SECTION 7

ENGINE TUNE-UP

CONTENTS OF THIS SECTION

CORVAIR—500, 700 AND 900 SERIES

INDEX

INTRODUCTION

The engine tune-up has become increasingly important to the modern automotive engine with its vastly improved power and performance. With the higher compression ratios, improved electrical systems and other advances in design, today's engines have become more sensitive to usage and operating conditions, all of which have a decided effect on power and performance.

Since the modern engine is admittedly more temperamental and sensitive to adjustments, some means must be devised to put back into the engine the standard of performance and economy of which it is capable.

Since it is seldom advisable to attempt an improvement in performance by correction of one or two items only, time will normally be saved and more lasting results assured if the serviceman will follow a definite and thorough procedure of analysis and correction of all items affecting power, performance, and economy.

The tune-up will be performed in two parts. The first part will consist of visual and mechanical checks and adjustments, while the second part will consist of an instrument checkout that can be performed with any one of the modern compact units of service equipment available for this purpose. Always follow the instructions provided by the manufacturer of the particular equipment to be used.

Additional checks and adjustments are included in the latter part of this section for use as required. Many of these operations would normally be used to isolate and correct trouble located during the tune-up. Where conditions are uncovered requiring major corrective action, refer to the appropriate section of this manual for detailed service information.

All operations included herein will be performed on the vehicle. Illustrations depicting bench operations have been employed for convenience only and are intended only to clarify the operations which will be performed on the vehicle. Since it is impractical to illustrate all possible installations that may be encountered, only a typical installation will be used to illustrate the point in question.

MECHANICAL CHECKS AND ADJUSTMENTS

The mechanical checks and adjustments described below are performed with the engine off. Except where noted, the car may be at either room temperature or operating temperature.

1. REMOVE SPARK PLUGS AND TEST COMPRESSION

a. Remove spark plug wires.

b. Remove any foreign matter from around spark plugs by blowing out with compressed air then loosen all plugs one turn.

NOTE: To remove or loosen center spark plugs, it will be necessary to disconnect or remove carburetor throttle rod and use a universal drive on spark plug socket.

c. Start engine and accelerate to 1000 rpm to blow out loosened carbon.

NOTE: Clearing out carbon in this manner is important in preventing false compression readings due to chips of carbon being lodged under the valves.

d. Stop engine and remove spark plugs.

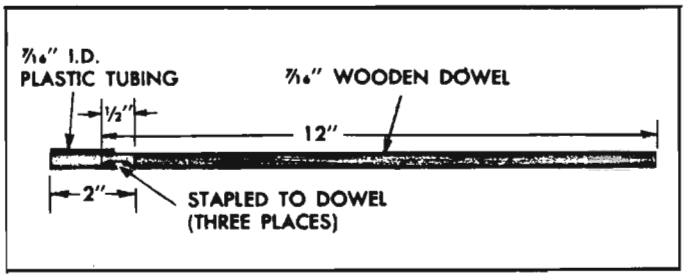

Fig. 7-1—Spark Plug Holding Tool

NOTE: It may be desirable to use a special spark plug socket that is equipped with an internal "O" ring seal to grip the spark plug or the serviceman can fabricate a tool as shown in Figure 7-1 to grip plug after loosening with socket to avoid the possibility of dropping plug into engine shroud assembly.

e. Remove air cleaner and block throttle and choke in wide open position.

f. Hook up starter remote control cable and insert compression gauge firmly in spark plug port (fig. 7-2).

NOTE: Unless special adapters are available, it will be necessary to remove both carburetors to perform the compression test.

g. Crank engine through at least four compression strokes to obtain highest possible reading.

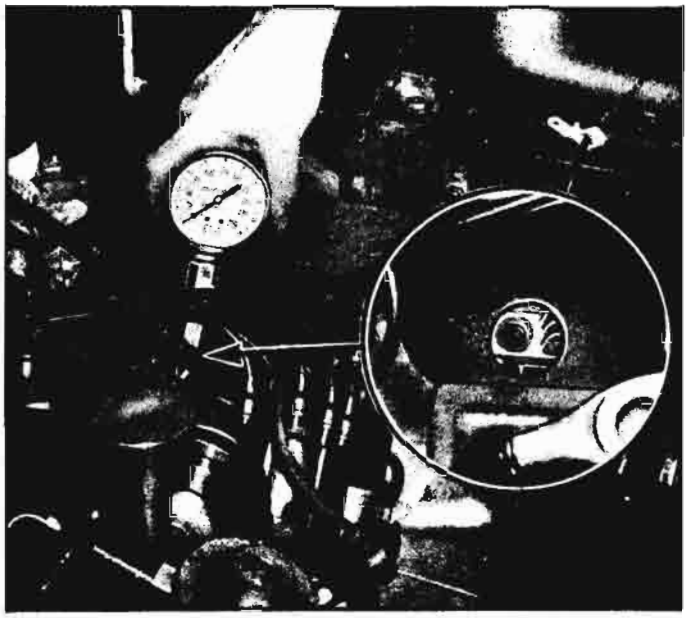

Fig. 7-2—Checking Compression

h. Check and record compression of each cylinder. Compression should read as indicated below and variation between highest and lowest reading cylinders should be less than 20 pounds. The minimum pressure should be 130 pounds.

i. To determine whether rings, valves, or head gasket are at fault, if one or more cylinders are low or uneven, oil would ordinarily be injected into each cylinder and compression rechecked. Due to the design of this engine (horizontal-opposed) the oil would lay in the bottom (along the cylinder wall) of each cylinder, thus preventing an accurate check. A careful diagnosis with a vacuum gauge, oscilloscope, etc., should be used with this compression test to determine what (if anything) is at fault.

The compression check is important because an engine with low or uneven compression cannot be tuned successfully to give peak performance. Therefore, it is essential that improper compression be corrected before proceeding with an engine tune-up. If a weak cylinder cannot be located with the compression check, see Cylinder Balance Test under Additional Checks and Adjustments in this section.

2. CLEAN, SERVICE AND INSTALL SPARK PLUGS

Inspect each plug individually for badly worn electrodes, glazed, broken or blistered porcelains and replace plugs where necessary. Refer to spark plug diagnosis information presented in *Ignition System, Section 8* for an analysis of plug conditions. Use new spark plug washers when reinstalling cleaned plugs.

