

WEBER 32 ADFA Carburetor

124/131 Models

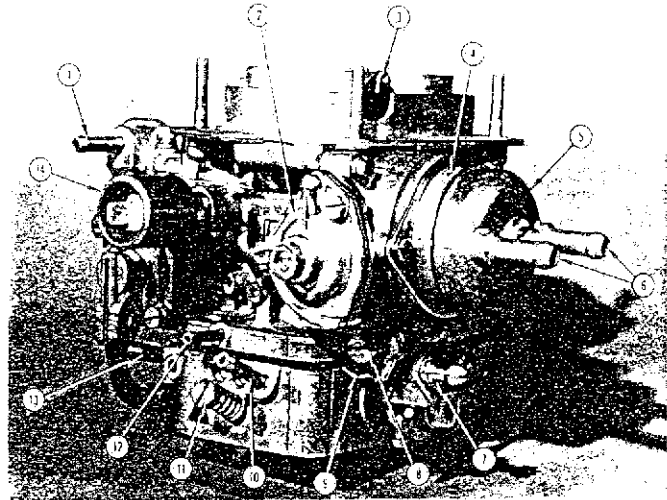
- Student Workbook -

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The Weber 32 ADFA carburetor is used on the 124 and 131 Models from 1975 to present. It is a two barrel, downdraft carburetor with mechanical progressive throttle linkage. The carburetor is specially calibrated to supply an air-fuel mixture compatible with the air injection system.

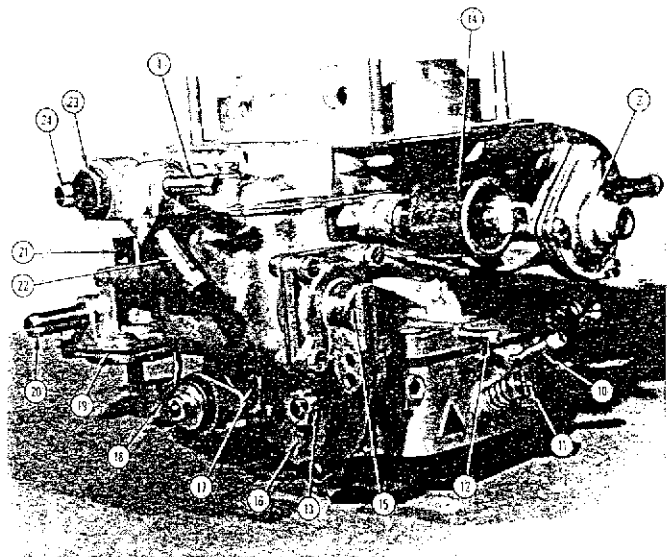
Idle Cutoff Solenoid (14)

The idle cutoff solenoid (14) blocks fuel flow thru the idle circuit when ignition switch is turned off. This prevents dieseling when engine is shut down. On 1975 and 1976 models with catalytic converters, the solenoid is also controlled by a tachimetric unit. This unit removes the electrical signal to the solenoid during deceleration over 2650 ± 50 RPM. This causes the solenoid to deenergize, shutting off the idle fuel flow.



High Idle

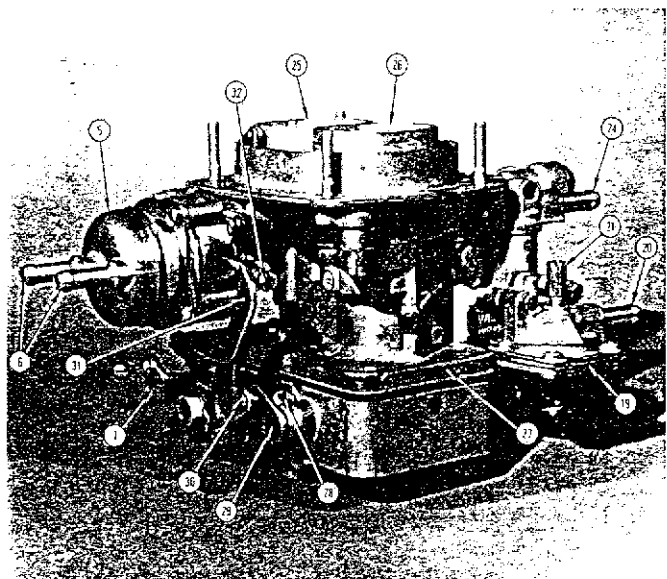
During decelerations a richer air-fuel mixture is formed. To prevent this a high idle system is used. The system consists of a vacuum capsule on the carburetor, an electrovalve, a switch on the clutch pedal, (standard transmission only) a switch on the transmission, and vacuum lines connecting the vacuum capsule to the intake manifold thru the electrovalve.



Automatic Choke (4)

The carburetor contains an automatic choke. The choke is controlled by a thermostatic spring in choke cover (5). The spring senses the temperature of the engine coolant.

1. Fuel return connection
2. Choke unloader assembly
3. Choke plate linkage
4. Choke housing
5. Choke cover
6. Choke coolant connections
7. Main throttle link
8. Idle speed screw
9. Inhibitor switch
10. Carbon trap purge connection
11. Idle mixture screw
12. E.G.R. signal connection
13. Crankcase vent connection
14. Idle cutoff solenoid
15. Accelerator pump
16. Accelerator pump cam
17. Bowl vent valve idler lever
18. High idle idler lever
19. High idle assembly
20. High idle signal connection
21. High idle speed screw
22. Fuel feed connection
23. Fuelainer
24. Float bowl vapor vent
25. Primary barrel
26. Secondary barrel
27. Carburetor identification
28. Throttle stop screw
29. Secondary throttle shaft
30. Progressive throttle linkage
31. Choke fast idle lever
32. Choke fast idle screw



Idle Orifice Restrictor Bushing

Idle orifice restrictor bushing (9) is installed in the throttle body where idle passage (7) empties into the bore of the carburetor.

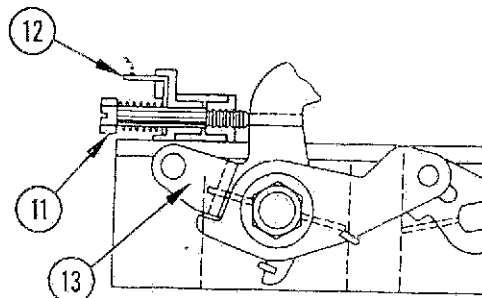
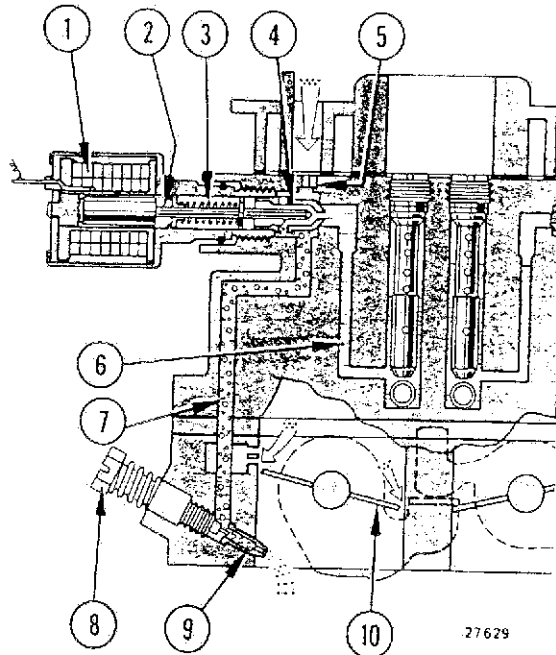
This bushing prevents damage to the soft material of the throttle body which could result from turning mixture screw (8) in too far. The bushing prevents the possibility of an overly rich mixture.

Idle Cutoff Solenoid

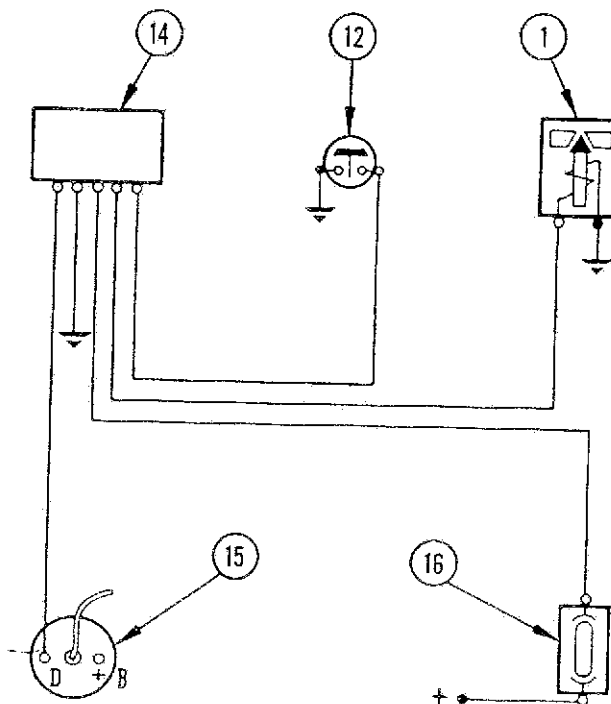
The idle cutoff solenoid (1) is installed in the main idle fuel passage (6). The piston (2) of the solenoid opens and closes the passage in the primary idle jet (4). When the ignition switch is turned on the solenoid is energized. The piston (2) pulls back against spring (3) opening the jet (4). When the ignition switch is turned off, spring (3) pushes piston (2) into jet (4). This cuts off the idle fuel flow to prevent dieseling.

On 1975 and 1976 catalyst equipped cars the solenoid is also controlled by a tachimetric switch (14). The tachimetric switch senses engine speed from the ignition coil (15). An inhibitor switch (12) on the idle speed adjusting screw (11) senses when the throttles are closed.

When engine speed is over 2650 ± 50 RPM and the throttles are closed the tachimetric switch interrupts the power circuit to the solenoid. This deactivates the solenoid and cuts off idle fuel flow. This protects the catalytic converter from excessive heat buildup during long decelerations.



