To make the idle speed adjustment, proceeds as follows:

(1) Turn the idle speed screw in or out to obtain 500 rpm. Be sure that the choke valve is fully open and that the fast idle adjusting screw is not contacting the cam.

(2) Adjust the idle mixture screw to obtain the highest rpm. While making the adjustment, carefully watch the tachometer and notice that the speed can be decreased by turning the screw in either direction from the setting that gave the highest rpm reading.

(3) From the highest idle speed setting, turn the mixture screw clockwise (leaner) until the speed starts to drop. Turn the screw in the opposite direction (counterclockwise) just far enough to recover the speed that was lost.

This procedure will assure that the idle has been set to the leanest mixture possible for smooth idle. *This setting is very important.*

Since the correct speed was originally set using the speed screw, the speed obtained after finding the leanest smooth idle setting will probably be too fast.

(4) Readjust the speed screw to obtain correct idle speed. Repeat steps 2 and 3 above.

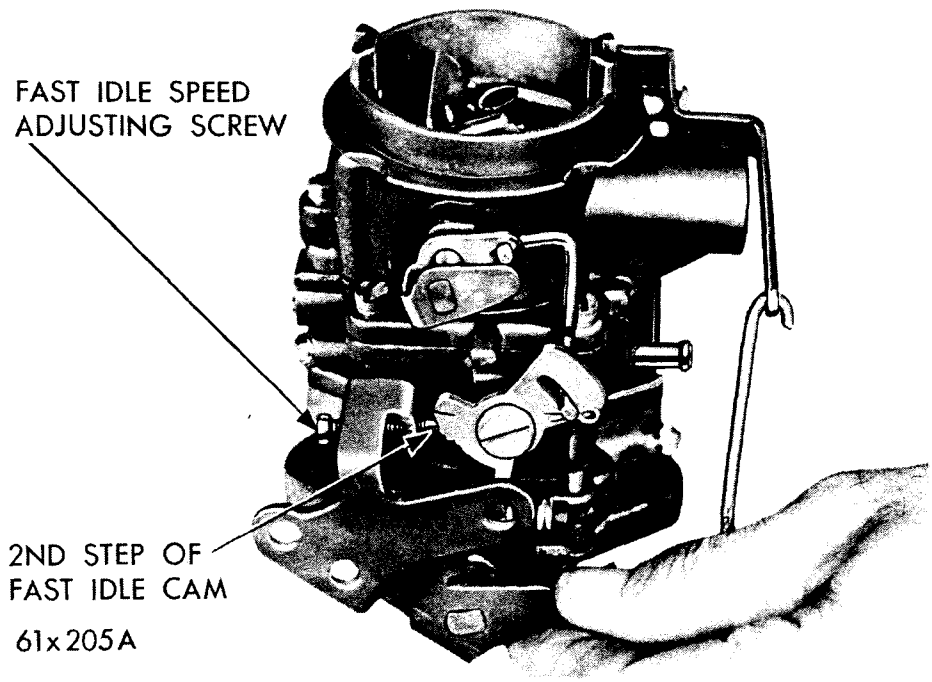


Fig. 60—Fast Idle Adjusting Screw on 2nd Step of Fast Idle Cam

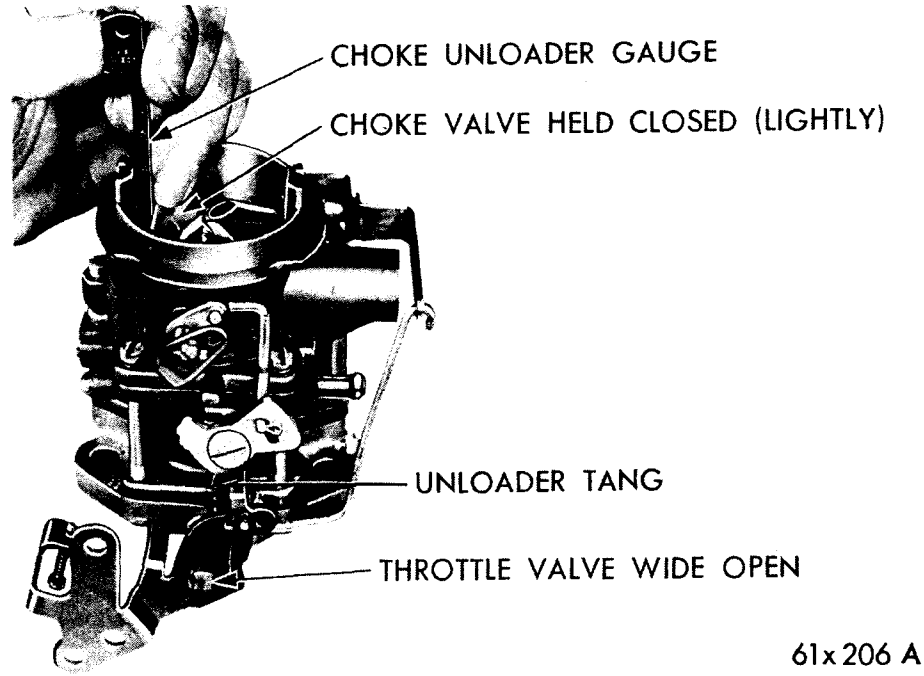


Fig. 61—Checking Choke Unloader Setting

FAST IDLE SPEED ADJUSTMENT

To set the fast idle speed, refer to Figure 60. Connect a tachometer, then proceed as follows:

(1) With the engine running and warmed-up, open the throttle slightly and rotate the fast idle cam until the fast idle adjustment screw will contact the second (2nd) step of the fast idle cam, as shown in Figure 60.

(2) Release the throttle. The linkage pull-back spring will cause the fast idle adjusting screw to hold the cam in this position.

(3) Turn the fast idle speed adjusting screw clockwise (faster) or counterclockwise (slower) to obtain the fast idle speed.

It should be remembered that this fast idle speed is used to secure the correct adjustment and is never encountered in normal engine operation. In cold weather, engine oils are thicker and engine friction is relatively high. Under these conditions, the above fast idle adjustments will result in opening the throttle enough to keep the engine running. Because conditions can vary widely (such as lighter oil, an engine with more hours of operation and lower friction, etc.), it is possible to adjust the fast idle speed to suit any owner's requirements. The recommended setting is intended to meet average conditions and normal operation.

CHOKE UNLOADER (WIDE OPEN KICK)

(1) Hold the throttle valve in the wide open position, insert Tool T109-28 or a 3/16" drill between the upper edge of the choke valve and the inner wall of the air horn, as shown in Figure 61.

