

SECTION 4C

POWER BOOSTER

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SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb-Ft	Lb-In
Booster and Support Bracket-to-Dash Panel Nuts	22	16	-
Booster Pushrod Hex Nut	18	13	-
Booster-to-Support Bracket Nuts	22	16	-
Master Cylinder Attaching Nuts	18	13	-

DIAGNOSIS

POWER BOOSTER FUNCTIONAL CHECK

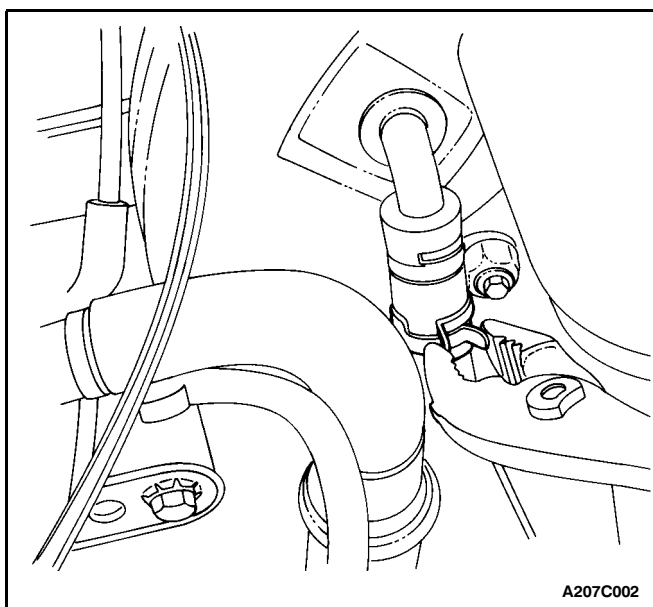
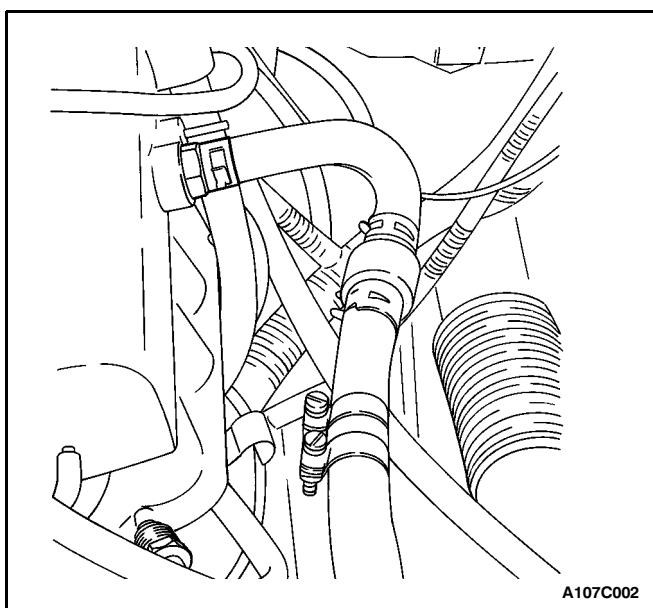
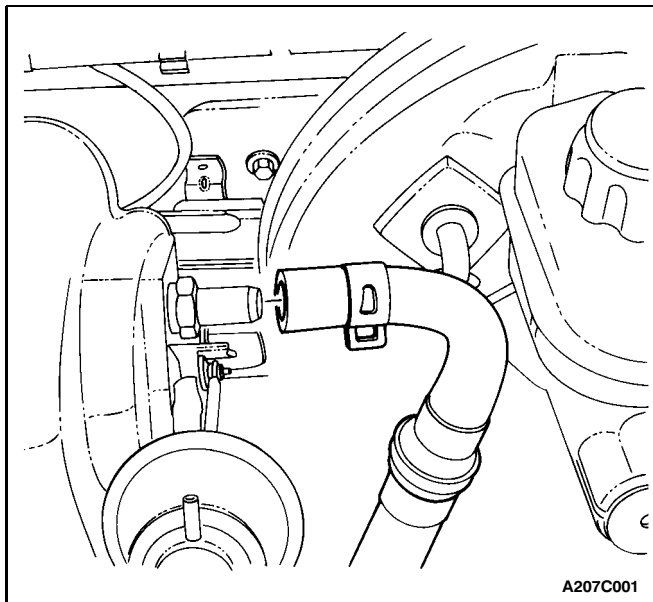
1. With the engine stopped, eliminate the vacuum in the booster by pumping the brake pedal several times.
2. Push the pedal down and hold it in this position.

