

The distributing mechanism consists of contact points, one of which is pivoted and driven by the four lobe distributor cam; an insulated rotor which is mounted on the top of the cam so that its electrode points to the stationary electrode of the correct spark plug wire at the instant the breaker points open; and a cap of high grade insulating material which contains the sockets and electrodes for the four spark plug wires the high voltage wire from the ignition coil and covers the distributor housing. The impulse initiated by the breaker points causes a high voltage current to flow from the coil to the center terminal on the distributor cap and through a spring loaded carbon brush to the rotor from which it jumps over an air gap of approx. 0.3 to 0.7 mm (.118 to .276 in.) to the electrode at the edge of the distributor cap and finally to the spark plugs.

The distributor is ventilated by holes in the bottom of the housing so that the ozone generated by the spark from the rotor to the wire terminals may escape. The harmful effects of the ozone are thereby reduced. The condenser, connected in parallel to the contact points, is located on the outside of distributor housing.

Maintenance

Dirty or slightly burned breaker points should be cleaned with a contact file, which is designed especially for this purpose. Emery cloth should never

be used. The contact surfaces must be flat and smooth to insure a parallel contact when closed. This is accomplished by filing with light pressure against the stationary contact while the movable contact presses against the file. It is important to file parallel to the contact surface. Clean the filings from the distributor with compressed air. The cam lobes should be slightly greased to reduce wear of the fiber block to a minimum.

A few drops of engine oil should be applied to the distributor shaft through the contact-breaker plate when carrying out the first service inspection of the car. Care should be taken that no oil gets on the contacts of the breaker points.

The rotor finger and the four electrodes of the distributor cap are subjected to a certain amount of erosion from continuous sparking during operation. Misfiring may occur, if the insulating material of the distributor cap or the rotor is cracked. The cap must be kept clean and dry inside and outside to prevent high voltage leaks. When mounting the cap, insure that the spring loaded brush for the rotor has not been left out and is in good working order. The rotor must be fully seated to insure proper operation.