

# Z1 ALTIMA STREET BIG BRAKE KIT INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2013-2018	Nissan Altima (L33)
2019+	Nissan Altima (L34)

## PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

## WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 Motorsports Altima Street Big Brake Kit, consult with a Professional Mechanic, or contact Z1 Motorsports for more information.

## **PARTS INCLUDED:**

Item	Quantity	Description
1	1	Left Front Caliper
2	1	Right Front Caliper
3	1	Left Rear Caliper
4	1	Right Rear Caliper
5	4	Short Banjo Bolt
6	2	Front Brake Rotor
7	2	Rear Brake Rotor
8	1	Front Brake Pad Set
9	1	Rear Brake Pad Set
10	1	Front Brake Hardware Kit
11	1	Rear Brake Hardware Kit
12	8	Crush Washer

## **TOOLS REQUIRED:**

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches
- Assorted Metric Sockets
- Torque Wrench
- Cutoff Wheel/Airsaw

## **SAFETY REQUIREMENTS:**

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Only operate drivetrain in safe space and well-ventilated areas.

## **BEFORE YOU BEGIN:**

Remove contents from the Z1 Motorsports Altima Street Big Brake Kit and verify that ALL necessary hardware is present.

18" Wheels are necessary for this Brake Kit to clear. Verify fitment with the Brake Template before installing.

## **PROCEDURE:**

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Loosen lug nuts on the wheels of the vehicle.
3. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands.
4. Remove and set aside the wheels of the vehicle.
5. Starting on the Front Driver Side, remove the (2) two bolts securing the the Brake Caliper to the vehicle. Retain this hardware. *Figure 1.*

