



SERVICE BULLETIN

Classification:

AT09-010

Reference:

NTB09-147

Date:

December 18, 2009

2009 – 2010 GT-R RATTLE FROM FLYWHEEL HOUSING

APPLIED VEHICLES: 2009 – 2010 GT-R (R35)

IF YOU CONFIRM

A rattle noise coming directly from the rear tail shaft area of the flywheel housing,

NOTE:

- The GT-R transmission has different operating characteristics than a typical passenger car. Because of this, various driveline rattle noises may be heard during some driving conditions. These normal characteristic noises do not indicate a malfunction. Refer to the Owner's Manual for addition information on transmission operating characteristics.
- When placed on a lift and listening from under the vehicle, the source of the typical GT-R driveline rattle noise is from the center of the main driveshaft or near the rear mounted transmission. A rattle noise caused by the flywheel housing will come directly from the rear tail shaft area of the flywheel housing.
- The rattle noise for this incident—if it should occur—can be duplicated by putting the transmission in Park or Neutral, then slightly accelerating and decelerating the engine.

ACTION

Replace the Flywheel housing with the new one listed in the Parts Information.

IMPORTANT: The purpose of ACTIONS (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the entire Service Procedure as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

PARTS INFORMATION

DESCRIPTION	PART NAME IN FAST	PART #	QUANTITY
Flywheel Housing	Flywheel Housing	32040 - JF02A	1
Upper/Lower radiator hose clamps	Clamp-Hose	01558 - 00721	4
Overflow tank lower hose clamps	Clamp	16439 - 7S01B	2
Overflow tank side hose clamps	Clamp	01558 - 00561	2
Radiator drain plug O-ring	O-ring- drain	21481 - 18000	1
Y-pipe front exhaust gaskets	Gasket-Exhaust	20692 - 24U00	2
Y-pipe rear exhaust gasket	Gasket-Exhaust	20692 - JF00A	1
Y-pipe front exhaust nuts	Nut-Front Exhaust Tube	20602 - 41G00	4
Y-pipe rear exhaust nuts	Nut-Flange	08918 - 3401A	2
Turbocharger Outlet Gasket RH	Turbocharger Outlet Gasket	14445 - JF01A	1
Turbocharger Outlet Gasket LH	Turbocharger Outlet Gasket	14445 - JF01B	1
Turbocharger Outlet Nuts	Nut	14094 - 4P110	10
Oil Cooler Line Gasket	Ring-Rubber	21304 - JF00A	2
Front Drive Shaft, Front Flange Bolts	Bolt-Fix Propeller Shaft	37120 - CG10A	4
Front Drive Shaft, Rear Flange Bolts	Bolt-Fix Propeller Shaft	37120 - JF01A	4
Main Driveshaft, Front Flange Bolts	Bolt-Fix Propeller Shaft	37120 - JD00B	4
Main Driveshaft, Front Flange Nuts	Nut-Fix Propeller Shaft	37171 - 7S00A	4
Main Driveshaft, Rear Flange Bolts	Bolt-Fix Propeller Shaft	37120 - JF00A	6
Front Driveshaft Support Bracket	Bolt	11298 - 4M418	5
Transmission Heat Exchanger Line Clamps	Clamp	16439 - 7S01B	2
Sway Bar to Lower Control Arm Nut	Nut	54588 - 1BA2A	2
Lower Control Arm to Knuckle Cotter Pin	Pin-Cotter	08921 - 3252A	2
Lower Control Arm to Knuckle Nut	Nut-Knuckle Spindle	40262 - EG010	2
Front Axle Nut Cotter Pin	Pin-Cotter	40073 - 0L700	2
Flywheel Housing Inspection Hole Cover	Cover-RR Plate	30417 - JF00A	1
AC Compressor line O-ring (low side)	O-ring - A/C	92474 - N8210	1
AC Compressor line O-ring (high side)	O-ring - A/C	92472 - N8210	1

CLAIMS INFORMATION

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace Flywheel Housing.	32040 - JF02A	AD24AA	BC	26	(1)

(1) Refer to the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

SERVICE PROCEDURE

1. Remove the engine from the vehicle using a suitable engine caddy or support table.

- Refer to the Service Manual, Section EM, for engine removal information.

NOTE: Each GT-R certified dealer received a “Nissan GT-R Service Requirements Resource Guide & DVD” kit. The information in this kit is very helpful for engine removal. The guide and video are also available on Nissan Virtual Academy.

Engine Removal Tips

Disconnecting the Engine Control Harness

- Remove the glove box.
 - Refer to Service Manual as needed.
- Remove the Engine Control Module (ECM).
 - Refer to Service Manual as needed.
- From under the dash; push the 2 clips to release the harness boot.

