

Z1 DE TRANSMISSION FRONT COVER INSTALLATION MANUAL



This Installation Manual is intended for the following models:

2003-2006	Nissan 350Z
2003-2006	Infiniti G35 Sedan
2003-2007	Infiniti G35 Coupe

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 DE Transmission Front Cover, consult with a Professional Mechanic, or contact Z1 Motorsports for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Z1 Transmission Front Cover
2	1	Z1 Transmission Cover Gasket

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches
- Assorted Metric Sockets
- Torque Wrench
- Channel Lock Pliers

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 DE Transmission Front Cover and verify that ALL necessary hardware is present.

NOTE: It is recommended that this kit is installed when the vehicle requires a clutch and/or transmission fluid service, due to the necessity of removing the transmission and loss of fluid.

NOTE: Consult with the Nissan Factory Service Manual (FSM) regarding the removal and installation procedure of OEM components.

PROCEDURE:

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Assure the car's ignition is in the **OFF** position, and the **NEGATIVE (-)** battery terminal is disconnected.
3. Locate proper jacking points on vehicle's chassis (refer to vehicle's Owner Manual). Raise and support vehicle using jack & jack stands. Assure that vehicle is raised to a minimum of 16" for removal of transmission.
4. Remove Shifter as outlined in the Nissan FSM.
5. Remove and set aside exhaust system from behind catalytic converters/test pipes.
6. Remove and set aside driveshaft as outlined in Nissan FSM.
7. Remove transmission drain plug and empty transmission of fluid.
8. Remove crankshaft position sensor as outlined in Nissan FSM.
9. Remove starter motor as outlined in Nissan FSM.

10. Disconnect OEM CSC Hydraulic Lines and drain fluid.

NOTE: DO NOT depress the clutch pedal during removal procedure or master cylinder damage can occur. Insert a suitable plug to the clutch hose after removing. Clutch fluid can damage painted surfaces. Clean up clutch fluid spills immediately and wash the affected area with water.

11. Remove rear plate cover as outlined in Nissan FSM.

12. Disconnect Park/Neutral position switch connector.

13. Disconnect (2) two heated oxygen sensors as outlined in Nissan FSM.

14. Remove rear engine mounting member as outlined in Nissan FSM.

15. Disconnect Back-up Lamp Switch connector. Remove harness & brackets and temporarily secure them to a position where it will not inhibit work.

16. Remove (12) twelve engine and transmission mounting bolts.

17. Remove Transmission as outlined in Nissan FSM.

WARNING:
Secure Transmission Assembly to a suitable jack before removing it. The Transmission Assembly must not interfere with exhaust piping, wire harnesses, or clutch hose. The input shaft of transmission must not interfere with Pressure Plate. Do not hold the control lever housing during installation or damage can occur to the control lever housing from deformation.

18. Remove Concentric Slave Cylinder (CSC) assembly as outlined in Nissan FSM. See *Figure 1* below.

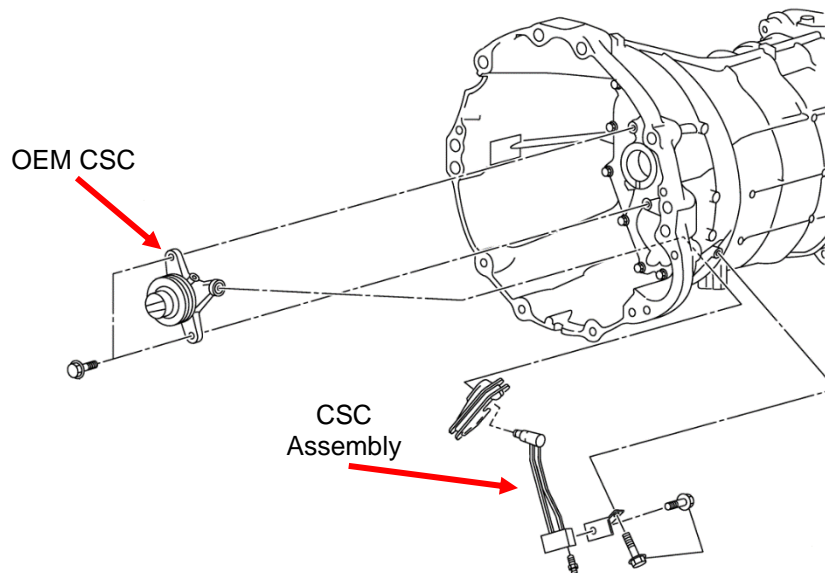


Figure 1

19. Remove and set aside mounting bolts (#1-7) and sealing bolts (#8-11). Remove and discard the OEM transmission front cover & gasket.

NOTE: Be sure to label which bolts (#8-11) are sealing bolts in accordance with *Figure 2*.

