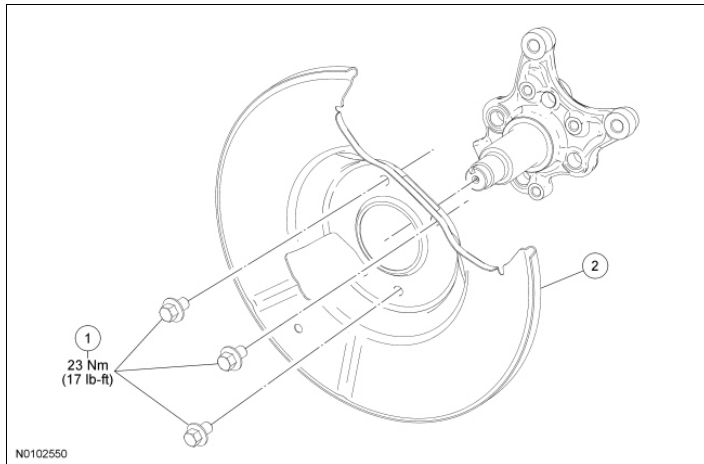


SECTION 206-04: Rear Disc Brake
REMOVAL AND INSTALLATION2009 Fusion/Milan/MKZ Workshop Manual
Procedure revision date: 03/31/2009**Brake Disc Shield - Front Wheel Drive (FWD)**

Item	Part Number	Description
1	N500020	Brake disc shield bolts (3 required)
2	2K045 RH/ 2K046 LH	Brake disc shield

Removal and Installation


1. Remove the wheel bearing and wheel hub. For additional information, refer to [Section 204-02](#) .
2. Remove the 3 brake disc shield bolts and the brake disc shield.
 - To install, tighten to 23 Nm (17 lb-ft).
3. To install, reverse the removal procedure.

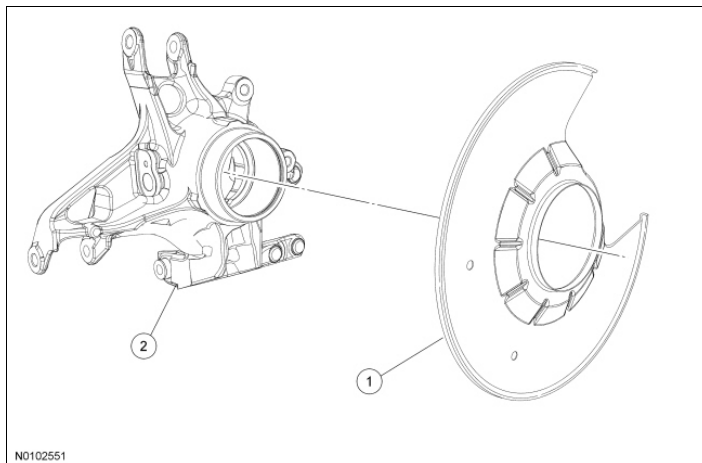
SECTION 206-04: Rear Disc Brake
REMOVAL AND INSTALLATION

2009 Fusion/Milan/MKZ Workshop Manual
Procedure revision date: 03/31/2009

Brake Disc Shield - All Wheel Drive (AWD)

Special Tool(s)

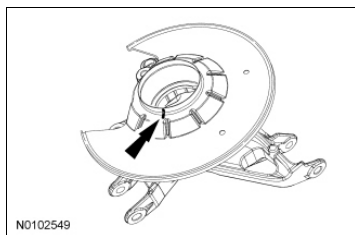
 ST1569-A	Remover/Installer, Front Subframe Bushing 204-362/2
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Item	Part Number	Description
1	2K005 LH/ 2K004 RH	Brake disc shield
2	3K186 LH/ 3K185 RH	Wheel knuckle

Removal

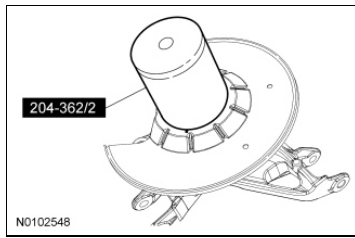
1. Remove the wheel bearing and wheel hub. For additional information, refer to [Section 204-02](#).
2. Index-mark the brake disc shield to the wheel knuckle.