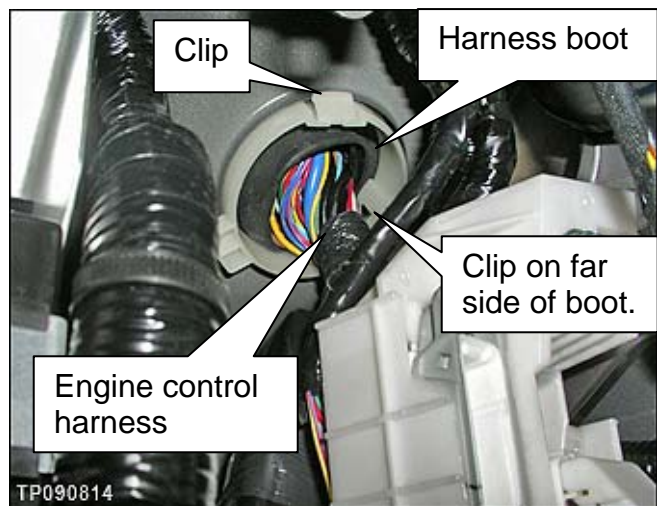


Figure 1

Flywheel Housing to Engine Bolts

- The 4 bolts shown in Figure 2 will need to be removed to replace the flywheel housing.
- They may be easier to remove while the engine is still in the vehicle.

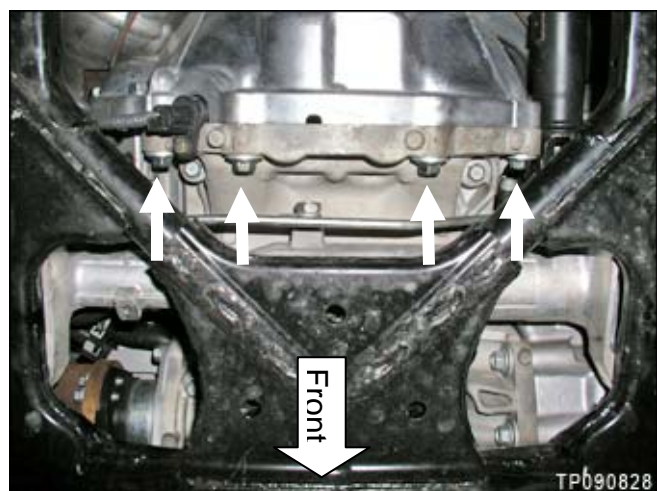


Figure 2

2. Apply penetrating oil on the nuts that connect the catalytic converters to turbo chargers.
Let soak for 5 minutes.
3. Remove both catalytic convertors.
 - Discard the nuts and gaskets – use new ones for reassembly.

