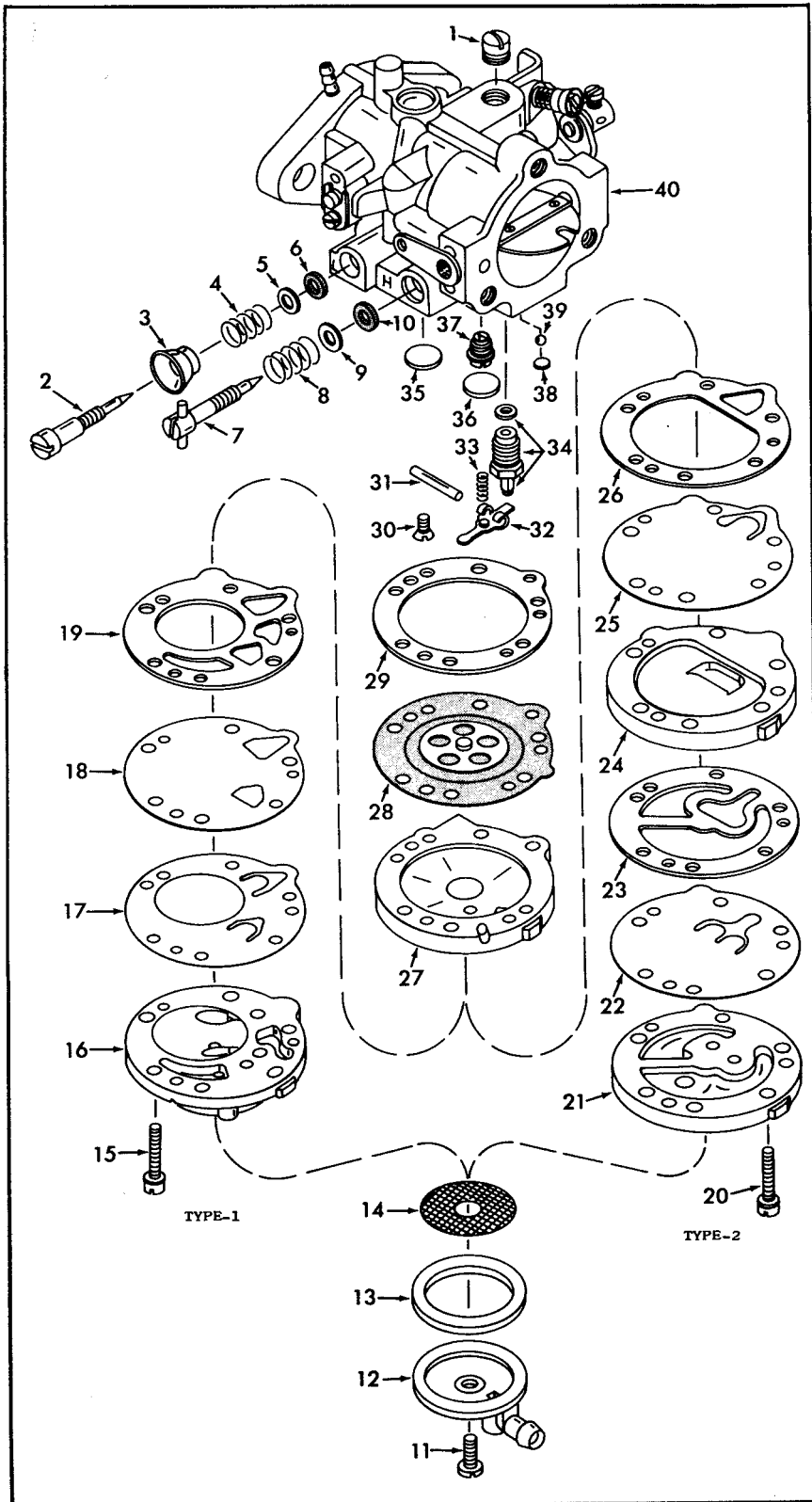


INSTRUCTION SHEET

TILLOTSON CARBURETOR — MODEL HR

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: IF WELCH PLUGS ARE REMOVED, CAREFULLY DRILL THROUGH THICKNESS OF PLUG, USING A 1/8" DRILL. THEN PRY OUT WELCH PLUG, USING A SMALL PUNCH.

