Vehicle Engineering Series

Leyland MOKE

1973 – 1982

Including Moke Californian

Tony Cripps

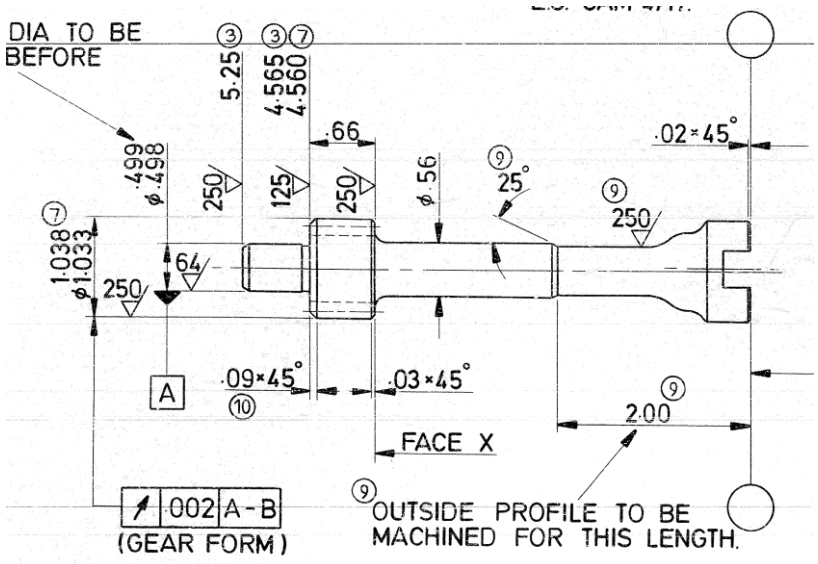


Fig. 2.7.3 *Distributor drive spindle 12G3560.*

2.8 Cylinder Head, and Valves

2.8.1 Cylinder Head

Cylinder head 28G193 is specified for 1098cc, this having a height of 2 ¾" +0 -1/64", a figure which may be of use in determining how much a cylinder head has been previously machined. The combustion chamber volume is 26.1cc.

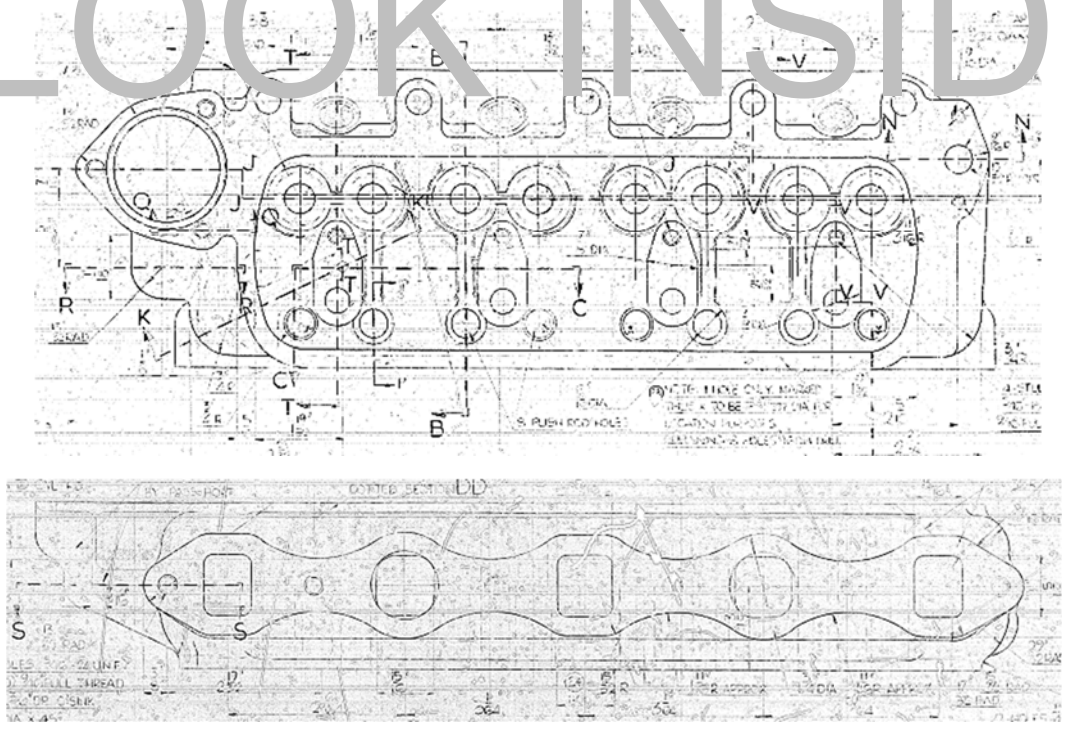


Fig. 2.8.1.1 *Cylinder head 28G193 (12G202).*

Cylinder head 12A1455[10] is specified for 998cc. The volume of the combustion chamber is 24.5cc. This head is a superficially refined version of the A series head which was first

[10] CAM4004 for ADR27A engine with Exhaust Port Air Injection (EPAI)

The inlet port OD (excluding lip) is 1.12".