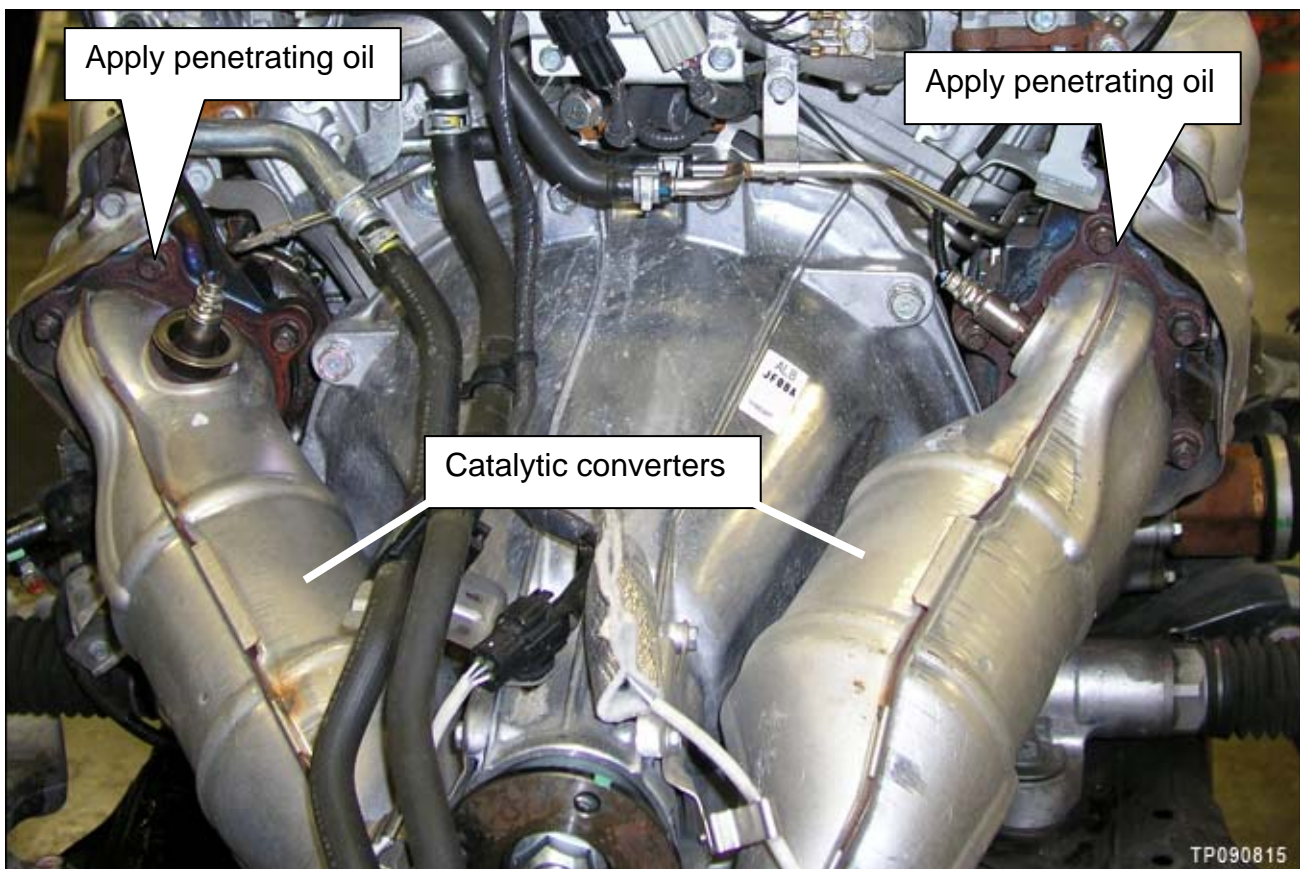


Figure 3

4. Apply clamps to secure the rear of the engine cradle to the support table (see Figure 4).
5. Lift the rear of the flywheel housing and remove the rear mount.

