

2005 Ford Focus ZX5 S

2005 BRAKES Drum Brake - Focus

2005 BRAKES**Drum Brake - Focus****SPECIFICATIONS****GENERAL SPECIFICATIONS****GENERAL SPECIFICATIONS**

Item	Specification
Silicone Brake Caliper Grease and Dielectric Compound XG-3-A	ESE-M1C171-A
High Performance DOT 3 Motor Vehicle Brake Fluid PM-1 (Canada CPM-1)	ESA-M6C25-A

DRUM BRAKE SPECIFICATION**DRUM BRAKE SPECIFICATION**

Description	mm	inch
New brake drum nominal diameter	203	7.99
Worn brake drum discard diameter ⁽¹⁾	204	8.03
Brake shoe width	36	1.42
Worn brake lining discard thickness	1	0.039
Wheel cylinder bore diameter	20.64	0.81
(1) When the discard diameter has been reached install a new brake drum/brake shoes. Particular care must be taken when refinishing drums to ensure they do not exceed the maximum diameter dimensions.		

TORQUE SPECIFICATIONS**TORQUE SPECIFICATIONS**

Description	Nm	lb-ft	lb-in
Wheel spindle retaining bolts	66	49	-
Wheel cylinder retaining bolts	12	9	-
Rear brake line-to-wheel cylinder fitting nut	8	-	71
Rear wheel speed sensor bolt	9	-	80

DESCRIPTION AND OPERATION

DRUM BRAKE

The drum brake system consists of the following components:

- Brake drum
- Brake shoes
- Brake shoe hold-down clip
- Brake shoe hold-down clip pin
- Brake shoe retracting spring
- Self-adjuster
- Self-adjuster spring
- Parking brake lever
- Wheel cylinder
- Brake backing plate
- Wheel cylinder bolts
- Bleeder screw

NOTE: To install a new brake drum, the wheel hub must be removed. Refer to REAR SUSPENSION .

The rear drum brake uses a pedal-actuated rear wheel cylinder to move the rear brake shoes against the brake drum. After initial setting, rear drum brake adjustment is maintained through periodic parking brake operation. For initial setting, refer to BRAKE SHOE ADJUSTMENT.

DIAGNOSIS AND TESTING**DRUM BRAKE**

Refer to BRAKE SYSTEM -- GENERAL INFORMATION .

GENERAL PROCEDURES**BRAKE SHOE ADJUSTMENT**

1. Raise and support the vehicle so that the rear wheels are off the ground. For additional information, refer to JACKING AND LIFTING .

NOTE: The internal auto-adjuster must be set and the brake shoes centralized to the brake drum.

2. With the aid of an assistant, rotate the rear wheel while applying the brake pedal 4

times.

3. Repeat Step 2 for the opposite rear wheel.
4. Carry out the parking brake cable adjustment. For additional information, refer to **PARKING BRAKE AND ACTUATION** .
5. Lower the vehicle.

REMOVAL AND INSTALLATION

BRAKE DRUM

Removal and Installation

CAUTION: This brake drum removal procedure is for access to brake system components, not for installing a new brake drum.

NOTE: To install a new brake drum, remove the wheel hub. For additional information, refer to **REAR SUSPENSION** .

All vehicles

1. Release the parking brake.
2. Remove the wheel and tire assembly. For additional information, refer to **WHEELS AND TIRES** .

Vehicles with anti-lock brakes

3. Disconnect the rear wheel speed sensor.

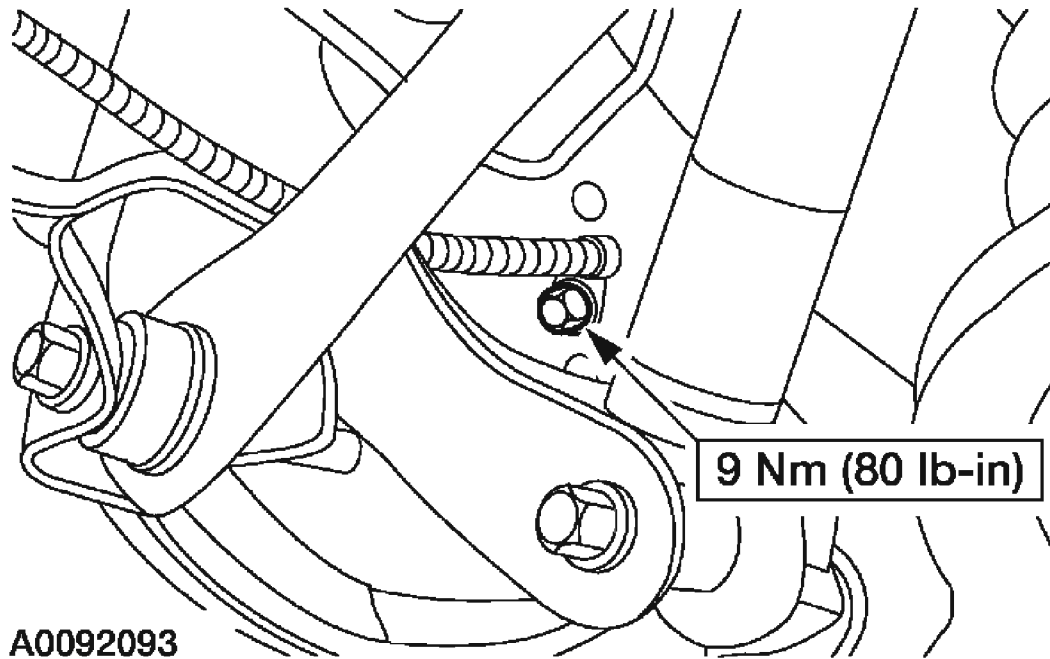


Fig. 1: Disconnecting Rear Wheel Speed Sensor
Courtesy of FORD MOTOR CO.

