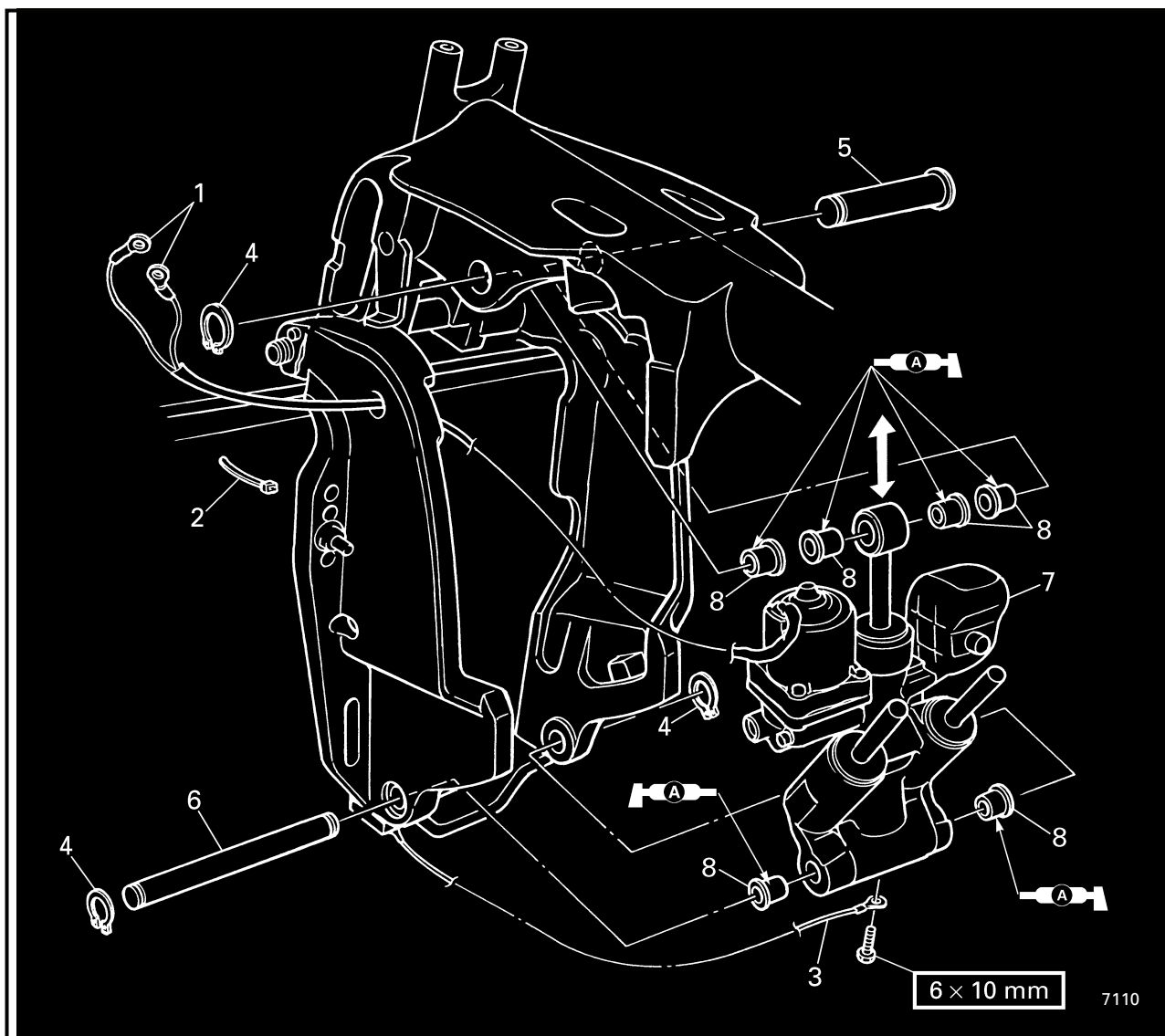


POWER TRIM AND TILT UNIT

REMOVING/INSTALLING THE POWER TRIM AND TILT UNIT



Order	Job/Part	Q'ty	Remarks
1	Tilt up the outboard	2	Not reusable
2	Power trim and tilt lead	3	
3	Plastic locking tie	1	
4	Ground lead	3	
5	Circlip	1	
6	Upper mounting pin	1	
7	Lower mounting pin	1	For installation, reverse the removal procedure.
8	Power trim and tilt unit	1	
	Collar	6	

