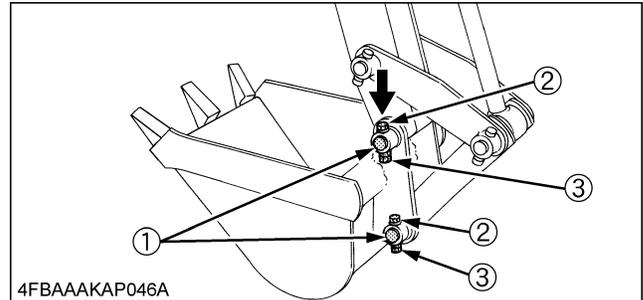


- (1) Cylinder rod
 (2) Hose (Cylinder bottom side)
 (3) Hose (Cylinder rod side)

■ Bucket

1. Install bucket to the dipperstick of the backhoe using two pins, bolts and nuts.



- (1) Pins (1.25 in. x 8.82 in.)
 (2) Bolt (M10 x 80)
 (3) Locking nut (M10)

IMPORTANT :

- Nuts : Do not tighten firmly. Gap between boss and nut should be 2 to 3 mm (0.08 to 0.12 in.).
- Bolts : Make sure not to confuse the set-up direction of bolts.
- Pins : Apply a small amount of multipurpose grease.

INSTALLING THE BACKHOE



WARNING

To avoid personal injury or death:

- When starting the engine, always sit in the operator's seat.
- When getting off the tractor, make sure that PTO lever is off and range gear shift lever is in neutral. Set the parking brake.
- Keep hands, feet and body from between tractor and backhoe. Never allow any part of body under the machine.



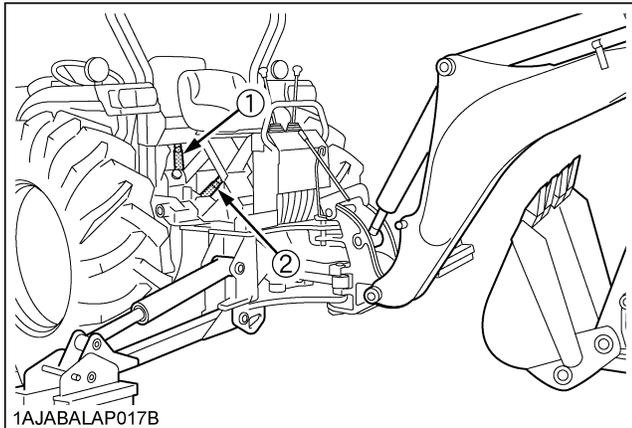
CAUTION

To avoid personal injury:

- Make sure the tractor PTO is disengaged.

IMPORTANT :

- When installing the backhoe, set the engine speed to low idle.
1. Remove the 3-point hitch and / or drawbar. (if equipped)
 2. Make sure the swing lock pin is installed.
 3. Slowly back the tractor / loader, centering to the backhoe main frame.
Stop the tractor 250 to 300 mm (10 to 12 inches) away from the backhoe.
 4. Shut the engine off and set the parking brake.
 5. Connect the inlet and outlet hoses of the backhoe to the outlet hose and return hose of the tractor.



- (1) Inlet hose
(2) Return hose

IMPORTANT :

- Make sure both hoses are firmly connected before starting the engine.
6. Restart the engine.



WARNING

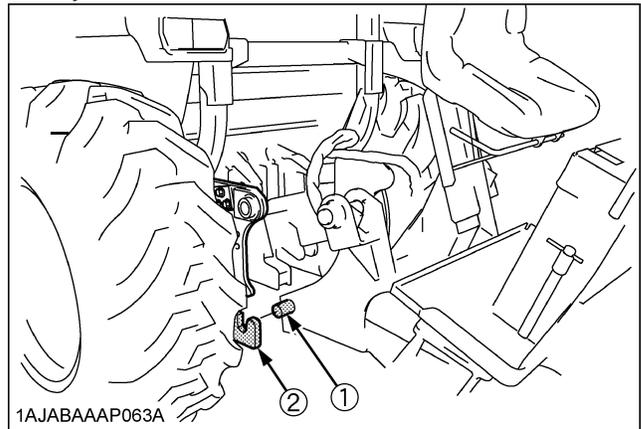
To avoid personal injury or death:

- Do not move the joystick control lever to the swing position.

7. Stand beside the rear tire. Move the boom to fully raised position and raise the backhoe by operating the stabilizers until the mount bars on the backhoe main frame are slightly higher than the tractor main frame support hooks.

