



General Instructions

- Take lots of pictures as you take your carburetor apart. This will give you a reference of where things go.
- Using a cookie sheet with folded up sides will help keep parts from falling on the floor.
- We suggest not removing the throttle shaft, valves, or choke shaft unless they are corroded, or very dirty. These parts can be easily damaged and are difficult to re-assemble.
- Instruction sheets that come with our carburetor kits are somewhat generic. It may not match your parts exactly.
- Do NOT use WD-40 around your carburetor. It reacts with ethanol.
- Using Silicon Spray Lubricant on the gaskets will help with sticking in case you need to take the carburetor apart again.
- Be careful after taking the top of the carburetor off. Turning the carburetor upside down may cause parts to fall out and you won't know where they were.
- Screws and jets that are frozen can often be removed after heating outside the screw or jet.
- Stuck check balls can be removed by heating the outside of where the check ball resides and tapping the carburetor on the work bench.
- Do not discard any parts until complete done. You may have to refer for size, or matching.

Cleaning:

- Clean with carburetor dis-assembled.
- Soak all parts except rubber & electrical in Simple Green for 2 hours. Aluminum parts will get discolored if left longer.
- Wash parts with hot water if available to remove all chemicals.
- Blow out each passage way taking special notice of the smaller ones. Test each passage that air goes through the entire passage.
- Blow out the idle mixture hole.

- Check any hole above the idle mixture hole (inside the bore). This is the idle discharge and often becomes plugged.
- A tooth brush can facilitate cleaning parts.
- Soda blasting, then washing again will make the carburetor look good any will clean any minor deposits.
- Any corrosion, or deposits that are hard to remove may indicate the passages are also corroded and the carburetor should be replaced.
- If your engine has been sitting for 6 months or more, the gas has probably turned, and the gas tank will need to be cleaned as well as the fuel lines. Flushing new gas through the tank will not be enough.

Assembly:

- Do NOT apply any gasket sealant on any of the gaskets. Gas will break sealant part and the particles will clog the small passages.
- Test your float.
 - Brass floats should be immersed into hot water. As the air inside expands any leak will be noticeable with air bubbles.
 - Plastic, or Nitrophyl floats should be weighed. The weight is in grams. Check our technical pages for any weight specification that we may have.
- Most gaskets will fit as expected, but you may have to trim some, especially under the venturis.
- Your kit may include multiple gaskets in order to get better coverage out of the kit. Use the one that fits the best. Look for any opening the gasket may leave allowing air into the carburetor. Some holes may be casting holes that don't lead to anything and do not have to be covered.
- Mounting gaskets for multiple bore carburetors do not have to have matching holes. Example a four-barrel gasket can be open in the middle instead of 4 holes as long as the carburetor has some kind of passage between bores. The passage is between primary, or secondary, not both.
- When adjusting the float be careful not to put any pressure on the needle. The viton tip is easily damaged.
- Most idle mixture screws can be cleaned using a soft wire wheel. Inspect for any scoring, which would indicate over tightening. Screw with scoring should be replaced.

Accelerator Pumps:

- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and the gas to do its job naturally.
- Twist the pump as you are inserting to help keep the cup from curling or folding over.
- Test your accelerator pump circuit before putting the top of the carburetor back on. Our technical pages have instructions on how to do this for most carburetor types.
- Pump wells are usually slight tapered, and the pump will not seal until it gets towards the bottom.

