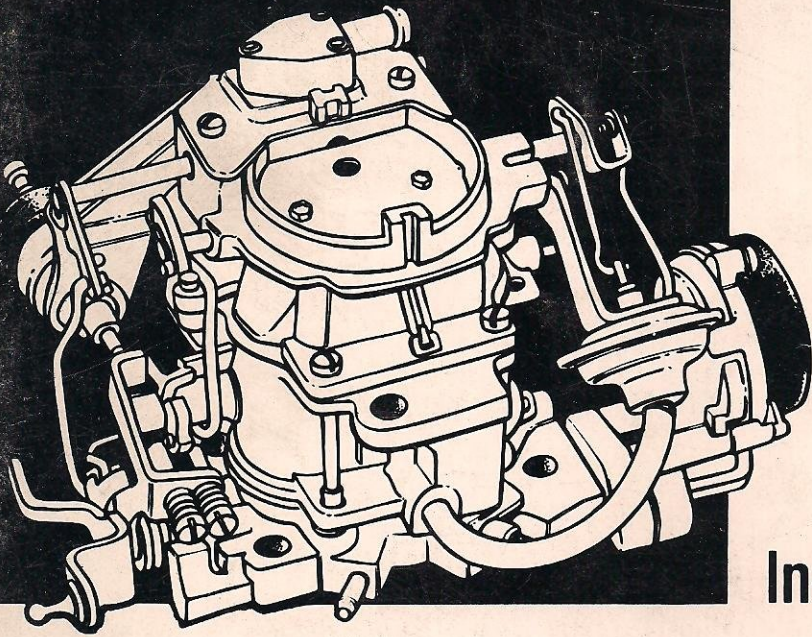




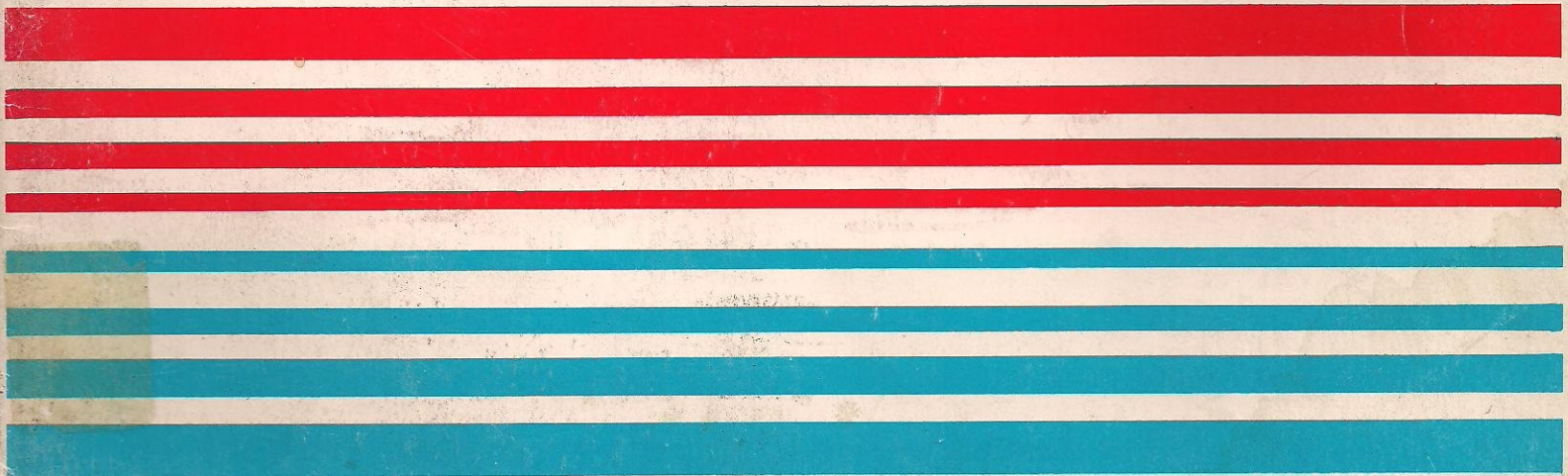
**American Motors
Sales Corporation**

**SERVICING
THE MODEL
BBD
2-VENTURI
CARBURETOR**



**FILM
REFERENCE
BOOK**

In-dealership Service Training



INTRODUCTION

www.carburetor-parts.com

This film reference book is an important part of the in-dealership training program, "Servicing the Model BBD 2-Venturi Carburetor". The book thoroughly details the information presented in the training film and includes information that simplifies diagnosis.

Together with the film - or used alone as a self-learning guide - this review book presents a fundamental approach to BBD 2-venturi carburetor operation, driveability symptoms and service adjustments.

AMC technical service manuals, service publications and this in-dealership training program will provide the professional mechanic with a comprehensive information source for proper servicing of the Model BBD 2-venturi carburetor.

All information and specifications in this reference book are based on the latest data available at the time of publication. American Motors Corporation reserves the right to discontinue models and change specifications or design without notice or incurring obligation.

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Parts Identification—Model BBD

1. DIAPHRAGM CONNECTOR LINK
2. SCREW
3. CHOKE VACUUM DIAPHRAGM
4. HOSE
5. VALVE
6. METERING ROD
7. S-LINK
8. PUMP ARM
9. GASKET
10. ROLLOVER CHECK VALVE
11. SCREW
12. LOCK
13. ROD LIFTER
14. BRACKET
15. NUT
16. SOLENOID
17. SCREW
18. AIR HORN RETAINING SCREW (SHORT)
19. AIR HORN RETAINING SCREW (LONG)
20. PUMP LEVER
21. VENTURI CLUSTER SCREW
22. IDLE FUEL PICK-UP TUBE
23. GASKET
24. VENTURI CLUSTER
25. GASKET
26. CHECK BALL (SMALL)
27. FLOAT
28. FULCRUM PIN
29. BAFFLE
30. CLIP
31. CHOKE LINK
32. SCREW
33. FAST IDLE CAM
34. GASKET
35. THERMOSTATIC CHOKE SHAFT
36. SPRING
37. SCREW
38. PUMP LINK
39. CLIP
40. GASKET
41. LIMITER CAP
42. SCREW
43. THROTTLE BODY
44. CHOKE HOUSING
45. BAFFLE
46. GASKET
47. RETAINER
48. CHOKE COIL
49. LEVER
50. CHOKE ROD
51. CLIP
52. NEEDLE AND SEAT ASSEMBLY
53. MAIN BODY
54. MAIN METERING JET
55. CHECK BALL (LARGE)
56. ACCELERATOR PUMP PLUNGER
57. FULCRUM PIN RETAINER
58. GASKET
59. SPRING
60. AIR HORN
61. LEVER

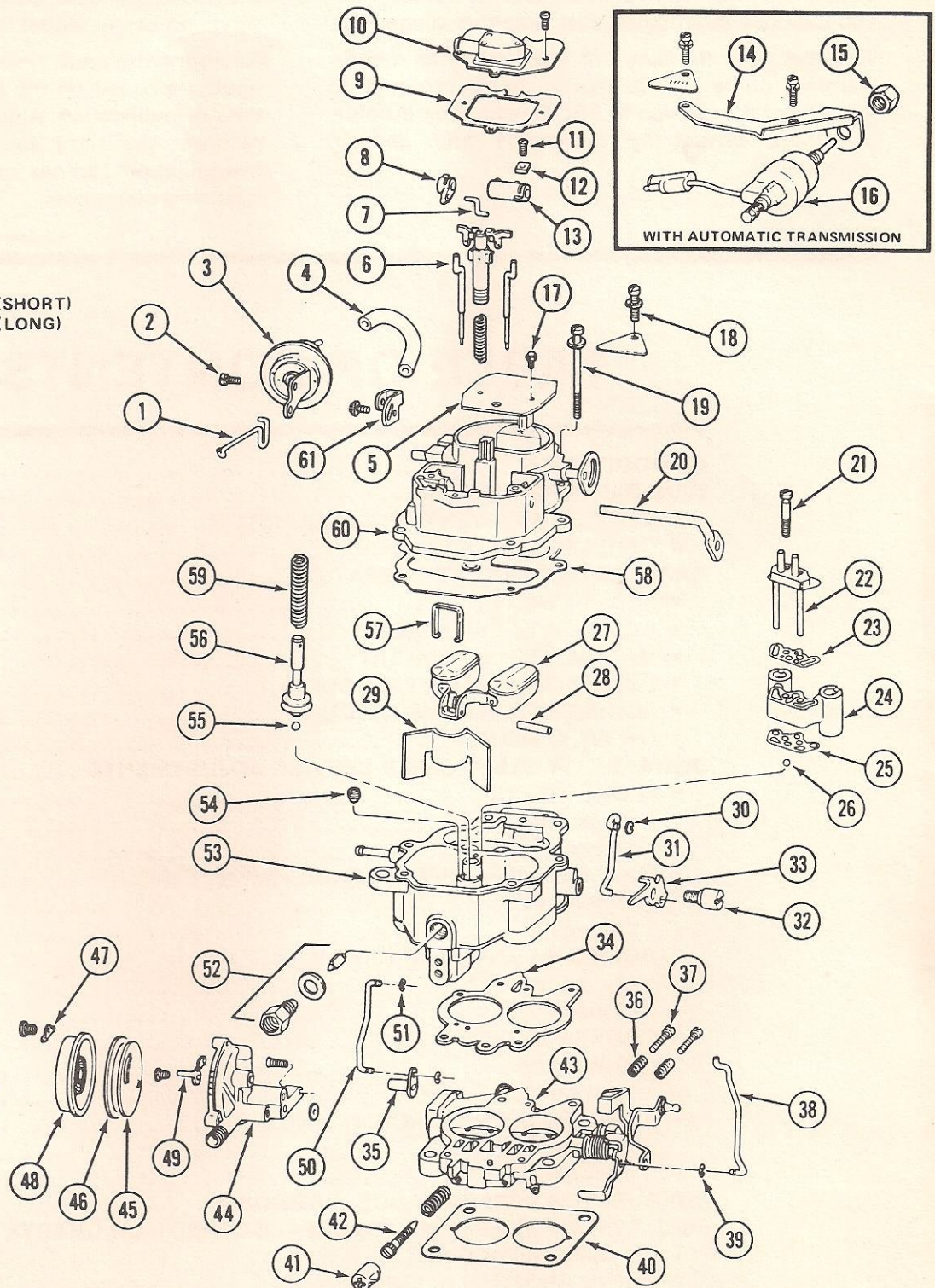


Figure 1, Model BBD 2-Venturi Carburetor, Exploded View

MODEL BBD 2-VENTURI CARBURETOR

The model BBD 2-venturi carburetor is used on AMC and Jeep six-cylinder engines. (See figure 1 and 2)