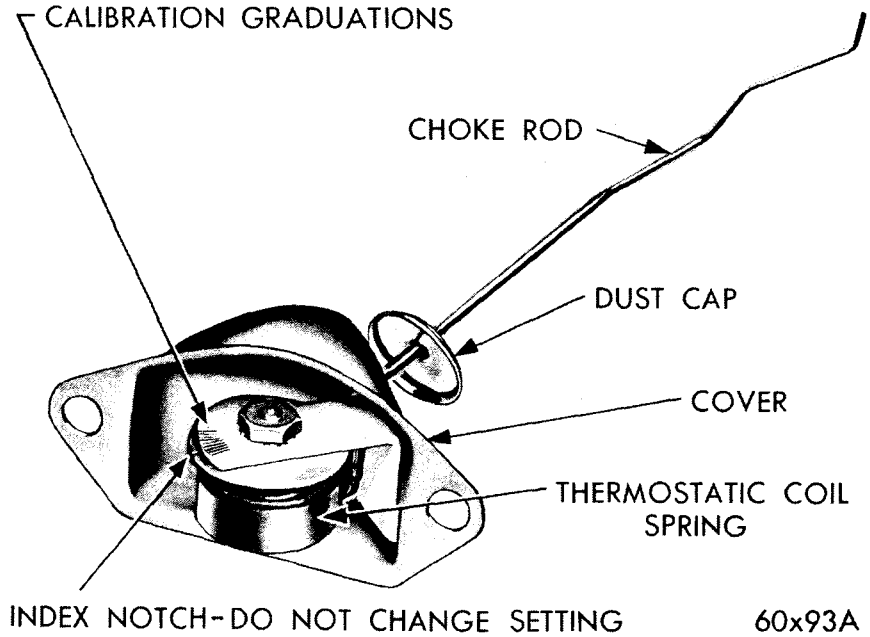
(2) If no drag is felt, or if too much drag is apparent, bend the unloader tang on the throttle lever until correct clearance has been obtained.

AUTOMATIC CHOKE—WELL TYPE

Carburetor Series BBS-3138S, BBS-3275S, BBS-3280S, BBS-3139S, BBS-3276S, BBS-3281S.

To function properly, it is important that all parts be clean and move freely. Other than an occasional cleaning, the choke requires no servicing. However, it is very important that the choke control unit work freely in the well and at the choke shaft. Move the choke rod up and down to check for free movement on the pivot. If the unit binds, a new choke unit should be installed. The well type choke unit is serviced as an assembly. Do not attempt to repair or change setting. The correct setting is with index notch opposite the central calibration graduation (See Fig. 62).

When installing the well type choke unit, be certain that the coil



housing does not contact the sides of the well in the exhaust manifold. Any contact at this point will affect choke operation. DO NOT lubricate any parts of the choke or the control unit. This causes an accumulation of dirt which will result in binding of the mechanism.

CLOSED CRANKCASE VENT SYSTEM

The closed crankcase ventilator valve is located in the cylinder head cover and is connected to the carburetor throttle body via a rubber tube.

The function of the valve is to regulate the flow of unburned hydrocarbons from the crankcase and return them to the intake manifold. From here they enter the combustion chamber and then exit via the exhaust system as completely burned exhaust products.

For servicing procedures of this valve, refer to "Lubrication" in this Manual.

CHECKING THE FLOAT SETTING (On the Engine)

(1) Remove the accelerator pump operating rod and the fast idle cam link retaining pin.

(2) Remove two of the long air horn attaching screws and two short screws, then install the two short screws in place of the two long screws removed. This will hold the main body to the throttle body. Tighten screws securely.

(3) Remove the remaining air horn screws, then tilt the air horn far enough to disengage the fast idle cam link from the fast idle cam. Remove the air horn and gasket.

Check the float setting as follows:

(4) Seat the float fulcrum pin by pressing on the fulcrum pin retainer.

There should be enough fuel in the bowl to raise the float so that the lip bears firmly against the needle. Additional fuel may be admitted by slightly depressing the float. If the fuel pressure in the line is insufficient to force additional fuel into the bowl, add the necessary fuel from a clean container.

CAUTION: Since the manifolds may be hot, it is dangerous to spill fuel on these surfaces. Therefore, take the necessary precautions to avoid spillage.

(5) With only the pressure of the buoyant float holding the float lip against the inlet needle, check the float setting, using Tool T109-239 or a "T" scale. There should be 7/32 inch from the surface of the bowl (gasket removed) to the crown of the floats at the center.

If an adjustment is necessary, hold the float on the bottom of the bowl, then bend the float lip toward or away from the needle. Recheck the 7/32 inch setting again, then repeat the lip bending operation as required.

CAUTION: When bending the float lip, do not allow the lip to push against the needle as the synthetic rubber tip can be compressed sufficiently to cause a false setting which will affect correct level of the fuel in the bowl.

After being compressed, the tip is very slow to recover its original shape.

It is very important that the float lip be perpendicular to the needle or slanted not more than 10 degrees away from the needle when the float is correctly set.

(6) Reassemble the air horn as described previously.

IDLE SPEED ADJUSTMENT

To make the idle speed adjustment, the engine must be thoroughly warmed up and then set to 500 rpm. For best results, it is recommended that a tachometer be used in this adjustment.

(1) Turn the idle speed screw *in* or *out* to btain 500 rpm. Be sure the choke valve is fully open and that the fast idle adjusting screw is not contacting the fast idle cam.

(2) Turn each idle mixture screw to obtain the highest rpm. While making the adjustment, carefully watch the tachometer and notice that the speed can be decreased by turning the screws in either direction from the setting that gave the highest rpm reading.

(3) Readjust to 500 rpm with the idle speed screw.

(4) Turn each idle mixture adjusting screw *in* the clockwise direction (leaner) until there is a slight drop in rpm. Now, turn each screw *out*, counterclockwise (richer) just enough to regain the lost rpm.

This procedure will assure that the idle has been set to the leanest mixture possible for smooth idle. *This setting is very important!*

Since the correct speed was originally set, using the speed screw, the speed obtained after finding the leanest smooth idle will probably be too fast.

(5) Readjust the speed screw to obtain correct idle speed. Repeat steps 2 and 4 above if necessary.

HOOF MECHANICAL GOVERNOR

The drive belt adjustment can be made by loosening the governor attaching bolts and positioning the governor for correct belt tension (Fig. 63). The level of SAE lubricant should be checked after every 250 hours of operation or 3 times a year.

