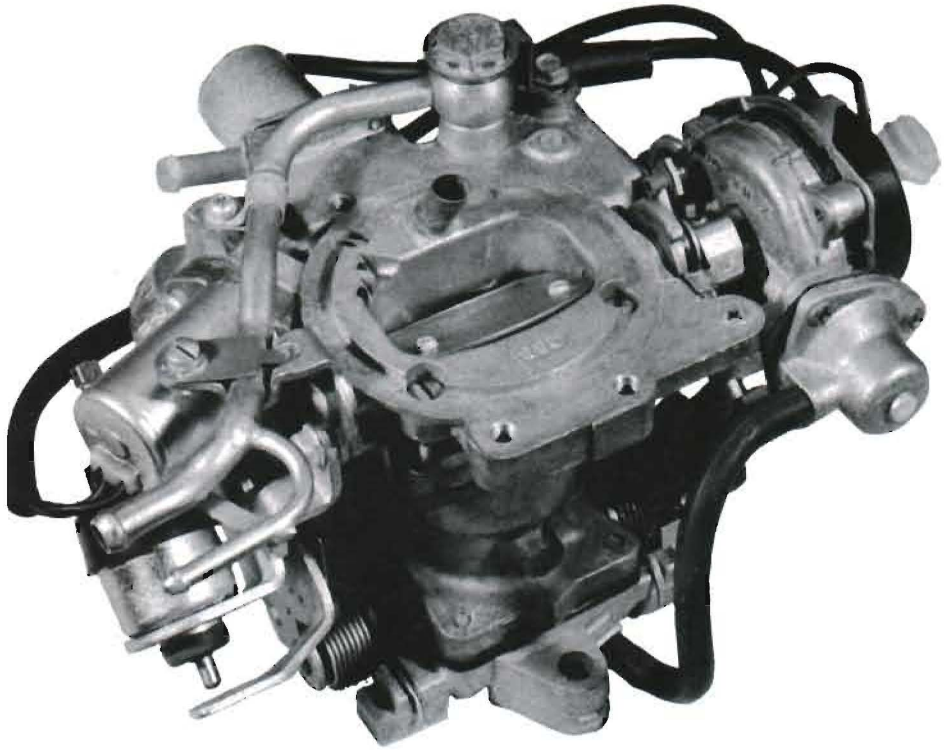
TYF
SERVICE MANUAL
CARTER-WEBER CARBURETOR



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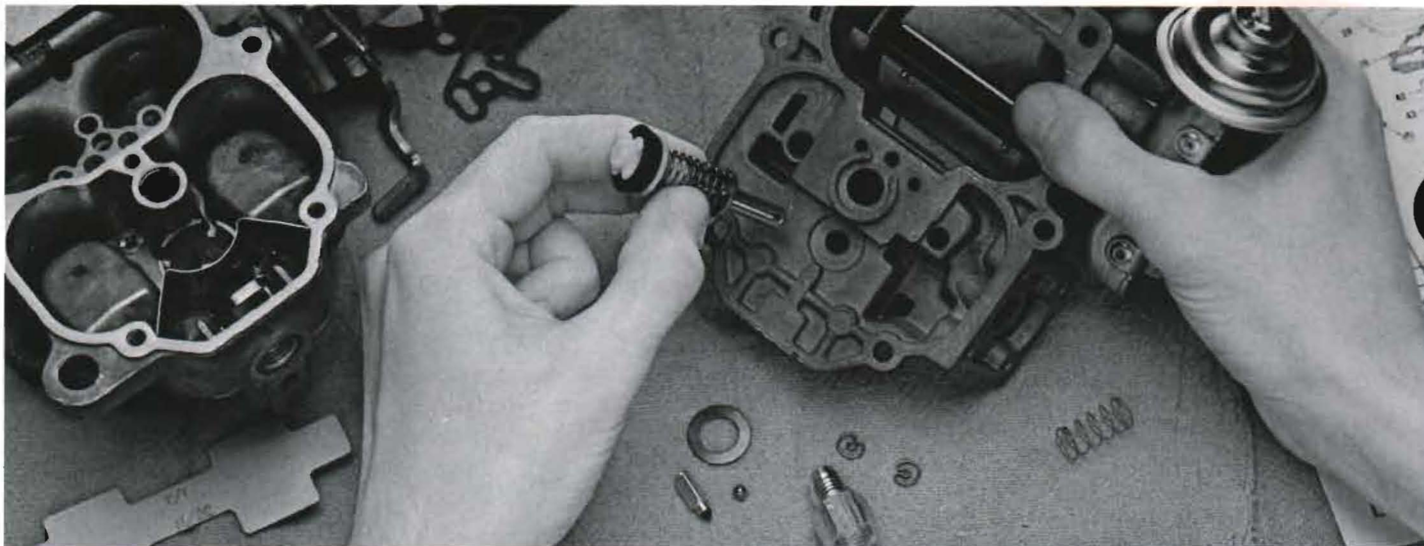

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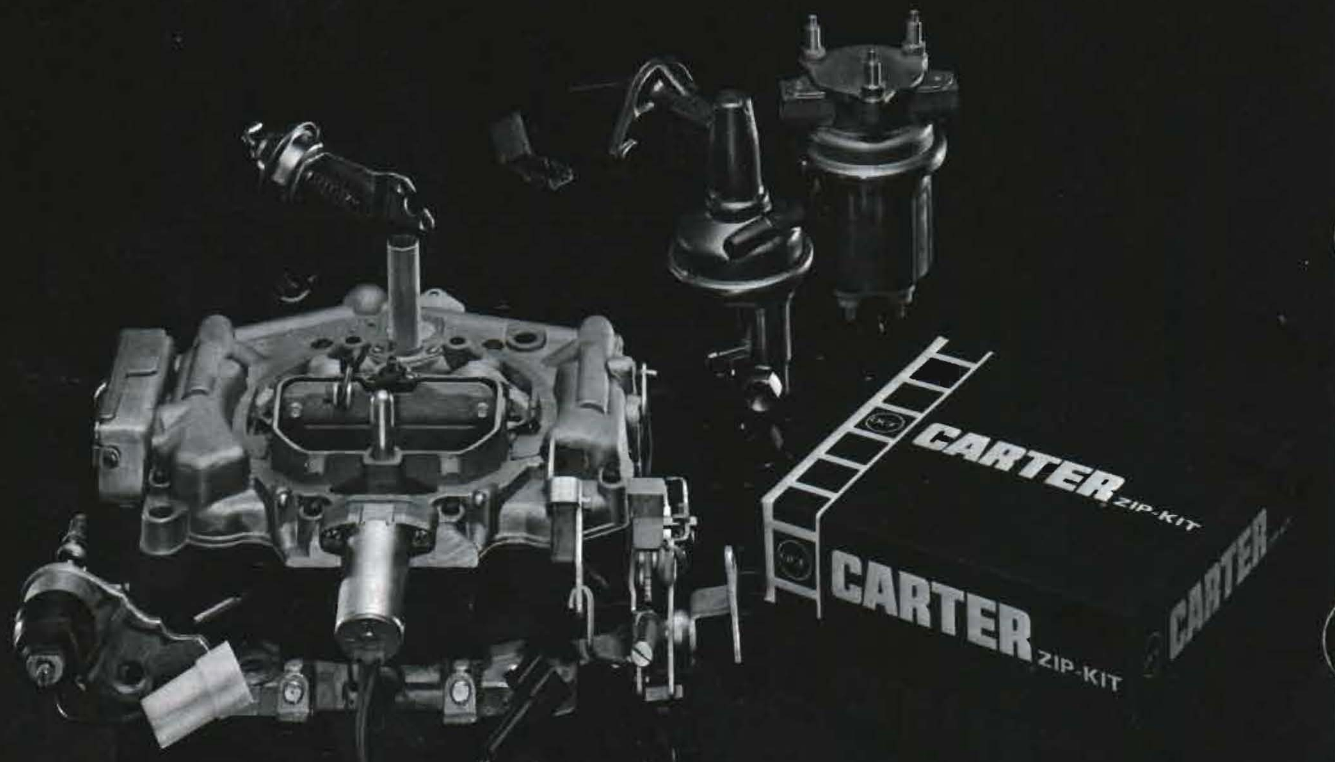
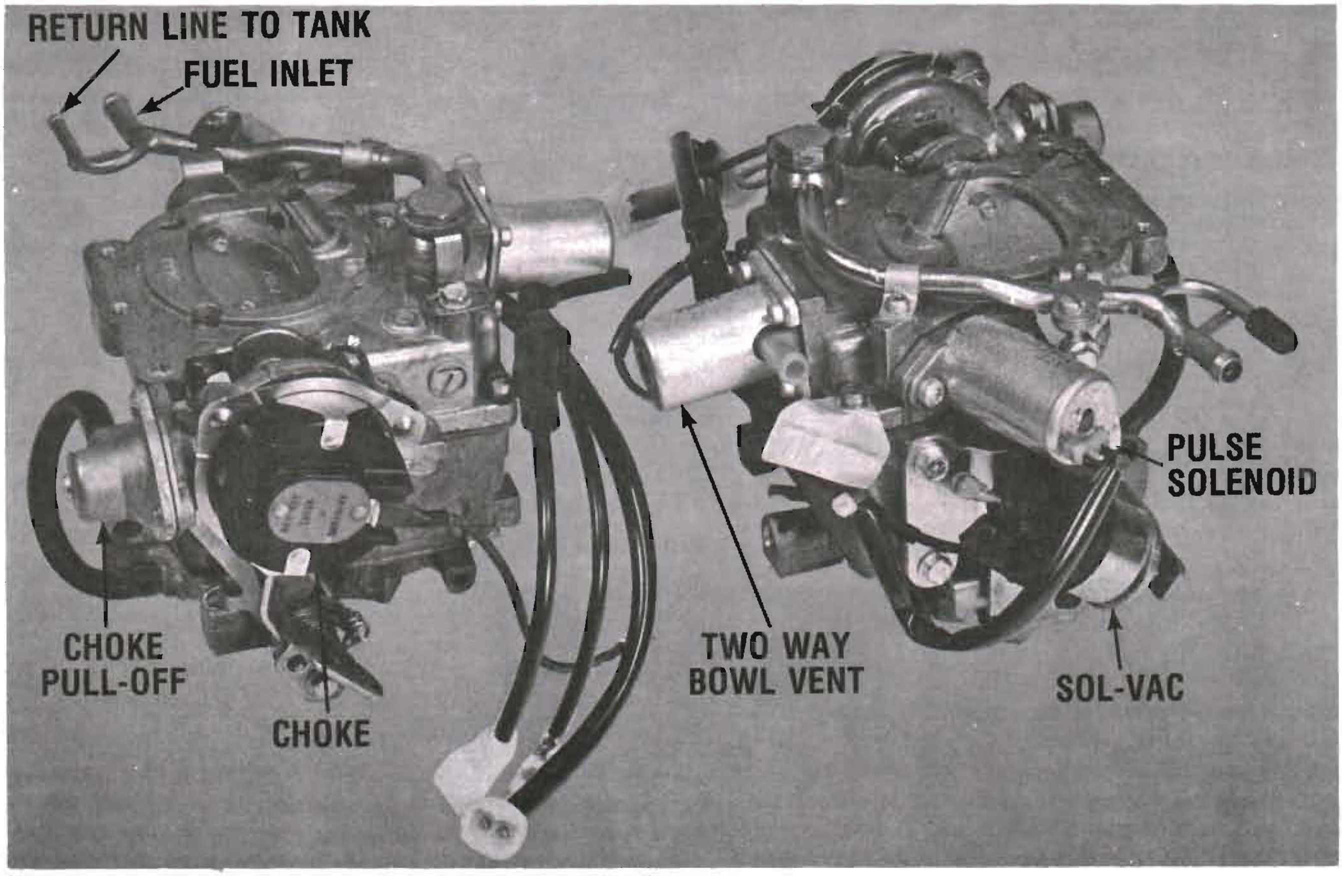