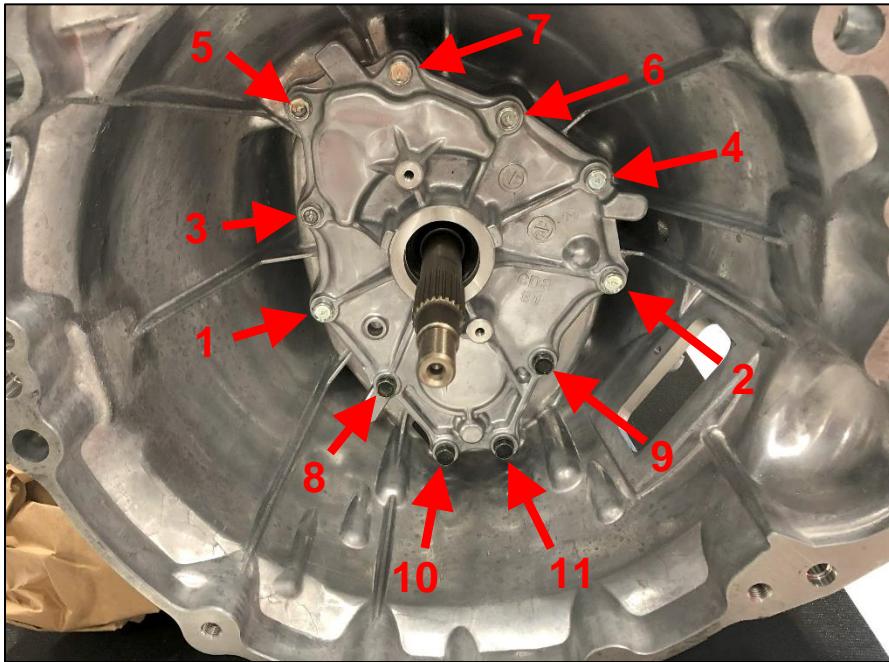


Figure 2

20. Clean the mating surface for the new Z1 Transmission Front Cover Gasket. *Figure 3*.

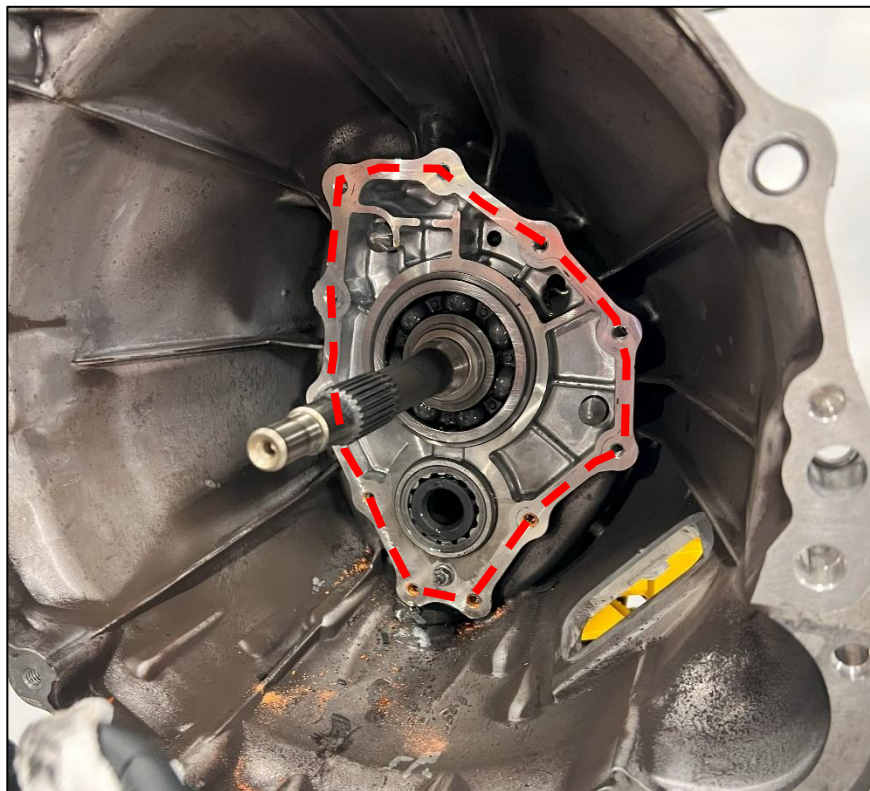


Figure 3

21. Locate the provided Z1 Transmission Front Cover and Transmission Front Cover Gasket. Line up and install the Transmission Front Cover with the Front Cover Gasket to the Transmission. Use hardware removed in *Step 19* to secure the Front Cover and Gasket in place. Make sure the mating surface of the Transmission Cover lines up with the Input Shaft Bearing of the Transmission. The Transmission Cover may need to be slightly held up when tightening bolts.
22. Tighten front cover bolts in order as shown in *Figure 2* above and torque to 13ft-lbs. Use Thread Sealant/RTV on bolts #8-11. *Figure 4.*



Figure 4

23. Install a new or reuse Concentric Slave Cylinder (CSC). Follow instructions for new CSC or use your Factory Service Manual for reinstallation of OE CSC.
24. If you are upgrading to a new Clutch and Flywheel assembly, do that now. Follow FSM or specific instructions to your install if necessary.
25. Follow *Steps 4-17* to reinstall the transmission and components.
26. Bleed the CSC and ensure proper function. Follow FSM for further details.
27. Start Engine and inspect for leaks. Shift through **ALL** gears to ensure proper engagement.
28. Properly lower vehicle from jack stands.
29. Perform a final test drive of the vehicle.

END

Additional Technical Support:

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