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

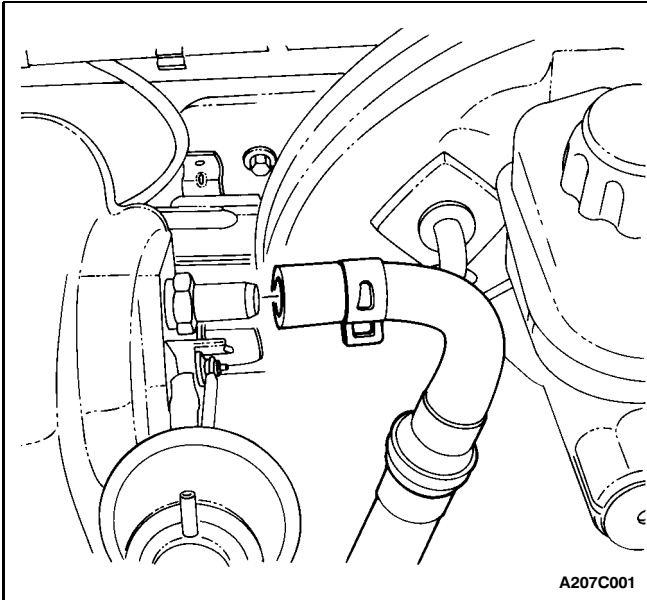
ON-VEHICLE SERVICE

VACUUM HOSE

(Left-Hand Drive Shown, Right-Hand Drive Similar)

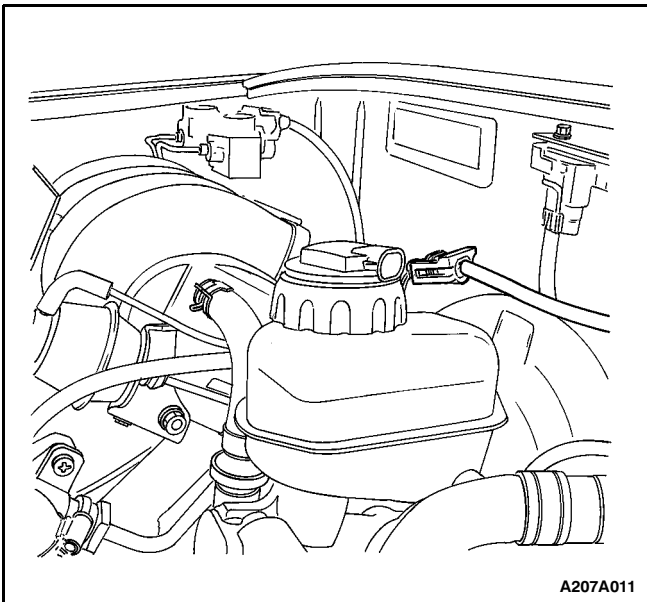
Removal Procedure

1. For vehicles with a DOHC engine, remove the clip on the vacuum hose connection at the intake manifold.
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. For vehicles with a SOHC engine, similarly remove the clip on the vacuum hose nut connection to the intake manifold.
4. Pull the hose from the union nut connection. If the hose does not remove easily or is deteriorated, pry off and discard the hose.
5. Remove the clip on the vacuum hose connection to the brake booster.
6. Remove the vacuum hose.



Installation Procedure

1. Mount the vacuum hose (DOHC engine connection shown), and make sure the connections are tight on each end.
2. Install the vacuum hose clips.
3. Check the function of the booster. Refer to the "Power Booster Functional Check" in this section.