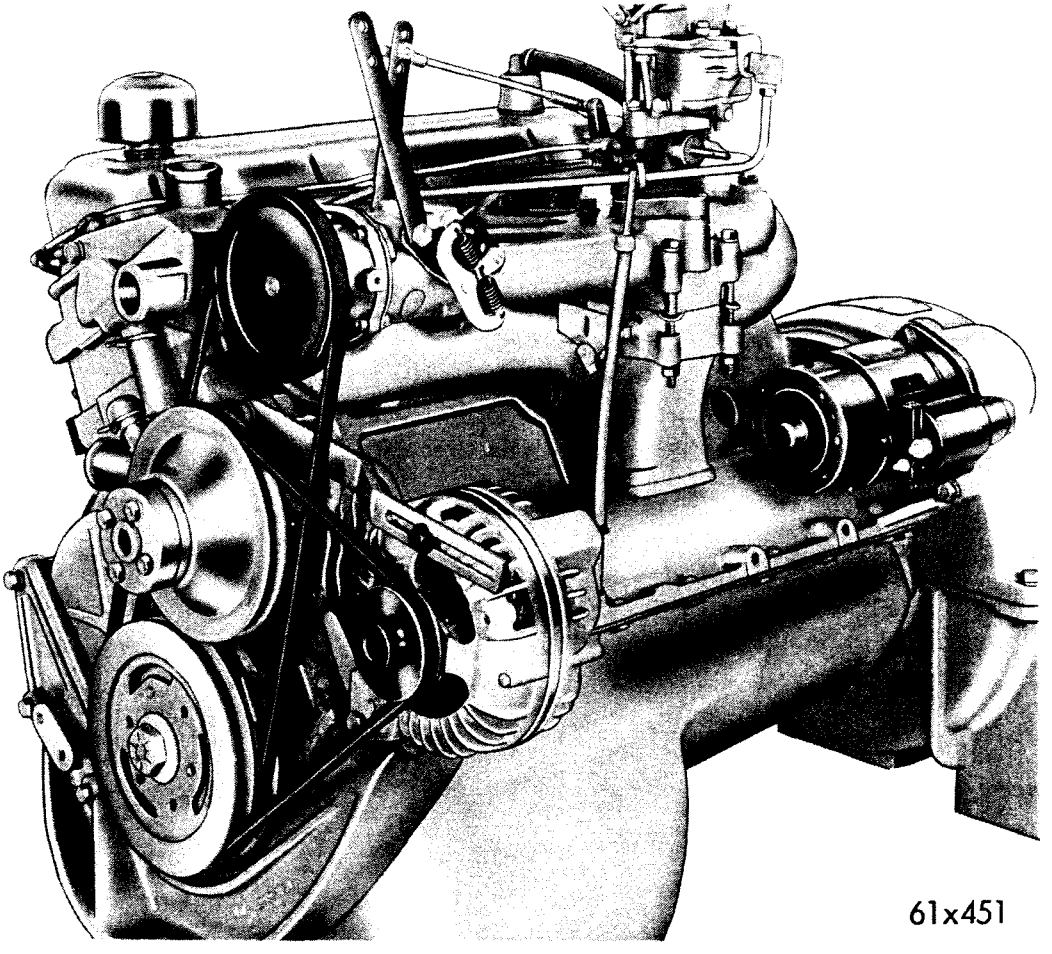


Fig. 63—Hoof Mechanical Governor Installed

ADJUSTMENT

(1) Adjust upper eye bolt to 5/8 inch from center of eye to out face of lock nut (Fig. 64).

(2) Adjust lower eye bolt to 3/4 inch from center of eye to upper face of lock nut.

(3) Adjust length of governor to carburetor rod to enter the governor lever as throttle starts to open.

(4) Attach a tachometer, start and run engine to operating temperature.

(5) With governor clutch engaged, pull both dash control rods out. Engine no load speed should be from 1750 to 1800 rpm, and free from surge.

(6) To eliminate surge, loosen lock nut and back out bumper spring adjusting screw at least 1/4 turn (Fig. 65). Set governor to control rod to produce 975 to 1000 rpm. Turn adjusting screw in to raise speed 25 rpm and tighten lock nut.

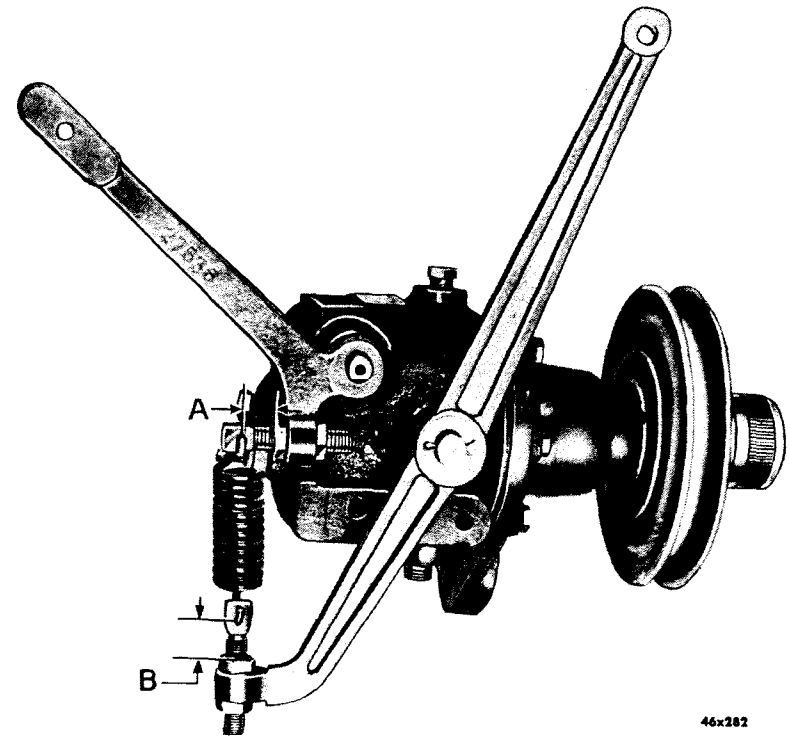


Fig. 64—Hoof Mechanical Governor Lever Adjustments

THROTTLE TO GOVERNOR ROD (Hoof) (Fig. 65)

Adjust the length of the rod so that the throttle lever on the carburetor contacts the stop just as the governor lever is at the wide open position. Test the operation of the rod for friction or excessive free play and adjust, if necessary, at the ball joint.