- 1. Idle cutoff solenoid 2. Piston 3. Spring 4. Primary idle jet
- 5. Primary idle air bleed 6. Main idle fuel passage
- 7. Main idle mixture passage 8. Mixture adjusting screw
- 9. Idle orifice restrictor bushing 10. Primary throttle plate
- 11. Idle speed adjusting screw 12. Inhibitor screw
- 13. Throttle opening lever 14. Tachimetric switch
- 15. Ignition coil 16. Fuse



High Idle System

The high idle system prevents the primary throttle plate (1) from closing completely when accelerator is released during deceleration. This prevents an over rich mixture which would result in an excessive exhaust emission level.

A vacuum diaphragm (6) on the carburetor is attached by link (5) to idler lever (4). Lever (4) is mounted on the shaft for the secondary throttle plate (3). When vacuum is applied to diaphragm (6), lever (4) rotates and contacts cam (2) on the shaft for primary throttle plate (1). This prevents plate (1) from closing completely.

The diaphragm (6) is controlled by electrovalve (17). The electrovalve (17) is in the vacuum signal line (18) from the intake manifold. When the electrovalve is energized vacuum is applied to diaphragm (6).

Electrical power is applied directly to the electrovalve. The ground circuit is routed thru switch (12, standard transmissions only) and switch (13).

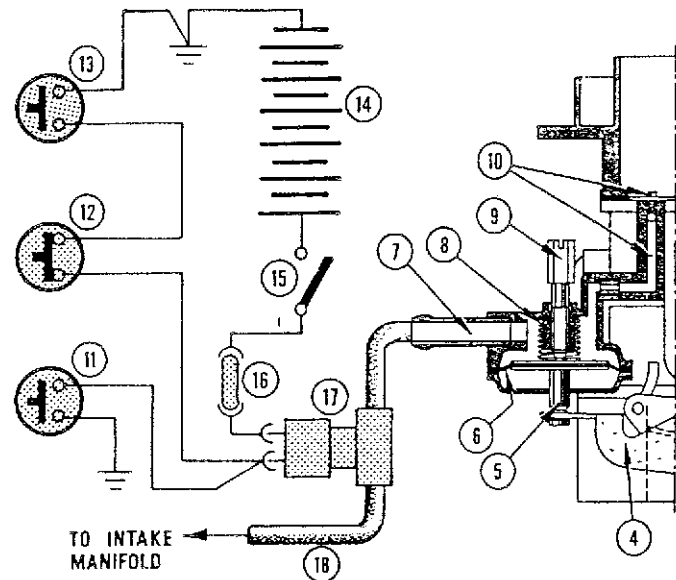
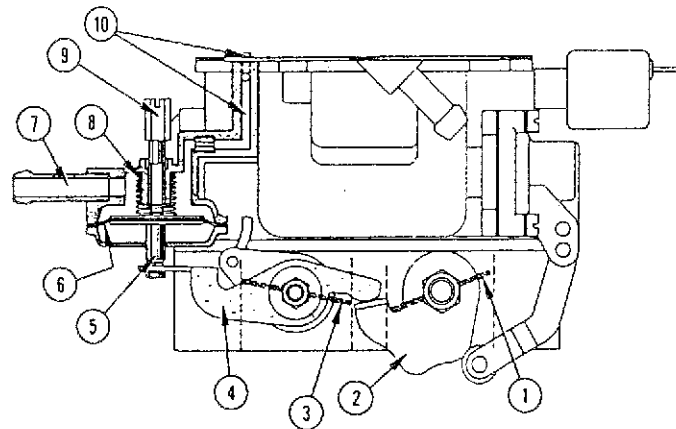
On automatic transmission switch (13) operates in third gear, applying ground for electrovalve (17).

On standard transmission switch (13) is operated by third and fourth gear shift rail. The clutch pedal switch (12) cuts out the system when the pedal is depressed while in third and fourth gear. This allows for smoother shifting.

When the system is deenergized diaphragm (6) is returned to rest position by spring (8). Atmospheric pressure is vented to the diaphragm housing thru air bleed passage (10) and a calibrated bushing.

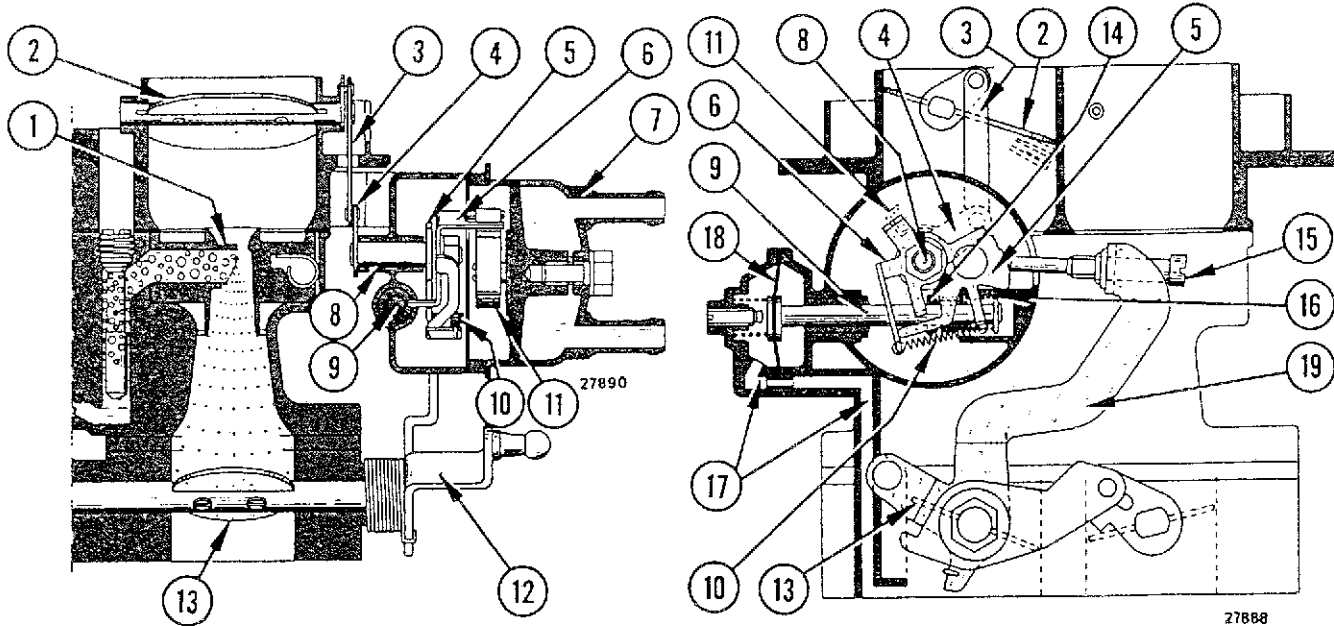
The system contains a test switch (11). This switch is used to energize the system for adjusting high idle RPM with screw (9).

- | | | |
|---------------------------|---------------------------|-------------------------------|
| 1. Primary throttle plate | 2. Cam | 3. Secondary throttle plate |
| 4. Idler lever | 5. Link | 6. Vacuum diaphragm |
| 7. Vacuum line connection | 8. Return spring | 9. High idle adjustment screw |
| 10. Air bleed passage | 11. High idle test switch | |
| 12. Clutch pedal switch | 13. Transmission switch | 14. Battery |
| 15. Ignition switch | 16. Fuse | 17. Electrovalve |
| 18. Vacuum line | | |



Automatic Choke

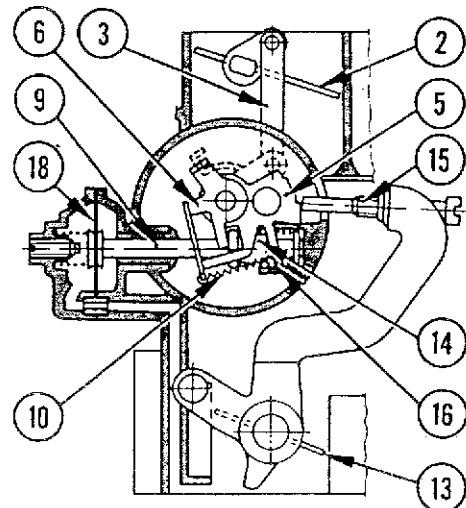
During cold starts and warm-up, the automatic choke controls the position of the choke plate through a series of links and levers. The position of the primary throttle plate is also controlled by the fast idle cam in the automatic choke. At temperatures below 77° F. (25° C.) when the accelerator is depressed prior to starting, the thermostatic spring closes the choke plate and positions the fast idle cam. When the accelerator is released the fast idle screw will come to rest against the top step of the cam. The proper adjustment of the automatic choke and fast idle screw ensures the correct mixture for cold starting and engine warm-up.



1. Spray tube 2. Choke throttle plate 3. Choke plate rod 4. Lever 5. Fast idle cam 6. Choke plate opening lever
 7. Choke cover 8. Choke plate control shaft 9. Rod 10. Fast idle cam return spring 11. Thermostatic spring 12. Throttle lever
 13. Primary throttle plate 14. Bushing 15. Fast idle adjustment screw 16. Spring 17. Vacuum passage
 18. Vacuum diaphragm 19. Choke fast idle lever

When the engine is shut down screw (15) holds cam (5) in the normal idle position. As the temperature cools down, thermostatic spring (11) contracts in a counter clock-wise direction. Depressing the accelerator allows spring (11) to position the automatic choke linkage.

