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:

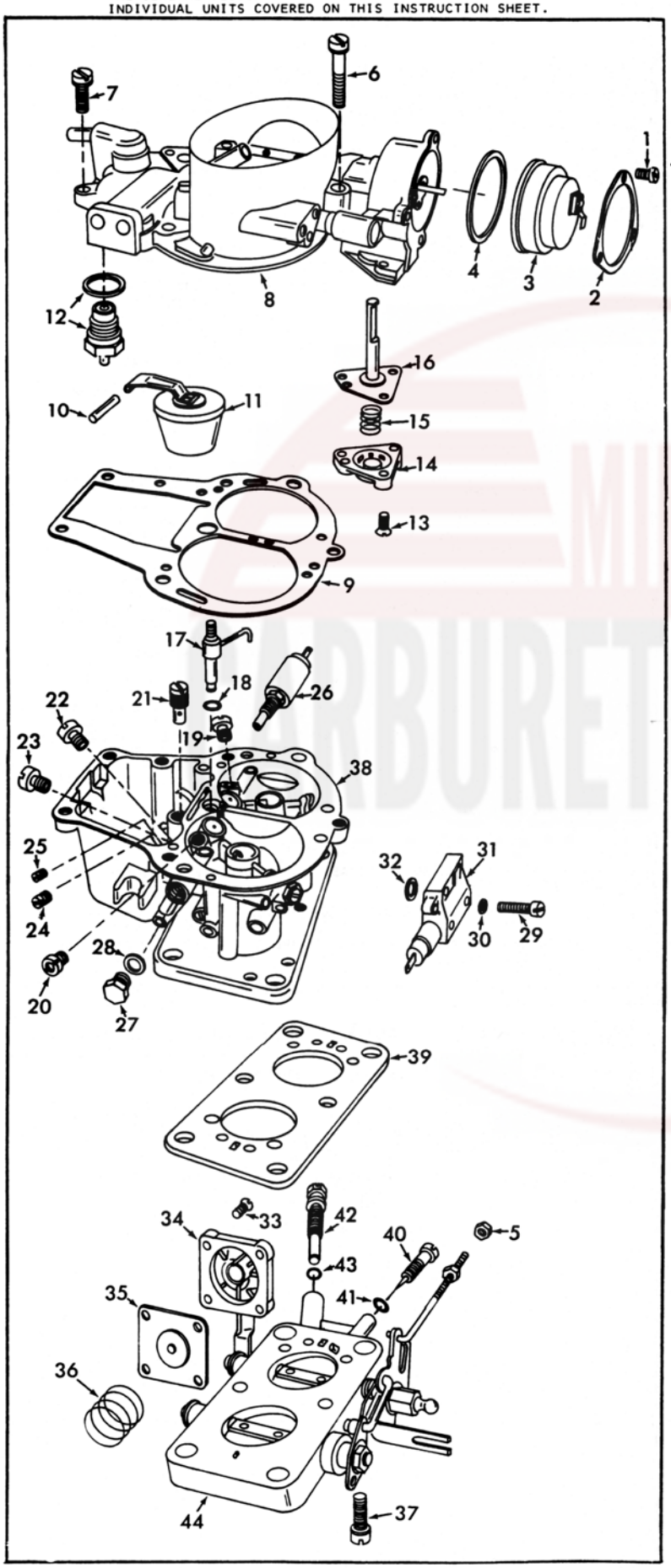
- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and 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

SOLEX CARBURETOR — MODEL TDID

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: TO REMOVE PUMP INJECTOR TUBE ASSY. (17) CAREFULLY PRY UP WITH SCREWDRIVER. REMOVE PUMP DIAPHRAGM COVER SCREWS (33) ONLY, NOT NECESSARY TO DISCONNECT LINKAGE, NOTE SIZES OF JETS AND THEIR LOCATION FOR PROPER ASSEMBLY. (RECORD SIZES BELOW.)

NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW (3)- RETAINER RING	23. JET SEC.- MAIN_____
2. RING- RETAINING	24. JET SEC.- AIR JET_____
3. CHOKE COVER ASSY. ELECTRIC TYPE	25. JET SEC.- IDLE_____
4. GASKET- CHOKE COVER	26. VALVE ASSY.- IDLE CUT OFF
5. NUT- CHOKE LINK ADJ.	27. PLUG - SEC. IDLE PASSAGE
6. SCREW & LOCKWASHER (1)- BOWL COVER LONG	28. GASKET- PLUG
7. SCREW & LOCKWASHER (4)- BOWL COVER SHORT	29. SCREW & LOCKWASHER (2)- THERMAL VALVE
8. BOWL COVER ASSY.	30. WASHER- VALVE SCREW
9. GASKET- BOWL COVER	31. THERMAL STARTING VALVE
10. PIN- FLOAT HINGE	32. GASKET- THERMAL-VALVE
11. FLOAT & LEVER ASSY.	33. SCREW (4)- PUMP COVER
12. NEEDLE, SEAT & GASKET ASSY.	34. COVER- PUMP DIAPHRAGM
13. SCREW (3)- DIAPHRAGM COVER	35. DIAPHRAGM ASSY.- PUMP
14. COVER- DIAPHRAGM	36. SPRING- DIAPHRAGM RETURN
15. SPRING- DIAPHRAGM RETURN	37. SCREW & LOCKWASHER (2)- THROTTLE BODY
16. DIAPHRAGM ASSY.- CHOKE VACUUM	38. BOWL ASSY.
17. TUBE ASSY.- PUMP INJECTION	39. GASKET- THROTTLE BODY
18. O-RING- TUBE ASSY.	40. NEEDLE- IDLE MIXTURE
19. JET PRI.- AIR CORRECTION_____	41. O-RING- IDLE NEEDLE
20. JET SEC.- AIR CORRECTION_____	42. SCREW- IDLE SPEED ADJUSTING
21. CHECK VALVE- PUMP INLET	43. O-RING- IDLE SPEED ADJ. SCREW
22. JET PRI.- MAIN_____	44. THROTTLE BODY ASSY.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. DO NOT PROLONG SOAKING OF PARTS WITH PLASTIC COMPONENTS. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL CARBON DEPOSITS. WASH 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 FLOAT (11) SOLENOID (26) THERMAL VALVE (31) OR PARTS MADE OF RUBBER MATERIAL IN CLEANING SOLVENTS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

IDLE SPEED ADJUSTING SCREW (42) - TURN IN UNTIL LIGHTLY BOTTOMED THEN BACK OUT 5/8 TURN (ROUND END TYPE.) 2 1/2 TURNS ON (SQUARE END TYPE.)

IDLE MIXTURE NEEDLE (40) - TURN IN UNTIL LIGHTLY BOTTOMED THEN BACK OUT 2 1/2 TURNS.

PUMP INJECTION TUBE (17) - INSTALL WITH TUBE POINTING INTO PRIMARY VENTURI.

NEEDLE & SEAT INSTALLATION (12) - SELECT PROPER GASKET THICKNESS REFER TO OLD GASKET.

CHOKE COVER ASSY. (3) - INSTALL CHOKE COVER SO THAT LOOP ON CHOKE SPRING SLIDES OVER THE AUTOMATIC CHOKE OPERATING LEVER. ALIGN THE MARK ON CHOKE COVER WITH CENTER TOOTH ON CHOKE HOUSING. (INDEX SETTING.)

