

A B S

Installation Guide

IMPORTANT: If you do not have the appropriate tools, test equipment and experience to perform the recommended installation and test procedures, you should use the services of a qualified technician.

Before installing the replacement unit, you must take the following steps. Failure to observe these precautions will damage the ABS unit and **VOID THE WARRANTY.**

- Find out what damaged the original ABS unit.
- Fix whatever caused the damage.
- When handling ABS control modules, use extreme care to avoid damage from static electricity.
- Do not remove the ABS unit from its shipping carton until you are ready to install the unit.
- Do not allow dirt or fluids to contaminate the ABS electrical harness connections.
- Do not remove sealing labels or protectors until unit is installed on vehicle.
- The entire brake system must be flushed before installation and operation of the replacement ABS unit or the **WARRANTY IS VOID.**

Removing Original Unit

1. Before disconnecting power to the ABS system, record any stored codes using the appropriate scan tool and OE recommended procedure.
2. Before disconnecting any hydraulic lines, deplete system pressure by depressing brake pedal 40 or more times with key off until a firm pedal is obtained.
3. Disconnect the battery ground terminal to avoid risk of short circuit and electrical damage.
4. Clean the area around the ABS unit hydraulic lines to prevent contamination of the brake system when lines are removed and to protect the replacement unit.
5. Remove original unit following recommended OE service procedures.
6. Thoroughly flush the entire brake system before installing replacement unit.

Installing Replacement Unit

1. Remove the replacement ABS unit from its carton and place the original unit in that carton to assure proper core credit upon return.
2. Use a grounding wrist strap or anti-static mat to protect electronic modules from static electricity damage. If not available, touch a known good ground before handling unit.
3. Follow OE recommended installation procedures and any enclosed instructions.
4. Flush and bleed the ABS system according to OE instructions using DOT 3 brake fluid from a sealed container. Using any other brake fluid will **VOID THE WARRANTY.**

Testing The ABS SYSTEM

1. Using suitable test equipment, follow recommended OE testing procedures before operating the vehicle.
2. If pedal action does not feel normal, repeat the entire bleeding and test procedure.
3. Road test the vehicle after verifying that all systems function properly and that there are no error codes.

NOTE: Under normal driving conditions the ABS system should be flushed every 2 years or whenever any brake system component is replaced, whichever occurs first. Always use DOT 3 fluid from a sealed container.

While it is not difficult to service ABS components, you must remove, install and test this replacement unit as described by service manuals specific to your vehicle.

ABS CHECKLIST

Tips for trouble-free installation. Do the following when installing the replacement unit.

DID YOU:

- Retrieve and record any stored codes before disconnecting electrical power?
- Determine and correct what caused the original ABS unit to fail?
- Depressurize brake system by depressing brake pedal 40 or more times with key off?
- Clean area around ABS hydraulic fittings and electrical connectors?
- Flush entire brake system using approved brake fluid before installing replacement unit?
- Follow OE service procedures and all enclosed guidelines for ABS unit removal and installation?
- Follow OE testing procedures before operating vehicle?
- Road test vehicle to verify all systems are functioning correctly?

Failure to perform these checks and procedures will lead to incorrect installation and premature system failure.