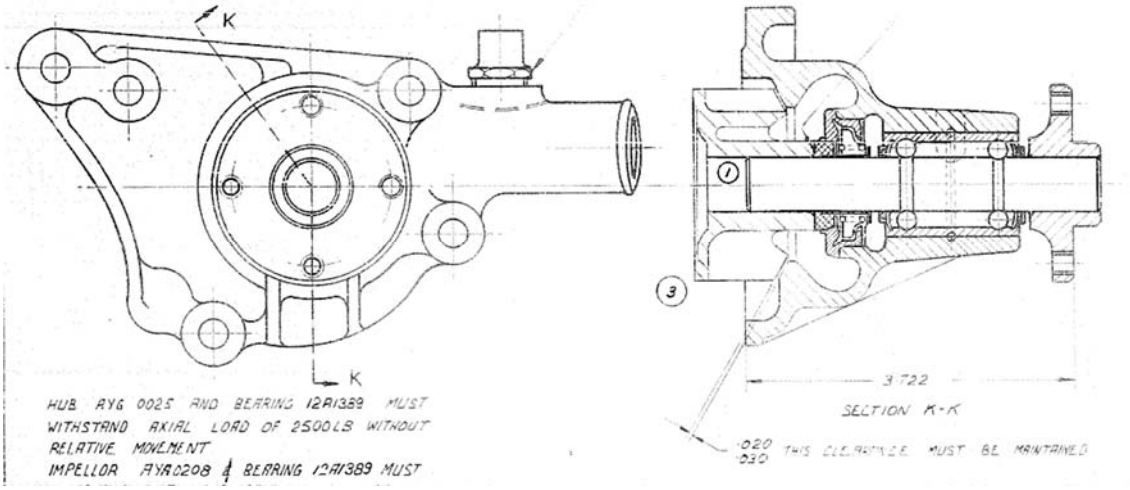


Fig. 2.14.1.1 *Water pump assembly AYA219*.

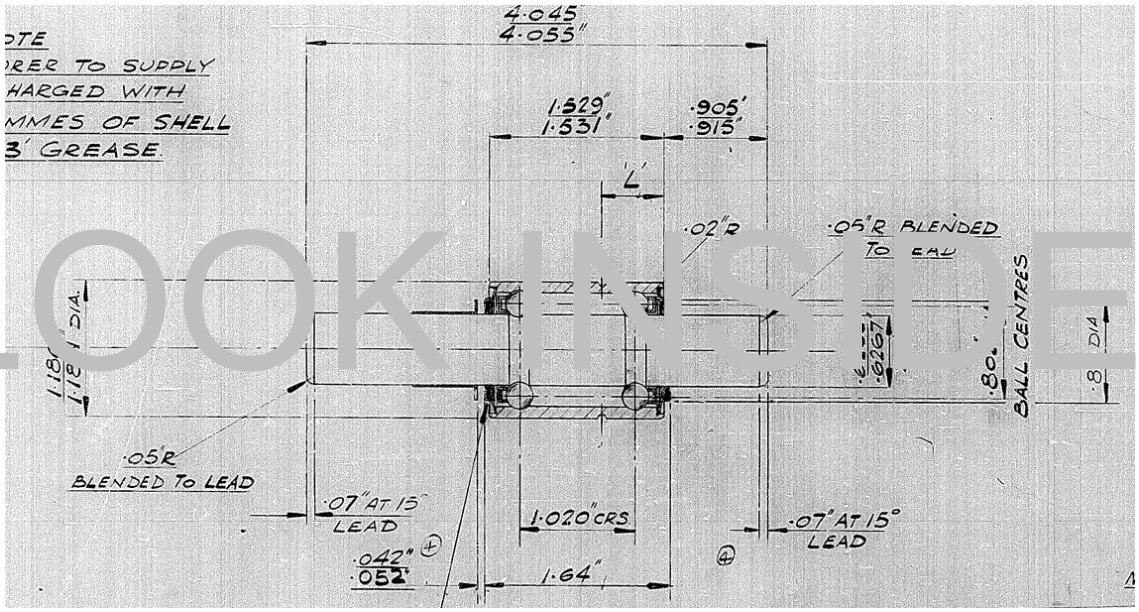


Fig. 2.14.1.2 *Water pump bearing 12A1389*.

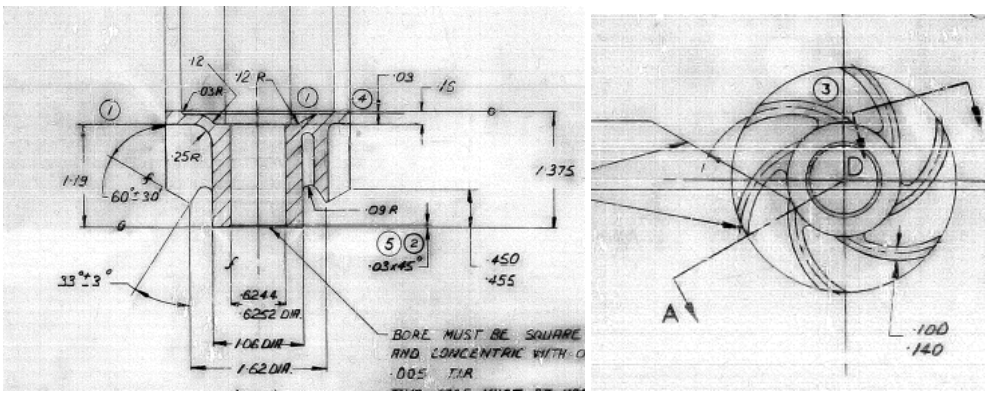


Fig. 2.14.1.3 *Water pump vane AYA208*.

The water pump seal 13H772 has a steel backing.

For later 998cc, there are three different manifolds specified: 12G3279[28], 12G1540[29] and CAM4539[30]. For 1275cc, manifold CAM4510 is specified.

