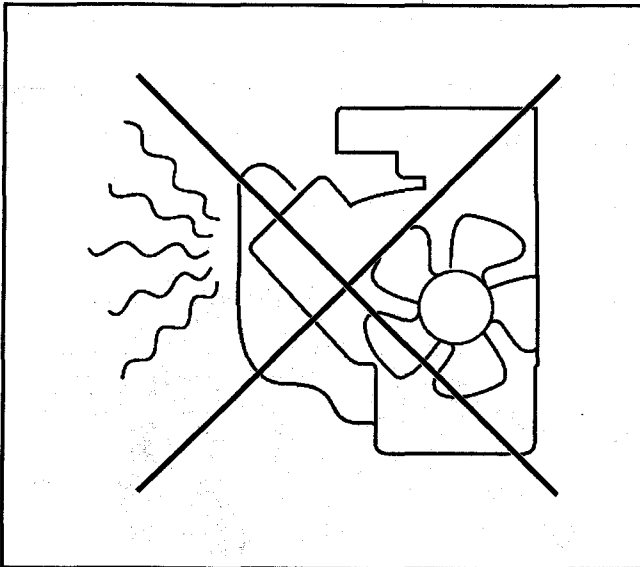


## Checking and Adding Power Steering Fluid

**Notice:** When adding fluid or making a complete fluid change, always use the proper fluid. Failure to use the proper fluid will cause hose and seal damage and fluid leaks. Refer to Power Steering Fluid Recommendations in this section.

The fluid level is indicated by marks on the fluid level indicator. The fluid level indicator is located on the reservoir cap.

- If the fluid is about 77°C (170°F), the fluid level should be at the H mark.
- If the fluid is about 21°C (70°F), the fluid level should be at the C mark.



443639

## Bleeding Power Steering System

### Bleed Procedure

#### Tools Required

- J 35555 Mity Vac
- J 43485 Power Steering Bleeder Adapter
- Bleed the steering system for the following reasons:
  - Components replaced
  - Fluid line disconnected
  - Steering system noise occurs
  - Prevention of pump damage
  - Proper system operation

**Important:** Use clean, new power steering fluid type only.

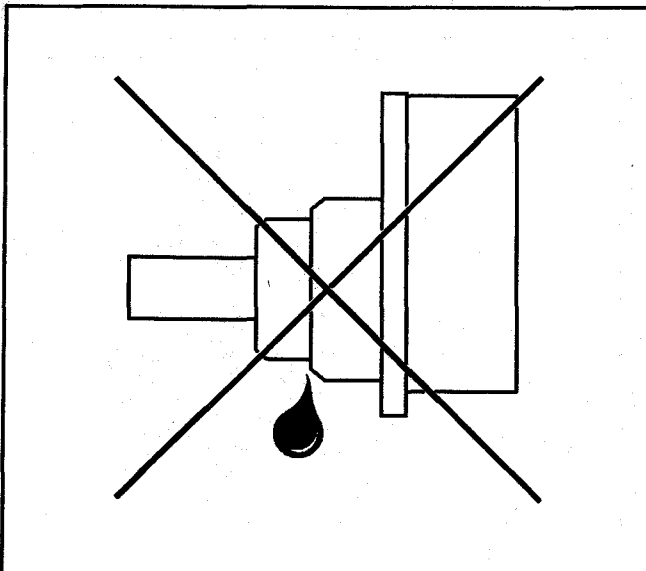
- See the Maintenance Lubrication subsection for fluid specifications.

**Important:** Hoses touching the frame, body or engine can cause system noise.

- The hoses must not touch any other part of the vehicle.

**Important:** Loose connections may not leak, but could allow air into the steering system.

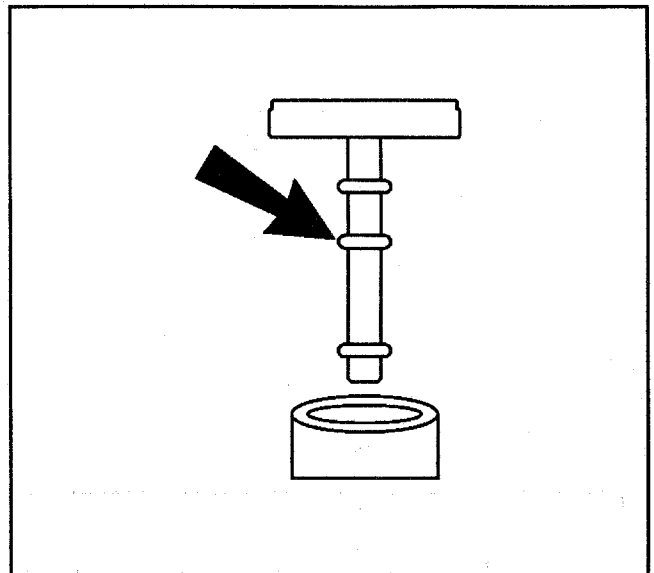
- Verify that all hose connections are tight.