TABLE OF CONTENTS

TYF CARTER WEBER CARBURETOR WITH FEEDBACK



DESCRIPTION

The overall height of the TYF is just slightly over four inches which makes it compatible with the lower hood lines.

It uses a zinc die cast body with aluminum flange and bowl cover to lower the overall weight and to prevent warpage.

The TYF is assembled with standard S.A.E. threads. Metric threads are used where a car part is attached to the carburetor.

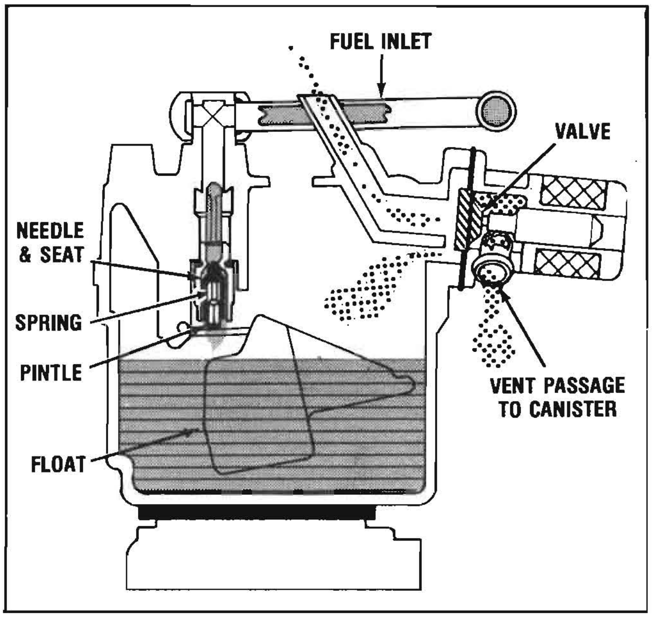
A few of the many advanced design features are:

- **Solid fuel design.**
- **Readily accessible and easy to service.**
- **Two way, solenoid controlled bowl vent.**
- **Full electric choke.**
- **Pulse solenoid to control the variable air bleeds.**
- **Mechanically operated metering rod.**
- **Diaphragm operated, thermostatically controlled accelerating pump.**
- **Anti-dieseling solenoid.**
- **Bronze bushings at both choke and throttle shaft.**
- **Plastic bushing inserts on linkage.**
- **True redundant, double throttle return spring.**

Five conventional circuits are used, they are:

Float Circuit
High Speed Circuit
Low Speed Circuit
Pump Choke
Choke Circuit

CIRCUITS



Float Circuit

The purpose of the float circuit is to maintain an adequate supply of fuel at the proper level in the bowl for use by the low-speed, high-speed and pump circuits.

Spring loaded intake needle and seat is used to give better control of fuel level, especially in rough terrain driving or vibrating conditions.

"Low Mass" intake needles are used in all TYF models. In this design, the contoured brass needle extends into the tip of the needle. This has two distinct advantages: it improves bonding of the "fluorocarbon" material to the tip of the needle, and decreases swelling effects which could be caused by various fuels.

Nitrophyl floats are used with stainless steel lever and float pin. The float pin in some models is held in place by the walls of the main body when the bowl cover is installed. Other models use a screw to retain the float pin.

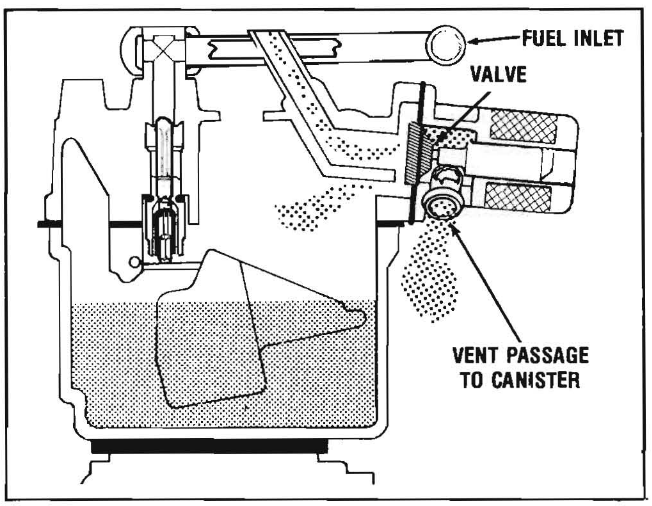
Setting the float to specifications assures an adequate supply of fuel in the bowl for all operating conditions. Float adjustments must be made with the bowl cover held inverted and with the free weight of the float resting on the intake needle. An incorrect float setting will result if the bowl cover is not held level, or the float is depressed when gauging the float setting. The float is adjusted by bending the float arm.

In servicing the carburetor, it is important to service the lip of the float which must be smooth for proper action and fuel level control. A small groove or indentation will probably be found on the lip from contacting the needle. Use a strip of emery cloth about ¼" wide and hold the abrasive side to the float lip. Place thumb on the cloth where it passes over the lip, and while pressing with the thumb, pull the emery cloth through until a new contact surface on the float lip is attained.

Float adjustment for proper fuel level in the bowl is important. Low or high float settings affect the transfer point (transfer from low speed circuit to the high speed circuit) as the throttle is opened.

A high float setting can result in flooding, while a low float setting could cause a hesitation in a turn should the jet become uncovered.

The intake needle, seat and float assembly should be inspected for wear. The carburetor bowl should be clean and free of dirt, gum or other foreign matter.

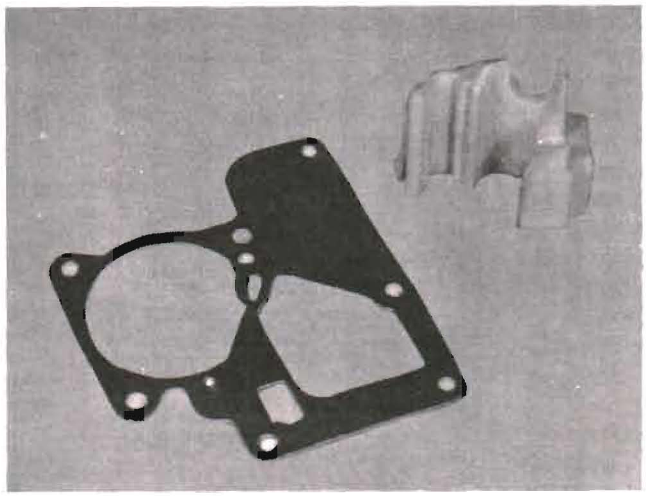


Two-way Bowl Vent

The bowl vent is calibrated to provide proper air pressure above the fuel in the bowl at all times. To meet evaporative emission requirements, a two way vent valve controlled by a solenoid is used. When the ignition switch is in the on position, the bowl is inside vented to the carburetor air horn. The pressure in the air horn and the pressure in the bowl are the same and is commonly referred to as a "balanced vent." A restriction in the induction air flow, such as a dirty air cleaner, will not upset this balance, however, it would affect volumetric efficiency. Any time the bowl cover is removed a new gasket should be used and the cover screws properly torqued. A leak at the bowl cover would increase the pressure in the bowl resulting in a mileage complaint.