3. SERVICE IGNITION SYSTEM AND MAKE NECESSARY REPAIRS

a. Replace brittle or damaged spark plug wires. Install all wires to proper spark plug.

b. Tighten all ignition system connections.

c. Replace or repair any wires that are frayed, loose or damaged.

d. Remove distributor cap, clean cap and inspect for cracks, carbon tracks and burned or corroded terminals. Replace cap where necessary.

e. Clean rotor and inspect for damage or deterioration. Replace rotor where necessary.

f. Check the distributor centrifugal advance mechanism by turning the distributor rotor to see if the springs return it to its retarded position. If the rotor does not return readily, the distributor must be disassembled and the cause of the trouble corrected.

g. Check to see that the vacuum spark control operates freely by turning the movable breaker plate to see if the spring returns it to the retarded position. Any stiffness in the operation of the vacuum spark control will affect the ignition timing. Correct any interference or binding condition noted.

h. Examine distributor points and clean or replace if necessary.

- Contact points with an overall gray color and only slight roughness or pitting need not be replaced.
- Dirty points should be cleaned with a clean point file.

Use only a few strokes of a clean, fine-cut contact file. The file should not be used on other metals and should not be allowed to become greasy or dirty. Never use emery cloth or sandpaper to clean contact points since particles will embed and cause arcing and rapid burning of points. Do not attempt to remove all roughness nor dress the point surfaces down smooth. Merely remove scale or dirt.

- Replace points that are burned or badly pitted.

Where burned or badly pitted points are encountered, the ignition system and engine should be checked to determine the cause of trouble so it can be eliminated. Unless the condition causing point burning or pitting is corrected, new points will provide no better service than the old points. See "Ignition System", Section 9, for an analysis of point burning or pitting.

i. Adjust distributor contact point gap to .019" new points) or .016" (used points), using a feeler gauge or dial indicator (fig. 7-3). Breaker arm rubbing block should be on extreme top of cam lobe during adjustment.

NOTE: Contact points should be cleaned before adjusting with a feeler gauge if they have been in service.

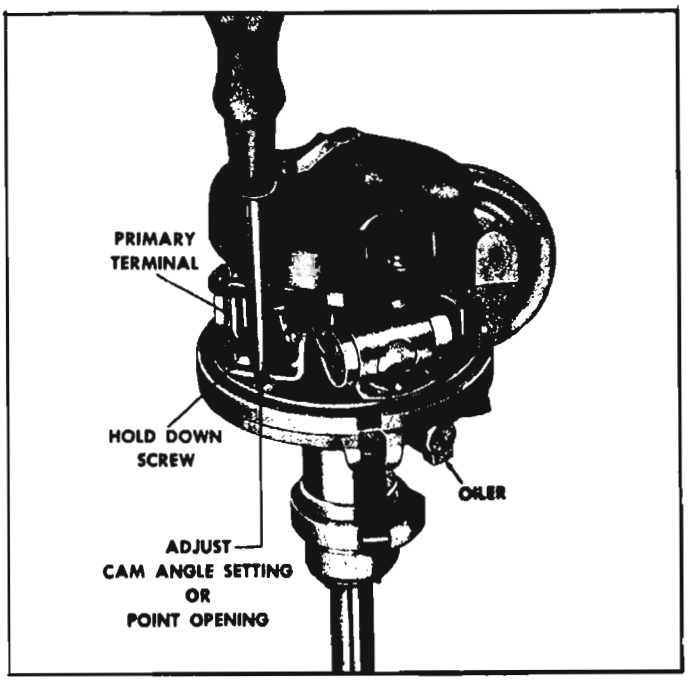

Fig. 7-3—Point Adjustment

- Check alignment of distributor points with points closed (fig. 7-4). Align new points where necessary, but do not attempt to align used points. Instead, replace used points where serious misalignment is observed.

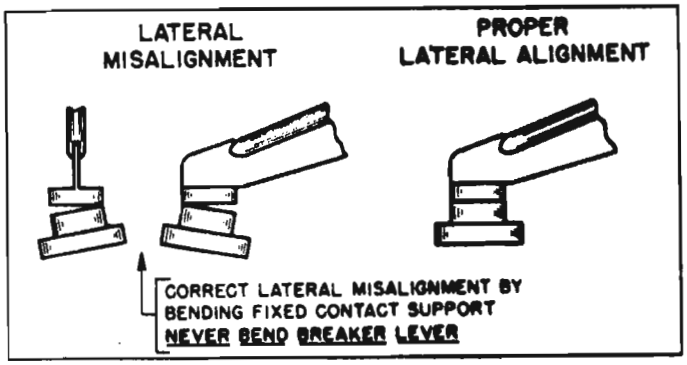

Fig. 7-4—Alignment of Points

- Align points by bending fixed contact support if necessary, using an alignment tool if available. Do not bend breaker arm.
- After adjusting alignment, readjust point gap.

j. Make sure all distributor wire terminals are clean and tight.

k. Lubricate distributor.

- Fill hinge cap oiler with light engine oil.
- Apply a thin film of Delco-Remy Cam and Ball Bearing Lubricant, Lubriplate or other similar high melting point, non-bleeding grease to the cam.
- Apply one small drop of light engine oil on the breaker lever pivot.

l. Install rotor and distributor cap. Press all wires firmly into cap towers.

4. SERVICE BATTERY AND BATTERY CABLES

Inspect battery and cables and perform necessary service on these components. See *Additional Checks and Adjustments* (page 7-13) for battery tests.

Inspect for signs of corrosion on battery, cables and surrounding area, loose or broken carriers, cracked or bulged cases, dirt and acid, electrolyte leakage and low electrolyte level. Fill cells to proper level with distilled water or water passed through a "demineralizer."

The top of the battery should be clean and the battery hold-down bolts properly tightened. Particular care should be taken to see that the tops of the 12-volt batteries are kept clean of acid film and dirt because of the high voltage between the battery terminals. For best results when cleaning batteries, wash first with a dilute ammonia or soda solution to neutralize any acid present and then flush off with clean water. Care must be taken to keep vent plugs tight so that the neutralizing solution does not enter the cell. The hold-down bolts should be kept tight enough to prevent the battery from shaking around in the holder, but they should not be tightened to the point where the battery case will be placed under a severe strain.

To insure good contact, the battery cables should be tight on the battery posts and fully bottomed. To remove or install the new spring type cable clamps, a suitable pliers must be used to spread the ends of the clamps. Oil battery terminal felt washer. If the battery posts or cable terminals are corroded, the cables should be cleaned separately with a soda solution and a wire brush. It is NOT recommended that the battery posts and cable clamps be greased prior to installing cables to battery as this may contribute to slippage of the clamps from the battery posts.

If battery has remained undercharged, check for loose (worn) generator belt, defective generator, high resistance in the charging circuit, oxidized regulator contact points, or a low voltage setting.

