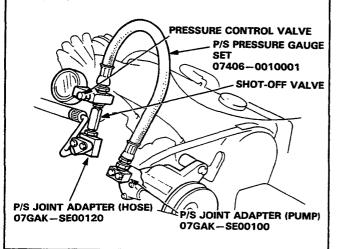
## **On-Car Checks**

# Pump Pressure Check (cont'd)-

- 6. Start the engine and let it idle.
- Turn the steering wheel from lock-to-lock several times to warm the fluid to operating temperature.
- Close the shut-off valve, then, close the pressure control valve gradually until the pressure gauge needle is stable. Read pressure.
- 9. Immediately open the shut-off valve fully.

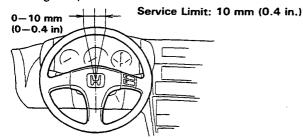
CAUTION: Do not keep the shut-off valve closed more then 5 seconds or the pump could be damaged by over-heating.

If the pump is in good condition, the gauge should read at least 7845—8826 kPa (80—90 kg/cm², 1138—1280 psi). A low reading means pump output is too low for full assist. Repair or replace the pump.



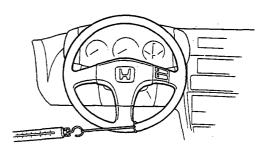
# - Steering Wheel Rotational Play -

- Place the front wheels in a straight ahead position and measure the distance the steering wheel can be turned without moving the front wheels.
- If the play exceeds the service limit, check all steering components.



### Assist Check with Car Parked-

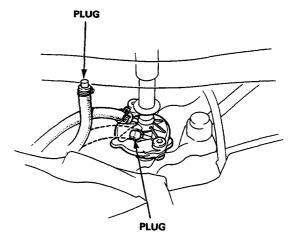
- Check the power steering fluid level and pump belt tension.
- Start the engine, allow to idle, and turn the steering wheel from lock-to-lock several times to warm up the fluid
- Attach a spring scale to the steering wheel. With the engine idling and the car on a clean, dry floor, pull the scale as shown and read it as soon as the tires begin to turn.



The scale should read no more than 18 N (1.8 kg, 4 lb).

If it reads more, go on step 4.

 Stop the engine. Disconnect the hose from the speed sensor and plug the hose and the sensor fitting as shown.

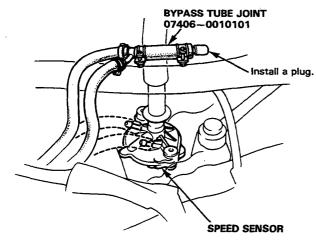


- 5. Start the engine and let it idle.
  - If the reading is now 18 N (1.8 kg, 4 lbs) or less, replace the speed sensor, see page 17-29.
  - If the reading is still more than 18 N (1.8 kg, 4 lbs), check the gearbox and pump.

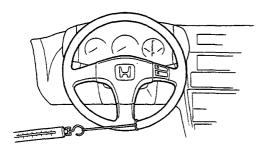


#### **Assist Check-**

- Check the power steering fluid level and pump belt tension.
- Start the engine, let it warm up to normal temperature, and turn the steering wheel lock-to-lock a few times to warm up the fluid.
- Stop the engine. To simulate speeds above 50 km/h (30 mph), disconnect the hoses from the speed sensor and connect them to the Bypass Tube Joint.



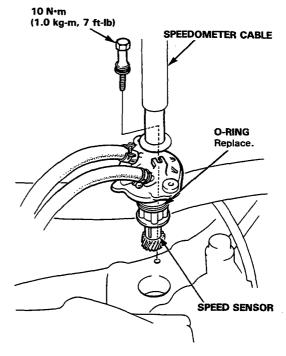
 Attach the spring scale to the steering wheel. With the engine idling and the car on a clean, dry floor, pull the scale as shown and read it as soon as the tires begin to turn.



- If the scale reads a normal 50 N (5.0 kg, 11 lbs), or more, the assist at high speeds is being caused by reduced speed sensor output.
  Replace the sensor.
- If the scale reads less than 50 N (5.0 kg, 11 lbs), the sensor is OK, and the problem is in the sensor feed line, the pump, or the control unit.
  See if the feed line is pinched or bent then check pump.

## Speed Sensor Replacement

 Remove the speed sensor mounting bolt and pull the speed sensor from the transmission housing.



- Pull up the speedometer cable boot, remove the clip, and pull out the speedometer cable.
- Disconnect the speed sensor hoses and plug the fittings.
- After installing a new sensor, turn the steering wheel lock-to-lock with the engine idling to bleed air from the system.
- 5. Check the reservoir and add fluid if necessary.