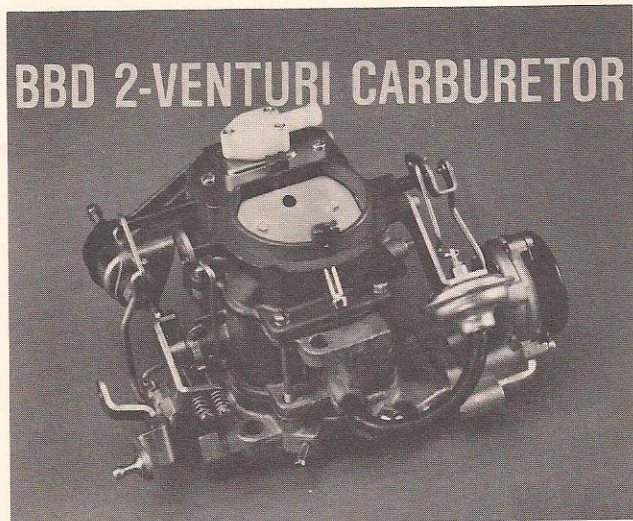


Fig. 2, Model BBD 2-Venturi Carburetor for AMC and Jeep 6-cylinder Engines

This film reference book describes how the BBD 2-venturi carburetor operates, some driveability symptoms that relate to the carburetor and how to make proper service adjustments.

While using this book, make it a point to remember that driveability symptoms can involve more than the carburetor itself ... the entire fuel system, the ignition system, emission devices and the condition of the engine have an effect on driveability. The "FUEL SYSTEM SYMPTOM-CAUSE CHARTS" in this book and your technical service manual will help you isolate and identify service needs.

CARBURETOR DESIGN

The BBD 2-venturi carburetor essentially has the same circuits used in other carburetors. These are the float circuit, the idle-low speed circuit, main metering and power enrichments, accelerator and the choke.

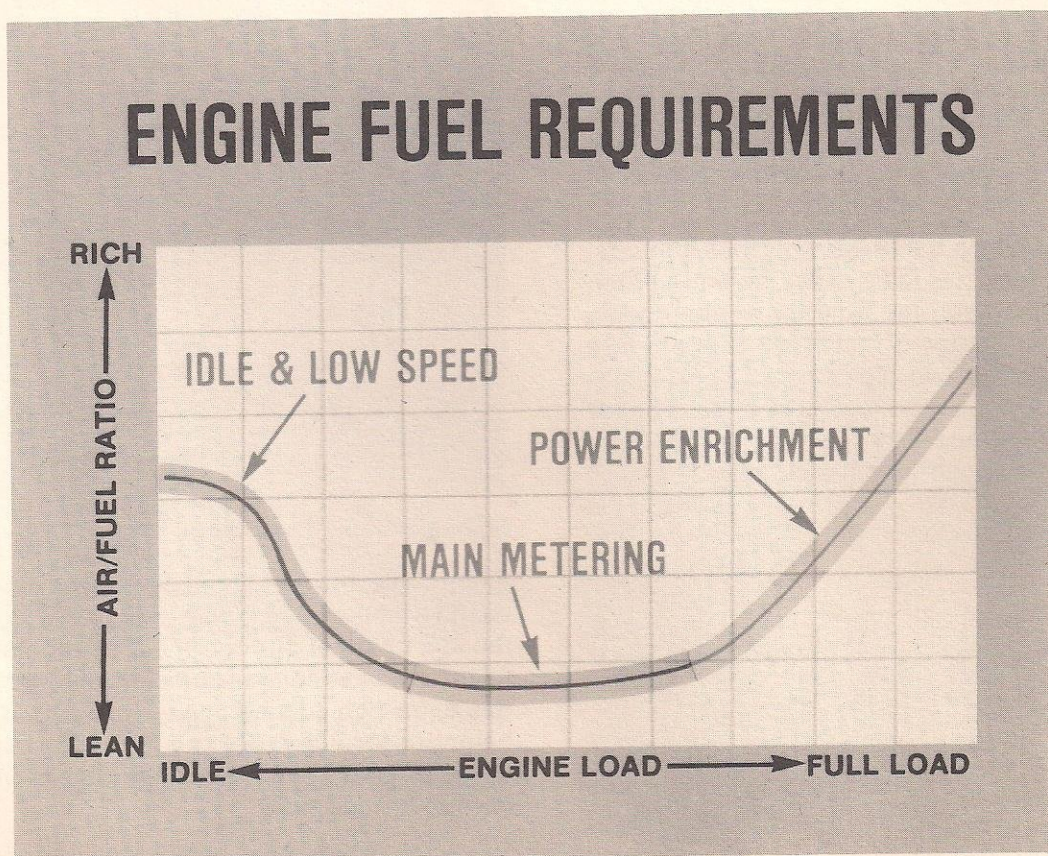


Figure 3, Engine Fuel Requirements Showing Fuel Metering Circuits

The graph (figure 3) describes engine fuel requirements and shows how they relate to carburetor fuel metering circuits. The following paragraphs, 1 through 5, explain the function of the 5 metering circuits:

1. FLOAT

The float or fuel inlet system is at the top of the graph (figure 3). Note that the float constantly supplies fuel to all the fuel metering systems.

2. CHOKE

The choke temporarily enriches the fuel-air mixture which aids in starting and running a cold engine.

3. IDLE/LOW SPEED

The idle or low speed circuit provides the proper fuel mixture for idle and low speed engine operation. A slightly rich mixture is used for smooth operation and reduces random missfire caused by a too lean mixture.

4. MAIN METERING

The main metering system provides an economical fuel-air mixture at cruising speeds.

5. POWER ENRICHMENT

For high speed or full load operation, the fuel-air mixture is enriched to gain increased engine power.

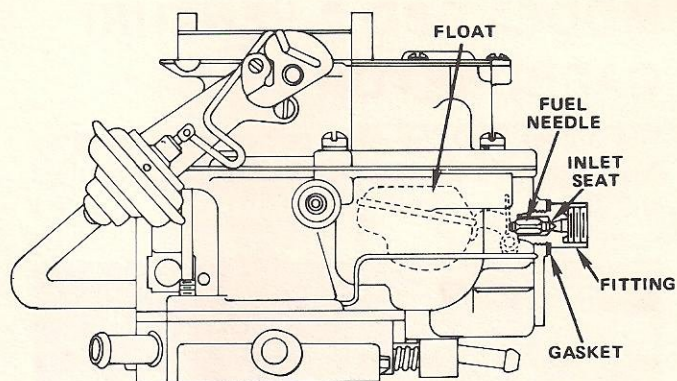


Figure 4, Float Circuit and Fuel Inlet System

IDLE/LOW SPEED CIRCUIT (Figures 5 & 6)

In the idle and low speed circuit fuel flows through the main metering jets into the main wells. The main metering jets do not restrict the small amount of fuel flowing in this circuit, therefore they have no effect on the air-fuel ratio of the idle/low speed circuit. The idle pickup tube meters the fuel, which is mixed with air entering through the idle air bleeds.

CARBURETOR CIRCUIT OPERATION

FLOAT CIRCUIT (FIGURE 4)

Fuel enters the fuel bowl through the fuel inlet fitting. A fuel inlet needle fits in the inlet seat and is opened and closed by the float action.

When the fuel level in the fuel bowl drops, the float also drops allowing fuel to flow into the bowl. When the fuel level has risen the float forces the needle against the seat stopping fuel flow. This process keeps the fuel in the bowl at a constant level. This is important since a constant fuel level is required for precise fuel metering in the idle/low speed, main metering and power enrichment circuits.

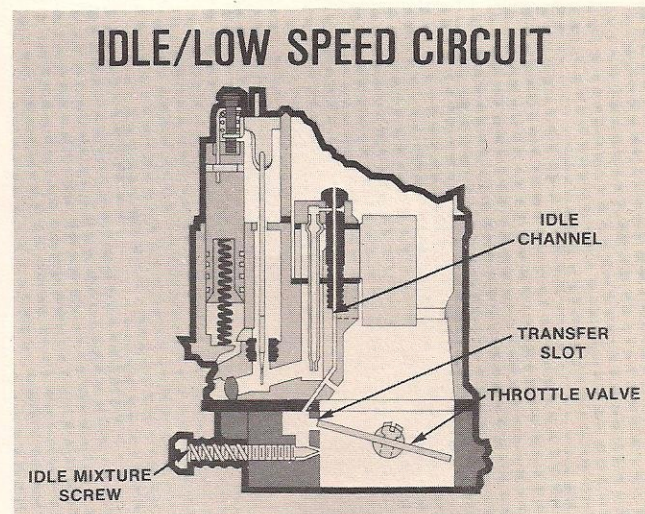


Figure 5, Idle/Low Speed Circuit

At curb idle, the fuel-air mixture flows down the idle channel and is mixed with more air which entered the idle channel through the transfer slot. The idle mixture adjustment screw controls the volume of the extra-rich fuel-air mixture that is discharged below the throttle valve. This extra-rich mixture then mixes with air from the small throttle opening that is normal for curb idle.

During low speed operation the throttle valve opens slightly exposing the transfer slot and fuel flows through the transfer slot as well as the idle port (see figure 6). This provides more of the extra-rich mixture for the slightly increased air volume, thus maintaining the correct air-fuel ratio.