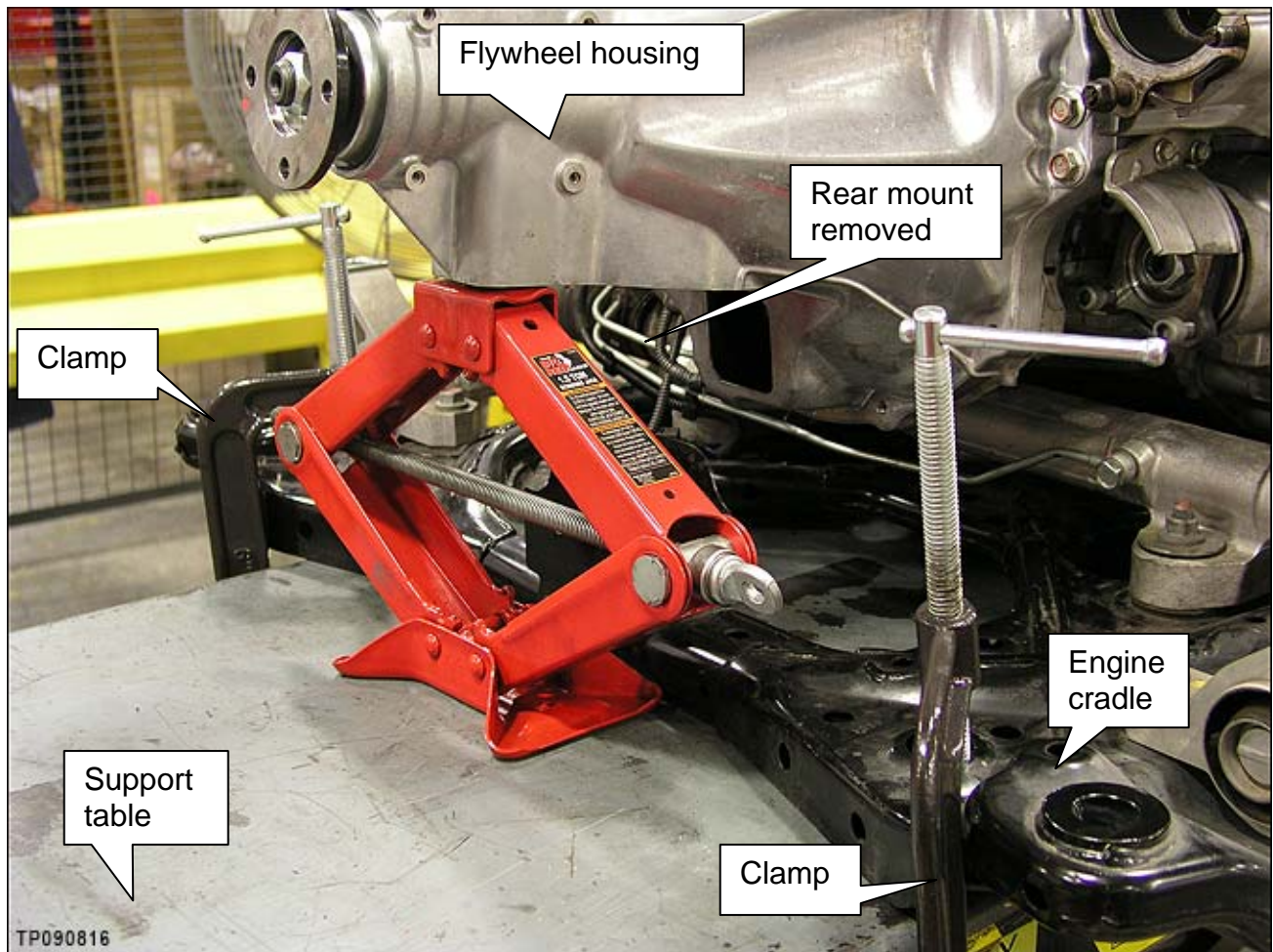


Figure 4

6. Place a wood block under the front differential as shown in Figure 5.

- Size of wood block; approximately 2" by 2" by 6".

7. Lower the rear of the flywheel housing.

- The wood block will support the engine and keep the flywheel housing elevated.

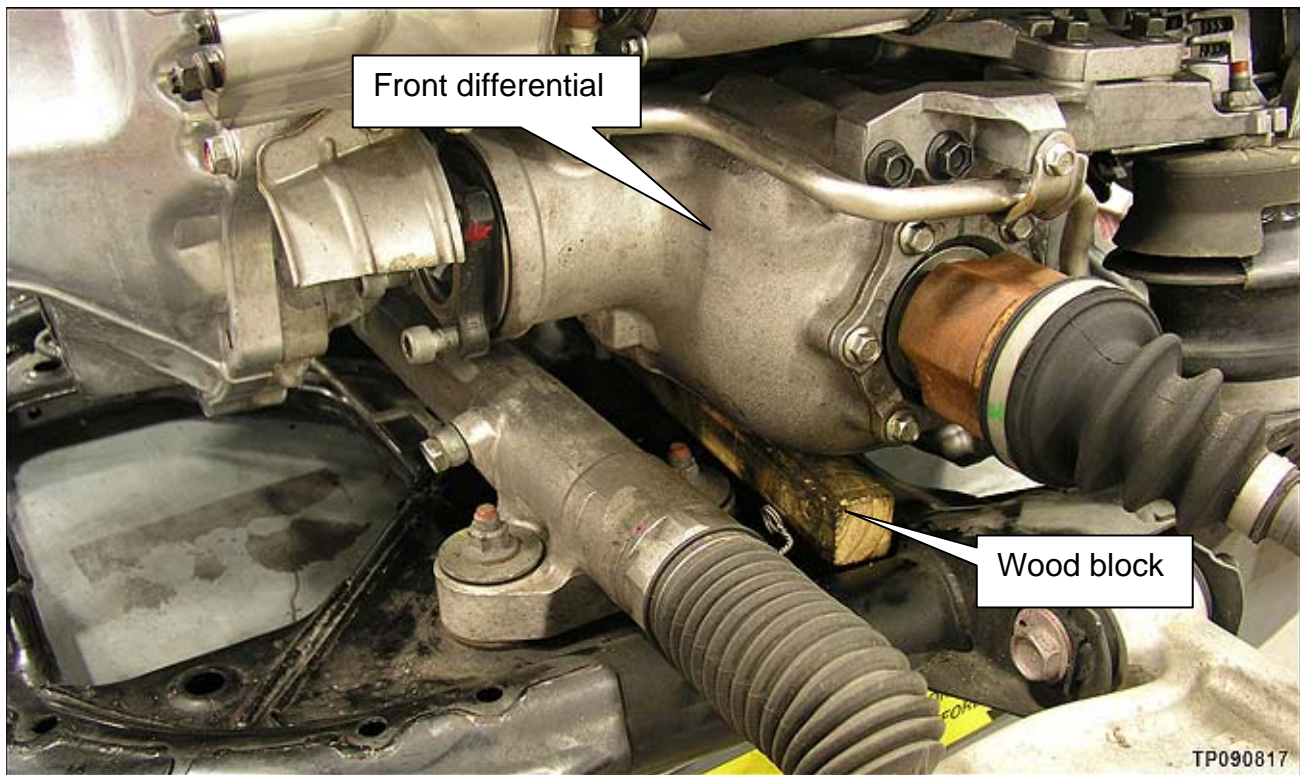


Figure 5

8. Remove the 6 bolts from the vibration damper.

- Remove the bolts through the access hole.
- To access each bolt, face the front of the engine, rotate the engine **Clockwise** (using the front crankshaft pulley bolt).

