

Installation For Engines: RB, CA, JZ, 1UZ, 4G63

Tools Required

- 9mm Socket
- 5mm Allen Key/Socket
- ½ inch Ratchet Spanner
- Torque wrench



High Torque High HP JZ engines

PRP recommends reusing/replacing the OE cam gear bolt.

The tensile strength vs reuse of our single Ti bolt cannot be established. Use at your own risk.

For other engines that don't use a single cam bolt, Ti is KING



Firstly, place the engine on TDC and line up all your timing marks then remove your OEM cam gears. Then simply bolt on your PRP gears, set to zero to start off with then install as per your workshop manual or have your specialist complete the installation for you. Dial in the cams in for best results. Just remember, incorrect timing can cause catastrophic engine failure.

Note: Use the PRP adjusting tool insert with a ½ inch ratchet or breaker bar when adjusting the cam to ensure you don't damage the cam gear. Be sure to back off the locking mechanism a few threads to allow disengagement.

Note: Steel cam gear sets will need to be cooled with a rag and cold water to allow adjustment; Alloy outer gears are not affected.

RB/CA



JZ/1UZ/4G63



GREEN arrows depicting cam gear M7 RB/CA mounting bolts to torque to 16Nm/11.8 ft Lbs and YELLOW M12 JZ/1UZ/4G63 Cam mount bolt 81 Nm/60 ft Lbs All RED arrows depict cam outer bolts to be tensioned to 14Nm/10.3 ft Lbs. **Note:** same tension for both steel and alloy, the alloy version gear has a longer thread and ti bolt than the steel version.

If you are running our trigger kit, please consult the Media and Guides section of our website to review the specific installation instructions to suit your engine. Click here -> [PRP Information Media and Guides](#)

Whilst installing your new RB PRP cam gears, please pay attention to the M8 bolt behind the inlet cam gear as you can see in the shadow behind the gear (RED Arrow) needs to be the original bolt that does **NOT** use any washers (spring nor flat as per OEM), if you put a washer or the wrong bolt in this position you run the risk of hitting a cam gear bolt thread at the back of the cam gear, this is only a potential issue on the alloy cam gears as they have a longer thread boss behind the gear.

If you must use an aftermarket bolt, please use a M8 x 20 button head cap bolts with no washers.

NOTE SINGLE CAM HEADS AS WELL AS TWIN CAM HEADS: The TDC timing mark is in line with the cam dowel, in the single cam gear the vernier marks are offset due to room restrictions, but they all follow the same format of CAM dowel points to TDC

NOTE: KELFORD CAMS: We have confirmed with Kelford that some PCD's on the nose of some Kelford RB cams are drilled with a discrepancy and they will replace them under warranty, we would prefer you did not drill the cam bolt holes larger as our gears are machined to a high precision specification.