If the battery has been using too much water, the voltage regulator setting is too high.

5. SERVICE BLOWER BELT AND GENERATOR

a. Inspect blower belt condition and check deflection of belt.

1. If belt damage is noted, replace the belt. A slightly damaged belt must be replaced to prevent premature failure.
2. Adjust belt (if necessary) to give a 3/8 deflection between blower and idler pulley under a 15 pound load. If a new belt is installed, adjust deflection as described above, then operate the engine at 1500 rpm for at least one minute to "seat" the new belt. Recheck deflection.

NOTE: If there is any preload on generator, front end frame will break. To avoid this condition, follow the generator mounting procedure outlined in section 8—engine electrical.

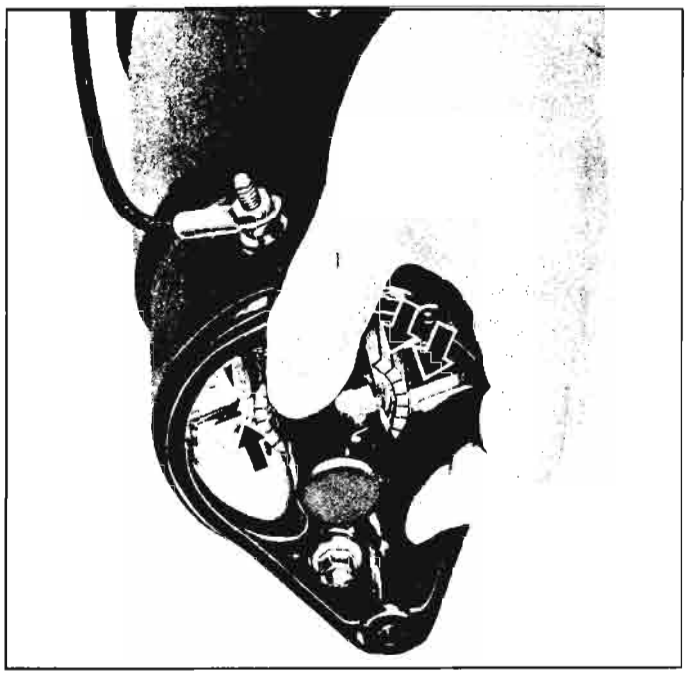

Fig. 7-5—Inspecting Generator Brushes and Commutator

b. Inspect generator commutator and brushes for cleanliness and wear (fig. 7-11). The commutator should be cleaned if dirty and the brushes should be replaced if worn down to less than half their original length.

The commutator may be cleaned by holding No. 00 sandpaper or a cleaning stone against it while the generator is operating.

Fig. 7-6—Lubricating Generator

c. Replace or repair frayed or broken generator wires and tighten all wire connections.
d. Lubricate generator by filling hinge cap oilers with light engine oil (fig. 7-12).

6. CHECK FUEL LINES AND FUEL FILTER

Inspect fuel lines for kinks, bends or leaks and clean fuel filter. (See Section 9)

NOTE: If a complaint of poor high speed performance exists on the vehicle, fuel pump tests described in *Instrument Check-Out* in this section should be performed.

7. CLEAN AND SERVICE AIR CLEANER

Refer to Section 9, for service operations. **Do not** attempt to perform any operational adjustments on the carburetor (idle speed, mixture, etc.) without first servicing the air cleaner.

8. CHECK CARBURETOR LINKAGE AND EXTERNAL ADJUSTMENTS

NOTE: Float level and float drop checks and adjustments will not be covered in this section but may require checking in the event of customer complaint. See *Section 9—Fuel and Exhaust.*

CARBURETOR SYNCHRONIZATION

1. Initial Adjustments

Perform the following adjustments, in sequence, with both throttle rods disconnected at the carburetor cross-shaft levers and with engine off.

NOTE: Adjustments must be made on each carburetor.

a. Back the curb idle speed and fast idle speed adjustment screws away from carburetor throttle shaft lever.
b. **Curb Idle Speed**—Place a .003" feeler gauge between the curb idle speed screw and the carburetor throttle shaft lever (fig. 7-7). Turn the screw until it just contacts the gauge, then remove the gauge and turn the screw 1½ more turns to set the throttle valve.

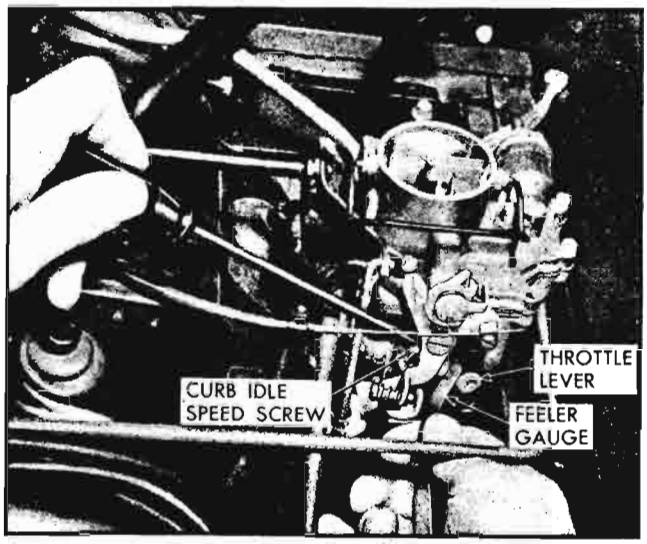

Fig. 7-7—Curb Idle Screw Adjustment

c. **Fast Idle—(choke fully open)**—Place a feeler gauge (.010" on automatic and .030" on synchromesh transmission) between fast idle speed

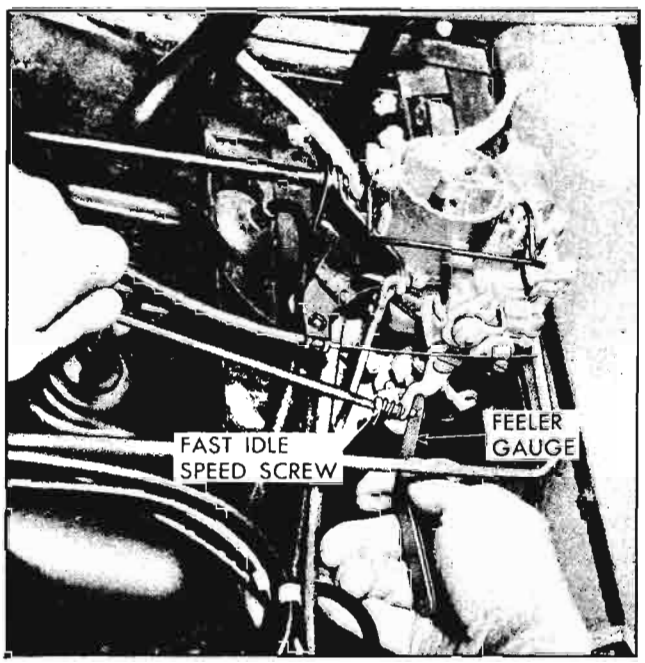

Fig. 7-8—Fast Idle Speed Screw Adjustment

screw and pad (tang) on throttle lever (fig. 7-8) and adjust the screw until it contacts (or holds) the gauge.

d. Turn the idle mixture screw lightly to its seat and back out 1½ turns.