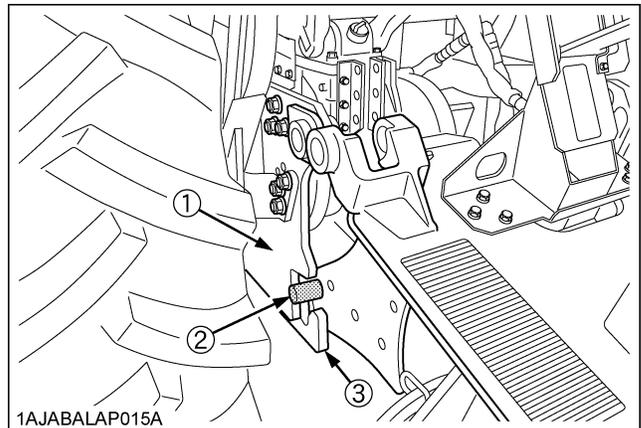
NOTE :

- If the support hooks are not parallel to the mount bars, adjust with the stabilizers.



- (1) Mount bar
(2) Support hook

8. Move the tractor backward until the support hooks on the tractor main frame are just beneath the mount bar on the backhoe main frame.

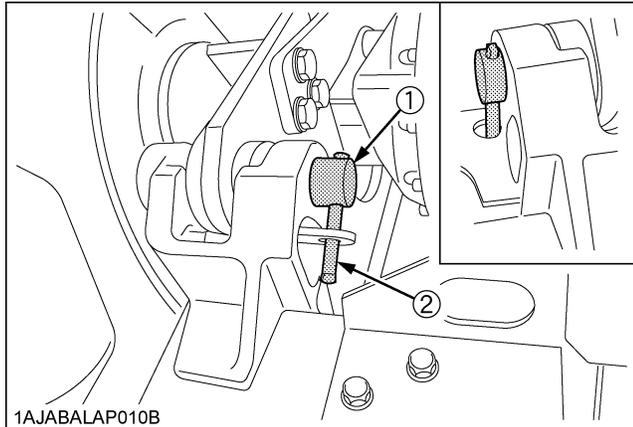


- (1) Guide stop
(2) Mount bar
(3) Support hook

9. Lower the mount bar onto the support hooks by operating the stabilizer and boom control levers.

10. Move the boom slowly to the lowering position, and engage the guide plates of the main frame to the bosses of sub frame. Then raise the rear wheels slightly by operating the boom to the lowering direction.

11. Shut off the engine. Reinstall the mounting pins, and insert the retaining bar of the mounting pins to the hole of the main frame.



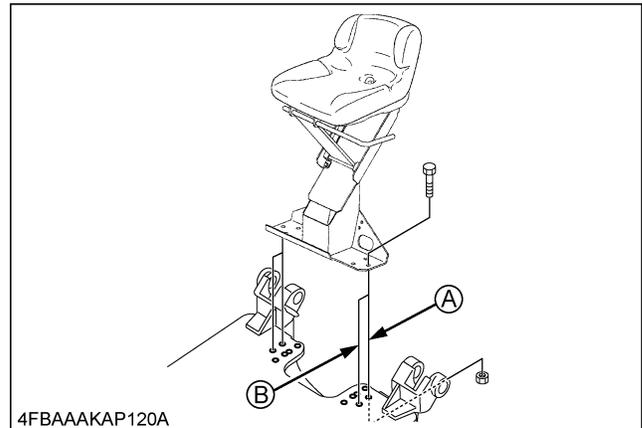
- (1) Mounting pin
(2) Retaining bar

NOTE :

- Move the tractor / loader / backhoe to an open area and cycle all backhoe functions. This will check their operation and flow oil back through the system, filtering it and refilling each circuit. Check the hydraulic oil level before putting the backhoe into full operation. See section "MAINTENANCE" for oil type and correct level.

◆ **Installation position for the seat support**

Choose the front or rear seat support position for the types of tractor which installs the backhoe.



(A): Rear position	L3240-3 to L5740-3 ROPS/CAB Model L3560 to L6060 ROPS/CAB Model
(B): Front position	L3240 to L5740 ROPS Model L4400-1, L4600, L4701, MX4700, MX4800, MX5100, MX5200, MX5400, MX5800, MX6000

Ⓢ Attach the seat support to the main frame.

Tighten the flange bolts and nuts by the correct tightening torque.

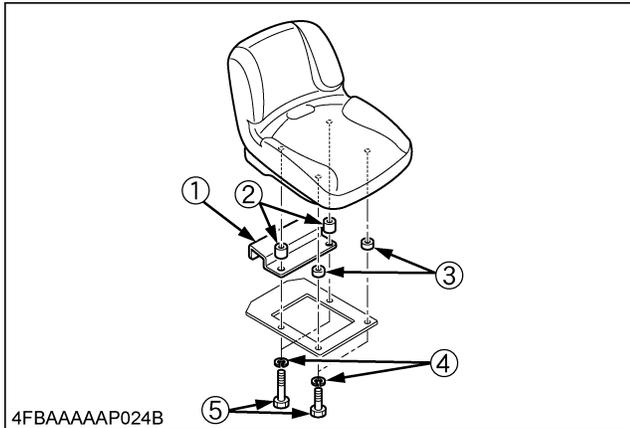
6 - M12 flange bolts and nuts

Tightening torque: 77.5 to 90.1 N·m

(7.9 to 9.2 kgf-m, 57.2 to 66.5 lbf-ft)

[BH4998] (L3940 - L5740)

☐ Place the seat-spacer under the operator's seat then reinstall them as shown below. Tighten the bolts by the correct tightening torque.



