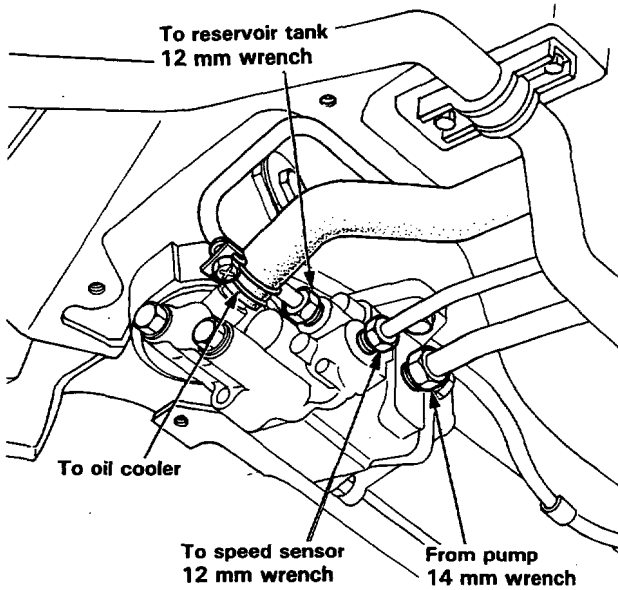




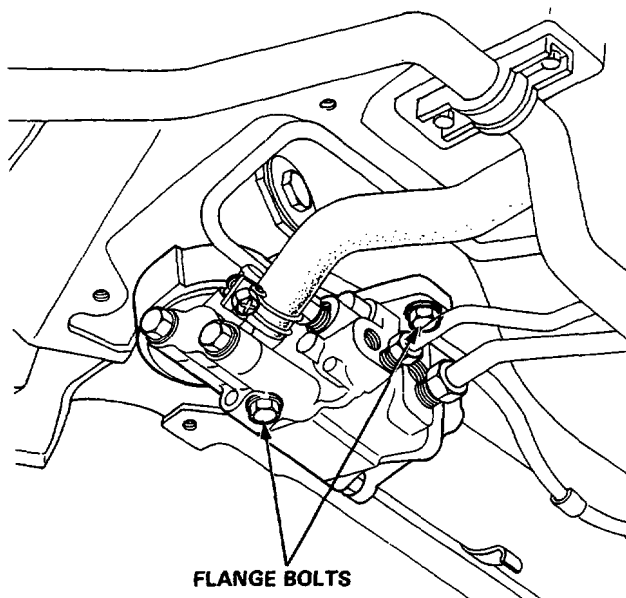
# Gearbox

## Valve Body Unit Disassembly

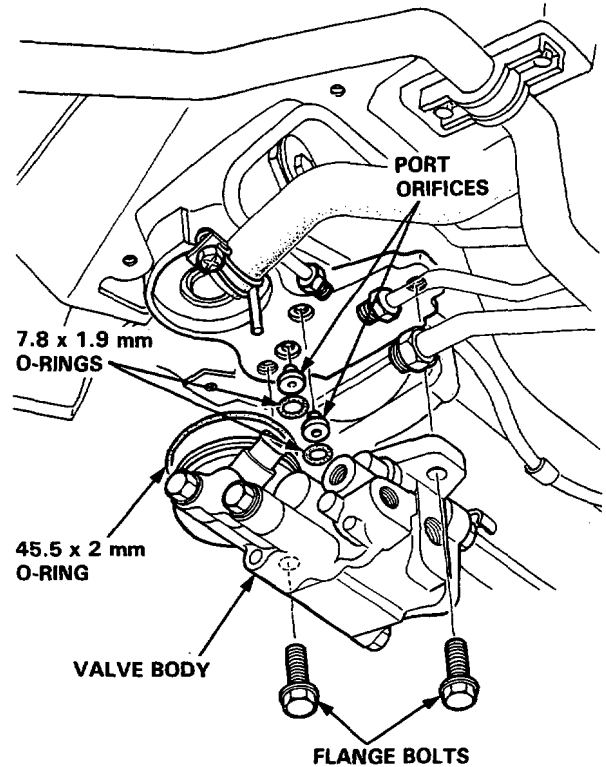
1. Drain the power steering fluid.
2. Remove the gearbox shield.
3. Using solvent and a brush, wash any oil and dirt off the control unit, its lines, and that end of the gearbox. Blow dry with compressed air.
4. Disconnect the return hose by removing the tube clip.
5. Using flare nut wrenches, disconnect the three lines from the control unit.