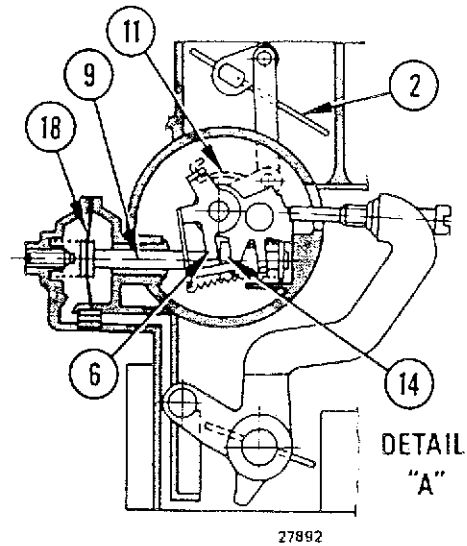
Spring (11) is connected to opening lever (6). Lever (6) is directly connected to choke plate (2) thru control shaft (8), lever (4), and rod (3). A leg of lever (6) also contacts cam (5). As spring (11) contracts, it moves lever (6) which closes choke plate (2) and rotates cam (5) to fast idle position. When accelerator is released, screw (15) contacts cam (5) and sets throttle plate (13) in fast idle position.



Detail A

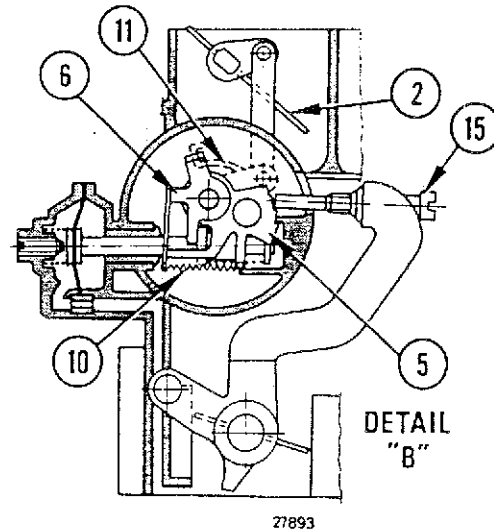
After engine starts, a vacuum signal is applied to diaphragm (8). This opens choke plate (2) to increase air flow.

The vacuum signal pulls diaphragm rod (9). A shouldered bushing (14) attached to rod (9) contacts lever (6) and moves the linkage to partially open choke plate (2). Thermostatic spring (11) opposes this movement until a balance is achieved with the strength of the vacuum signal. The vacuum signal is strongest when the engine is running smooth. If the engine falters, vacuum is weakened, allowing spring (11) to close the choke plate and enrich the mixture.

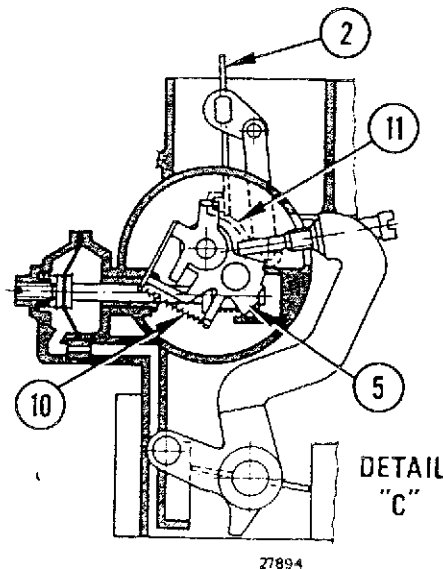
**Detail B**

As the engine warms up, thermostatic spring (11) is heated by engine coolant. This causes the spring to expand clockwise, moving the linkage and opening choke plate (2).

When accelerator is depressed, screw (15) is moved away from cam (5). Fast idle cam return spring (10) can then rotate cam (5) to a lower step. The amount of rotation is determined by the tension of thermostatic spring (11) which rotates lever (6) and applies more or less tension to spring (10).

**Detail C**

When thermostatic spring (11) is sufficiently heated to open choke plate (2) completely, enough tension is applied to spring (10) to return fast idle cam (5) to the normal idle position.



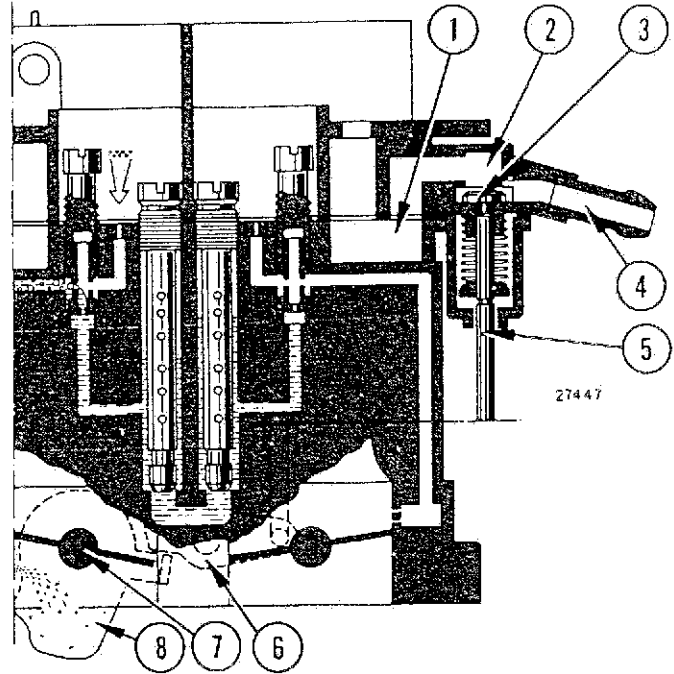
OPERATION

Evaporative Emission Control

Raw fuel vapors occurring in float chamber (1) cannot be allowed to escape into the atmosphere. In addition, heat in the carburetor increases the amount of vapors. If these vapors are allowed to collect in the carburetor bores and air cleaner when engine is shut down, they could cause hot start problems.

Vapors in chamber (1) are vented to the carbon trap thru vent valve (3) and hose. Vent valve (3) is controlled by rod (5) which is connected to idler lever (6). When throttle is released a tang on cam (8) contacts idler lever (6). This lever pulls down rod (5) and opens valve (3). At all other throttle positions, the valve is closed.

- 1. Float chamber
- 2. Vapor discharge duct
- 3. Vent valve
- 4. Carbon trap hose connection
- 5. Control rod
- 6. Idler lever
- 7. Primary throttle shaft
- 8. Cam



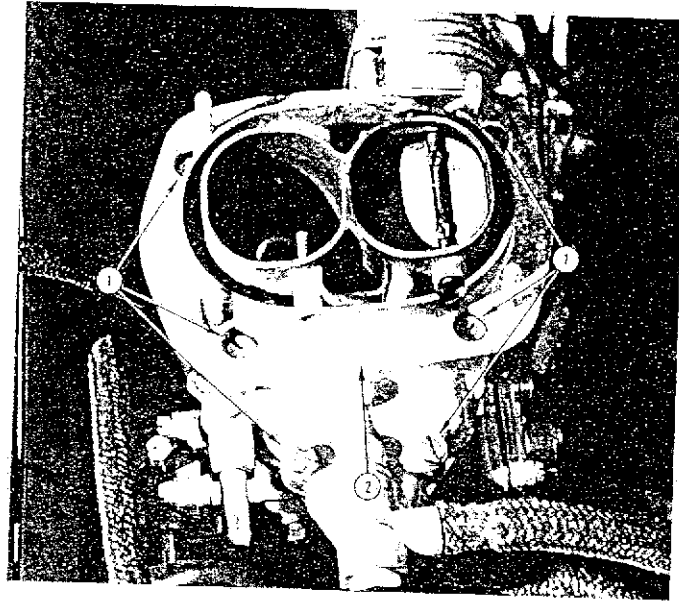
CHECKS AND ADJUSTMENTS ON BENCH

1. FLOAT LEVEL ADJUSTMENT

If working on car, remove air cleaner. Using a screwdriver, remove 6 screws holding float bowl cover (2) to carburetor. Pull throttle link out of automatic choke housing and remove cover.

Be careful not to damage gasket.

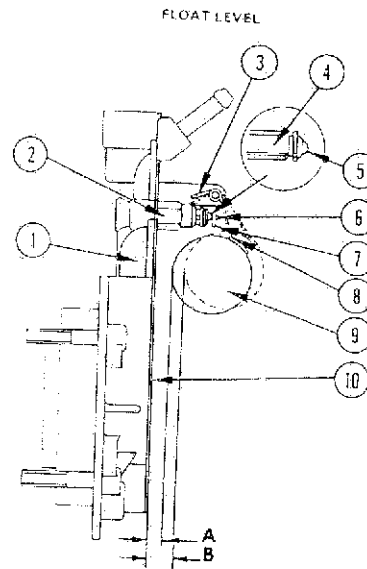
- 1. Screws
- 2. Float bowl cover



Check that needle valve seat (2) is tight in cover. Check that float (9) is free of dents or punctures.

Check that float can move freely on hinges.

- 1. Carburetor cover
- 2. Needle valve seat lug
- 3. Float drop
- 4. Needle valve
- 5. Damper ball
- 6. Return hook
- 7. Float tang
- 8. Float arm
- 9. Float
- 10. Gasket

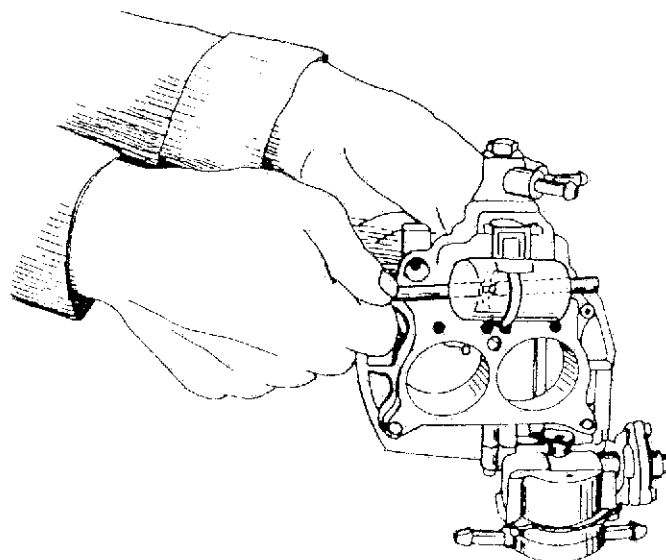


Float level adjusting diagram.

Hold float in vertical position with needle valve lightly seated. Measure distance (A) above between float and cover gasket. Use tool 4900. Distance should be 6 to 7 mm. If necessary, carefully bend tang (7) above to obtain proper distance.

