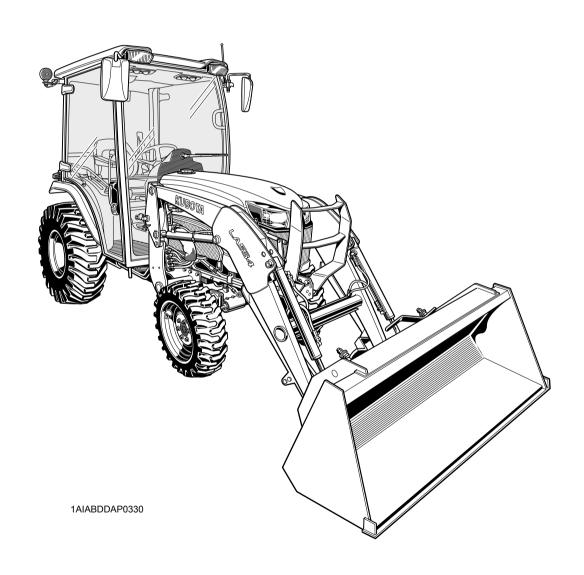
# ASSEMBLY INSTRUCTIONS

**MODEL LA534** 



READ AND UNDERSTAND THIS MANUAL BEFORE ASSEMBLING

Kubota

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## ASSEMBLY INSTRUCTIONS

#### TO THE DEALER

- 1. This manual contains procedures intended to assist the dealer in unpacking and assembling the product before delivering to the customer.
  - The customer's purchase is based on confidence in both the product and your store. Observe the procedures in this manual to assemble and adjust equipment for your customer's safety and satisfaction. When fully assembled, check function of each part and feature.
- The following safety alert symbol marks and indications are found throughout this manual in steps where particular attention is required so as to ensure your safety and to avoid product damage. Observe the instructions in these warnings where indicated.

	•
▲ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
<b>A</b> WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
A CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
IMPORTANT :	Indicates that equipment or property damage could result if instructions are not followed.
NOTE:	Gives helpful information

#### **SAFETY**

To prevent accidents, read through the following items before starting work, and always regard safety when working. It is your responsibility to ensure your safety on the job.

- 1. Preparations
  - (1) Select a work site which is level, has sufficient space, and is not close to dangerous objects.
  - (2) Avoid poorly ventilated rooms.

Asphyxiation from exhaust fumes is always a possibility that accompanies running an engine.



(3) Working clothes which may be pinched or caught in the equipment must not be worn. Loose clothing can cause serious injury or death.



(4) Always wear a mask and protective goggles during work when dust or flying debris may be thrown by equipment.



- 2. Assembly and adjustments
  - (1) Before assembling equipment, read the assembly instructions for the product to become familiar with the equipment and procedures.



- (2) Use only adequate and required equipment, tools and instruments (e.g. torque wrench, battery hydrometer and etc.).
- (3) Set the parking brake and block wheels to prevent machine (or tractor) movement.
- (4) Lower the attachment or implement to the ground before assembling or adjusting equipment.
- (5) Before working under suspended or raised equipment, support the equipment or attachment and utilize the valve lock to prevent the machine from falling or moving out of place.



(6) Keep fire from cigarettes, matches or other ignition sources away from fuel, oil, antifreeze and other flammable materials.



- 3. After assembly check
  - (1) Before operating or test driving the equipment, read and understand the operator's manual.
  - (2) Once the equipment is fully assembled, select a safe place for a test run. Prevent onlookers from approaching the equipment.





#### **DANGER**

To avoid personal injury or death:

 Do not start engine or operate levers from anywhere other than the seat.

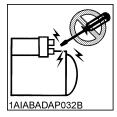




#### **DANGER**

To avoid personal injury:

 Do not bypass-start the equipment. Short circuiting the starter terminal runs the risk that the equipment will start operating or moving unexpectedly.



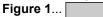
#### **UNPACKING AND CHECKING PARTS**

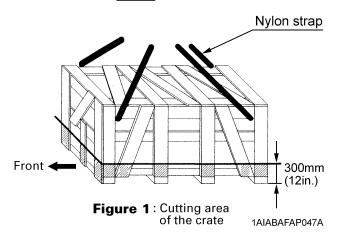
#### **■**Unpacking Wooden Crate

- Cutting metal bands (if two are banded together).
   Metal bands hold the two crates together as one. Cut
   these bands and separate the crates.
- 2. Unpacking the crates
  - Hook a hoist to the 4 corners of the crate and raise the hoist cable until taut.
     This serves to prevent the upper part of the crate from striking the loader when cut.
  - (2) Saw the crate as indicated in figure 1.