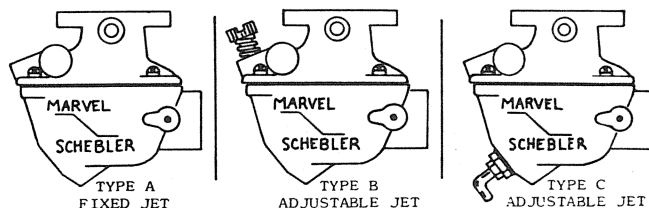
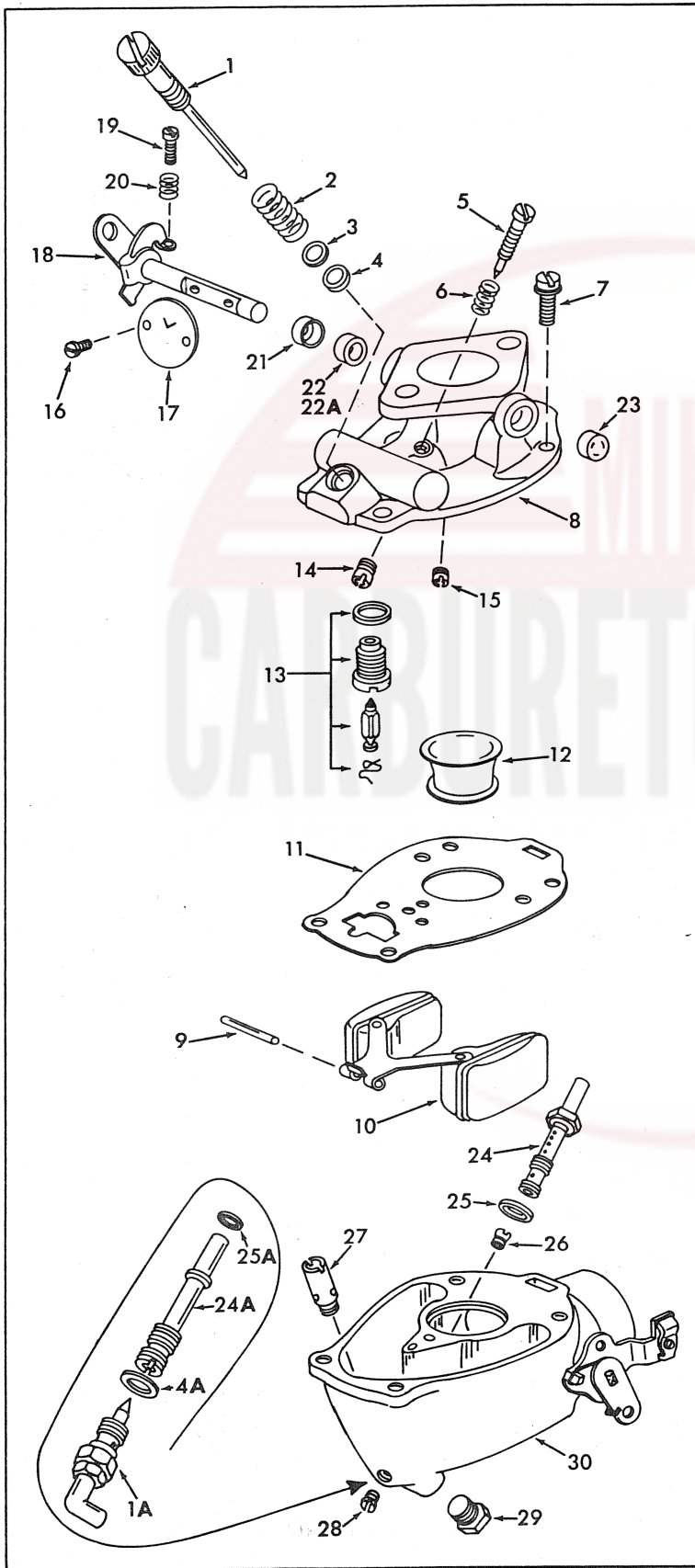
INSTRUCTION SHEET

MARVEL-SCHEBLER CARBURETOR MODEL-TSX

50-386

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: IDLE JET (14) AND ECONOMIZER JET (15) ARE NOT USED IN ALL CARBURETORS. WHEN REMOVING IDLE JET (14), ECONOMIZER JET (15), OR POWER JET (26) BE SURE TO USE THE PROPER SIZE SCREW DRIVER. JETS CAN EASILY BE BROKEN. BEFORE REMOVING THROTTLE VALVE (17), NOTE ANGLE IDENTIFICATION MARK FACING FLANGE FACE OF CARBURETOR. POWER ADJUSTING NEEDLE SEAT (27) NOT USED IN ALL TYPE B CARBURETORS.