CAUTION: Do not turn idle mixture screws tightly against seats or damage to needle seat will result.

2. Connect Throttle Rods as Follows:

a. Right Carburetor—Connect throttle rod to carburetor cross-shaft lever using retainer clip.

b. Left Carburetor—Rotate carburetor cross-shaft (with accelerator rod—fig. 7-9) to ensure positive closing of the right carburetor throttle valve. Adjust throttle rod length in swivel until rod freely enters hole on carburetor cross-shaft lever and secure rod with retainer clip.

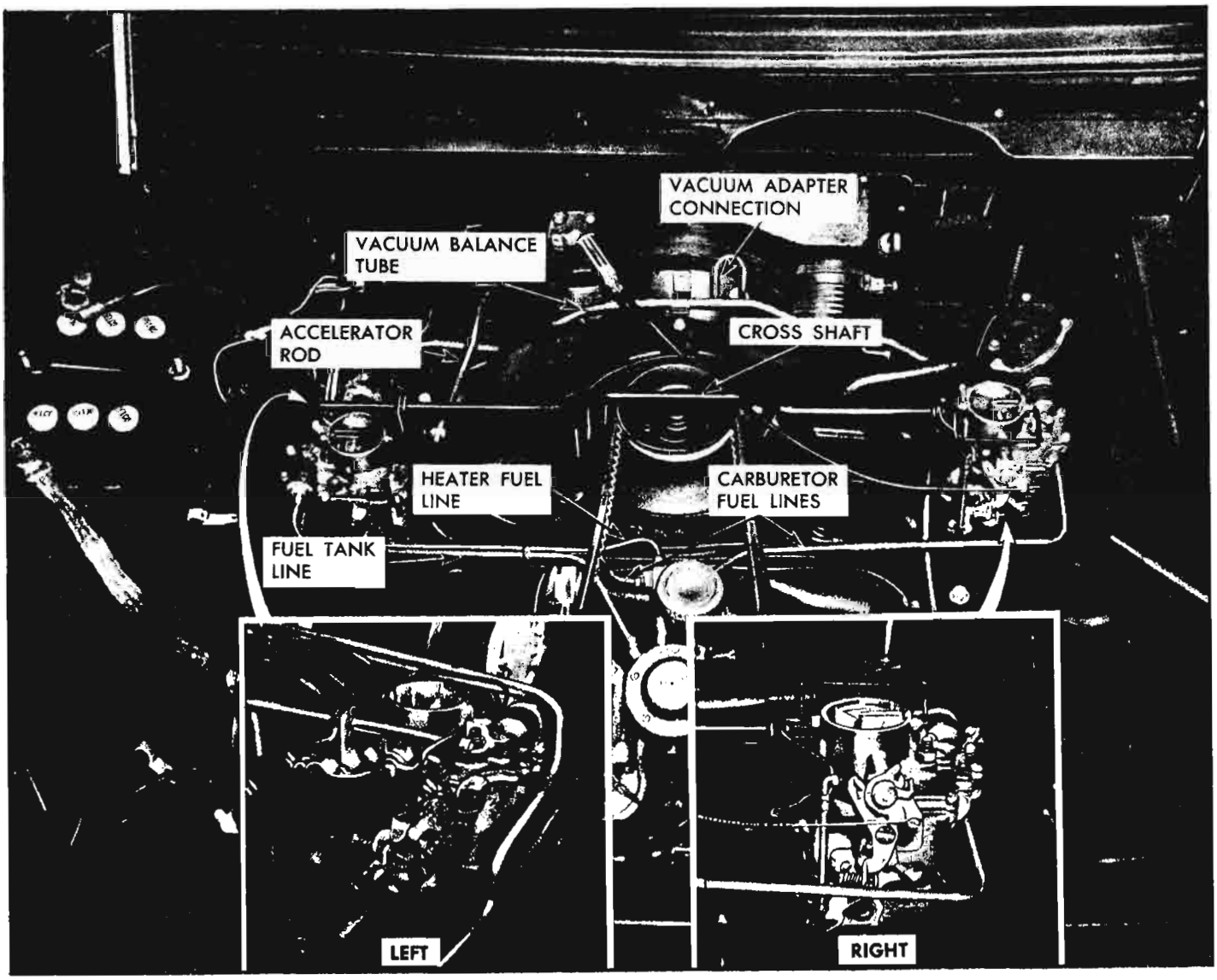

Fig. 7-9—Cross-shaft and Linkage to Carburetors

NOTE: The carburetors are now mechanically synchronized. Any further curb idle speed screw adjustment must be duplicated on both carburetors.

3. Preliminary Curb Idle Speed and Mixture Adjustment

a. Start engine and normalize.

b. Check timing.

c. Connect vacuum gauge to adapter (fig. 7-9) on vacuum balance tube. (Remove transmission vacuum line on automatic transmission and cap on synchromesh from balance tube adapter.)

d. Connect tachometer to engine.

e. Adjust curb idle speed (duplicate adjustment on both carburetors) to attain approximately

500 rpm (automatic transmission in drive and synchromesh in neutral, hand brake applied). Adjust idle mixture screws (fig. 7-10) on both carburetors to obtain peak steady vacuum at given idle speed.

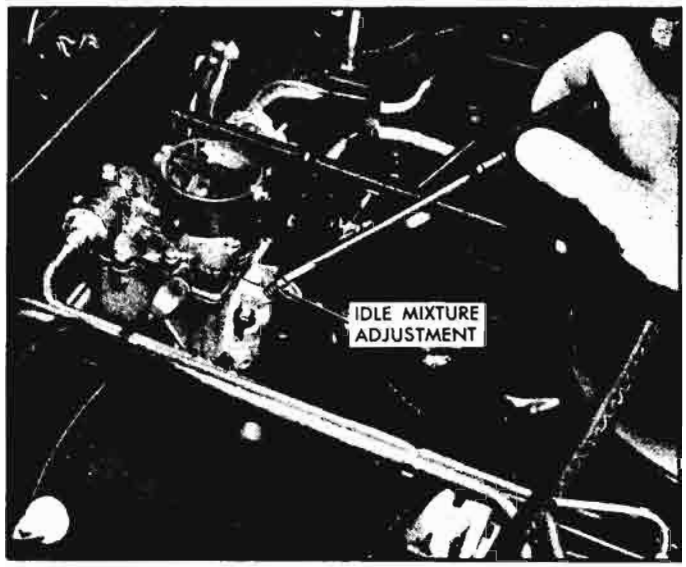

Fig. 7-10—Idle Mixture Adjustment

f. Remove vacuum gauge and close adapter as required for given transmission model.

