

Z1 VQ35DE LIGHTWEIGHT CRANK PULLEY INSTALLATION MANUAL



This Installation Manual is intended for the following models:	
2003-2006	Nissan 350Z (VQ35DE)
2003-2006	Infiniti G35 Sedan (VQ35DE)
2003-2007	Infiniti G35 Coupe (VQ35DE)

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 VQ35DE Lightweight Crank Pulley, consult with a Professional Mechanic, or contact Z1 Motorsports for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Z1 Lightweight Crank Pulley

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches
- Assorted Metric Sockets
- Torque Wrench
- Impact Gun
- Impact Sockets
- Pulley Puller

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 VQ35E Lightweight Crank Pulley 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 the jacking points on the vehicle's chassis (refer to Vehicle's Owner's Manual). Raise and support the vehicle using a jack and jack stands.
3. Refer to the Factory Service Manual to remove the Radiator from the vehicle. This is necessary to provide clearance to use an Impact Gun on the Crank.
4. Loosen the Belt Tensioner and remove the Drive Belts from the Crank Pulley.
5. Using an Impact Gun, loosen the OE Crank Pulley bolt. *Figure 1.*

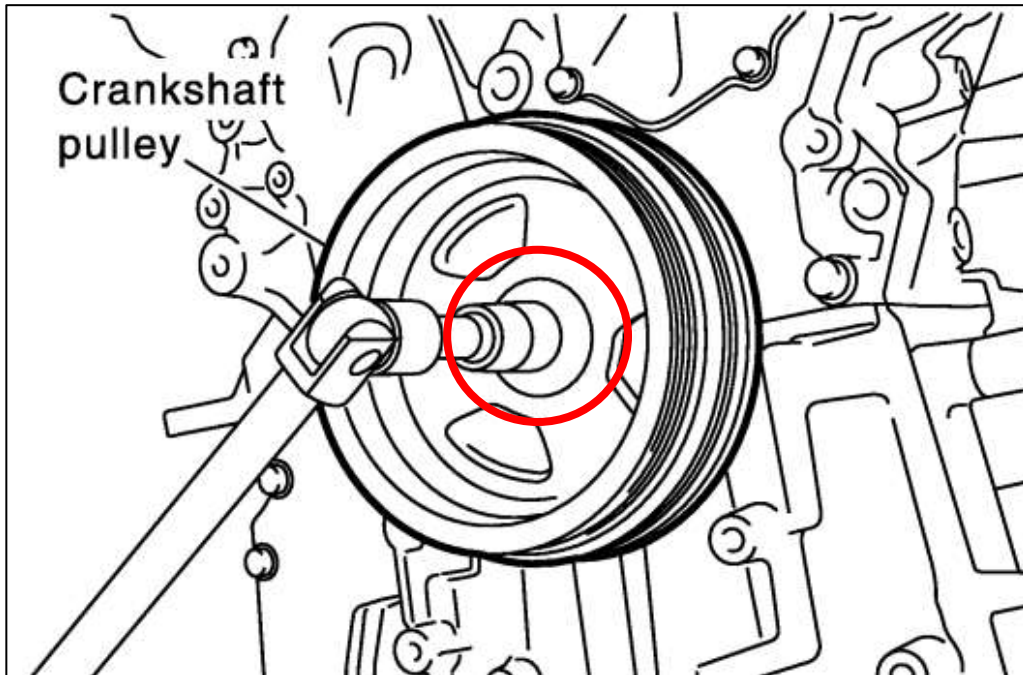


Figure 1

6. Using a Pulley Puller, remove the Crank Pulley from the Crankshaft Snout. *Figure 2.*

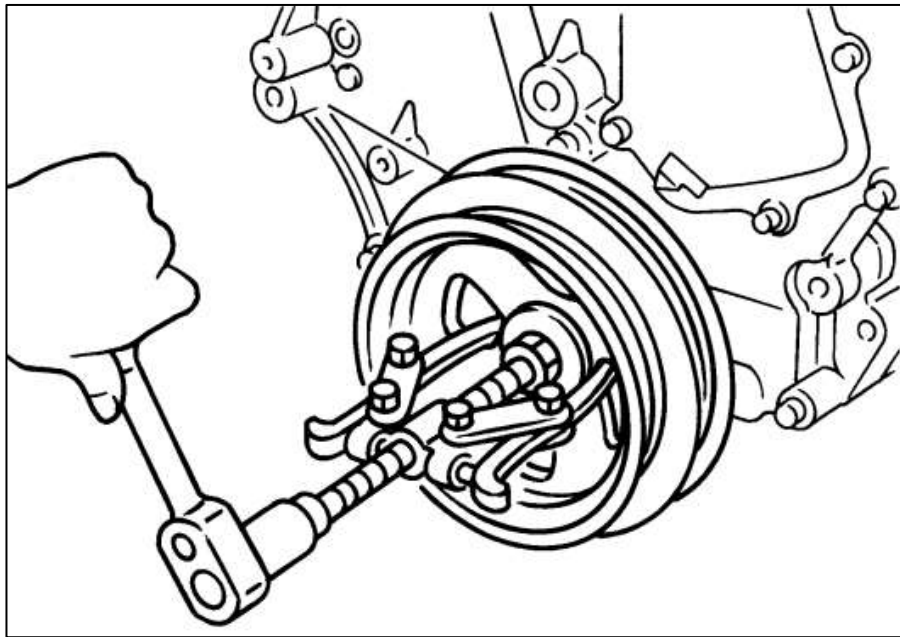


Figure 2

7. Fully remove the Crank Pulley and Bolt.
8. Clean the mounting surface of the Crank Pulley.
9. Locate the Z1 Lightweight Crank Pulley. Line up the Keyhole of the Pulley with the Tab on the Crankshaft and press the Pulley onto the Crank. The Z1 Logo will face outwards.
10. Install the Crankshaft Bolt to secure the Crank Pulley. Torque the bolt to **33 ft-lbs**. After torquing, tighten the bolt an additional 60° for **NON-REVUP ENGINES**, and an additional 90° for **REVUP ENGINES**. *Figure 3.*

