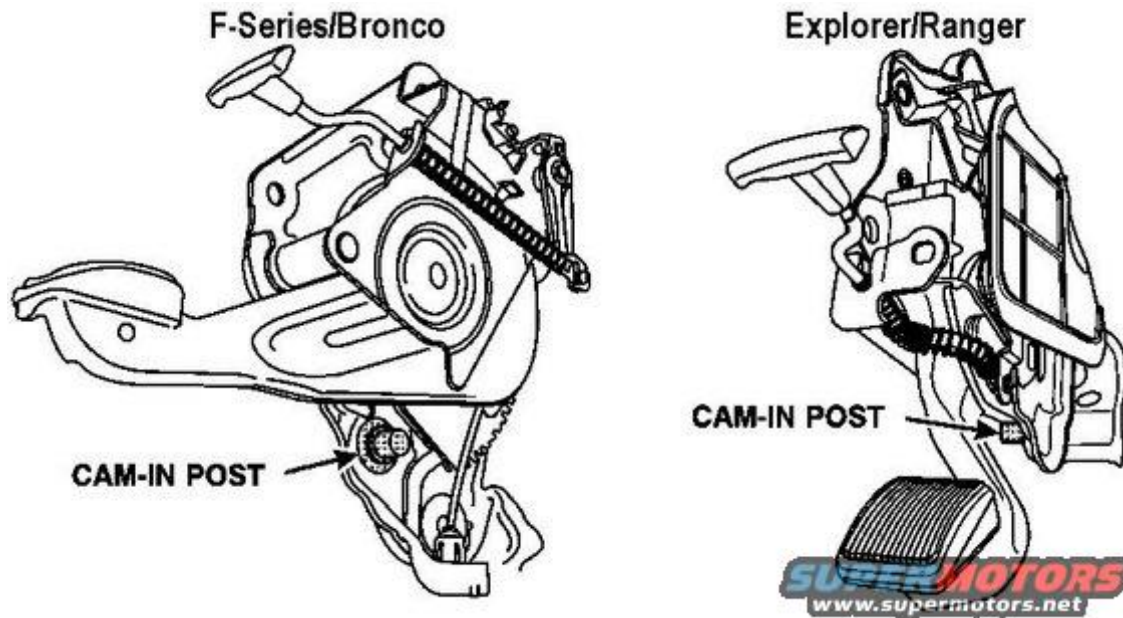


FSA 94S91 E-Brake Wedge



FSA94S91E-BrakeWedge1.jpg | Hits: 3155 | Size: 45.36 KB | Posted on: 1/2/07 | [Link to this image](#)

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Check [the Ford website](#) &/or [the NHTSA](#) to see if your VIN is affected.

Ford Motor Company has determined that a defect which relates to motor vehicle safety exists in certain 1992-1994 Model Year Bronco, F-150-350 Series Trucks and 1993-1994 Model Year Explorer/Ranger vehicles.

Safety Defect

During rapid pedal application of the parking brake, the pedal may go to the floor with little or no effort. Should this occur, the parking brake system may not achieve full tension, potentially

resulting in parking brake ineffectiveness, or diminished effectiveness.

Repairs

At no charge to you, your dealer will install a parking brake lock-in wedge. This wedge retains the adjustment pawl in mesh with the ratchet. Dealers currently have instructions and parts ordering information.

WARNING: DO NOT PARK THE VEHICLE IN NEUTRAL. USE FIRST (1) GEAR AND SET THE PARKING BRAKE FULLY.

NOTE: When the transfer case is in the N (Neutral) Position, the engine and transmission are disconnected from the rest of the driveline. Therefore, the vehicle is free to roll even if the manual transmission is in gear. Do not leave the vehicle unattended with the transfer case in N (Neutral).

NOTE: Always set the parking brake fully and turn off the ignition when leaving the vehicle. Make sure that the gearshift is securely positioned in First (1) gear.

How Long Will It Take?

The time needed for this service is about one-half hour. However, due to service scheduling times, your dealer may need your vehicle for one full working day.

Call your dealer without delay. Ask for a service date and whether parts are in stock. If your dealer does not have the parts in stock, they can be ordered before scheduling your service date. Parts would be expected to arrive within a week.

When you bring your truck in, show the dealer this letter. If you misplace this letter, your dealer will still do the work, free of

charge.

AFFECTED VEHICLES:

CERTAIN 1992-1994 BRONCO, F-150/350 SERIES TRUCKS
AND CERTAIN 1993-1994 EXPLORER/RANGER VEHICLES
EQUIPPED WITH MANUAL TRANSMISSIONS

OVERVIEW

The parking brake procedures described in this attachment supersede all previous parking brake procedures.