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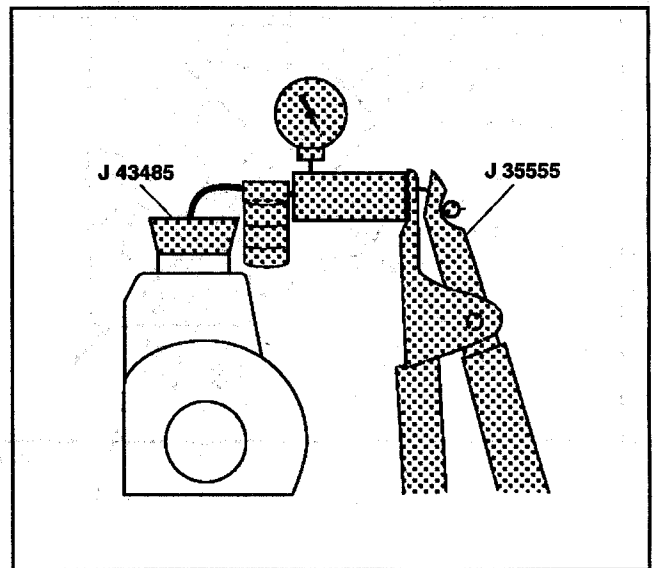
**Important:** Maintain the fluid level throughout the bleed procedure.

- Remove the pump reservoir cap.
- Fill the pump reservoir with fluid to the "FULL COLD" level.



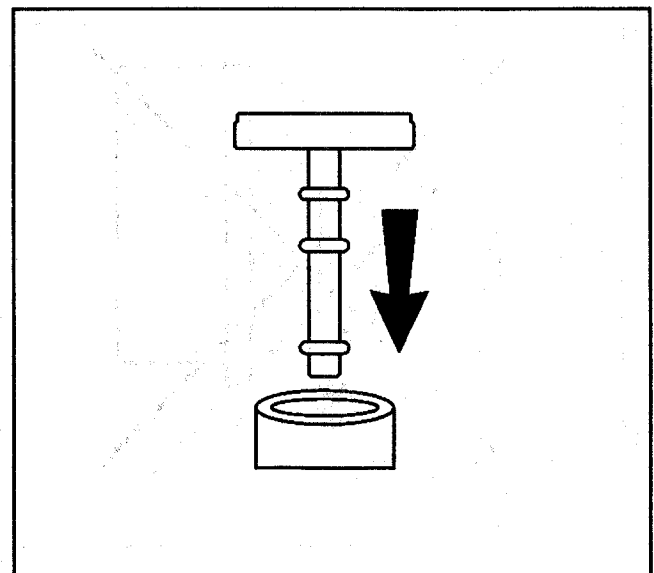
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- Attach *J 43485* to *J 35555* or equivalent.
- Place *J 43485* on the pump reservoir filler neck.
- Apply a vacuum of 20 Hg maximum.
- Wait 5 minutes.
- Verify the fluid level.



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- Reinstall the pump reservoir cap.

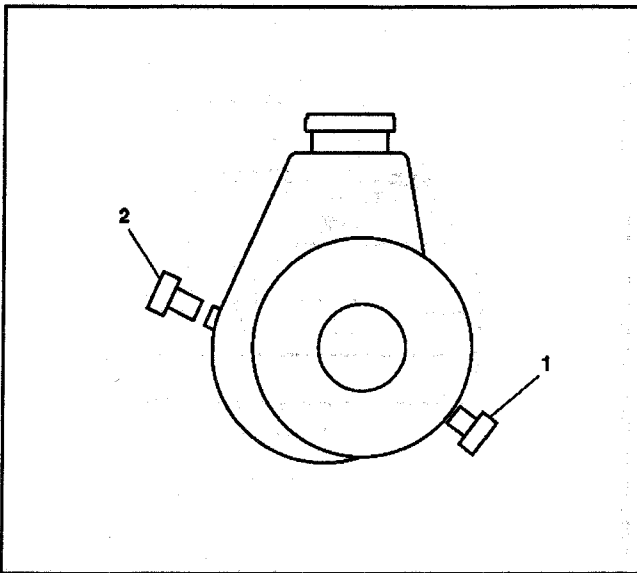


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## Special Conditions Procedure