ADJUST VARIABLE SPEED LEVER TRAVEL (Some Hoof Models)

Test the engine rpm's at high and low speeds in the desired range and set the adjusting screws to limit travel of the variable speed lever in that range. The maximum speed adjusting screw is located at the right of the lever and the minimum speed adjusting screw is at the left. Both screws are provided with lock nuts to hold the adjustment.

ADJUST CONTROL (Hoof)

Sharpness of governor control may be increased by varying the

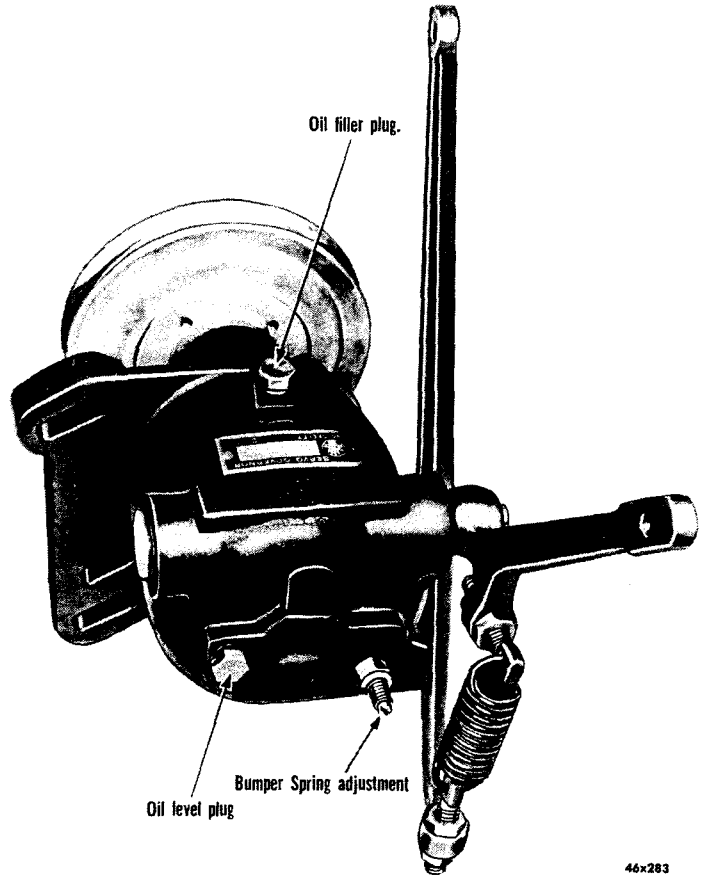
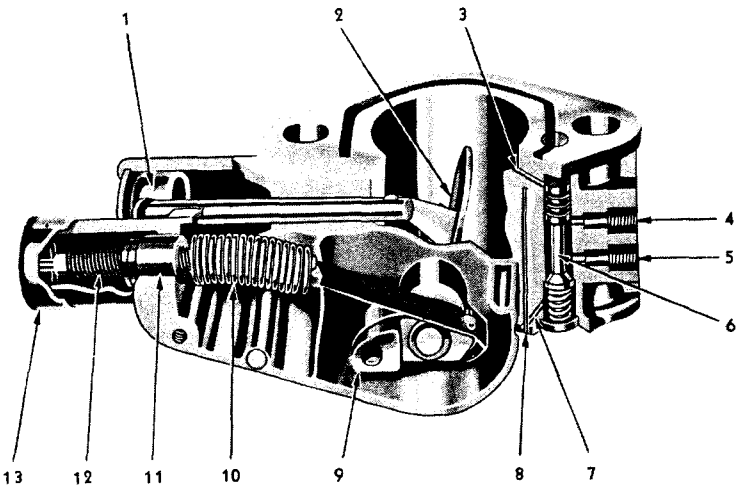


Fig. 65—Hoof Mechanical Governor Lubrication Plugs and Bumper Spring Adjusting Screw

tension of the governor spring. In general, increasing the spring tension sharpens the control. However, for very low speeds, it may be advisable to reduce spring tension. To increase spring tension, loosen the spring lever clamp screw and move the spring lever counterclockwise. To decrease tension, move the lever clockwise. The position of the lever will be determined by the speed range at which greatest accuracy is desired. For middle speed ranges, the spring lever should be approximately vertical when the throttle valve is wide open. Tighten the spring lever clamp after adjusting the lever. Check the spring deflection; normal deflection for wide range of speed is 3/8 inch with the throttle wide open and the eye of the spring lever in alignment with the front edge of the operating lever. If spring deflection exceeds 3/4 inch when the spring level is vertical, or nearly so, hook the spring in the end hole in the spring clip, or move the spring clip to the next anchor pin hole on the right. (The spring clip is secured to the anchor pin with a cotter pin.)

ADJUSTING THE KING SEELEY (HANDY) GOVERNOR (Fig. 66)

Should the governor become inoperative, or require servicing, or



1—Non-cheating stabilizer piston
2—Throttle valve
3—Passage to transfer valve chamber
4—Carburetor vacuum connection (not used)
5—Ignition distributor vacuum connection (not used)
6—Vacuum transfer valve plunger
7—Vacuum passage
8—Vacuum by-pass passage
9—Cam and valve shaft assembly
10—Control spring and ribbon assembly
11—Calibrating nut
12—Adjusting screw
13—Adjusting screw cap assembly

Fig. 66—King Seeley Governor (Sectional View)

if the correct settings cannot be obtained, the governor should be removed. Replace or take them to the local King-Seeley Distributor where facilities are available for proper adjustment.

Leakage of manifold, carburetor, or interconnector gaskets must be corrected before carburetors or governors can be properly set.

It may be apparent after a long period of operation that the governor has become sluggish and is not as responsive as when it was originally installed. Such sluggishness is most generally caused by deposits of carbon and gum on the valve shaft and bearings, stabilizer piston rod or cylinder. The remedy for this condition is to remove the governor and soak it in a cleaning solvent that will remove the carbon and gum deposits. It is always recommended that a governor that is not functioning properly be soaked in cleaning solvent before any adjustments or repairs are attempted, because in many cases, satisfactory performance can be restored in this manner. Before attempting any adjustment or recalibration of the governor, run the engine until normal operating temperature is reached. Manifold vacuum at sea level should be at least 16 inches with engine running at full throttle (governor operating), and at least 17 inches at idling speed, with an allowable reduction for altitude.

