ASSEMBLY INSTRUCTIONS

MODEL LA1154A/EA

4FAAAAWAP2660

READ AND UNDERSTAND THIS MANUAL BEFORE ASSEMBLING

Kubota

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ASSEMBLY INSTRUCTIONS

TO THE DEALER

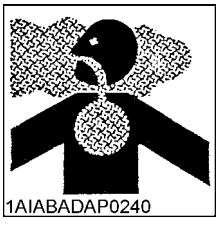
1. This manual contains procedures intended to assist the dealer in unpacking and assembling the product before delivering to the customer.
   The customer's purchase is based on confidence in both the product and your store. Observe the procedures in this manual to assemble and adjust equipment for your customer's safety and satisfaction. When fully assembled, check function of each part and feature.
2. 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.**
WARNING	**Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.**
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.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   (3) Working clothes which may be pinched or caught in the equipment must not be worn. Loose clothing can cause serious injury or death.


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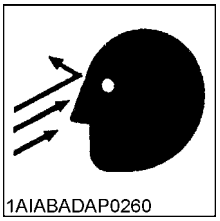
   (4) Always wear a mask and protective goggles during work when dust or flying debris may be thrown by equipment.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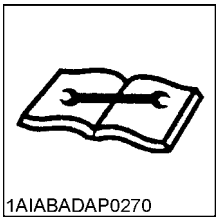
2. Assembly and adjustments
   (1) Before assembling equipment, read the assembly instructions for the product to become familiar with the equipment and procedures.
   (2) Use only adequate and required equipment, tools and instruments (e.g. torque wrench, battery hydrometer and etc.).
   (3) Set the 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.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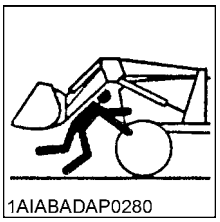
   (5) Before working under suspended or raised equipment, support the equipment or attachment and utilize the valve lock to prevent the machine from falling or moving out of place.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   (6) Keep fire from cigarettes, matches or other ignition sources away from fuel, oil, antifreeze and other flammable materials.


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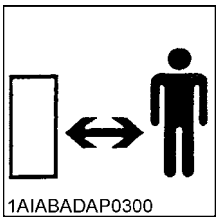
3. After assembly check
   (1) Before operating or test driving the equipment, read and understand the operator's manual.
   (2) Once the equipment is fully assembled, select a safe place for a test run. Prevent onlookers from approaching the equipment.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DANGER

To avoid personal injury or death:

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


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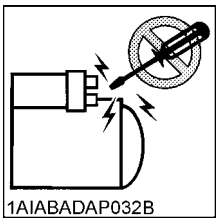
DANGER

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.**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UNPACKING AND CHECKING PARTS

■Unpacking Wooden Crate

1. 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
   (1) 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 **Figure 1**...

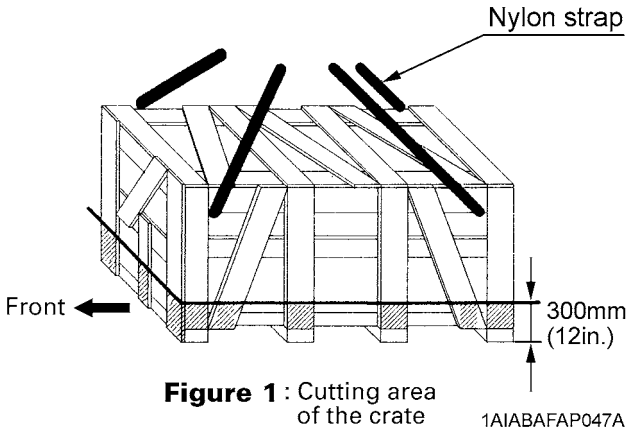

Figure 1 : Cutting area of the crate

■Checking Parts

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

[LA1154A]

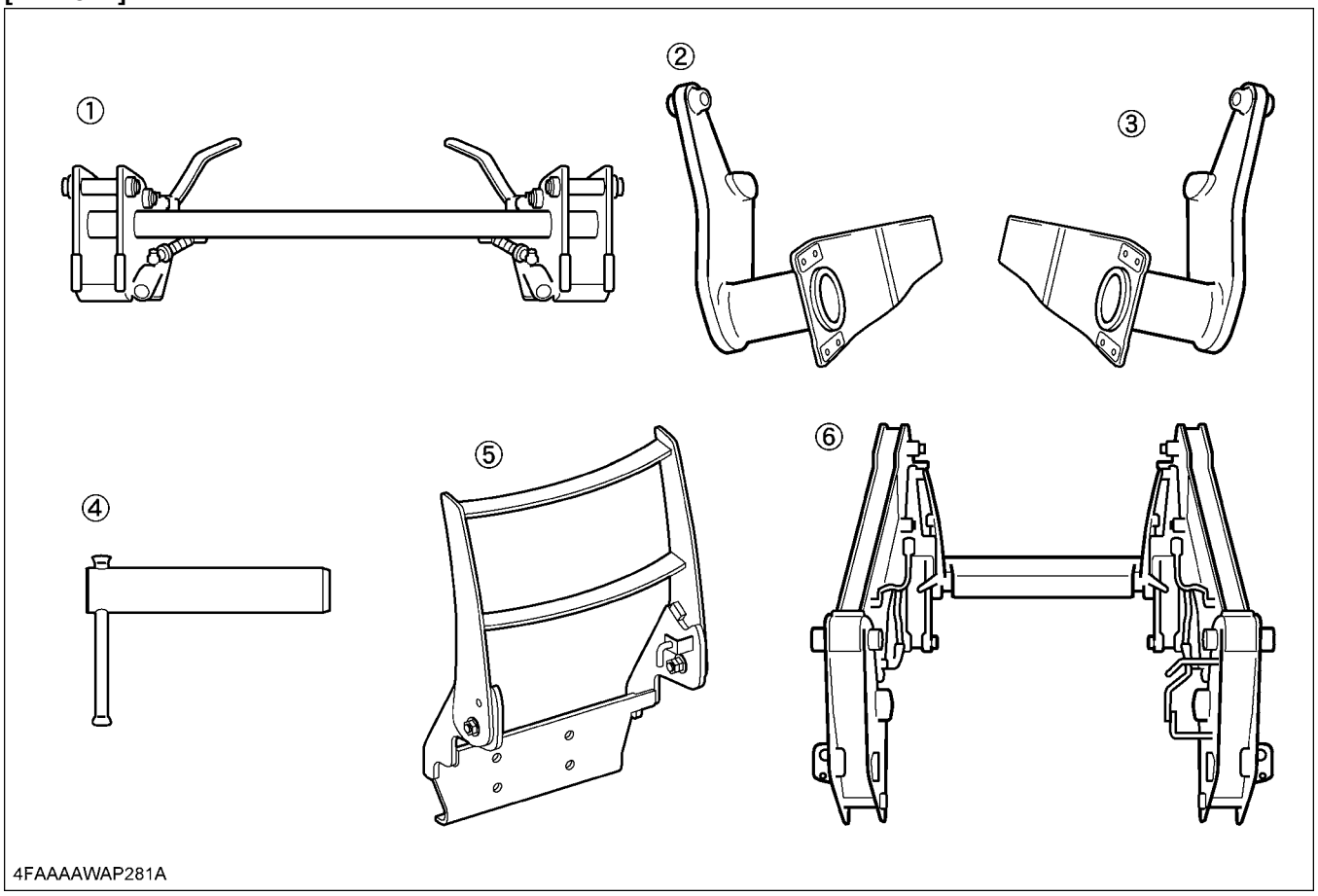

Fig. No.	PART No.	PART NAME	Q'TY	REMARKS
1	-	HITCH, S-QUICK, ASSY	1	
2	7J437-5501-0	FRAME (MAIN, LH)	1	
3	7J437-5503-0	FRAME (MAIN, RH)	1	
4	7J417-5681-0	PIN, MOUNT	2	
5	-	FRONT GUARD, ASSY	1	
6	-	BOOM, ASSY	1	
-	01073-51640	BOLT	4	M16 x 1.5 x 40
-	01173-52060	HEX. BOLT	16	M20 x 1.5 x 60
-	04512-50160	WASHER, SPRING LOCK	4	M16
-	04512-50200	WASHER, SPRING LOCK	16	M20
-	75599-3251-8	WASHER, PLAIN (HD) 3/4	16	3/4"
7	7J461-6911-1	MANUAL (E, OPERATOR)	1	
8	7J461-6915-1	MANUAL (E, ASSEMBLY)	1	This sheet

NOTE :

- For valve kit, 3rd function kit and accumulator kit, check the checklists included in each kit.

[LA1154EA]

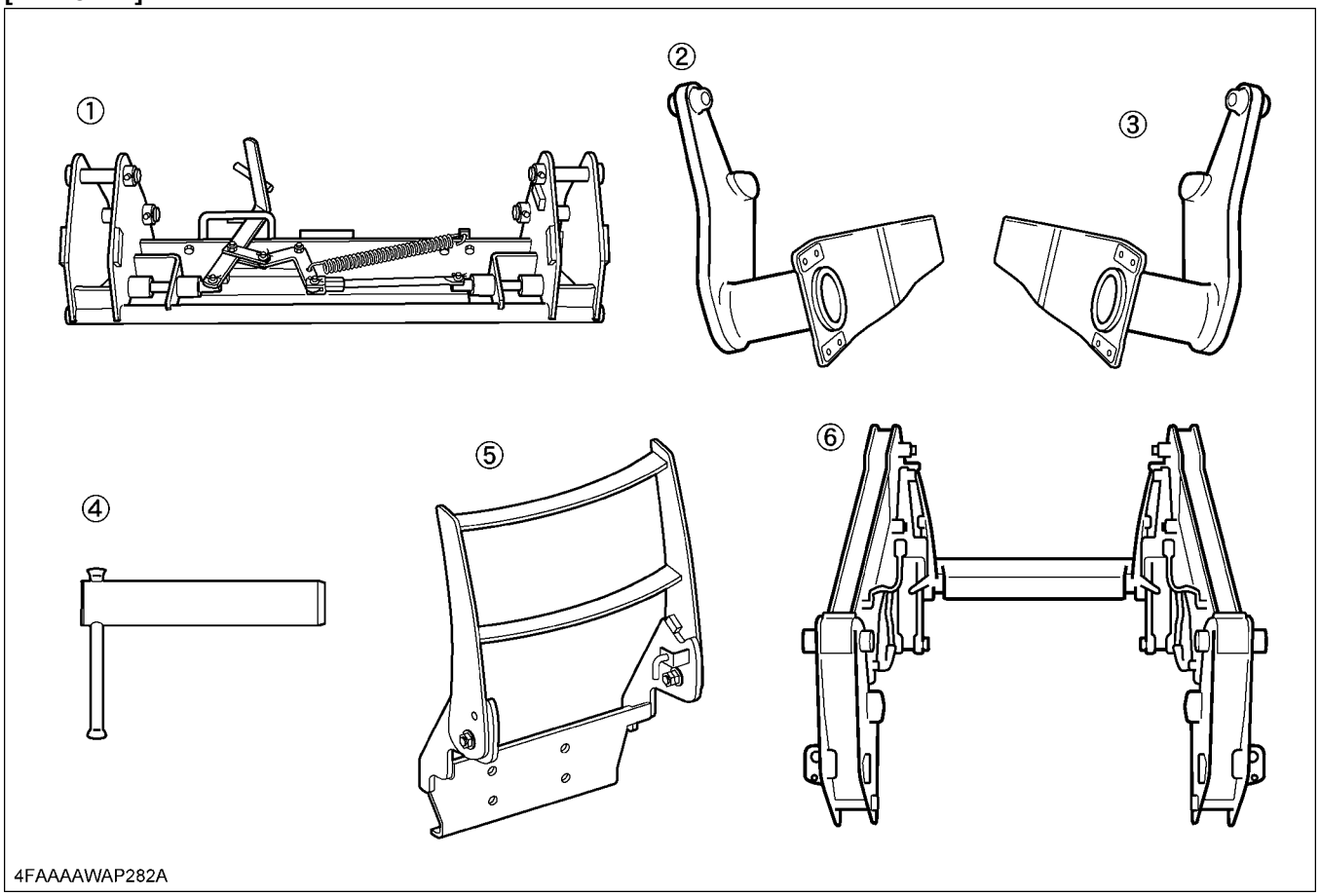

Fig. No.	PART No.	PART NAME	Q'TY	REMARKS
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6	-	BOOM, ASSY	1	
-	01073-51640	BOLT	4	M16 x 1.5 x 40
-	01173-52060	HEX. BOLT	16	M20 x 1.5 x 60
-	04512-50160	WASHER, SPRING LOCK	4	M16
-	04512-50200	WASHER, SPRING LOCK	16	M20
-	75599-3251-8	WASHER, PLAIN (HD) 3/4	16	3/4"
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8	7J461-6915-1	MANUAL (E, ASSEMBLY)	1	This sheet

NOTE :
- For valve kit, 3rd function kit and accumulator kit, check the checklists included in each kit.

TRACTOR PREPARATION

■Adjusting the Tractor

1. Locate the tractor on a firm level surface.
   Lower the implement to the ground, set the parking brake and stop the engine.
2. Set the front tread as follows.

		Tire sizes	Front Tread
M6060, M7060	Front 4WD	9.5-20, 6PR	1520 mm (59.8 in.)
		9.5-24, 6PR	
	Front 2WD	6.50-16, 6PR	1420 mm (55.9 in.)
		9.5L-15, 6PR	
M4-061, M4-071	Front 4WD	9.5-24R1	1520 mm (59.8 in.)
		320/85R20	1487 mm (58.5 in.)
		LSW320/70R24	1564 mm (61.6 in.)

* usable for power position

IMPORTANT :

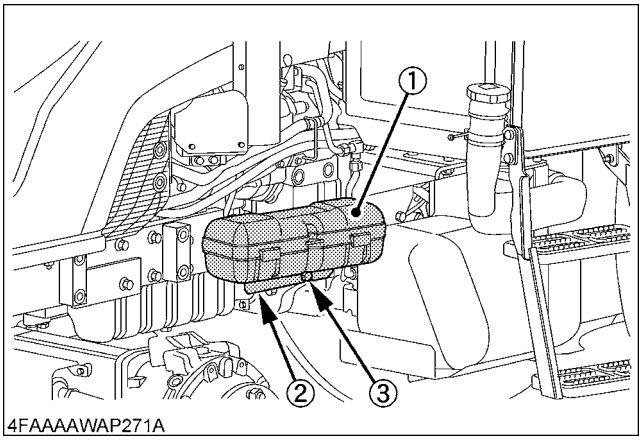
- Setting the tread wider than recommended may cause premature failure of the front axle components due to excessive stress.

3. For better stability, set the rear tread as follows depending on the requirements of the work being done.

	Rear Tread
M6060, M7060	1520 mm or more (59.8 in. or more)
M4-061, M4-071	

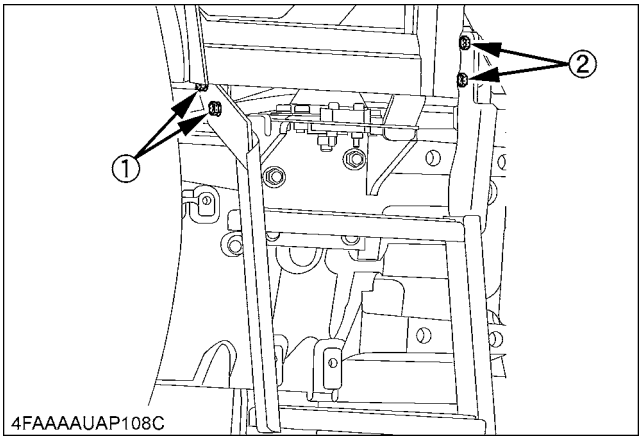
■Removing the Tractor Parts

1. Remove the tool box and stay (LH).



(1) Tool box
(2) Tool box stay
(3) M20 bolt

2. Remove the step (RH).



(1) 2-M10 bolts
(2) 2-M10 nuts

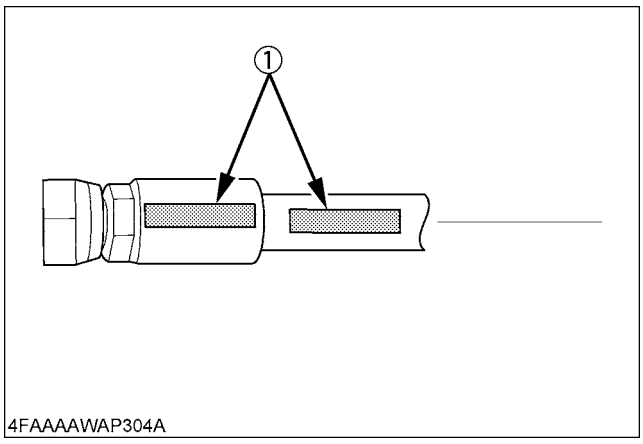
NOTE :

- With the entire kit in place, reinstall the step (RH) in position.

BEFORE ASSEMBLY

IMPORTANT :

- Before assembling the hardware parts (bolts, adapters, hoses, etc.), make sure that oil or contamination (grease, grit, dust, etc.) is NOT adhering to the threads of these and counter parts. If oil or contamination has adhered, wash the parts and clean them. If oil or contamination remains on the threads, it may lead to damaged threads and the hardware parts may be loosened.
- Tightening torque: See “tightening torque of bolts and nuts” and “tightening torque of adapters, elbows and others” section.
- Do not tighten any bolts firmly until most components are attached to the tractor.
- Before finally tightening all mounting hardware, start the engine and apply down pressure to the bucket until the loader takes the tractor weight off the front wheels – do not lift the wheels off the ground. Make sure that the mounting pins can be rotated easily.
  Torque all bolts and nuts in this position.
- To avoid damage to hoses, adjust all connections to route hoses away from sharp edges.
- Preferred assembly surface is concrete.
- The part number of the hose is marked on the hose fitting, or located in its vicinity.



(1) Part number
(Marked on either position)

- When labeling:
  (1) Wipe off the dust, oil and grease completely from label cover surface.
  (2) Do not use the cotton work gloves. And also be careful not to touch the label adhesive with your hand.

ASSEMBLING LOADER KIT

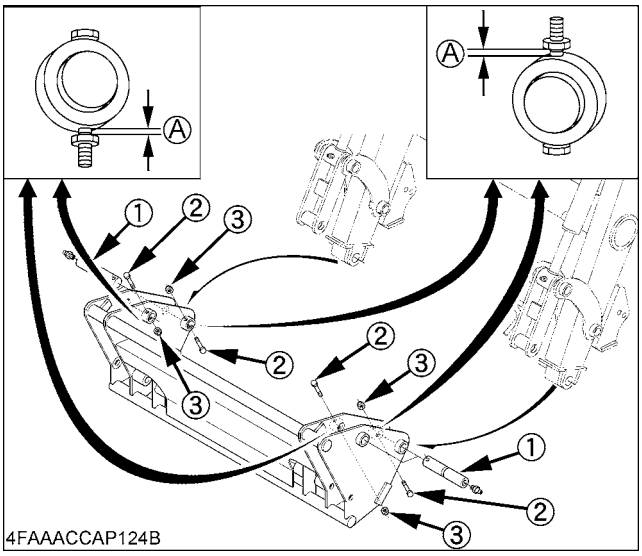
■LA1154A/EA

IMPORTANT :

- Do not operate or mount loader without quick attach coupler installed to loader. Damage may occur to bucket cylinders without this conditions being set.

◆ Quick hitch frame and bucket

1. Attach the quick hitch frame to the boom and bucket links as shown.



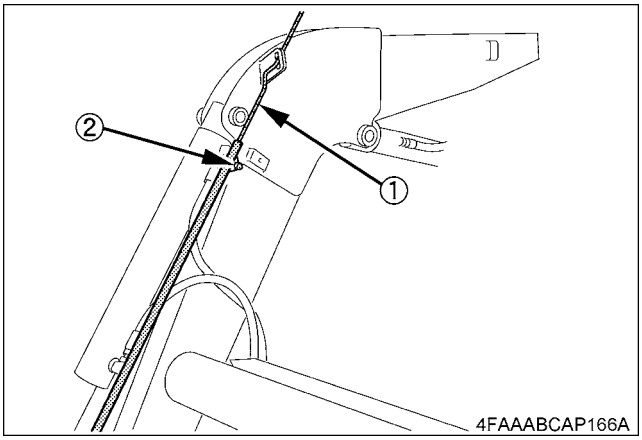
(1) 4-Pin 3 *(A) 2 to 3 threads*
(2) 4-M8 x 60 bolts
(3) 4-M8 locking nuts

IMPORTANT :

- Do not tighten the nuts too firmly. Keep 2 to 3 threads between the boss and the nuts.

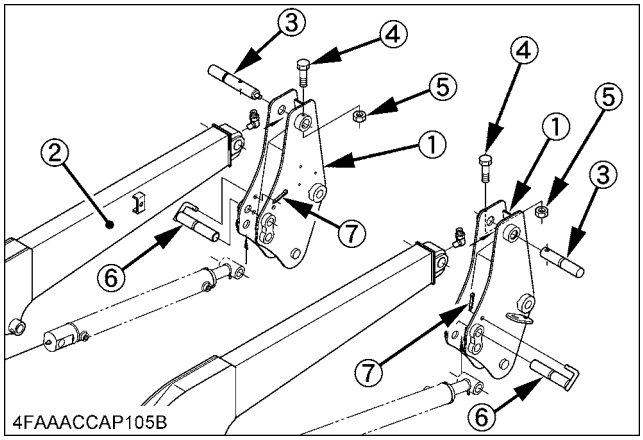
◆ Level indicator

1. Mount the level indicator in place.



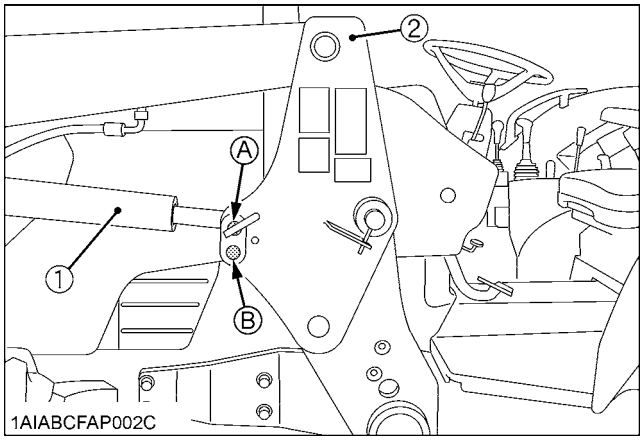
(1) Level Indicator
(2) M8 x 25 bolt
M8 nut

2. Attach the side frame to the boom.



(1) Side frame
(2) Boom
(3) 2-Pin 5
(4) 2-M10 x 80 bolts
(5) 2-M10 locking nuts
(6) 2-Pin 4
(7) 2-Snap pins

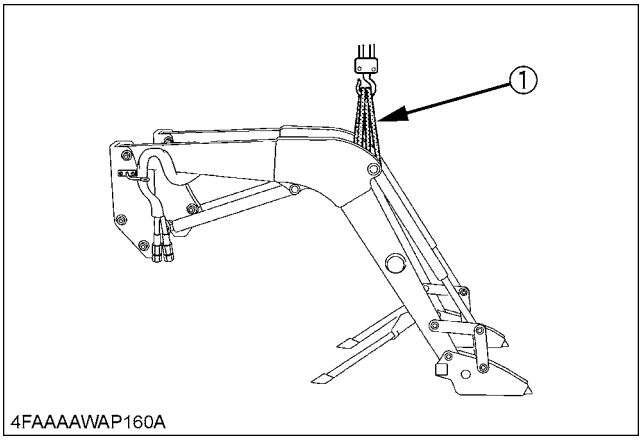
IMPORTANT :
- Do not tighten the nuts too firmly. Keep 2 to 3 threads between the boss and the nuts.
- When the boom cylinder fulcrum has been repositioned, make sure that the left and right fulcrum positions (A and B) are the same. Then proceed to the job.



(1) Boom cylinder
(2) Side frame
(A) Top fulcrum (Height position)
(B) Bottom fulcrum (Power position)

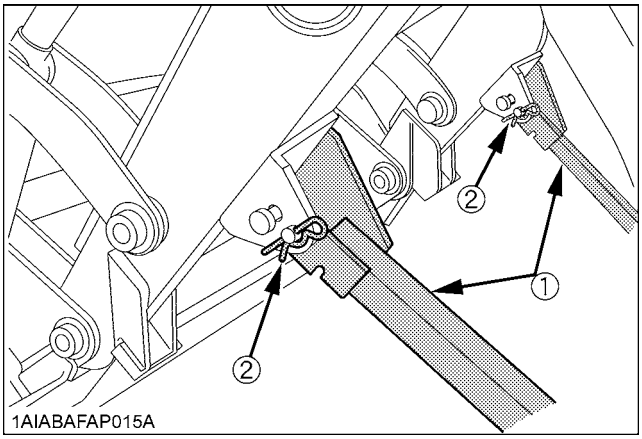
◆ Stand

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



(1) Belt sling

2. Remove the spring pins holding the stands to the boom.
3. 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.



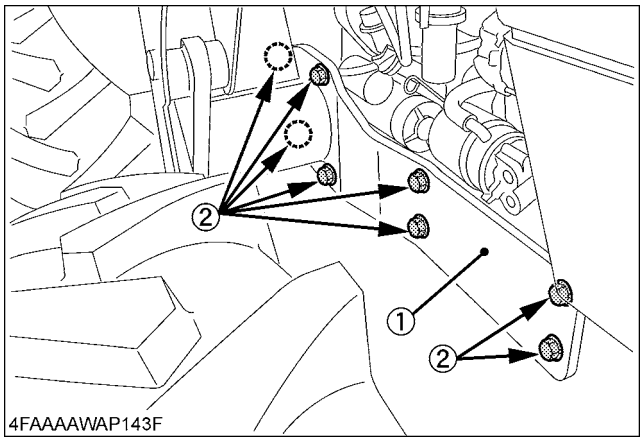
(1) Stand
(2) Spring pin

■Main Frame [Upper Muffler Model]

IMPORTANT :

- Before attaching the main frames, make sure that oil or contamination (grease, grit, dust, etc.) is NOT adhering to the joint surfaces of these and counter parts, and to the threads of the bolts for tightening. If oil or contamination has adhered, wash the parts and clean them. If oil or contamination remains on the threads, it may lead to damaged threads and the bolts may be loosened.

1. Install the left and right main frames to the clutch housing and the front frame as shown.

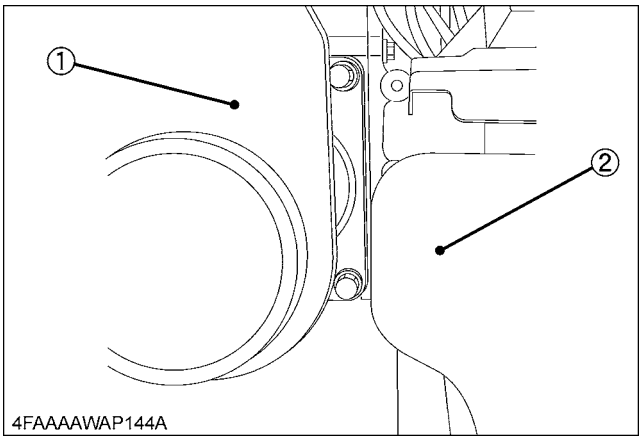


(1) Main frame
(2) 16-M20 x 60 bolts
16-M20 spring lock washers
16-3/4 hardened plain washers

Tightening torque	367.8 N-m (37.5 kgf-m) (271.3 ft-lbs)

NOTE :

- On installing main frame, do NOT pinch any hoses of tractor.
- Main frame (LH) must be hoisted vertically as shown to avoid contact with the fuel tank.



(1) Main frame (LH)
(2) Fuel tank

■Main Frame [Under Muffler Model]

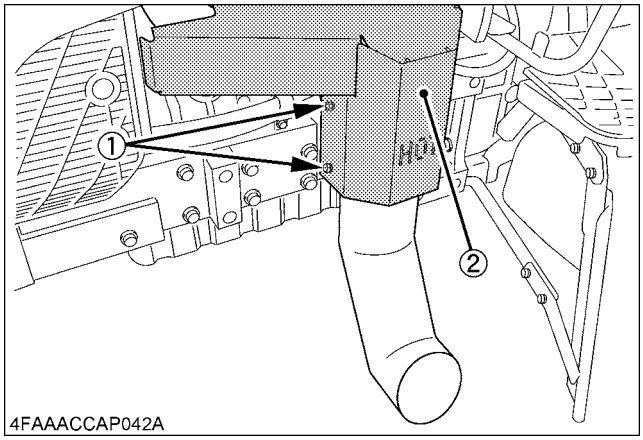
CAUTION

- Wait long enough for the muffler cover and the muffler pipe to cool down.

IMPORTANT :

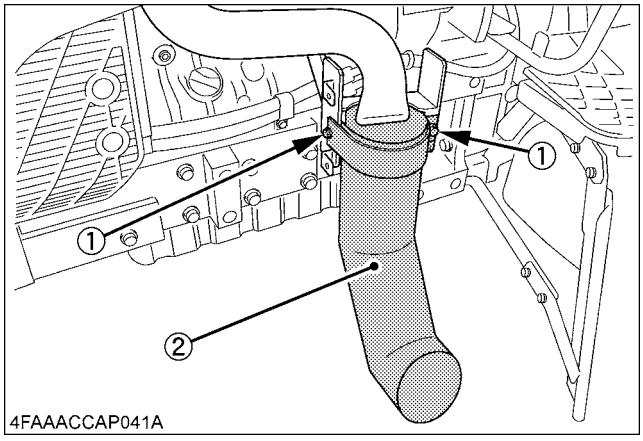
- Before attaching the main frames, make sure that oil or contamination (grease, grit, dust, etc.) is NOT adhering to the joint surfaces of these and counter parts, and to the threads of the bolts for tightening. If oil or contamination has adhered, wash the parts and clean them. If oil or contamination remains on the threads, it may lead to damaged threads and the bolts may be loosened.

1. Remove the bolt and the muffler cover (Left side).



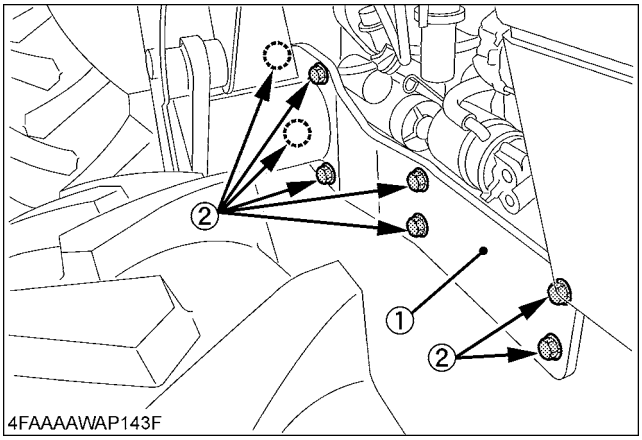
(1) 2-Bolts
(2) Muffler cover

2. Remove the bolts and the muffler pipe (Left side).



(1) 2-Bolts
(2) Muffler pipe

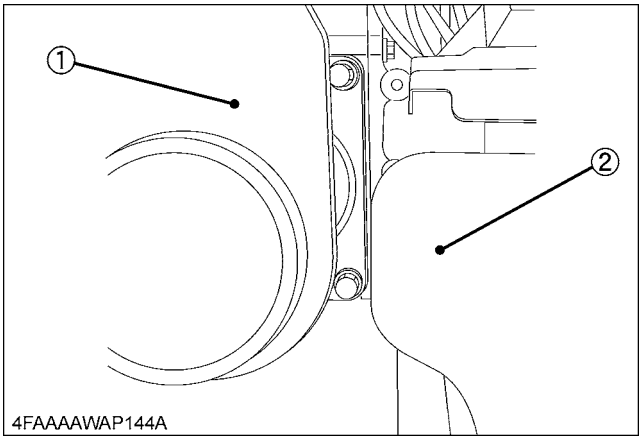
3. Install the left and right main frames to the clutch housing and the front frame as shown.



(1) Main frame
(2) 16-M20 x 60 bolts
16-M20 spring lock washers
16-3/4 hardened plain washers

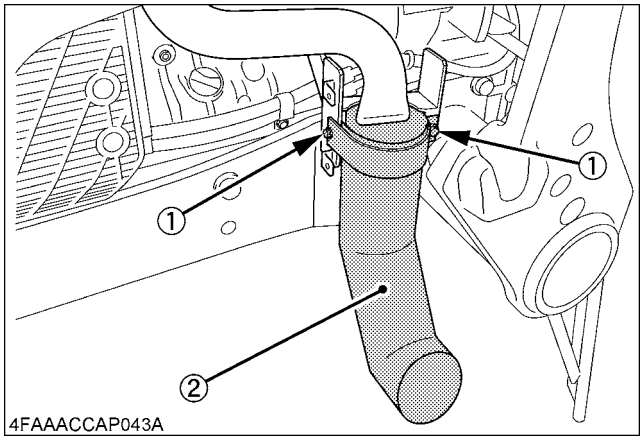
Tightening torque	367.8 N-m (37.5 kgf-m) (271.3 ft-lbs)

NOTE :
- On installing main frame, do NOT pinch any hoses of tractor.
- Main frame (LH) must be hoisted vertically as shown to avoid contact with the fuel tank.



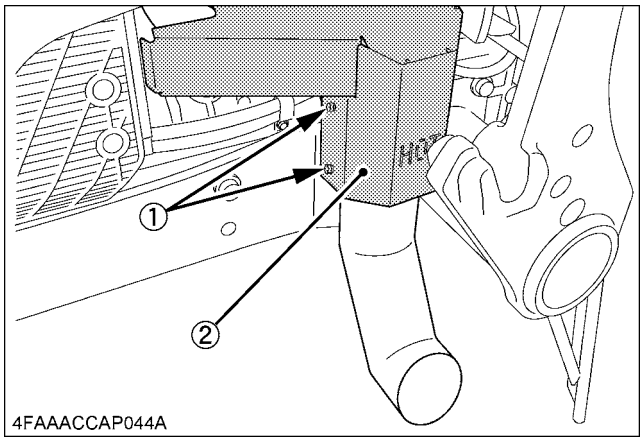
(1) Main frame (LH)
(2) Fuel tank

4. Reinstall the muffler pipe with the original bolts (Left side).



(1) 2-Bolts (original)
(2) Muffler pipe

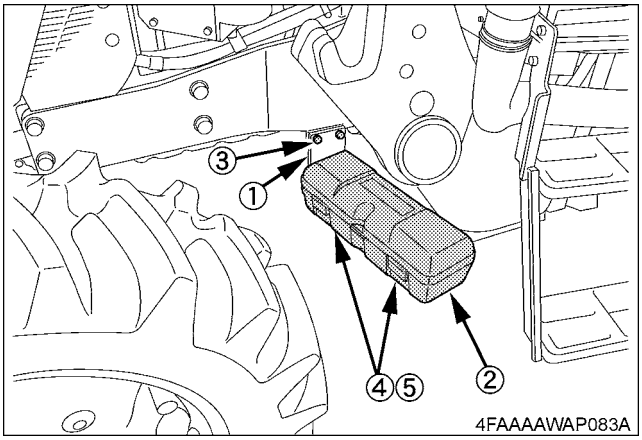
5. Reinstall the muffler cover with the original bolts (Left side).



(1) 2-Bolts (original)
(2) Muffler cover

■Tool Box (CAB MODEL)

1. Attach the tool box stay to the main frame LH using bolts.
2. Attach the tool box to the stay using the original bolts and M8 nuts.



(1) Tool box stay
(2) Tool box (Removed from the tractor)
(3) 2-M10 x 20 bolts with washer
(4) 2-M8 nuts
(5) 2-M8 x 30 bolts with washer (inside the box)
2-M8 plain washers (original) (inside the box)

ASSEMBLING CONTROL VALVE KIT [M4-061, M4-071 TRACTOR]

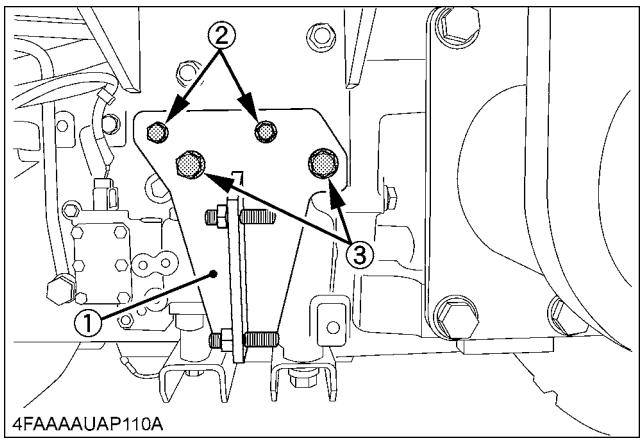
■Standard Valve (CAB) [M6870]

◆ Hydraulic lines section

IMPORTANT :

- Before hose assembly, shift the range and creep gear shift lever to creep position (if no creep position is equipped, shift lever to L position).
- With all the hoses connected to the valve, be certain that all the hoses are out of contact with the other hoses, the fittings and edges.
- To verify the hoses, the power beyond line hose should be installed to the green colored port and the pump line should be installed to the orange colored port of the valve.
- If the pump line hose and power beyond line hose are installed incorrectly, the tractor hydraulic pump may experience damage.
- Equipment or property damage could result if instructions are not followed.

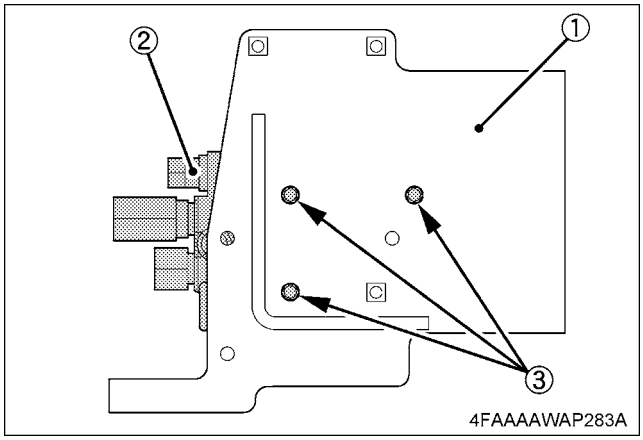
1. Remove 2 tractor bolts, attach the valve stay support on the tractor.



(1) Valve stay support
(2) 2-M10 x 25 bolts
(3) 2-M14 x 40 bolts

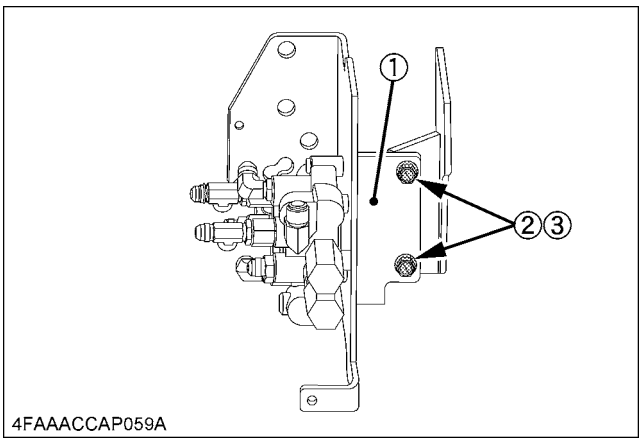
M14 bolt	Tightening torque	124 to 147 N-m (1.3 to 1.5 kgf-m) (91.5 to 108.4 ft-lbs)

2. Attach the valve to valve stay.



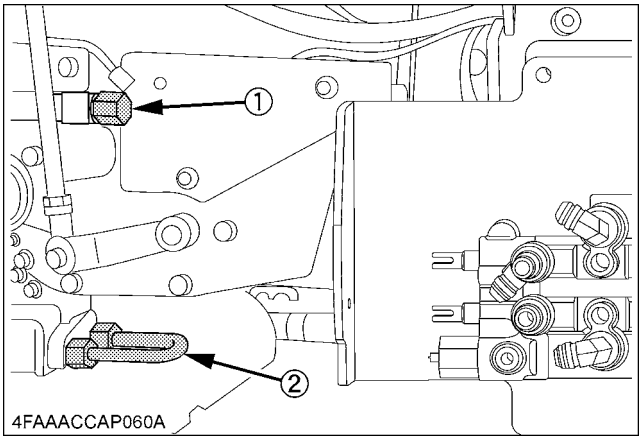
(1) Valve stay
(2) Standard valve
(3) 3-M8 x 20 bolts with washer

3. Attach the valve stay assembly to the valve stay support.

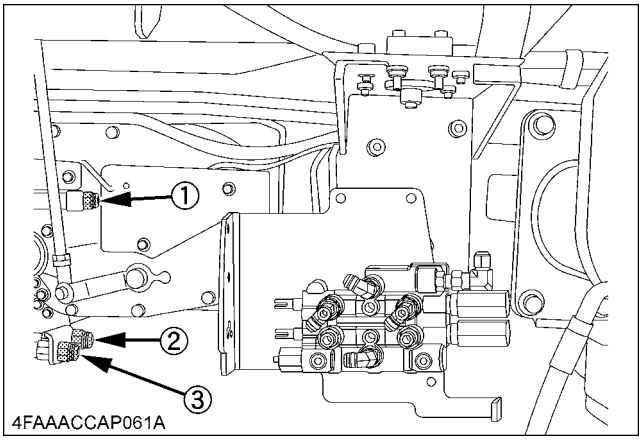


(1) Valve stay
(2) 2-M12 nuts
(3) 2-M12 spring lock washers

4. Remove the U pipe and tank port cap.

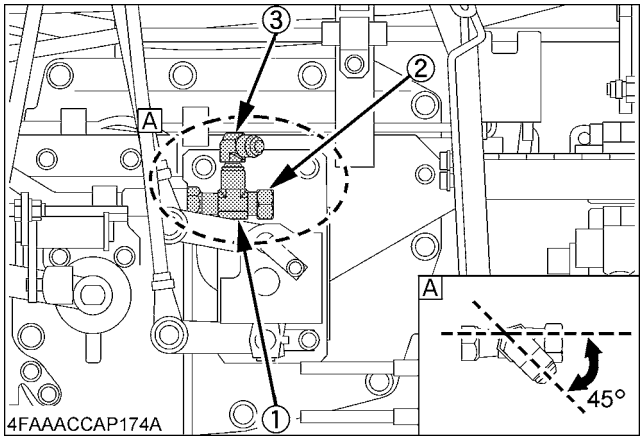


(1) Tank port cap
(2) U pipe



(1) Tank port
(2) Pump line port
(3) Power beyond port

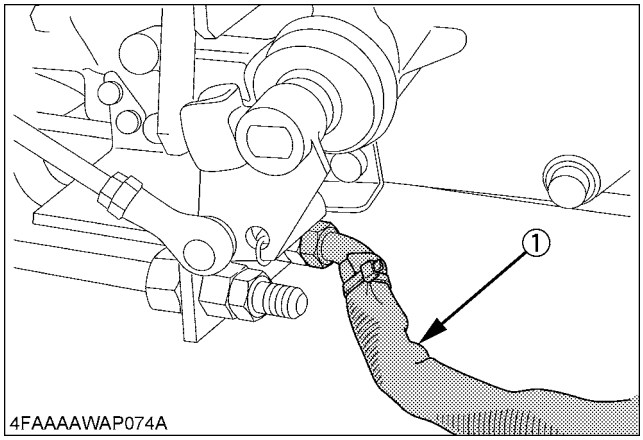
5. Attach the T-joints, elbow adapter and caps in place.



(1) T-joint (7/8-UNF)
(2) Cap (7/8-UNF)
(3) Elbow adapter (7/8-UNF)
(A) View from top

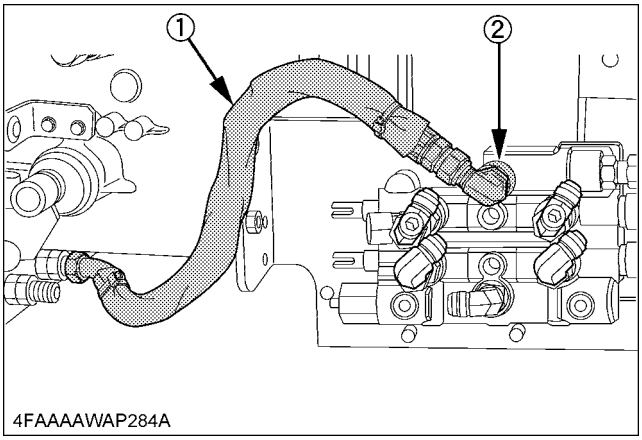
NOTE :
- Temporary attach the elbow adapter.

6. Connect the pump line hose to the pump line port as shown.



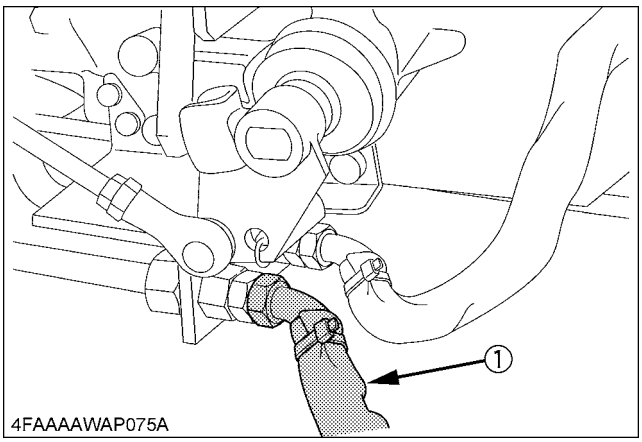
(1) Pump line hose (Orange, 630 mm (24.8 in.), 7/8-UNF)

7. Connect the pump line hose to the valve as shown in the figure.



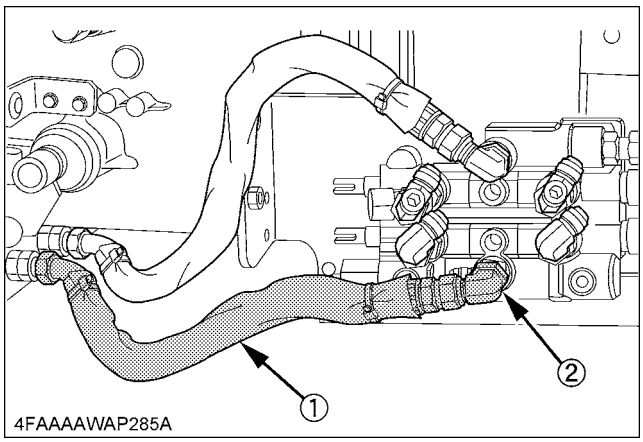
(1) Pump line hose
(Orange, 630 mm (24.8 in.), 3/4-UNF)
(2) Valve pump port (Orange dot)

8. Connect the power beyond line hose as shown in the figure.



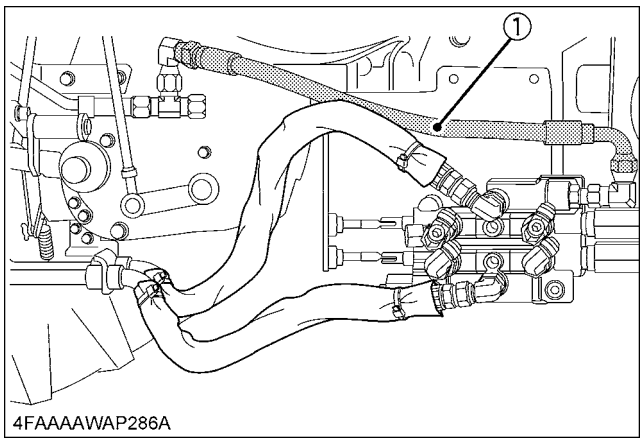
(1) Power beyond line hose with sleeve
(Green, 500 mm (19.7 in.), 3/4-UNF)

9. Connect the power beyond line hose to the valve as shown in the figure.



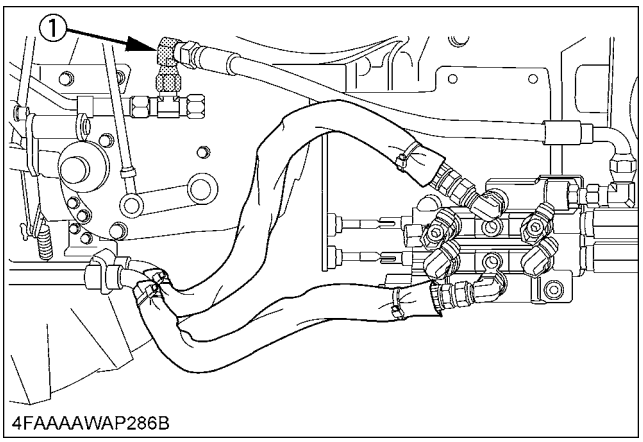
(1) Power beyond line
(Green, 500 mm (19.7 in.), 3/4-UNF)
(2) Valve power beyond port (Green dot)

10. Connect the tank line hose to the tractor as shown in the figure.



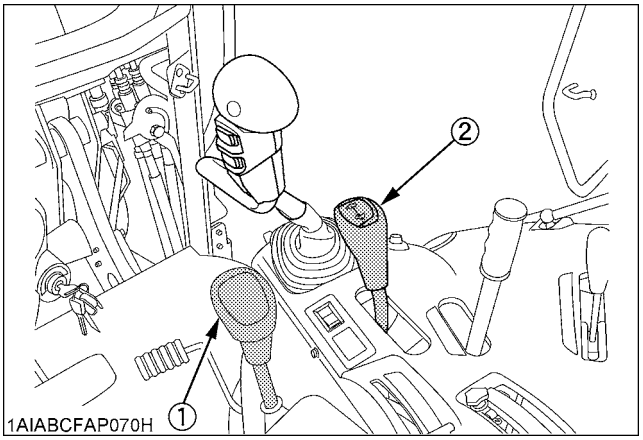
(1) Tank line hose
(Gray: 600 mm (23.6 in.), 7/8-UNF and 7/8-UNF)

11. Adjust the elbow adapter angle which does not twist the hose, then tighten.



(1) Elbow adapter (7/8-UNF)

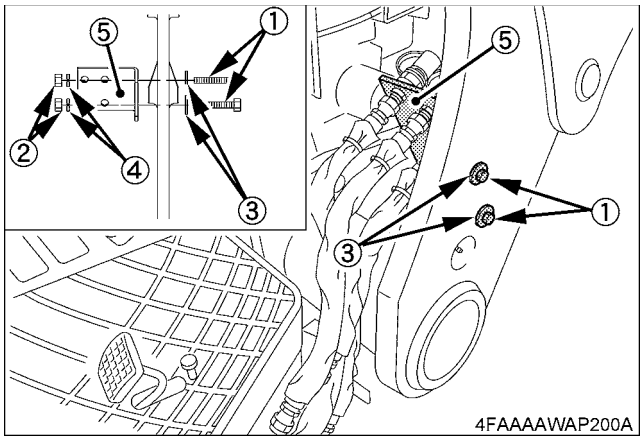
12. Shift the main shift lever and the range and creep gear shift lever to make sure the links do not contact to the hoses. If the links contact to the hoses, revise the hose route.



(1) Main shift lever
(2) Range and creep gear shift lever

◆ Connector assembly stay section

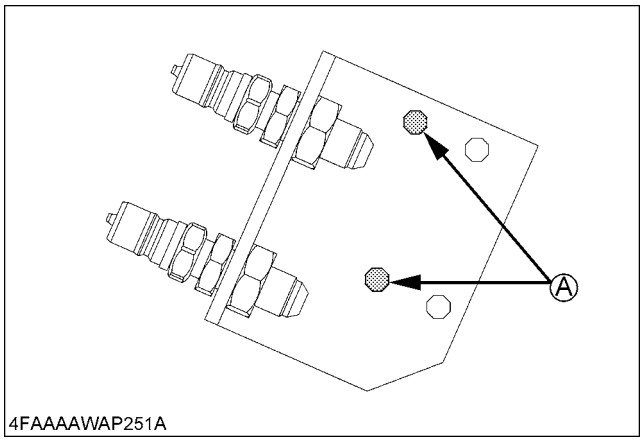
1. Fit the connector assembly stay to the left and right main frame as shown in the figure.



(1) 2-M10 x 60 bolts
(2) 2-M10 nuts
(3) 2-M10 plain washers
(4) 2-M10 spring lock washers
(5) Connector assy stay

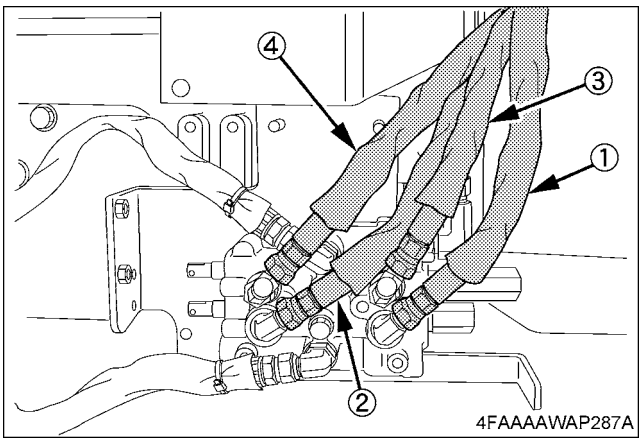
NOTE :

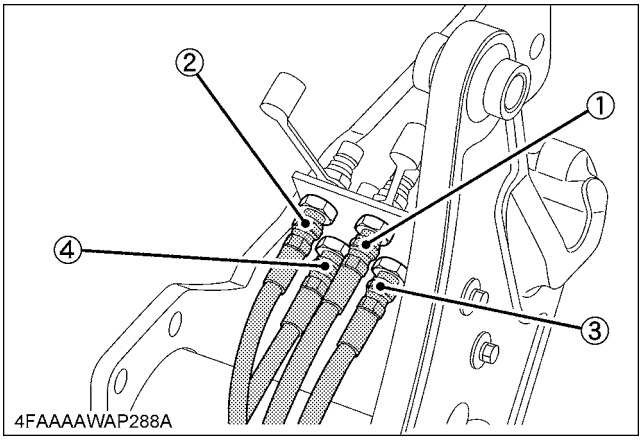
- At the time of assembly, use the holes which showing on the picture.



(A) Use these holes.

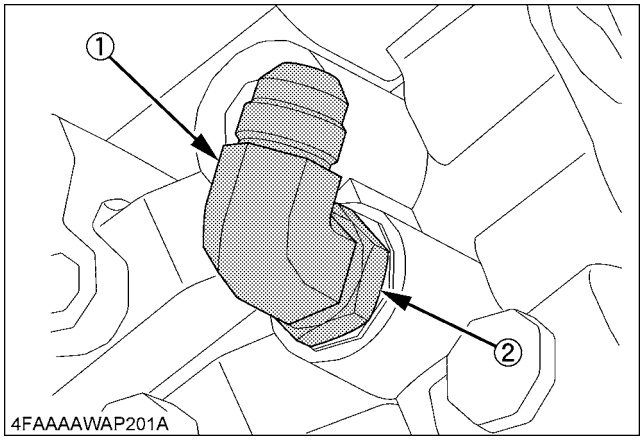
2. Connect the hoses between the connector assembly stay and the valve as shown in the figure.





(1) Hydraulic hose
(Red, 500 mm (19.7 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose
(Blue, 597 mm (23.5 in.), 3/4-UNF and 3/4-UNF)
(3) Hydraulic hose
(Yellow, 465 mm (18.3 in.), 3/4-UNF and 3/4-UNF)
(4) Hydraulic hose
(White, 559 mm (23.4 in.), 3/4-UNF and 3/4-UNF)

IMPORTANT :
- Make sure valve color mark, connector assembly cap color and hose color band are matching.
- With all the hoses connected to the valve, be certain that any of the hoses is out of close contact with the other hoses, the fittings and edges.
- If the above problem is found, correct the hoses to remove their twist by loosing the nut shown in the figure and readjusting the fitting angle for avoiding such close contact.

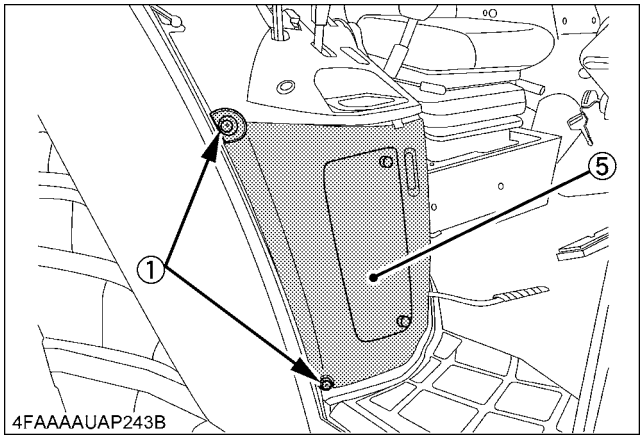


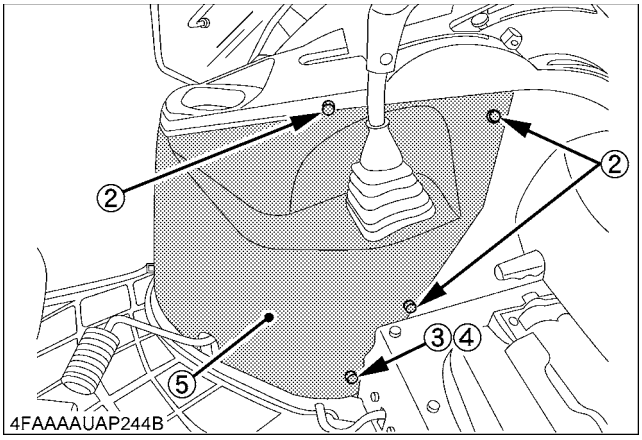
(1) Fitting
(2) Nut

NOTE :
- To prevent hose twisting both of hose ends are connecting to adapter first then tighten.

◆ Controller stand section

1. Remove the cover of the tractor.

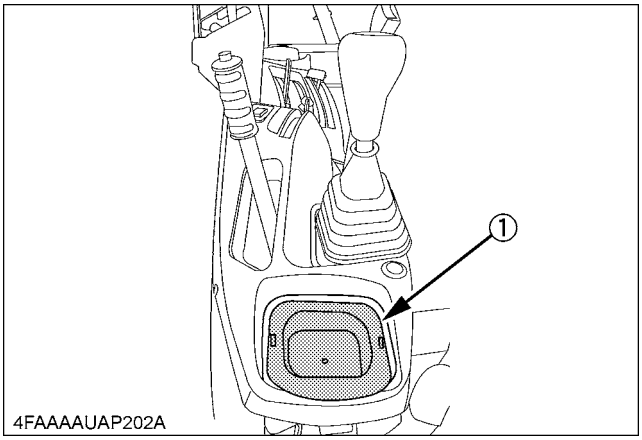




(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

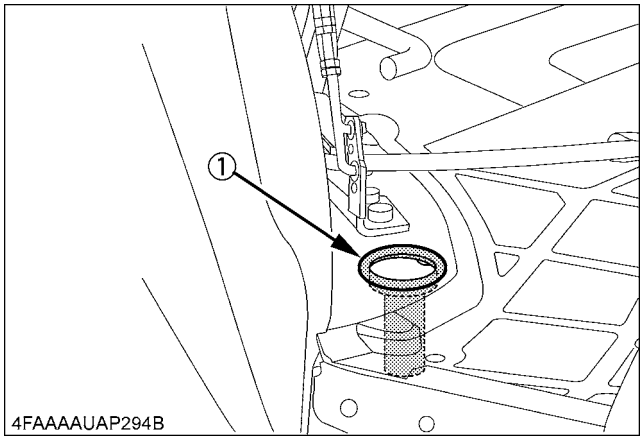
NOTE :
- At the time of removing the rivets, use screw driver to loosen the screw then pull the rivets out.