#### **IMPORTANT:**

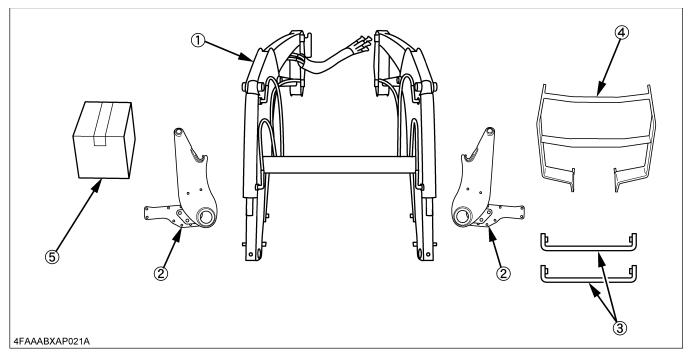
- Sawing outside the indicated area may damage the loader or accessory parts.
- Be sure that the crate is free of other obstructions (e.g. nails, staples and etc.).
  - (3) Raise the upper part of the crate and remove from the immediate area.
  - (4) Remove the remaining slats from the crate. These are indicated by the oblique lines in





#### **■**Checking Parts

Remove all loader components. Referring to the illustration, ensure that all components have been included.



- (1) Boom assembly
- (2) Main frames
- (3) Main frame connector

- (4) Front guard
- (5) Parts box

#### NOTE:

• For LA534, the bucket is shipped separately.

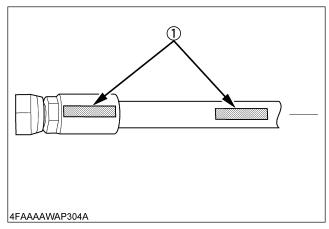
#### TRACTOR PREPARATION

Locate the tractor on a firm level surface. Stop the engine.

#### BEFORE ASSEMBLY

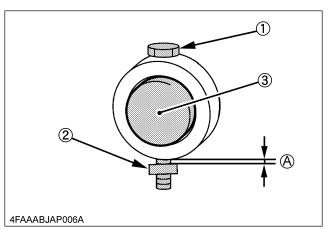
#### **IMPORTANT:**

- Before assembling the hardware (bolts, adapters, hoses, etc.), ensure all contaminates (grease, grit, dust, etc.) are removed from the threads and all mating surfaces (Tractor, Main Frames, etc.). If oil or contamination has adhered, clean off thoroughly before assembling (by using contact cleaner, scrapers, etc.). If oil or contamination remains on the threads, it may lead to damaged threads and the loosing of hardware and/or parts.
- For the tightening torque, see the tables at the end of this manual. If the torque values are specified in the text, follow that specification.
- Do not tighten any bolts firmly until most components are attached to the tractor.
- Before tightening all mounting hardware, start the engine and apply down pressure with the bucket until the loader takes the tractor weight off the front wheels without lifting the front wheels off of the ground. Make sure that the mounting pins can be rotated easily (Pin on mount), or the Swift-Tach hooks can be unlocked easily (Swift-Tach mount). Torque all bolts and nuts in this position.
- During assembly of all hydraulic parts make sure parts remain clean of contamination. If contamination occurs it could affect the performance of the hydraulic system.
- When using the tapered adapters, wrap the seal tape around the thread part 2 or 3 times. At this time, ensure all contaminates are removed from the threads.
- To avoid damage to hoses, adjust all connections to route hoses away from sharp edges and do not twist hoses.
- The part number of the hose is marked on the hose fitting, or located on the hose.



(1) Part number (Marked on either position)

When fixing the pin with the bolt and nut, do not tighten the nut completely as shown. The clearance between the boss and the nut should be 2 to 3 mm (0.08 to 0.12 in.).



(1) Bolt

(A) 2 to 3 mm (0.08 to 0.12 in.)

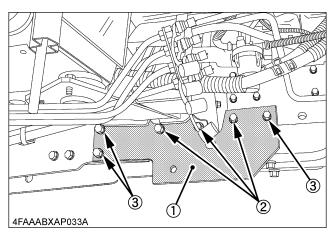
- (2) Nut
- (3) Pin
- When applying label:
  - Clean off all contaminates (dust, oil, grease, etc.) from surface before applying label.
  - (2) Do not use the cotton work gloves or touch the label adhesive surface with your hand.
- Assemble on a hard surface, preferably concrete.

#### ASSEMBLING LOADER KIT

#### ■ Main Frames

#### **IMPORTANT:**

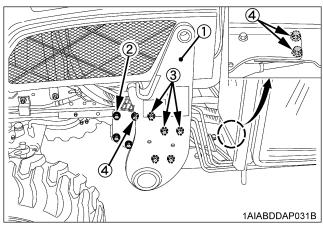
 Before attaching the main frames, ensure all contaminates (grease, grit, dust, etc.) are removed from the threads and all mating surfaces. If oil or contamination has adhered, clean off thoroughly before assembling (by using contact cleaner, scrapers, etc.). If oil or contamination remains on the threads, it may lead to damaged threads and the loosing of hardware and/or parts. 1. Remove the sub frame bracket from the tractor.



