

## **INSTALLATION METHOD FOR HEAD STUD KITS** **Part Number: 151-4301 Application: Ford EcoBoost 2.3L HSK**

1. Inspect all hardware prior to installation. Look for obvious defects or shipping damages. Please call 800-826-3045 with any questions or issues.
2. To ensure proper thread engagement and accurate torque readings, clean all threads in the block. Chase if necessary with ARP Thread Chaser, part number 912-0002 (M10 X 1.25)
3. Clean the spot faces on the cylinder head where the washer seats, use of solvent or brake/carb cleaner is recommended.
4. Use a degreaser to remove the rust preventative oil from both sides of the washers.
5. Install the head gasket and cylinder head.
6. Screw the studs into the block, 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.
7. Place the washers over the studs and on to the **dry, clean spot faces** of the cylinder head. Place the stamped side of the washer, see figure to the right, down against the cylinder head. This stamped surface grips the cylinder head preventing the washer from spinning while the nut is being torqued. The result is accurate and consistent preload.
8. Lubricate the stud threads and bottom of the nuts with ARP Ultra-Torque Fastener Assembly Lubricant. Then install the nuts onto the studs and tighten hand tight.



### **TORQUE PROCEDURE**

9. Following the manufacturers recommended torque sequence, shown below, use a **12mm** socket to torque the nuts per steps 1-7

- |                                 |           |
|---------------------------------|-----------|
| 1- Tighten nuts 1 through 10 to | 25 ft-lbs |
| 2- Tighten nuts 1 through 10 to | 50 ft-lbs |
| 3- Tighten nuts 1 through 10 to | 75 ft-lbs |
| 4- Loosen nuts 10 through 1     |           |
| 5- Tighten nuts 1 through 10 to | 25 ft-lbs |
| 6- Tighten nuts 1 through 10 to | 50 ft-lbs |
| 7- Tighten nuts 1 through 10 to | 75 ft-lbs |

### **Torque Sequence**