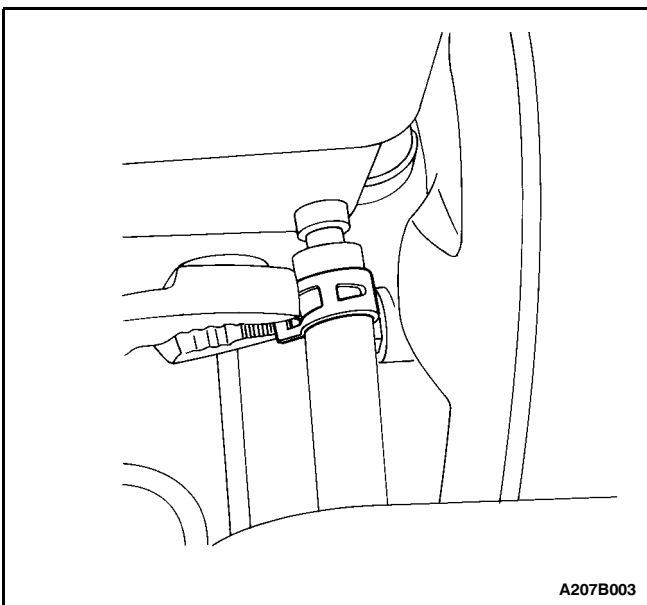


POWER BOOSTER ASSEMBLY

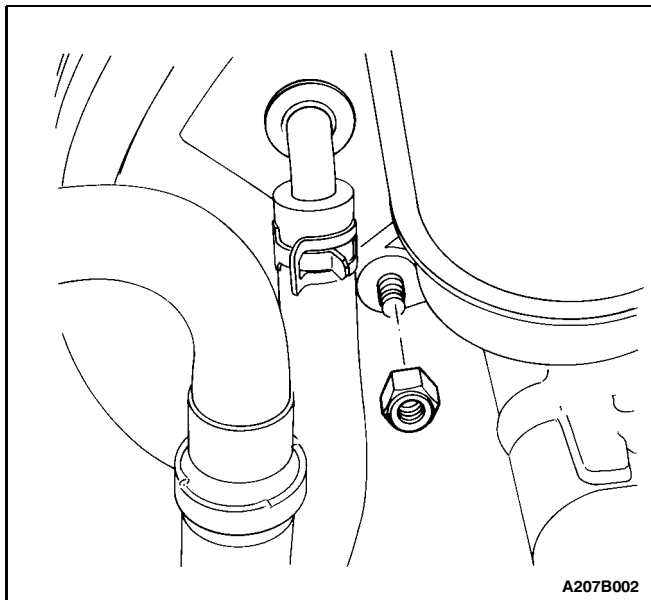
(Left-Hand Drive Shown, Right-Hand Drive Similar)

Removal Procedure

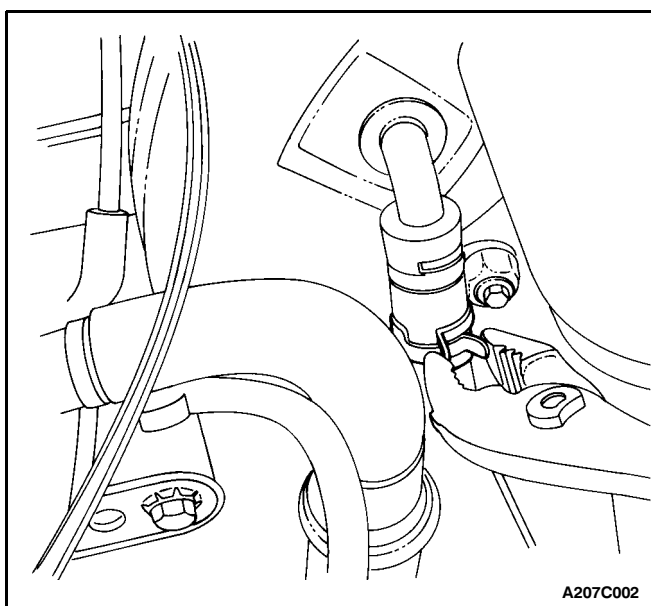
1. Disconnect the electrical connector from the reservoir cap.
2. For vehicles with a manual transaxle, disconnect the clip on the clutch hose connection to the master cylinder.
3. Plug the clutch hose and the master cylinder so that the fluid does not escape.



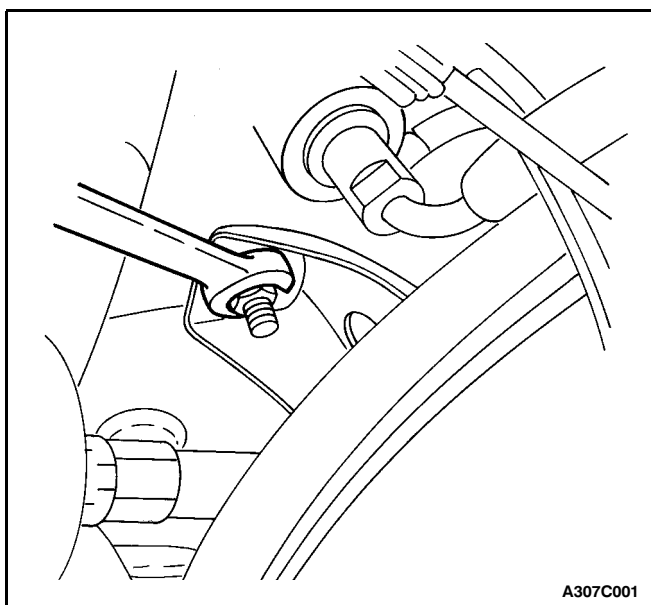
4C - 4 POWER BOOSTER



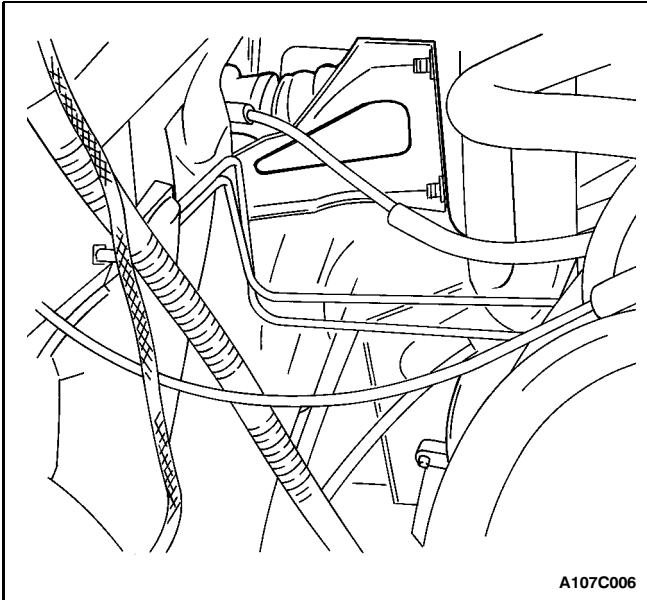
4. Remove the master cylinder attaching nuts.
5. Push the master cylinder forward slightly and move it out of the way. Do not disconnect the brake lines.
6. Remove and discard the booster housing seal.



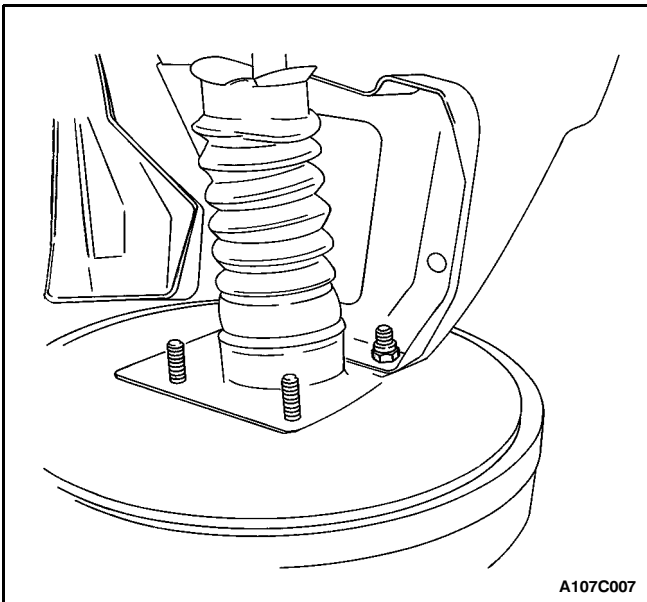
7. Remove the clip on the vacuum hose connection to the booster (DOHC engine connection shown).
8. Disconnect the brake lamp switch.
9. Remove the brake pedal spring.
10. Disconnect the clip and the pushrod pin from the pedal bracket assembly. Refer to Section 4A, Hydraulic Brakes.



