

November 2, 2018

Version 1

Safety Recall: Soft or Low Brake Pedal

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2017-19	MDX	ALL	Check the iN VIN status for eligibility.
2017-18	MDX Sport Hybrid	ALL	Check the iN VIN status for eligibility.

BACKGROUND

The brake pedal may have a soft feeling or travel to the floor with low effort because of air bubbles in the brake fluid. Air may be trapped in the system due to the temporary release of air bubbles from improperly plated rear brake caliper pistons. This may cause low braking performance or increased pedal stroke, increasing the risk of a crash.

CLIENT NOTIFICATION

Owners of affected vehicles will be sent a notification of this campaign.

Do an iN VIN status inquiry to make sure the vehicle is shown as eligible.

Some vehicles affected by this campaign may be in your new or used vehicle inventory.

Failure to repair a vehicle subject to a recall or campaign may subject your dealership to claims or lawsuits from the client or anyone else harmed as a result of such failure. To see if a vehicle in inventory is affected by this safety recall, do a VIN status inquiry before selling it.

CORRECTIVE ACTION

Bleed the brake system.

NOTE

The MDX and MDX Sport Hybrid require different repair procedures.

MDX REPAIR PROCEDURE - Page 2

MDX Sport Hybrid REPAIR PROCEDURE - Page 7

REQUIRED MATERIALS

Part Name	Part Number	Quantity
Brake Fluid (DOT 3)	08798-9008A	2

CLIENT INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

WARRANTY CLAIM INFORMATION

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
4130A9	MDX (Non-Sport Hybrid) - Bleed the brake system. (Includes rear caliper bleed procedure.)	1.6 hrs	6RB00	L3000	B18061A	43018-TZ5-A11
4130A2	MDX Sport Hybrid - Bleed the brake system. (Includes rear caliper bleed procedure.)	1.8 hrs	6RB00	L3000	B18061B	43018-TZ5-A11

Skill Level: Repair Technician

REPAIR PROCEDURE - MDX (NON SPORT HYBRID)

NORMAL BLEED

NOTICE

Do not spill brake fluid on the vehicle, it may damage the paint. If brake fluid does contact the paint, wash it off immediately with water.

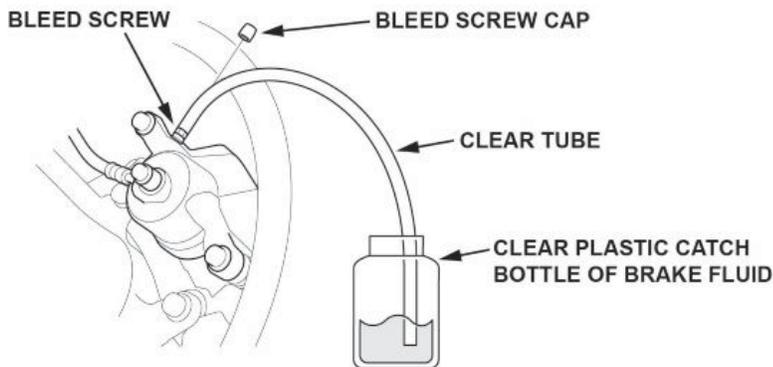
NOTES

- Review the Service Precautions before doing repairs or service.
- Before beginning the bleeding procedure, remove the reservoir cap and strainer, and remove any dirt and debris then reinstall the strainer only.
- Use only new Acura DOT 3 Brake Fluid from an unopened container. Using a non-Acura brake fluid can cause corrosion and shorten the life of the system. Do not reuse the drained brake fluid.
- The brake fluid in the reservoir connected to the master cylinder must be at the MAX (upper) level mark at the start of the bleeding procedure and checked after bleeding each wheel. Add fluid as required.
- Unless indicated, the illustrations shown are examples only and may not match your vehicle.