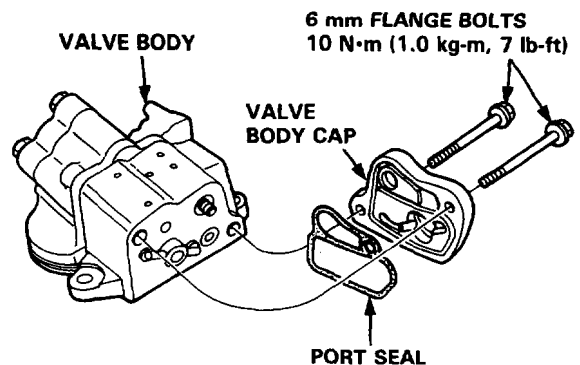
6. Remove the two 6 mm flange bolts and remove the valve body unit from the gear box.



7. Remove the O-rings and port orifices from the gear box.
8. Remove the O-ring from the valve body unit.



9. Remove the two 6 mm flange bolts, and remove the cap from the valve body.
10. Remove the port seal from the cap.

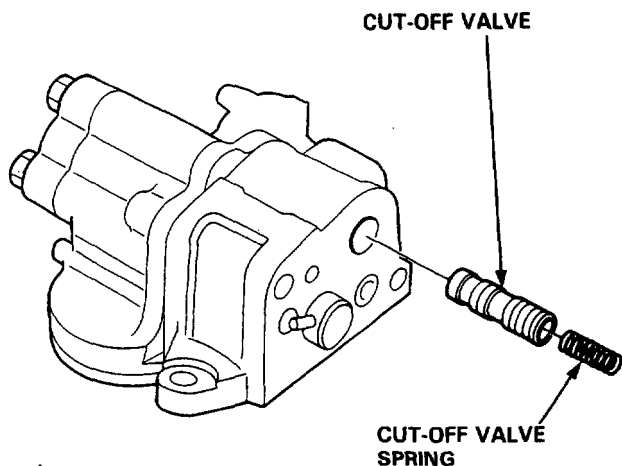


(cont'd)

# Gearbox

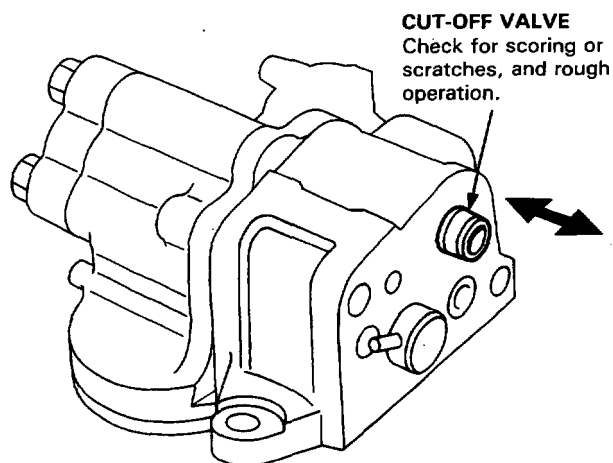
## Valve Body Unit Disassembly (cont'd)

11. Remove the cut-off valve and spring from the valve body.



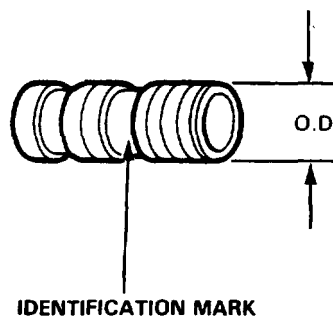
12. Check the cut-off valve:

- Inspect its surface for scoring or scratches.
- Slip it back into the valve body, and make sure it slides smoothly without drag and without side play.



