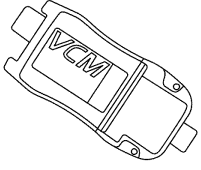
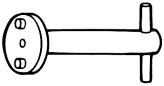


## GENERAL PROCEDURES

### Component Bleeding

#### Special Tool(s)

 <p>ST2834-A</p>	<p>Vehicle Communication Module (VCM) and Integrated Diagnostic System (IDS) software with appropriate hardware, or equivalent scan tool</p>
 <p>ST1112-A</p>	<p>Adapter for Adjuster, Rear Brake Caliper Piston 206-026 (T87P-2588-A)</p>

#### Material

Item	Specification
<p>High Performance DOT 3 Motor Vehicle Brake Fluid PM-1 or PM-1-C (US); CPM-1 or CPM-1-C (Canada)</p>	<p>ESA-M6C25-A or WSS-M6C62-A</p>

### Master Cylinder

**⚠ WARNING:** Use of any brake fluid other than approved DOT 3 will cause permanent damage to brake components and will render the brakes inoperative. Failure to follow these instructions may result in personal injury.

**⚠ WARNING:** Carefully read cautionary information on product label. For **EMERGENCY MEDICAL INFORMATION** seek medical advice. In the USA or Canada on Ford/Motorcraft products call: 1-800-959-3673. For additional information, consult the product Material Safety Data Sheet (MSDS) if available. Failure to follow these instructions may result in personal injury.

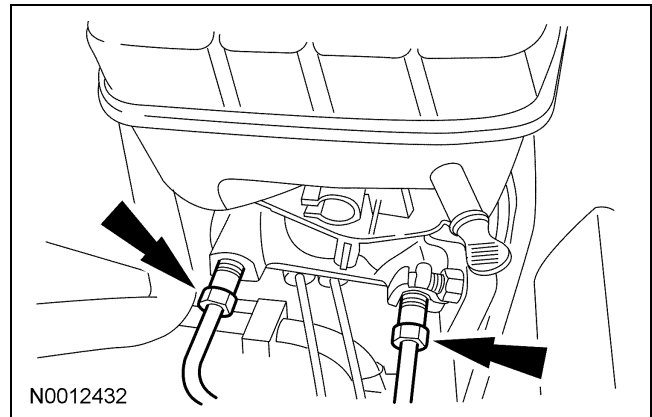
**⚠ CAUTION:** Do not allow the brake master cylinder reservoir to run dry during the bleeding operation. Keep the brake master cylinder reservoir filled with clean, specified brake fluid. Never reuse the brake fluid that has been drained from the hydraulic system.

**⚠ CAUTION:** Brake fluid is harmful to painted and plastic surfaces. If brake fluid is spilled onto a painted or plastic surface, immediately wash it with water.

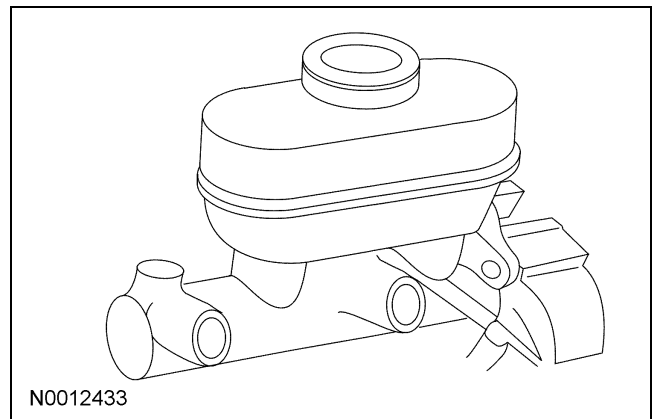
**NOTE:** When any part of the hydraulic system is disconnected for repair or installation of new components, air can enter the system and cause spongy brake pedal action. This requires bleeding of the hydraulic system after it is correctly connected. The hydraulic system can be bled manually or with pressure bleeding equipment.

**NOTE:** When a new brake master cylinder is installed, or the system is emptied or partially emptied, it should be primed to prevent air from entering the system.

