

SECTION : 4C

POWER BOOSTER

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SPECIFICATIONS

FASRENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb-Ft	Lb-In
Booster-to-Bracket Nuts (Right-Hand Drive)	22	16	–
Booster-to-Dash Panel Nut (Left-Hand Drive)	22	16	–
Booster Hex Nut and Pushrod Clevis	18	13	–
Brake Line Fittings	16	12	–

DIAGNOSIS

POWER BOOSTER FUNCTIONAL CHECK

1. With the engine stopped, eliminate vacuum in the booster by pumping the brake pedal several times.
2. Push the pedal down and hold in this position.
3. Start the engine.

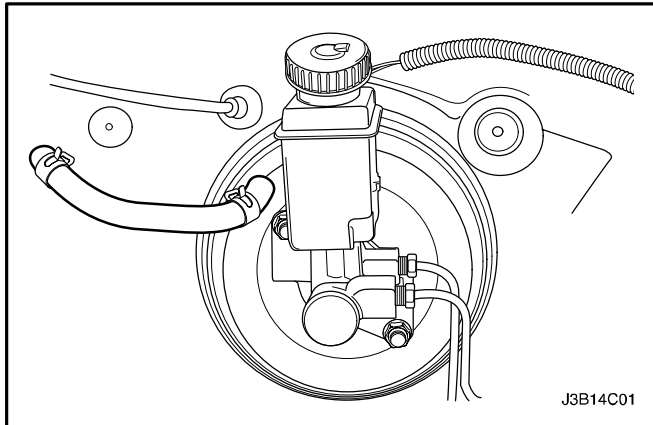
4. The booster is OK if the pedal drops further because of extra force produced.

If the brake pedal does not drop, the vacuum system (vacuum hoses, check valve, etc.) is probably defective and should be checked.

If no defect is revealed by checking the vacuum system, the defect is in the booster itself.

MAINTENANCE AND REPAIR

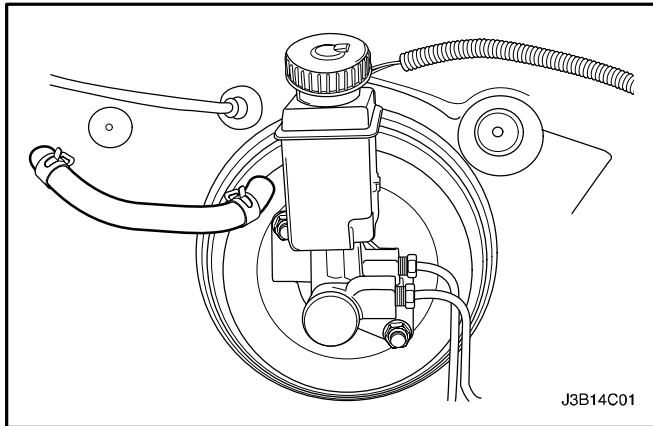
ON-VEHICLE SERVICE



VACUUM HOSE

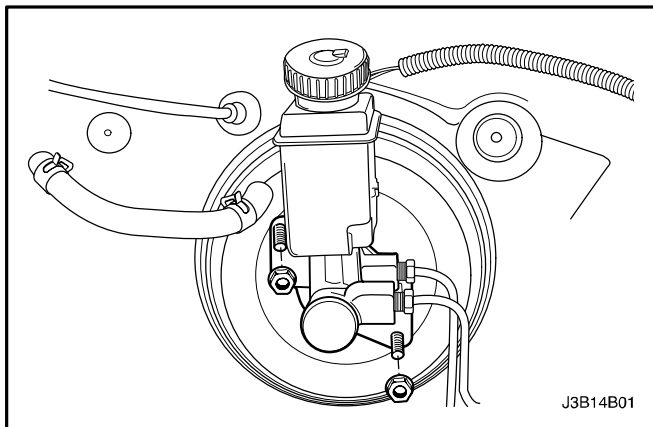
Removal Procedure

1. Spread the clip on the vacuum hose connection at the intake manifold and move the clip slightly toward the brake booster.
2. Pull the hose from the union nut connection. If the hose does not remove easily or is deteriorated, pry off and discard the hose.
3. Spread the clip on the vacuum hose connection to the brake booster, and move the clip clear of the booster.
4. Remove the vacuum hose.



