

Vehicle Engineering Series



**LEYLAND**

LOOK  SIDE

Tony Cripps

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### 2.1.7 Cylinder head

The cast iron cylinder head AYB453 features an overhead camshaft.

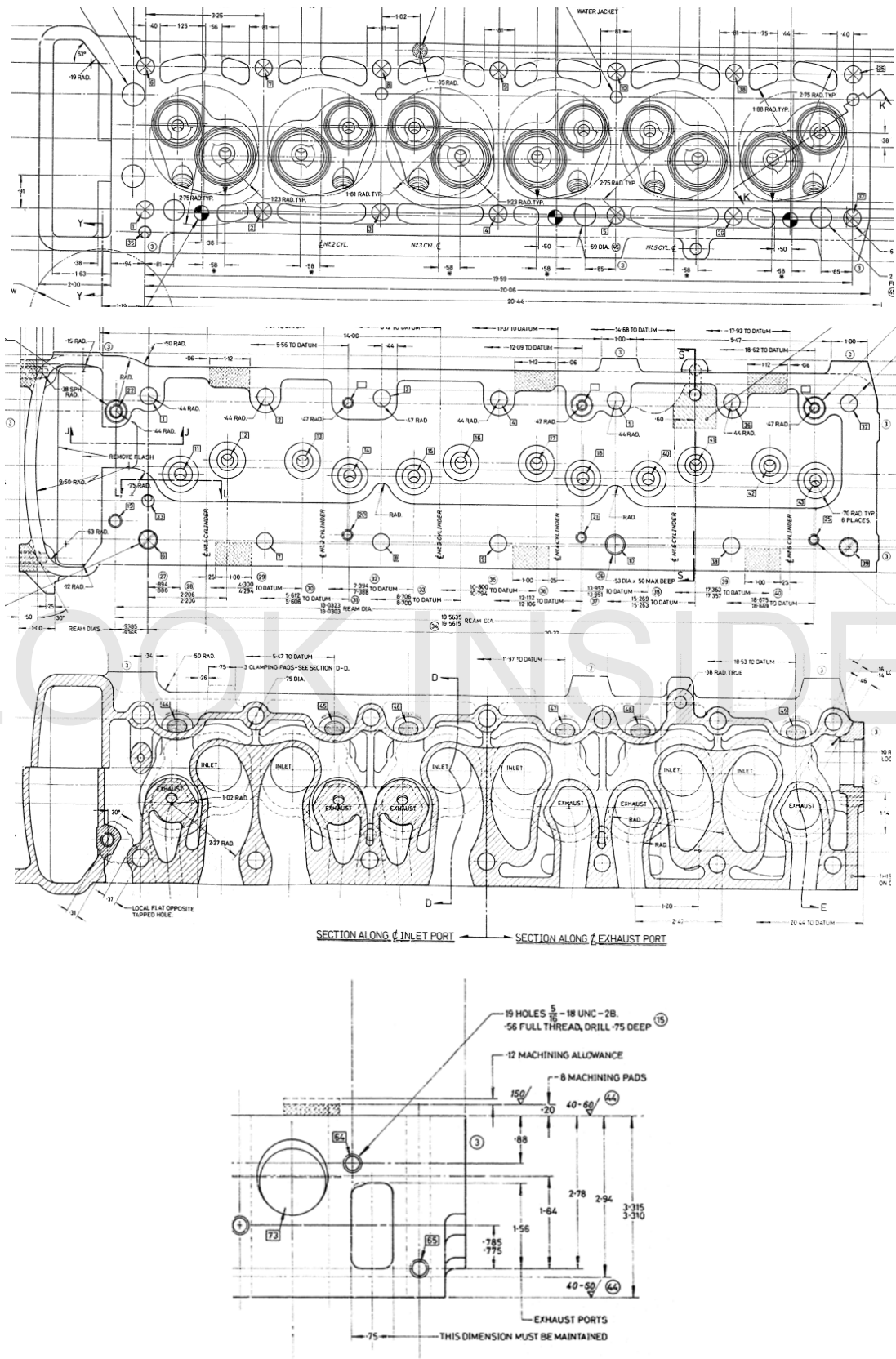
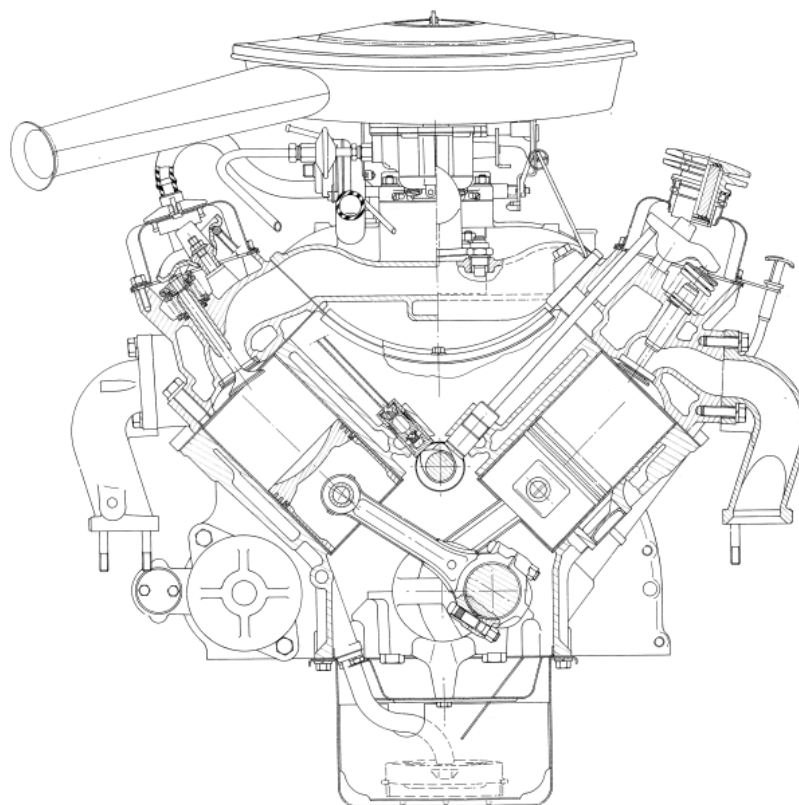
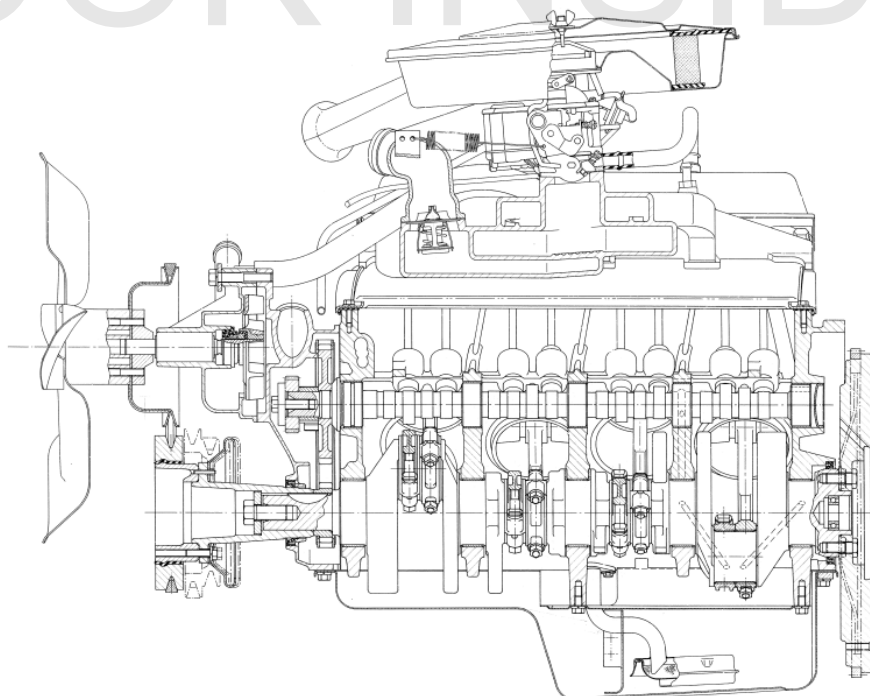


Fig. 2.51 Cylinder head AYB413.



# LOOK INSIDE



**Fig. 2.68** Engine layout eight cylinder YS791.



### 3.4 Fuel pump

#### 3.4.1 Six Cylinder

The Goss mechanical fuel pump AYH2905 is mounted on a boss on the valve rocker cover and is driven by an eccentric on the camshaft. There is a heat-insulating spacer AYH2279 0.25" fitted. The pump is rated at 5 psi and pressure tested to 20 psi. the flow rate is 120 pts/hr at 6000 rpm engine speed and 40 pts/hr at 1000 rpm engine speed. The inlet is 5/16" OD Bundy tube. The outlet is threaded 1/2" 20 UNF.

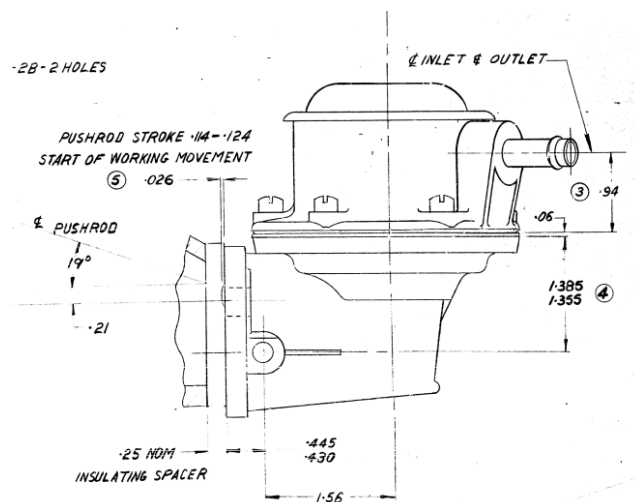


Fig. 3.17 Fuel pump AYH2905.

#### 3.4.2 Eight Cylinder

The Goss mechanical fuel pump AYD318 is driven from an eccentric via lever HYL4856. There is a heat insulating spacer AYD200 0.25" thick fitted. The inlet is 5/15 Bundy tube, and the output is threaded 1/2 20 UNF. Maximum pressure is 6 psi and pressure tested at 20 psi. Fuel delivery is 140 pts/hr at 2500 rpm camshaft speed and 40 pts/hr at 500 rpm camshaft speed.