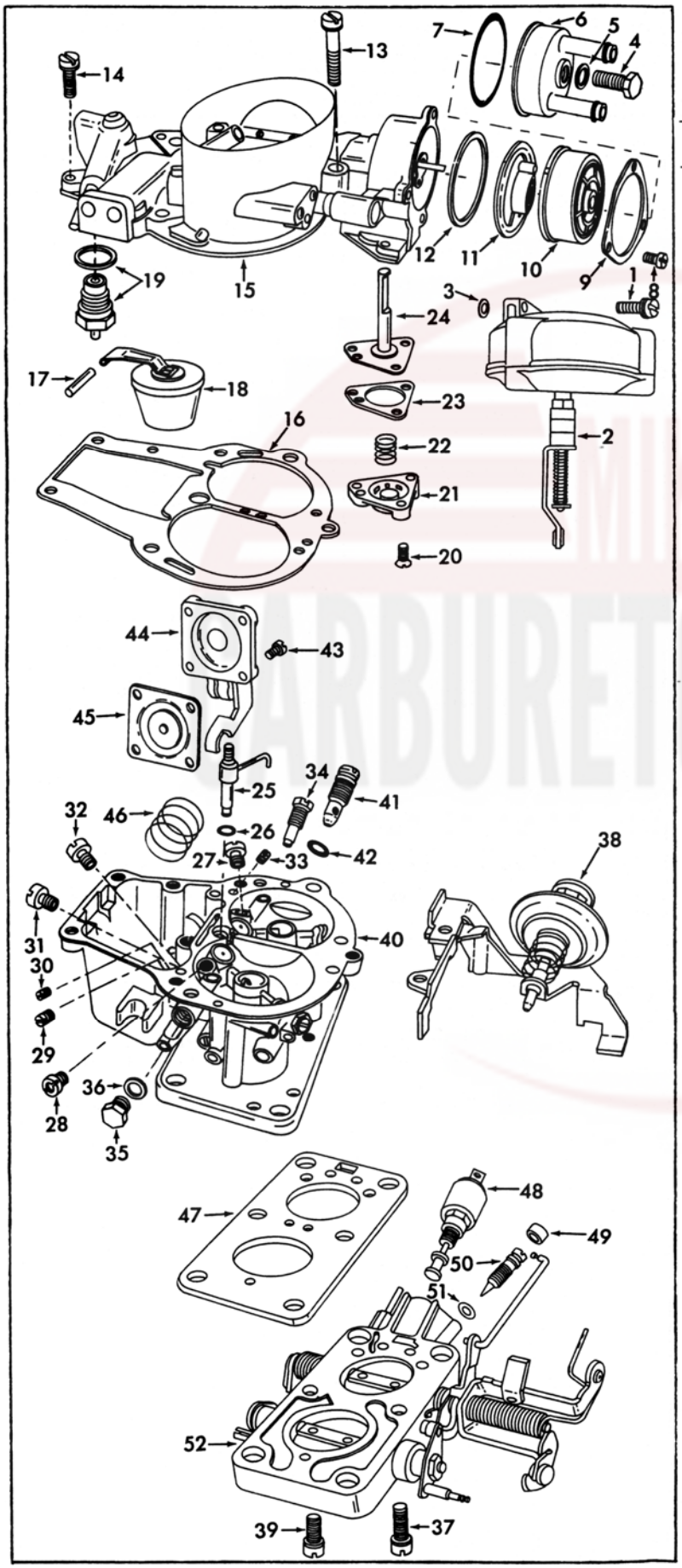
CARBURETOR MOUNTING BOLTS - TIGHTEN TO 7 FT. LBS. DO NOT OVERTIGHTEN.

INSTRUCTION SHEET

SOLEX CARBURETOR — MODEL DIDTA

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: TO REMOVE PUMP INJECTOR TUBE ASSY. (25) CAREFULLY PRY UP WITH SCREWDRIVER. NOTE SIZES OF JETS AND THEIR LOCATION FOR PROPER ASSEMBLY. (RECORD SIZES BELOW.)

NOMENCLATURE

REF. NO.		REF. NO.	
1.	SCREW(2)-VACUUM DIAPHRAGM ASSY.	27.	JET PRI.-AIR CORRECTION____
2.	SECONDARY VACUUM DIAPHRAGM ASSY.	28.	JET SEC.-AIR CORRECTION____
3.	GASKET-SEC. VAC. DIAPH. HOUSING	29.	JET-IDLE AIR____
4.	SCREW-WATER CONNECTOR	30.	JET-IDLE FUEL____
5.	GASKET-SCREW	31.	JET-SEC.-MAIN____
6.	COVER-WATER HOUSING	32.	JET-PRI.-MAIN____
7.	O-RING-COVER	33.	JET-AUXILIARY AIR____
8.	SCREW(3)-RETAINER RING	34.	JET-IDLE____
9.	RING-RETAINING	35.	PLUG-SEC. IDLE PASSAGE
10.	COVER-CHOKE COIL	36.	GASKET-PLUG
11.	SPRING ASSY.-CHOKE	37.	SCREW & LOCKWASHER-DASHPOT ASSY.
12.	GASKET-CHOKE COVER	38.	DASHPOT & BRACKET ASSY.
13.	SCREW & LOCKWASHER(1)-BOWL COVER	39.	SCREW & LOCKWASHER-THROTTLE BODY
14.	SCREW & LOCKWASHER(4)-BOWL COVER	40.	BOWL ASSY.
15.	BOWL COVER ASSY.	41.	SCREW-IDLE SPEED ADJUSTING
16.	GASKET-BOWL COVER	42.	O-RING-IDLE SPEED SCREW
17.	PIN-FLOAT HINGE	43.	SCREW & LOCKWASHER(4)-PUMP DIAPHRAGM COVER
18.	FLOAT & LEVER ASSY.	44.	COVER ASSY.-PUMP DIAPHRAGM
19.	NEEDLE, SEAT & GASKET ASSY.	45.	DIAPHRAGM ASSY.-PUMP
20.	SCREW & LOCKWASHER(3)-DIAPHRAGM COVER	46.	SPRING-DIAPHRAGM
21.	COVER-DIAPHRAGM	47.	GASKET-THROTTLE BODY
22.	SPRING-DIAPHRAGM RETURN	48.	VALVE ASSY.-BYPASS CUTOFF
23.	GASKET-CHOKE VACUUM DIAPHRAGM	49.	PLUG-IDLE ADJUSTING NEEDLE
24.	DIAPHRAGM ASSY.-CHOKE VACUUM	50.	NEEDLE-IDLE ADJUSTING
25.	TUBE ASSY.-PUMP INJECTOR	51.	O-RING-IDLE ADJ. NEEDLE
26.	O-RING-INJECTOR TUBE	52.	THROTTLE BODY ASSY.