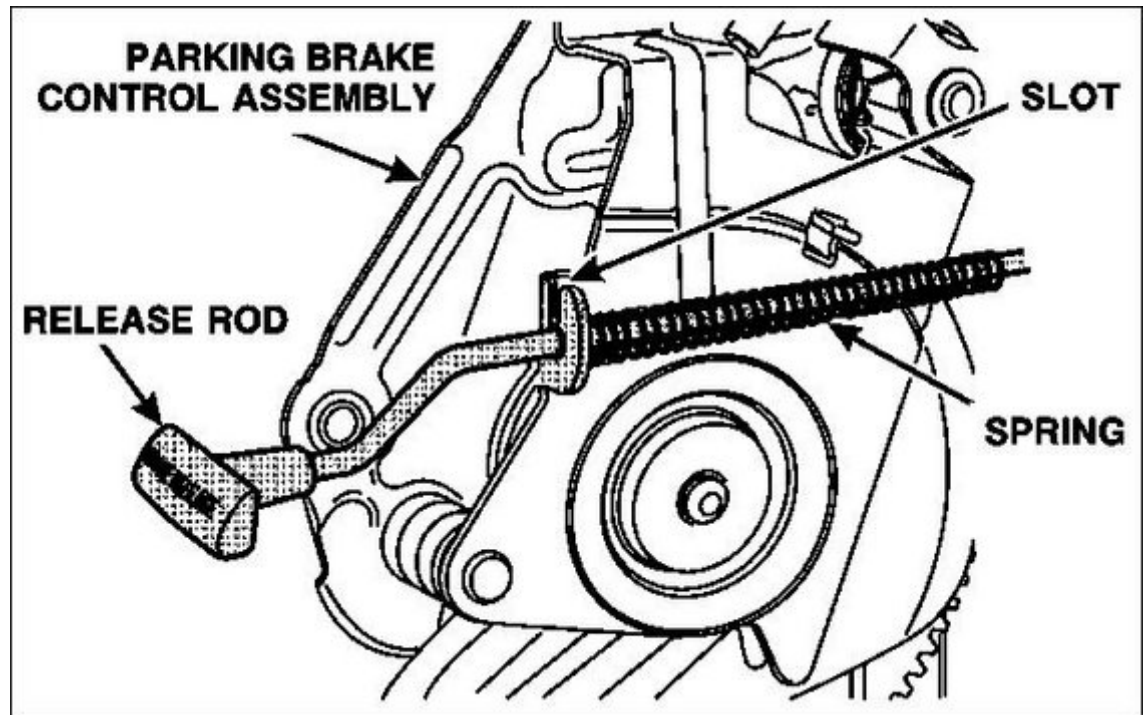
The following instructions have been revised to make them easier to follow. Special emphasis is placed on the installation of the lock-in wedge and verifying that the wedge is properly installed. When installed properly, the wedge WILL NOT fall out.

Except where noted, the illustrations included here are of the Bronco/F-Series. The Explorer/Ranger are similar. PLEASE FOLLOW THESE INSTRUCTIONS CAREFULLY.

NOTE: This recall applies to PARKING BRAKES ONLY. The service brake system is not affected by this recall.