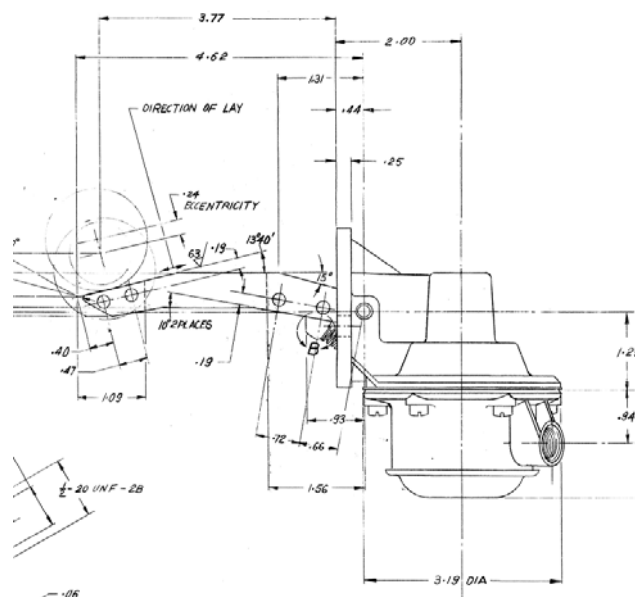


Fig. 3.18 Fuel pump AYD318.



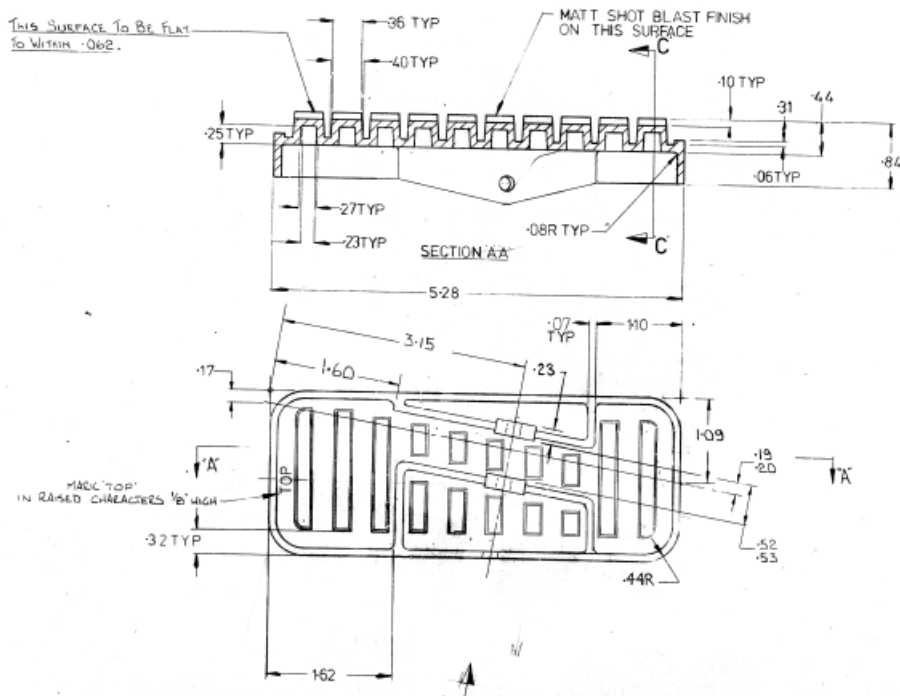


Fig. 3.88 Pedal AYD2020.

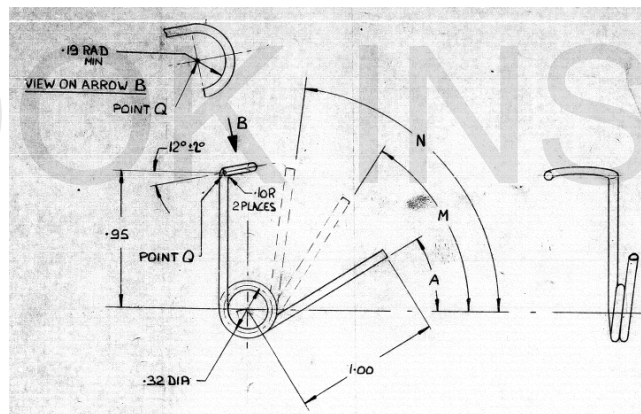


Fig. 3.89 Return spring AYD2021.

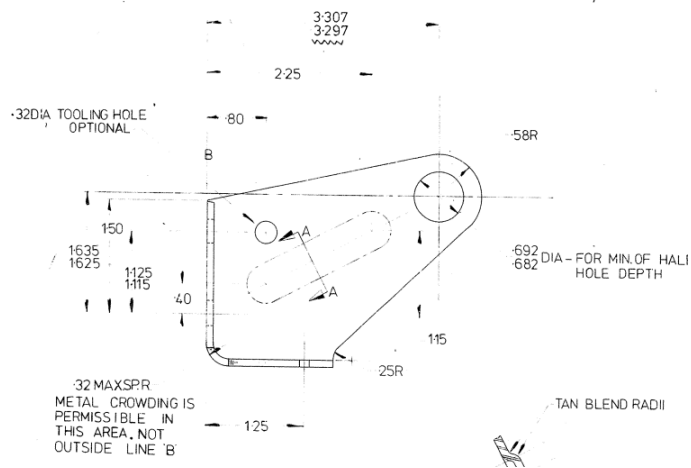


Fig. 3.90 Bracket AYD2025.

### 4.2 Eight Cylinder

Lucas distributor 29D8 is fitted with AYD157 fitted initially and AYD302 fitted in late 1973, the only apparent difference being the length L of the low tension cable being shortened from 30" to 18" with a change in position of the ignition coil. Note that the marked arrow showing direction of rotation on the side of the casing was reversed in January 1973 prior to the vehicle's introduction in June 1973.

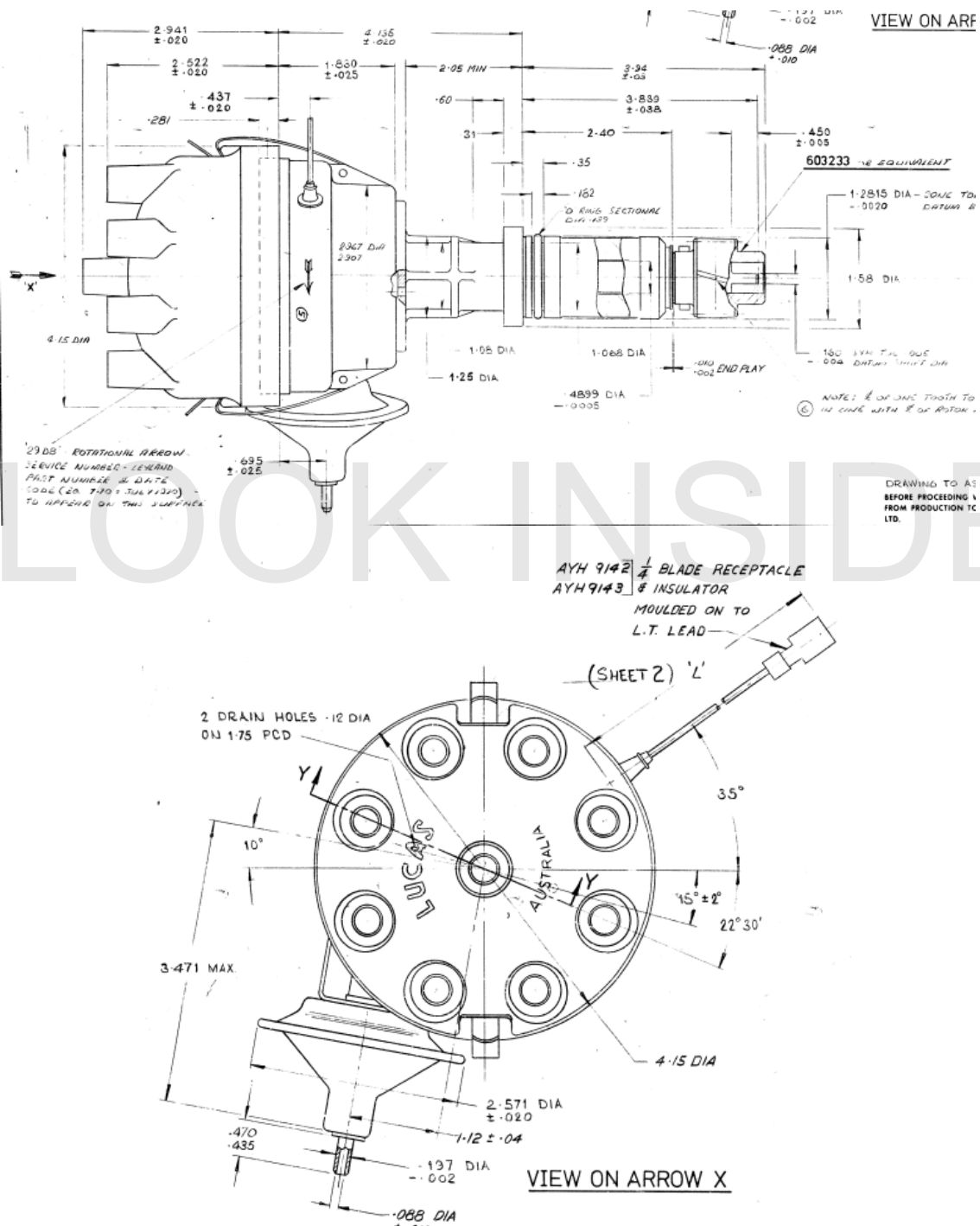


Fig. 4.10 Distributor 29D8.

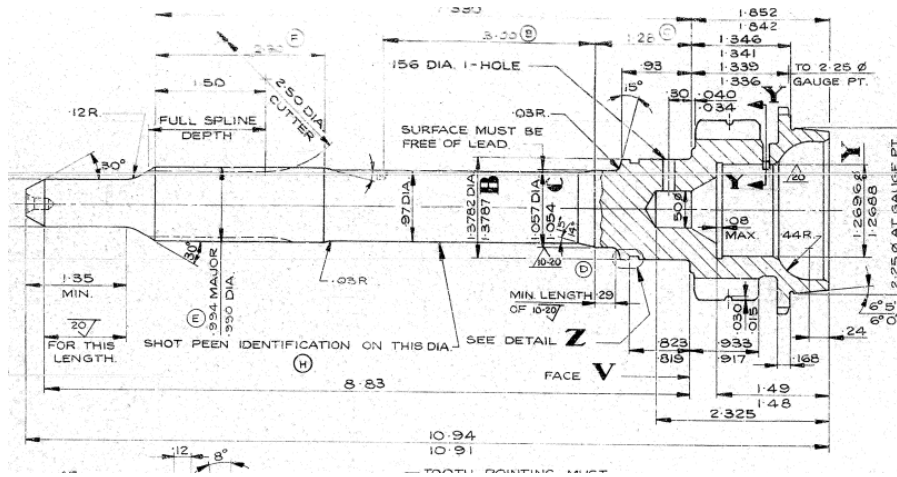


Fig. 8.2 1<sup>st</sup> motion shaft gear (8 cyl) 501085077.