3. Cut the brake disc shield and remove it from the wheel knuckle.

Installation

1. Transfer the index mark from the removed brake disc shield to the new brake disc shield.
2. Position the brake disc shield onto the wheel knuckle.
3. Align the index marks and install the brake disc shield onto the wheel knuckle using the Front Subframe Bushing Remover/Installer.



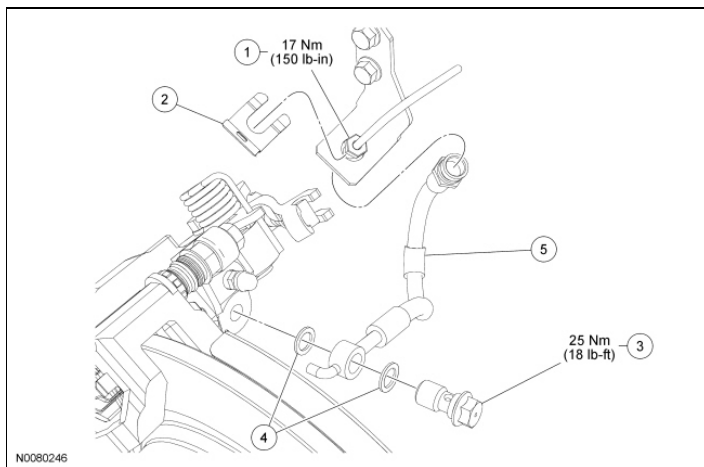
SECTION 206-04: Rear Disc Brake
REMOVAL AND INSTALLATION

2009 Fusion/Milan/MKZ Workshop Manual
Procedure revision date: 06/26/2008

Brake Flexible Hose

Material

Item	Specification
High Performance DOT 3 Motor Vehicle Brake Fluid PM-1-C (US); CPM-1-C (Canada)	WSS-M6C62-A or WSS-M6C65-A1



Item	Part Number	Description
1	-	Brake tube fitting (part of 2268 RH/ 9J279 LH)
2	2L198	Brake flexible hose retaining clip (part of 2282)
3	2L122	Brake caliper flow bolt
4	2149	Copper washers
5	2282	Brake flexible hose

Removal and Installation

⚠ WARNING: Do not use any fluid other than clean brake fluid meeting manufacturer's specification. Additionally, do not use brake fluid that has been previously drained. Following these instructions will help prevent system contamination, brake component damage and the risk of serious 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 serious personal injury.

NOTICE: Do not spill brake fluid on painted or plastic surfaces or damage to the surface may occur. If brake fluid is spilled onto a painted or plastic surface, immediately wash the surface with water.

1. Remove the wheel and tire. For additional information, refer to [Section 204-04](#) .
2. Remove the brake caliper flow bolt and discard the 2 copper washers.
 - To install, tighten to 25 Nm (18 lb-ft).

3. Disconnect the brake tube fitting from the brake flexible hose.
 - To install, tighten to 17 Nm (150 lb-in).
 4. Remove the brake flexible hose retaining clip and the brake hose.
 5. To install, reverse the removal procedure.
 - Bleed the brake caliper. For additional information, refer to Section 206-00 Component Bleeding.
-

Torque Specifications

Description	Nm	lb-ft	lb-in
Catalytic converter-to-exhaust flexible pipe nut	40	30	-
Parking brake cable routing bracket bolts	23	17	-
Parking brake cable routing bracket nuts	9	-	80
Parking brake control bolt	20	-	177
Parking brake control nuts	20	-	177

Parking Brake

The parking brake system consists of the following components:

- Parking brake control
- Parking brake warning indicator switch
- Rear parking brake cable assembly

The parking brake system is a mechanical system that activates a self-adjusting brake system within the rear brake caliper.

