

# Troubleshooting (4WS)

## General Troubleshooting (cont'd)

Uneven or rough steering.

Belt slipping on pulley.

Adjust belt tension. Replace belt, if necessary (page 11-18).

Gain control valve sticking or leaking.

Check gain control valve; clean or replace the gain control valve or control unit.

Idle speed low or erratic.

If the engine stalls when wheel is turned while car is stopped or moving at low speed, adjust idle speed (see Fuel Section).

Check power steering pump preload (page 11-31).  
If preload is above 8 N·m (0.8 kg-m, 70 lb-in.), the pump is probably damaged internally; clean, repair, or replace as necessary (page 11-32).

Air bubbles visible in reservoir fluid.

Check fluid level.  
If low, check for leaks.  
Add fluid to proper level (page 11-19).

If fluid level is OK, check O-rings and seals on both ends of the pump inlet hose, and the oil pump housing mating surfaces for suction leaks. Replace parts as necessary.

Improperly adjusted rack guide.

Adjust rack guide (page 11-19).

If the rack guide adjustment is OK, check the pinion bearings for wear or damage. Replace them as necessary.

Interference with center shaft.

Visually inspect that the front and rear gearboxes are installed properly.

Uneven rear steering.  
NOTE: Measure the wheel alignment (Toe, camber) and confirm that they are within limits.

Confirm the rear gearbox neutral position and check the rear wheel angle.

If the wheel angle is not within limit, replace the rear gearbox.



Shock or vibration when wheel is turned to full lock.

Pump belt slipping on pulley (pump stops momentarily).

Adjust belt tension (page 11-18) or replace belt.

Sticking relief valve; pulsation exceeds 980 kPa (10 kg/cm<sup>2</sup>, 142 psi).

Check flow control valve (page 11-33); clean or replace as necessary. If the flow control valve is OK, replace the pump.

Assist (excessively light steering) at high speed.

Measure force required to turn wheel with bypass tube joint installed, and car parked on dry paved surface (page 11-21).

If below 50 N (5.0 kg, 11 lbs), check gain control/pressure control valves and control unit and replace parts as necessary.

Check the installation of the front/rear gearboxes and center shaft.

If installation is OK, perform a function check of the rear gearbox (page 11-94).

If defective, replace the rear gearbox (page 11-90).

Check installation of the front/rear gearboxes.

If the torque of the mounting bolts is normal, perform a function check of rear gearbox (page 11-94).

If defective, replace the rear gearbox assembly (page 11-91).

Steering kicks back during wide turns.

Pump belt slipping.

Adjust belt tension (page 11-18) or replace belt.

Sticking gain control valve, pressure control valve or control valve.

Replace valves or control unit.

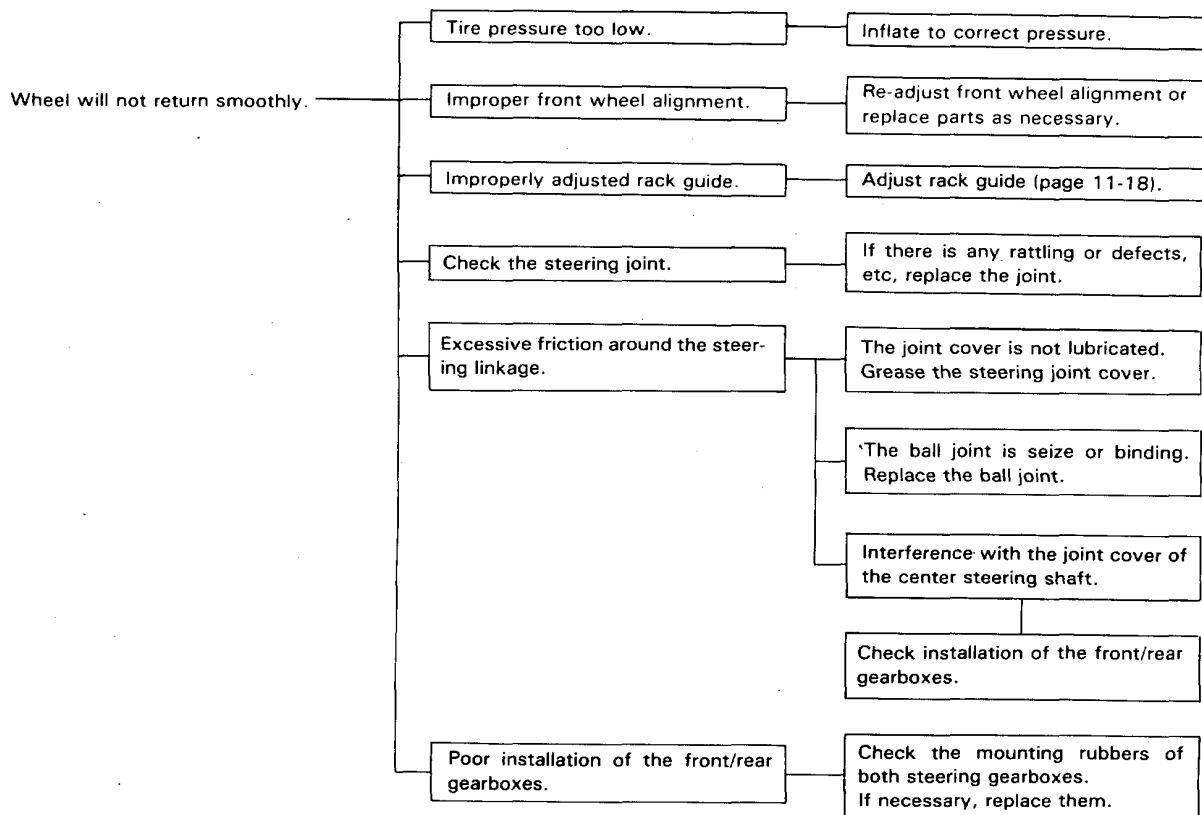
Rack guide adjusted too loose.