Bleed the brake system in this order:

- Front Driver's Side Brake Caliper
- Front Passenger's Side Brake Caliper
- Rear Passenger's Side Brake Caliper
- Rear Driver's Side Brake Caliper

1. Raise the vehicle on a lift.
2. Attach a clear tube to the bleed screw.



3. Submerge the other end of the clear tube into a clear plastic catch bottle of brake fluid.
4. Have an assistant slowly pump the brake pedal several times then apply steady continuous pressure.
5. Loosen the bleed screw slowly to bleed the fluid into the plastic catch bottle. The brake pedal will travel toward the floor as the fluid is bled from the system.
6. When the brake pedal reaches the floor, have the assistant hold the pedal in that position, then tighten the bleed screw to the specified torque. The brake pedal can now be released.

NOTE

Inspect the brake lines and fittings for damage, leaks, deterioration, or twisting.

Component	Specified Torque Value
Front Brake Caliper Bleed Screw	8.3 N·m (6.1 lbf-ft)
Rear Brake Caliper Bleed Screw	11 N·m (8 lbf-ft)

7. Repeat steps 3 thru 6 until the brake fluid in the clear tube appears fresh and there are no air bubbles in the fluid.
8. Repeat this procedure for each caliper in the bleeding sequence.
9. Go to REAR CALIPER BLEED.

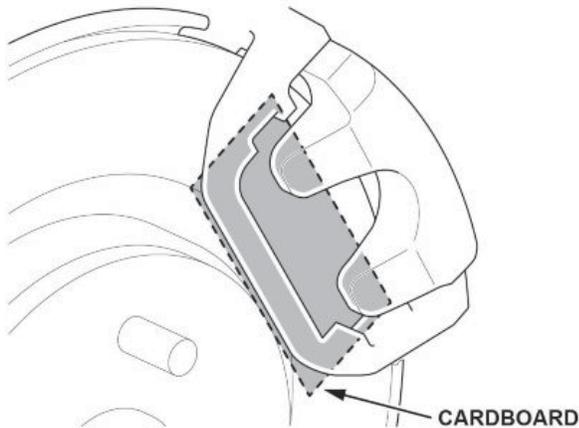
REAR CALIPER BLEED

NOTE

Do the following procedure only after doing the NORMAL BLEED procedure.

Bleed the rear brakes in this order:

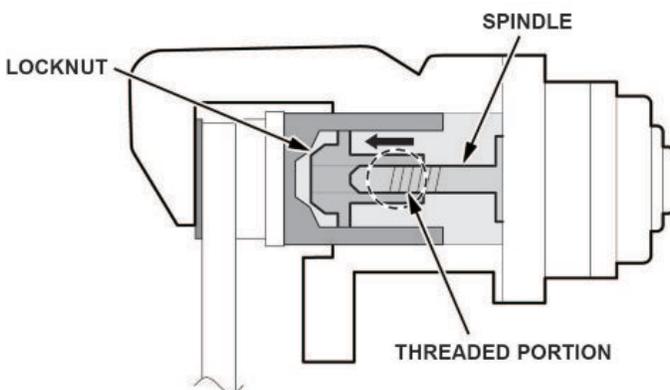
- Passenger's Side Rear Brake Caliper
 - Driver's Side Rear Brake Caliper
1. Remove the passenger's side rear caliper body and remove the outer pad.
 2. Place a small piece of cardboard in place of the outer pad and reinstall the brake caliper.



3. Slowly press the brake pedal until the caliper body contacts the cardboard.
4. Turn the ignition to ON.
5. Apply and release the parking brake.

NOTE

The air in the threaded portion between the spindle and the locknut is discharged by operating the parking brake.