1. For in-vehicle priming, disconnect the brake tubes.

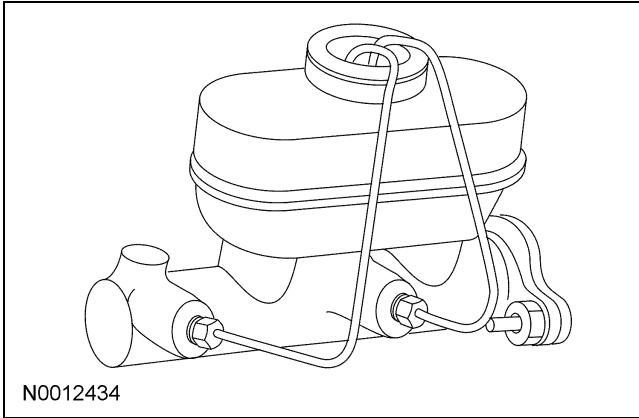


2. For bench priming, mount the brake master cylinder in a vise.



**GENERAL PROCEDURES (Continued)**

3. Install short brake tubes onto the primary and secondary ports with the ends submerged in the brake master cylinder reservoir.



4. Fill the brake master cylinder reservoir with clean, specified brake fluid.
5. Have an assistant pump the brake pedal, or slowly press the primary piston until clear fluid flows from the brake tubes, without air bubbles.
6. If the brake master cylinder has been primed at the bench, install it in the vehicle. For additional information, refer to Section 206-06.
7. Remove the short brake tubes and install the master cylinder brake tubes.
  - Tighten to 17 Nm (13 lb-ft).
8. Bleed each brake tube at the brake master cylinder as follows:
  1. Have an assistant pump the brake pedal, and then hold firm pressure on the brake pedal.
  2. Loosen the rear-most brake tube fittings until a stream of brake fluid comes out. While the assistant maintains pressure on the brake pedal, tighten the brake tube fitting.
  3. Repeat this operation until clear, bubble-free fluid comes out.
  4. Refill the brake master cylinder reservoir as necessary. Repeat the bleeding operation at the front brake tube.

**Rear Brake Caliper**

**⚠ WARNING:** Use of any other than approved DOT 3 motor vehicle brake fluid will cause permanent damage to brake components and will render the brakes inoperative. Failure to follow these instructions may result in personal injury.

**⚠ WARNING:** Carefully read cautionary information on product label. For EMERGENCY MEDICAL INFORMATION seek medical advice. In the USA or Canada on Ford/Motorcraft products call: 1-800-959-3673. For additional information, consult the product Material Safety Data Sheet (MSDS) if available. Failure to follow these instructions may result in personal injury.

**⚠ CAUTION:** Brake fluid is harmful to painted and plastic surfaces. If brake fluid is spilled onto a painted or plastic surface, immediately wash it with water.

**⚠ CAUTION:** Do not allow the brake master cylinder reservoir to run dry during the bleeding operation. Keep the brake master cylinder reservoir filled with clean, specified brake fluid. Never reuse the brake fluid that has been drained from the hydraulic system.

**NOTE:** When any part of the hydraulic system is disconnected for repair or installation of new components, air can get into the system and cause spongy brake pedal action. This requires bleeding of the hydraulic system after it is correctly connected. The hydraulic system can be bled manually or with pressure bleeding equipment.

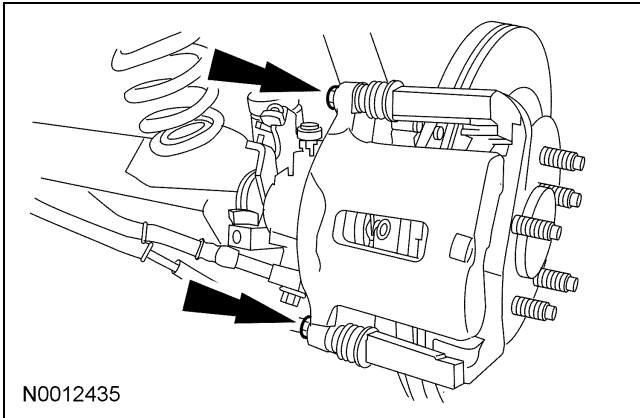
**NOTE:** Due to the complexity of the fluid path within the rear integral parking brake calipers, it may be necessary to follow this procedure when new calipers are installed.

