Vehicle Engineering Series



MORRIS COOPER 5

Tony Cripps

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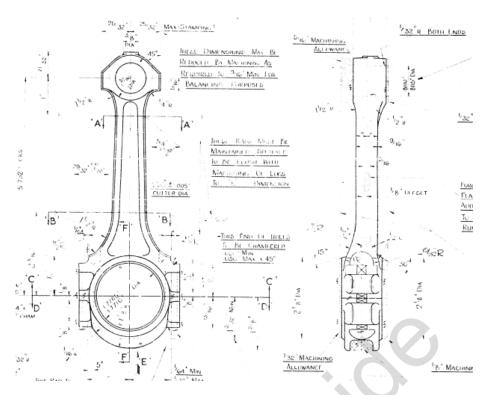


Fig. 2.3.1 Connecting rod AEG520.

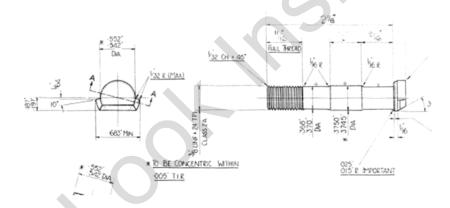


Fig. 2.3.2 Connecting rod bolt AEG519.

The big end bearings 8G2399 (AYG234 YDO6/2) are the same as those used on the 1098cc engine.

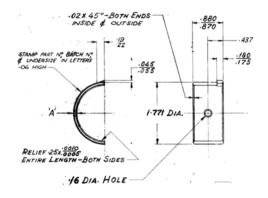


Fig. 2.3.3 Conrod bearing YDO6/2 AYG234.

There is a double coil spring 2A18, plain washer 6K555 (1"x37/64"x0.080") and split pin at the end of the rocker shaft. The plain washer has an outside diameter of 59/64" and an inside diameter of 23/32".

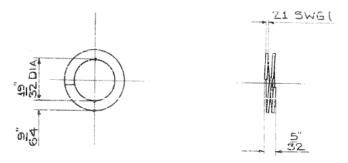


Fig. 2.8.7 Double coil spring for rocker shaft 2A18.

12G1221 rocker arms are EN12 forged steel with induction hardened faces where they bear against the valve stems. The plug 5C2436 in the oil way is welded into position. The split bush 2A21 is reamed to 0.555'' - 0.5585'' after pressing into the arm. The joint is positioned at the top of the bore. The 9/32" BSF thread for the tappet clearance adjustment is required to be a close fit thread.

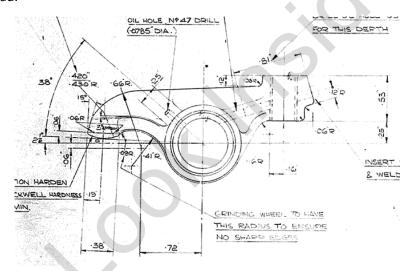


Fig. 2.8.8 Forged steel rocker arm 12G1221.

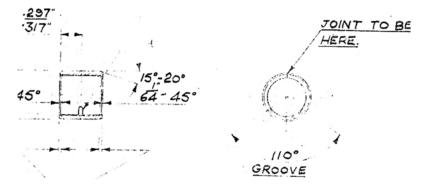


Fig. 2.8.9 Bush for forged steel rocker arm 2A21.



Fig. 2.10.5 *Profile of plain side cover (YDO6) 12A1386.*

Front side cover 12A1212 for YDO6 has an oil separator fitted to which is attached a closed circuit breather valve which is then connected to the carburetter.

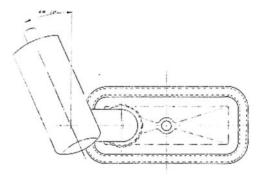


Fig. 2.10.6 Side cover (front) 12A1212.

2.11 Oil Pump

Oil pump AEG410 is driven by a pin and $\frac{1}{2}$ " diameter slotted spindle at the end of the camshaft. It has three mounting holes for fitment to the cylinder block.

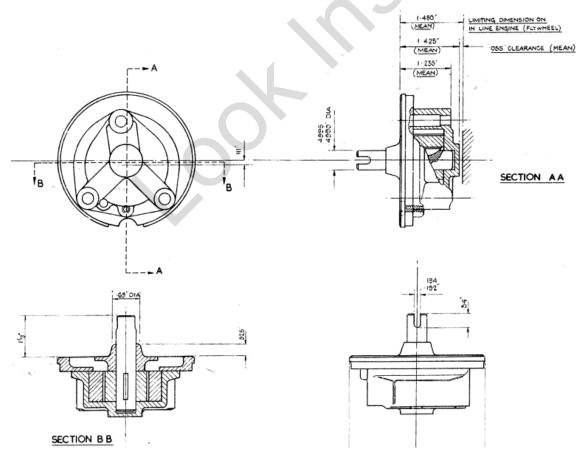


Fig. 2.11.1 Oil Pump AEG410.

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There are several styles of multi-branch exhaust manifolds to be found in the YDO6 range. Original fitment is 12G6715 where three pipes join into one outlet $1 \frac{3}{4}$ " diameter.