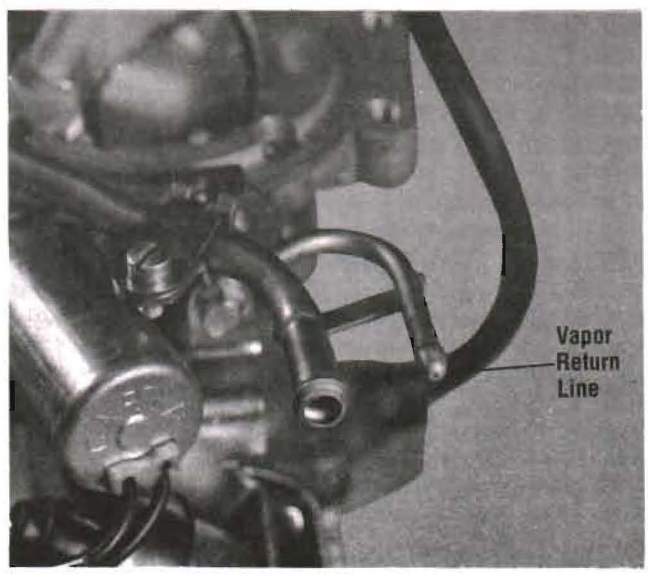
When the ignition switch is turned off, the solenoid is de-energized closing the inside bowl vent and opening the bowl vent to the canister. All vapors are routed to and held by a charcoal canister. When the engine is restarted the vapors are purged from the canister to the induction system.

If the solenoid should fail it would seriously affect carburetion. The inside vent would remain closed, venting would then be thru the charcoal canister. This would change the pressure in the bowl as canister pressure and air horn pressure are not the same.



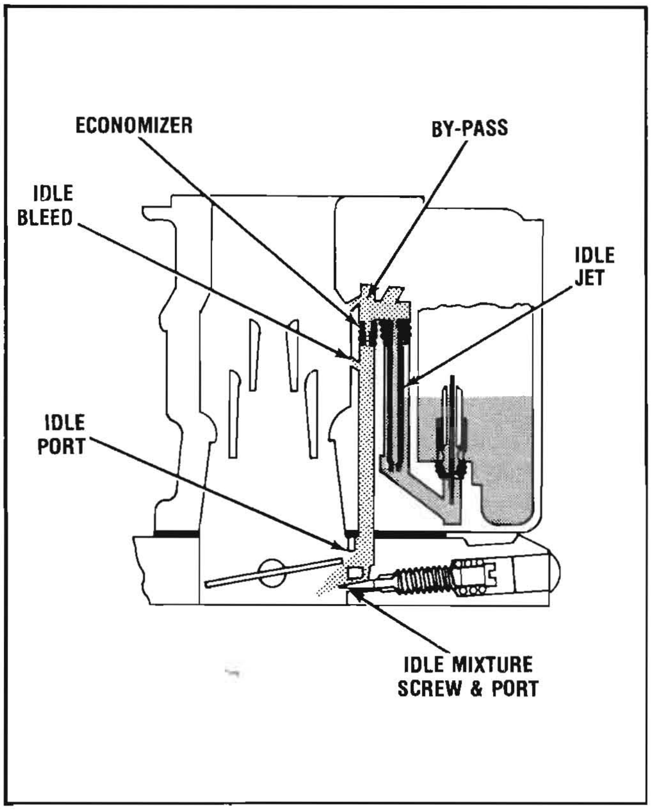
Bowl Cover Gasket and Bowl Filler

Anti-wicking type bowl cover gaskets are used to prevent evaporative emissions. The solid type gasket prevents sloshing of fuel in the bowl which helps maintain proper fuel level, especially during turns at higher speeds, or sudden stops. For this same reason, some applications use a plastic bowl filler.



Vapor Return Line

Some models use a vapor return line to the fuel tank which is in the form of a "Y" connection at the inlet of the carburetor. The third connection has a restricting orifice and returns to the fuel tank. This improves vapor handling characteristics and also assists hot engine starts as it prevents any pressure build up between the fuel pump and the carburetor as a result of high under hood temperatures.



Low Speed Circuit

Fuel for idle and early part throttle operation is metered by the low speed circuit. Fuel for the low speed circuit is supplied from the high speed well.

The air flowing through the carburetor must now pass around the edges of the nearly closed throttle valve and the bore of the carburetor. Since this serves as a restriction to the flow of air, the velocity of the air around the throttle valve is increased. The air velocity passing around the throttle valve and over the idle port creates a low pressure area at the idle port. The higher pressure in the fuel bowl will cause fuel to flow from the idle port. The idle circuit is an inverted "U" from the idle port to the low speed jet.

The idle jet meters the gasoline to the low speed circuit. Following this circuit downstream, the first entrance of air is called the "By-Pass." This is followed by the "Economizer." The air and fuel mixture is "squeezed" through this restriction and ejected into the lower pressure area which speeds up the flow and further mixes the air and gasoline. Following downstream is the second entrance of air called the "Idle Bleed," and then to the idle port. This is known as Five Point Circuit . . . . Low Speed Jet, By-Pass, Economizer, Idle Bleed and Idle Port.

Although the idle port is located below the level of the fuel in the fuel bowl, no syphoning action takes place. That's because the by-pass and the idle bleed serve as vents to prevent syphoning of fuel from the bowl.

Equally important, tiny air bubbles enter the fuel stream through the air bleeds. Aerating the fuel before it reaches the idle port helps the fuel mix more readily and uniformly with the air flowing through the carburetor.

The quality of the mixture is determined by the size of the idle jet, the by-pass and the idle bleed.

The idle adjusting screw adjusts the quantity of the air-fuel mixture from the idle port, *it is not an air adjustment.*

With the throttle valves at curb idle position, the fuel mixture is discharged from the lower port. The upper transfer port is at or near atmospheric pressure. As the throttle valve is opened, the transfer port delivers fuel.

Further opening of the throttle valve increases air volume and velocity and the main high speed nozzle comes into operation.

During opening of the throttle valve, a point is reached when the low speed circuit fuel delivery becomes inadequate and the high speed circuit begins to deliver fuel from the main nozzle. This is known as the transfer point.

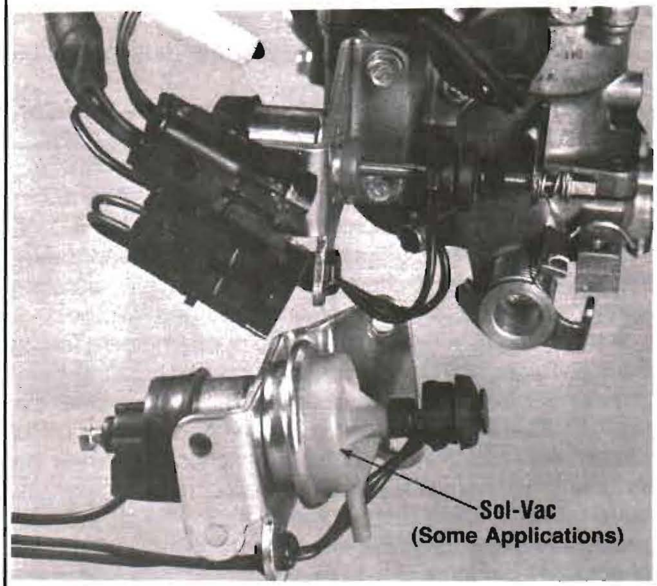
A low float setting can cause a problem at the transfer point as the high speed nozzle will not begin fuel delivery at the correct time. Float setting plays its part in timing the nozzle.

Port relation is the position of the throttle valve relative to the idle port at curb idle. Port relation could be out of specifications due to carbon in the bore of the carburetor, throttle shaft or throttle body wear. In either case, it can upset the idle and affect the transfer point.

To meet emission regulations, the idle mixture adjusting screw is tamperproof.

Idle Solenoid

The idle solenoid is used to prevent "dieseling". The idle RPM is adjusted at the solenoid. When the engine is turned off, the solenoid is de-energized and the plunger moves inward allowing the throttle valve to close enough to virtually shut-off the air supply, thereby causing the engine to stop running immediately. A second adjustment is used to prevent the throttle valve from closing too tightly.

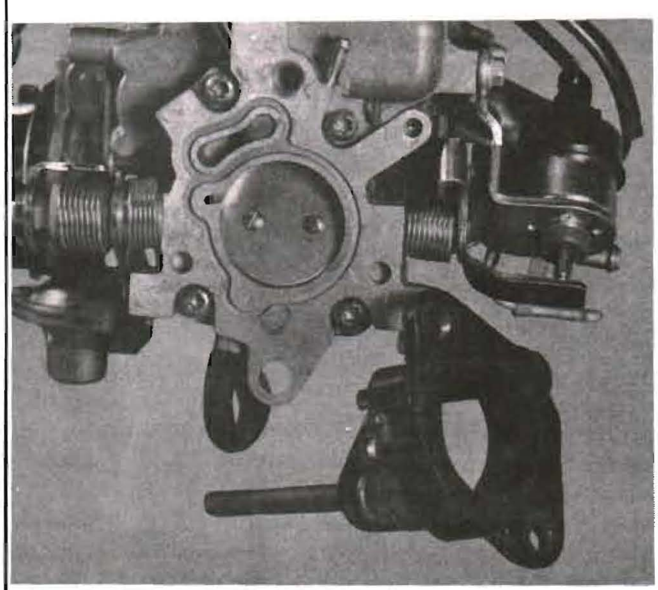


SOL-VAC

Some applications use a sol-vac which is controlled electrically and by vacuum. The electrical portion is used to prevent dieseling, the vacuum diaphragm is actuated anytime the air conditioner is turned on.

P.T.C. Flange Heater

Some applications use a P.T.C. (Positive Temperature Coefficient) heater which fits into a recess on the port side of the carburetor flange. The heater temperature is 180 degrees C (356 degrees F.) during the warm-up period and is turned off after operating temperature is reached. This improves cold engine driveability and prevents icing at the throttle valve.