2. Remove the holder.



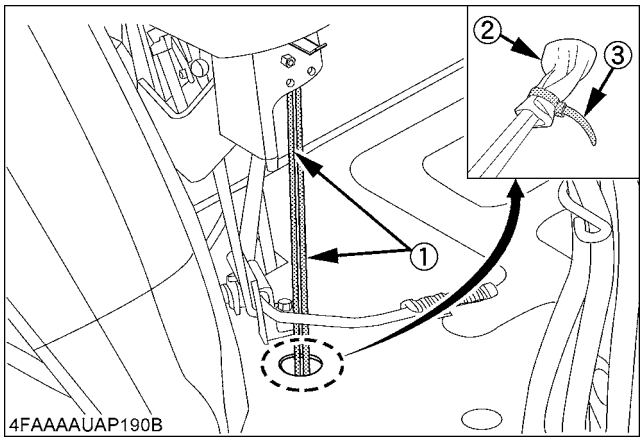
(1) Holder

3. Fit the grommet.



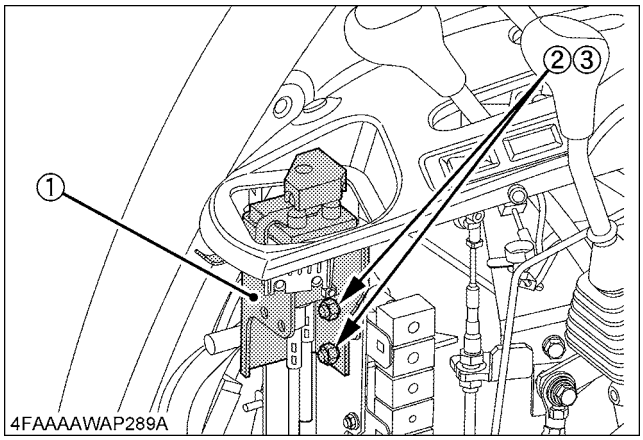
(1) Grommet

4. Pass the wire cable in the specified route. Bind them up with the cord band.



(1) 2-Assy cable
(2) Grommet
(3) Clamp band

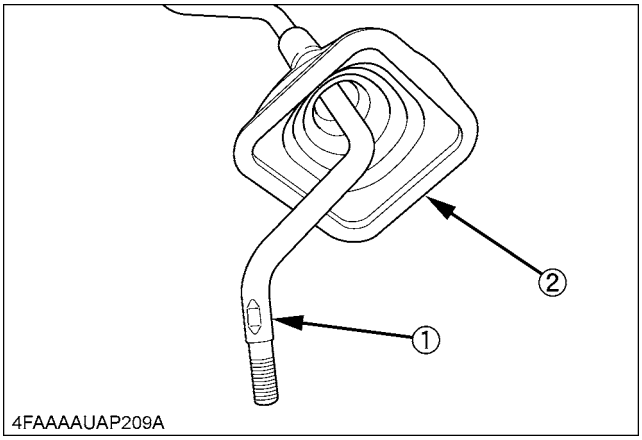
5. Fasten the controller stay in position.



(1) Controller assy
(2) 2-M10 nuts
(3) 2-M10 spring lock washers

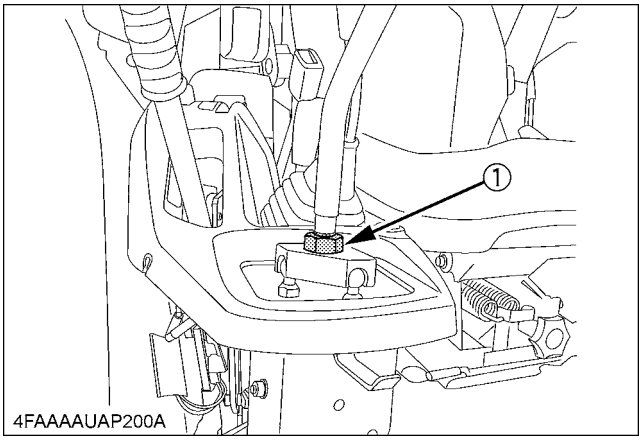
NOTE :
- The lock lever must be under the console cover.

6. Pass the lever through the lever boot.



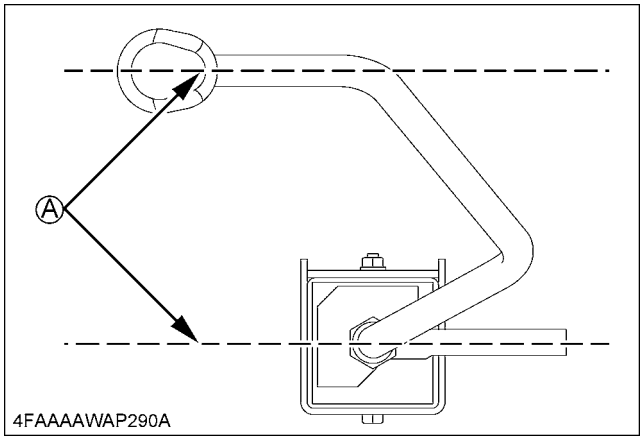
(1) Lever
(2) Lever boot

7. Install the lever as shown below and then fix the lock nut.



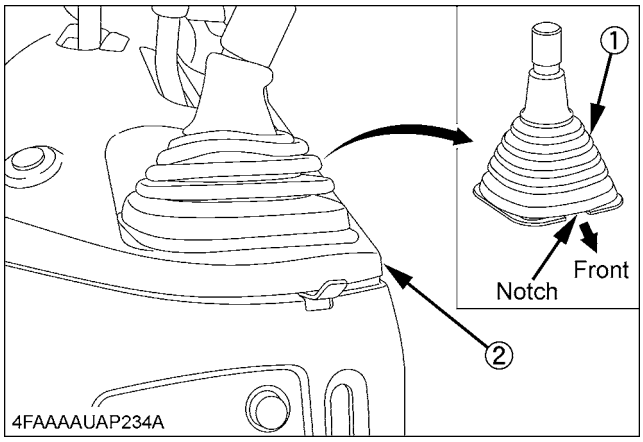
(1) M14 nut

NOTE :
- Install the lever pointing straight to the traveling direction.



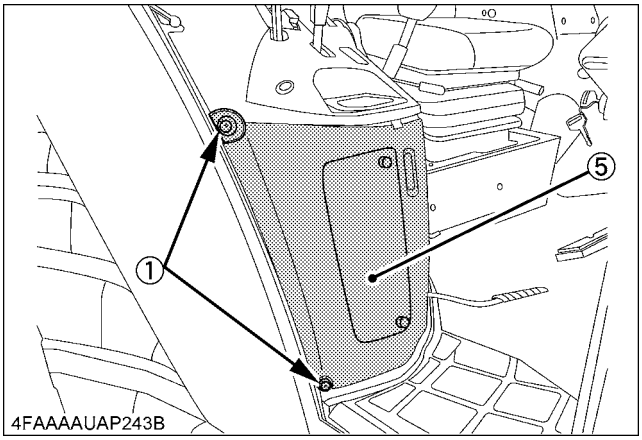
(A) Parallel

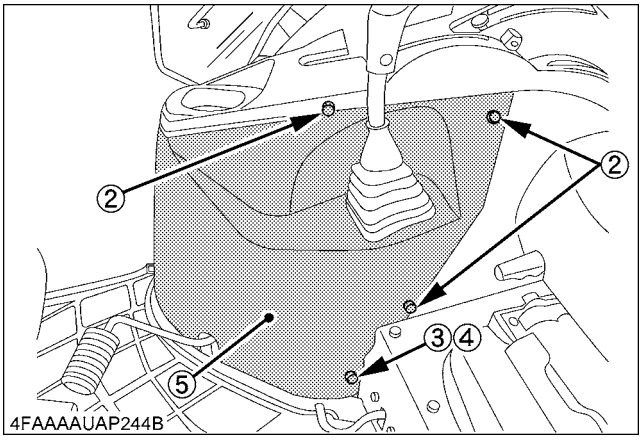
8. Fit the lever boot to the console.



(1) Lever boot
(2) Console

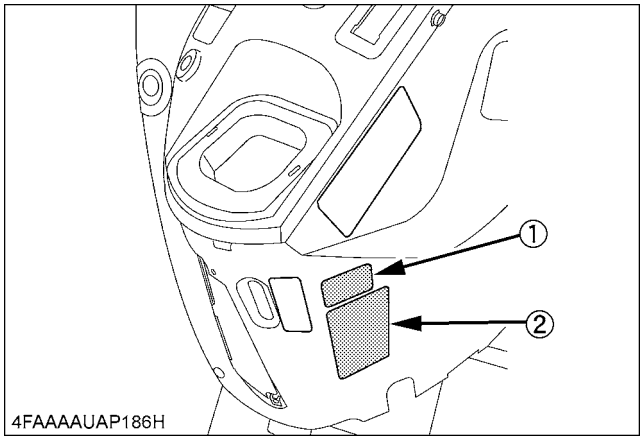
9. Mount the cover (detached in Step 1) back on the tractor.

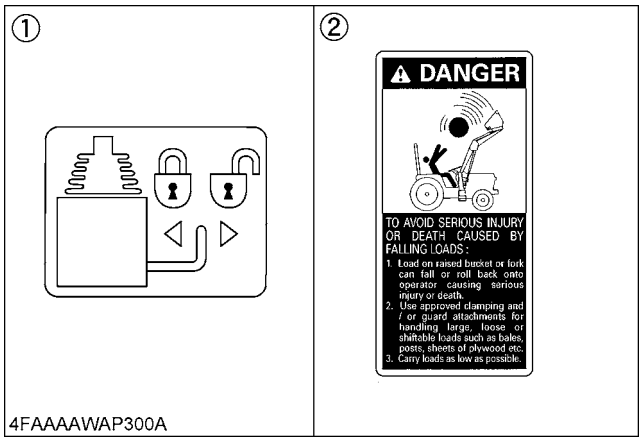




(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

10. Apply the labels on the cover.





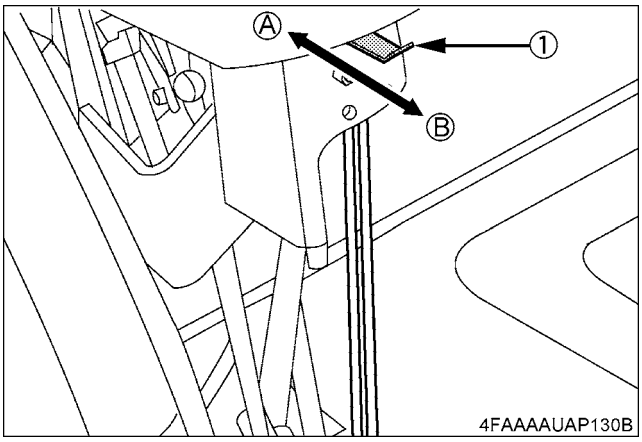
(1) Label of lever lock
(2) Label of danger 3

IMPORTANT :
- Wipe off the dust, oil and grease completely from label cover surface.
- Do not use the cotton work gloves at the time of label attachment.
  And also be careful not to touch the label adhesive with your hand.
- The bubble must not remain after sticking.

◆ Controller cables section

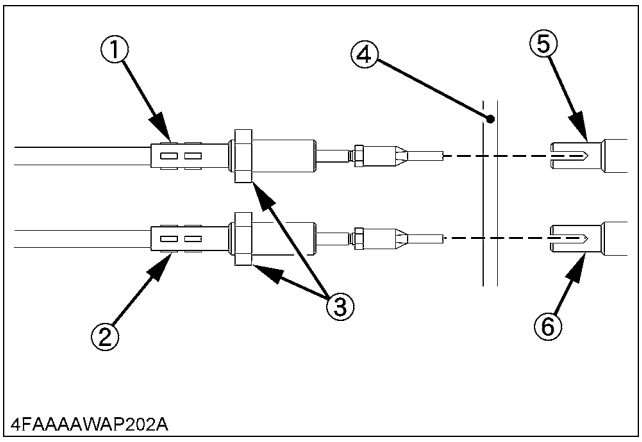
1. Set the lock lever on the cable controller to the neutral position.

IMPORTANT :
- Control lever should be neutral and be locked with lock lever.



(1) Lock lever
(A) "LOCK"
(B) "UNLOCK"

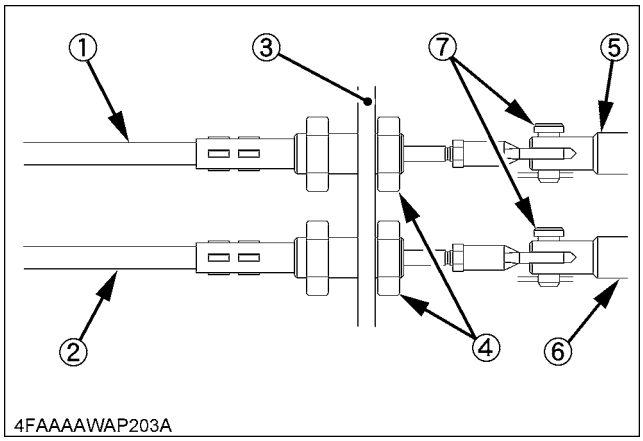
2. Install one lock nut to each cable end. Then route the cable ends through the valve stay.



(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) 2-M16 lock nuts
(4) Valve stay
(5) Spool (Boom section)
(6) Spool (Bucket section)

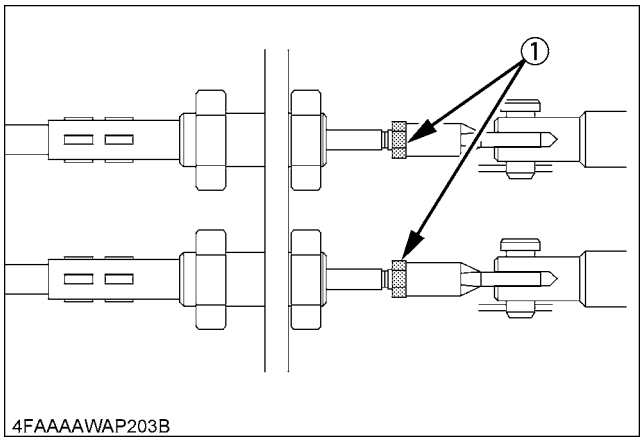
NOTE :
- The cable with blue tape is for boom section and the cable with red tape is for bucket section.

3. Install the other lock nuts to the cable ends and adjust the location of lock nuts so that the cable end hole aligns with the spool hole. Then connect the cable to the spools with pins.



(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) Valve stay
(4) 2-M16 lock nuts
(5) Spool (Boom section)
(6) Spool (Bucket section)
(7) 2-Pins
2-Snap pins

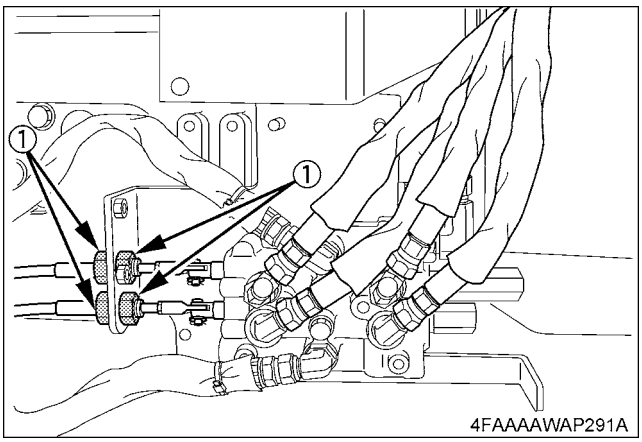
4. Loosen the M6 lock nuts of the cable ends. Turn the cable ends and spools so that the direction of the pins should be as shown in the figure. Then retighten the M6 lock nuts.



(1) 2-M6 lock nuts

NOTE :
- To reposition the cables for correct connections, use the M16 lock nuts.

5. Tighten up the lock nuts at both sides of the valve stay to secure the cables in place.

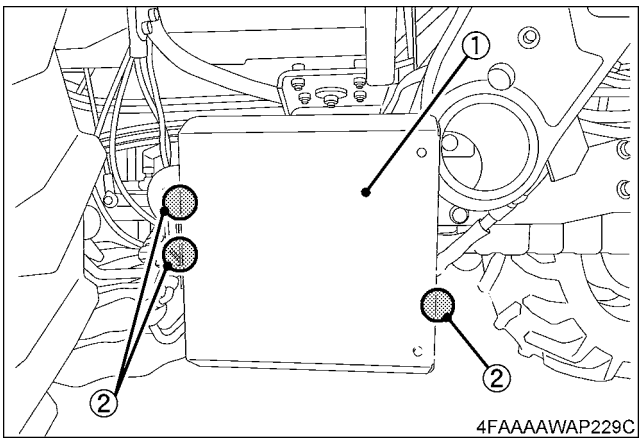


(1) 4-M16 lock nuts

Tightening Torque	60.0 to 80.0 N-m (6.1 to 8.2 kgf-m) (44.3 to 59.0 ft-lbs)

◆ Control valve cover section

1. Attach the valve cover to the valve stay.



(1) Valve cover
(2) 3-M8 x 20 bolts with washers

NOTE :
- In case the hydraulic hose contacts the valve cover, readjust the angle of hose.

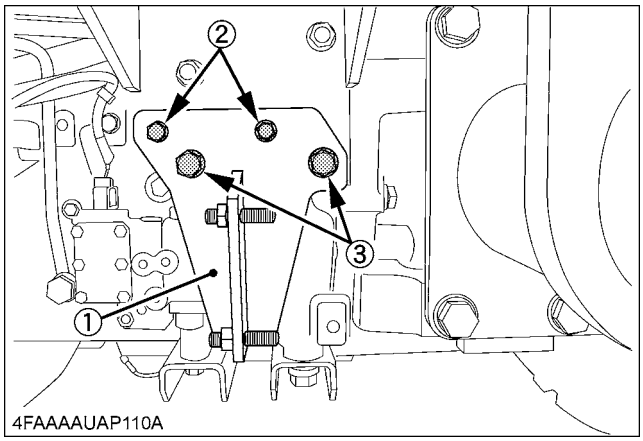
■Self-Leveling Valve (CAB) [M6874] (if equipped)

◆ Hydraulic lines section

IMPORTANT :

- Before hose assembly, shift the range and creep gear shift lever to creep position (if no creep position is equipped, shift lever to L position).
- With all the hoses connected to the valve, be certain that all the hoses are out of contact with the other hoses, the fittings and edges.
- To verify the hoses, the power beyond line hose should be installed to the green colored port and the pump line should be installed to the orange colored port of the valve.
- If the pump line hose and power beyond line hose are installed incorrectly, the tractor hydraulic pump may experience damage.
- Equipment or property damage could result if instructions are not followed.

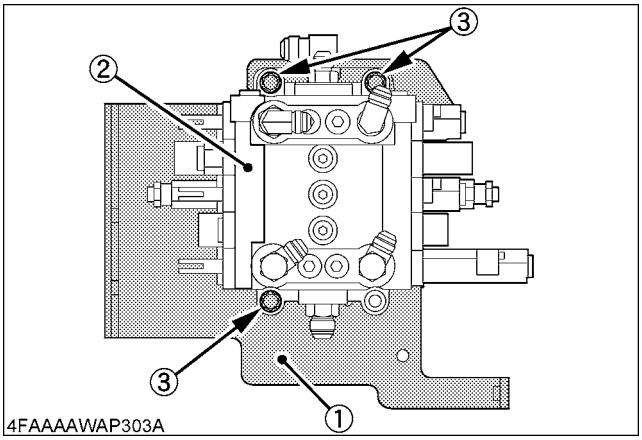
1. Remove 2 tractor bolts, attach the valve stay support on the tractor.



(1) Valve stay support
(2) 2-M10 x 25 bolts
(3) 2-M14 x 40 bolts

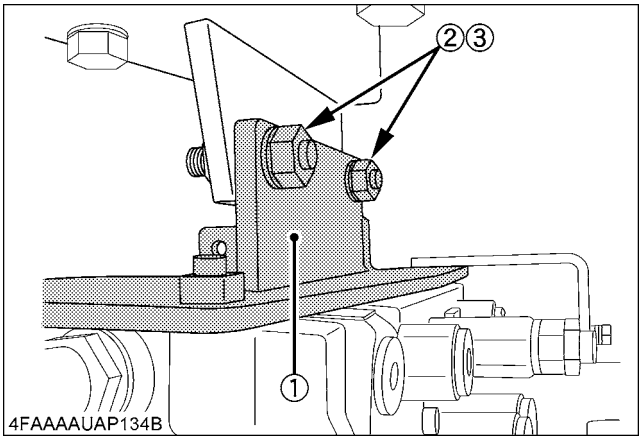
M14 bolt	Tightening torque	124 to 147 N-m (1.3 to 1.5 kgf-m) (91.5 to 108.4 ft-lbs)

2. Attach the valve to valve stay.



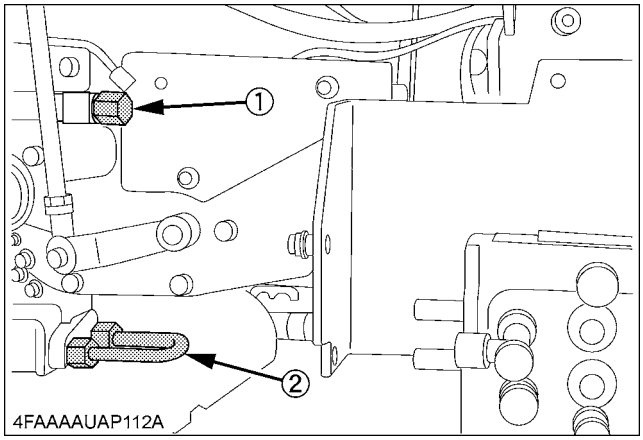
(1) Valve stay
(2) Self-level valve
(3) 3-M10 x 60 bolts with washer

3. Attach the self-level valve stay assembly to the valve stay support.

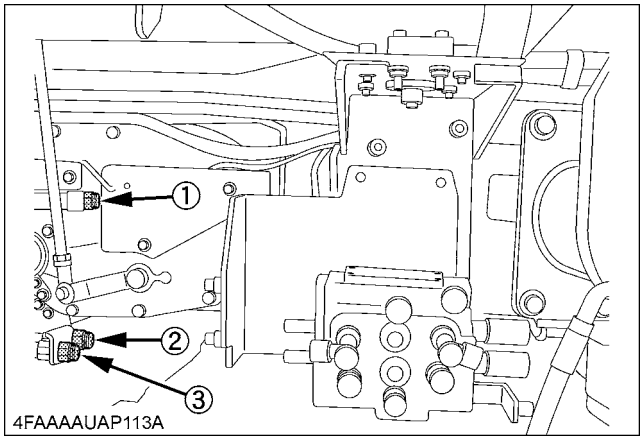


(1) Valve stay
(2) 2-M12 nuts
(3) 2-M12 spring lock washers

4. Remove the U pipe and tank port cap.

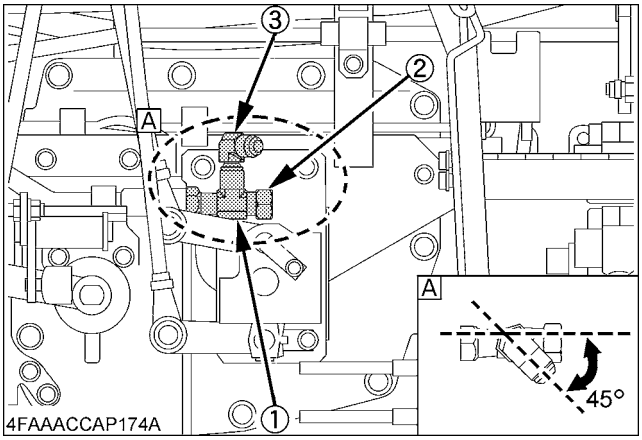


(1) Tank port cap
(2) U pipe



(1) Tank port
(2) Pump line port
(3) Power beyond port

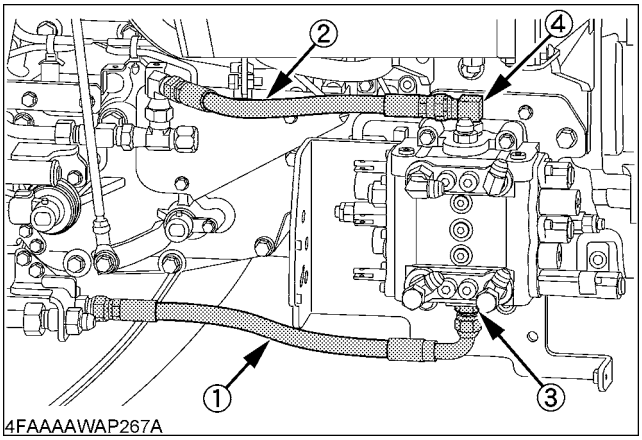
5. Attach the T-joints, elbow adapter and caps in place.



(1) T-joint (7/8-UNF)
(2) Cap (7/8-UNF)
(3) Elbow adapter (7/8-UNF)
(A) View from top

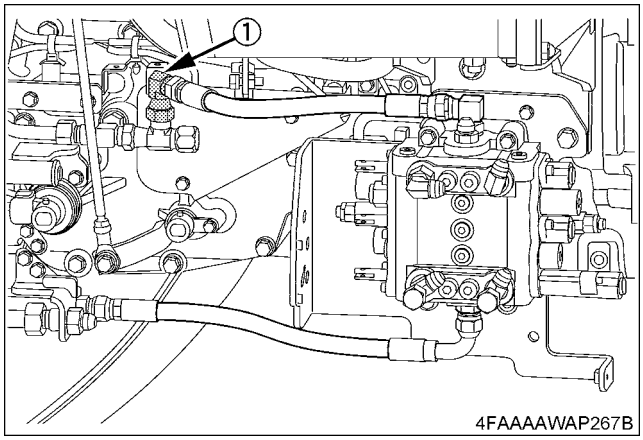
NOTE :
- Temporary attach the elbow adapter.

6. Connect the pump line and tank line hydraulic hoses as shown in the figure.



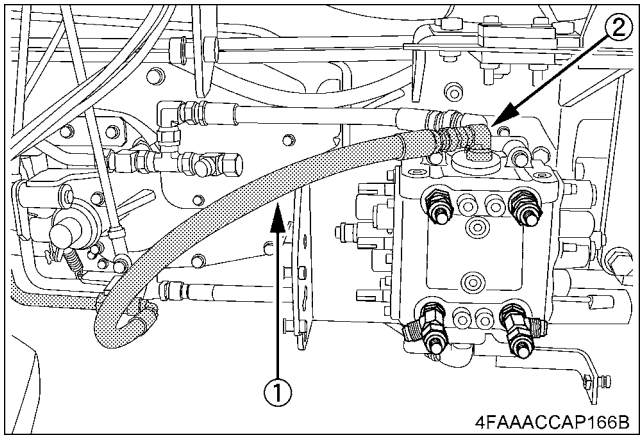
(1) Pump line hose
(Orange, 545 mm (21.5 in.), 7/8-UNF and 7/8-UNF)
(2) Tank line hose
(Gray, 365 mm (14.4 in.), 7/8-UNF and 7/8-UNF)
(3) Valve pump port (Orange dot)
(4) Valve tank port (Gray dot)

7. Adjust elbow adapter angle which does not twist the hose, then tighten.



(1) Elbow adapter (7/8-UNF)

8. Connect the power beyond line hose as shown in the figure.

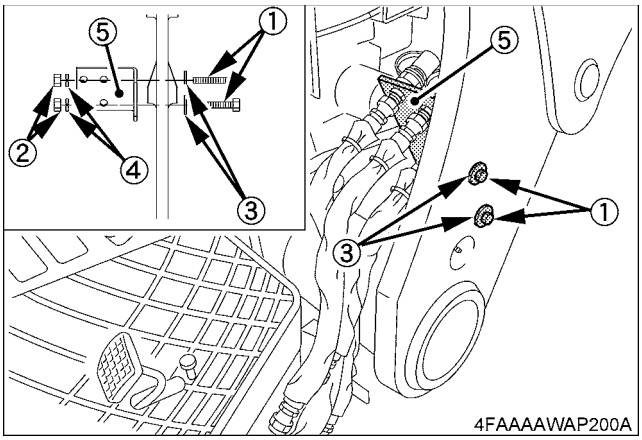


(1) Power beyond line hose
(Green, 670 mm (26.4 in.), 3/4-UNF and 3/4-UNF)
(2) Valve power beyond port (Green dot)

9. Shift the main shift lever and the range and creep gear shift lever to make sure the links do not contact to the hoses. If the links contact to the hoses, revise the hose route.

◆ Connector assembly stay section

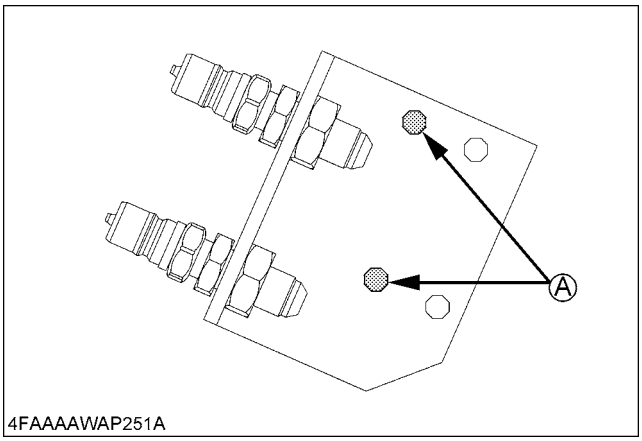
1. Fit the connector assembly stay to the left and right main frame as shown in the figure.



(1) 2-M10 x 60 bolts
(2) 2-M10 nuts
(3) 2-M10 plain washers
(4) 2-M10 spring lock washers
(5) Connector assy stay

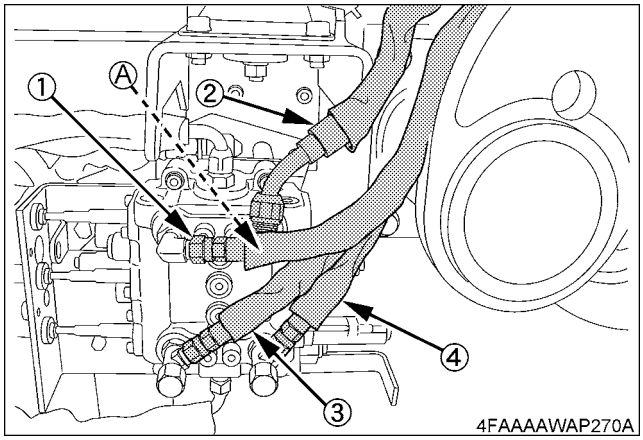
NOTE :

- At the time of assembly, use the holes which showing on the picture.



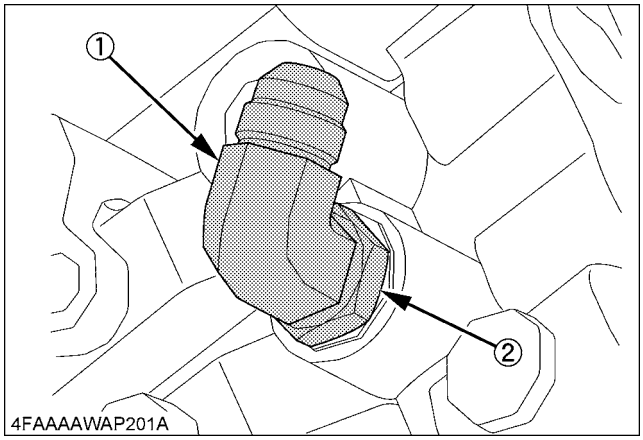
(A) Use these holes.

2. Connect the hoses between the connector assembly stay and the valve as shown in the figure.



(1) Hydraulic hose (Red, 465 mm (18.3 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose (Blue, 394 mm (15.5 in.), 3/4-UNF and 3/4-UNF)
(3) Hydraulic hose (Yellow, 500 mm (19.7 in.), 3/4-UNF and 3/4-UNF)
(4) Hydraulic hose (White, 447 mm (17.6 in.), 3/4-UNF and 3/4-UNF)
(A) 90°side

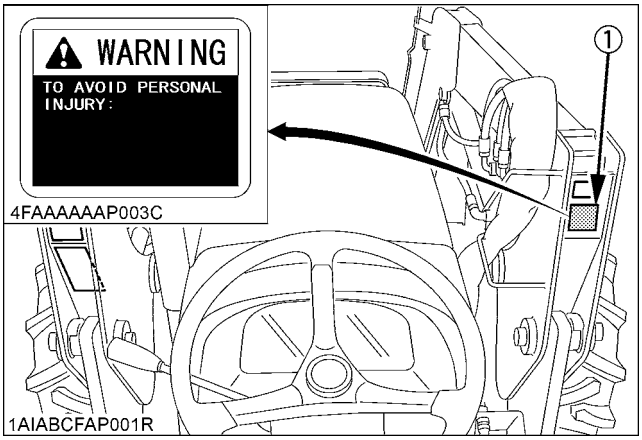
IMPORTANT :
- Make sure valve color mark, connector assembly cap color and hose color band are matching.
- With all the hoses connected to the valve, be certain that any of the hoses is out of close contact with the other hoses, the fittings and edges.
- If the above problem is found, correct the hoses to remove their twist by loosing the nut shown in the figure and readjusting the fitting angle for avoiding such close contact.



(1) Fitting
(2) Nut

NOTE :
- To prevent hose twisting both of hose ends are connecting to adapter first then tighten.

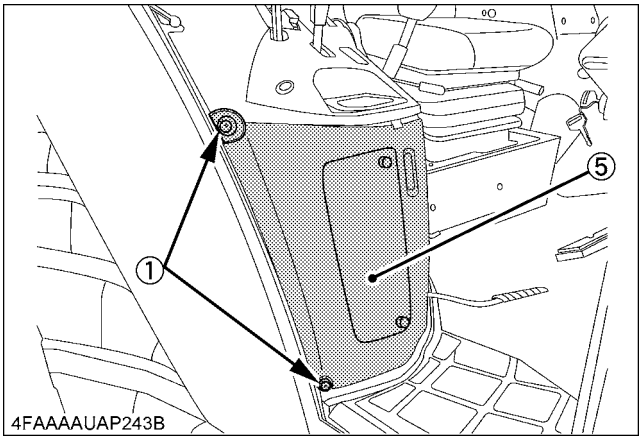
3. Attach the label on the back of the side frame (RH).

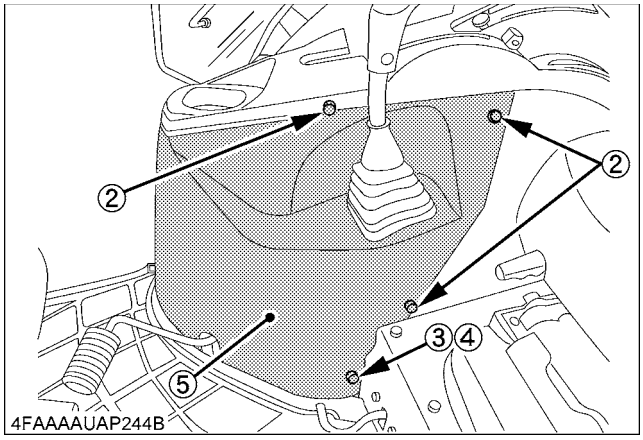


(1) Label of warning 8

IMPORTANT :
- Wipe off the dust, oil and grease completely from label cover surface.
- Do not use the cotton work gloves at the time of label attachment.
  And also be careful not to touch the label adhesive with your hand.
- The bubble must not remain after sticking.

◆ Controller stand section
1. Remove the cover of the tractor.

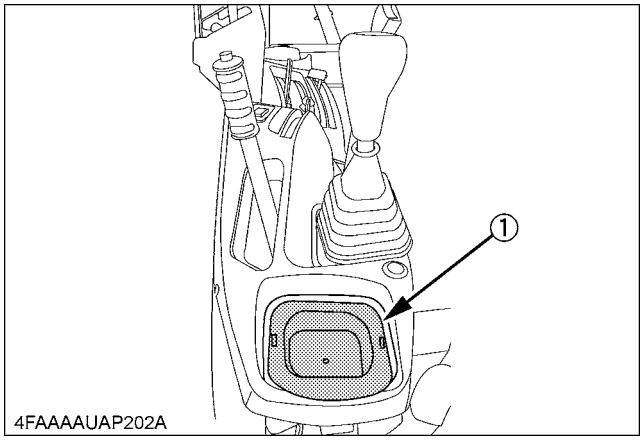




(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

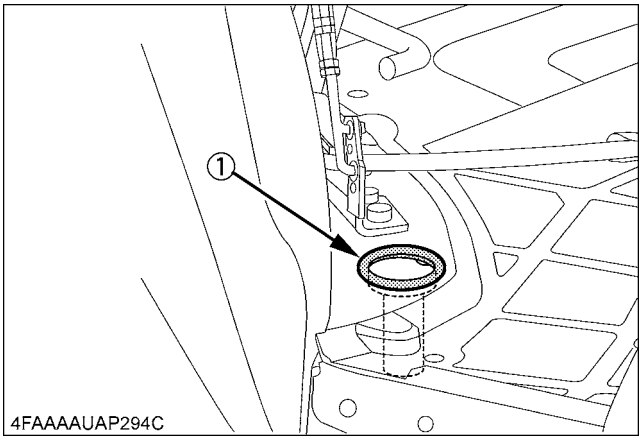
NOTE :
- At the time of removing the rivets, use screw driver to loosen the screw then pull the rivets out.

2. Remove the holder.



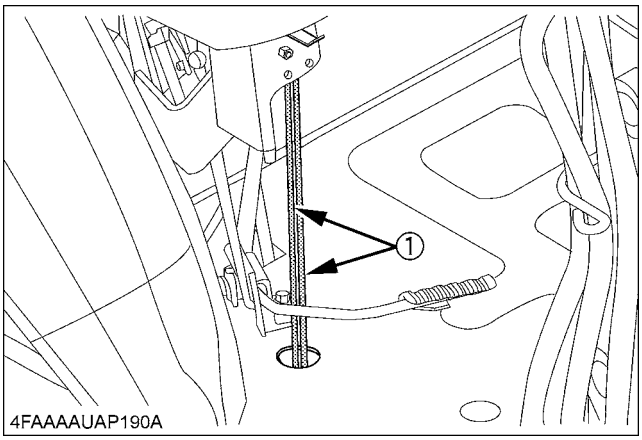
(1) Holder

3. Fit the rubber ring.



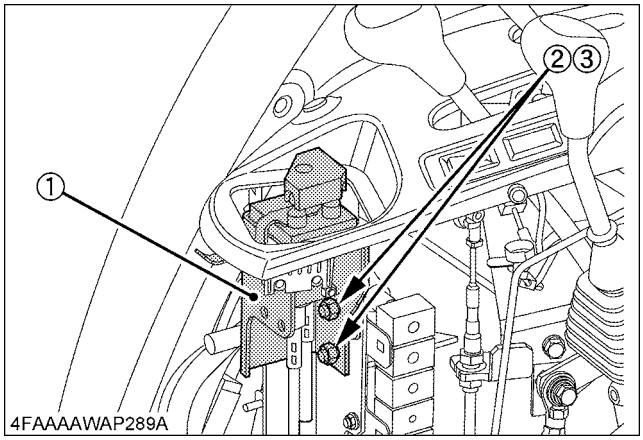
(1) Rubber ring

4. Pass the wire cable in the specified route.



(1) 2-Assy cable

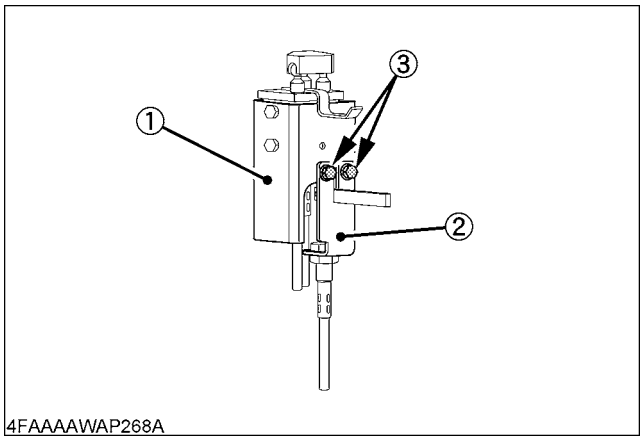
5. Fasten the controller stay in position.



(1) Controller assy
(2) 2-M10 nuts
(3) 2-M10 spring lock washers

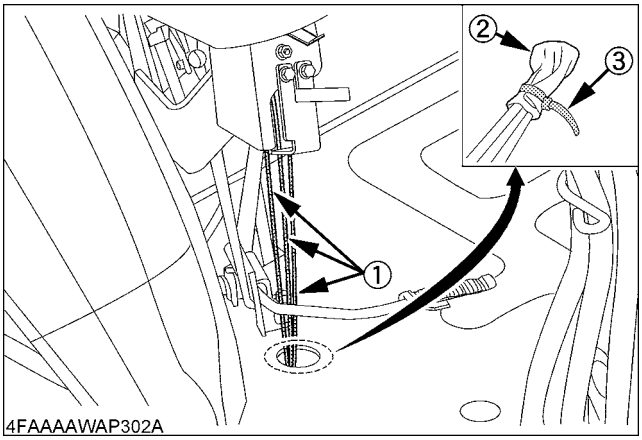
NOTE :
- The lock lever must be under the console cover.

6. Lever stay assembly wire cable pass through same hole as controller assembly wire cables. Then fasten the lever stay assembly to controller assembly.



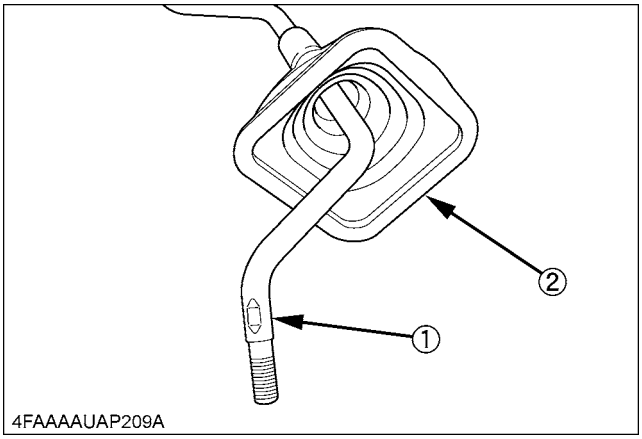
(1) Controller assy
(2) Lever stay assy
(3) 2-M8 x 16 bolts with washer

7. Bind the cables up with the cord band.



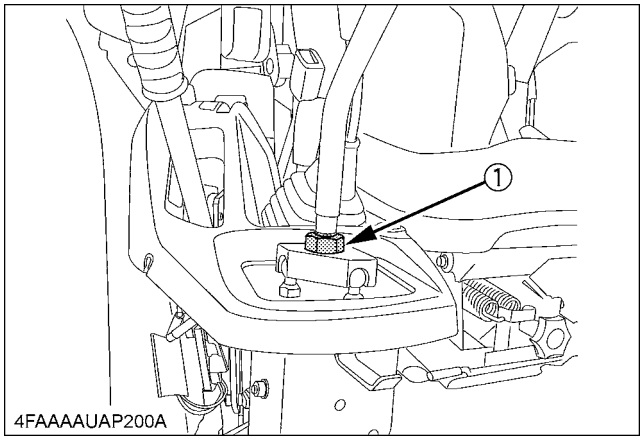
(1) 3-Assy cable
(2) Grommet
(3) Clamp band

8. Pass the lever through the lever boot.



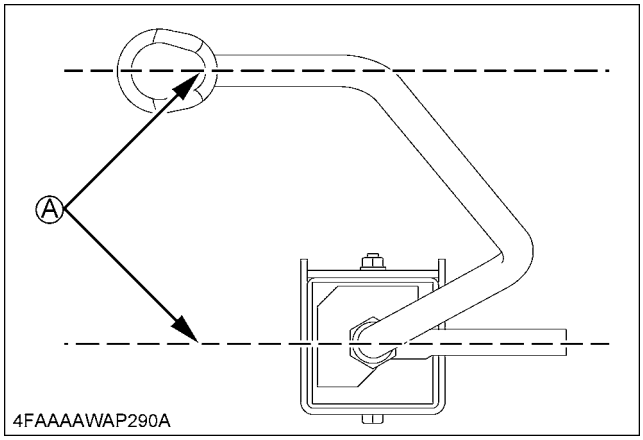
(1) Lever
(2) Lever boot

9. Install the lever as shown below and then fix the lock nut.



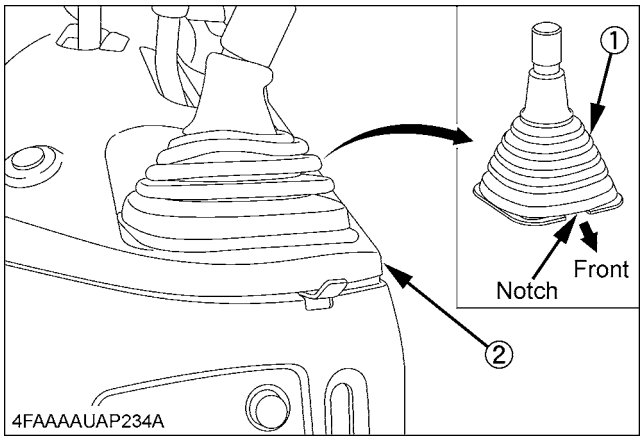
(1) M14 nut

NOTE :
- Install the lever pointing straight to the traveling direction.



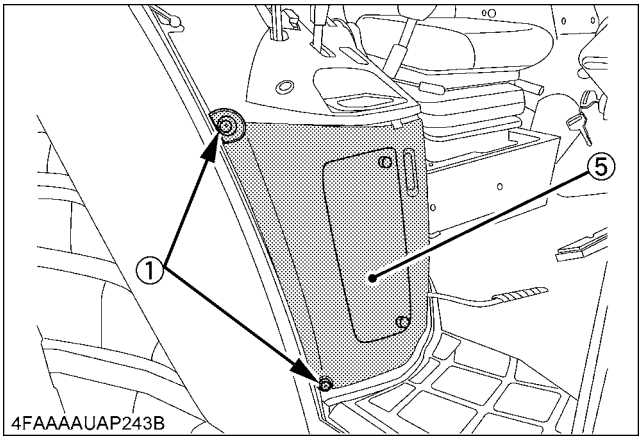
(A) Parallel

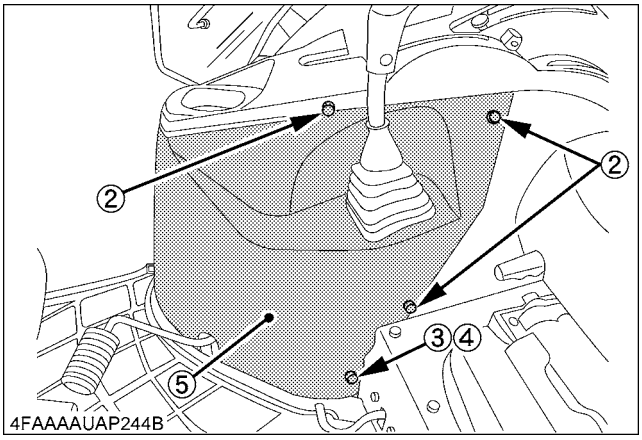
10. Fit the lever boot to the console.



(1) Lever boot
(2) Console

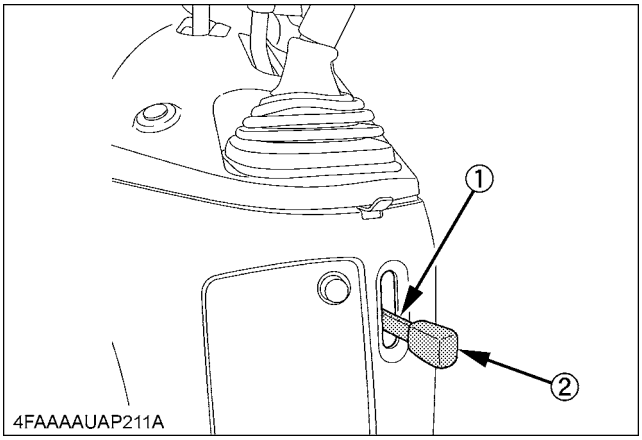
11. Mount the cover (detached in Step 1) back on the tractor.





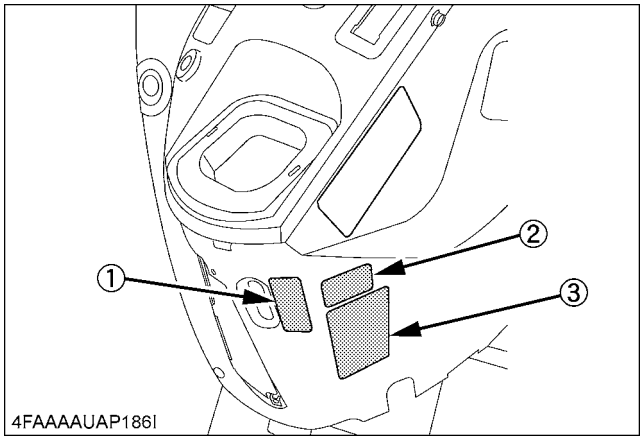
(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

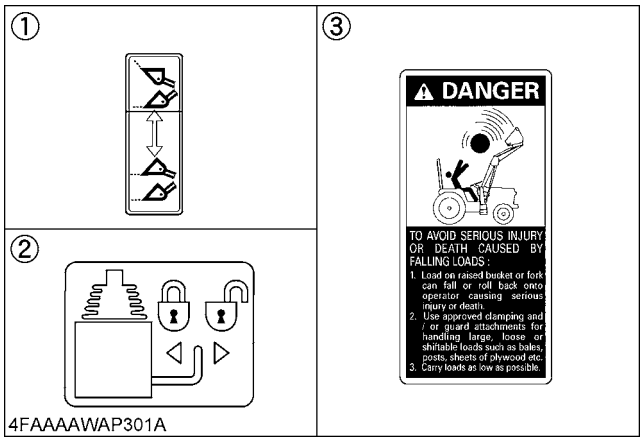
12. Fit the lever grip to the self-leveling lever.



(1) Lever
(2) Lever grip

13. Apply the labels on the cover.





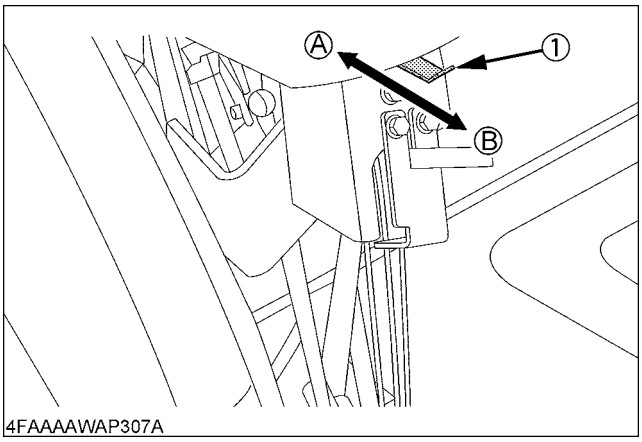
(1) Label of self-leveling valve
(2) Label of lever lock
(3) Label of danger 3

IMPORTANT :
- Wipe off the dust, oil and grease completely from label cover surface.
- Do not use the cotton work gloves at the time of label attachment.
  And also be careful not to touch the label adhesive with your hand.
- The bubble must not remain after sticking.

◆ Controller cables section

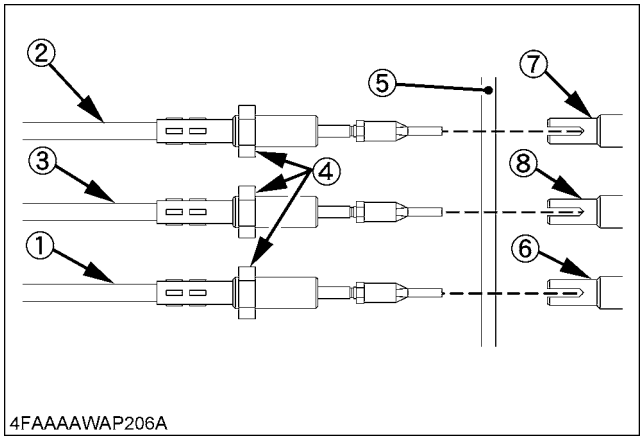
1. Set the lock lever on the cable controller to the neutral position.

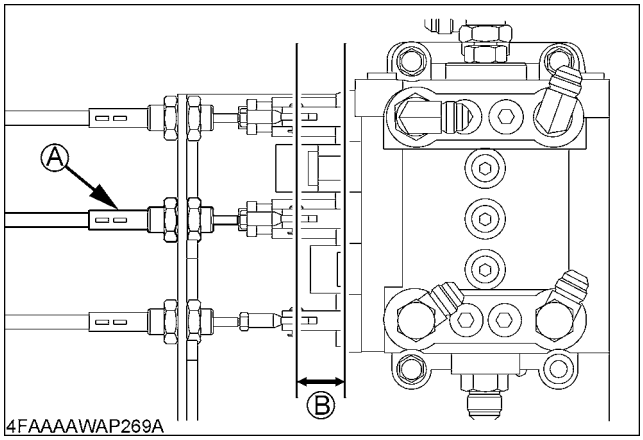
IMPORTANT :
- Control lever should be neutral and be locked with lock lever.



(1) Lock lever
(A) "LOCK"
(B) "UNLOCK"

2. Install one lock nut to each cable end. Then route the cable ends through the valve stay.



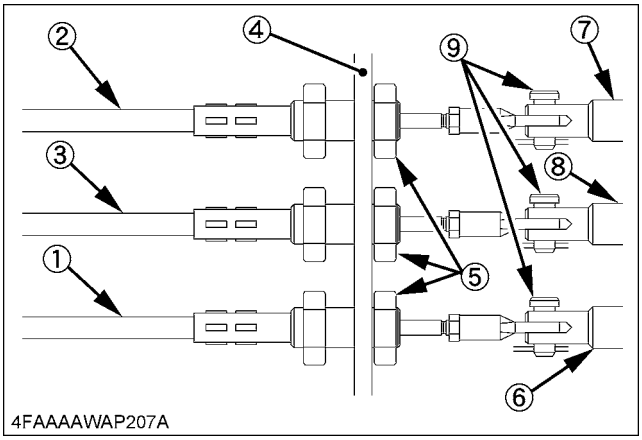


(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) Cable (Gray, Switch section)
(4) 3-M16 lock nuts
(5) Valve stay
(6) Spool (Boom section)
(7) Spool (Bucket section)
(8) Spool (Switch section)
(A) For switch section
(B) Same length (30 mm (1.2 in.))

IMPORTANT :
- Check the spool position at first. Distance from center of the spool holes to end surface of the valve must be same length as other spools.
- When assembling the switch section, keeping the self-level on/off lever downward.

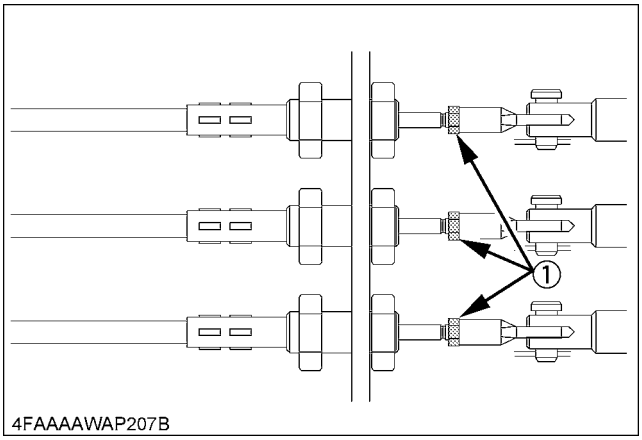
NOTE :
- The cable with blue tape is for boom section and the cable with red tape is for bucket section and the cable with gray tape is for switch section.

3. Install the other lock nuts to the cable ends and adjust the location of lock nuts so that the cable end hole aligns with the spool hole. Then connect the cable to the spools with pins.



(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) Cable (Gray, Switch section)
(4) Valve stay
(5) 3-M16 lock nuts
(6) Spool (Boom section)
(7) Spool (Bucket section)
(8) Spool (Switch section)
(9) 3-Pins
3-Snap pins

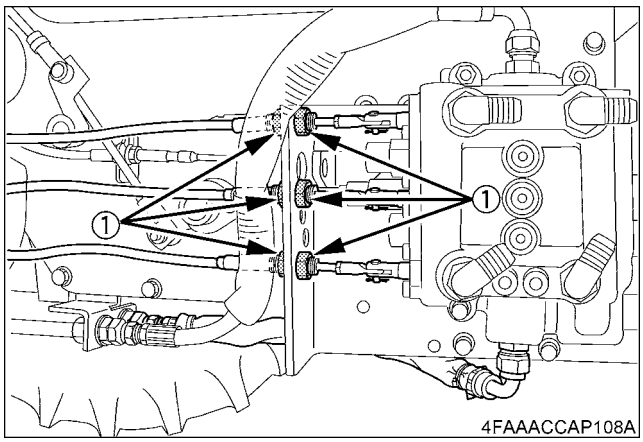
4. Loosen the M6 lock nuts of the cable ends. Turn the cable ends and spools so that the direction of the pins should be as shown in the figure. Then retighten the M6 lock nuts.



(1) 3-M6 lock nuts

NOTE :
- To reposition the cables for correct connections, use the M16 lock nuts.

5. Tighten up the lock nuts at both sides of the valve stay to secure the cables in place.



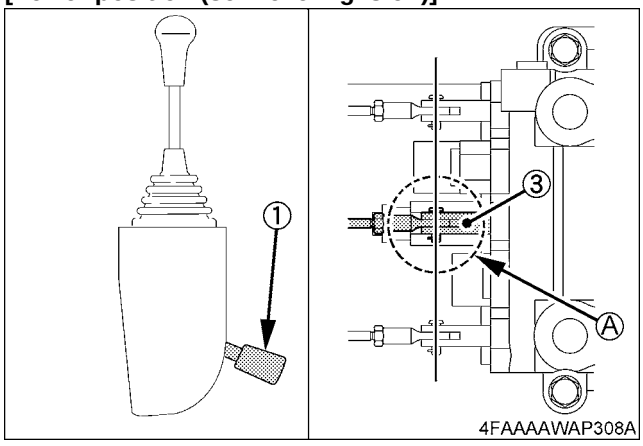
(1) 6-M16 lock nuts

Tightening Torque	60.0 to 80.0 N-m (6.1 to 8.2 kgf-m) (44.3 to 59.0 ft-lbs)

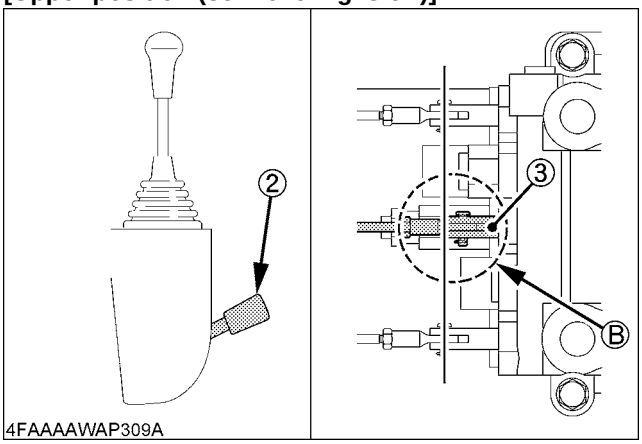
IMPORTANT :
- When assembling the switch section, keeping the self-level on/off lever downward.
- With the lock nuts tight in position, move the lever to make sure that the cables and spools behave smoothly as specified.

6. Check the position of the valve spool for self-leveling relative to the lever position. If it is not following the figures below, reconfigure the cable assembling process.

[Lower position (self-leveling is on)]



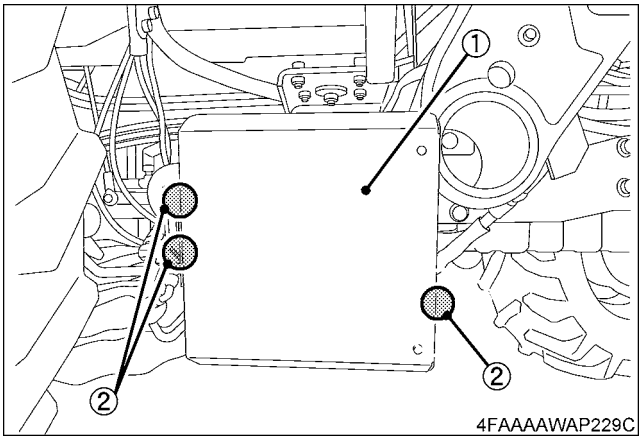
[Upper position (self-leveling is off)]



(1) Self-level on/off lever (Lower position)
(2) Self-level on/off lever (Upper position)
(3) Spool for self-leveling
(A) Spool length is same
(B) Spool length is shorter than others

◆ Control valve cover section

1. Attach the valve cover to the valve stay.



(1) Valve cover
(2) 3-M8 x 20 bolts with washers

NOTE :
- In case the hydraulic hose contacts the valve cover, readjust the angle of hose.

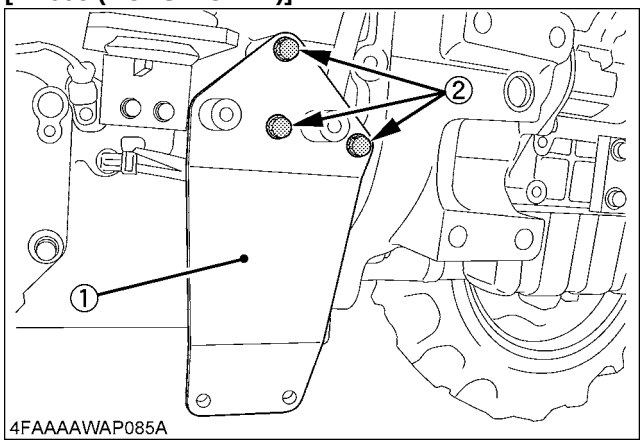
ASSEMBLING CONTROL VALVE KIT [M6060, M7060 TRACTOR]

■Standard Valve [M7995, M7996]

◆ Hydraulic lines section

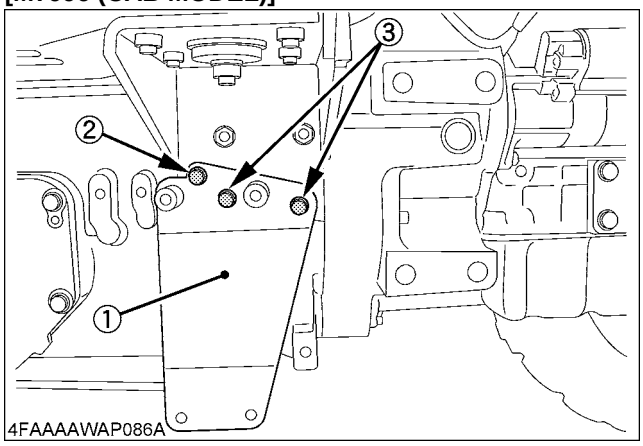
1. Attach the valve stay support on the tractor.

