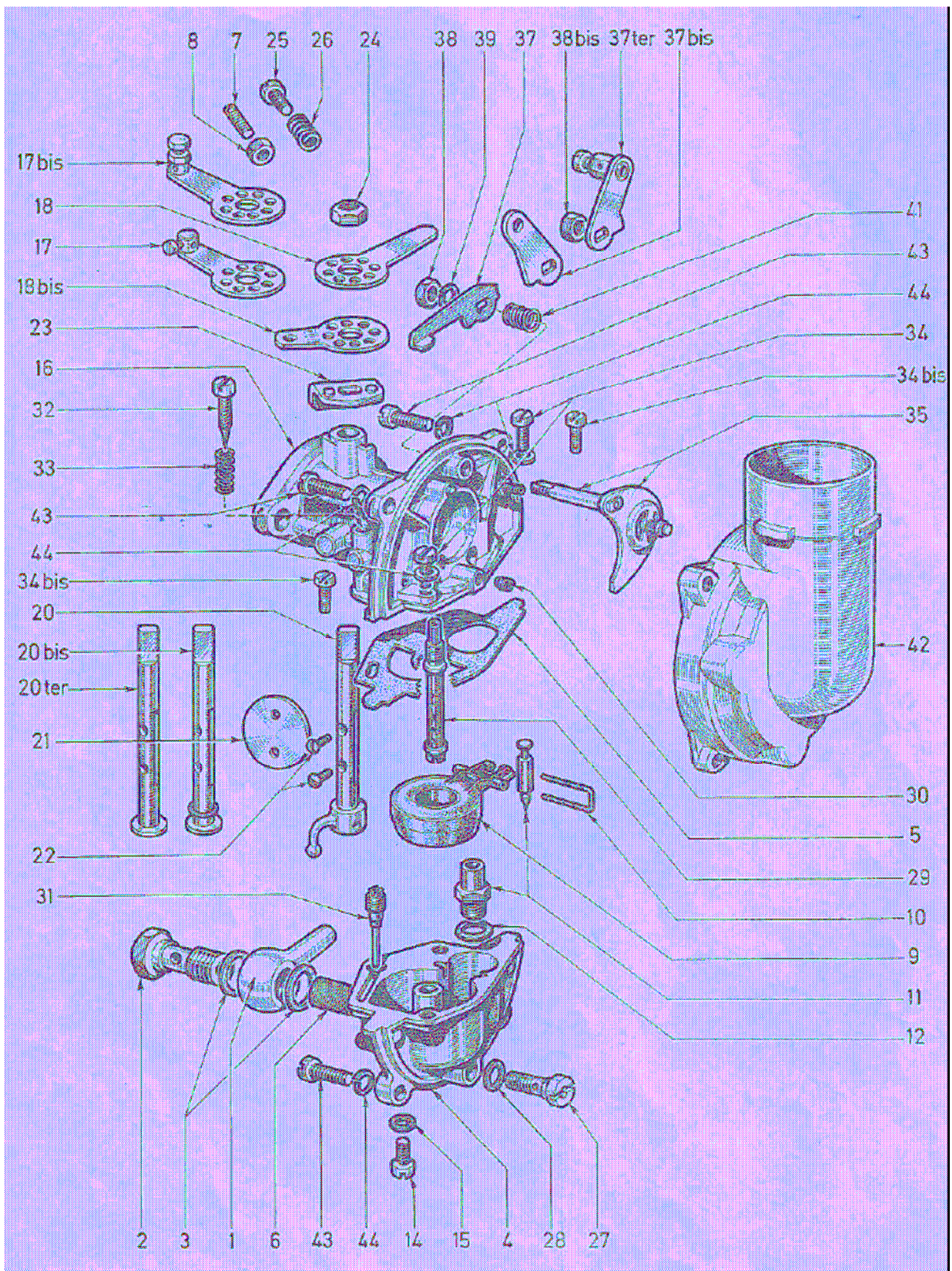


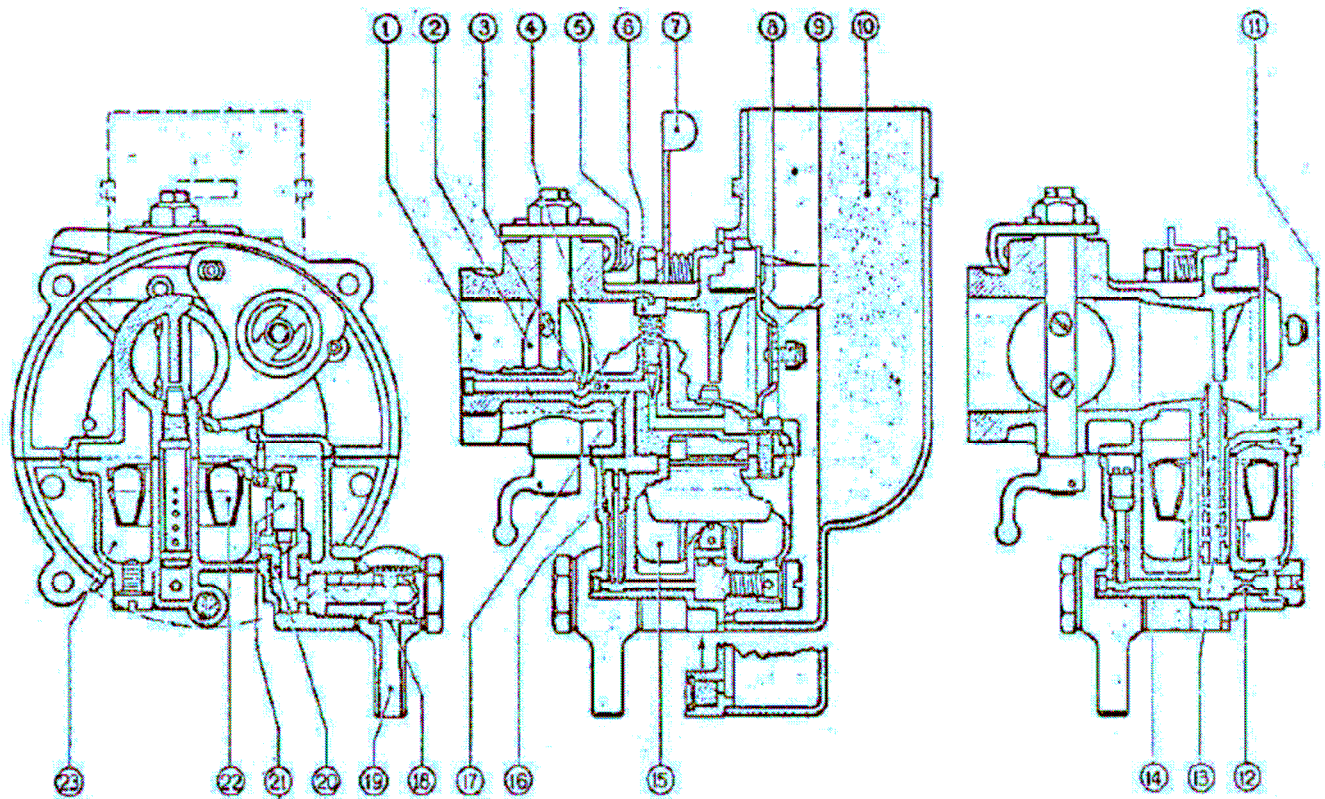
CARBURETTOR Zenith 28RXZ

Used on Rectimo 4AR1200, Limbach L1700EA, Stark Stamo MS 1500



Exploded view

1	Raccord orientable Petrol elbow
2	Axe du raccord - Plug for do
3	Joint du raccord - Fibre washer for petrol elbow
4	Cuve à niveau constant Carburetter bowl
5	Joint entre cuve et corps papillon - Gasket bowl to throttle body
6	Crépine de raccord orientable - Filter gauze
7	Vis butée - Stop screw
8	Contre écrou - Nut
9	Flotteur - Float
10	Axe de flotteur - Float spindle
11	Siège de pointeau avec pointeau Needle and seating
12	Joint de siège - Seating washer
14	Vis de vidange de la cuve - Bowl drain screw
15	Joint de la vis - Screw washer
16	Corps principal Main body
17	Levier de commande du papillon - Throttle lever
17 bis	Levier de commande du papillon - Throttle lever
18	Levier de commande du papillon - Throttle lever
18 bis	Levier de commande du papillon - Throttle lever
20	Axe de papillon avec levier - Throttle spindle and lever assy
20 bis	Axe de papillon - Throttle spindle
20 ter	Axe de papillon - Throttle spindle
21	Papillon des gaz - Throttle
22	Vis fixant le papillon - Screw fixing throttle to spindle
23	Butée de papillon - Throttle stop lever
