

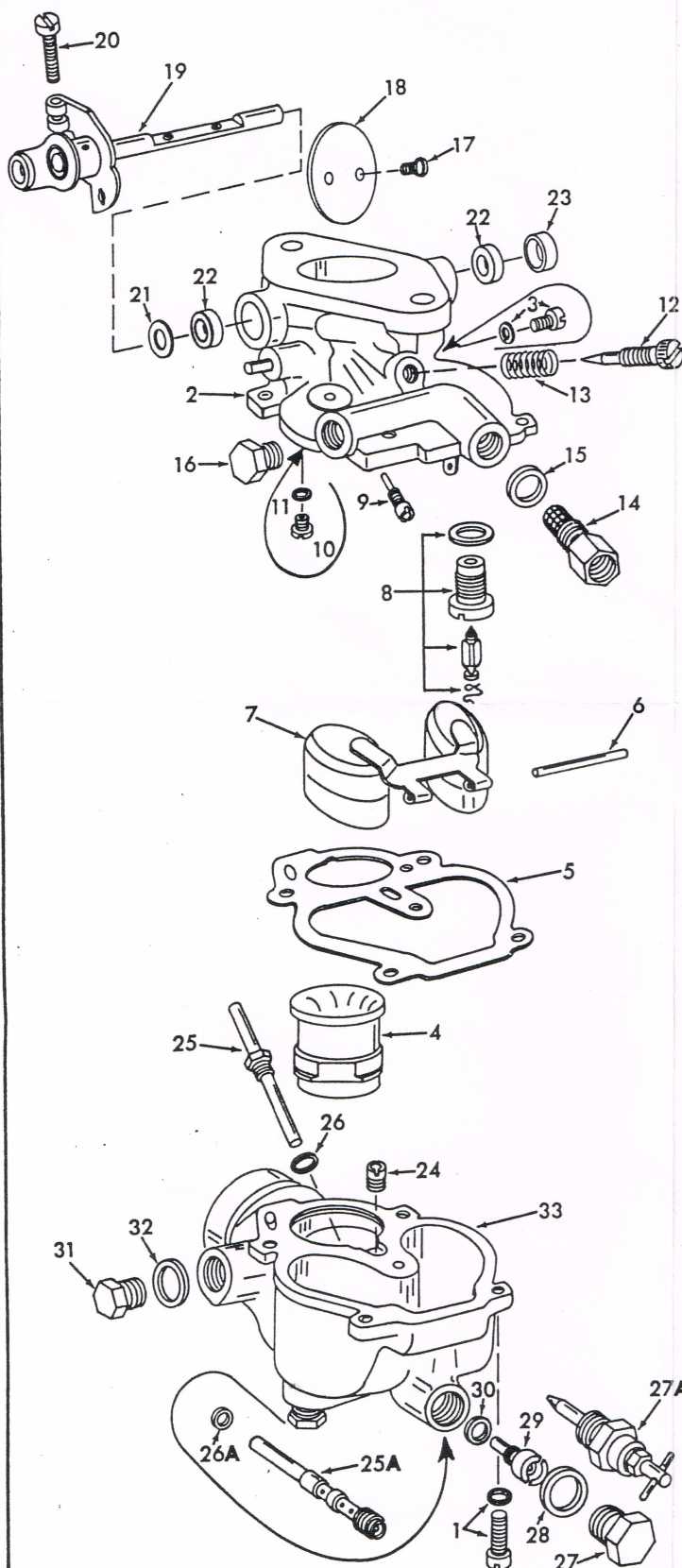
INSTRUCTION SHEET

ZENITH CARBURETOR SERIES — 61-62-67-68-161-267

50-389-1

GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET



DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: BEFORE REMOVING THROTTLE VALVE (18) MAKE A SCRIBE MARK ON VALVE AND SURFACE OF FLANGE. ON SOME SERIES CARBURETORS IT IS NECESSARY TO FILE OFF REVETED OR PEENED END OF THROTTLE VALVE SCREWS (17) FLUSH WITH THROTTLE SHAFT BEFORE REMOVING.