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. DO NOT PROLONG SOAKING OF PARTS WITH PLASTIC COMPONENTS. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BODY IS FREE OF ALL CARBON DEPOSITS. WASH 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 FLOAT (18) SOLENOID (48) SECONDARY VACUUM UNIT (2) OR PARTS MADE OF RUBBER MATERIAL IN CLEANING SOLVENTS.

REASSEMBLY

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

SPECIAL INSTRUCTIONS

IDLE SPEED ADJUSTING SCREW (41)-TURN IN UNTIL LIGHTLY BOTTOMED, THEN BACK OUT 5/8 TURN (ROUND END TYPE).

IDLE MIXTURE NEEDLE (50)-TURN IN UNTIL LIGHTLY BOTTOMED, THEN BACK OUT 2 1/2 TURNS.

PUMP INJECTION TUBE (25)-INSTALL WITH TUBE POINTING INTO PRIMARY VENTURI.

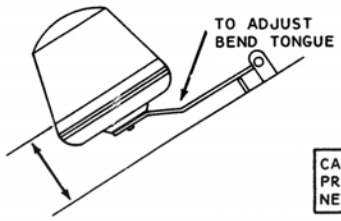
NEEDLE & SEAT INSTALLATION (19)-SELECT PROPER GASKET THICKNESS REFER TO OLD GASKET.

CHOKE SPRING ASSY. (11)-INSTALL SO THAT LOOP ON SPRING SLIDES OVER THE AUTOMATIC CHOKE OPERATING LEVER. ALIGN MARK ON CHOKE HOUSING AND INTERMEDIATE RING BETWEEN THE TWO MARKS ON CHOKE COVER (10).

CARBURETOR MOUNTING BOLTS-TIGHTEN TO 7 FT. LBS. DO NOT OVERTIGHTEN.

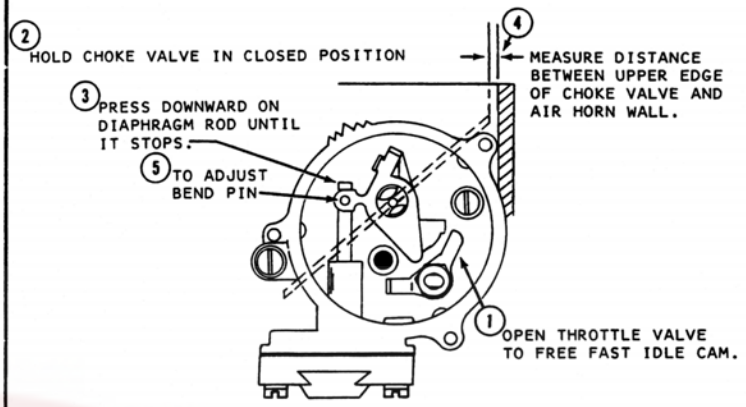
ADJUSTMENTS

FLOAT BOWL HELD AT A 45° ANGLE. MEASURE DISTANCE FROM SURFACE OF BOWL COVER TO UPPER EDGE OF BEAD ON THE FLOAT. (DO NOT COMPRESS SPRING LOADED BALL.)