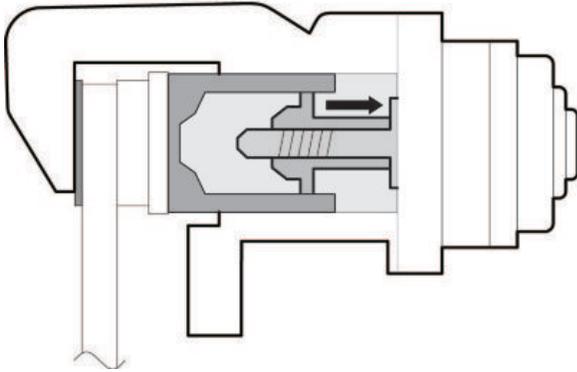


6. Connect the HDS to the data link connector (DLC).

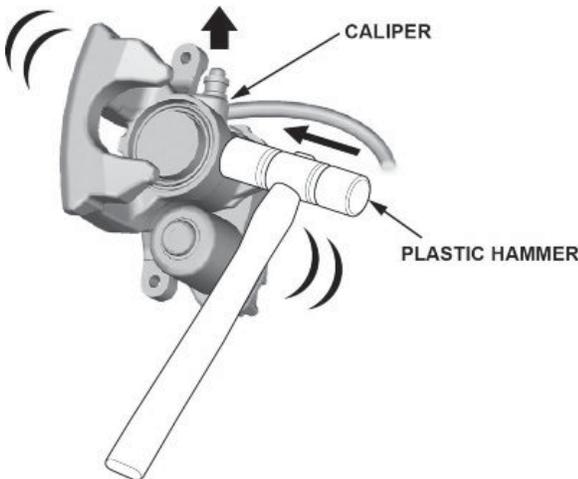
7. Select **ELECTRIC PARKING BRAKE** from the **BRAKE SYSTEM** menu with the HDS, then select **BRAKE PAD MAINTENANCE MODE** from **ADJUSTMENT**, and follow the screen prompts.

NOTE

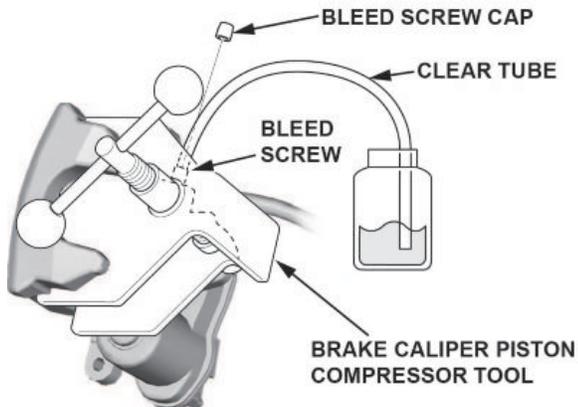
The spindle returns to the initial position by entering the brake pad maintenance mode.



8. Turn the ignition to OFF.
9. Disconnect the negative cable from the 12 volt battery.
10. Press the brake pedal several times.
11. Disconnect the electric parking brake actuator connector, and remove the caliper body without disconnecting the brake hose from the caliper body.
12. Hold the caliper body so that the bleed screw is upright.
13. Direct any air trapped in the caliper by doing the following.
 - 13.1. Shake the caliper side to side.
 - 13.2. Strike the caliper several times using a plastic hammer.



14. Attach a clear tube to the bleed screw.



15. Install a commercially available brake caliper piston compressor tool between the caliper body and piston.

16. Loosen the bleed screw slowly and press in the piston with the brake caliper piston compressor tool.

- **If there are air bubbles** in the fluid, tighten the bleed screw to the specified torque, install the rear brake caliper and repeat steps 2 thru 16.
- **If there are no air bubbles** in the fluid, tighten the bleed screw to the specified torque, remove the cardboard and reinstall the outer pad and caliper.

Component	Specified Torque Value
Rear Brake Caliper Bleed Screw	11 N·m (8 lbf-ft)

17. Connect the electric parking brake actuator connector.

18. Press the brake pedal several times.

19. Reconnect the negative cable to the 12 volt battery.

20. Turn the ignition to ON.

21. Select **ELECTRIC PARKING BRAKE** from the **BRAKE SYSTEM** menu with the HDS, then select **BRAKE PAD MAINTENANCE MODE** from **ADJUSTMENT**, and follow the screen prompts.

22. Apply and release the parking brake.

23. Turn the ignition to OFF.

24. Repeat this procedure for the rear caliper body on the opposite side.

REPAIR PROCEDURE MDX SPORT HYBRID

BRAKE SYSTEM - BLEED 1 (Between Pedal Feel Simulator and Brake Caliper)

NOTICE

Do not spill brake fluid on the vehicle, it may damage the paint. If brake fluid does contact the paint, wash it off immediately with water.