[M7995 (ROPS MODEL)]



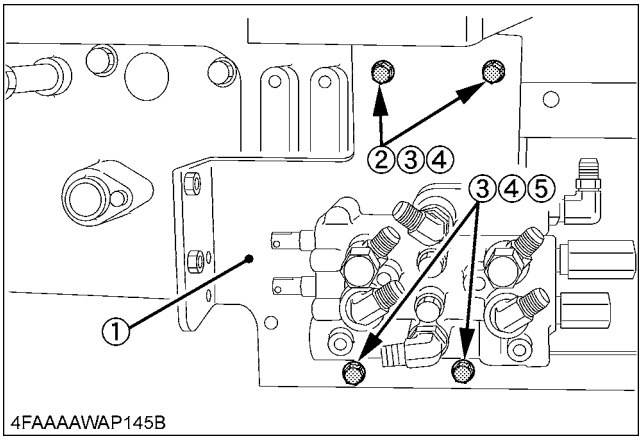
(1) Valve stay support
(2) 3-M12 x 30 bolts

[M7996 (CAB MODEL)]



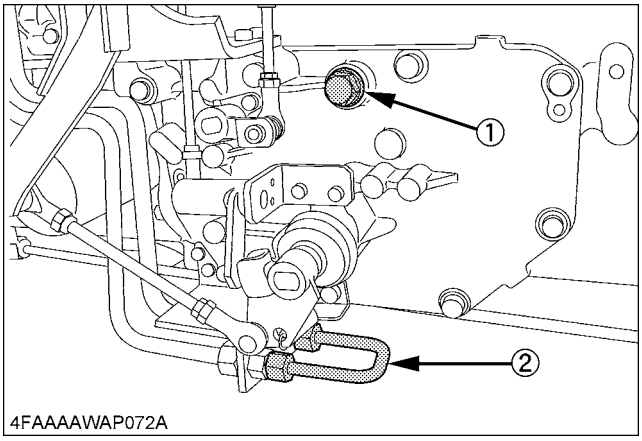
(1) Valve stay support
(2) M12 x 25 bolt
(3) 2-M12 x 35 bolts (original)

2. Fit the valve stay assembly to the valve stay support.

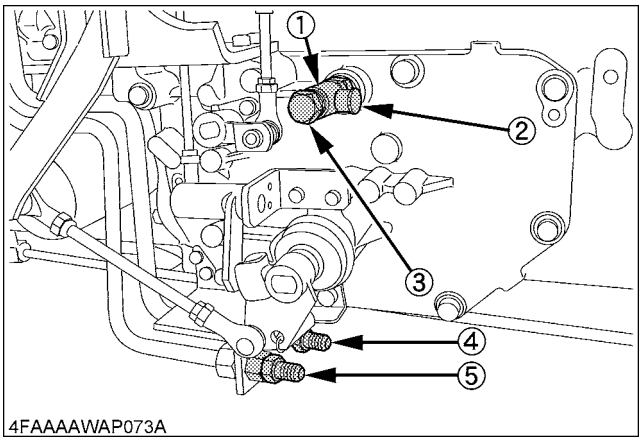


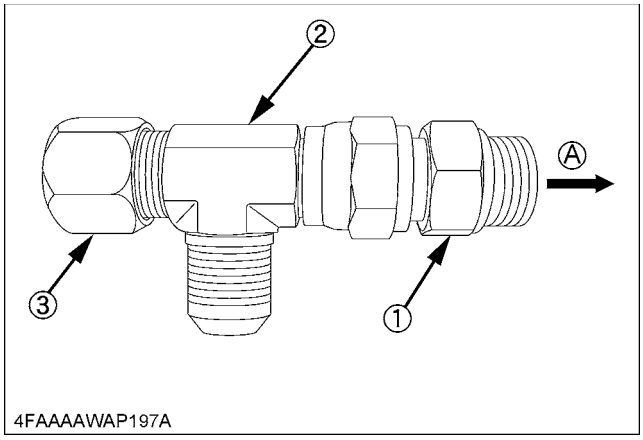
(1) Valve stay
(2) 2-M10 x 110 hex. bolts
(3) 4-M10 spring lock washers
(4) 4-M10 plain washers
(5) 2-M10 x 120 hex. bolts

3. Remove the U pipe and tank port plug.
   Connect the loader adapters to the tank port.



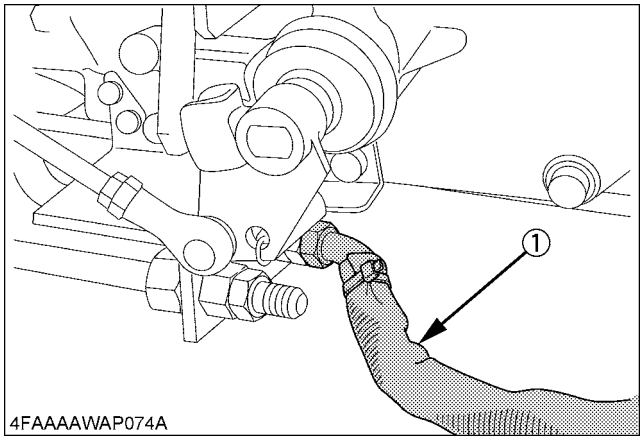
(1) Tank port plug
(2) U pipe





(1) Assy adapter 1 (7/8-UNF)
(2) Tee, swivel run (7/8-UNF)
(3) Cap, nut#10 (7/8-UNF)
(4) Pump line port
(5) Power beyond port
(A) To the tractor tank port

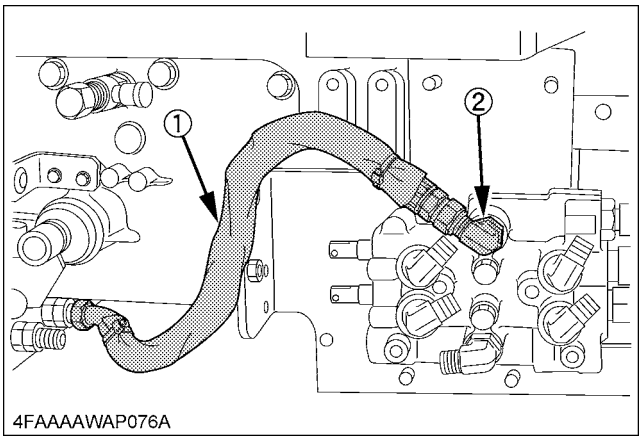
4. Connect the pump line hose as shown.



(1) Pump line hose with sleeve (630 mm (24.8 in.), 7/8-UNF)

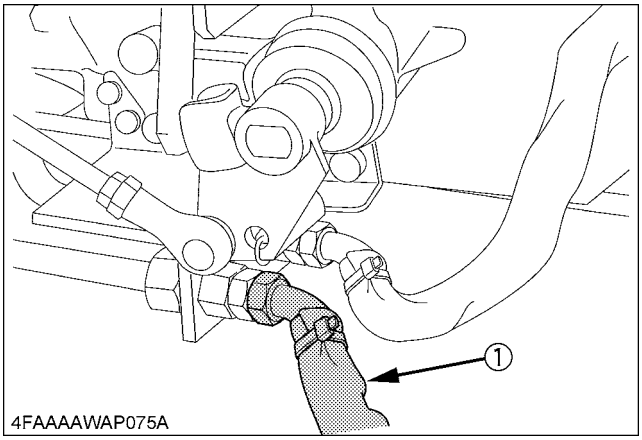
5. Connect the pump line hose to the valve.

IMPORTANT :
- Equipment or property damage could result if instructions are not followed.



(1) Pump line hose with sleeve (630 mm (24.8 in.), 3/4-UNF)
(2) Valve port marked with an orange dot (Pump line)

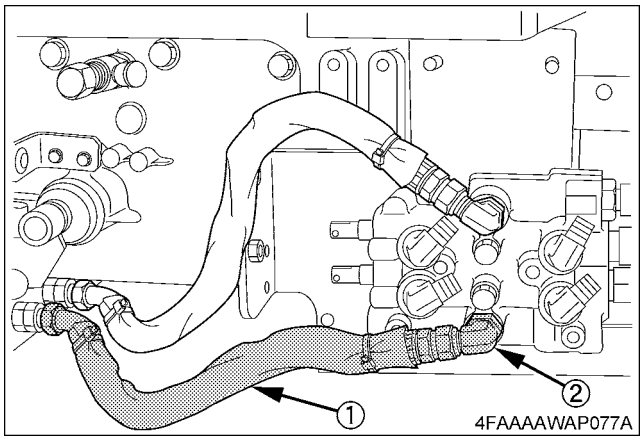
6. Connect the power beyond line hose as shown.



(1) Power beyond line hose with sleeve (500 mm (19.7 in.), 7/8-UNF)

7. Connect the power beyond line hose to the valve.

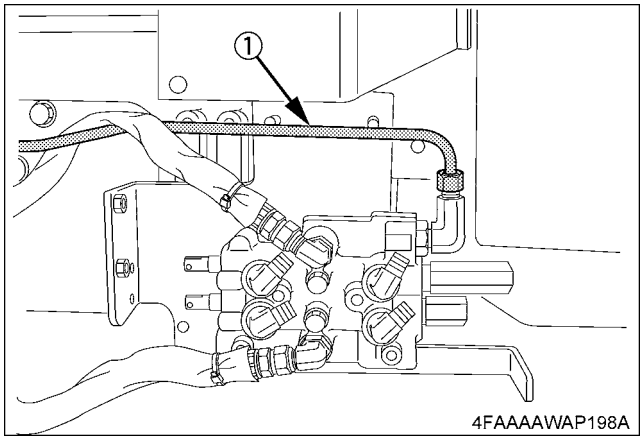
IMPORTANT :
- Equipment or property damage could result if instructions are not followed.



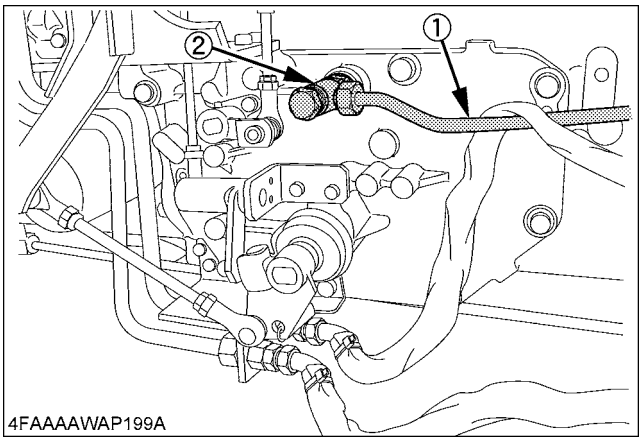
(1) Power beyond line hose with sleeve (500 mm (19.7 in.), 3/4-UNF)
(2) Valve port marked with a green dot (Power beyond line)

IMPORTANT :
- To verify the hoses, the power beyond line hose should be installed to the green colored port and the pump line should be installed to the orange colored port of the valve.
- If the pump line hose and power beyond line hose are installed incorrectly, the tractor hydraulic pump may experience malfunction.

8. Connect the return line tube.



(1) Return line tube (7/8-UNF)

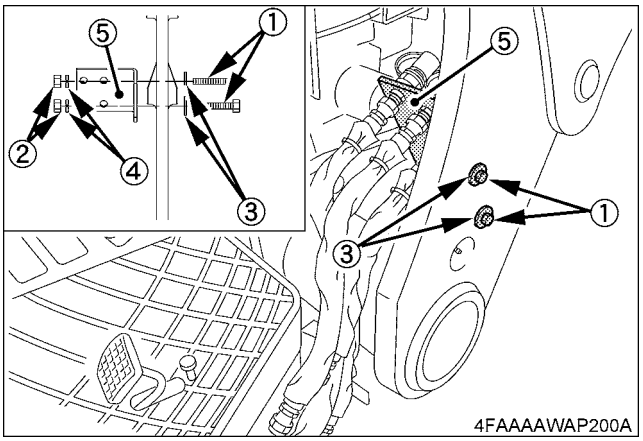


(1) Return line tube (7/8-UNF)
(2) Tee, swivel run (7/8-UNF)

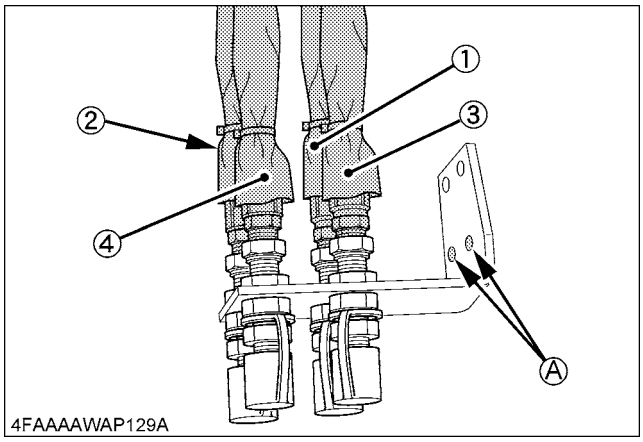
NOTE :
- Before tightening up the return line tube, loosen the tee swivel run first and then temporarily tighten the above 2 parts. Then tighten them up together.

◆ Connector assembly stay section

1. Fit the connector assembly stay to the main frame with the bolts and plain washers inserted from the outside and the nuts and spring lock washers from the inside.

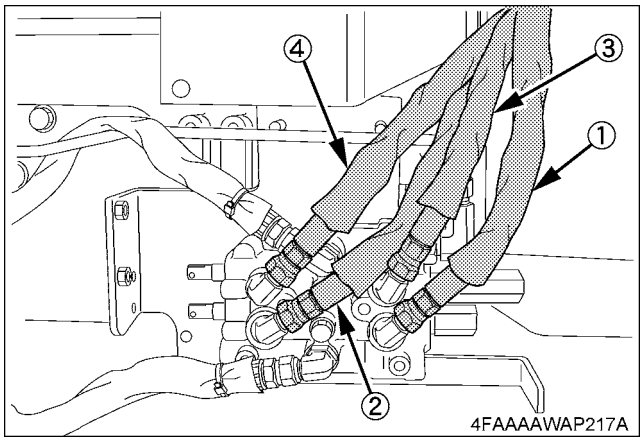


(1) 2-M10 x 60 bolts
(2) 2-M10 nuts
(3) 2-M10 plain washers
(4) 2-M10 spring lock washers
(5) Connector assy stay



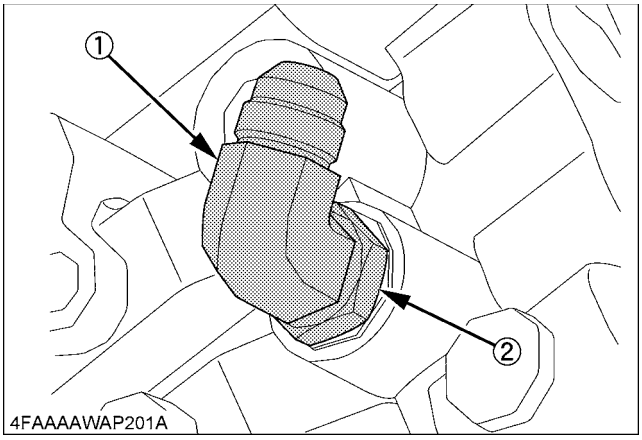
(1) Hydraulic hose (Red)
(2) Hydraulic hose (Blue)
(3) Hydraulic hose (Yellow)
(4) Hydraulic hose (White)
(A) Use the holes.

2. Connect the hoses between the connector assembly stay and the valve.



(1) Hydraulic hose (Red 500 mm (19.7 in.), 3/4-UNF)
(2) Hydraulic hose (Blue 597 mm (23.5 in.), 3/4-UNF)
(3) Hydraulic hose (Yellow 465 mm (18.3 in.), 3/4-UNF)
(4) Hydraulic hose (White 559 mm (22.0 in.), 3/4-UNF)

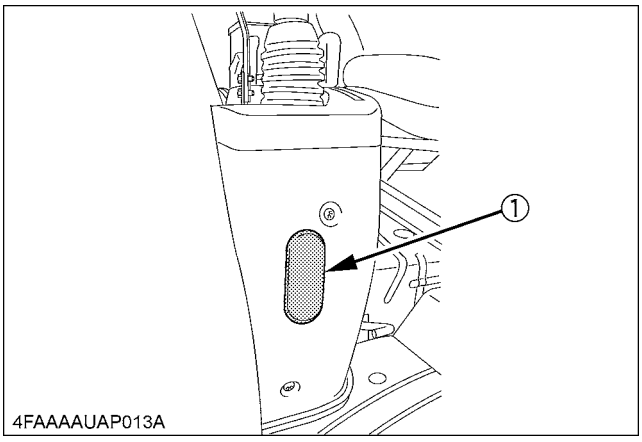
IMPORTANT :
- With all the hoses connected to the valve, be certain that any of the hoses is out of close contact with the other hoses, the fittings and edges.
- If the above problem is found, correct the hoses to remove their twist of loosen the nut shown in the figure to readjust the fitting angle for avoiding such close contact.



(1) Fitting
(2) Nut

◆ Controller and cables section

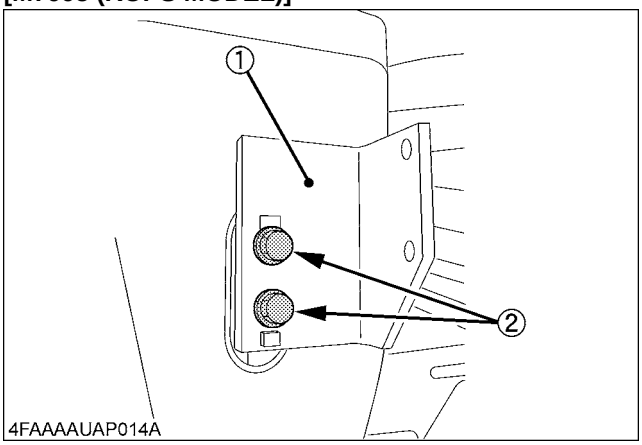
1. Remove the cover cap of the tractor.



(1) Cover cap

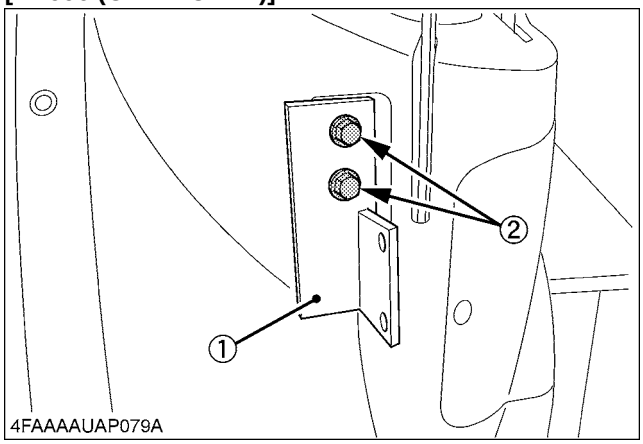
2. Fit the controller stay 2 in position.

[M7995 (ROPS MODEL)]



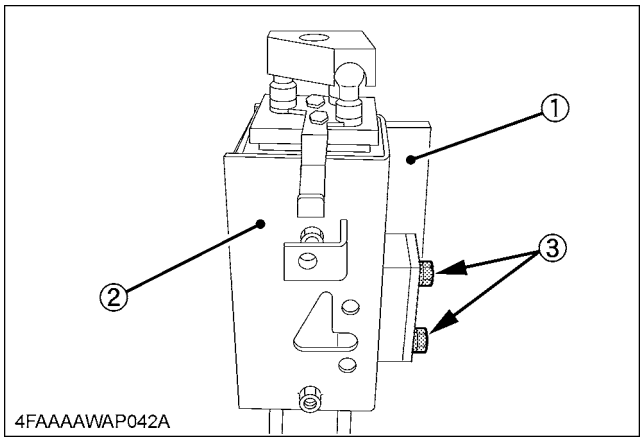
(1) Controller stay 2
(2) 2-M10 x 40 bolts

[M7996 (CAB MODEL)]



(1) Controller stay 2
(2) 2-M10 x 70 bolts
2-M10 spring lock washers

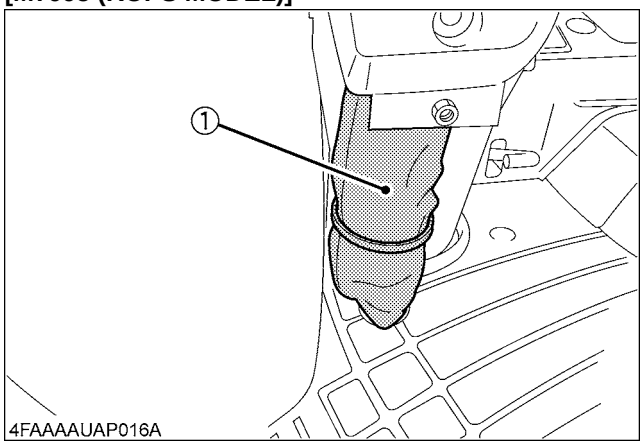
3. Fix the controller assembly stay 1 to the controller stay 2.



(1) Controller stay 2
(2) Controller assy stay 1
(3) 2-M8 x 20 bolts

4. Pass the wire cable in the specified route.

[M7995 (ROPS MODEL)]



(1) 3-Assy cable with sleeve

[M7996 (CAB MODEL)]

(1) Remove the mat.
(2) Pass the cable through the opening.
(3) Make a cut in the mat so that the cable can pass through the slit.

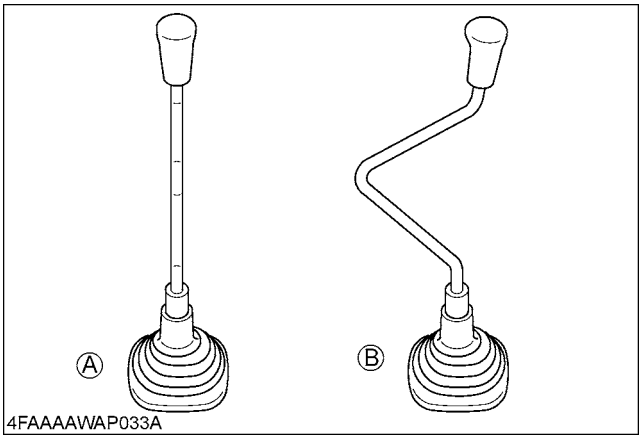
NOTE :

- For the cutting position, refer to the pattern sheet on last page.
- Keep the wire cable hidden with the sleeve. Pass the sleeve down through the bottom of the hole.

5. Install the control lever.

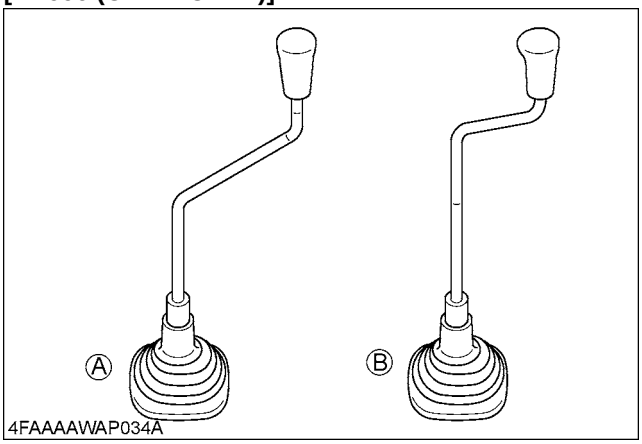
[M7995 (ROPS MODEL)]

Install the lever pointing straight to the traveling direction.



(A) "FRONT"
(B) "SIDE"

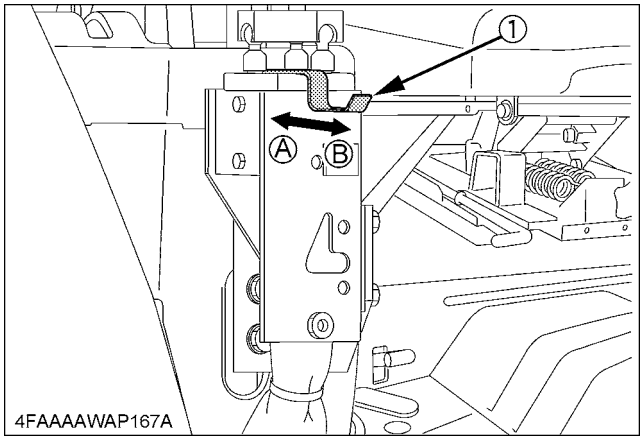
[M7996 (CAB MODEL)]



(A) "FRONT"
(B) "SIDE"

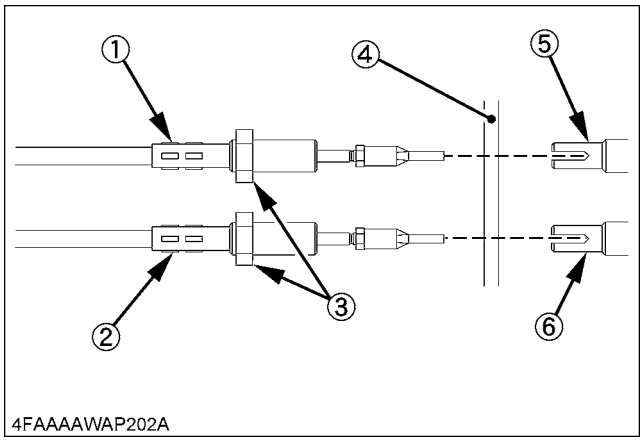
6. Set the lock lever on the cable controller to the neutral position.

IMPORTANT :
- Control lever should be neutral and be locked with lock lever.



(1) Lock lever
(A) "LOCK"
(B) "UNLOCK"

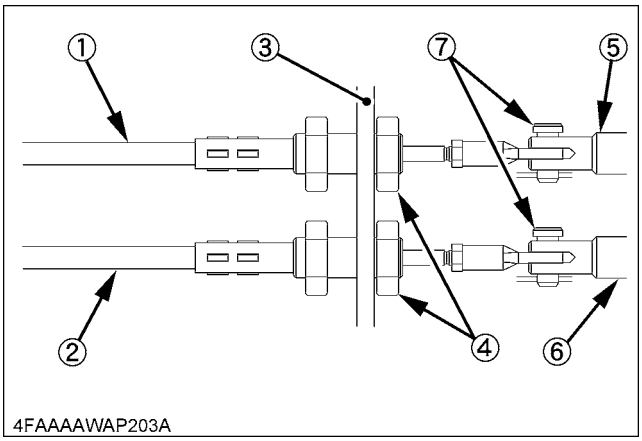
7. Install one lock nut to each cable end. Then route the cable ends through the valve stay.



(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) 2-M16 Lock nuts
(4) Valve stay
(5) Spool (Boom section)
(6) Spool (Bucket section)

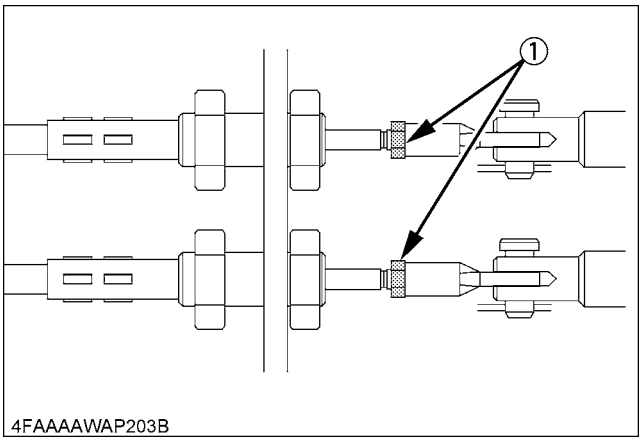
NOTE :
- The cable with blue tape is for boom section and the cable with red tape is for bucket section.

8. Install the other lock nuts to the cable ends and adjust the location of lock nuts so that the cable end hole aligns with the spool hole. Then connect the cable to the spools with pins.



(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) Valve stay
(4) 2-M16 Lock nuts
(5) Spool (Boom section)
(6) Spool (Bucket section)
(7) 2-Pins
2-Snap pins

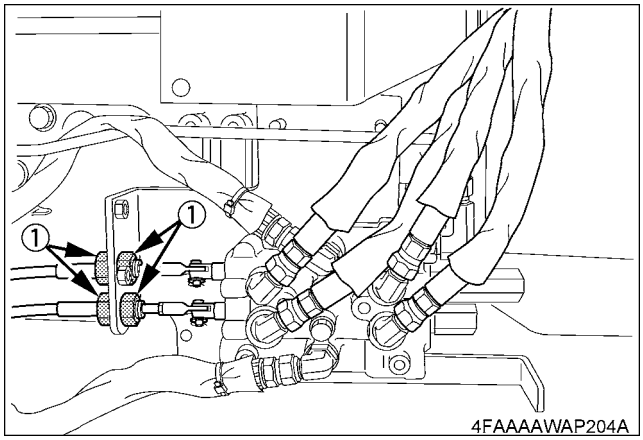
9. Loosen the M6 lock nuts of the cable ends. Turn the cable ends and spools so that the direction of the pins should be as shown in the figure. Then retighten the M6 lock nuts.



(1) 2-M6 Lock nuts

NOTE :
- To reposition the cables for correct connections, use the M16 lock nuts.

10. Tighten up the lock nuts at both sides of the valve stay to secure the cables in place.



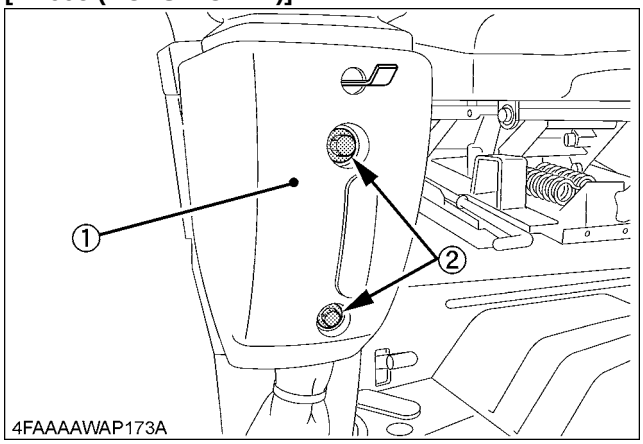
(1) 4-M16 lock nuts

Tightening torque	60.0 to 80.0 N-m (6.1 to 8.2 kgf-m) (44.3 to 59.0 ft-lbs)

IMPORTANT :
- With the lock nuts tight in position, move the lever to make sure that the cables and spools behave smoothly as specified.

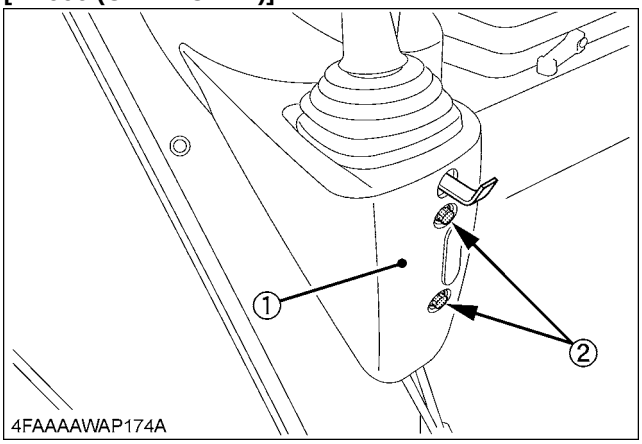
11. Attach the lever cover in place.

[M7995 (ROPS MODEL)]



(1) Lever cover
(2) 2-M8 x 16 flange bolts

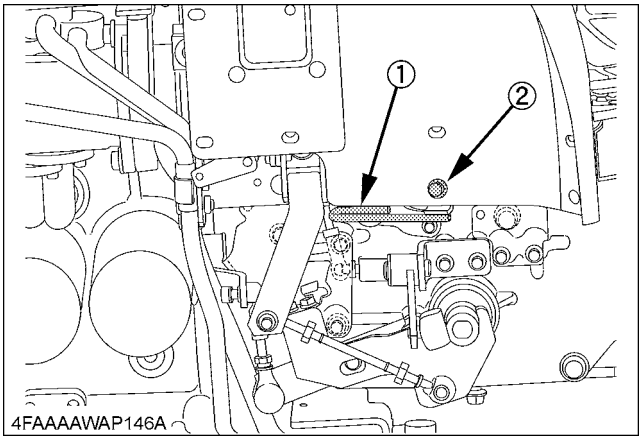
[M7996 (CAB MODEL)]



(1) Lever cover
(2) 2-M8 x 16 flange bolts

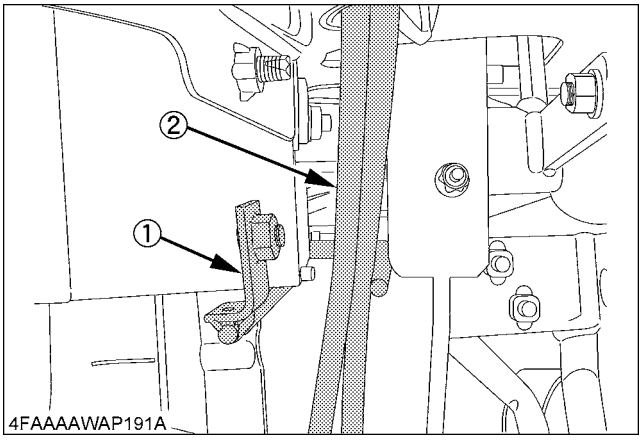
◆ Cable guide section [M7995 (ROPS model only)]

1. Attach the cable guide to the fender.



(1) Cable guide
(2) M8 x 16 bolt with washers

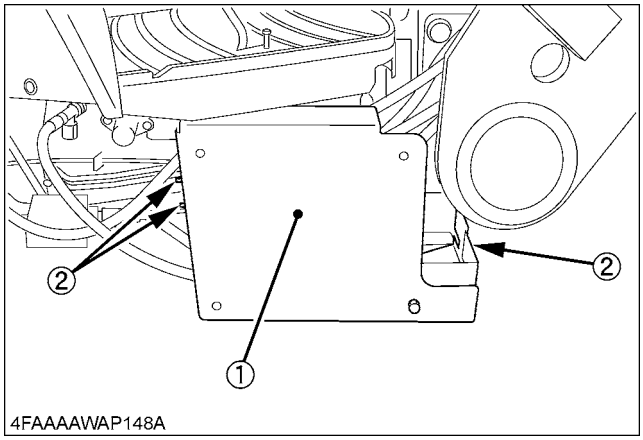
2. Pass the controller cable through the cable guide.



(1) Cable guide
(2) Controller cable

◆ Control valve cover section

1. Attach the valve cover to the valve stay.



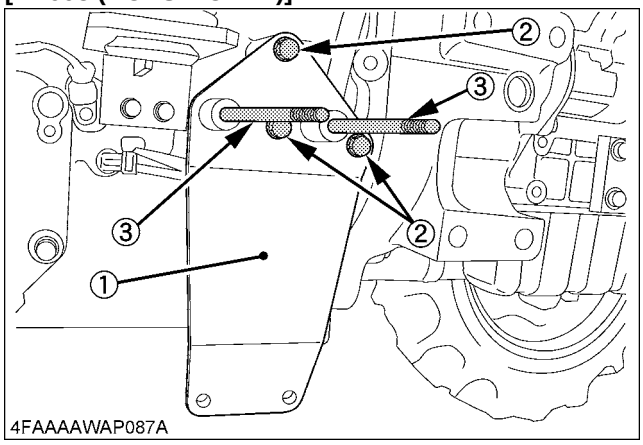
(1) Valve cover
(2) 3-M8 x 20 bolts with washers

■Self-Leveling Valve [M7998, M7999] (if equipped)

◆ Hydraulic lines section

1. Put the stud bolt in the valve stay support.

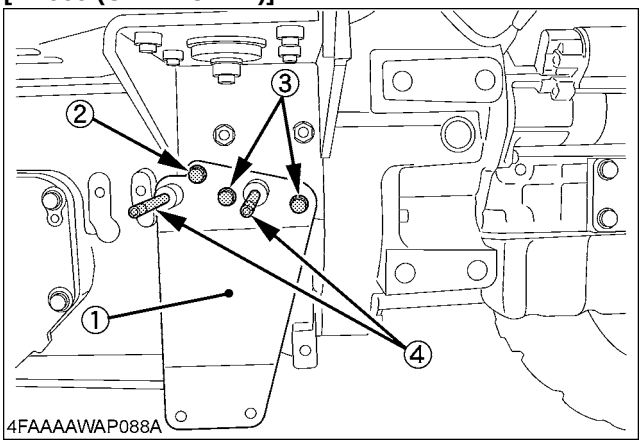
[M7998 (ROPS MODEL)]



(1) Valve stay support
(2) 3-M12 x 30 bolts
(3) 2-M10 stud bolts

M10 stud	Tightening torque	24.5 to 31.4 N-m (2.5 to 3.2 kgf-m) (18.1 to 23.2 ft-lbs)

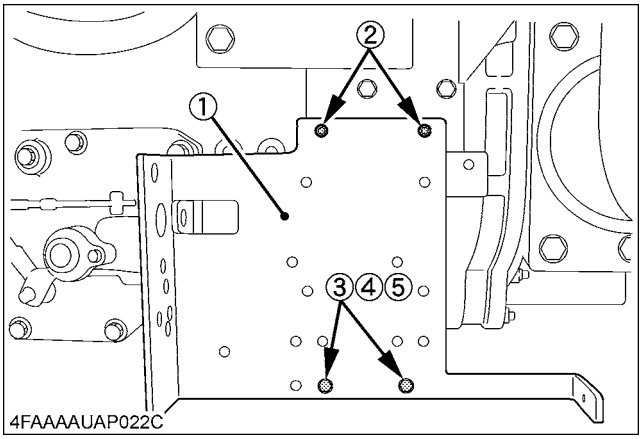
[M7999 (CAB MODEL)]



(1) Valve stay support
(2) M12 x 25 bolt
(3) 2-M12 x 35 bolts (original)
(4) 2-M10 stud bolts

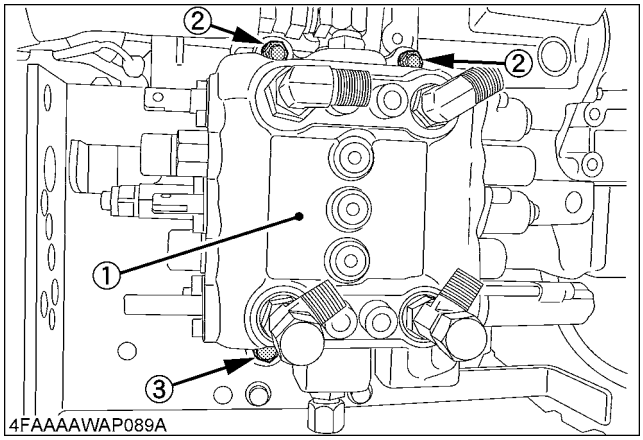
M10 stud	Tightening torque	24.5 to 31.4 N-m (2.5 to 3.2 kgf-m) (18.1 to 23.2 ft-lbs)

2. Temporarily assemble the valve stay to the valve stay support.



(1) Valve stay
(2) 2-Stud bolts
(3) 2-M10 x 120 hex. bolts
(4) 2-M10 spring lock washers
(5) 2-M10 plain washers

3. Attach the self-level valve assy to the valve stay.

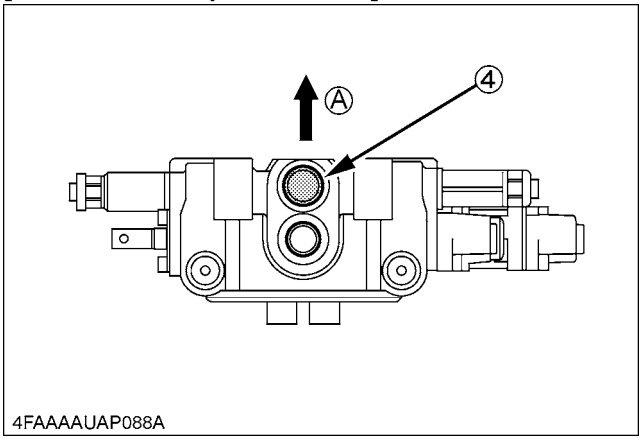


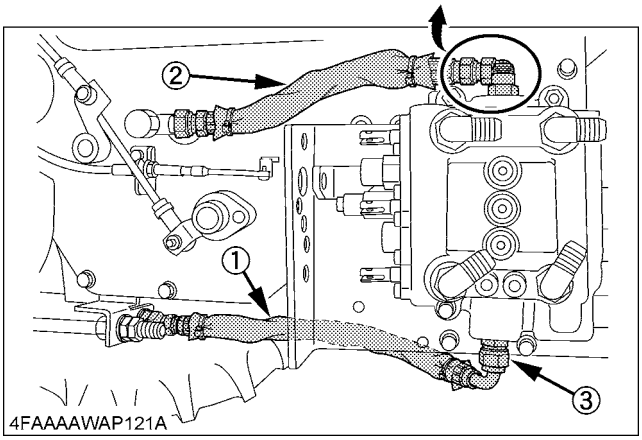
(1) Self-level valve assy
(2) 2-M10 nuts
2-M10 spring lock washers
(3) M10 x 60 hex. bolt

4. Connect the pump line hose and tank hose.

IMPORTANT :
- Equipment or property damage could result if instructions are not followed.

[View from the top of the valve]

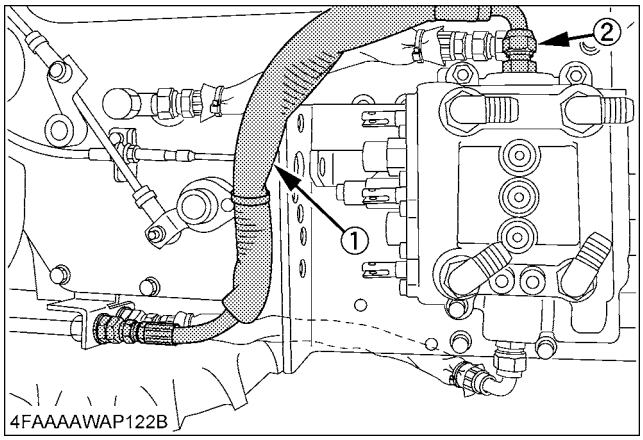




(1) Pump line hose with sleeve (hose 6) (580 mm (22.8 in.), 7/8-UNF and 3/4-UNF)
(2) Hydraulic tank hose with sleeve (345 mm (13.6 in.), 7/8-UNF and 7/8-UNF)
(3) Valve port marked with an orange dot (Pump line)
(4) Valve port (Tank)
(A) Tractor side

5. Connect the power beyond hose.

IMPORTANT :
- Equipment or property damage could result if instructions are not followed.

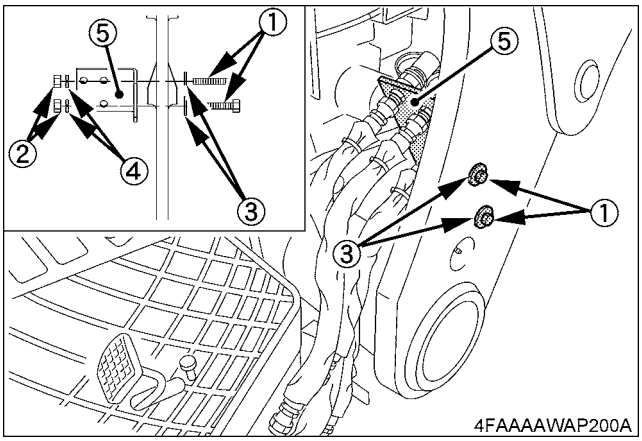


(1) Power beyond line hose with sleeve (hose 5) (730 mm (28.4 in.), 3/4-UNF and 3/4-UNF)
(2) Valve port marked with a green dot (Power beyond line)

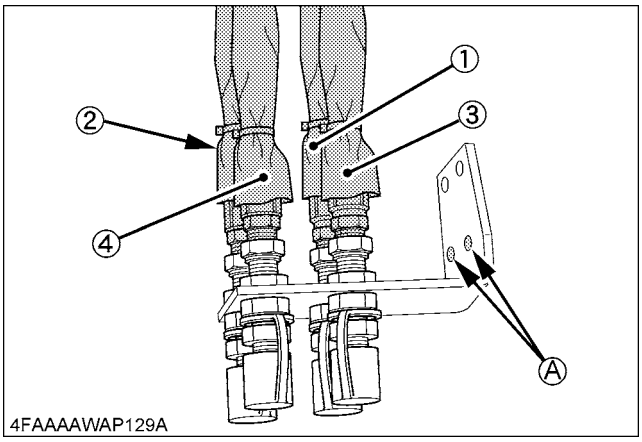
IMPORTANT :
- To verify the hoses, the power beyond line hose should be installed to the green colored port and also the pump line should be installed to the orange colored port of the valve.
- If the pump line hose and power beyond line hose are installed incorrectly, the tractor hydraulic pump may experience malfunction.

◆ Connector assembly stay section

1. Fit the connector assembly stay to the main frame with the bolts and plain washers inserted from the outside and the nuts and spring lock washers from the inside.

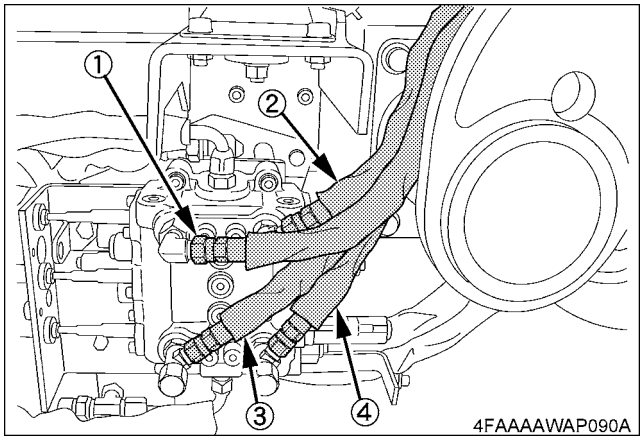


(1) 2-M10 x 60 bolts
(2) 2-M10 nuts
(3) 2-M10 plain washers
(4) 2-M10 spring lock washers
(5) Connector assy stay



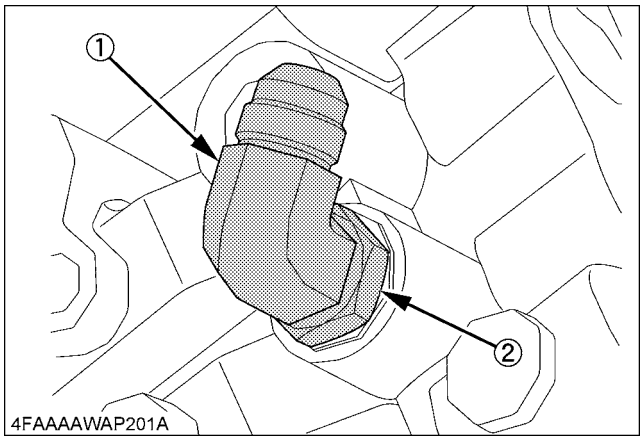
(1) Hydraulic hose (Red)
(2) Hydraulic hose (Blue)
(3) Hydraulic hose (Yellow)
(4) Hydraulic hose (White)
(A) Use the holes.

2. Connect the hoses between the connector assembly stay and the valve.



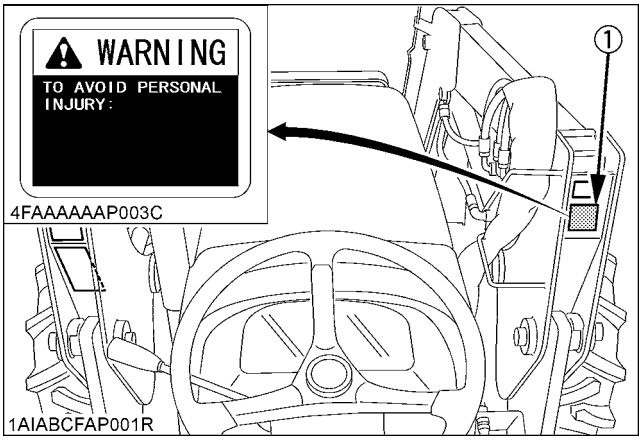
(1) Hydraulic hose (Red 500 mm (19.7 in.), 3/4-UNF)
(2) Hydraulic hose (Blue 432 mm (17.0 in.), 3/4-UNF)
(3) Hydraulic hose (Yellow 520 mm (20.4 in.), 3/4-UNF)
(4) Hydraulic hose (White 485 mm (19.1 in.), 3/4-UNF)

IMPORTANT :
- With all the hoses connected to the valve, be certain that any of the hoses is out of close contact with the other hoses, the fittings and edges.
- If the above problem is found, correct the hoses to remove their twist of loosen the nut shown in the figure to readjust the fitting angle for avoiding such close contact.



(1) Fitting
(2) Nut

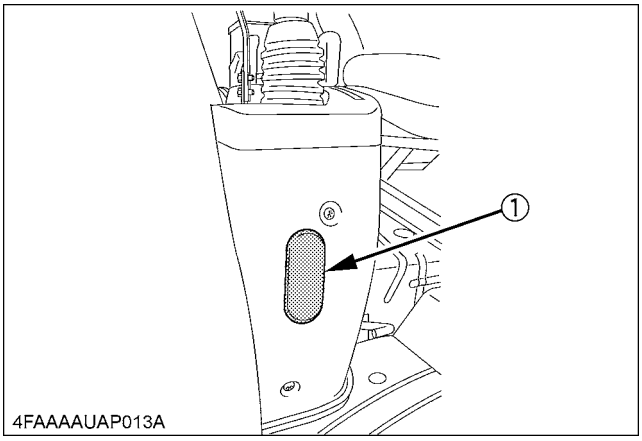
3. Attach the label on the back of the side frame (RH).



(1) Label of warning 8

◆ Controller and cables section

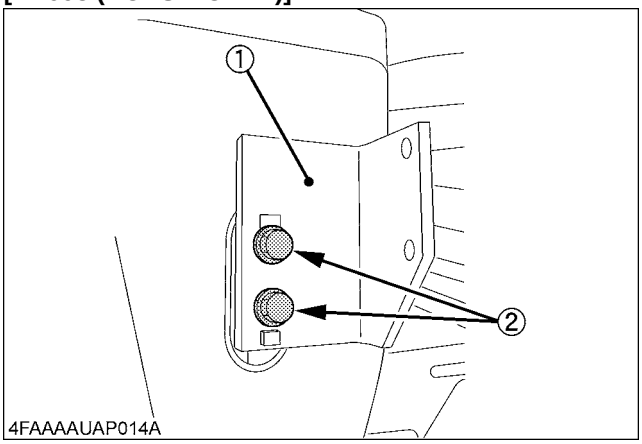
1. Remove the cover cap of the tractor.



(1) Cover cap

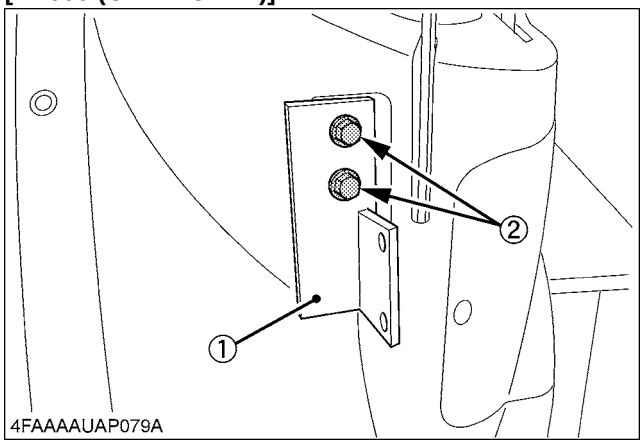
2. Fit the controller stay 2 in position.

[M7998 (ROPS MODEL)]



(1) Controller stay 2
(2) 2-M10 x 40 bolts

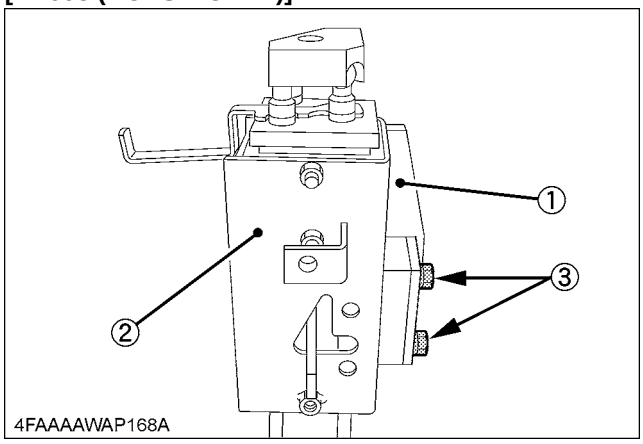
[M7999 (CAB MODEL)]



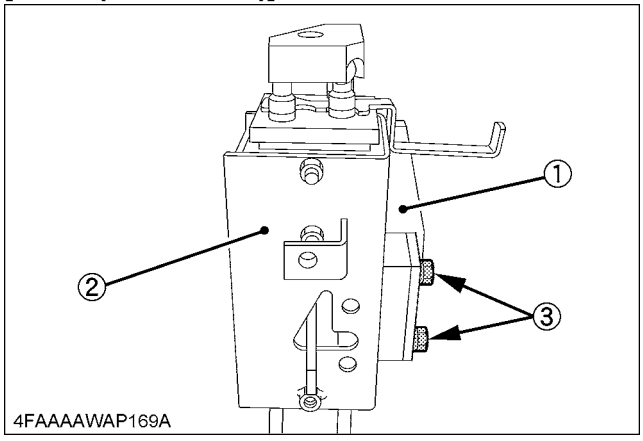
(1) Controller stay 2
(2) 2-M10 x 70 bolts
2-M10 spring lock washers

3. Fix the controller assembly stay 1 to the controller stay 2.

[M7998 (ROPS MODEL)]



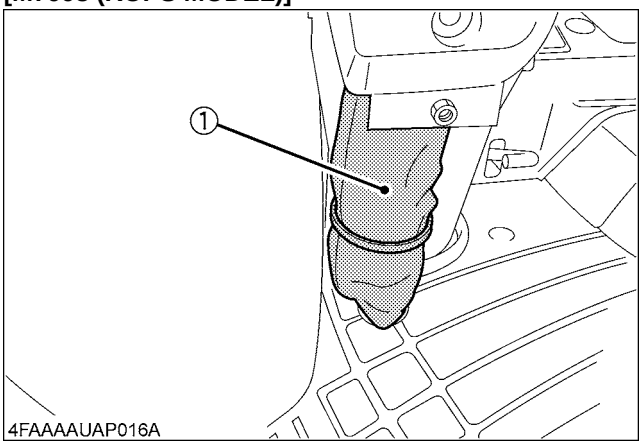
[M7999 (CAB MODEL)]



(1) Controller stay 2
(2) Controller assy stay 1
(3) 2-M8 x 20 bolts

4. Pass the wire cable in the specified route.

[M7998 (ROPS MODEL)]



(1) 3-Assy cable with sleeve

[M7999 (CAB MODEL)]

(1) Remove the mat.
(2) Pass the cable through the opening.
(3) Make a cut in the mat so that the cable can pass through the slit.

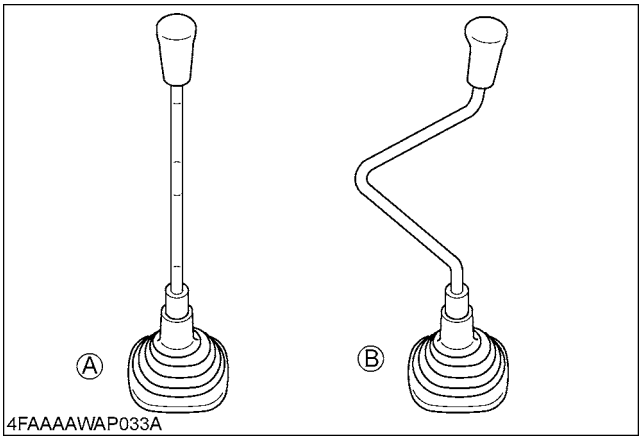
NOTE :

- For the cutting position refer to the pattern sheet on last page.
- Keep the wire cable hidden with the sleeve.
  Pass the sleeve down through the bottom of the hole.

5. Install the control lever.

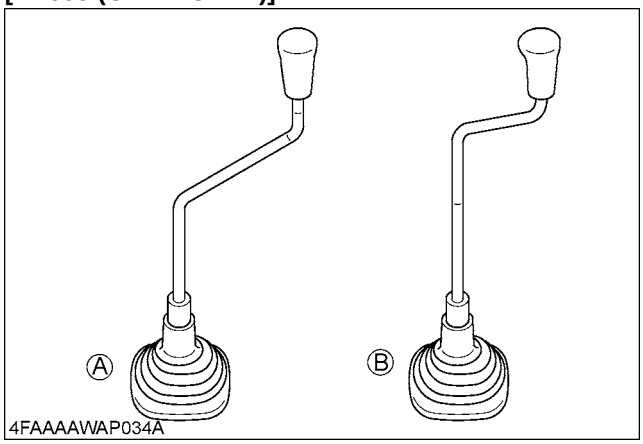
[M7998 (ROPS MODEL)]

Install the lever pointing straight to the traveling direction.



(A) "FRONT"
(B) "SIDE"

[M7999 (CAB MODEL)]

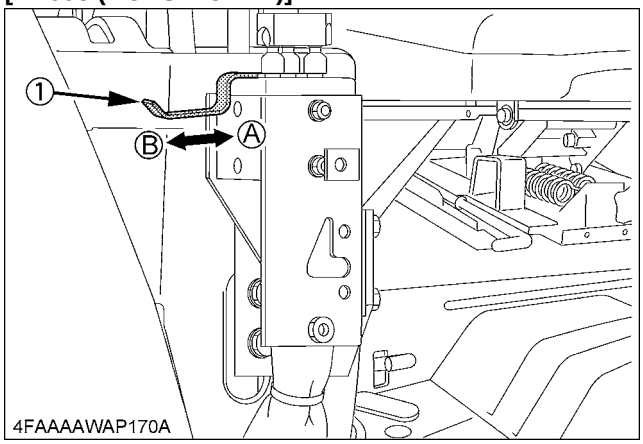


(A) "FRONT"
(B) "SIDE"

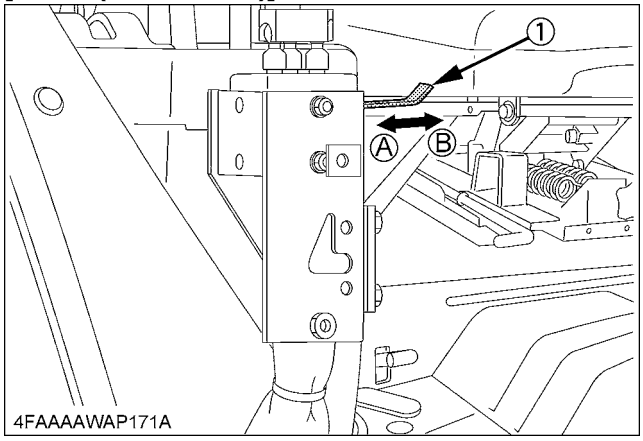
6. Set the lock lever on the cable controller to the neutral position.

IMPORTANT :
- Control lever should be neutral and be locked with lock lever.