Adjust rack guide (page 11-19).

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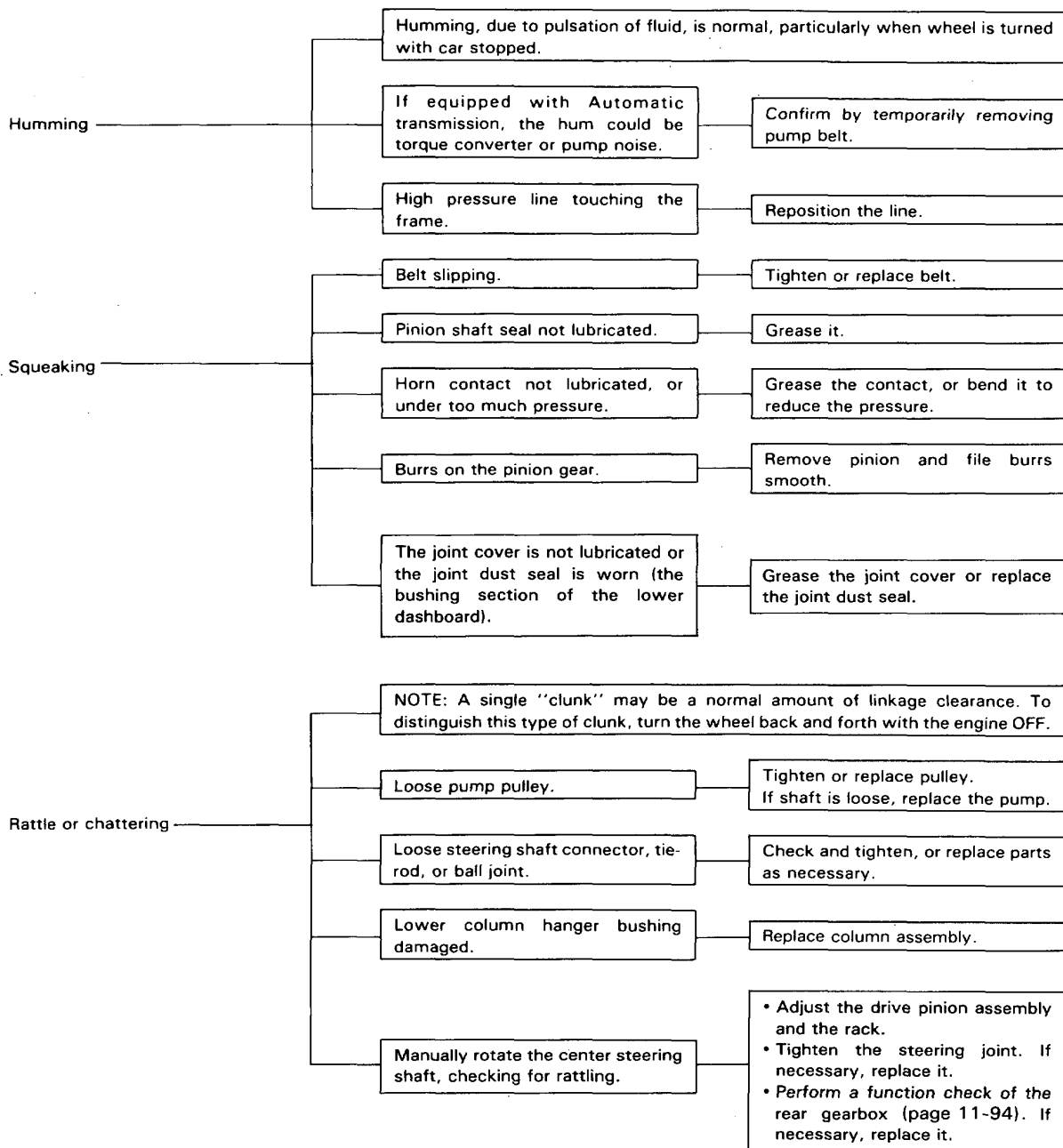
## General Troubleshooting (cont'd)





## Noise and Vibration

NOTE: Pump noise in first 2–3 minutes after starting in cold weather (– 20°C, – 4°F or colder) is normal.



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