**NOTE:**

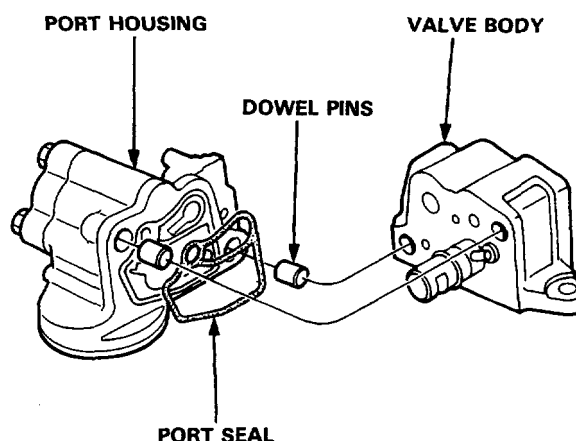
- The cut-off valve is sized to fit the valve body, so, if you replace it, make sure the new valve has the same identification mark on it.
- If the valve body is damaged, replace all three parts (valve body, cut-off valve and control valve) as a set.



Identification mark	Outside diameter	Part number
A	10.000 – 10.005 mm (0.3937 – 0.3939 in.)	53650 – SEO – 950
B	9.995 – 10.000 mm (0.3935 – 0.3937 in.)	53651 – SEO – 950
C	9.990 – 9.995 mm (0.3933 – 0.3935 in.)	53652 – SEO – 950

13. Separate the valve body and port housing.

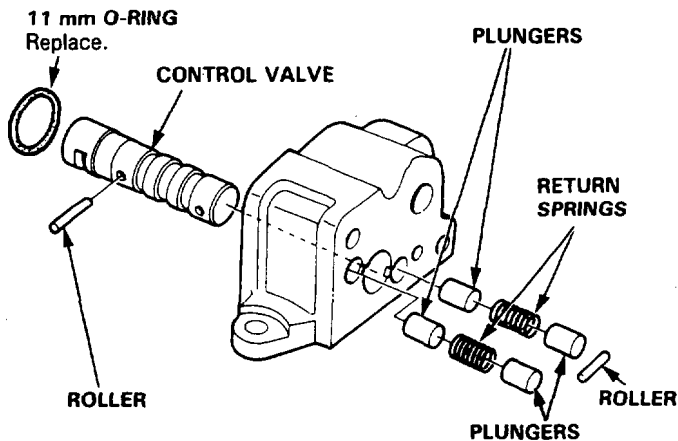
14. Remove the port seal and dowel pins from the port housing.





15. Remove the rollers from the control valve by pushing the valve out one side of the valve body, and then the other.

**NOTE:** When removing the rollers, hold the plungers with your fingers to keep them from popping out.



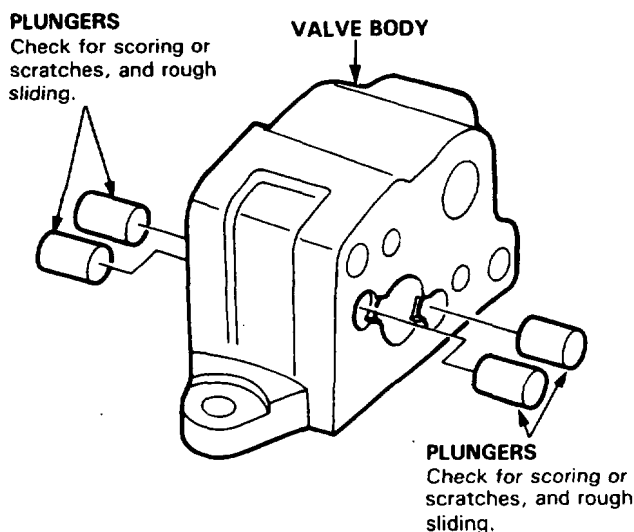
16. Remove the plungers, return springs and control valve from the valve body.

17. Remove the 11 mm O-ring from the control valve.

18. Check the plungers.

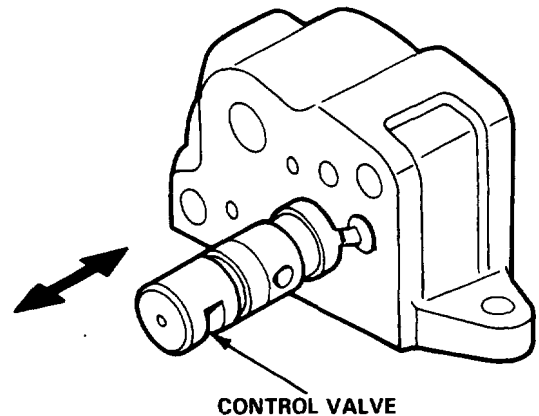
- Inspect their surface for scoring or scratches.
- Slip each plunger into the valve body, and make sure it slides smoothly, without drag or side play. If any plunger is damaged, replace it.