4. Carburetor Balance—Vacuum Check

a. Remove distributor vacuum advance hose from right hand carburetor and plastic cap from left hand carburetor spark port adapter tubes (fig. 7-11).

b. Connect vacuum gauge to adapter tube of each carburetor (best results will be obtained using 2 equally calibrated gauges).

c. Move accelerator lever (fig. 7-9) to obtain 1200 rpm (all transmissions in neutral).

d. Check vacuum readings at each carburetor and note difference. If difference is one inch or less, the carburetors are satisfactorily synchronized. If difference is more than one inch, return engine to idle and adjust **left** carburetor throttle rod one turn (up to increase left carburetor vacuum and down to decrease) and recheck carburetor vacuum difference at 1200 rpm. Make adjustment by disconnecting rod at cross-shaft end and rotating in swivel. Repeat adjustment until difference is within one inch of vacuum.

NOTE: It is preferable to have higher reading on right carburetor (distributor advance side).

CAUTION: When making linkage adjustments, accelerate engine by moving accelerator rod only (fig. 7-9). Do not open throttle by grasping other portions of linkage or this may upset geometry and synchronization.

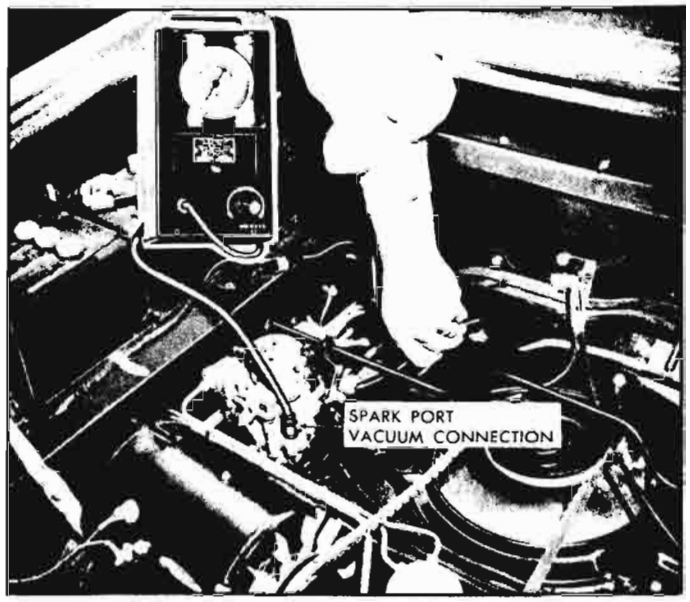

Fig. 7-11—Spark Port Vacuum Connections

e. Remove vacuum gauge/or gauges, replace distributor advance hose on spark port adapter tube of right carburetor and plastic cap on left carburetor spark port adapter tube.

5. Final Curb Idle Speed and Mixture Adjustment Check

NOTE: Always make final idle speed mixture adjustment with air cleaners installed.

a. Replace air cleaners.

b. Reconnect vacuum gauge to vacuum balance tube adapter.

c. Read vacuum at idle speed of 500 rpm.
If necessary, adjust curb idle speed and mixture screws to highest steady vacuum reading between 14-18 inches.

CAUTION: Any necessary adjustment must be duplicated at each carburetor.

6. Recheck Fast Idle Setting as Outlined in Step 1C.

(This setting depends upon final curb idle 500 rpm setting.)

CHOKE ADJUSTMENT

1. With the slide (fig. 7-12) ¼" from the rear of the mounting bracket and choke knob on dashboard out approximately ⅛", tighten the slide screw onto main choke cable wire.

