NOTE: PLEASE READ ALL INSTRUCTIONS COMPLETELY & THOROUGHLY BEFORE PERFORMING ANY WORK. IF YOU DO NOT KNOW WHAT YOU ARE DOING, DO NOT DO IT!

No information in this instruction sheet pertaining to motorcycle repair is represented as fool proof or even all together safe. Even something safe, done incorrectly or incompletely can and will backfire. You and only you are responsible for the safety of your repair work and for your understanding the application and use of repair equipment, components, methods and concepts. Each and every step this tool is designed to do must be carefully and systematically performed safely by you. All information listed in this instruction sheet has been tested, re-tested and used daily in JIMS Research and Development Department.

JIMS® IS NOT RESPONSIBLE FOR ANY DAMAGE OR INJURY FROM YOUR WORK, QUALITY AND SAFETY OF YOUR WORK. ALWAYS WEAR SAFETY GLASSES OR OTHER FACE AND EYE PROTECTION SUCH AS FULL FACE SHIELD.

See JIMS Catalog for more Beta engine rebuilding tools or view catalog at www.jimsusa.com.

Hand tools and other supplies needed.
• 3/4” socket, to drive screw No. 1024
• 1/2” socket, to drive stand offs No. 915-3
• 1/4” Allen socket, to drive screws No. 2016
• Torque wrench, drives to match sockets
• Assembly lube
• Oil for threads
• H-D Service Manual for the year and model you will be servicing.

Note: Do not use any type of impact tool with this tool. Use hand tools only.
Installing Balancer Shafts and Bearings, 2007 and later Beta

Note: Before installing any new components make sure you have checked all bearing bores to be within service wear limits. Cases must also be washed and ready for reassembly.

Note: To protect the outside surface of left case use JIMS® Tool No. 916 Beta Case Support Blocks.

1. Remove bearing from counter balancer shaft using JIMS tool No. 963.

2. Install a new bearing on the balancer shaft, with letter side up using an arbor press.


4. Place this balancer weight assembly over bearing bore in case. Apply lube to all threads of stand off shaft's No.915-3. Thread all three standoff shafts into the threaded three holes of the left case around the front and rear balancer shaft. Use a 1/2” deep socket and torque to 5 ft-lbs. See Fig. 1

5. Place bearing press cup No. 915-2 centered over the end of balancer shaft with small diameter facing up. See Fig. 2.

6. Lube the threads on screw No.1024, then thread this screw, through plate No.915-1 just far enough to thread on driver No. 2190. and No. 915-2. See Fig. 3

7. Place installer puller plate No.915-1 with direction arrow (laser marked side) facing you, locating them over the tops of all three standoffs No. 915-3. Note: If working with front balancer shaft, the arrow marked on the plate should point to the front of the case when positioned correctly on standoffs. The arrow should point to the rear of case for rear balancer shaft installation. See Fig. 4.

8. Place one washer No. 2014 on three screws No. 2016. Thread three screws and washers into the tops of each stud. Torque to 5 ft-lbs with your 1/4” wrench.

9. With your 3/4” socket torque screw No.1024 to 30 ft-lbs. This will seat the bearing. See Fig. 5.

Note: Follow your H-D service manual for the installation of bearing retaining Torx screw and other components.

10. Repeat steps 1 thru 9 for the other balancer shaft and bearing.
Installing Balancer Bearings on 2000 to 2006 Betas

Note: Before installing any new components make sure you have checked all bearing bores for being within service wear limits. Cases must also be washed and ready for reassembly.

Note: To protect the outside surface of left case use JIMS Tool No. 916 Beta case support blocks.

1. Apply press fit lube to the O.D. of new bearing and I.D. of bearing bore in case.

2. Position new balancer case bearing over the bore hole in case, then insert the installation collar No. 1167-2 into the bearing I.D. See Fig. 6.

3. Lube the threads on screw No. 1024, then thread this screw, through plate No. 915-1 just far enough to thread on driver No. 2190. Now mount plate assembly No. 915-1 to the engine case centered over the new balancer bearing that is being installed. Use three screws No. 2016 and No. 2014 washers to mount to case. Torque screws to 5 ft-lbs with your 1/4” wrench. See Fig. 7

Note: If working with front balancer bearing, the arrow marked on the plate should point to the front of the case when positioned correctly on case. The arrow should point to the rear of case for rear balancer shaft. See Fig. 4.

4. With your 3/4” socket torque screw No. 1024 to 30 ft-lbs. This will seat the bearing. See Fig. 7.

5. Repeat steps 1 through 4 for the other balancer shaft and bearing.

Note: Follow your H-D service manual for the installation any of the remaining components.