To adjust governor, refer to Figure 66, and proceed as follows: For a HIGHER speed, turn adjusting cap (13) counterclockwise or to the left; for LOWER speeds, turn adjusting cap clockwise or to the right. One turn of the adjusting screw will change the engine speed approximately 300 rpm.

When a more sensitive regulation is desired, or if the governor is too sensitive and inclined to surge at full throttle, correct as follows by means of the calibrating nut (11).

SENSITIVITY ADJUSTMENT

If the governor is too sensitive or has a tendency to surge, place the hollow wrench (1) in position on the calibrating nut (11) and insert the special adjusting wrench (2) through the hollow wrench into the adjusting screw and turn the screw clockwise one turn (Fig. 67).

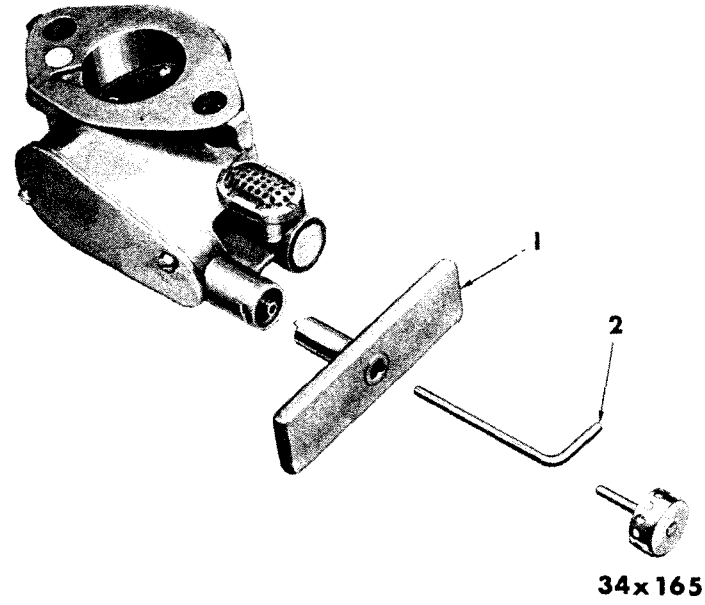
With the hollow wrench in the slot of the calibrating nut, turn the nut clockwise about ¼ of a turn. When this adjustment is made the adjusting screw must be held from turning.

Continue this adjustment until the surge is eliminated. However, engines operate most efficiently when the governor is adjusted to the point which just barely eliminates the surge at full throttle.

REACTION ADJUSTMENT

If the governor is slow acting and does not open promptly when a load is applied at the governed speed or cut off promptly at maximum speed, turn the adjusting screw counterclockwise one turn and while holding the screw in the new position, turn the calibrating nut counterclockwise ¼ of a turn. Repeat this procedure until the desired regulation is obtained. However, when making this adjustment, it is best to continue until an actual surge is produced, and then, just eliminate the surge.

When the adjustment is completed, tap lightly on the end of the hollow wrench so that the calibrating nut will be properly seated and re-check speed.



1—Hollow Wrench—A-24283 2—Hex Wrench—A-25264

Fig. 67—Governor Adjusting Wrench

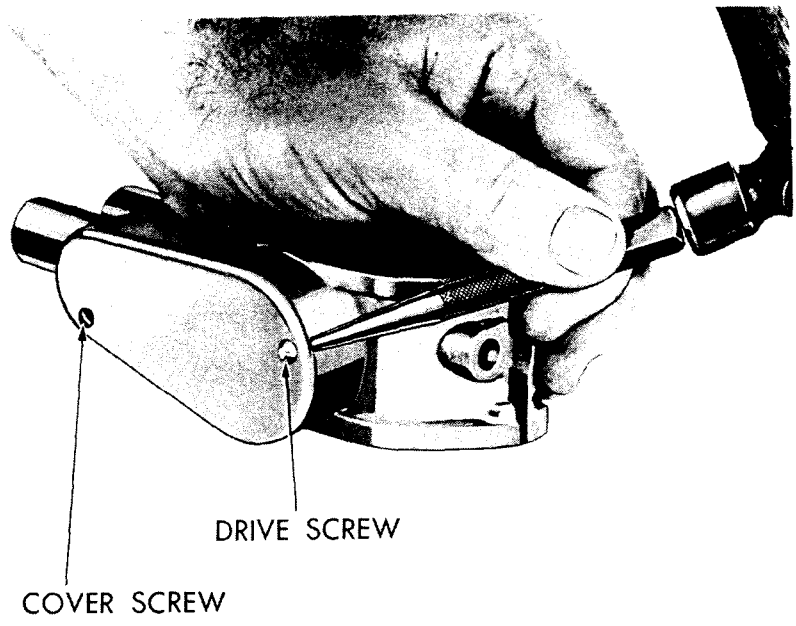


Fig. 68—Removing Governor Housing Cover

The stock numbers of the special wrenches (Fig. 67) are as follows:

A-24283 (Item 1, Fig. 67).

A-25264 (Item 2, Fig. 67).

These wrenches can be obtained from the King-Seeley Corporation, Ann Arbor, Michigan.

CALIBRATION

If the control spring should for any reason be disengaged from the adjusting screw, or the relationship of the adjusting screw and calibrating nut changed by someone not familiar with the governor, it will be necessary to go over the complete calibration for the particular governor to insure efficient control.

Remove seal and adjust screw cap (13). Remove cover screw and force out the drive screw, as indicated on Figure 68. Do not use a screw driver or similar tool, as it will result in damage to the housing or cover. When the drive screw is out far enough so that side cutting pliers can be applied under the screw head, turn the screw out counterclockwise.