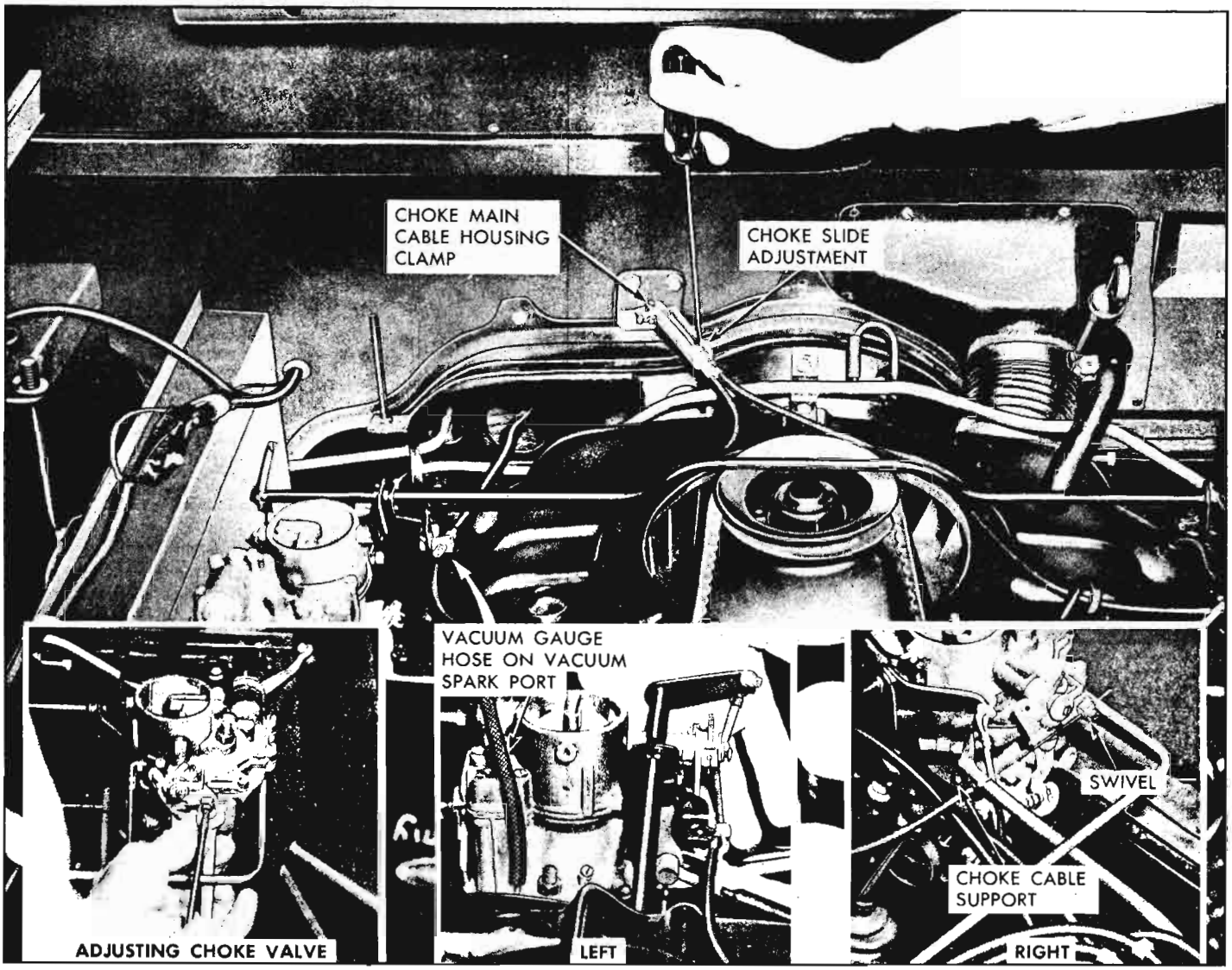

Fig. 7-12—Choke Linkage

2. Assemble cable and housing assemblies loose at both carburetor mounting brackets (fig. 7-12). Extend cable housing approximately ¼" beyond mounting bracket clamps and tighten clamp at each carburetor.
3. With slide approximately ¼" from rear of mounting bracket slot, tighten swivels at choke valve shaft levers with choke valve fully open. Cut the cable wire so about ¼" extends past the swivel. Do not bend the cable wire.

   CAUTION: Hold swivel with a wrench (fig. 7-12 insert) when tightening the screw, to avoid kinking the choke cable wire.

4. Pull choke knob and check for proper operation.
   a. Pull knob approximately ⅜" to ½" out and check to see that choke valve just begins to move.

      NOTE: During the first ⅜" to ½" choke knob travel, the fast idle cam raises idle speed without moving the choke valve.

      Pull knob full out and choke valve should be closed.
   c. Check ease of operation. (Kinks cause sticking.)

9. CHECK OPERATION OF COOLING AIR DAMPERS

With the engine at operating temperature, the dampers must move freely from open to closed position without binding. Check and adjust as outlined below.

With Engine at Operating Temperature:

1. Open the damper door until the bellows is stopped within its mounting bracket.

2. Measure the opening of the damper door from its upper edge, as shown in Figure 7-13, and, if necessary adjust swivel to produce a 2.36 (approximately $2\frac{11}{32}$ inch opening.

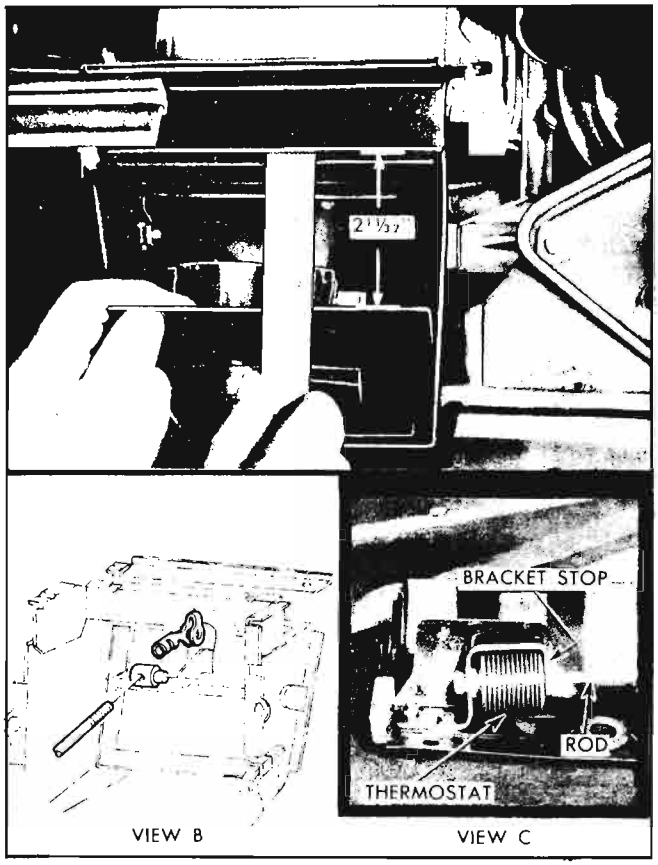

Fig. 7-13—Adjusting Cooling Air Damper

10. INSPECT AND SERVICE COOLING SYSTEM

- Be certain that all metal shrouds are in place and are properly fitted so as to prevent air leaks.
- Be certain that blower belt is properly tensioned and that blower assembly is in good condition.
- Be certain that openings in rear lid are free of dirt, twigs, leaves, paper, etc., as this is the source of engine cooling air.

11. CHECK LUBRICANT LEVEL AND INSPECT FOR OIL LEAKS

Check level of lubricant in crankcase and inspect engine for oil leaks.

12. NORMALIZE ENGINE

Set parking brake and place transmission in Neutral, then start engine and run until normal operating temperature is reached. This should be approximately 3-5 minutes with a cold engine.

NOTE: If disturbed, throttle stop screws and point gap will have to be reset.

Warmup will insure that proper lubricant viscosity is provided at each engine component and that each component will be at operating temperature and size.

13. PERFORM FOLLOWING CLEANING AND CHECKING OPERATIONS DURING WARMUP

Check the following for proper operation:

a. Windshield wipers
b. Headlights
c. Parking lights
d. Tail lights
e. Stop lights
f. Directional signals
g. Horn
h. Instruments and indicator lights
i. Brake and clutch pedal adjustment
j. Accessories

14. CYLINDER HEAD BOLTS

The cylinder head bolts should **not** be retorqued.

INSTRUMENT CHECK-OUT

The instrument check-out may be performed with any one of several excellent pieces of equipment on the market by following the specific operating instructions of the equipment manufacturer.

15. TEST DWELL AND DWELL VARIATION

a. Use dwell meter as directed by manufacturer. Dwell should be 31° to 35°.