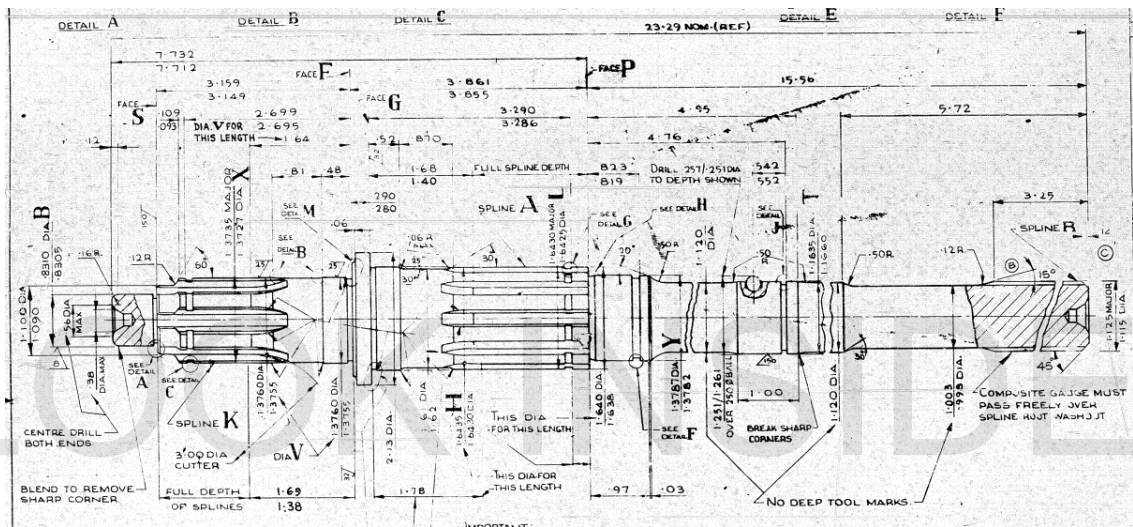


Fig. 8.3 Main shaft 67071.

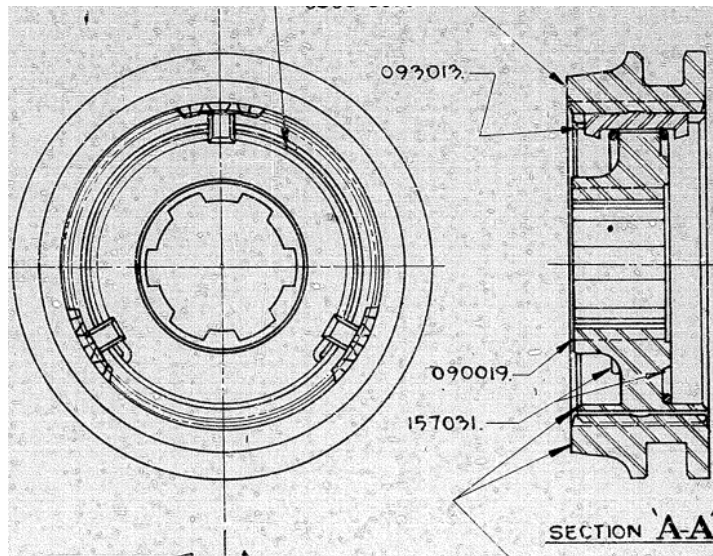
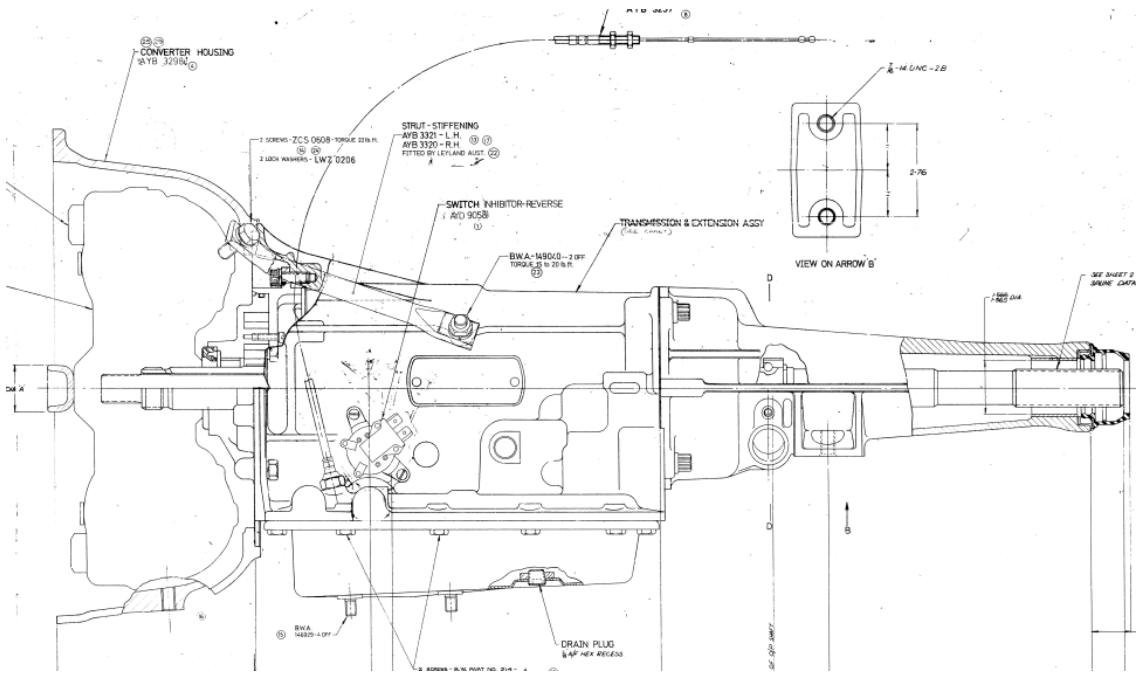


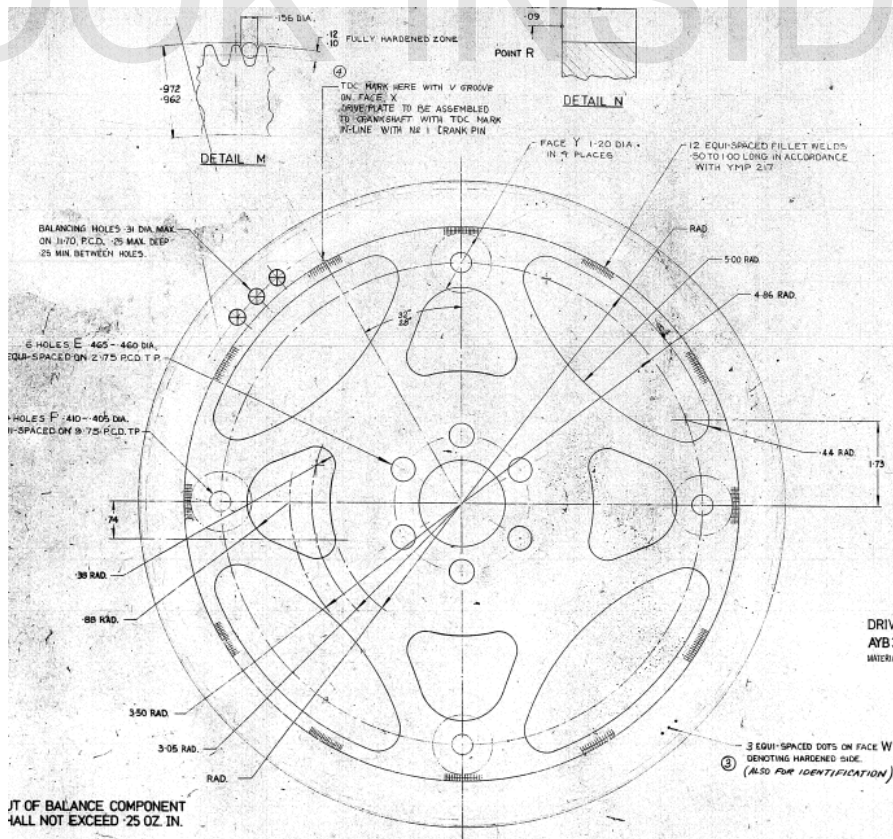
Fig. 8.4 Synchronizer 50357501.



**Fig. 8.44** Transmission and torque converter assembly AYB3254.

Gear selection can be either column change or floor lever.

Drive plate AYD3208 differs from AYB3436 by having 18 equally spaced holes  $\frac{1}{4}$ " 28 UNF on 11.70 PCD drilled around the periphery for balance bolts for balancing the completed engine assembly.



**Fig. 8.45** Drive plate AYB3436.

### Chapter 10. Rear Axle

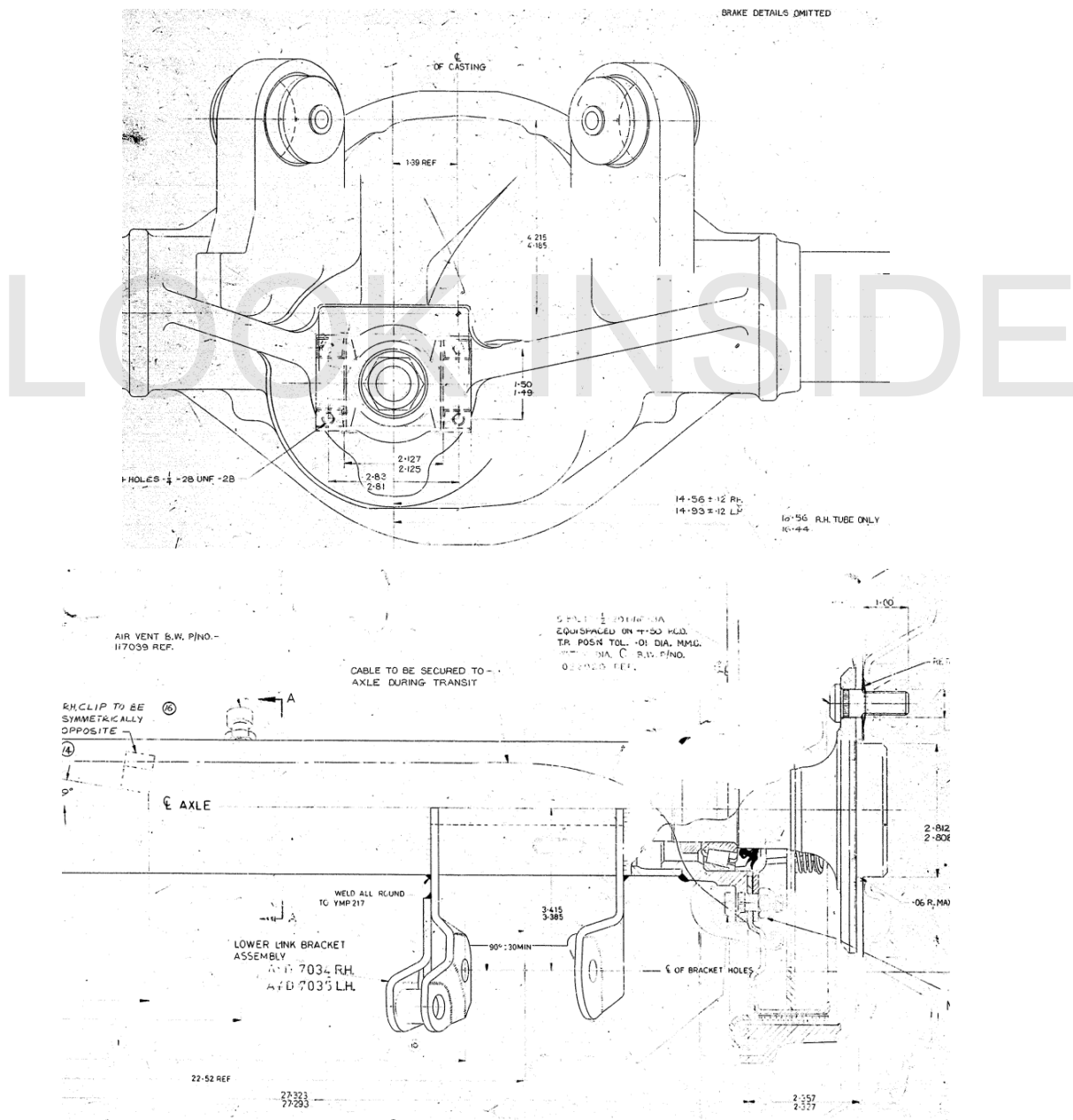
The rear axle assembly is manufactured by Borg Warner and only a limited number of drawings are available.