CAUTION: Rotate the engine Clockwise only, as viewed facing the front of the engine.

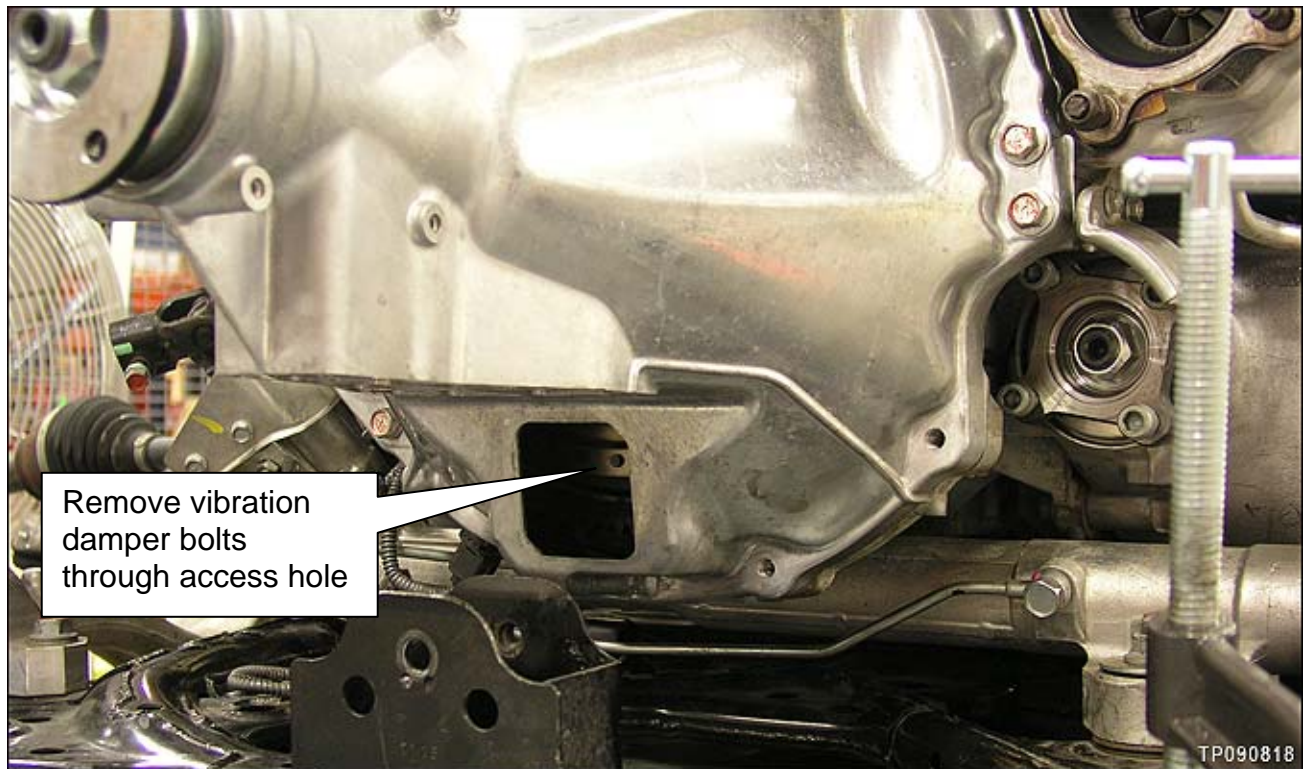


Figure 6

9. Remove the starter motor mounting bolts.

10. Remove all of the flywheel housing to engine bolts.

- These bolts have different lengths. Pay attention when removing the bolts so the correct bolt can be reinstalled in each location.

Bolt symbol	A (Housing side → Engine side)	B (Housing side → Engine side)	C (Engine side → Housing side)
Quantity	4	3	4
Nominal length mm (in)	65 (2.56)	40 (1.57)	40 (1.57)
Tightening torque N·m (kg-m, ft-lb)	75 (7.7, 55)	34 (3.5, 25)	65 (6.6, 48)

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11. Remove the flywheel housing with vibration damper.



Figure 7

12. Rotate the engine **Clockwise** (using the front crankshaft pulley bolt) so the alignment dowels on the flywheel are at the 12 o'clock and 6 o'clock positions.

CAUTION: Rotate the engine **Clockwise only**, as viewed facing the front of the engine.