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW & LOCKWASHER (4) - BOWL COVER	18. VALVE - THROTTLE
2. BOWL COVER ASSEMBLY	19. THROTTLE SHAFT & LEVER ASSY.
3. SCREW & LOCKWASHER (SERIES 62) - VENTURI	20. SCREW - THROTTLE STOP
4. VENTURI	21. RETAINER - THROTTLE SHAFT SEAL
5. GASKET - BOWL COVER	22. SEAL - THROTTLE SHAFT
6. PIN - FLOAT LEVER	23. PLUG - THROTTLE SHAFT HOLE
7. FLOAT & LEVER ASSEMBLY	24. JET - WELL VENT
8. NEEDLE, SEAT & GASKET ASSY.	25. NOZZLE - MAIN
9. JET - IDLE	25A. NOZZLE (SERIES 67-267) - MAIN
10. JET (SERIES 62) - ECONOMIZER	26. GASKET - MAIN NOZZLE
11. GASKET (SERIES 62) - ECONOMIZER JET	26A. GASKET (SERIES 67-267) MAIN NOZZLE
12. NEEDLE - IDLE ADJUSTING	27. PLUG - MAIN PASSAGE
13. SPRING - IDLE ADJUSTING NEEDLE	27A. MAIN JET ADJUSTMENT
14. SCREEN & FITTING - FILTER	28. GASKET - MAIN PASSAGE PLUG OR MAIN JET ADJUSTMENT
15. GASKET - SCREEN & FITTING	29. JET - MAIN
16. PLUG - FUEL INLET	30. GASKET - MAIN JET
17. SCREW & LOCKWASHER (2) - THROTTLE VALVE	31. PLUG - CHOKE SHAFT HOLE
	32. GASKET - CHOKE SHAFT PLUG
	33. FLOAT BOWL ASSEMBLY

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE (1) A CARBURETOR CLEANING SOLVENT, (2) LAQUER THINNER, OR (3) DENATURATED ALCOHOL. MAKE CERTAIN THE THROTTLE BORE IS FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTING WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK MAIN JET ADJUSTMENT (27A) OR RUBBER PARTS IN CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS.

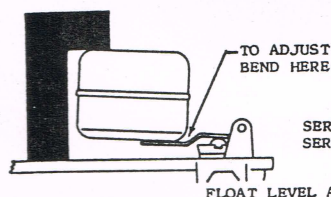
SPECIAL INSTRUCTIONS

MAIN JET ADJUSTMENT INSTALLATION (27A) - BACK OUT NEEDLE SEVERAL TURNS BEFORE TIGHTENING ASSEMBLE IN CARBURETOR. THEN TURN IN LIGHTLY UNTIL SEATED AND BACK OUT 2 TURNS.

THROTTLE SHAFT SEAL INSTALLATION - INSTALL NEOPRENE SEAL (22) WITH SEALING EDGES TO THE OUTSIDE. COVER WITH FLAT WASHER (21) AND STAKE IN PLACE.

THROTTLE VALVE INSTALLATION - INSTALL VALVE (18) WITH SCRIBE MARKS ALIGNED. TAP LIGHTLY TO CENTER IN THROTTLE BORE, TIGHTEN SCREWS SECURELY. WHERE NECESSARY, PEEN END OF SCREWS. THROTTLE HELD CLOSED, TURN THROTTLE STOP SCREW (20) IN UNTIL IT JUST CONTACTS STOP PIN, THEN TURN SCREW IN 1 1/2 ADDITIONAL TURNS.

IDLE NEEDLE INSTALLATION - TURN NEEDLE (12) IN LIGHTLY UNTIL SEATED. THEN BACK OUT 1 1/4 TURNS.



CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE

SERIES -61-67-68-161-267 (1 5/32")
SERIES -62 (1 39/64")

WITH BOWL COVER INVERTED, MEASURE FROM MACHINED SURFACE OF BOWL COVER (NO GASKET) TO TOP OF EACH FLOAT PONTON. TO ADJUST BEND FLOAT LEVER CLOSE TO FLOAT BODY. NOTE: WHEN VIEWED FROM FREE END, THE FLOAT PONTONS MUST BE CENTERED AND AT RIGHT ANGLES TO THE MACHINED SURFACE OF BOWL COVER AND MOVE FREELY ON THE FLOAT PIN.

VENTURI INSTALLATION - INSTALL LARGE OPENING END OF VENTURI (4) INTO THROTTLE BORE AND POSITION VENTURI SO THAT MACHINED FLAT WILL BE TOWARD FUEL BOWL WHEN ASSEMBLED. SOME SERIES USE A GUIDE NOTCH OR SCREW TO HOLD VENTURI IN PROPER POSITION.

IDLE ADJUSTMENT - ENGINE AT OPERATING TEMPERATURE, CHOKE VALVE COMPLETELY OPEN, ADJUST IDLE SCREW UNTIL ENGINE RUNS SMOOTHLY WITH IDLE STOP SCREW SET AT PROPER IDLE R.P.M.