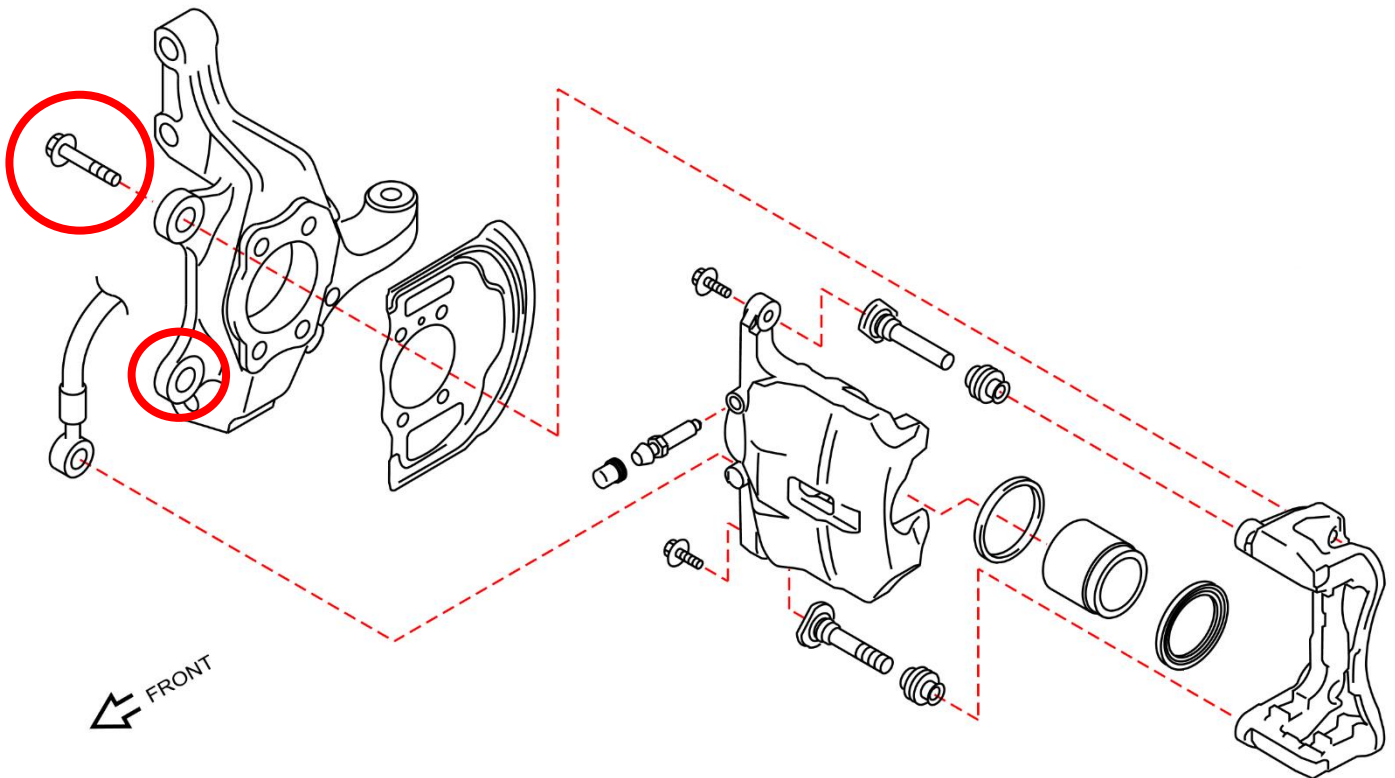
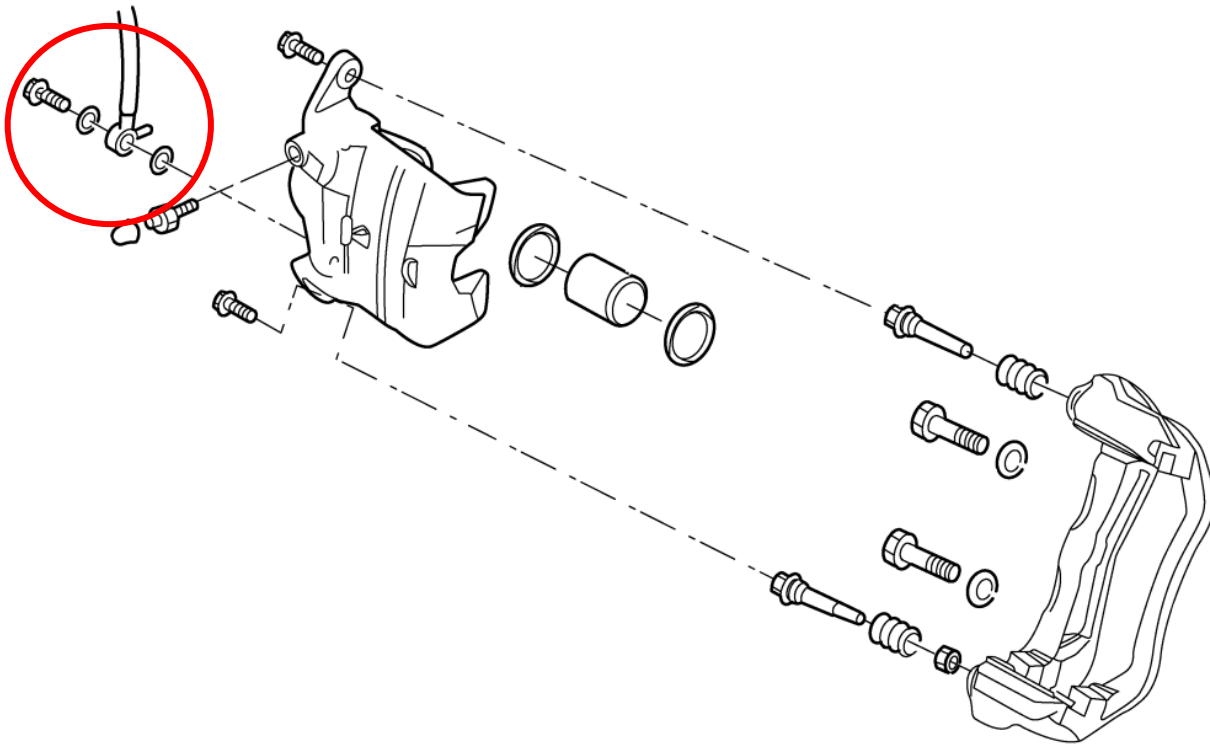


Figure 1

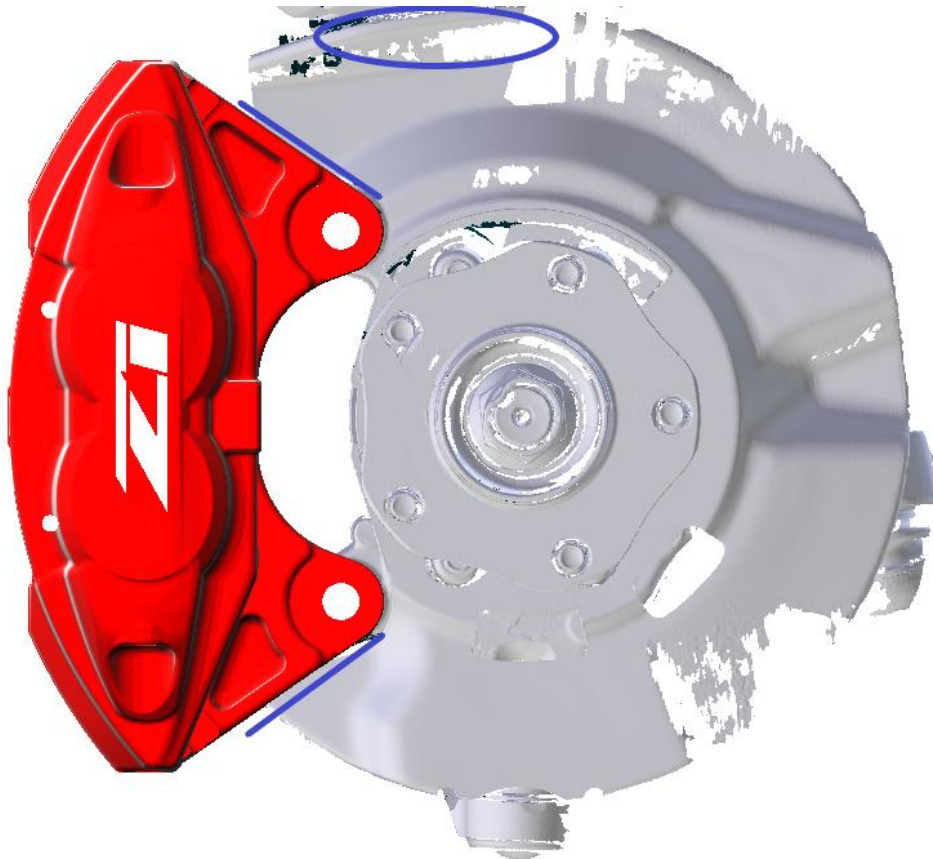
6. Remove the OE Banjo Bolt from the Front Caliper and Brake Line. Prepare a cap for the Brake Line, or a rag to catch leaking Brake Fluid, as it will damage painted surfaces. *Figure 2.*