Installation Procedure

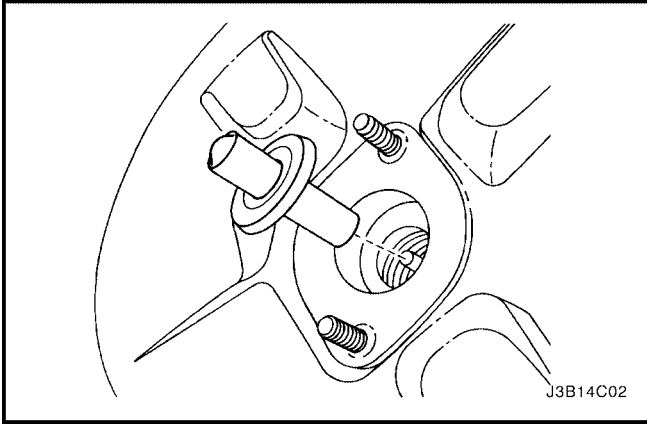
1. Mount the vacuum hose and ensure the connections are tight on each end.
2. Check the function of the booster. Refer to the "Power Booster Functional Check" in this section.



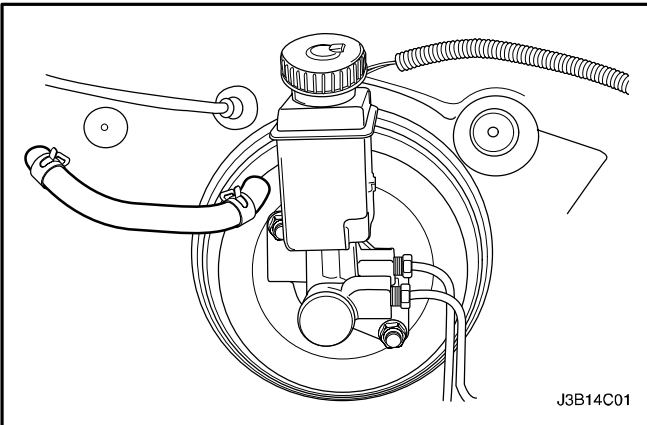
POWER BOOSTER ASSEMBLY

Removal Procedure

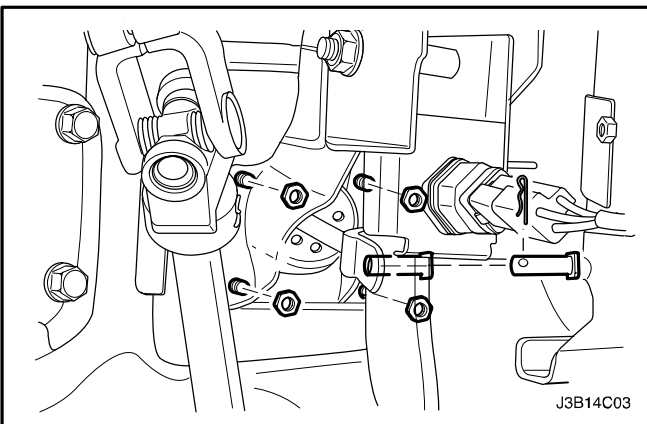
1. Remove the master cylinder. Refer to *Section 4B, Master Cylinder Assembly*.