If dwell reading is not within specifications, recheck point gap, then check for wrong point assembly, defective or misaligned point rubbing block, or worn distributor cam.

b. Slowly accelerate engine to 1500 rpm and note dwell reading. Return engine to idle and note dwell reading. Dwell reading at no time should vary more than 3 degrees. If dwell reading varies more than 3 degrees, check for worn distributor shaft, bushings or breaker plate or loose breaker plate.

c. Stop engine.

16. TEST IGNITION TIMING AND ADVANCE

a. Connect a distributor tester and/or timing light to No. 1 spark plug and battery, using extention at plug.

b. Start engine and run at idling speed.

c. Aim timing light at timing mark on top of crankshaft pulley as shown in Figure 7-14. For correct timing mark on pulley should line up with 4° ± 1° BTDC mark on timing tab for models with manual transmissions and 13° BTDC on Powerglide models.

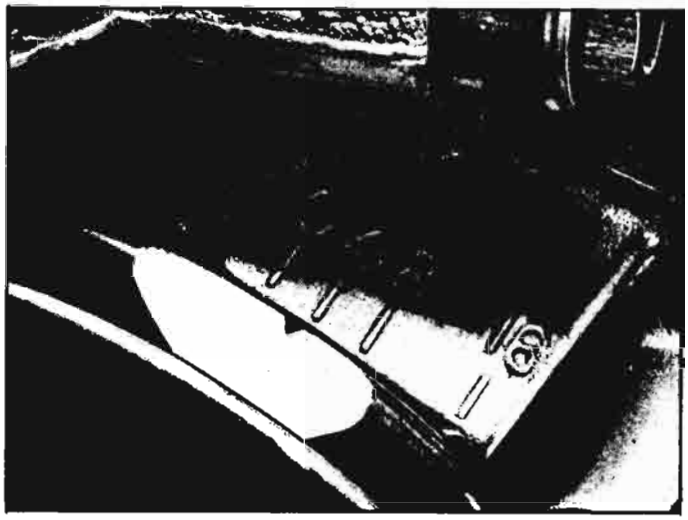

Fig. 7-14—Ignition Timing

d. Adjust timing as required by loosening distributor clamp bolt and rotating distributor body until correct timing is indicated, then tighten distributor clamp bolt.

e. Check distributor advance and compare against distributor specifications (see *Specifications—Section 12*). If total advance is not within limits, disconnect vacuum line to obtain centrifugal advance only. If centrifugal advance is satisfactory, the difficulty is in the vacuum system.

An unsteady position of the timing mark during either timing or advance test is generally caused by pitted or misaligned distributor points, improper distributor point spring tension, worn or loose vacuum breaker plate, worn distributor shaft or bushings.

17. ROAD TEST VEHICLE

(For Use as Required)

The following tests are described herein for use as required where either an abnormal condition requiring further checking has been detected during Tune-Up or a specific customer complaint exists:

- Cylinder Balance Test
- Starting Circuit Checks
- Generating Circuit Checks
- Ignition Circuit Checks
- Fuel Pump Test

CYLINDER BALANCE TEST

It is often difficult to locate a weak cylinder. A compression test, for example, will not locate a leaky intake manifold, a valve not opening properly due to a worn camshaft, or a defective spark plug.

With the cylinder balance test, the power output of one cylinder may be checked against another, using a set of grounding leads. When the power output of each cylinder is not equal, the engine will lose power and run roughly. Tool J-7412 is available to perform this test.

Perform a cylinder balance test as follows (see Figure 7-15):

1. Connect the tachometer and vacuum gauge.
2. Start engine and run at 1500 rpm.
3. Ground large clip of grounding leads and connect individual leads to all spark plugs except the pair being tested. Divide the firing order in half and arrange one-half over the other. The cylinders to be tested together appear one over the other, i.e.,

$$\text{Firing Order} = 1\text{-}4\text{-}5\text{-}2\text{-}3\text{-}6 = \frac{1\text{-}4\text{-}5}{2\text{-}3\text{-}6} = 1\text{-}2,\ 4\text{-}3,\ 5\text{-}6.$$

4. Operate engine on each pair of cylinders in turn and note engine rpm and manifold vacuum for each pair. A variation of more than 1 inch of vacuum or 40 rpm between pairs of cylinders being tested indicates that the cylinders are off balance.

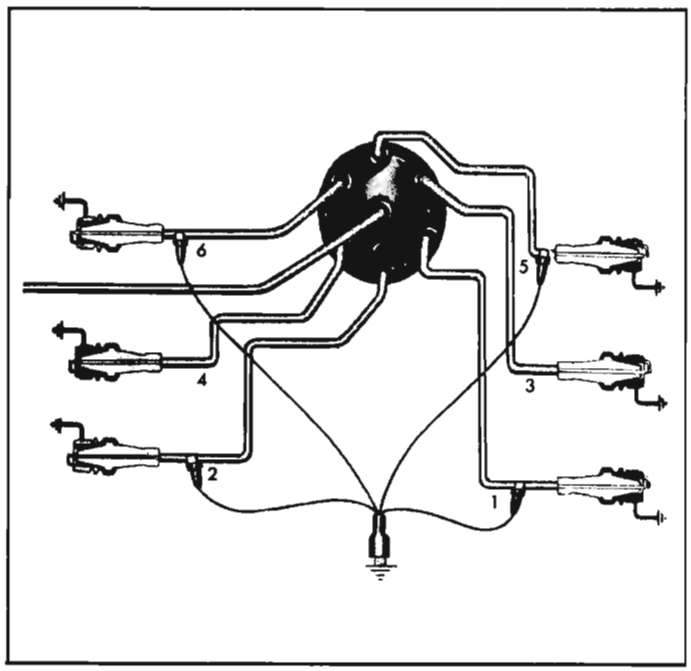

Fig. 7-15—Cylinder Balance Test

5. To isolate one weak cylinder, short out one bank of cylinders at a time. The bank giving the lower readings will include the weak cylinder.

STARTING CIRCUIT CHECKS

See *Engine Electrical—Section 8,* for a description of these checks.

GENERATING CIRCUIT CHECKS

See *Engine Electrical—Section 8,* for a description of generating circuit checks and regulator adjustments.

IGNITION CIRCUIT CHECKS

See *Engine Electrical—Section 8,* for a description of ignition circuit checks.

FUEL PUMP TESTS

If the owner has complained of poor high speed performance, the fuel pump may be at fault. Too low a pump pressure or volume will cause a high speed miss because of lack of fuel delivered to the carburetors, while too high a pressure will cause carburetor flooding.