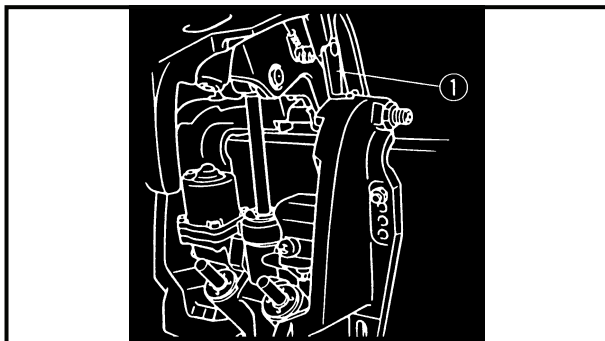


REMOVING THE POWER TRIM AND TILT UNIT

⚠ WARNING

After tilting up the outboard, be sure to support it with the tilt stop levers.

Otherwise, the outboard could suddenly lower if the power trim and tilt unit should lose fluid pressure.



NOTE:

Tilt up the outboard and then turn the tilt stop levers ① to support it.

Remove:

- Power trim and tilt unit

NOTE:

Slightly lower the tilt ram assembly and then remove the power trim and tilt unit.

BLEEDING THE POWER TRIM AND TILT UNIT

NOTE:

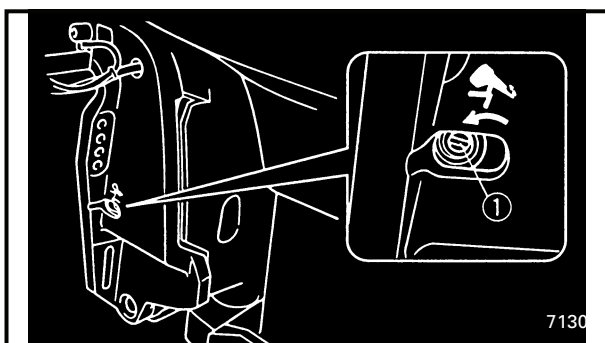
Install the power trim and tilt unit onto the outboard before bleeding.

Bleed:

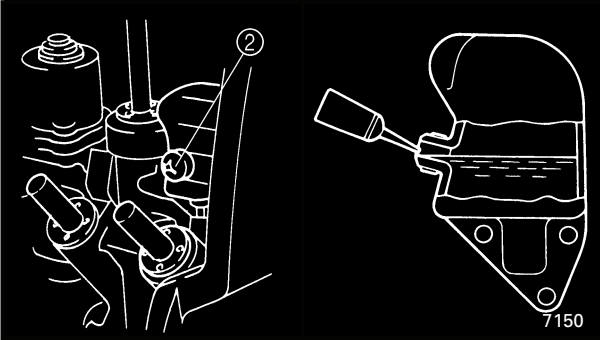
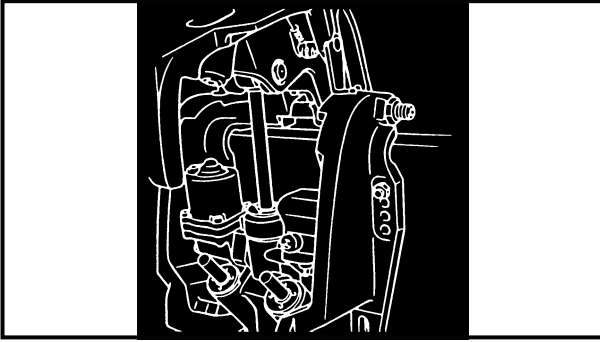
- Air bubbles
(from the power trim and tilt unit)

Bleeding steps

- (1) Connect the battery leads to the battery.
- (2) Loosen the manual valve ① by turning it counterclockwise until it stops.