- (1) Sub frame bracket
- (2) 3-M12 bolts
- (3) 3-M14 bolts

#### NOTE:

- Reuse the bolts fastening the sub frame bracket.
- 2. Attach the main frame to the tractor.

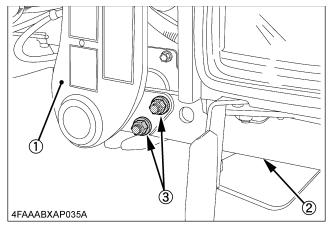


- (1) Main frame
- (2) 1-M14 bolt
  - 1-M14 spring lock washer
- (3) 3-M12 bolts (pitch 1.75) (original)
  - 3-M12 spring lock washers (original)
- (4) 3-M14 bolts (pitch 1.75) (original) 3-M14 spring lock washers (original)

(2) (4)	Tightening torque	150 N·m (15.3 kgf·m) (111 lbf·ft)
(3)	Tightening torque	80 N·m (8.2 kgf·m) (59.0 lbf·ft)

#### NOTE:

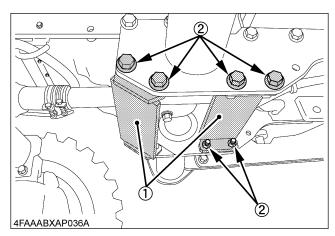
 When installing the backhoe, be sure to attach the sub frame with two bolts.



- (1) Main frame
- (2) Sub frame
- (3) 2-M16 x 50 bolts
  - 2-M16 nuts
  - 4-5/8 hardened plain washers
  - 2-M16 spring lock washers

Tightening torque 196 to 225 N•m (20.0 to 23.0 kgf•m) (145 to 166 lbf•ft)

3. Attach the main frame connector as shown.



- (1) Main frame connector
- (2) 8-M14 bolts
  - 8-M14 spring lock washers

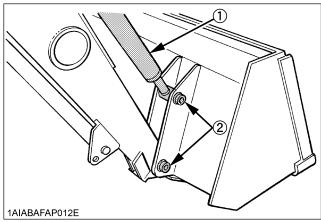
Tightening torque	124 to 147 N·m (12.6 to 15.0 kgf·m) (91.5 to 108.4 lbf·ft)
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#### NOTE

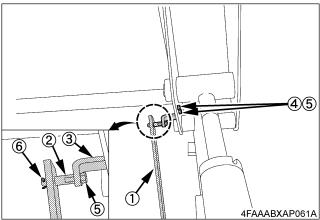
Do not tighten until all components are assembled.

#### **■**Boom Assembly

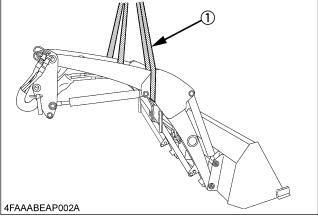
1. Attach the bucket to the boom as shown.



- (1) Bucket cylinder
- (2) 4-PIN 3
- 2. Connect the indicator link with bucket.

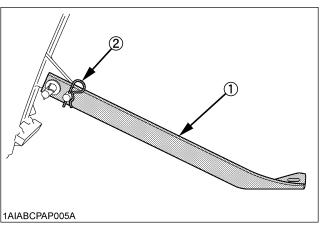


- (1) Indicator link
- (2) Pin (1, link)
- (3) Stay (Pin, link)
- (4) 2-M6 bolts
- (5) 3-M6 locking nuts
- (6) Split pin
- 3. Raise the boom until the stands can be rotated.



(1) Belt sling

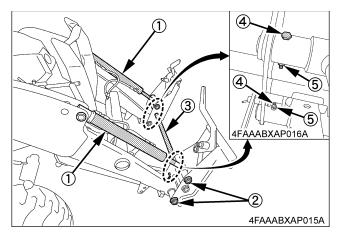
- 4. Remove the spring pins holding the stands to the boom.
- 5. Slide the stands leftward and rotate them until the hole in the stand and pin on the boom are aligned. Then slide the stands rightward and insert the spring pin as shown.



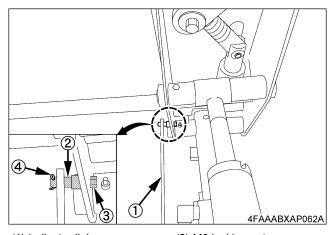
(1) Stand (2) Spring pin

## ■ Boom Assembly with 2-Lever Quick Coupler

1. Attach the 2-lever quick coupler to the boom and bucket cylinders as shown.

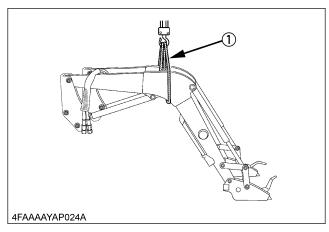


- (1) Bucket cylinder
- (2) 4-PIN 3
- (3) 2-Lever quick coupler
- (4) 4-M6 bolts
- (5) 4-M6 locking nuts
- 2. Connect the indicator link with 2-lever quick coupler.