NOMENCLATURE

REF. NO.	REF. NO.
1. NEEDLE-POWER ADJ. (TYPE B)	15. JET-ECONOMIZER
1A. NEEDLE ASSY.-POWER ADJUSTING (TYPE C)	16. SCREW & LOCKWASHER (2) - THROTTLE VALVE
2. SPRING-POWER ADJ. NEEDLE	17. THROTTLE VALVE
3. WASHER-FLAT POWER ADJ. NEEDLE SPRING	18. SHAFT & LEVER ASSY.-THROTTLE
4. GASKET-POWER ADJ. NEEDLE	19. SCREW-THROTTLE STOP
4A. GASKET-POWER ADJ. NEEDLE ASSY. (TYPE C)	20. SPRING-THROTTLE STOP SCREW
5. NEEDLE-IDLE ADJUSTING	21. RETAINER-THROTTLE SHAFT SEAL
6. SPRING-IDLE ADJ. NEEDLE	22. SEAL (FELT)-THROTTLE SHAFT
7. SCREW & LOCKWASHER (4) - BOWL COVER	22A. SEAL (RUBBER)-THROTTLE SHAFT
8. BOWL COVER	23. CUP-THROTTLE SHAFT
9. PIN-FLOAT LEVER	24. NOZZLE-MAIN (TYPE A-B)
10. FLOAT & LEVER ASSY.	24A. NOZZLE-MAIN (TYPE C)
11. GASKET-BOWL COVER	25. GASKET-MAIN NOZZLE (TYPE A-B)
12. VENTURI	25A. GASKET-MAIN NOZZLE (TYPE C)
13. NEEDLE, SEAT & GASKET ASSY.	26. JET-POWER (TYPE A-B)
14. JET-IDLE	27. SEAT-POWER ADJ. NDL. (TYPE B)
	28. SCREW-PLUG
	29. PLUG-BOWL DRAIN
	30. BOWL ASSY.-FLOAT

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) DENATURIZED ALCOHOL. MAKE CERTAIN THE THROTTLE BORES ARE 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 RUBBER PARTS OR POWER ADJUSTING ASSEMBLY (1A) TYPE C IN CLEANING SOLVENT.

REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS.

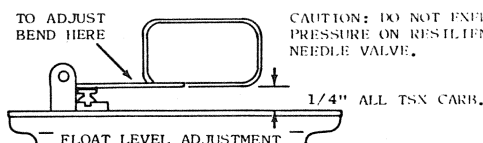
SPECIAL INSTRUCTIONS

THROTTLE SHAFT SEAL AND RETAINER INSTALLATION - ASSEMBLE RETAINER (21) AND FELT SEAL (22), OR RUBBER SEAL (22A) WITH RETAINER IF REQUIRED, ON THROTTLE SHAFT. INSERT SHAFT IN CARBURETOR AND TAP LIGHTLY UNTIL RETAINER IS FLUSH WITH CASTING.

THROTTLE VALVE (17) INSTALLATION - INSTALL VALVE WITH ANGLE IDENTIFICATION MARK FACING FLANGE FACE OF CARBURETOR. TAP LIGHTLY TO CENTER IN THROTTLE BORE. TIGHTEN SCREWS SECURELY.

IDLE ADJUSTING NEEDLE (5) - TURN NEEDLE IN LIGHTLY UNTIL SEATED. THEN BACK OUT 1 TURN.

POWER ADJUSTING NEEDLE (1) OR (1A) - TURN NEEDLE IN LIGHTLY UNTIL SEATED. THEN BACK OUT 1 TURN.



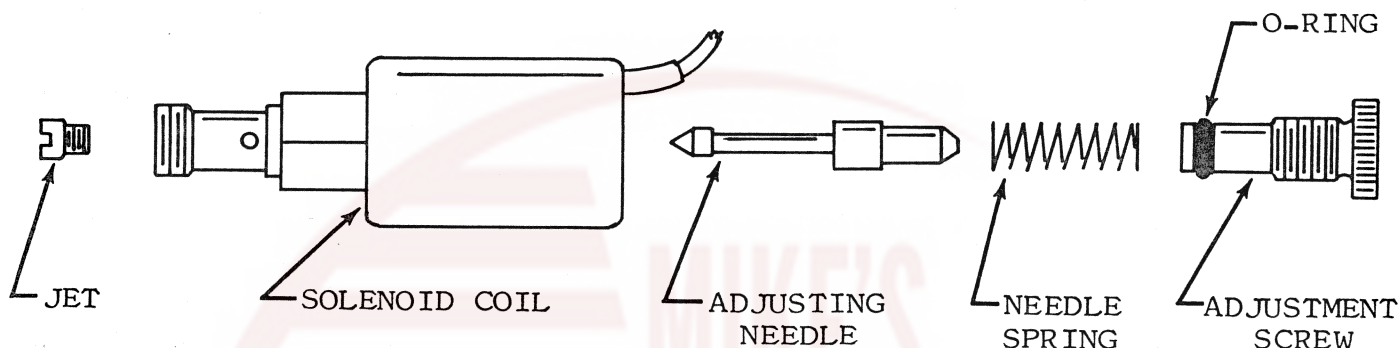
MEASURE FROM GASKET SURFACE TO NEAREST EDGE OF EACH FLOAT. TO ADJUST, BEND FLOAT LEVER KEEPING EDGE OF FLOAT PARALLEL WITH GASKET.

