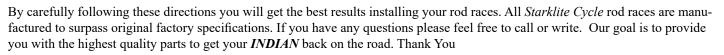
ROD RACE INSTALLATION

Many of our customers have recently inquired about the proper way to install rod races. This same procedure holds true for any engine with a make/female rod combination. The dimensions may vary but not the procedure.

For our example we will use the dimensions of the Chief or Scout "45" rod races.

The rod races are designed to protrude beyond the sides of the female rod. The races are what is to contact the flywheel thrust washers, not the sides of the female rod. When the sides of the races wears down, it should be replaced. The width of the of the female races is .400 inch. The width of the male race is .800 inch. We replace all of the races if any one is worn more than .005 inches on its width.

- 1. Remove old races. Female rod requires pressing from inside the slot toward the outside. The rod must be fully supported around the entire circumference.
- 2. Examine new races, make sure the outer edge is not sharp. It should have a slight taper to prevent shaving metal from the rod when it is pressed in.
- 3. Using "Red Loctite", press male race into male rod. Support the outer circumference, as you did in step 1. Make sure the race is centered in the rod.
- 4. Using "Red Loctite", press the two female races into the female rod from inside the slot toward the outside of the rod. Support the rod around the circumference as in step 1. The races normally end up flush, or nearly flush, with the inside edges of the rod.
- 5. Measure the distance across the outer edges of the female races. This distance should be 1.610 inches. (The 2 female races are .400" each and the male is .800". The clearance of the male between the 2 females should be **.010 inches.** This all totals up to 1.610 inches). If this dimension is different, the male race rod will not fit properly in the female rod slot. If it is over 1.610 inches, the rod end play will be too low, or may not even go in. The 1.610" dimension should measure the same all of the way around. If it varies, this means the races are not installed parallel to each other and adjustments are necessary.
- 6. To insure a perfectly round race, the races should be honed to fit standard .2500" bearings, after installation. However, if you wish to bypass this honing procedure, .2495" bearings should fit with the proper clearance.



WARNING: All modifications are done at the consumers own risk. *Starklite Cycle* urges that all modifications be done by a qualified mechanic to insure proper installation.