The parking brake system is cable-actuated and controlled by an independent, hand-operated parking brake control. The parking brake control applies tension to rear brake pads through the front parking brake cable and conduit and the LH and RH rear parking brake cables. The parking brake warning indicator is located in the instrument cluster. It illuminates to signal the driver that the parking brake is applied or to signal a low brake fluid condition. The warning indicator system is diagnosed in Section 413-01 .

Parking Brake

Principles of Operation

Parking Brake System

The parking brake system is cable-actuated and controlled by an independent, hand-operated parking brake control that is not self adjusting. The parking brake system is actuated when the parking brake control is pulled up. When the parking brake control is pulled, tension is applied to the front parking brake cable. This tension pulls on both rear parking brake cables, which are attached to the brake caliper parking brake actuators and apply the brake pads. When the parking brake release button is pressed and the brake control is released, the return springs on the brake calipers and the parking brake control return the system to the released position.

Inspection and Verification

NOTE: Prior to carrying out any diagnosis, make sure the red brake warning indicator is functional. Refer to Section 413-01 .

The first indication that something may be wrong in the brake system is a change in the feeling through the parking brake control. The parking brake not holding on an incline or dragging after being released are also indicators of system concerns.

Check the operation of the parking brake system with the vehicle on a hoist and the parking brake control fully released. Check for any damaged cables and install new components as necessary. Carry out the brake system diagnosis.

1. Verify the customer concern.
2. Visually inspect for obvious signs of mechanical damage.

Visual Inspection Chart

Mechanical
<ul style="list-style-type: none">• Front parking brake cable and conduit• Parking brake control• Parking brake equalizer• Rear brake calipers• Rear parking brake cables and conduits

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.

4. If the cause is not visually evident, verify the symptom and GO to [Symptom Chart](#) .

Symptom Chart

Symptom Chart

Pinpoint Tests

Pinpoint Test A: The Parking Brake Will Not Apply

Normal Operation

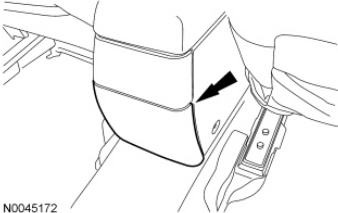
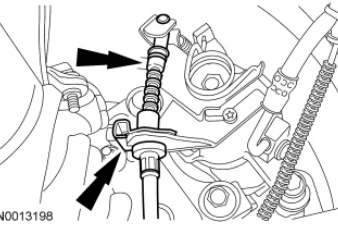
The parking brake system is cable-actuated and controlled by an independent, hand-operated parking brake control that is not self adjusting. The parking brake system is actuated when the parking brake control is pulled up. When the parking brake control is pulled, tension is applied to the front parking brake cable. This tension pulls on both rear parking brake cables, which are attached to the brake caliper parking brake actuators and apply the brake pads.

This pinpoint test is intended to diagnose the following:

- Parking brake control
- Parking brake cables
- Rear brake calipers

PINPOINT TEST A: THE PARKING BRAKE WILL NOT APPLY

Test Step	Result / Action to Take
A1 CHECK THE PARKING BRAKE CONTROL	
<ul style="list-style-type: none"> • Apply the parking brake control. • Does the parking brake control move? 	<p>Yes GO to A2 .</p> <p>No GO to A3 .</p>
A2 CHECK FOR BROKEN CABLES	
<ul style="list-style-type: none"> • NOTE: Have an assistant apply and release the parking brake control to help isolate disconnected cables or cables that do not move. • Inspect the following items for damage and correct connections: <ul style="list-style-type: none"> ◆ Parking brake control ◆ Front cable ◆ Equalizer ◆ LH rear cable ◆ RH rear cable ◆ Rear brake caliper actuators • Is any damage found or are any components disconnected? 	<p>Yes CONNECT the component(s) or INSTALL a new parking brake component(s) as necessary. TEST the system for normal operation.</p> <p>No VERIFY that the rear pads are within thickness specifications. REFER to Specifications in Section 206-00 . If the rear pads are OK, INSTALL new rear brake calipers. REFER to Section 206-04 .</p>