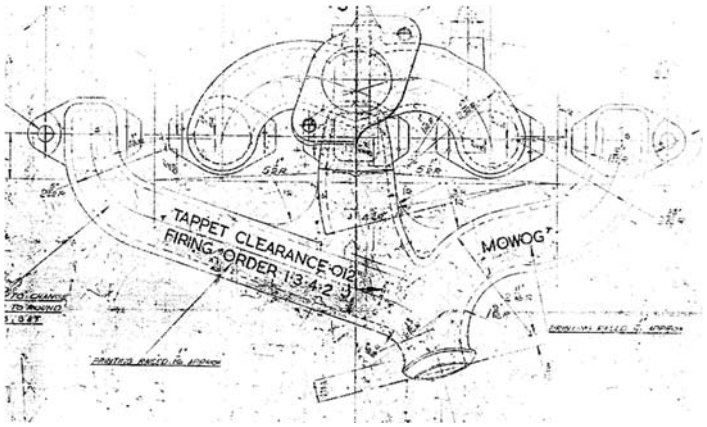


Fig. 2.17.2 *Inlet and exhaust manifold 998cc 12G3279.*

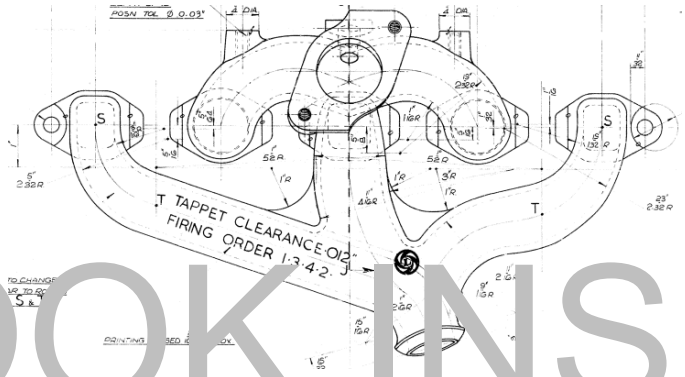


Fig. 2.17.3 *Inlet and exhaust manifold 998cc 12G1540*

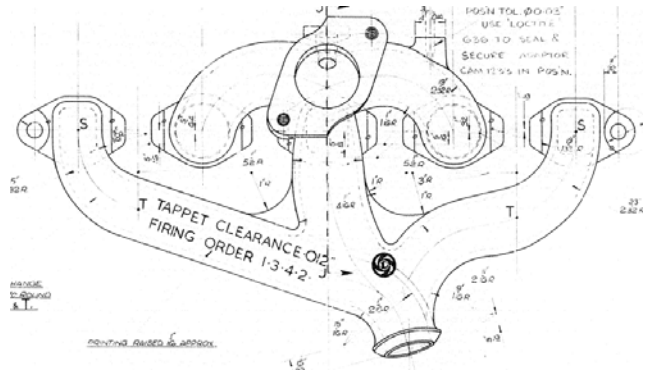


Fig. 2.17.4 *Inlet and exhaust manifold 998cc CAM4539*

CAM4539 and CAM4510 have provision for a gulp valve adaptor 12H2958 and vacuum tube sensor CAM1233.

[28] 12G3279 also specified for 1275cc 12H706 on.

[29] 998cc ADR27A.

[30] 99H905AJ 101 onwards.

4.2 998cc and 1275cc ADR27A

For ADR27A fitment[45], the position of the radiator inlet (top) is repositioned to the rear to allow clearance for the air pump at the front. This is accompanied by a change of upper support bracket, lower cowl, radiator hoses and thermostat housing. An expansion tank is also fitted.

In July 1976, radiator AYK2892 is fitted with repositioned outlet and provision for expansion tank connection.

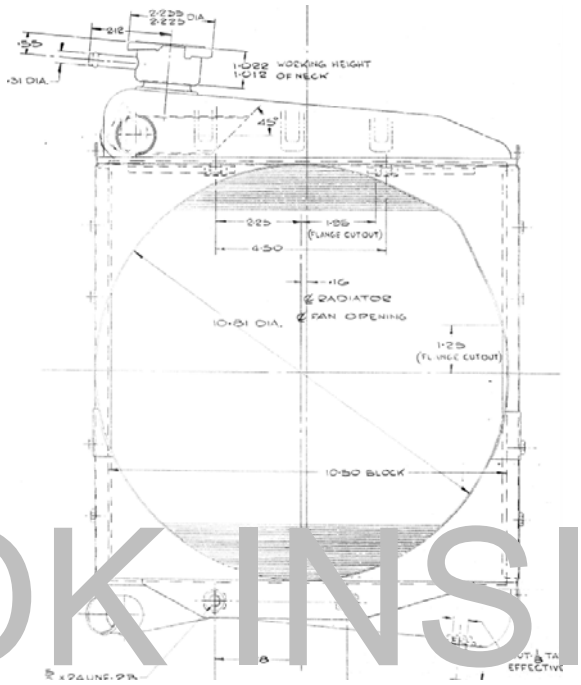


Fig. 4.2.1 Radiator assembly AYK2892.

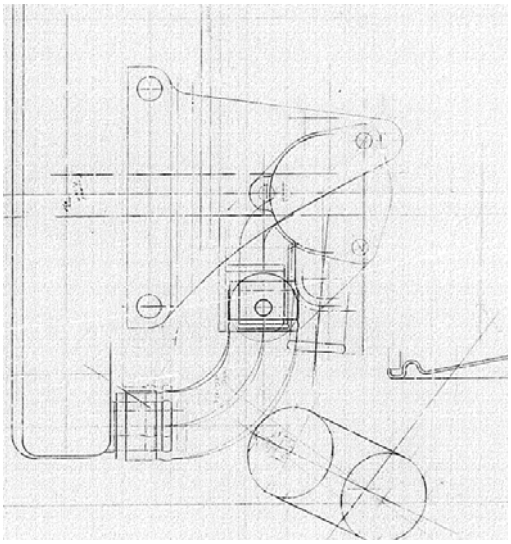


Fig. 4.2.2 EPAI engine and radiator EYA1231.

Radiator AYA2243 is then specified for 998cc and AYG2386 for 1275cc. 998cc radiator AYA2243 has 1.6” thick core with 16 fins per inch with fin thickness 0.0025”. AYG2386 has an

[45] PUB27 specifies 018XOB1M09 17680 onwards but TDY32 shows EPAI engine fitted at 5/76.

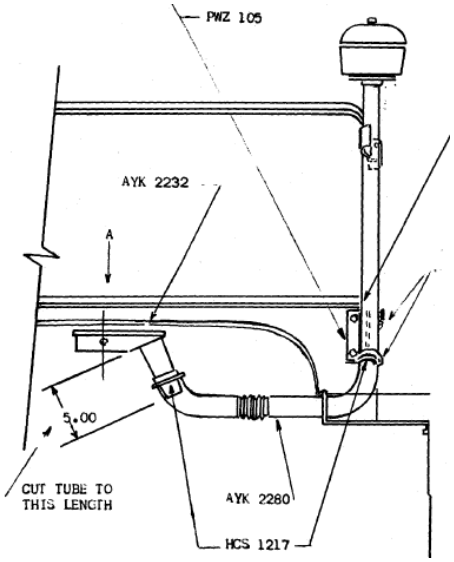
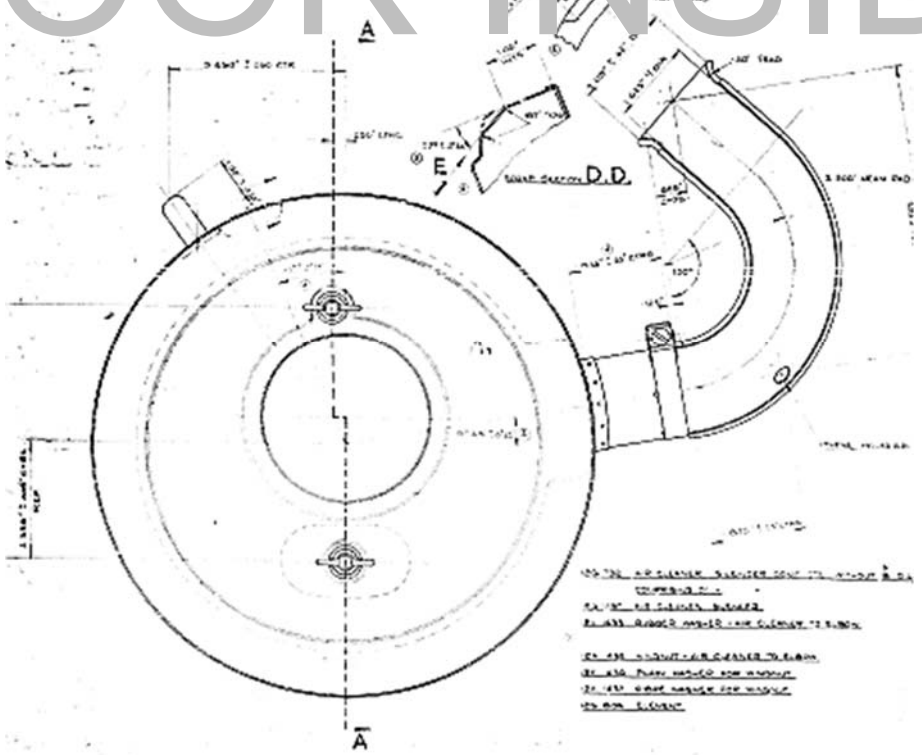


Fig. 5.4.1.9 *Air cleaner stack arrangement C16/69*.

5.4.2 998cc and 1275cc

The air cleaner assembly 8G639 for 998cc is initially not fitted with air temperature control. This air cleaner assembly uses wing nuts 12A1435, washer 12A1437 and a larger diameter element GFE1008.