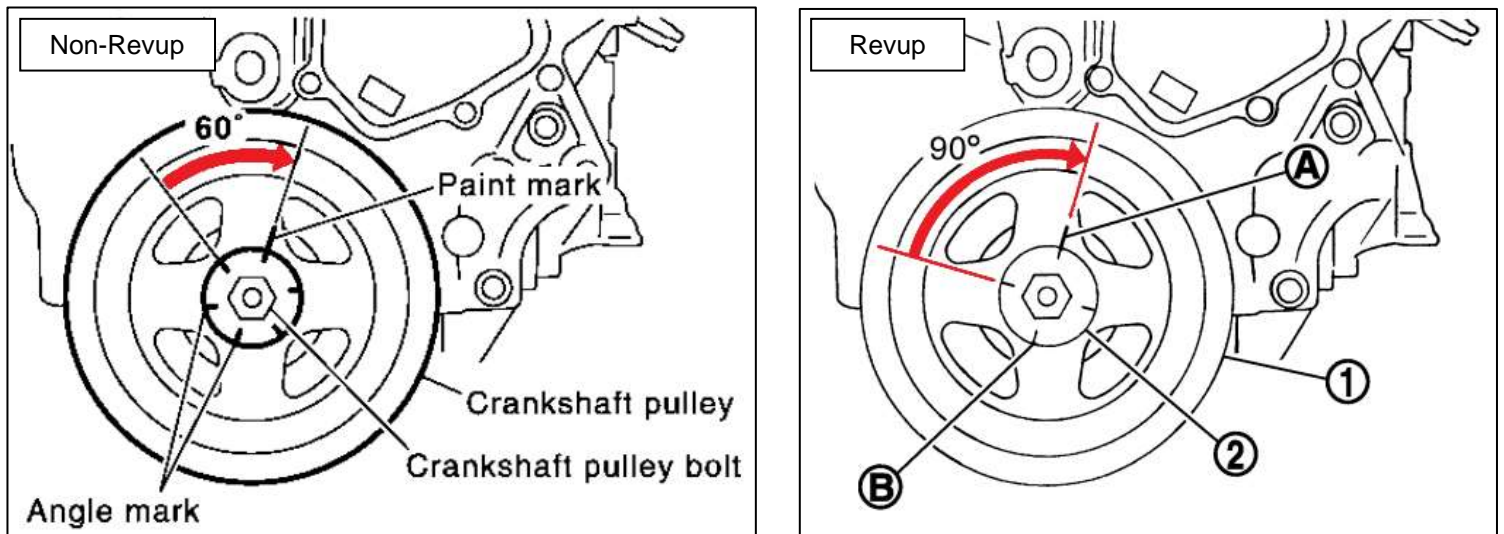


Figure 3

11. Rotate the Crankshaft Pulley Clockwise when looking at the Pulley from the front. Confirm that it turns smoothly.
12. Reinstall the Drive Belts onto the Crank Pulley. *Figure 4* below shows the proper Belt routing.

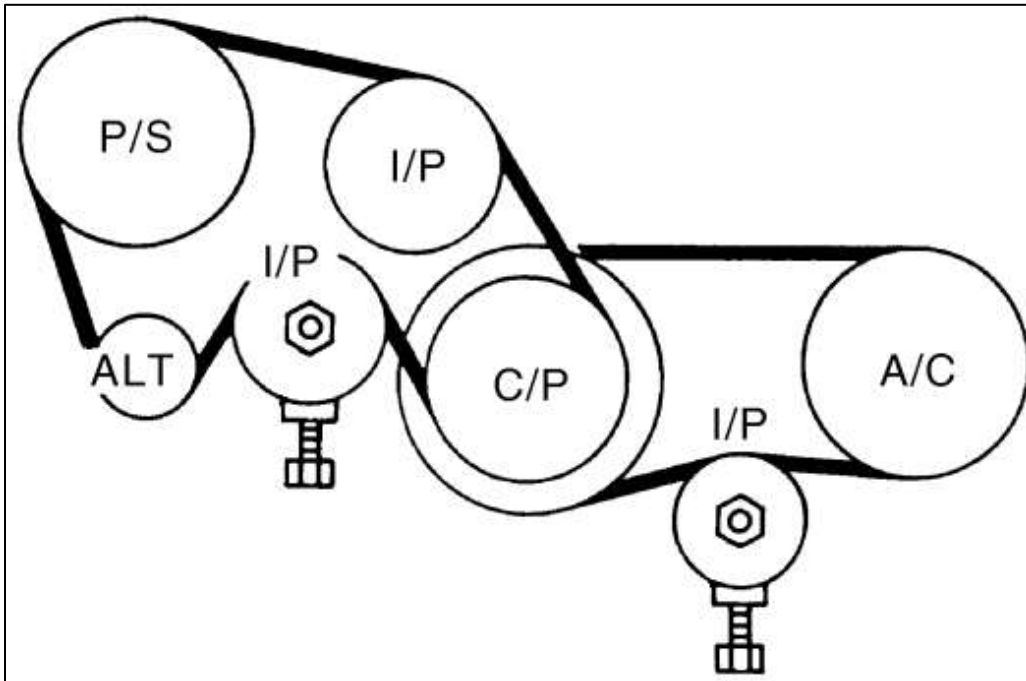


Figure 4

13. Reinstall the Radiator. Refer to the Factory Service Manual for installation. Refill and bleed the Coolant System.
14. Start the vehicle and check for any unusual noise or vibration.

END

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