

3.2 Best & Lloyd Pumps

EARLY MODELS - NON-MECHANICAL OIL FEED.

Veteran and early Vintage Scott engines were fitted with manually adjusted drip-feed lubricators. Veterans had Carmael-type spring-loaded pumps with needle-valve regulators; some machines had Best & Lloyd spring-loaded pumps with visual regulators, and later models used visual regulators only - relying on atmospheric/crankcase pressure difference to force oil through them.

The illustration is a cross-section of the Best and Lloyd plunger pump fitted with one regulator and sight feed of the type used in tandem on Scott oil tanks.

A is the pump barrel whose lower end is below oil, and open but for a gauze filter. B is the plunger pushed upwards by spring C. D is the plunger rod, J the tapered plug, K the graduated handwheel and N a spring catch for retaining K in any given position. E is a cup leather and O is a ball valve at the barrel top. K is turned to open valve, and D pushed down and released. Spring C pushes plunger B upwards - the air above it being expelled, and a charge of oil drawn in beneath it. The plunger is again pushed down, oil flowing past cup leather E to upper side of plunger B. Spring pressure C forces oil past valve O to valve J, which meters oil as required.

In use, the setting will vary greatly with oil viscosity, temperature, atmospheric pressure, etc., and the greatest disadvantage of the system is the lack of co-ordination between oil supply and engine revolutions. (i.e., oil feed at 400 rpm. is practically the same at 4,000 rpm.) It calls for continual adjustment according to engine requirements. (And, of course, the feeds must be shut off on stopping the engine - everyone forgets this at least once !!)

The most reliable guide to correct lubrication is the exhaust 'haze'. As long as smoke is visible immediately after takeaway, and at each gear change, the engine is receiving sufficient oil for normal running. The regulating valves must be opened for increased or sustained speeds, and restricted for town and traffic riding.

A useful modification sometimes carried out is the removal of the large glass sight-feeds and regulators, and their replacement by small needle-valve chain-oilers. Clear plastic tubing is used for the initial connection, providing an excellent 'window'. It is advisable to retain copper piping nearer the mains connections, where heat and chain movement can be unkind to the plastic !

As there are no moving parts in the equipment, replacements beyond an occasional washer or packing are seldom necessary. Maintenance is simply a matter of keeping joints and unions clean, tight and leak-free.

The makers of both plunger-pumps and regulator/sight feeds were Best and Lloyd, Ltd, whose assets were acquired by Benton and Stone Ltd. (The 'Enots' People). Their address is:

Benton and Stone Ltd.,
~~Bracebridge Street,~~
ASTON Brook ST. Birmingham, 6.

Source: S.O.C. Service and Information Sheets