NOTES

- Review the Service Precautions before doing repairs or service.
- Before beginning the bleeding procedure, remove the reservoir cap and strainer, and remove any dirt and debris then reinstall the strainer only.
- Use only new Acura DOT 3 Brake Fluid from an unopened container. Using a non-Honda brake fluid can cause corrosion and shorten the life of the system. Do not reuse the drained brake fluid.
- The brake fluid in the reservoir connected to the master cylinder must be at the MAX (upper) level mark at the start of the bleeding procedure and checked after bleeding each wheel. Add fluid as required.
- Unless indicated, the illustrations shown are examples only and may not match your vehicle.

Bleed the brake system in this order:

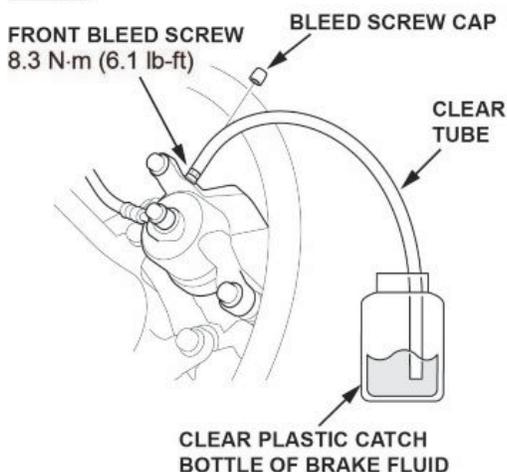
- Front Driver's Side Brake Caliper
 - Front Passenger's Side Brake Caliper
 - Rear Passenger's Side Brake Caliper
 - Rear Driver's Side Brake Caliper
1. Raise the vehicle on a lift.
 2. Open the driver's door and wait 3 minutes or more.

NOTE

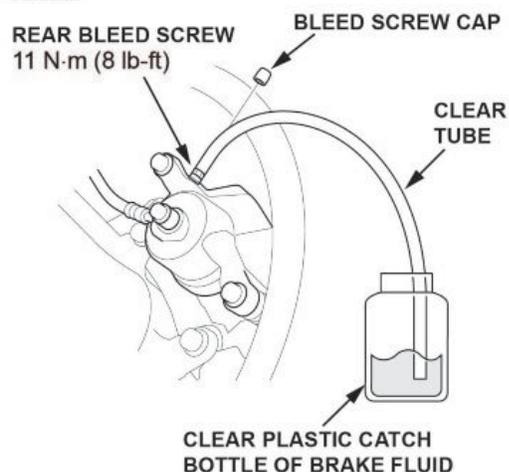
Do not turn the ignition ON.

3. Do the 12 volt battery terminal disconnection procedure.
4. Remove the air cleaner.
5. Attach a clear tube to the bleed screw.

FRONT



REAR



6. Submerge the other end of the clear tube into a clear plastic catch bottle of brake fluid.

7. Have an assistant slowly pump the brake pedal several times then apply steady continuous pressure.
8. Loosen the bleed screw slowly to bleed the fluid into the plastic catch bottle. The brake pedal will travel toward the floor as the fluid is bled from the system.
9. When the brake pedal reaches the floor, have the assistant hold the pedal in that position, then tighten the bleed screw to the specified torque. The brake pedal can now be released.

NOTE

Inspect the brake lines and fittings for damage, leaks, deterioration, or twisting.

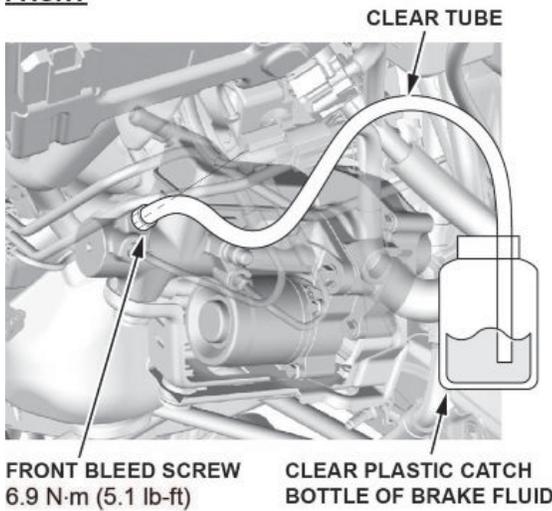
Component	Specified Torque Value
Front Brake Caliper Bleed Screw	8.3 N·m (6.1 lbf-ft)
Rear Brake Caliper Bleed Screw	11 N·m (8 lbf-ft)

10. Repeat steps 7 thru 9 until the brake fluid in the clear tube appears fresh and there are no air bubbles in the fluid.
11. Repeat this procedure for each caliper in the bleeding sequence.
12. Go to BRAKE SYSTEM - BLEED 2.