NOMENCLATURE

REF. NO.	REF. NO.
1. PLUG SCREW - BODY CHANNEL	19. GASKET - FUEL PUMP TYPE 2
2. NEEDLE - IDLE ADJUSTING	20. SCREW & LOCKWASHER (6) - INLET VALVE BODY
3. CUP - IDLE ADJUSTING NEEDLE	21. BODY - INLET VALVE
4. SPRING - IDLE ADJUSTING NEEDLE	22. DIAPHRAGM - INLET VALVE
5. WASHER - IDLE NEEDLE	23. GASKET - INLET VALVE
6. O-RING - IDLE NEEDLE	24. BODY - FUEL PUMP
7. NEEDLE - HIGH SPEED ADJUSTING	25. DIAPHRAGM - FUEL PUMP
8. SPRING - HIGH SPEED NEEDLE	26. GASKET - FUEL PUMP
9. WASHER - HIGH SPEED SPRING	27. COVER - DIAPHRAGM
10. O-RING - HIGH SPEED NEEDLE	28. DIAPHRAGM
11. SCREW - FUEL STRAINER COVER	29. GASKET - DIAPHRAGM
12. COVER - FUEL STRAINER	30. SCREW - LEVER FULCRUM PIN RETAINER
13. GASKET - FUEL STRAINER	31. PIN - LEVER FULCRUM
14. SCREEN - FUEL STRAINER TYPE 1	32. LEVER - INLET CONTROL
15. SCREW & LOCKWASHER (6) - FUEL PUMP BODY	33. SPRING - INLET LEVER TENSION
16. BODY - FUEL PUMP	34. NEEDLE, SEAT & GASKET ASSEMBLY
17. DIAPHRAGM (VALVE) - FUEL PUMP	35. WELCH PLUG - IDLE PORT
18. DIAPHRAGM (PULSE) - FUEL PUMP	36. WELCH PLUG - NOZZLE CHECK VALVE
	37. VALVE - NOZZLE CHECK
	38. WELCH PLUG - ECONOMIZER CHECK BALL (SOME MODELS)
	39. BALL - ECONOMIZER CHECK (SOME MODELS)
	40. BODY - MAIN CARBURETOR

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) LACQUER THINNER, OR (3) DENATURED ALCOHOL. MAKE CERTAIN THE THROTTLE BORE IS FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK GASKETS OR RUBBER PARTS IN CLEANING SOLVENTS.

REASSEMBLY

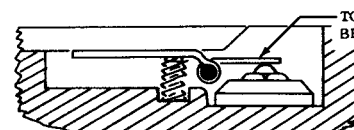
REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND ADJUSTMENTS.

SPECIAL INSTRUCTIONS

WELCH PLUG INSTALLATION - INSTALL PLUG WITH CONVEX SIDE UP. THEN FLATTEN, USING A 5/16" FLAT END PUNCH AND HAMMER. (CORRECTLY INSTALLED WELCH PLUG IS FLAT.)

INLET NEEDLE SEAT - INSTALL AND TIGHTEN TO 25-30 INCH LBS. OF TORQUE.

INLET CONTROL LEVER SETTING



CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

INLET CONTROL LEVER SHOULD BE FLUSH WITH THE METERING CHAMBER WALL.

IDLE NEEDLE INSTALLATION - TURN NEEDLE (2) IN LIGHTLY UNTIL SEATED, THEN BACK OUT 1 TURN.

IDLE ADJUSTMENT - ENGINE AT OPERATING TEMPERATURE, ADJUST IDLE MIXTURE SCREW TO OBTAIN A SMOOTH STEADY IDLE AND ADJUST IDLE SPEED SCREW TO ENGINE MANUFACTURER'S R.P.M.

HIGH SPEED NEEDLE INSTALLATION - TURN NEEDLE (7) IN LIGHTLY UNTIL SEATED, THEN BACK OUT 1 TURN.

HIGH SPEED ADJUSTMENT - ENGINE AT FULLY OPEN THROTTLE AND UNDER NORMAL FULL LOAD, ADJUST NEEDLE TO OBTAIN THE HIGHEST R.P.M.