

KNIGHT PROWLER®
“DIRECTIONAL” ROLLER LIFTERS INSTRUCTIONS

1. Using factory HD service manual, install cams, cam support plate, oil pump and related parts.
2. Clean and lubricate lifter bores, lifter roller race and bearings. We use Kendall GT1 20W-50 oil.
3. Install lifters in the case. Install lifter block covers.
4. Adjust rear cylinder.
 - A. Make sure piston is at TDC on compression stroke.
 - B. Install push rod and extend until there is zero lash. Be careful not to go past zero lash. If in doubt, loosen adjustment and extend slowly until there is zero lash.
 - C. Extend push rods to reach .120 to .130 total travel. Tighten push rod locking nut securely.
 - D. Wait until push rod turns freely to make sure lifter has bled down.
5. Repeat steps A, B, C, and D for front cylinder.

BELOW IS CHART OF PUSH ROD TRAVEL PER TURN

24 TEETH = .042 travel	36 TEETH = .028 travel
28 TEETH = .036 travel	40 TEETH = .025 travel
32 TEETH = .031 travel	

Example: 32 TEETH [$.125 \div .031 = \text{Approximately } 4 \text{ turns}$]

- ✓ **ATER ADJUSTING FRONT AND REAR CYLINDERS ALWAYS DO A COMPRESSION CHECK ON THE ENGINE WITH THROTTLE WIDE OPEN.**
- ✓ **USE FACTORY SERVICE MANUAL TO FINISH UP.**

SPECIAL NOTE: You will notice a longer time required to fill lifter body cavity. Slight lifter noise is normal until engine warms up. This increased fill time rate gives you performance like a solid lifter but with “ANTI-PUMP UP” hydraulic operation.