Comment:

SPEED-PRO VALVE LIFTER SELECTION GUIDELINES

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CONVENTIONAL HYDRAULIC LIFTERS

SPEED-PRO hydraulic lifters are precision manufactured to maintain precise valve timing under all operating conditions. A patented constant orifice metering valve provides precise oil metering to the overhead valve train. Longer plungers or pistons provide increased bearing surfaces resulting in longer lifter life. Check valves are lightweight, flat discs allowing higher speeds and more uniform operation than competitive lifters.

The lifters listed below are intended for use with both O.E.M. and aftermarket stock camshafts. Also recommended for use with hydraulic performance camshafts with R.P.M. limitations of between 5500 and 6000 R.P.M.

Conventional hydraulic lifters can be identified by the prefix "HT". Listed below are the conventional hydraulic lifters that are shown in the alphabetical section of this catalog. Additional listings can be found in the master engine parts catalog.

HI-REV HYDRAULIC LIFTERS

SPEED-PRO Hi-Rev (commonly called anti pump up) hydraulic lifters feature the same quality material and construction as the conventional hydraulic lifter. A special high strength, steel retainer is used in place of the normal spring clip to precisely limit the travel of the plunger during operation. With plunger travel limited, adjustable rocker arms must be used to effect a lash adjustment of .000/.002". This then allows the valve train to perform more like a mechanical system. thus allowing high R.P.M. operation. Because of the high R.P.M. capability and the elimination of frequent lash adjustments (which are required with mechanical lifters), Hi-Rev hydraulic lifters are the best choice for all-around performance engines.

Hi-Rev hydraulic lifters can be identified by the prefix Hr and the suffix "S

LASH ADJUSTMENT DIRECTIONS FOR HI-REV HYDRAULIC LIFTERS

These racing hydraulic lifters are designed to eliminate so-called lifter "pump-up" at high R.P.M. In order for the lifters to perform this function the valve lash is critical and must be performed as follows:

1. The preliminary lash adjustment on engine buildup requires the lifter to be on the base circle of the camshaft (valve closed position) and then to just remove all rocker arm to push rod clearance. This can be determined by rotating and/or moving the push rod while tightening the adjusting nut. When resistance to turning or movement is felt, the lash is satisfactory for engine start-up.

2. After the engine is running and has been warmed up, the final lash adjustment can be made, preferably at hot idle. Set the valve lash at .002". If obvious valve click is heard at this setting, tighten down adjusting nut until click just disappears.

3. For Pontiac Engines there is a washer and self-locking nut included with these lifters. They must be used to perform the above adjustment. If washer is included, install the washer and then the nut in the place of the stock nut. DO NOT use these washers and nuts on Oldsmobile Engines.

MECHANICAL LIFTERS

SPEED-PRO mechanical (fixed) lifters are manufactured from high quality hardenable iron alloys to withstand design stresses and normal engine contamination. Material and design excellence provide a lifter that is lightweight yet exhibits superior strength. A patented oil metering system limits the amount of oil that reaches the overhead. This keeps as much oil in the crankcase as possible while still providing adequate lubrication to the overhead. Heat treated push rod seats are used to eliminate wear from push rods in racing engines with high valve spring pressures.

SPEED-PRO mechanical lifters are intended for use with cast iron camshaft billets only and can be identified by the prefix "AT".

HYDRAULIC ROLLER LIFTERS

SPEED-PRO'S hydraulic roller lifter provides significant friction reduction while greatly increasing horsepower and fuel economy at the same time. Valves open more quickly from a fully closed to a fully opened position with a hydraulic roller lifter when compared to a conventional flat lifter This then provides for enhanced performance. quieter engine operation, more horsepower and still allows for proper vacuum and idling capabilities.