NOTE: One side of tool 4900 is 6 mm other side is 7 mm. Be sure seam of float sits in intended section of gauge.

Move float until drop lug (3) above touches its stop. Check that distance (B) is 14mm. If necessary, bend lug (3) to obtain proper distance.



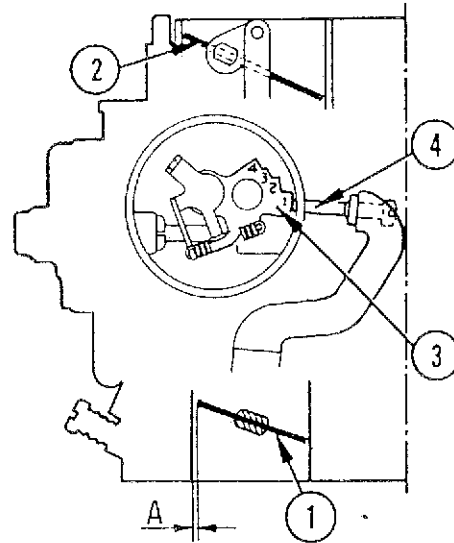
2. AUTOMATIC CHOKE CHECK AND ADJUSTMENT

Remove carburetor from car. Remove 3 screws holding automatic choke cover. Remove cover and gasket.

A. Choke Fast Idle

Set fast idle screw (4) on first (Highest) step of cam (3). Check that primary throttle opening (dimension A) is 1.05 to 1.15 mm (0.042 to 0.046 in.). If dimension A is not correct, adjust screw (4).

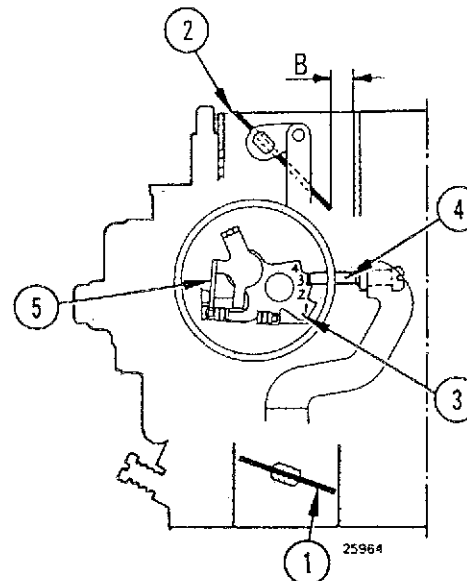
1. Primary throttle plate cam 2. Choke plate 3. Fast idle cam
4. Fast idle adjustment screw



B. Fast Idle Cam

Set fast idle screw (4) on third step of cam (3). Check that choke plate opening (dimension B) is 6.25 to 6.75 mm (0.246 to 0.266 inch). Use 1/4 inch and 17/64 inch drill bits to check dimension. If dimension B is not correct carefully bend arm (5).

1. Primary throttle plate cam 2. Choke plate 3. Fast idle cam
4. Fast idle screw 5. Choke lever arm



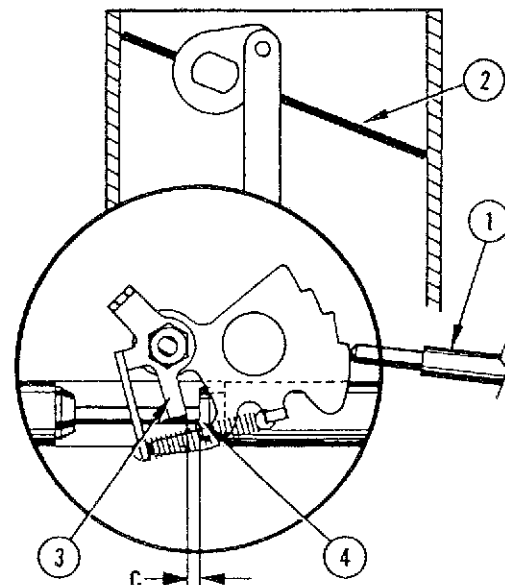
C. Choke Unloader

Pull fast idle linkage (1) back. Close choke plate (2). Release linkage (1).

Measure gap (c) between lever (3) and shoulder of bushing (4). A spark plug gap gauge of the bent wire type can be used.

Gap should be 0.3 to 1.0 mm (0.012 to 0.039 inch). If gap is not correct, carefully bend tang (3).

1. Fast idle linkage 2. Choke plate 3. Tang
4. Spring bushing



CHECKS AND ADJUSTMENTS ON BENCH

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D. Choke Plate Minimum Opening

Set fast idle screw (2) on second step of cam (3). Separate tool 4900 into its 3 parts by unscrewing. Thread tool (1) into end of vacuum piston bore as far as it will go without forcing.

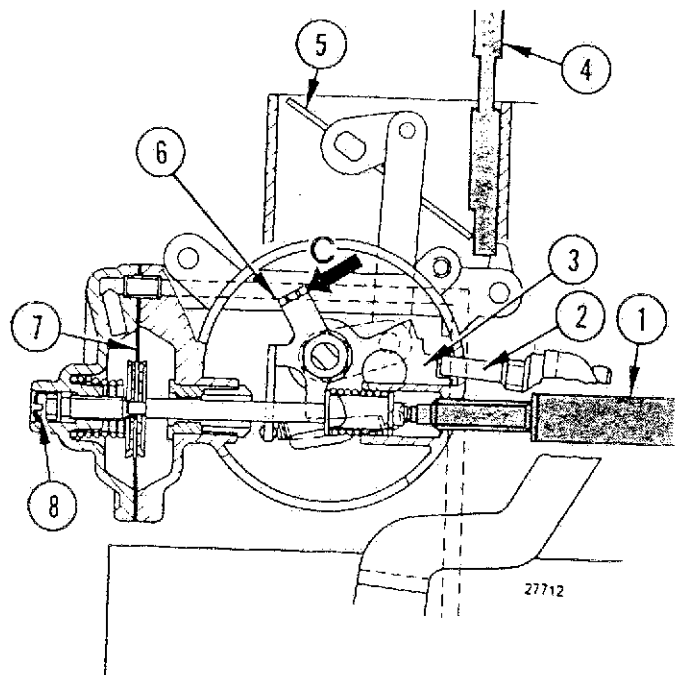
Push lever (6) in direction of arrow (C) and hold it. Measure choke plate opening using tool gauge (4). Opening should be 4.7 mm (0.177 inch).

NOTE: Notch on tool (4) is 4.5 mm. If opening is too small, back off stop screw (7) and thread tool half (1) further in until 4.5 mm is obtained. Turn stop screw in until it contacts piston.

If opening is too large, back off tool (1) until 4.5 mm is obtained. Turn stop screw (7) in until it contacts piston.

Leave tool (1) in place for next check.

1. Tool (threaded end)
2. Fast idle screw
3. Fast idle cam
4. Tool gauge 4.5 mm (notched end)
5. Choke plate
6. Choke plate opening lever
7. Diaphragm travel stop screw
8. Diaphragm



E. Choke Plate Maximum Opening

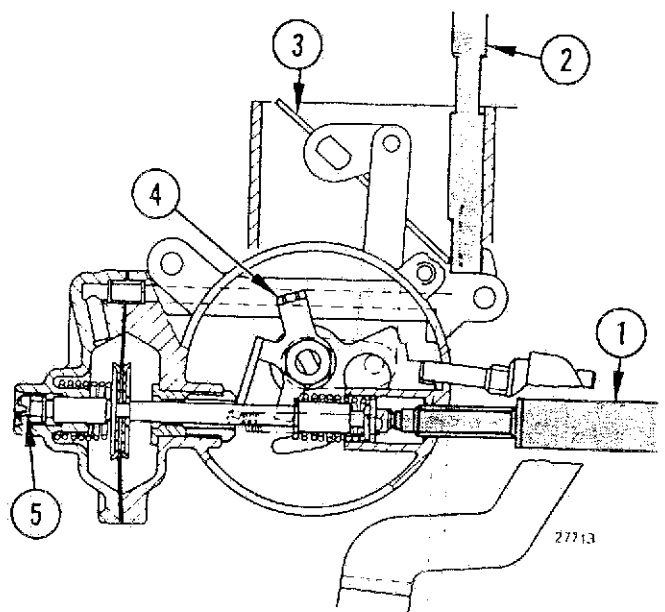
After having checked minimum opening setting and with tool (1) in place, release lever (4). Check that opening is 6.7 mm (0.264).

Use tool gauge (2) to check opening.

NOTE: Notch on tool is 6.7 mm.

If opening is not within specifications, replace vacuum diaphragm assembly.

1. Tool (threaded end)
2. Tool gauge 6.7 mm
3. Choke plate
4. Choke plate opening lever
5. Diaphragm travel stop screw

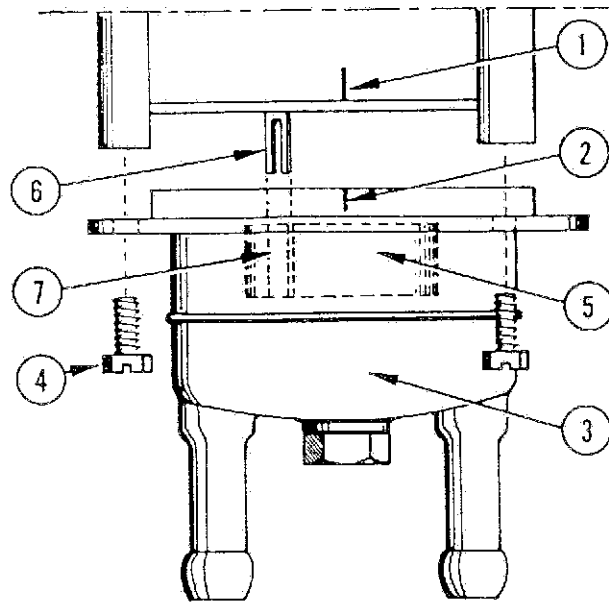


F. Choke Cover Indexing

Place choke cover (3) on housing so that lug (7) on spring (5) inside cover is in fork (6) of choke opening lever. Rotate cover to align index marks (2) on cover with marks (1) on housing. Secure cover (3) with 3 screws (4).