IDLE ADJUSTMENT - ENGINE AT OPERATING TEMPERATURE, CHOKE VALVE COMPLETELY OPEN, ADJUST IDLE SCREW UNTIL ENGINE RUNS SMOOTHLY STAYING ON THE RICH SIDE OF THE ADJUSTMENT.

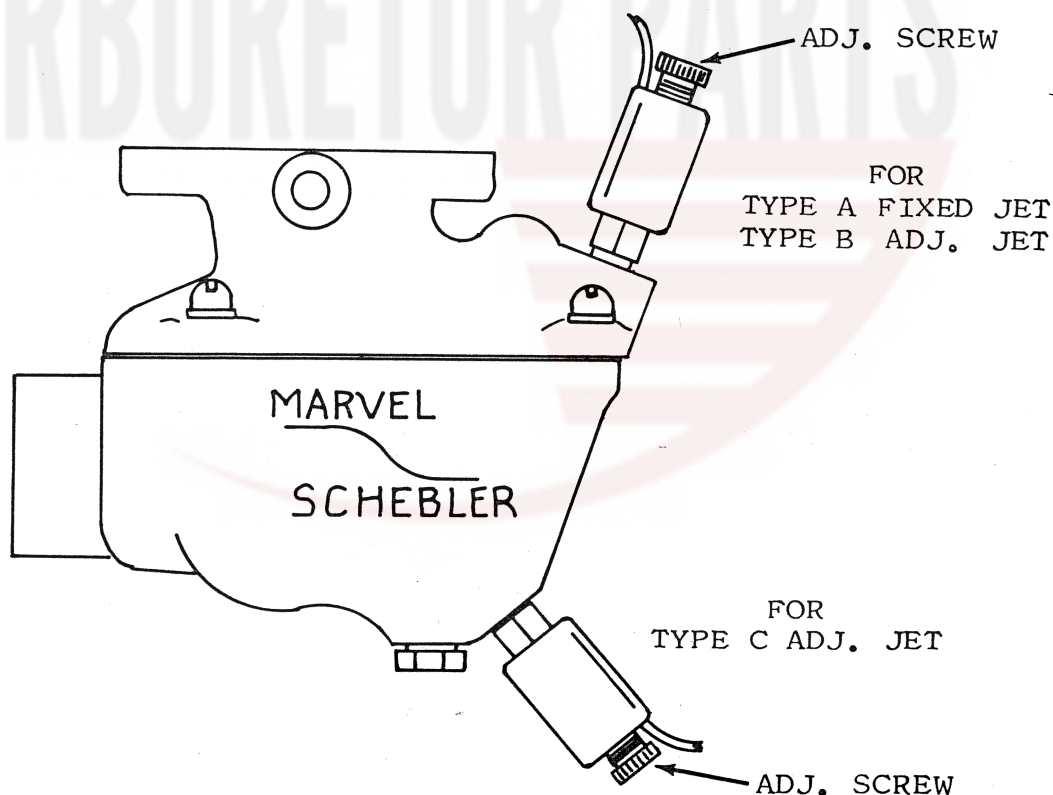
POWER ADJUSTMENT - ENGINE RUNNING AT GOVERNED SPEED UNDER LOAD, TURN POWER ADJUSTING NEEDLE CLOCKWISE UNTIL ENGINE BEGINS TO LOSE POWER. THEN BACK OUT UNTIL ENGINE PICKS UP POWER AND RUNS SMOOTHLY. A RICHER MIXTURE MAY BE NEEDED TO IMPROVE ACCELERATION.

SERVICE INSTRUCTIONS FOR CARBURETORS EQUIPPED WITH ANTI-DIESELING POWER ADJUSTING NEEDLE

REMOVE UNIT FROM CARBURETOR. DISASSEMBLE AS SHOWN. DO NOT TRY TO REMOVE O-RING. WASH IN CLEANING SOLVENT AND BLOW OFF WITH COMPRESSED AIR. CAUTION: DO NOT SOAK COIL ASSEMBLY OR RUBBER O-RING IN CARBURETOR CLEANER.



ASSEMBLY: LIGHTLY OIL O-RING AND REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY.



PRELIMINARY SETTING. TURN ADJUSTMENT SCREW IN LIGHTLY UNTIL NEEDLE SEATS, THEN BACK OUT 2-3 TURNS. FINAL SETTING UNDER LOAD IN ACCORDANCE WITH YOUR ENGINE MANUAL.