*Figure 2*

7. Remove the OE Front Brake Rotor.

- Trim the Front Brake Dust Shield as shown below. This is necessary to clear the new Z1 Caliper and Rotor.  
*Figure 3.*

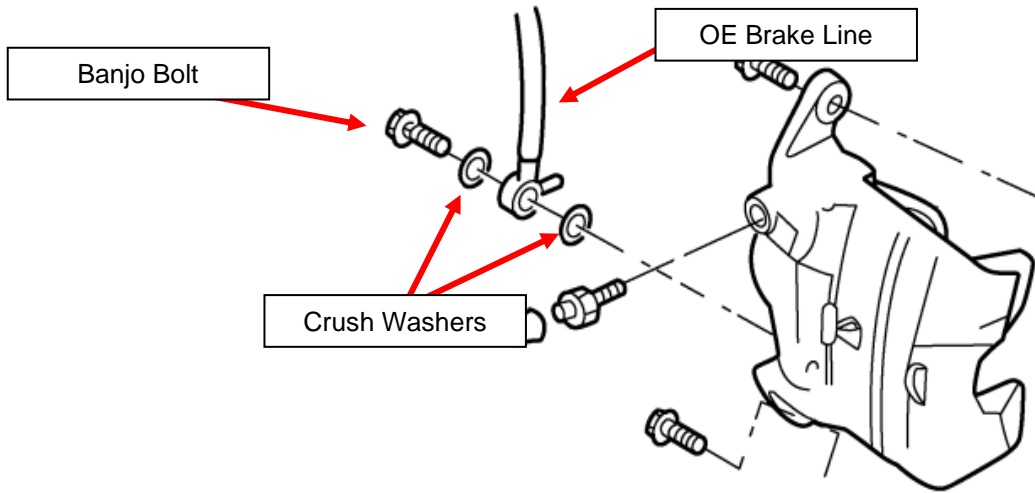


*Figure 3*

- Locate (1) one Z1 Front Rotor and install it onto the Wheel Hub. Wipe down the Rotor to clean the protective oils off of the Rotor Surface.
- Install the Front Right Caliper onto the OE Mounting Locations using the OE Hardware removed in *Step 5*. Torque the Hardware to **107 ft-lbs.**

**NOTE:** The Bleeder Valve of the Caliper **MUST** be facing upwards, otherwise you will not be able to properly bleed the Caliper.

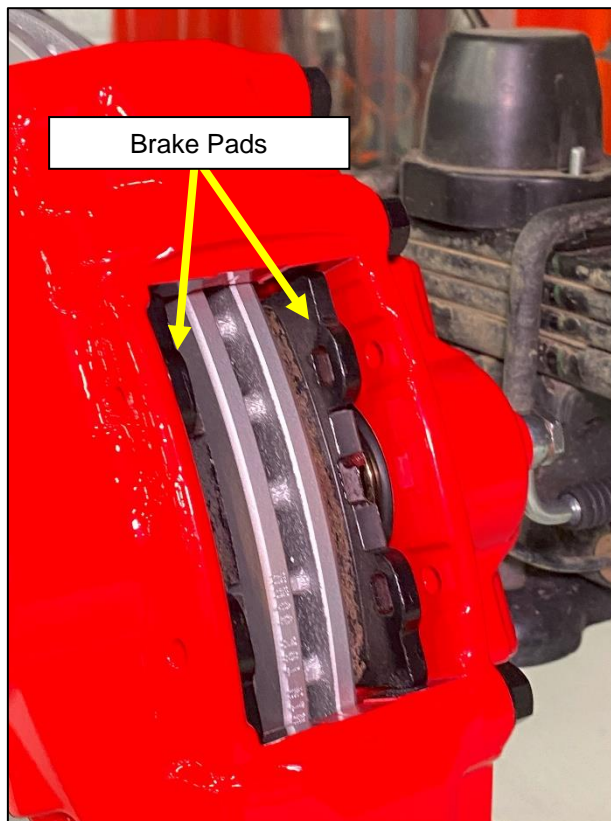
11. Locate the new Z1 Banjo Bolt and (2) two Crush Washers. Install the Banjo Bolt into the OE Brake Line and Caliper with a Crush Washer on both sides as shown below. Torque the Banjo Bolt to **13 ft-lbs**, or **156 in-lbs**. *Figure 4.*