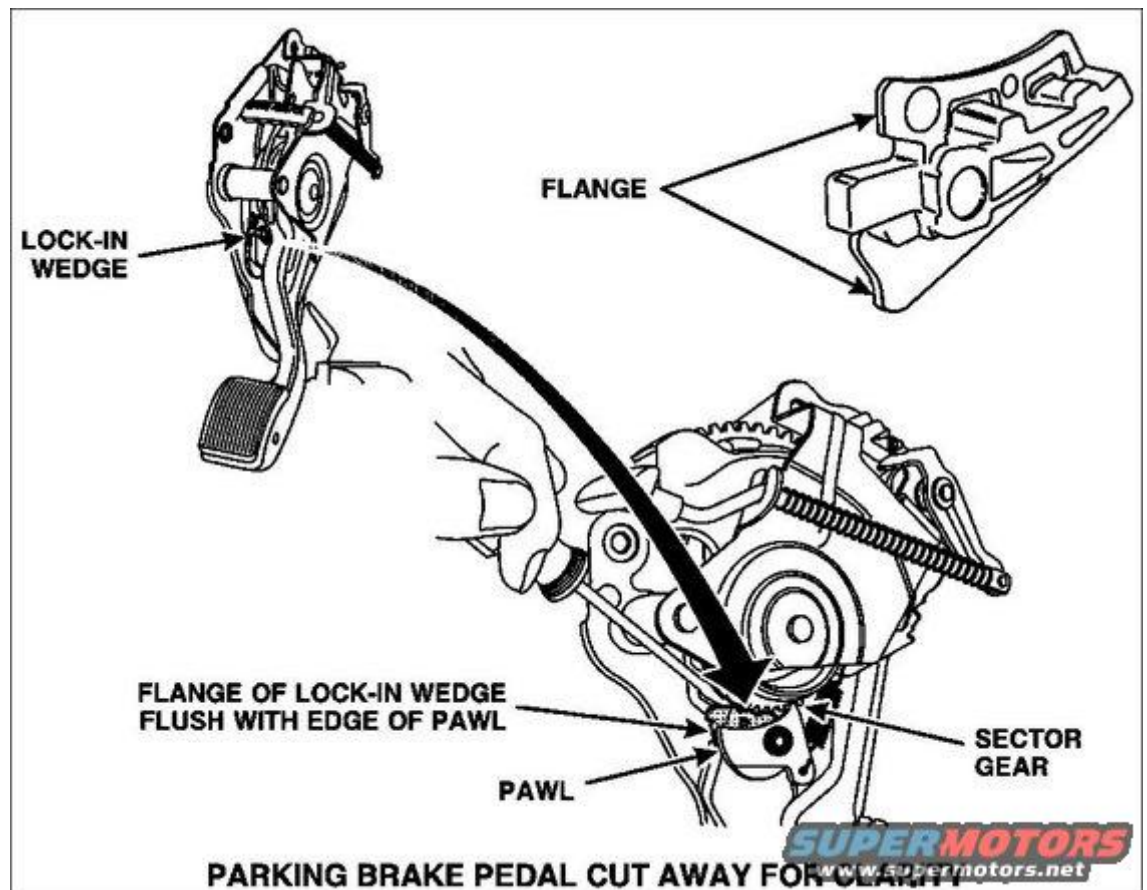
PRELIMINARY CHECKS

1. Park the vehicle on a flat surface. Turn the ignition OFF. Do not apply the parking brake.
2. Check the parking brake control assembly to see if it is a "Cam-In-Post" design. The "Cam-In-Post" design control assembly does not require installation of the lock-in wedge. If the vehicle has a "Cam-In-Post" design control assembly, return the vehicle to the owner.



FSA94S91E-BrakeWedge2.jpg | Hits: 2124 | Size: 60.3 KB |
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3. NOTE: This step is not necessary for Explorer/Ranger vehicles. Check the release rod and spring for proper position. The release rod must be fully inserted into the slot in the bracket, and the spring must be located behind the slot in the bracket.



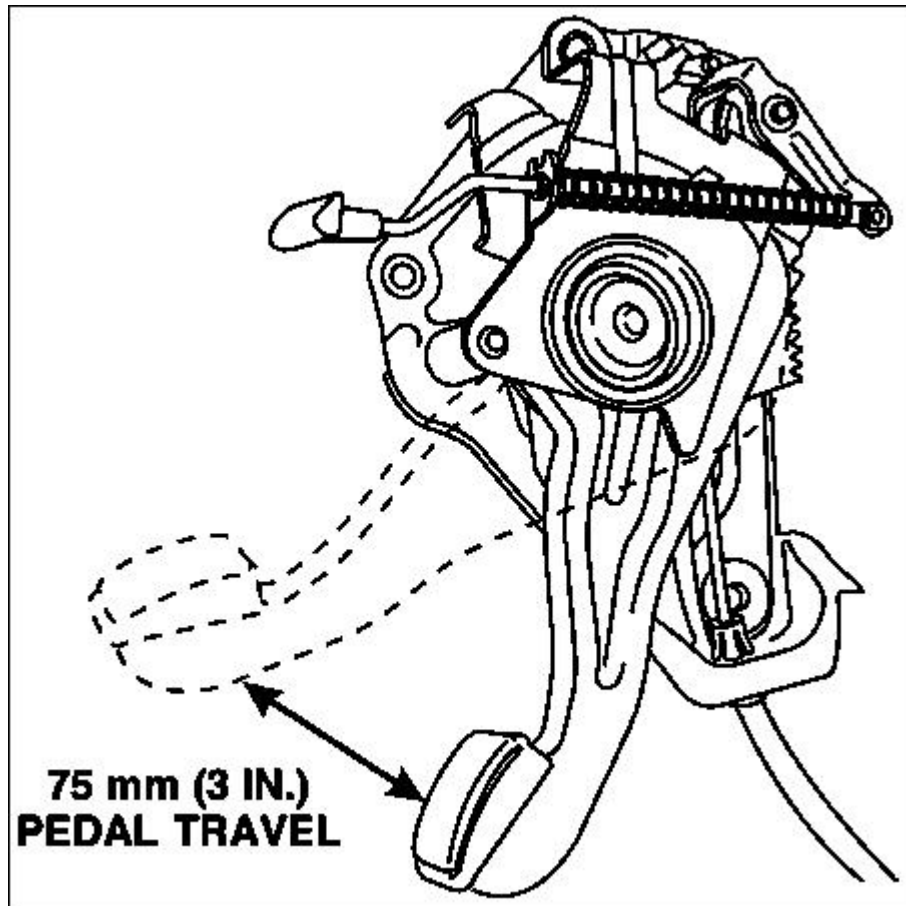
FSA94S91E-BrakeWedge3.jpg | Hits: 1960 | Size: 55.4 KB |
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1. Without moving the parking brake pedal, inspect the parking brake control assembly to determine if the lock-in wedge has been previously installed.

