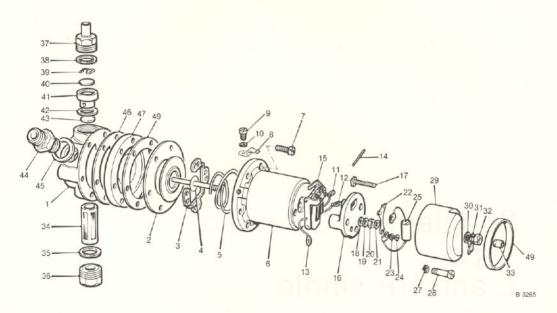
# Supplement Covering Type L and HP single FUEL PUMPS

The type 'L' and 'HP' pumps, although earlier designs, have much in common with later SU single pumps.

This supplement covers the major differences from the other single pump designs already described in this brochure.



# THE SU TYPE L AND HP SINGLE PUMPS



### Plate C

#### No. Description

- 1 Pump body
- 2 Diaphragm and spindle assembly, including armature
- 3 Armature centralizing plate
- 4 Impact washer
- 5 Armature spring
- 6 Coil housing
- 7 Screw, securing housing, 2 BA
- 8 Earth connector 9 Earth screw (4BA - H. 2BA - L)
- 10 Spring washer
- 11 Terminal tag, 5 BA
- 12 Terminal tag, 2 BA
- 13 Earth tag, 2 BA 14 Rocker pivot pin
- 15 Rocker mechanism
- 16 Pedestal

#### No. Description

- 17 Terminal stud
- 18 Spring washer
- 19 Lead washer
- 20 Terminal nut
- 21 End cover seal washer
- 22 Contact blade
- 23 Washer, 5 BA
- 24 Contact blade screw, 5 BA 25 Condenser (or diode-resistor)

- 27 Spring washer, 2 BA 28 Screw, pedestal to housing, 2 BA
- 29 End cover
- 30 Shakeproof washer, 2 BA
- 31 Lucar connector
- 32 Nut, 2 BA

#### No. Description

- 33 Insulating sleeve
- 34 Filter
- 35 Washer
- 36 Filter plug
- 37 Outlet connection
- 38 Fibre washer (medium)
- 39 Spring clip
- 40 Outlet valve
- 41 Outlet valve cage
- 42 Fibre washer (thin)
- 43 Inlet valve
- 44 Inlet connection
- 45 Fibre washer
- 46 Joint gasket
- 47 Sandwich plate
- 48 Sealing band 49 Diaphragm gasket

## Single pump features

Both the type 'L' and 'HP' pumps are the predecessors of the other single pump designs already described in this brochure.

The type 'L' is a suction pump intended to be mounted close to the engine, the type 'HP' pump has similar mounting requirements and flows to the AUF 200/AZX1200 type pumps.

## Description

The type 'L' and 'HP pumps have the same three main assemblies as the later single pumps; body casting; diaphragm, armature and magnet assembly; and the contact breaker assembly. The latter two assemblies are common with other pumps, only the body requires further description.

#### The body

This consists of a main body casting (1) and a sandwich plate (47) which is assembled to it together with a joint gasket (46). A filter (34) is screwed into the lower part of the body, and the inlet union (44) is screwed in at an angle on one side. The outlet union (37) is screwed into the top of the body, opposite to the filter, and tightens down onto the delivery valve cage (41), which is clamped between two fibre washers, thin (42) and medium (38). In the top of the cage is the outlet valve, a thin brass disc (40) held in position by a spring clip (39). The inlet valve (43), a similar brass disc, rests on a seating machined in the body. A series of holes connects the space between the valves to the pumping chamber which is a shallow depression on the face of the sandwich plate, bounded by the diaphragm assembly.

# SERVICING THE BODY AND VALVES

## Dismantling

(Refer to illustration, Plate C)

Remove the inlet union (44), then the outlet union (37), the outlet valve cage (41), and the inlet valve disc (43). Remove the base plug (36) and filter (34).

## Inspection

1 Clean the pump and inspect for cracks, damaged joint faces and threads.

2 Remove the circlip in the outlet valve cage and examine the inlet and outlet valve discs for wear. Replace if worn.

3 Examine the valve seat in the body and outlet valve cage for damage and corrosion; if it is impossible to remove the corrosion, or if the seat is pitted, the body or cage must be discarded.

4 Clean the filter with a brush, examine for fractures and renew if necessary.

## Assembly

**Note:** Outlet valve cages may be identified by the 4-hole drilling of the HP type and the 2-hole drilling of the L type.

5 Assemble the brass valve disc (4) (see Fig. 1) to the outlet valve cage (3), making sure that the smooth face of the disc faces the valve seat, retain it in position with the circlip (5) which must be located in the groove in the valve cage. The valve must rattle freely when the valve cage is shaken.

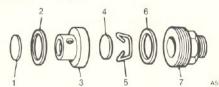


Fig 1. The valve assembly, L and HP single pumps

6 Drop the other valve disc (1) (see Fig. 1) smooth face downwards onto the inlet valve seat in the body of the pump. Insert the thin fibre washer (2), drop the valve cage (3) in position, insert the medium fibre washer (6), then screw in the outlet union (7), and tighten with a ¾-in Whitworth ring or box spanner. Fit the inlet union.

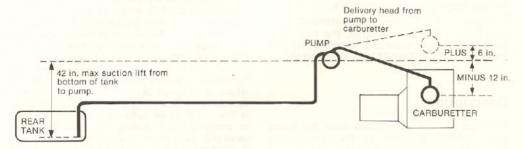
## Body attachment

- 7 Place the sandwich plate gasket onto the face of the body, lining up the holes in the body and gasket; fit the sandwich plate, concave face to diaphragm together with the diaphragm gasket, again lining up the holes.
- 8 Offer up the coil housing to the body and sandwich plate and ensure correct seating between them. Outlet connection to the top and filter plug at the bottom.
- 9 Line up the six securing screw holes, making sure that the two cast lugs on the coil housing are at the bottom, insert the six 2 BA screws, finger-tight. Fit the earthing screw with its Lucar connector.
- 10 Tighten the securing screws in sequence as they appear diametrically opposite each other.



# INSTALLATION AND PERFORMANCE

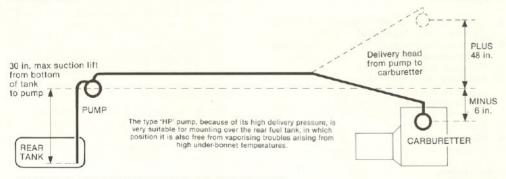
TYPE L PUMP



(OUTPUT - 8 GALLONS PER HOUR)

Pump Type	Voltage	Test at Volts	Minimum FLow gal./hr.	At Suction Head	Delivery Head	Bore of Pipe	Cut-off Pressure Ib./sq. in.
L	12	13.5	8	42 in.	6 in.	1/4 in.	1.5 max.
HP	12	13.5	7	30 in.	48 in.	1/4 in.	2 to 3.8

#### TYPE HP PUMP



(AUF RANGE - 7 GALLONS PER HOUR AT 18 in. SUCTION HEAD)