7130

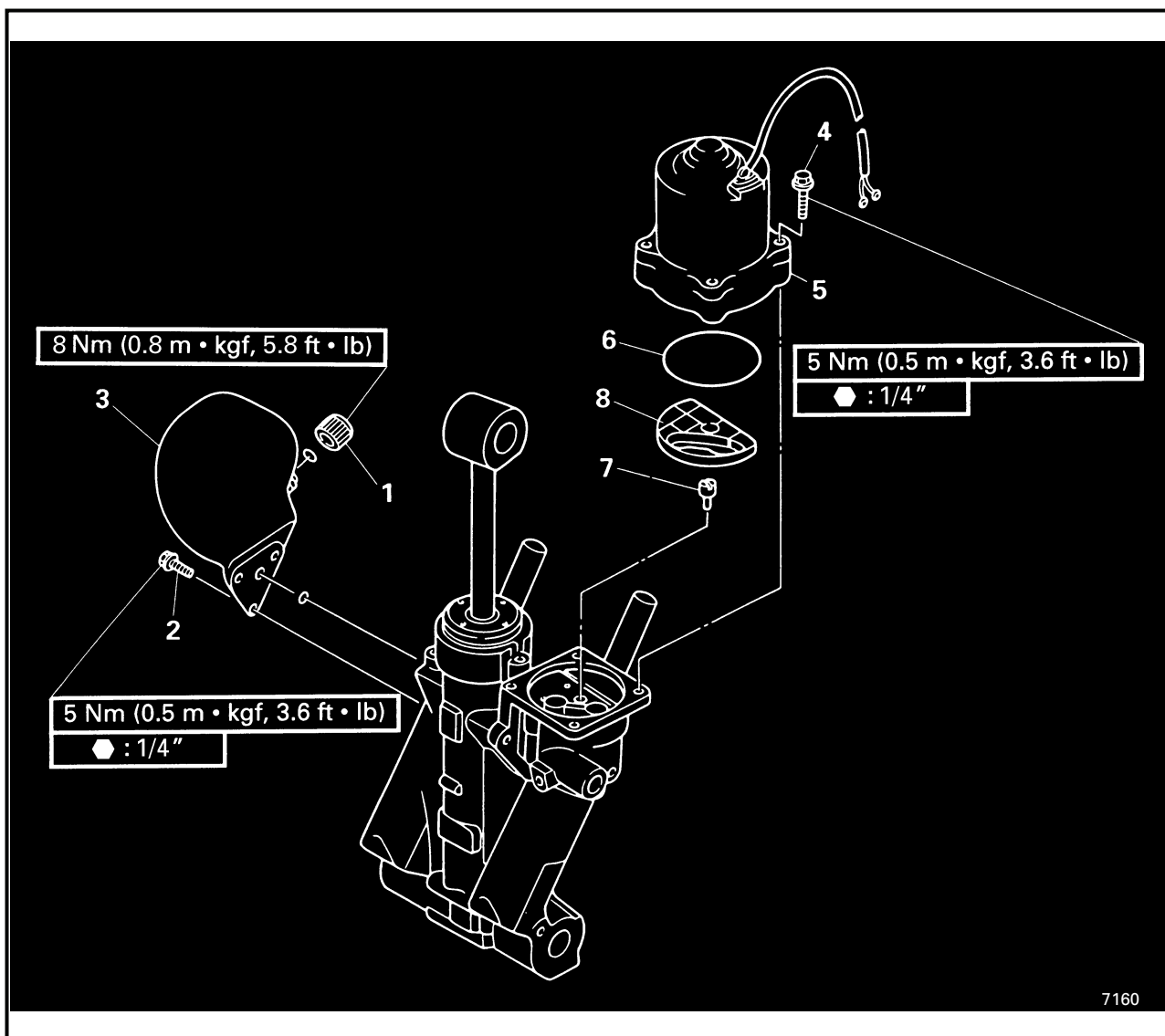


- (3) Tilt up the outboard fully, then release it, and let it lower by its own weight.
- (4) Tighten the manual valve by turning it clockwise.
- (5) Let the power trim and tilt fluid settle for about 5 minutes.
- (6) Push and hold the power trim and tilt switch in the up position until the outboard is fully tilted up.
- (7) Turn the tilt stop levers to support the outboard. Then, let the power trim and tilt fluid settle for about 5 minutes.
- (8) Remove the reservoir cap ② and check that fluid is up to the brim as shown. Add fluid if the level is below the brim.
- (9) Install the power trim and tilt reservoir cap.
- (10) Repeat the above steps two or three times until the power trim and tilt fluid is at the correct level.



RESERVOIR AND POWER TRIM AND TILT MOTOR

REMOVING/INSTALLING THE RESERVOIR AND POWER TRIM AND TILT MOTOR



Order	Job/Part	Q'ty	Remarks
	Power trim and tilt unit		Refer to "POWER TRIM AND TILT UNIT" on page 7-35.
1	Reservoir cap	1	
2	Bolt	3	
3	Reservoir	1	
4	Bolt	4	
5	Power trim and tilt motor	1	
6	O-ring	1	
7	Drive pin	1	
8	Gear pump housing filter	1	
			For installation, reverse the removal procedure.

**⚠ WARNING**

- To prevent the hydraulic fluid from spurt-
ing out due to internal pressure, the out-
board should be kept fully tilted up (the
tilt rod at full length).
- After removing the power trim and tilt
motor or reservoir, do not push the tilt
ram down. This may cause hydraulic fluid
to spurt out from the port.