All vehicles

4. Remove the brake drum and wheel spindle assembly.

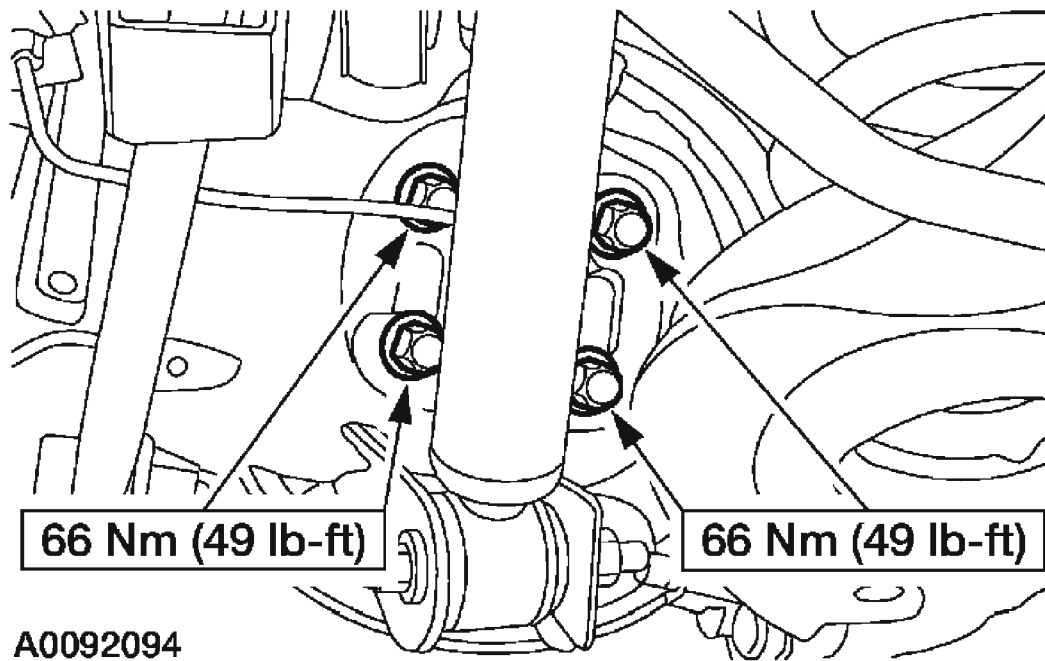


Fig. 2: Removing Brake Drum And Wheel Spindle Assembly
Courtesy of FORD MOTOR CO.

CAUTION: Make sure that all mating surfaces are free of foreign material and debris.

5. To install, reverse the removal procedure.

BRAKE SHOES

Material

MATERIALS

Item	Specification
Silicone Brake Caliper Grease and Dielectric Compound XG-3-A	ESE-M1C171-A

Removal and Installation

1. Remove the parking brake control boot.
 1. Release the boot clip.
 2. Lift the boot upward and over the parking brake control handle.

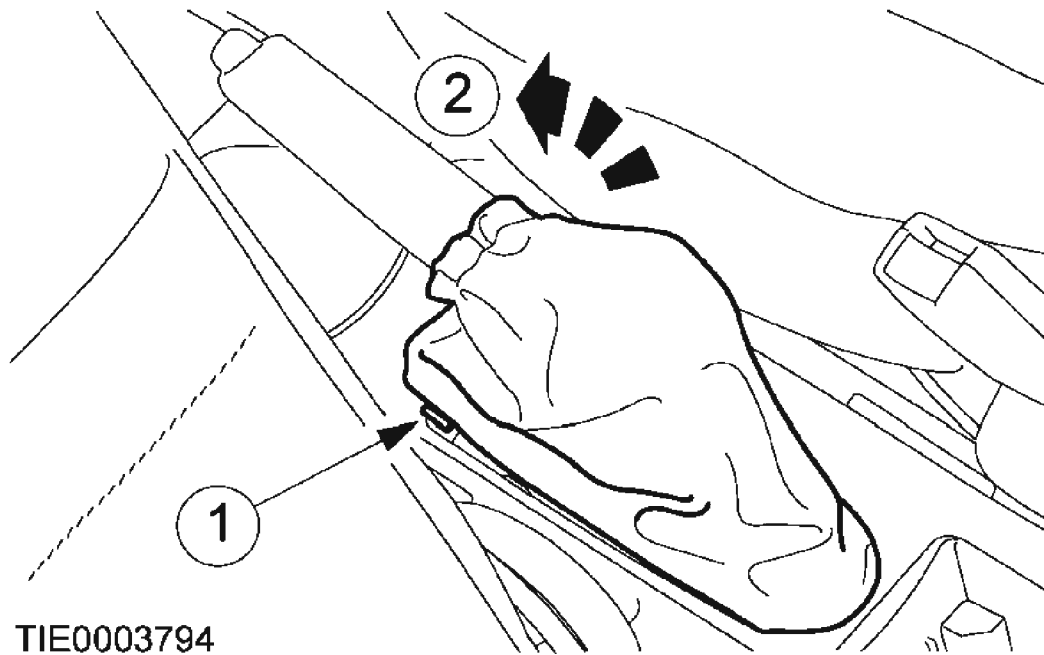


Fig. 3: Removing Parking Brake Control Boot
Courtesy of FORD MOTOR CO.

NOTE: **Make sure the rear brakes are cool to the touch.**

2. Move the parking brake control to the fully released position.
3. Relieve the tension on the parking brake cable.
 1. Remove the retaining clip.
 2. Loosen the adjustment nut.

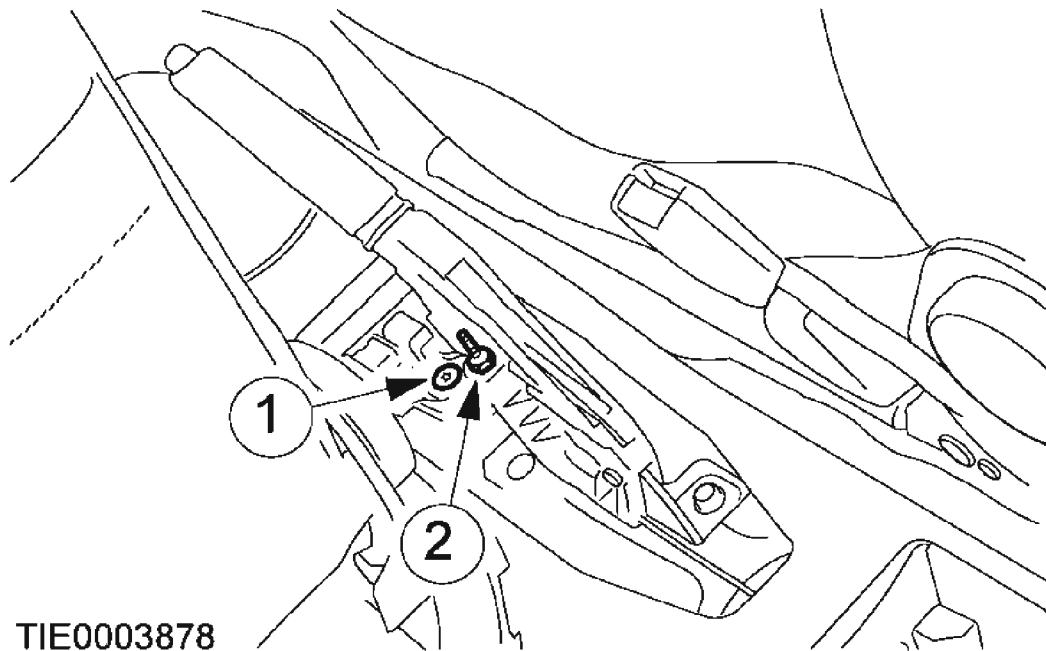
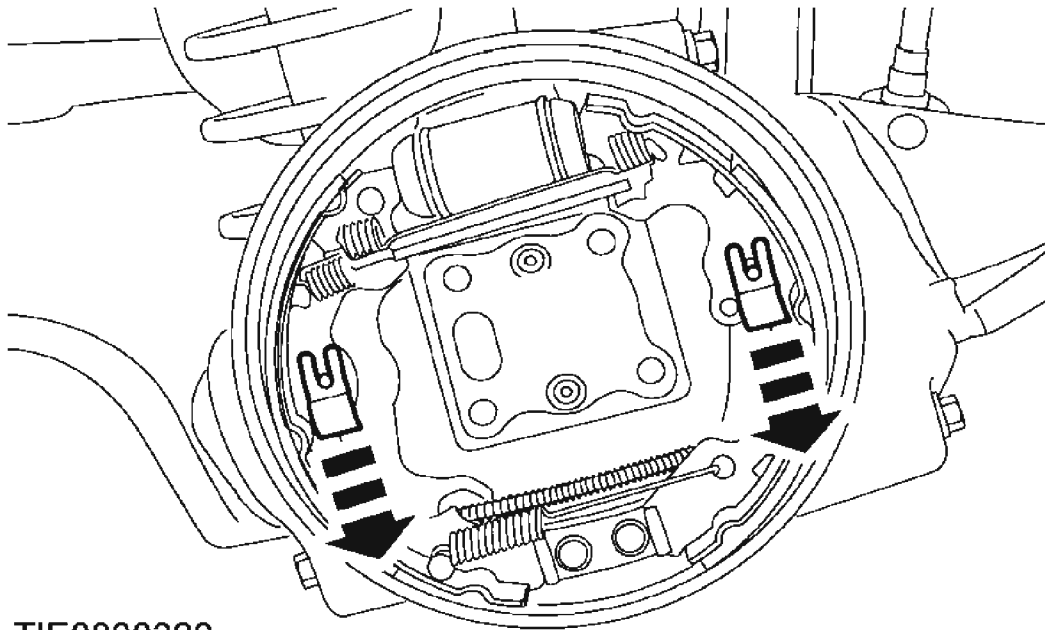


Fig. 4: Removing Retaining Clip And Loosening Adjustment Nut
Courtesy of FORD MOTOR CO.

CAUTION: Do not remove the brake drum by means of the hub retaining nut.

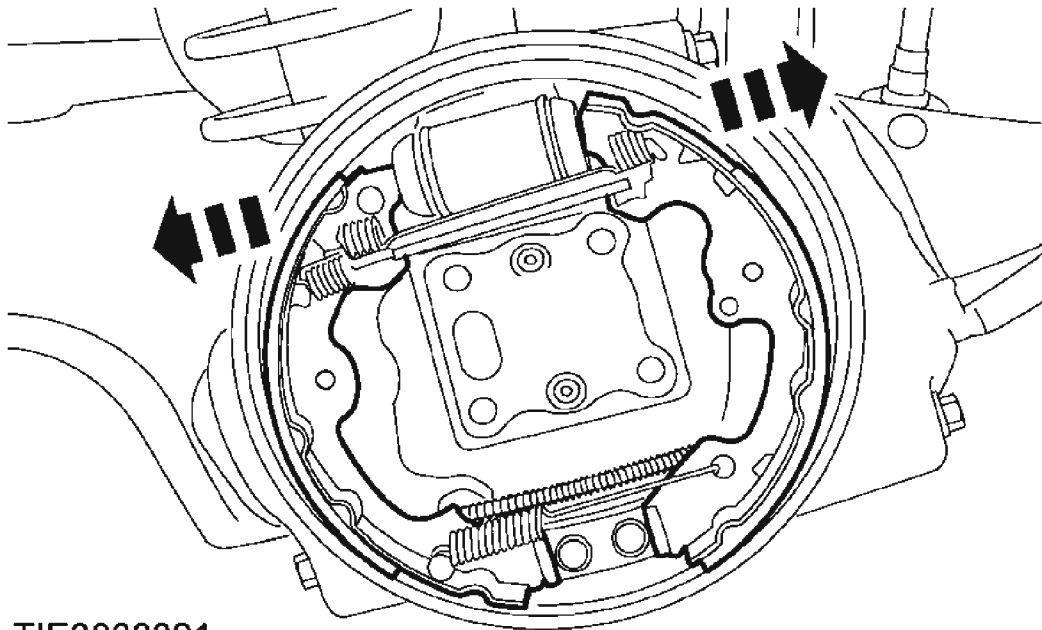
4. Remove the brake drum. For additional information, refer to **BRAKE DRUM**.
5. Remove the hold-down clips and pins.



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Fig. 5: Removing Hold-Down Clips And Pins
Courtesy of FORD MOTOR CO.

NOTE: Do not allow the wheel cylinder pistons to fall out of the wheel cylinder bore.



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Fig. 6: Disconnecting Brake Shoes From Wheel Cylinder
Courtesy of FORD MOTOR CO.

6. Disconnect the brake shoes from the wheel cylinder.
 - Using a suitable tool, hold the wheel cylinder pistons in place.
7. Release the shoes from the anchor block.

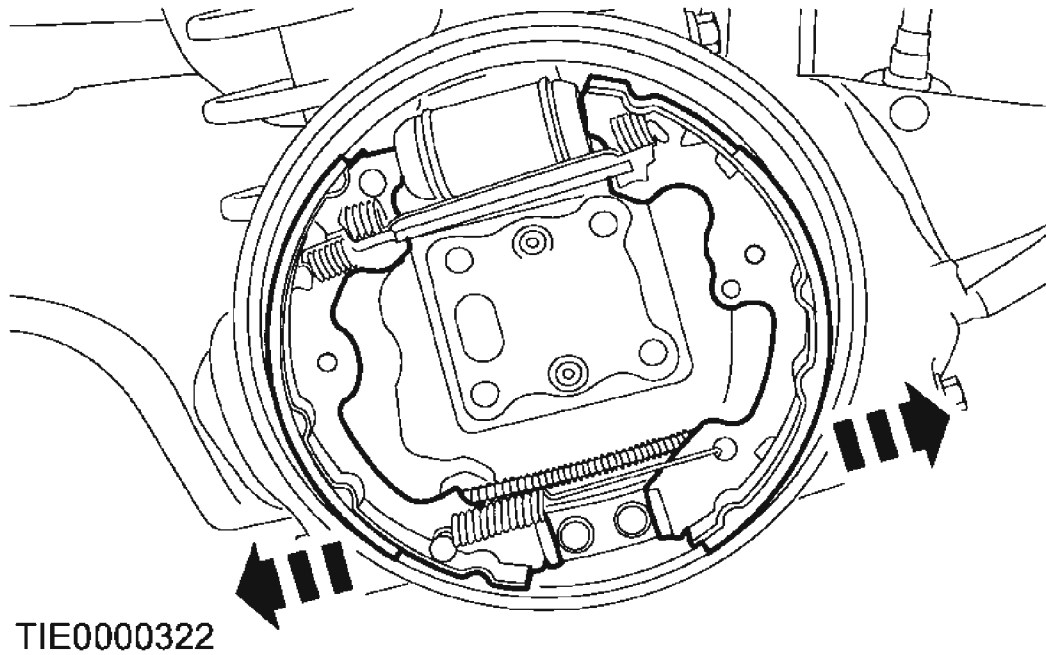
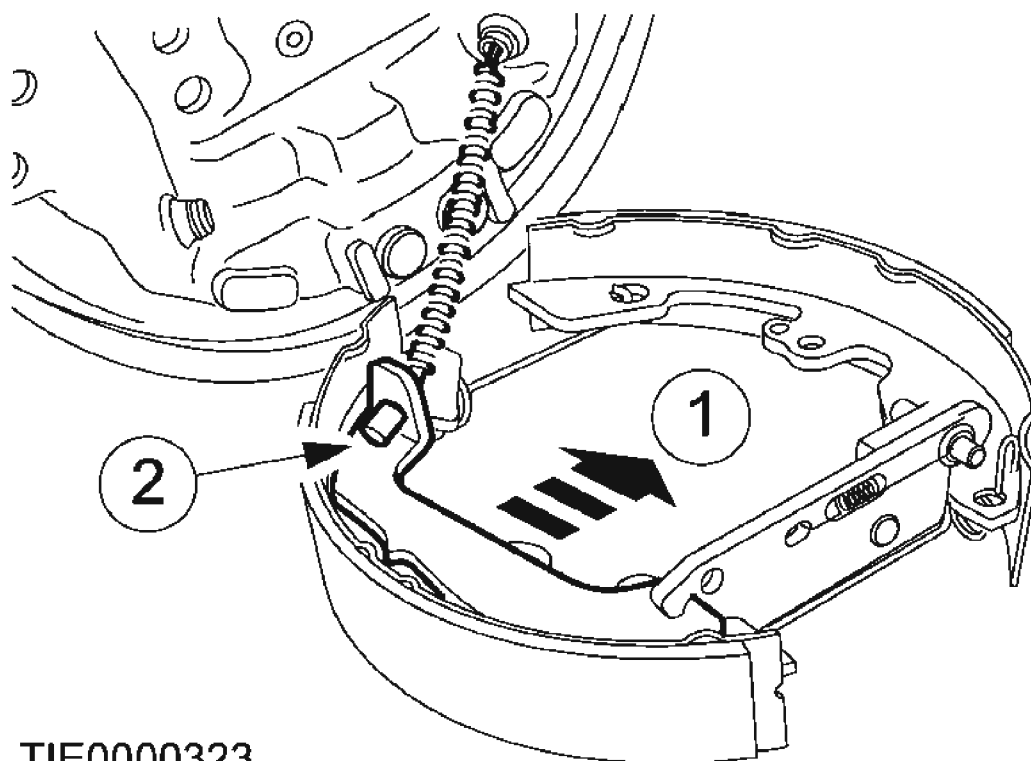


Fig. 7: Removing Shoes From Anchor Block
Courtesy of FORD MOTOR CO.

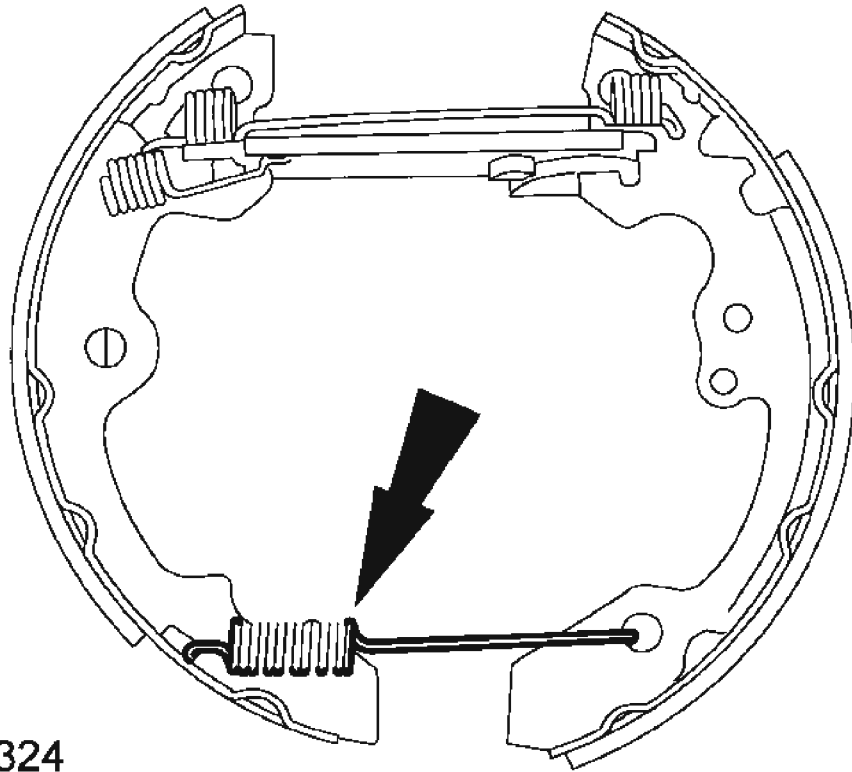
8. Disconnect the parking brake cable.
 1. Push the lever inward.
 2. Release the cable from the lever.



