

Component Procedures: Hydraulic Control Assembly - Antilock Brakes

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Parts and Labor (itype_189)

Parts

Qualifier	Part #	Name	Price	Note
Modulator Valve	92242285	Modulator Valve	942.95	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Anti-Lock Brakes > Modulator Valve, R&R	B	1.6	1.0

Brake Pressure Modulator Valve Replacement (Article 10572)

Removal Procedure

- Place the ignition switch in the OFF position. Click for full-size image
- Thoroughly clean the area around the electronic brake control module (EBCM) of all dirt and debris.
- Disconnect the EBCM electrical connector.
- Disconnect the rear brake pipe fittings (1) from the brake pressure modulator valve (BPMV).
- Cap the brake pipe fittings and plug the BPMV outlet ports to prevent brake fluid loss and contamination.
- Disconnect the front brake pipe fittings (1) from the BPMV. Click for full-size image
- Disconnect the master cylinder brake pipe fittings (1) from the BPMV. Click for full-size image
- Cap the brake pipe fittings and plug the BPMV inlet ports to prevent brake fluid loss and contamination.
- Remove the BPMV nuts (1). Click for full-size image
- Remove the BPMV (1). Click for full-size image
- Remove the BPMV lower insulator (1). Click for full-size image
- Remove the BPMV insulators (1) and bushings (2). Click for full-size image
- Remove the EBCM. Refer to Electronic Brake Control Module Replacement .

Installation Procedure

- Install the EBCM. Refer to Electronic Brake Control Module Replacement . Click for full-size image
- Install the BPMV insulators (1) and bushings (2).
- Install the BPMV lower insulator (1). Click for full-size image
- Install the BPMV (1). Click for full-size image
- Install the BPMV nuts (1) and tighten to 8 Nm (71 lb in) . Click for full-size image
- Connect the master cylinder brake pipe fittings (1) to the BPMV and tighten to 23 Nm (17 lb ft) . Click for full-size image
- Connect the front brake pipe fittings (1) to the BPMV and tighten to 16 Nm (12 lb ft) . Click for full-size image
- Connect the rear brake pipe fittings (1) to the BPMV and tighten to 16 Nm (12 lb ft) . Click for full-size image
- Connect the EBCM electrical connector.
- Bleed the hydraulic brake system. Refer to Hydraulic Brake System Bleeding .
- Perform the Diagnostic System Check - Vehicle .
- Observe the brake pedal feel after performing the diagnostic system check. If the pedal now feels spongy, air may have been in the secondary hydraulic circuit of the brake modulator which may have been introduced into the primary circuit. If the pedal feels spongy, perform the Antilock Brake System Automated Bleed .

Brake Pressure Modulator Valve Pressure Sensor Calibration (Article 10571)

The brake pressure sensor does not require calibration often. Calibration of the brake pressure sensor might be required after certain service procedures are performed. Some of these procedures are as follows:

- Electronic brake control module (EBCM) replacement.
- Brake pressure modulator valve assembly replacement

The Brake Pressure Sensor Calibration procedure can be completed with a scan tool using the following steps:

- Apply the parking brake , or set the transmission in the P position.
- Release the brake pedal .
- Install the scan tool to the data link connector.
- Ignition ON/Vehicle in Service Mode
- Select Brake Pressure Sensor Calibration in the EBCM Configuration/Reset Functions list.
- Follow the scan tool directions to complete the calibration procedure.

- Clear any DTCs that may be set.