- (1) Indicator link
- (2) Pin (1, link)
- (3) M6 locking nut
- (4) Split pin

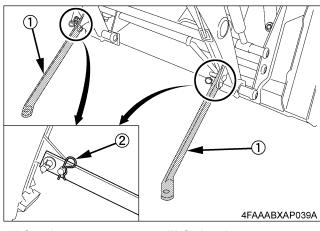
3. Raise the boom until the stands can be rotated.



(1) Belt sling

- Remove the spring pins holding the stands to the boom.
- 5. Rotate the stands until the pin on the stand and hole in the boom are aligned.

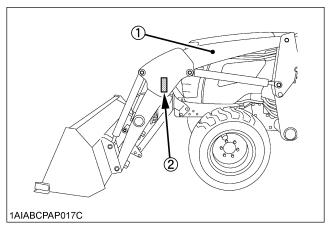
Then slide the stands outward and insert the spring pin as shown.



(1) Stand (2) Spring pin

#### ■ Applying the Label for Pallet Fork

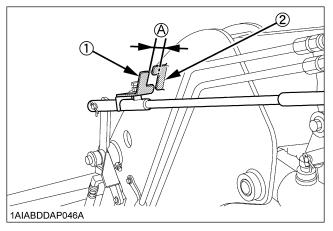
1. Apply the danger label (P. F.) to the boom assembly LH as shown in the illustration below.



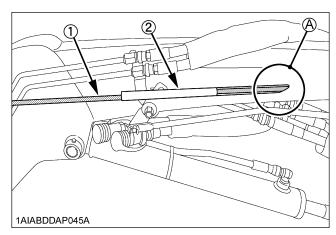
- (1) Boom assembly
- (2) Label (Part No. 7J048-3923-4)

#### ■ How To Use the Level Indicator

 Fit the indicator plate (rod) and the indicator plate (boom) in the same plane. As a result, the front attachment (bucket) can come down flatly on the ground.



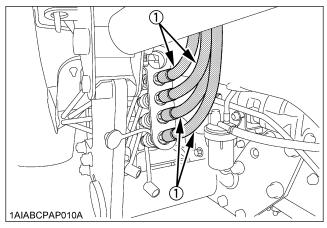
- (1) Indicator plate (rod)(2) Indicator plate (boom)
- (A) Fit in the same plane.
- 2. By bringing the end of indicator rod to the same position as that of indicator guide, the front attachment (bucket) and the pallet forks can be horizontally positioned at any level.



- (1) Indicator rod(2) Indicator guide
- (A) Position the rod end to the guide end.

#### ■Hydraulic Line

Connect 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.



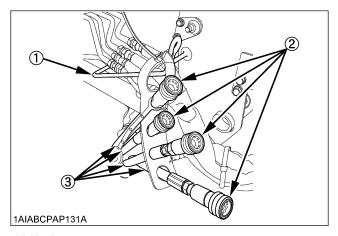
(1) Hoses

#### **IMPORTANT:**

• Failure to connect couplers completely and correctly will cause hydraulic malfunction and damage.

#### NOTE

 When disconnecting the four hoses with quick couplers at the control valve, be sure to hook the hoses and attach the protective plugs to their respective couplers as shown below.



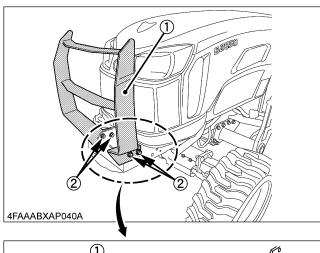
- (1) Hook
- (2) Protective plugs
- (3) Hoses

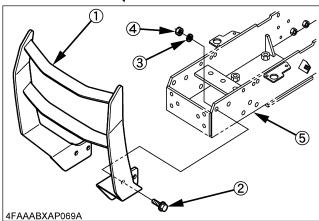
#### Front Guard

Attach the front guard to the front axle frame of tractor.

#### NOTE:

 When attaching the front guard to the front axle frame, do not tighten the bolt. Make sure the top of bolts contacts the front axle frame and then tighten the nuts.



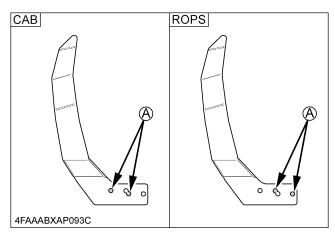


- (1) Front guard
- (2) 4-M14 x 40 bolts
- (3) 4-M14 spring lock washers
- (4) 4-M14 nuts
- (5) Front axle frame

Tightening torque	147 N·m (15.0 kgf·m) (108 lbf·ft)

#### NOTE:

 The front guard has its mounting holes in different positions between CAB models and ROPS models.
 Referring to the figure below, select their respective proper mounting holes.