*Figure 4*

12. Locate the Front Pad Hardware Kit and a pair of Front Brake Pads. Install the Pads into the Caliper as shown below. Make sure the Pad surface is facing the Brake Rotor. A light coating of Brake Grease added on the back of the Pad will help prevent squeaking. *Figure 5.*

**NOTE:** The Brake shown below is from a Nissan Frontier, but the process is still the same.



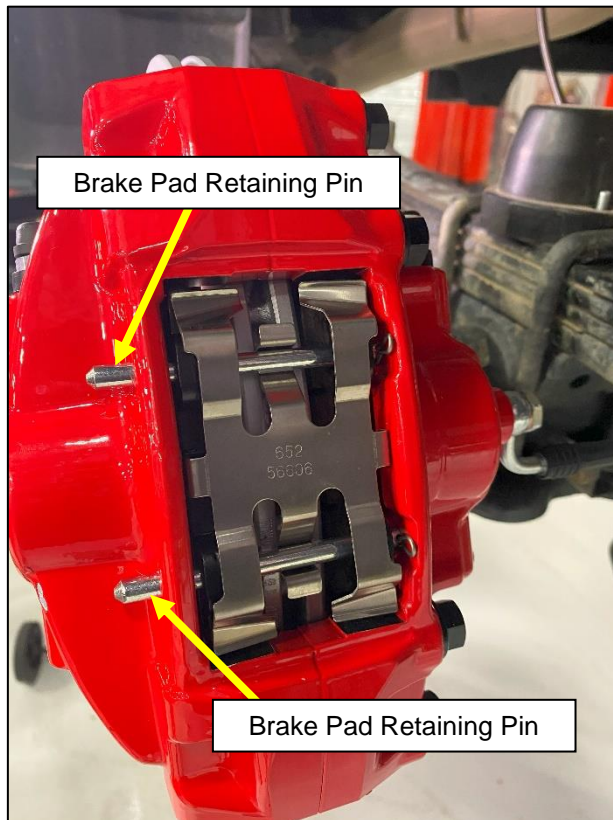
*Figure 5*

13. Locate (1) one Front Brake Pad Retainer from the Brake Hardware Kit. Install it onto the Brake Pads and Caliper as shown below in *Figure 6*.



*Figure 6*

14. Locate (2) two Front Brake Pad Retaining Pins. Insert them from the inside of the Caliper as shown below. They may need to be slightly tapped with a hammer to go through the Caliper. *Figure 7*.



*Figure 7*

15. Locate (2) two Cotter Pins. Insert them through the Brake Pad Retaining Pins installed in *Step 14*. The Retaining Pins may need to be rotated to allow access for the Cotter Pin Holes. *Figure 8*.

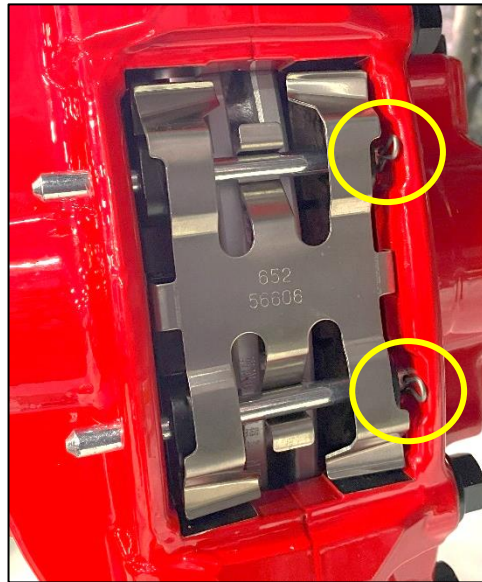


Figure 8

16. Repeat *Steps 5-15* for the Front Passenger Side of the Vehicle.

17. On the Rear of the vehicle, remove the (2) two bolts securing the Brake Caliper to the vehicle. Retain this hardware. *Figure 9*.