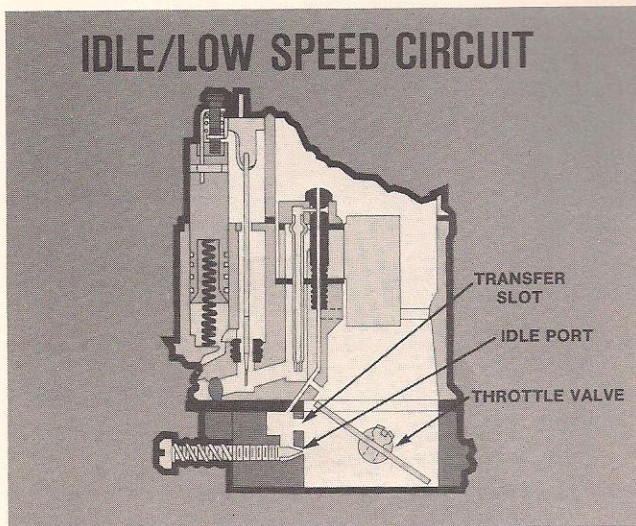


Figure 6, Low Speed Operation

MAIN METERING CIRCUIT (Figure 7)

When the throttle valves are opened and engine speed increases from low speed operation, the air flow through the carburetor also increases. The greatly increased air flow creates a low pressure area in the venturi and the main metering systems begin to discharge fuel.

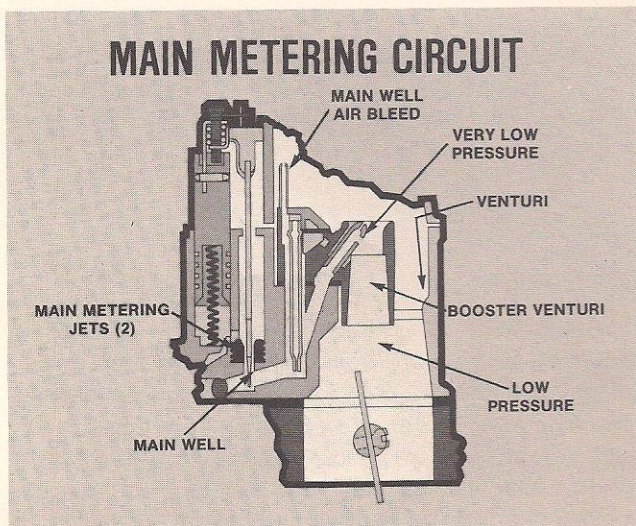


Figure 7, Main Metering Circuit Operation

Atmospheric pressure present in the bowl above the fuel causes fuel to flow to the lower pressure area created by the venturi and magnified by the booster venturi.

Fuel flows through the main metering jet into the main well while air enters through the main well air bleeds. At this point the air and fuel make a foam-

like mixture. This mixture of fuel and air being lighter than raw fuel responds faster to changes in venturi vacuum and is also more readily vaporized when discharged into the venturi. Slight changes in throttle opening vary the amount of air flow through the carburetor. This requires slight changes in fuel flow at the same time so the air-fuel ratio can remain correct. This is made possible by a slightly tapered section on the metering rod.

POWER ENRICHMENT CIRCUIT (Figures 8 and 9)

In the BBD 2-venturi carburetor, power enrichment is accomplished by steeply tapered sections of the metering rods. The metering rods are connected to a vacuum actuated step-up piston (figure 8).

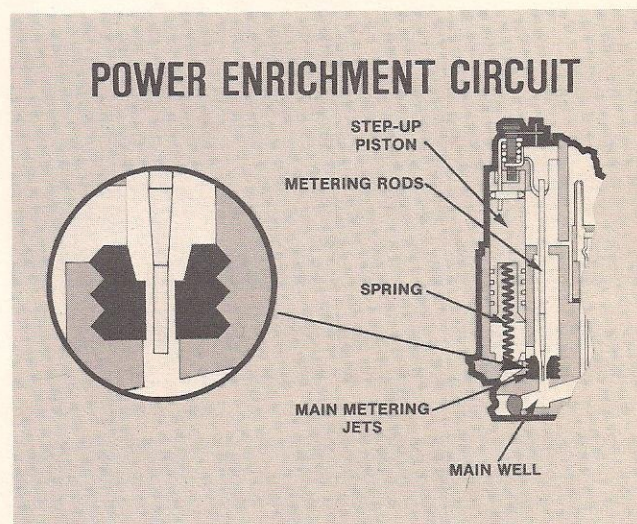


Figure 8, Power Enrichment Circuit Operation

At idle, part throttle or cruise, high vacuum causes the piston to compress the spring moving the metering rods deeper into the main metering jets (figure 9). This restricts fuel flow to the main well.

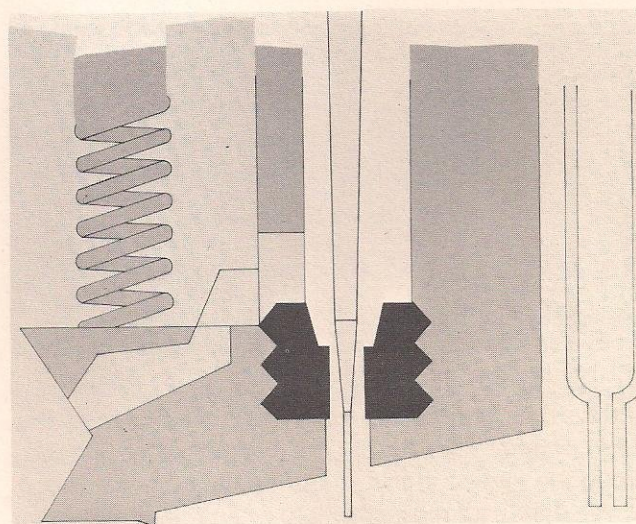


Figure 9, Metering Rod Function

Refer to figure 8. Mechanical control of the step up piston is accomplished by the rod lifter on the accelerator pump rod. Under wide throttle opening the mechanical linkage lifts the metering rods so the smallest part of the taper extends into the main metering jets. This allows maximum fuel flow into the main well for power enrichment. It should be noted the vacuum affects only a slight adjustment of the main metering rods.

ACCELERATOR PUMP CIRCUIT (Figure 10)

When the throttle valves are opened suddenly to accelerate from low speeds, air flow through the carburetor is increased immediately. However, there is a brief time lag before the fuel can begin to flow, overcoming its own inertia because fuel is heavier than air. This momentary lag leans out the fuel-air mixture.

The accelerating pump mechanically supplies the fuel necessary to overcome this momentary lag.

Fuel enters the pump cylinder through an inlet check valve in the bottom of the pump well below the pump piston. As the throttle lever is moved the pump link and drive spring push the pump piston down. Fuel is forced through a passage around the pump discharge check ball and out the pump discharge jets in the venturi cluster.

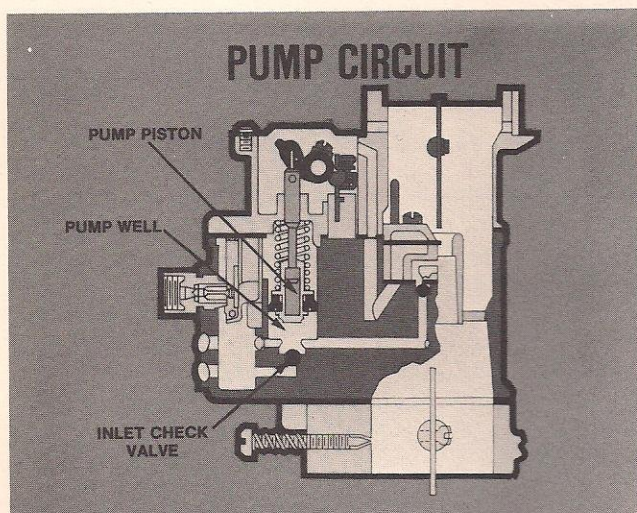


Figure 10, Accelerator Pump Circuit Operation

CHOKE CIRCUIT (Figure 11)

The choke shaft is connected by linkage to a thermostatic coil within the choke cover. The coil winds up when cold and unwinds when heated.

When the engine is cold the tension of the thermostatic coil holds the choke valve closed. When the engine starts, manifold vacuum is applied to the diaphragm assembly to open the choke valve slightly. This is the initial choke valve clearance, and

is adjustable. This adjustment is the most important carburetor adjustment. For adjustment procedure refer to the 5 steps to a happy choke described later in this book.

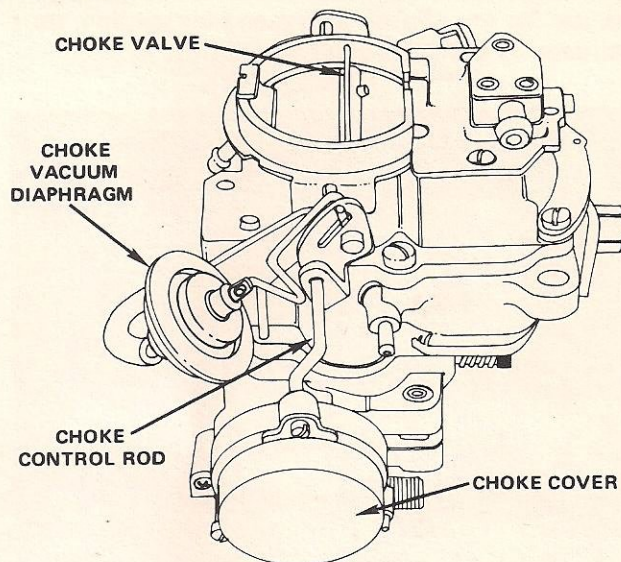


Figure 11, Choke Circuit

A faster idle speed prevents stalling during warm-up. The fast idle cam, actuated by the choke shaft through connecting linkage, rotates into position against the fast idle screw. When the choke valve reaches its fully open position, the cam rotates free of the fast idle screw, allowing the throttle lever to return to the curb idle position.

DRIVEABILITY SYMPTOMS & SERVICE ADJUSTMENTS

When diagnosing driveability symptoms be sure to remember that the carburetor is not always at fault. Be sure to use your technical service manual and the charts in this film reference book to help identify other possible service needs.

FLOAT CIRCUIT

SYMPTOMS

Starting with the float, driveability symptoms requiring service are flooding, low and high speed surge ... Actually any drive symptom that happens at idle, low speed and cruise usually relates to the float. Also, loss of power during sustained high speed acceleration or sustained full throttle operation could be caused by fuel starvation.