1. **NOTE:** This procedure is necessary only when installing a new rear brake caliper. To bleed the brake system, refer to Brake System Bleeding in this section.

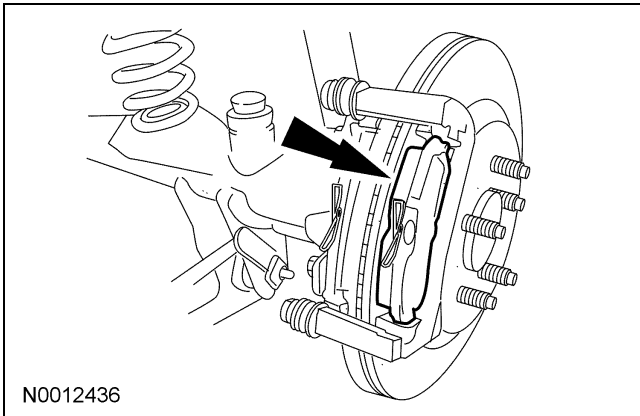
With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to Section 100-02.

**GENERAL PROCEDURES (Continued)**

2. Remove the 2 brake caliper bolts and position the brake caliper aside.



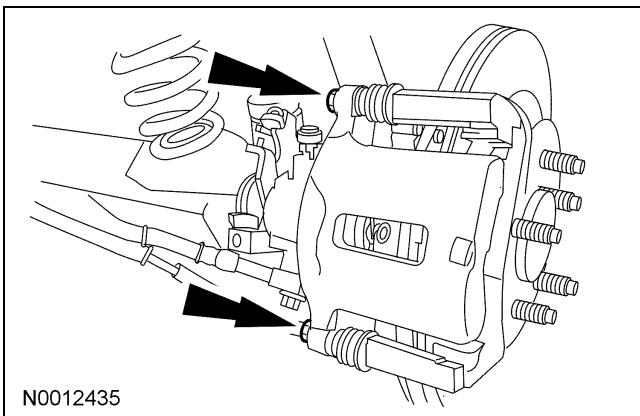
3. Remove the outer brake pad.



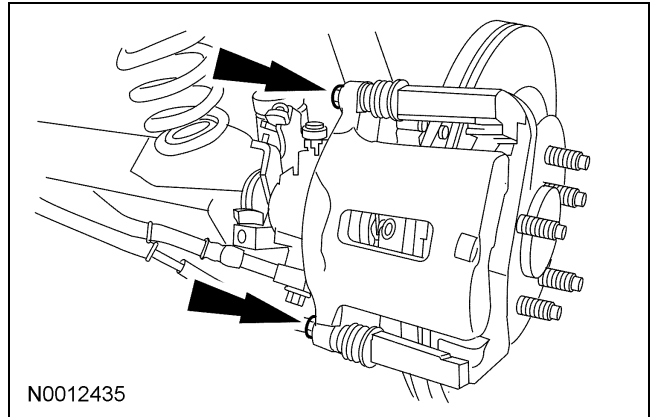
4. **NOTE:** Place a shop towel between the caliper and the brake disc.

Install the brake caliper using the 2 brake caliper bolts.

- Tighten to 33 Nm (24 lb-ft).

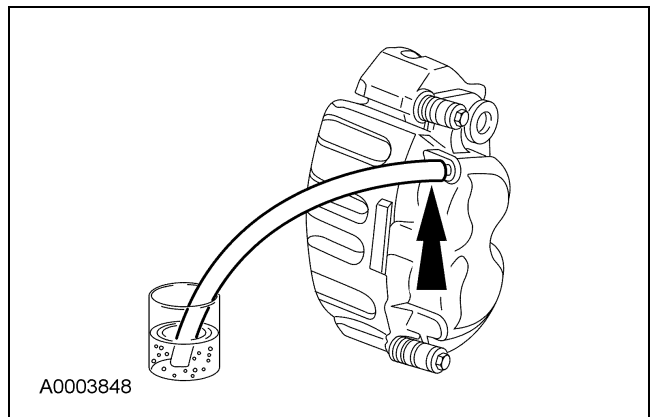


5. Slowly apply the brake pedal to extend the brake caliper piston outward.
6. Remove the 2 brake caliper bolts and position the brake caliper aside.