24	Ecrou fixant la butée sur l'axe - Nut
25	Vis de réglage de vitesse de ralenti - Throttle stop screw
26	Ressort de freinage de la vis - Spring for screw
27	Gicleur principal - Main jet
28	Joint du gicleur principal - Washer for main jet
29	Tube de sortie d'émulsion Main discharge nozzle
30	Gicleur air émulsion - Main air bleed
31	Gicleur de ralenti - Slow running jet
32	Vis de richesse ralenti - Slow running richness adjusting screw
33	Ressort de freinage de la vis - Spring for screw
34	Vis fixant le corps papillon sur la cuve - Screw fixing throttle body to bowl
34 bis	Vis de fixation freinée - Screw fixing throttle body
35	Volet d'air avec clapet et axe de volet - Strangler with valve and spindle ..
37	Levier de commande de volet - Strangler lever
37 bis	Levier de commande de volet - Strangler lever
37 ter	Levier de commande de volet - Strangler lever
38	Ecrou fixant le levier - Nut fixing lever
38 bis	Ecrou fixant le levier - Nut fixing lever
39	Rondelle de freinage de l'écrou - Spring washer
41	Ressort de l'axe de volet - Friction spring for strangler spindle
43	Vis fixant la prise d'air - Screw fixing air intake
42	Corps de prise d'air - Air intake
44	Rondelle de freinage de la vis - Washer