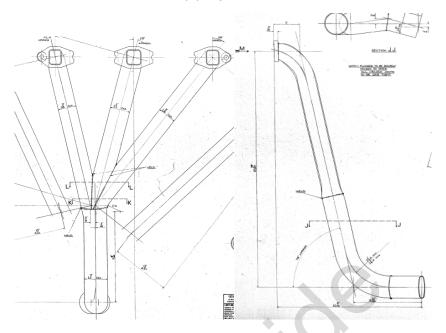
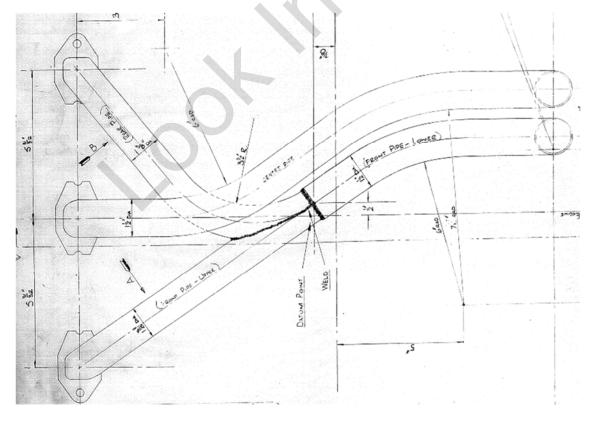


Fig. 2.18.11 Exhaust manifold 12G6715.

Also specified is AEG375 which has a long centre branch leading to a joiner with the two outer pipes which have previously joined.



The fuel outlet pipe is silver soldered to the tank and a press-on nylon mesh filter ARA1200 is fitted at the end of the pipe.

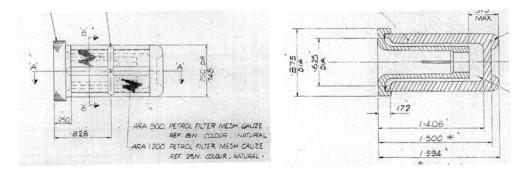


Fig. 5.1.6 Fuel tank nylon filter ARA1200.

For both tanks, the silver-soldered filler necks are covered by a stainless steel non-vented cap AYA5074 (locking cap optional). The fuel tank filler necks are sealed to the body by specially shaped grommets 14A7057.

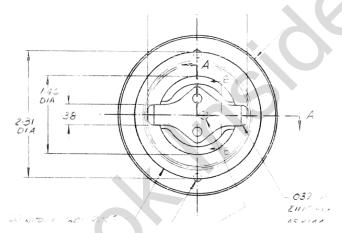


Fig. 5.1.7 Fuel tank cap AYA5074.

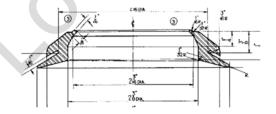


Fig. 5.1.8 Fuel filler neck grommet 14A7057.

A 3/16'' ID, %'' OD nylon vent hose 27H2985 2'7" long is fitted to the top of each tank and exits through the boot floor via a grommet. An interior nylon filter is attached to each outlet pipe which is silver soldered to the tank structure. The securing straps are lined with a Salkoid packing strip to avoid chafing.

The left hand fuel tank AYA2137 incorporates the Smiths Quick Fix ring type ring connector AYA2125 with Lucar spade connectors. These replaced the earlier sender unit secured by six No.8 32 TPI UNC pan head screws and copper washers with ring terminals.

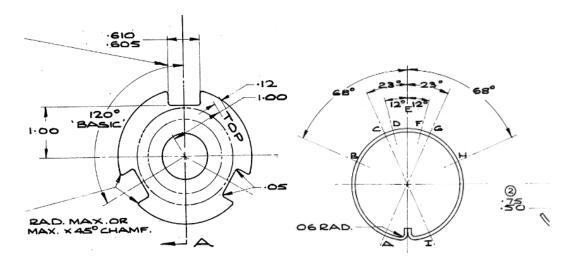


Fig. 6.2.1.6 Thrust plate AYG265 and circlip AYG266.

The clutch withdrawal lever 22A2204 has an induction hardened and polished ball end of 0.430" diameter.

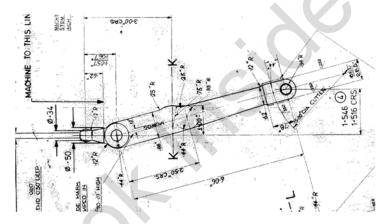


Fig. 6.2.1.7 Clutch withdrawal lever 22A2204.

Overthrow is limited by a threaded throw out stop 22A427 and lock nut.

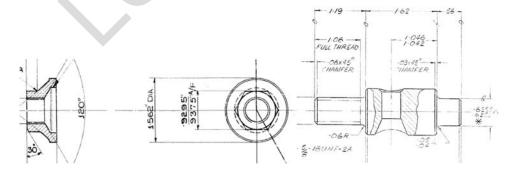


Fig. 6.2.1.8 Throw out stop 22A427 and plunger AYG97.

Case hardened plunger AYG97 bears against the release bearing.

