Troubleshooting (2WS)

Fluid Leaks

- **Steering gearbox**
  - Leaking from cylinder end seal into tie-rod boots.
    - Leaking from left side.
      - Remove the control valve and inspect the 11 mm O-ring and the port housing bore for pits, burrs or scratches (page 11-40). Repair as necessary.
      - If no abnormality is found, replace the O-ring, reseal the gearbox and inspect the steering rack sealing surface for burrs or scratches between the steering rack gear teeth and the piston. Inspect the seal retainer bore in the gearbox housing for proper chamfer and sharp edges (page 11-55).
    - Leaking from right side.
      - Reseal gearbox and inspect the rack sealing surface between the steering rack piston and the right end (page 11-52).

    NOTE: When fluid leaks from one side of the rack the balance tube transfers the fluid to the other side, giving the appearance that both sides are leaking. To troubleshoot, remove both boots, clean the rack and locate the leak.
  - Leaking from control unit mating surfaces.
    - Tighten attaching bolts or replace valve body or port housing.
  - Leaking from either side of valve body.
    - Replace all control unit seals and O-rings.
  - Leaking from drilled passage plug (steel ball).
    - Replace control valve body.
- **Pump**
  - Front seal leaking.
    - Replace front seal.
  - Pump housing leaks at either end.
    - Replace housing O-rings. If the housing still leaks, replace the pump.
- **Speed sensor**
  - Leaking.
    - Replace the sensor.
- **Reservoir**
  - Leaking from around dipstick.
    - Reservoir overfilled. Pull off the hose and drain to proper level.
    - Air leak in suction side of system (reservoir, inlet hose, front pump seal).
- **Pump outlet line (high pressure)**
  - Leaking at threaded fitting.
    - Tighten fitting. If still leaking, replace hose.
  - Leaking at swagged joint.
    - Replace hose.
- **Low pressure hoses**
  - Leaking because of damage, deterioration, or improper assembly.
    - Replace or repair as necessary.
- **Pipes**
  - Leaking at gearbox connection.
    - Tighten connector. If still leaking, replace the pipe or control unit.