# Supplemental Information & Instructions for 320-899 Bolt & Lock Washer Set, Wrist Pin Clamp MG T-Series Engines

## 4 Contents of Kit

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#### 5 Qty Item# Description

- 6 (4) 320-891 Bolt, wrist pin clamp, 8 MM X 1.0 x 30 MM
- 7 (4) 324-030 Lock Washer, Square Cross-Section
- 8 (1) 322-815 ARP Ultra-Torque Assembly Lube
- 9 (1) 980-277 Supplemental Information Sheet (this document)

### 10 A Little History

The original bolt fitted to the small end of the connecting rod was one of 11 12 the "Nuffield Mad Metric" fasteners found on T-Series engines. The 13 head is BSF, and measures 0.525" across the flats (AF). The threads 14 are 8 MM with a 1.0 thread pitch, or 25.5 threads per inch. For years, 15 these bolts were made in the Moss Machine shop from lengths of high tensile strength BSF hex stock, which we purchased in England. As you 16 can imagine, the proper BSF hex material became hard to find, and 17 finally disappeared. When that happened, Moss offered replacement 18 pinch bolts made from both 0.500" hex stock and 13mm (0.511") EN16T 19 steel hex stock. You may already have replacement pinch bolts that are 20 not 0.525" AF. Important! If you attempt to remove (or install) a bolt 21 22 with a 1/2" (0.500") or 13mm head using a BSF socket, you will 23 round off the corners on the head. This makes it nearly impossible 24 to tighten or remove the bolt. Test fit your socket on the bolt 25 before you apply significant force.

### 26 New Bolts from Moss

To offer a permanent solution and eliminate the confusion of hex-head 27 bolts in 4 different sizes, we have chosen socket cap bolts made from 28 DFARs (Defense Acquisition Regulations System) military-spec steel 29 30 alloy,(Class 12.9). Because the new bolts differ in weight from the 31 original bolts and the replacement bolts currently in use, we only supply 32 these in sets of four with lock washers so as not to disturb the balance of the four piston/connecting rod assemblies. The kit includes a packet 33 34 of ARP Ultra-Torque Assembly Lube for use on these bolts. It allows 35 you to reach within 5% of the required pre-load on the first torque and 36 stays consistent if you re-torque the bolts 37

#### 38 Torque Procedure:

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- 39 1. Lube bolt threads with ARP Ultra-Torque Assemble Lube.
- 40 2. Hand thread bolt into assembled piston/wristpin/rod assy.
- 41 3. Torque pinch bolt to **15 ft-lbs.**
- 42 4. Torque pinch bolt to **28 ft-lbs.**
- 43 5. Back bolt off, and re-torque to 28 ft-lbs.44



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