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Fig. 8: Disconnecting Parking Brake Cable
Courtesy of FORD MOTOR CO.

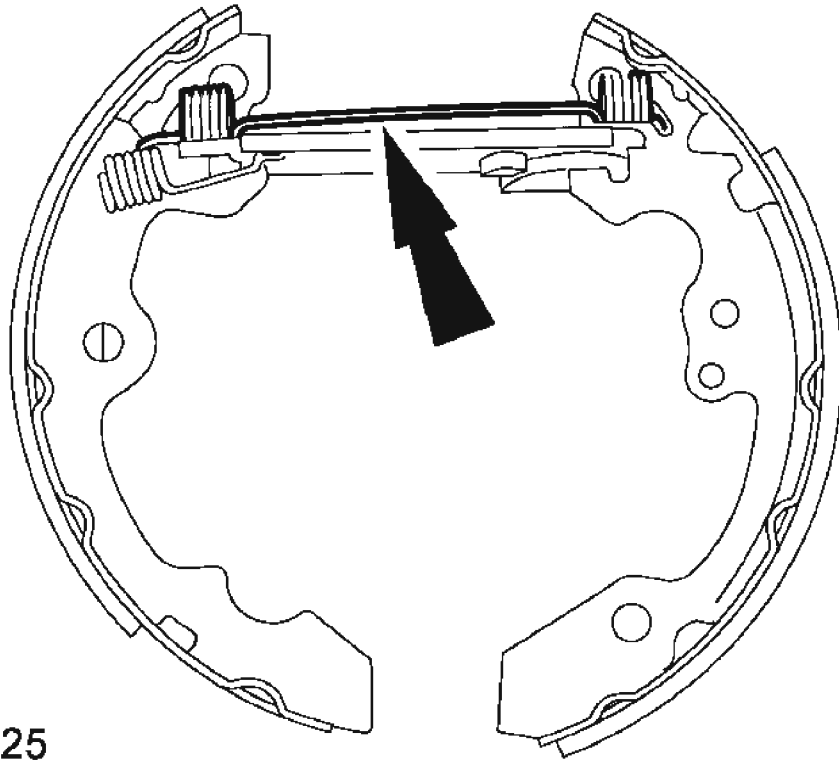
9. Remove the lower return spring.



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Fig. 9: Removing Lower Return Spring
Courtesy of FORD MOTOR CO.

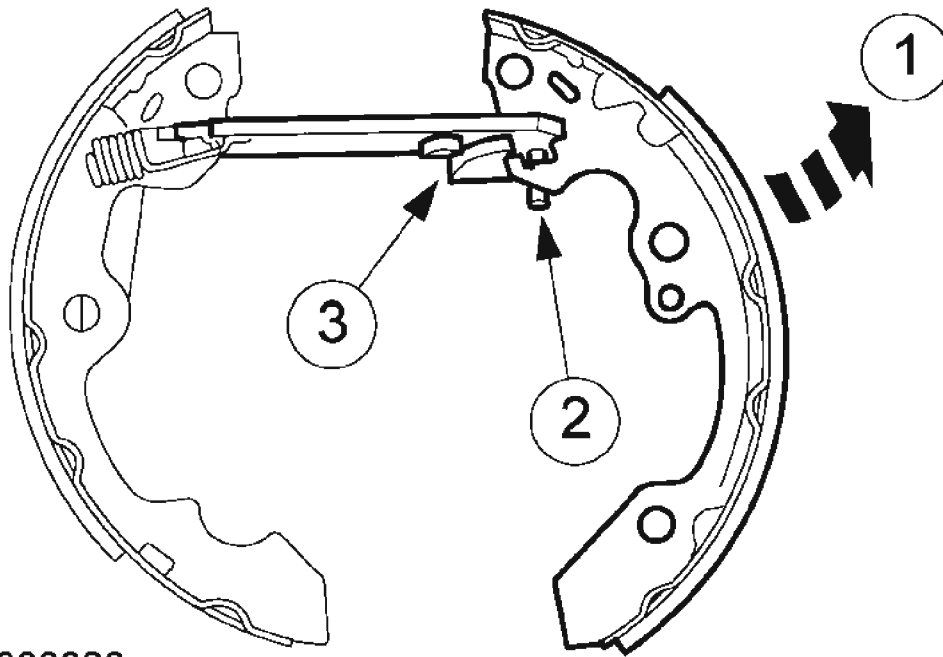
10. Remove the upper return spring.



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Fig. 10: Removing Upper Return Spring
Courtesy of FORD MOTOR CO.

11. Remove the primary shoe from the strut and brake shoe adjuster.
 1. Pull the shoe outward.
 2. Disconnect the strut and adjuster.
 3. Release the strut and adjuster.



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Fig. 11: Removing Primary Shoe From Strut And Brake Shoe Adjuster
Courtesy of FORD MOTOR CO.

CAUTION: The strut support spring is under tension.