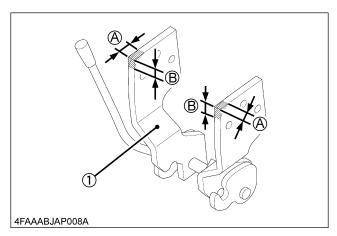


(A) Proper mounting hole

#### **IMPORTANT:**

#### [When installing the old type mower]

 When the nuts, which is fixing the bolt of the front guard, contact the front hanger bracket of the mower, cut the front hanger bracket as shown in the illustration below.



(1) Front hanger bracket

[RCK60-30B]
(A) 30 mm (1.18 in.)
(B) 20 mm (0.78 in.)
[RC72-27B]
(A) 40.5 mm (1.59 in.)
(B) 16.5 mm (0.64 in.)

#### **■**Tightening Bolts and Nuts

Tighten all bolts and nuts with required torque.

Location	Bolt / Nut	Required Torque
Main frame (Front axle frame)	M14 bolts	147 N·m (15.0 kgf·m) (108 lbf·ft)
Main frame (Clutch housing)	M12 bolts (pitch 1.75)	80.0 N·m (8.2 kgf·m) (59.0 lbf·ft)
Main frame (Center frame)	M12 bolts (pitch 1.25) M12 nuts	90 N·m (9.2 kgf·m) (66.5 lbf·ft)

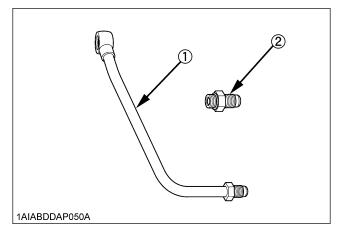
#### NOTE:

 Before finally tightening all mounting hardware, start the engine and apply down pressure to the bucket until the loader raises the front wheels slightly, and make sure that the mounting pins can be rotated easily. Tighten all bolts and nuts in this position.

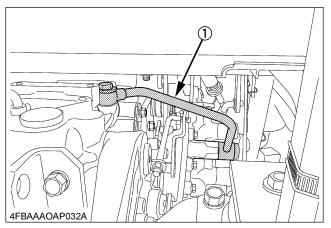
#### ■3rd Function (if equipped)

### ♦ Hydraulic Line Section [Not equipped with backhoe]

Use the following kit parts as shown below.

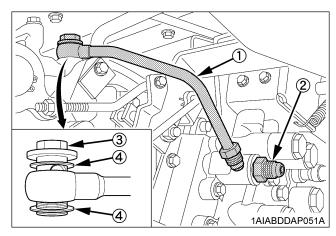


- (1) Power beyond pipe
- (2) Adapter
- 1. Disconnect the front loader power beyond pipe.



(1) Front loader power beyond pipe

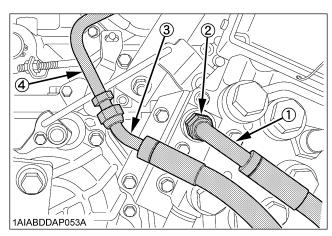
2. Connect the power beyond pipe and adapter as shown below.



- (1) Power beyond pipe
- (2) Adapter
- (3) Plug (original)
- (4) 2-Packing

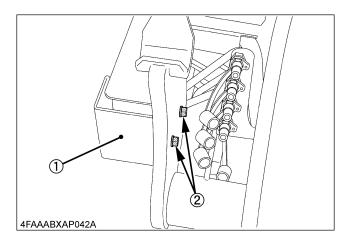
#### NOTE:

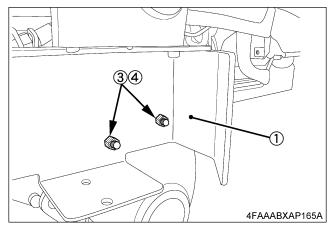
- Tighten the plug (original) after all hoses are connected.
- 3. Connect the inlet hose to the adapter and connect the outlet hose to the power beyond pipe respectively.



- (1) Inlet hose
- (2) Adapter
- (3) Outlet hose
- (4) Power beyond pipe

4. Attach the 3rd function valve cover to the front loader main frame RH.



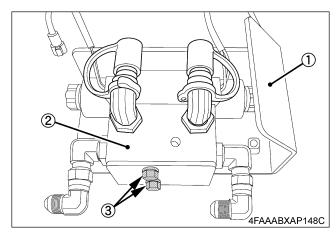


- (1) 3rd function valve cover
- (2) 2-M10 x 40 bolts with washers
- (3) 2-M10 spring lock washers
- (4) 2-M10 nuts

	48.1 to 55.8 N•m
Tightening torque	(4.9 to 5.7 kgf•m)
	(35.5 to 41.2 lbf•ft)
	,

#### NOTE:

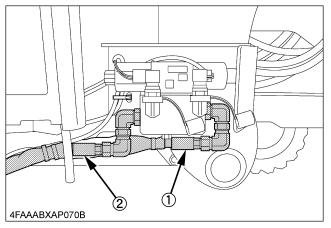
 Pay attention to the direction of the bolts. (Apply them as shown in the figure.) 5. Install the 3rd function valve assembly on the 3rd function valve cover.