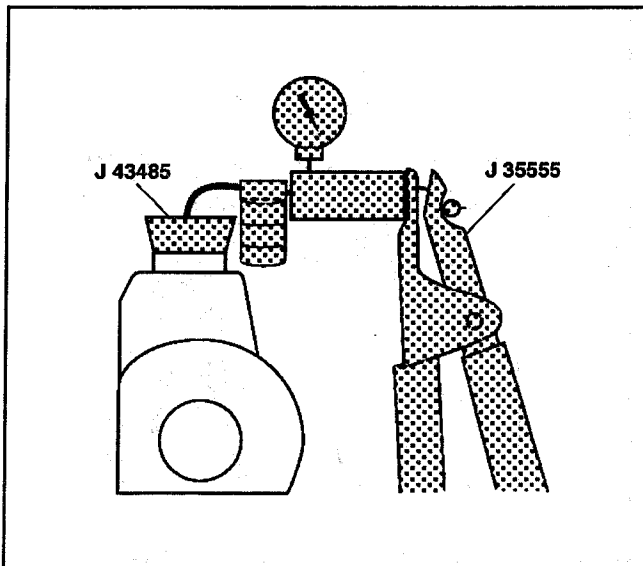
## Tools Required

- J 35555 Mity Vac
  - J 43485 Power Steering Bleed Adapter
1. If the vacuum continues to drop, remove the pressure and return hose from the pump.
  2. Install the plugs (1) (2) supplied with J 43485 into the pressure and return port.



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3. Attach J 43485 to J 35555 or equivalent.
4. Place J 43485 on the pump reservoir filler neck.
5. Apply a vacuum of 20 Hg maximum.
6. If the vacuum drops again, repair or replace the pump. If the vacuum holds steady, continue to check the other parts of the steering system.

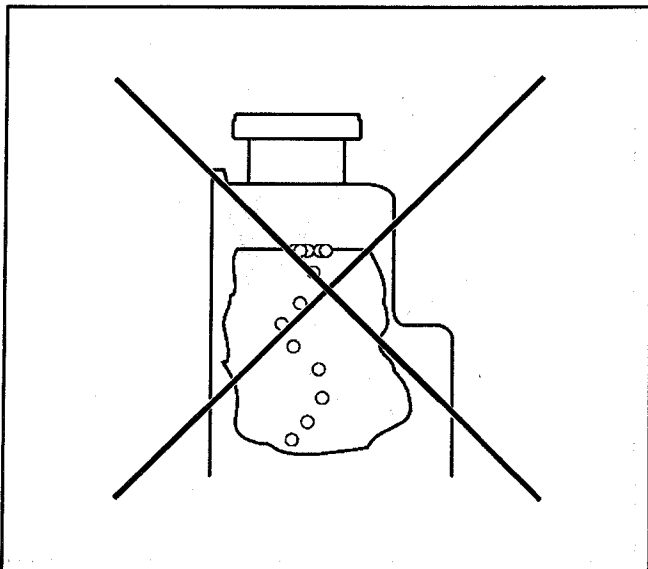


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**Important:** Fluid must be free from bubbles. Be aware of periodic bubbles that indicate a loose connection or leaking O-ring seal in the return hose or the pressure hose.

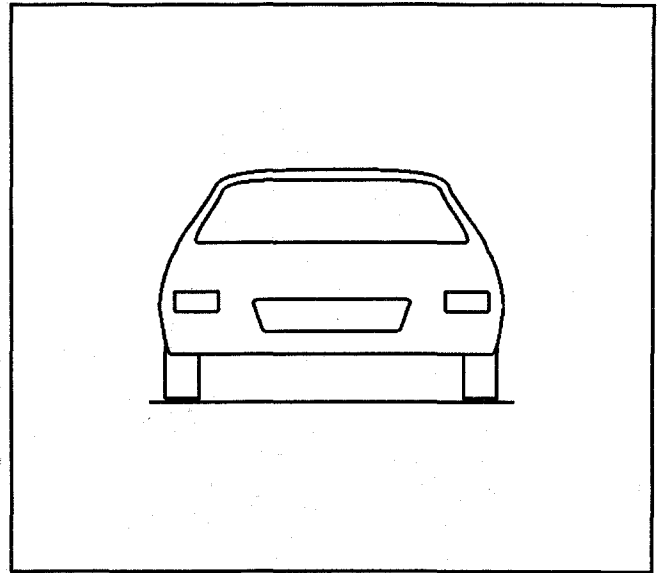
**Important:** Fluid must be free from discoloration.

7. Observe the fluid.
8. If condition persists, replace the following parts:
  - The return hose clamps
  - The return hose O-rings
  - The pressure hose O-rings
  - The gear cylinder line O-rings
  - The reservoir to pump O-ring



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9. Repeat the bleed procedure from the beginning.
10. Drive the vehicle approximately 16 kilometers (10 miles) to warm the system to operating temperature. Evaluate vehicle on a smooth flat surface.
11. To check for noise problems, verify the following items:
  - There is smooth power assist.
  - The vehicle operates quietly.
  - The pump maintains the proper fluid level.
  - There is no leaking in the steering system.
  - The fluid is free of foam or discoloration.