The final drive is of the Salisbury type with hypoid bevel gear crownwheel and pinion. The case is cast iron. The differential carrier bearings are taper roller type.

For the 6 cylinder application, the crownwheel has 35 teeth, the pinion 9 teeth giving a final drive ratio 3.89:1.

For the 8 cylinder application, the crownwheel has 38 teeth, the pinion 13 teeth giving a final drive ratio 2.92:1.

The axles are 30.94" (RH) 27.22" (LH) with 25 splines with PCD 1.0417".



### 13.2 Steering Wheel

Standard steering wheel AYD6028 carries horn plate AYD6030 and pad AYD6034 with badge AYD6045 (Super and Executive).

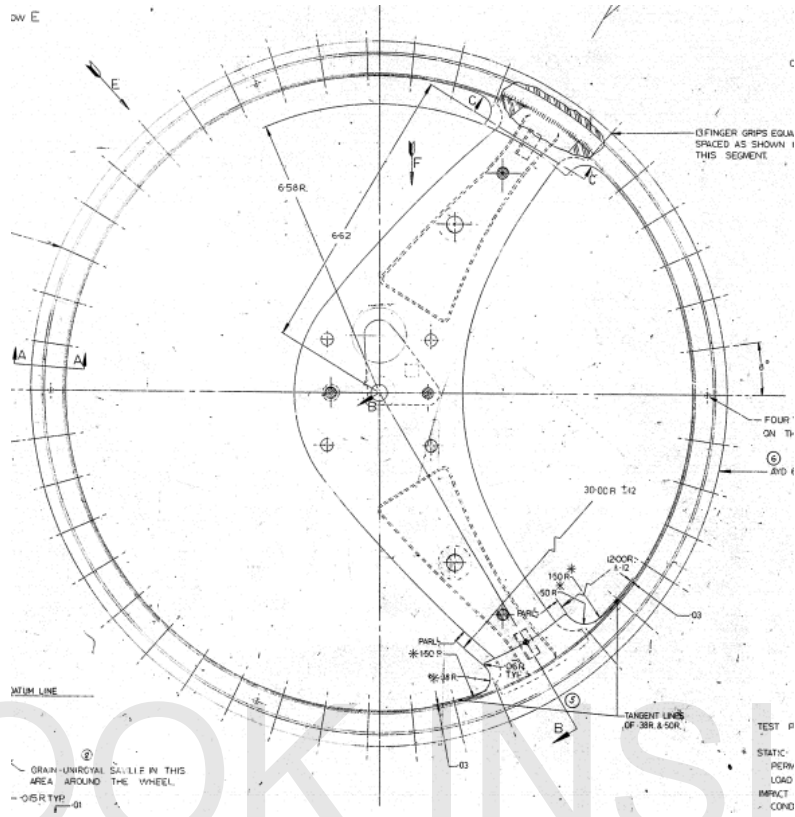


Fig. 13.1 Steering wheel AYD6028.

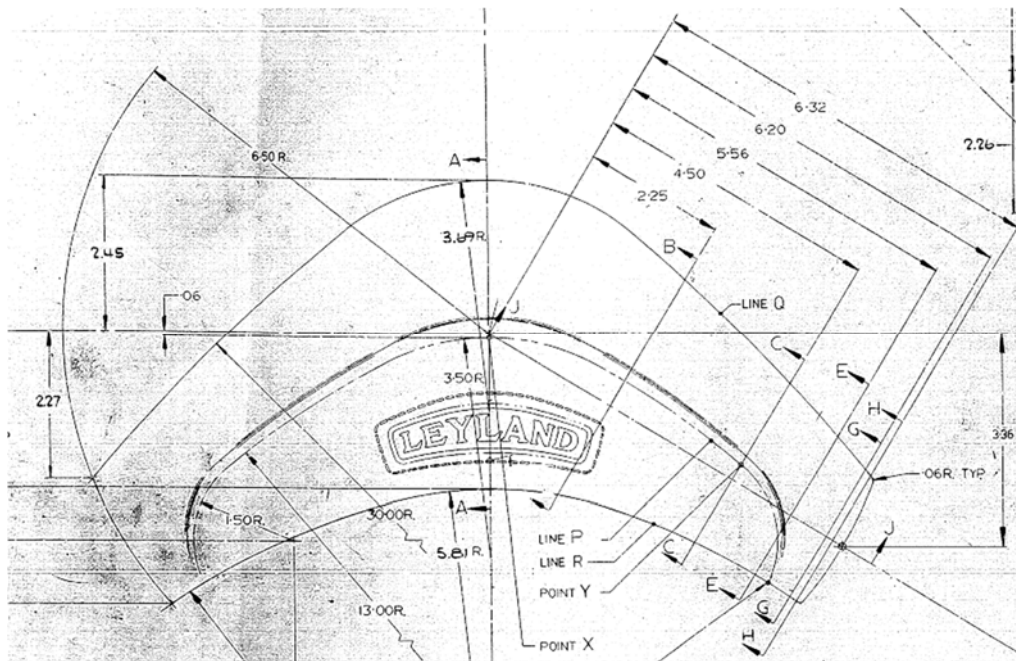


Fig. 13.2 Pad AYD6034.

### 13.4 Steering Gear

#### 13.4.1 Manual Steering

The industry-standard steering rack AYD6042 is rubber mounted to the crossmember via bush AYD6009 at the steering column end and AYD6012 at the other end. Bush AYD6009 outer diameter is suited to a housing diameter 0.999 – 0.997”.

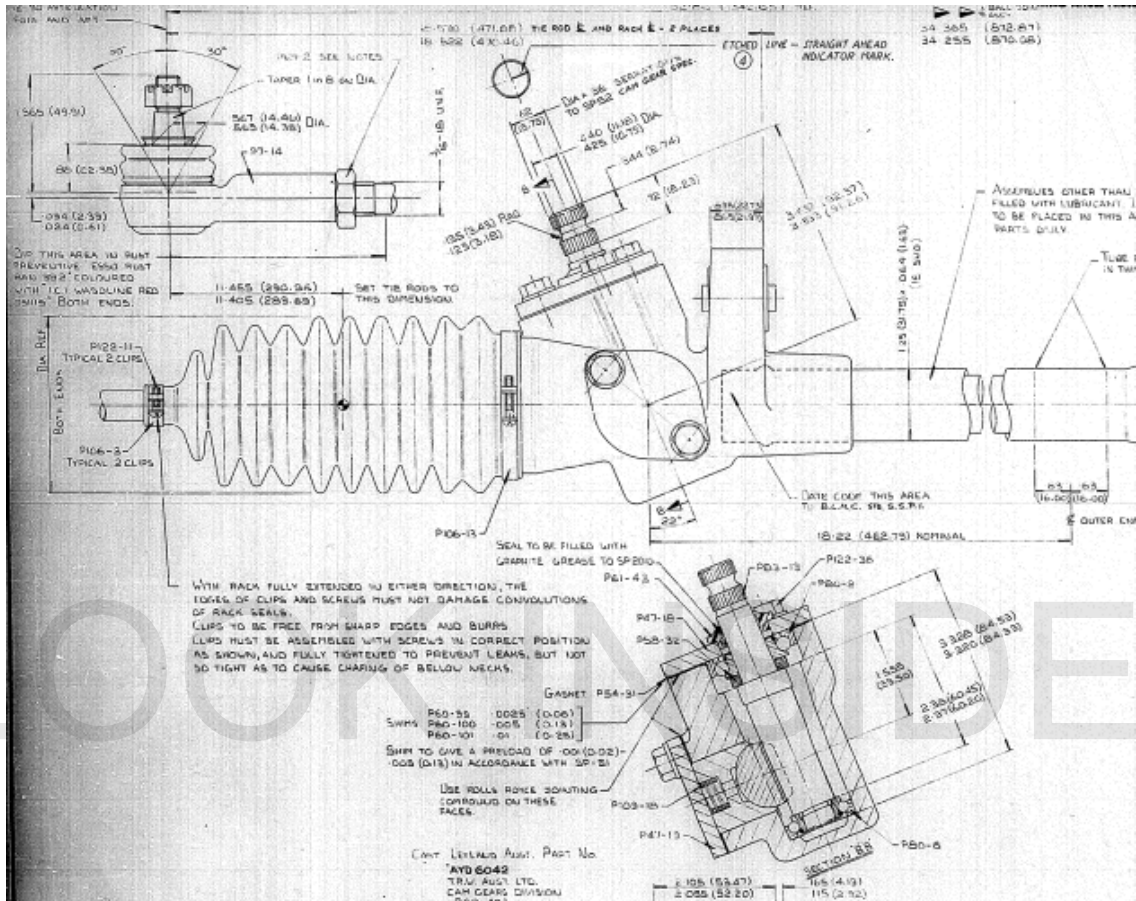


Fig. 13.23 Steering rack AYD6042.

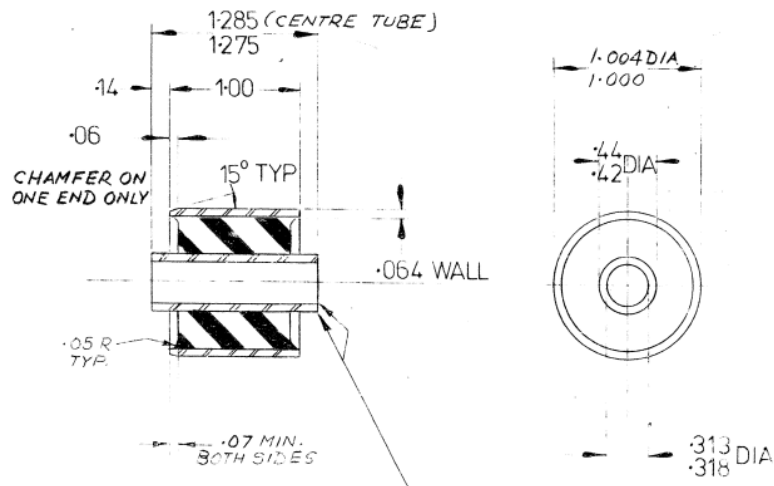


Fig. 13.24 Bush AYD6009.