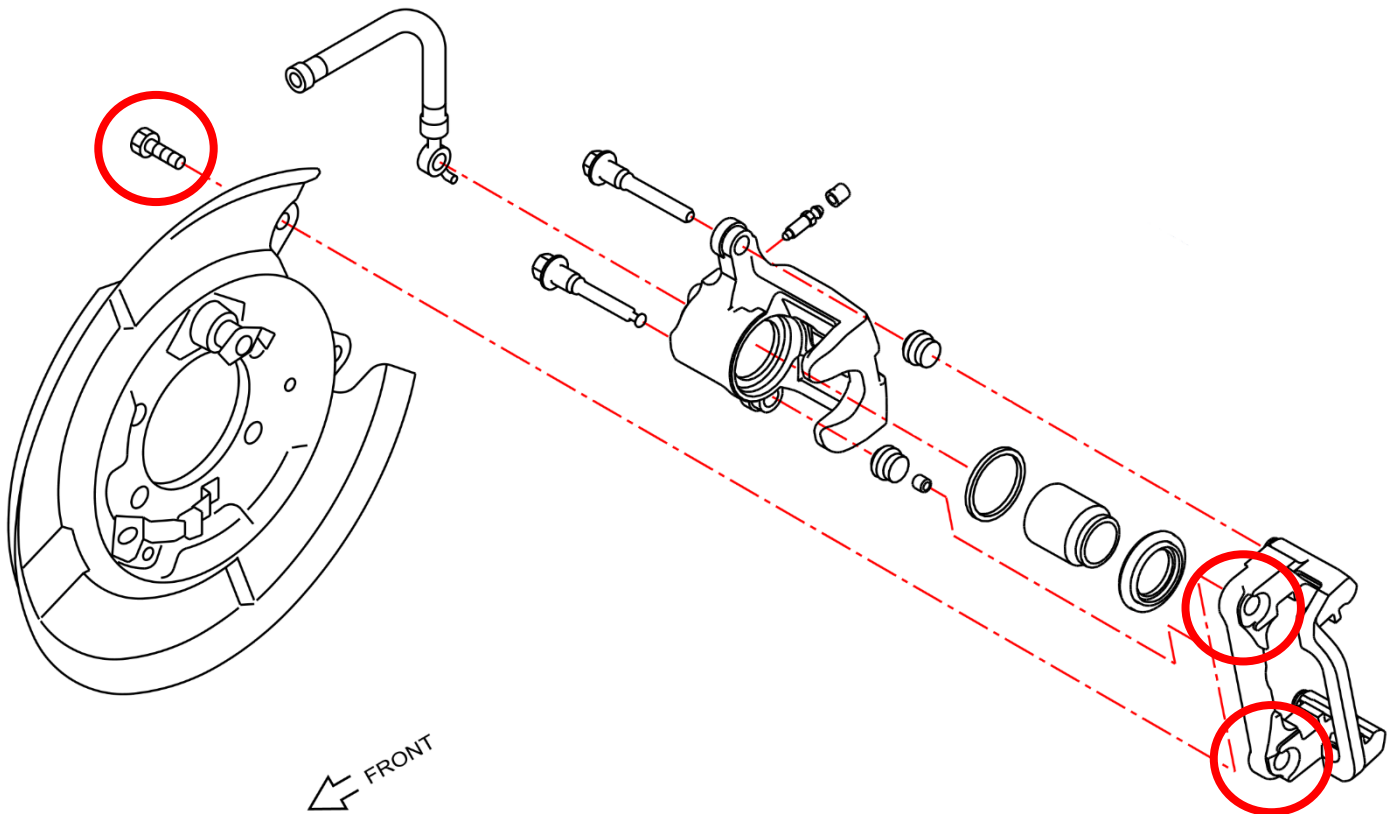
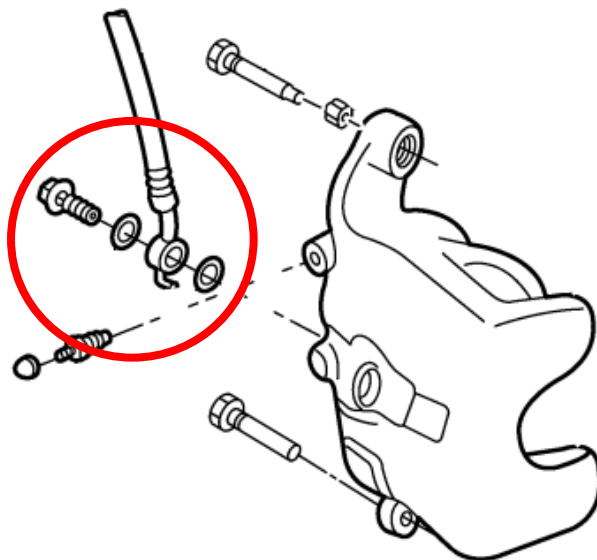


Figure 9



18. Remove the OE Banjo Bolt from the Rear Caliper and Brake Line. Prepare a cap for the Brake Line, or a rag to catch leaking Brake Fluid. Be sure to clean up any leaking Brake Fluid, as it will damage painted surfaces.  
*Figure 10.*

