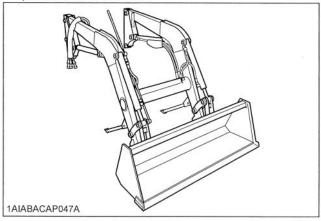


(1) Protective plug

15. Start the engine and slowly back the tractor away from the loader.

# STORING THE LOADER

- 1. Store the loader in a clean dry place.
- 2. Make sure the loader is properly supported.
- 3. Attach the protective plugs and caps to the couplers to protect them from dust.



- 4. Check all hydraulic hoses and connections. Repair or replace them if necessary.
- 5. Repair or replace any worn, damaged or missing parts.
- 6. Lubricate loader as described in "LUBRICATION" in Maintenance section.
- 7. Apply a coat of grease to all exposed cylinder rods and mounting pins to prevent rust.
- 8. Repaint worn or scratched parts.

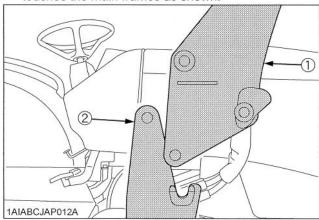
# REINSTALLING THE LOADER



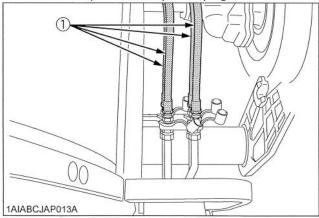
# **CAUTION**

To avoid personal injury:

- When starting the engine and operating the control valve, always sit in the operator's seat.
- 1. Slowly drive the tractor between the loader side frames until the rear portion of both side frames touches the main frames as shown.

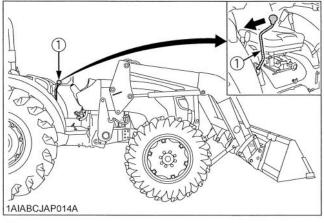


- (1) Side frame
- (2) Main frame
- 2. Stop the engine.
- Connect the four hoses with couplers to the nipples on the control valve as indicated with color marks. Then connect the protective caps and plugs to each other.



- (1) Hoses
- 4. Start the engine and run at idle.

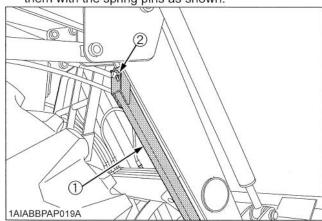
5. Slowly move the hydraulic control lever to dump position to lower the side frames into the main frames and engage the bosses of the side frames to the guide plates of the main frames. Then lift the weight off the front wheels with the loader - do not lift the wheels off the ground.



(1) Hydraulic control lever

#### **IMPORTANT:**

- Do not attempt to lift the front wheels with the stands.
- 6. Stop the engine. Reinstall the mounting pins and secure them with the spring pins.
- 7. Start the engine.
- 8. Raise the boom until the stands can be rotated.
- 9. Stop the engine.
- 10. Store the stands to their original positions and secure them with the spring pins as shown.



- (1) Stand
- (2) Spring pin
- 11. Start the engine.
- 12. Lower the boom and level the bucket.

# Kいりつけつ

: KUBOTA TRACTOR CORPORATION U.S.A.

3401 Del Amo Blvd., Torrance, CA 90503, U.S.A. Telephone : (310)370-3370 /ision : 1175 S. Guild Avc., Lodi, CA 95240

Western Division

(209)334-9910 Telephone:

Central Division 14855 FAA Blvd., Fort Worth, TX 76155

Telephone: (817)571-0900

Northern Division 6300 at One Kubota Way, Groveport, OH 43125

Telephone: (614)835-1100

Southeast Division: 1025 Northbrook Parkway, Suwanee, GA 30024

(770)995-8855 Telephone: KUBOTA CANADA LTD. Canada

5900 14th Avenue, Markham, Ontario, L3S 4K4, Canada

Telephone: (905)294-7477

Delta Distribution Center: 7979 82nd St, Delta B.C. V4G 1L7

Telephone: (604)940-6061

Drummondville Distribution Center: 5705 Place Kubota, Drummondville, Québec, J2B 6B4 Telephone: (819)478-7151

KUBOTA EUROPE S.A.S

19-25, Rue Jules Vercruysse, Z.I. BP88, 95101 Argenteuil Cedex, France Telephone: (33)1-3426-3434

KUBOTA EUROPE S.A.S Italy Branch
Via Grandi, 29 20068 Peschiera Borrome (MI) Italy

Italy

Telephone: (39)02-51650377

KUBOTA (DEUTSCHLAND) GmbH Germany

Senefelder Str. 3-5 63110 Rodgau /Nieder-Roden, Germany Telephone: (49)6106-873-0 : KUBOTA (U.K.) LTD.

U.K.

France

Dormer Road, Thame, Oxfordshire, OX9 3UN, U.K. Telephone: (44)1844-214500

KUBOTA ESPAÑA S.A. Spain

Ctra, Del Barrio de la Fortuna s/n Cuatro Vientos 28044 Madrid, Spain Telephone: (34)91-508-6442: KUBOTA TRACTOR AUSTRALIA PTY LTD.

Australia

100 Keilor Park Drive, Tullamarine, Victoria 3043 Australia Telephone : (61)-3-9279-2000

SIME KUBOTA SON. BHD. Malaysia

No.3 Jalan Sepadu 25/123 Taman Perindustrian Axis,

Seksyen 25, 40400 Shah Alam, Selangor Darul Ehsan Malasia Telephone: (60)3-736-1388

Philippines: KUBOTA AGRO-INDUSTRIAL MACHINERY PHILIPPINES, INC.

155 Panay Avenue, South Triangle Homes, 1103 Quezon City, Philippines Telephone: (63)2-9201071: SHIN TAIWAN AGRICULTURAL MACHINERY CO., LTD.

Taiwan

16, Fengping 2nd Rd, Taliao Shiang Kaohsiung 83107, Taiwan R.O.C. Telephone: (886)7-702-2333 Indonesia: P.T. KUBOTA INDONESIA

JALAN. Setyabudi 279, Semarang, Indonesia Telephone: (62)-24-7472849 THE SIAM KUBOTA INDUSTRY CO., LTD. Thailand

101/19-24 Navanakorn, Tambol Klongneung, Amphur Klongluang, Pathumtani 12120, Thailand

Telephone: (66)2-529-0363

KUBOTA Corporation

Code No. 7J275-6911-1