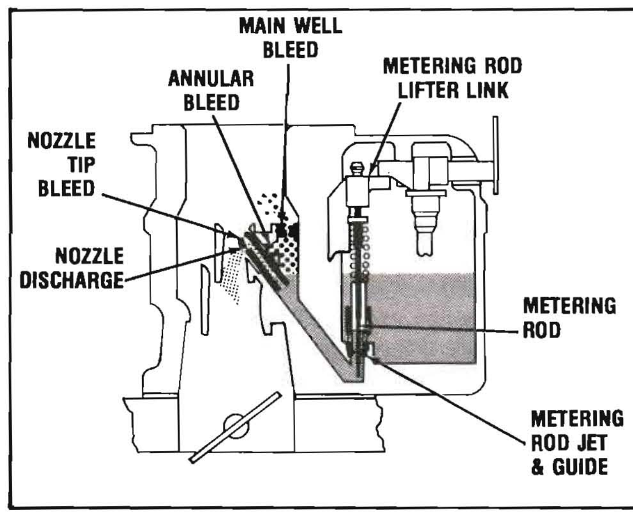
Isolater and Flange

Some units are mounted to the manifold with an isolater which is approximately 1 inch thick. This acts like an engine mount to reduce vibrations at the carburetor. No mounting gaskets are used.

One model uses a carburetor flange designed for water circulation to be used on future models. Water will circulate upward thru the bottom of the flange, thru a recess on the port side and out thru a connection on the side of the flange. The additional heat at the base of the carburetor promotes faster warm-up to improve cold engine driveability, lower emissions and prevent icing at the throttle valve.

This carburetor mounts to the manifold without the typical flange gasket. The flange is grooved to accept an "O" ring. An "O" ring will also be used at the water inlet.

As the aluminum flange is mounted directly to the manifold, a thermo-plastic "heat barrier" spacer with gaskets is used between the main body and flange assembly.



High Speed Circuit

Fuel for part throttle and full throttle operation is supplied through the high-speed circuit.

The solid fuel carburetor design provides precise fuel metering and nozzle control which results in lower emission levels while still maintaining maximum response and performance.

The solid fuel design is less sensitive to changes in fuel level in the bowl.

The solid fuel carburetor takes solid fuel from the high-speed well and bleeds air into the circuit at the top through the main well and annular bleeds.

The position of the metering rod in the metering rod jet controls the amount of fuel admitted to the high-speed nozzle. The rod is "stepped" or tapered to meter the exact amount of fuel required by engine demand.

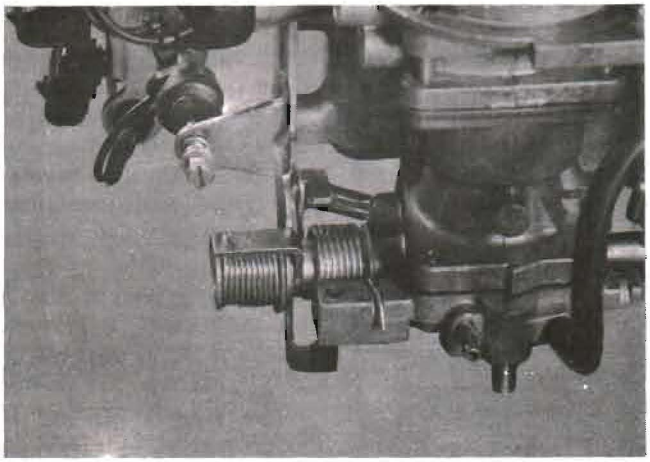
When the throttle valve is closed, the metering rod lifter link forces the metering rod to its downward position whereby the largest diameter of the rod is in the metering jet. As the throttle valve is opened, the metering rod is forced upward by the metering rod spring where a smaller diameter of the rod is in the metering jet, allowing more fuel to flow thru the jet. It serves as a variable size jet to supply the proper amount of fuel to the engine under all operating conditions.

Because of reversion at higher speeds, an "hour glass" shaped metering rod is used in some applications to maintain proper air fuel ratio.

Metering rod adjustment must be made after the pump adjustment as pump adjustment changes metering rod setting.

When the engine is turned off, the main well bleed serves as an anti-percolator passage.

A special tool is required to remove the high speed jet. It is not necessary to remove this jet for routine cleaning and servicing as there are no gaskets. The metering jet incorporates a guide that directs the metering rod directly through the center of the metering jet orifice.

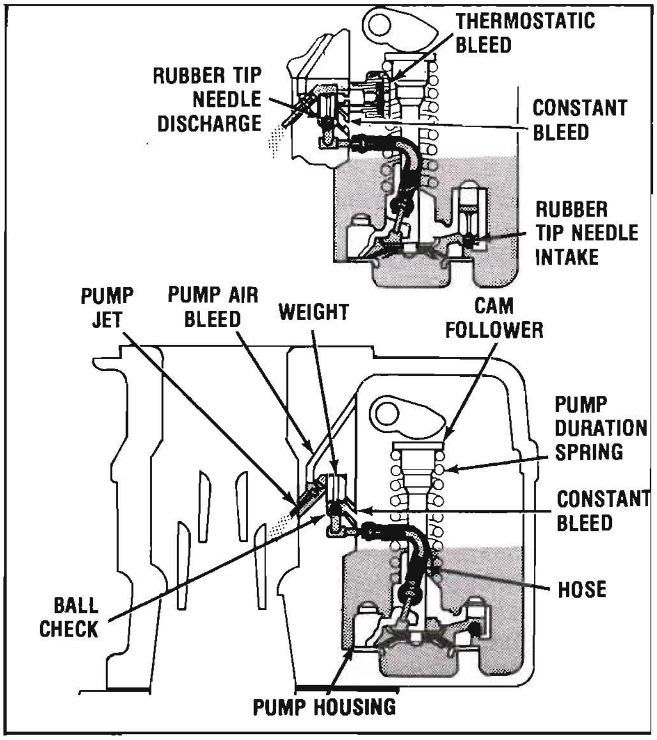


Throttle Return Springs

Many applications use true redundant throttle return springs. Two springs are installed on the shaft with only one in operation. If this spring should fail, the second spring with the same tension comes into operation.

Other models use two springs, one on each end of the throttle shaft.

In addition to the throttle return springs, air velocity assists throttle closure as the throttle shaft and throttle valve are slightly offset in the bore of the carburetor.



Pump Circuit

The pump circuit is used to supply fuel during sudden acceleration from lower speeds.

Air being lighter than gasoline is immediately available. The mechanical action of the accelerating pump assures gasoline delivery to this additional air flow.

As the pump is not needed at higher speeds, it becomes inoperative at approximately half throttle.

The pump circuit consists of the pump diaphragm, intake and discharge checks, pump jet, drive or duration spring, pump bleed and operating cam and linkage.

As the throttle is closed, the pump operating cam forces the cam follower and diaphragm downward creating a low pressure area above the diaphragm. At this time the discharge check is seated, the intake check is lifted off its seat to allow fuel to flow into the pump chamber. When the throttle is opened, the pump operating cam moves upward allowing the pump duration spring to lift the diaphragm. As the diaphragm moves upward, the intake check is drawn to its seated position, the discharge check is forced open allowing gasoline to be discharged thru the pump jet into the bore of the carburetor.

These units incorporate a constant fuel bleed from the pump circuit back to the fuel bowl. This calibrates pump delivery to engine requirements. The amount of fuel returned to the bowl varies with the rate of throttle opening. On light acceleration most of the fuel from the pump is returned to the bowl. On fast acceleration more fuel is delivered to the engine, less returned to the bowl.

A pump diaphragm shaft seal is located in the pump housing to prevent fuel travel up the shaft during acceleration.

The duration of fuel flow from the pump jet is controlled by the duration spring, the size of the pump jet and fuel bleed.

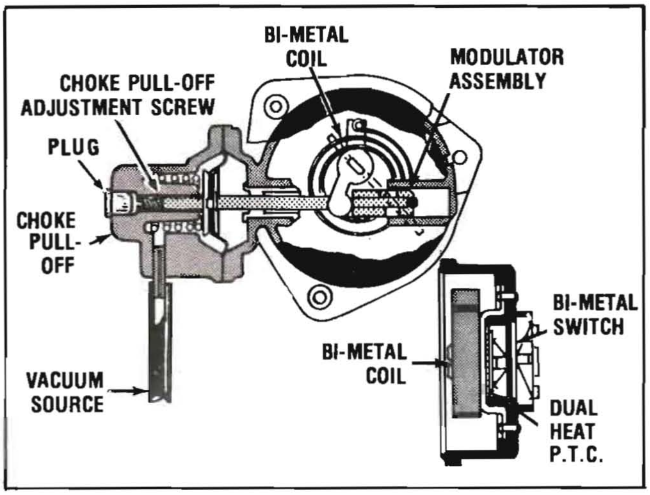
At higher speeds the air velocity across the tip of the pump jet creates a low pressure area. To prevent pump pull-over, an air bleed is located between the discharge check and the pump jet.

Trouble-shooting the pump circuit should include a thorough check of the intake and discharge checks, pump diaphragm, duration spring and all linkage.

If the discharge check is not seating, air will be drawn into the pump circuit during deceleration. If the intake check is not seating, some gas will be returned to the bowl during acceleration. In either case, a hesitation would result.

Ball type intake and discharge checks are used in some applications, others use viton tipped needles. The viton tipped discharge needle is spring loaded, the ball type discharge check uses a weight.

Many units use a thermostatically controlled pump circuit to calibrate pump delivery relative to engine temperature. This pump circuit has two bleeds to return fuel back to the bowl. In addition to the constant bleed, a controlled bleed has been added which is opened and closed by a thermostatic pill. When the unit is cold the controlled bleed is closed, forcing more fuel thru the pump jet. When a predetermined temperature is reached, the thermostatic pill opens the controlled bleed and returns more fuel to the bowl, less fuel to the pump jet. It all adds up to more fuel from the pump circuit when the engine is cold and requires more fuel, and less fuel after engine warm-up.