- (1) Seat-spacer
 (2) Cushion
 (3) Cushion
 (4) Washer
 (5) 4-5/16" bolts

Tightening torque: 23.1 to 27.7 N·m
 (2.35 to 2.82 kgf·m, 17.0 to 20.4 lbf·ft)

REMOVING THE BACKHOE**■ Removal of The Backhoe****CAUTION**

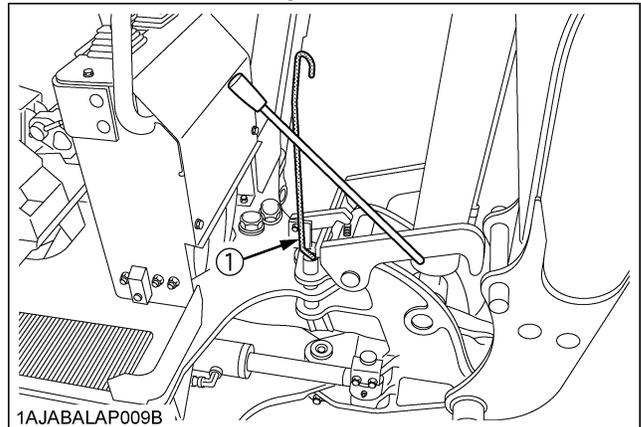
To avoid personal injury:

- When starting the engine, always sit in the tractor operator's seat.
- When getting off the tractor, make sure that PTO lever is off and range gear shift lever is in neutral. Then set the parking brake.
- Keep hands, feet and body from between tractor and backhoe. Never allow any part of body under the machine.
- When leaving the backhoe operator's seat, fully lower the boom to the ground.
- When removing the backhoe set the swing lock pin.

IMPORTANT :

- When removing the backhoe, set the engine speed to low idle.
- For removing the backhoe, locate the tractor / loader / backhoe on a flat level and hard surface, preferably concrete. If the surface is soft, place a board on the ground for the bucket and stabilizers.

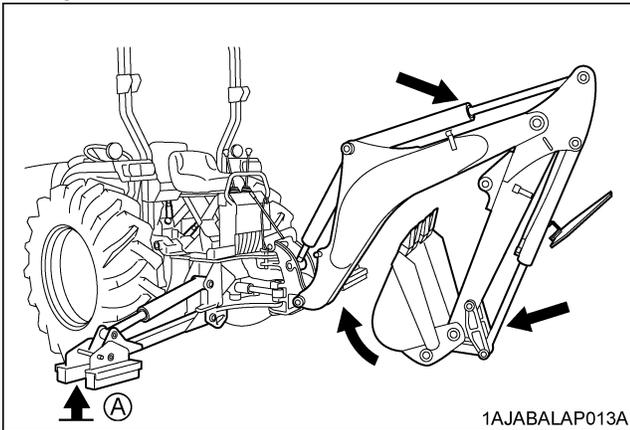
1. Set the swing lock pin to prevent the pivoting of the boom before removing the backhoe.



- (1) Swing lock pin

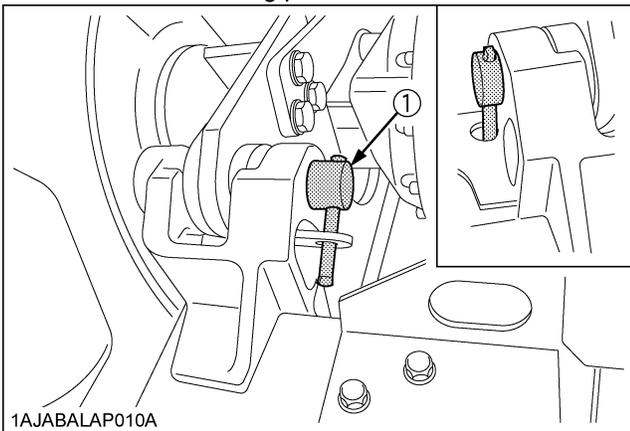
2. Stand beside the rear tire, fully close the dipperstick, curl the bucket and lower the boom until the back of bucket contacts the ground.

- Keep the stabilizer pads at about 380 mm (15 inches) high.



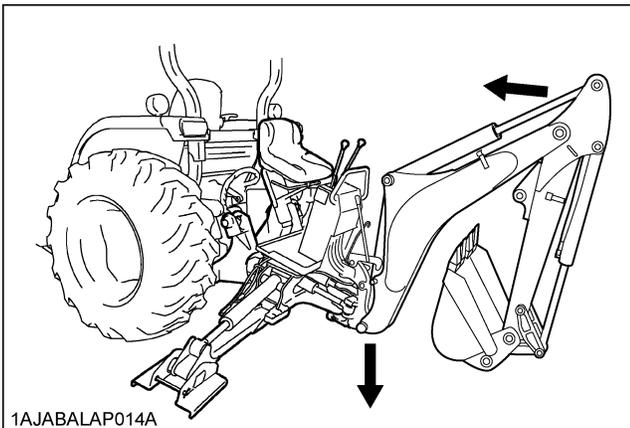
(A) 380 mm (15 inches)

- Raise the rear wheels slightly with the boom and remove the mounting pins.



