

ZENITH

CARBURETTERS
SERVICE
BULLETIN

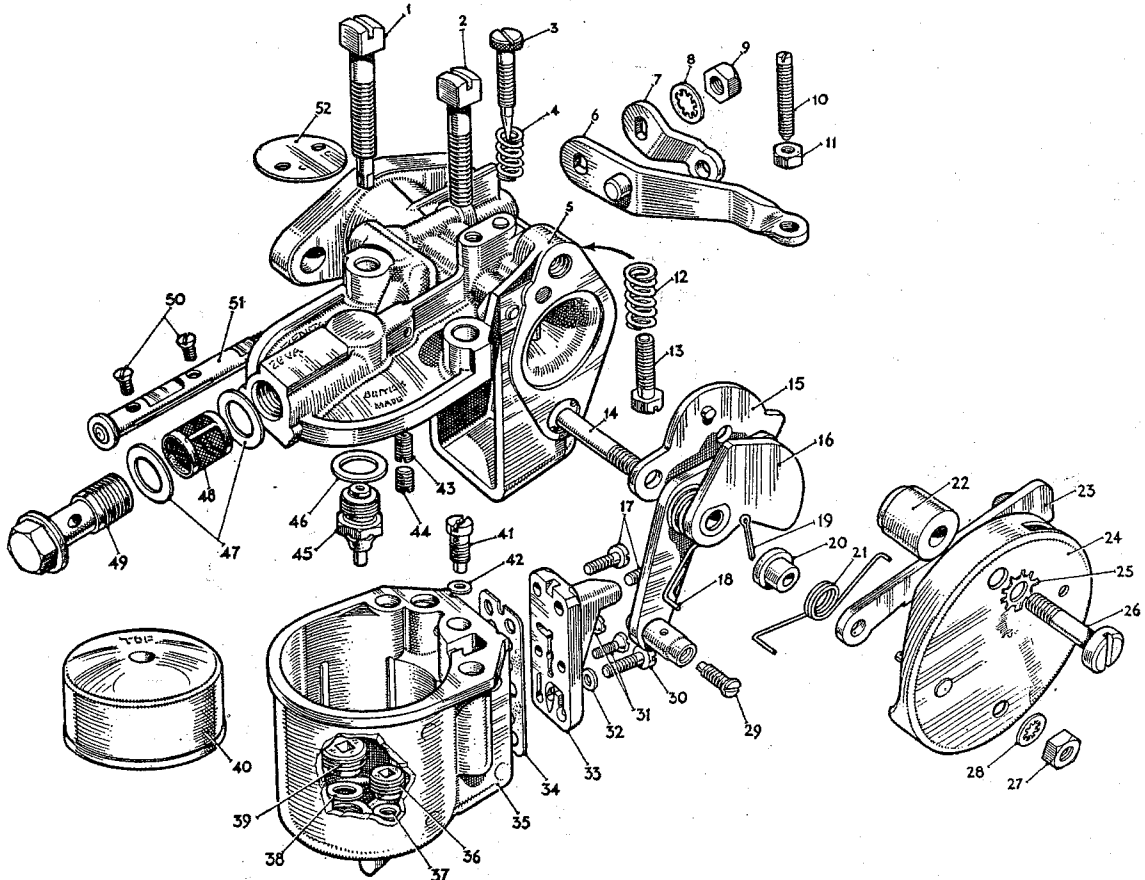
AUSTIN 7 h.p.

1933-39

4 cyls. 56 x 76

CARBURETTER: 26VA : c/s. 548
48m/m. flange centres.

IDENTITY MARK : "7"
(Stamped on edge of flange)

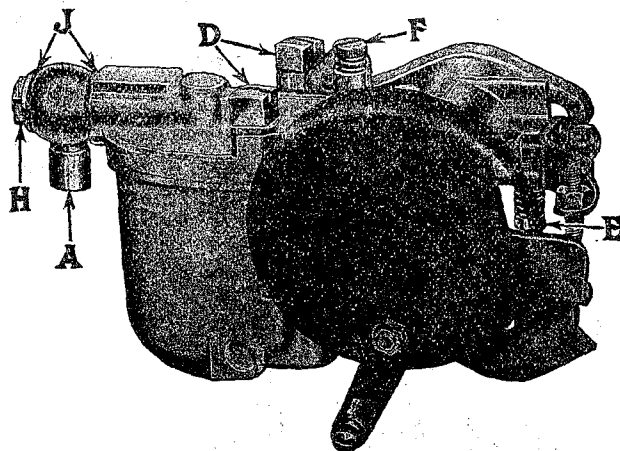


STANDARD SETTING :	Choke Tube	Main Jet	Comp. Jet	S.R. Jet	Progression Jet	Needle Seating
	17	57	50	60	50	1.5m/m.

