CERTAIN 2010 MODEL YEAR RANGER VEHICLES EQUIPPED WITH A MANUAL TRANSMISSION — RIGHT REAR PARKING BRAKE ACTUATOR

OVERVIEW

In some of the affected vehicles, it is possible for the parking brake cable to become disconnected from the right rear actuator during cold weather. Due to right rear actuator orientation, this may occur when the parking brake is released if wet parking brake shoes have frozen in the applied position. Dealers are to install a new, revised right rear parking brake actuator with the lever pivot oriented at the top.

SERVICE PROCEDURE

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

2. With the help of an assistant, release the parking brake cable tension by pulling down on the intermediate cable at the cable-to-cable connector clip until the parking brake control sector rotates to its stop and insert a fabricated 4 mm (0.15 in.) x 150 mm (5.9 in.) retainer pin. See Figure 1.

FIGURE 1
3. Remove the right rear wheel and tire assembly.
4. Remove the right rear brake disc. For additional information, refer to the WSM, Section 206-04.
5. Remove the right rear parking brake adjuster spring and the parking brake adjuster. See Figure 2.

![Figure 2](image1)

6. Remove the right rear parking brake shoes. See Figure 3.

   1. Remove the parking brake shoe hold-down springs and anchors.
   2. Remove the parking brake return spring and the parking brake shoes.

![Figure 3](image2)
7. **NOTE:** The *new* parking brake actuator should be installed with the pivot and the word “UP” at the top. See figure 4.

Install a *new* parking brake actuator. See figure 4.

1. Remove and discard the original actuator.

2. Position the parking brake cable extension onto the *new* parking brake actuator hook so the pivot is located at the top.

3. Position the *new* parking brake actuator next to the parking brake anchor and secure it with a tie strap.

4. Make sure the *new* parking brake actuator hook is fully engaged in the parking brake cable extension loop by firmly pulling down on the parking brake cable extension.

8. **NOTE:** Do not allow grease, oil, brake fluid or other contaminants to contact the parking brake shoes.

Using Motorcraft® High Temperature Nickel Anti-Seize Lubricant XL-2 or equivalent, lubricate the parking brake shoe contact points on the backing plate prior to parking brake shoe installation.
9. **NOTICE:** The parking brake return spring must be positioned with its center body away from the Anti-lock Brake System (ABS) tone ring. Failure to install the parking brake return spring as shown will damage the spring and ABS tone ring. See Figure 5.

![Figure 5](image)

**FIGURE 5**

Install the parking brake shoes. See Figure 6.

1. Connect the parking brake shoe return spring to the inboard side of the lower parking brake shoe and position the shoe between the hub and brake shoe actuator.

2. Position the upper parking brake shoe between the hub and actuator and connect the parking brake return spring.

![Figure 6](image)

**FIGURE 6**
10. Starting with the upper parking brake shoe, position both the upper and lower parking brake shoes into the parking brake actuator notches. See Figure 7.

**FIGURE 7**
11. Install the parking brake shoe hold-down springs and anchors. See Figure 8.

12. Using Motorcraft® High Temperature Nickel Anti-Seize Lubricant XL-2 or equivalent, lubricate the parking brake adjuster threads and install it with the star wheel at the bottom. Install the parking brake shoe adjuster spring. See Figure 9.
13. Remove the previously installed tie strap and position the parking brake shoes into the anchor notches. See Figure 10.

1. Using a suitable cutting tool, cut the tie strap.

2. Remove the tie strap from the parking brake actuator and shoe anchor. This may require that the parking brake shoes be pulled slightly away from the anchor to relieve the spring tension.

3. Position each of the parking brake shoes into the anchor notches.

FIGURE 10
14. If necessary, adjust the right rear parking brake shoes. See Figure 11.

   1. Using a suitable brake adjusting gauge, measure the inside diameter of the drum portion of the rear brake disc. Record the measurement.

   2. Using a suitable brake adjusting gauge, set the parking brake shoe diameter to 0.5 mm (0.020 in.) less than the inside diameter of the drum portion of the rear brake disc.

   ![BRAKE ADJUSTING GAUGE](image1)

   ![BRAKE ADJUSTING GAUGE](image2)

   **FIGURE 11**

   15. Install the brake disc. For additional information, refer to the WSM, Section 206-04.

   16. Install the wheel and tire assembly.

      • Tighten the wheel nuts in a star/cross pattern to 135 Nm (100 lb-ft).

   17. With the help of an assistant, release the parking brake cable tension by pulling down on the intermediate cable at the cable-to-cable connector clip until the parking brake control sector rotates to its stop and remove the previously installed retainer pin.

   18. Check the parking brake system for correct operation.