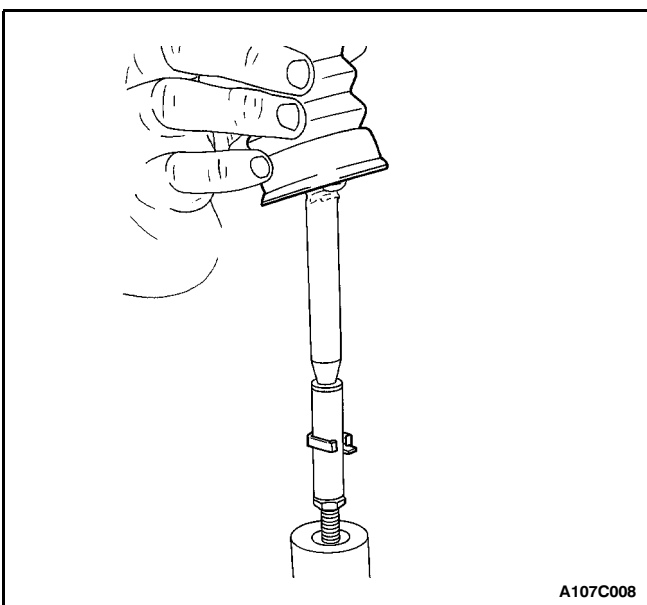
11. For vehicles with left-hand drive, remove the booster and the support bracket-to-dash panel nuts. For vehicles with right-hand drive, remove the brake pedal bracket nuts from under the dashboard. Then remove the booster.



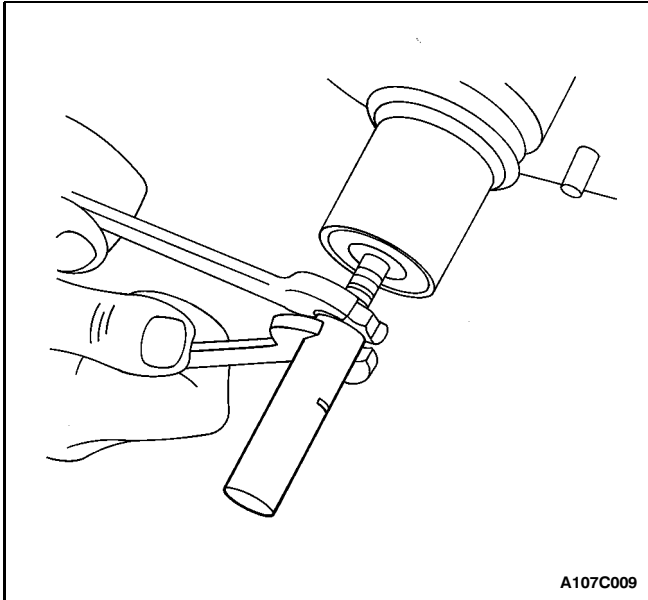
- 12. Remove the booster and the bracket assembly from the dash panel.**