SPARE PARTS SCHEDULE

Ref.	Description	Part No.	Price Each	Bin No.	Ref.	Description	Part No.	Price Each	Bin No.
1	Screw Fixing Bowl (Jet Key Type) ...	08123	9d.		28	Shakeproof Washer for do. ...	07734	1d.	
2	Screw Fixing Bowl (Plain Type) ...	07857	6d.		29	Screw for Swivel ...	07949	2d.	
3	Air Regulating Screw ...	09845	1/-		30	Screw Fixing Emulsion Block (Long Cheese Head) (2 off) ...	07967	2d.	
4	Spring for do. ...	09846	3d.		31	Screw Fixing Emulsion Block (Instrument Head) ...	02730	2d.	
5	Carburettor Barrel ...	08658	50/-		32	Washer for Screw (Long Cheese Head) ...	08523	1d.	
6	Interconnection Lever (Assd. Comp.) ...	08642	1/6		33	Emulsion Block ...	09587	5/-	
7	Throttle Lever ...	09120	1/6		34	Gasket for do. ...	08363	4d.	
8	Shakeproof Washer for do. ...	08515	1d.		35	Carburettor Bowl ...	010105	25/-	
9	Nut for Throttle Spindle ...	10145	2d.		36	Main Jet ...	06605	2/6	
10	Screw for Interconnection Lever ...	08647	3d.		37	Fibre Washer for do. ...	16709	1d.	
11	Locknut for do. ...	11818	2d.		38	Fibre Washer for Compensating Jet ...	16828	1d.	
12	Spring for Throttle Stop Screw ...	04611	3d.		39	Compensating Jet ...	06620	2/6	
13	Throttle Stop Screw ...	05923	6d.		40	Float ...	08898	3/6	
14	Strangler Spindle ...	08430	9d.		41	Slow Running Jet ...	06798	2/-	
15	Strangler Flap ...	08479	2/6		42	Washer for do. ...	06983	1d.	
16	Strangler Lever (Assd. Comp.) ...	09330	4/-		43	Progression Jet ...	33451	1/6	
17	Screw Fixing Emulsion Block (Short Cheese Head) 2 off) ...	07087	2d.		44	Plug for do. ...	05972	2d.	
18	Spring for Strangler Lever ...	09331	4d.		45	Needle and Seating ...	07864	5/-	
19	Split Pin for Cam Follower Pivot ...	06893	1d.		46	Washer for do. ...	09619	1d.	
20	Distance Piece for Cam Follower ...	07770	4d.		47	Fibre Washer for Plug or Banjo ...	06101	1d.	
21	Spring for Cam Follower ...	08652	4d.		48	Filter Gauze ...	06100	6d.	
22	Distance Piece for Cowl ...	08348	6d.		49	Plug Fixing Petrol Pipe ...	06098	2/6	
23	Cam Follower ...	09329	1/6		50	Screw Fixing Throttle (2 off) ...	09479	2d.	
24	Cowl (Assd. Comp.) ...	09333	2/6		51	Throttle Spindle ...	08646	2/6	
25	Shakeproof Washer for Screw Fixing Cowl ...	08516	1d.		52	Throttle ...	07339	2/-	
26	Screw Fixing Cowl ...	07921	6d.			Not shown (Restriction Tube Main Jet on drawing)	08733	6d.	
27	Nut for Strangler Spindle ...	15321	3d.			Comp. "	08734	6d.	

TECHNICAL NOTES



- A. Petrol Union.
- D. Fixing Bolts.
- E. Throttle Adjustment Screw.
- F. Air Adjustment Screw.
- H. Filter Plug.
- J. Washers.

Starting.

To provide the required rich starting mixture the 26VA type carburettor has a strangler flap inserted in the air intake. When the control from the dash is operated the flap closes the air intake and upon the engine being turned over the depression is directed entirely upon the jets of the carburettor.

Consequently a very rich mixture is supplied and the engine starts readily and continues to run.

It is often advantageous to give the engine one or two turns with the strangler closed and ignition "off." Then switch "on" and again turn the engine over by starter or handle.

The strangler is inter-connected with the throttle so that the latter is automatically opened the correct amount when the strangler is closed.

Adjustments.