With index marks aligned and carburetor at room temperature of 77° F. check that the choke plate closes fully and remains closed when primary throttle is opened.

- | | | |
|-----------------|------------------------|-----------------------------|
| 1. Housing mark | 2. Cover mark | 3. Choke cover |
| 4. Screw | 5. Thermostatic spring | 6. Choke opening lever fork |
| | 7. Spring lug | |



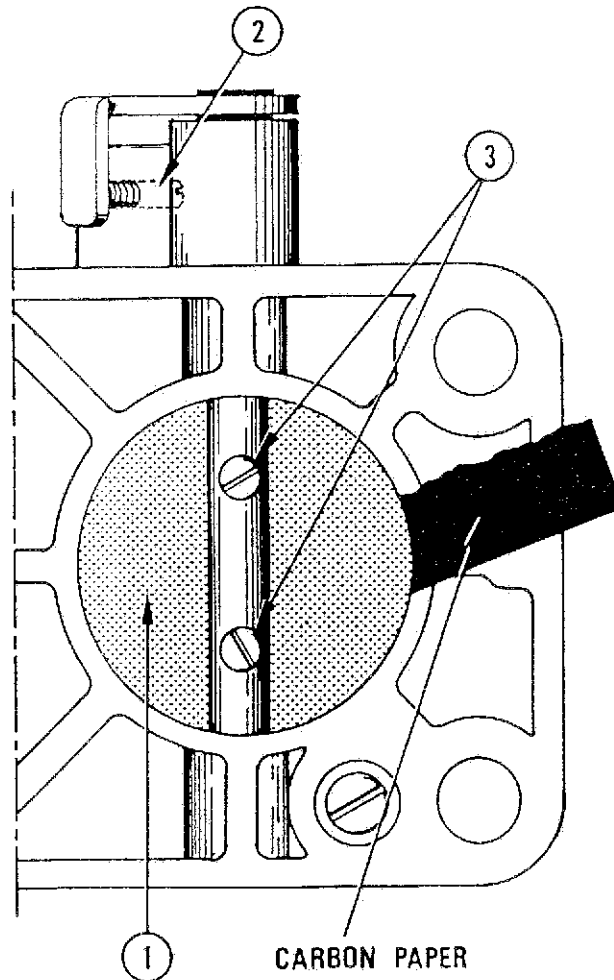
3. SECONDARY THROTTLE PLATE GAP

With throttle linkage released, secondary throttle plate (1) should have an opening of 0.04 to 0.05 mm (0.0015 to 0.0019 inch). This dimension is about the thickness of a piece of typewriter carbon paper.

To check opening, open secondary throttle plate (1). Place strip of carbon paper inside barrel. Release secondary throttle plate. Turn screw (2) as necessary until a resistance is felt when pulling strip out of barrel without tearing it.

Using a light, check that gap is even around the throttle plate (1). If not, loosen 2 screws (3) holding plate to shaft. Center the plate and tighten the screws. Check gap again.

- | | |
|-----------------------------------|-----------------------------------|
| 1. Throttle plate | 2. Secondary throttle plate screw |
| 3. Throttle plate mounting screws | |

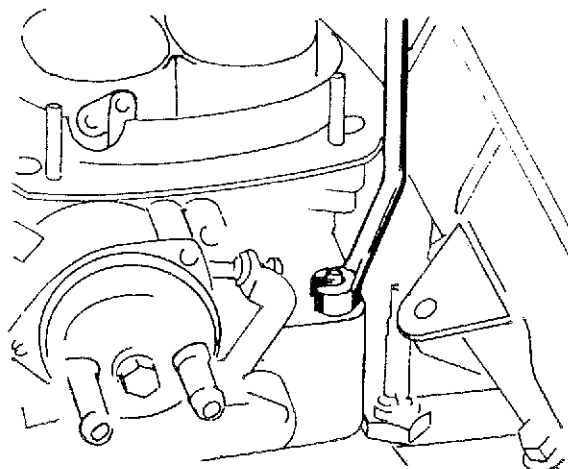


CHECKS AND ADJUSTMENTS ON CAR

1. ENGINE COLD CHECKS

If carburetor was removed, install it. Do not install air cleaner cover. If carburetor was not removed, remove air cleaner cover.

Make sure the four 13 mm nuts holding carburetor are tight. Use wrench 50146 to tighten two inboard nuts.

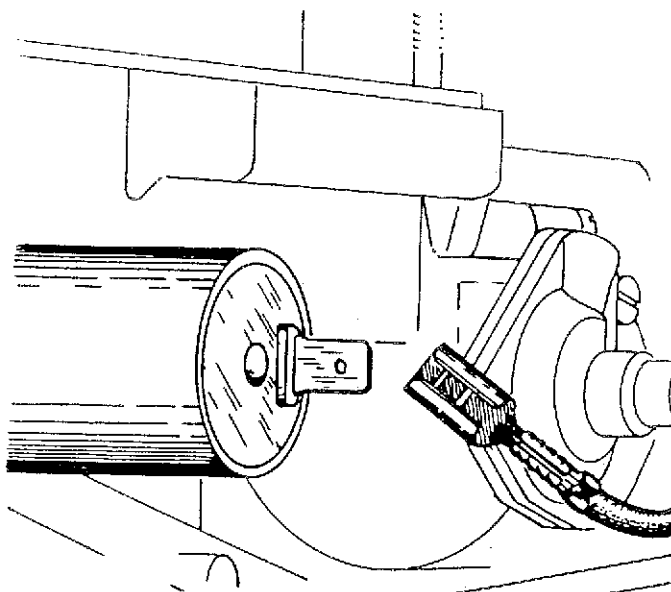


A. Idle Cut-off Solenoid Check

Disconnect wire from solenoid. Turn ignition switch to ON without cranking engine.

Listen closely while reconnecting the wire to the solenoid. You should hear solenoid click while connecting wire. Repeat as necessary to confirm.

If click is not heard, check for voltage at solenoid connection. If no voltage, troubleshoot electrical system. If voltage is present, remove solenoid. Clean or replace solenoid as necessary.

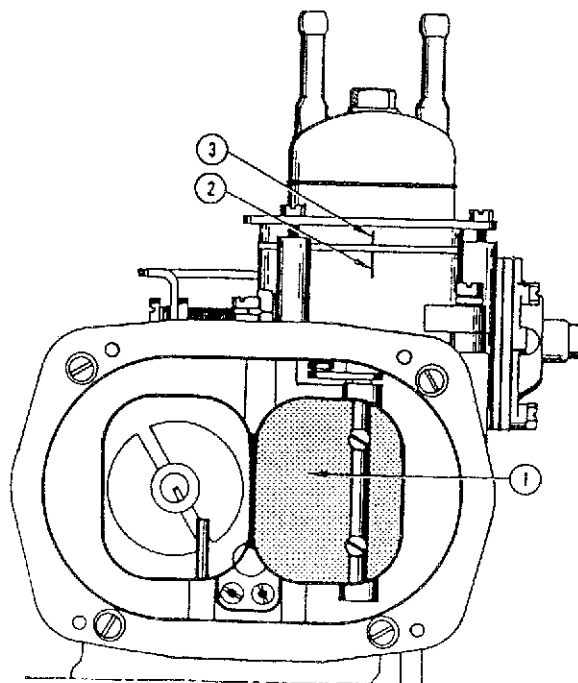


B. Closed Position of Choke Plate

Pull carburetor linkage to open throttles. Release linkage. With engine cold and temperature of 77° F or less, check that choke plate (1) is fully closed.

If plate is not fully closed, check choke plate for binding. Check that plate is centered. If plate is centered and not binding, check alignment of marks (2 and 3) on choke housing. If marks are aligned, replace thermostatic spring in choke housing.

1. Choke plate alignment mark 2. Housing alignment mark 3. Cover



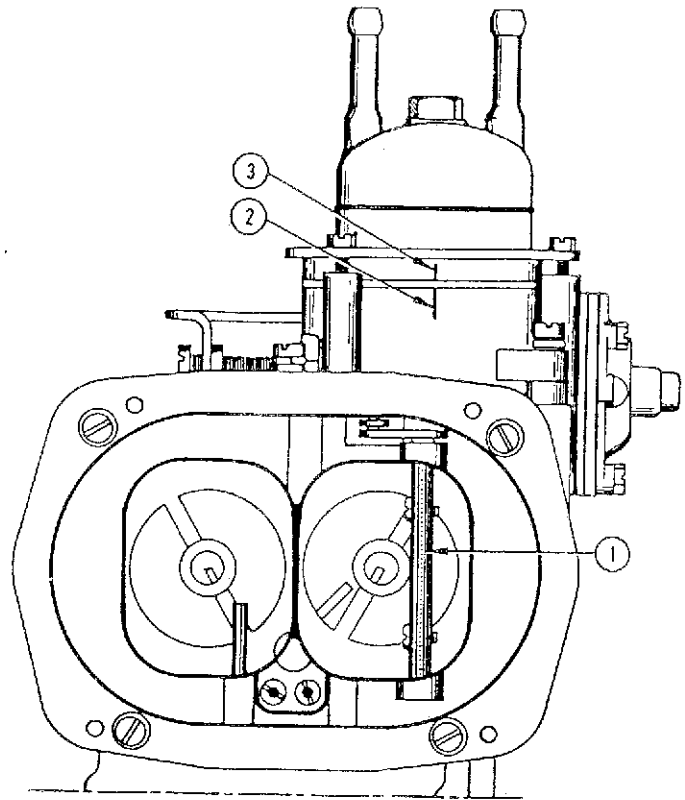
C. Open Position of Choke Plate

Run engine until it reaches normal operating temperature (radiator fan starts running).

Check that choke plate (1) is fully open.