Position the adjusting screw in the spring until the open coils cor-

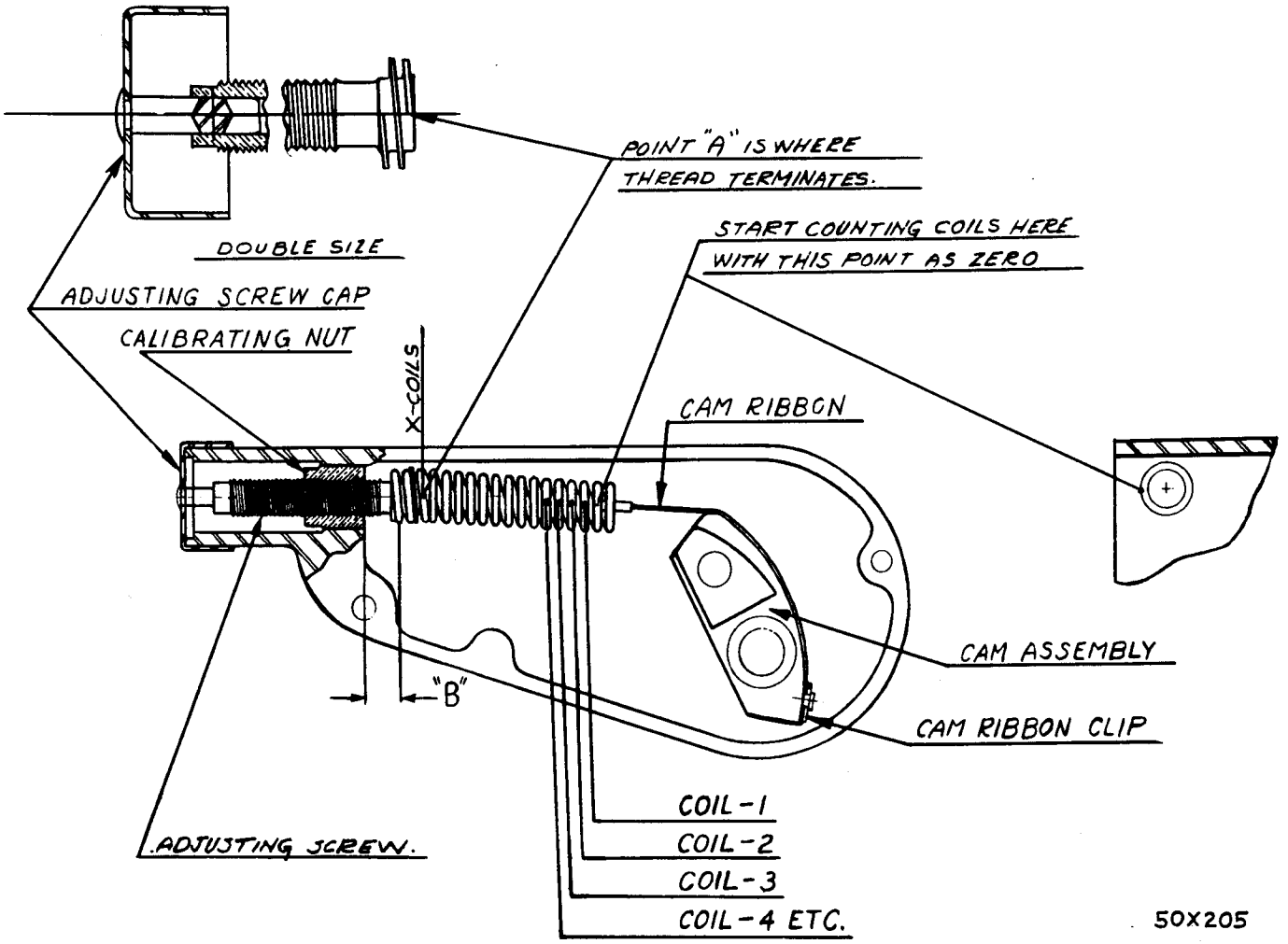


Fig. 69—Control Spring Calibration Detail

respond to the number indicated on the "Calibration Specification" sheets for the particular governor, and it may in some cases be necessary to move the calibrating nut several turns to provide sufficient space between the end of the spring and governor housing to obtain the correct number of open coils.

Referring to Figure 69, the active coils of the control spring end where the spring contacts the thread of the adjusting screw at point "A". Each turn of the adjusting screw adds or subtracts one coil. As an example: To obtain 10¼ coils turn the adjusting screw until there are 10 active coils between zero point and point "A", and then add ¼ coil by turning adjusting screw counterclockwise ¼ turn.

When the adjusting screw is positioned to provide the correct number of active coils, hold the adjusting screw and turn the calibrating nut in the direction required with the A-24283 wrench until dimension "B" (Fig. 69) indicated on the "Calibration Specification" sheets for the particular governor is provided. This measurement is from the center of the last spring coil to the inside of the governor housing, as indicated on Figure 69.

This will usually provide a setting within a few hundred revolutions of the maximum governed engine speed recommended for a particular model. However, further adjustment may be required after the governor is installed on the engine to obtain correct control and governed maximum speed. Perform any changes necessary, according to the instructions outlined under the subject of "Adjustments".

Lead type seals are recommended for the governor adjustment, inasmuch as it is possible to lock the lead type seals with a particular symbol which prevents tampering, as any change in the seal would be readily noticeable. While the patented type seals are easier to use, they offer but little protection, inasmuch as they can be easily purchased, enabling the operator or mechanic to change the adjustment and reseal the governor to avoid detection.

Generally, it is not economical to attempt major governor repairs in the average shop, as mechanics are seldom familiar with this type of work. Moreover, it will usually prove less expensive to replace the governor if necessary, or have it reconditioned in an Authorized King-Seeley Governor Service Station.

BELT ADJUSTMENTS

Belt deflection measurements should be taken while applying a

10-pound load to the belt.

The crankshaft to water pump to alternator belt should have ¼ inch deflection at midpoint between the pump and the alternator.

To adjust the belt, loosen all mounting bolts and use a pry bar to apply tension to the belt, being careful not to damage the accessory. Tighten the mounting bolts and check the deflection. It may be necessary to repeat this procedure several times to secure the correct tension.

CLUTCH HOUSING ALIGNMENT

When performing adjustments or repairs that involve removing the clutch housing, it will be necessary to align the face of the housing parallel with that of the block when assembling.

To correctly align the clutch housing, proceed as follows:

(1) Mount Tool C-870 with dial indicator C-435 on flywheel.

(2) With flywheel turning Tool C-771, crank engine while noting dial indicator needle deflection. Out-of-round of bore must not exceed .005 inch total indicator reading (See Fig. 70).