6.2.2 Clutch Master and Slave Cylinders

The clutch master cylinder 21A2063/AAU4969 has a 0.75 bore diameter. The centre point of the filler hole in the top face of the reservoir is set at an angle of 28° to a line drawn through

The thrust washers 2A7324 and sealing rings 2A7327 are also used on the upper suspension arms in the front suspension.

The radius arms connect to the suspension struts 21A1805 by knuckle ends 21A1163, ball socket 21A423 and dust cover 21A425.

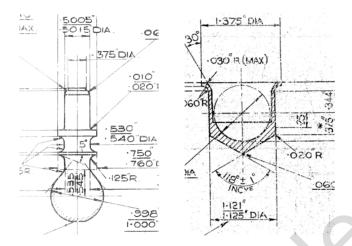


Fig. 8.7 Knuckle joint 21A1163 and ball socket 21A423.

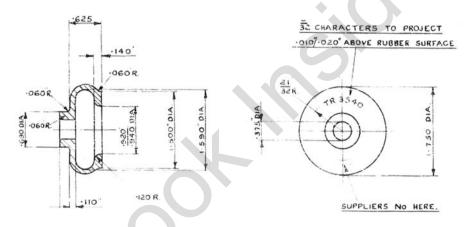


Fig. 8.8 Dust cover 21A425.

The rear strut 21A1805 of length 9.720" (orange identifier) connects the ball socket to the displacer unit.

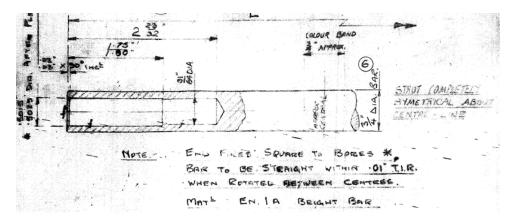


Fig. 8.9 Rear strut 21A1805 (21A1497).

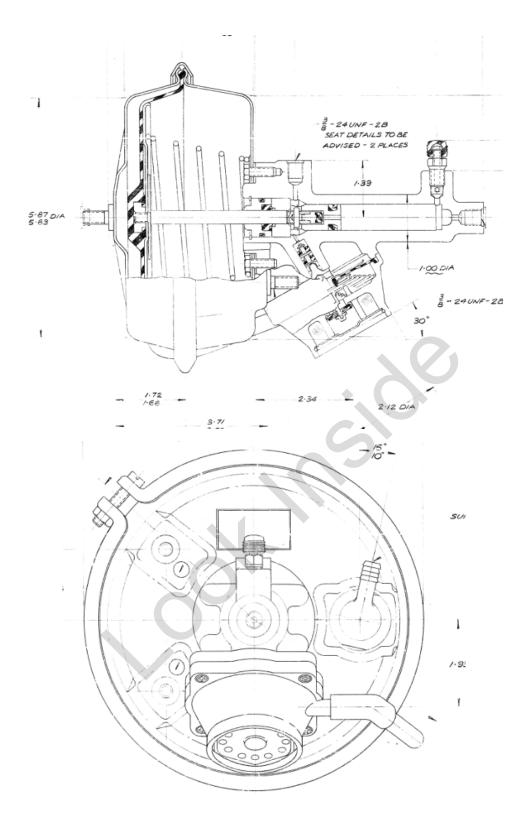


Fig. 11.1.5 Vacuum servo unit VH44 111493 (AYG5244)

Vacuum is supplied via reinforced hose 13H5017 0.45" ID 0.8" OD and 24" long, to inlet manifold adaptor AYG232 for the Lockheed unit and AYK5419 for the VH44 unit.

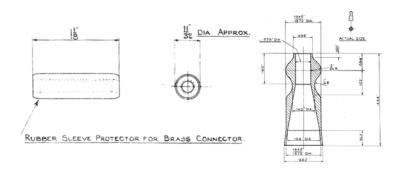


Fig. 12.10.9 Snap connector socket 2H3406 and plug 2H2704.

	ALTERNATOR
	 POWER PLUG
	ALTERNATOR FIELD PLUG
(000 (000 (000	MULTI-CIRCUIT CONNECTOR MALE PLUG.
(COO)	MULTI-CIRCUIT CONNECTOR FEMALE PLUG
B F .	 ALTERNATOR - REGULATOR CONNECTOR.
· []	DEAD ENC JERMINAL
	EMAIL ALTERNATOR PLUG

Table 12.10.10 Connector types AYG9121.

The main harness and washer tubes pass through special grommet AYA9026 in the parcel shelf underneath the instrument binnacle.

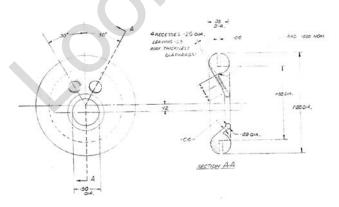


Fig. 12.10.11 Grommet AYA9026.

The 7.50" long engine earth strap AYK9137 is connected at the flywheel housing to the flitch panel and is constructed of copper braid 256/30.

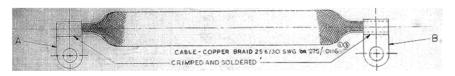


Fig. 12.10.12 Earth strap AYG9137 (AYG9016)