Installation instructions for your MAP Ultimate Duty Head Stud Kit

Please read all instructions thoroughly before starting installation.

Handling Precautions:

The H11 studs are extremely sensitive to contamination from the acid in your skin. You do not want to allow any corrosion on them. Keep them oiled with a lubricant like WD-40. Do not touch them with your bare hands. Keep them oiled in a bag until you are ready to install them. Use gloves.

- 1.Remove the existing head bolts, head.
- 2. We recommend that you clean and check all threads in your block, clean and use **thread** chaser or a bottoming tap, if necessary, to prepare the threads in the block. Be sure to get all oil, fuel, dirt, etc. out of the hole with compressed air and brake clean (Don't forget the safety glasses).
- 3. Install new head gasket
- 4. Install the head studs into the locations by hand (Put a small dab of engine oil onto the portion of the studs that will thread into the engine block itself). Only tighten the studs finger-tight. Lower the head down over the studs and onto the gasket.
- 5. Apply A1 Technologies International Compound #2 Assembly Lubricant onto the upper threads of the stud, the nut side of the provided washer and bearing surface of the nut.

Torque the nuts on the studs in sequence as shown in the manufacturer's manual to 45 ft.- lbs. After all studs have been torqued, loosen them, repeat the torque sequence to 45 ft.- lbs., loosen them, repeat the torque sequence to 45 ft.-lbs. and loosen them.

You are now ready for your final torque assembly procedure. Place a small amount of International Compound #2 on the fine threads (nut end) then following the same assembly pattern, torque the studs in a three-step sequence to a final torque as follows. 25 ftlbs, 45 ft-lbs, then the final step to your intended torque.

NOTE: It is a lot of work to torque, loosen, torque, loosen, torque loosen, and torque again, but it is WELL WORTH IT. Doing this helps seat the threads and will give you the VERY BEST RESULTS. Take the time to do it right so you never have to do it again!