

## Vehicle lubrication system

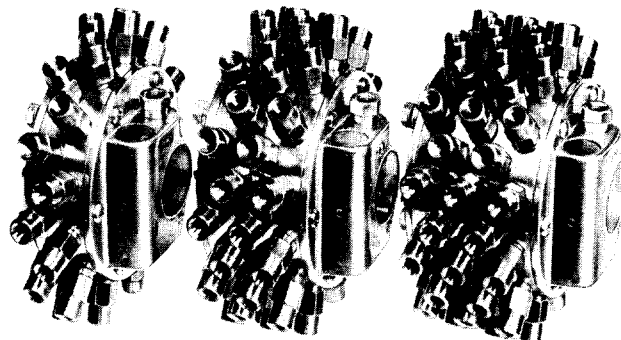
An updated version of Tecalemit's Airdromic vehicle lubrication system has just been developed. Airdromic units comprise four major units — reservoir, pump assembly, safety valve, and air control unit — plus the lubricant distribution piping.

While the new Mark 3 system retains the simplicity of its predecessor, design changes have been made to the pump mechanism which can now be housed in a smaller case to facilitate fitting to the chassis of the vehicle.

The air control unit which is driven from the vehicle gearbox, has been designed to incorporate a standard air proportioning unit, available with a full range of end fittings for gearboxes of all British manufactured vehicles. There are separate ranges for Continental and American vehicles as well as cable driven versions for special vehicle applications.

During vehicle movement air pulses from the unit are transmitted to the air cylinder of the pump mechanism. Each pulse causes partial rotation of the pump camshaft through a built-in roller clutch. Each self contained pumping unit within the pump mechanism is then in turn activated by the cams to deliver a metered shot of oil to the appropriate bearing via a distribution system of tough nylon tubing.

The system offers three sizes of pump assemblies to cater for 0-24, 25-48, 49-60 pumping units (Fig 10). Pumping units are available in four sizes, calibrated to cover a range from 0.01 to 0.040 cm<sup>3</sup> per stroke. These units are interchangeable permitting, if necessary, variation to the quantity of oil supplied to any particular bearing. For each type, pressure output is more than adequate to ensure effective lubrication of even the tightest bearing.



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To protect the system against foreign matter an integral microfine filter is fitted to the reservoir.

Maintenance consists of refilling the oil reservoir as part of the normal servicing routine, periodic checking of distribution lines, and occasional replacement of the reservoir filter. The air control unit and safety valve are 'sealed for life' assemblies and require no attention in use.

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