A. If the lock-in wedge has not been previously installed or has fallen out, proceed to Lock-In Wedge Service Procedure (Next Image).

B. If the lock-in wedge has been previously installed, it must be inspected for proper installation. Inspect to make sure the flange of the lock-in wedge is flush with the edge of the pawl. Place a small screwdriver between the lock-in wedge and the sector gear. Apply a firm, up and down prying force to the wedge. The wedge should feel very stiff, with no movement

between the sector gear, wedge and pawl.
-- If no movement is noted, the wedge has been properly installed. Return the vehicle to the owner.
-- If movement is noted, proceed to Lock-In Wedge Service Procedure (Next Image).



FSA94S91E-BrakeWedge4.jpg | Hits: 2326 | Size: 50.28 KB | Posted on: 1/2/07 | [Link to this image](#)

LOCK-IN WEDGE SERVICE PROCEDURE

NOTE: This procedure should only be performed if the lock-in wedge was never installed, or the original wedge is loose or missing.

A. Lock-In Wedge Removal (If Applicable)

1. Depress the parking brake pedal until a full travel position is achieved. The pedal will be in a vertical position.

WARNING: BE CAREFUL TO AVOID ACCIDENTALLY ACTIVATING THE RELEASE LEVER DURING ANY PART OF THE LOCK-IN WEDGE SERVICE PROCEDURE.

2. Using a pair of standard or needle nose pliers, grip the tab of the lock-in wedge. Pull the wedge out with a twisting motion.

3. Release the parking brake.

4. Inspect the wedge for damage. If any part of the wedge is broken or damaged, obtain a new wedge.

C. Parking Brake Adjustment

NOTE:

The installation of the lock-in wedge disables the self-adjusting feature of the parking brake system. Therefore, it is critical to adjust the parking brake system before installing the lock-in wedge.

1. Place the transmission in neutral, then raise the vehicle on a hoist until the rear wheels are off the ground.

NOTE: The vehicle must be supported by the

rear axle to maintain curb height.

2. Position two (2) jack stands under the rear axle housing, then lower the hoist until the weight of the vehicle is supported by the rear axle.

3. Apply and release the parking brake three times allowing the pedal to return each time without any interference.

4. Firmly apply the parking brake.

5. Verify that the parking brake is applied by trying to rotate the rear wheels by hand.

6. Release the parking brake with your foot resting on the pedal, and allow the pedal to return slowly to the released position.

7. Verify that the parking brake is fully released. Check for brake drag by rotating the rear wheels by hand.

8. Raise the vehicle and remove the two (2) jack stands. Lower the vehicle.

9. Call 1-800-325-5621 for further instructions if any of the following conditions exist:

a. The rear wheels turn while the parking brake is applied.

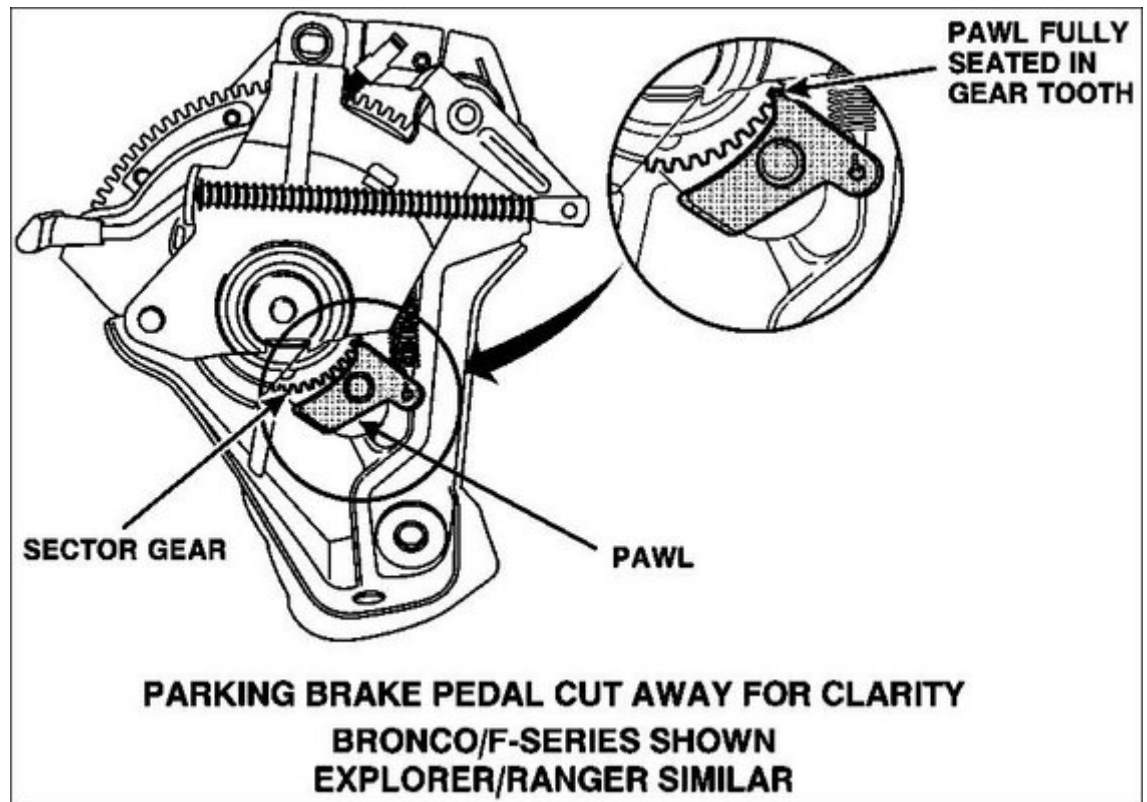
b. Brake drag occurs when the parking brake is released.