**NOTE:** If the valve body is damaged, replace all three parts (valve body, cut-off valve and control valve) as a set.



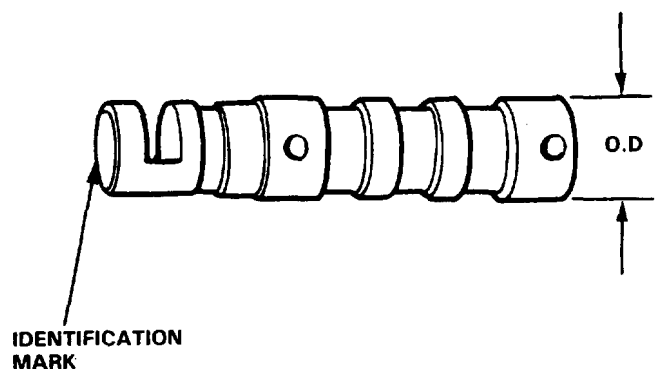
19. Check the control valve.

- Inspect its surface for scoring or scratches.
- Slip it into the valve body, and make sure it slides smoothly, without drag or side play.



**NOTE:**

- The control valve is sized to fit the valve body, so, if you replace it, make sure the new valve has the same identification mark on it.
- If the valve body is damaged, replace all three parts (valve body, control valve and cut-off valve) as a set.



Identifica- tion mark	Outside Diameter	Part Number
X	13.998 – 14.003 mm (0.5511 – 0.5513 in.)	53646–SD4–J60
Y	13.993 – 13.998 mm (0.5509 – 0.5511 in.)	53647–SD4–J60
Z	13.988 – 13.993 mm (0.5507 – 0.5509 in.)	53648–SD4–J60

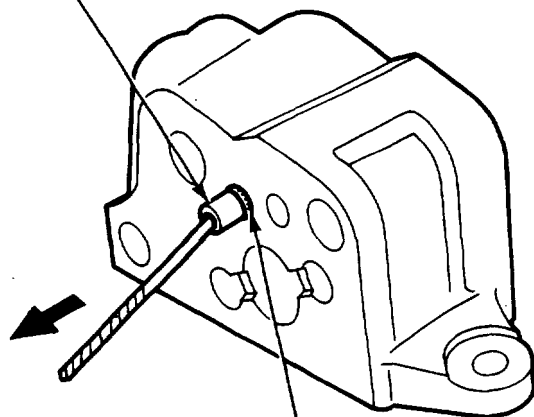
(cont'd)

# Gearbox

## Valve Body Unit Disassembly (cont'd)

20. Using a 1.5 mm (1/16") drill bit, remove the sensor orifice and O-ring.

SENSOR ORIFICE

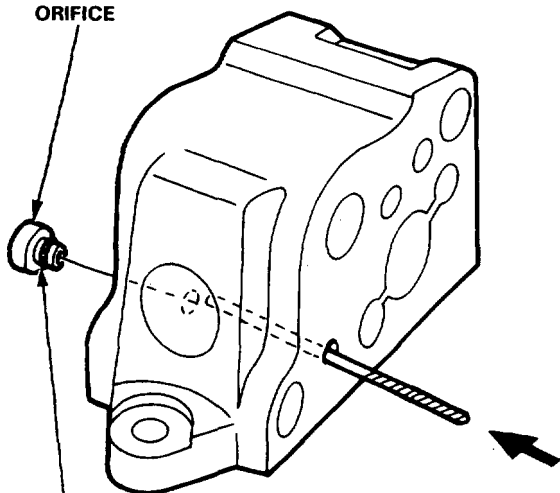


O-RING  
Replace.

21. Using a 1.5 mm (1/16") drill bit, push the damping orifice and O-ring out of the valve body.

**CAUTION:** Grind the shank end of the drill bit flat before using.

DAMPING  
ORIFICE



O-RING  
Replace.