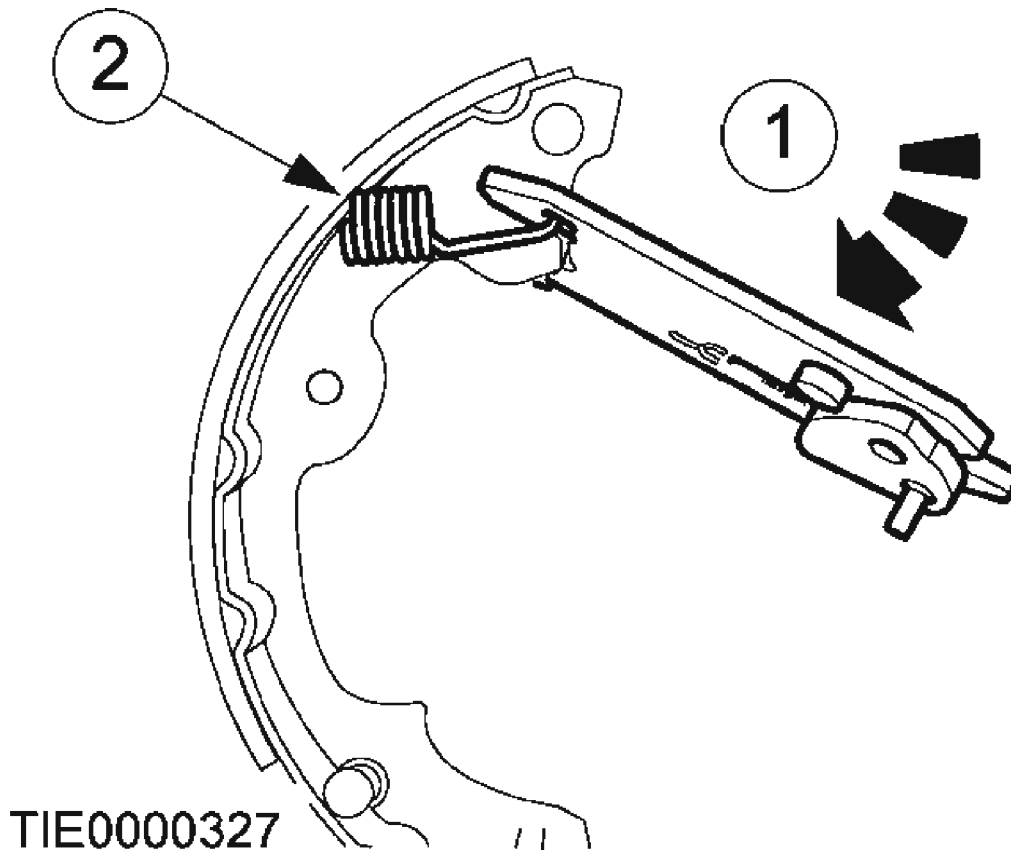


Fig. 12: Removing Secondary Shoe From Support
Courtesy of FORD MOTOR CO.

12. Remove the secondary shoe from the support.
 1. Move the strut downward.
 2. Disconnect the parking brake return spring.
13. Clean, check and apply silicone grease to the brake shoe contact points on the brake backing plate.

CAUTION: Make sure that all mating surfaces are free of foreign material and debris.

14. To install, reverse the removal procedure.

NOTE: The internal auto-adjuster must be set and the brake shoes centralized to the brake drum.

15. Carry out the brake shoe adjustment. For additional information, refer to **BRAKE SHOE ADJUSTMENT**.

WHEEL CYLINDER

Material

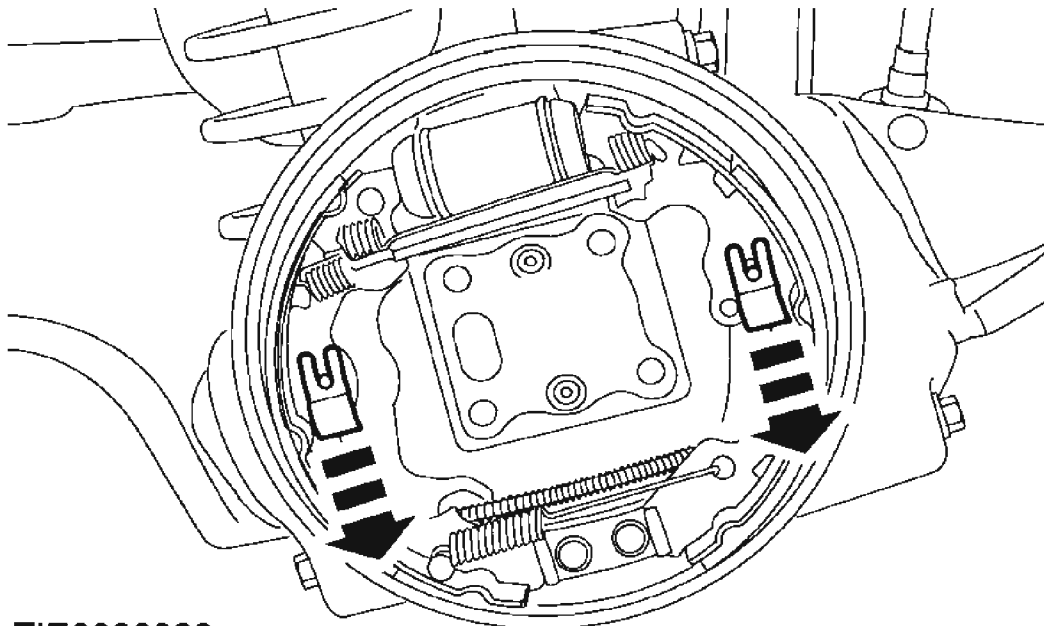
MATERIALS

Item	Specification
High Performance DOT 3 Motor Vehicle Brake Fluid PM-1 (Canada CPM-1)	ESA-M6C25-A

Removal and Installation

CAUTION: Do not remove the brake drum by means of the hub retaining nut.

1. Remove the brake drum. For additional information, refer to **BRAKE DRUM**.
2. Remove the hold-down clips and pins.



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Fig. 13: Removing Hold-Down Clips And Pins
Courtesy of FORD MOTOR CO.

NOTE: Do not allow the wheel cylinder pistons to fall out of the

wheel cylinder bore.