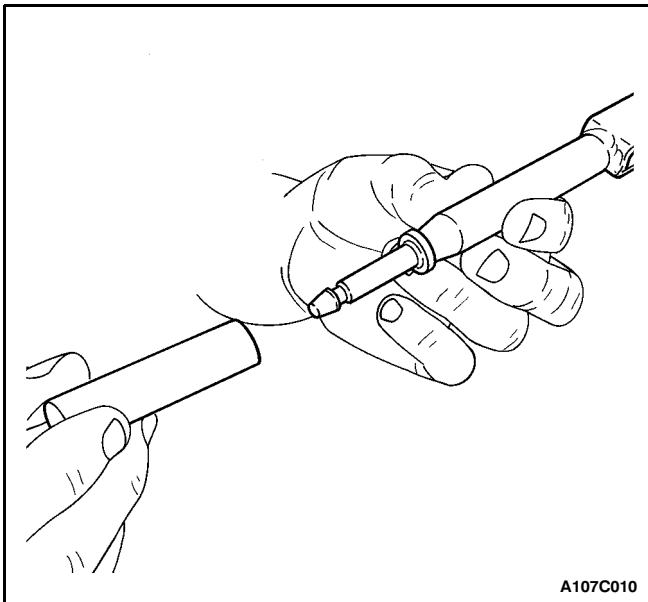
- 13. Remove the bracket nuts from the booster and remove the booster.**



- 14. Remove the rubber boot and the retainer.**

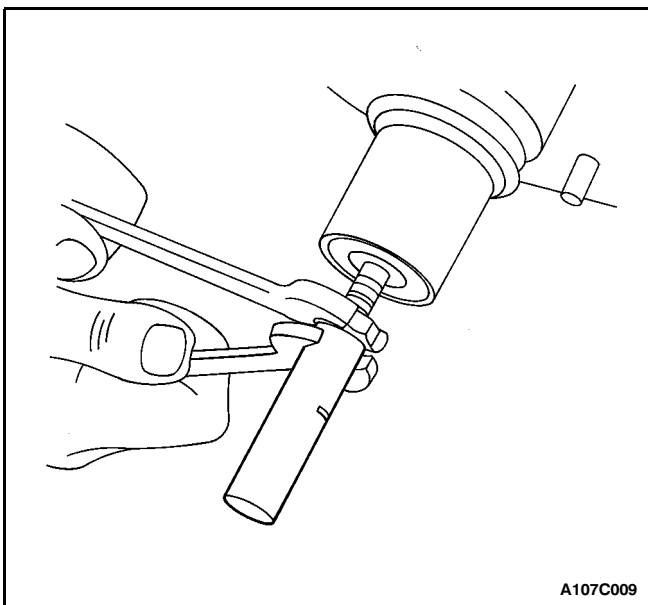


15. Remove the pushrod.
16. Remove the adjustment sleeve from the pushrod.
17. Remove the hex nut.



Installation Procedure

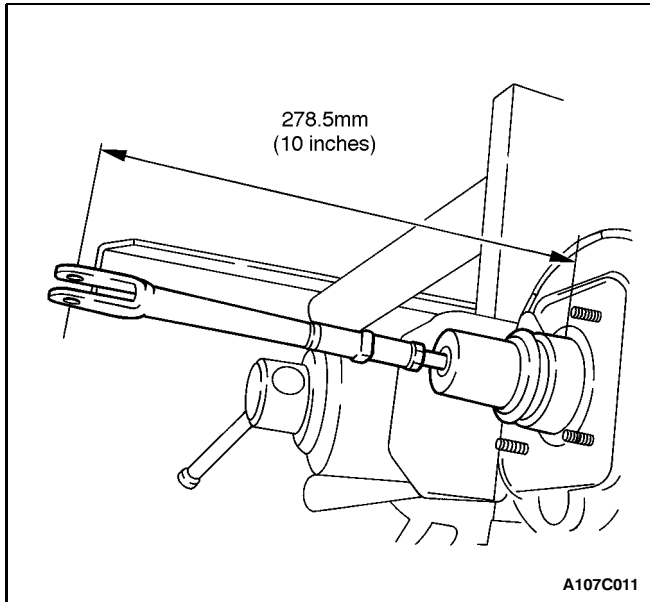
1. Check the pushrod and the adjustment sleeve for damage and proper fit.