SERVICE

Remove the six screws holding the air horn and disconnect the choke vacuum diaphragm hose. Next, carefully remove the two choke link clips and accelerator pump link clip. The air horn may now be removed (Figure 12).

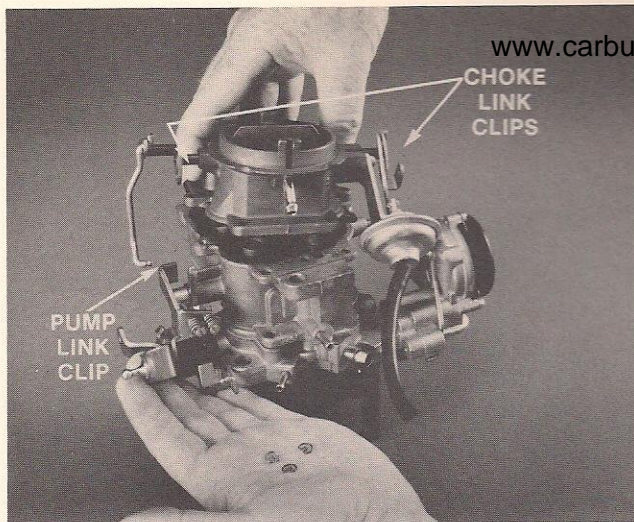


Figure 12, Remove Air Horn to Adjust Float

Measure the float level by placing a straight edge across the top of the float bowl (figure 13). Hold the float up and measure to the top of the float. If adjustment is needed, simply bend the float lip, then measure the float level again. Use caution when making this adjustment because the soft needle tip can be damaged by too much pressure. Float height specifications are in the technical service manual.

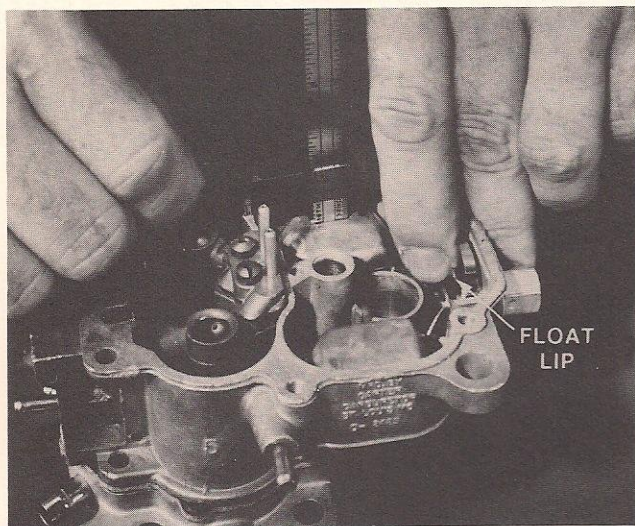


Figure 13, Measuring Float Level

MAIN METERING POWER ENRICHMENT CIRCUIT SYMPTOMS

The main metering power enrichment circuit provides the right fuel-air mixture during cruise and acceleration. If a cruise surge occurs between 35 to about 60 miles per hour, or if there seems to be a lack of passing power, the main metering rods may require adjustment. Also, if power appears to be

lacking during heavy load operation, this symptom relates to the power enrichment circuit which is controlled by the main metering rods.

SERVICE

With air horn in place, remove the dust cover and the rod lifter lock screw, then lift the vacuum piston and metering rod assembly out of the air horn (figure 14).

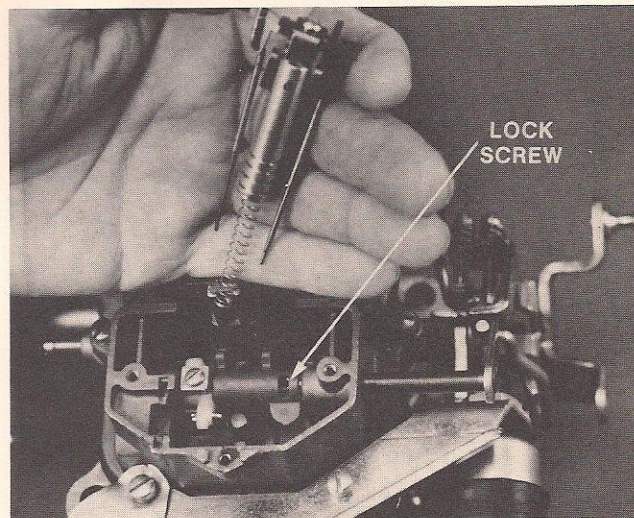


Figure 14, Removing Vacuum Piston and Metering Rod Assembly

Measure the gap between the step up piston and the metering rod assembly (figure 15). Your technical service manual has the specifications. To adjust the gap, turn the adjusting screw. A counter-clockwise turn leans the fuel mixture and a clockwise turn gives a rich mixture.

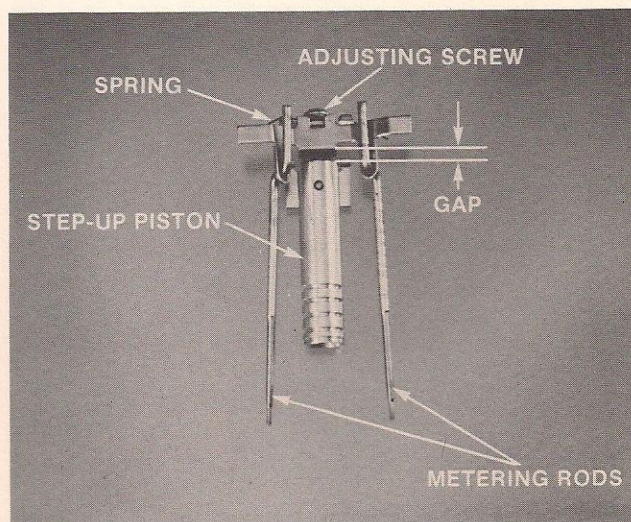


Figure 15, Gap Measurement Between Step-up Piston and Metering Rod

Before installing the assembly in the air horn, make sure that the spring maintains pressure against both metering rods. If the rods flutter, it could cause an erratic high speed surge.

Carefully insert the metering rods through the access holes and into the main metering jets (figure 16). Then install the rod lifter lock screw.

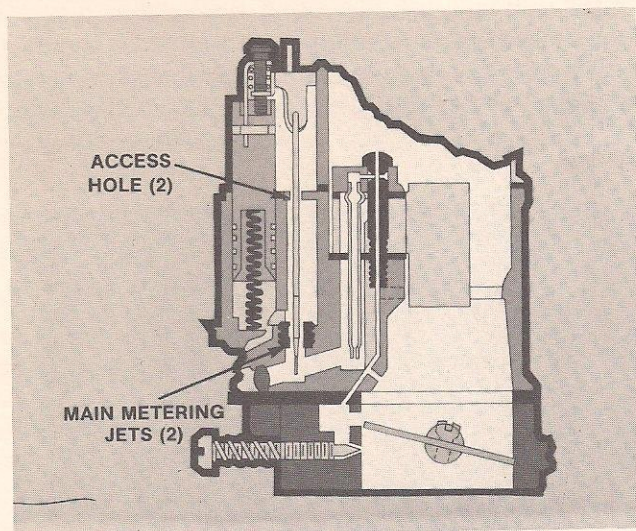


Figure 16, Align Metering Rods with Main Metering Jets

The final step in servicing the metering rod assembly is adjusting the vacuum step-up piston ... Close the throttle valves by backing off the curb idle adjustment screw. Be sure to count the turns (figure 17). This screw must be returned to its original position later. Turn the idle screw in against the stop, and continue one full turn. This places the throttle valves at the adjustment reference point.

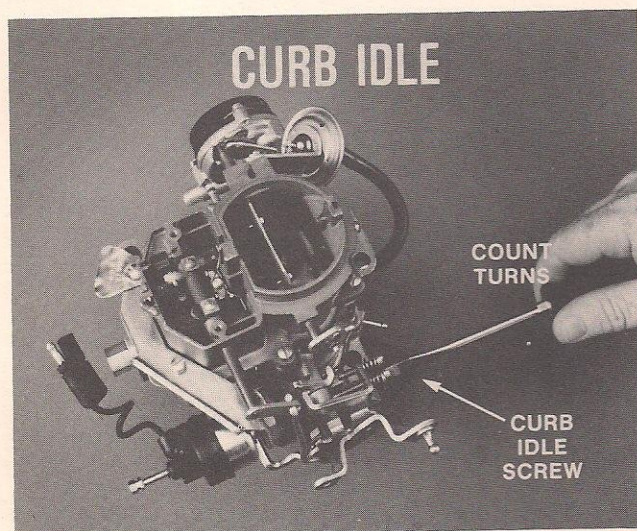


Figure 17, Closing Throttle Valves

Hold moderate pressure on the rod lifter tab and fully depress the vacuum piston. Then tighten the rod lifter lock screw (figure 18). The throttle valves and metering rods are now synchronized. It's also necessary to adjust the accelerator pump before returning the curb idle screw to its original setting.

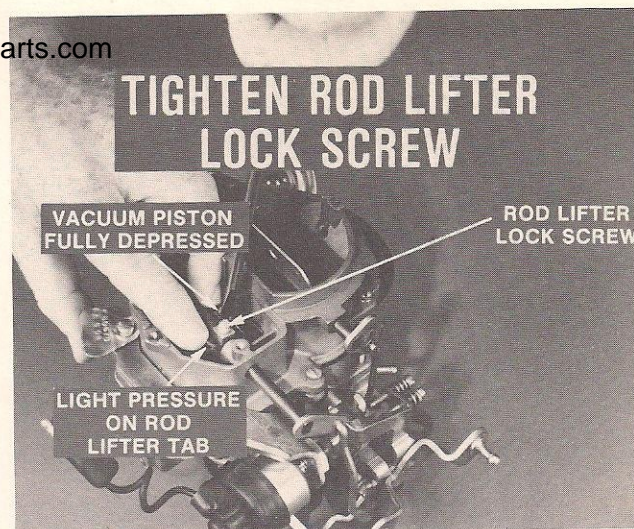


Figure 18, Tightening Rod Lifter Lock Screw

ACCELERATOR PUMP CIRCUIT

SYMPTOMS

Accelerator pump service may be in order if the engine stalls or hesitates accelerating at low speeds. A good tip to remember is that if an engine at operating temperature coughs through the carburetor and the air horn appears sooty, the mixture is probably too lean. An over-rich mixture could cause the engine to lag or hesitate but it normally won't cough.

