

HYDRO-BOOST BRAKE BOOSTER Installation Guide

REMOVING THE ORIGINAL POWER BOOSTER

NOTE: Before beginning work, be sure vehicle is parked in a level area and that wheels are chocked to prevent unintentional movement. Read all of these instructions before attempting to install the Hydro-Boost unit.

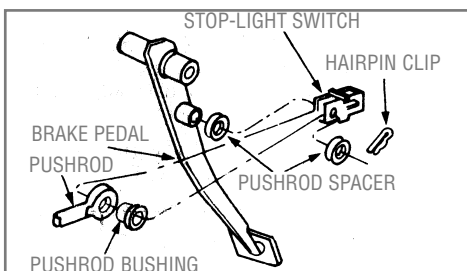
1. Disconnect the ground cable from the battery. Get rid of any fluid stored under pressure in the Hydro-Boost unit by applying the brakes several times. You will notice a change to a hard pedal when all pressure has been relieved.
2. Remove the nuts attaching the master cylinder to the Hydro-Boost unit.
3. Separate the master cylinder from the mounting studs.

NOTE: DO NOT disconnect the brake lines from the master cylinder unless necessary to avoid bending or damaging those lines.

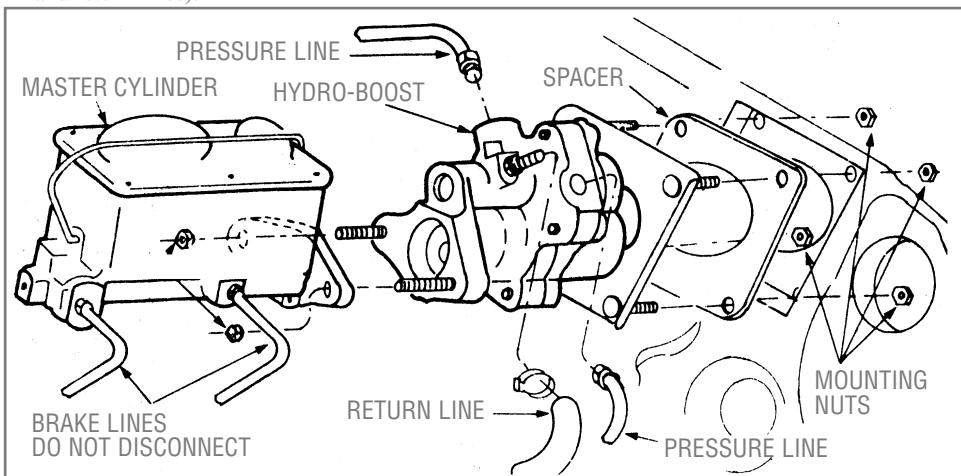
4. Disconnect all hydraulic lines from the Hydro-Boost unit (pressure, steering gear and return lines).

5. Disconnect the Hydro-Boost pushrod linkage from the brake pedal.

NOTE: It may be necessary to remove the stoplight switch from the brake pedal. If so, unplug the stoplight switch wires, remove the hairpin retainer, slide the switch off the pedal pin just far enough to permit removing the switch from the pin. **Do not damage the switch.**



6. Loosen the locknuts holding the Hydro-Boost unit to the firewall and then slide the linkage, nylon washers and brushing off the pedal pin.



REMOVAL (continued)

7. Remove the locknuts retaining the Hydro-Boost unit and remove the unit from the firewall while sliding the pushrod out of the engine side of the firewall.

IMPORTANT: Be sure to save any nuts, bolts, spacers or non-riveted mounting brackets since they **must** be reused when installing the replacement unit. These parts are critical to the operation of the replacement Hydro-Boost.

8. Put the old Hydro-Boost into carton to assure proper core credit upon return.

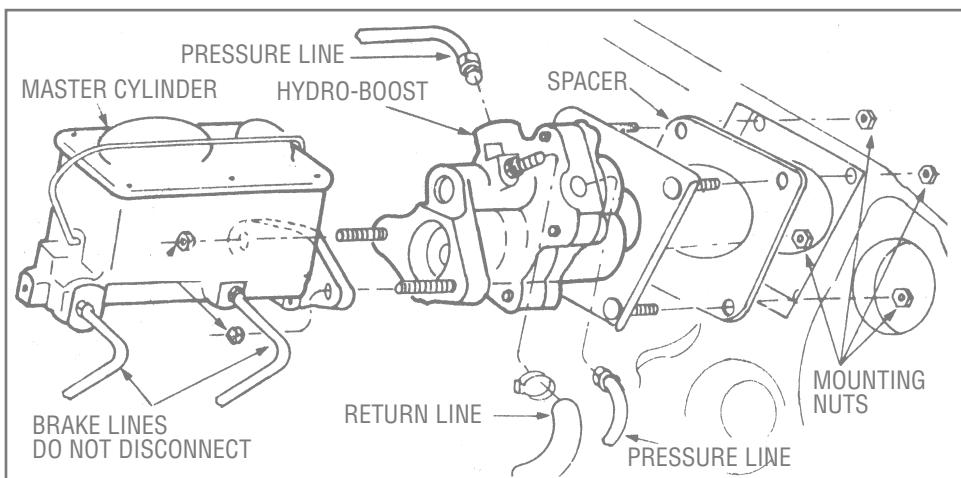
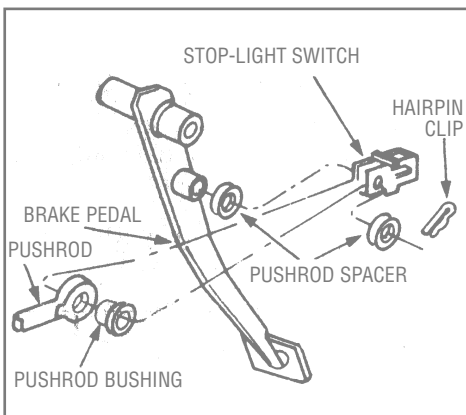
REPLACE BAD HOSES

Inspect ALL power steering hoses. If a leaking or soft, spongy hose is found, replace all hoses. If any one hose is bad the others are likely to also be ready to fail.

