

# Z1 BILLET FLEX PLATE INSTALLATION MANUAL



This Installation Man	ual is intended for the following models:
2003-2008	Nissan 350Z
2009-2020	Nissan 370Z
2023+	Nissan Z
2003-2007	Infiniti G35
2008-2015	Infiniti G37/Q40
2014+	Infiniti Q50
2017+	Infiniti Q60

#### 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 Billet Flex Plate, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

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#### PARTS INCLUDED:

Item	Quantity	Description
1	1	Z1 Billet Flex Plate
2	4	Flex Plate to Torque Converter Bolts

## **TOOLS REQUIRED:**

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- 3/8" and 1/2" Ratchet
- Ratchet Extension(s)

- Assorted Metric Sockets/Wrenches
- Ring Gear Stopper or 19mm Socket
- Torque Wrench

#### **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:**

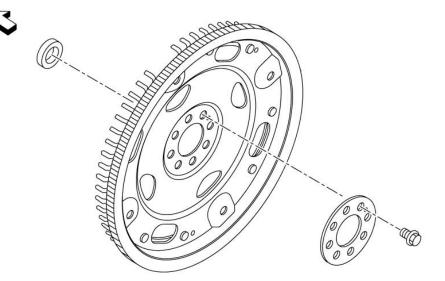
Remove contents from the Z1 Motorsports Billet Flex Plate and verify that ALL necessary hardware is present.

#### PROCEDURE:

- 1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
- 2. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands.
- 3. Refer to the Factory Service Manual (FSM) to remove the transmission.
- 4. If you have a ring gear stopper, attach it to the engine and OEM flex plate to prevent the flex plate from rotating. If you do not have a specific ring gear stopper tool, place a large ratchet with a 19mm socket on the

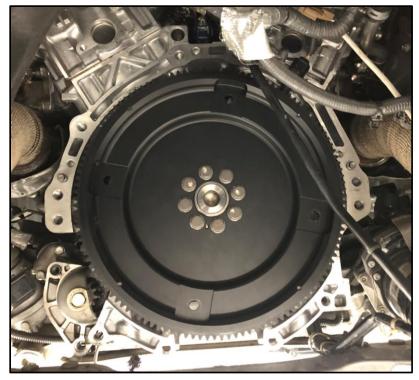
front of the crankshaft pulley bolt and set the handle of the ratchet against something solid (frame rail, the ground, etc.) or have a buddy hold it in place.

- With the OEM flex plate held in position, loosen the (8) bolts that secure the flex plate to the rear of the crankshaft diagonally and in steps.
- 6. Once all bolts are loose, remove them and then carefully remove the OEM flex plate and reinforcement plate ring with both hands.



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- 7. Locate the Z1 Billet Flex Plate.
  - a. Never disassemble flex plate.
  - b. Handle flex plate with care taking precaution not to damage the tone ring or ring gear teeth.
  - c. It is recommended to wear gloves when handling the flex plate.
- 8. Position the Z1 flex plate onto the engine with the silver zinc plated tone ring facing the front and making sure the dowel pin hole on the flex plate lines up with the dowel pin on the rear of the crankshaft (see picture below).



- 9. With either a ring gear stopper installed or large ratchet on the front of the crankshaft, install the (8) flex plate bolts that were removed in step # 5-6, diagonally and in steps to secure the flex plate to the engine. Torque bolts to 65ft-lbs. It is highly recommended to add a dab of Loctite to each bolt.
- 10. Once the flex plate is installed onto the engine, use a large ratchet and socket to rotate the engine **CLOCKWISE** until one of the (4) outer bolt holes of the flex plate is at the bottom (in the 6 o'clock position). In the image above, the flex plate and bolt hole is rotated a little off the 6 o'clock position but is low enough to still have access.
- 11. Refer to the FSM to reinstall the transmission but make sure the torque converter is rotated in the same orientation as the flex plate, so that one of the bolt holes of the torque converter will line up with the bottom bolt hole of the flex plate from the previous step.

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12. Once the transmission is installed, leave the rear plate cover at the back of the oil pan removed to access the bolt holes for the flex plate and torque converter (as shown below).



13. Using the access hole, with a dab of Loctite on each, install the (4) supplied bolts securing the Z1 flex plate to the torque converter. Torque bolts to <u>38ft-lbs</u> in an X pattern and in steps.

<u>Note</u>: Once you get the first bolt installed, you will need to rotate the engine in order to spin the flex plate and torque converter to have access to the other bolt holes, use a large ratchet and 19mm socket to rotate the engine **CLOCKWISE**.

- 14. Refer to the factory service manual to reinstall all other components removed in previous steps.
- 15. Check the vehicle for loose tools/items.
- 16. Perform a final test drive of vehicle.

#### **END**

#### **Additional Technical Support:**

Contact Z1 Motorsports at info@z1motorsports.com Or call 770-838-7777 between 9am and 6pm ET

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