[M7998 (ROPS MODEL)]

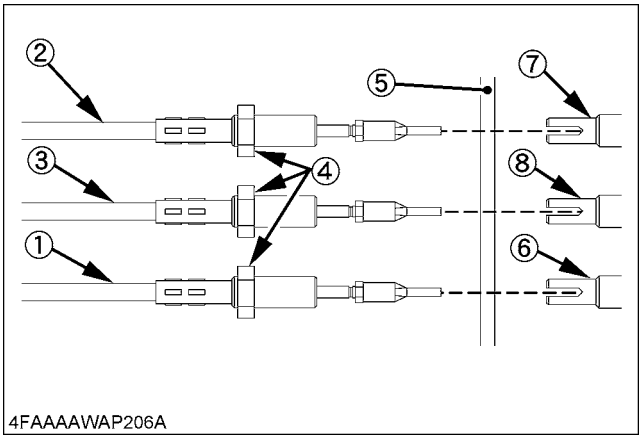


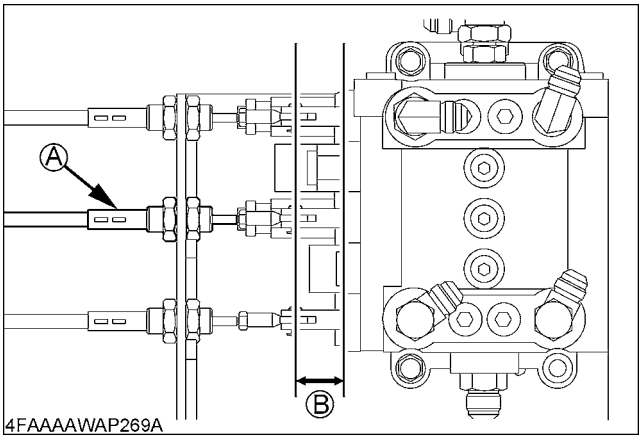
[M7999 (CAB MODEL)]



(1) Lock lever
(A) "LOCK"
(B) "UNLOCK"

7. Install one lock nut to each cable end. Then route the cable ends through the valve stay.



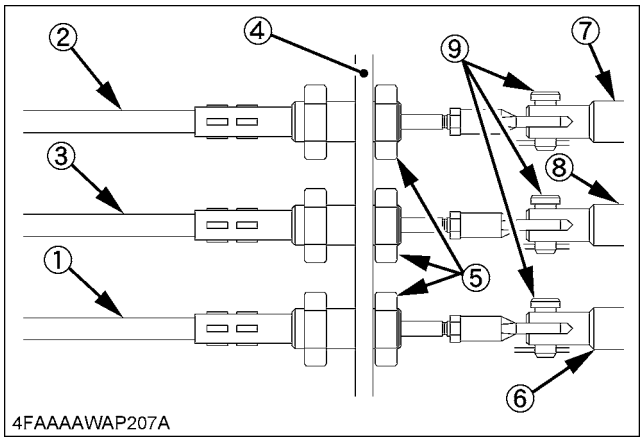


(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) Cable (Gray, Switch section)
(4) 3-M16 lock nuts
(5) Valve stay
(6) Spool (Boom section)
(7) Spool (Bucket section)
(8) Spool (Switch section)
(A) For switch section
(B) Same length (30 mm (1.2 in.))

IMPORTANT :
- Check the spool position at first. Distance from center of the spool holes to end surface of the valve must be same length as other spools.
- When assembling the switch section, keeping the self-level on/off lever downward.

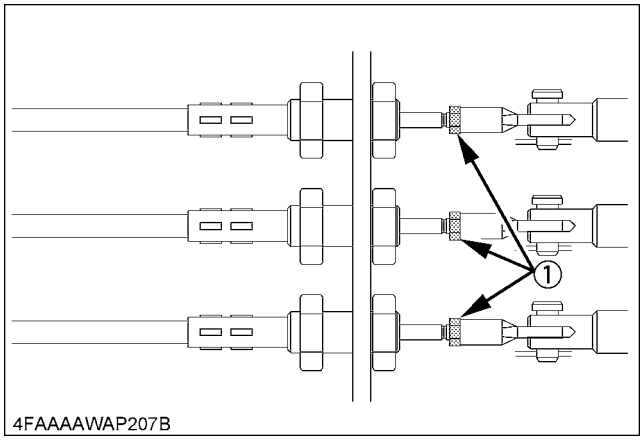
NOTE :
- The cable with blue tape is for boom section and the cable with red tape is for bucket section and the cable with gray tape is for switch section.

8. Install the other lock nuts to the cable ends and adjust the location of lock nuts so that the cable end hole aligns with the spool hole. Then connect the cable to the spools with pins.



(1) Cable (Blue, Boom section)
(2) Cable (Red, Bucket section)
(3) Cable (Gray, Switch section)
(4) Valve stay
(5) 3-M16 lock nuts
(6) Spool (Boom section)
(7) Spool (Bucket section)
(8) Spool (Switch section)
(9) 3-Pins
3-Snap pins

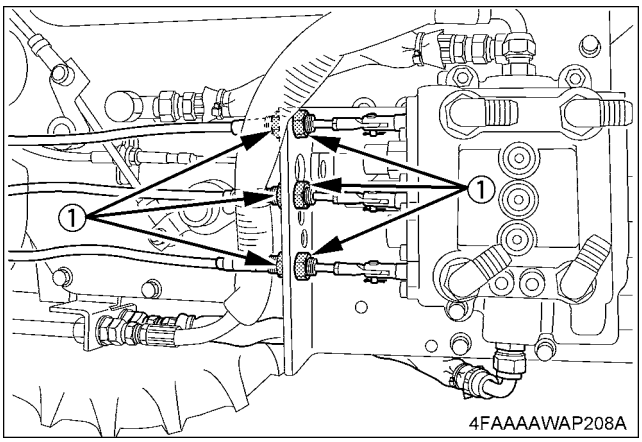
9. Loosen the M6 lock nuts of the cable ends. Turn the cable ends and spools so that the direction of the pins should be as shown in the figure. Then retighten the M6 lock nuts.



(1) 3-M6 lock nuts

NOTE :
- To reposition the cables for correct connections, use the M16 lock nuts.

10. Tighten up the lock nuts at both sides of the valve stay to secure the cables in place.



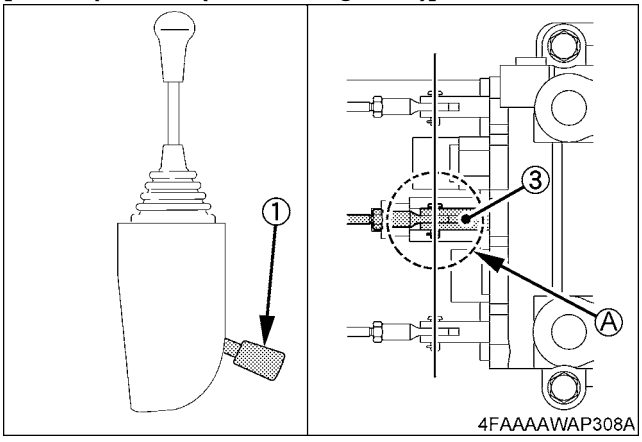
(1) 6-M16 lock nuts

Tightening torque	60.0 to 80.0 N-m (6.1 to 8.2 kgf-m) (44.3 to 59.0 ft-lbs)

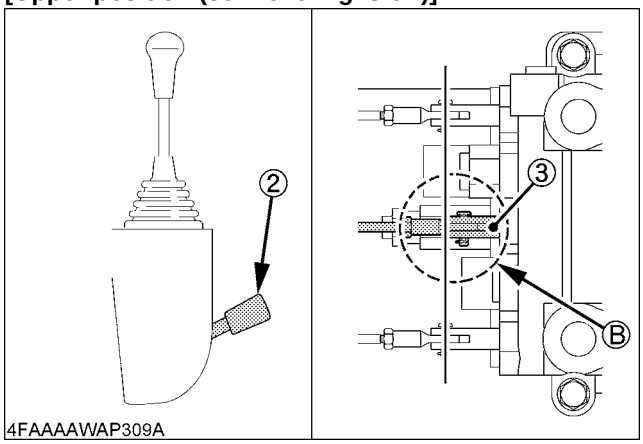
IMPORTANT :
- When assembling the switch section, keeping the self-level on/off lever downward.
- With the lock nuts tight in position, move the lever to make sure that the cables and spools behave smoothly as specified.

11. Check the position of the valve spool for self-leveling relative to the lever position. If it is not following the figures below, reconfigure the cable assembling process.

[Lower position (self-leveling is on)]



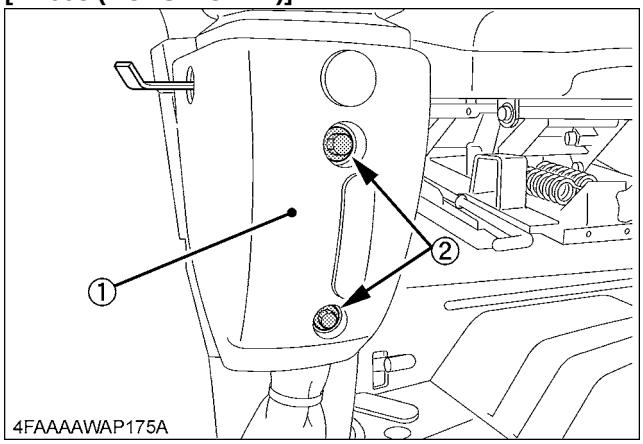
[Upper position (self-leveling is off)]



(1) Self-level on/off lever (Lower position)
(2) Self-level on/off lever (Upper position)
(3) Spool for self-leveling
(A) Spool length is same
(B) Spool length is shorter than others

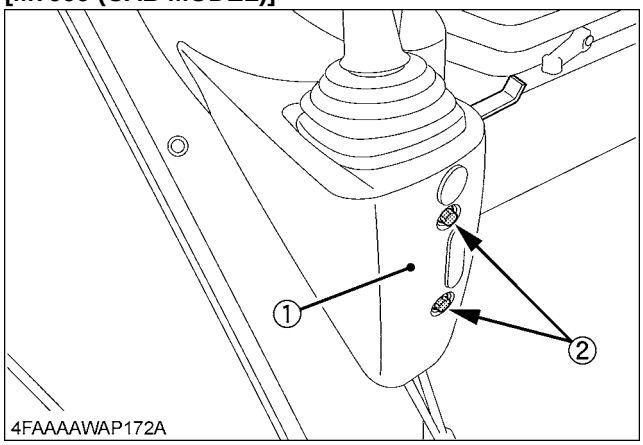
12. Attach the lever cover in place.

[M7998 (ROPS MODEL)]



(1) Lever cover
(2) 2-M8 x 16 flange bolts

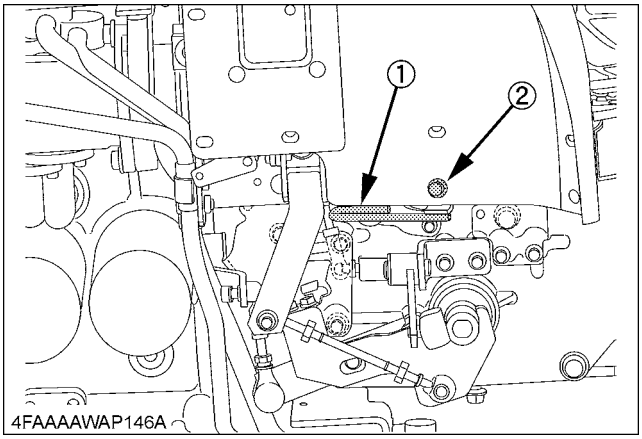
[M7999 (CAB MODEL)]



(1) Lever cover
(2) 2-M8 x 16 flange bolts

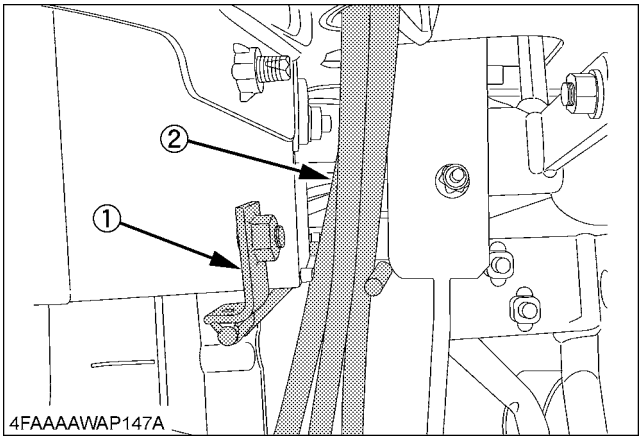
◆ Cable guide section [M7998 (ROPS model only)]

1. Attach the cable guide to the fender.



(1) Cable guide
(2) M8 x 16 bolt with washers

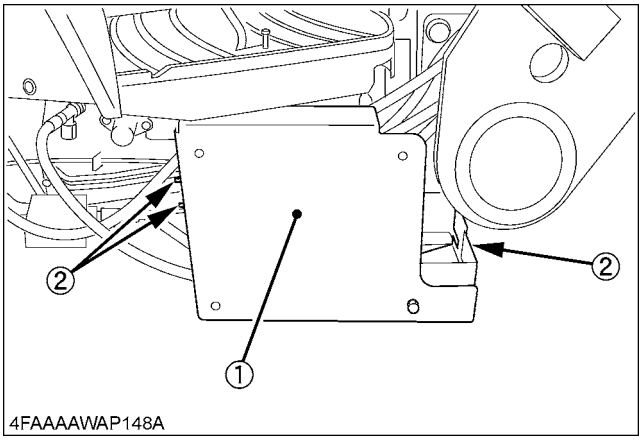
2. Pass the controller cable through the cable guide.



(1) Cable guide
(2) Controller cable

◆ Control valve cover section

1. Attach the valve cover to the valve stay.



(1) Valve cover
(2) 3-M8 x 16 bolts with washers

ASSEMBLING ACCUMULATOR KIT

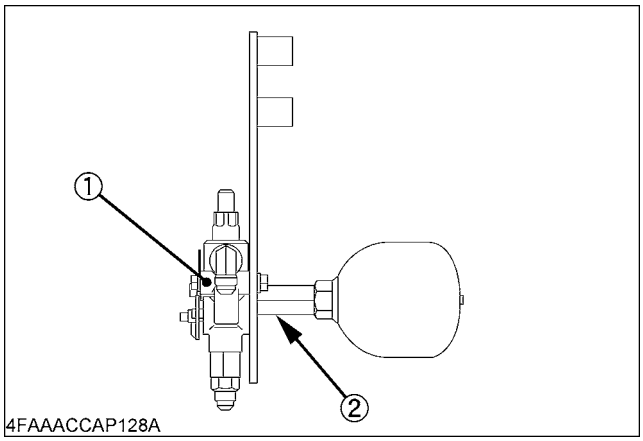
■Accumulator [M6871] (if equipped)

◆ Accumulator section [Self-level valve only]

IMPORTANT :

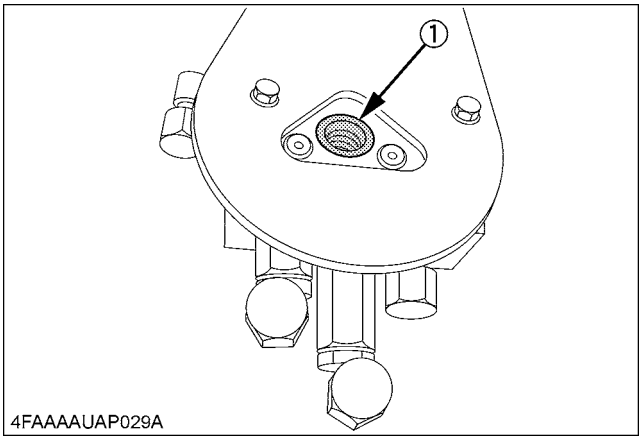
- If the machine is equipped with the optional self-level valve, fit the accompanying orifice to the accumulator assembly (RH) in the following procedure.
- If the machine does not have a self-leveling valve, the orifice is not needed.

1. Remove the adapter assy from the accumulator valve.

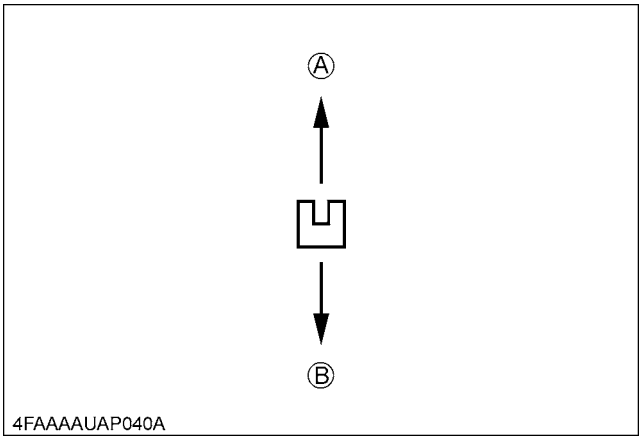


(1) Accumulator valve assy
(2) Adapter assy (3/4-UNF)

2. Set the orifice into the port.



(1) Port

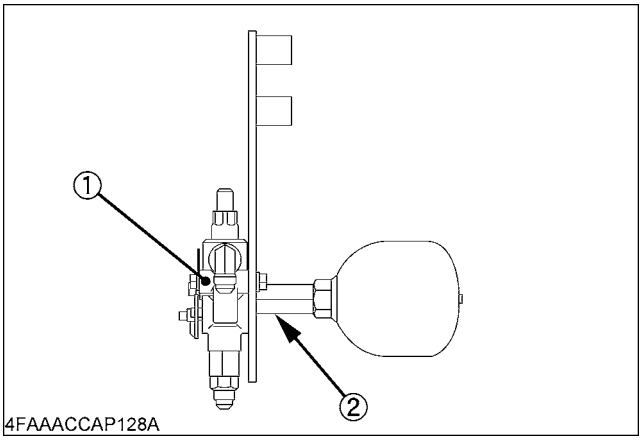


(A) Adapter side
(B) Accumulator valve side

NOTE :

- Be careful not to confuse the orifice direction.

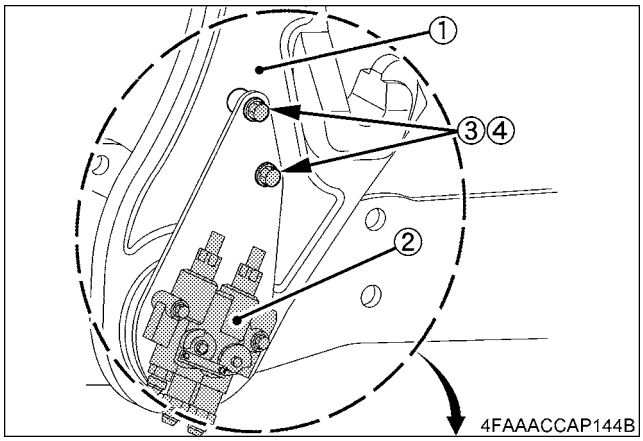
3. Attach the adapter assy back to the accumulator valve.

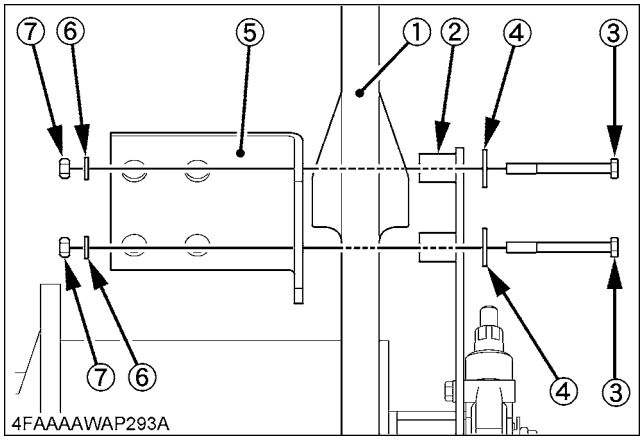


(1) Accumulator valve
(2) Adapter assy (3/4-UNF)

◆ Hydraulic hoses section

1. Remove the bolts which the connector assembly stay is fasten, then fasten the accumulator assembly (RH) to the main frame with the stay.





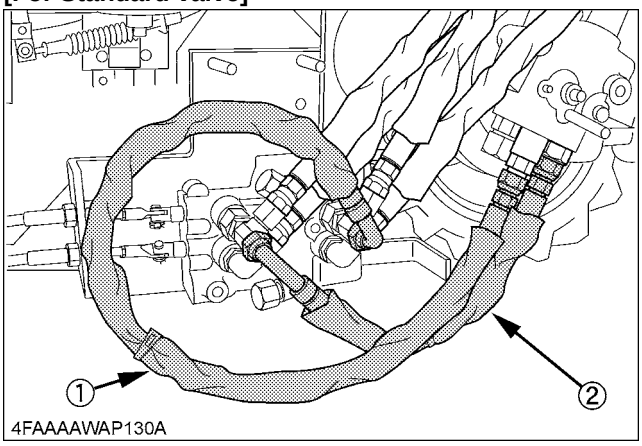
(1) Main frame (RH)
(2) Accumulator assembly (RH)
(3) 2-M10 x 90 bolts (without 3rd function valve kit)
2-M10 x 110 bolts (if equipped with 3rd function valve kit)
(4) 2-M10 plain washers (original)
(5) Connector assy stay (original)
(6) 2-M10 spring lock washers (original)
(7) 2-M10 nuts (original)

NOTE :

- Kits has 90 mm and 110 mm bolts, use applicable bolts due to 3rd function valve kit is installed or not.

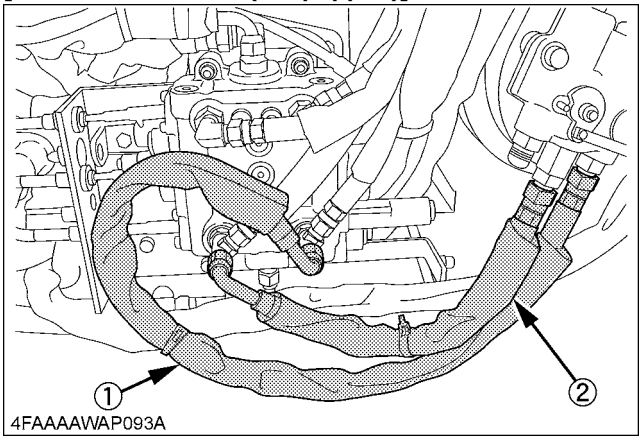
2. Connect the hoses as shown below.

[For Standard valve]



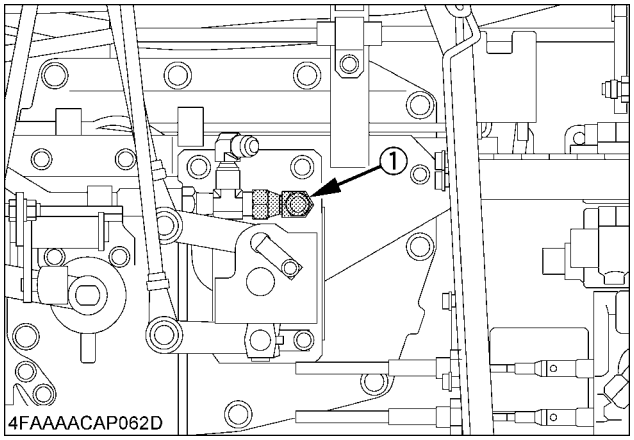
(1) Hydraulic hose
(850 mm (33.5 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose
(385 mm (15.2 in.), 3/4-UNF and 3/4-UNF)

[For Self-level valve (if equipped)]



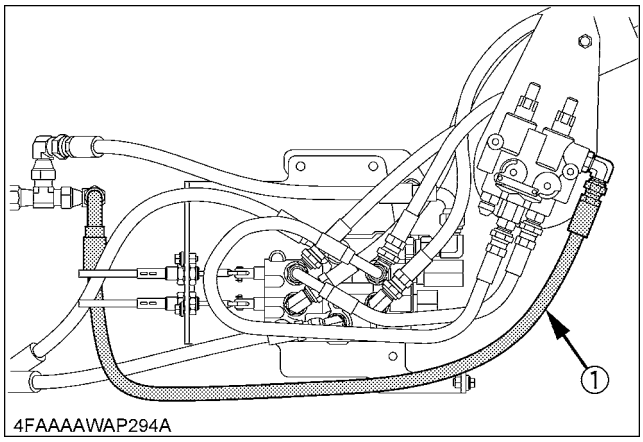
(1) Hydraulic hose
(850 mm (33.5 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose
(385 mm (15.2 in.), 3/4-UNF and 3/4-UNF)

3. Remove the cap from T-joint and install elbow adapter as shown in the figure.



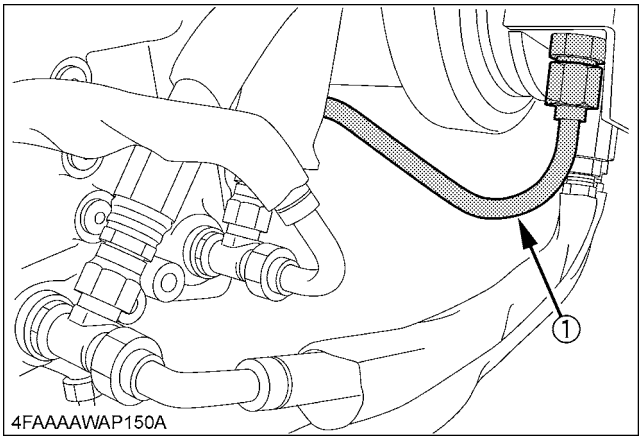
(1) Elbow adapter

4. Connect the tank hose as shown in the following figure.



(1) Hydraulic tank hose (1050 mm (41.3 in.), 3/4-UNF and 3/4-UNF)

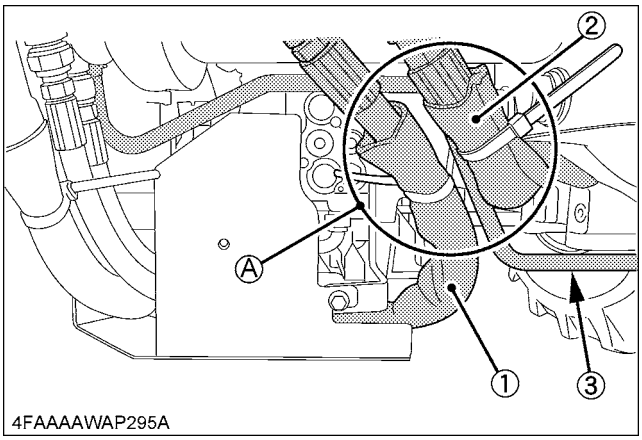
5. Connect the tube as shown in the following figure.



(1) Tube (3/4-UNF)

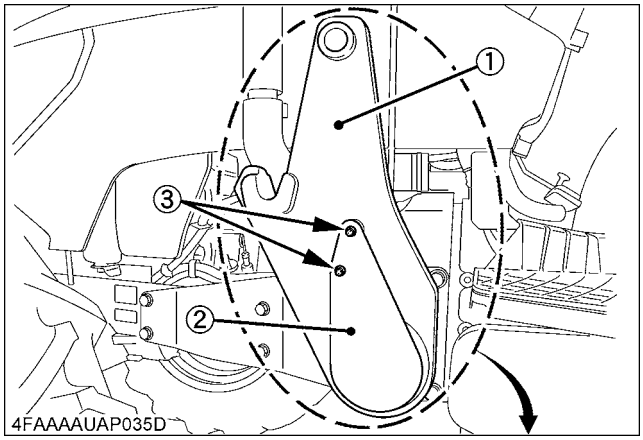
IMPORTANT :

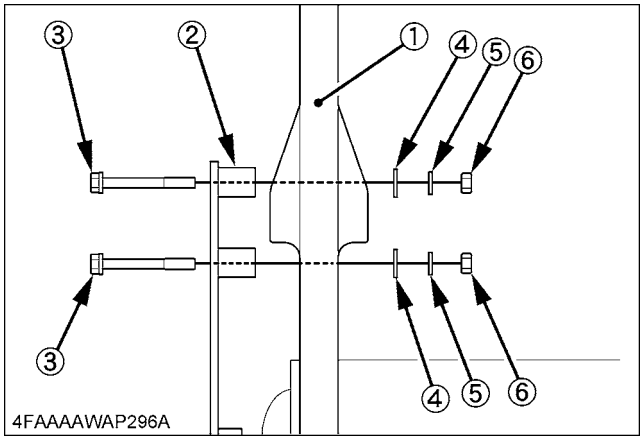
- If 3rd function valve kit is installed, tube routing through between A hose and B hose of 3rd function.



(1) Port A hose
(2) Port B hose
(3) Tube
(A) Routing through between 2-hoses

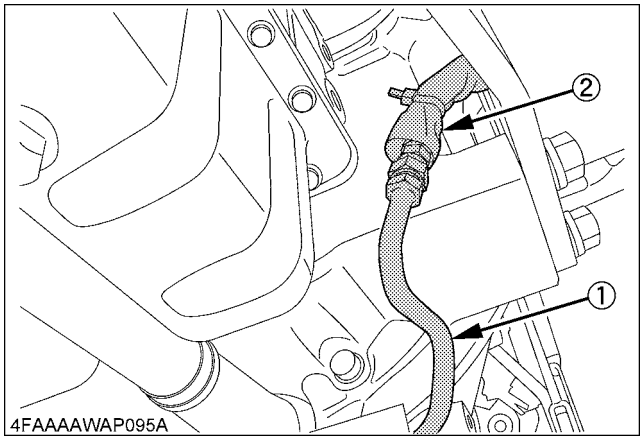
6. Connect the accumulator assembly (LH) to the main frame (LH).





(1) Main frame (LH)
(2) Accumulator assy (LH)
(3) 2-M10 x 80 bolts
(4) 2-M10 plain washers
(5) 2-M10 spring washers
(6) 2-M10 nuts

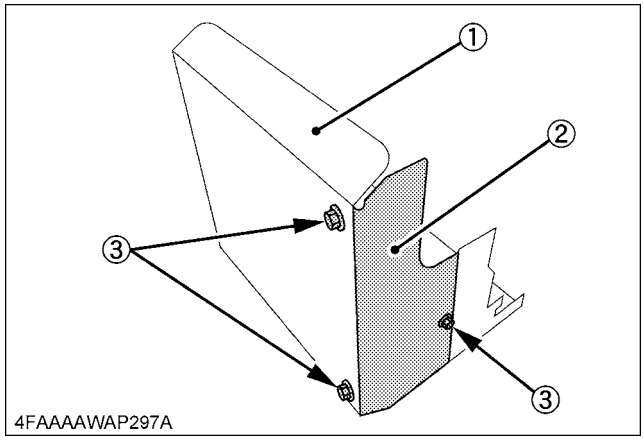
7. Connect the tube to the accumulator assembly (LH).



(1) Tube
(2) Hydraulic hose (Connected to accumulator assy (LH)) (275 mm (10.8 in.), 3/4-UNF)

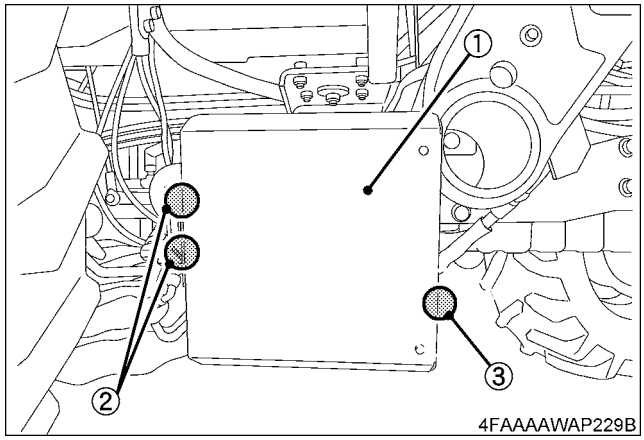
◆ Valve cover section

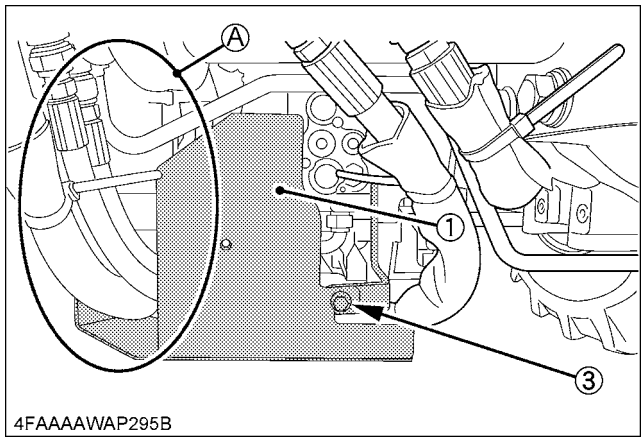
1. Remove the valve cover 2 from the valve cover.



(1) Valve cover
(2) Valve cover 2
(3) 3-M8 x 16 bolts with washers

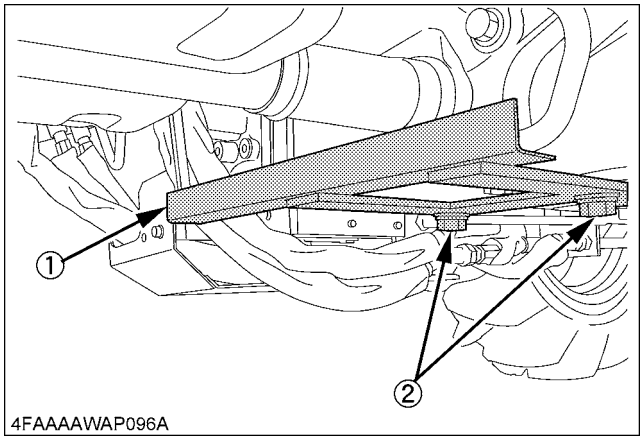
2. Attach the valve cover as shown below.





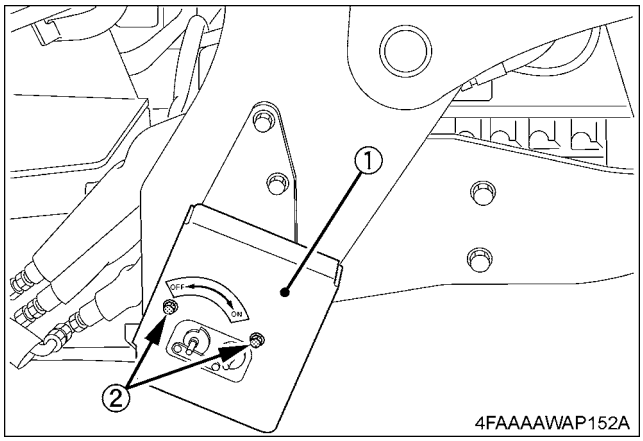
(1) Valve cover
(2) 2-M8 x 20 bolts with washers (without 3rd function valve kit) 2-M8 x 25 bolts with washer (if equipped with 3rd function valve kit)
(3) M8 x 20 bolt with washers
(A) Hose routing through here

3. Attach the tube guard in place.



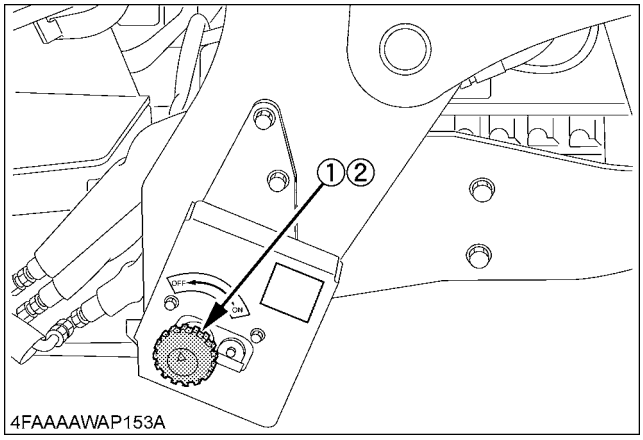
(1) Tube guard
(2) 2-M18 x 35 bolts
2-M18 spring lock washers

4. Attach the accumulator valve cover in place.



(1) Accumulator valve cover
(2) 2-M8 x 20 bolts with washer

5. Apply the selector lever to the accumulator valve.



(1) Selector lever
(2) M8 lock nut

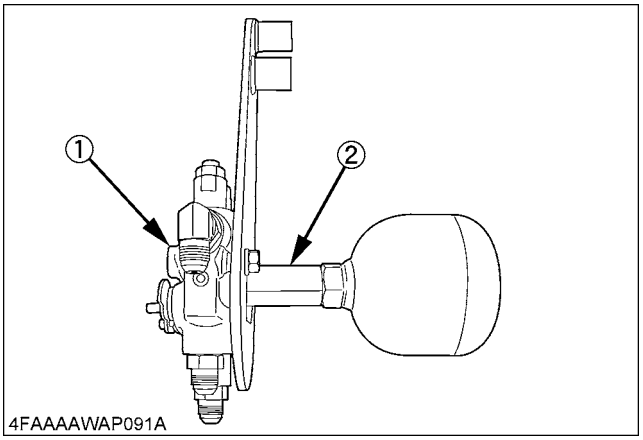
NOTE :
- Secure the selector lever with the lock nut.

■Accumulator [M7993] (if equipped)

◆ Accumulator section [self-leveling valve only]

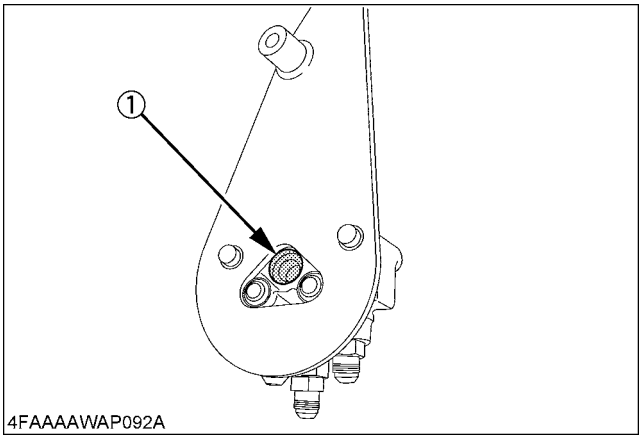
IMPORTANT :
- If the machine is equipped with the optional self-level valve, fit the accompanying orifice to the accumulator assembly (RH) in the following procedure.
- If the machine does not have a self leveling valve, the orifice is not needed.

1. Remove the adapter from the accumulator valve.

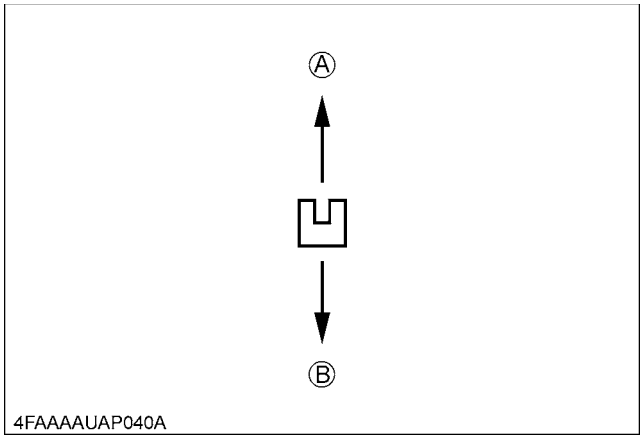


(1) Accumulator assy (RH)
(2) Adapter assy

2. Set the orifice into the port.



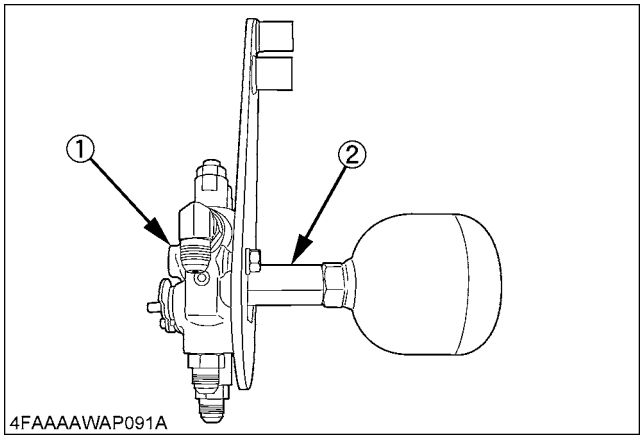
(1) Port



(A) Adapter side
(B) Accumulator valve side

NOTE :
- Be careful not to confuse the orifice direction.

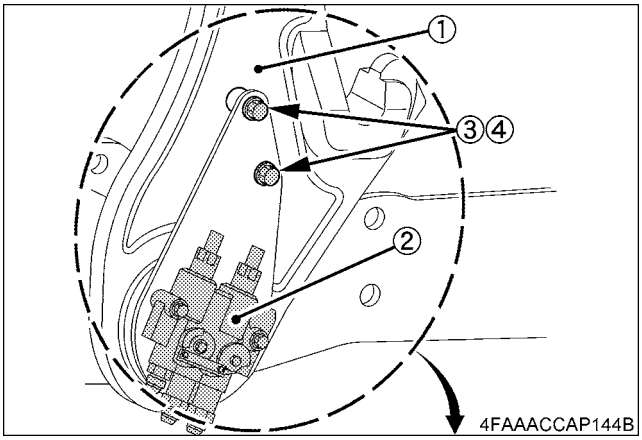
3. Attach the adapter back to the accumulator valve.

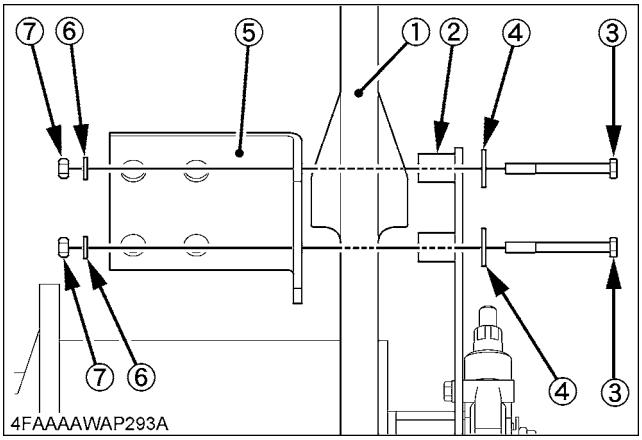


(1) Accumulator assy (RH)
(2) Adapter assy (3/4-UNF)

◆ Hydraulic hoses section

1. Remove the bolts which the connector assembly stay is fasten, then fasten the accumulator assembly (RH) to the main frame with the stay.



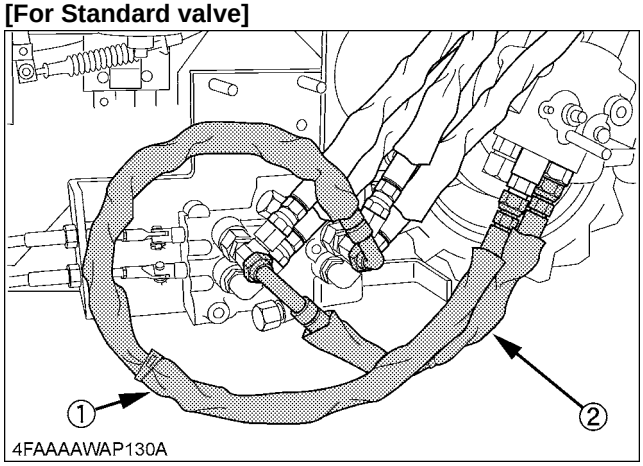


(1) Main frame (RH)
(2) Accumulator assembly (RH)
(3) 2-M10 x 90 bolts (without 3rd function valve kit)
2-M10 x 110 bolts (if equipped with 3rd function valve kit)
(4) 2-M10 plain washers (original)
(5) Connector assy stay (original)
(6) 2-M10 spring lock washers (original)
(7) 2-M10 nuts (original)

NOTE :
- Kits has 90 mm and 110 mm bolts, use applicable bolts due to 3rd function valve kit is installed or not.

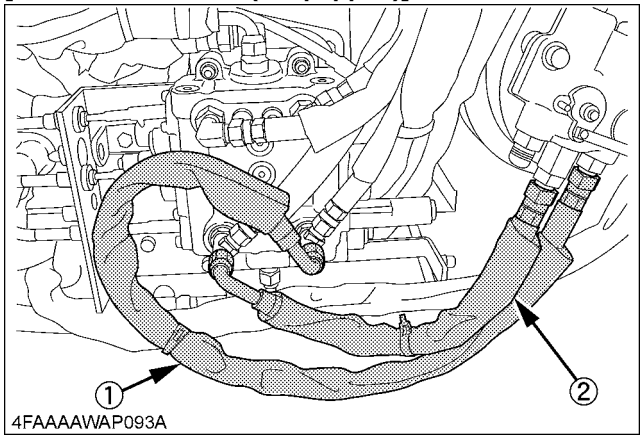
2. Fit the boom section adapter in position, and connect the hose between the accumulator valve and the control valve.

[For Standard valve]



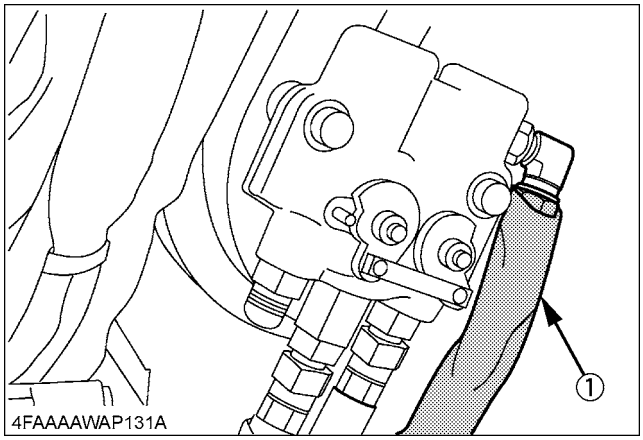
(1) Hydraulic hose
(850 mm (33.5 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose
(385 mm (15.2 in.), 3/4-UNF and 3/4-UNF)

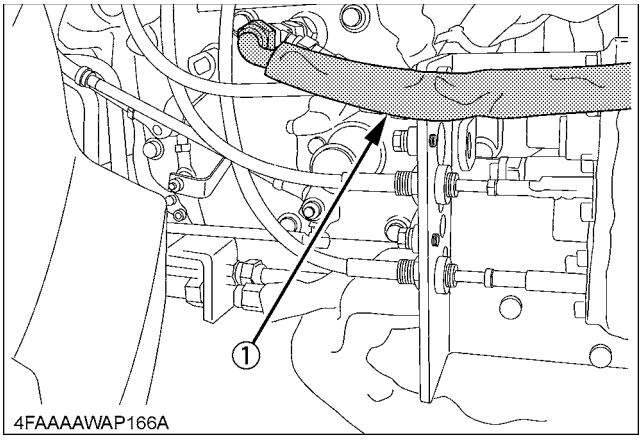
[For Self-level valve (if equipped)]



(1) Hydraulic hose
(850 mm (33.5 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose
(385 mm (15.2 in.), 3/4-UNF and 3/4-UNF)

3. Connect the tank hose as shown in following figure.



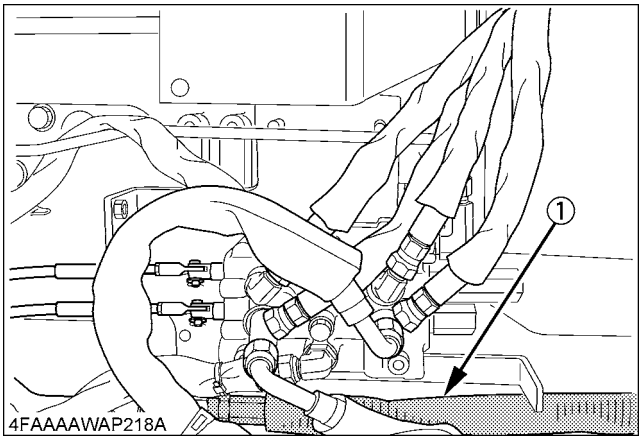


(1) Hydraulic tank hose
(914 mm (36.0 in.), 3/4-UNF and 7/8-UNF)

[3rd function (if equipped)]

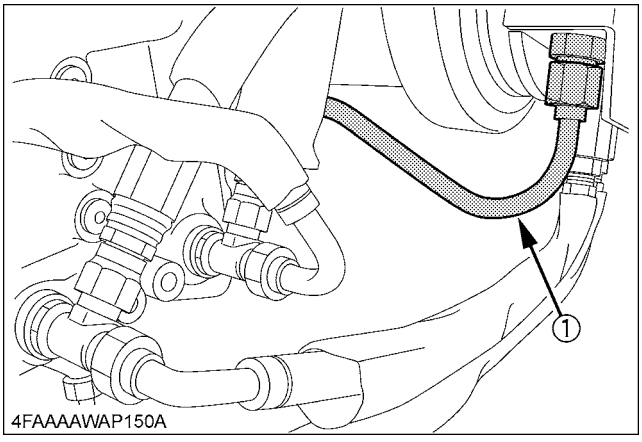
NOTE :

- Connect the hydraulic tank hose to the 3rd function port.



(1) Hydraulic tank hose
(625 mm (24.6 in.), 7/8-UNF)

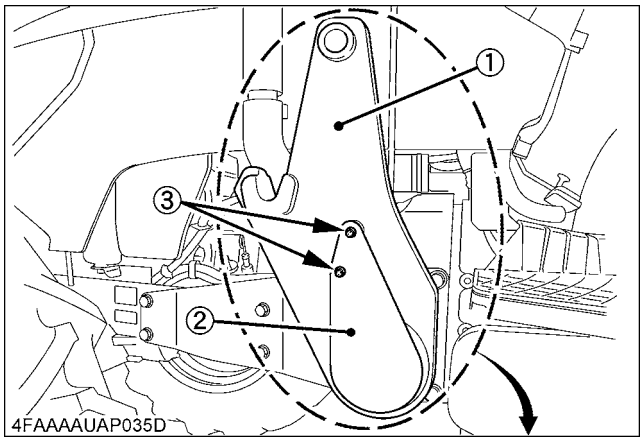
4. Connect the tube as shown in following figure.

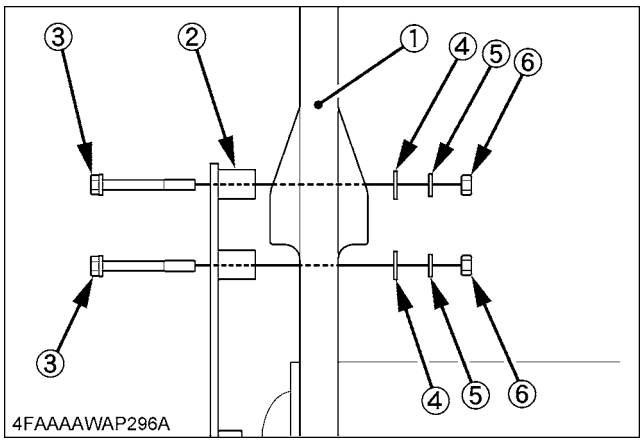


(1) Tube (3/4-UNF)

NOTE :
- There are 2 different pipes in the accumulator kit to accommodate different models.
- It should be apparent by fit which one should be used.

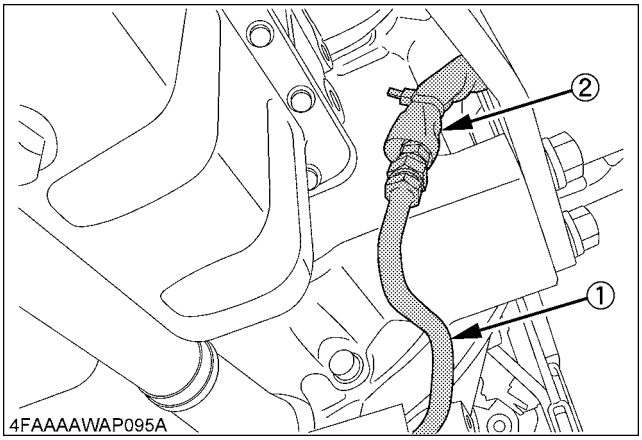
5. Connect the accumulator assembly (LH) to the main frame (LH).





(1) Main frame (LH)
(2) Accumulator assy (LH)
(3) 2-M10 x 80 bolts
(4) 2-M10 plain washers
(5) 2-M10 spring washers
(6) 2-M10 nuts

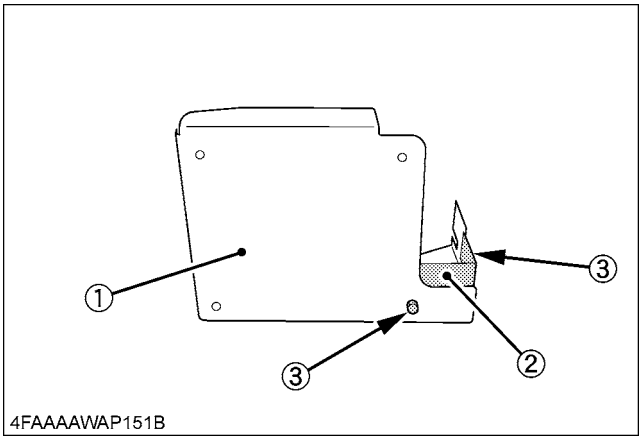
6. Connect the tube to the accumulator assembly (LH).



(1) Tube
(2) Hydraulic hose (LH) (275 mm (10.8 in.), 3/4-UNF)

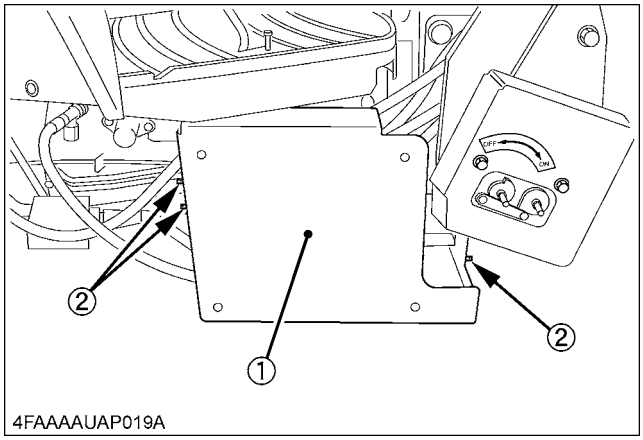
◆ Valve cover section

1. Remove the valve cover 2 from the valve cover.



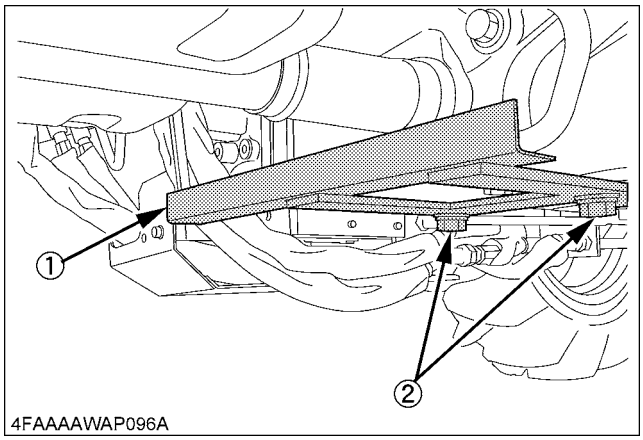
(1) Valve cover
(2) Valve cover 2
(3) 2-M10 x 16 bolts

2. Attach the valve cover.



(1) Valve cover
(2) 3-M8 x 20 bolts with washers
[Standard valve]
3-M8 x 16 bolts with washers
[Self leveling valve]

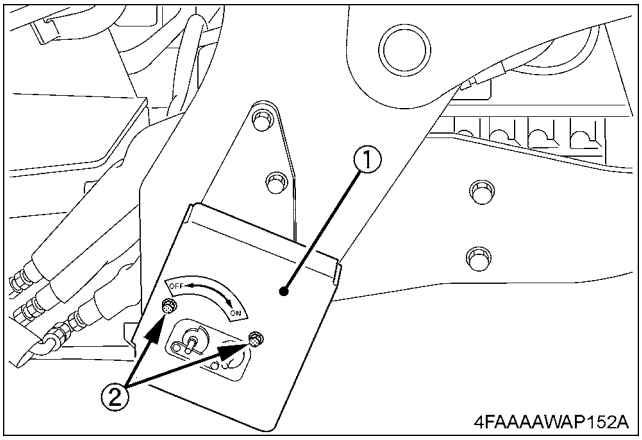
3. Attach the tube guard in place.



(1) Tube guard
(2) 2-M16 x 40 bolts
2-M16 plain washers
2-M16 spring lock washers

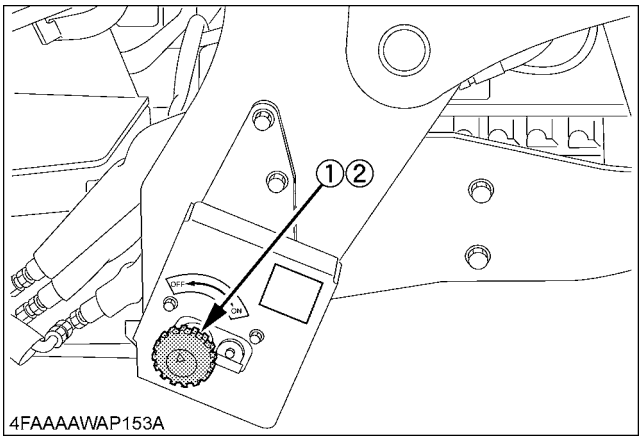
NOTE :
- There are 2 different tube guards in the accumulator kit to accommodate different models.
- It should be apparent by fit which one should be used.

4. Attach the accumulator valve cover in place.



(1) Accumulator valve cover
(2) 2-M8 x 20 bolts

5. Apply the selector lever to the accumulator valve.



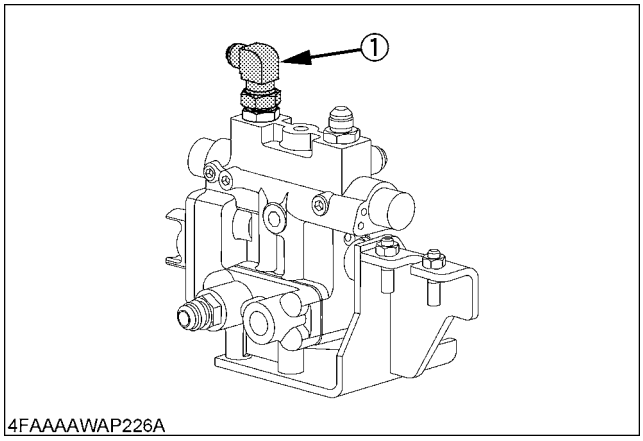
(1) Selector lever
(2) M8 lock nut

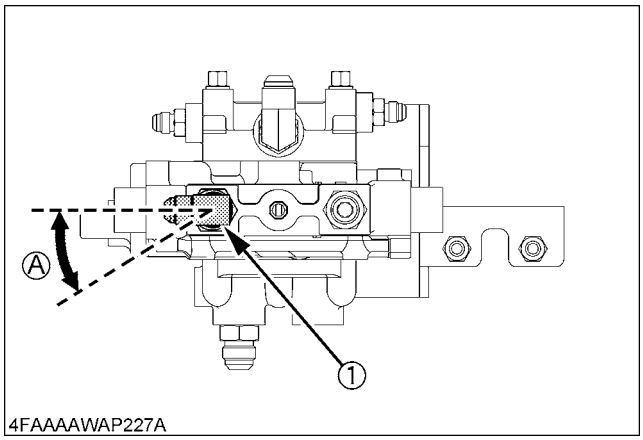
ASSEMBLING FRONT REMOTE HYDRAULIC CONTROL VALVE KIT

■Independent Circuit Type with Standard Valve [M6873] (if equipped)

◆ Valve section

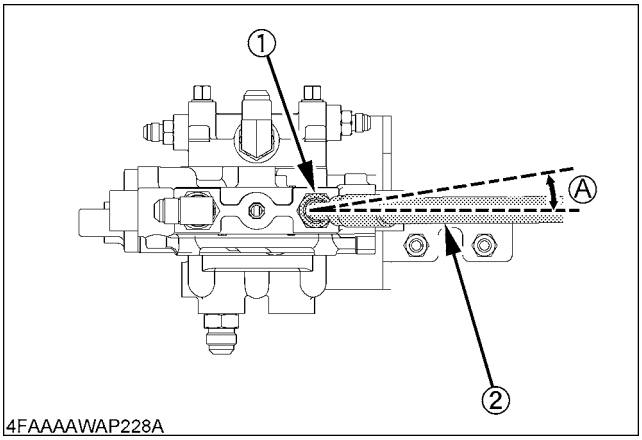
1. Connect the adapters to the 3rd function valve assembly as shown below.