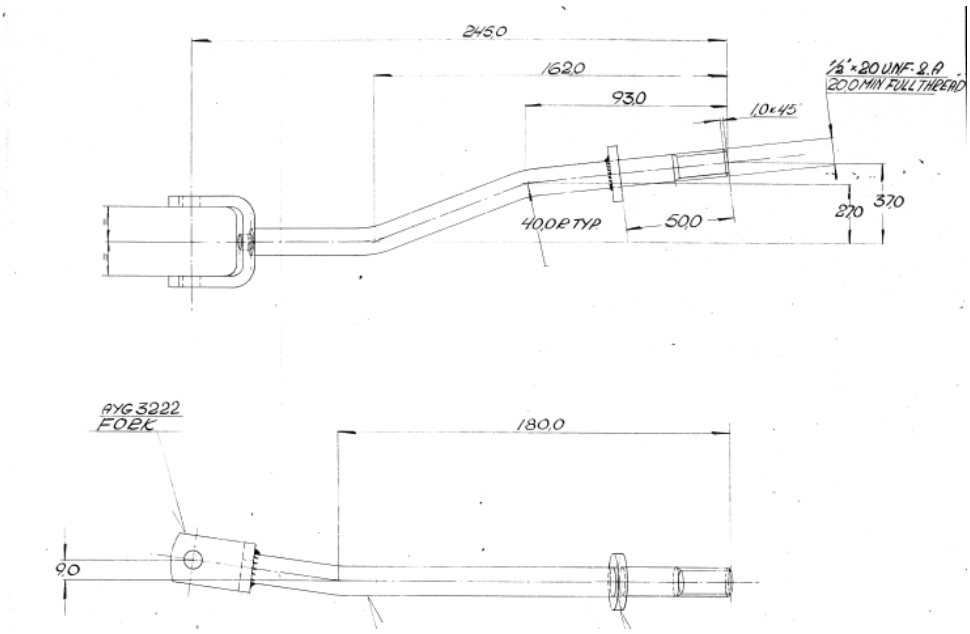


Fig. 7.1.4.2.10 *Steady shaft AYE2059*.

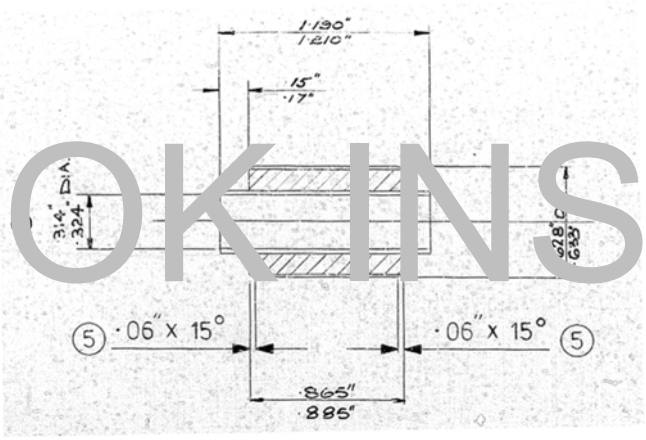


Fig. 7.1.4.2.11 *Metalastik bush 13H7286*.

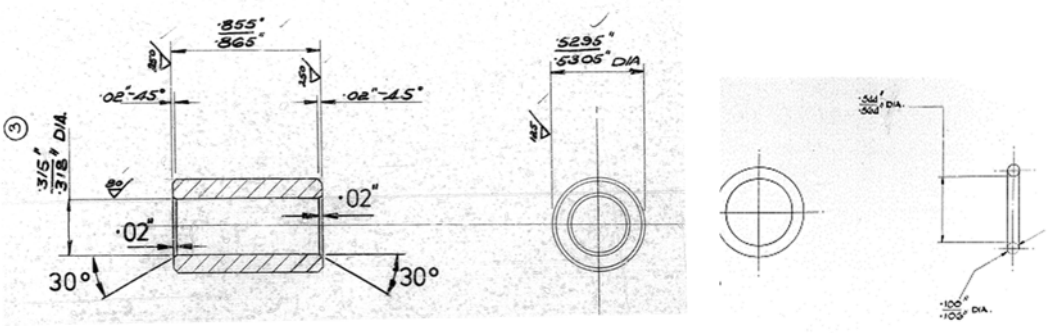


Fig. 7.1.4.2.12 *Detent sleeve 22G1870* and O ring 22G1417

Detent spring 22G2083 free length 0.950”, OD 0.295-0.305”, 9.5 working coils, 0.648” fitted length at 15lb.

Steady bolt BH605161 5/16 UNF x 2” long.

24") is increased by approximately 10mm from previous although the tie rod length remains the same at 7". Rack diameter is 0.8402". The rack diameter is specified as 21.4mm (27/32").