Choke Circuit

Three factors control the operation of the automatic choke. They are: air velocity, heat and manifold vacuum.

Air velocity is used to create a mechanical movement of the choke valve. The choke valve is mounted "off-center" on its shaft. The air velocity against the off-set (long side) opens the valve the proper amount to allow the engine to breathe.

Heat is used to cause mechanical movement of a thermostatic coil, which is a bi-metal spring consisting of two dissimilar metals bonded together, and sensitive to changes in temperature. This spring is connected to the choke lever.

Manifold vacuum is converted to mechanical movement by the use of a diaphragm connected by linkage to the choke shaft.

As the engine is cranked, air striking the off-set portion of the choke valve causes it to open a pre-determined amount to allow the engine to breathe. When the engine starts, manifold vacuum is applied to the choke pull-off diaphragm which opens the choke valve a predetermined amount to prevent over-rich mixtures. The thermostatic coil is a direct indicator of temperature. As heat from the P.T.C. (Positive Temperature Coefficient) heaters warm-up the spring, the choke begins to open.

During the warm-up period, the choke valve is always in a position relative to these three controlling factors. A rich mixture is needed to accelerate during the warm-up stage. During acceleration, a drop or loss of manifold vacuum occurs reducing the pull against the choke pull-off assembly. This in turn allows the choke to close slightly, giving the needed richer mixture for acceleration.

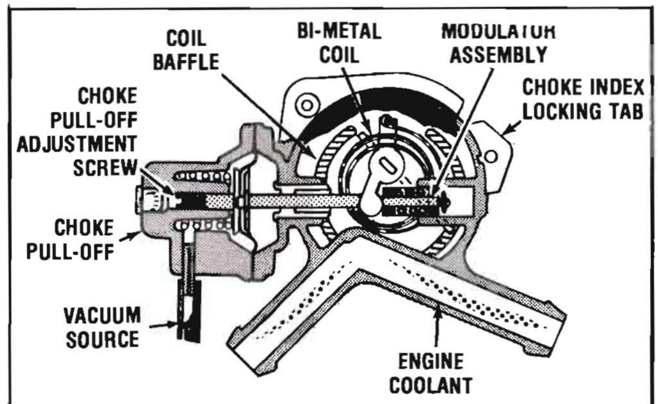
The choke uses dual P.T.C. heaters. One is on at all times during engine operation, the other is controlled by a thermostatic snap disc which is open at approximately 49 degrees F and closed at approximately 71 degrees F.

A captive type, reverse wound coil is used which actually pushes the choke valve closed. The eyelet end of the coil is installed on the choke lever with a teflon bushing to prevent wear from vibration.

Proper choke pull-off adjustment is very important. Too much choke pull-off will cause false starts. Not enough will result in a rich condition during the warm-up period. The adjusting screw may seem tight, as an encapsulated anerobic type sealant is used to prevent an air leak. A new tamper-resistant plug should always be installed after servicing.

A modulator spring is used on the choke pull-off shaft to improve drive ability and economy by allowing the amount of choke valve opening to vary with the torque of the thermostatic spring. It gives a temporarily tighter closed choke valve during the early stage of the warm-up period. A 15 second vacuum delay valve is used in the vacuum source hose.

The choke pull-off housing is integral with the choke housing. Replacement of the choke pull-off consists of diaphragm and diaphragm shaft.

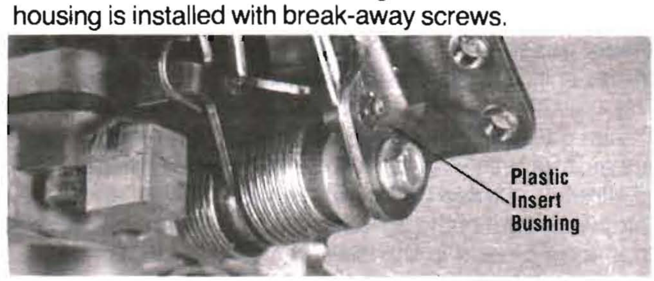


Coil Baffle Plate

Some units use a cup type, plastic baffle plate. The reverse wound thermostatic coil moves outward (clockwise) with temperature. At operating temperature, the outer coil contacts the cup of the baffle plate which prevents vibration and wear.

Several models circulate water thru the choke for heat retention. This prevents a cold choke with a warm engine and allows the choke to cool off at the same rate as engine.

To meet federal emission regulations the choke coil housing is installed with break-away screws.



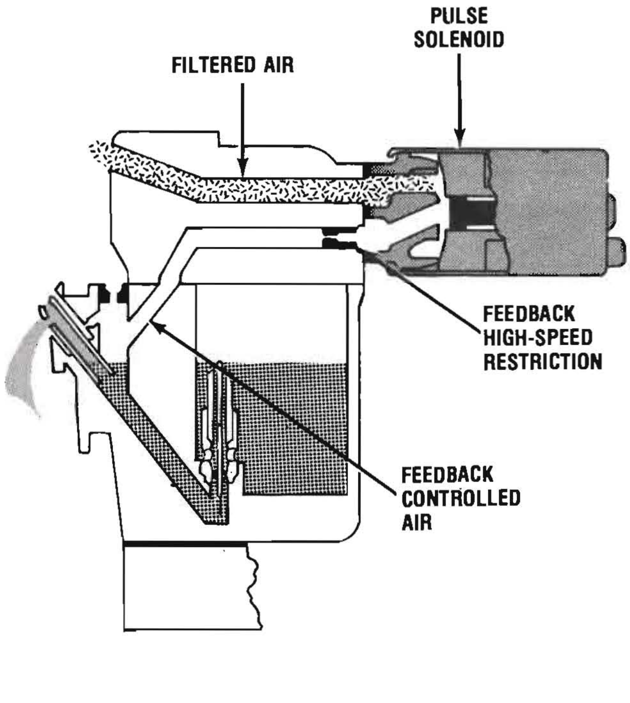
Plastic Insert Bushings

A combination plastic insert bushing and link retainer is used on the link to prevent vibration wear. These should always be replaced when installing the link, as the retainer section is usually damaged in removal.

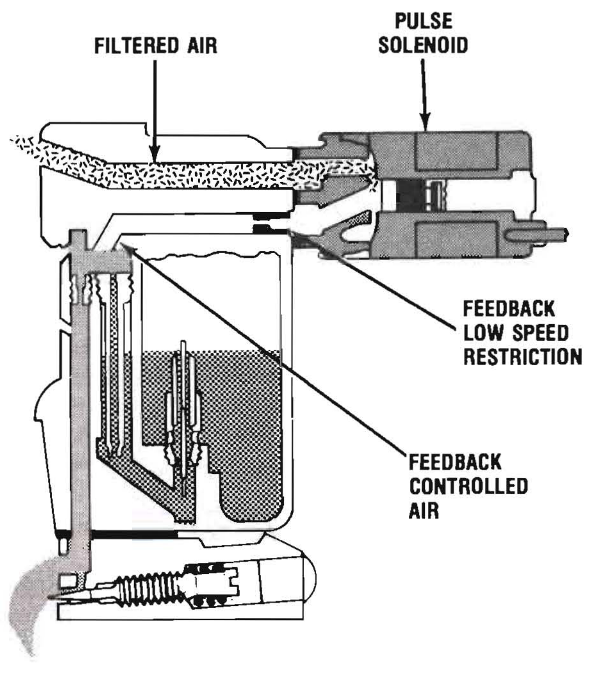
Bronze Bushings

Bronze bushings are used on the countershaft and at both ends of the throttle and choke shafts.

THE O_2 FEEDBACK SYSTEM USING VARIABLE AIR BLEEDS



HIGH SPEED CIRCUIT–FEEDBACK



LOW SPEED CIRCUIT–FEEDBACK

The basic purpose of feedback control is to provide a narrow air-fuel ratio band so that the catalytic converter will operate at maximum efficiency.

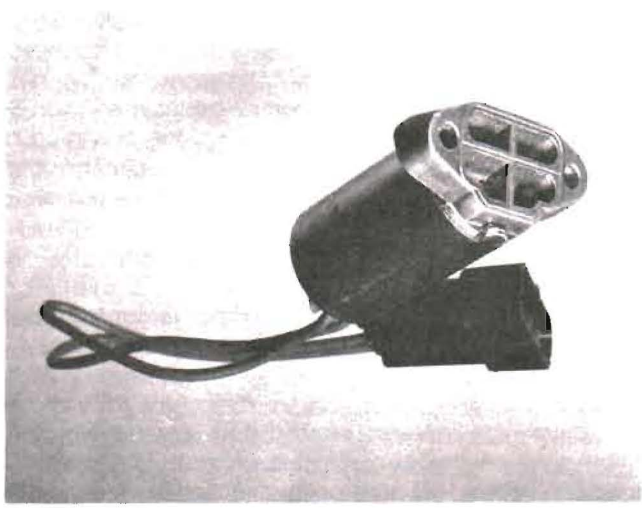
A feedback controlled carburetion system has been developed by Carter-Weber that maintains a flow of exhaust gases of uniform composition to catalytic converters. This is a requirement if catalytic converters are to be used in meeting projected emission standards. Exhaust gas uniformity depends upon delivery of a constant air-fuel ratio by the carburetor. Instead of metering fuel directly, Carter-Weber finds that precise and responsive control of the air-fuel ratio is obtained by using variable air bleeds in the carburetor fuel circuits.

Carburetor Operation

The basic carburetor contains two fuel supply subsystems, the high-speed and the low-speed system. The high-speed system meters fuel with a tapered metering rod positioned in the jet by the throttle. Fuel is metered into the main nozzle where air from the feedback controlled variable air bleed is introduced. Since this air is delivered above the fuel level, it reduces the vacuum signal on the fuel, consequently reducing the amount of fuel delivered from the nozzle.