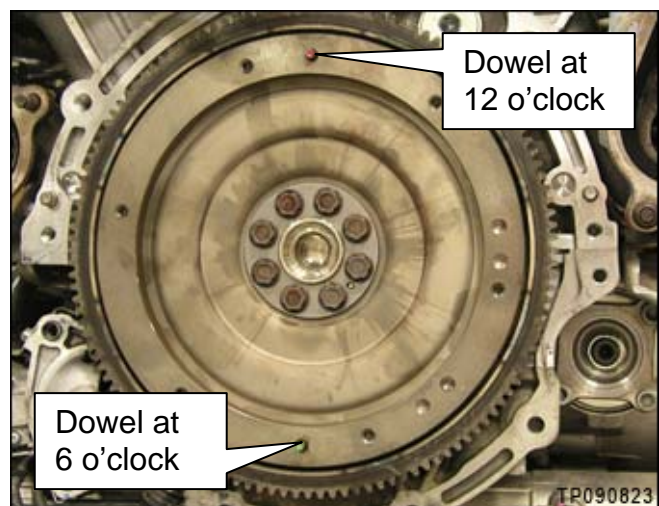


Figure 8

CAUTION: The new flywheel housing and vibration damper are two pieces. Do not let the vibration damper fall off the flywheel housing shaft, possibly damaging it.

13. On the new flywheel housing / vibration damper – use paint to mark the damper and center shaft as shown in Figure 9.

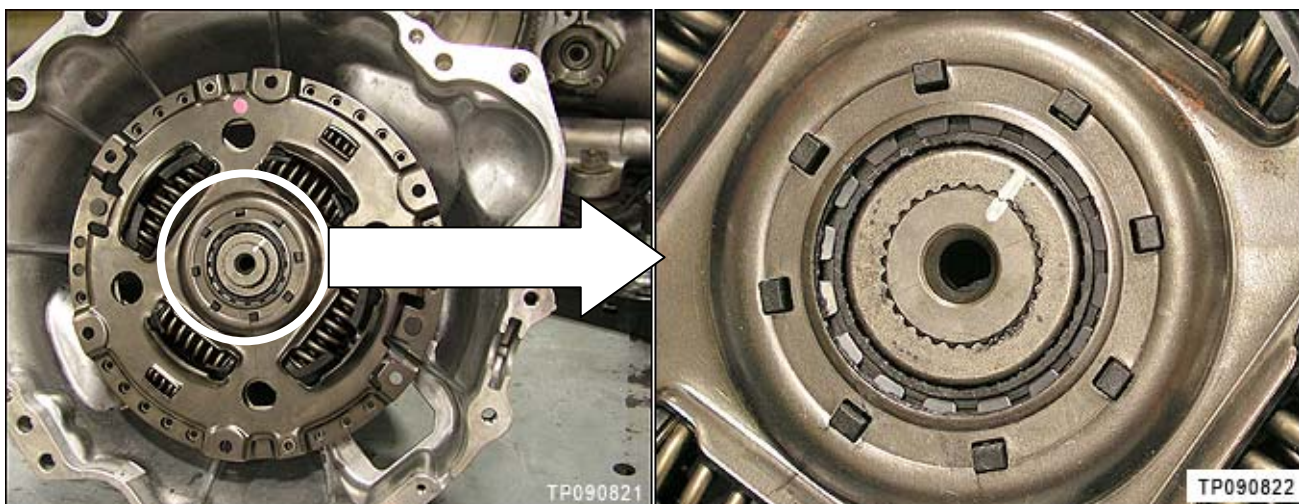


Figure 9

14. Remove the vibration damper from the flywheel housing and place it on the flywheel.

- Make sure the damper is fully seated on the dowel pins.

15. Use paint to mark the damper dowel pin holes as shown.

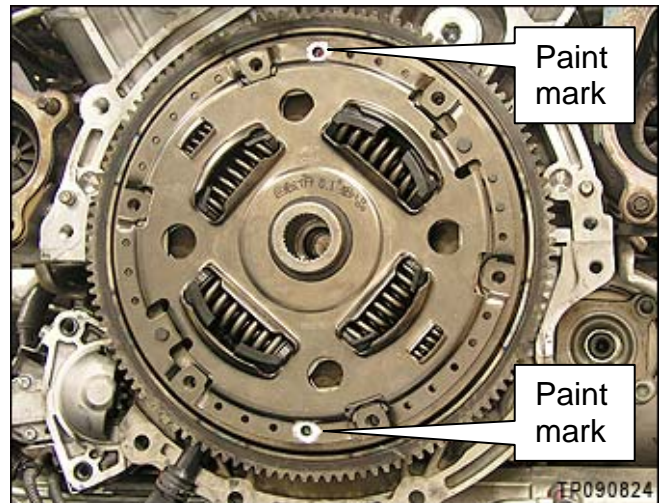


Figure 10

CAUTION: Do not drop the vibration damper. Do not let the vibration damper fall off the flywheel housing shaft.