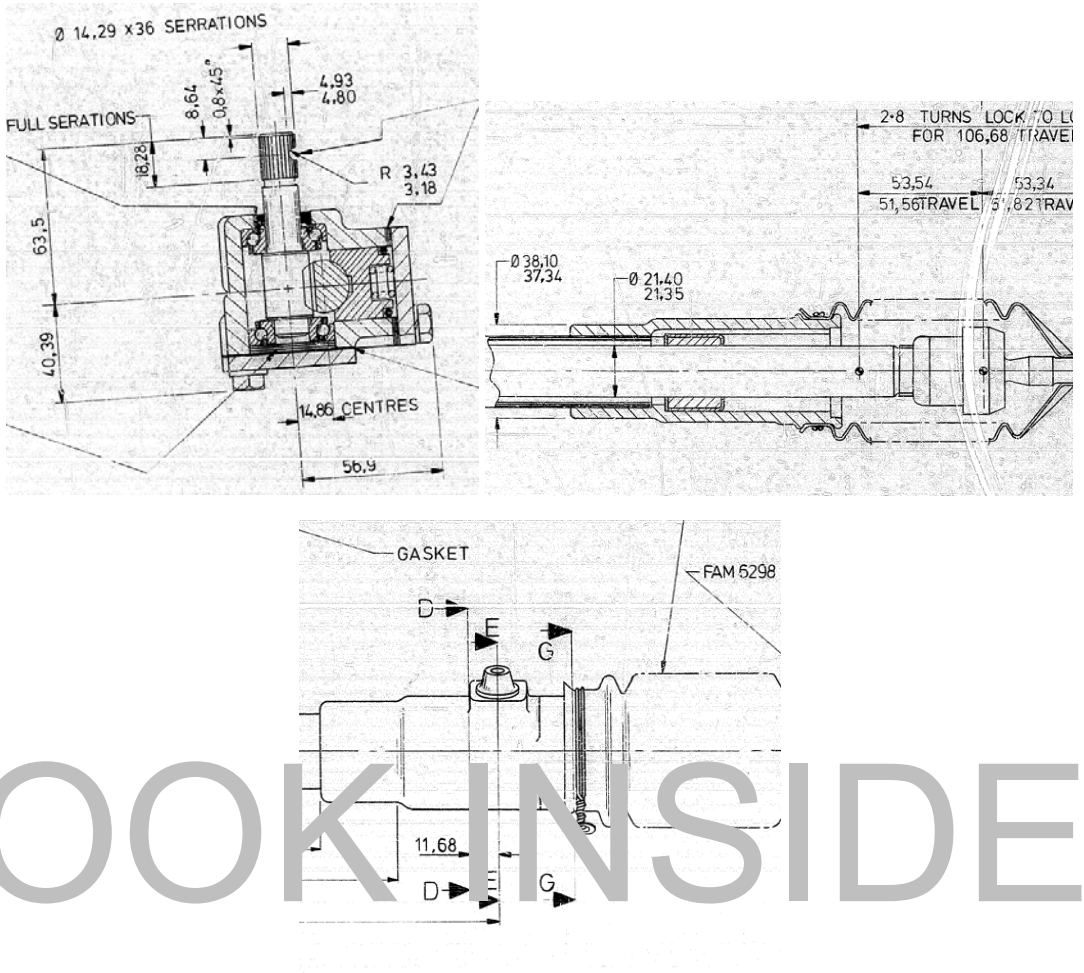


Fig. 9.1.4 FAM7306

For the unmodified rack, the steering is 2.8 turns lock to lock for 106.7mm of travel compared to 2.31 turns and approximately 90 mm of previous.

For Australian Moke use, spacer rings AYE6000 were introduced at each end of the rack to limit the total travel back to approximately 90mm as in previous racks. These spacer rings are tack welded onto the ball seating at each end of the rack. This modification generates a new Australian Part No, AYE6001 for the rack assembly for use with Moke.

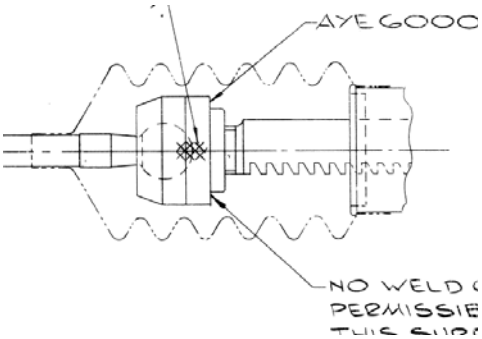


Fig. 9.1.5 AYE6001 Australian rework to FAM7306.

10.6 Front Hub Driving Flange

For 1098cc and 998cc, the front hub driving flange AYA4024 is splined to take the drive shafts and carries the road wheel on four studs on a 4” PCD. The splines are 19T on a base circle diameter 0.7233”.

There are two ¼ UNF threaded holes provided for retention of the brake drum.