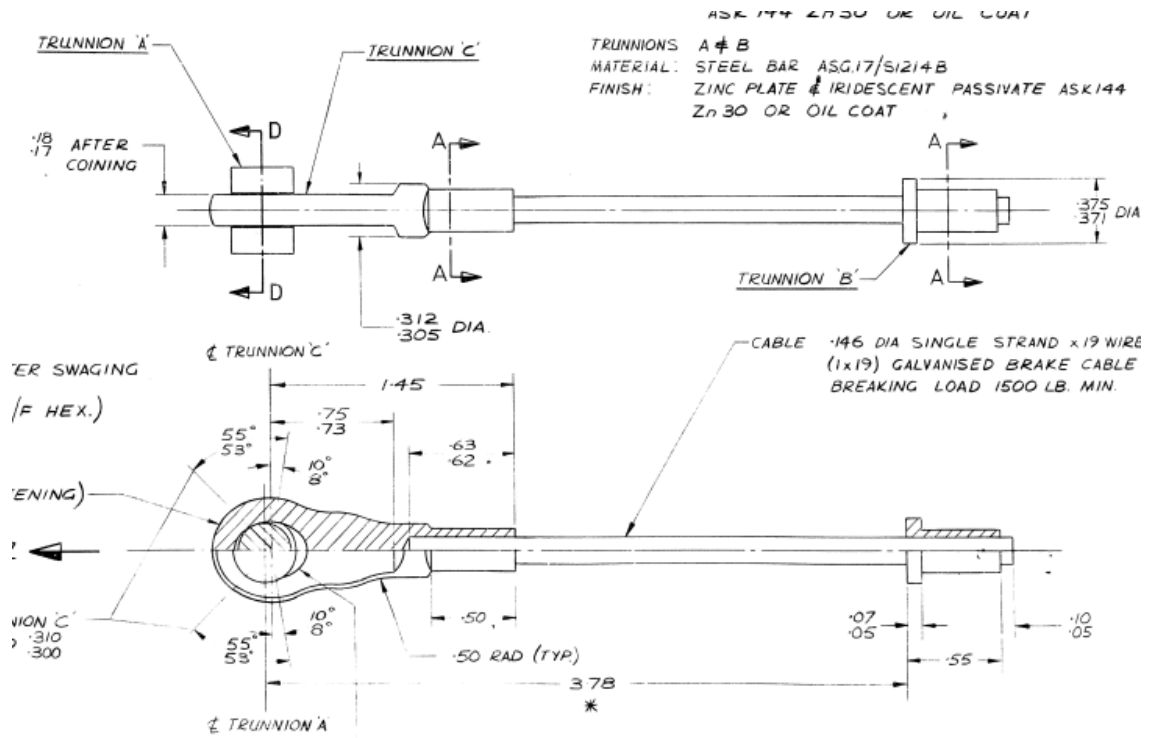


Fig. 14.37 Handbrake cable AYD5103.

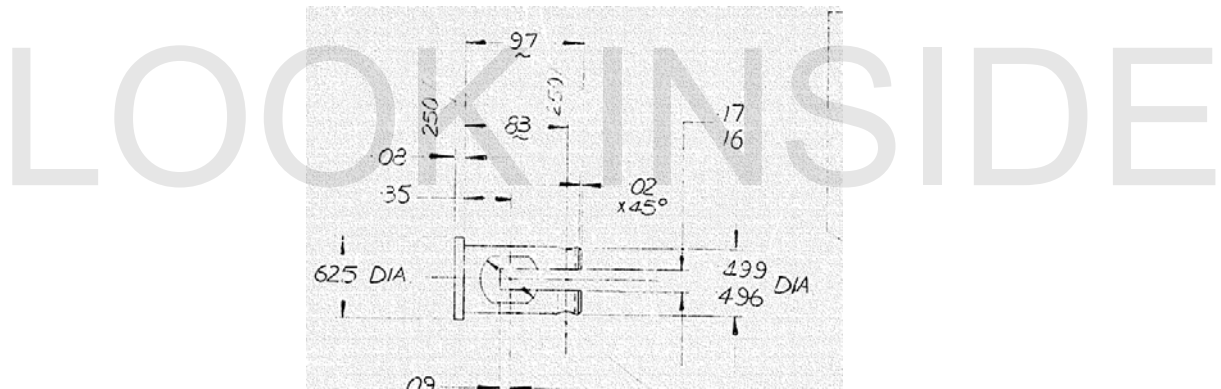


Fig. 14.38 Clevis pin AYD5024.

A pawl AYD5039 engages with ratchet AYD5012 until released by rod AYD5014 operated by a spring loaded button AYD5077.

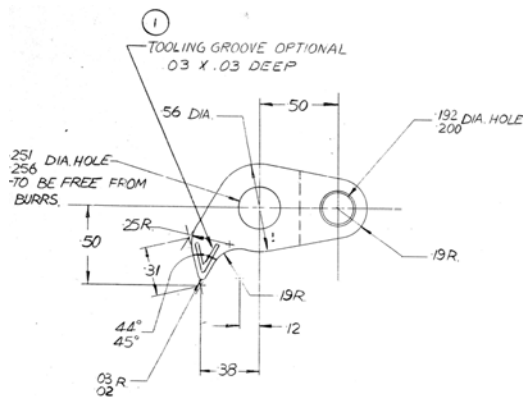
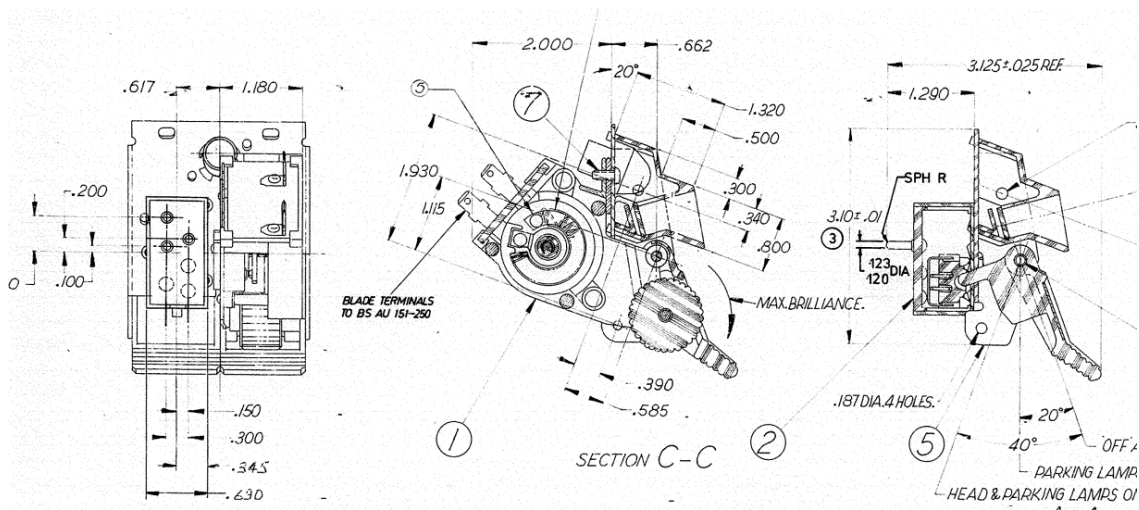


Fig. 14.39 Pawl AYD5039.



### 15.7 Interior Lights and Switches

Headlamps and side marker lamps are controlled by switch assembly AYD9039 which also houses light dimmer control.



NAME	TERMINALS		SWITCH POSITION		
	No	SIZE	1(OFF)	2	3
HEAD & SIDE LIGHTS	3	.121			
PANEL & INTERIOR	4	.25			

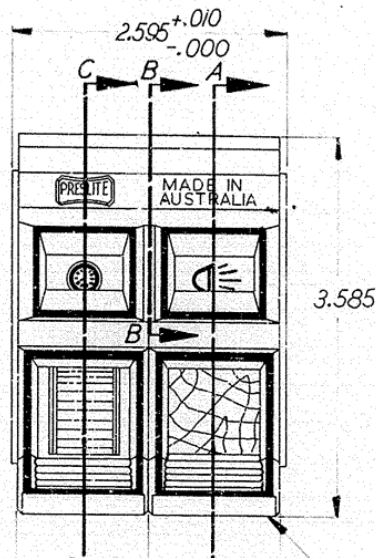


Fig. 15.30 Light switch assembly AYD9039.

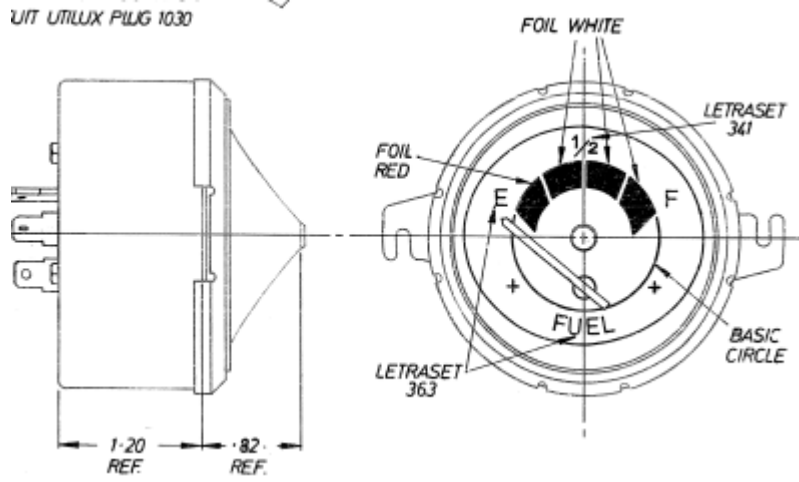


Fig. 15.51 Fuel gauge AYD9094.