C. Lock-In-Wedge Installation

NOTE: Do not proceed unless the parking brake system is working properly.

WARNING: BE VERY CAREFUL TO AVOID ACCIDENTALLY ACTIVATING THE RELEASE LEVER DURING ANY PART OF THE LOCK-IN WEDGE SERVICE PROCEDURE.

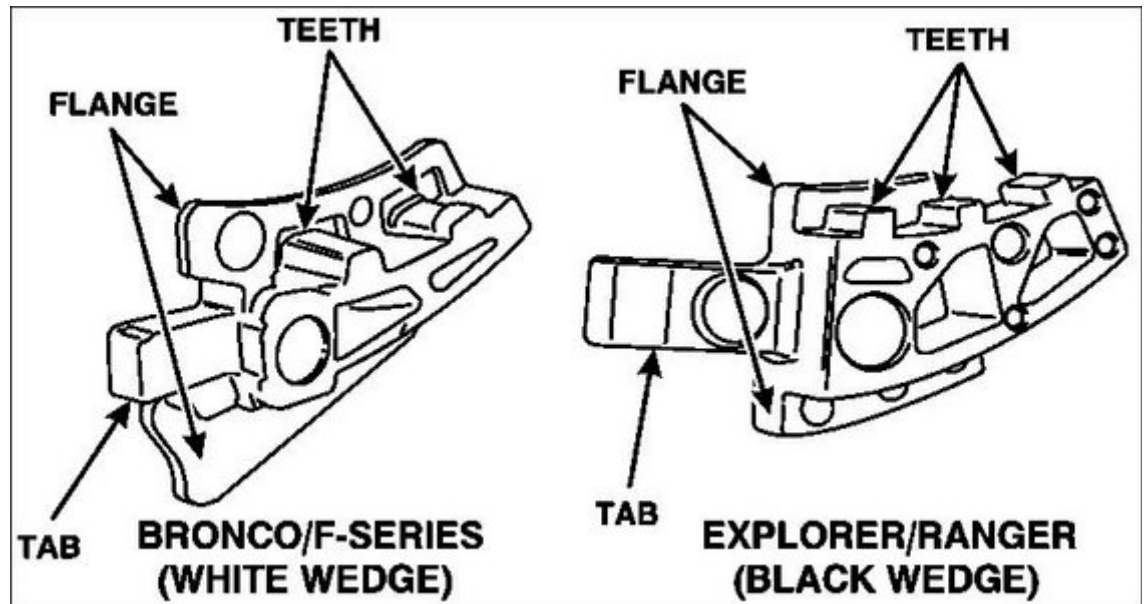
1. Depress the parking brake pedal so that the pedal travels 75 mm (3 inches) from the released position.



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2. Visually inspect to make sure that the pawl is fully seated in the bottom of a sector gear tooth. If it is not, place a screwdriver between the sector gear and

pawl, pry down on the pawl to force it into a sector gear tooth.