SERVICE

To adjust the accelerator pump, close the throttle valve using the curb idle adjusting screw. Open the choke valve so that the fast idle cam allows the throttle valves to fully close in the bores. Then turn the curb idle adjusting screw in until it makes contact with the stop. Make two more complete turns (figure 19).

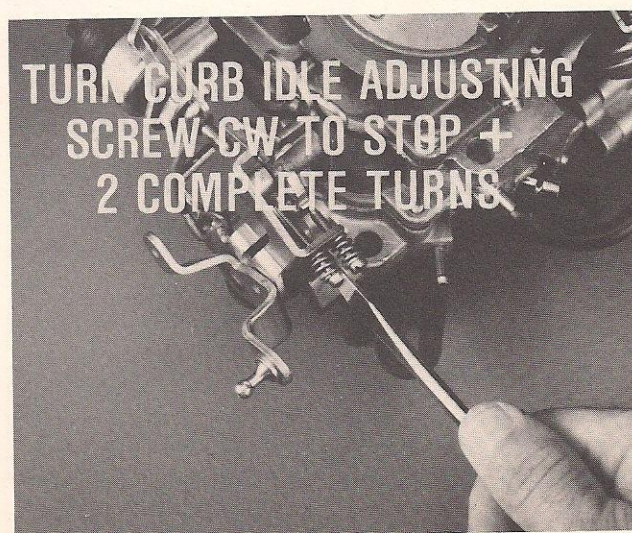


Figure 19, Setting Curb Idle Screw

Use a T-scale to measure the distance between the air horn lip and the top of the accelerator pump shaft (figure 20). Your technical service manual contains the clearance specification.

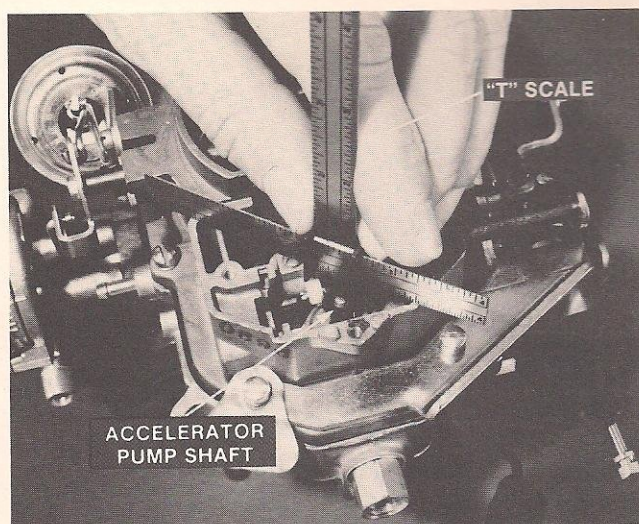


Figure 20, Measuring Accelerator Pump Shaft Clearance

To adjust accelerator pump shaft height, loosen the pump arm lock screw and adjust pump travel to proper specifications. Then tighten the pump arm lock screw (figure 21), install the dust cover, and reset the throttle.

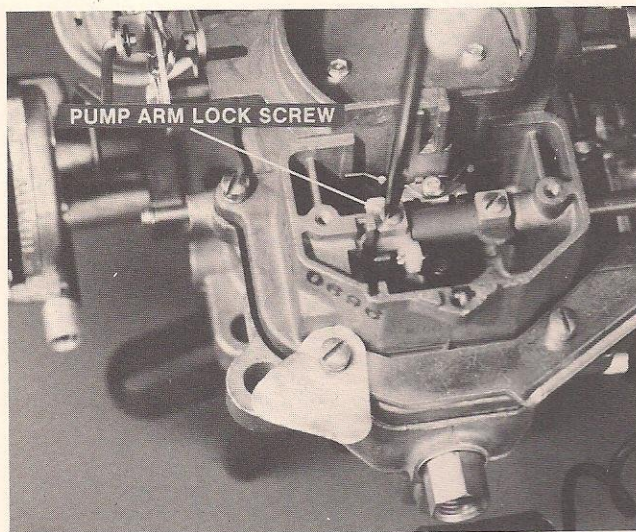


Figure 21, Tightening Pump Arm Lock Screw

CHOKE CIRCUIT

SYMPTOMS

Some typical driveability symptoms related to the choke are hard or no start, rough idle when the engine is cold, poor low speed performance or stalling with a cold engine, or the engine coughs only when cold. More choke related symptoms are too fast or too slow of an idle with a cold engine, or the fast idle lasts too long and engine stalls warm, not hot.

SERVICE

See figure 22. To service the choke, make adjustments in the order ... call it 5 service steps to a happy choke. First, adjust the initial choke clearance ... this is the most important adjustment in choke servicing ... second, adjust the fast idle linkage ... third, adjust the choke unloader ... Step 4 is the choke cover and Step 5 is adjusting fast idle RPM.

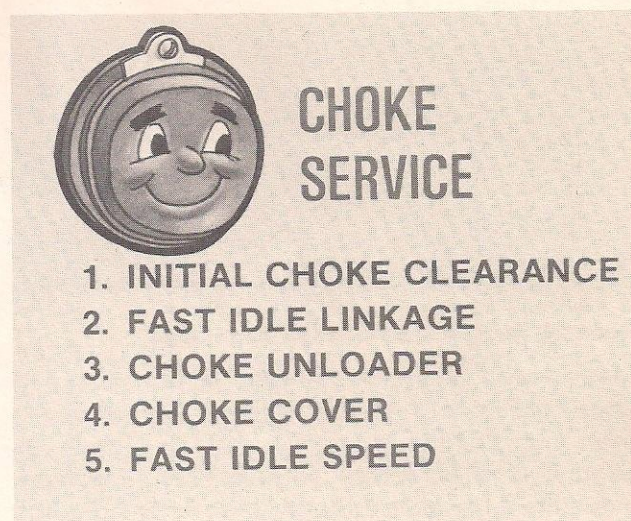


Figure 22, Five Steps to a Happy Choke

STEP 1, INITIAL CHOKE CLEARANCE ... SYMPTOMS: TOO RICH, ENGINE LOADS; TOO LEAN, ENGINE DIES -- Start adjusting initial choke clearance by turning the choke cover 1/4 turn clockwise. This applies tension against the choke cover spring. Then apply about 19 inches of vacuum to the diaphragm (figure 23).

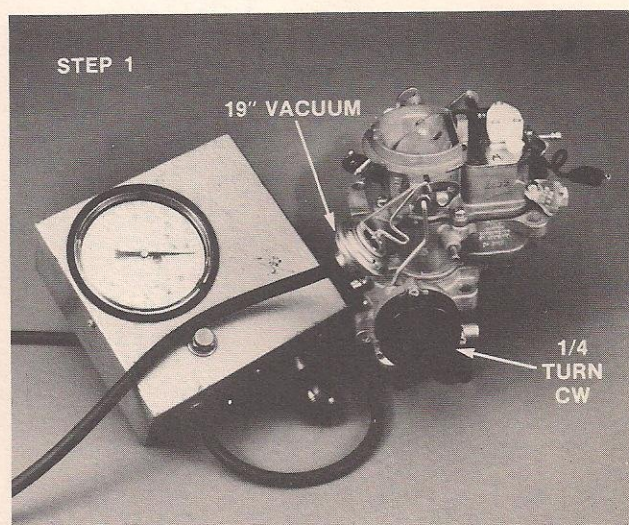


Figure 23, Applying Tension and Vacuum

Open the throttle valve slightly to place the fast idle screw on the high step of the cam (figure 24).

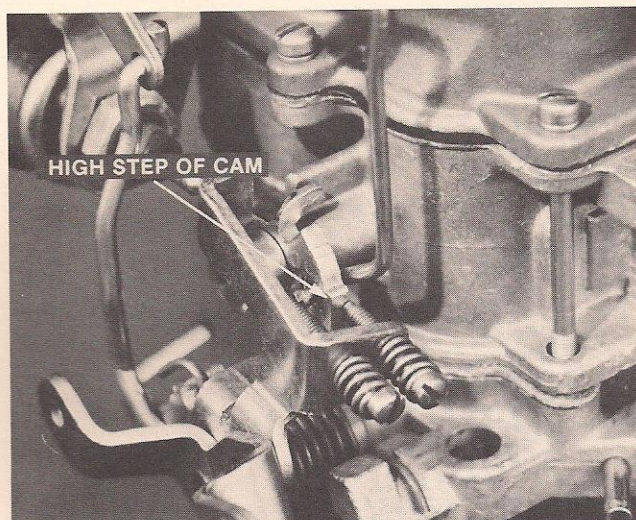


Figure 24, Fast Idle Screw on High Step of Cam

Measure the clearance between the top edge of the choke and the air horn wall. Bend the connector link from the diaphragm at the "U" to obtain the specified dimension (figure 25). Improper adjustment can cause rough idle or stalling during engine warm-up. Also, if the initial choke clearance opens too far the engine will cough during warm-up.

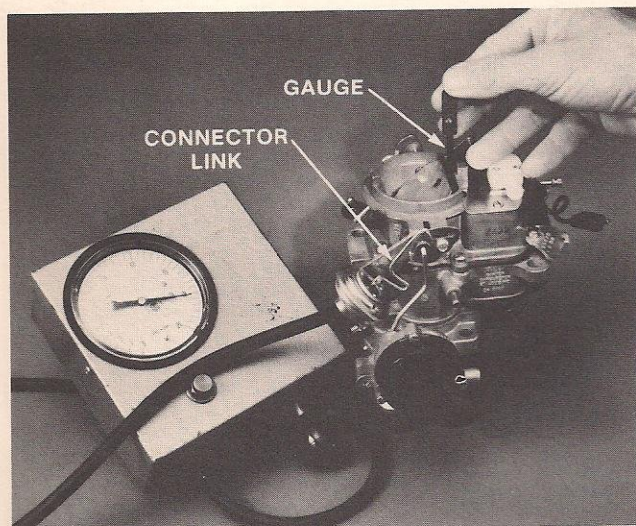


Figure 25, Measure Clearance and Adjust

STEP 2, FAST IDLE LINKAGE ... SYMPTOMS: IDLES TOO FAST, TOO LONG; IDLES TOO SLOW, TOO SHORT OF TIME -- Set up the fast idle linkage. (This must be done after an initial choke adjustment.) Place the fast idle set screw on the second step of the cam and against the high step shoulder. Leave the choke cover turned $\frac{1}{4}$ turn as in step one.