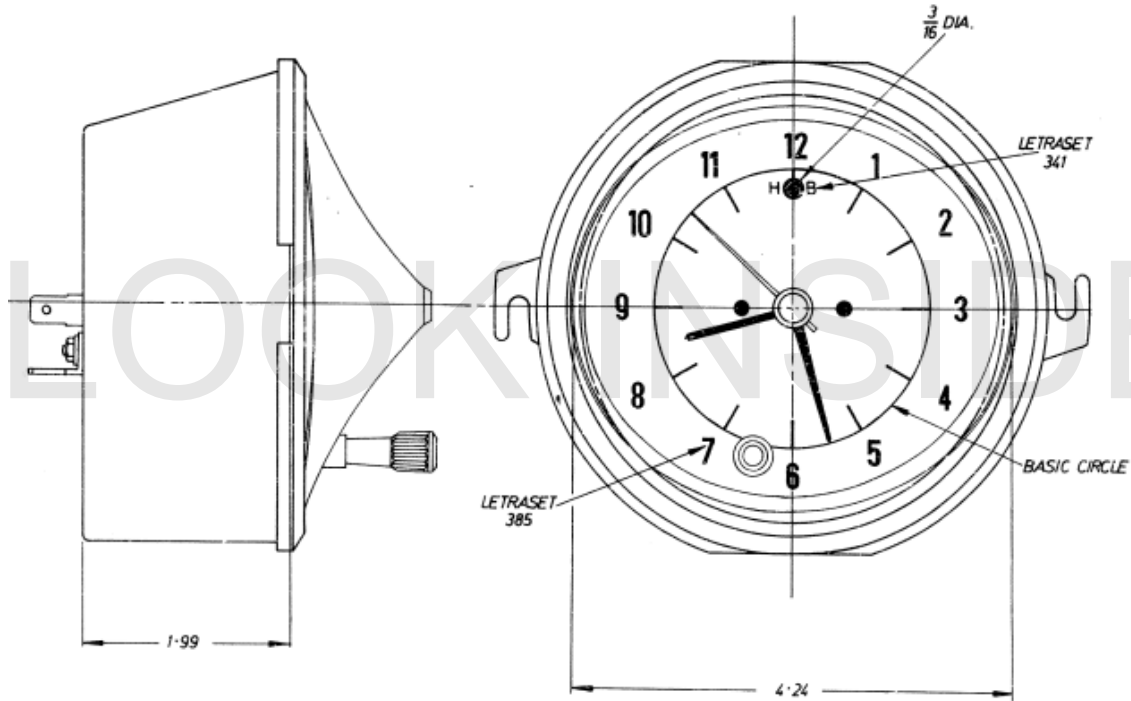
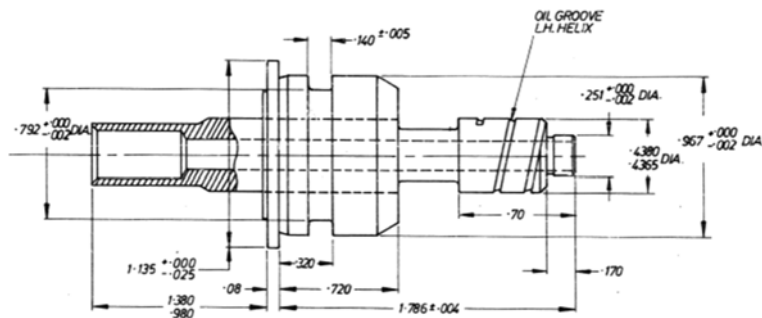


Fig. 15.52 Clock AYD9096.



15.10 Wiring

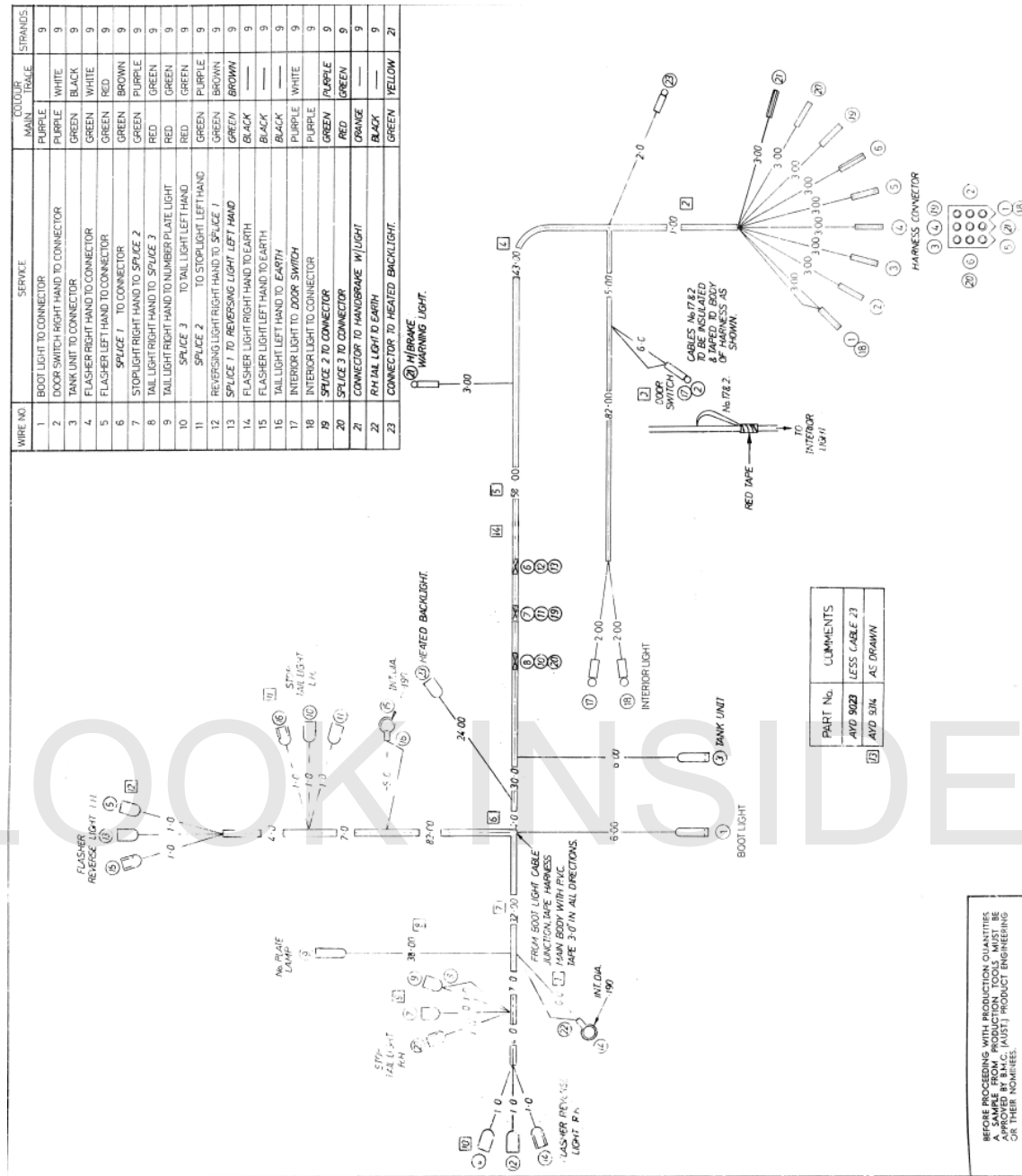


Fig. 15.59 Body harness AYD9023.

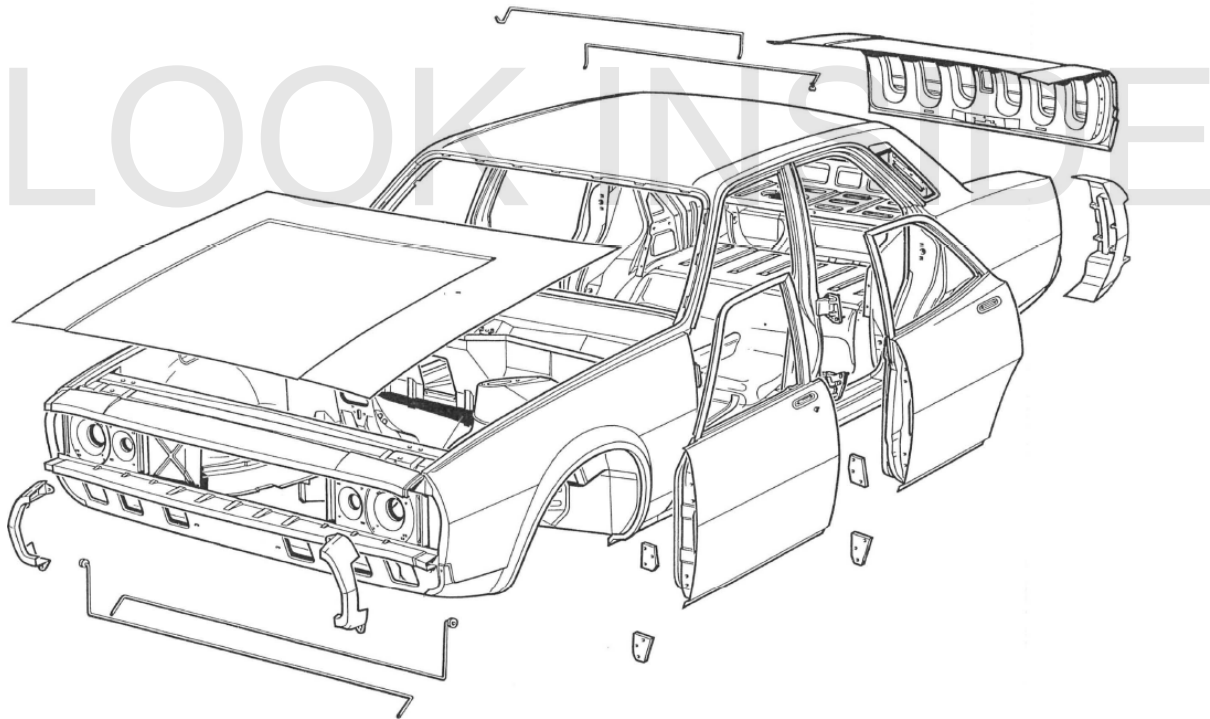
- Automatic T-Bar transmission
- Reclining bucket seats with textile facings
- Cut pile carpet
- Full console and arm rests (front & rear)
- Door ajar lamp
- Rear quarter reading lamp
- Kerbside illuminating lamps (all four doors)
- Push button radio
- Power aerial
- Carpeted boot
- Spare tyre cover
- Rubber front bumper bar face protectors

A range of accessories could be fitted by the selling dealer:

## 18.2 Body Shell

The P76 body is a monocoque of pressed steel construction, with forward opening bonnet and reinforced doors containing side impact rails for greater occupant protection.

### 18.2.1 4-Door Saloon



**Fig. 18.2** Saloon body shell (Pressed Steel Fisher)

General:

- The power unit is mounted conventionally north - south at the front and transmission is by a single drive shaft to the rear wheels.
- Suspension is by Macpherson strut at the front and trailing arms with coil springs at the rear.