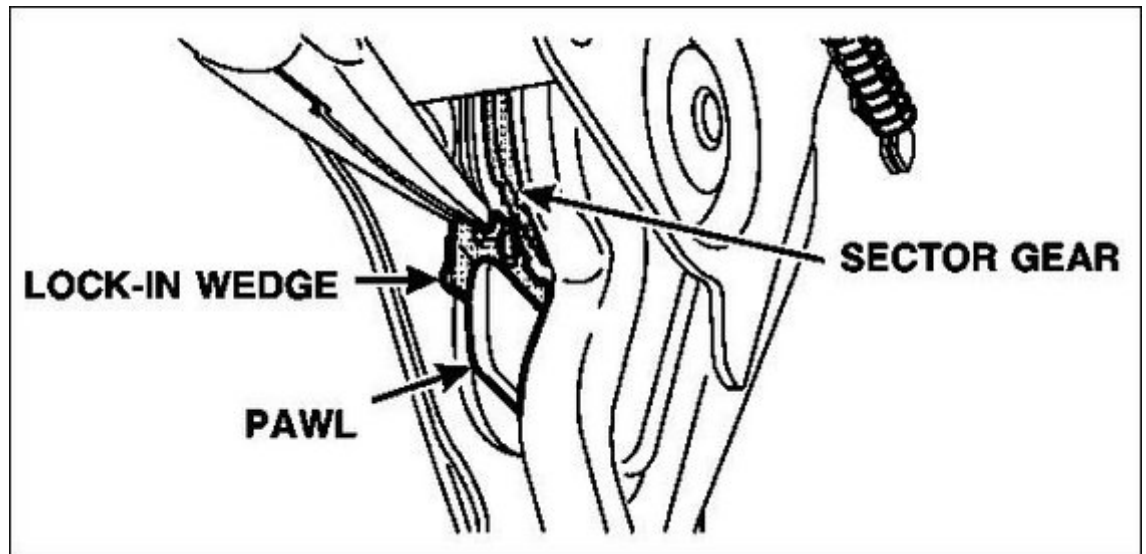
FSA94S91E-BrakeWedge6.jpg | Hits: 1636 | Size: 43.54 KB |
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3. When the pawl and sector gear are fully engaged, depress the parking brake pedal until a full travel position is achieved. This will allow more working room and make the installation of the wedge easier.

NOTE: The Bronco/F-Series uses a white wedge and the Explorer/Ranger uses a black wedge. They are not interchangeable.

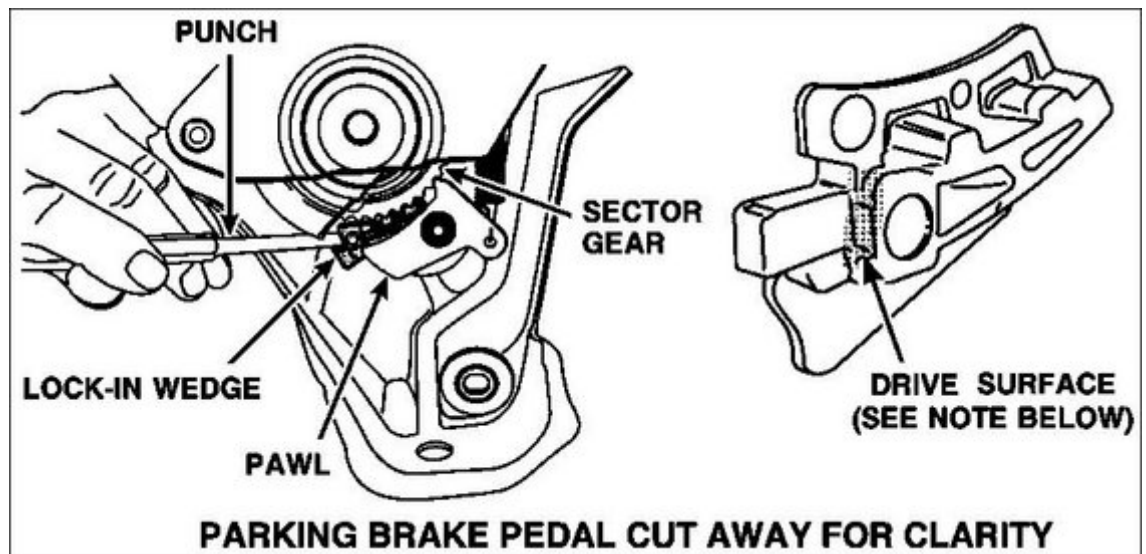
4. Obtain the proper lock-in wedge for the vehicle.

5. Grab the tab of the lock-in wedge with a pair of needle nose pliers and position the wedge so the teeth of the wedge are pointing up.