CAUTION:

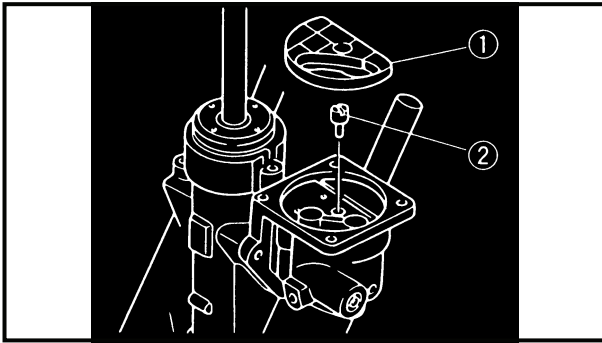
Do not wipe hydraulic system components
with rags, paper, tissues, or the like, as
fibers from such material will cause mal-
functions if they enter the system.

INSPECTING THE RESERVOIR

1. Drain:
 - Power trim and tilt fluid
2. Inspect:
 - Reservoir
Cracks/damage/leaks → Replace.

**INSPECTING THE GEAR PUMP
HOUSING FILTER**

- Inspect:
- Gear pump housing filter
Damage/tears → Replace.
Foreign matter → Clean.



INSTALLING THE POWER TRIM AND TILT MOTOR

1. Install:

- Gear pump housing filter ①
- Drive pin ②

2. Fill:

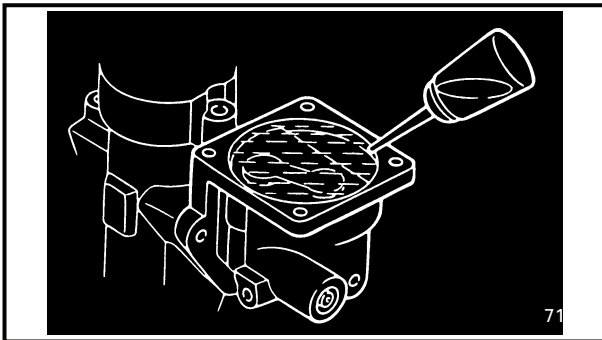
- Gear pump housing



Recommended power trim and tilt fluid
ATF Dexron II

NOTE:

Add power trim and tilt fluid until it reaches the top of the gear pump housing.

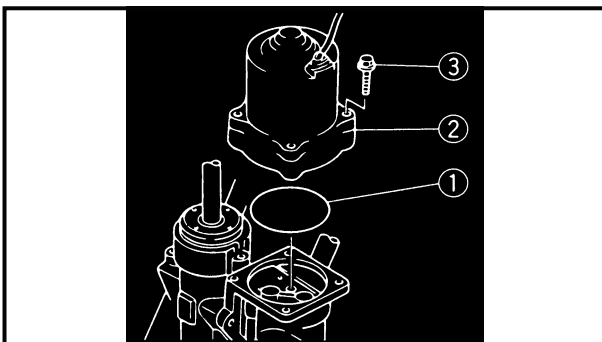


3. Bleed:

- Air bubbles

NOTE:

- Remove all of the air bubbles with a syringe or suitable tool as shown.
- Turn the gear pump gears with a screwdriver and then remove any air between the gear teeth.



4. Install:

- O-ring ①
- Power trim and tilt motor ②
- Bolt ③

NOTE:

Align the armature shaft with the recess in the drive pin.



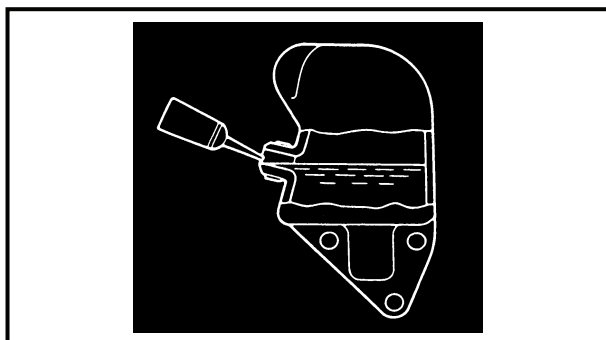
FILLING THE RESERVOIR

⚠ WARNING

To prevent the hydraulic fluid from spurt-
ing out due to internal pressure, the tilt
ram should be kept at full length.

1. Fill:

- Reservoir



**Recommended power trim and
tilt fluid**
ATF Dexron II

2. Inspect:

- Power trim and tilt fluid level
Level is low → Add power trim and tilt
fluid to the proper level.