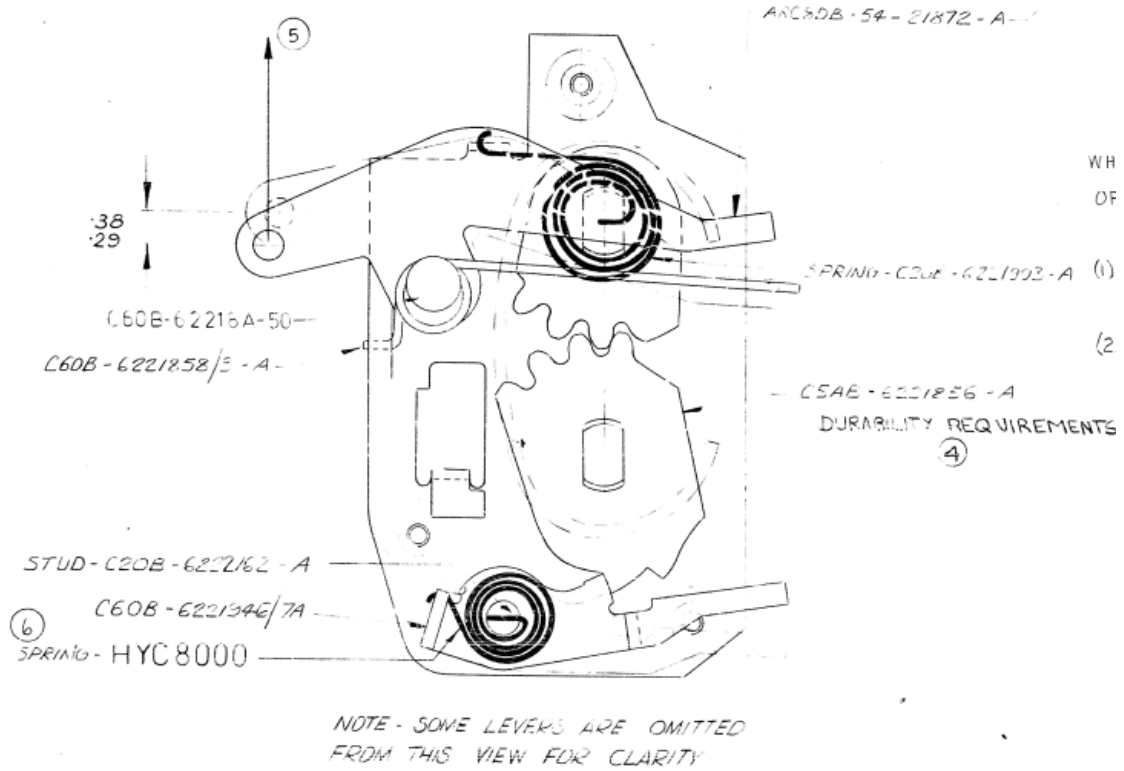


Fig. 18.51 Lock HYC5256.

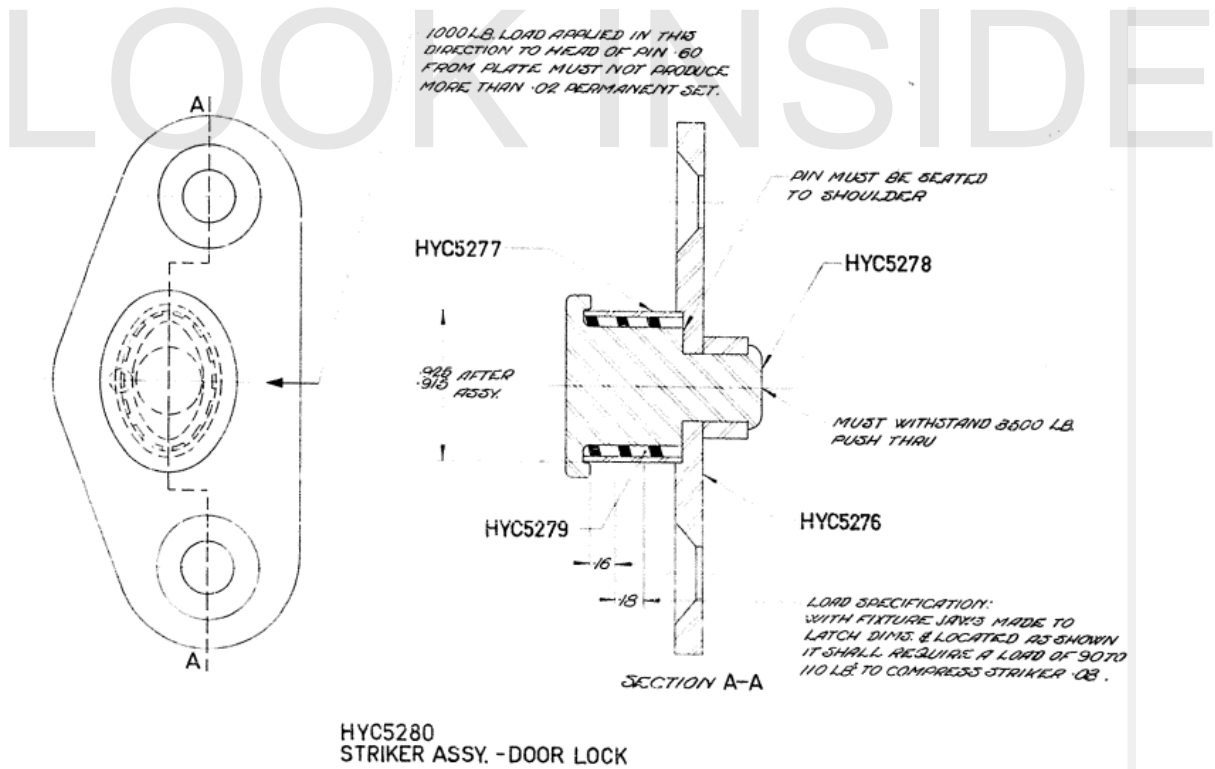


Fig. 18.52 Striker assembly HYC5280.

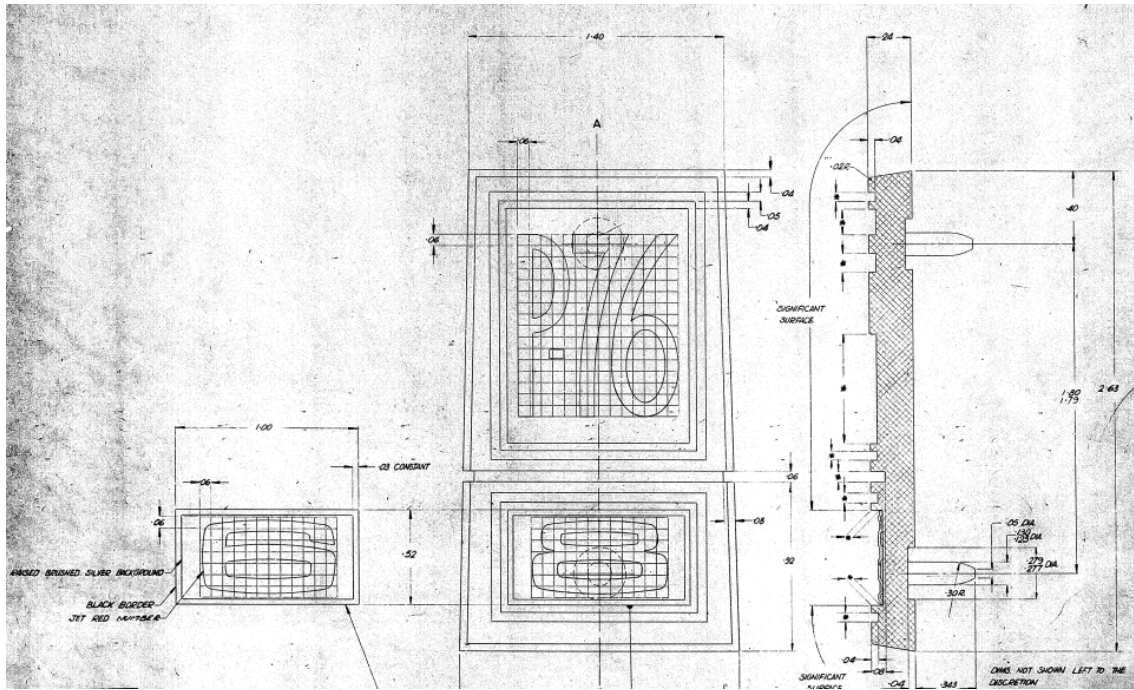


Fig. 18.112 Badge HYC6641.

18.8 Bumpers

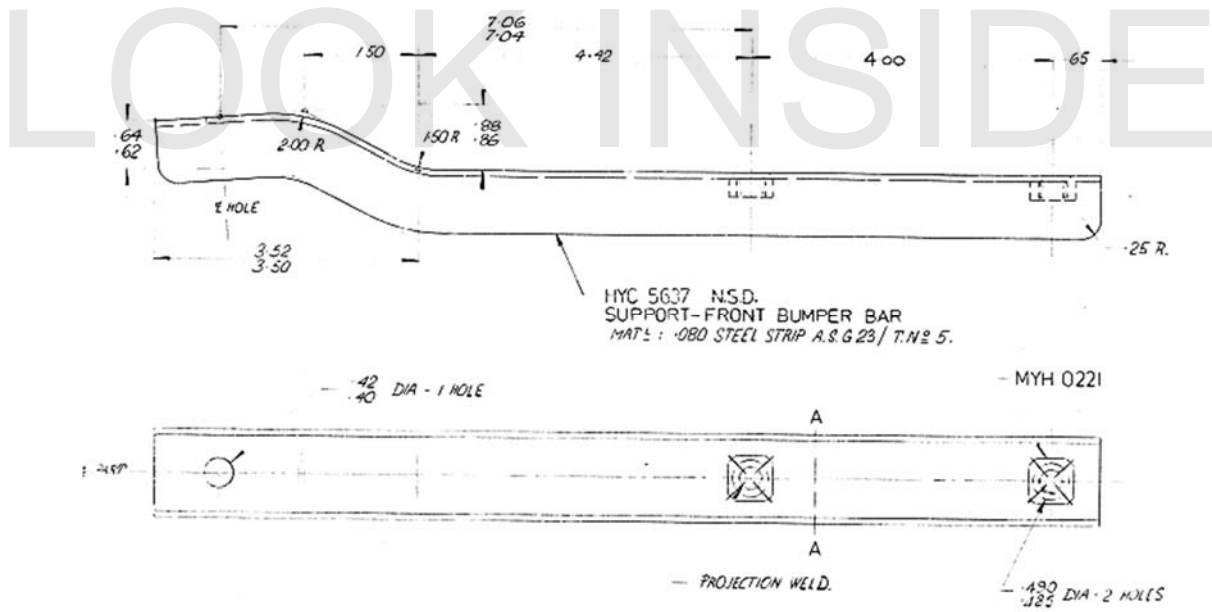


Fig. 18.113 Support F/B BA HYC5636.