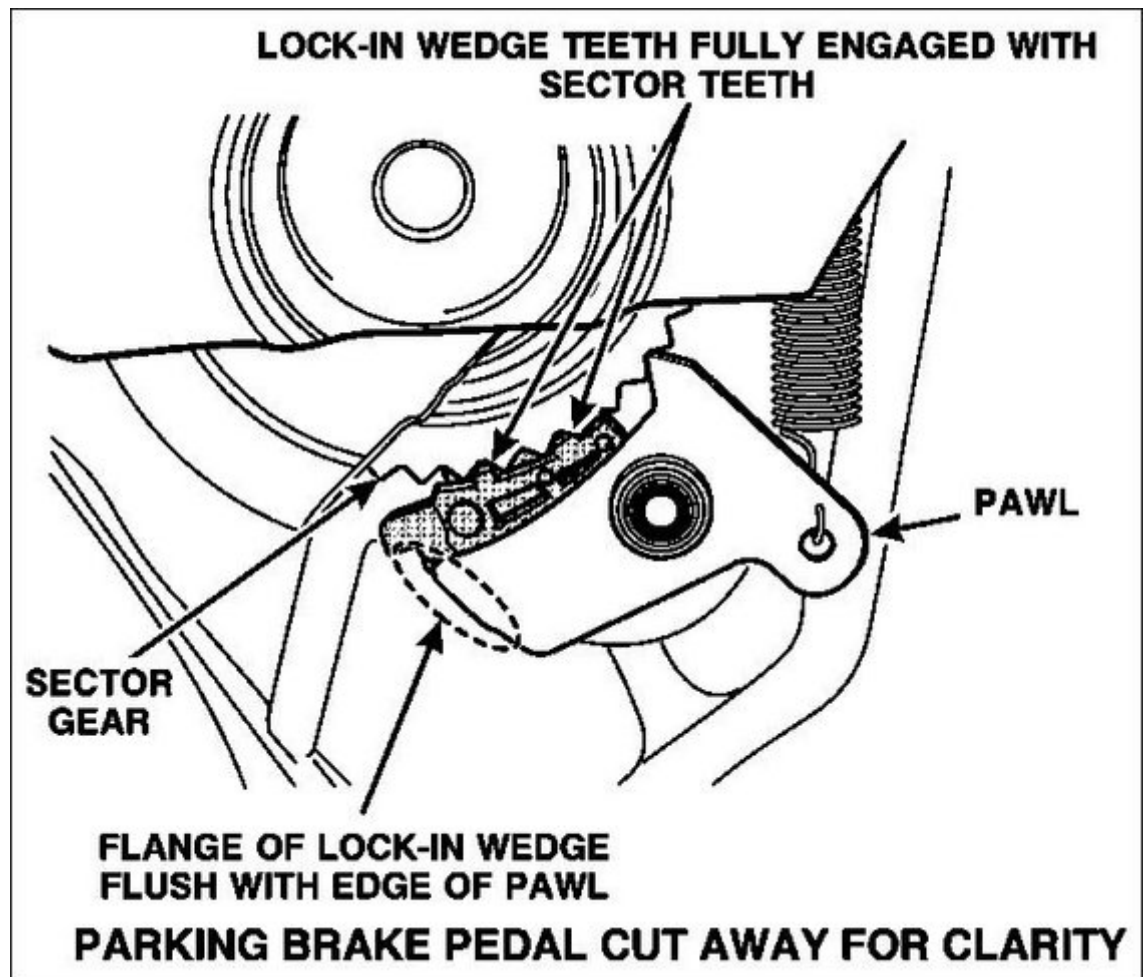
FSA94S91E-BrakeWedge7.jpg | Hits: 1799 | Size: 33.94 KB |
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6. Using the needle nose pliers, insert the lock-in wedge between the pawl and the sector gear with the flange of the wedge behind the pawl and sector gear.



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7. Position a punch on the drive area of the lock-in wedge.