If bore runout is in excess of .005 inch total indicator reading proceed with correction as follows:

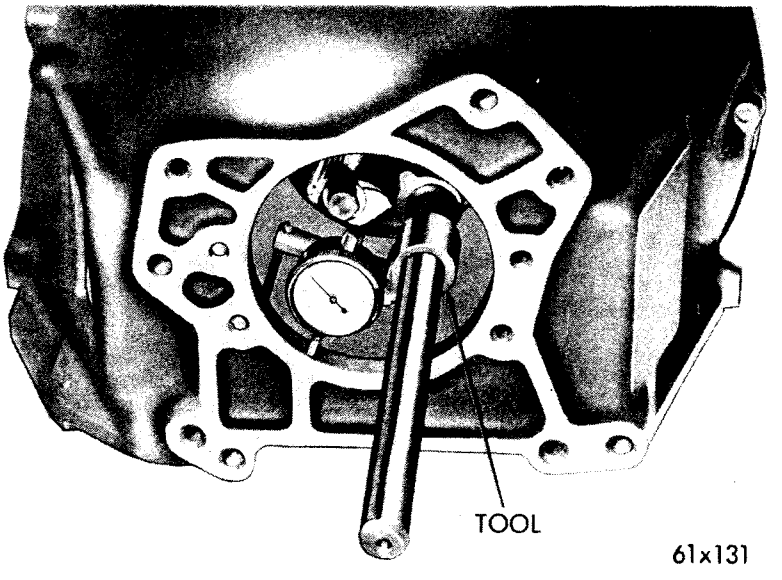


Fig. 70—Checking Clutch Housing Bore

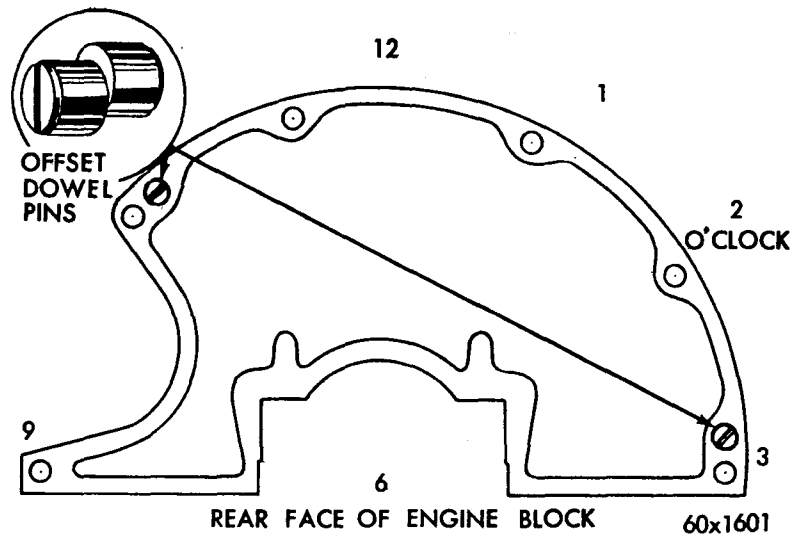


Fig. 71—Offset Dowel Orientation Diagram

To illustrate the recommended correction procedure, assume that the total indicator reading is .016 inch, in a direction which approximates 2 o'clock on engine block. (Refer to Fig. 71.)

In this case, the housing is off crankshaft centerline .008 inch (one-half total indicator reading) which is .003 inch greater than the allowable limit of .005 (one-half total indicator reading).

In the case under consideration, use of the .007 inch offset dowels (pair) will bring the runout well within the allowable limits of .005 inch or: .008 inch minus .007 inch (offset dowels) equals .001 inch runout. Dowels must be used in pairs *(same part number)*.

(3) To install the dowel pins (pair), remove clutch housing (after disconnecting and removing starting motor). Remove dowel pins from engine block. Select eccentric dowels (pair) which are available with the following amount of offset: .007" (No. 1736347), .014" (No. 1736348), .021" (No. 1736353).

The amount of eccentricity of the dowel will produce a total indicator reading change of double the dowel eccentricity, therefore, a pair of dowels with the nearest to ½ of the total indicator runout of the bore. For runout (total indicator reading) of .012" through .020", use a .007" dowel (P/N 1736347), .022" through .034", use .014": dowel P/N 1736348), and .036" through .052", use .021" dowel (P/N 1736353).

(4) Install both dowels with the slots parallel and aligned in the direction to correct the bore runout. (Slot indicates the direction of

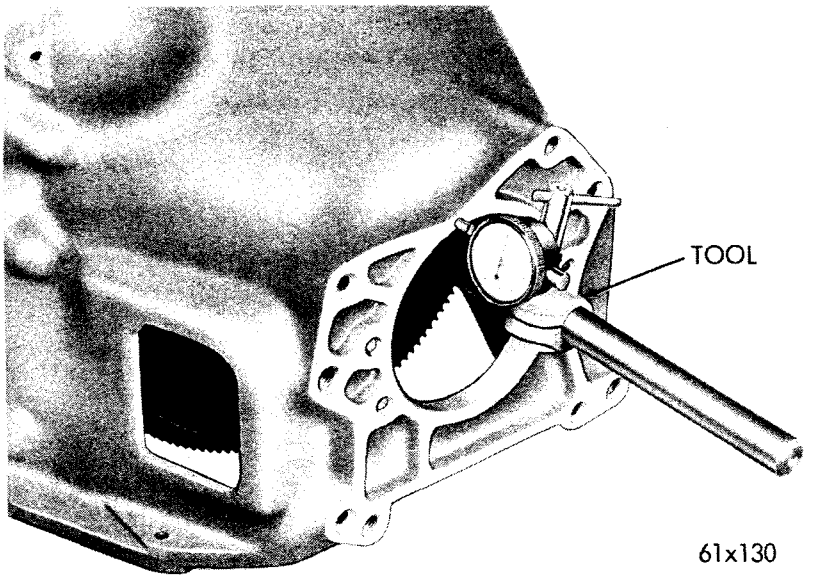


Fig. 72—Checking Clutch Housing Alignment

maximum dowel eccentricity.) Both dowels must be inserted into engine block, up to off-set shoulder.

(5) Install and tighten clutch housing bolts to 50 foot-pounds. Remount dial indicator and recheck bore runout. Small corrections can be made by removing clutch housing (if necessary) and turning dowels with a screw driver to shift the housing and bring bore within limits. (Refer to Fig. 72.)

(6) Relocate dial indicator, as shown in Figure 72. Rotate flywheel, using Tool C-771. If the total indicator reading is greater than .003 note the amount of the total indicator reading and the location of the lowest indicator reading (i.e., the point where the indicator arm or follower is extended the furthest.)

(7) To correct excessive runout, place proper thickness of shim stock between the clutch housing and engine block or between transmission and clutch housing. After rechecking face runout, tighten housing bolts to 50 foot-pounds. Install transmission.

