

EARL'S RACING PRODUCTS - HEAD BOLTS P/N HBS-001ERL, HBS-002ERL, TBS-001ERL, & TBS-002ERL Installation Instructions 199R11247

GM LS Engines – 170,000 PSI – 11mm Diameter Large Bolts & 8mm Smaller Bolts Early LS Engines – 1997-'03 use Part Numbers HBS-001ERL (Hex Head) & TBS-001ERL (12-Point Head) Late LS Engines – 2004-up use Part Numbers HBS-002ERL (Hex Head) & TBS002ERL (12-Point Head)

INSTALLATION:

- 1. To ensure proper thread engagement and accurate torque readings, clean all threads in the block and the bolts. Use a thread chaser or tap to clean out the threads in the block.
- 2. Inspect and check all hardware for proper fit and length prior to installation.
- 3. The chamfered side of the washers must be facing toward the bolt head. The chamfer is needed to clear the radius under the head of the bolt. Improper installation of the washer will cause premature bolt failure.
- 4. Lubricate the threads of the bolts, the washers, and the underside of the head bolts w/ the anti-seize that is included with these parts.
- 5. Install the cylinder heads and check for any binding or misalignment.
- 6. Install the head bolts and tighten them hand tight (don't forget to lubricate the threads, washers, and underside of the head on the bolts).
- 7. Follow the manufacturer's recommended torque sequence. Tighten the 11mm bolts in three equal steps to:
 - 11mm x 2.0 Bolts First Pass 30 lb-ft, Second Pass 50 lb-ft, Third Pass 75 lb-ft
 - 8mm x 1.25 Bolts 25 lb-ft

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