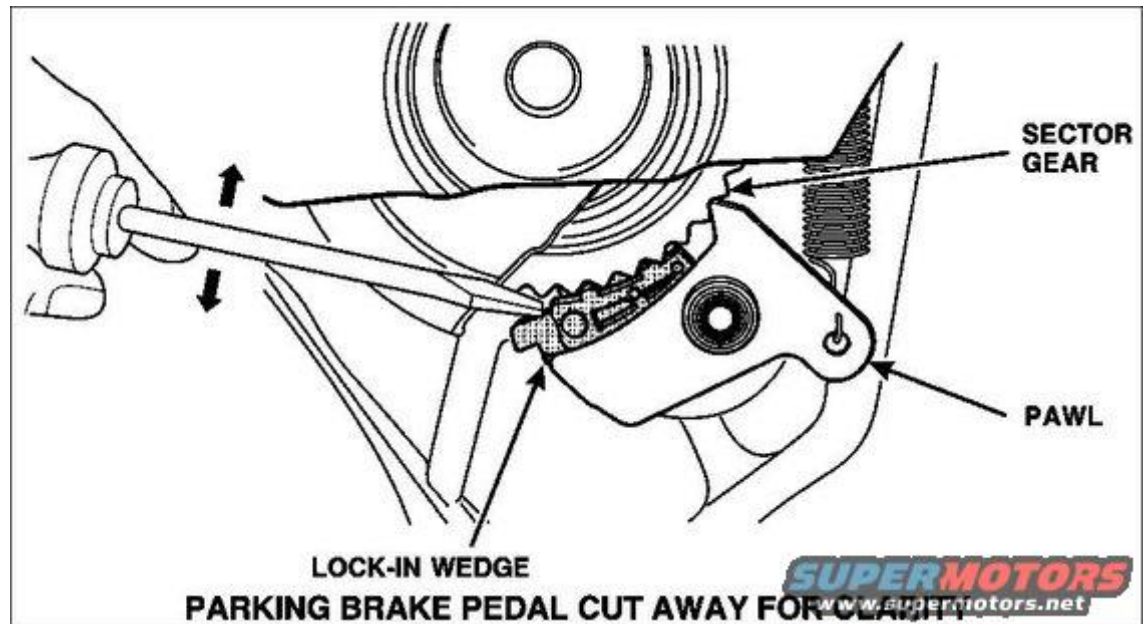


FSA94S91E-BrakeWedge9.jpg | Hits: 1848 | Size: 67 KB |
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7. (continued) Using a hammer, drive the lock-in wedge between the pawl and the sector gear, until the flange of the wedge is flush with the edge of the pawl. NOTE: The drive surface of the wedge is where the head of the punch must be placed during installation of the wedge.

8. Verify that the lock-in wedge is fully seated. Wedge teeth must be fully engaged with at least one of the sector teeth. Wedge flange must be flush with the edge of the pawl.

+



FSA94S91E-BrakeWedge10.jpg | Hits: 3525 | Size: 40.57 KB |
Posted on: 1/2/07 | [Link to this image](#)

9. Apply and release the parking brake at least two times, allowing the pedal to return each time without any interference. This will cause the wedge to loosen or fall out if it is not installed properly.

10. Place a small screwdriver between the lock-in wedge and the sector gear. Apply a firm, up and down prying force to the wedge. The wedge should feel very stiff, with no movement between the sector gear, wedge and pawl.

If no movement is noted, the wedge has been properly installed. Proceed to Parking Brake Functional Test.

If movement is noted, call 1-800-325-5621 for further instructions.

PARKING BRAKE FUNCTIONAL TEST

NOTE: The parking brake system has been adjusted, checked for proper operation, and a wedge installed.

The following parking brake functional test must be performed to verify proper parking brake adjustment.

1. Place the transmission in neutral, then raise the vehicle on a hoist until the rear wheels are off the ground.

NOTE: The vehicle must be supported by the rear axle to maintain curb height.

2. Position two (2) jack stands under the rear axle housing, then lower the hoist until the weight of the vehicle is supported by the rear axle.

3. Firmly apply the parking brake.

4. Verify that the parking brake is applied by trying to rotate the rear wheels by hand.

5. Release the parking brake.

6. Verify that the parking brake is fully released. Check for brake drag by rotating the rear wheels by hand.

7. Raise the vehicle and remove the two (2) jack stands. Lower the vehicle.

8. Turn the ignition to the "RUN" position and verify that the dash brake light is not illuminated.

9. Call 1-800-325-5621 for further instructions if any of the following conditions exist:

- a. The rear wheels turn while the parking brake is

applied.

b. Brake drag occurs when the parking brake is released.

c. The dash board brake light is illuminated with the parking brake released.

NOTE: In the future, if the parking brakes require adjustment, the lock-in wedge must be removed. The parking brakes must be adjusted according to the procedure on page 5 of this attachment. The lock-in wedge must be reinstalled after the parking brakes have been adjusted.

TSB 00-01-03 PARKING BRAKE - PROCEDURE FOR SERVICING PARKING BRAKE - SERVICE TIP - BRONCO AND F-SERIES BUILT THROUGH 4/22/1994 AND EXPLORER/RANGER BUILT THROUGH 5/13/1994

Publication Date: DECEMBER 22, 1999

FORD: 1992-94 BRONCO, F-150-350 SERIES
1993-94 EXPLORER, RANGER

ISSUE: When servicing the parking brake or service brake systems where the lock-in wedge has been installed in the parking brake control, additional service procedures will be necessary.

ACTION: When a lock-in wedge part has been previously installed in the parking brake control assembly, it must be removed prior to conducting maintenance procedures from the appropriate Service Manual, Sections 06-04 (Rear Drum Brakes)

and 06-05 (Parking Brake System). The wedge must be reinstalled after service is completed. Refer to Service Recall Bulletin 94S91-S3 for lock-in wedge part removal and installation detailed service procedures, part numbers, and diagrams. Be sure to inspect the wedge for damage. If any part of the wedge is broken or damaged, install a new wedge.

OTHER APPLICABLE ARTICLES: 94S91-S3
WARRANTY STATUS: INFORMATION ONLY