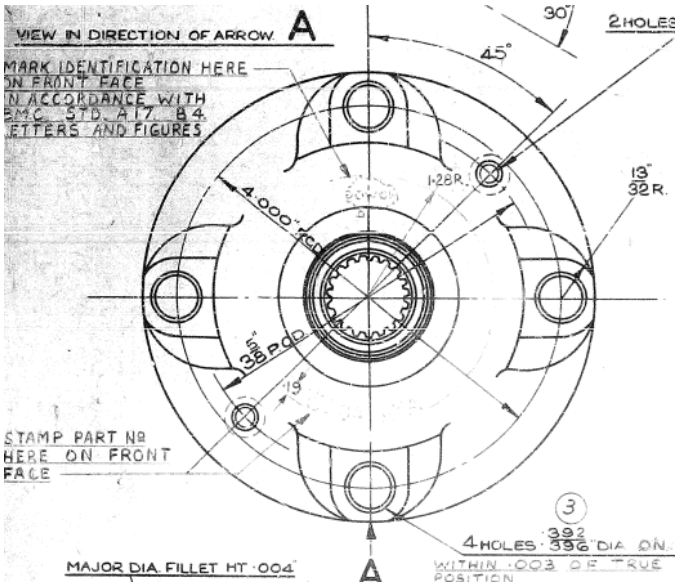


Fig. 10.6.1 *Driving flange AYA4024.*

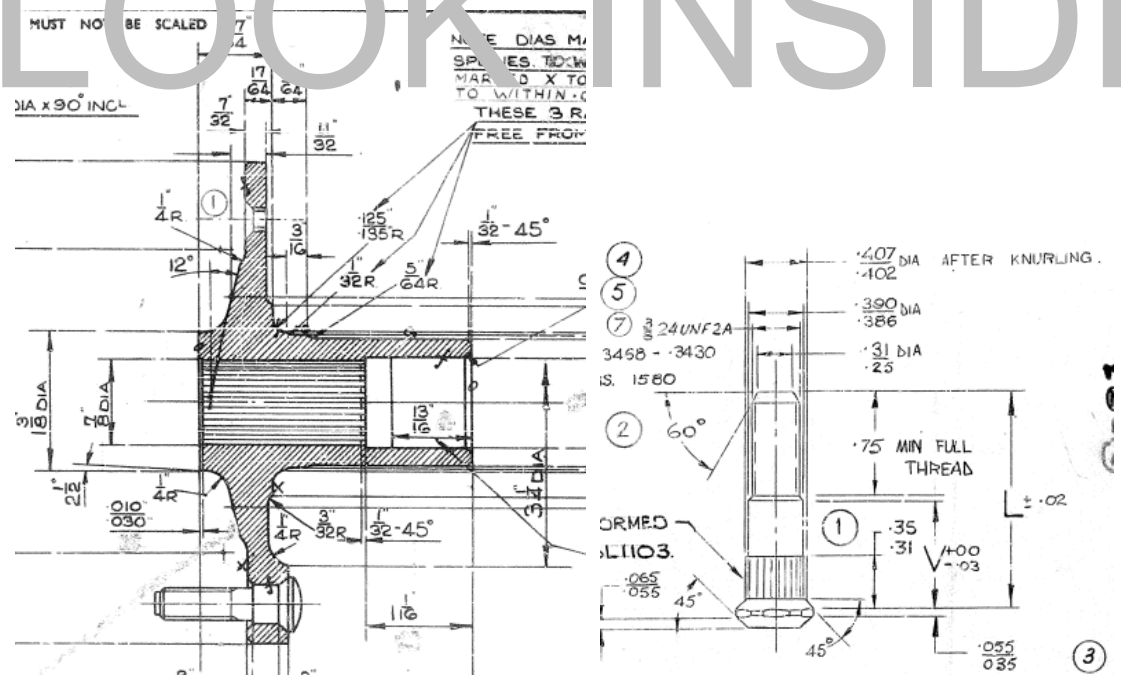


Fig. 10.6.2 *Front driving flange AYA4024 and stud AYK4147 (AYH7087).*

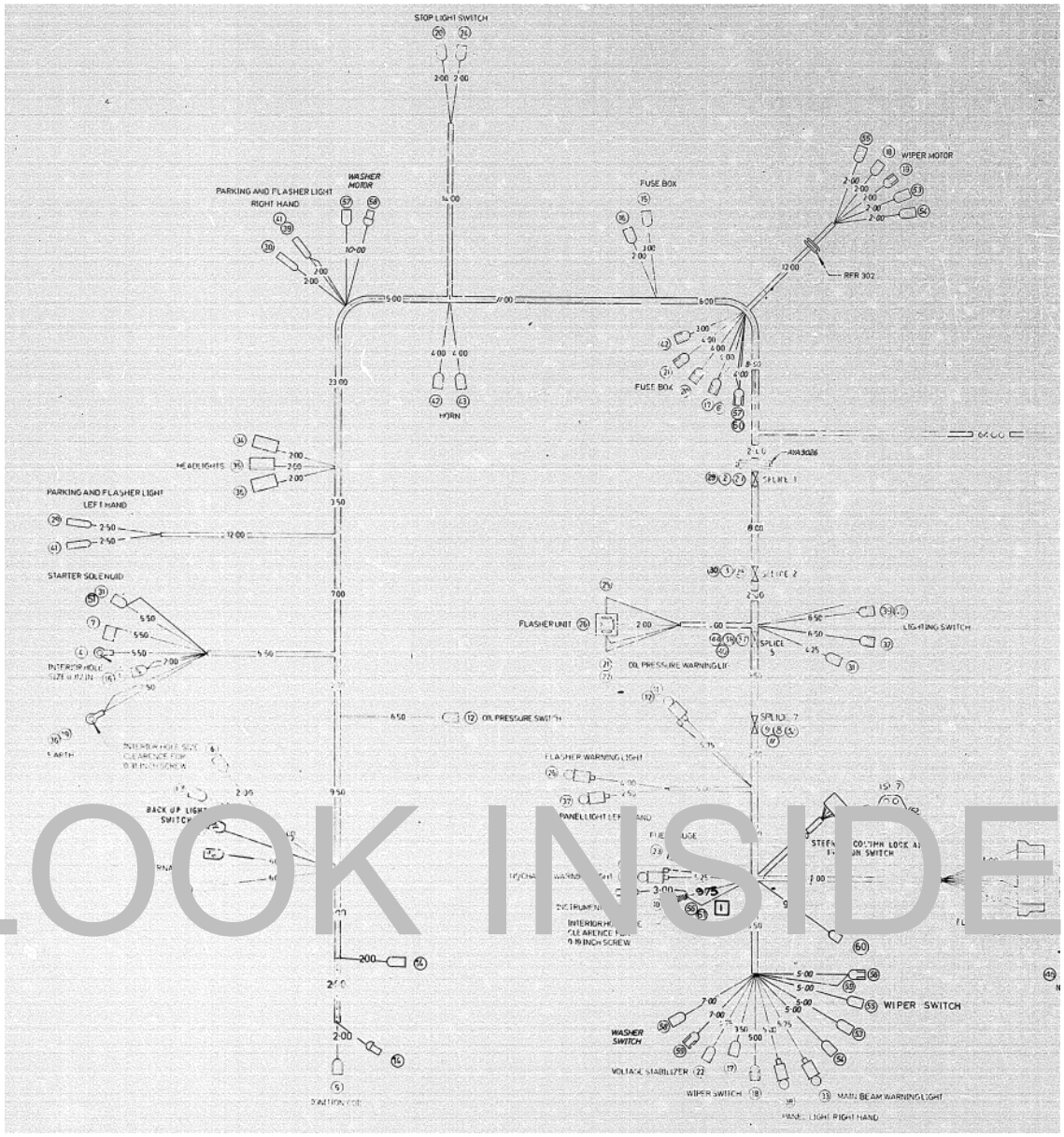


Fig. 12.9.6 *Main harness AYK9820*.

