**Beta Engine Hydraulic Balancer retaining tool**

Use these retainers to hold in the hydraulic tensioners in place when repairing all Bata engines. The hydraulic tensioners are used to keep constant chain tension on the counter balancer system. Without the use of these retaining tools you will not be able to remove or install the balancing system.

No. 779 - Use on all Beta Twin Cam engines 2000 to present.

**NOTE: PLEASE READ ALL INSTRUCTIONS COMPLETELY 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 foolproof or even altogether 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 you 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.

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

**Recommended JIMS tools:**

See JIMS catalog for a complete list of engine tools. Catalog may be viewed at www.jimsusa.com

**Other Recommended tools and parts:**

- Service manual for the year and model you will be repairing.
- Parts book for the year and model you will be repairing.
- A good padded jaw wood clamp with about an 8” opening.

**Disassembly:** Start by clamping down on one of the hydraulic tensioners with your clamp. Compress the hydraulic tensioners only far enough to slip on the retainers tool. **See Fig 1.**

1. With one of the hydraulic tensioners compressed, slip one of the retainers tools over the top of hydraulic tensioner and at the same time allow tool to slip over the top of hydraulic tensioner housing. **See Fig 1.**

2. It is now safe to remove your clamp and repeat the above steps on the other hydraulic tensioners.

**Reassembly**

1. Again start by clamping down on one of the hydraulic tensioners. Use your clamp, compress the hydraulic tensioners only far enough to remove the retainers tool. Repeat this for the other hydraulic tensioners.

**Caution:** Do not remove the retaining tools without first clamping hydraulic tensioners.