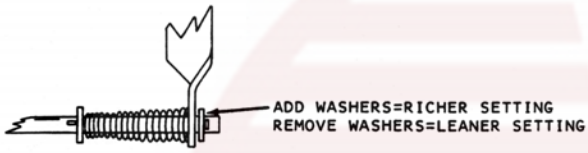


CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

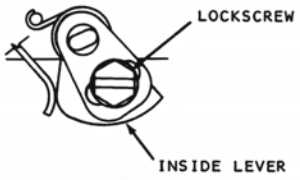
DRY FLOAT LEVEL ADJUSTMENT FIG. 1



VACUUM BREAK ADJUSTMENT FIG. 2



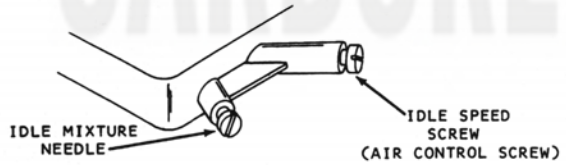
EARLY DESIGN
PUMP STROKE SETTING FIG. 3



TO ADJUST PUMP STROKE LOOSEN LOCKSCREW, THEN MOVE INSIDE LEVER COUNTERCLOCKWISE TO RICHEN OR CLOCKWISE TO A LEANER SETTING. (TIGHTEN LOCKSCREW.)

LATE DESIGN
PUMP STROKE SETTING FIG. 4

USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW IDLE IF AVAILABLE.



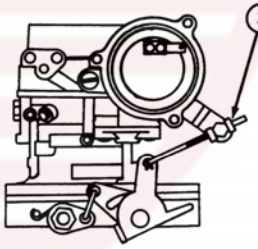
SUPPLEMENT

1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS AND PROCEDURE
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN. AIR CLEANER IN PLACE. LEAD TO IDLE CUTOFF VALVE CONNECTED.
3. ADJUST IDLE SPEED ADJUSTING SCREW UNTIL ENGINE RUNS AT APPROXIMATELY 950 ± 50 R.P.M. USE A TACHOMETER.
4. ADJUST IDLE MIXTURE NEEDLE TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING. READJUST IDLE R.P.M. IF NECESSARY.

SLOW IDLE ADJUSTMENT FIG. 5

1. ENGINE AT NORMAL OPERATING TEMPERATURE. (ENGINE NOT RUNNING) OPEN THROTTLE AND CLOSE CHOKE VALVE. RELEASE THROTTLE TO TRAP FAST IDLE CAM.

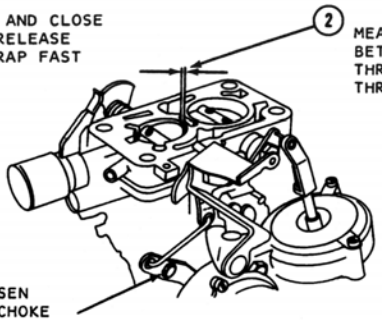
2. WITHOUT TOUCHING ACCELERATOR PEDAL OR LINKAGE, START ENGINE. CHECK FAST IDLE SPEED.



3. TO ADJUST TURN NUTS ON THROTTLE CONNECTING LINK. SHORTEN LINKAGE TO DECREASE OR LENGHTHEN TO INCREASE FAST IDLE R.P.M. (LOCK ADJUSTING NUTS.)

EARLY TYPE. (ON CAR).
FAST IDLE ADJUSTMENT FIG. 6

1. OPEN THROTTLE AND CLOSE CHOKE VALVE. RELEASE THROTTLE TO TRAP FAST IDLE CAM.



2. MEASURE CLEARANCE BETWEEN PRIMARY THROTTLE VALVE AND THROTTLE BORE.

.025"
.650MM

3. TO ADJUST LOOSEN LOCKSCREW ON CHOKE CONNECTING ROD AND MOVE ARM AS NECESSARY. (RETIGHTEN LOCK SCREW).

LATE TYPE (BENCH ADJ.)
FAST IDLE ADJUSTMENT FIG. 7

ADJUSTMENT DATA

MAKE	FLOAT LEVEL		VACUUM BREAK	
AUDI				
1971	21/32"	16.5MM	.140"	3.50MM
1972	21/32"	16.5MM	.098"	2.50MM
1973				
100	21/32"	16.5MM	.137"	3.50MM
FOX	21/32"	16.5MM	.146"	3.70MM
1974	21/32"	16.5MM	.126"	3.20MM
DASHER				
1974	*		.128"	3.27MM
BMW				
1974-76	23/32"	18MM	.259"	6.6MM

* NOTE: DASHER USE 2.0MM GASKET ON NEEDLE SEAT.