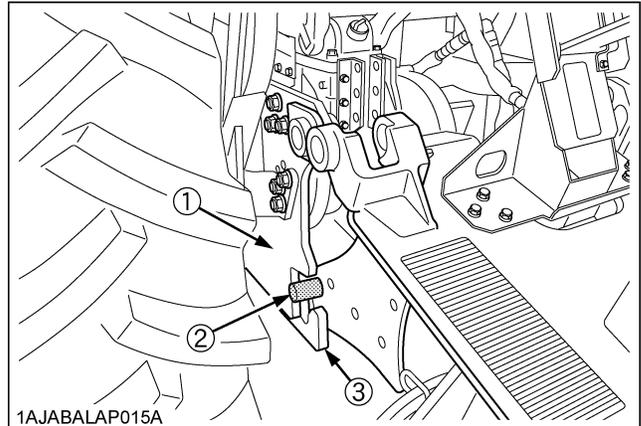
(1) Mounting pin

- Slowly raise the boom to disengage the backhoe from the tractor.



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- Raise the backhoe by operating the stabilizers in the lowering direction until the mount bars hit the guide stopper on the support hooks.



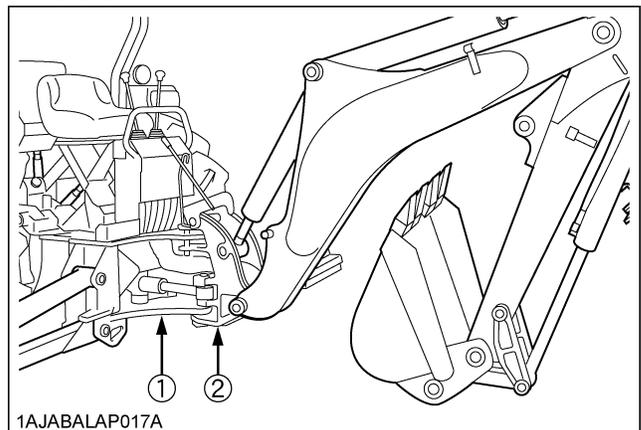
(1) Guide stop
(2) Mount bar
(3) Support hook

- Move the tractor forward from the backhoe about 200 mm (8 inches).

IMPORTANT :

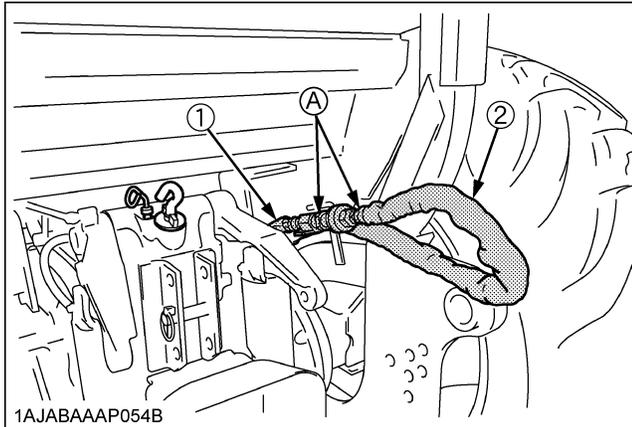
- Be careful not to damage or break the hoses when moving the tractor.

- Lower the main frame and swing frame onto the ground by operating the boom and stabilizer control levers.



(1) Main frame
(2) Swing frame

9. Shut off the engine and set the parking brake.
10. Slowly release all hydraulic pressure by moving the backhoe hydraulic control levers in all directions.
11. Disconnect hydraulic hoses in the following manner:
 - (1) Disconnect the inlet and outlet hoses from the tractor.
 - (2) Connect tractor's outlet hose to the coupler of return hose.



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 (1) Outlet hose (tractor) (A) To be connected
 (2) Return hose (tractor)

12. Restart the engine.
Then drive the tractor / loader slowly away from the backhoe.
13. Shut off the engine and remove the key from the tractor. Set the parking brake.

