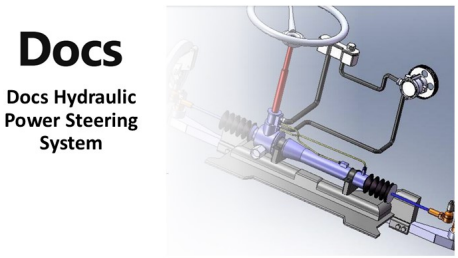

Docs Hydraulic Power Steering System Instructions

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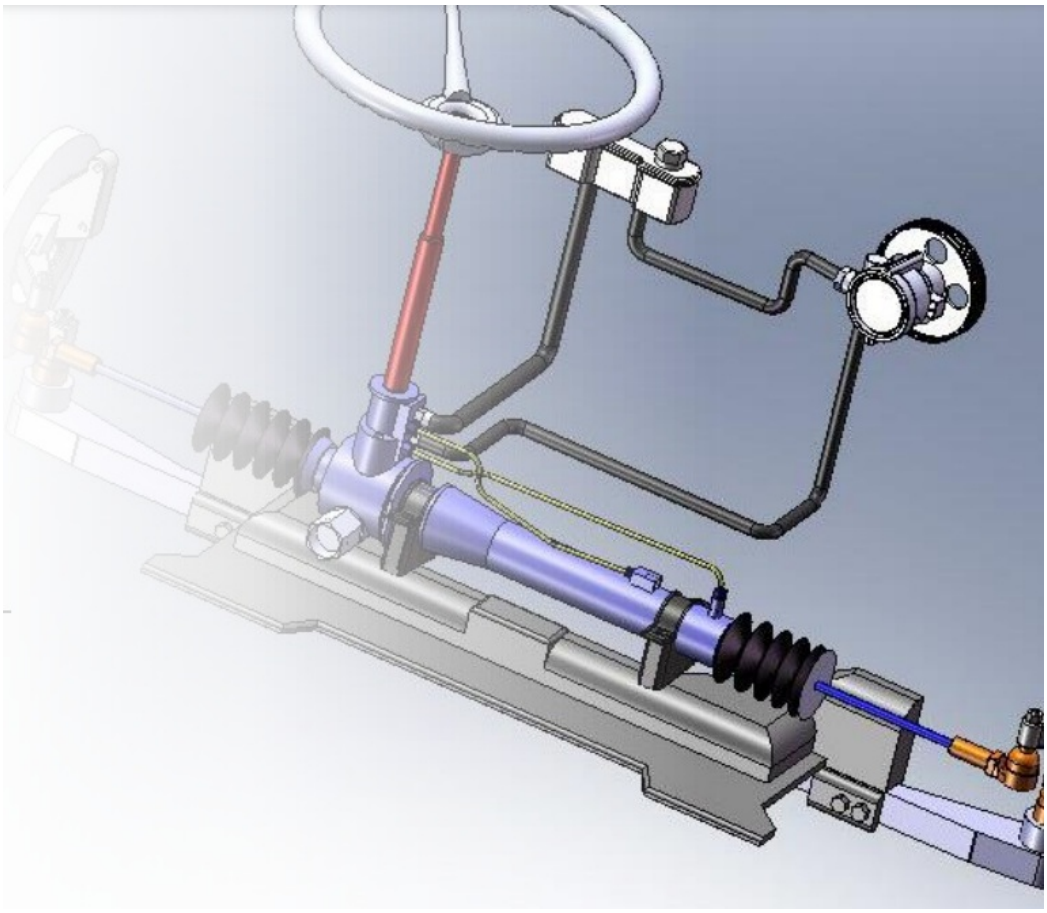


Specifications

- Product Name: Hydraulic Power Steering System Bleeder Kit
- Usage: Bleeding air from hydraulic power steering systems

Product Usage Instructions

Checking the Steering System for Trapped Air:

1. Top off the fluid in the reservoir to the Cold Full level.
2. If normal operation resumes without noises or hard steering, then everything is OK.
3. If fluid level drops again, there’s a leak in the system you need to repair.
4. If fluid level is stable but noise or hard steering remains, proceed to the next test.

Searching for Trapped Air in the Steering System:

1. Bring the engine up to operating temperature.
2. With the engine running, turn the wheel about 15 times from left to right and right to left without hitting the stops or locks.
3. Turn off the engine and open the bonnet.
4. Inspect the fluid in the reservoir.
    - If the fluid looks foamy or you see bubbles in it, there’s air in the system and you need to bleed it.
    - If unsure, proceed with bleeding the system regardless.

