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SECTION 06-07 Brake System, Power

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MOVAL AND INSTALLATION

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VEHICLE APPLICATION

Capri.

DESCRIPTION

WARNING: BRAKE FLUID CONTAINS POLYGLYCOL ETHERS AND POLYGLYCOLS. AVOID CONTACT WITH EYES. WASH HANDS THROUGHLY AFTER HANDLING. IF BRAKE FLUID CONTACTS EYES, FLUSH EYES WITH RUNNING WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. IF TAKEN INTERNALLY, DRINK WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY.

The brake booster reduces the effort required to push the brake pedal when applying the brakes. Power assist occurs due to a pressure differential within the brake booster. When the brakes are not applied and the engine is running, engine vacuum is present on both sides of the booster diaphragm. As the brake pedal is pressed, the input rod assembly moves forward inside the valve body until the vacuum port closes. At this point vacuum is still present on each side of the diaphragm. Then as the input rod assembly continues to move forward, an atmospheric port is opened and atmospheric pressure enters the rear half of the brake booster. Engine vacuum on the front side of the diaphragm and atmospheric pressure on the back side of the diaphragm assist the input rod in pushing the diaphragm plate forward and the master cylinder push rod against the master cylinder piston.

When the brake pedal is held in this position the diaphragm will momentarily continue to move forward and compress the outer edges of the reaction disc. This movement causes the center of the disc to press the input rod back and thus close the vacuum port or the atmospheric port depending on whether the brake pedal is released or depressed further.

The rubber vacuum hose from the engine is attached to the brake booster by a check valve which closes when the engine is shut off. The closed valve traps engine vacuum in the booster. This reserve vacuum allows several assisted brake applications with the engine off.



REMOVAL AND INSTALLATION

Brake Booster

Removal

NOTE: Pump brake pedal several times to exhaust any vacuum in the booster.

- 1. Remove the battery. Refer to Section 14-01.
- 2. Remove the master cylinder. Refer to Section 06-06.
- 3. Remove the rubber hose connecting the intake manifold to the power brake booster.
- 4. Working under the instrument panel, remove the spring clip in the brake pedal clevis pin.

REMOVAL AND INSTALLATION (Continued)

- 5. Remove the brake pedal clevis pin and the brake pedal push rod from the brake pedal.
- 6. Remove the four retaining nuts that hold the booster to the dash panel.
- 7. Remove the power brake booster.

Installation

- 1. Have an assistant position the power brake booster on the dash panel so that the four retaining studs protrude through the dash panel into the passenger compartment.
- 2. Working under the instrument panel, install the four retaining nuts. Tighten nuts to 19-26 N·m (14-19 lb-ft).
- 3. Apply Multi-Purpose Grease D7AZ-19584-AA (ESR-M1C159-A) or equivalent to the clevis pin and install it through the brake pedal push rod and the brake pedal.
- 4. Install the clevis pin spring clip in the clevis pin.
- 5. From under the hood, install the rubber hose connecting the power brake booster to the intake manifold. Ensure the hose is installed correctly.
- 6. Install the master cylinder. Refer to Section 06-06.
- 7. Install the battery. Refer to Section 14-01.

ADJUSTMENTS

Push Rod Length

NOTE: Push rod length is not adjustable. To ensure the master cylinder is free to return to its rest position with no residual pressure, verify stoplamp switch adjustment. Refer to Section 17-01.

INSPECTION

Vacuum Hose and Check Valve

- 1. Inspect the hose for cuts, abrasions and cracking.
- 2. Disconnect the vacuum hose (check valve) from the engine side.
- 3. Apply suction and pressure to the hose from the engine side. Be sure air flows only toward the engine.

NOTE: The check valve is attached to the end of the vacuum hose.

SPECIFICATIONS

TORQUE SPECIFICATIONS		
Description	N∙m	Lb-Ft
Brake Booster Mounting Nuts	19-26	14-19
	1 13 20	