NOTE :

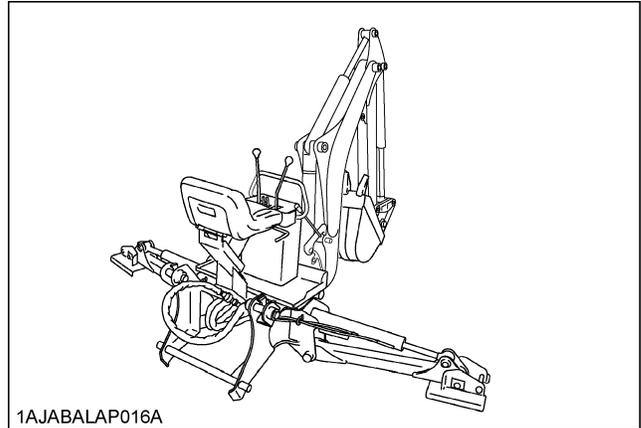
- The entire three point hitch can now be reinstalled on the tractor for use with other rear mount implements.
- Be sure that there is sufficient ballast in the rear tires and an implement is attached to the three point hitch before using the loader with backhoe removed.

IMPORTANT :

- Tractor outlet hose must be connected to tractor return hose when backhoe is removed.

Storage of The Backhoe

1. Store the backhoe in a dry place.
2. Apply a coat of grease to all exposed cylinder rods to prevent rusting.
3. If the backhoe is being stored outside, cover the backhoe with a suitable weather cover. This will keep moisture, dirt and other airborne debris from getting into the system.
4. Repair or replace any worn, damaged or missing parts.



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IMPORTANT :

- When storing the backhoe, install the dust caps onto the backhoe's hydraulic fittings to prevent contamination.

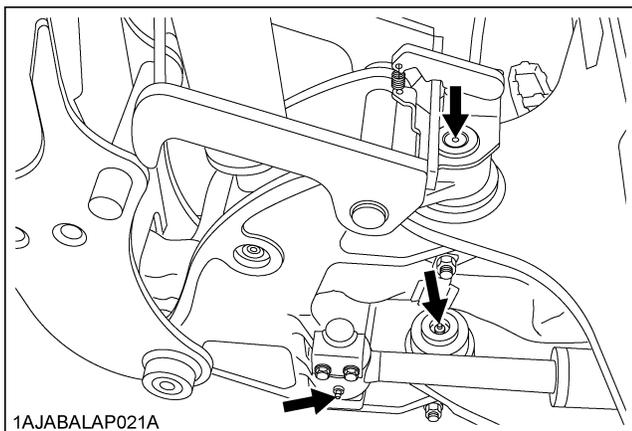
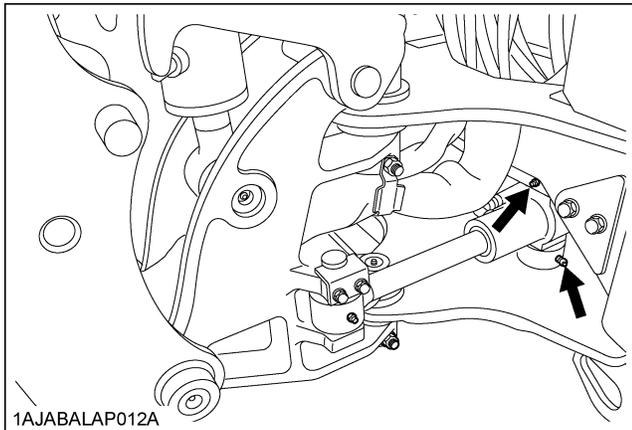
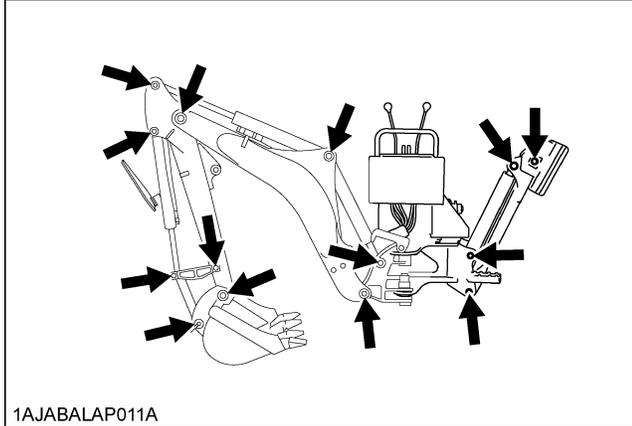
PRE-OPERATION CHECK

■ Lubrication

Lubricate all grease fittings with grease.

High quality grease designating "extreme pressure" and containing Molybdenum disulfide is recommended.

This grease may specify "Moly EP" on its label.