General Steering System Bleeding Procedure
Follow these steps to purge air from the power steering system:

1. Refer to your car owner's manual or vehicle repair manual for specific instructions.
2. A common method involves turning the steering wheel from lock to lock.
3. Some manufacturers recommend using a vacuum pump or provide their own bleeding instructions.
4. If necessary, consult your manual for additional guidance.

Frequently Asked Questions (FAQ):

Q: Why should I bleed my power steering system?
A: Bleeding removes trapped air which can cause steering issues like noise, hard steering, or foamy fluid.

GENERAL INFORMATION ON BLEEDING A HYDRAULIC POWER STEERING SYSTEM

Why bleed the power steering system?
Maybe turning the steering wheel has become noisy, or parallel parking is harder. These are potential signs of air trapped in the power steering system.

Signs of Trapped Air in the Steering System:

- You hear a whine in the steering pump.
- Bubbles appear in the reservoir fluid.
- Reservoir fluid is low and foamy.
- The steering wheel is hard to turn.
- You hear a grunt or growling noise at low speeds when turning.
- You hear a buzzing sound when turning the steering wheel.

Air can find its way into the system in different ways:

- Because of a damaged hose, fitting, seal or component
- Because of a loose connection
- After you've replaced a system component
- After you have disconnected and reconnected a hose

  The following sections help you check for trapped air and, if necessary, bleed the system. You'll find more than one method you can apply, depending on your particular model. So, it's a good idea to check your car owner's manual or vehicle repair manual for the recommended procedure for your particular model.

Checking the Steering System for Trapped Air

Probably you are not sure whether the steering system in your vehicle has air in it. Here are a couple of simple tests you can apply at home to check the system for air.

When fluid in the reservoir is low:

Top off the fluid in the reservoir to the Cold Full level. Consult your car owner's manual or vehicle repair manual for the correct type of steering fluid for your particular model.

- If normal operation resumes without noises or hard steering, then everything is OK.
- If fluid level drops again, there's a leak in the system you need to repair.
- If fluid level is stable but noise or hard steering remains, go on to the next test.

Consult your car owner's manual or vehicle repair manual, if necessary, to make sure you are checking fluid level properly in your particular model. On some models, you need to check fluid level at operating temperature.

Searching for trapped air in the steering system:
If the previous procedure didn't solve the problem, or you suspect air has entered the system, do this test.

1. Bring the engine up to operating temperature.
2. With the engine running, turn the wheel about 15 times from left to right and right to left without hitting the stops or locks.
3. Turn off the engine and open the bonnet.
4. Inspect the fluid in the reservoir.

- If the fluid looks foamy or you see bubbles in it, there's air in the system and you need to bleed it.
- If you still are not sure, you can go ahead and bleed the system anyway. It'll take only a few minutes.

Which Bleeding Method Should You Use?

Make sure to use the correct bleeding method for your vehicle. Although there's a general procedure to bleed the system, some car manufactures recommend a different method to prevent system damage. Check your car owner's manual or vehicle repair manual.
A common and simple bleeding method requires turning the steering wheel from lock to lock.

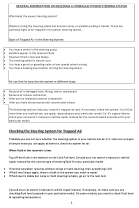
General Steering System Bleeding Procedure

The following is a general procedure to purge air from the power steering system. However, some manufacturers provide their own instructions or recommend using a vacuum pump for this procedure, especially on late model vehicles. Check the following section to use a special bleeder kit for this purpose. If necessary, consult your car owner's manual or vehicle repair manual.

1. Park in a safe place on level ground. Make sure the engine is cool.
2. Check the steering fluid in the reservoir.
3. Add steering fluid, if necessary, to bring it to Full Cold level (only use the steering fluid recommended by your car manufacturer. Consult your car owner's manual or vehicle repair manual). Raise the wheels off the ground using a floor jack and secure the vehicle with a couple of jack stands. Start the engine.
   Slowly turn the steering wheel from left to right and right to left ten times, without hitting the stops or locks to prevent seal damage. This step will force air into the reservoir and out of the system. Have an assistant monitor fluid level. Don't allow the reservoir to become empty.

Check the fluid level. Add fluid, if necessary.
Repeat steps 6 and 7 until fluid level remains steady and you see no more bubbles. Shut off the engine.
If the manual method doesn't seem to get all the air out of the system (you still see bubbles in the reservoir fluid), you'll need to use a vacuum pump to bleed the system. Also, if you have a late vehicle model, use a vacuum pump to bleed the system.

Documents / Resources

	Docs Hydraulic Power Steering System [pdf] Instructions Hydraulic Power Steering System, Power Steering System, Steering System, System

References

- User Manual