- (1) 3rd function valve cover
- (2) 3rd function valve assembly
- (3) 2-M10 x 25 bolts with washer

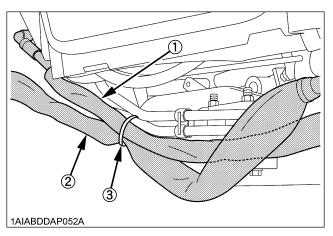
Tightening torque 43.3 to 50.3 N·m (4.41 to 5.13 kgf·m) (31.9 to 37.1 lbf·ft)

6. Connect the hoses to the 3rd function assembly.



- (1) Inlet hose
- (2) Outlet hose

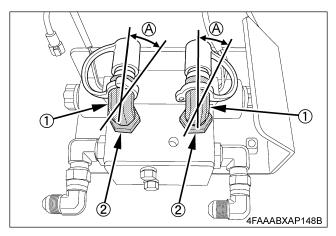
7. Secure the inlet hose and outlet hose with the band as shown below.



- (1) Inlet hose
- (2) Outlet hose
- (3) Band

#### Adjusting Section of the 3rd function valve fittings (As required)

1. After installing the loader, adjust the valve fitting angles with loosening the nuts as shown below depending on the loader 3rd function hoses.



- (1) 2-Fittings (2) 2-Nuts
- (A) 0° to 20°

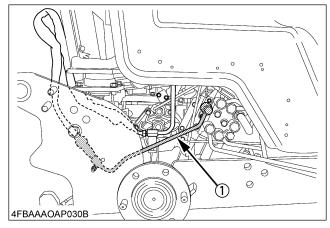
	88 to 108 N·m (9.0 to 11.0 kgf·m)
Tightening torque	(9.0 to 11.0 kgf·m)
	(57.1 to 79.7 lbf•ft)

#### **IMPORTANT:**

- Before starting this job, be sure to stop the engine and relieve the hydraulic oil pressure completely.
- If you adjust the valve fitting angles, make sure to tighten the nuts securely.
- With the hoses connected, move up and down the loader and make sure the hoses are not extremely tense.

#### [Equipped with backhoe]

If the backhoe kit has been equipped, disconnect the backhoe inlet pipe first and then remove the female coupler and dust plug.

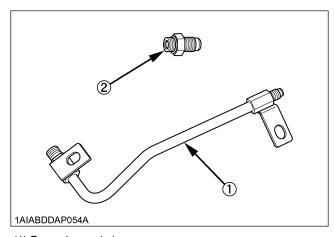


(1) Backhoe inlet pipe (Disconnect)

#### NOTE:

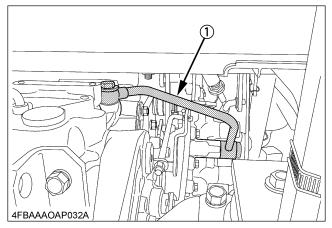
 The removed female coupler and dust plug will be used again for the power beyond pipe.

Use the following kit parts as shown below.

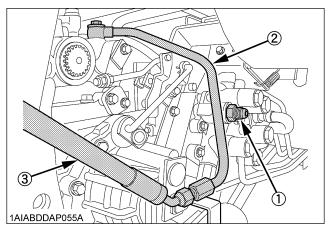


- (1) Power beyond pipe
- (2) Adapter

1. Disconnect the front loader power beyond pipe if equipped.



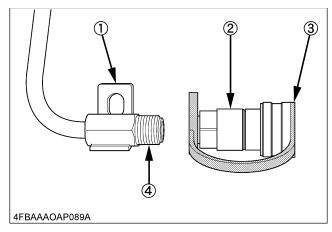
- (1) Front loader power beyond pipe
- 2. Connect the adapter.



- (2) Backhoe outlet pipe (in the backhoe kit)
- (3) Backhoe outlet hose (in the backhoe kit)

 Refer to the backhoe assembly instructions for the backhoe outlet pipe and backhoe outlet hose.

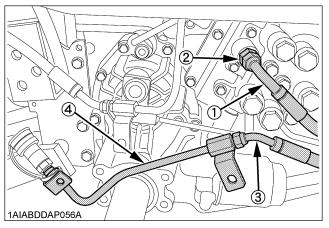
3. Attach the female coupler and dust plug to the power beyond pipe. At this time, use the female coupler and dust plug in the backhoe kit.