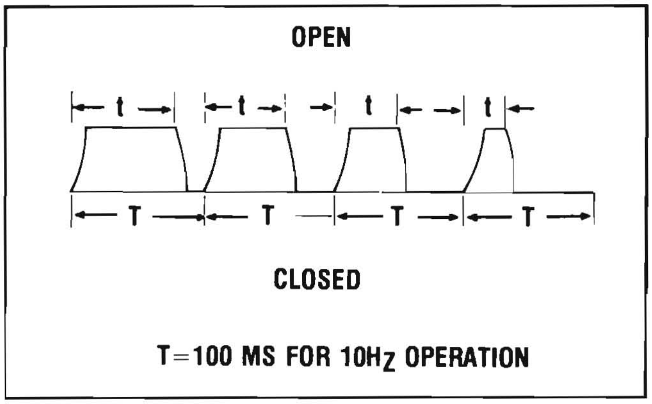
The idle system is needed at low air flows through the venturi because there is insufficient vacuum at the nozzle to draw fuel into the air stream. After leaving the main jet, fuel is supplied to the idle system by the low-speed jet. It is then mixed with air from the idle by-pass, then accelerated through the economizer and mixed with additional air from the idle bleed before being discharged from the idle ports below the throttle. Air from the variable air bleed is introduced between the by-pass and the economizer. This air reduces the vacuum signal on the low-speed jet and consequently the amount of fuel delivered to the idle system.

The variable air bleeds change the pressure difference which controls fuel flow thru the jets.



PULSE SOLENOID

The TYF uses a pulse solenoid to control the variable air bleeds. The solenoid has only two positions of operation, opened when energized to bleed air to both the high speed and low speed circuits, or closed when de-energized, cutting off the air bleeds.



PULSE WIDTH MODULATION

During normal operation the solenoid goes thru one open and one closed period in each cycle. The pulse solenoid is a 10Hz unit (10 cycles per second) which adds up to 100 Mil/sec. per cycle.

Each cycle has a particular time period, "T", from beginning of one cycle to the next and is held constant during operation (always 10 cycles per second).

During any one cycle, the solenoid is open for some fractional period of time, "t". The duration of "t" can be varied, thus varying the duty cycle and amount of air bled to the carburetor circuits.

100% duty cycle meaing full air bleed for approximately 100 Mil/seconds per cycle. This duty cycle may be varied from zero percent to one hundred percent.

Pulse width modulation of the air flow is controlled by the solenoid duty cycle as signaled by the computer. Some import vehicles use a 15Hz system (15 cycles per second) which is approximately 66 Mil/sec. per cycle.

Checking Pulse Solenoid

Checking the pulse solenoid is very quick and easy. With engine at operating temperature, merely place hand on solenoid. If not pulsing, shut off engine and disconnect pulse solenoid wires.

Check all connections. Check for open or shorted coil winding by using an ohmmeter across the two pulse solenoid wires. (The coil is not grounded to the case.) Should be 22 ohms resistance at room temperature.

If winding checks good, momentarily flash 12 volts to pulse solenoid to check armature movement.

A dwell meter can be used with the pulse solenoid to give an overall indication of operation. The dwell reading would be indicative of the ratio of "on" to "off" time which is referred to as pulse width modulation. With engine warmed up, place fast idle cam to obtain approximately 1200 R.P.M. and check dwell reading. Closing the choke valve slightly to richen air fuel mixture should give an increase in dwell.

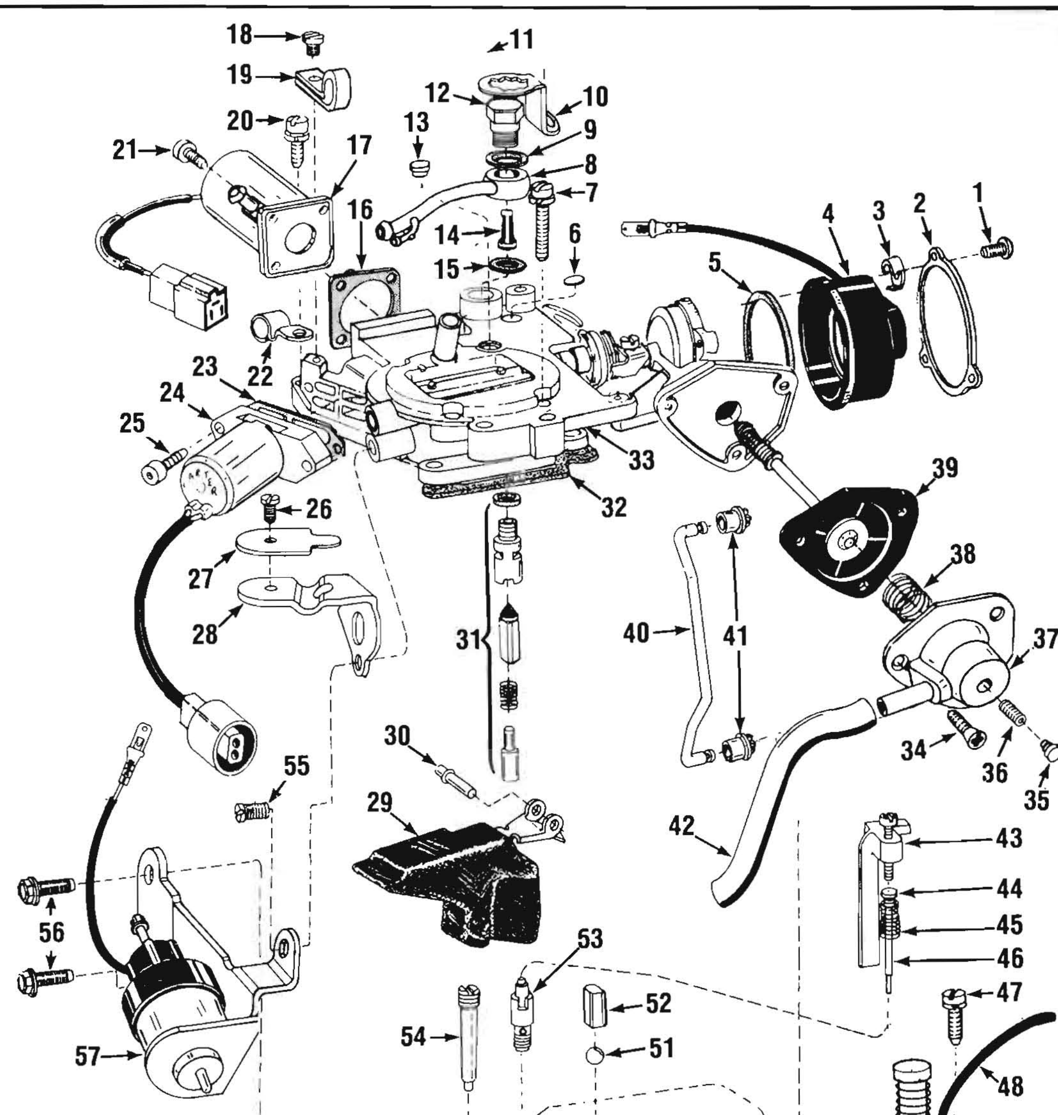
A command from the computer to "lean out" would give a higher dwell reading, a rich command would give a lower dwell.

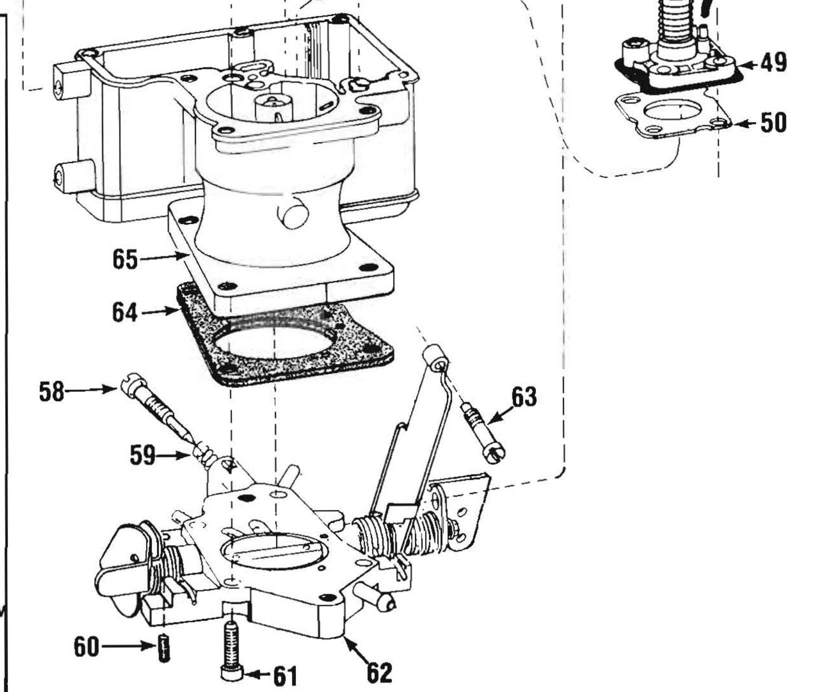
The dwell meter should always be set on the 6 cylinder scale.