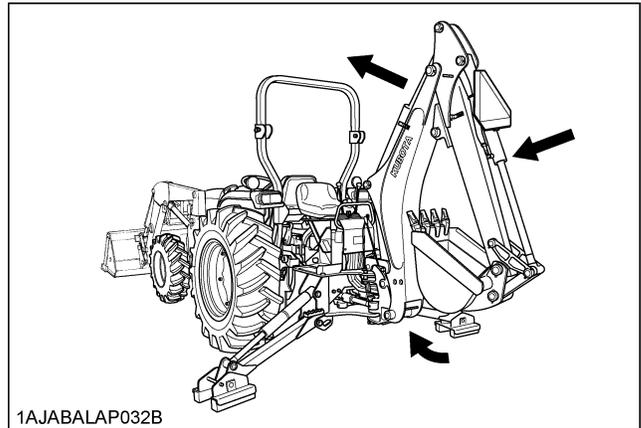


■ Transmission Fluid

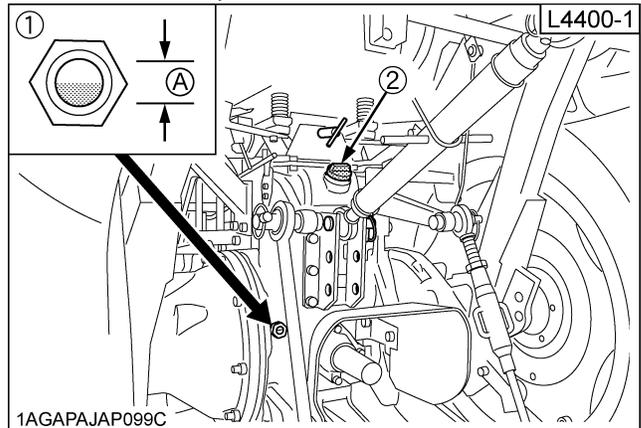
Check tractor transmission fluid level. Add fluid if necessary. Refer to the tractor operator's manual for instructions and proper fluid. Repeat this check after purging air from the system. At that time, it will be necessary to add transmission fluid.

IMPORTANT :

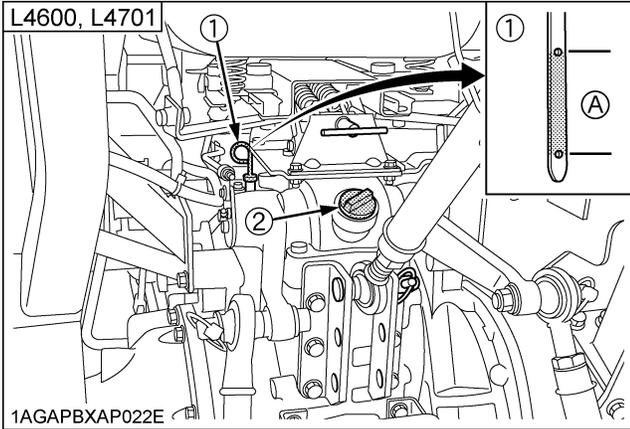
- If oil level is low, do not run engine.
- When checking the oil level, locate the tractor / loader / backhoe on a flat and level surface and set the loader / backhoe as illustrated.



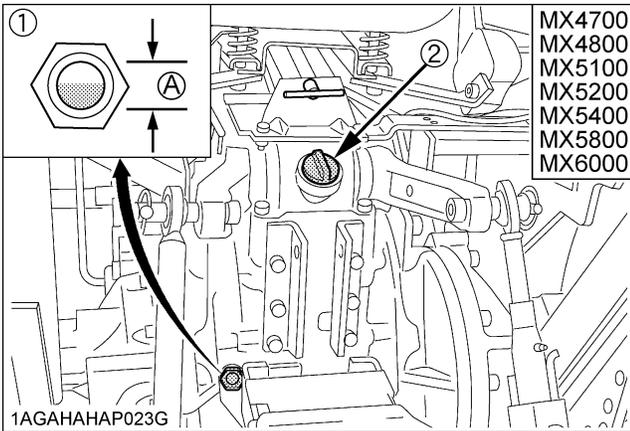
After purging air from the hydraulic circuit, add transmission oil to prescribed level.



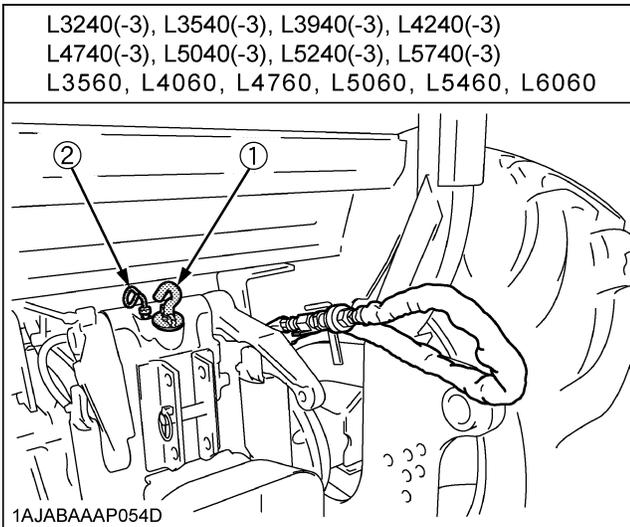
- (1) Gauge (A) Oil level is acceptable within this range.
 (2) Oil inlet



(1) Dipstick (A) Oil level is acceptable within this range.
 (2) Oil inlet



(1) Gauge (A) Oil level is acceptable within this range.
 (2) Oil inlet



(1) Oil port
 (2) Dipstick

ASSEMBLY TIME

Refer to the following table for the assembly time to open the crate and assemble the tractor.