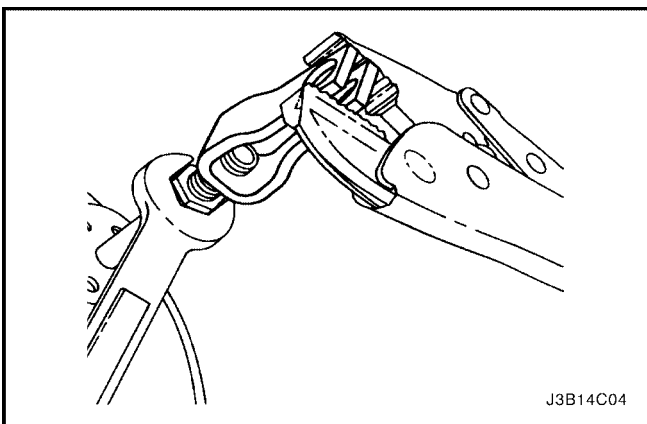
2. Remove the shaft and the rubber O-ring.



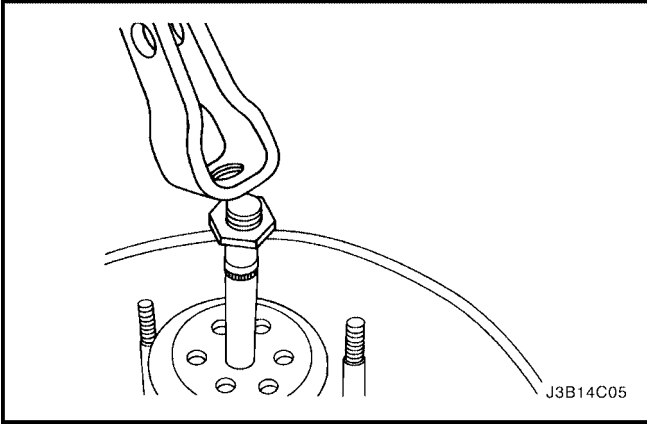
3. Remove the clip on the vacuum hose connection on the booster.
4. Disconnect the brake stoplamp switch.
5. Remove the brake pedal spring.
6. Disconnect the clip and the pushrod pin from the pedal bracket assembly. Refer to *Section 4A, Hydraulic Brakes*.



7. Remove the booster mounting nuts from the studs protruding from the dash panel and remove the booster.
8. Remove the rubber boot.



9. Holding the hex nut, twist off the pushrod clevis.
10. Remove the hex nut from the pushrod.

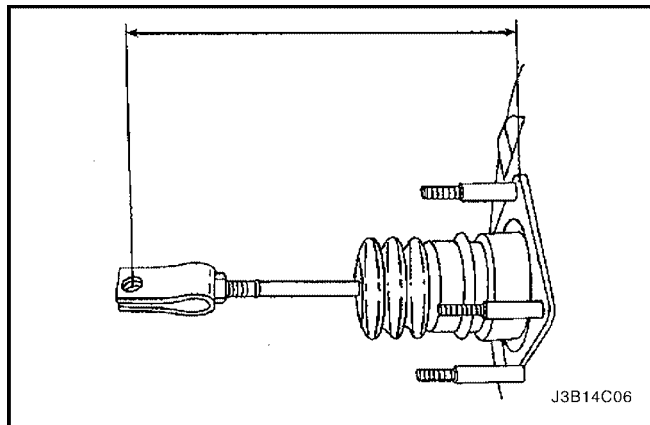


Installation Procedure

1. Check the pushrod and the pushrod clevis for damage and proper fit.
2. Install the hex nut and the pushrod clevis on the booster shaft.

Tighten

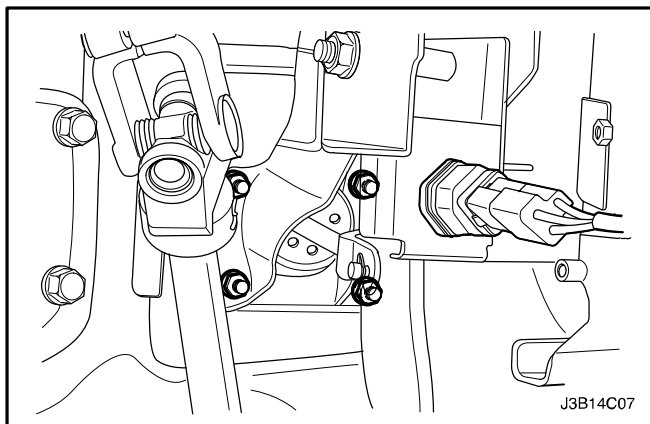
Tighten the booster hex nut and the pushrod clevis to 18 N•m (13 lb–ft).