Measure the clearance between the top edge of the choke and the air horn wall, and compare it with specifications. If necessary, bend the fast idle cam

connector rod to adjust the clearance to specification (figure 26). This adjustment synchronizes the choke valve and throttle valve while the choke is in operation. Improper adjustment makes symptoms like engine loading, rough idle or stalling during warm-up.

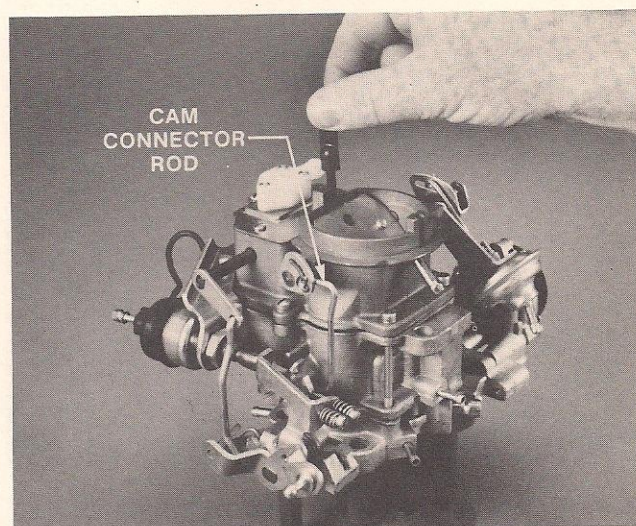


Figure 26, Measuring Clearance Between Choke and Air Horn Wall

STEP 3, CHOKE UNLOADER SETTING ... SYMPTOMS: FLOODED ENGINE WON'T CLEAR; THROTTLE STICKS WIDE OPEN -- The choke unloader setting is made with the carburetor at wide-open throttle and the choke valve closed as far as possible without forcing it. Notice that the unloader tang pushes against the fast idle cam to open the choke part way to clear a flooded carburetor (figure 27).

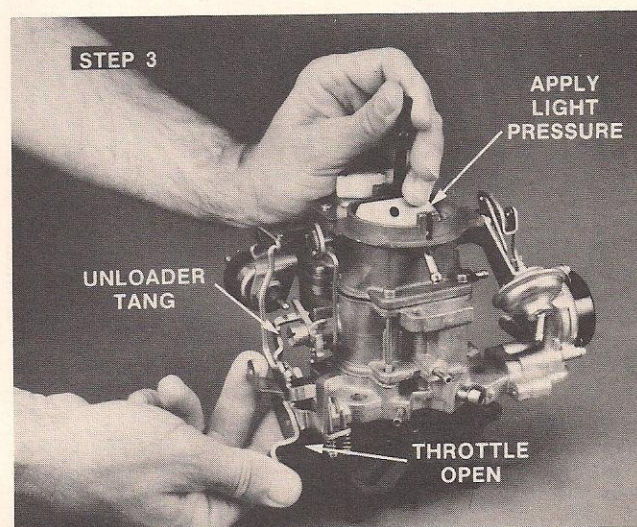


Figure 27, Setting the Choke Unloader

It is difficult to have too much unloader but if clearance is not as specified bend the tang to adjust it to specifications. This adjustment should be rechecked on the car to be certain the linkage is permitting full throttle movement. Also, make sure

that the tang is not binding on the fast idle cam because it could cause the throttle to www.carburetor-parts.com

STEP 4, AUTOMATIC CHOKE COVER ...
SYMPTOMS: CHOKE ON TOO LONG; CHOKE ON NOT LONG ENOUGH -- Automatic choke cover ... for longer choke operation, simply loosen the housing retaining screws and rotate the cover clockwise. For a shorter operation time, turn the cover counter-clockwise (figure 28). Set within the OK range as shown in the TSM.

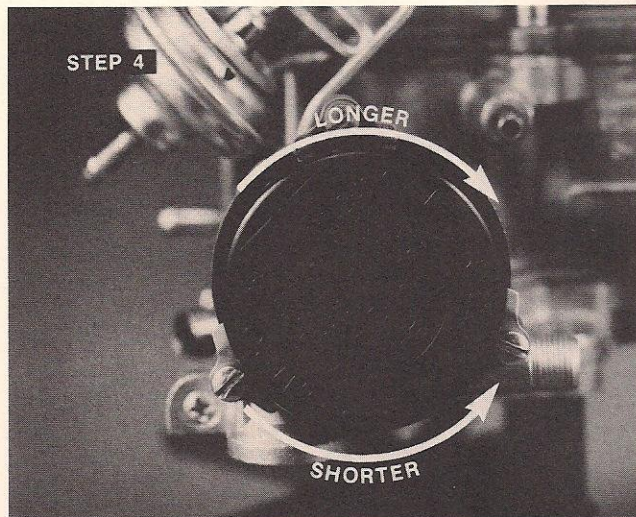


Figure 28, Setting Automatic Choke Operation Time

Driveability symptoms such as fast idle stays on too long, or the engine stalls after a short warm up, but not when hot can usually be corrected by adjusting the automatic choke cover.

STEP 5, FAST IDLE SPEED ... SYMPTOMS: ENGINE RUNS TO FAST, COLD; ENGINE RUNS TO SLOW, COLD -- Adjustment to fast idle speed is performed after the engine reaches operating temperature.

First, disconnect the EGR and TCS. Then set the fast idle screw on the second step of the fast idle cam (figure 29).

Refer to the technical service manual and adjust the fast idle screw to the setting specified for the particular model vehicle. If this is out of adjustment, the engine can stall, idle too slow or race during choke operation.

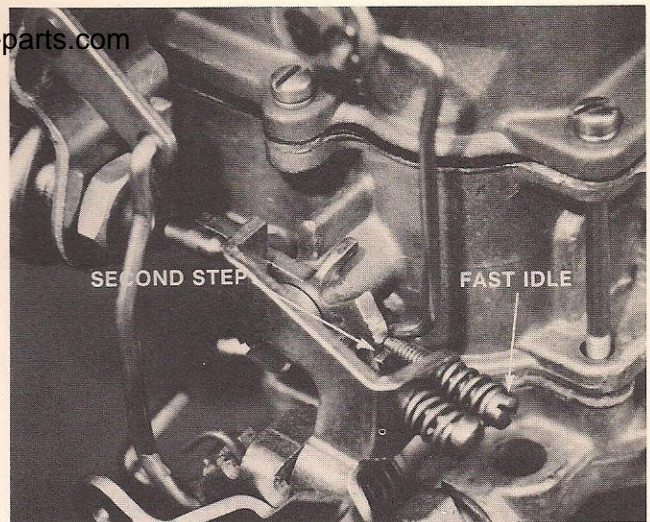


Figure 29, Fast Idle Screw on Second Step of Cam

IDLE/LOW SPEED CIRCUIT

SYMPTOMS

Typical symptoms that may occur at idle or low operating speeds while the engine is at operating temperature are engine stalling, rough idle or low speed surge.

SERVICE

HOT ENGINE STALLS

If the condition is a hot engine that stalls, the curb idle screw may require adjustment.

If equipped with an idle speed solenoid, first determine if solenoid is working. Next, turn the nut on the solenoid plunger in or out to obtain the specified idle RPM (figure 30). Adjusting the idle can also involve resetting the idle mixture.

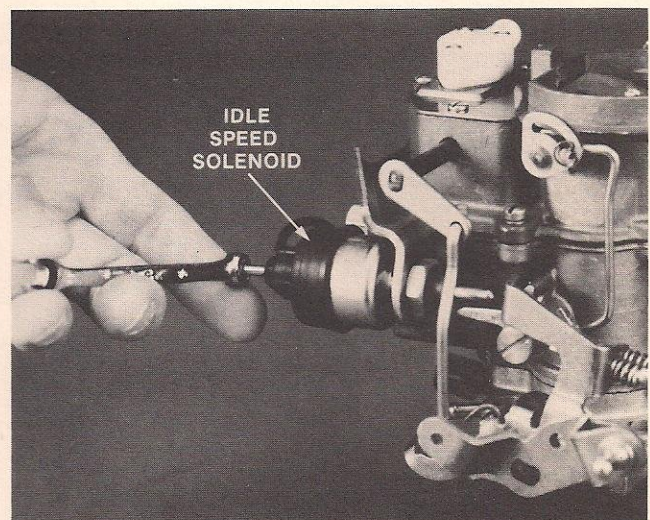


Figure 30, Adjusting Idle Speed Solenoid

ROUGH IDLE, HOT

If the engine idles rough when it's at operating temperature, the idle mixture screws may need some adjustment. But be sure to remember that idle settings are critical on emission controlled engines. When performing this service, always refer to the technical service manual for step-by-step engine idle speed and mixture setting procedures. These adjustments are made with air cleaner in place and the engine at operating temperature. If the original limiter caps are still in place chances are something else is at fault, such as, dirt in the fuel system, faulty ignition, dirty air cleaner, etc. Adjustment should be attempted only after other possible causes have been eliminated.

If the vehicle does not have a catalytic converter, an infra-red analyzer test probe may be inserted in the exhaust pipe. Idle mixture screws, with the plastic idle limiter caps in place, are adjusted to obtain proper idle speed at the specified carbon monoxide level.

On vehicles with a catalytic converter, the tachometer method must be used. However, the plastic idle limiter caps must be removed to adjust to a lean drop idle setting. The lean drop idle procedure is detailed in the technical service manual.

IDLE MIXTURE SCREW ADJUSTMENT

The following four steps summarized the idle mixture screw adjustment procedure:

Note: To adjust idle mixture the plastic idle limiter caps over the idle mixture screws must be removed and new (blue) service caps installed after the idle adjustment is completed.

The plastic limiter caps limit the adjustment range and control exhaust emission levels at idle speeds.