EXPLODED VIEW

PARTS LIST

1. Choke Housing Break Away Screws
2. Thermostatic Choke Housing Gasket
3. Retainer
4. Thermostatic Choke Housing
5. Thermostatic Choke Housing Gasket
6. Welch Plug
7. Air Horn Attaching Screw (Long)
8. Banjo Fuel Line Assy.
9. Banjo Gasket
10. Banjo Fitting Lock
11. Banjo Fitting Locks
12. Banjo Fitting Fuel Bolt
13. Metering Rod Adjustment Hole Plug
14. Fuel Inlet Filter
15. Fuel Inlet Gasket
16. Bowl Vent Solenoid Mtg. Gasket
17. Bowl Vent Solenoid
18. Fuel Line Clamp Screw (Inner)
19. Fuel Line Clamp
20. Air Horn Attaching Screw (Short)
21. Bowl Vent Solenoid Attaching Screw
22. Wire Support
23. Pulse Soleniod Mtg. Gasket
24. Pulse Solenoid
25. Pulse Solenoid Mtg. Screw
26. Fuel Line Clamp Screw (Outer)
27. Fuel Line Clamp (Outer)
28. Fuel Line Bracket
29. Float
30. Float Hinge Pin
31. Needle and Seat Assembly
32. Air Horn Gasket
33. Air Horn Assy.
34. Choke Pull-Off Housing Mtg. Screw
35. Choke Pull-Off Adjusting Screw Plug
36. Choke Pull-Off Adjusting Screw
37. Choke Pull-Off Housing
38. Choke Pull-Off Diaphragm Spring
39. Choke Pull-Off Diaphragm
40. Connector Rod
41. Connector Rod Bushing
42. Choke Vacuum Hose
44. Metering Rod Adj. Screw
43. Lifter Link
45. Metering Rod Spring
46. Metering Rod
47. Pump Housing Attach Screw
48. Pump Hose
49. Pump Housing and and Diaphragm Assy
50. Pump Housing Gasket
51. Pump Discharge Check Ball
52. Pump Discharge Weight
53. Metering Rod Jet
54. Low Speed Jet
55. Fuel Line Brkt. Attaching Screw
56. Idle Solenoid Attaching Screw
57. Idle Soleniod
58. Idle Mixture Screws
59. Idle Mixture Screw Spring
60. Engine Off Throttle Stop Screw
61. Flange Attaching Screw
62. Flange Assy.
63. Fast Idle Adj. Screw
64. Body Gasket
65. Body Casting

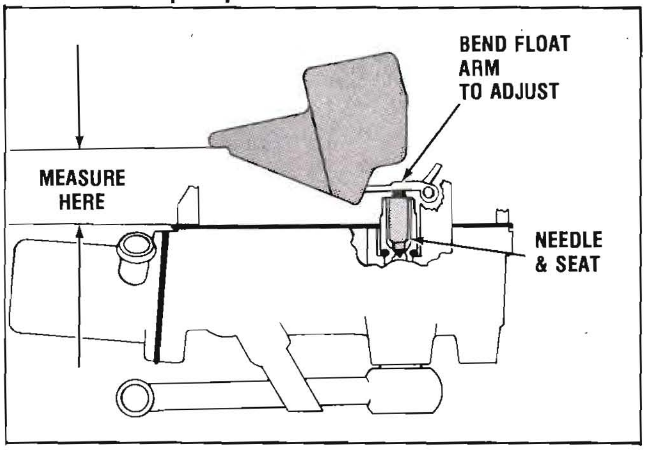




ADJUSTMENTS

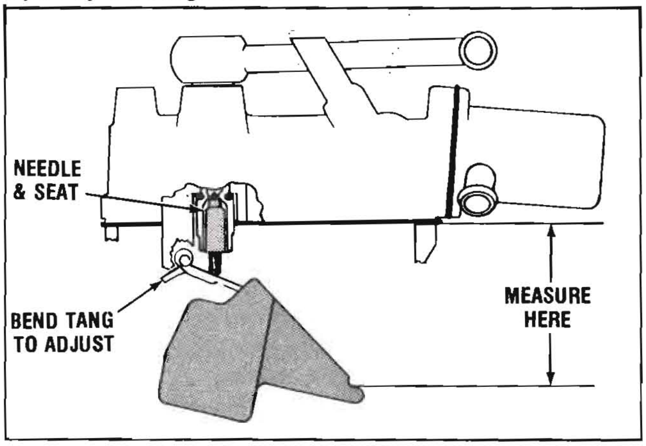
Carburetor Adjustments Are:

- Float setting.
- Cam index.
- Fast idle.
- Unloader.
- Choke pull-off.
- Engine-off throttle stop screw.
- Accelerator pump.
- Metering rod.
- Idle adjustments.
- Air conditioning SOL-VAC.



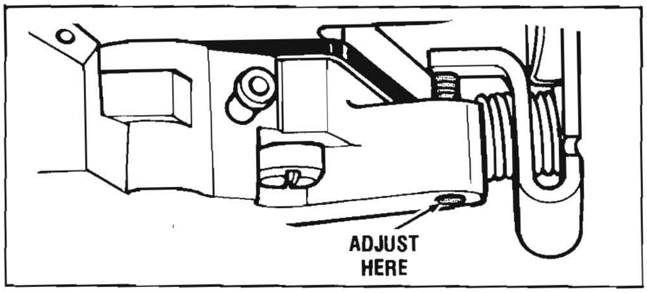
Float Adjustment

With bowl cover inverted, float resting on its own free weight, the distance from the bowl cover gasket to the notch on the outer end of float should be as specified. Adjust by bending float arm.



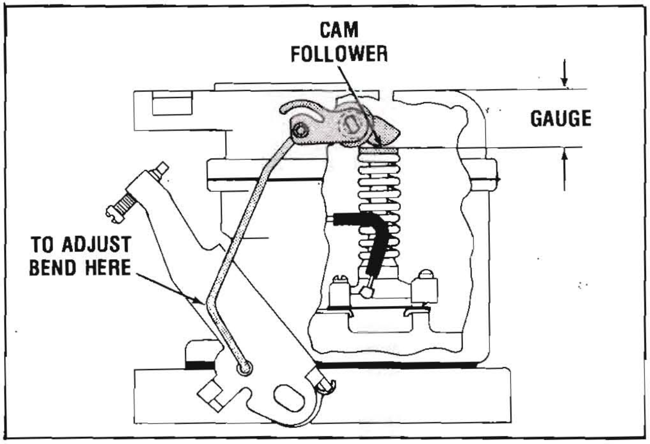
Float Drop

With bowl cover assembly held in upright position, the distance between the top of the float at notch on outer end of float and the bowl cover gasket should be as specified. Adjust by bending stop tab on float lever.



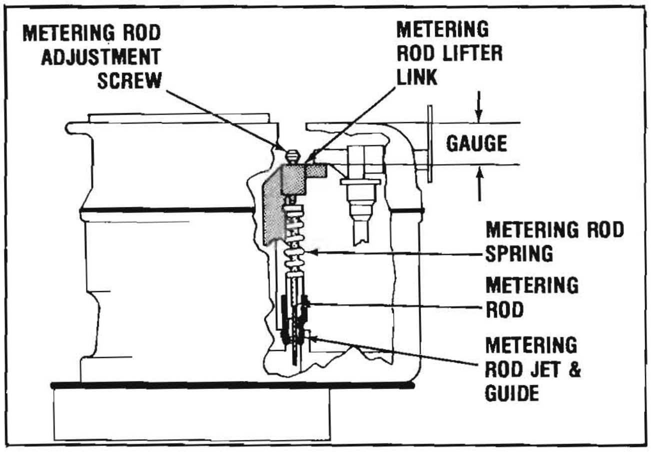
Engine Off Throttle Stop Screw

With choke open, turn adjusting screw clockwise until it just contacts the throttle lever, then continue one complete turn. This adjustment should be made before pump and metering rod adjustment.



Pump

Pump adjustment must be made before metering rod adjustment. With throttle valve wide open (diaphragm in its upper position), use a dial indicator or suitable tool to gauge through the hole in the bowl cover and measure the distance from the bowl cover to the top of the pump. Then close the throttle and measure the downward pump travel. Adjust pump travel to specifications by bending the link. A new welch plug should be installed.

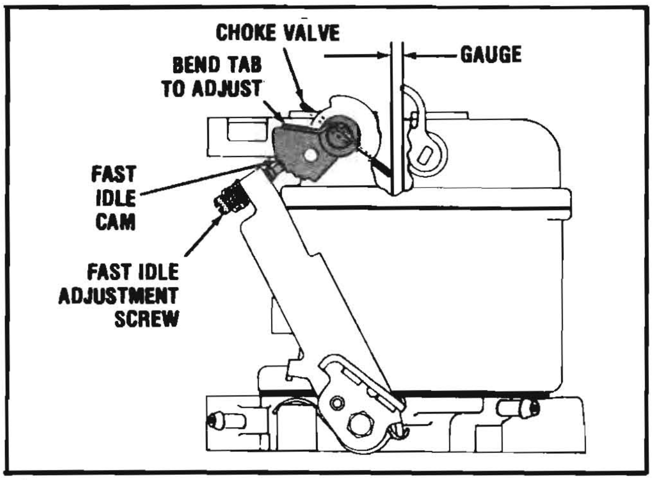


Metering Rod

Metering rod adjustment should not be required, if adjustment must be made, the tamper-resistant plug over the metering rod, in the bowl cover, can be removed with the bowl cover off.

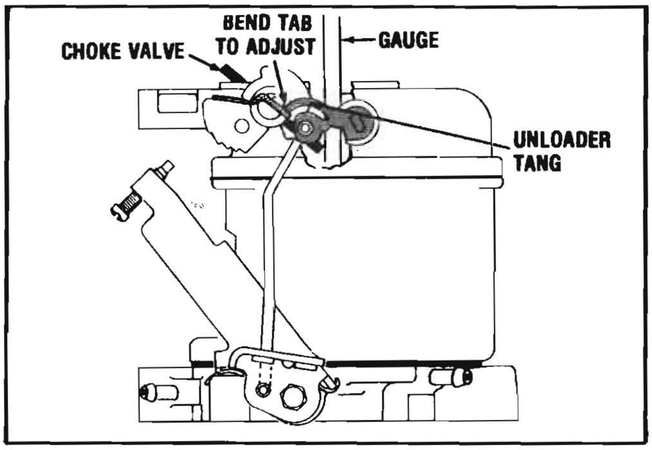
Specifications give the distance the metering rod should be off of its bottomed position at idle.