3. Measure the distance from the booster to the center of the fork pin bore.

Important : This measurement should be 120 mm (4.7 inches).

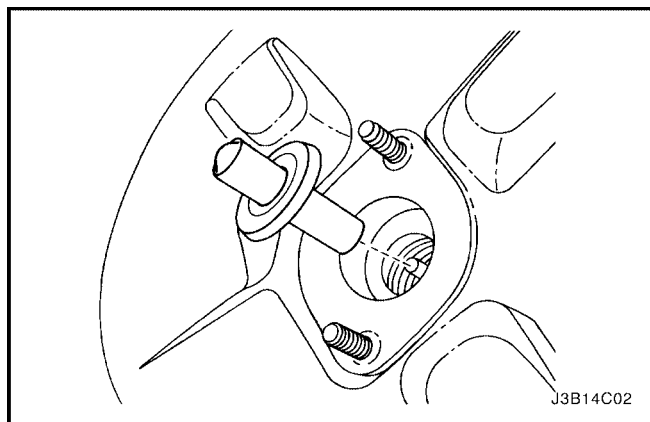
Important : Install the rubber boot on the booster.



4. Install the booster and the mounting nuts to the dash panel.

Tighten

Tighten the booster-to-dash panel nuts to 22 N•m (16 lb–ft).



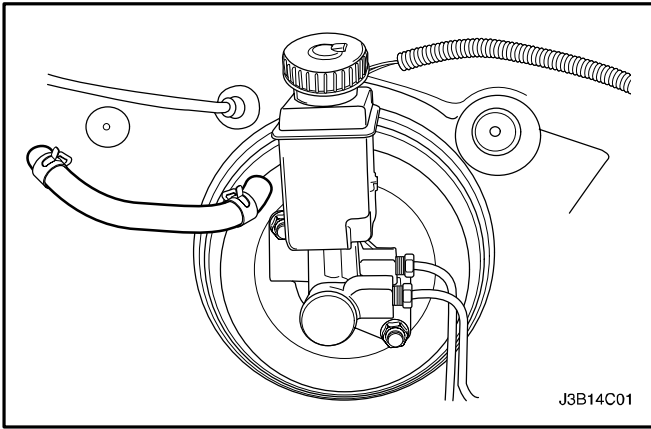
5. Attach the shaft and the rubber O–ring.
6. Connect the master cylinder to the booster. Refer to *Section 4B, Master Cylinder Assembly*.
7. Connect the brake line fittings to the hydraulic modulator, if applicable.

Tighten

Tighten the brake line fittings to 16 N•m (12 lb–ft).

Tighten

Tighten the master cylinder attaching nuts to 24 N•m (18 lb–ft).



8. Install the new vacuum hose to the booster. Refer to "Vacuum Hose" in this section.
9. Install the hose clamps on the vacuum hose, and snap the vacuum hose in the revolving clip.
10. Install the pushrod pin to the brake pedal bracket assembly and connect the clip and the spring. Refer to *Section 4A, Hydraulic Brakes*.
11. Install the brake stoplamp switch. Refer to *Section 4A, Hydraulic Brakes*.

GENERAL DESCRIPTION AND SYSTEM OPERATION

POWER BOOSTER

This booster is a single or tandem diaphragm, vacuum-suspended unit. In a normal operating mode, with the service brakes in the release position, a vacuum-suspended booster operates with a vacuum on both sides of its dia-

phragm. When the brakes are applied, air at atmospheric pressure is admitted to one side of the diaphragm to provide the power assist. When the brakes are released, atmospheric air is shut off from that side of the diaphragm. The air is then drawn from the booster through the vacuum check valve by the vacuum source.

Important : If any hydraulic component is removed or disconnected, it may be necessary to bleed all or part of the brake system.