If plate is not fully open check linkage for binding. Check that plate is centered in barrel. If plate is centered and not binding, check alignment of marks (2 and 3) on choke housing. If marks are aligned, replace the thermostatic spring in choke housing.

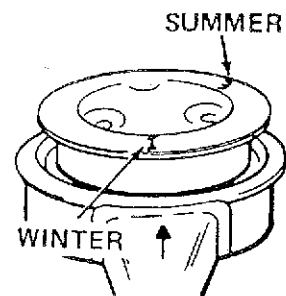
1. Choke plate alignment mark 2. Housing alignment mark 3. Cover



D. Air Cleaner Cover Indexing

If air cleaner is not installed, install it. Before installing cover, align letter on cover with arrow on air cleaner duct as follows:

- I = outside temperatures 60° F (15° C) or less
 E = outside temperatures above 60° F (15° C)



CHECKS AND ADJUSTMENTS ON CAR

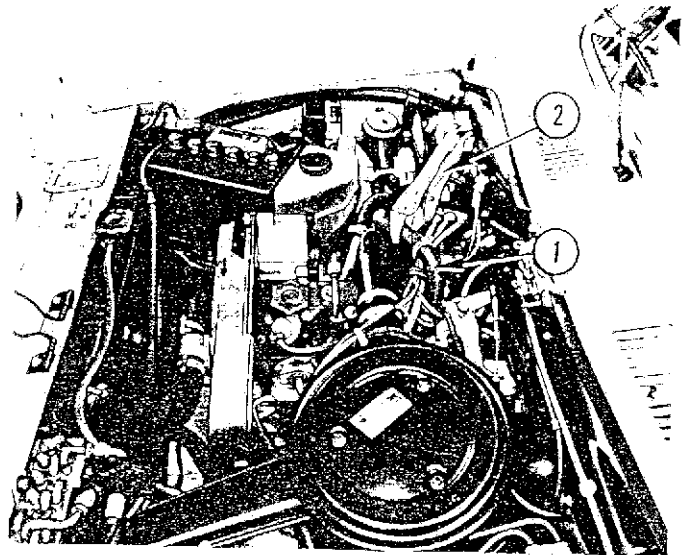
2. ENGINE WARM – CHECKS AND ADJUSTMENTS

A. Preparation

Connect tachometer. Connect exhaust gas analyzer. Make sure ignition timing is correct. Make sure engine is at normal operating temperature.

Check tag in engine compartment. According to instructions on tag, disconnect or clamp air hose from valve on air injection manifold or leave it connected.

1. Air injection hose 2. Pliers



B. Normal Idle Speed and CO

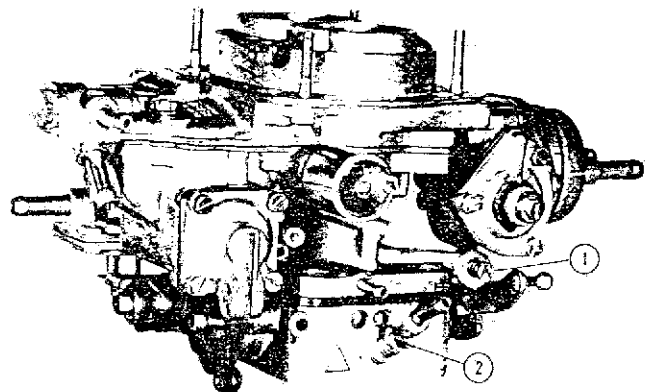
On cars with automatic transmission, apply hand brake and place lever in DRIVE. Using tachometer check and adjust normal idle.

	Normal Idle RPM	
	Manual Trans.	Auto. Trans.
Standard Exhaust	850 ± 50	700-750
Catalytic Converter	800-850	700-750

Using exhaust gas analyzer, check CO

1975	Std. trans	0.5 ± .2
& 76	Auto trans	0.7 ± .2
	Catalyst	3 ± .5
1977	All	2 ± .5

1. Normal idle adjustment screw
2. Idle mixture screw



C. High Idle Speed

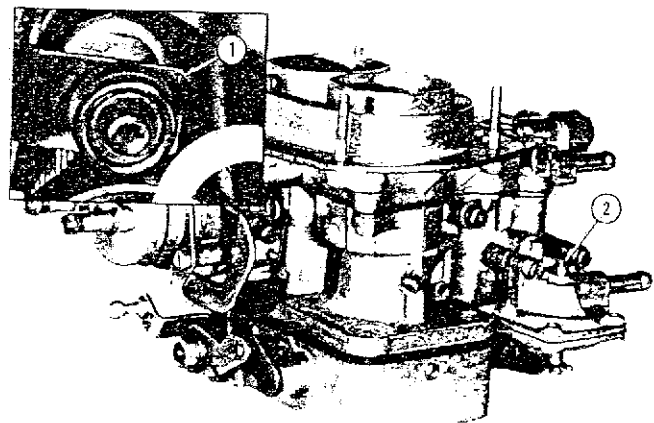
Let engine idle. Place transmission in NEUTRAL.

Move throttle linkage to obtain 2500 RPM. Hold linkage and push high idle button (1) down. Hold button down and release carburetor linkage. Allow engine to decelerate to high idle. Check that high idle is 1550 to 1650 RPM (manual trans.) or 1250 to 1350 RPM (auto trans.)

If high idle is not correct, adjust screw (2). Turn screw in to decrease or out to increase RPM.

Release button. Engine should return to normal idle in a few seconds.

1. High idle button 2. High idle adjustment screw



3. CATALYTIC CONVERTER TACHIMETRIC SWITCH CHECKS (1975 and 1976 Models)

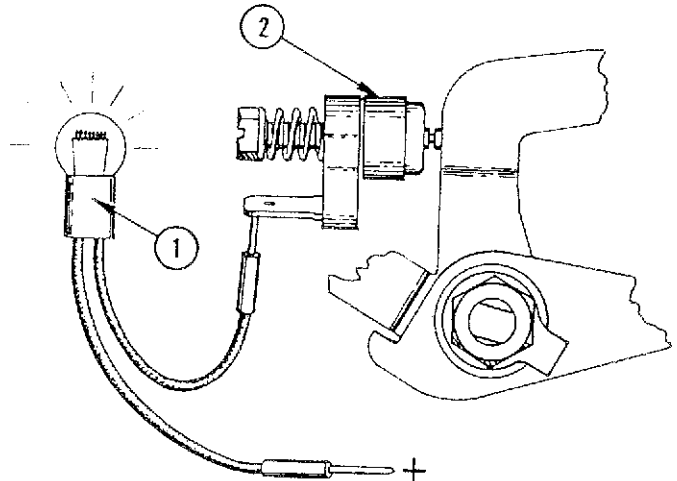
A. Inhibitor Switch Check

Run engine until normal operating temperature is reached. Shut engine off. Turn ignition ON.

Disconnect wire from inhibitor switch (2) and ground wire for later checks. Connect lead of test lamp (1) to terminal of inhibitor switch. Connect other lead of test lamp to power. Lamp should be on.

Open carburetor throttle linkage slowly. Lamp should remain on for a while and then go out. If test lamp did not indicate proper operation, troubleshoot electrical system.

1. Test lamp 2. Inhibitor switch



B. Tachimetric Switch Calibration Check

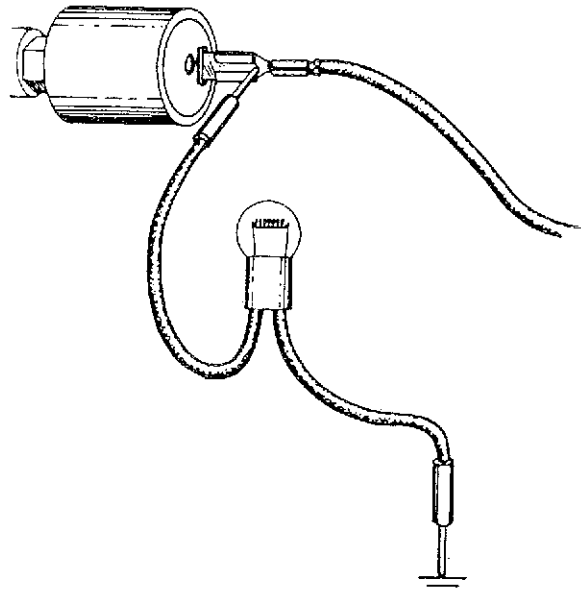
Connect tachometer. Connect test lamp between idle cutoff solenoid and ground. Run engine and let it idle.

Check that test lamp is lit. Slowly increase engine speed to 2,800 RPM by pulling throttle linkage. Check that test lamp goes out between 2600 and 2700 RPM. Slowly allow engine speed to decrease to idle. Check that test lamp comes on at 2,600 RPM or above.

If test lamp did not indicate proper operation, trouble shoot tachimetric system.

Shut off engine. Disconnect test equipment. Connect wire to inhibitor switch.

1. Test lamp 2. Idle cutoff solenoid



TROUBLESHOOTING

NOTE

The following troubleshooting information applies to the carburetor only. For any particular symptom, other relevant systems such as fuel, ignition, electrical, etc. may also be considered as a probable cause.