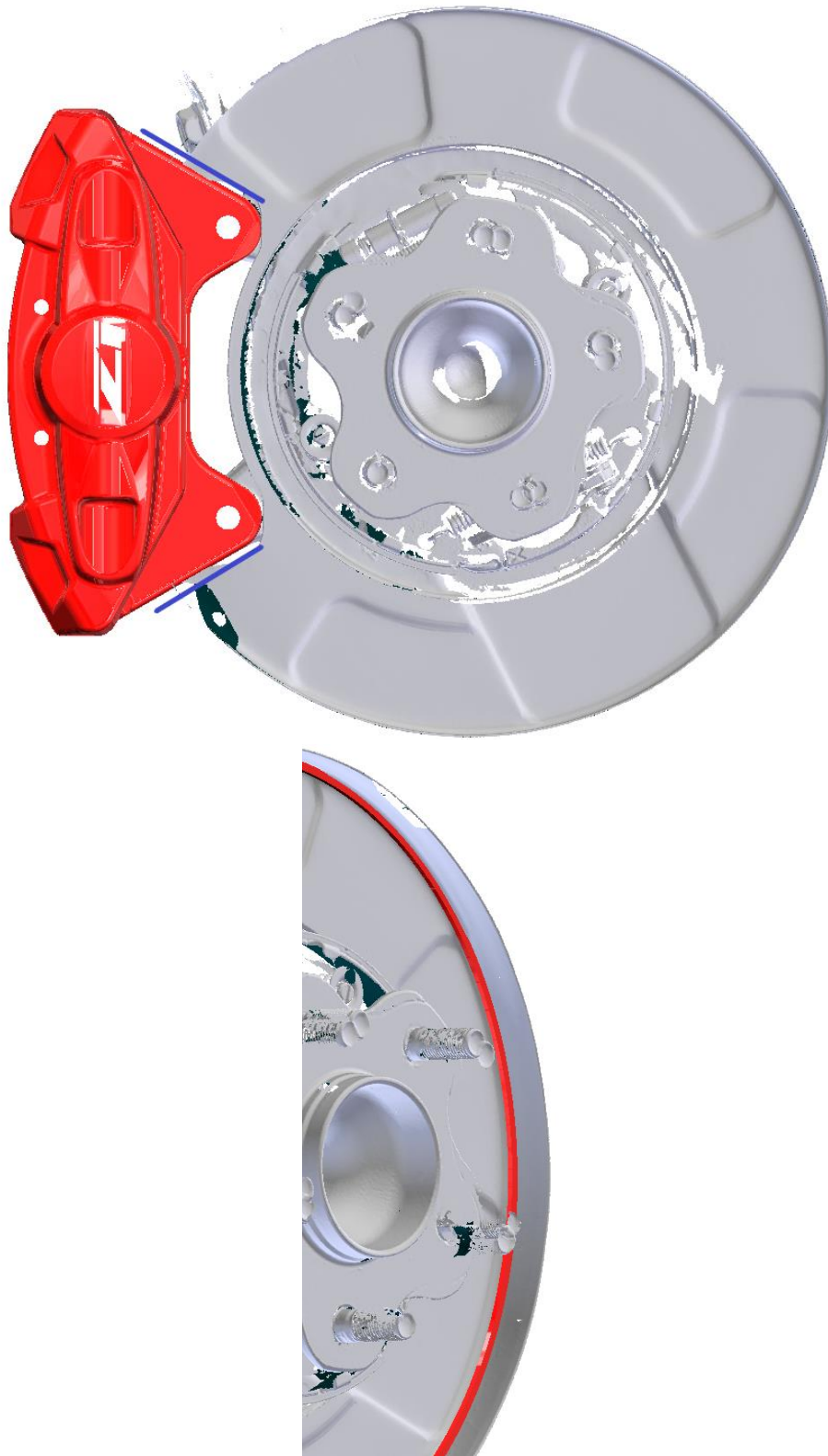


*Figure 10*

19. Remove the OE Rear Brake Rotor.

20. Trim the Rear Brake Dust Shield as shown below. This is necessary to clear the new Z1 Caliper and Rotor.  
*Figure 11.*