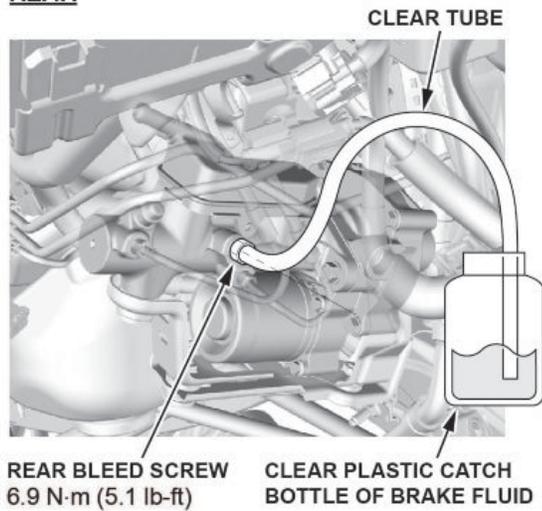
BRAKE SYSTEM - BLEED 2 (Between Pedal Feel Simulator and Tandem Motor Cylinder)

1. Attach a clear tube to the front or rear tandem motor bleed screw.

FRONT



REAR



2. Submerge the other end of the clear tube into a clear plastic catch bottle of brake fluid.
3. Have an assistant slowly pump the brake pedal several times then apply steady continuous pressure.
4. Loosen the bleed screw slowly to bleed the fluid into the plastic catch bottle. The brake pedal will travel toward the floor as the fluid is bled from the system.
5. When the brake pedal reaches the floor, have the assistant hold the pedal in that position, then tighten the bleed screw to the specified torque. The brake pedal can now be released.

Component	Specified Torque Value
Front and Rear Bleed Screw	6.9 N·m (5.1 lbf-ft)

6. Repeat steps 3 thru 5 until the brake fluid in the clear tube appears fresh and there are no air bubbles in the fluid.
7. Repeat this procedure for the remaining tandem motor bleed screw.
8. Reconnect the 12 volt battery.

9. Install the air cleaner.
10. Go to BRAKE SYSTEM - BLEED 3.

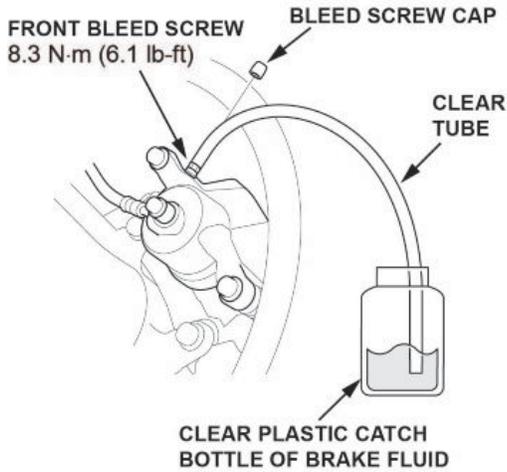
BRAKE SYSTEM - BLEED 3 (Between Pedal Feel Simulator and Brake Caliper)

Bleed the brake system in this order:

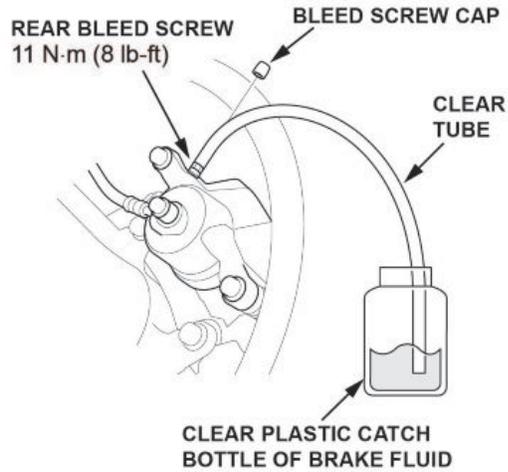
- Front Driver's Side Brake Caliper
- Front Passenger's Side Brake Caliper
- Rear Passenger's Side Brake Caliper
- Rear Driver's Side Brake Caliper

