



A Division of Thiessen Products, Inc.

INSTRUCTION SHEET FOR TOOL No.1 146

TWIN CAM BETA MOTOR CASE BEARING REMOVER & INSTALLER USE ON ALL 2000-PRESENT BETA MOTORS

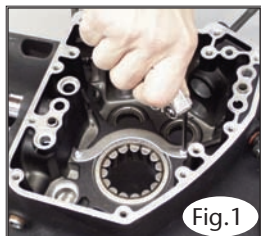


Fig.1

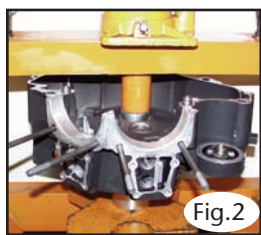


Fig.2

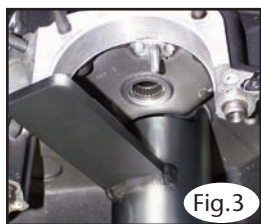


Fig.3

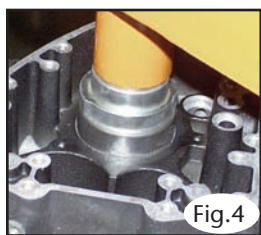


Fig.4

Bearing Removal:

1. Be sure the Torx screws (2) and bearing plate have been removed (Fig.1), place the support tool No.1146 on the press table with remover side facing up (laser marked "REMOVER SIDE") With the Cam side of motor case facing down (flywheel side of motor case facing up) Position the old Bearing to be removed over the support's bore side of Tool.
2. Slip driver/pilot (No.1146-3) through old bearing and into the support tool Note: You must match the contour of driver/pilot, with the contour of case, See Fig.2.
3. Position ram of press over the center of driver/pilot, apply pressure slowly until bearing is free from case.

Bearing Installation:

- 1: Start by turning tool support No.1146 over so that the installer side is facing up (laser marked INSTALLER SIDE)
- 2: With the Cam side of case facing up, bearing centered over tool support and the of leg of support tool located as shown in Fig. 3. This will allow the case to sit flat on support tool.
- 3: Coat the bearing bore & O.D. of new bearing with press fit lube or clean H-D 20-50 motor oil
- 4: Start new bearing into it's bore by hand, then slip driver/pilot No.1146-3 through new bearing and into the support tool (bearing letter side up) & position ram of arbor press over the center of driver/pilot (Fig.4). **Apply pressure slowly** until bearing is fully seated or until resistance is felt.

Note: Over aggressive pressure cold fracture case

- 5: Remove tool (keep tool clean for the next job) & case, replace retaining plate & both screws with Blue Loctite applied to threads, tighten to 20-30 in-lbs.

WARRANTY

All JIMS® parts are guaranteed to the original purchaser to be free of manufacturing defects in material and workmanship for a period of six (6) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at JIMS® option if the parts are returned to us by the purchaser within the six (6) months warranty period or within ten (10) days thereafter.

In the event warranty service is required, the original purchaser must call or write JIMS® immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action. A part suspected of being defective must not be replaced by a dealer without prior authorization by JIMS®. If it is deemed necessary for JIMS® to make an evaluation to determine whether the part is defective, it must be packaged properly to prevent further damage and be returned prepaid to JIMS® with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by JIMS® and the part was found to be defective, repair, replacement or credit will be granted.

ADDITIONAL WARRANTY PROVISIONS

1. JIMS® shall have no obligation in the event a JIMS® part is modified by person or organization.
2. JIMS® shall have no obligation if a JIMS® part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the part.
3. JIMS® shall not be liable for any consequential or incidental damages resulting in the failure of a JIMS® part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or for any other breach of contract or duty between JIMS® and a customer.
4. JIMS® parts are designed exclusively for use in Harley-Davidson® motorcycles. JIMS® shall have no warranty or liability obligation if JIMS® part is used in any other application.
5. Any JIMS® parts or tools that are returned and replaced become the property of JIMS® and will not be returned under any circumstance.

CAUTION: WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS! SEE JIMS® CATALOG FOR OVER 100 OTHER TOP QUALITY PROFESSIONAL TOOLS. THE LAST TOOLS YOU WILL EVER NEED TO BUY.

"From The Track... To The Street!"

555 DAWSON DRIVE, CAMARILLO, CA 93012 • PHONE 805-482-6913 • FAX 805-482-7422