The Zenith carburettor is designed for use with industrial and agricultural engines.

The carburettor's main jet is in the centre of the base of a circular float bowl. The float and float bowl are annular, so both the carburettor and engine will continue to operate correctly at high angles of pitch and roll without the fuel level or operation being adversely affected.

The cast metal air inlet elbow (plenum) is completely sealed and fitted with an air filter to prevent the entry of dust into the main venturi, the jets or the float bowl vent.

DESCRIPTION

The carburettor is composed of a main body (1), a float bowl (23) and an air inlet elbow (plenum) (10). The main body incorporates the throttle butterfly, the choke and the atomiser (emulsion tube).

The float bowl incorporates the float and needle (float) valve mechanism.

The inlet elbow (plenum) has no moving parts.

METHOD OF OPERATION

Fuel flows through the fuel pipe banjo fitting (19), through the filter (18) and through the needle valve jet (20) into the float bowl.

The float (22) is connected to the needle valve pin, and this maintains a constant level of fuel in the float bowl.

NORMAL OPERATION

Fuel passes through the main jet (12) and flows up inside the emulsion tube (14). Air is introduced through the air jet (11), into the emulsion tube through its side holes (13) into the atomizer. The resulting air/fuel emulsion is sucked into the main venturi. The layout and size of the holes (13) automatically ensure the proper mixture for correct functioning of the engine.

IDLING (slow running)

During slow running, fuel is sucked through the idle jet (16). This fuel is drawn into the idle mixture gallery (17) where it combines with air drawn through the slow-running mixture adjusting screw (6), to form an emulsion which is sucked into the venturi beside the throttle butterfly the at the idle (3) port.

A further opening (4) ensures the right amount and quality of fuel/air mixture during the first few degrees of opening of the throttle butterfly during acceleration or under load.

COLD STARTING

For cold starting the fuel/air mixture must be richer than during normal running with a warm engine.

This enrichment is achieved using a choke plate (8) incorporating a relief valve (9), which opens automatically under the influence of increased intake suction in the venturi.

After starting, the choke (8) should be gradually opened by operating the lever (7). When the engine has reached its optimum temperature, the choke should be in its fully open position.

ADJUSTMENT AND MAINTENANCE

Each carburettor is supplied with the proper settings for the engine for which it is intended, so no adjustment should be necessary.

The correct idling mixture can be adjusted by setting the idling air screw. Any adjustment should be made when the engine is warm.

Loosening this screw (6) causes a weaker mixture, while tightening causes enrichment.

The throttle stop screw (5) on the throttle lever bar controls the engine's idle speed.

In principle, the carburettor should not need any maintenance, only a regular cleaning of the float bowl to remove any impurities that may occur over time.

AIR FILTER

Engine life is influenced by good air filtration. The ZENITH Company has therefore developed specifically for their 28RXZ carburettor a paper filter element FA50 P20 with a large filtration surface.

MISCELLANEOUS DATA (figures are metric)

Choke22
Main jet (27) on Rectimo 4AR 1200, Sauer-Rectimo 1400, Stark Stamo 1500	1.25
Main air bleed (30)	1.00
Slow running jet (31)60
Level 9 mm below top face of float chamber under a head of 30 cm fuel	
Needle valve (float) on fuel pump feed engines (Limbach and Stamo)	1.5
Needle valve (float) on engines without fuel pump (Rectimo)	2.5