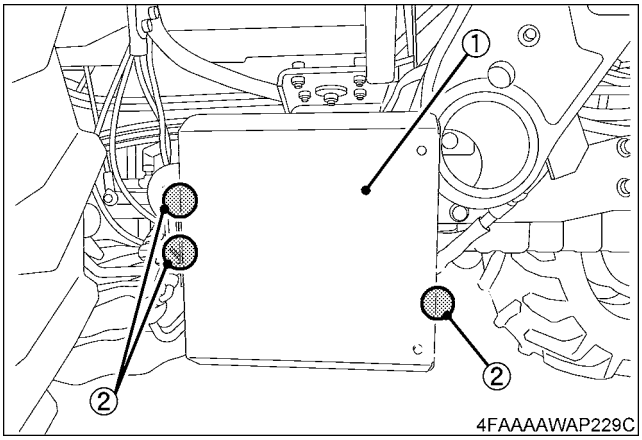
(1) Adapter (3/4-UNF) *(A) 0°to10°*

2. Connect the hose to the port B of the 3rd function valve.



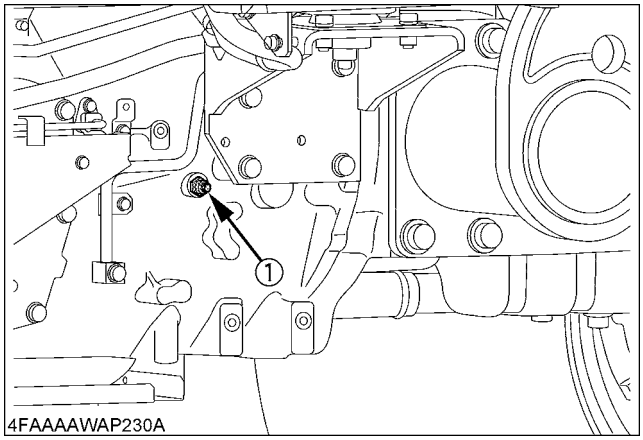
(1) Port B *(A) 0°to 5°*
(2) Port B hose
(Green: 660 mm (30.0 in.), 3/4-UNF)

3. Remove the valve cover, if attached in place.



(1) Valve cover
(2) 3-M8 x 20 bolts with washers

4. Remove the plug from the tractor and attach the adapter.



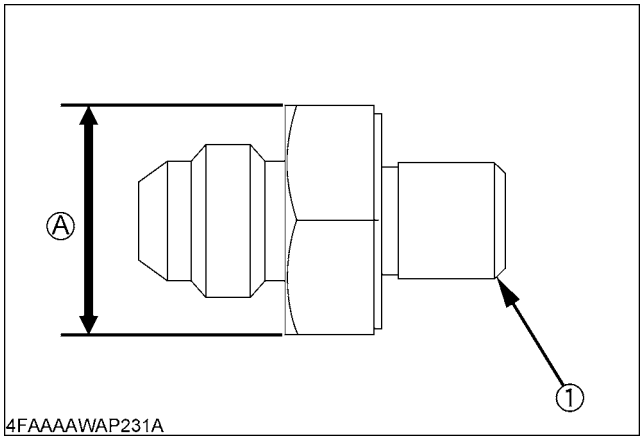
(1) Adapter (1/4-BSPT)

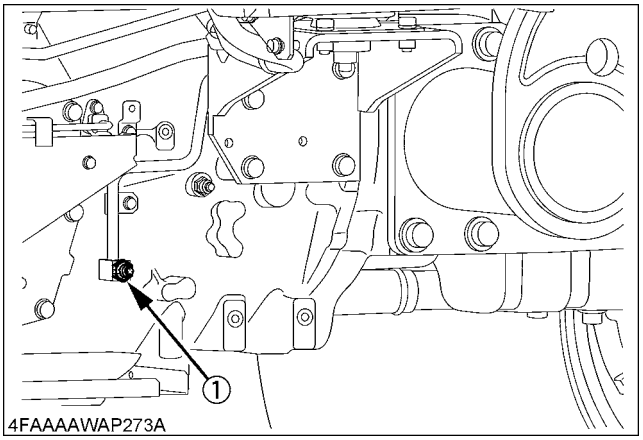
Tightening torque	15 N-m (1.6 kgf-m) (11.1 ft-lbs)

IMPORTANT :

- Before fitting the adapter, wrap the sealing tape 2 or 3 turns around it.

5. Remove the adapter from the tractor and fit the other adapter as shown below.
   Make sure the new copper packing in the kit fit to the adapter.

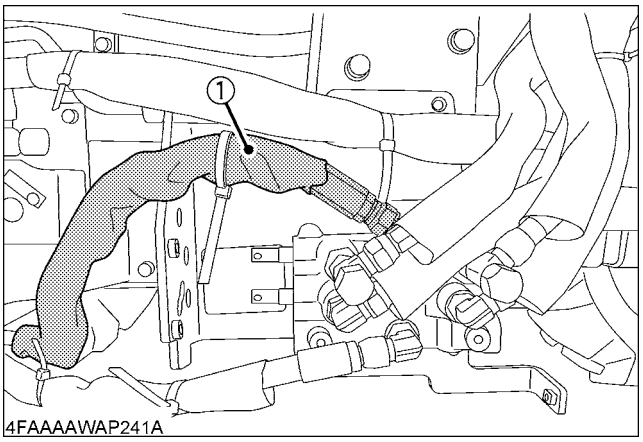




(1) Adapter (M12) *(A) 22 mm (0.87 in.)*

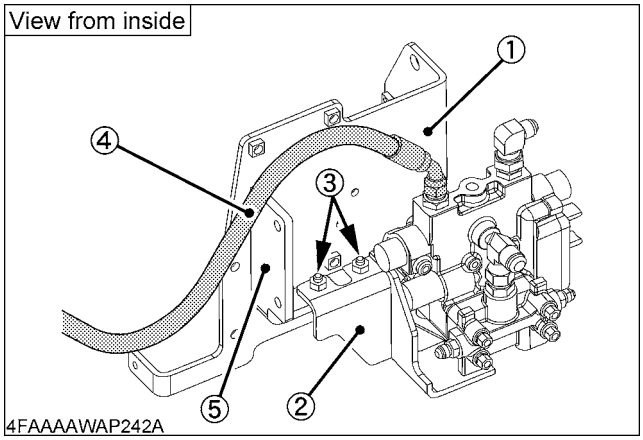
Tightening torque	32.4 N-m (3.3 kgf-m) (23.9 ft-lbs)

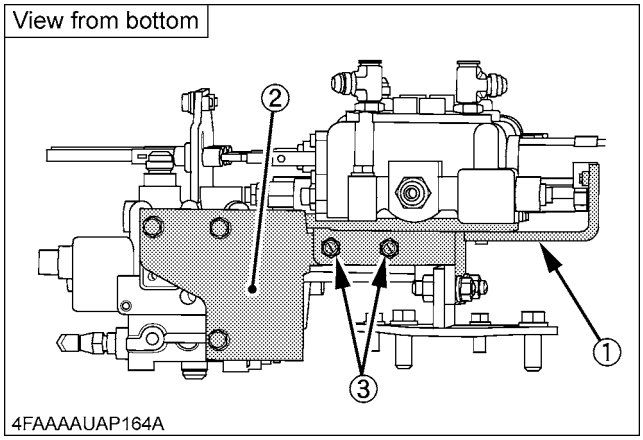
6. Remove the pump line hose.



(1) Pump line hose (630 mm (24.8 in.))

7. Attach the 3rd function valve assembly to the valve stay.

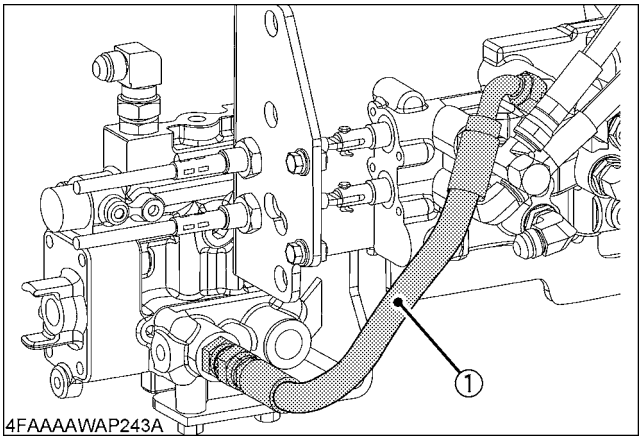




(1) Valve stay
(2) 3rd function valve assy
(3) 2-M10 spring washers
2-M10 nuts
(4) Port B hose
(5) Valve stay plate

NOTE :
- Pass the port B hose above the valve stay plate, as shown in the figure.

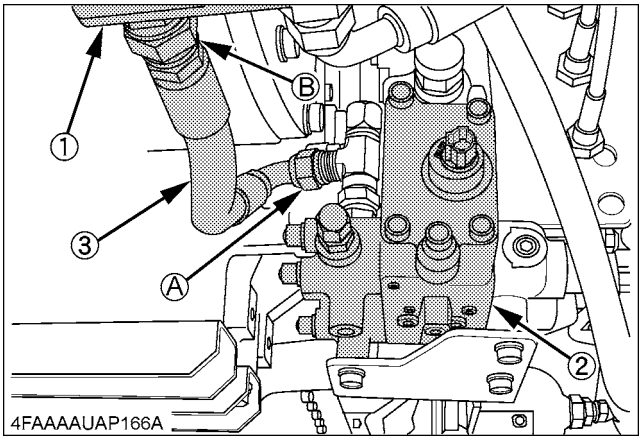
8. Connect the pump line hose as shown in the figure.



(1) Pump line hose (500 mm (19.7 in.), 7/8-UNF and 7/8-UNF)

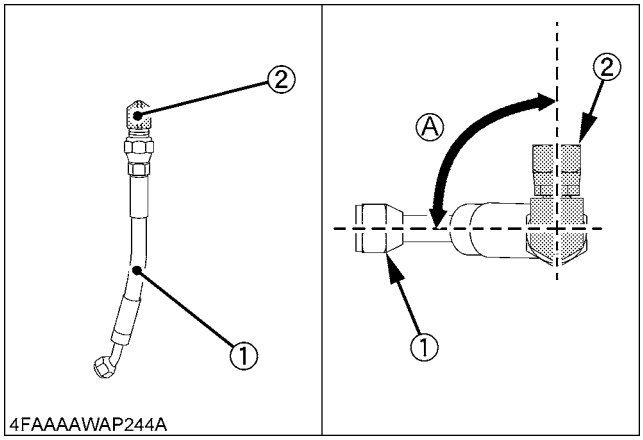
IMPORTANT :
- Adjust the assembling angle of 90° side of the hose to keep the hose out of contact with its nearby parts.

9. Connect the hose to the pump ports of the tractor and 3rd function valve.



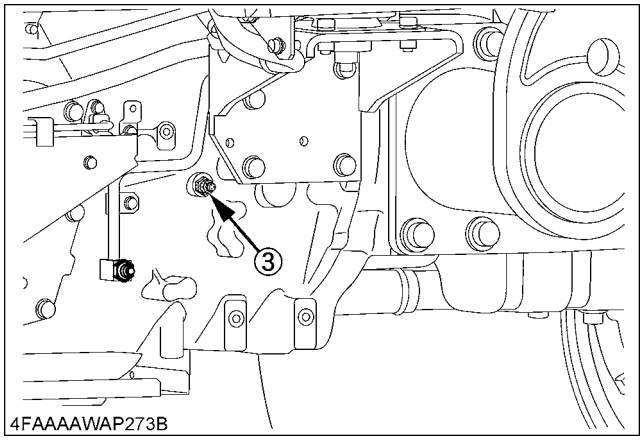
(1) Pump port of the tractor
(2) 3rd function valve
(3) Pump line hose
(330 mm (13.0 in.), 7/8-UNF and 7/8-UNF)
(A) 90° side
(B) 0° side

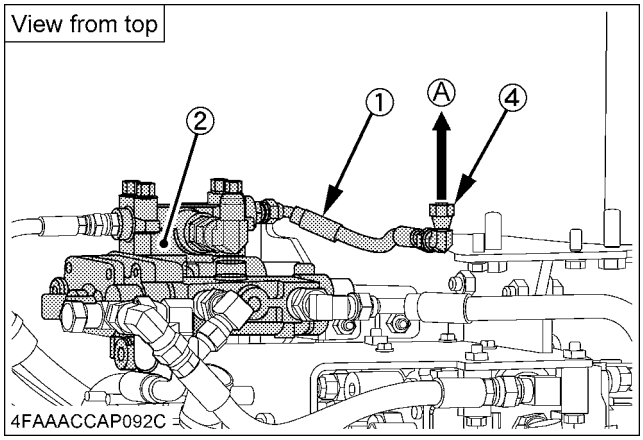
10. Attach the elbow adapter to the pilot tank line hose.



(1) Pilot tank line hose (230 mm (9.1 in.), 3/4-UNF) *(A) 90°*
(2) Elbow adapter (3/4-UNF)

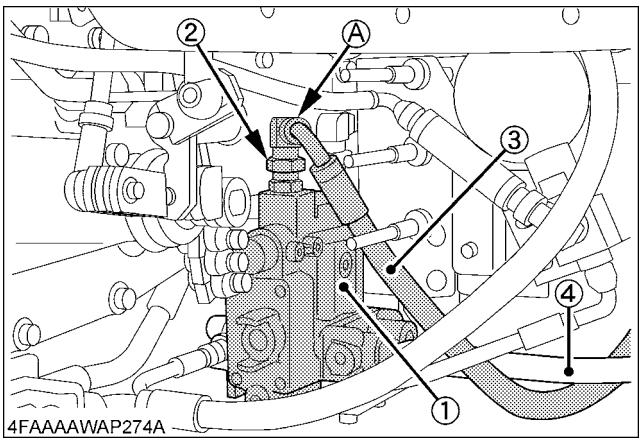
11. Connect the pilot tank line as shown in the following figure.





(1) Pilot tank line hose (230 mm (9.1 in.), 9/16-UNF) *(A) Connect to the pilot tank port of the tractor*
(2) 3rd function valve
(3) Pilot tank port of the tractor
(4) Elbow adapter (9/16-UNF)

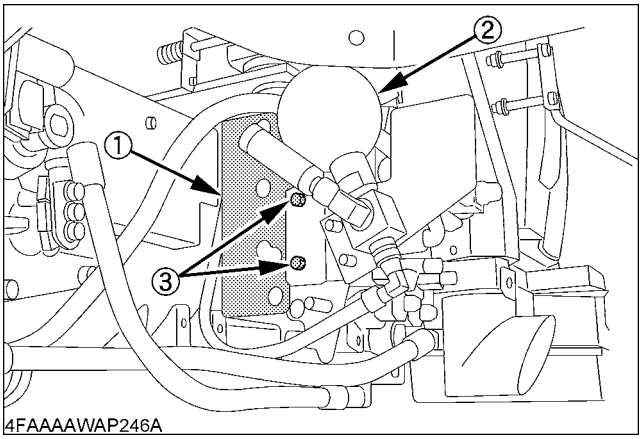
12. Connect the hose to the port B of the 3rd function valve.



(1) 3rd function valve *(A) 90° side*
(2) Port A
(3) Port A hose (Gray: 1340 mm (52.8 in.), 3/4-UNF)
(4) Pump line hose

NOTE :
- Pass the hose below the 2 lever cables and the pump line hose.

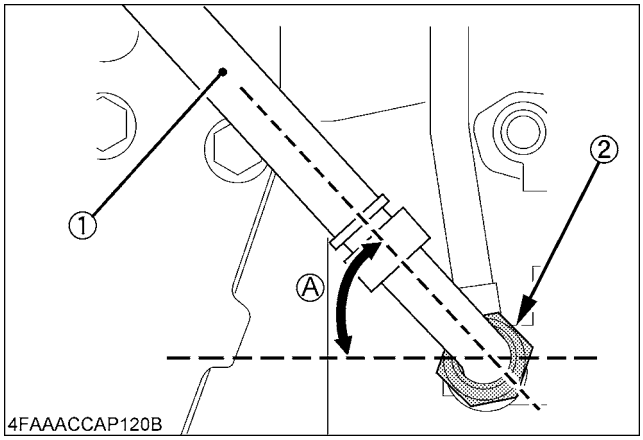
13. Attach the accumulator assembly for the 3rd function.

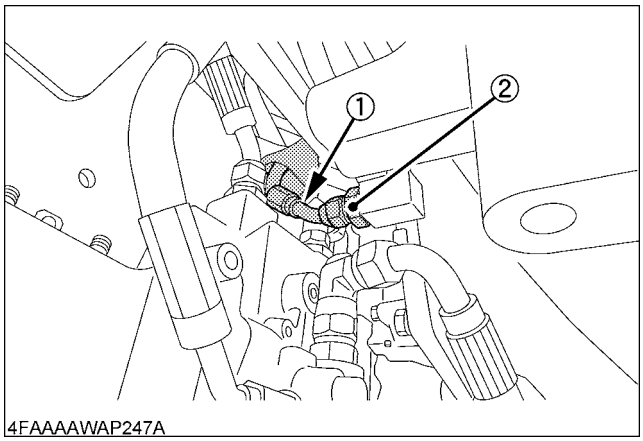


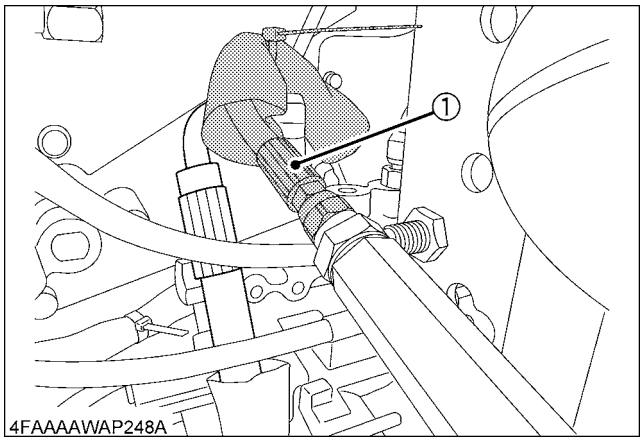
(1) Stay
(2) Accumulator assy
(3) 2-M8 x 25 bolts with washer

NOTE :
- Temporarily attach the bolts.

14. Connect the pilot pump line as shown below.



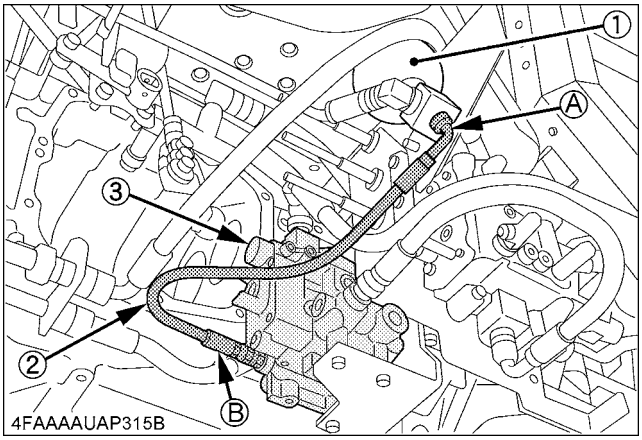


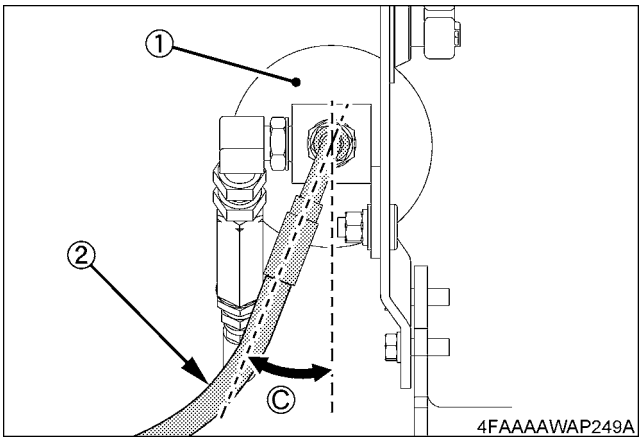


(1) Pilot pump line hose (325 mm (12.8 in.), 9/16-UNF and 9/16-UNF)
(2) Pilot pump port
(A) Angle to keep the hose out of contact with nearby parts.

NOTE :
- In case the pilot pump hose line contacts other parts, readjust the angle of hose fitting.

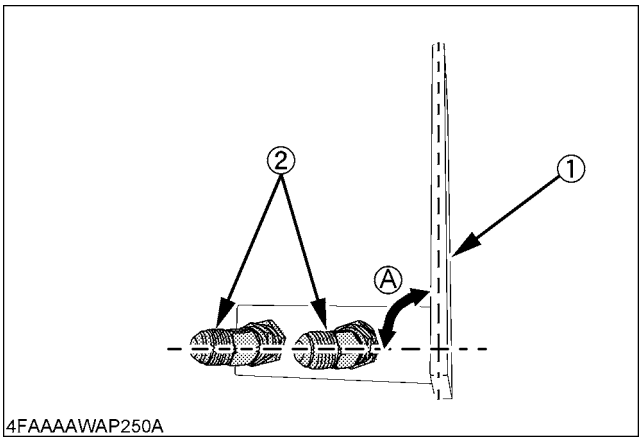
15. Connect the hydraulic hose as shown below.





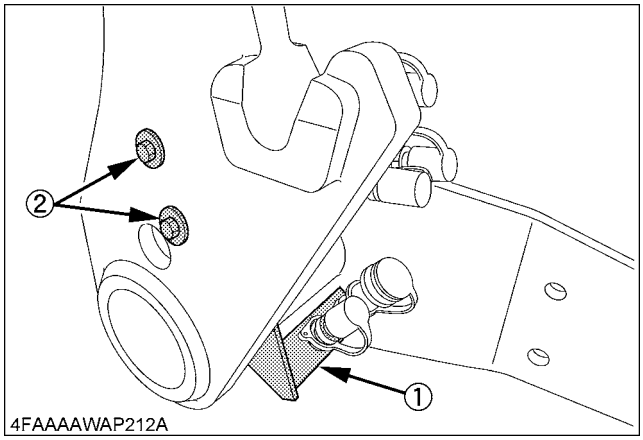
(1) 3rd function accumulator
(2) Hydraulic hose (500 mm (19.7 in.), 9/16-UNF and 9/16-UNF)
(3) 3rd function valve
(A) 90°side
(B) 0°side
(C) 10° to 20°

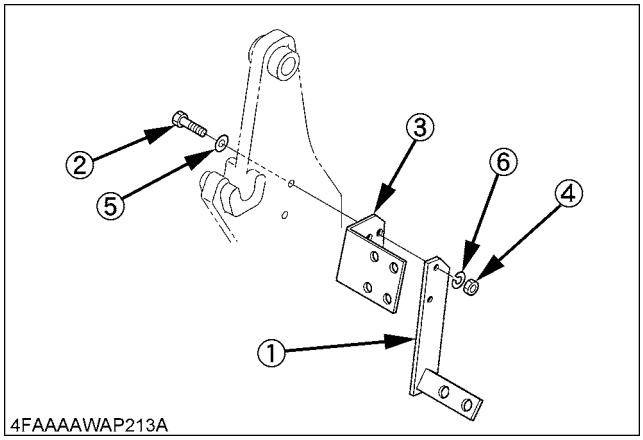
16. Attach the 45° adapters to the 3rd function coupler stay assembly.



(1) 3rd function coupler stay assy
(2) 2-45° adapters (3/4-UNF)
(A) 90° ±5°

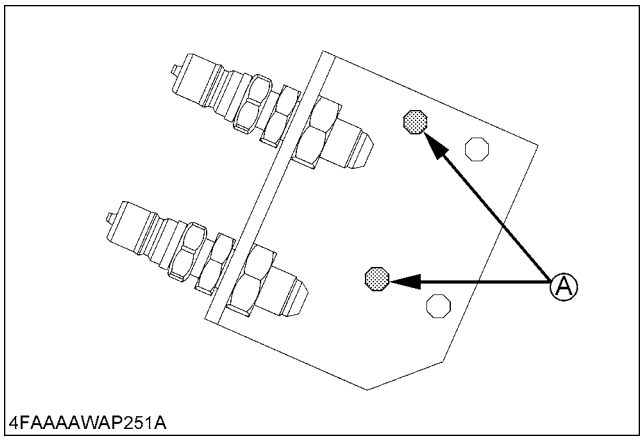
17. Fit the 3rd function coupler stay assembly as shown below.





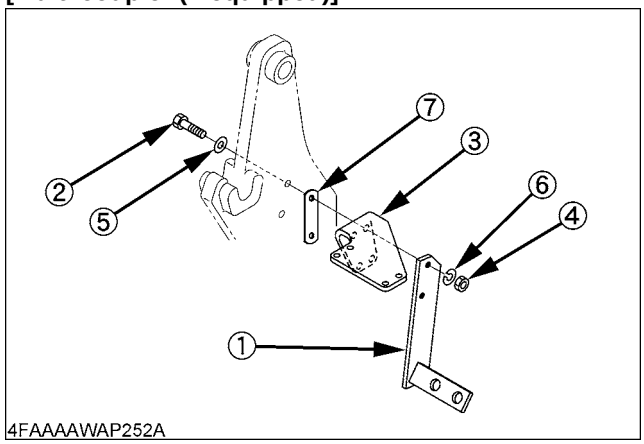
(1) 3rd function coupler stay assy
(2) 2-M10 x 60 bolts (original)
(3) Connector stay assy (original)
(4) 2-M10 nuts (original)
(5) 2-M10 plain washers (original)
(6) 2-M10 spring lock washers (original)

NOTE :
- To fix the connector stay assembly, use these holes as shown below.



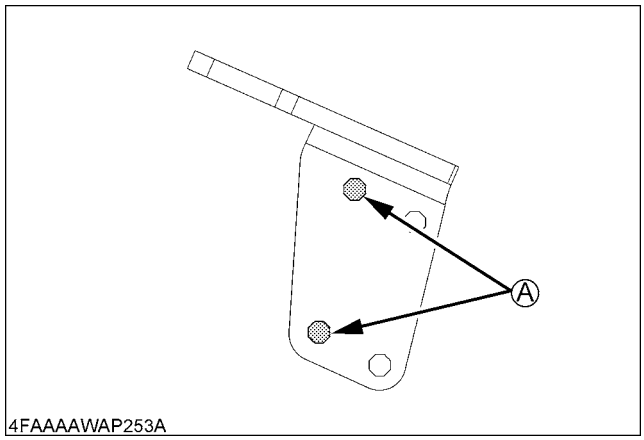
(A) Use these holes.

[Multi coupler (if equipped)]



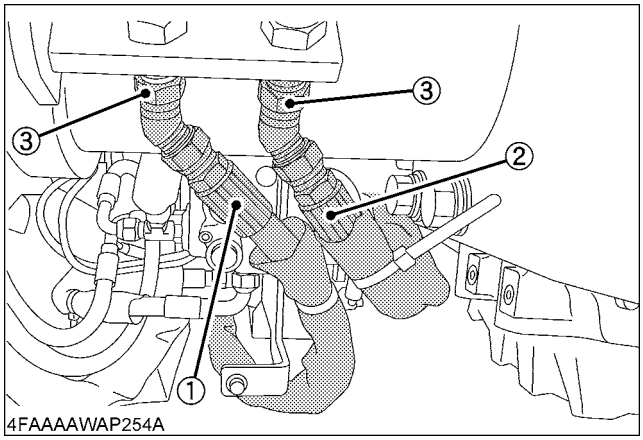
(1) 3rd function coupler stay assy
(2) 2-M10 x 60 bolts (original)
(3) Multi coupler stay assy (original)
(4) 2-M10 nuts (original)
(5) 2-M10 plain washers (original)
(6) 2-M10 spring lock washers (original)
(7) Spacer (original)

NOTE :
- To fix the multi coupler stay assembly, use these holes as shown below.



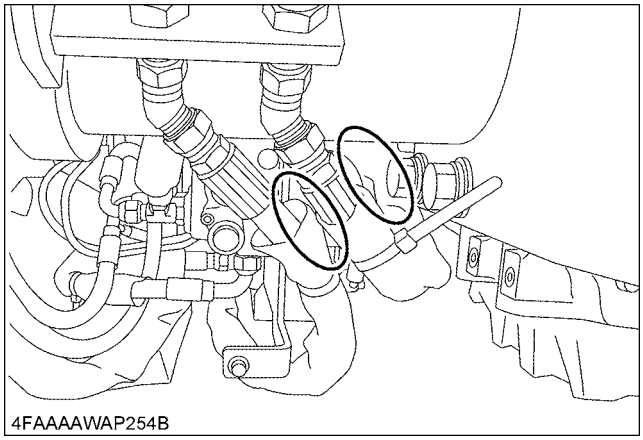
(A) Use these holes.

18. Connect the port A hose and port B hose to the 3rd function coupler stay.



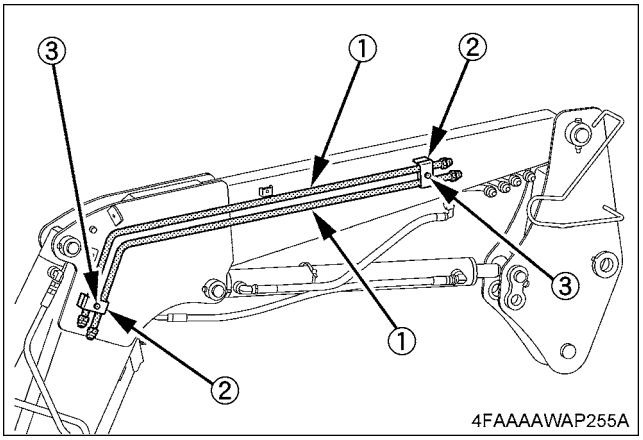
(1) Port A hose (Gray, 1340 mm (52.8 in.), 3/4-UNF)
(2) Port B hose (Green, 660 mm (30.0 in.), 3/4-UNF)
(3) 2-45° adapters (3/4-UNF)

IMPORTANT :
- Check the hoses not for contact with the frames or bolts or not for their mutual tight contact. If contacted, readjust the adapter angles to avoid any contact.



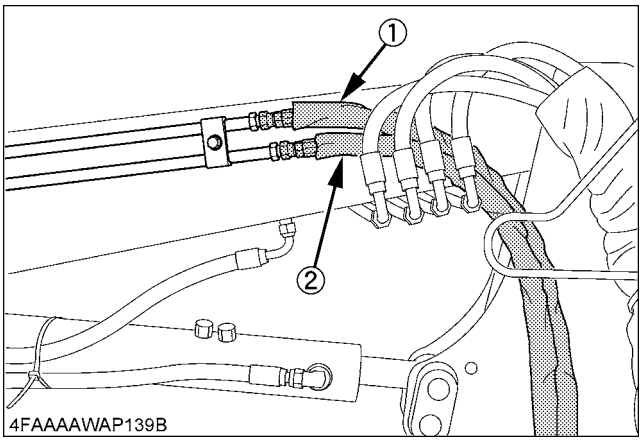
◆ Boom section

1. Secure the tubes onto the boom.



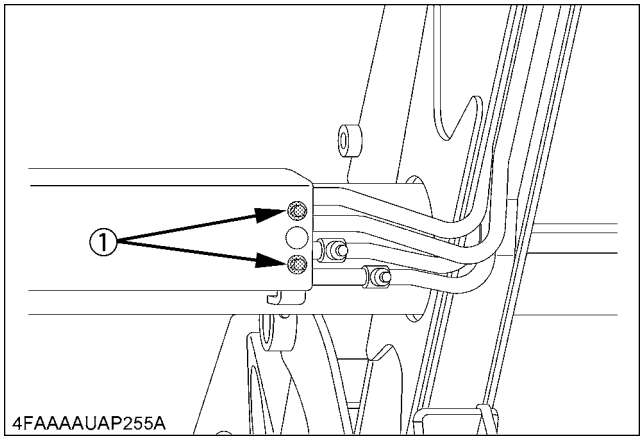
(1) 2-Tubes
(2) 2-Tube stays
(3) 2-M8 x 35 bolts
2-Collars

2. Install the hydraulic hoses to the tubes.



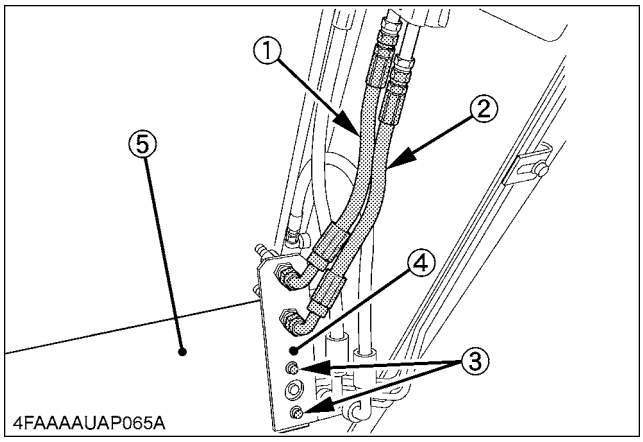
(1) Hydraulic hose mid-1 (with male coupler) (Green, 1180 mm (46.5 in.), 3/4-UNF)
(2) Hydraulic hose mid-2 (with female coupler) (Gray, 1180 mm (46.5 in.), 3/4-UNF)

3. Remove the bolts from the cover.



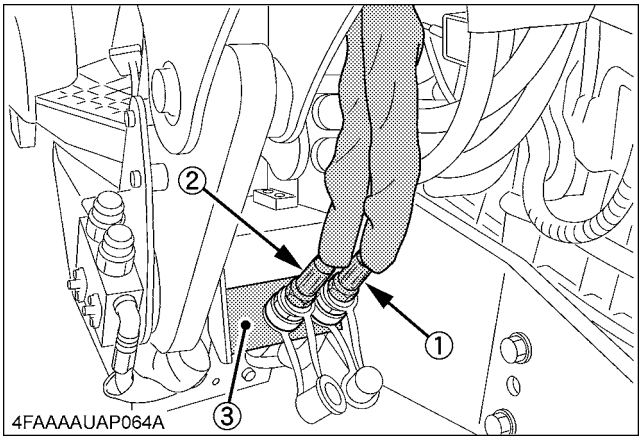
(1) 2-M8 x 35 bolts with washers

4. Attach the hitch stay assembly in place. Then connect each of the hoses between its tube and stay adapter, as shown below.



(1) Hydraulic hose hitch-1
(370 mm (14.6 in.), 3/4-UNF and 3/4-UNF)
(2) Hydraulic hose hitch-2
(370 mm (14.6 in.), 3/4-UNF and 3/4-UNF)
(3) 2-M8 x 40 bolts with washer
(4) Hitch stay assy
(5) Cover

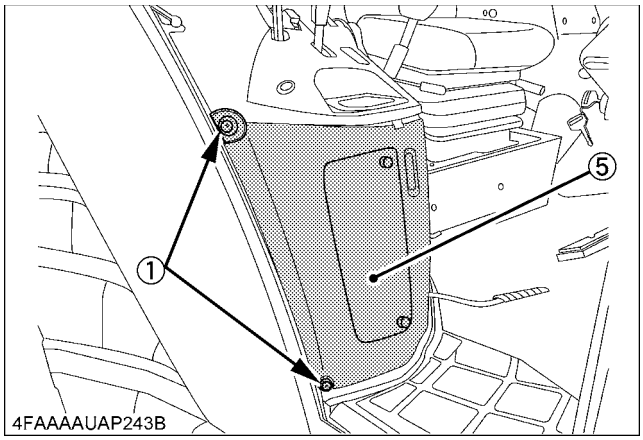
5. Connect the hydraulic hoses to the 3rd function coupler stay assy.

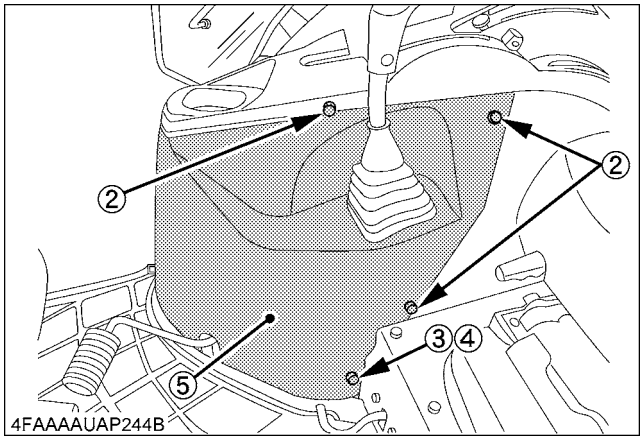


(1) Hydraulic hose mid-1 (with male coupler) (Green)
(2) Hydraulic hose mid-2 (with female coupler) (Gray)
(3) 3rd function coupler stay assy

◆ **Controller section**

1. Remove the rivets and bolts first and then the console cover.



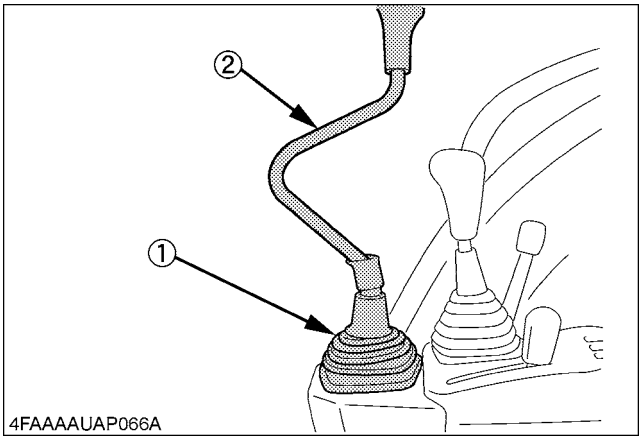


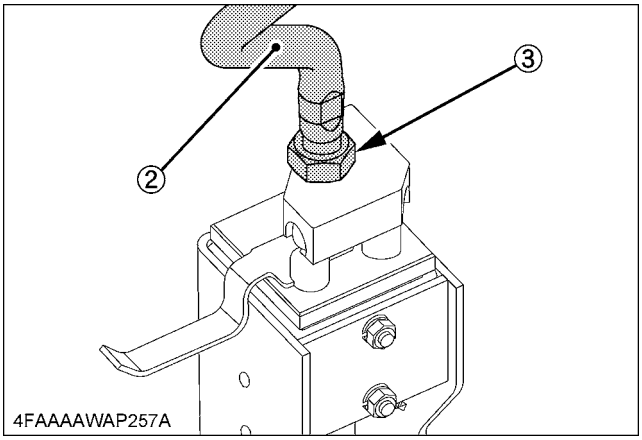
(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

NOTE :

- To draw out the rivets, loosen the screws first with a screwdriver.

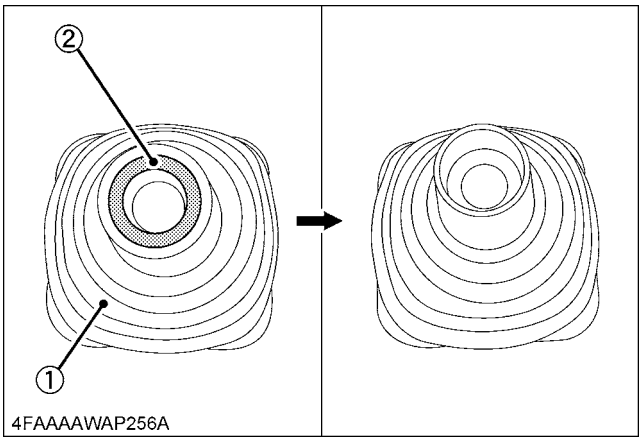
2. Slide the lever boot, loosen the nut and remove the control lever.





(1) Lever boot
(2) Control lever
(3) Nut

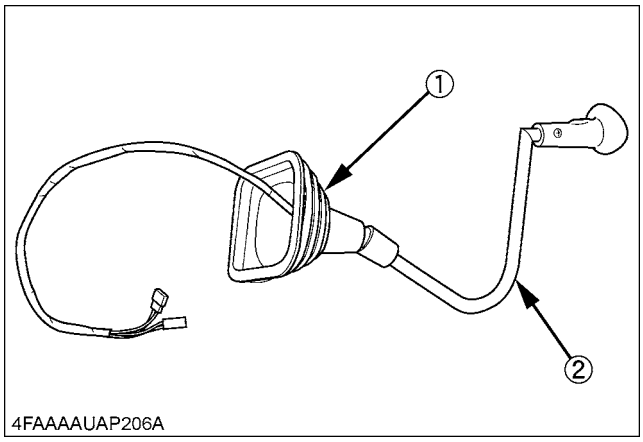
3. Cut the lip off the lever boot.



(1) Lever boot
(2) Lip

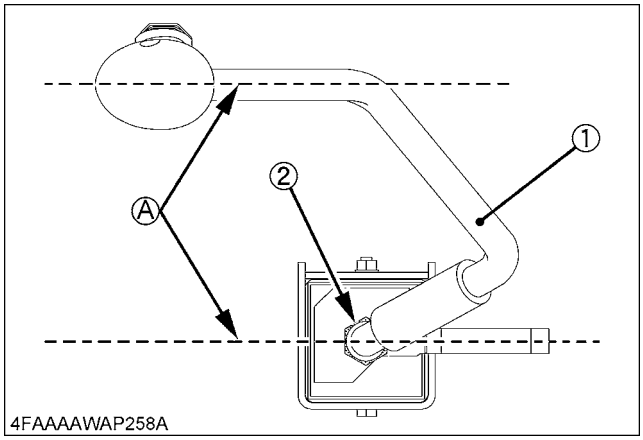
4. Pass the lever boot through the 3rd function control lever.

NOTE :
- Pass the harness through the boot.
- If the harness is difficult to go through the boot, apply a small amount of grease on the inside of the lever boot in advance, pass it carefully through the boot and finally wipe off the grease.



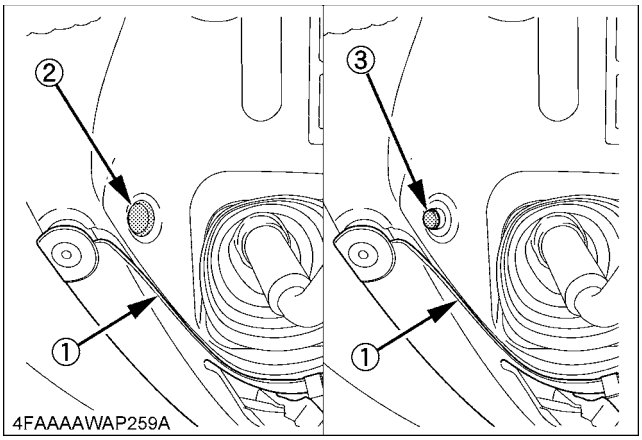
(1) Lever boot
(2) 3rd function control lever

5. Install the 3rd function control lever as shown below, and secure it with the nut.



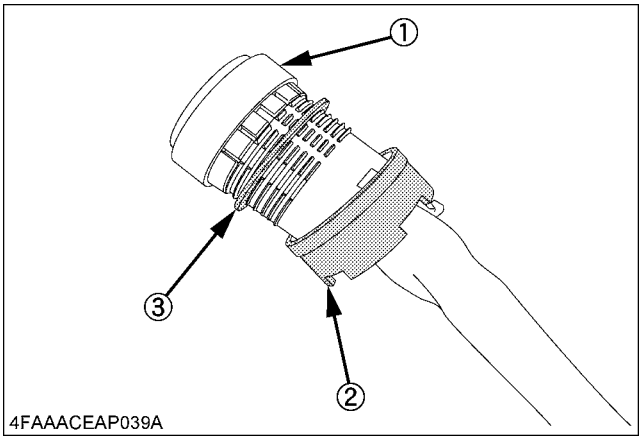
(1) 3rd function control lever *(A) Parallel*
(2) M14 nut

6. Remove the plug from the console. Remove the plastic fastener from the 3rd function on/off switch, and attach the switch onto the console.



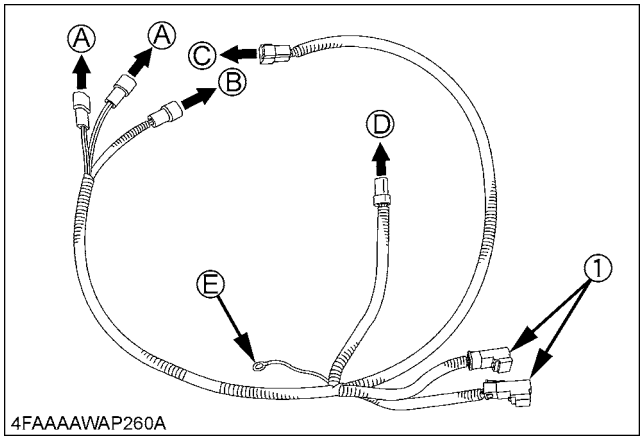
(1) Console
(2) Plug
(3) Switch

IMPORTANT :
- When removing the plastic fastener from the switch, remain the rubber ring on the switch.



(1) Switch
(2) Plastic fastener
(3) Rubber ring

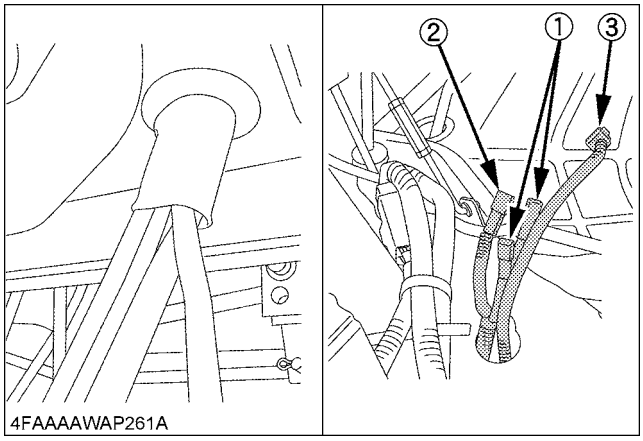
7. Connect the relays to the 3rd function harness.



(1) 2-Relays

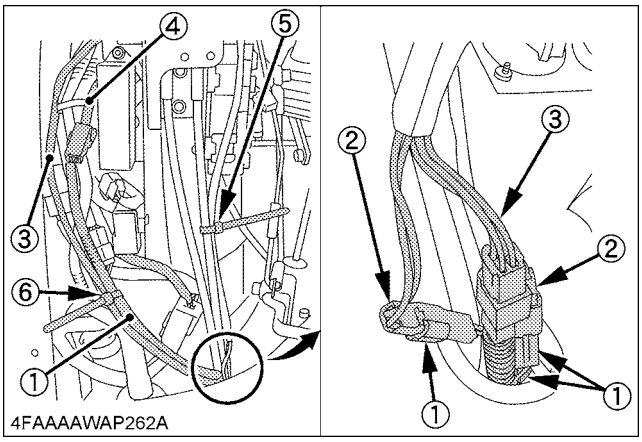
(A) To 3rd function control lever
(B) To ON/OFF switch
(C) To tractor harness
(D) To solenoid valve
(E) To earth

8. Pass the 3rd function harness through the cabling hole of the tractor step.



(1) Harness to 3rd function control lever
(2) Harness to ON/OFF switch
(3) Harness to tractor harness

9. Connect the 3rd function harness to the 3rd function control lever harness, 3rd ON/OFF switch harness and tractor harness. Clamp them with the cord bands.

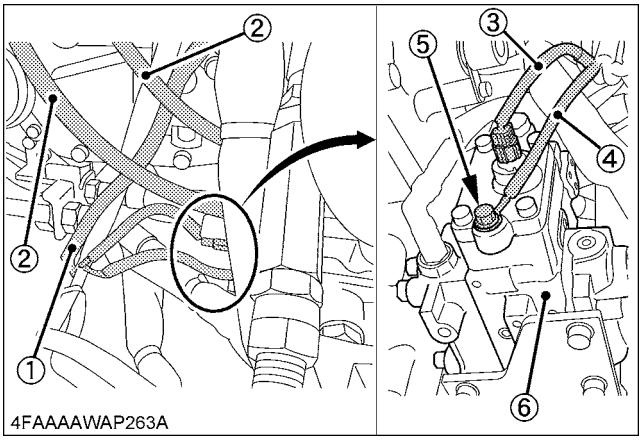


(1) 3rd function harness
(2) 3rd function control lever harness
(3) 3rd ON/OFF switch harness
(4) Tractor harness
(5) Cord band (140 mm (5.5 in.))
(Clamp with the lever cables)
(6) Cord band (140 mm (5.5 in.))
(Clamp with the tractor main harness)

IMPORTANT :

- In connecting the 3rd function harness and 3rd function control lever harness, match the connector colors.
- With the harnesses secured with the cord bands, move the relevant levers and make sure well that no harness gets too tense nor stuck.

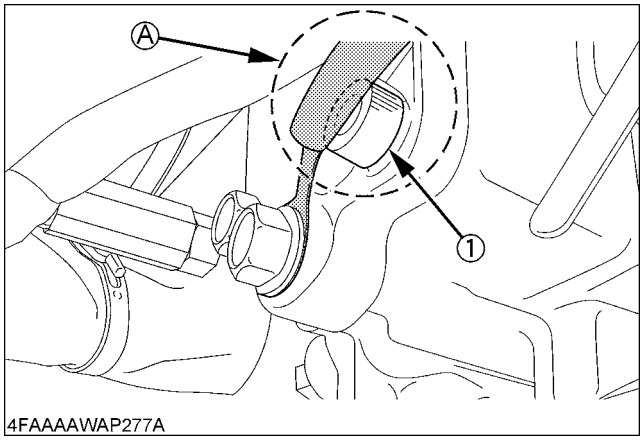
10. Pass the 3rd function harness behind the lever cables. Then connect the harness to the 3rd valve, as shown below.



(1) 3rd function harness
(2) 2-Lever cable
(3) Harness to solenoid valve
(4) Harness (to earth)
(5) M8 bolt (earth bolt)
(6) 3rd function valve

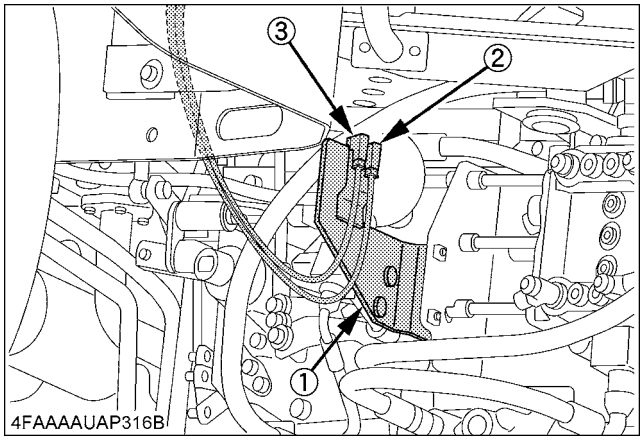
IMPORTANT :

- Secure the earth harness in place. Adjust its angle beforehand, as required, not to run over the valve bolt as shown below.



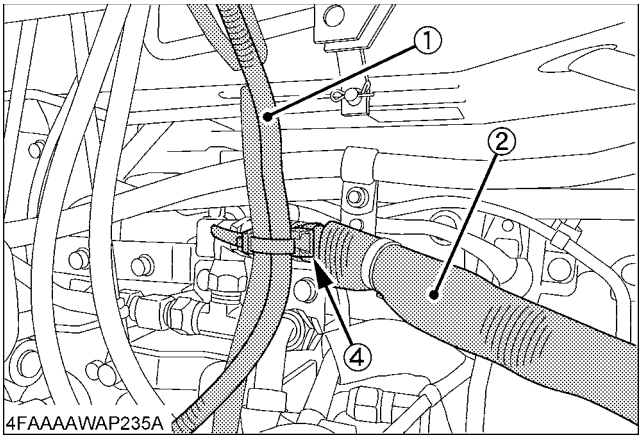
(1) Valve bolt
(A) Cable running over the bolt (Not good)

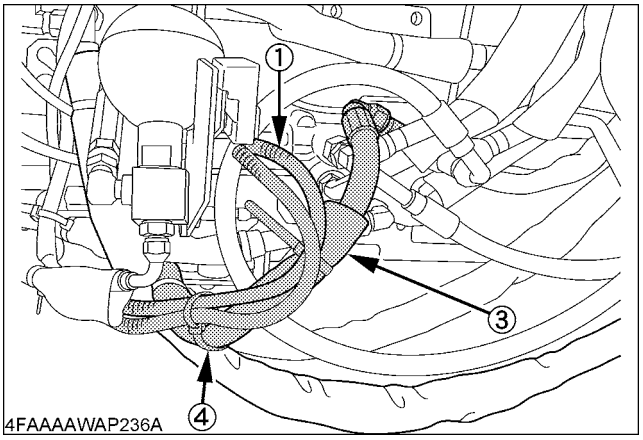
11. Put the relays to the relay stay.



(1) Relay stay
(2) Relay (with white connector)
(3) Relay (with black connector)

12. Using the cross-shaped clamps, secure the 3rd function harness to the hoses, as shown below.



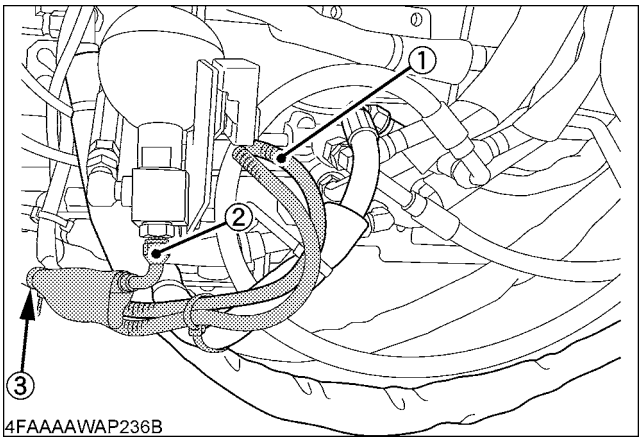


(1) 3rd function harness
(2) Loader valve tank hose
(3) 3rd function valve to loader valve pump hose
(4) 2-Clamps (72427-3133-30)

NOTE :

- Clamp the 3rd function harness at the white-taped point.

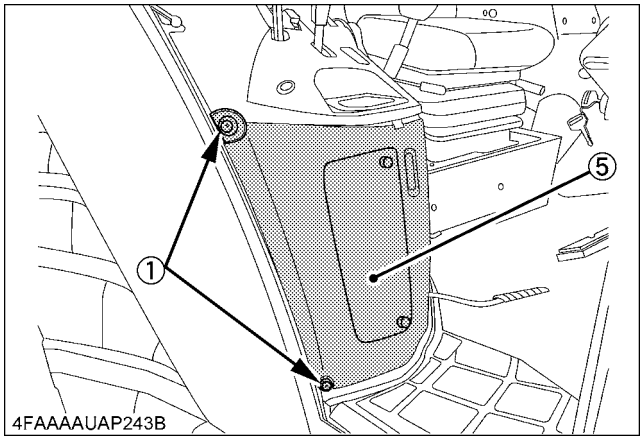
13. Using the cross-shaped clamp, secure the 3rd function harness to the hoses, as shown below.

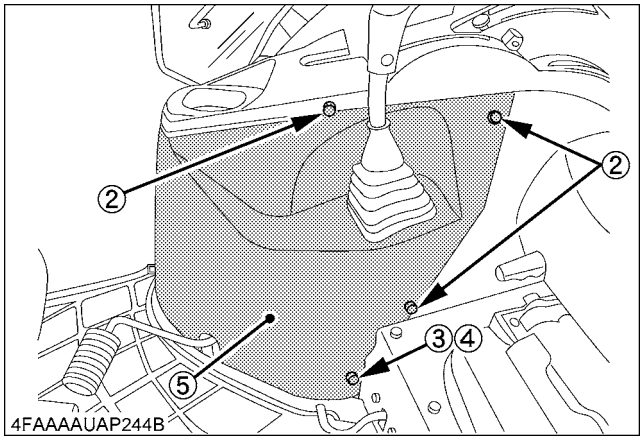


(1) 3rd function harness
(2) 3rd function PP hose
(3) Clamps (72427-3133-30)

NOTE :
- Clamp the 3rd function harness at the yellow-taped point.

14. Using the rivets and bolts first and then the console cover, secure the console cover in place.

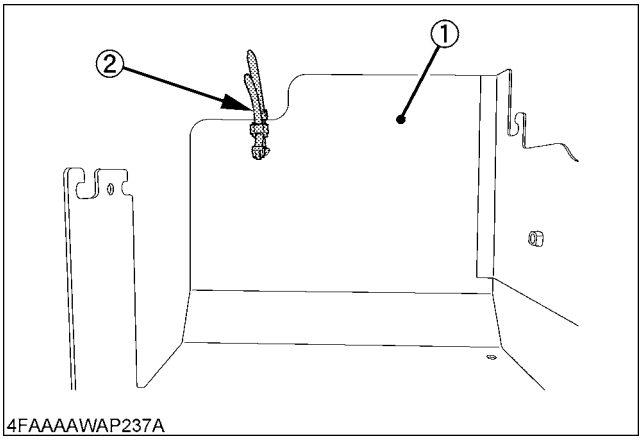




(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

◆ Valve cover section

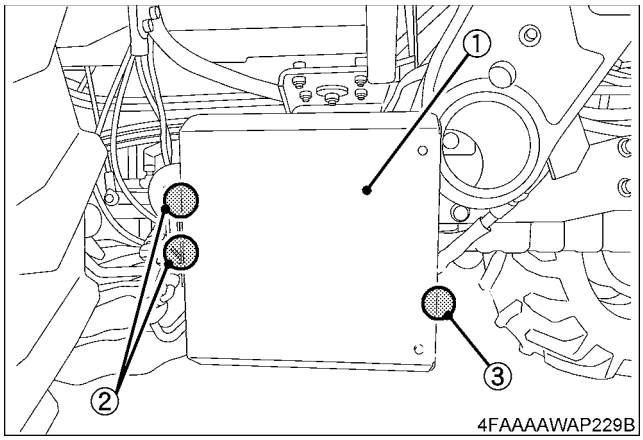
1. Attach the cross-shaped clamp on the valve cover.

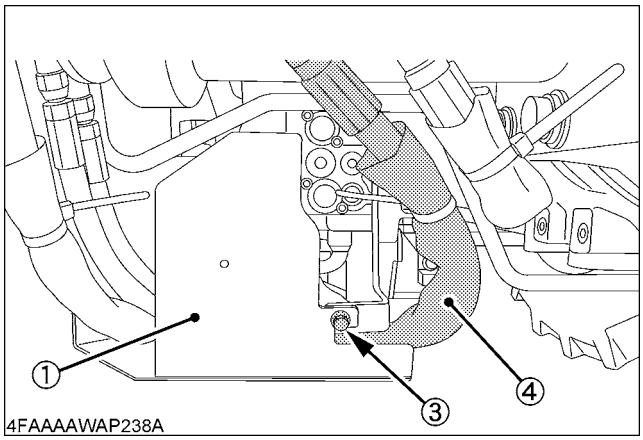


(1) Valve cover
(2) Clamp (7247-3133-30)

NOTE :
- Secure the clamp in position with its longer side.
- Temporarily fix the clamp for it to move freely while the hoses are finally fixed.

2. Loosen the bolts that fix the 3rd function accumulator assembly on the stay. Then secure the valve cover to the valve stay.

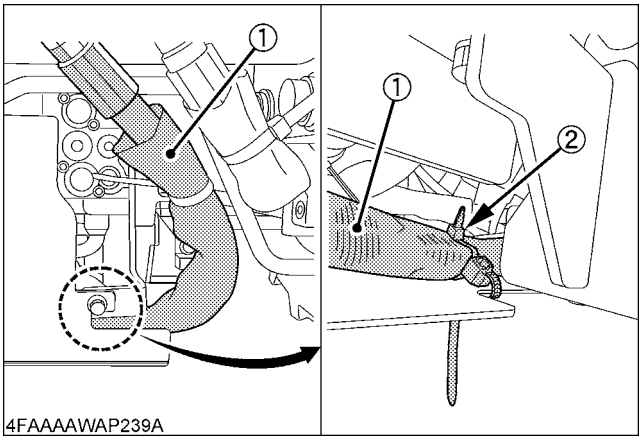




(1) Valve cover
(2) 2-M8 x 25 bolts with washer (original)
(3) M8 x 20 bolt with washers (original)
(4) Port A hose

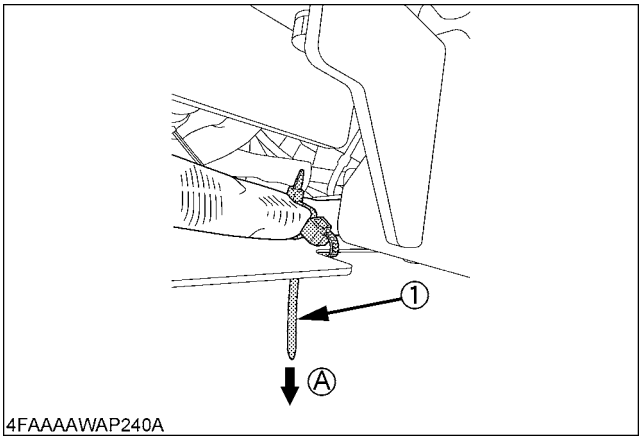
IMPORTANT :
- When setting up the valve cover, pay attention not to get the port A hose caught between the 3rd function valve stay and valve cover.

3. Secure the port A hose to the cross-shaped clamp on the valve cover.



(1) Port A hose
(2) Clamp (7247-3133-30)
(Already set up on the valve cover)

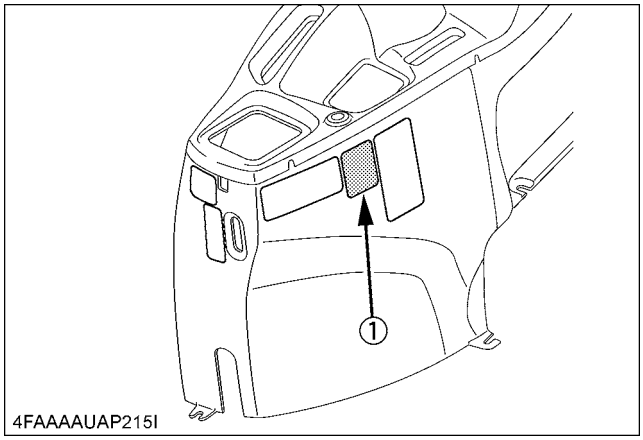
4. Finally fix the cross-shaped clamp tightly on the valve cover.