443663

### Flushing the Power Steering System

**Notice:** When adding fluid or making a complete fluid change, always use the proper fluid. Failure to use the proper fluid will cause hose and seal damage and fluid leaks. Refer to Power Steering Fluid Recommendations in this section.

1. Raise and support the front of the vehicle. Ensure that the tires and wheels are free to turn. Refer to *Lifting and Jacking the Vehicle* in General Information.

**Important:** Position the inlet hose or the reservoir hose toward a large container in order to catch any draining fluid.

2. Remove the reservoir hose at the fluid reservoir inlet connector.
3. Plug the fluid inlet connector port on the fluid reservoir.
4. While an assistant is filling the fluid reservoir with fluid, start the engine. Run the engine at idle.

**Notice:** Do not hold the steering wheel against the stops while flushing the power steering system. Holding the steering wheel against the wheel stops will cause high system pressure, overheating, and damage to the power steering pump and/or gear.

5. Turn the steering wheel from stop to stop.
6. Continue to drain the reservoir until all of the old fluid is cleared from the power steering system.
7. Add approximately 0.94 liters (1 quart) of new fluid in order to flush the system.
8. Inspect the fluid that is draining while you are refilling the fluid reservoir. Do not reuse any drained fluid.

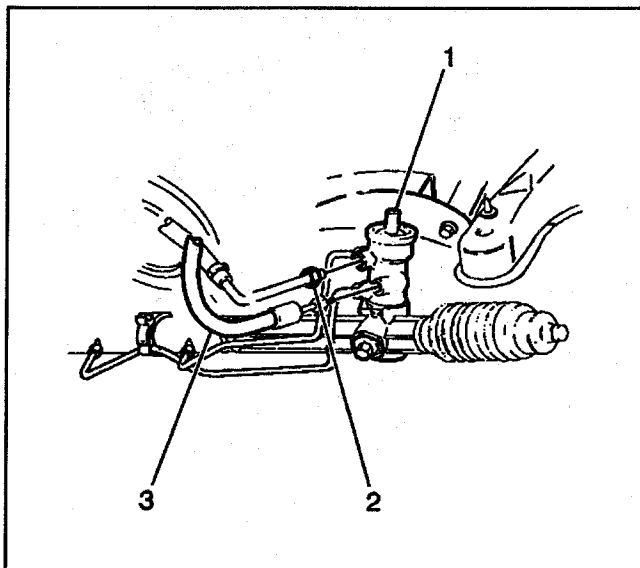
9. If necessary, perform the following steps:
  - Replace all of the lines.
  - Disassemble and clean the system components.
  - Replace the system components.

10. Unplug the reservoir hose at the fluid reservoir inlet connector.
11. Turn the engine off.
12. Fill the fluid reservoir to the C mark on the fluid level indicator.
13. Bleed the power steering system. Refer to *Bleeding Power Steering System* in Power Steering.

## Power Steering Hoses Replacement

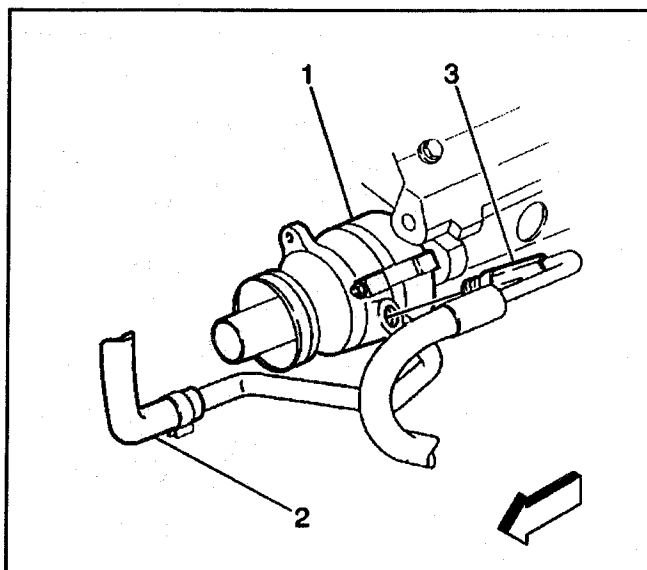
### Removal Procedure

1. Place drain pan(s) under vehicle under steering gear and pump.
2. Raise and suitably support vehicle. Refer to *Lifting and Jacking the Vehicle* in General Information.
3. Remove power steering gear inlet (3) and outlet (2) hoses from steering gear (1).



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4. Lower vehicle.
5. Remove the serpentine belt.
6. Remove the power steering pump pulley. Refer to *Power Steering Pulley Replacement* for L36 V6 or *Power Steering Pulley Replacement* for LS1 V8.
7. Remove inlet hose fitting (3) from pump (1) (L36 shown, LS1 similar).



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