The carburettor is delivered with a jet setting that has been found by extensive experimental work to be most suitable for the engine to which it is fitted. Consequently, very little adjustment to the carburettor should be needed. Indeed, the user will find that greater service will be obtained from the instrument if adjustments are made only when absolutely necessary. Adjustment to the slow running mixture is the only likely alteration, apart from an occasional cleaning of the jets, float chamber bowl, filter gauze, etc. When trouble is experienced with the engine, do not assume that it is always due to the carburettor. If satisfied that the instrument is completely free from dirt, do not be tempted to alter the carburettor until all other possible causes of trouble, such as sparking plugs, ignition, valves, etc., have been investigated.

The Bowl of the Carburettor is removed by releasing the Fixing Bolts.

The hand should be placed beneath the bowl during this operation so that when the bolts are removed, the bowl will drop into the hand. (Economy Note—Petrol in the bowl can then be emptied back into the tank).

The jets should be removed occasionally and thoroughly cleaned. One of the fixing bolts is squared at the end to fit into the jets. When the bottom end is placed into the squared recesses, a spanner applied to the head of the bolt will enable the jets to be removed.

When cleaning the jets, do not pass anything through them that is likely to damage the carefully calibrated orifices. The most satisfactory and efficient method is to blow through them, and wash them in petrol. This will remove any obstruction, and leave the jets undamaged.

The sizes of all jets in Zenith carburettors are clearly numbered, and the larger the jet the greater the number.

The slow running jet is provided with a screwdriver slot for its removal.

In the 26VA type carburettor the capacity well is cored the desired size and no capacity tube is required.

The emulsion block is held to the side of the bowl by five screws. To remove the block, first ease the bottom screw, and then completely remove those above. The bottom screw should not be removed completely, but upon turning this in an anti-clockwise direction, it will come away from the bowl, complete with the emulsion block. Particular care should be taken not to damage the gasket beneath the block. Never use shellac or any jointing compound on this gasket. Upon replacing the block, locate the bottom screw first, and then tighten evenly the remaining screws.

The progression jet is removed from the carburettor by means of a screwdriver but the cover must be removed first, and care taken that it is replaced after inspection.

Slow Running is adjusted by means of the Throttle Stop Screw, and the Air Regulating Screw.

The stop screw determines the speed of slow running, i.e., it adjusts the throttle position for idling. To increase the slow running speed, the stop screw must be turned in a clockwise direction. If turned with opposite rotation, a slower tick-over will be given.

The richness of the slow running mixture is adjusted by the air regulating screw. Should the engine refuse to tick-over for any length of time, or stall on deceleration, the slow running jet may be choked, and should be cleaned. After examination, reset the slow running by means of the throttle and air adjustment screws. If the engine is inclined to "hunt" when running slowly, the mixture is too rich, and must be weakened by turning the air regulating screw in an anti-clockwise direction. The best position for the slow running air screw from the point of view of pick-up is within one turn of the full "home" position. A size of slow running jet must be decided upon that will permit even tick-over with this setting of the screw, although a slight tendency to richness can often be corrected by setting the idling speed a trifle faster.

There are other factors quite apart from the carburettor that have considerable influence on the slow running, i.e., slow running when the engine is out of gear, and the car is stationary. These factors include non-airtight joints, worn valve guides, valves not seating, unequal tappet adjustment, ignition too far advanced, incorrect setting of sparking plug points. Such details must always be taken into consideration. The carburettor only should not be suspected if slow running is unsatisfactory.

The Filter.

Petrol is filtered on entering the carburettor, and the gauze should be cleaned occasionally. To remove this item, unscrew the petrol connection and take the filter out of its seating. The gauze can then be cleaned thoroughly with petrol.

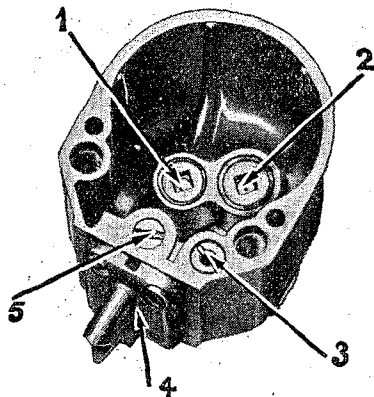
When reassembling the filter, care should be taken to see that the washers on both sides of the petrol pipe connection are correctly replaced.

The Bowl.

It will be seen that the jets are situated well away from the bottom of the bowl, so that any sediment will fall around and not into the jets. To keep the bowl free, swill it out occasionally with petrol.

Choke Tube.

The choke tube in the 26VA carburettor is cast in the barrel portion. Consequently it is not removable or changeable.



- 1. Main Jet.
- 2. Compensating Jet.
- 3. Screw over Capacity Well.
- 4. Emulsion Block.
- 5. Slow Running Jet.

Interior of Bowl showing position of Jets.