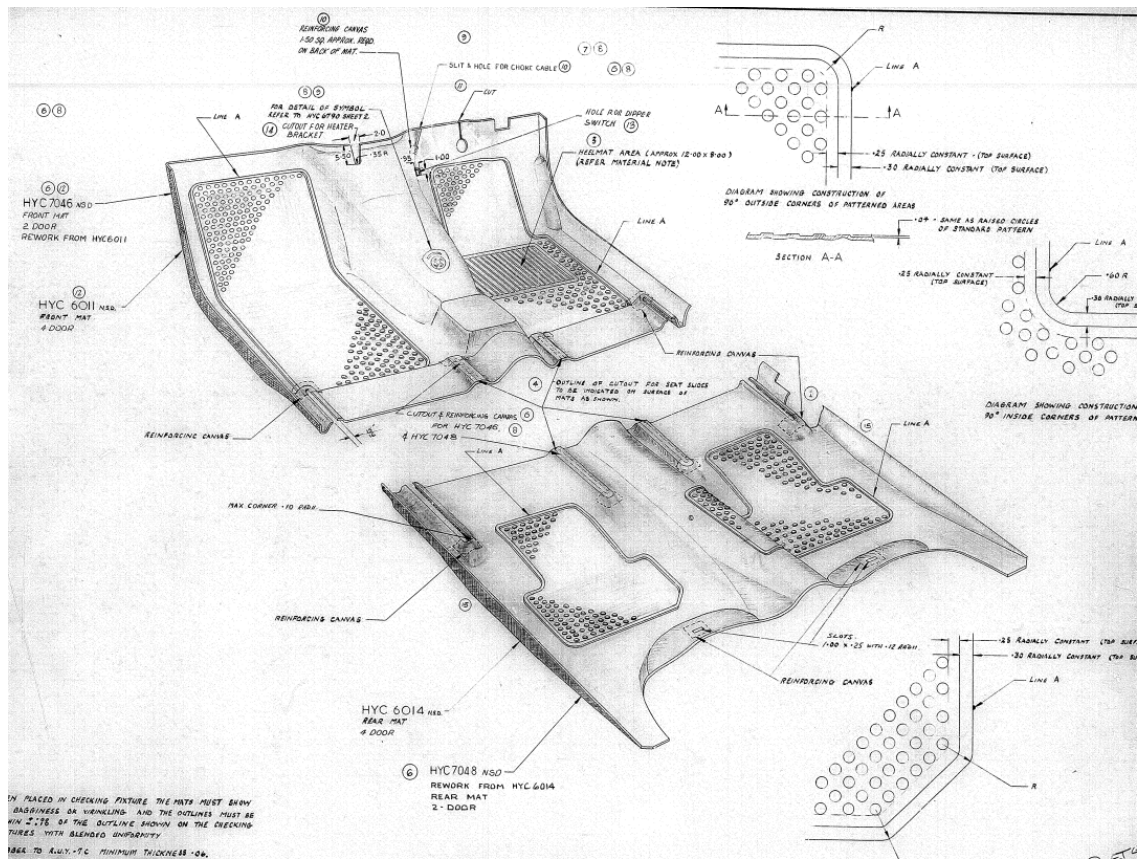


Fig. 18.178 Installation floor mats Levels 1 and 2 HYC6011 (HYC6790).

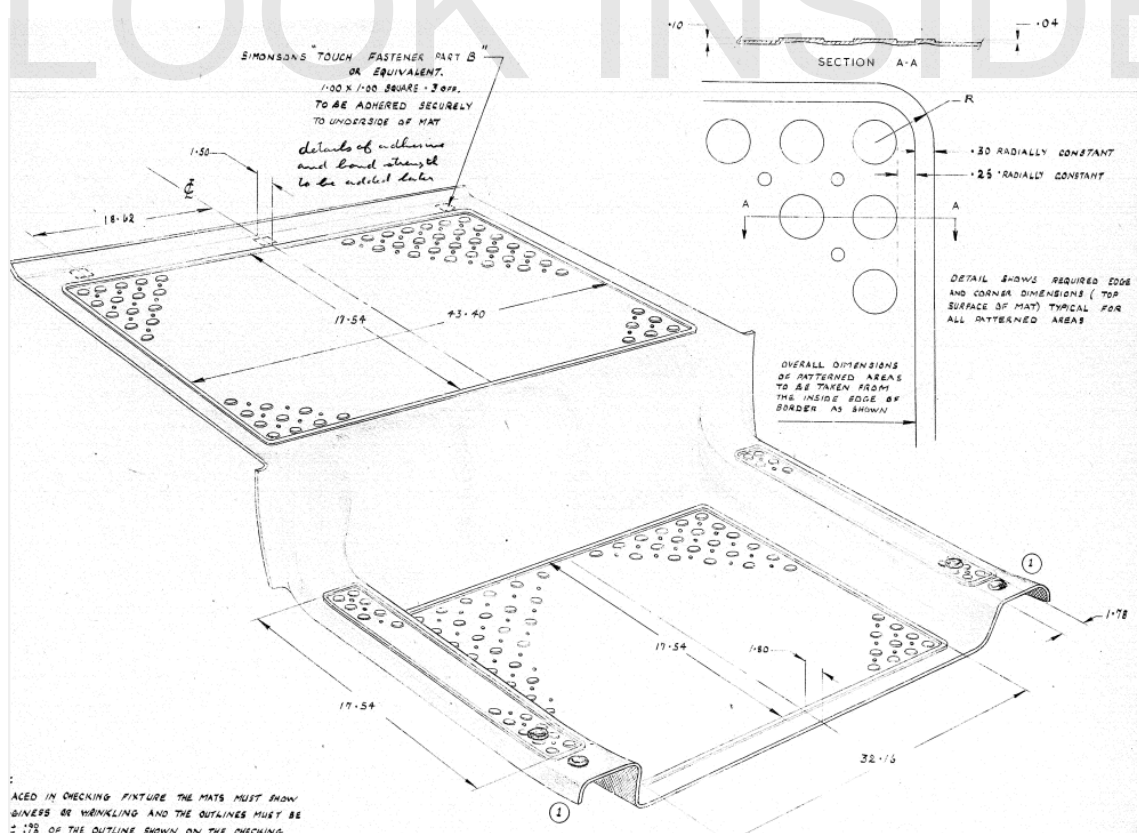


Fig. 18.179 Boot mat HYC6015.

18.15 Radio

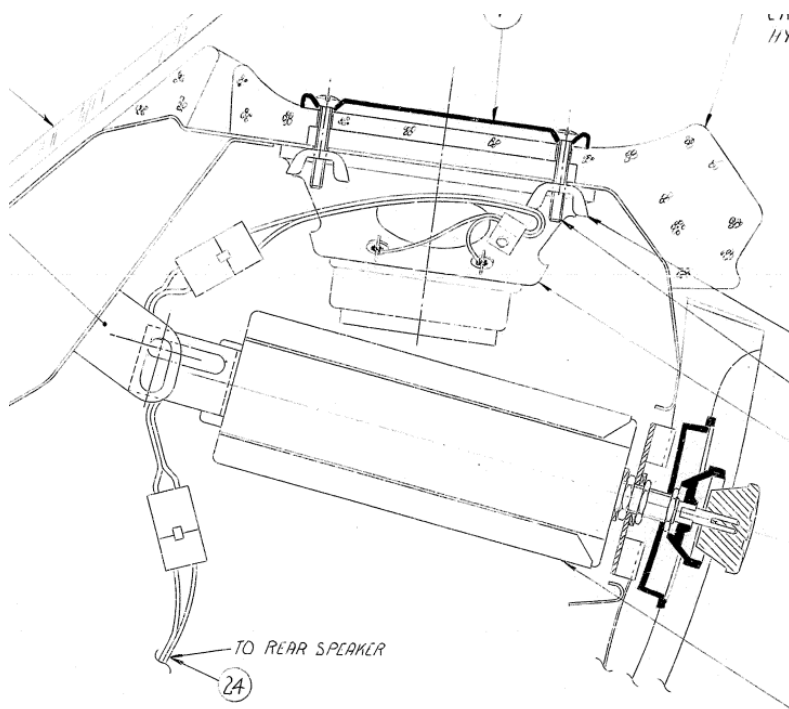


Fig. 18.243 Radio installation AYD9176.

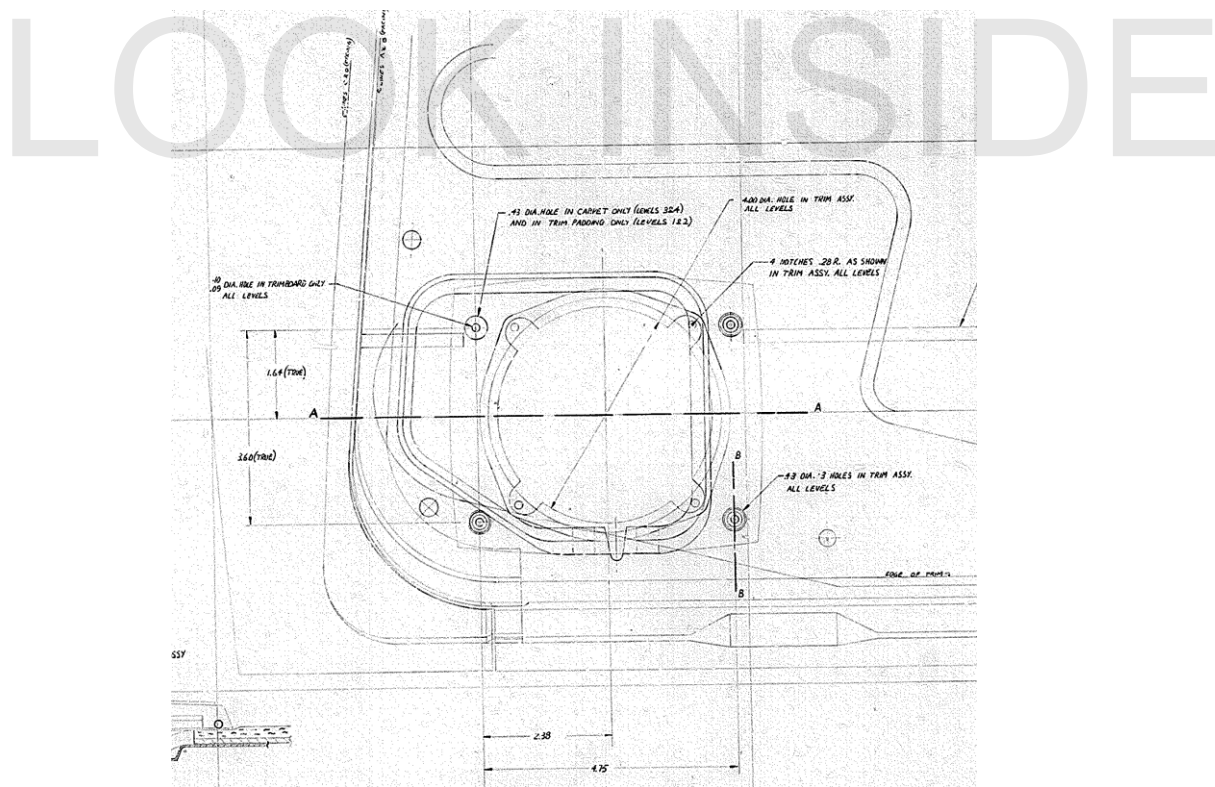


Fig. 18.244 Speaker installation stereo front doors EYA228.