PROBABLE CAUSE	CORRECTION
1. Engine Will Not Start	
Incorrect starting procedure	Start engine as directed in Owner's Manual.
No fuel feed to carburetor	Check fuel system to carburetor.
No fuel feed in carburetor	Check fuel strainer in bowl cover. Check needle valve and seat. Clean float bowl and passages.
Choke out of adjustment	Adjust choke.
2. Engine Starts Hard When Cold	
Incorrect starting procedure	Start engine as directed in Owner's Manual.
Choke plate does not shut	Check choke plate for freedom of movement in throttle bore. Check choke cover and housing alignment. Check choke internal linkage for freedom of movement. Check that thermostatic spring is not broken. Make sure thermostatic spring engages internal linkage when installing choke cover.
Partially clogged fuel strainer	Clean or replace as necessary.
Float level low	Adjust float level.
3. Engine Starts Hard When Hot	
Incorrect starting procedure	Start engine as directed in Owner's Manual.
Incorrect air cleaner climatic setting	Set air cleaner cover to proper position.
Dirty air cleaner element	Replace air cleaner element.
Idle cutoff solenoid not energized or stuck closed	Check solenoid for operation.
Choke plate stuck closed	Check choke plate for freedom of movement. Check choke cover and housing alignment.
Accelerator pump discharge nozzle dripping	Inspect discharge nozzle outlet. Check ball for proper seating.
Float level high	Adjust float level.
Bowl vapor vent system inoperative	Check linkage for movement and damage. Check vapor vent passages and line for blockage.
4. Engine Idles Rough and Stalls	
Improper air cleaner climatic setting	Set air cleaner cover to proper position.
Dirty air cleaner element	Replace air cleaner element.
Incorrect idle adjustment	Adjust idle speed and mixture.
Loose carburetor hold down nuts	Tighten nuts.
Idle cutoff solenoid loose or operating intermittently	Tighten solenoid. Check electrical operation.
Choke plate not releasing completely	Check alignment of cover and housing.
Float level incorrect	Adjust float level.
Dirt in idle circuit	Blow out passages.
Secondary throttle plate gap incorrect	Adjust secondary throttle stop screw.

PROBABLE CAUSE

CORRECTION

5. Engine Hesitates During Operation

Improper air cleaner climatic setting
 Dirty air cleaner element
 Partially clogged fuel strainer
 Needle valve sticking
 Incorrect float level
 Loose or dirty jets or passages
 Accelerator pump not operating properly

Set air cleaner cover to proper position.
 Replace air cleaner element.
 Clean or replace as necessary.
 Check and replace as necessary.
 Adjust float level.
 Tighten jets and/or blow out passages, including idle transfer ports.
 Remove pump assembly and blow out pump passages.

6. Engine Backfires Through Exhaust

Incorrect idle adjustment
 Float level high
 High idle system inoperative or out of adjustment

Adjust idle speed and mixture.
 Adjust float level.
 Check system for proper operation and adjustment.

7. Engine Loses Power

Improper air cleaner climatic setting
 Dirty air cleaner element
 Throttle plates do not open fully
 Partially clogged fuel strainer
 Dirty main jets

Set air cleaner cover to proper position.
 Replace air cleaner element.
 Check throttle shafts and linkage for binding or damage.
 Check accelerator linkage for correct adjustment.
 Clean or replace as necessary.
 Clean jets.

8. Normal Idle Speed Adjustment Does Not Respond

Accelerator linkage sticking or out of adjustment
 Choke fast idle cam not releasing
 High idle system out of adjustment or not releasing
 Idle air bleeds clogged
 Loose carburetor hold down nuts

Check, adjust, or replace accelerator linkage as necessary.
 Check cam for freedom of movement.
 Check cam return spring for damage.
 Check adjustment.
 Blow out air bleed passage to diaphragm.
 Check electrovalve.
 Blow out air bleed passages.
 Tighten nuts.

9. Engine Diesels On Shut Down

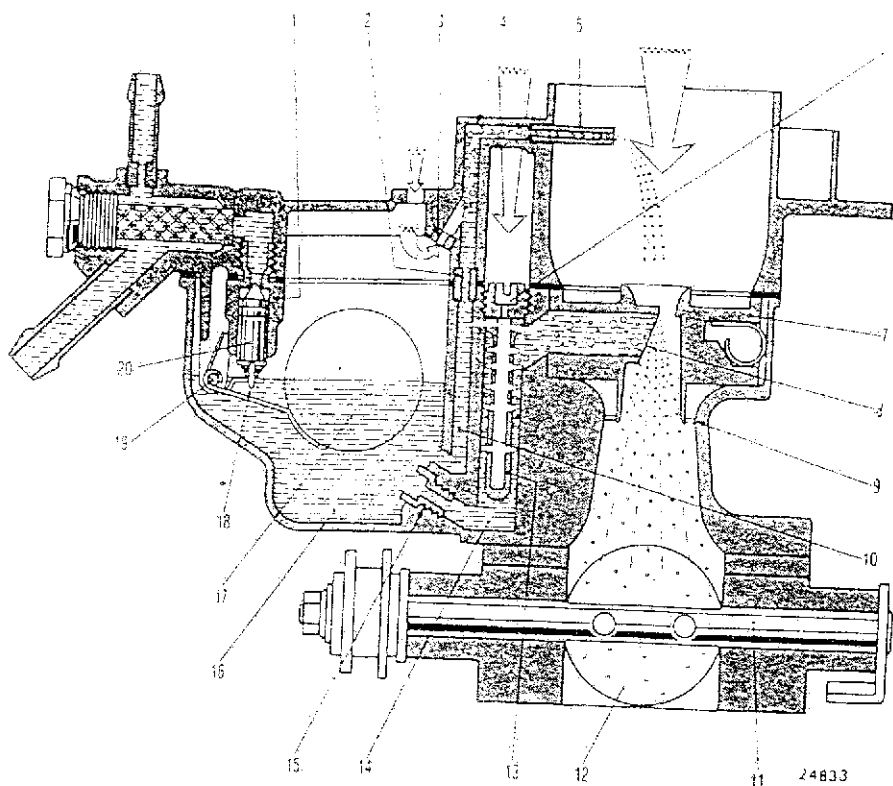
Idle cutoff solenoid stuck open
 Idle speed too high
 Secondary throttle plate gap incorrect

Clean or replace as necessary.
 Adjust idle speed.
 Adjust secondary throttle stop screw.

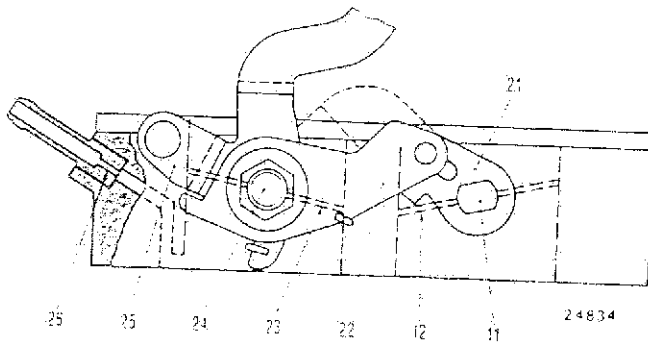
1. Needle valve seat
2. Power enrichment fuel jet
3. Power enrichment air jet
4. Power enrichment mixture passage
5. Power enrichment delivery tube
6. Air correction jet
7. Auxiliary venturi
8. Spray tube
9. Primary venturi
10. Power enrichment fuel passage
11. Secondary throttle shaft
12. Secondary throttle plate
13. Emulsion tube
14. Main jet well
15. Main jet
16. Float bowl
17. Float
18. Needle return hook
19. Hinge pin
20. Needle valve
21. Secondary throttle shaft lever
22. Progressive throttle link
23. Primary throttle plate
24. Primary throttle shaft
25. Main throttle link
26. Fuel vapor trap purge connection
27. Crankcase breather orifice
28. Crankcase breather connection
29. Rotary vent valve
30. Crankcase breather passage
31. Idle cutoff solenoid
32. Piston
33. Piston return spring
34. Primary idle jet
35. Primary idle air bleed
36. Secondary idle jet
37. Secondary idle air bleed
38. Vapor discharge duct
39. Float bowl vent valve
40. Vent valve control rod
41. Secondary idle fuel passage
42. Secondary idle mixture passage
43. Float bowl idler lever
44. Accelerator pump cam
45. Idle orifice restrictor bushing
46. Idle mixture screw
47. Main idle mixture passage
48. Main idle fuel passage
49. Emulsion tube
50. Primary idle transfer ports
51. Secondary idle transfer ports
52. Idle speed screw
53. Idle cutoff solenoid inhibitor switch (catalytic converter only)
54. Accelerator pump spray nozzle
55. Ball check
56. Power outlet bypass orifice
57. Pump diaphragm spring
58. Pump diaphragm
59. Pump diaphragm damper spring
60. Pump lever
61. Pump delivery ball check
62. Pump delivery passage
63. Choke plate control shaft
64. Choke plate lever
65. Choke plate rod
66. Choke plate
67. Fast idle cam
68. Fast idle speed adjustment screw
69. Choke unloader balance spring
70. Fast idle cam return spring
71. Choke unloader vacuum signal passage
72. Choke unloader vacuum diaphragm
73. Choke unloader rod
74. Choke plate opening lever
75. Thermostatic spring
76. Choke cover
77. Spring bushing
78. Idle lever for high idle system
79. Link for high idle system
80. High idle vacuum diaphragm
81. High idle vacuum signal connection
82. High idle speed adjustment screw
83. High idle air bleed

CIRCUIT DIAGRAMS

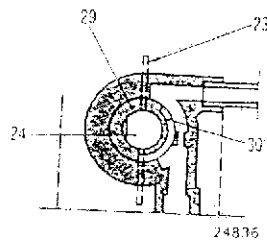
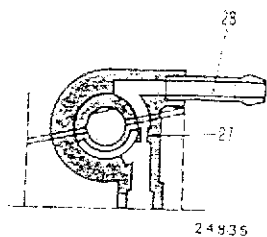
CRUISE