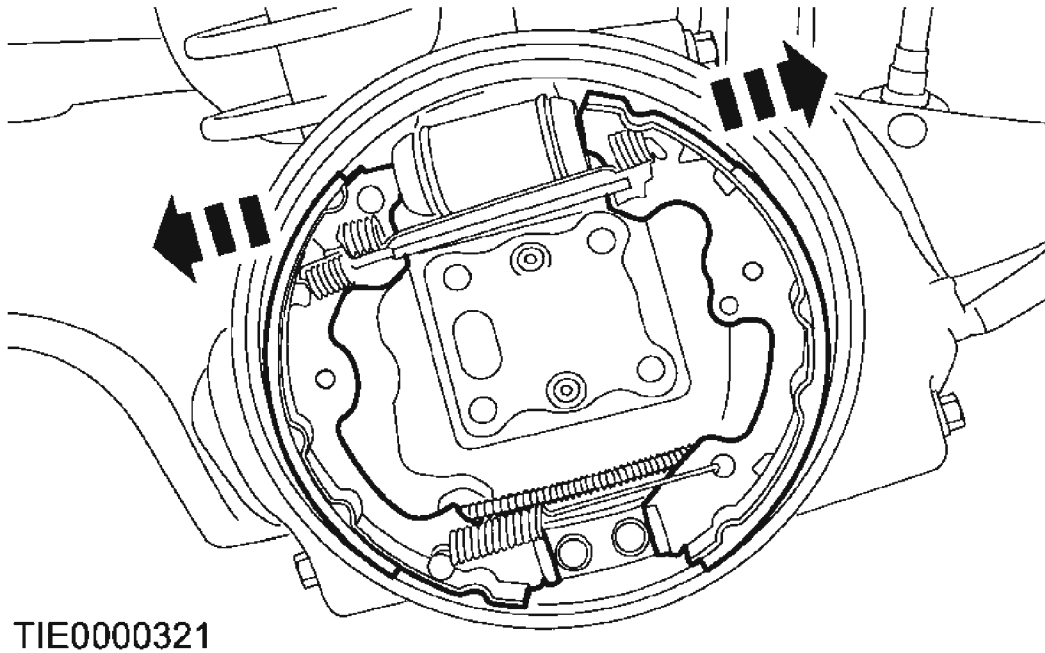


Fig. 14: Using Suitable Tool To Hold Wheel Cylinder Pistons In Place
Courtesy of FORD MOTOR CO.

3. Disconnect the brake shoes from the wheel cylinder.
 - Using a suitable tool, hold the wheel cylinder pistons in place.
4. Remove the wheel cylinder.
 1. Disconnect the brake line fitting.
 2. Remove the bolts.

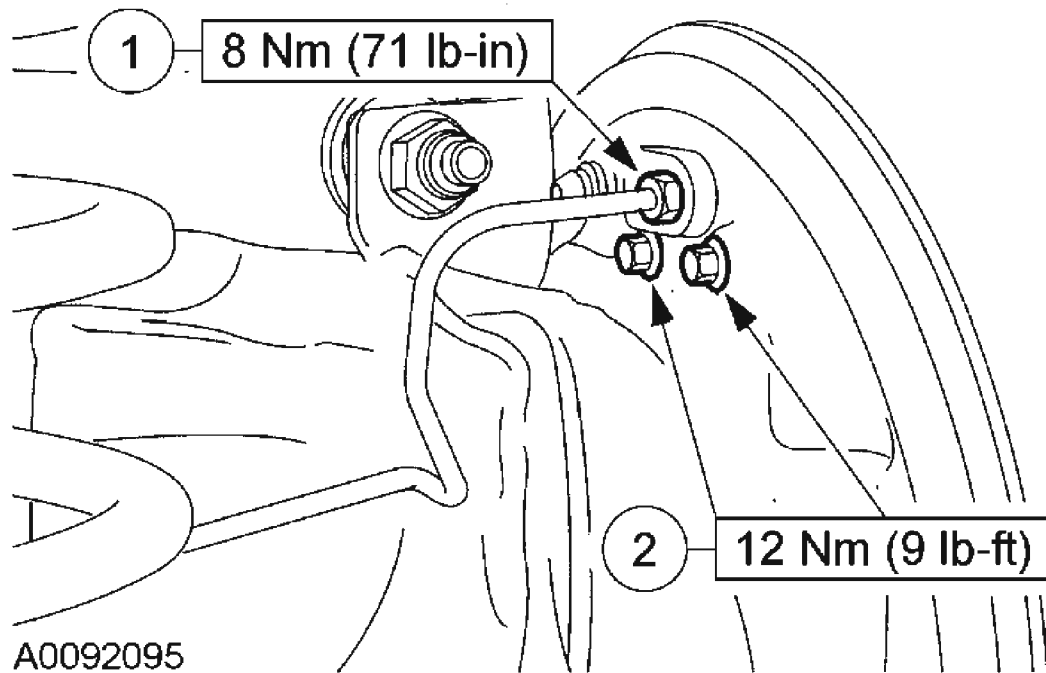


Fig. 15: Removing Wheel Cylinder
 Courtesy of FORD MOTOR CO.

CAUTION: Make sure that all mating surfaces are free of foreign material and debris.

5. To install, reverse the removal procedure.
6. Bleed the brake system. For additional information, refer to **BRAKE SYSTEM -- GENERAL INFORMATION**.

NOTE: The internal auto-adjuster must be set and the brake shoes centralized to the brake drum

7. Carry out the brake shoe adjustment. For additional information, refer to **BRAKE SHOE ADJUSTMENT**.

BRAKE BACKING PLATE

Material

MATERIALS

Item	Specification
High Performance DOT 3 Motor Vehicle Brake Fluid PM-1 (US);	ESA-M6C25-

CPM-1 (Canada)

A

Removal and Installation

WARNING: Use of any brake fluid other than the 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. . 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 or plastic surfaces. Do not spill brake fluid onto painted or plastic surfaces. If spilled, wipe up immediately.

1. Remove the brake shoes. For additional information, refer to **BRAKE SHOES**.
2. Remove the wheel cylinder.
 1. Remove the brake line fitting.
 2. Remove the bolts.