- (1) Power beyond pipe
- (2) Female coupler (in the backhoe kit)
- (3) Dust plug (in the backhoe kit)
- (4) Sealing tape

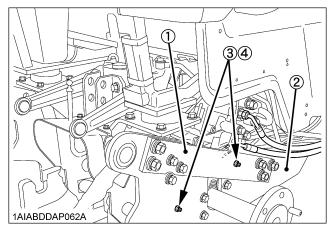
39 to 60 N·m (3.9 to 6.1 kgf·m) Tightening torque (29 to 44 lbf•ft)

4. Connect the inlet hose to the adapter and connect the outlet hose to the power beyond pipe respectively.



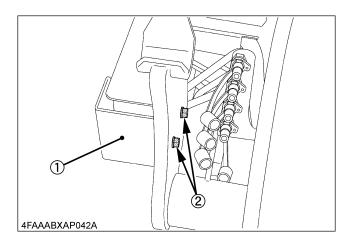
- (1) Inlet hose
- (2) Adapter
- (3) Outlet hose
- (4) Power beyond pipe

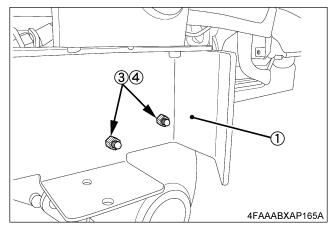
5. Secure the power beyond pipe with the backhoe sub frame and connecting plate.



- (1) Connecting plate
- (2) Sub frame
- (3) 2-M8 x 30 bolts
- (4) 2-M8 nuts

Attach the 3rd function valve cover to the front loader main frame RH.





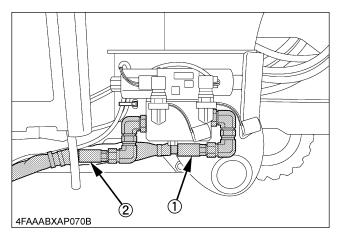
- (1) 3rd function valve cover
- (2) 2-M10 x 40 bolts with washers
- (3) 2-M10 spring lock washers
- (4) 2-M10 nuts

Tightening torque	48.1 to 55.8 N·m (4.9 to 5.7 kgf·m) (35.5 to 41.2 lbf·ft)
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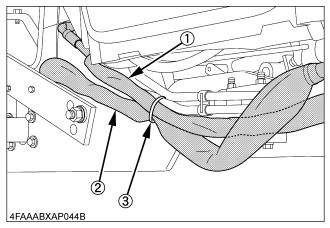
#### NOTE:

Pay attention to the direction of the bolts.
 (Apply them as shown in the figure.)

7. Connect the hoses to the 3rd function assembly.



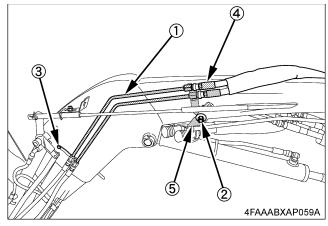
- (1) Inlet hose
- (2) Outlet hose
- 8. Secure the inlet hose and outlet hose with the band as shown below.



- (1) Inlet hose
- (2) Outlet hose
- (3) Band

#### 3rd Function Boom Section

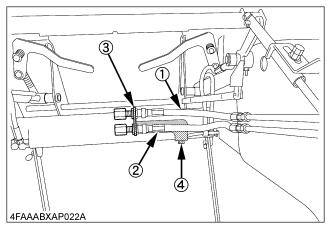
1. Connect the 3rd function tubes to the mid hydraulic hose. Then secure them, the collar and the indicator lever with the original bolt.



- (1) 3rd function tubes
- (2) 1-M8 bolt
- (3) 1-M6 bolt
  - 1-M6 locking nut
- (4) 2-Mid hydraulic hoses
- (5) Indicator lever

(2)	Tightening torque	23.6 to 27.4 N·m (2.4 to 2.8 kgf·m) (17.4 to 20.2 lbf·ft)
(3)	Tightening torque	9.8 to 11.2 N·m (1.0 to 1.1 kgf·m) (7.2 to 8.3 lbf·ft)

2. Secure the coupler stay and tube cover with the original bolt and connect the hydraulic hoses (A and B) and 3rd function assembly to the coupler stay.

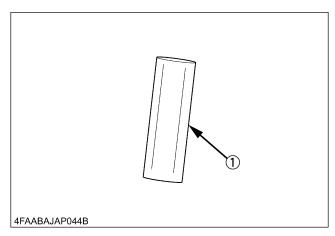


- (1) 1-Hose A
- (2) 1-Hose B
- (3) 1-Coupler stay
- (4) 1-M8 bolt

Tightening torque	23.6 to 27.4 N·m (2.4 to 2.8 kgf·m) (17.4 to 20.2 lbf·ft)
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#### **♦** Controller Section (CAB Model)

Before assembly, check whether the lever cover is included or not in the kit.



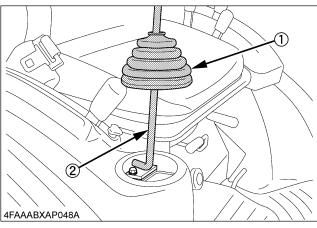
(1) Lever cover

#### NOTE:

In case lever cover is "not" included, refer to "B7302".
 In case lever cover is included, refer to "B7302A".