STEAM CLEANING PRECAUTIONS

The clutch housing, being ventilated, steam vapor condenses and moisture settles on the internal moving parts of clutch mechanism. The facings of the disc will absorb moisture and under the force exerted by the pressure plate, will bond the facings to flywheel and/or the pressure

plate, if the engine is allowed to stand for some time before use. If this condition occurs, it will necessitate complete replacement of disc, pressure plate, flywheel and/or driving plate. *Immediately after the cleaning operation, start engine and "slip the clutch" in order to dry off the disc assembly, pressure plate and/or flywheel.*

PREPARATION FOR STORAGE

When the engine is to be stored or removed from operation for an extended period of time, the following precautions should be taken to prevent rust accumulation, corrosion of bearing and mating surfaces within the engine, and gum formation in the fuel system.

(1) Drain the lubricating oil from the engine and add 2½ quarts of Rust Preventive Oil which may be obtained from a reliable oil company.

(2) Drain the cooling system, add MOPAR RUST RESISTOR and fill with clean water.

(3) Add one quart of special rust preventive oil to each five gallons of gasoline in the fuel tank.

(4) Drain the fuel tank and operate the engine until the carburetor runs dry.

NOTE

The purpose of this operation is to aid in preventing the carburetor from being contaminated with gums that normally form in the gasoline as a result of its prolonged exposure to the oxygen in the air. Failure to take this precaution generally results in carburetor flat spots or other carburetor malfunctioning.

(5) Remove the spark plugs and pour two ounces of rust preventive oil into each spark plug opening. Turn the engine over four or five revolutions with the starting motor to distribute the rust preventive oil on the cylinder walls and install the plugs.

(6) Remove the cylinder head covers, and using a clean paint brush, coat the rocker arms, the rocker arm shafts, the valve springs, the push rods and the valve stems with special rust preventive oil.

(7) Drain the cooling system.

(8) Remove the carburetor air cleaner, the oil filler pipe air cleaner and the outlet ventilator pipe air cleaner. Seal the openings with masking or adhesive tape. Also, seal the exhaust outlet opening in the exhaust manifold or exhaust pipe.

(9) Replace the element in the oil filter after cleaning the filter housing.

(10) Remove the storage battery and store in a cool, dry place. Replenish the water in the battery cells to cover the plates 3/8 inch. See that the battery is fully charged and keep it fully charged during the idle period.

(11) Protect the engine with a waterproof cover if it is exposed to the weather.

(12) Make periodic inspections to see that the engine is properly stored and that all seals are intact.

(13) The Rust Preventive Oil should be drained prior to putting the engine back into operation. The crankcase should then be filled with the recommended engine oil for the operating conditions being encountered.

Ordering of Parts

The exploded views shown in this book are intended to enable the operator to better understand the general construction of Chrysler Industrial Engines, and to assist in ordering parts.

The views are helpful in determining the sequence of assembly and function of the various parts; therefore, they will be of considerable assistance when making adjustments or repairs.

Important

Orders for parts should be placed with the nearest Authorized Dealer. Authorized Dealers are in possession of complete parts information and can, in most instances, promptly supply your parts requirements from their inventory. If you do not know the location of your nearest Chrysler Industrial Engine Dealer, a card addressed to the Industrial Engine Division, Chrysler Corporation, P.O. Box 1, Marysville, Michigan 48040, will bring you his name and address promptly.

MOST IMPORTANT in ordering parts is the proper identification of the engine. ALWAYS mention the Model, Type and Serial Number. (Sample: Model H-225, Type 640, Serial Number E-XXXXXX). This information is stamped on the identification plate (located on the side of engine) and should be mentioned in all parts orders or communications. The number stamped on the front end of the cylinder block at the upper right hand corner is a manufacturing code and should NOT be used for the purpose of identification.

used for the purpose of identification.

DATA AND SPECIFICATIONS

Make	CHRYSLER INDUSTRIAL ENGINE
Model	H-225, HB-225, I-225
Type	6 cyl. In-line, Valve-in-head
Piston Displacement	225 cu. in.
Bore	3.40 inches
Stroke	4.125 inches
Compression Ratio	8.4 to 1
Compression Pressure	
at 150 r.p.m. cranking speed and wide open throttle	120 to 150 p.s.i.
Maximum variation between cylinders	20 p.s.i.
Oil Pressure	
Operating oil pressure at 2000 r.p.m.	30 p.s.i. to 70 p.s.i.
Minimum oil pressure at idle r.p.m.	8 p.s.i.
Crankcase Oil Capacity	5 qts.* or 4 qt. on passenger type oil pans
Cooling System Capacity	
with radiator	12 qts.**
without radiator	8 qts.

*When oil filter is changed add 1 qt.

**Depending on radiator size.

ENGINE TUNE-UP SPECIFICATIONS

For electronic ignition system—see service manual. For air gap setting—see below.

Breaker Point Distributors:

Distributor Point Gap	.014 to .019"
Distributor Point Dwell	40° to 45°
Firing Order	1-5-3-6-2-4
Idle Speed	500 RPM

Initial Spark Advance: As shown on individual engine specification sheet.

Up to 1975 Models:

Spark Plugs—Standard	Champion N-6
—Light Duty	Champion N-14Y

1975 & After Models:

Spark Plugs—Standard	BL11Y or RBL11Y
—Medium	BL13Y or RBL13Y
—Light	BL15Y or RBL15Y
Spark Plug Gap	.035"
Spark Plug Torque	30 Ft Lbs (N Series) 10 Ft Lbs (BL Series)

Tappet Adjustment—

Intake	.012" (Hot)
Exhaust	.024" (Hot)
Recommended Fuel	"Regular" grade automotive fuel of 91 Octane Research Method. 87 Octane Motor Method.

AIR GAP ADJUSTMENT

(1) Align one reluctor tooth with pick up coil tooth.
(2) Loosen pick up coil hold down screw.
(3) Insert .006 non-magnetic feeler guage between reluctor tooth and pick up coil tooth.
(4) Adjust air gap so that contact is made between reluctor tooth, feeler guage, and pick up coil tooth.
(5) Tighten hold down screw.
(6) Remove feeler guage. NOTE: No force should be required in removing feeler guage.
(7) Check air gap with .008 feeler guage. A .008 feeler guage can be forced into air gap. DO NOT FORCE FEELER GUAGE INTO AIR GAP.
(8) Apply vacuum to vacuum unit and rotate governor shaft. Pickup pole should not hit reluctor teeth. Gap was not properly adjusted if hitting occurs on only one side of reluctor, the distributor shaft is probably bent. Replace governor and shaft assembly.