

2. Crank the engine until the breaker arm rubbing block reaches the top of the cam.
3. Adjust the point gap to 0.4 ~ 0.5 mm (0.016 ~ 0.02 in.). If the points are replaced with new points, there is initial wear of the rubbing block to be considered, therefore, set the point gap at 0.5 mm (0.02 in.).

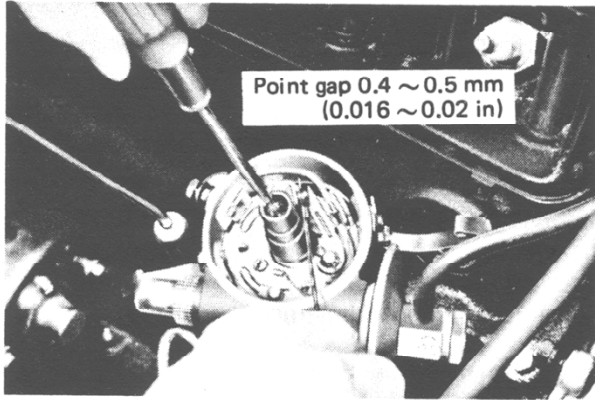


Fig. 1-9 Point Gap Inspection

- (1) If point gap is wide.

The point closing time will be shorter, and as the current flowing into the primary circuit becomes insufficient, the secondary voltage will be low, thus, the ignition spark will be weak especially at high speed.

- (2) If point gap is narrow.

As the point closing time will be too long, the ignition spark created during dwell will be too long, thus, points burning will be quicker and secondary voltage will be low.

4. Wipe the point surfaces with trichloroethylene.

As the trichloroethylene affects bakelite and painted surface, carefully handle upon usage.

Caution:

Also wipe the new point surfaces when replaced.

RESISTIVE CORD INSPECTION

Resistance inspection

Measure the resistance between both terminals of resistive cord with the circuit tester.

If the resistance exceeds the limit, replace as the cord is open-circuited.

Limit: 25K Ω per meter
Specified resistance: 16K Ω per meter

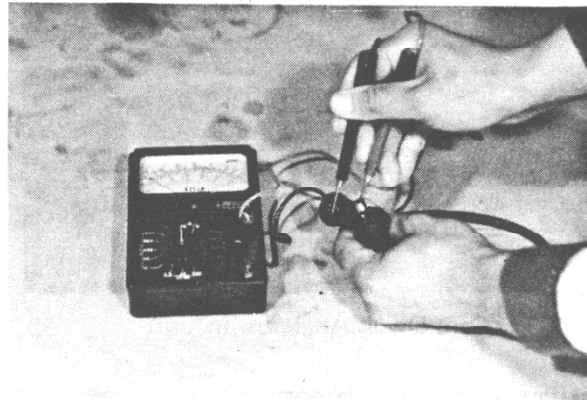


Fig. 1-10 Resistive Cord Resistance Inspection

Caution:

For measurement, connect the circuit tester prongs onto the ends of the cord, and while holding the center with the fingers, inspect the conductance.

It is normal if the indicator does not vibrate when the cord is shaken.

Installation

1. If the cord insertion is loose, install after correcting with pliers.
2. Confirm the installation of the primary wire on the distributor and ignition coil.

CAM DWELL ANGLE INSPECTION (Point type)

Caution:

Before inspection, set the engine at idle revolution.

1. The cam dwell angle inspection is to inspect whether it is within the specified value or not at low revolution.
2. Accelerate the engine from low to intermediate then to high revolution, and inspect the variation of cam dwell angle.

Adjustable range: 50 ~ 54°

- (1) If larger than specified range.

The distributor point gap is narrow.

- (2) If smaller than specified range.
The distributor point gap is wide.
- (3) If dwell angle varies.
The distributor cam is worn.
The breaker arm is defective (spring weak).

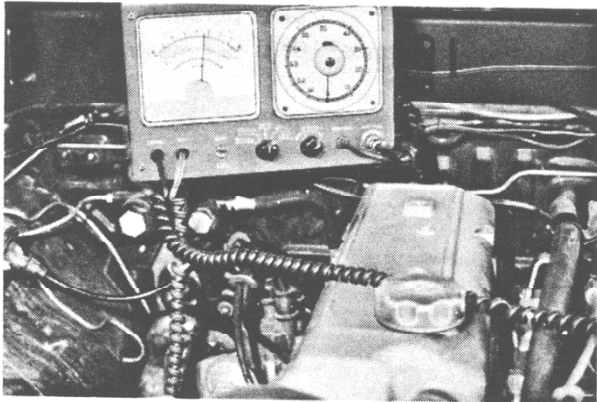


Fig. 1-11 Cam Dwell Angle Inspection

IGNITION TIMING INSPECTION

Caution:

Set the octane selector at standard position.
To adjust the timing, rotate the distributor assembly, and do not perform with the octane selector.

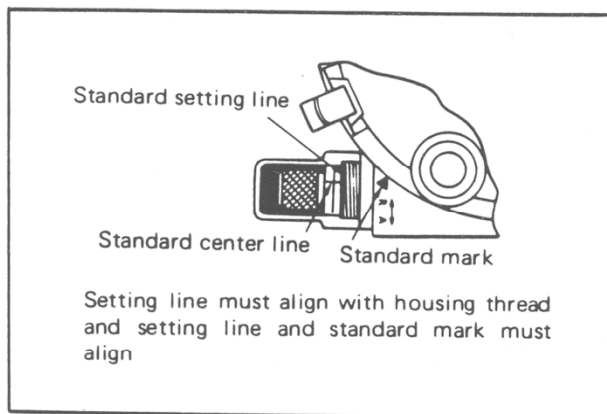


Fig. 1-12 Octane Selector Standard Position

Timing inspection

Inspect with the timing light, and it is satisfactory if the ignition timing marks align during engine idle revolution.

If the timing is incorrect, loosen the distributor clamp, and adjust by rotating the distributor assembly to counter-clockwise or clockwise direction.

If the timing pointer and timing ball or slot are misaligned in the same direction as pulley rotation, the timing is advanced, therefore, rotate the distributor clockwise.

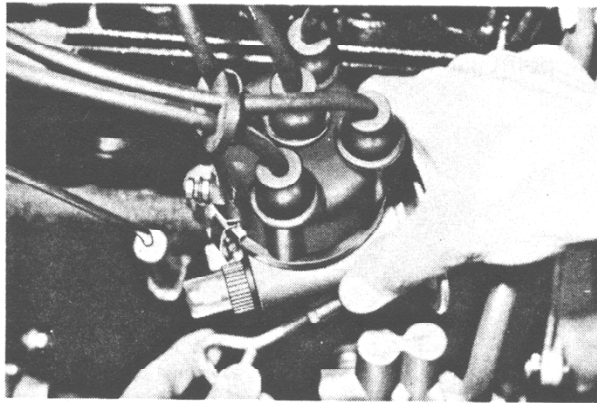


Fig. 1-13 Timing Adjustment

Advancement inspection

While observing the timing ball or slot, it is satisfactory if it advances at the same time when the engine is accelerated.

If it does not advance, the vacuum controller diaphragm is defective or vacuum pipe is clogged, therefore, inspect the governor operation.

If the timing ball or slot moves in the opposite direction of pulley rotation, the vacuum controller and governor are operating properly.

Adjustment for gasoline octane rating.

Depending on the gasoline octane rating, adjust the adequate of the ignition timing with the octane selector.

For adjustment, drive the vehicle in top speed, and accelerate from permissible low speed. Slight "ping" will be produced, and this "ping" will disappear gradually.

If the "ping" is loud, rotate toward R direction.

If there is no "ping", rotate toward A direction.

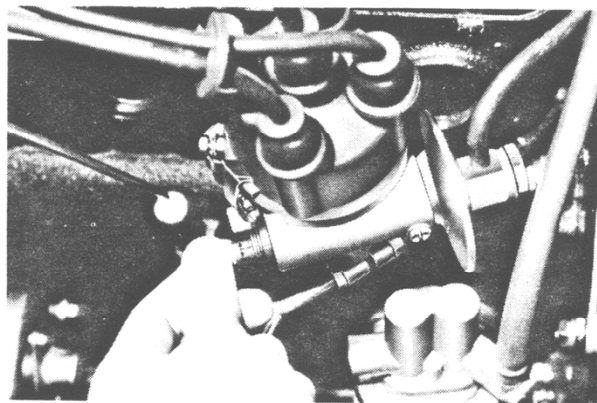


Fig. 1-14 Octane Selector Adjustment

Caution:

- (1) The timing will advance when the octane selector is turned to A direction, and will retard when turned to R direction.
- (2) The selector adjustable range is equivalent to 14 ~ 20° of crankshaft angle, and this has no relation with the vacuum advancer characteristics.

VALVE CLEARANCE INSPECTION & ADJUSTMENT

The valve clearances are required to prevent malfunction of valve timing due to over lifting of the valves from heat expansion of engine components.

Preparation

If required, tighten the following locations while hot.

- Cylinder head securing bolts
- Valve rocker supports securing bolts
- Intake manifold securing bolts

Inspection

Confirm that rocker arms and valve stems are lubricated, and it is satisfactory if the valve clearances are within the specified values with coolant temperature at 75 ~ 85°C (167 ~ 185°F) at engine idle revolution.

Valve clearances:

Intake: 0.20 mm (0.008 in.)

Exhaust: 0.36 mm (0.014 in.)

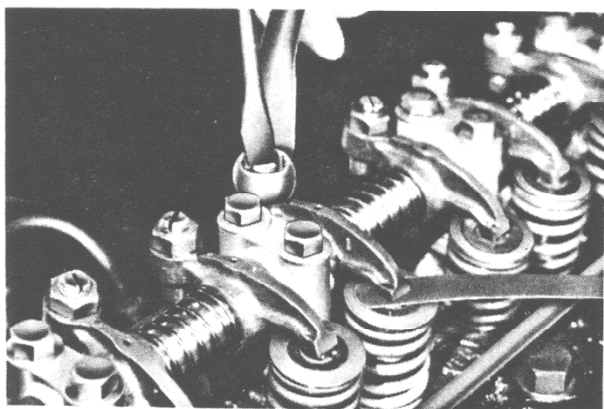


Fig. 1-15 Valve Clearance Adjustment

1. When too wide.
Will produce noise (will malfunction the intake and exhaust timing).
2. When too narrow.
Will reduce power due to over lifting of valves (will reduce compression pressure).

Caution:

- (1) Utilize specified thickness feeler gauge.
- (2) Do not utilize worn or extremely damaged gauge.
- (3) Do not force in the gauge into tight or narrow clearance.
- (4) During adjustment, carefully check so that splashed oil will not dirty the surrounding.
- (5) After inspection and adjustment, when installing the rocker arm cover, also inspect the gasket for deformation and damage.

CARBURETOR INSPECTION & ADJUSTMENT**Idle adjustment**

1. Remove the intake manifold suction hole plug, install the fitting for vacuum outlet, and connect the vacuum gauge.
2. Warm the engine until the coolant temperature reaches 75 ~ 85°C (167 ~ 185°F)
3. Connect the engine tachometer.
4. Turn the throttle adjusting screw until the engine operates smoothly at low revolution.
5. Turn the idle adjusting screw, and set at maximum vacuum reading.
6. Adjust the throttle adjusting screw and idle adjusting screw alternately with maximum vacuum reading.

Idle revolution: 650 ± 50 rpm

Idle vacuum: Over 400 mmHg (16 inHg)

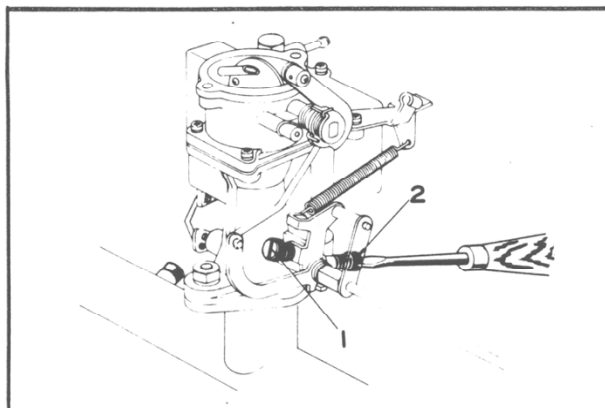


Fig. 1-16 Throttle Adjusting Screw Adjustment

Intermediate speed inspection

Gradually open the throttle valve, and inspect if the engine revolution increases smoothly in relation to valve opening angle.