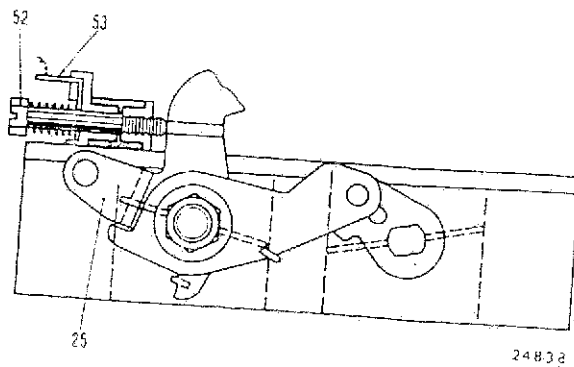
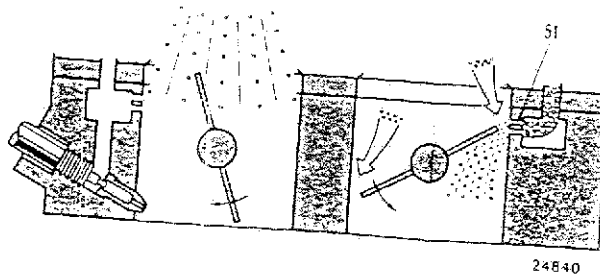
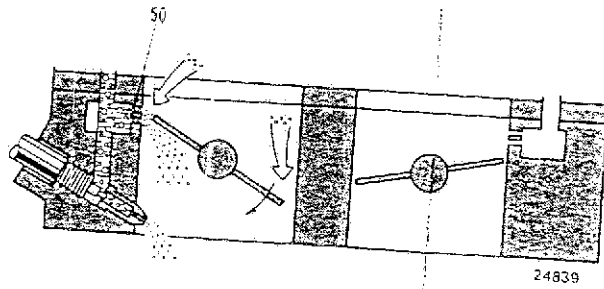
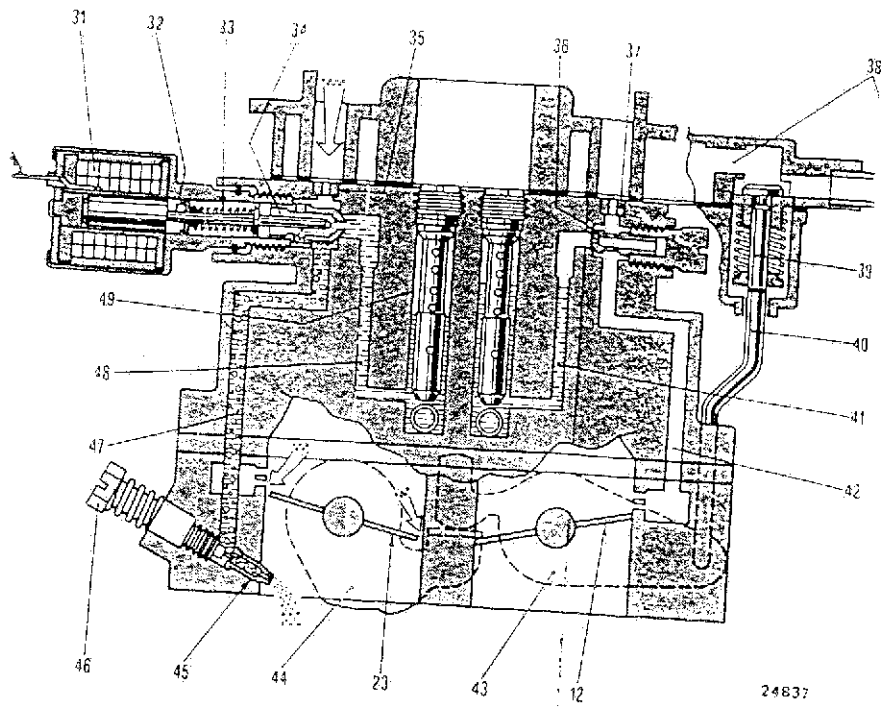
DIFFERENTIAL OPENING DEVICE OF THROTTLE VALVES



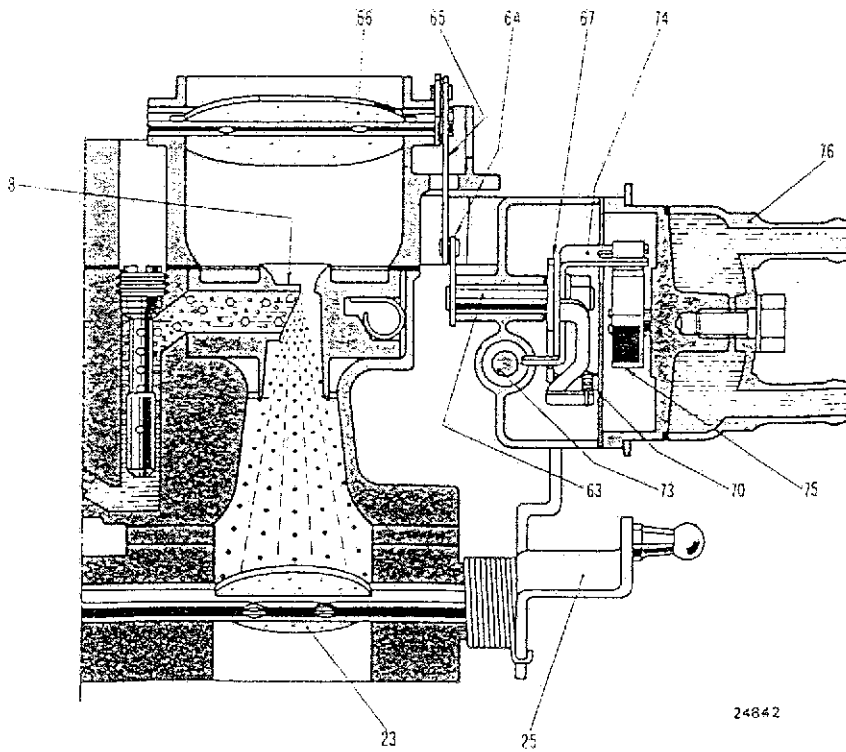
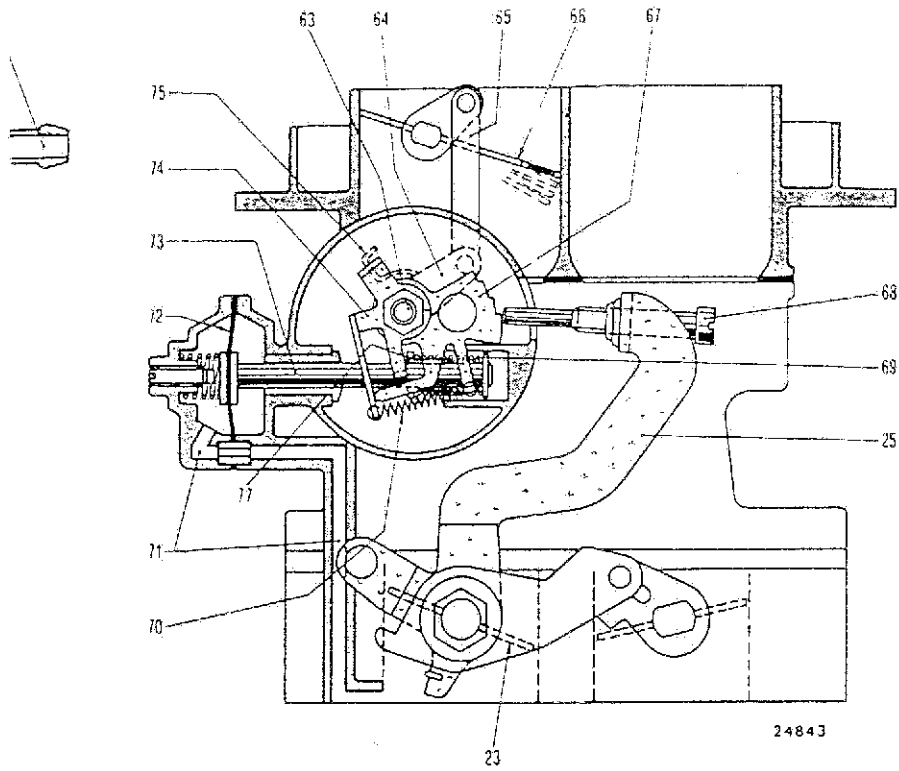
RECIRCULATING DEVICE OF BLOW-BY GASES



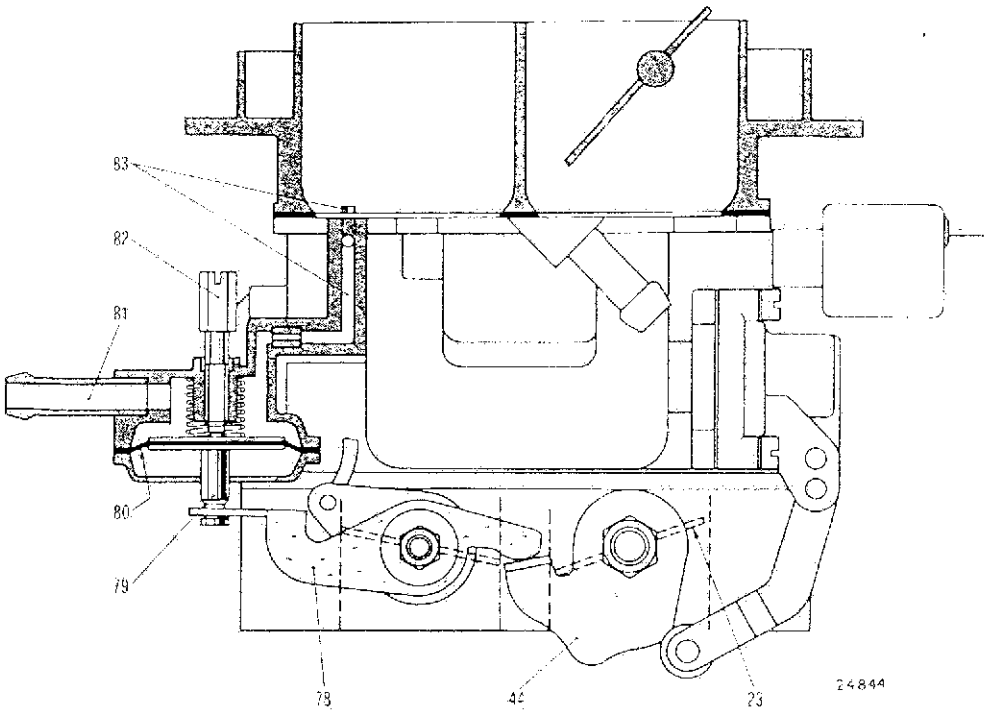
IDLE AND TRANSFER



CHOKE



FAST IDLE



ACCELERATING PUMP

