

## INSTALLATION METHOD FOR MAIN STUD KITS

Part Number: 247-5501 Application: Dodge Viper SRT-10 2008-10 12MM MSK

**NOTE:** When changing from factory fasteners to high strength fasteners, clamping force and main bearing bore tolerances will change. Therefore it will be necessary to check the main bearing bores for proper size and out of round condition and align hone the cylinder block if necessary. The main bores should always be align honed using the same fasteners and lubricant which will be installed during final engine assembly at the recommended torque.

1. **Clean and inspect all hardware prior to installation.**
2. Look for obvious defects or shipping damages.
3. **ARP strongly recommends a mockup or test fitting the kit before final assembly.** ARP fasteners generally have different bolt head or nut height than factory that could possibly interfere with factory components and or other aftermarket components.
4. **To ensure proper thread engagement and accurate torque readings, clean all threads in the block and main caps.** Chase if necessary with a thread chaser or a tap D4 or less.
5. **Screw the studs into the block until they bottom out, do not apply torque.** The hex broach in the end of the stud is designed to assist with installing / removing the studs from the block, not for applying torque. Studs with the M8 thread extension are for installing the oil scrapper (passenger side) and oil pump pickup tube.
6. **Clean the spot faces on the main caps where the washer seats, use of solvent or brake/carb cleaner is recommended.**
7. **Install the main caps and check for binding or misalignment.**
8. **Then, using a clean, dry rag remove all oil from both sides of each washer.** The main cap and washer mating surfaces must be free of oil/grease/lubricant. Failure to keep these surfaces dry may result in inconsistent fastener clamping forces / bore distortion.
9. **Place the washers over the studs and on to the dry, clean spot faces of the main caps.**
10. **Lubricate the stud threads, and bottom side of the nuts with ARP Ultra-Torque Fastener Assembly Lubricant.** Then install the nuts onto the studs and tightening by hand until the nut contacts the washer.
11. **Following the manufacturer's recommended torque sequence, Figure 1, tighten the nuts per the steps below:**
  1. Torque nuts 1-12 to 40 ft-lbs
  2. Torque nuts 1-12 to 80 ft-lbs
  3. Torque nuts 1-12 to 115 ft-lbs
11. **Lubricate the main cap side bolt threads and bottom side of the bolt head with ARP Ultra-Torque Fastener Assembly Lubricant.** Following the manufacturer's recommended torque sequence, Figure 2, tighten the main cap side bolts per the steps below:
  1. Torque bolts 1-12 to 20 ft-lbs
  2. Torque bolts 1-12 to 40 ft-lbs
12. **If applicable, install the Crankshaft Oil Scrapper and Oil Pickup Tube.** Lubricate the stud threads and bottom side of the nuts with ARP Ultra-Torque Fastener Assembly Lubricant. Then install the nuts onto the studs and torque to 20 ft-lbs.

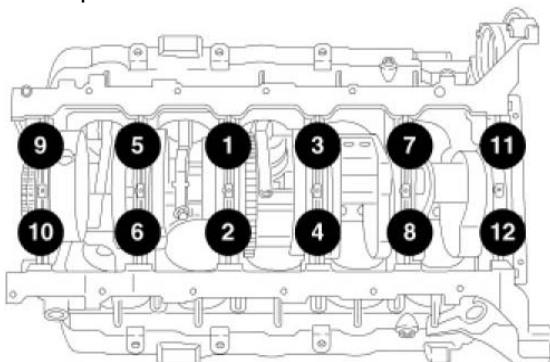


Figure 1 - Main Cap Torque Sequence

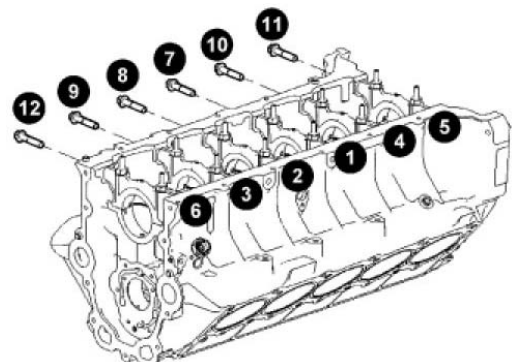


Figure 2 - Main Cap Side Bolt Torque Sequence