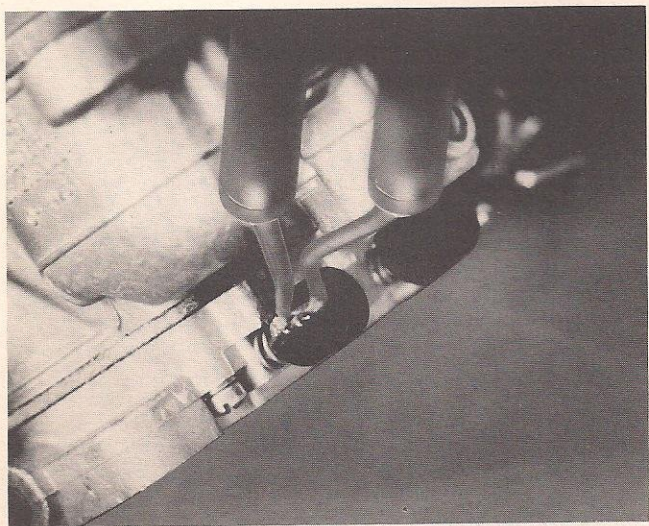


Figure 31, Removing Plastic Idle Limiter Caps

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1. The idle limiter caps may be removed by using a soldering gun to melt through the plastic (figure 31). Or install a number 10 sheet metal screw in the center of the cap and turn it clockwise.
2. Start the engine and let it warm up to operating temperature. Then adjust the idle speed to the RPM specified in the technical service manual.
3. Essentially, the lean drop procedure is to adjust each mixture screw to obtain the highest RPM, moving each mixture screw equal amounts, unless the engine demands otherwise. If the RPM increases above specifications -- reset the curb idle screw. Once the best idle is achieved, turn the idle mixture screws clockwise to lean the mixture until the specified drop in RPM is obtained.
4. Install new plastic idle limiter caps over the idle mixture screws. Service caps are blue in color. Make sure that the limiter cap tab rests against the full rich stop. Take care not to disturb the idle mixture setting while installing the caps.

LOW SPEED SURGE

To correct low speed surge, look for dirt or an obstruction in the low speed jet, low speed well, the idle air bleed, idle channel or idle port (figure 32). Clean these passages as necessary.

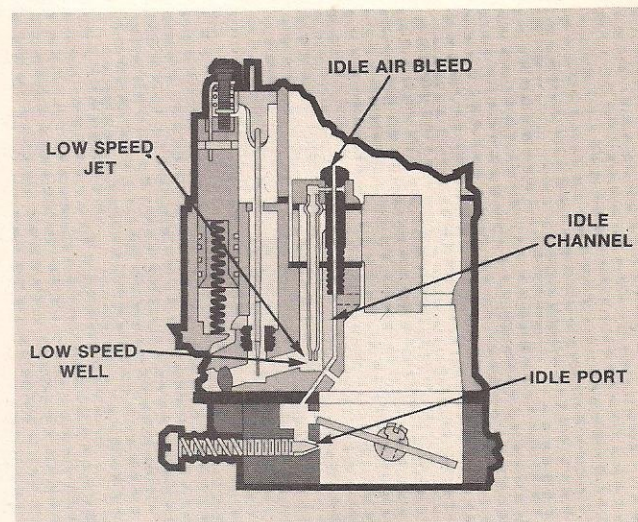


Figure 32, Low Speed Circuit Air Fuel Passages

CARBURETOR PERFORMANCE DIAGNOSIS (Figure 3)

For quick carburetor diagnosis an easy way to identify circuits requiring service is to relate the symptom and when it happens to the engine operating graph (figure 3).

The float affects the idle, main and power circuits. The choke action affects fuel-air mixture from starting a cold engine until it reaches operating temperature ...

The idle and low speed circuit involves fuel mixture parts dose setting for lower engine speeds ...

For cruise or steady speed driving around 45 MPH or more, look to the main metering circuit. This involves the vacuum piston and metering rod assembly.

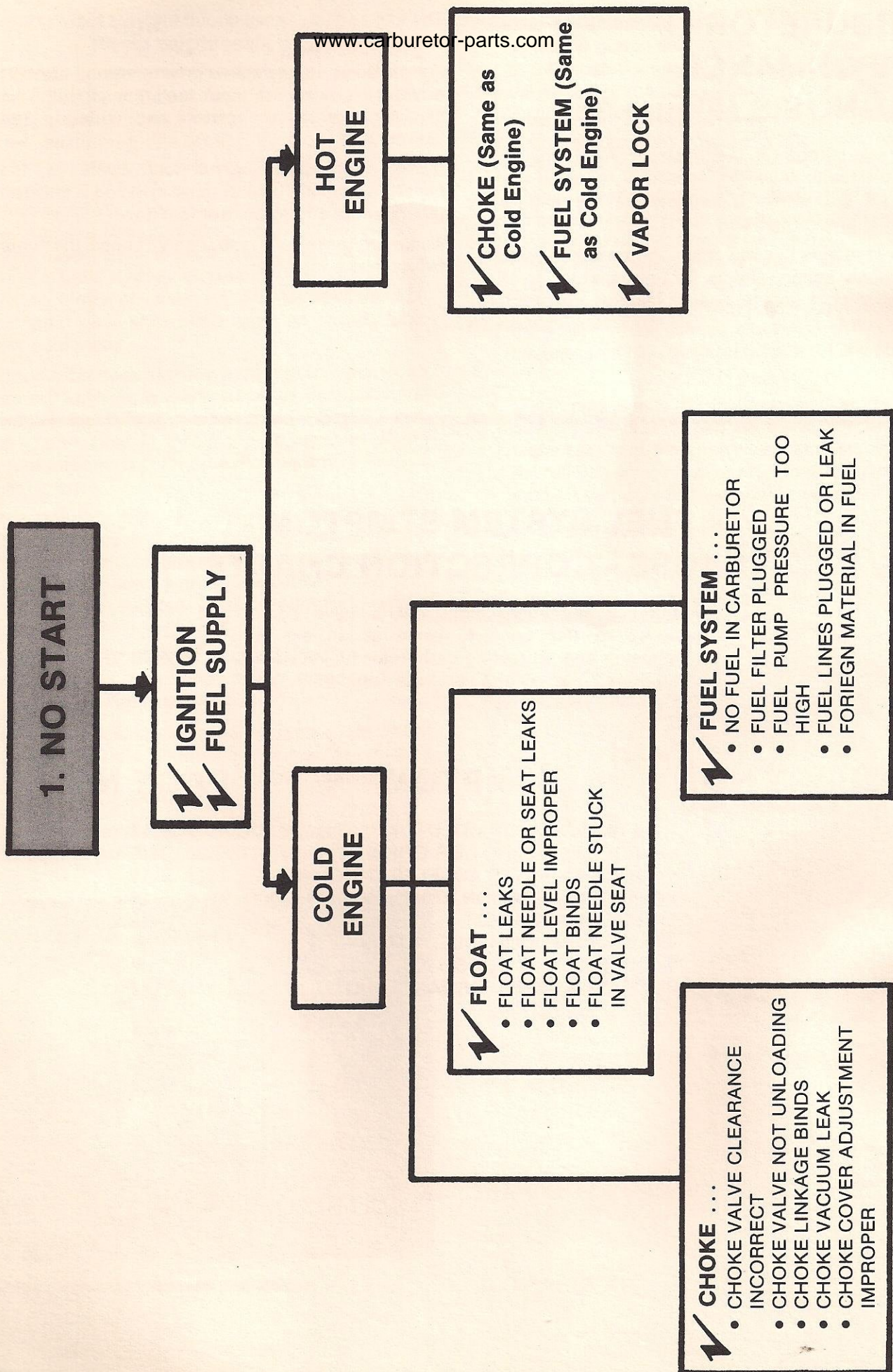
During high speed or full load operation, the metering rods are also directly involved ... this rod tapers at the end to control fuel flow.

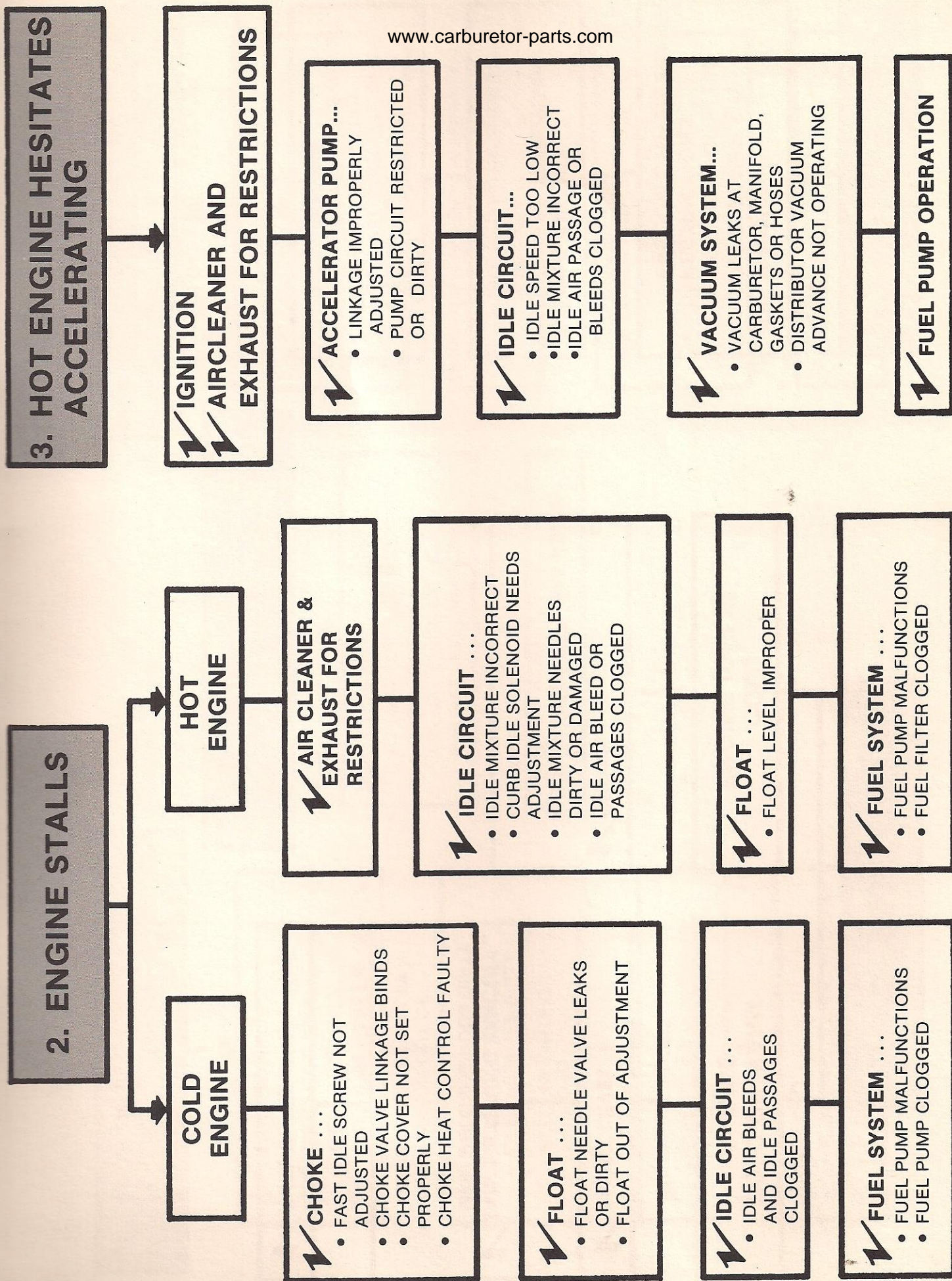
And when the throttle is suddenly opened, the pump overcomes engine lag.