2. Install the hex nut and the adjustment sleeve on the booster.

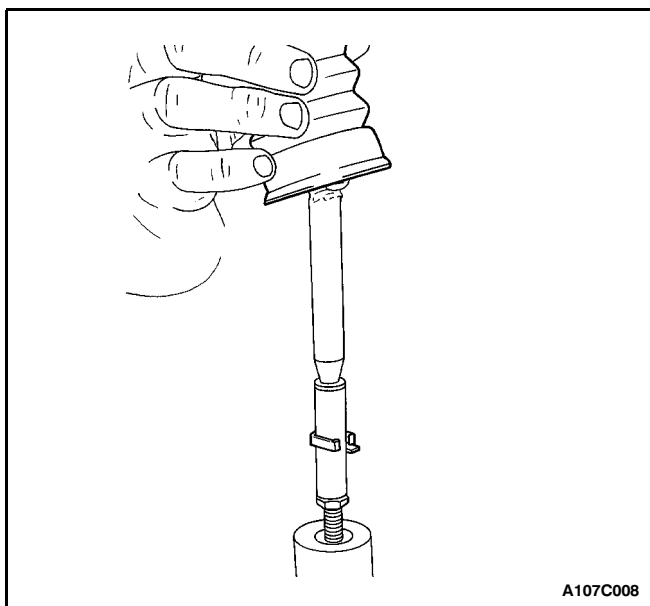
Tighten

Tighten the booster pushrod hex nut and the adjustment sleeve to 18 N•m (13 lb-ft).

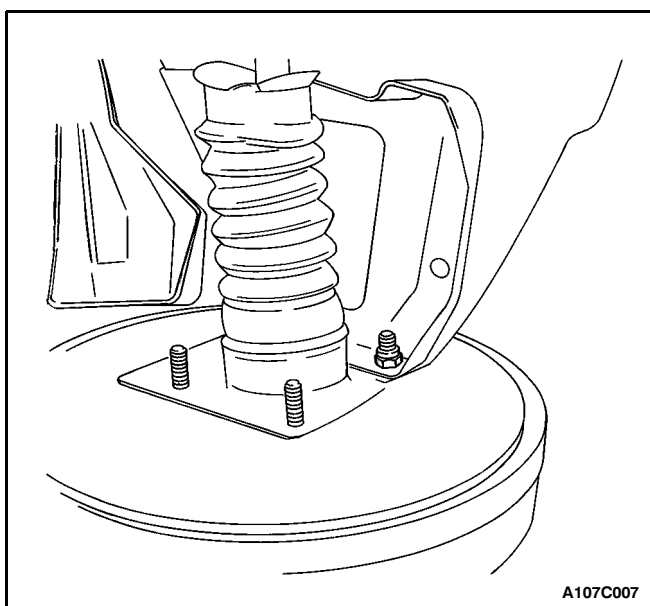


3. Insert the pushrod in the adjustment sleeve and mount the retainer.
4. Measure the distance from the booster to the center of the fork bin bore.

Important: This measurement should be 278.5 mm (10 inches).



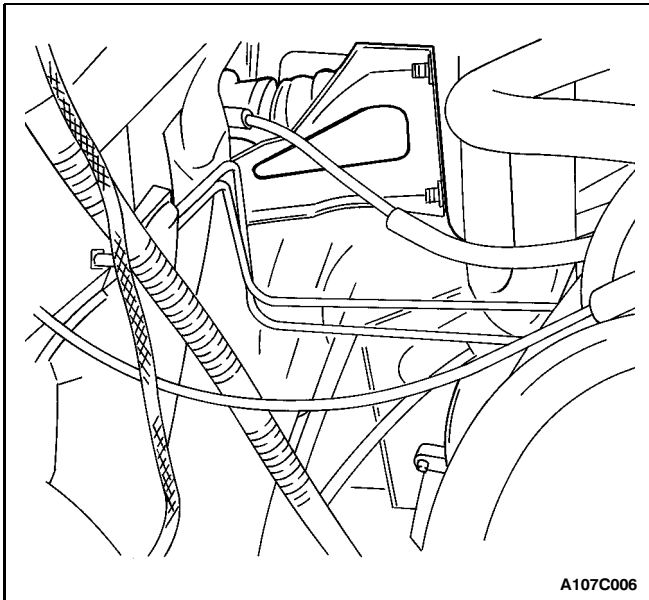
5. Install the rubber boot on the booster.