Assembly times on the table are just for reference under the following conditions.

1. Assembly by one worker.
2. Following tools and equipment are available.
 - (1) Chain hoist or crane.
 - (2) Impact wrench, Ratchet wrench, Torque wrench, Socket wrench, Spanner wrench.
 - (3) Nylon strap.

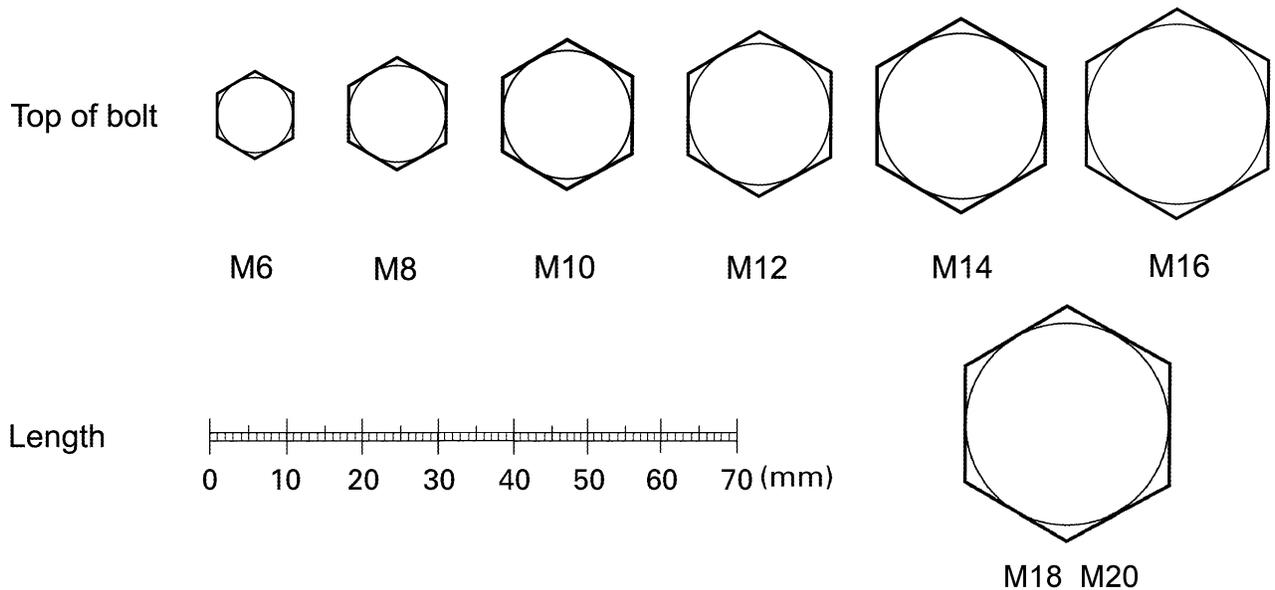
L4400-1 L4600 L4701 MX4700 MX4800 MX5100 MX5200 MX5400 MX5800 MX6000	2.25 HRS
-------------------------------------------------------------------------------------------------	----------

L3240(-3) L3540(-3) L3940(-3) L4240(-3) L4740(-3) L5040(-3) L5240(-3) L5740(-3) L3560 L4060 L4760 L5060 L5460 L6060	[ROPS] 2.50 HRS [CAB] 3.00 HRS
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TIGHTENING TORQUE OF BOLTS AND NUTS

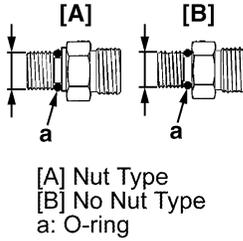
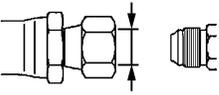
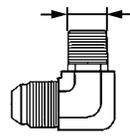
If the torque levels are specified in the text, follow that specification.