1. Attach a clear tube to the bleed screw.

FRONT



REAR



2. Submerge the other end of the clear tube into a clear plastic catch bottle of brake fluid.
3. Have an assistant slowly pump the brake pedal several times then apply steady continuous pressure.
4. Loosen the bleed screw slowly to bleed the fluid into the plastic catch bottle. The brake pedal will travel toward the floor as the fluid is bled from the system.
5. When the brake pedal reaches the floor, have the assistant hold the pedal in that position, then tighten the bleed screw to the specified torque. The brake pedal can now be released.

Component	Specified Torque Value
Front Brake Caliper Bleed Screw	8.3 N·m (6.1 lbf-ft)
Rear Brake Caliper Bleed Screw	11 N·m (8 lbf-ft)

6. Repeat steps 3 thru 5 until the brake fluid in the clear tube appears fresh and there are no air bubbles in the fluid.
7. Repeat this procedure for each bleed screw of the brake caliper in the bleeding sequence.
8. Go to REAR CALIPER BLEED.

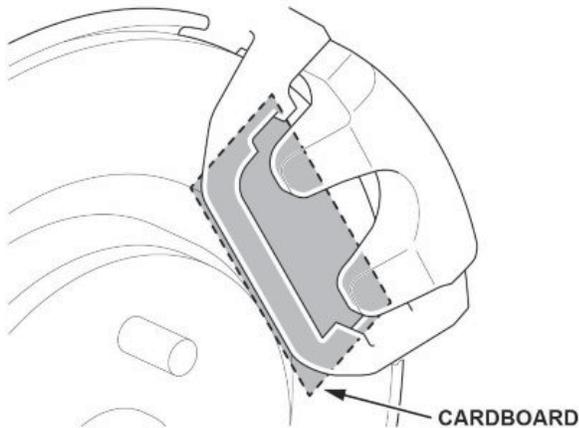
REAR CALIPER BLEED

NOTE

Do the following procedure only after doing the previously listed BLEED procedures.

Bleed the rear brakes in this order:

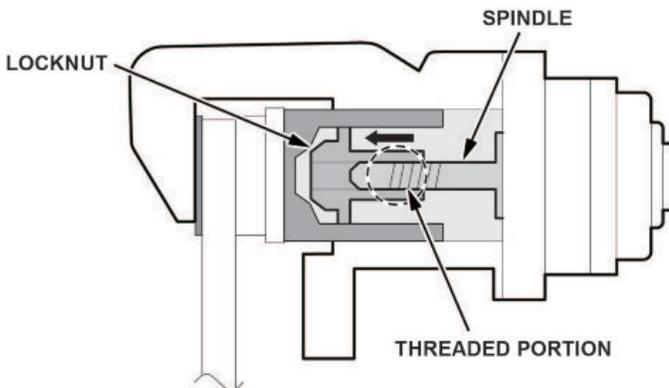
- Passenger's Side Rear Brake Caliper
 - Driver's Side Rear Brake Caliper
1. Remove the passenger's side rear caliper body and remove the outer pad.
 2. Place a small piece of cardboard in place of the outer pad and reinstall the brake caliper.



3. Slowly press the brake pedal until the caliper body contacts the cardboard.
4. Turn the ignition to ON.
5. Apply and release the parking brake.

NOTE

The air in the threaded portion between the spindle and the locknut is discharged by operating the parking brake.