A3 ISOLATE THE PARKING BRAKE CONTROL AND FRONT PARKING BRAKE CABLE	
<ul style="list-style-type: none"> Remove the floor console rear access panel.  <p>N0045172</p> <ul style="list-style-type: none"> Loosen the parking brake adjustment nut and disconnect the rear cables from the equalizer. Apply the parking brake control. Does the parking brake control move? 	<p>Yes GO to <u>A4</u> .</p> <p>No INSTALL a new parking brake control. REFER to <u>Parking Brake Control</u> in this section. TEST the system for normal operation.</p>
A4 ISOLATE THE REAR PARKING BRAKE CABLES	
<ul style="list-style-type: none"> Disconnect the LH and RH parking brake cables from the brake calipers.  <p>N0013198</p> <ul style="list-style-type: none"> While holding the cable conduit, attempt to slide the cable inside the conduit. Does the cable slide freely inside the conduit? 	<p>Yes INSTALL new rear brake calipers. REFER to <u>Section 206-04</u> . ADJUST the parking brake cable. REFER to <u>Parking Brake Cable Adjustment</u> in this section.</p> <p>No INSTALL a new rear brake cable(s). REFER to <u>Parking Brake Cable - Rear</u> in this section. TEST the system for normal operation.</p>

Pinpoint Test B: The Parking Brake Will Not Release

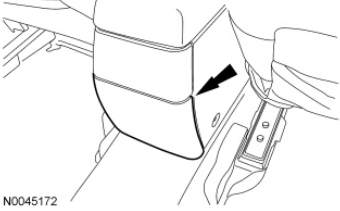
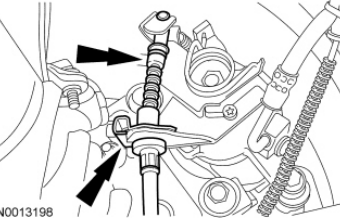
Normal Operation

When the parking brake release button is pressed and the brake control is released, the return springs on the brake calipers and the parking brake control return the system to the released position.

This pinpoint test is intended to diagnose the following:

- Parking brake cables
- Parking brake control
- Parking brake rear wheel components

PINPOINT TEST B: THE PARKING BRAKE WILL NOT RELEASE

Test Step	Result / Action to Take
B1 CHECK THE PARKING BRAKE CONTROL	
<ul style="list-style-type: none"> Press the release button on the parking brake control and release the handle. Does the parking brake control move? 	<p>Yes GO to <u>B2</u> .</p> <p>No INSTALL a new parking brake control. REFER to <u>Parking Brake Control</u> in this section. TEST the system for normal operation.</p>
B2 CHECK THE REAR PARKING BRAKE CABLES	
<ul style="list-style-type: none"> Remove the floor console rear access panel.  <p>N0045172</p> <ul style="list-style-type: none"> Loosen the parking brake adjustment nut and disconnect the rear cables from the equalizer. Disconnect the LH and RH parking brake cables from the brake calipers.  <p>N0013198</p> <ul style="list-style-type: none"> While holding the rear cable conduit, attempt to slide the rear cable inside the conduit. Does the cable slide freely inside the conduit? 	<p>Yes INSTALL new rear brake calipers. REFER to <u>Section 206-04</u> . ADJUST the parking brake cable. REFER to <u>Parking Brake Cable Adjustment</u> in this section.</p> <p>No INSTALL new rear brake cable(s). REFER to <u>Parking Brake Cable - Rear</u> in this section. TEST the system for normal operation.</p>