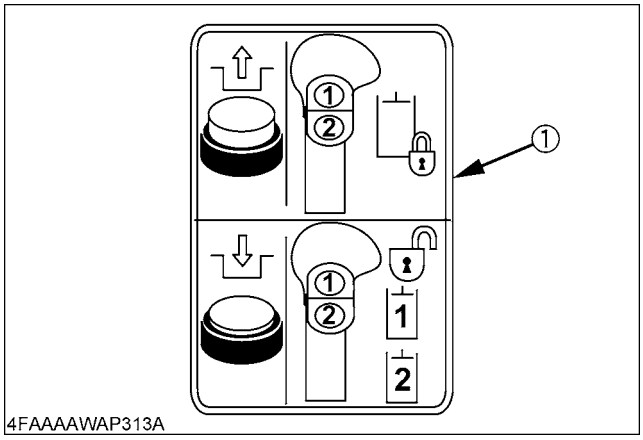


(1) Clamp (7247-3133-30) *(A) Pull downward.*

◆ Label section

1. Apply the label in position as shown below.



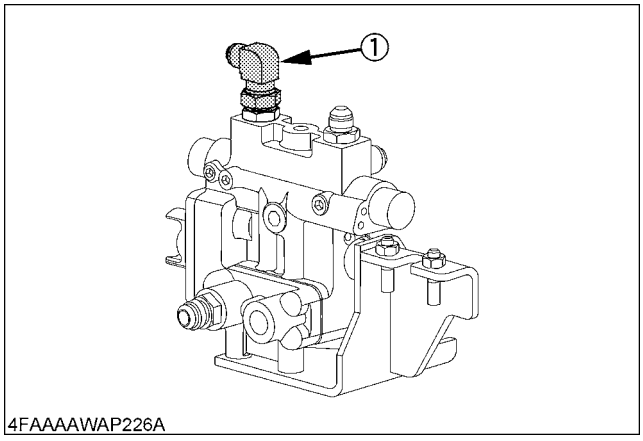


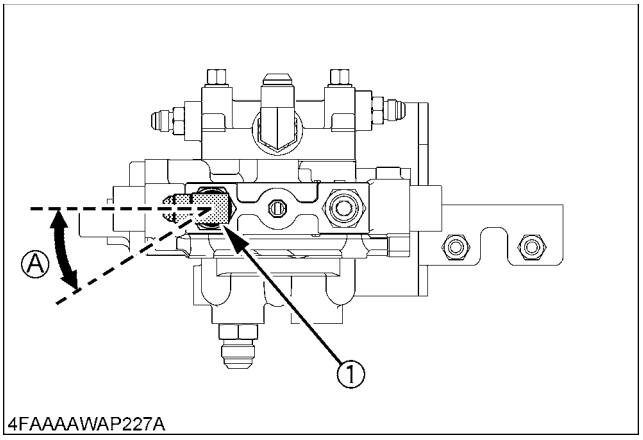
(1) Label

■Independent Circuit Type with Self-leveling Valve [M6873] (if equipped)

◆ Valve section

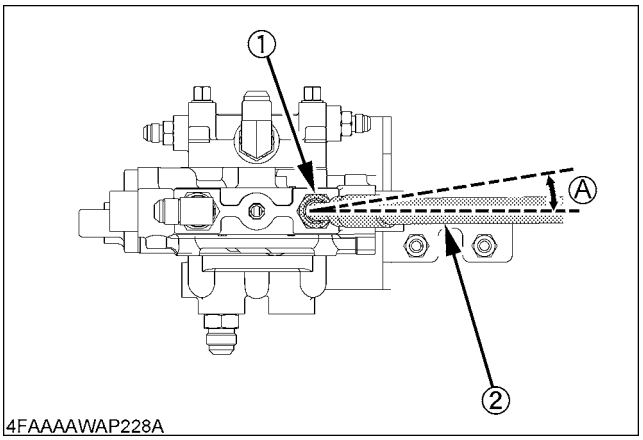
1. Connect the adapters to the 3rd function valve assembly as shown below.





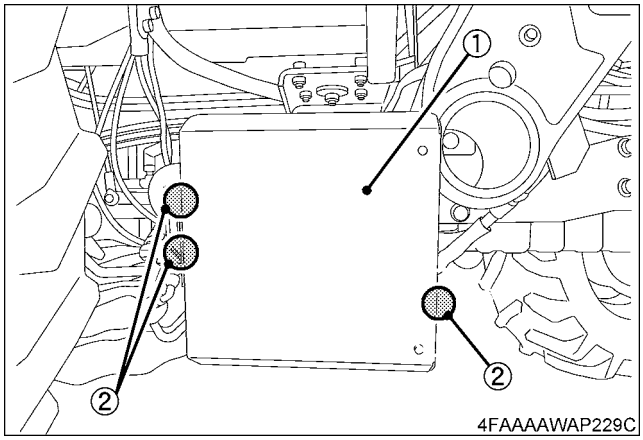
(1) Adapter (3/4-UNF) *(A) 0°to10°*

2. Connect the hose to the port B of the 3rd function valve.



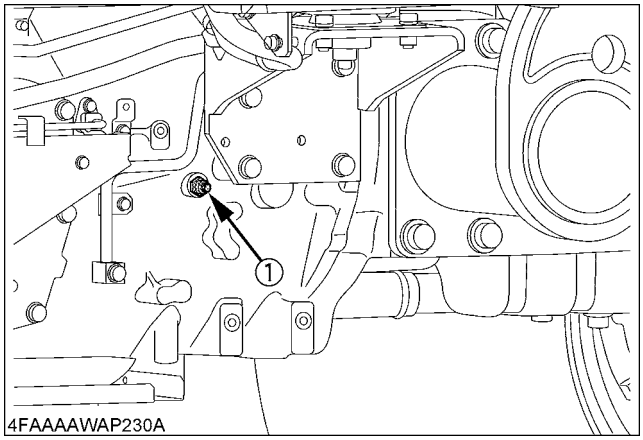
(1) Port B *(A) 0°to 5°*
(2) Port B hose
(Green: 660 mm (30.0 in.), 3/4-UNF)

3. Remove the valve cover, if attached in place.



(1) Valve cover
(2) 3-M8 x 20 bolts with washers

4. Remove the plug from the tractor and attach the adapter.

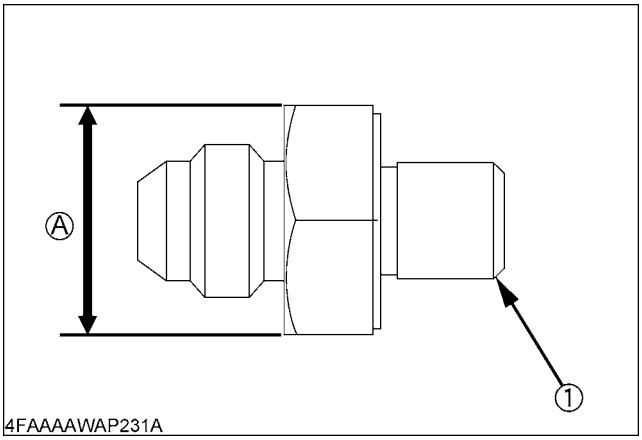


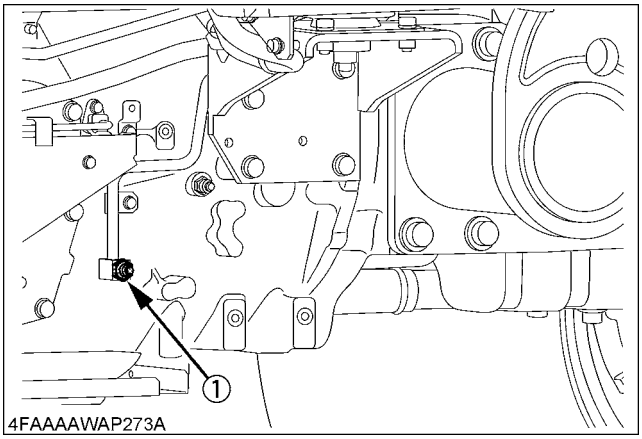
(1) Adapter (1/4-BSPT)

Tightening torque	15 N-m (1.6 kgf-m) (11.1 ft-lbs)

IMPORTANT :
- Before fitting the adapter, wrap the sealing tape 2 or 3 turns around it.

5. Remove the adapter from the tractor and fit the other adapter as shown below.
   Make sure the new copper packing in the kit fit to the adapter.

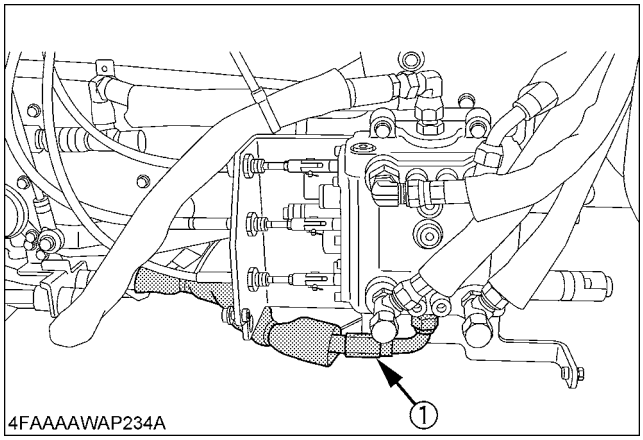




(1) Adapter (M12) *(A) 22 mm (0.87 in.)*

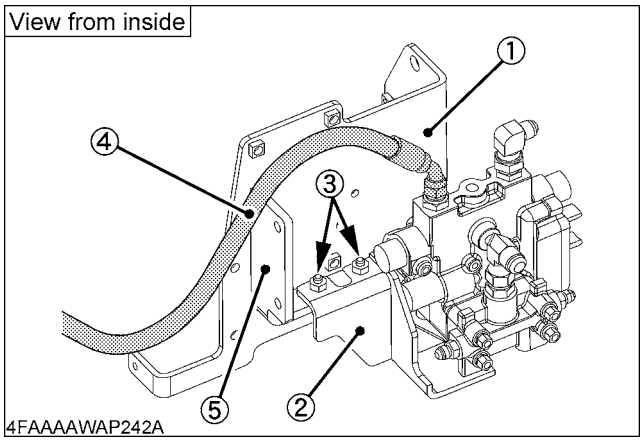
Tightening torque	32.4 N-m (3.3 kgf-m) (23.9 ft-lbs)

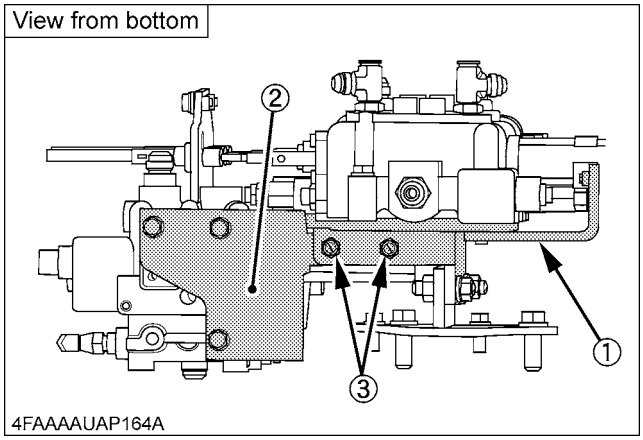
6. Remove the pump line hose.



(1) Pump line hose (545 mm (21.5 in.))

7. Attach the 3rd function valve assembly to the valve stay.

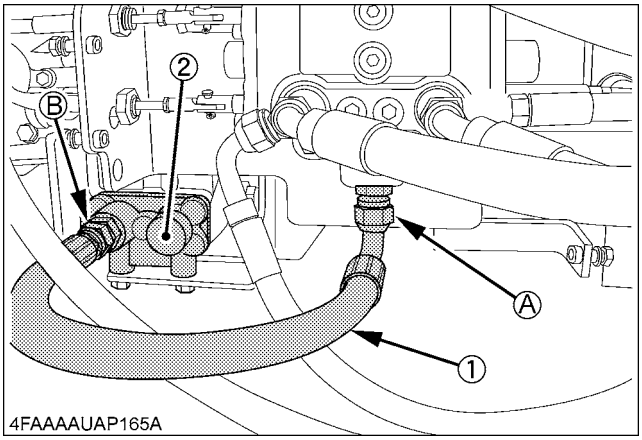




(1) Valve stay
(2) 3rd function valve assy
(3) 2-M10 spring washers
2-M10 nuts
(4) Port B hose
(5) Valve stay plate

NOTE :
- Pass the port B hose above the valve stay plate, as shown in the figure.

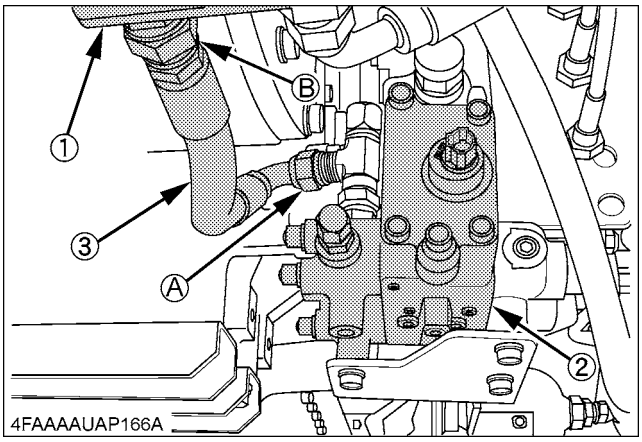
8. Connect the pump line hose removed in step 6 as shown below.



(1) Pump line hose (545 mm (21.5 in.), 7/8-UNF and 7/8-UNF) (original)
(2) 3rd function valve
(A) 90°side
(B) 0°side

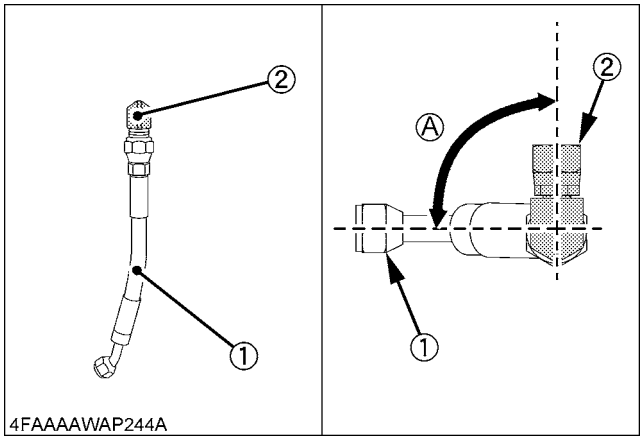
IMPORTANT :
- Adjust the assembling angle of the 90° side of the hose to keep the hose out of contact with its nearby parts.

9. Connect the hose to the pump ports of the tractor and 3rd function valve.



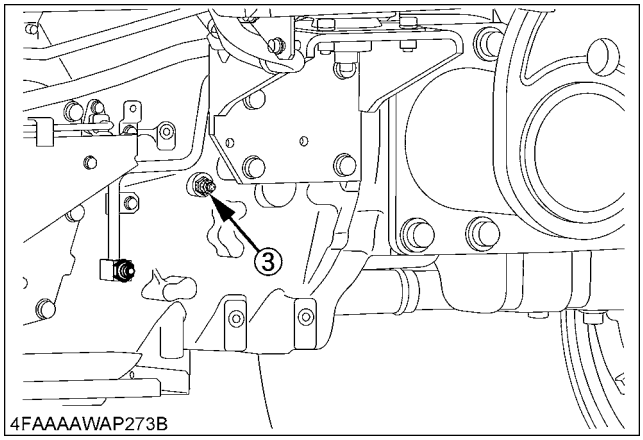
(1) Pump port of the tractor
(2) 3rd function valve
(3) Pump line hose
(330 mm (13.0 in.), 7/8-UNF and 7/8-UNF)
(A) 90°side
(B) 0°side

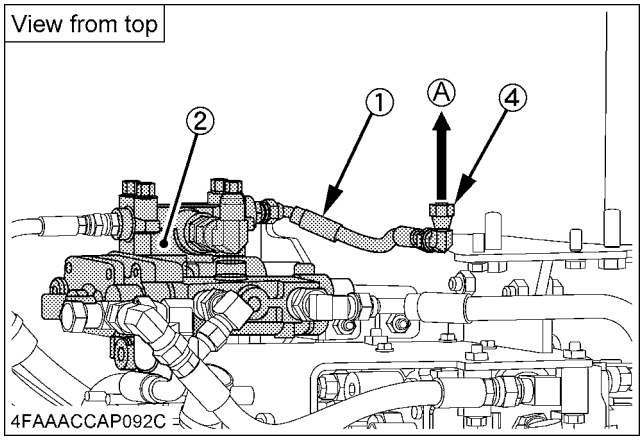
10. Attach the elbow adapter to the pilot tank line hose.



(1) Pilot tank line hose (230 mm (9.1 in.), 3/4-UNF) (A) 90°
(2) Elbow adapter (3/4-UNF)

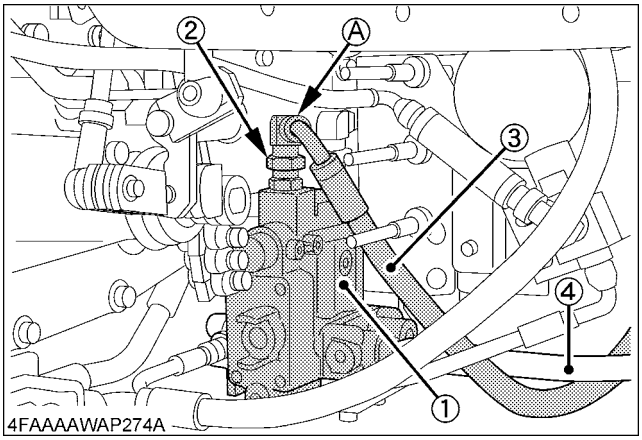
11. Connect the pilot tank line as shown in the following figure.





(1) Pilot tank line hose (230 mm (9.1 in.), 9/16-UNF)
(2) 3rd function valve
(3) Pilot tank port of the tractor
(4) Elbow adapter (9/16-UNF)
(A) Connect to the pilot tank port of the tractor

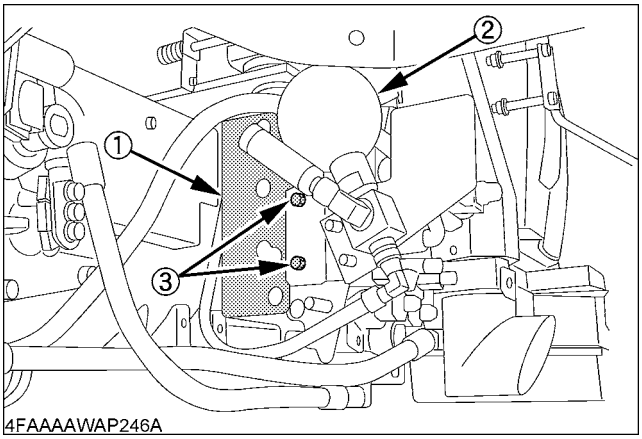
12. Connect the hose to the port B of the 3rd function valve.



(1) 3rd function valve
(2) Port A
(3) Port A hose (Gray: 1340 mm (52.8 in.), 3/4-UNF)
(4) Pump line hose
(A) 90° side

NOTE :
- Pass the hose below the 3 lever cables and the pump line hose.

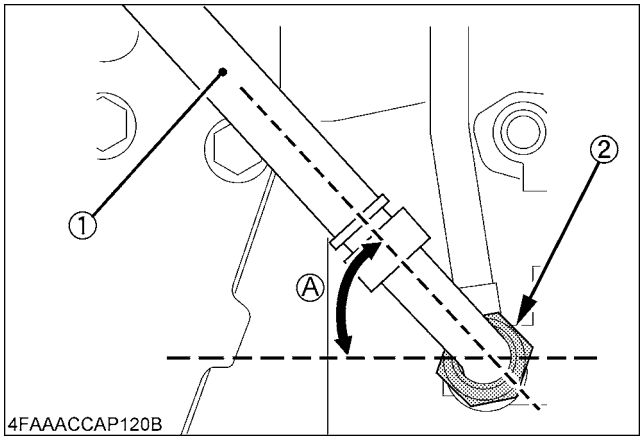
13. Attach the accumulator assembly for the 3rd function.

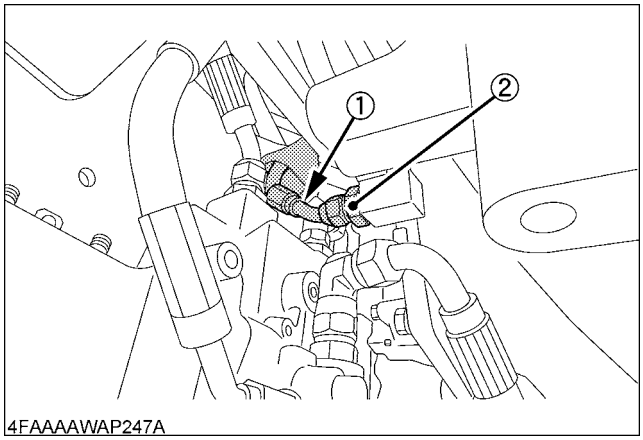


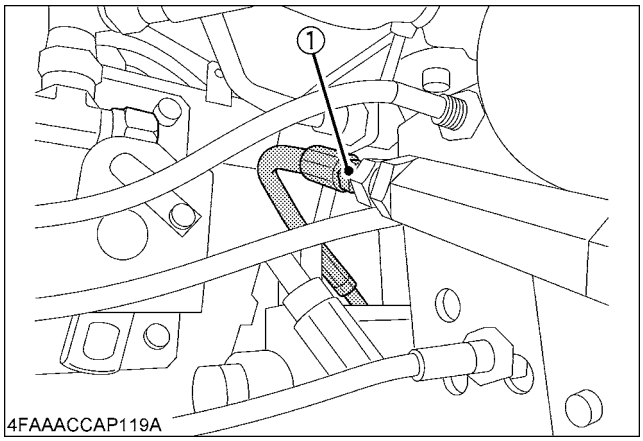
(1) Stay
(2) Accumulator assy
(3) 2-M8 x 25 bolts with washer

NOTE :
- Temporarily attach the bolts.

14. Connect the pilot pump line as shown below.



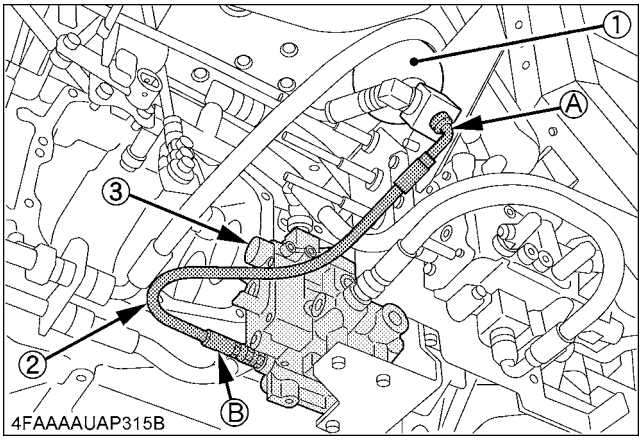


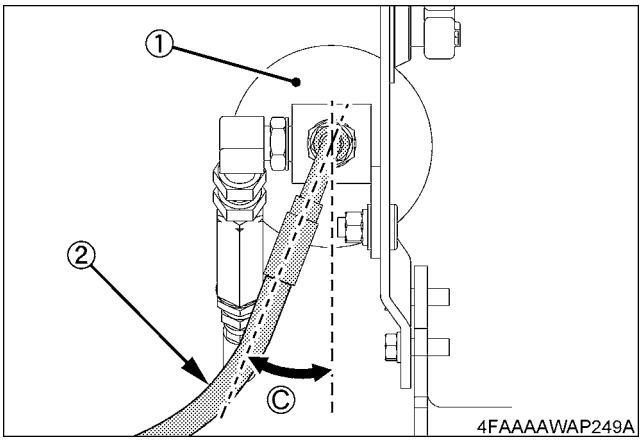


(1) Pilot pump line hose (325 mm (12.8 in.), 9/16-UNF and 9/16-UNF)
(2) Pilot pump port
(A) Angle to keep the hose out of contact with nearby parts.

NOTE :
- In case the pilot pump hose line contacts other parts, readjust the angle of hose fitting.

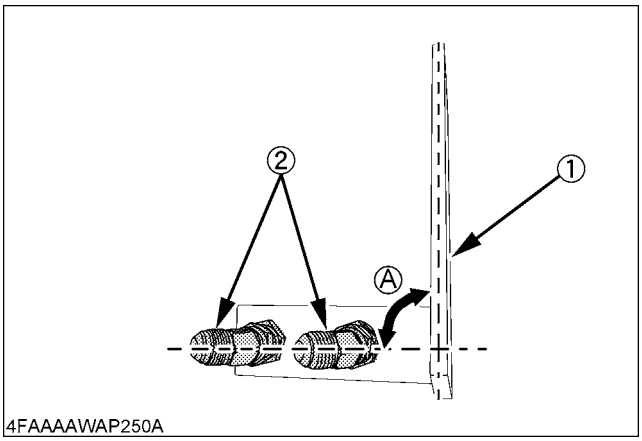
15. Connect the hydraulic hose as shown below.





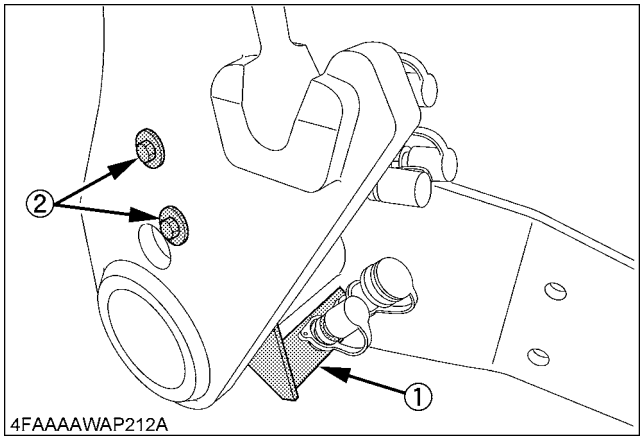
(1) 3rd function accumulator
(2) Hydraulic hose (500 mm (19.7 in.), 9/16-UNF and 9/16-UNF)
(3) 3rd function valve
(A) 90°side
(B) 0°side
(C) 10° to 20°

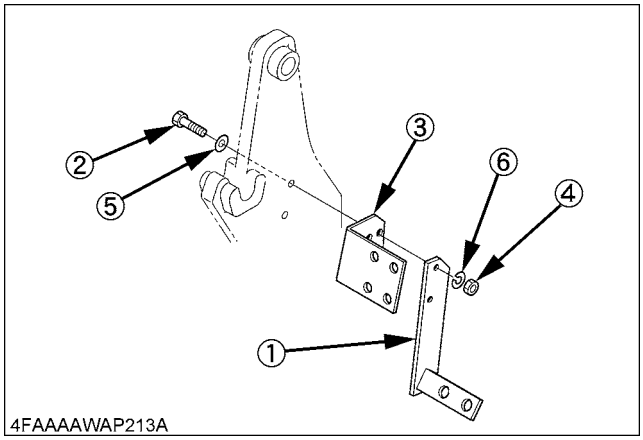
16. Attach the 45° adapters to the 3rd function coupler stay assembly.



(1) 3rd function coupler stay assy
(2) 2-45° adapters (3/4-UNF)
(A) 90° ±5°

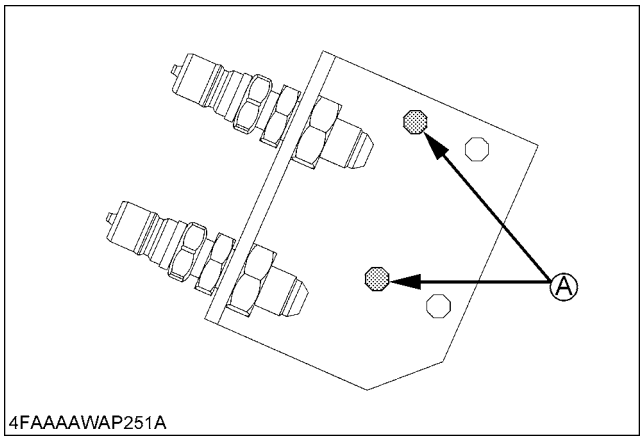
17. Fit the 3rd function coupler stay assembly as shown below.





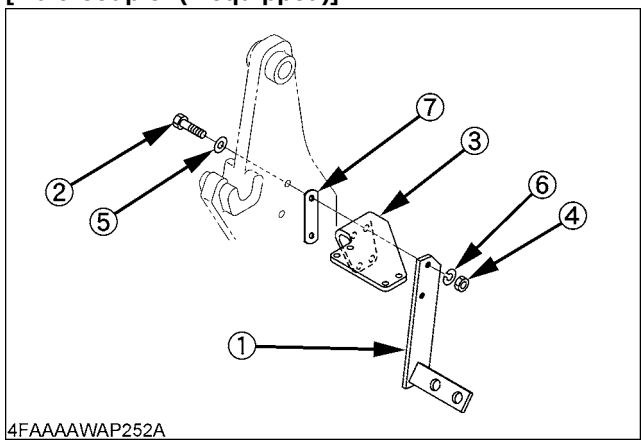
(1) 3rd function coupler stay assy
(2) 2-M10 x 60 bolts (original)
(3) Connector stay assy (original)
(4) 2-M10 nuts (original)
(5) 2-M10 plain washers (original)
(6) 2-M10 spring lock washers (original)

NOTE :
- To fix the connector stay assembly, use these holes as shown below.



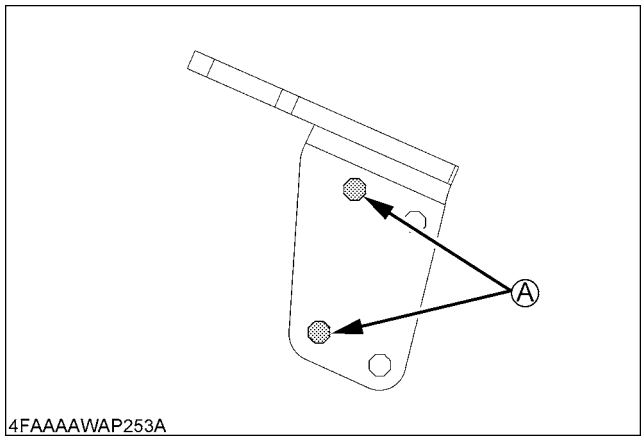
(A) Use these holes.

[Multi coupler (if equipped)]



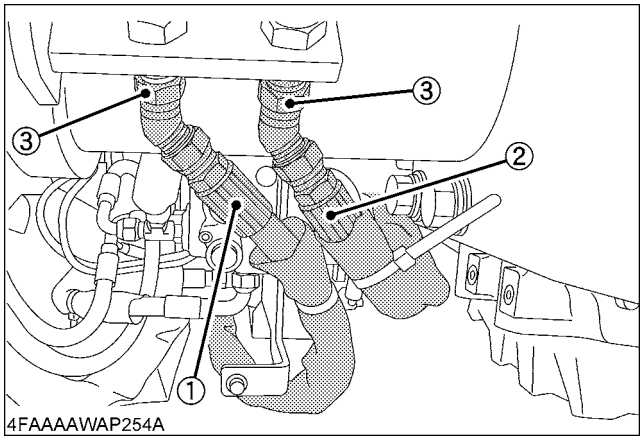
(1) 3rd function coupler stay assy
(2) 2-M10 x 60 bolts (original)
(3) Multi coupler stay assy (original)
(4) 2-M10 nuts (original)
(5) 2-M10 plain washers (original)
(6) 2-M10 spring lock washers (original)
(7) Spacer (original)

NOTE :
- To fix the multi coupler stay assembly, use these holes as shown below.



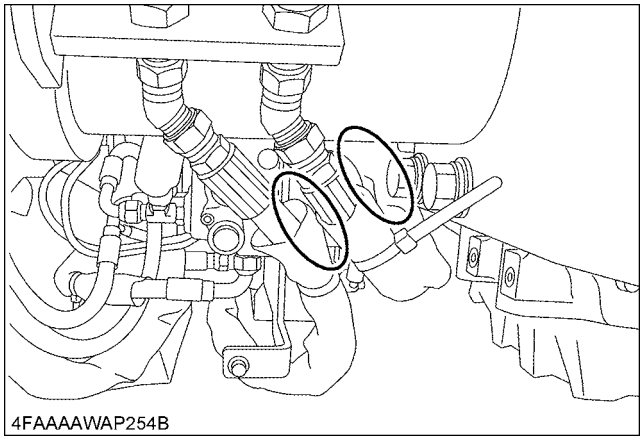
(A) Use these holes.

18. Connect the port A hose and port B hose to the 3rd function coupler stay.



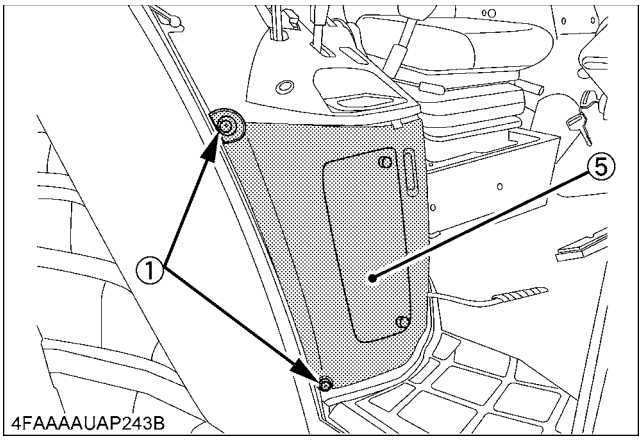
(1) Port A hose (Gray, 1340 mm (52.8 in.), 3/4-UNF)
(2) Port B hose (Green, 660 mm (30.0 in.), 3/4-UNF)
(3) 2-45° adapters (3/4-UNF)

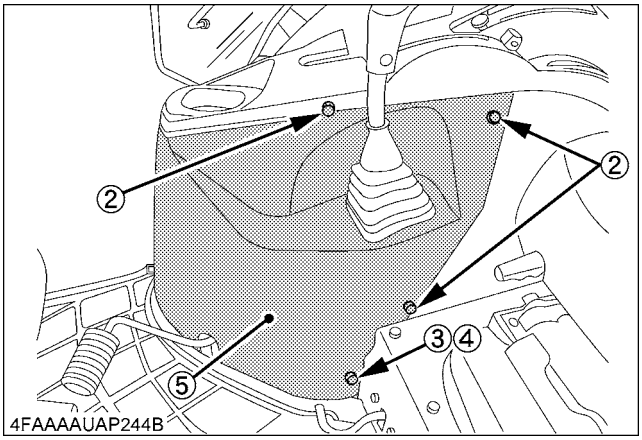
IMPORTANT :
- Check the hoses not for contact with the frames or bolts or not for their mutual tight contact. If contacted, readjust the adapter angles to avoid any contact.



◆ Boom section
Follow the instructions given in
"■ Independent Circuit Type with Standard Valve [M6873] (if equipped)".

◆ **Controller section**
1. Remove the rivets and bolts first and then the console cover.

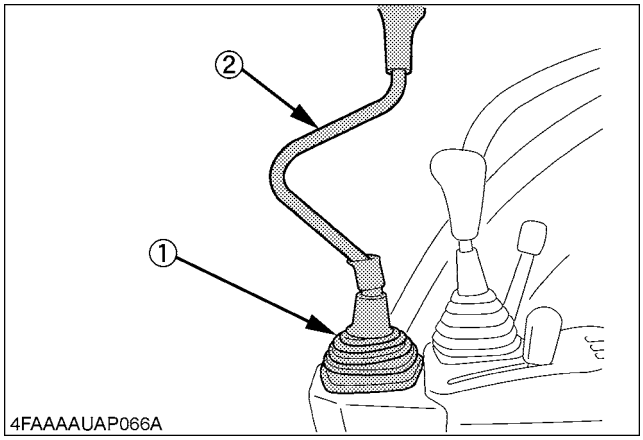


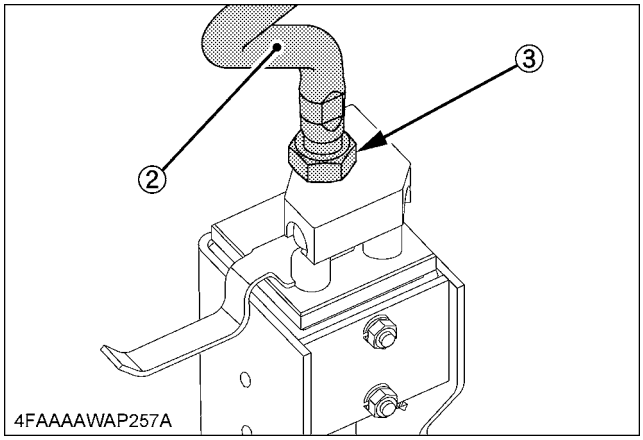


(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

NOTE :
- To draw out the rivets, loosen the screws first with a screwdriver.

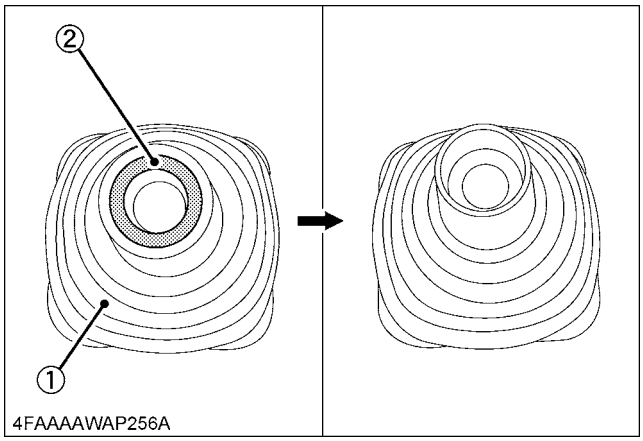
2. Slide the lever boot, loosen the nut and remove the control lever.





(1) Lever boot
(2) Control lever
(3) Nut

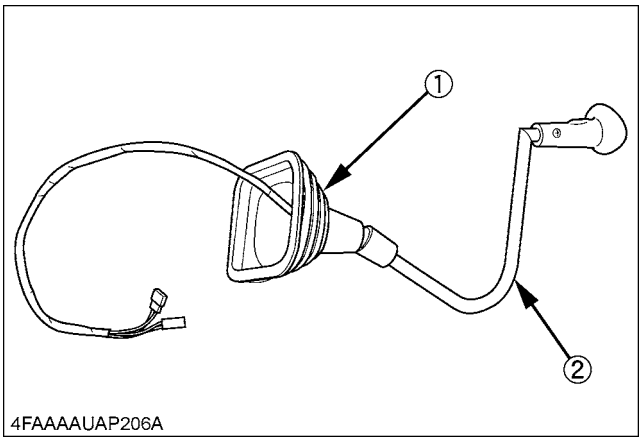
3. Cut the lip off the lever boot.



(1) Lever boot
(2) Lip

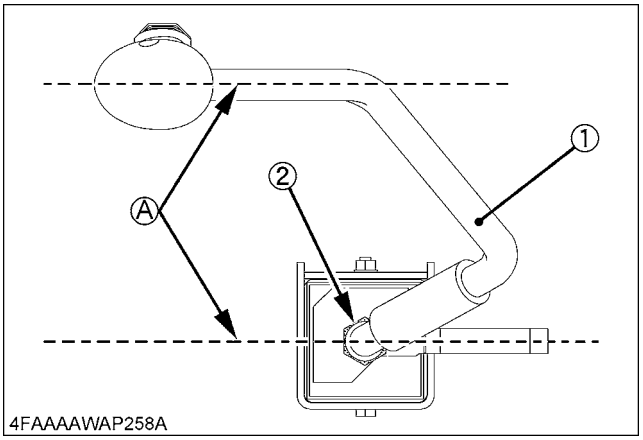
4. Pass the lever boot through the 3rd function control lever.

NOTE :
- Pass the harness through the boot.
- If the harness is difficult to go through the boot, apply a small amount of grease on the inside of the lever boot in advance, pass it carefully through the boot and finally wipe off the grease.



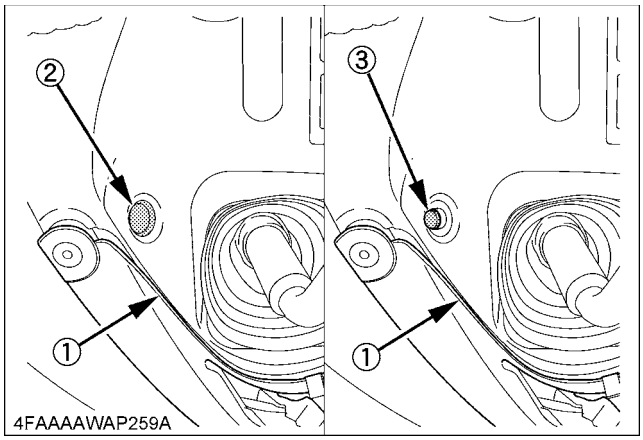
(1) Lever boot
(2) 3rd function control lever

5. Install the 3rd function control lever as shown below, and secure it with the nut.



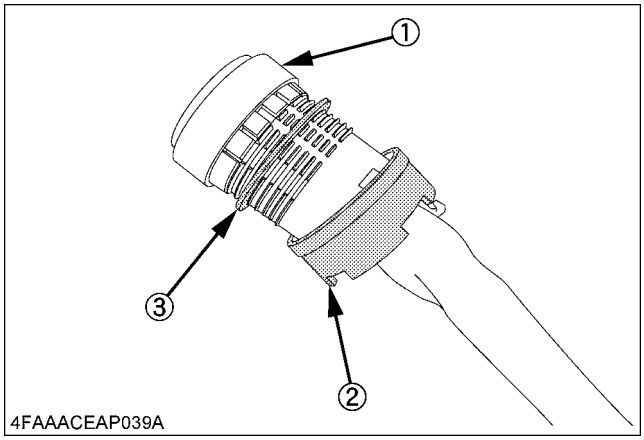
(1) 3rd function control lever
(2) M14 nut
(A) Parallel

6. Remove the plug from the console. Remove the plastic fastener from the 3rd function on/off switch, and attach the switch onto the console.



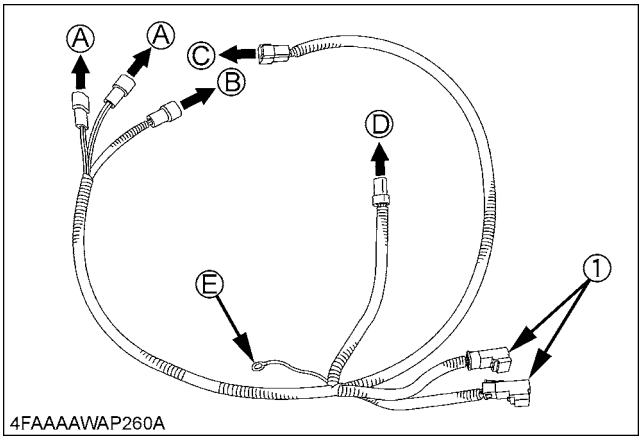
(1) Console
(2) Plug
(3) Switch

IMPORTANT :
- When removing the plastic fastener from the switch, remain the rubber ring on the switch.



(1) Switch
(2) Plastic fastener
(3) Rubber ring

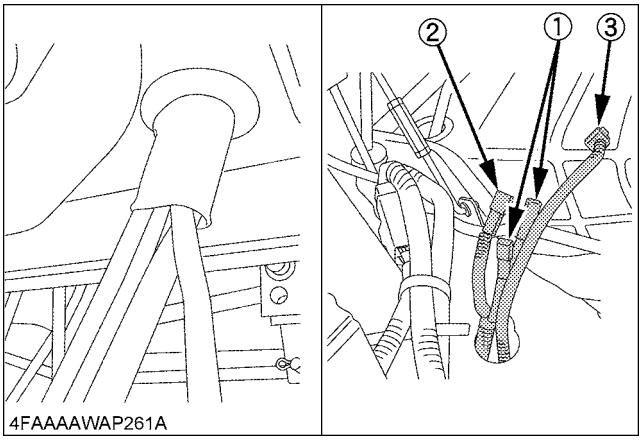
7. Connect the relays to the 3rd function harness.



(1) 2-Relays

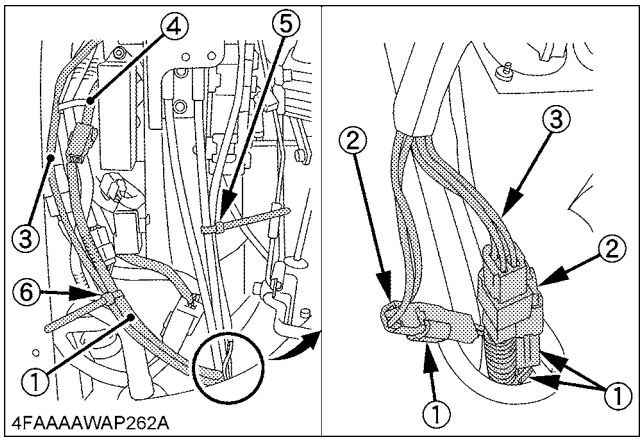
(A) To 3rd function control lever
(B) To ON/OFF switch
(C) To tractor harness
(D) To solenoid valve
(E) To earth

8. Pass the 3rd function harness through the cabling hole of the tractor step.



(1) Harness to 3rd function control lever
(2) Harness to ON/OFF switch
(3) Harness to tractor harness

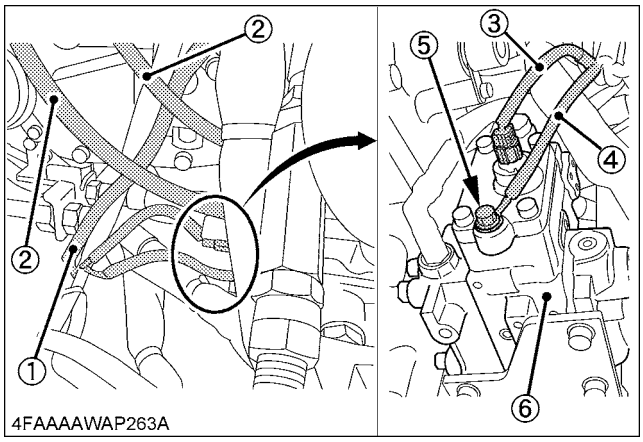
9. Connect the 3rd function harness to the 3rd function control lever harness, 3rd ON/OFF switch harness and tractor harness. Clamp them with the cord bands.



(1) 3rd function harness
(2) 3rd function control lever harness
(3) 3rd ON/OFF switch harness
(4) Tractor harness
(5) Cord band (140 mm (5.5 in.))
(Clamp with the lever cables)
(6) Cord band (140 mm (5.5 in.))
(Clamp with the tractor main harness)

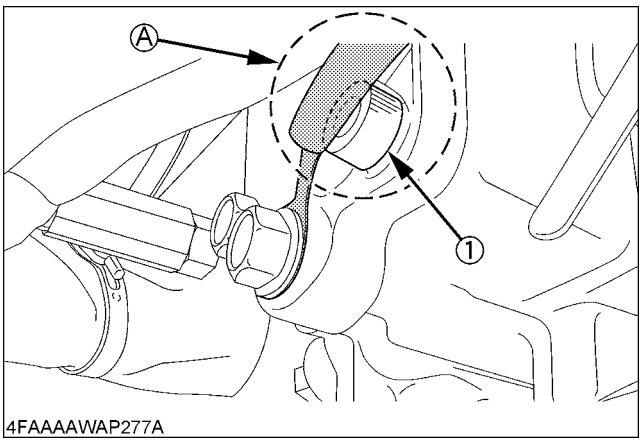
IMPORTANT :
- In connecting the 3rd function harness and 3rd function control lever harness, match the connector colors.
- With the harnesses secured with the cord bands, move the relevant levers and make sure well that no harness gets too tense nor stuck.

10. Pass the 3rd function harness behind the lever cables. Then connect the harness to the 3rd valve, as shown below.



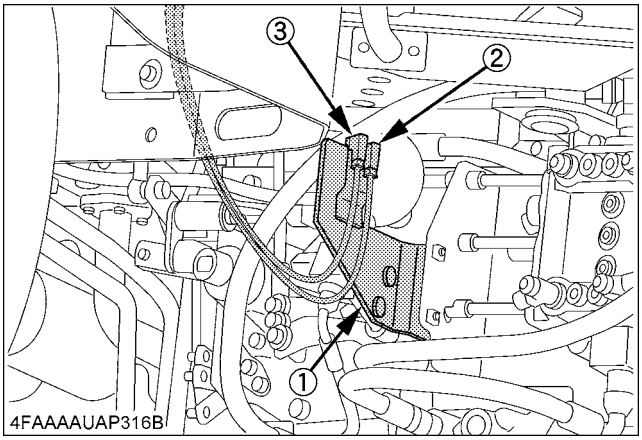
(1) 3rd function harness
(2) 2-Lever cable
(3) Harness to solenoid valve
(4) Harness (to earth)
(5) M8 bolt (earth bolt)
(6) 3rd function valve

IMPORTANT :
- Secure the earth harness in place. Adjust its angle beforehand, as required, not to run over the valve bolt as shown below.



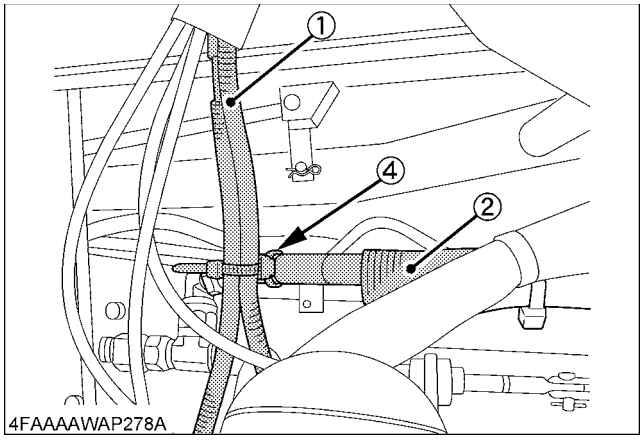
(1) Valve bolt
(A) Cable running over the bolt (Not good)

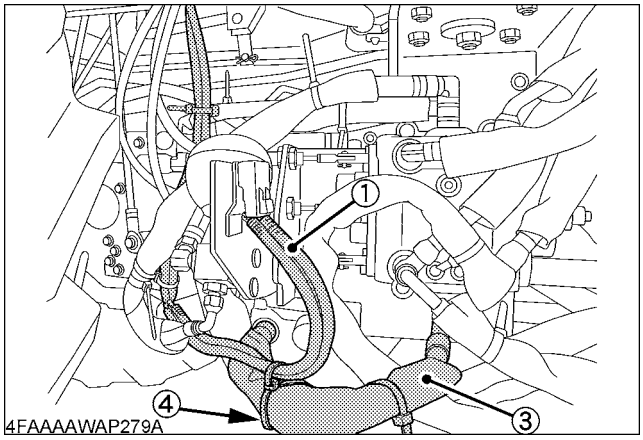
11. Put the relays to the relay stay.



(1) Relay stay
(2) Relay (with white connector)
(3) Relay (with black connector)

12. Using the cross-shaped clamps, secure the 3rd function harness to the hoses, as shown below.

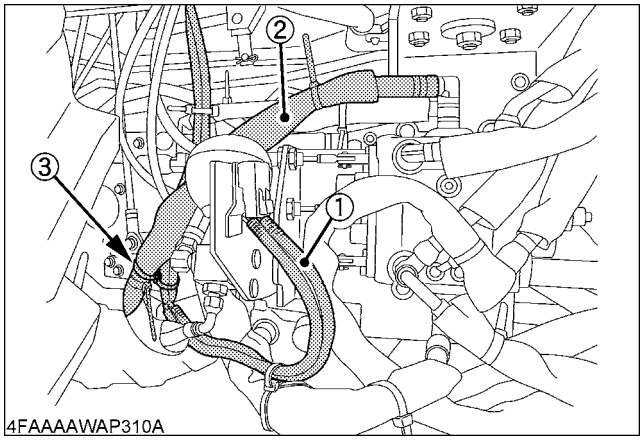




(1) 3rd function harness
(2) Loader valve tank hose
(3) 3rd function valve to loader valve pump hose
(4) 2-Clamps (72427-3133-30)

NOTE :
- Clamp the 3rd function harness at the white-taped point.

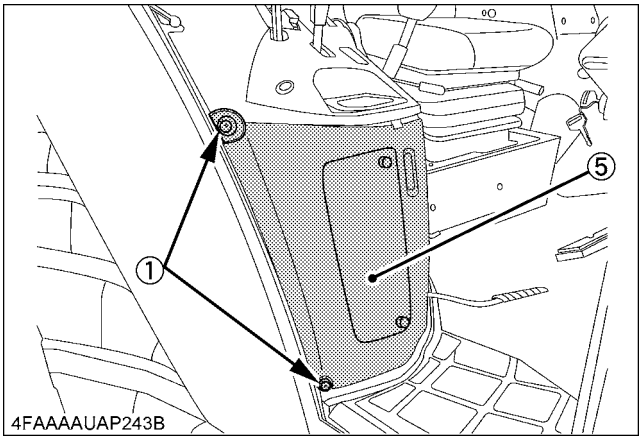
13. Using the cross-shaped clamp, secure the 3rd function harness to the hoses, as shown below.

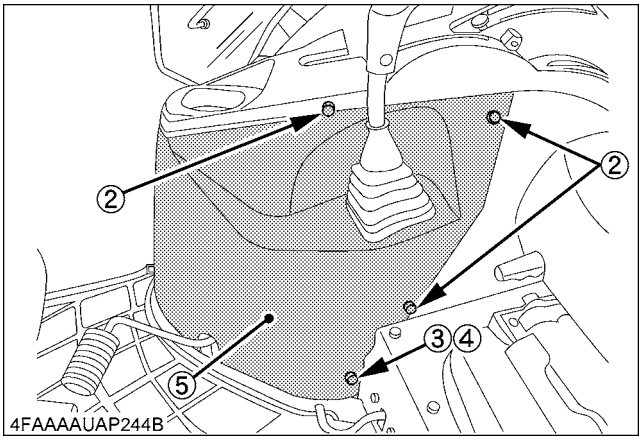


(1) 3rd function harness
(2) 3rd function PB hose
(3) Clamps (72427-3133-30)

NOTE :
- Clamp the 3rd function harness at the yellow-taped point.

14. Using the rivets and bolts first and then the console cover, secure the console cover in place.





(1) 2-Rivets
(2) 3-Bolts with washers (with cap)
(3) Flange bolt
(4) Plain washer
(5) Console cover

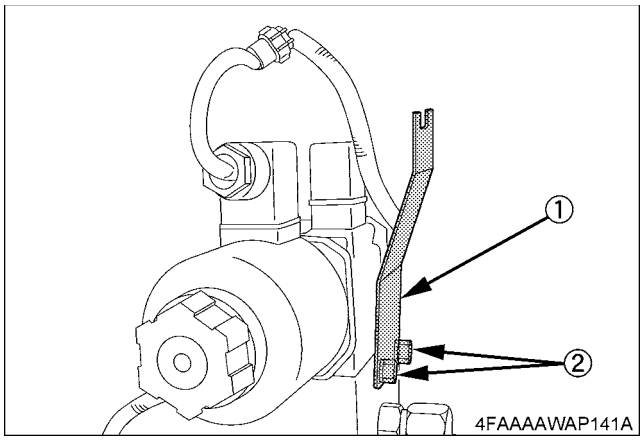
◆ Valve cover section
Follow the instructions given in "■ Independent Circuit Type with Standard Valve [M6873] (if equipped)".

◆ Label section
Follow the instructions given in "■ Independent Circuit Type with Standard Valve [M6873] (if equipped)".

■Independent Circuit Type [M7991, M7992] (if equipped)

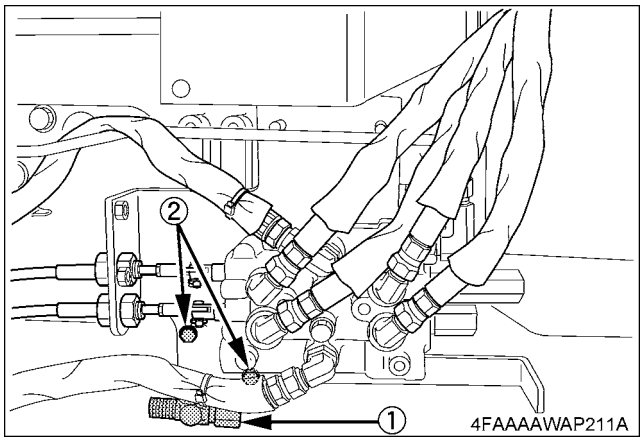
◆ Valve section

1. Attach the relay stay to the solenoid valve assy.



(1) Relay stay (Solenoid valve assy)
(2) 2-M8 x 16 bolts

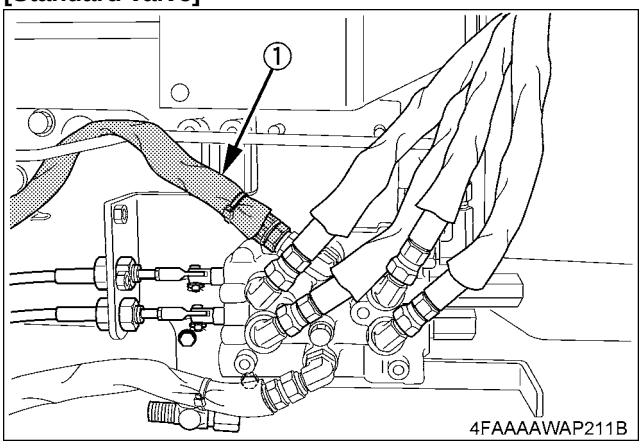
2. Assemble the following parts as shown below.



(1) Solenoid valve assy
(2) 2-M10 x 30 bolts with washers

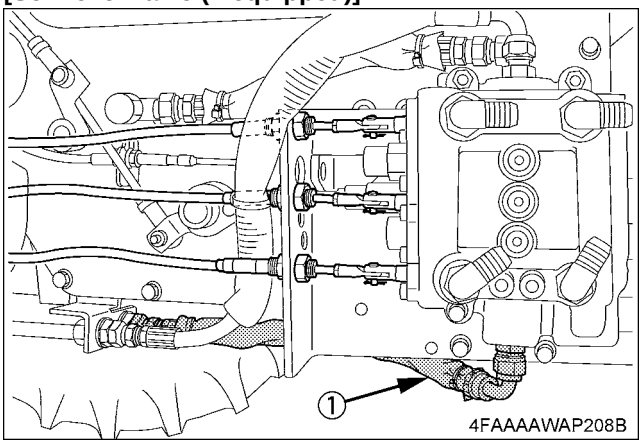
3. Disconnect the pump line hose.

[Standard valve]



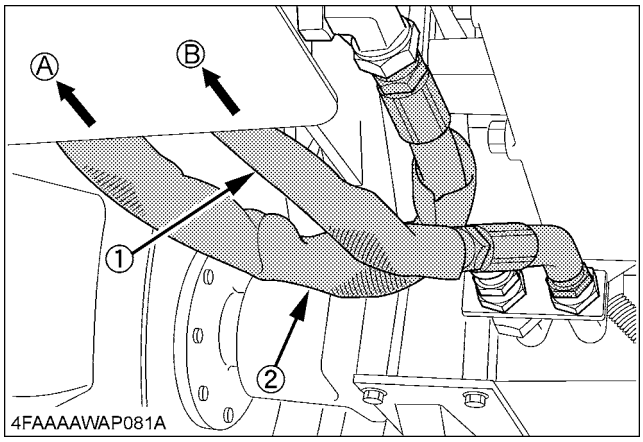
(1) Pump line hose

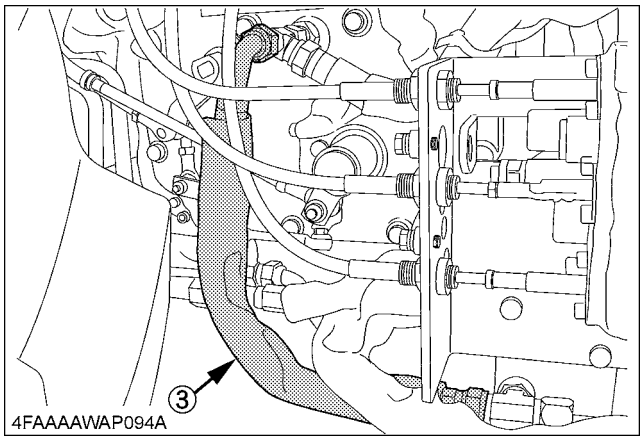
[Self-level valve (if equipped)]



(1) Pump line hose

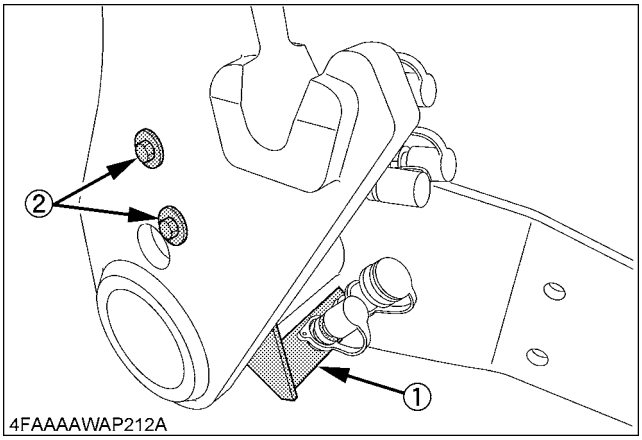
4. Assemble the following parts as shown below.