7. Bleed the brake caliper.

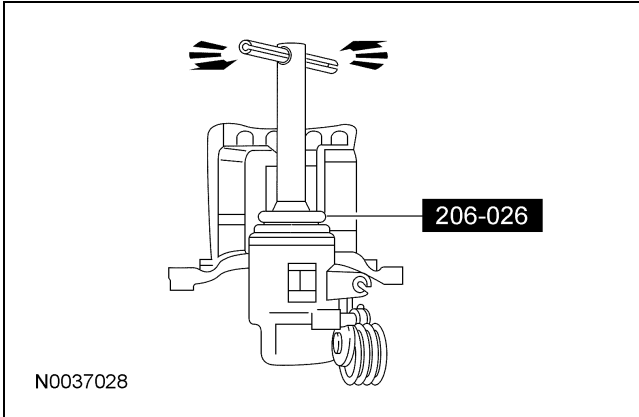
- Remove the bleeder screw cap and place a box end wrench on the brake caliper bleeder screw. Attach a rubber drain hose to the brake caliper bleeder screw and submerge the free end of the hose in a container partially filled with clean, specified brake fluid.



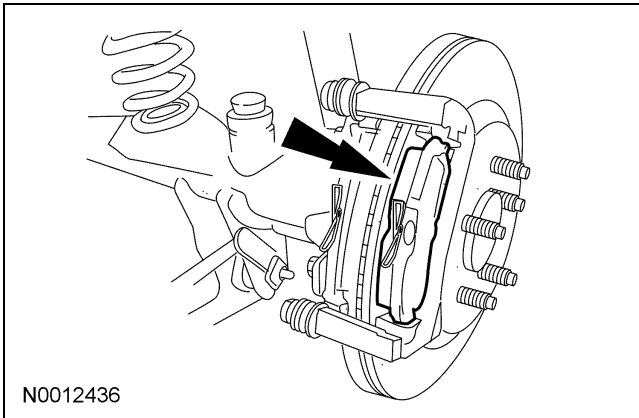
8. Loosen the brake caliper bleeder screw.

**GENERAL PROCEDURES (Continued)**

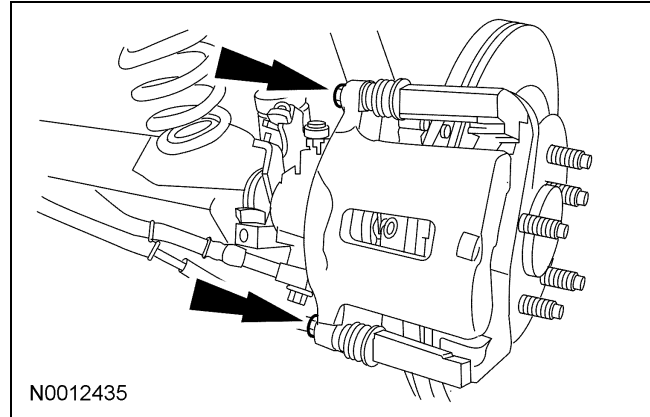
9. Using the special tool, fully retract the brake caliper piston and tighten the bleeder screw.
  - Tighten to 10 Nm (89 lb-in).
  - Refill the brake master cylinder reservoir as necessary.



10. Repeat Steps 5 through 9 until clear, bubble free fluid comes out.
  - Install the bleeder screw cap.
11. Remove the 2 brake caliper bolts and the shop towel.
12. Install the outer brake pad.



13. Position the brake caliper and install the 2 brake caliper bolts.
  - Tighten to 33 Nm (24 lb-ft).

**Hydraulic Control Unit (HCU)**

**NOTE:** This procedure is only required when a new HCU is installed.

**NOTE:** When any part of the hydraulic system has been disconnected for repair or new installation, air may get into the system and cause spongy brake pedal action. This requires bleeding of the hydraulic system after it has been correctly connected. The hydraulic system can be gravity bled, manually bled or bled with pressure bleeding equipment.

1. Connect the scan tool and follow the anti-lock brake system (ABS) bleed instructions.
2. Use the pressure or manual bleed procedure(s) to bleed the system. Begin at the RH rear brake caliper.