	Service	Colour	Strands
1	Starter Solenoid to Ignition Switch	Brown	44
2	Splice 1 to LH Rear Flasher	Green/Red	9
3	Splice 2 to RH Rear Flasher	Green/White	9
4	Starter Solenoid to Alternator	Brown	44
5	Alternator to No Charge Warning Light	Brown/Yellow	9
6	Fuse Box to Backup Lamp Switch	Green	9
7	Ignition Switch to Starter Solenoid	White/Red	9
8	Splice 7 to No Charge Warning Lamp	White	9
9	Splice 7 to Ignition Coil	White	9
10	Flasher Junction to Earth	Black	14
11	Splice 7 to Oil Pressure Warning Lamp	White	9
12	Oil Pressure Warning Lamp to Oil Pressure Switch	White/Brown	9
13	Backup Lamp Switch	Green/Brown	9
14	Distributor to Coil	White/Black	9
15	Ignition Switch to Fuse A3	White	28
16	Starter Solenoid to Fuse A1	Brown	14
17	Fuse A4 to Wiper Switch	Green	14

16.6.4 Hardtop Canopy

From 1977, a hardtop canopy HYK4137 with hinged doors and glass windows, and a rear hatch was available as an option.

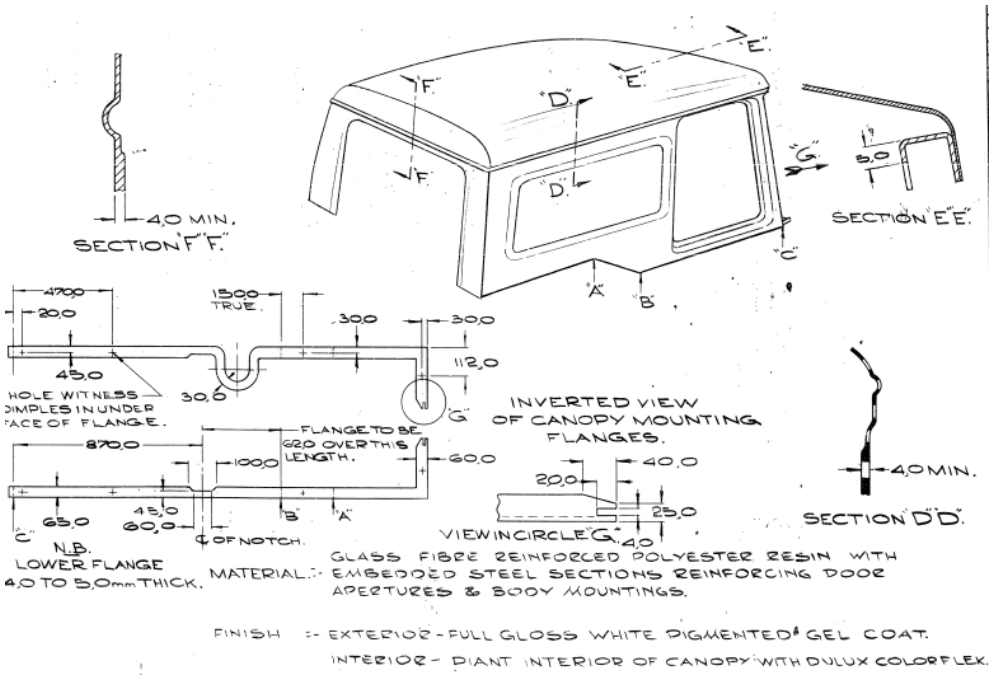


Fig. 16.6.4.1 *Hardtop canopy HYK4137*

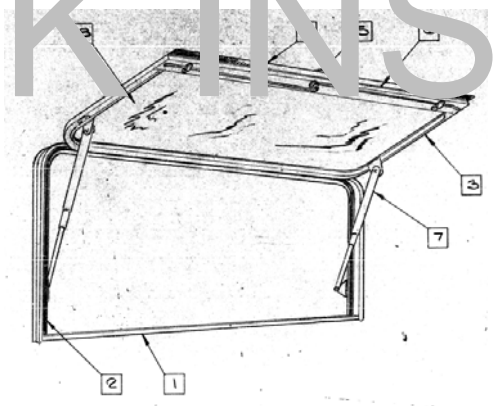


Fig. 16.6.4.2 *Rear hatch HYK4138.*

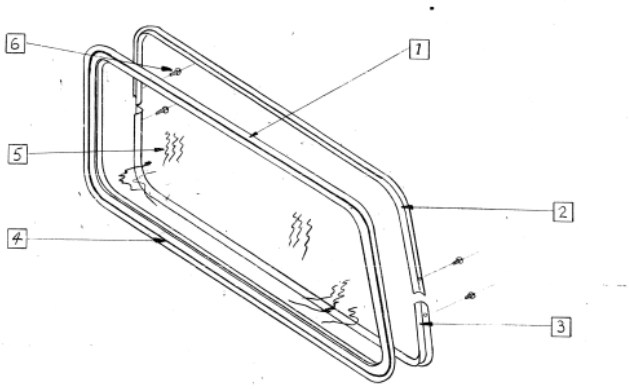


Fig. 16.6.4.3 *Rear side window HYK4147.*