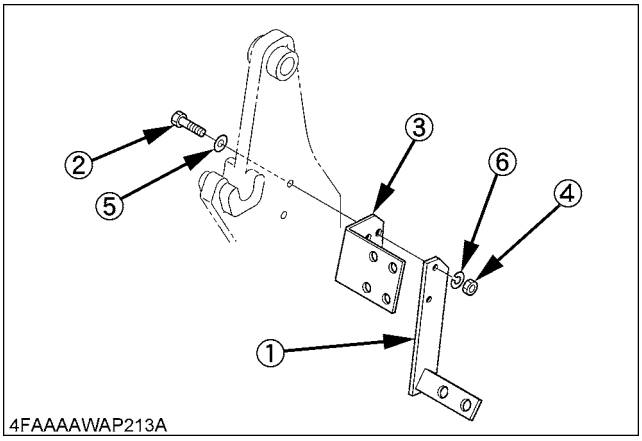




(1) Pump line hose 1 (300 mm (11.8 in.), 7/8-UNF and 7/8-UNF)
(2) Pump line hose 2
(For standard valve: 710 mm (28.0 in.), 3/4-UNF and 7/8-UNF)
(For self-level valve: 570 mm (22.4 in.), 3/4-UNF and 7/8-UNF)
(3) Tank hose (460 mm (18.1 in.), 7/8-UNF and 7/8-UNF)

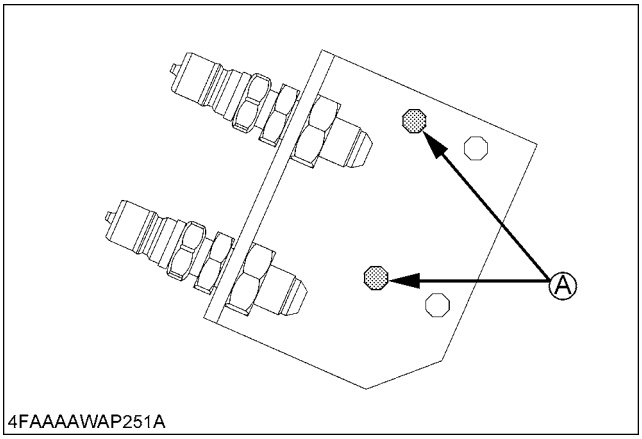
5. Fit the coupler stay assembly as shown below.





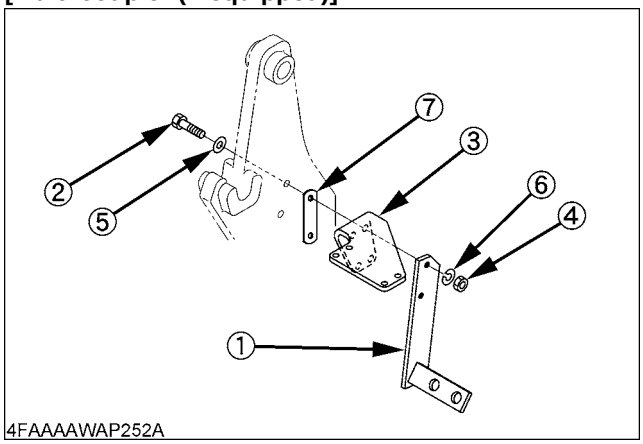
(1) Coupler stay assy
(2) 2-M10 x 60 bolts (original)
(3) Connector stay assy
(4) 2-M10 nuts (original)
(5) 2-M10 plain washers (original)
(6) 2-M10 spring lock washers (original)

NOTE :
- To fix the connector stay assembly, use these holes as shown below.



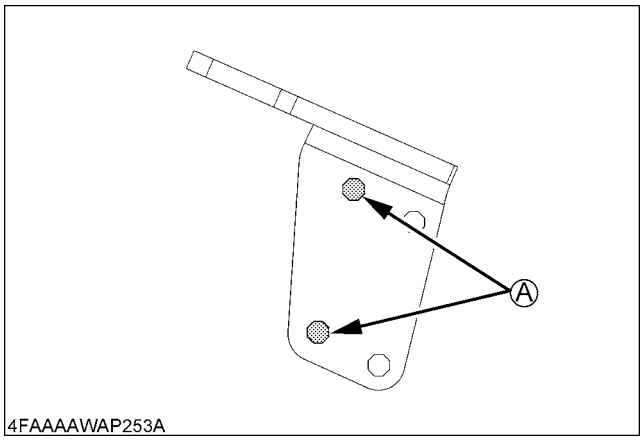
(A) Use these holes.

[Multi coupler (if equipped)]



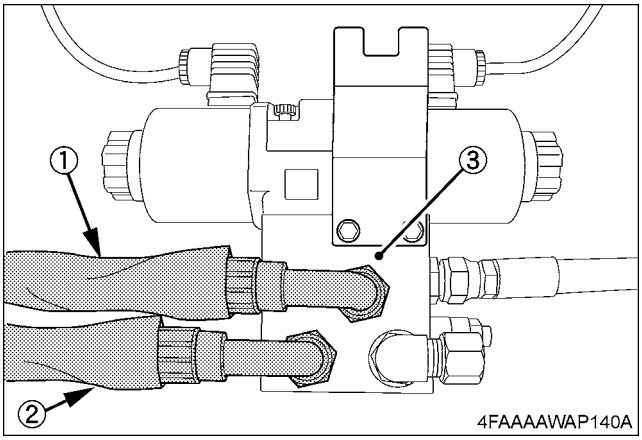
(1) 3rd function coupler stay assy
(2) 2-M10 x 60 bolts (original)
(3) Multi coupler stay assy (original)
(4) 2-M10 nuts (original)
(5) 2-M10 plain washers (original)
(6) 2-M10 spring lock washers (original)
(7) Spacer (original)

NOTE :
- To fix the multi coupler stay assembly, use these holes as shown below.



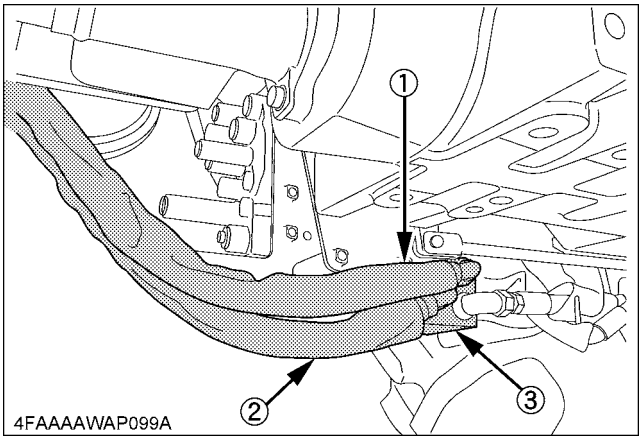
(A) Use these holes.

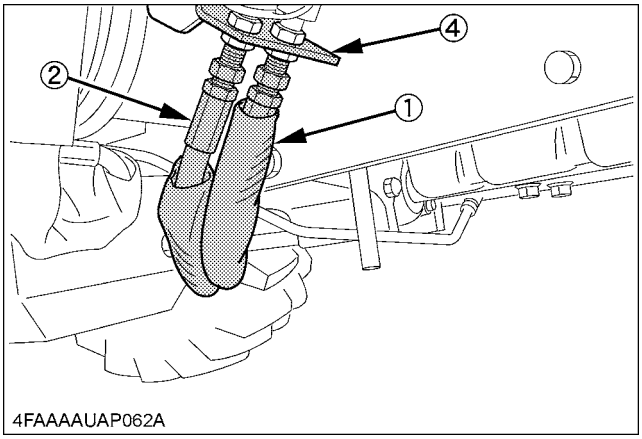
6. Connect the hydraulic hose A-1 and hydraulic hose A-2 to the solenoid valve assembly.



(1) Hydraulic hose A-1 (648 mm (25.5 in.), 7/8-UNF)
(2) Hydraulic hose A-2 (648 mm (25.5 in.), 7/8-UNF)
(3) Solenoid valve assy

7. Connect Hydraulic hose A-1 and Hydraulic hose A-2 to coupler stay assembly.



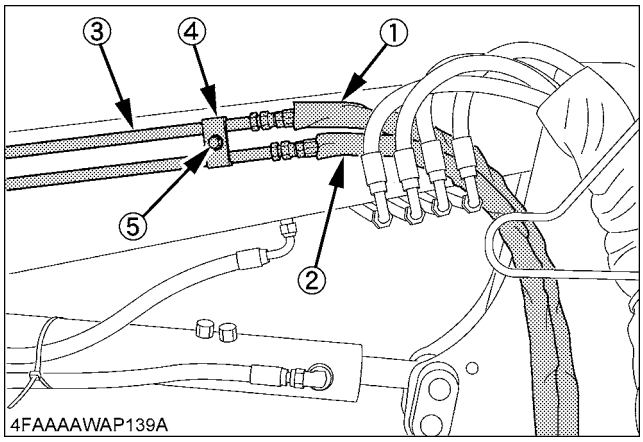


(1) Hydraulic hose A-1 (3/4-UNF)
(2) Hydraulic hose A-2 (3/4-UNF)
(3) Solenoid valve assy
(4) Coupler stay assy

NOTE :
- When connecting, be careful not to interfere the brake link.

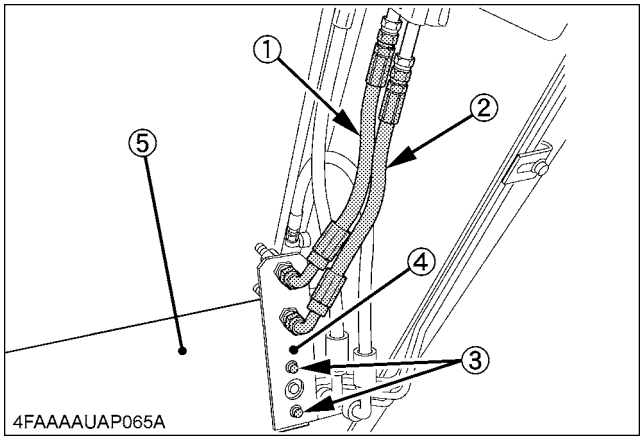
◆ Boom section

1. Install tubes to the boom and install the hydraulic hoses to the tubes.



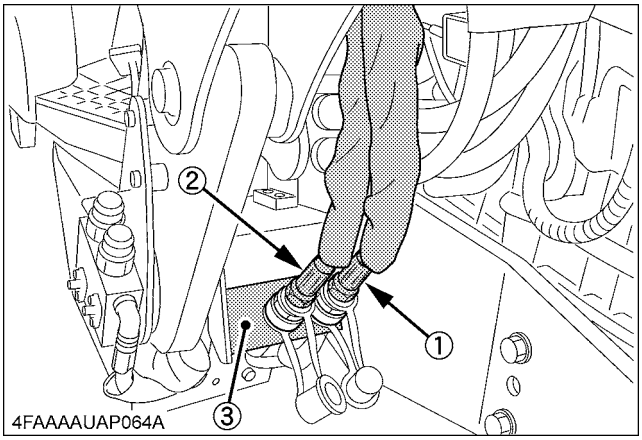
(1) Hydraulic hose mid-1 (with male coupler) (3/4-UNF)
(2) Hydraulic hose mid-2 (with female coupler) (3/4-UNF)
(3) 2-Tubes
(4) 2-Tube stays
(5) 2-M8 x 35 bolts
2-Collars

2. Remove the M8 bolts from the cover.
   Using the M8 bolts contained in the kit, secure the stay (provided with the hydraulic hose joint) and the cover together in position.
3. Connect the hydraulic hose hitch 1 and hydraulic hose hitch 2 between the pipe and hitch stay assembly.



(1) Hydraulic hose hitch-1
(2) hydraulic hose hitch-2
(3) 2-M8 x 40 bolts
(4) Stay
(5) Cover

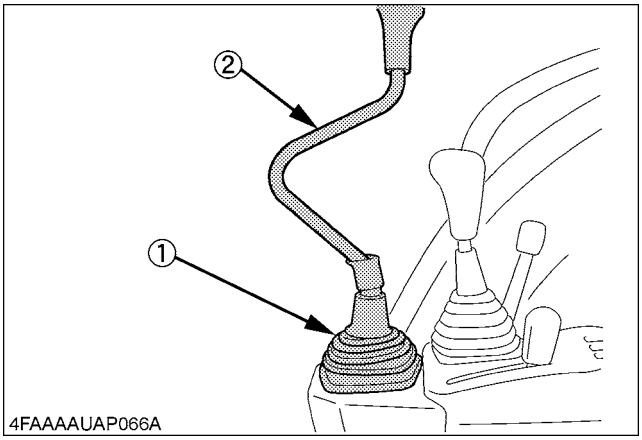
4. Connect the hydraulic hoses to the coupler stay assy.



(1) Hydraulic hose mid-1 (with male coupler)
(2) Hydraulic hose mid-2 (with female coupler)
(3) Coupler stay assy

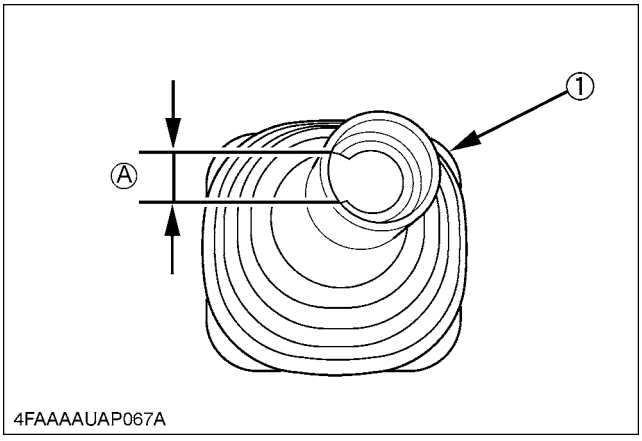
◆ Controller section

1. Remove the lever boot first and then the lever.



(1) Lever boot
(2) Control lever

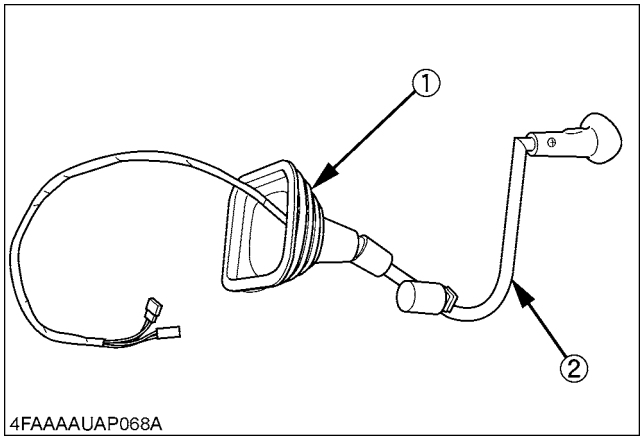
2. Cut the lever boot as shown below.



(1) Lever boot *(A) 15 mm (0.6 in.)*

3. Pass the lever boot through the 3rd function control lever, and attach the 3rd function control lever to the tractor.

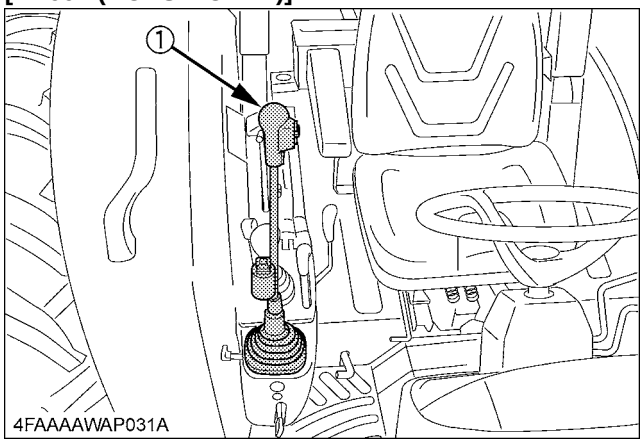
NOTE :
- Pass the harness through the cut opening of the boot.



(1) Lever boot
(2) 3rd function control lever

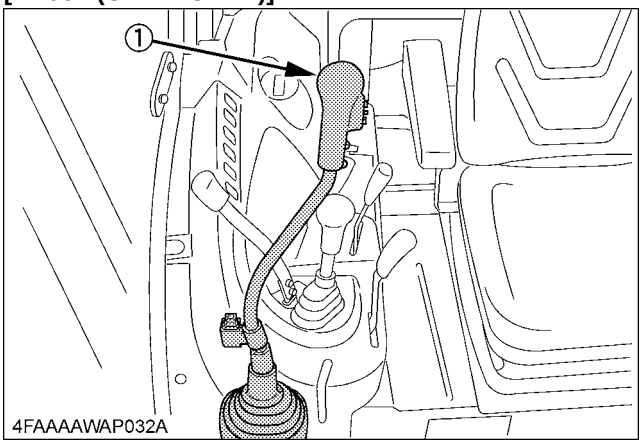
NOTE :
- Install the lever upright in position.

[M7991 (ROPS MODEL)]



(1) 3rd function control lever

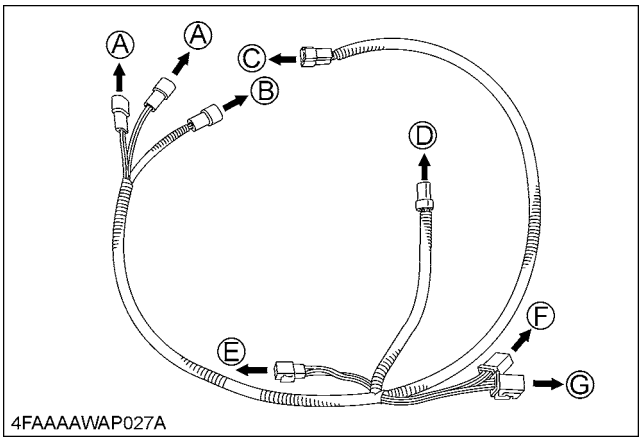
[M7992 (CAB MODEL)]



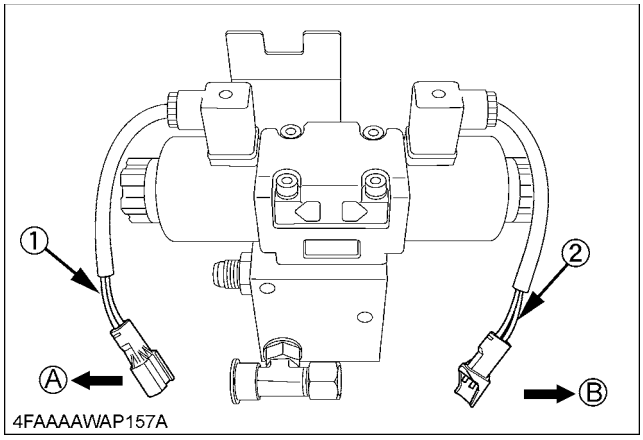
(1) 3rd function control lever

4. Attach the relay to the wire harness, and connect the wire harness to the tractor and solenoid valve harness.

IMPORTANT :
- Connect the wire harness couplers of the 3rd function control lever to their respective same-color couplers.

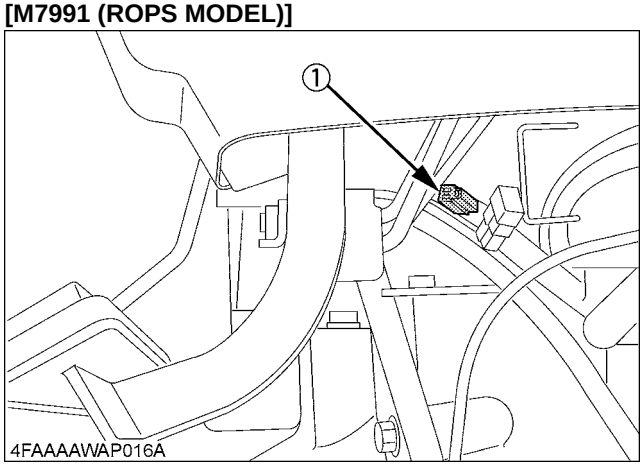


(A) To 3rd function control lever
(B) To ON/OFF switch
*(C) To tractor harness **[M7991]***
*To additional harness **[M7992]***
(D) To solenoid valve harness-1
(E) To solenoid valve harness-2
(F) To relay
(G) To relay



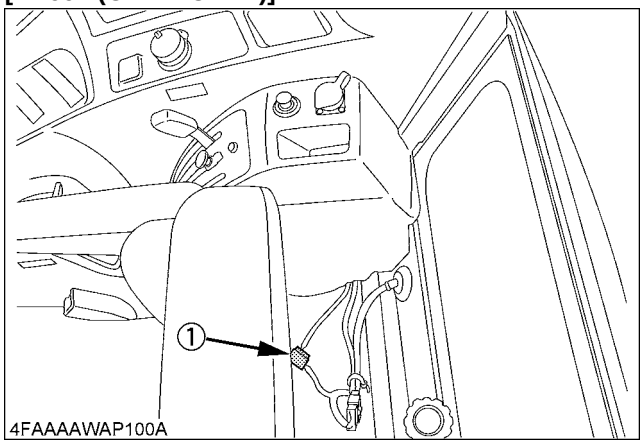
(1) Solenoid valve harness-1 *(A) Rear of tractor*
(2) Solenoid valve harness-2 *(B) Front of tractor*

[M7991 (ROPS MODEL)]



(1) Tractor harness

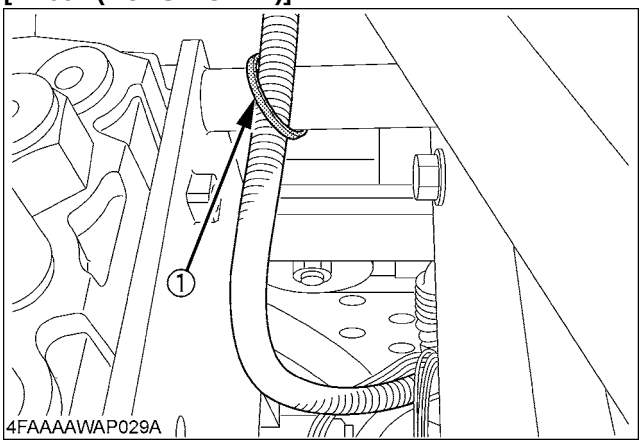
[M7992 (CAB MODEL)]



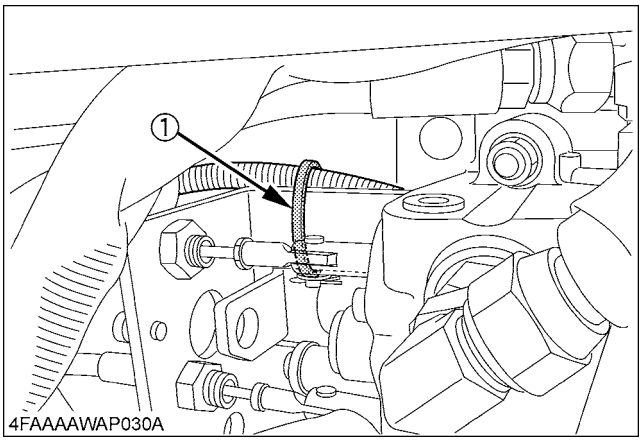
(1) Tractor harness

5. Clamp the wire harness as shown below.

[M7991 (ROPS MODEL)]

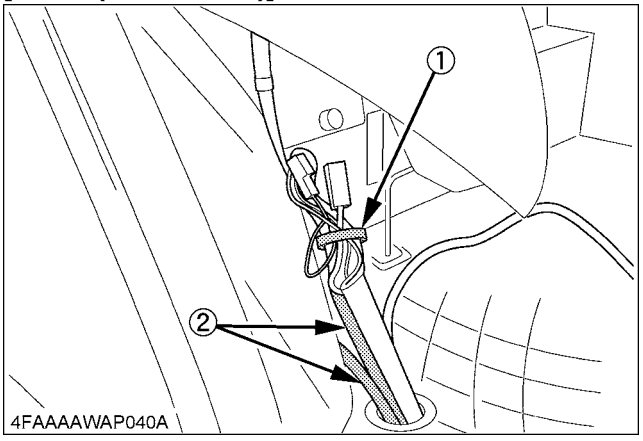


(1) Clamp (cord band)



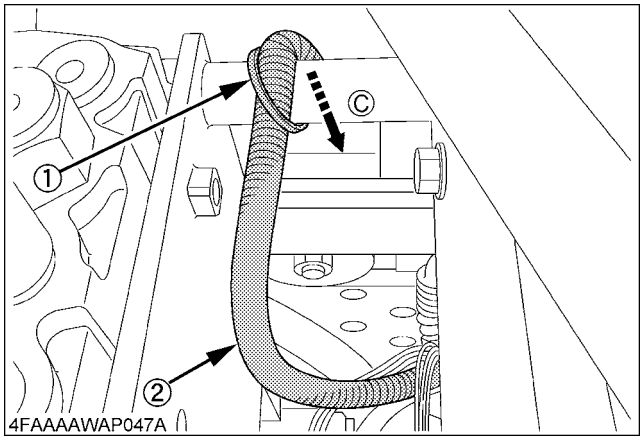
(1) Clamp (cord band)

[M7992 (CAB MODEL)]

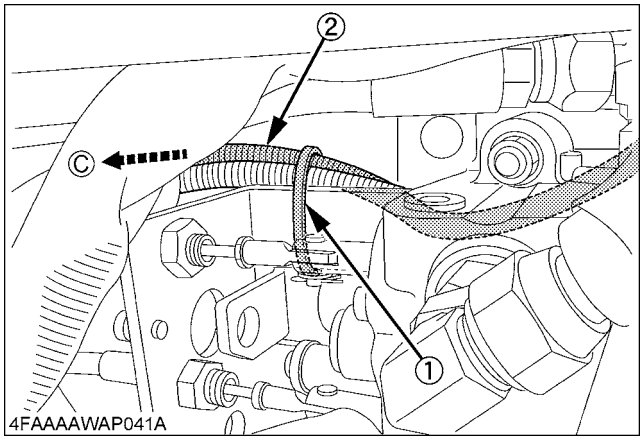


(1) Clamp (cord band)
(2) Controller cable

Pass the wire harness along with its coupler facing the back of the tractor.

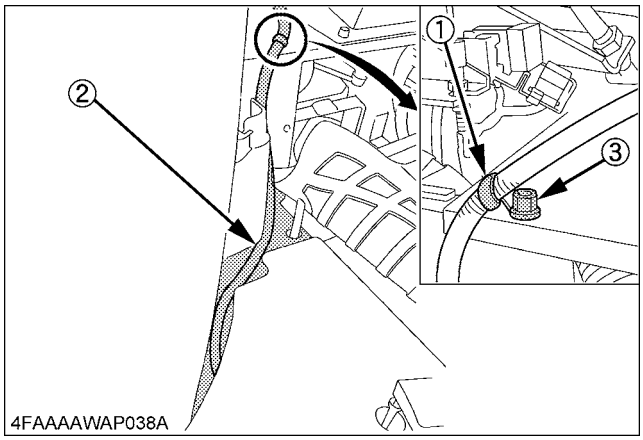


(1) Clamp (cord band) *(C) To additional harness*
(2) Wire harness



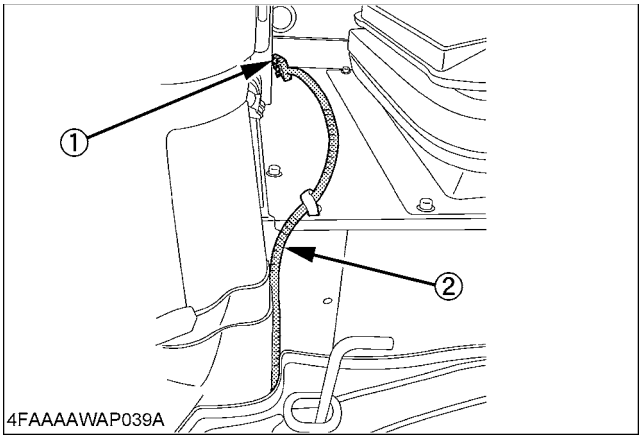
(1) Clamp (cord band) *(C) To additional harness*
(2) Wire harness

Put an additional harness in the interior trim clearance. Remove the bolt and clamp the harness.



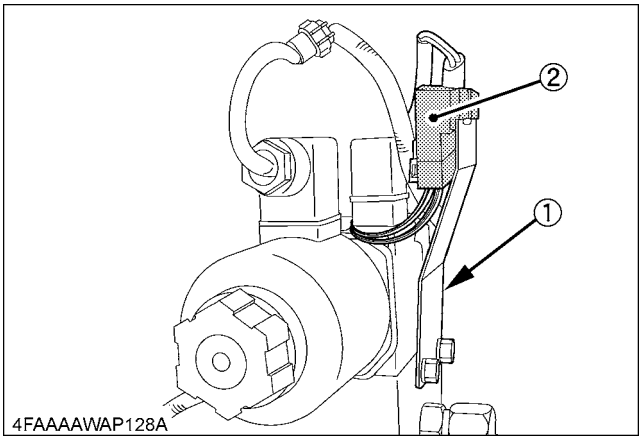
(1) Clamp (cord band) *(3) Bolt*
(2) Additional harness

Connect the additional harness to the tractor harness.



(1) Tractor harness
(2) Additional harness

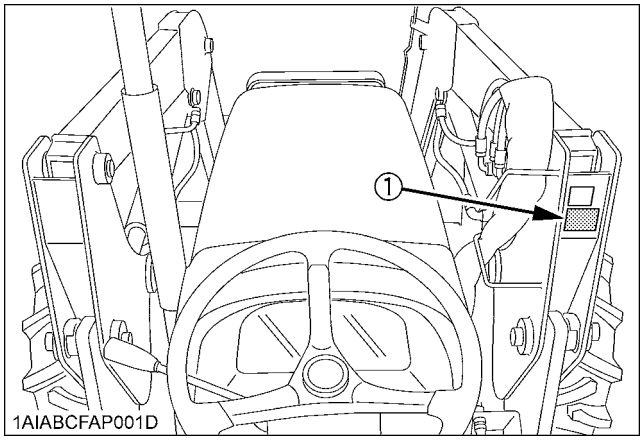
6. Fix the relays to the relay stay.

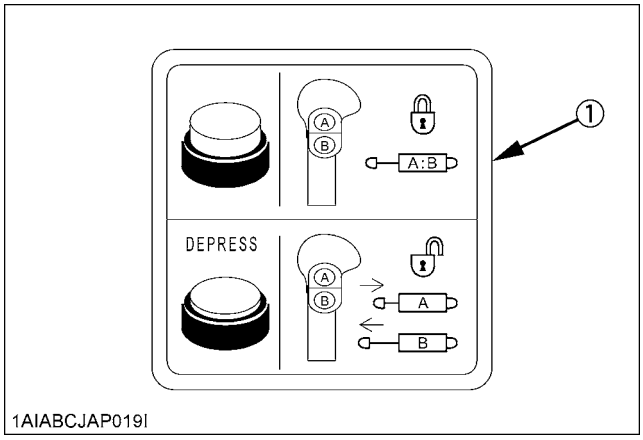


(1) Relay stay (Solenoid valve assy)
(2) 2-relays

◆ Label section

1. Apply the label as shown in the illustration.





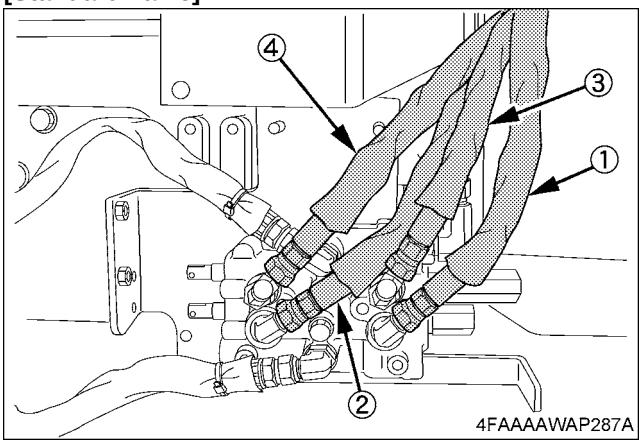
(1) Label

ASSEMBLING MULTI COUPLER KIT

■Multi Coupler [M1869] (if equipped)

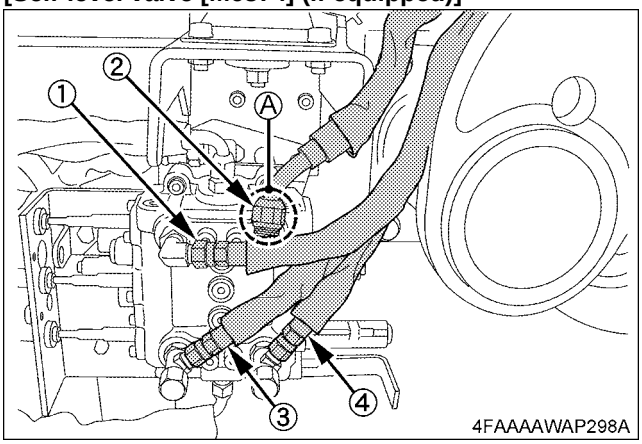
1. Detach the loader.
2. Disconnect the hoses from the valves and coupler stay assembly.

[Standard valve]



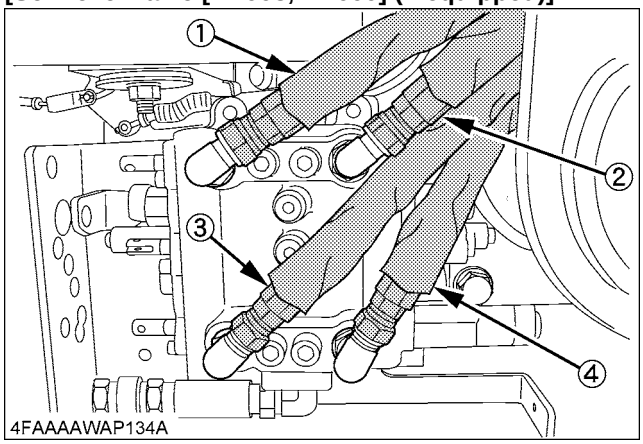
(1) Hydraulic hose (Red, 500 mm (19.7 in.))
(2) Hydraulic hose (Blue, 597 mm (23.5 in.))
(3) Hydraulic hose (Yellow, 465 mm (18.3 in.))
(4) Hydraulic hose (White, 559 mm (22.0 in.))

[Self-level valve [M6874] (if equipped)]



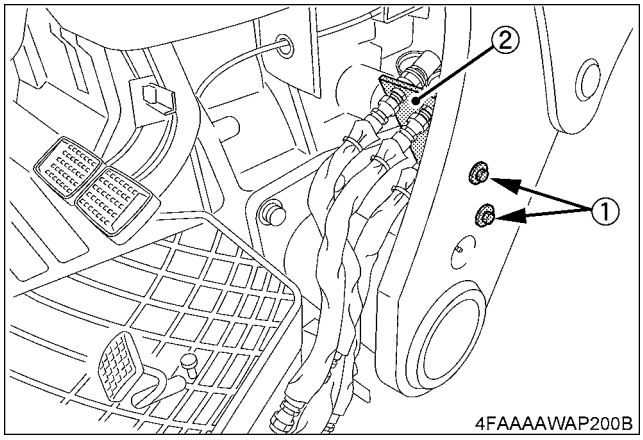
(1) Hydraulic hose (Red, 465 mm (18.3 in.)) *(A) 90° side*
(2) Hydraulic hose (Blue, 394 mm (15.5 in.))
(3) Hydraulic hose (Yellow, 500 mm (19.7 in.))
(4) Hydraulic hose (White, 447 mm (17.6 in.))

[Self-level valve [M7998, M7999] (if equipped)]



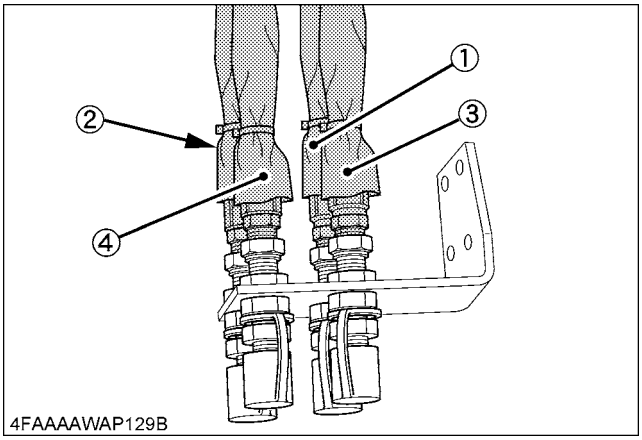
(1) Hydraulic hose (Red, 500 mm (19.7 in.))
(2) Hydraulic hose (Blue, 432 mm (17.0 in.))
(3) Hydraulic hose (Yellow, 520 mm (20.4 in.))
(4) Hydraulic hose (White, 485 mm (19.1 in.))

3. Remove the connector stay assembly.



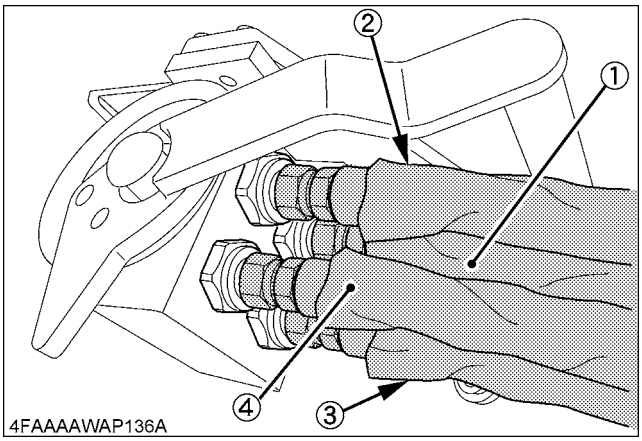
(1) 2-M10 bolts
2-M10 plain washers
2-M10 spring lock washers
2-M10 nuts
(2) Connector assy stay

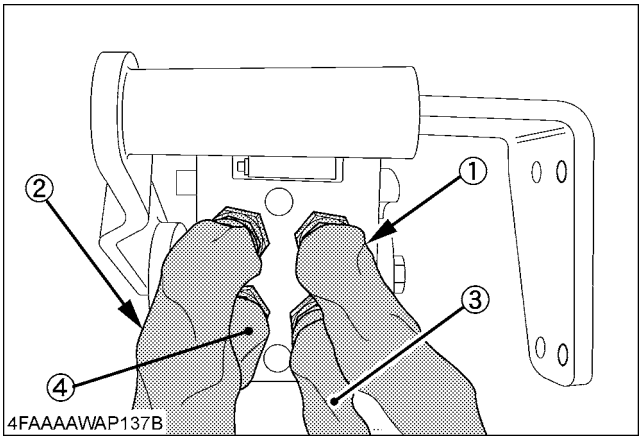
4. Disconnect the hoses from the connector stay assembly.



(1) Hydraulic hose (Red)
(2) Hydraulic hose (Blue)
(3) Hydraulic hose (Yellow)
(4) Hydraulic hose (White)

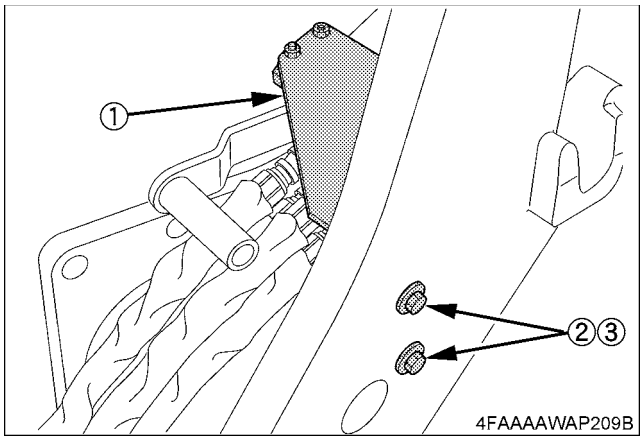
5. Connect the hoses to the multi coupler 1.

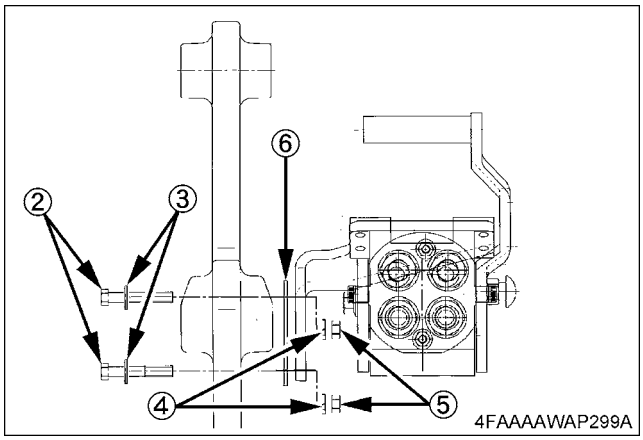




(1) Hydraulic hose (Red, 3/4-UNF)
(2) Hydraulic hose (Blue, 3/4-UNF)
(3) Hydraulic hose (Yellow, 3/4-UNF)
(4) Hydraulic hose (White, 3/4-UNF)

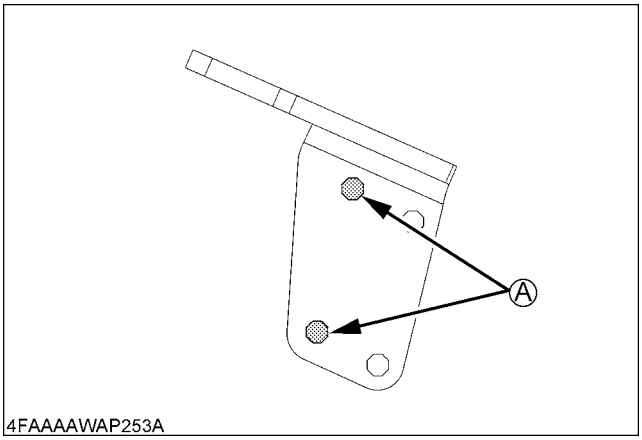
6. Attach the multi coupler 1 to the main frame (RH).
   At this time, put the spacer between the main frame and the multi coupler 1 stay.





(1) Multi coupler 1
(2) 2-M10 x 65 bolts (without accumulator kit)
2-M10 x 90 bolts (original)
(if equipped with accumulator kit)
2-M10 x 110 bolts (original)
(if equipped with 3rd function valve kit and accumulator kit)
(3) 2-M10 plain washers (original)
(4) 2-M10 spring lock washers (original)
(5) 2-M10 nuts (original)
(6) Spacer

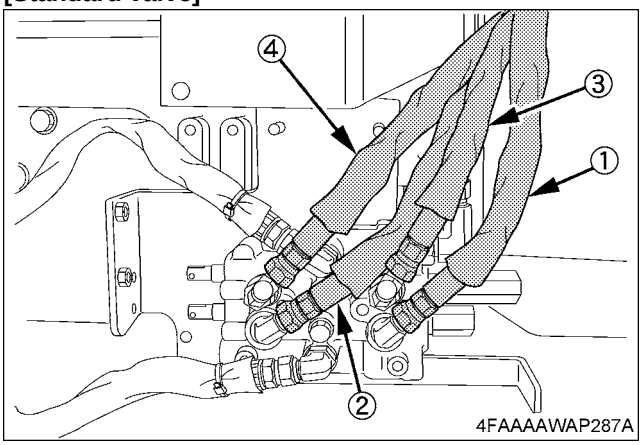
NOTE :
- To fix the multi coupler stay assembly, use these holes as shown below.



(A) Use these holes.

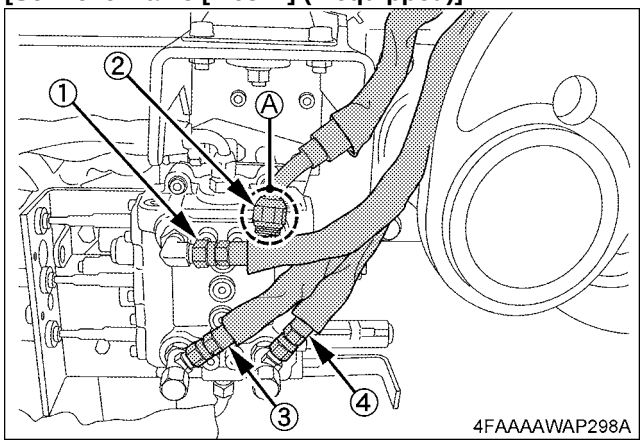
7. Connect the hoses to the valve.

[Standard valve]



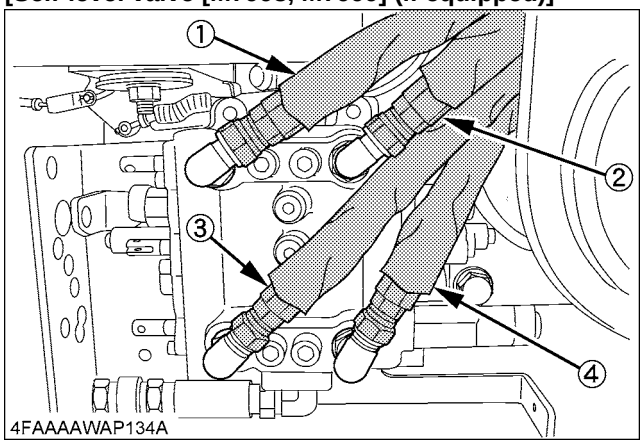
(1) Hydraulic hose (Red, 500 mm (19.7 in.) 3/4-UNF)
(2) Hydraulic hose (Blue, 597 mm (23.5 in.) 3/4-UNF)
(3) Hydraulic hose (Yellow, 465 mm (18.3 in.) 3/4-UNF)
(4) Hydraulic hose (White, 559 mm (22.0 in.) 3/4-UNF)

[Self-level valve [M6874] (if equipped)]



(1) Hydraulic hose (Red, 465 mm (18.3 in.) 3/4-UNF)
(2) Hydraulic hose (Blue, 394 mm (15.5 in.) 3/4-UNF)
(3) Hydraulic hose (Yellow, 500 mm (19.7 in.) 3/4-UNF)
(4) Hydraulic hose (White, 447 mm (17.6 in.) 3/4-UNF)
(A) 90° side

[Self-level valve [M7998, M7999] (if equipped)]

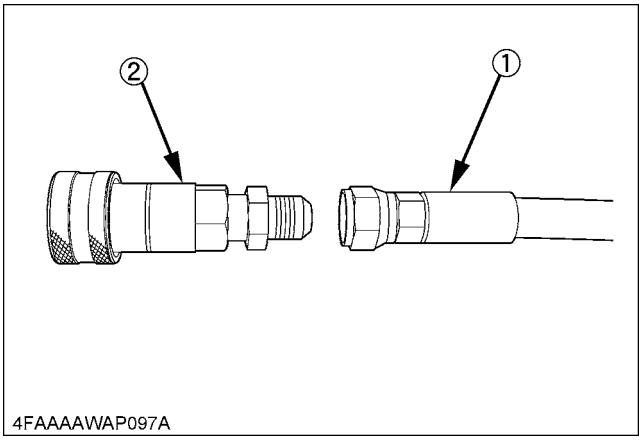


(1) Hydraulic hose (Red, 500 mm (19.7 in.))
(2) Hydraulic hose (Blue, 432 mm (17.0 in.))
(3) Hydraulic hose (Yellow, 520 mm (20.4 in.))
(4) Hydraulic hose (White, 485 mm (19.1 in.))

IMPORTANT :

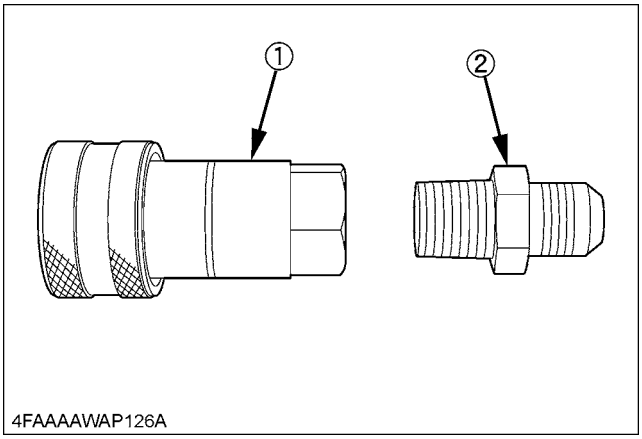
- With all the hoses connected to the valve, be certain that any of the hoses is out of close contact with the other hoses, the fittings and edges.

8. Disconnect the female couplers from the boom hoses.



(1) 4-Hoses
(2) 4-Couplers

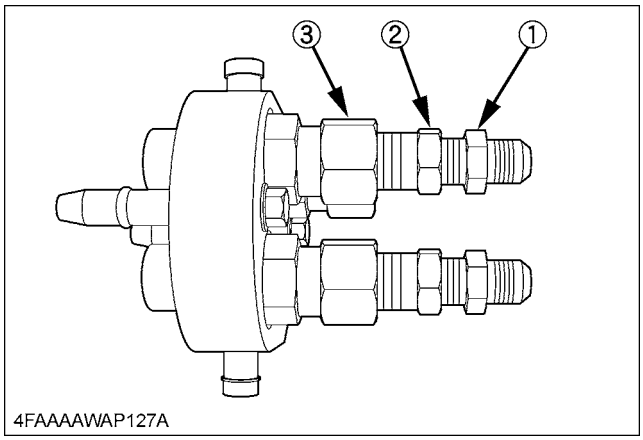
9. Remove the adapters from the female couplers.



(1) 4-Couplers
(2) 4-Adapters 1

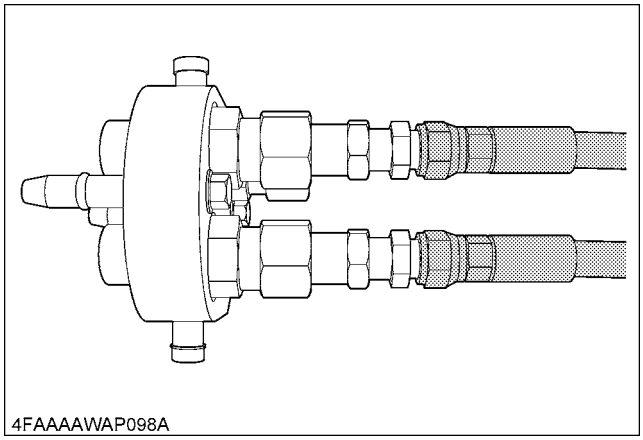
10. Attach the adapter 1 and 2 to the multi coupler 2

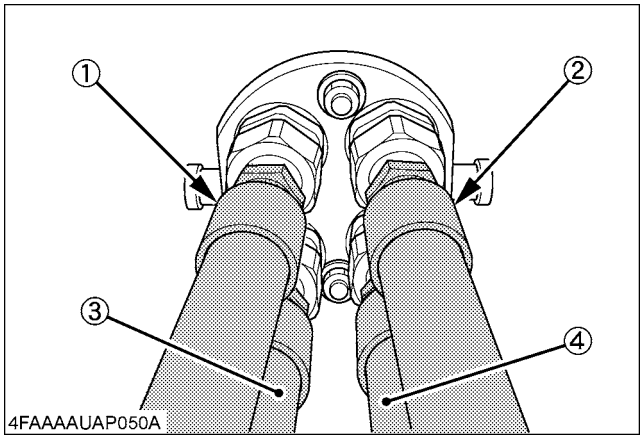
IMPORTANT :
- Wrap each adapter 1 and 2 with Teflon tape or similar liquid sealer before connecting to the multi coupler 2.



(1) 4-Adapters 1 (original, 3/8-UNF)
(2) 4-Adapters 2 (1/2-UNF)
(3) Multi coupler 2

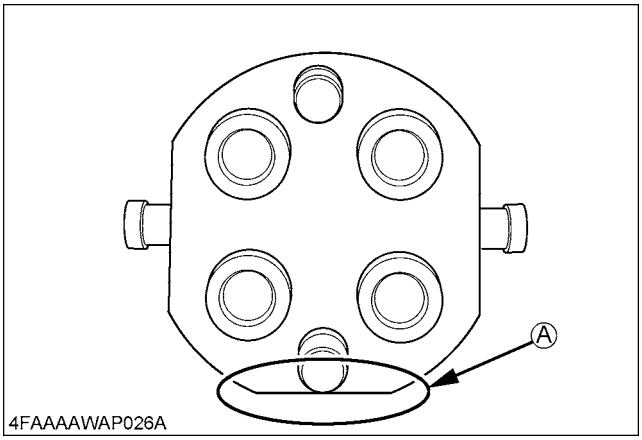
11. Connect the boom hoses to the multi coupler 2.





(1) Hydraulic hose (Red, 3/4-UNF)
(2) Hydraulic hose (Blue, 3/4-UNF)
(3) Hydraulic hose (Yellow, 3/4-UNF)
(4) Hydraulic hose (White, 3/4-UNF)

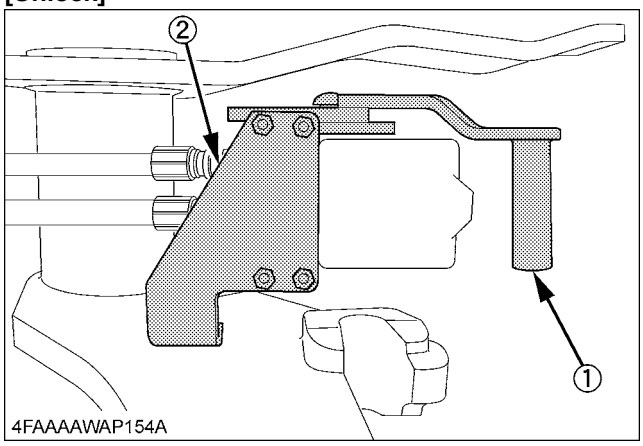
IMPORTANT :
- Install the multi coupler with its flat face facing downward, as shown below.



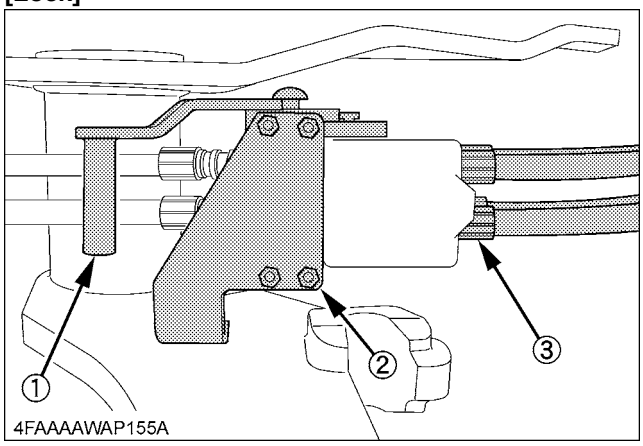
(A) Flat face

12. Interconnect the multi coupler 1 and multi coupler 2.

[Unlock]



[Lock]



(1) Lever
(2) Multi coupler 1
(3) Multi coupler 2

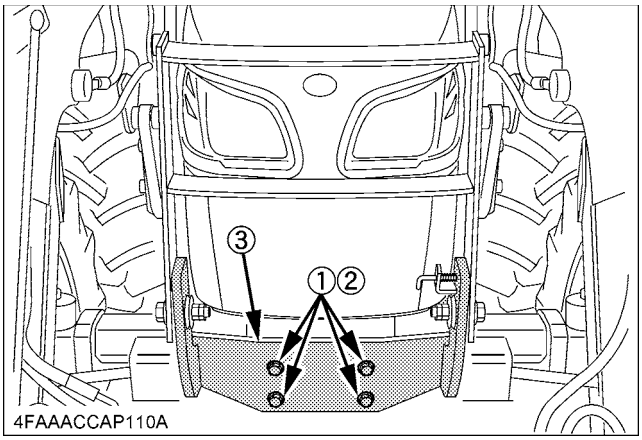
NOTE :

- If the hoses are twisted when the multi couplers 1 and 2 are temporarily connected, untwist them and reconnect.

ASSEMBLING FRONT GUARD/FRONT GUARD KIT

■Front Guard

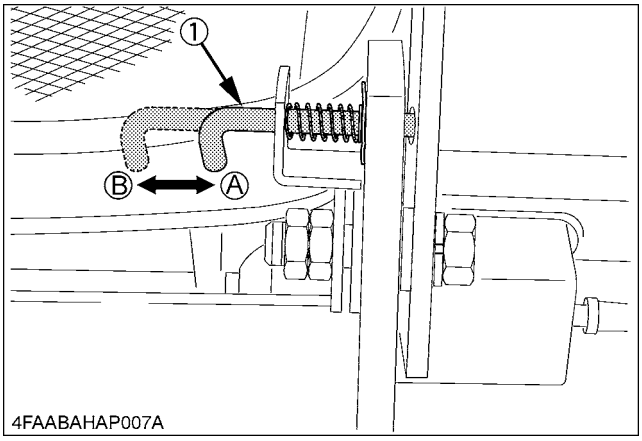
1. Attach the front guard in position on the tractor.



(1) 4-M16 x 40 hex. bolts
(2) 4-M16 spring lock washers
(3) Lower front guard

IMPORTANT :

- Before moving the tractor or the front loader, make sure the front guards are tightly locked.



(1) Front guard lever

(A) "LOCK POSITION"
(B) "UNLOCK POSITION"

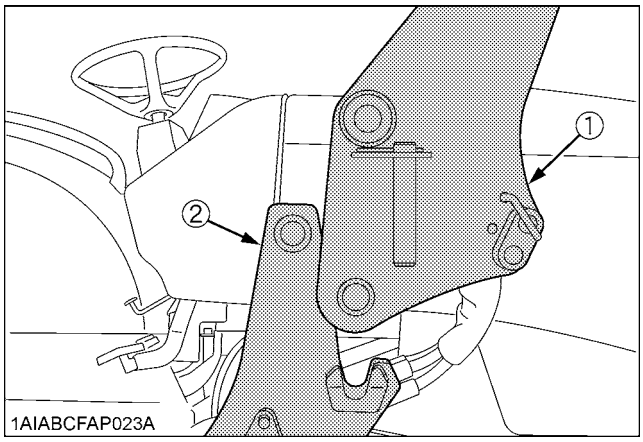
INSTALLING THE LOADER

WARNING

To avoid personal injury or death:

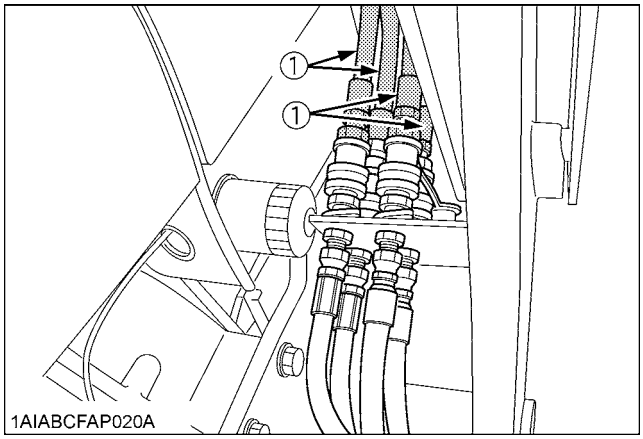
- **When starting the engine and operating the hydraulic-control-valve, always sit in the operator's seat.**

1. Slowly drive the tractor between the side frames of the loader until the rear portion of both side frames touches the main frames as shown in the following figure.



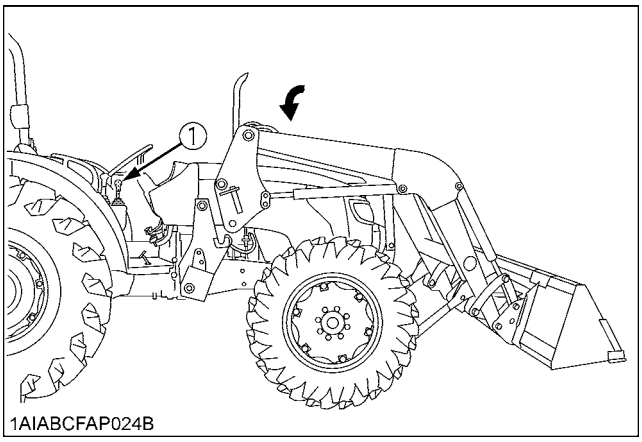
(1) Side frame
(2) Main frame

2. Stop the engine.
3. Connect the 4 hoses with couplers to the fittings on the control valve as indicated with color marks.
4. Then connect the protective caps and plugs to each other.



(1) Hoses

5. Start the engine and run at idle.
6. Slowly move the hydraulic-control-lever to the 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.