**NOTE:** The inside lip of the Dust Shield will need to be cut to clear the new Z1 Rotor.

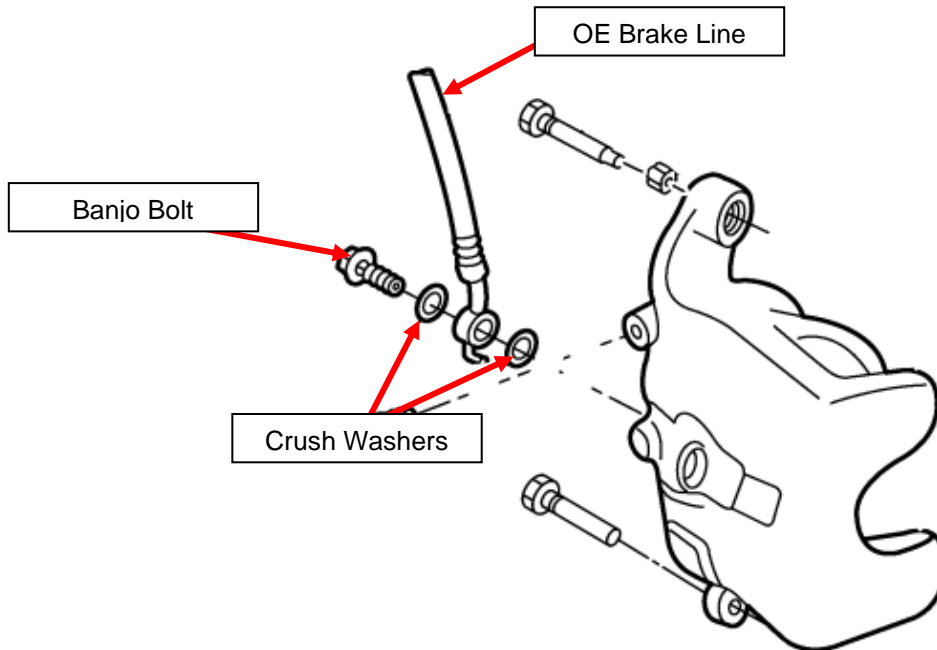


*Figure 11*

21. Locate (1) one Z1 Rear Rotor and install it onto the Wheel Hub. Wipe down the Rotor to clean the protective oils off of the Rotor Surface.
22. Install the Rear Caliper onto the OE Mounting Locations using the OE Hardware removed in *Step 17*. Torque the Hardware to **62 ft-lbs**.

**NOTE:** The Bleeder Valve of the Caliper **MUST** be facing upwards, otherwise you will not be able to properly bleed the Caliper.

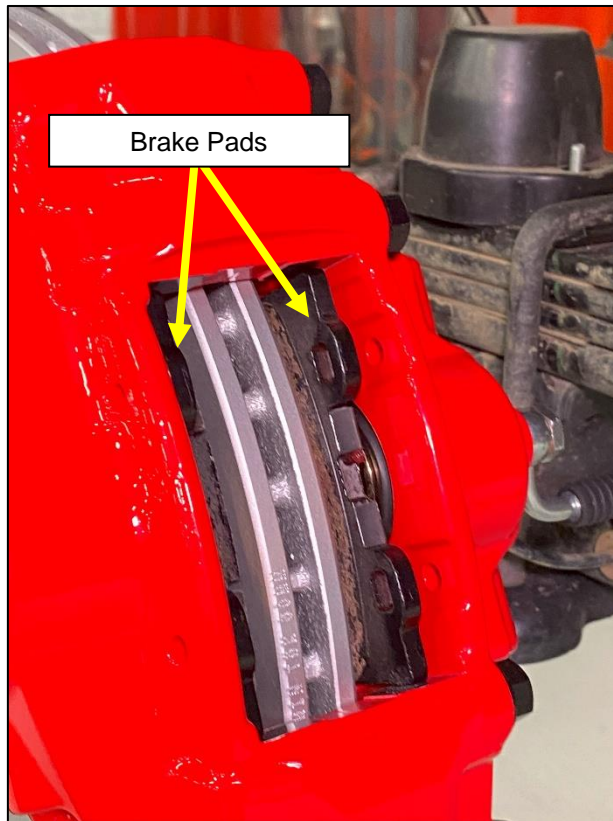
23. Locate the new Z1 Banjo Bolt and (2) two Crush Washers. Install the Banjo Bolt into the OE Brake Line and Caliper with a Crush Washer on both sides as shown below. Torque the Banjo Bolt to **13 ft-lbs**, or **156 in-lbs**. *Figure 12*.