Not all hose defects can be detected from outward inspection since they usually fail from the inside out. Deteriorated hoses produce debris which will damage all parts of the system, including the Hydro-Boost unit. **If a unit is damaged by such debris the warranty is void.**

INSTALLING THE HYDRO-BOOST UNIT

1. Install spacers, gaskets and/or mounting brackets from the old unit onto the replacement unit.
2. Mount the replacement Hydro-Boost to the firewall but do not tighten the mounting nuts at this time. Be sure to guide the pushrod into place without applying any damaging force to it. **Do not** force the rod in any direction as this will damage the unit and void the warranty.
3. Connect the Hydro-Boost pushrod to the brake pedal. Make sure the nylon washers and brushing are installed in their original positions.



4. Install the stop light switch and it's retaining hairpin clip. Connect the stoplight switch wires.
5. Securely tighten the lock nuts holding the Hydro-Boost unit to the firewall.
6. Install the master cylinder onto its mounting studs on the Hydro-Boost. Tighten securely.
7. Connect all power steering hydraulic lines (fluid pressure, steering gear and return) to the Hydro-Boost.

NOTE: Whenever the Hydro-Boost is removed the power steering system must be bled.

Use only the Power Steering Fluid specified by the vehicle manufacturer in the power steering reservoir.

ALWAYS FLUSH SYSTEM

When any part of the power steering system is replaced the system should be flushed as follows:

1. Disconnect return hose from power steering pump and place end of hose in waste oil container.
2. Using fluid specified for vehicle, fill pump reservoir. Start engine and keeping reservoir filled, run engine until fluid flowing from return hose runs clear. A second person should turn steering from stop to stop during this process. **Never let pump run without fluid.**
3. Reconnect return hose and fill reservoir to proper level.

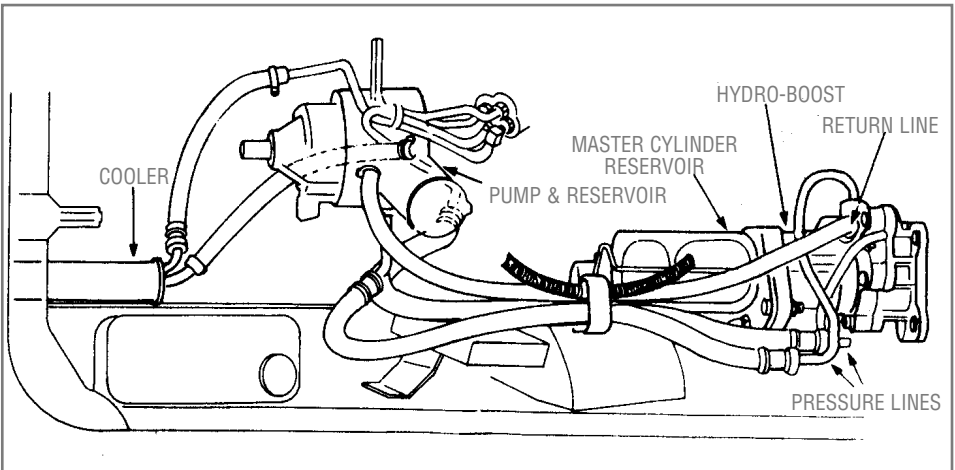
BLEEDING THE HYDRO-BOOST

When any part of the Hydro-Boost system is replaced the power steering system must be bled to eliminate trapped air.

CAUTION: Be very careful to avoid getting even a single drop of fluid into a part of the system where it does not belong. Power steering fluid and brake fluid must not be mixed. Power steering fluid will damage brake system seals on contact. If brake fluid contacts power steering seals they will immediately be damaged.

Use only DOT-3 or better Brake Fluid in the brake master cylinder reservoir.

1. Fill power steering reservoir to the bottom of the filler neck with specified fluid.
2. Disable ignition system to keep the engine from starting and then crank the engine for several seconds.
3. Check fluid level and add fluid if needed.



BLEEDING THE HYDRO-BOOST (continued)

4. Enable ignition system and start the engine.
5. Turn the steering wheel from stop to stop several times. **Do not** hold it against the stop.
6. Stop the engine and then discharge pressurized fluid from the accumulator by pushing on the brake pedal 4 or 5 times.
7. Check fluid level and add fluid if needed.
8. Again start engine and turn steering wheel from stop to stop several times (avoid turning fully against stops as much as possible). Recheck fluid level and fill as required. If there is evidence of fluid foaming, turn off engine and wait an hour for foam to clear.

TROUBLESHOOTING THE SYSTEM	CAUSE AND POSSIBLE SOLUTION			
PROBLEM	Loose or broken power steering pump drive belt	Low fluid level in reservoir	Fluid return line restricted	Dirt/Debris in Hydro-Boost
Lacks Power Assist	X	X		X
Booster or Pedal Chatters	X	X		
Brakes Grab				X
Pedal Returns Slowly			X	
Looses Reserve Pressure	X			X