16. Install the vibration damper back into the flywheel housing.

- Make sure the damper and shaft are aligned using the paint mark you applied in step 13.

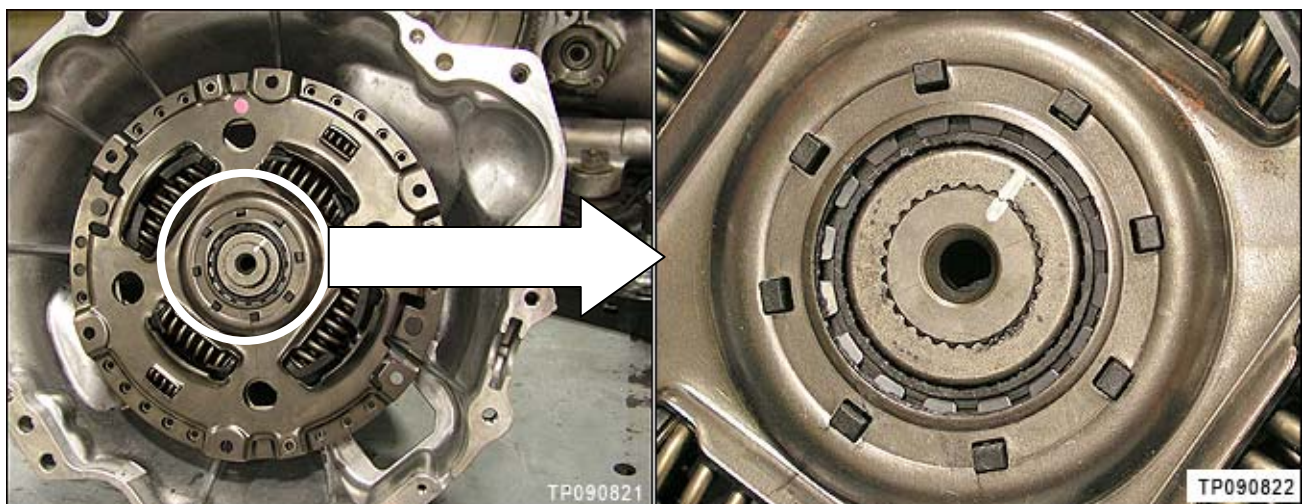


Figure 11

17. Rotate the companion flange until one of the damper dowel pin holes is visible in the access hole as shown.

Apply a paint mark on the companion flange as shown.

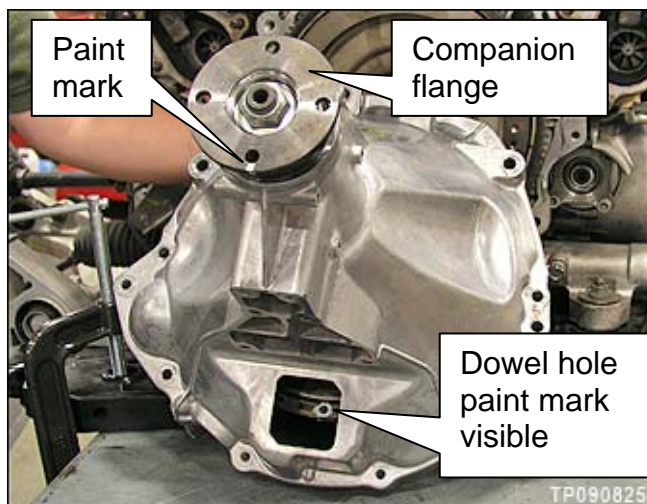


Figure 12

18. Install the new flywheel housing.

- As the housing is installed, the dowel pins must be aligned with the dowel holes on the vibration damper.
- Reach in the access hole and make sure the vibration damper is fully seated on the dowel pin (damper is flat against the flywheel).

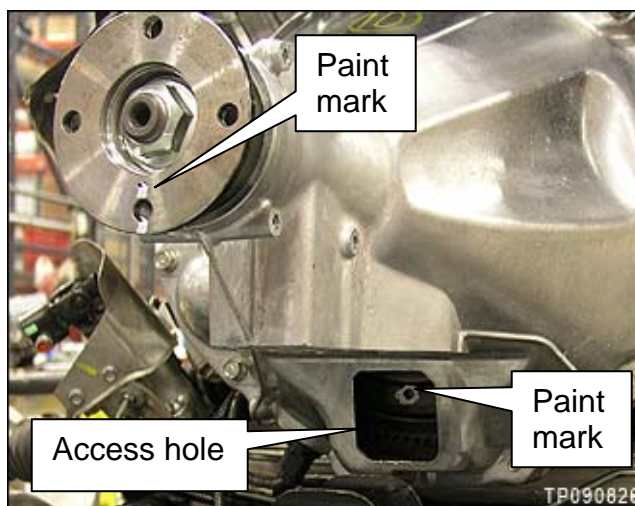


Figure 13

- Install the housing bolts in the correct locations according to Figure 14.
- Torque housing bolts according to Figure 14.