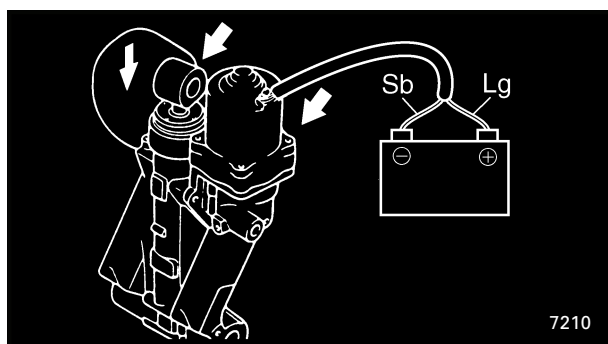
BLEEDING THE POWER TRIM AND TILT UNIT

NOTE:

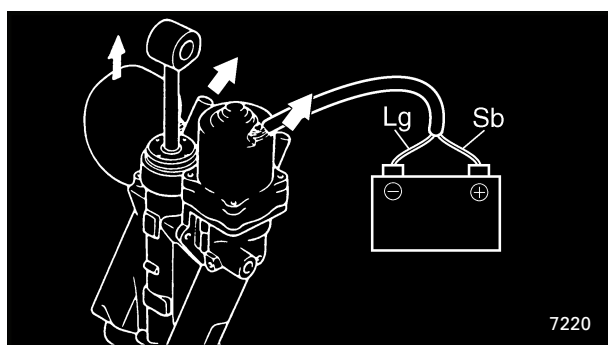
This bleeding must be done before install-
ing the power trim and tilt unit onto the out-
board.

1. Bleed:

- Air bubbles
(from the power trim and tilt unit)



7210



7220

Bleeding steps

- (1) Set the power trim and tilt unit upright.
- (2) Connect the leads of the power trim and tilt on the battery terminals until the trim and tilt ram assemblies are fully compressed.

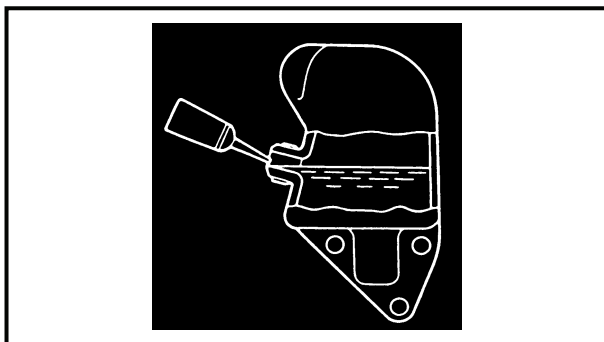
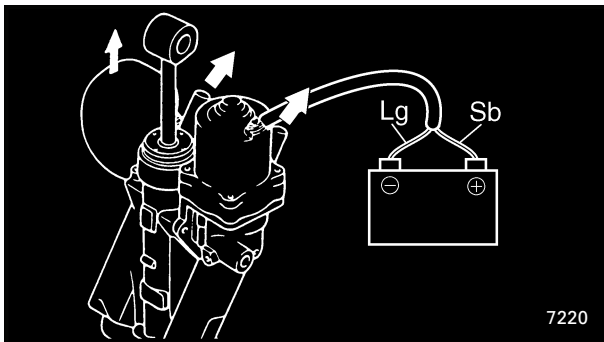
NOTE:

If the rams will not go down, refer to the fol-
lowing.

- A. Connect the leads of the power trim and tilt on the battery terminals until the trim and tilt ram assemblies are fully extended. Then, reverse the leads on the battery terminals until the trim and tilt ram assemblies are fully compressed.



- B. If step A was unsuccessful, connect the leads on the battery terminals and fully compress the tilt ram assembly by hand.
- C. If step B was unsuccessful, loosen the manual valve, compress the trim and tilt ram assemblies fully by hand, and then tighten the manual valve. Then, compress and extend the trim and tilt ram assemblies by connecting the leads on the battery terminals in the up and down positions.
- D. If step C was unsuccessful, disassemble, check, and correct any problems with the power trim and tilt unit.



- (3) Connect the leads on the battery terminals in the up position until the trim and tilt ram assemblies are fully extended.
- (4) Remove the power trim and tilt reservoir cap and inspect that fluid is up to the brim as shown. Add power trim and tilt fluid if the level is below the brim.
- (5) Repeat the above steps two or three times until the fluid is at the correct level.

2. Inspect:

- Power trim and tilt unit operation
Unsmooth operation → Bleed the power trim and tilt unit again.