American standard screws, bolts and nuts with UNC or UNF threads			Metric cap screws 		
SAE grade No.	SAE GR.5 	SAE GR.8 	property class	8.8 Approx. SAE GR 5	
1/4	(N·m) 11.7 to 15.8 (kgf·m) 1.19 to 1.61 (lbf·ft) 8.6 to 11.6	(N·m) 16.3 to 19.8 (kgf·m) 1.66 to 2.02 (lbf·ft) 12.0 to 14.6	M6	(N·m) 9.8 to 11.2 (kgf·m) 1.0 to 1.1 (lbf·ft) 7.2 to 8.3	
5/16	(N·m) 23.1 to 27.8 (kgf·m) 2.35 to 2.83 (lbf·ft) 17.0 to 20.5	(N·m) 32.5 to 39.3 (kgf·m) 3.31 to 4.01 (lbf·ft) 24.0 to 29.0	M8	(N·m) 23.6 to 27.4 (kgf·m) 2.4 to 2.8 (lbf·ft) 17.4 to 20.2	
3/8	(N·m) 47.5 to 57.0 (kgf·m) 4.84 to 5.81 (lbf·ft) 35.0 to 42.0	(N·m) 61.0 to 73.2 (kgf·m) 6.22 to 7.46 (lbf·ft) 45.0 to 54.0	M10	(N·m) 48.1 to 55.8 (kgf·m) 4.9 to 5.7 (lbf·ft) 35.5 to 41.2	
1/2	(N·m) 108.5 to 130.2 (kgf·m) 11.06 to 13.28 (lbf·ft) 80.0 to 96.0	(N·m) 149.2 to 179.0 (kgf·m) 15.21 to 18.25 (lbf·ft) 110.0 to 132.0	M12	(N·m) 77.5 to 90.1 (kgf·m) 7.9 to 9.2 (lbf·ft) 57.2 to 66.5	
9/16	(N·m) 149.2 to 179.0 (kgf·m) 15.21 to 18.25 (lbf·ft) 110.0 to 132.0	(N·m) 217.0 to 260.4 (kgf·m) 22.13 to 26.55 (lbf·ft) 160.0 to 192.0	M14	(N·m) 124 to 147 (kgf·m) 12.6 to 15.0 (lbf·ft) 91.5 to 108.4	
5/8	(N·m) 203.4 to 244.1 (kgf·m) 20.74 to 24.89 (lbf·ft) 150.0 to 180.0	(N·m) 298.3 to 358.0 (kgf·m) 30.42 to 36.51 (lbf·ft) 220.0 to 264.0	M16	(N·m) 196 to 225 (kgf·m) 20.0 to 23.0 (lbf·ft) 145 to 166	
			M18	(N·m) 275 to 318 (kgf·m) 28.0 to 32.5 (lbf·ft) 203 to 235	
			M20	(N·m) 368 to 431 (kgf·m) 37.6 to 44.0 (lbf·ft) 272 to 318	



TIGHTENING TORQUE OF ADAPTORS, ELBOWS AND OTHERS

If the torque levels are specified in the text, follow that specification.

Item	Shape	Thread size	Tightening torque		
			N·m	kgf·m	lbf·ft
Adjustable elbow, Adaptor (O-ring port) (UNF)	 <p>[A] Nut Type [B] No Nut Type a: O-ring</p> <p>4FBAAAKAP064A</p>	9/16	37 to 44	3.8 to 4.5	27 to 33
		3/4	48 to 54	4.9 to 5.5	35 to 40
		7/8	77 to 85	7.9 to 8.6	57 to 62
Hose fitting, Flare nut (UNF)	 <p>4FBAAAKAP065A</p>	9/16	25 to 28	2.55 to 2.85	18.5 to 20.6
		3/4	49 to 53	5.00 to 5.40	36.2 to 39.0
		7/8	77 to 85	7.86 to 8.67	56.8 to 62.6
Adaptor (NPT)	 <p>4FBAAAKAP066A</p>	1/4	30 to 50	3.1 to 5.0	23 to 36
		3/8	39 to 60	4.0 to 6.1	29 to 44
		1/2	49 to 58	5.0 to 5.9	36 to 43

CHECK LIST FOR INSPECTION AFTER ASSEMBLY

Inspector:	Date completed:	
Backhoe model:	Serial No.:	

Classification	Inspection items	Result
Assembly	<p>[L3560, L4060, L4760, L5060, L5460, L6060 ROPS Model] [L3560, L4060, L4760, L5460, L6060 CAB Model] [L3240(-3), L3540(-3), L3940(-3), L4240(-3), L4740(-3), L5040(-3), L5240(-3), L5740(-3) ROPS Model] [L3240-3, L3540-3, L3940-3, L4240-3, L4740-3, L5240-3, L5740-3 CAB Model]</p> <p>1. Check for proper tightening of floor sheet cover. Tightening torque for M8 bolts and nuts: 23.6 to 27.4 N·m</p>	
	<p>[When you changed the position of seat support]</p> <p>2. Check for proper tightening of seat support assy. Tightening torque for M12 flange bolts and nuts: 77.5 to 90.1 N·m</p>	
	<p>[BH4998 (L3940, L4240, L4740, L5040, L5240, L5740)]</p> <p>3. Check for proper tightening of backhoe seat. Tightening torque for 5/16" bolts: 23.1 to 27.7 N·m</p>	
	<p>[All tractors]</p> <p>4. Check for proper tightening of rear tires.</p> <p>[L4400-1, L4600, L4701] Tightening torque for M16 bolts: 196 to 225 N·m [MX4700, MX4800, MX5100, MX5200, MX5400, MX5800, MX6000] Tightening torque for M16 bolts and nuts: 196 to 225 N·m [L3240(-3), L3540(-3), L3940(-3), L4240(-3), L4740(-3), L5040(-3), L5240(-3), L5740(-3)] Tightening torque for M16 bolts and nuts: 215 N·m [L3560, L4060, L4760, L5060, L5460, L6060] Tightening torque for M16 bolts and nuts: 215 N·m</p>	