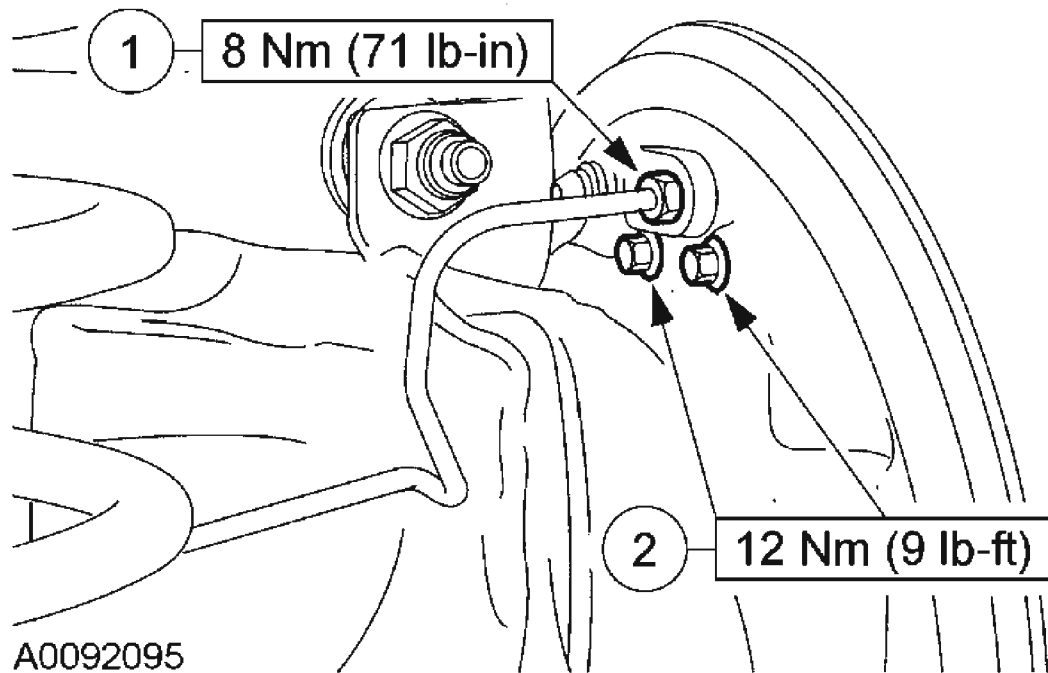


Fig. 16: Removing Brake Line Fitting And Bolts
Courtesy of FORD MOTOR CO.

3. Disconnect the parking brake cable from the backing plate.
 1. Press the retaining clip.
 2. Remove the parking brake cable.

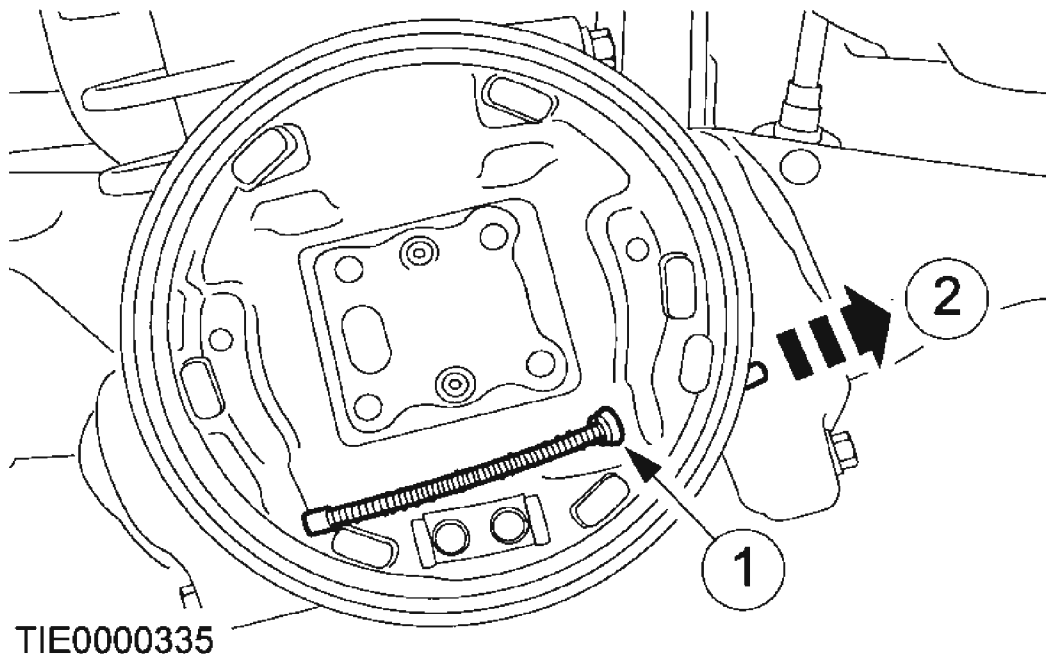


Fig. 17: Removing Retaining Clip And Parking Brake Cable
Courtesy of FORD MOTOR CO.

4. Remove the backing plate rivets and remove the backing plate.

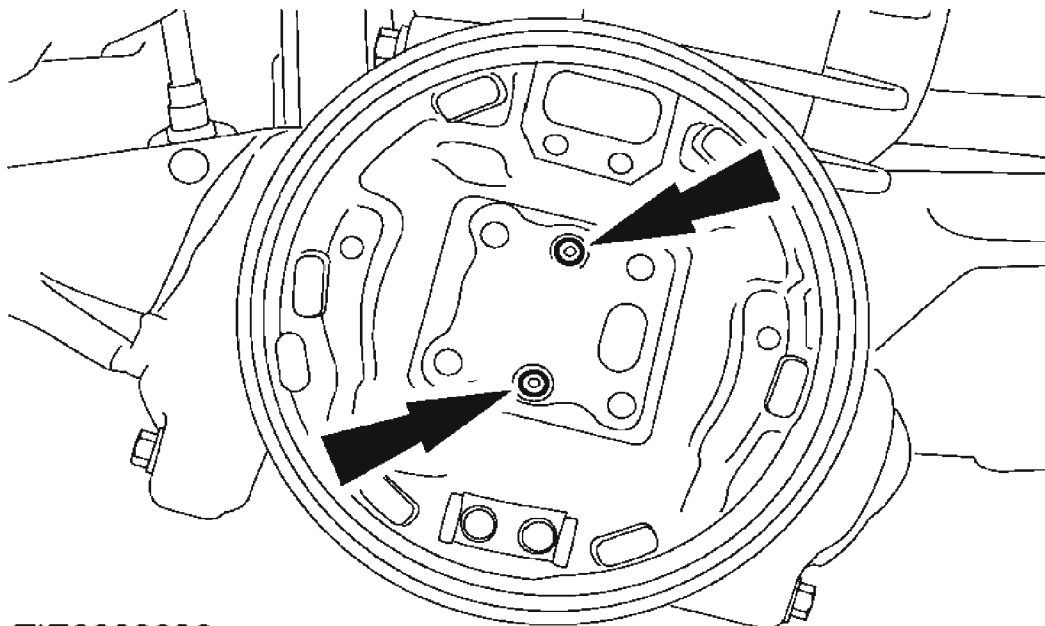


Fig. 18: Removing Backing Plate Rivets And Remove Backing Plate
Courtesy of FORD MOTOR CO.

CAUTION: Make sure that all mating surfaces are free of foreign material and debris.

5. To install, reverse the removal procedure.
6. Bleed the brake system. For additional information, refer to **BRAKE SYSTEM -- GENERAL INFORMATION** .