*Figure 12*

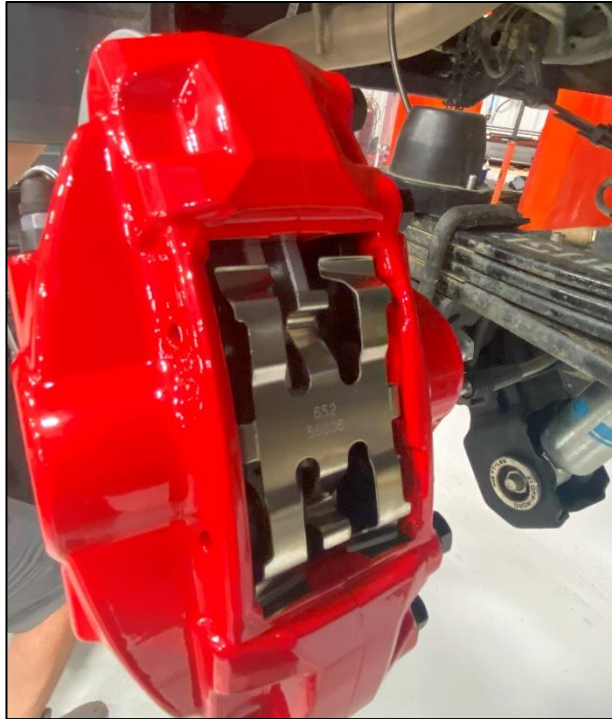
24. Locate the Rear Pad Hardware Kit and a pair of Rear Brake Pads. Install the Pads into the Caliper as shown below. Make sure the Pad surface is facing the Brake Rotor. A light coating of Brake Grease added on the back of the Pad will help prevent squeaking. *Figure 13.*

**NOTE:** The Brake shown below is from a Nissan Frontier, but the process is still the same.



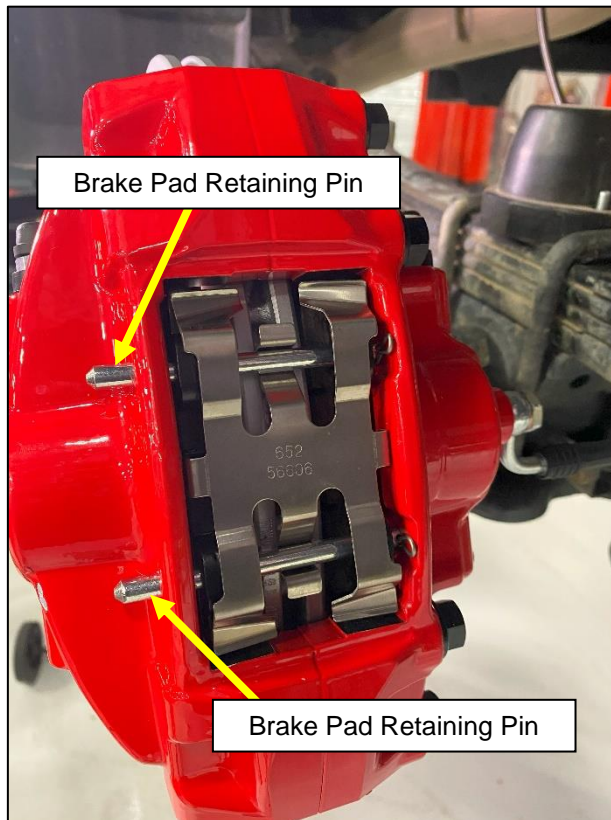
*Figure 13*

25. Locate (1) one Rear Brake Pad Retainer from the Brake Hardware Kit. Install it onto the Brake Pads and Caliper as shown below in *Figure 14*.



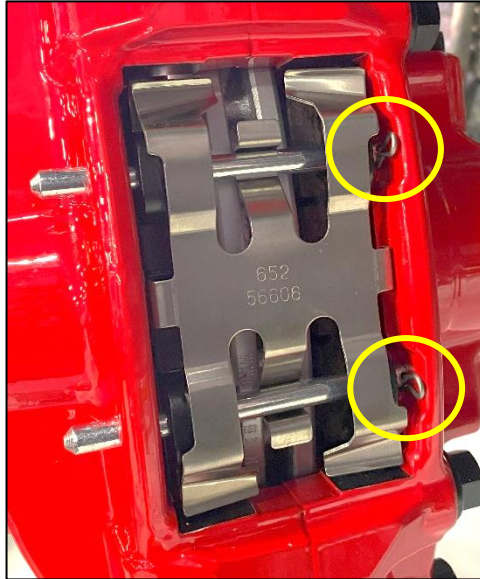
*Figure 14*

26. Locate (2) two Rear Brake Pad Retaining Pins. Insert them from the Inside of the Caliper as shown below. They may need to be slightly tapped with a hammer to go through the Caliper. *Figure 15*.



*Figure 15*

27. Locate (2) two Cotter Pins. Insert them through the Brake Pad Retaining Pins installed in *Step 26*. The Retaining Pins may need to be rotated to allow access for the Cotter Pin Holes. *Figure 16*.



*Figure 16*

28. Repeat *Steps 17-27* for the other Rear Brake Caliper.
29. Bleed the Brakes in accordance with the Factory Service Manual (FSM) starting at the Passenger Side Rear Caliper.
30. Reinstall wheels and lug nuts.
31. Safely lower vehicle from jack stands.
32. Take your vehicle for a test drive and bed your Brake Pads in according to the Pad Manufacturer's instructions.

**END**

**Additional Technical Support:**  
Contact Z1 Motorsports at [info@z1motorsports.com](mailto:info@z1motorsports.com)  
Or call 770-838-7777 between 9am and 6pm ET