[B7302] (without lever cover model)

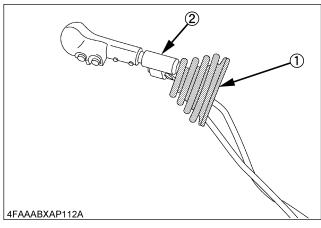
Remove the lever boot first and then the control lever.
 The lever boot will be reused.



(1) Lever boot

(2) Control lever

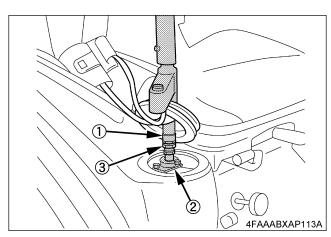
2. Pass the lever boot through the 3rd function lever.



(1) Lever boot

(2) 3rd function lever

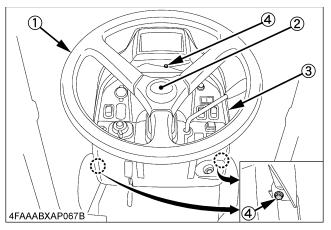
- 3. Attach the 3rd function lever to the control lever assembly.
- 4. Pass the harness through the center of the controller.
- 5. Install the 3rd function lever to the tractor.



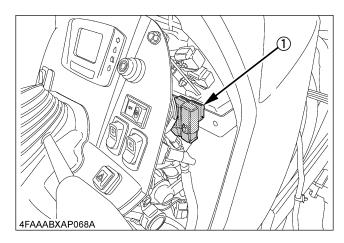
(1) 3rd function lever(2) Control lever assembly

(3) M14 nut

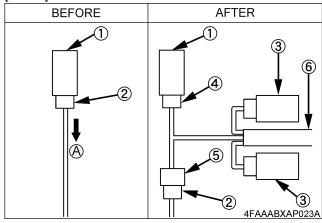
6. Detach the steering wheel removing the pad, one M12 nut and spring washer and then detach the meter panel removing the three bolts.



- (1) Steering wheel
- (2) Pad M12 nut Spring washer
- (3) Meter panel
- (4) Bolt
- 7. Disconnect the relays and connect the wire harness as shown in the following figure.

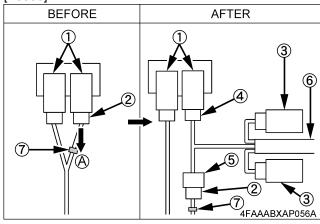


#### [B2650]



- (1) Relay (original)
- (A) Disconnect
- (2) Connector (male, original)
- (3) Relay
- (4) Connector (male)
- (5) Connector (female)
- (6) Wire harness

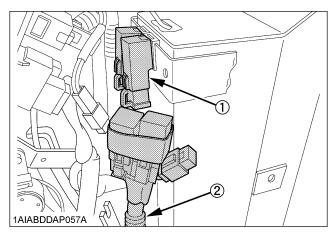
#### [B3350]



- (1) 2-Relays (original)
- (A) Disconnect
- (2) Connector (male, original)
- (3) Relay
- (4) Connector (male)
- (5) Connector (female)
- (6) Wire harness
- (7) Yellow tape

#### NOTE:

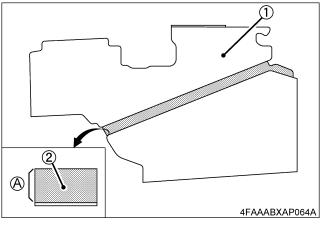
 If the yellow tape is not found here, disconnect the connector having the yellow / black, red / yellow, black and white / black wires and connect the wire harness. 8. Fit the relays back into position.



- (1) Relay
- (2) Wire harness

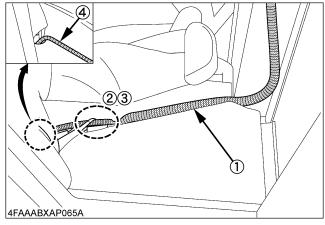
#### **IMPORTANT:**

- Secure all the relays that will face upwards.
- 9. Remove the foot mat and cut the upper layer made of sponge of the floor mat as shown in the following figure.

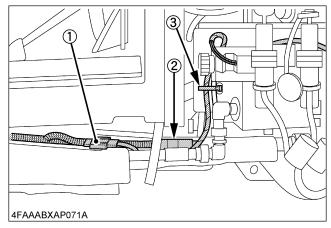


- (1) Foot mat
- (2) Layer of sponge
- (A) Cut

10. Pass the wire harness through the foot mat as shown in the following figure and connect the 3rd function control harness and the ON/OFF switch harness. And then pass the solenoid valve harness through the hole of the floor.



- (1) Wire harness
- (3) ON/OFF switch harness
- (2) 3rd function control harness (4) Solenoid valve harness
- 11. Connect the wire harness and solenoid valve harness. And then, bind them by the cord band as shown below.



- (1) Solenoid valve harness 1
- (2) Solenoid valve harness 2
- (3) Band