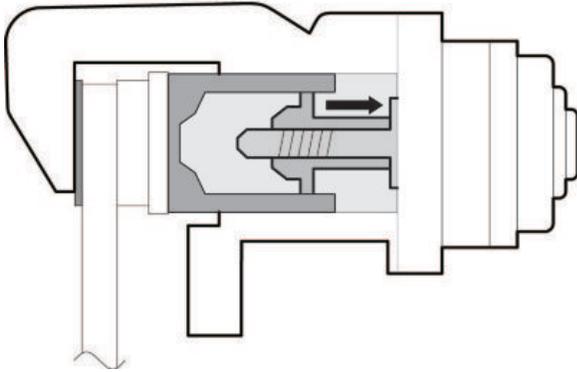


6. Connect the HDS to the data link connector (DLC).

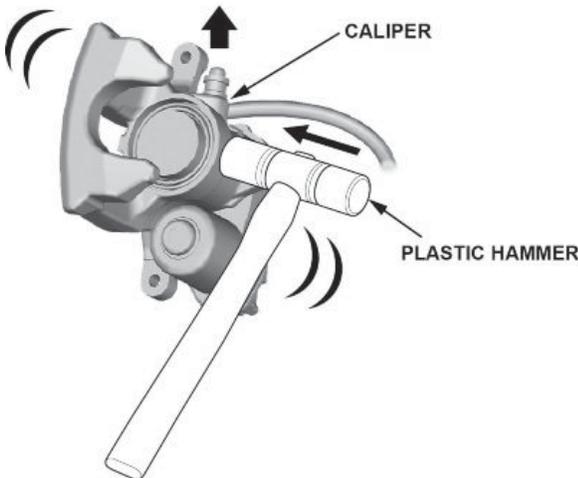
7. Select **ELECTRIC PARKING BRAKE** from the **BRAKE SYSTEM** menu with the HDS, then select **BRAKE PAD MAINTENANCE MODE** from **ADJUSTMENT**, and follow the screen prompts.

NOTE

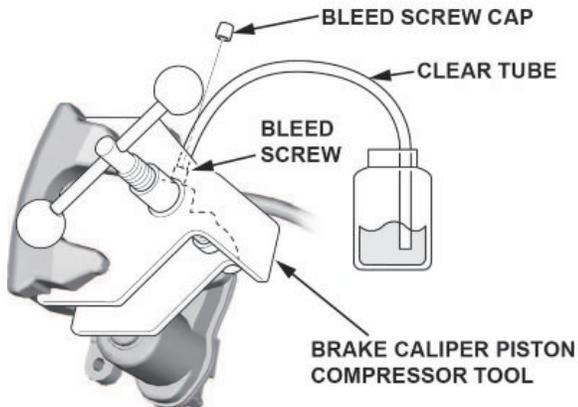
The spindle returns to the initial position by entering the brake pad maintenance mode.



8. Turn the ignition to OFF.
9. Disconnect the negative cable from the 12 volt battery.
10. Press the brake pedal several times.
11. Disconnect the electric parking brake actuator connector and remove the caliper body without disconnecting the brake hose from the caliper body.
12. Hold the caliper body so that the bleed screw is upright.
13. Direct any air trapped in the caliper by doing the following.
 - 13.1. Shake the caliper side to side.
 - 13.2. Strike the caliper several times using a plastic hammer.



14. Attach a clear tube to the bleed screw.



15. Install a commercially available brake caliper piston compressor tool on the caliper body.

16. Loosen the bleed screw slowly and press in the piston with the brake caliper piston compressor tool.

- **If there are air bubbles** in the fluid, tighten the bleed screw to the specified torque, install the rear brake caliper and repeat steps 2 thru 16.
- **If there are no air bubbles** in the fluid, tighten the bleed screw to the specified torque, remove the cardboard and reinstall the outer pad and caliper.

Component	Specified Torque Value
Rear Brake Caliper Bleed Screw	11 N·m (8 lbf-ft)

17. Connect the electric parking brake actuator connector.

18. Press the brake pedal several times.

19. Reconnect the negative cable to the 12 volt battery.

20. Turn the ignition to ON.

21. Select **ELECTRIC PARKING BRAKE** from the **BRAKE SYSTEM** menu with the HDS, then select **BRAKE PAD MAINTENANCE MODE** from **ADJUSTMENT**, and follow the screen prompts.

22. Apply and release the parking brake.

23. Turn the ignition to OFF.

24. Repeat this procedure for the rear caliper body on the opposite side.

END