Use a dial indicator or suitable tool to gauge through the hole in the bowl cover. Pushing the metering rod downward to its bottomed position, measure the distance from the bowl cover to the top of the metering rod adjusting screw. With throttle closed and the metering rod spring lifting the rod to its upper position, the amount of lift from the bottomed position should be as specified. To adjust, rotate adjusting screw with a torx head, T-9 driver. After adjustment install tamper-resistant plug.



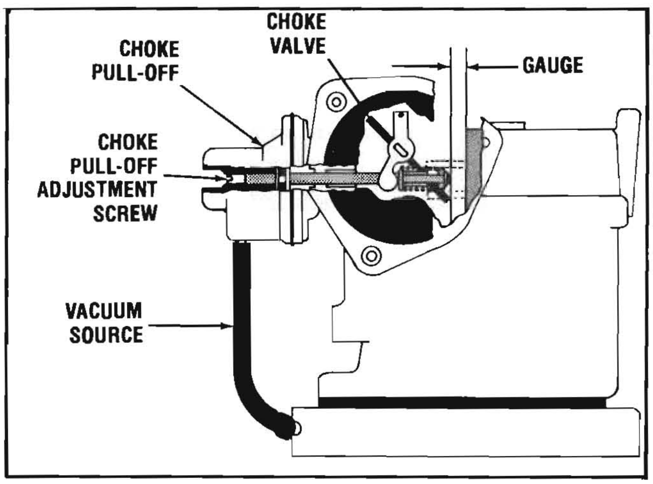
Cam Index

With fast idle screw on second step of the fast idle cam, against shoulder of the first step, close choke valve as far as possible. The dimension between the lower edge of the choke valve and the wall of the air horn should be as specified. Adjust by bending tab.



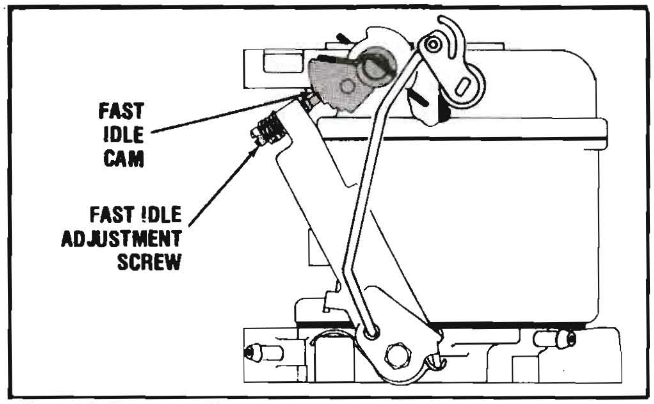
Unloader

Hold throttle valve in wide open position and close choke valve as far as possible without forcing. There should be clearance as specified between the lower edge of the choke valve and inner wall of air horn. Adjust by bending tab.



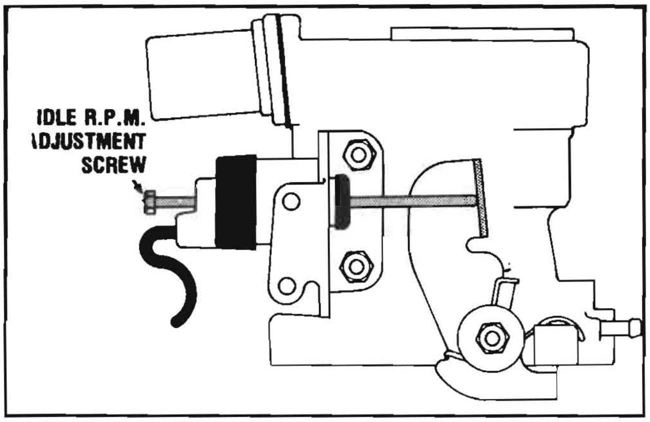
Choke Pull-Off

Seat diaphragm by using an outside vacuum source. Apply a light closing pressure to the choke valve to move the valve toward the closed position as far as possible without forcing. The dimension between the lower edge of the choke valve and air horn wall should be as specified. To adjust, use adjusting screw located in diaphragm housing. After adjustment is made, replace tamper-resistant plug.



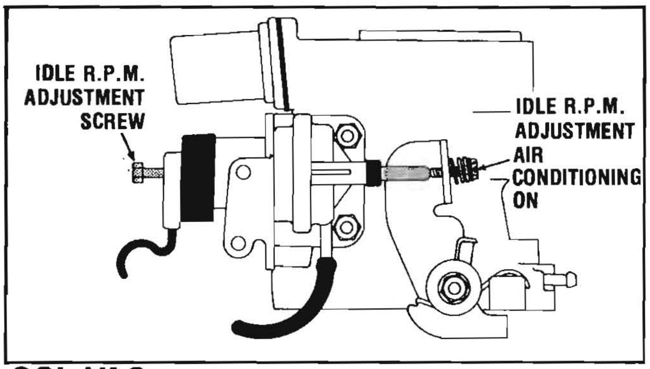
Fast Idle on Car

With fast idle screw on second step and against shoulder of the first step of the cam, adjust fast idle screw to specified R.P.M. as shown on underhood decal.



Idle Solenoid

With engine running and solenoid activated, adjust hex nut on solenoid plunger to specified R.P.M. as shown on underhood decal.



SOL-VAC

Turn on air conditioner to energize the vacuum section of the SOL-VAC. Adjust to specifications with screw on lever.

BUILT TO MEET OR EXCEED O.E. SPECS.

ELECTRIC PUMP

- •Weight - 2 lb., 6 oz.
- •Rotary Vane design
- •Pressure Regulated
- •No inlet or outlet valves
- •72 gph Free-Flow
- •Operates at 160° temperature
- •1/4" inlet and outlet fittings
- •Lift - 8'
- •P4070 - 12 volt, 5 psi
- •P4259 - 6 volt, 5 psi
- •P4389 - 12 volt marine, 5 psi
- •P4594 - 12 volt, 7 psi

MECHANICAL PUMP

- •Aluminum castings to dissipate heat
- •Light weight
- •Channel steel levers
- •Unitized diaphragm/shaft/spring/seal
- •Resilient valves, self conforming to seat
- •Rolling-Loop diaphragm
- •Delivers 45 gph with 4 psi restriction

12 VOLT IMPORT APPLICATIONS

- •Universal mounting bracket and hardware
- •Bayonet fittings for either 5/16" or 1/4" hose
- •Single screw for pressure adjustment
- •Pressure adjustable from 1-3/4 psi to 6 psi

IN-TANK ELECTRIC PUMP

- •For carburetor equipped vehicles
- •Current draw - 1.4 amps
- •20 gph at 4 psi

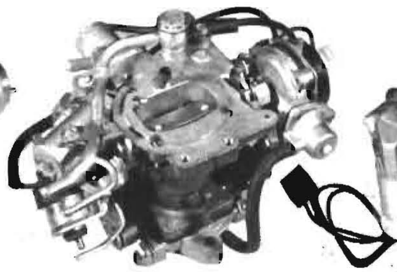
IN-TANK ELECTRIC PUMP

- •Used with Throttle Body Injection
- •Current draw - 4 amps
- •Continuous delivery - 20 gph at 12 psi
- •Excess fuel returned to tank

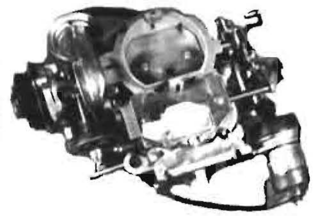
TECH. MANUAL		WITH COLOR SLIDES
TYF	FORM #3560	CTP-21
740	FORM #3624	CTP-20
BBS	FORM #3620A	CTP-5A
BBD-1¼"	FORM #3576A	CTP-6A
YF-YFA	FORM #3608B	CTP-22
RBS	FORM #3625	CTP-8A
TQ	FORM #3623A	CTP-1A
AFB-AVS	FORM #3703A	CTP-23
BASICS	FORM #3630A	CTP-2A

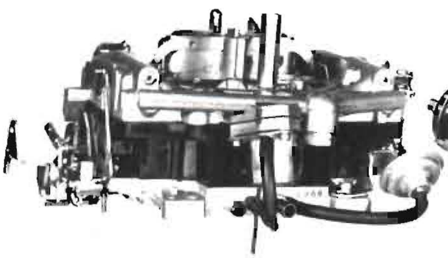
TYF
SERVICE MANUAL
CARTER-WEBER CARBURETOR

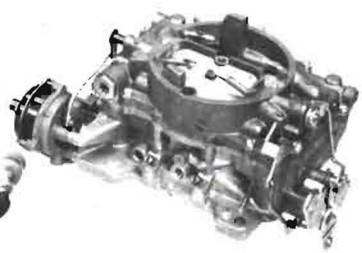

CARTER-WEBER 740

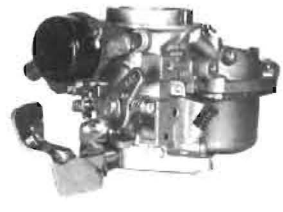

CARTER-WEBER TYF

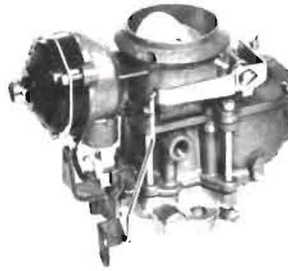

CARTER YF-YFA


CARTER BBD 1-1/4"


CARTER THERMO-QUADTM


CARTER AFB-AVS


CARTER RBS


CARTER BBS

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