Pump Volume Test

1. Disconnect both fuel lines at carburetors, plug one line and direct opposite line into a container, preferable one indicating the pint level (fig. 7-16).
2. Start engine and run at idle using fuel in carburetor bowl.
3. Measure the time required to deliver one pint of fuel, then shut off engine. At idle the pump should deliver one pint of fuel in 45 seconds or less.
   - If no gasoline or only a small amount flows from open end of pipe, then the fuel line is clogged or the pump is inoperative. Before removing pump, remove gas cap, disconnect both inlet and outlet pipes and blow through them with an air hose to make sure they are clear. This will eliminate the possibility of a clogged gas strainer in the fuel tank. Reconnect pipes to pump and retest flow.
   - If capacity is within limits, proceed with Pump Pressure Test below.

Pump Pressure Test

1. Attach vacuum-pressure gauge hose to fuel line (fig. 7-17) while opposite line remains plugged from above test.
2. Operate engine at idle and observe reading on gauge. Pressure should be 4 to 5 lbs. and should remain constant at all speeds between idle and 1000 rpm.
   - If pressure is too low or too high or varies materially at different speeds, the pump should be removed for repairs or replacement.
   - If the fuel pump checks out correctly on a high speed complaint, overhaul the carburetor.
3. Remove gauge and plug and reconnect fuel lines to carburetors. Inspect fuel lines for kinks and bends, and check all connections for leaks.

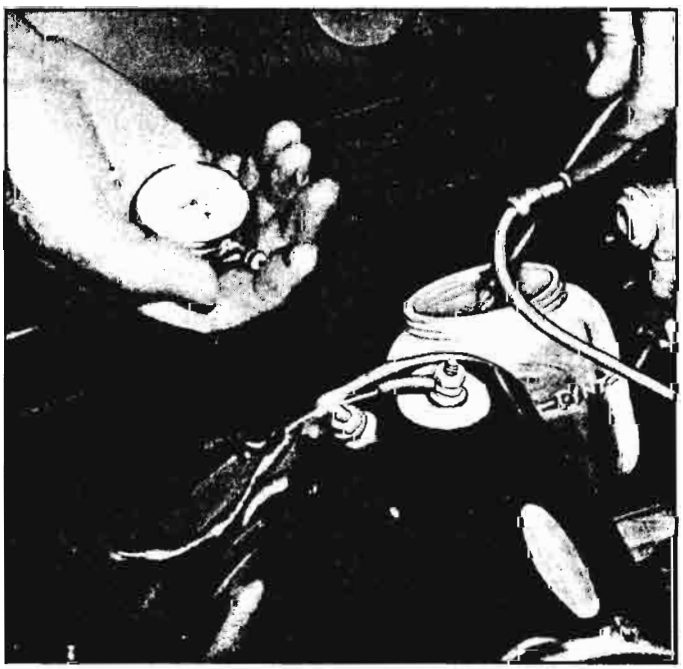

Fig. 7-16—Fuel Pump Volume Test

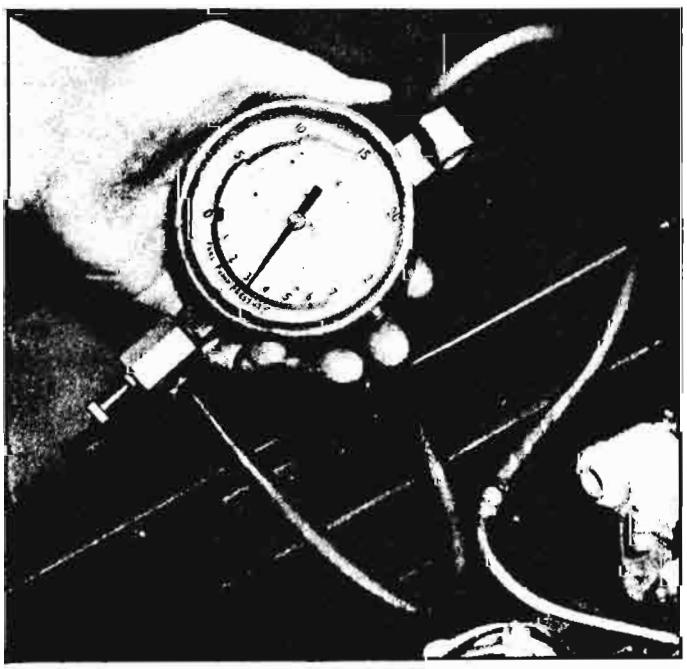

Fig. 7-17—Fuel Pump Pressure Test

1961 TUNE-UP SPECIFICATIONS

ENGINE		TURBO-AIR	SUPER TURBO-AIR
Compression Pressure (Cranking)		130 lbs. Variation—20 lbs.	130 lbs. Variation—20 lbs.
Spark Plugs	Make and Number	AC—46FF	AC—46FF
	Gap and Torque	.035″—20-25 ft. lb.	.035″—20-25 ft. lb.
Ignition Distributor	Cam Angle	31° — 36°	31° — 36°
	Point Gap	.019 new—.016 used	.019 new—.016 used
	Arm Spring Tension	19-23 oz.	19-23 oz.
	Condenser	.18-.25 mfd.	.18-.25 mfd.
Ignition Timing	See Note 1	4° BTDC Synchromesh 13° BTDC Automatic	Synchromesh only 13° BTDC
Tappet Clearance	Inlet and Exhaust	Hydraulic—¾ turn to center lifter	Hydraulic—1¼ turn to center lifter
Fuel Pump	Pressure	4 to 5 lbs. @ idle to 1000 RPM	4 to 5 lbs. @ idle to 1000 RPM
	Volume	1 Pint in 30 to 45 seconds	1 Pint in 30 to 45 seconds
Engine Idle RPM	Automatic (In Drive)	500	500
	Synchromesh	500	500
Air Cleaners		Oil wetted—to be cleaned and reoiled aprox. 2000 mile intervals	Oil wetted—to be cleaned and reoiled aprox. 2000 mile intervals
Blower Belt Adjustment		⅜″ deflection (with 15 lb. push midway between blower and idler pulleys)	⅜″ deflection (with 15 lb. push midway between blower and idler pulleys)
Carburetor		Rochester model H with manual choke	Rochester model H with manual choke
Fuel Filter		Backwash in fuel and blow out with compressed air	Backwash in fuel and blow out with compressed air
Exhaust Damper Door Adjustment		Approx. 2 11/32″ from door top to opening top with door open against bellow stop	Approx. 2 11/32″ from door top to opening top with door open against bellow stop

NOTE 1—At idle speed without disconnecting vacuum advance hose

CORVAIR 95 AND GREENBRIER—1200 SERIES

Tune-up procedures and specifications for the Corvair 95 and Greenbrier vehicles are the same as for Corvair 500, 700 and 900 series.