6. Install the brackets to the booster.

Tighten

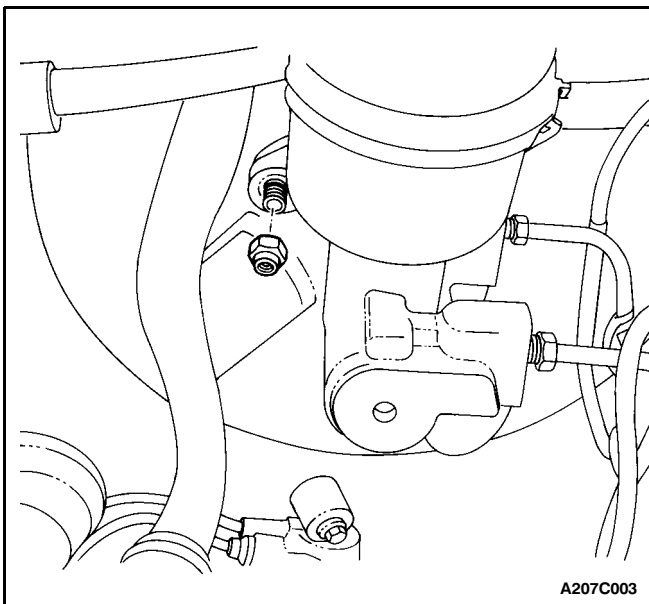
Tighten the booster-to-support bracket nuts to 22 N•m (16 lb-ft).



7. For vehicles with left-hand drive, install the booster and the bracket assembly to the dash panel. For vehicles with right-hand drive, install the booster to the vehicle. Then install the brake pedal bracket and the brake pedal bracket nuts.

Tighten

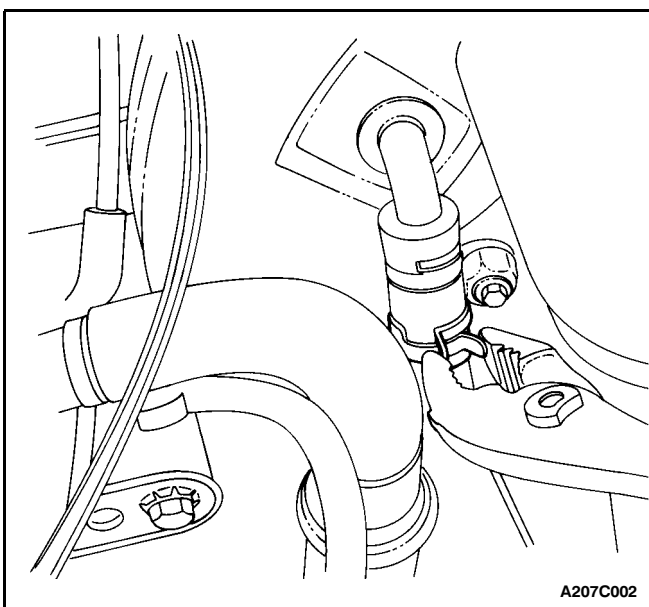
Tighten the booster and support bracket-to-dash panel nuts to 22 N•m (16 lb-ft).



8. Connect the master cylinder to the booster and install a new booster housing seal.

Tighten

Tighten the master cylinder attaching nuts to 18 N•m (13 lb-ft).



9. Install the new vacuum hose to the booster (DOHC engine connection shown). Refer to "Vacuum Hose" in this section.
10. Install new hose clamps on the vacuum hose.
11. Install the pushrod pin to the brake pedal bracket assembly and connect the clip and the spring. Refer to Section 4A, Hydraulic Brakes.
12. Install the brake lamp switch.

GENERAL DESCRIPTION AND SYSTEM OPERATION

POWER BOOSTER

This booster is a single 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 diaphragm.

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.