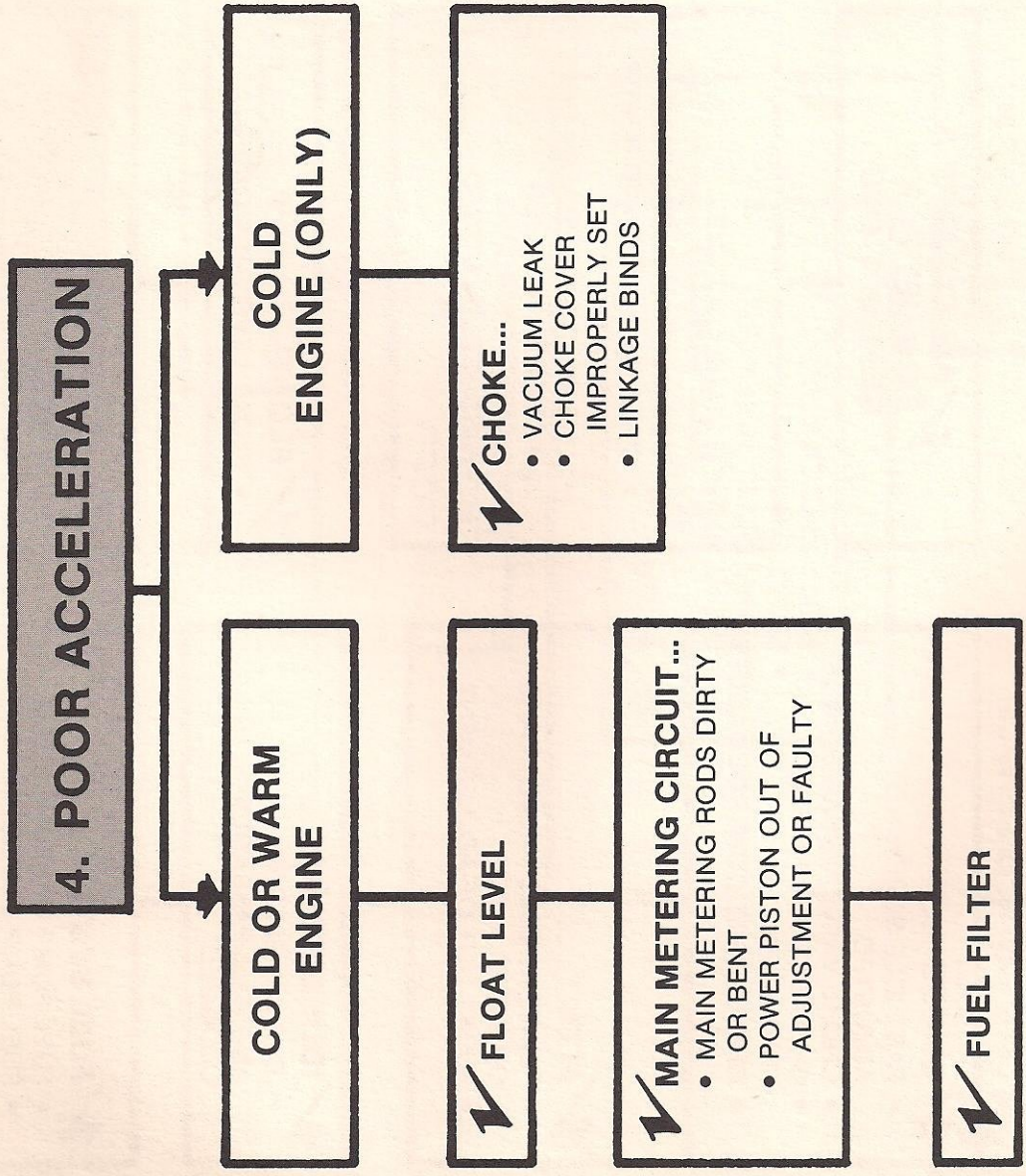
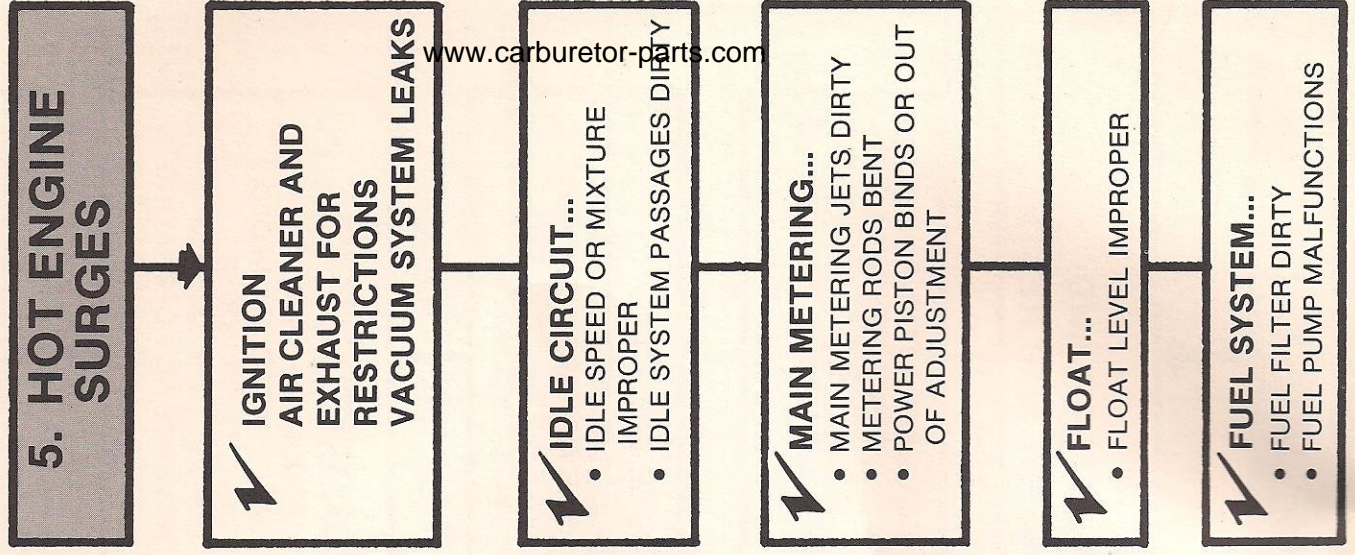
FUEL SYSTEM SYMPTOM - CAUSE - CORRECTION CHARTS

For quick reference, eight charts have been included in this book to serve as an aid in diagnosing and correcting carburetor/fuel system conditions. The charts address the following symptoms:

CHART NO.	SYMPTOM	PAGE NO.
1	NO START, HOT OR COLD	14
2	ENGINE STALLS, HOT OR COLD	15
3	ENGINE HESITATES ACCELERATING, HOT	15
4	POOR ACCELERATION, COLD, HOT OR COLD	16
5	ENGINE SURGES, HOT	16
6	STALLS OR ROUGH IDLE, HOT	17
7	CARBURETOR FLOODS	17
8	POOR CRUISE PERFORMANCE, HOT	17







6. HOT ENGINE STALLS OR ROUGH IDLE

✓ **IGNITION**
✓ **AIR CLEANER AND EXHAUST FOR RESTRICTIONS**
✓ **VACUUM SYSTEM LEAKS**

✓ **IDLE CIRCUIT...**
• IDLE SPEED IMPROPER
• IDLE PASSAGES DIRTY
• IDLE MIXTURE ADJUSTING NEEDLES DIRTY OR DAMAGED

✓ **THROTTLE...**
• THROTTLE VALVE STICKS OPEN

✓ **FLOAT...**
• FLOAT NEEDLE VALVE LEAKS
• FLOAT BINDS OR LEAKS
• FLOAT LEVEL IMPROPER

7. CARBURETOR FLOODS

✓ **FLOAT...**
• FLOAT NEEDLE VALVE DIRTY OR LOOSE
• FLOAT BINDS OR LEAKS
• FLOAT LEVEL IMPROPER

✓ **FUEL PUMP PRESSURE**

8. HOT ENGINE, POOR CRUISE PERFORMANCE

✓ **IGNITION**
✓ **AIR CLEANER AND EXHAUST FOR RESTRICTIONS**
✓ **FUEL FILTER**
✓ **FUEL PUMP**

✓ **THROTTLE...**
• THROTTLE DOES NOT FULLY OPEN

✓ **MAIN METERING...**
• POWER PISTON BINDS
• METERING JETS OR RODS DIRTY
• METERING RODS BENT OR OUT OF ADJUSTMENT

✓ **FLOAT...**
• FLOAT LEVER IMPROPER
• FLOAT BINDS OR LEAKS