

DIAGNOSIS (Continued)

(Continued)

STEERING SYSTEM (Continued)

CONDITION	POSSIBLE SOURCE	ACTION
<ul style="list-style-type: none"> Poor Returnability-Sticky Feel—Condition noticed when the steering fails to return to center following a turn without manual effort from the driver. In addition, when the driver returns the steering wheel to center, it may have a sticky or catchy feel. 	<ul style="list-style-type: none"> Improper tire pressure. Improper tire size or incorrect type. Column flange rubbing steering wheel and / or flange. Column intermediate shaft universal joints binding. Check for boot tears and / or evidence of binding or damage to tie rod ends or ball joints. Improper toe adjustment. Column bearing binding. System contaminated. 	<ul style="list-style-type: none"> Adjust tire pressures. Replace as required. Refer to Section 11-04. Replace intermediate shaft assembly. Refer to Section 11-04. Replace as necessary. Refer to Section 11-02. Adjust toe as required. Refer to Section 04-00. Replace bearing. Refer to Section 11-04. Flush power steering system. Refer to Flushing procedure Section 11-02.

TG4161E

NOTE: The following diagnosis chart applies to a variable assist steering system.

STEERING SYSTEM DIAGNOSIS

CONDITION	POSSIBLE SOURCE	ACTION
<ul style="list-style-type: none"> High (Excessive) Steering Gear Efforts at All Vehicle Speeds is a Condition Recognized While Turning Corners and During Low Speed Maneuvers and Especially While Parking. The Assist Concerns May Occur in Both Directions or Only in One Direction, They May be Intermittent, or Consistent. <p>NOTE: Discolored steering fluid in a rack-and-pinion steering system should not be misdiagnosed as a functional or noise concern.</p>	<ul style="list-style-type: none"> Low pump fluid. Gear assembly external or internal leak. Pump external leak. Pump pressure and flow improper. VAPS (Variable Assist Power Steering) system malfunction. Improper drive belt tension. Hose external leak. Hose restriction. Pump pulley loose / warped. Power steering pump belt loose / glazed / broken or water on belt. Engine idle too low. Tires not properly inflated. Suspension bent or interference. System contaminated. Valve screen plugged. Flex coupling rubbing against housing face. Column misaligned or binding. 	<ul style="list-style-type: none"> Fill as required and check for system leaks. Replace steering gear assembly. Refer to Section 11-02. Refer to Section 11-02. Perform pump flow and relief pressure tests. Service as required. Refer to VAPS system diagnostic procedure in Section 11-02. Check for proper belt tension. Service or replace as necessary. Clean and replace as necessary. Replace pulley. Refer to Section 11-02. Inspect, adjust belt tension or replace as required. Adjust idle. Inflate. Inspect service or replace as necessary. Refer to Section 04-00. Inspect system for foreign object, kinked hose, etc. —flush system —refer to power steering pump, Section 11-02. Prior to rebuilding a pump, examine the valve screen for contamination, Replace all valves which have plugged or contaminated valve screens. Reposition flex coupling. Align column assembly.
<ul style="list-style-type: none"> High (Excessive) Efforts at Low Vehicle Speeds 	<ul style="list-style-type: none"> VAPS (Variable Assist Power Steering) system malfunction. 	<ul style="list-style-type: none"> Refer to VAPS system diagnostic procedure and service or replace components accordingly. Refer to Section 11-02.