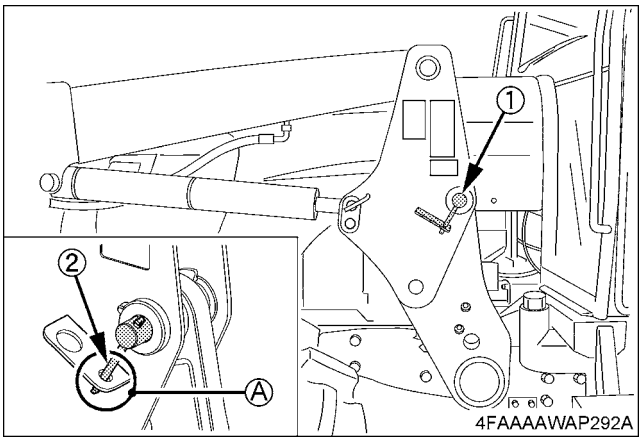
(1) Hydraulic control lever

7. Then lift the weight off the front wheels with the loader. Do not lift the wheels off the ground.

IMPORTANT :

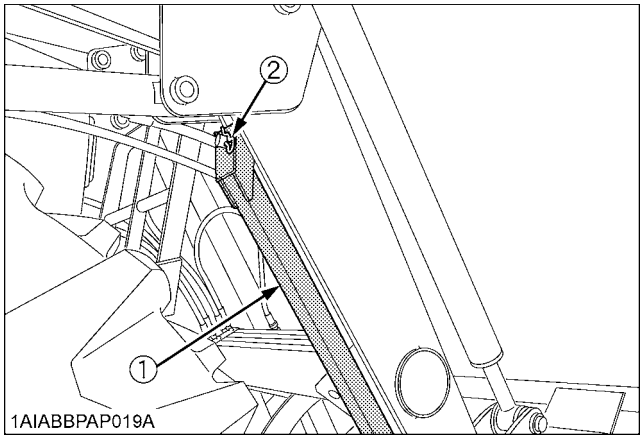
- Do not lift the front wheels with the stands.

8. Stop the engine.
9. Reinstall the mounting pins and secure them by inserting the retaining bars of the pins into the holes of the stays on the side frames.



(1) Mounting pin
(2) Retaining bar
(A) Insert

10. Start the engine.
11. Raise the boom until the stands can be rotated.
12. Stop the engine.
13. Store the stands to their original positions and secure them with the spring pins as shown.



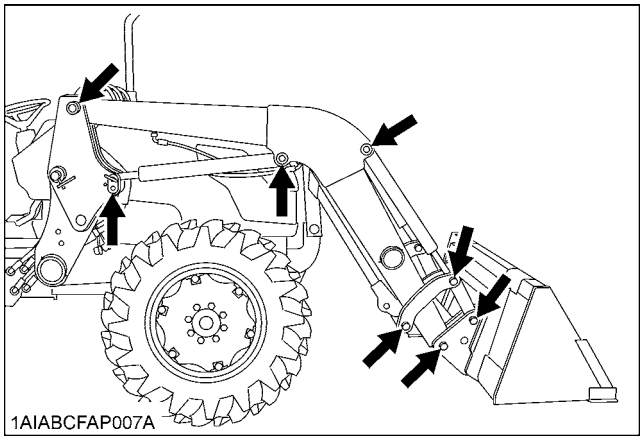
(1) Stand
(2) Spring pin

14. Start the engine.
15. Lower the boom and level the bucket.

PRE-OPERATION CHECK

■Lubrication

Lubricate all grease fittings with SAE multipurpose grease.

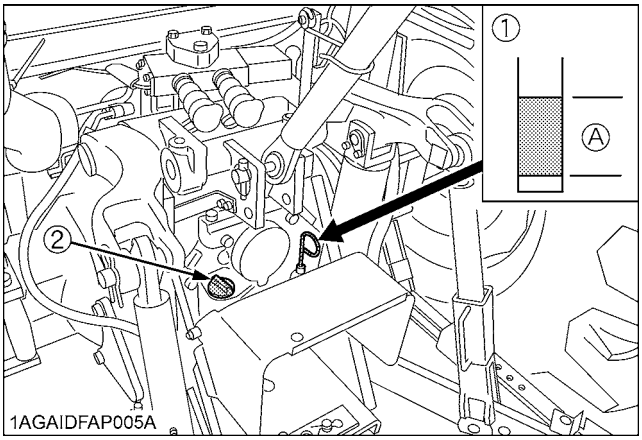


■Transmission Fluid

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.



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

■Operation Check of the Loader

IMPORTANT :

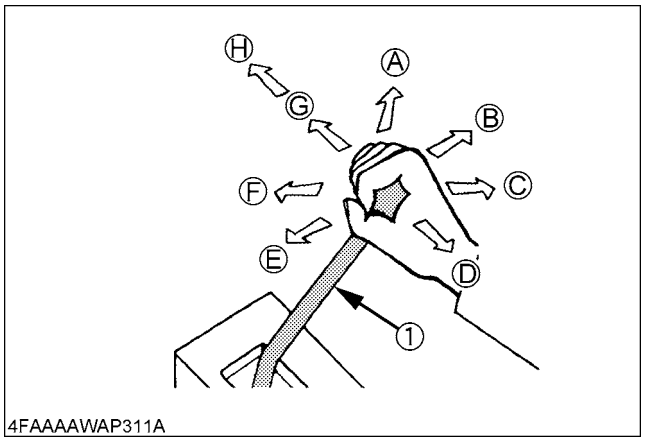
- If the loader does not operate properly, check each assembly process again.

NOTE :

- Refer to operator's manual for the operation of each function of the loader.

◆ Detect abnormal movement of the loader
Turn on the engine. Release your hand from the loader lever and check the movement of the loader. If the loader operates slowly up and down while operating the tractor, turn off the tractor immediately. Check connecting pump line hose and power beyond line hose to verify that they are installed correctly to the control valve.

◆ Operation check of the loader lever
Make sure that the loader operates as shown below.

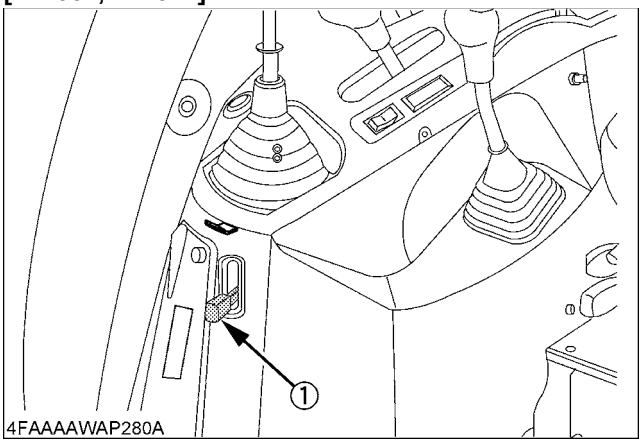


(1) Loader control lever

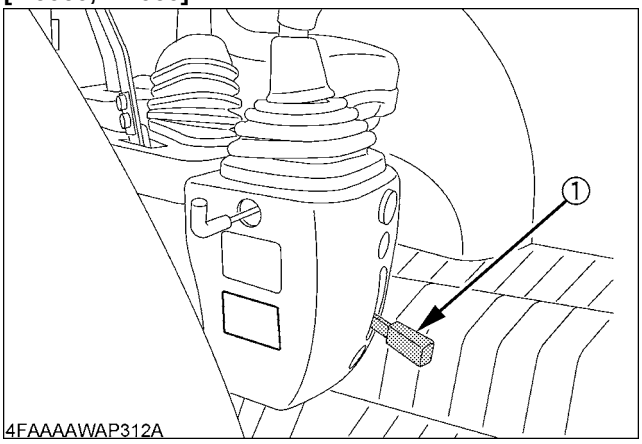
(A) Down and dump
(B) Dump
(C) UP and dump
(D) Up
(E) Roll back
(F) Down and roll back
(G) Down
(H) Float

◆ Operation check of the self-leveling function (if equipped)

[M4-061, M4-071]



[M6060, M7060]



(1) Self-level on/off lever

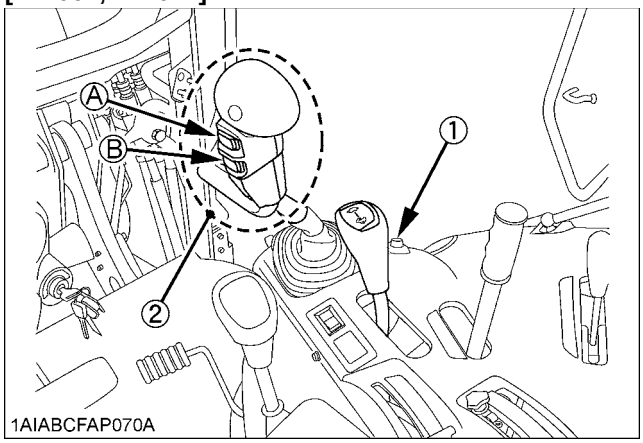
1. Put the self-level on/off lever in the lower position (self-leveling is on). Make sure that the self-leveling function is activated both when raising and lowering the loader.
2. Put the self-level on/off lever in the upper position (self-leveling is off). Make sure that the self-leveling function is inactivated both when raising and lowering the loader.

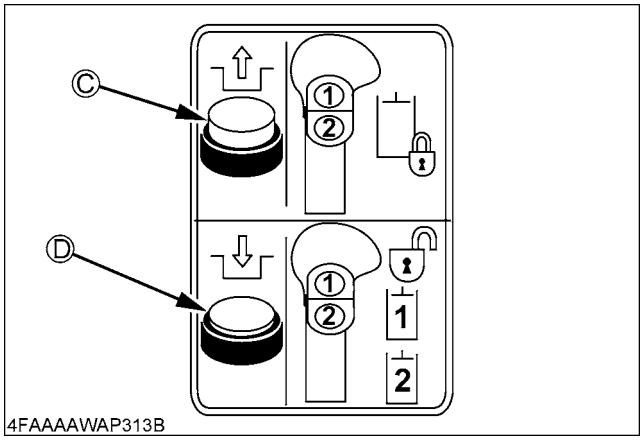
NOTE :

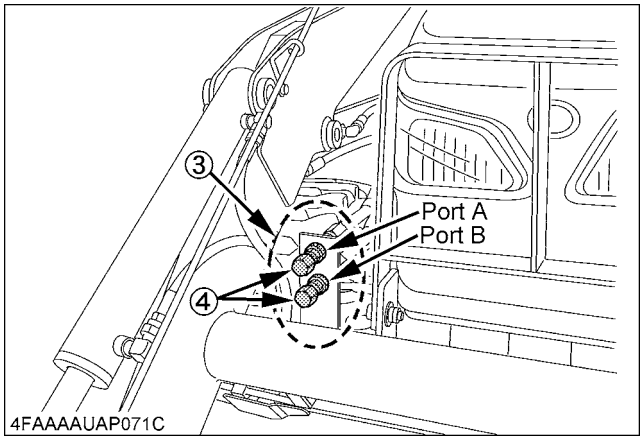
- The self-level adjustment procedure is referred to operator's manual.

◆ Operation check of the front remote hydraulic control system (if equipped)

[M4-061, M4-071]

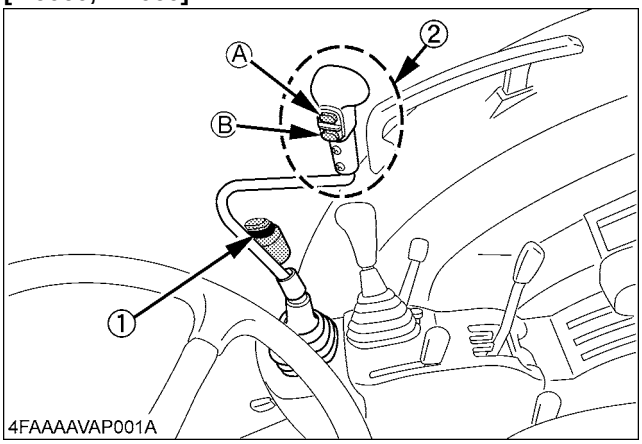


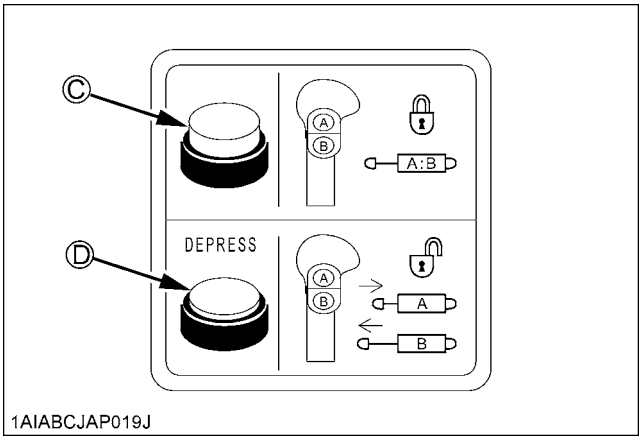


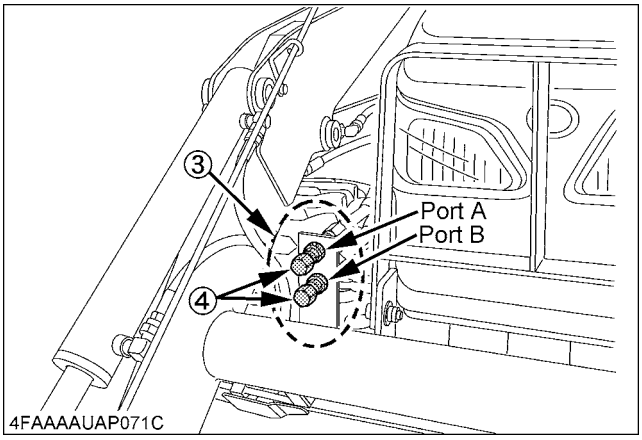


(1) Front hydraulic valve main switch
(2) Activation switch
(3) Front hydraulic outlet
(4) Plug
(A) Activate "port A"
(B) Activate "port B"
(C) Front hydraulic valve main switch "OFF"
(D) Front hydraulic valve main switch "ON"

[M6060, M7060]







(1) Front hydraulic valve main switch
(2) Activation switch
(3) Front hydraulic outlet
(4) Plug
(A) Activate "port A"
(B) Activate "port B"
(C) Front hydraulic valve main switch "OFF"
(D) Front hydraulic valve main switch "ON"

1. Push the front hydraulic valve main switch. Make sure the switch light turns on.
2. Press the activation switch-A, make sure hydraulic oil is coming out from the port-A as long as the activation switch is pressed.
3. Press the activation switch-B, make sure hydraulic oil is coming out from the port-B as long as the activation switch is pressed.
4. Push the front hydraulic valve main switch. Make sure the switch light turns off.
5. Press the activation switch-A and switch-B, make sure the front remote hydraulic valve does not operate.

ESTIMATED ASSEMBLY TIME

Refer to the following table for the estimated assembly time from opening the crate to finishing assembling the loader.

Assembly time on the table are just reference under average conditions with the following assumptions.

(1) When assembly is performed by two workers.

(2) Following tools and equipment are prepared.

1. Chain hoist or crane.
2. Impact wrench, Ratchet wrench, Torque wrench, Socket wrench, Spanner wrench.
3. Nylon strap.

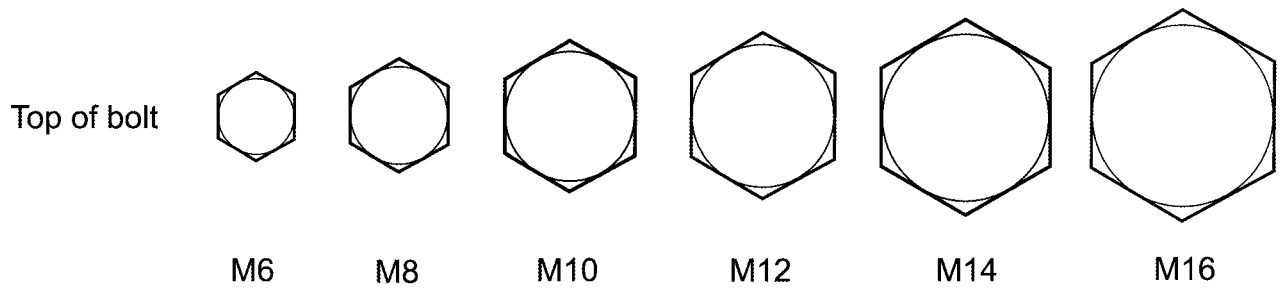
	Remote Valve Type Loader
LA1154A/EA	1.5 hours

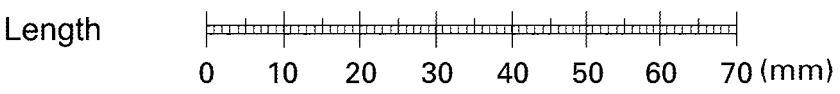
TIGHTENING TORQUE

■Bolts and Nuts

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

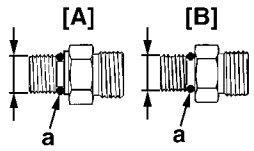
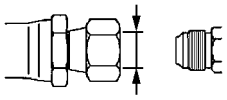
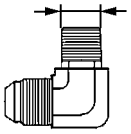
American standard screws, bolts and nuts with UNC or UNF threads				Metric cap screws 8.8		
SAE grade No.		SAE GR.5	SAE GR.8	property class		8.8 Approx. SAE GR 5
1/4	(N-m) (kgf-m) (ft-lbs)	11.7 to 15.8 1.19 to 1.61 8.6 to 11.6	16.3 to 19.8 1.66 to 2.02 12.0 to 14.6	M6	(N-m) (kgf-m) (ft-lbs)	9.8 to 11.2 1.0 to 1.1 7.2 to 8.3
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 27.4 2.4 to 2.8 17.4 to 20.2
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 55.8 4.9 to 5.7 35.5 to 41.2
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 90.1 7.9 to 9.2 57.2 to 66.5
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 147 12.6 to 15.0 91.5 to 108.4
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 225 20.0 to 23.0 145 to 166





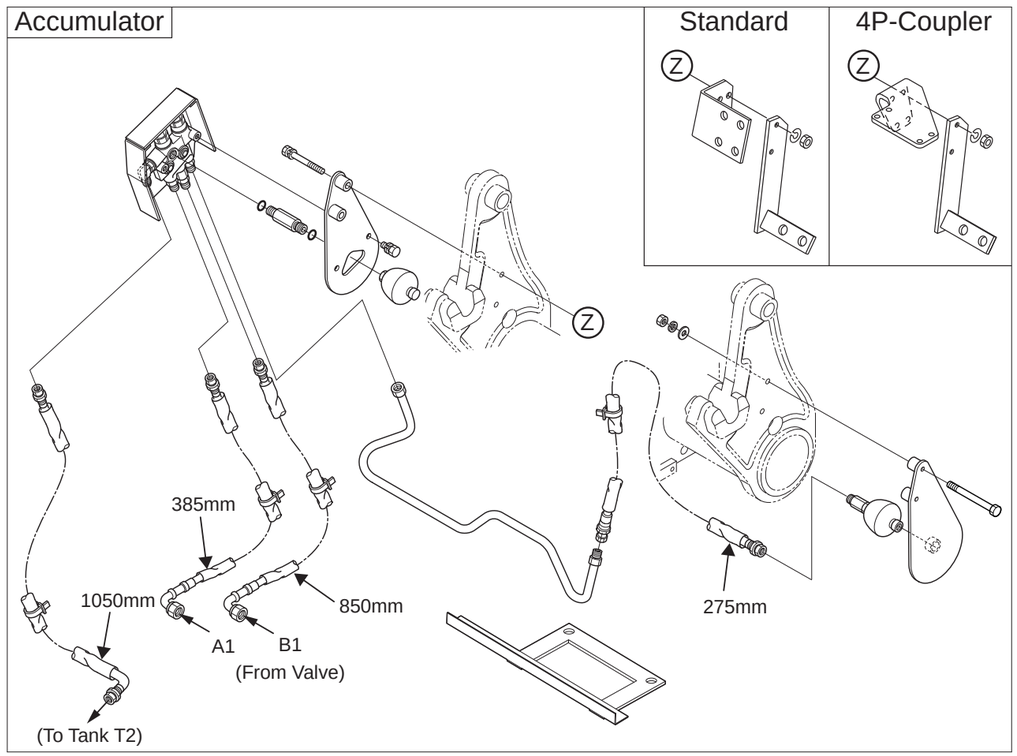
■Adaptors, Elbows and Others

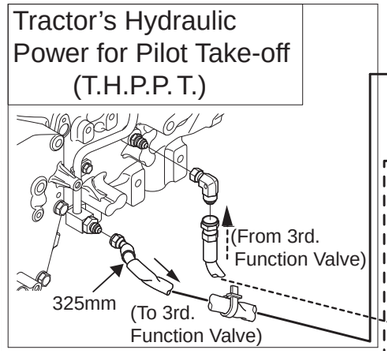
If the torque levels are specified in the text, follow that specification.

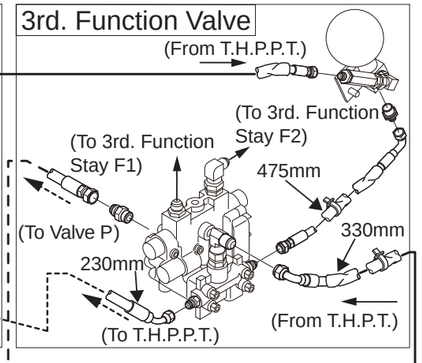
Item	Shape	Thread size	Tightening torque		
			N-m	kgf-m	ft-lbs
Adjustable elbow, Adaptor (O-ring port) (UNF)	 [A] Nut Type [B] No Nut Type a: O-ring 4FBAAAKAP064A	9/16	37 to 44	3.8 to 4.5	27 to 33
		3/4	48 to 54	4.9 to 5.5	35 to 40
		7/8	77 to 85	7.9 to 8.6	57 to 62
Hose fitting, Flare nut (UNF)	 4FBAAAKAP065A	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
		1-1/16	107 to 119	10.8 to 12.0	79 to 88
		1-3/16	127 to 141	13.0 to 14.4	94 to 104
Adaptor (NPT)	 4FBAAAKAP066A	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

MODEL LA1154A [M4-061, M4-071 TRACTOR]

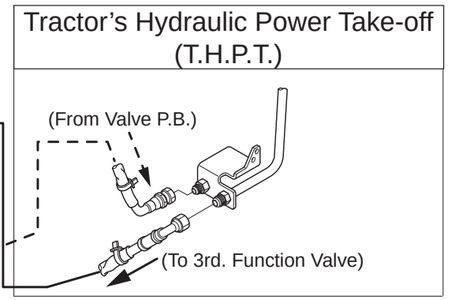
[Standard valve with 3rd. Function, Accumulator]

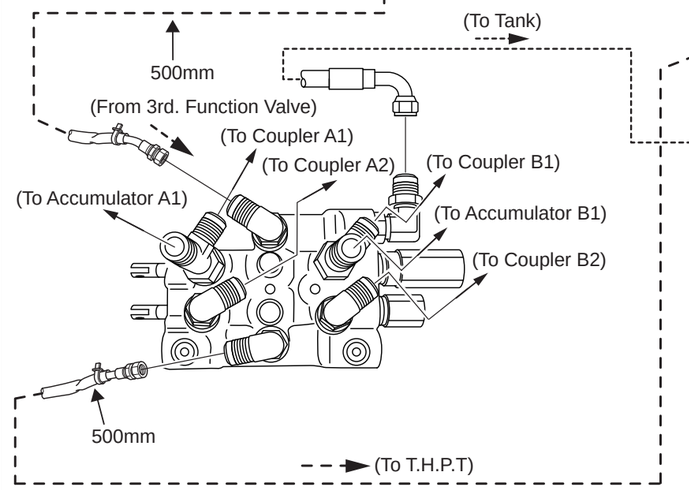


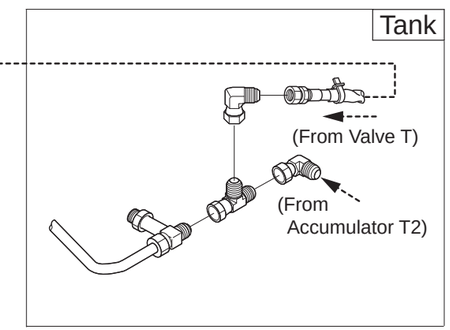




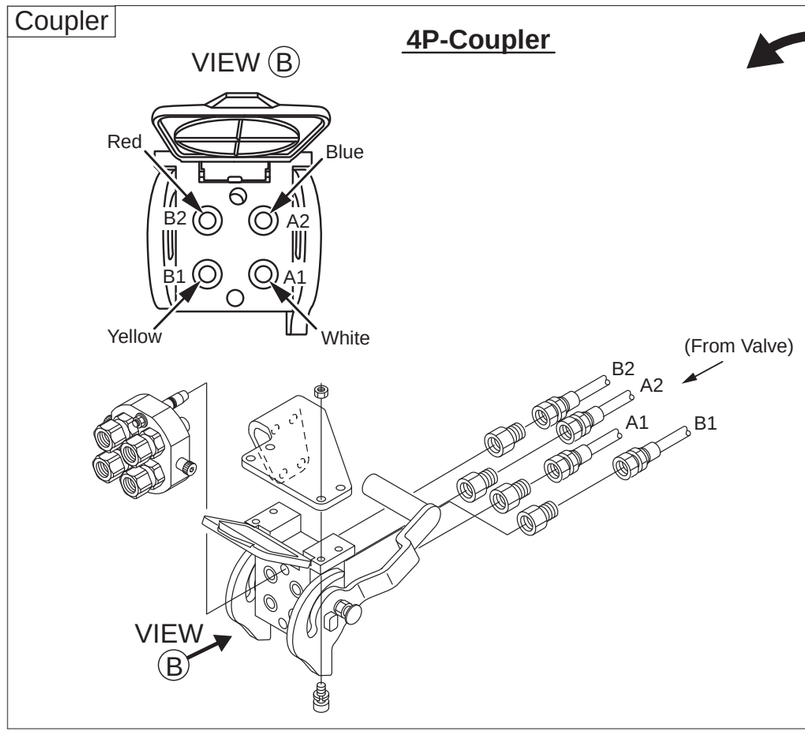
PUMP LINE
POWER BEYOND LINE
TANK LINE

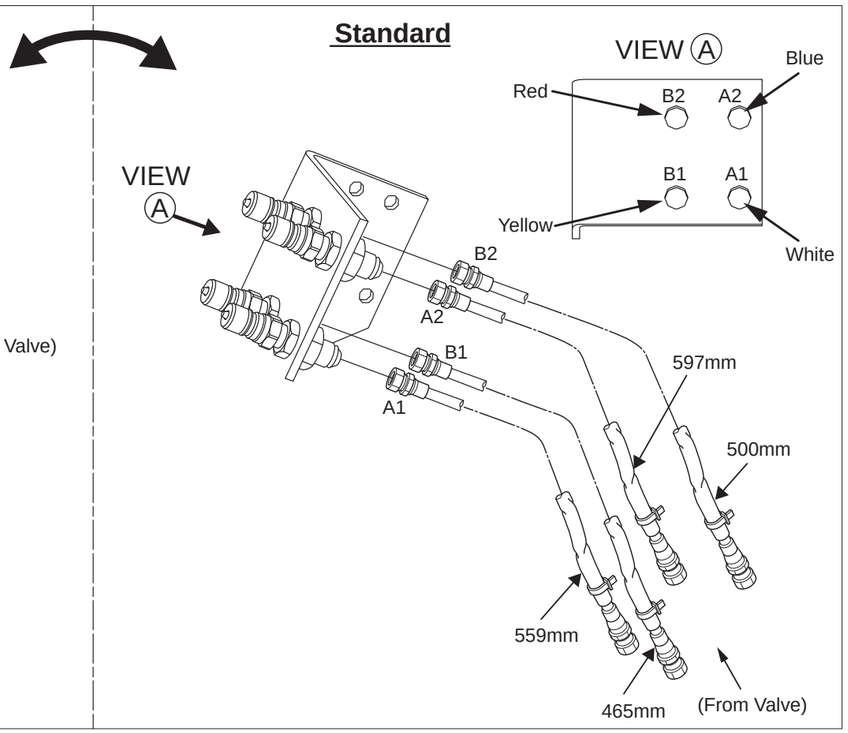


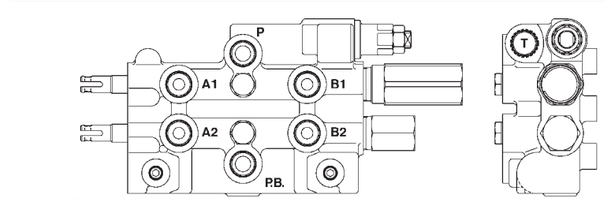




440mm







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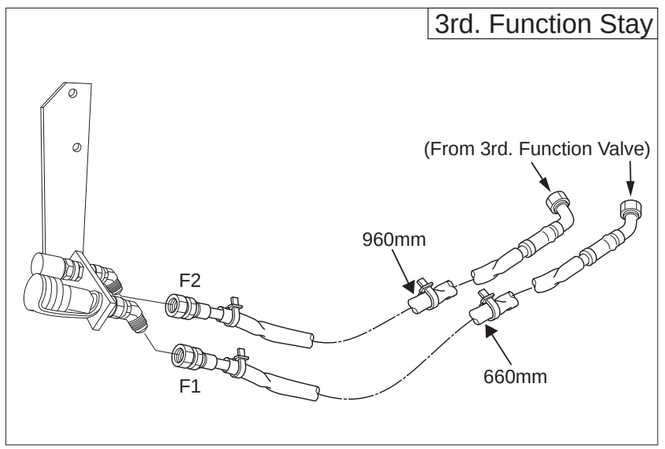
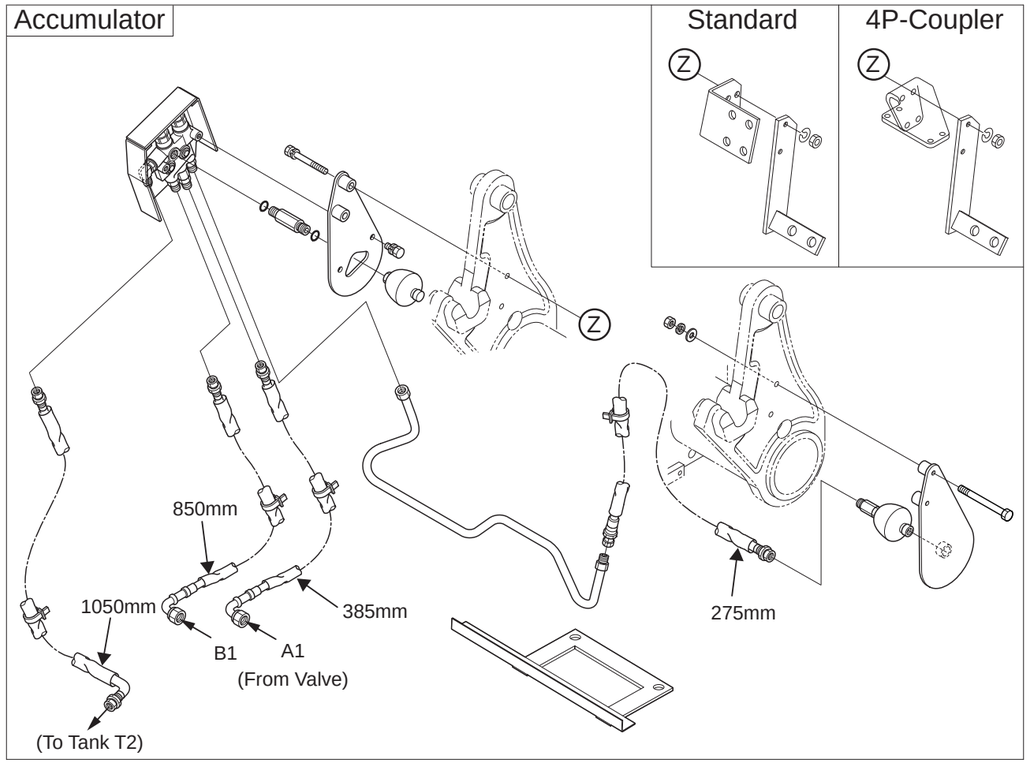
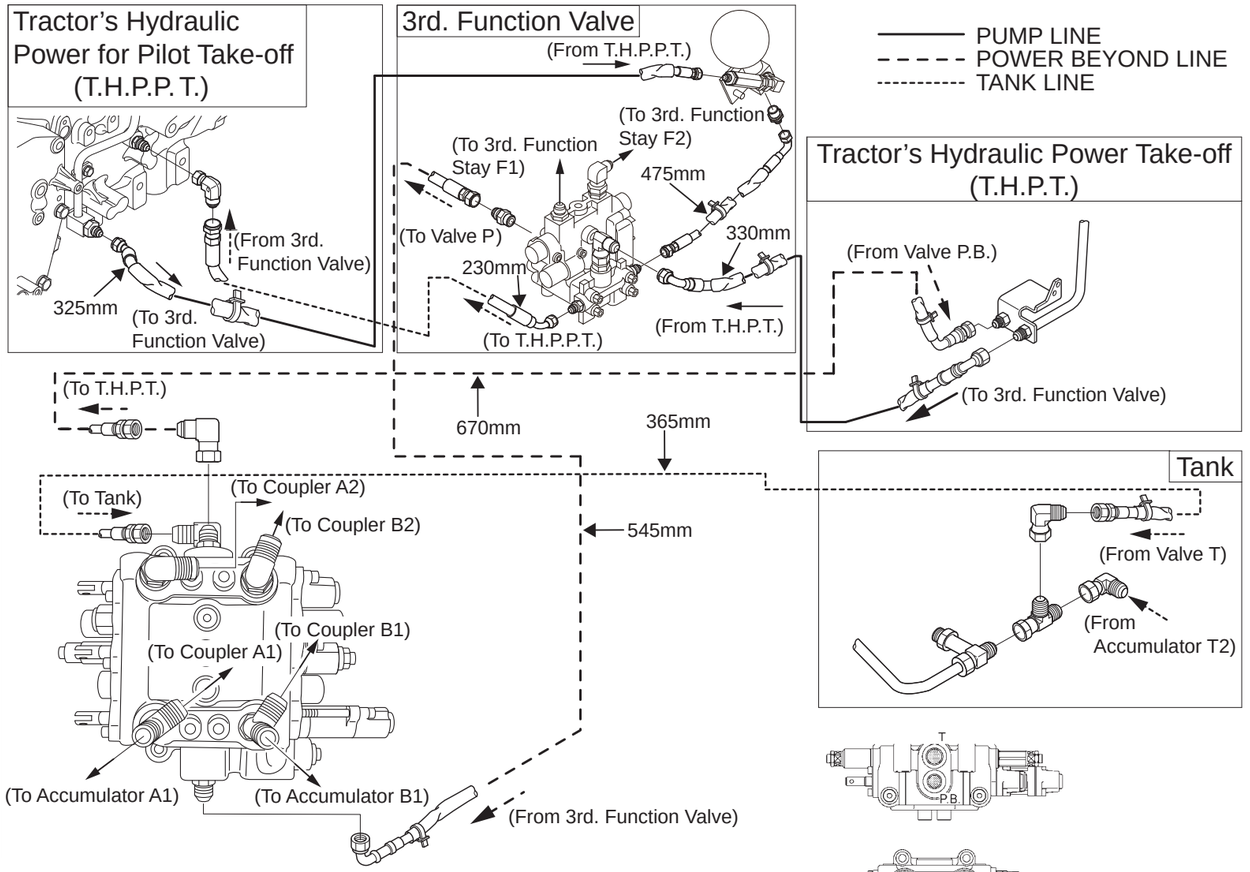
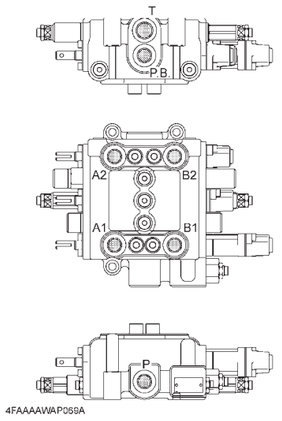


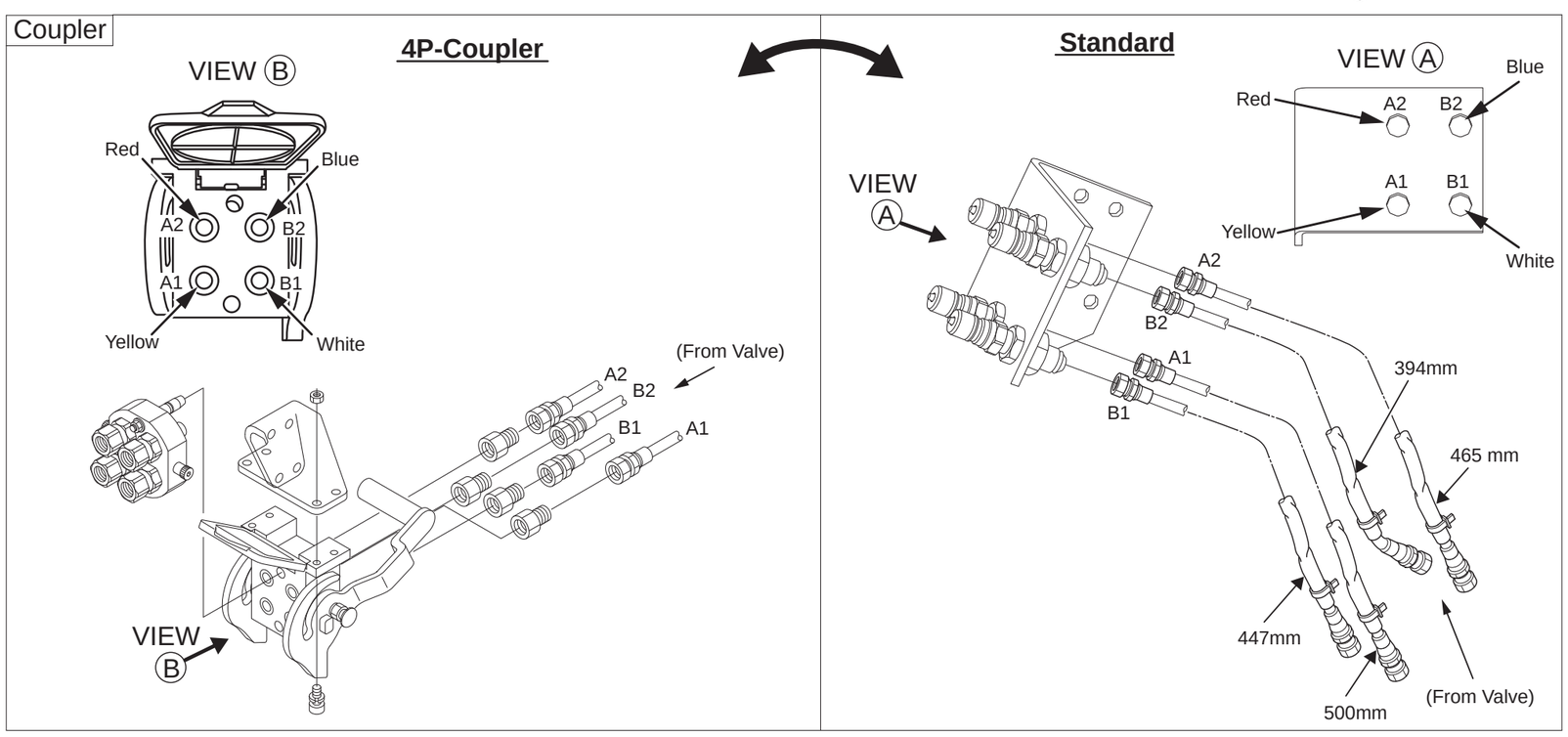
MODEL LA1154A [M4-061, M4-071 TRACTOR]

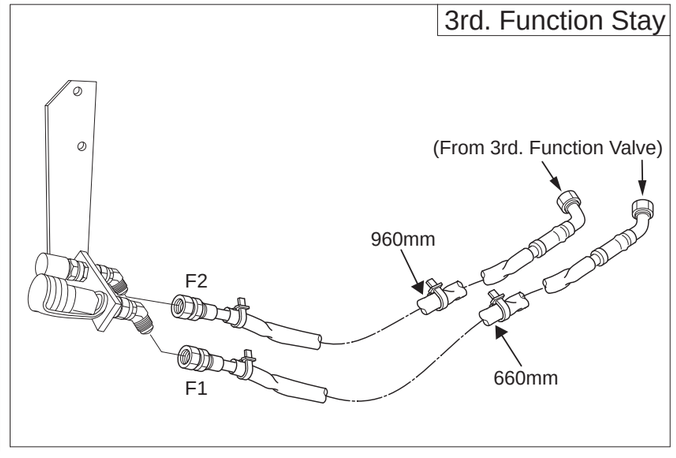
[Self-leveling valve with 3rd. Function, Accumulator]





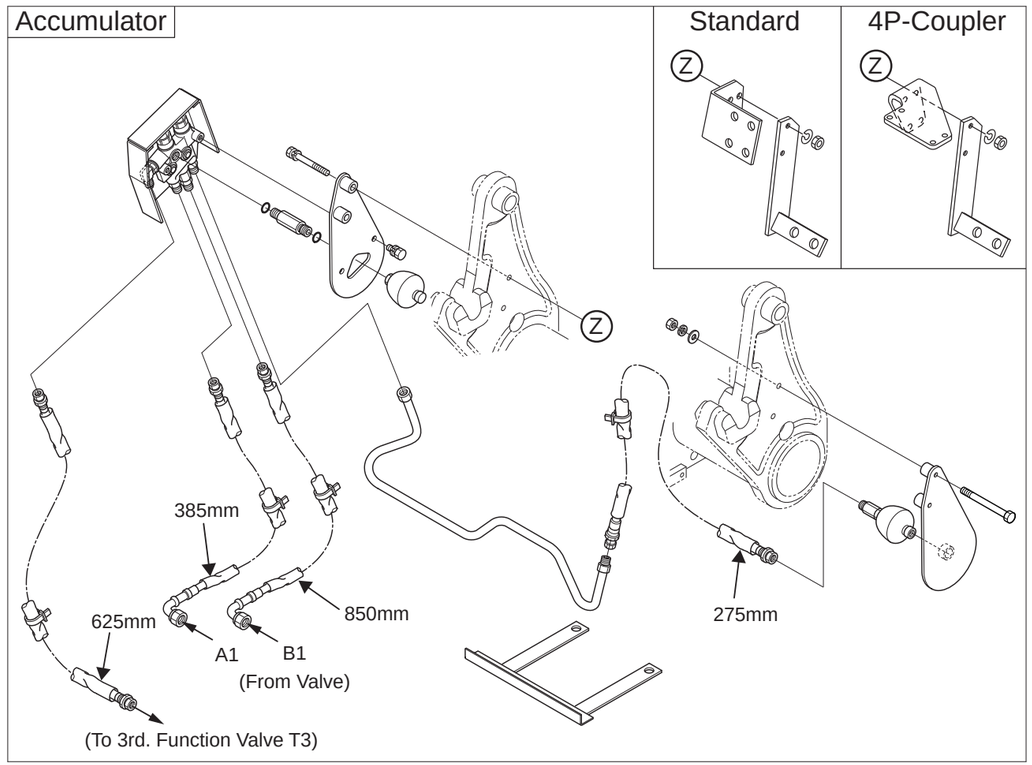


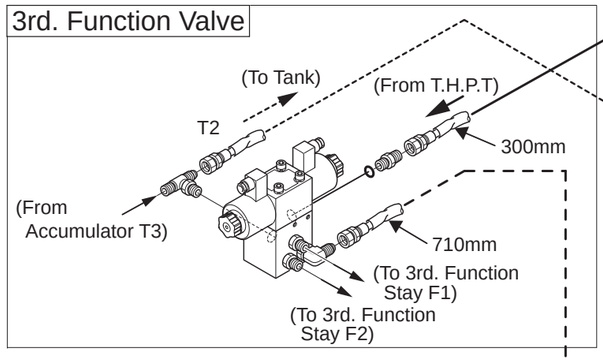


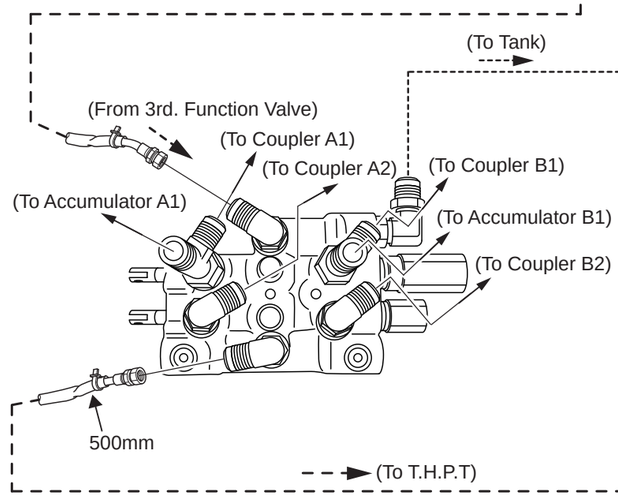


MODEL LA1154A [M6060, M7060 TRACTOR]

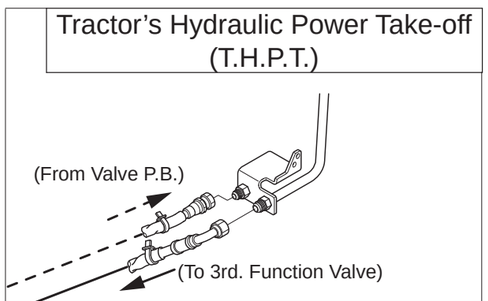
[Standard valve with 3rd. Function, Accumulator]

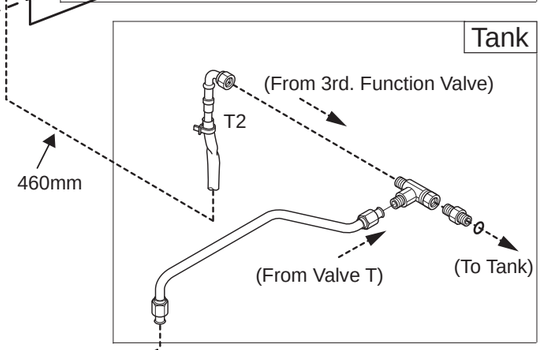


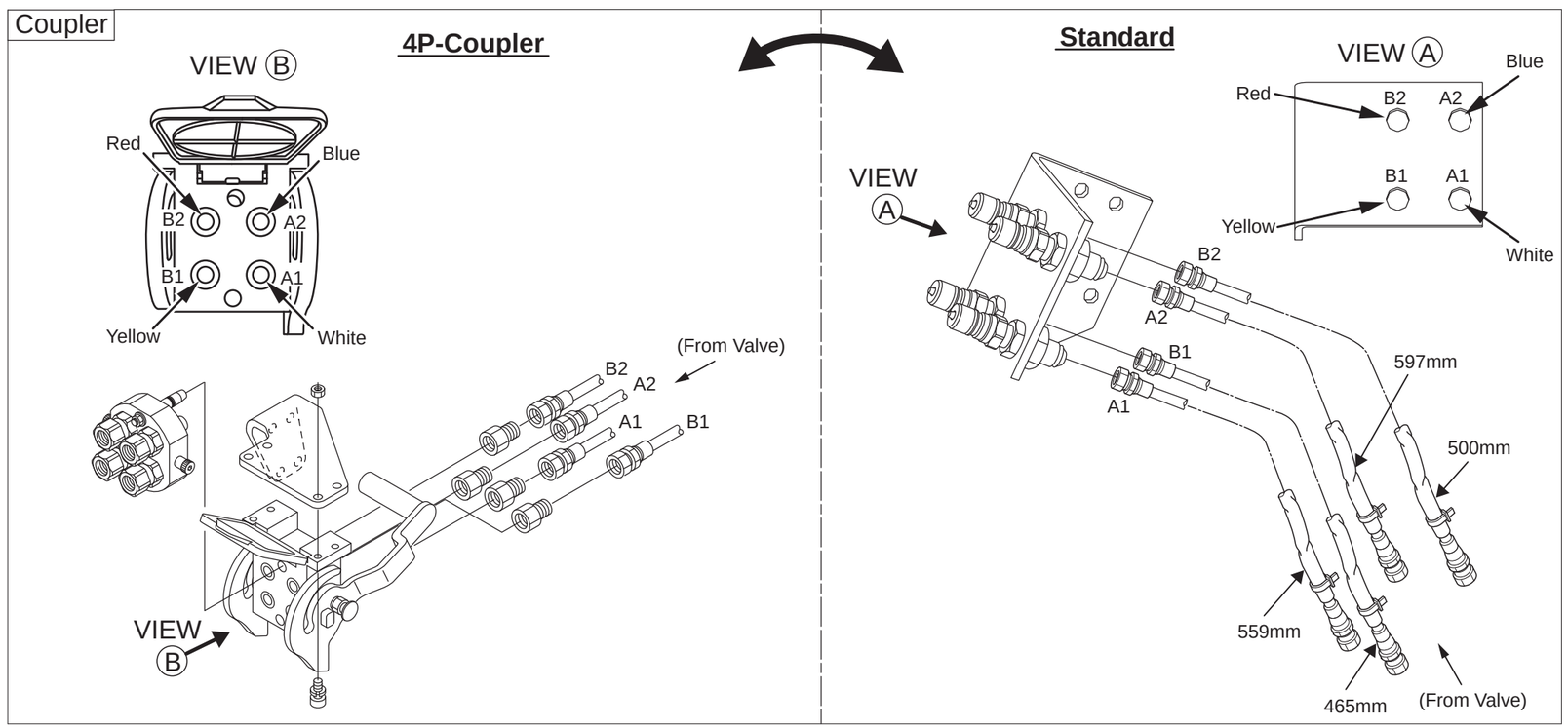


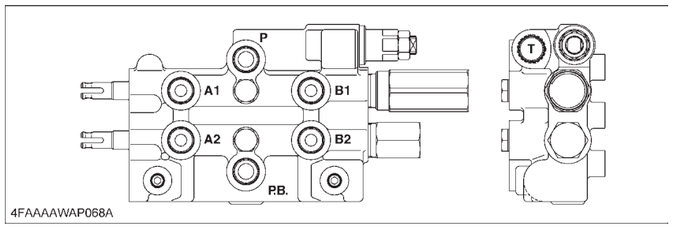


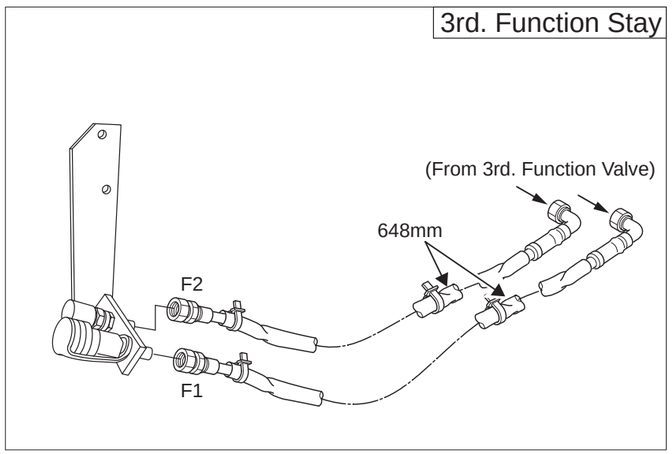
PUMP LINE
POWER BEYOND LINE
TANK LINE









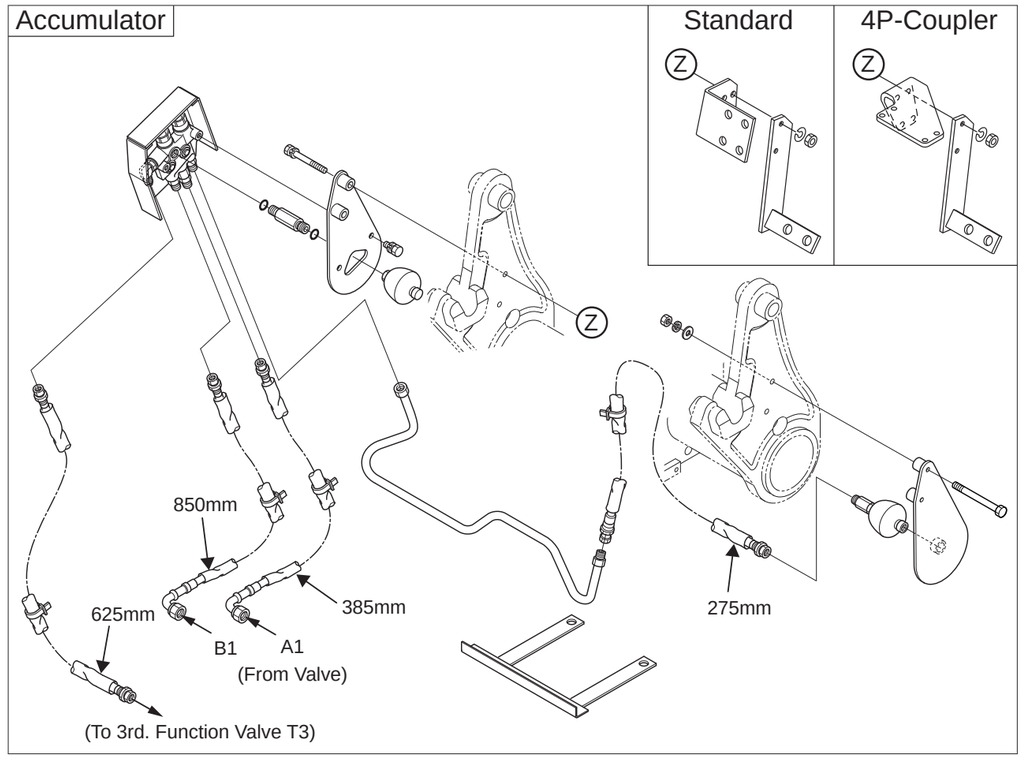


MODEL LA1154A [M6060, M7060 TRACTOR]

[Self-leveling valve with 3rd. Function, Accumulator]

PUMP LINE
POWER BEYOND LINE
TANK LINE

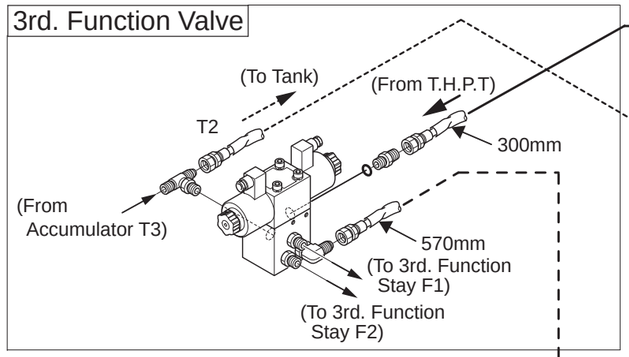
Accumulator



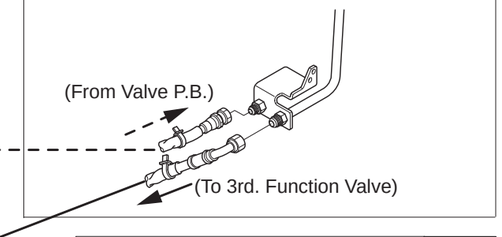
Standard

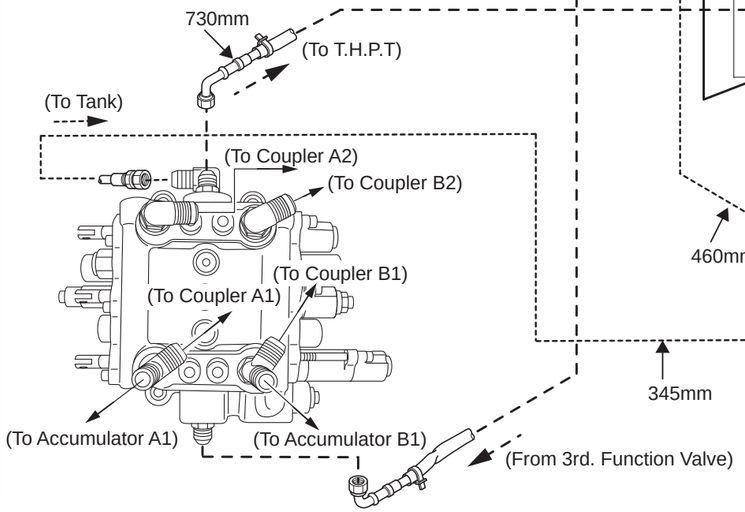
4P-Coupler

3rd. Function Valve

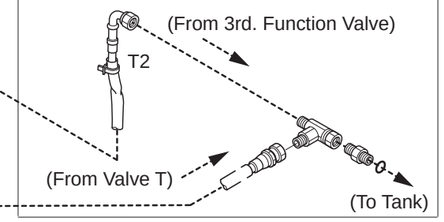


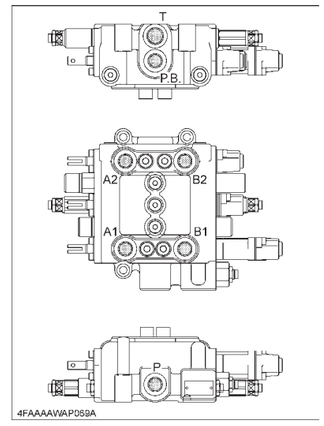
Tractor's Hydraulic Power Take-off (T.H.P.T.)





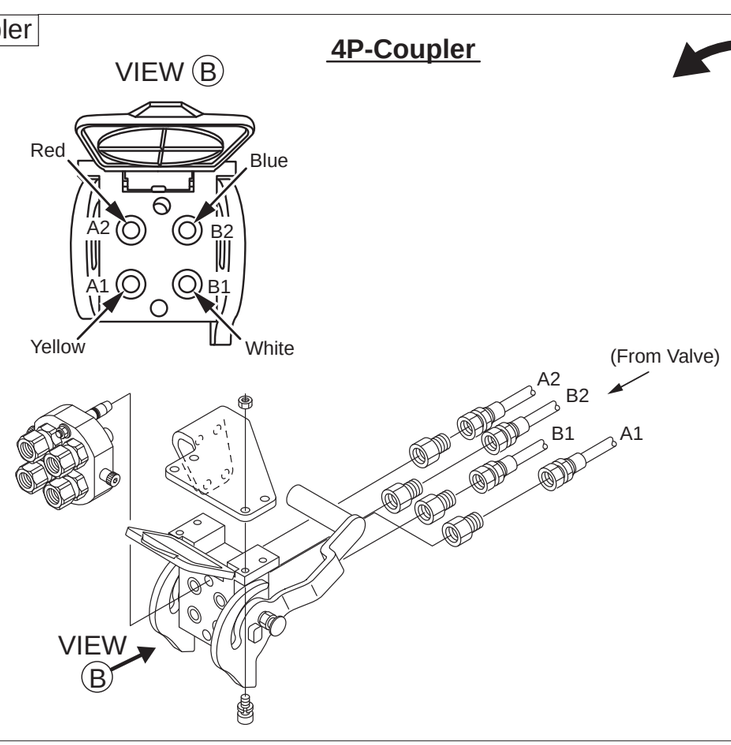
Tank



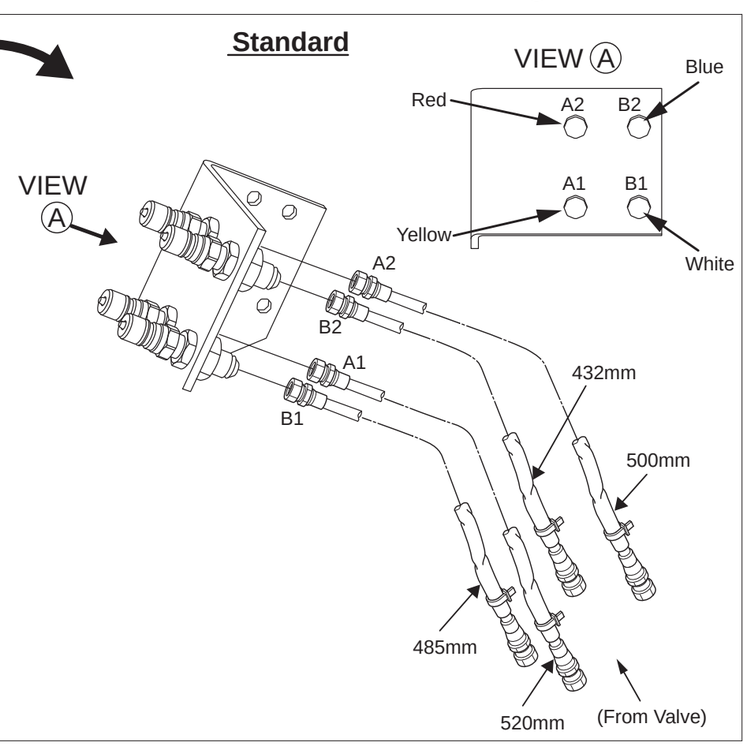


Coupler

4P-Coupler



Standard



3rd. Function Stay