Bolt symbol	A (Housing side → Engine side)	B (Housing side → Engine side)	C (Engine side → Housing side)
Quantity	4	3	4
Nominal length mm (in)	65 (2.56)	40 (1.57)	40 (1.57)
Tightening torque N·m (kg-m, ft-lb)	75 (7.7, 55)	34 (3.5, 25)	65 (6.6, 48)

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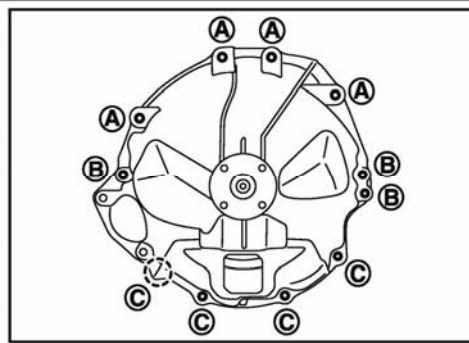


Figure 14

19. Rotate the engine 180° **Clockwise** (using the front crankshaft pulley bolt) so the other dowel hole is visible in the access hole.

CAUTION: Rotate the engine **Clockwise only**, as viewed facing the front of the engine.

20. Reach in the access hole and make sure the vibration damper is fully seated on the dowel pin (damper is flat against the flywheel).

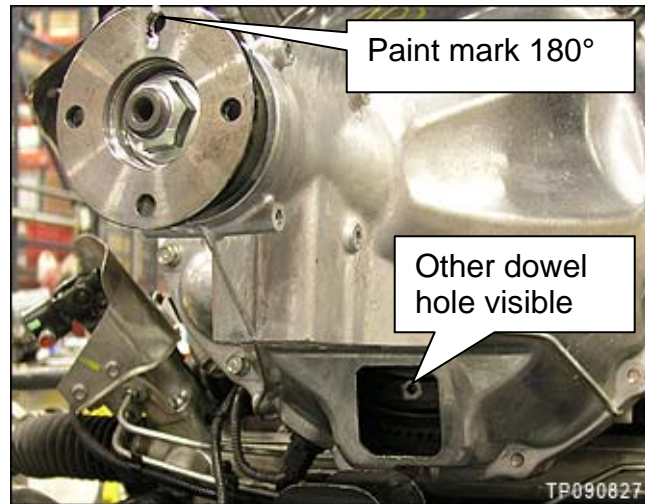


Figure 15

21. Install the 6 damper to flywheel bolts in two steps as shown.

“A” 1st step:
Torque to 14.7 N•m (1.5 Kg-m, **11 ft lb**).

“B” 2nd step;
Torque to 125.5 N•m (2.6 Kg-m, **19 ft lb**).

“C” Dowel pins

CAUTION: Rotate the engine **Clockwise only**, as viewed facing the front of the engine.

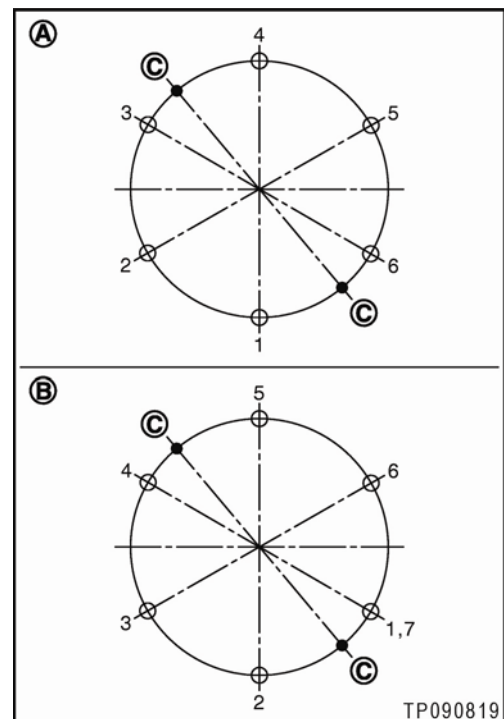


Figure 16

22. Reinstall all other parts and reinstall the engine.

- Refer to the Service Manual as needed.
- Use new gaskets and nuts when installing the catalytic converters.