Installation Instructions for 80591 Rod Bolt Stretch Gauge

- 1. Measure free standing length of all rod bolts and record them in the chart below.
- 2. In order for this gauge to be used effectively, there must be dimples in both ends of the rod bolt to hold the stretch indicator in place. If your rod bolts do not have dimples, they should be chucked up in a lathe and dimpled using a #2 or #3 centering drill. The exact depth of the dimple is not important; it only needs to be deep enough to keep the indicator from slipping off.
- 3. If you are using a box end wrench to tighten the rod bolt, put it on before you install the stretch indicator.
- 4. Place the point of the gauge in one dimple and the point of the thumbscrew in the other, then adjust the thumbscrew so that there is between .050" and .075" of preload on the gauge. Once the preload is set, tighten the jam nut.
- 5. Loosen the indicator thumbscrew and zero indicator dial. For ease of operation there are two movable pointers on the dial which can be preset to the desired stretch.
- 6. Lubricate the rod and bolt threads with 30 weight motor oil, then tighten the rod bolt until it stretches the amount recommended by the rod bolt manufacturer. When you tear the engine down for maintenance, again measure the length of each rod bolt in its free standing length being careful to keep everything in the proper order. If any of the rod bolts have taken a permanent set and have stretched by .001 or longer you should replace the fastener IMMEDIATELY! The stretching is a sure indicator that the bolt has been compromised and taken past its yield point.
- 7. This tool will give you accurate and repeatable results if used correctly. Always be sure:
 - 1.) The rod bolt dimples are both seated and centered between the points of the gauge.
 - 2.) The thumbscrew is adjusted so that there is between .050" and .075" of preload
 - 3.) The jam nut is tightened after preload is set.

ROD BOLT STRETCH CHART			
ROD #1	ROD #2	ROD #3	ROD #4
INSIDE BOLT	INSIDE BOLT	INSIDE BOLT	INSIDE BOLT
IN: OUT:	IN: OUT:	IN: OUT:	IN: OUT:
OUTSIDE BOLT	OUTSIDE BOLT	OUTSIDE BOLT	OUTSIDE BOLT
IN: OUT:	IN: OUT:	IN: OUT:	IN: OUT:
ROD #5	ROD #6	ROD #7	ROD #8
INSIDE BOLT	INSIDE BOLT	INSIDE BOLT	INSIDE BOLT
IN: OUT:	IN: OUT:	IN: OUT:	IN: OUT:
OUTSIDE BOLT	OUTSIDE BOLT	OUTSIDE BOLT	OUTSIDE BOLT
IN: OUT:	IN: OUT:	IN: OUT:	IN: OUT:

