DISTRIBUTOR
CHRYSLER PRESTOLITE 3755056

To Remove

Position the truck on full right hand lock.

Disconnect the battery.

Open and secure the bonnet.

Remove front and rear engine covers inside the cab.

Remove the front right hand sound insulation panel.

Securely chock one front wheel.

Raise the right hand rear wheel clear of the ground, release handbrake and engage top gear.

Disconnect vacuum pipe at distributor.

Disconnect the distributor two pin connector.

Release the retaining clips and lift off the distributor cap.

Rotate the rear wheel until rotor is in position as shown in Fig. 1 approximately 30°.

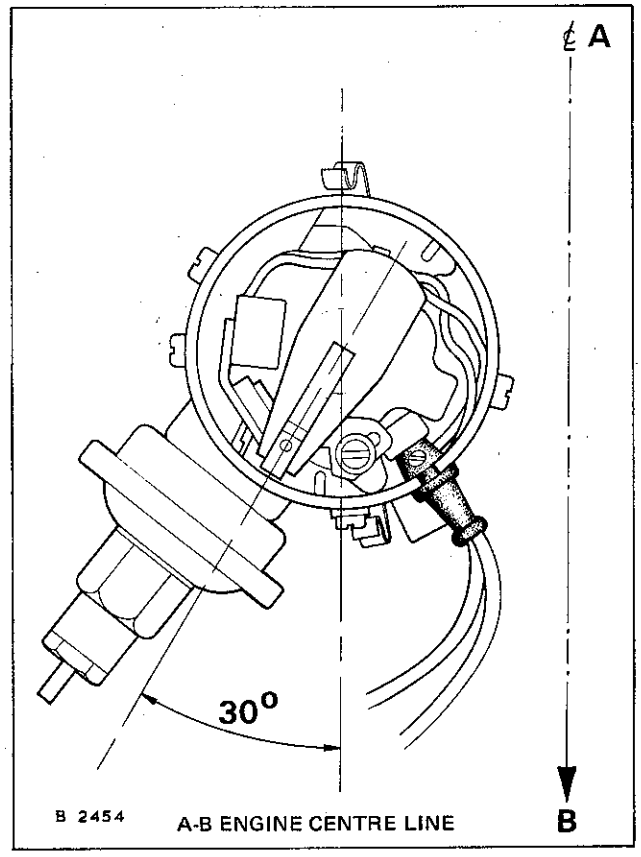


Fig. 1 *Rotor position for distributor removal*

The crankshaft pulley/damper has three slots at 120° around the periphery, one long slot and two short slots. With the rotor in position as shown in Fig. 1, it should be found that the longest slot is now aligned to the timing marks on timing cover indicator strip. Make a paint or chalk mark on pulley to assist strobe lamp timing during refitting.

Remove the bolt and retaining clamp, and withdraw the distributor body from the engine.

To Refit

Refitting is a reversal of the removal procedure noting the following.

Ensure "O" ring is fitted to distributor body shank.

Ensure that the engine has not been turned after distributor removal.

The rotor turns approximately 30° clockwise as the distributor drive gear engages the camshaft, the rotor should therefore point directly to front of vehicle (approximately) as distributor shank is entered to crankcase.

With the rotor fitted as shown in Fig. 1, check that a tooth of the reluctor is immediately aligned with the pick-up coil pole piece. If necessary, rotate the distributor body in the crankcase to obtain this condition. Nip the clamp bolt sufficiently to permit fine adjustment later. This setting will give an "Engine Start" condition.

Final ignition timing must be carried out using a strobe lamp.

Where an engine has been removed from the chassis for overhaul, refit the distributor before refitting the engine.

In order to identify No. 1 cylinder firing stroke following overhaul, remove No. 1 spark plug, turn crankshaft until compression is felt at the spark plug hole with the finger.

IGNITION TIMING

To obtain maximum engine performance, the distributor must be correctly positioned on the engine to give proper ignition timing.

The ignition timing test will indicate timing of the spark at number one cylinder.

Connect a suitable strobe timing light to No. 1 cylinder as per manufacturers instructions.

Connect a suitable tachometer to the engine.

Start and run the engine until operating temperature is obtained. Check that the automatic choke is fully disengaged and the throttle stop is fully disengaged from the fast idle cam, so that the engine idles at normal idling speed.

Note: If the timing is considerably displaced, it may be found that the engine stalls as the choke/fast idle cam setting becomes reduced as the engine warms up, particularly if the timing is excessively retarded. In this event, adjust the timing by rotating the distributor body relative to the engine (anti-clockwise movement advances the timing) until a consistant idle speed can be obtained.

Disconnect vacuum hose at distributor and plug vacuum hose.

Loosen the clamping bolt sufficiently so that the distributor can be rotated in its mounting.

Ensure calibration marks are visible on timing cover indicator strip. Divisions at 2° intervals, with numbers indicating 0° (T.D.C.) and 10° and 20° B.T.D.C. are provided.

Adjust distributor body until previously marked slot on crank pulley strobes to Data ignition timing point. Turn the distributor body clockwise to retard the timing, anti-clockwise to advance it.

Note: As timing is corrected to Data figure, engine idling speed may change appreciably. As correct point is approached, check and if necessary reset idling speed, before making final timing adjustment check.

Tighten the distributor clamping bolt and recheck timing.

Stop engine and reconnect vacuum pipe.

Disconnect strobe and tachometer.

Refit side insulation panel and rear engine covers.

Shaft and Bushing Wear Test

Remove the distributor as described previously.

Remove rotor.

Clamp distributor in a soft jawed vice.

Attach a dial indicator to distributor housing so indicator plunger arm rests against reluctor.

Place one end of a wire loop around the shaft just above the reluctor.

Hook a spring scale in the other end of the wire loop. Apply a one pound pull toward the dial indicator and a one pound pull away from the indicator. If the total indicator plunger movement exceeds 0.152 mm (0.006 in) renew the distributor housing or shaft assembly.

To Dismantle (Fig. 2)

Remove the distributor as described previously.

Remove rotor.

Remove reluctor and locating pin by prying up from the bottom of the reluctor with two pry bars or screwdrivers. Care should be taken not to distort or damage reluctor teeth.

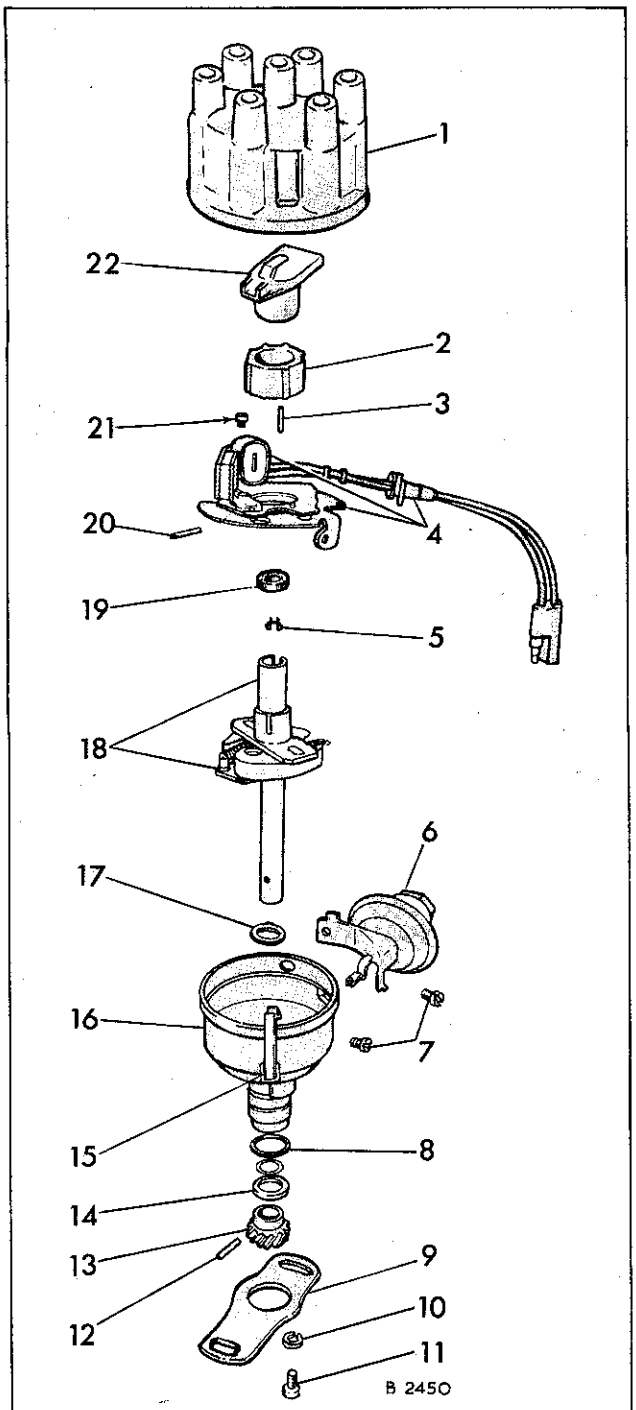
Remove two screws and lockwashers securing the vacuum control unit.

Ease up pick-up base sufficiently to disconnect vacuum control arm and remove unit.

Remove two screws and lockwashers securing base assembly to housing, lift out assembly. To renew pick-up coil see "Pick-up Coil Renewal". If the side play exceeds 0.152 mm (0.006 in) in Shaft and Bushing Wear Test renew distributor housing or shaft and governor assembly as follows.

Remove distributor drive gear retaining pin and slide gear off end of shaft. If gear is worn or damaged see "To Re-assemble". Use a file to clean burrs from around pin hole in the shaft and remove the lower thrust washer.

Push the shaft up and remove shaft assembly and upper thrust washer from distributor body.



1.CAP
2.RELUCTOR
3.RELUCTOR LOCATING PIN
4.PICK-UP COIL AND PLATE ASSEMBLY
5.SNAP RING
6.VACUUM CONTROL UNIT
7.SCREWS
8."O" RING
9.CLAMP PLATE
10.WASHER
11.SCREW
12.ROLL PIN
13.DRIVE GEAR
14.LOWER THRUST WASHER
15.SPRING CLIP
16.HOUSING
17.UPPER THRUST WASHER
18.SHAFT ASSEMBLY
19.SPACER
20.LOCATING PIN
21.SCREW
22.ROTOR

Fig. 2 *Distributor details*

To Re-assemble

Test operation of governor weights and inspect weight springs for distortion.

Lubricate governor weights.

Inspect all bearing surfaces and pivot pins for roughness, binding or excessive looseness.

Lubricate and install upper thrust washer on shaft assembly, slide shaft assembly into the distributor body.

If drive gear is worn or damaged, renew as follows.

Install lower thrust washer and old gear on shaft and temporarily install roll pin.

Scribe a line on the end of shaft from centre to edge, so line is centred between two gear teeth as shown in Fig. 3. Do not scribe completely across the shaft.

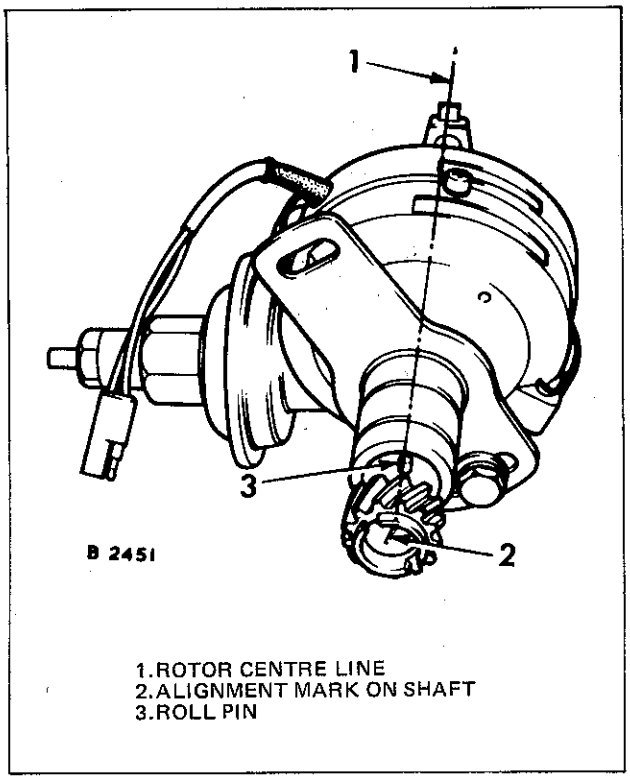


Fig. 3 *Scribe line on distributor shaft*

Remove roll pin and gear, clean burrs from around the pin hole.

Install new gear and thrust washer on shaft.

Place a 0.178 mm (0.007 in) feeler gauge between gear and thrust washer. Drill a 3.15 – 3.28 mm (0.124 – 0.129 in) hole in gear and shaft approximately 90° from old hole in shaft and with scribed line centred between the two gear teeth as shown in Fig 4.

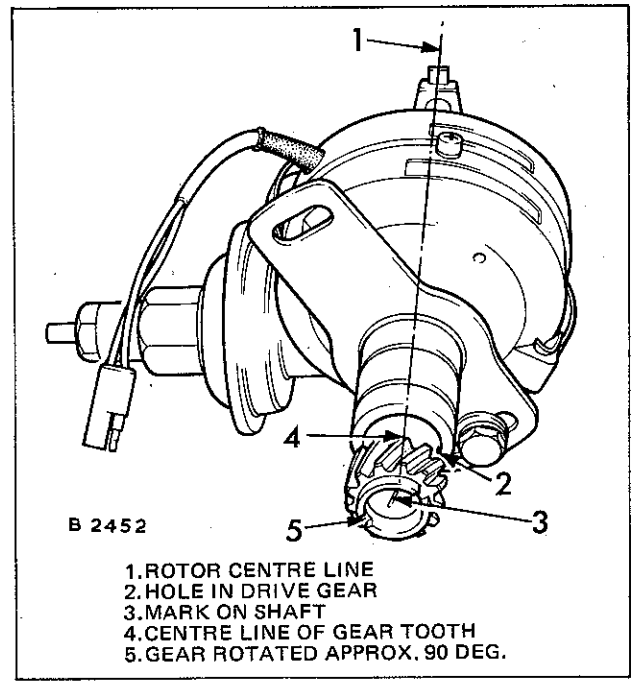


Fig. 4 *Aligning gear teeth with rotor centre line*

Secure drive gear with roll pin.

Note: Support hub of gear when installing roll pin to prevent damage to teeth.

Install the base assembly into housing, ensuring the locating pin fits correctly. Secure with two screws and lockwashers.

Ease up pick-up base sufficiently to connect vacuum control arm. Position vacuum control unit on locating pin and secure with two screws and lockwashers.

Refit the reluctor ensuring the locating pin correctly fits into shaft.

Lubricate the felt pad in top of shaft with one drop of engine oil and install the rotor.

Refit the distributor as described previously.

PICK-UP COIL RENEWAL

To Dismantle

Remove distributor as described previously.

Remove rotor.

Remove reluctor and locating pin by prying up from the bottom of the reluctor with two pry bars or screwdrivers. Care should be taken not to distort or damage reluctor teeth.

Remove two screws and lockwashers securing the vacuum control unit. Ease up pick-up base sufficiently to disconnect vacuum control arm and remove unit.

Remove two screws and lockwashers securing base assembly to housing, lift out assembly.

Remove upper plate and pick-up coil assembly from lower plate by depressing retainer clip on underside of lower plate and moving it away from attaching stud.

Note: Pick-up coil is not removable from upper plate, they are renewed as an assembly.

To Re-assemble

Lubricate upper plate support pins located on lower plate.

Position upper plate on lower plate, install retainer clip, depress and lock into place.

Install the base assembly into housing, ensuring the locating pin fits correctly. Secure with two screws and lockwashers.

Refit the reluctor ensuring the locating pin correctly fits into shaft.

Refit the rotor.

Refit the distributor as described previously.

AIR GAP ADJUSTMENT

Align one reluctor tooth with pick-up coil tooth.

Loosen pick-up coil base screw.

Insert 0.152 mm (0.006 in) non-magnetic feeler gauge between reluctor tooth and pick-up coil tooth.

Adjust air gap so that contact is made between reluctor tooth, feeler gauge and pick-up coil tooth.

Tighten base screw.

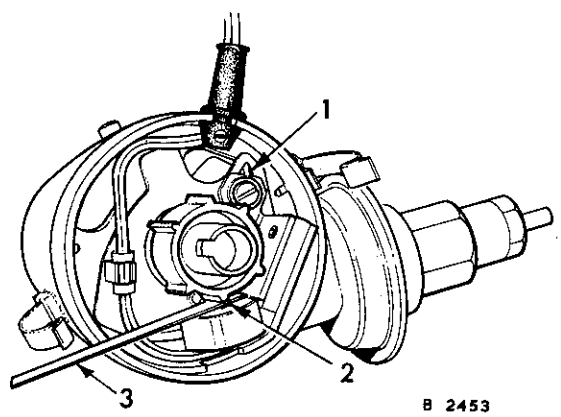
Remove feeler gauge.

Note: No force should be required in removing feeler gauge.

Check air gap with 0.2032 mm (0.008 in) feeler gauge. The feeler gauge should not fit into air gap, although it can be forced into air gap. DO NOT FORCE FEELER GAUGE INTO AIR GAP.

Apply vacuum to vacuum unit and rotate governor shaft.

Pick-up pole should not hit reluctor teeth. If hitting occurs on only one side of reluctor the shaft is probably bent, renew governor and shaft assembly.



1. PICK-UP COIL BASE SCREW
2. AIR GAP
3. NON-MAGNETIC FEELER GAUGE

Fig. 5 *Air gap adjustment*

DESCRIPTION AND MODIFICATIONS

This may seem a little out of place but I have heard about problems with people stealing work and selling it - for example on eBay.

If you're reading this and you bought this manual anywhere then you have been ripped off.

Please contact me via my email mikejamson@hotmail.com Otherwise I can be found on the dodge50 facebook page, if not then get in contact with Greg and he can pass the message on to me.

I have note done this pdf manual for my own personal gain and wish to see the community of 50 series owners benefit from the information here, and I do not want to see the community get taken advantage of and somebody else gain from it unfairly.

The information in pdf format will hopefully allow more of these wonderful trucks to stay on the road by providing information to everybody.

This has been quite a long and involved process to scan the manual and to convert it into a pdf format. I do aplogise as I have used several different scanners and several different computers to do it, so there are no doubt some errors hidden throughout, as well as some editing errors.

I have aimed to balance quality and file size and hope that this balance meets to everybody's approval.

If you see an error please let me know and I will fix it as soon as I can.