moving the magneto but when necessary, the drive collar nut L can be loosened to permit relative movement of the engine drive shaft in collar K. The drive member slots J can then be turned for alignment with the impulse coupling lugs, after which the nut L should be tightened. The locking lugs M of the washer should be turned up around the nut to prevent its coming loose.

## Primary Ground Switches

Engines may be stopped by shutting off the fuel supply or grounding out the magneto ignition circuit. Shutting off the fuel supply has the disadvantage of not stopping the engine quickly, while grounding the ignition circuit stops the engine at once.

Battery ignition systems must be opened to stop the engine while in magneto ignition systems the ignition circuit must be grounded to stop the engine.

Primary ground swtiches must be located in the primary circuit of either type magneto, Fig. 26. The action is instantaneous and fuel is left in the fuel system for immediate starting.

There are many types or styles of ground switches, but in general they may be divided into two groups, those located on the unit and those located away from the unit.

On the self-mounted ground switch, a wire is run from the primary terminal of the coil to a spring switch mounted on the magneto housing and is so arranged that when operated the primary circuit is grounded. On the mounted switch the same primary coil wire is extended to the control panel, usually through an intermediate terminal mounted on the magneto.

When stopping the engine by grounding out the primary circuit, the switch must be kept closed until the engine stops.

## Radio Shielded Magnetos

The high voltage spark discharge, which provides ignition for the engine, often causes interference in radio reception. Frequently it is necessary or desirable to eliminate this interference, Fig. 27. In principle, the radio shielding of a magneto requires the replacement of the plastic end cap by an all metal end cap with an insulated plastic distributor block mounted inside. Special outlets are provided for the metal encased high tension cables, and the spark plugs are metal covered. All this exterior metal housing is interconnected and grounded to function as a shield and absorb the interference causing waves. On certain magnetos for military applications the primary ground terminal is located on the end of the feed-thru condenser or on the end of the primary circuit connector.

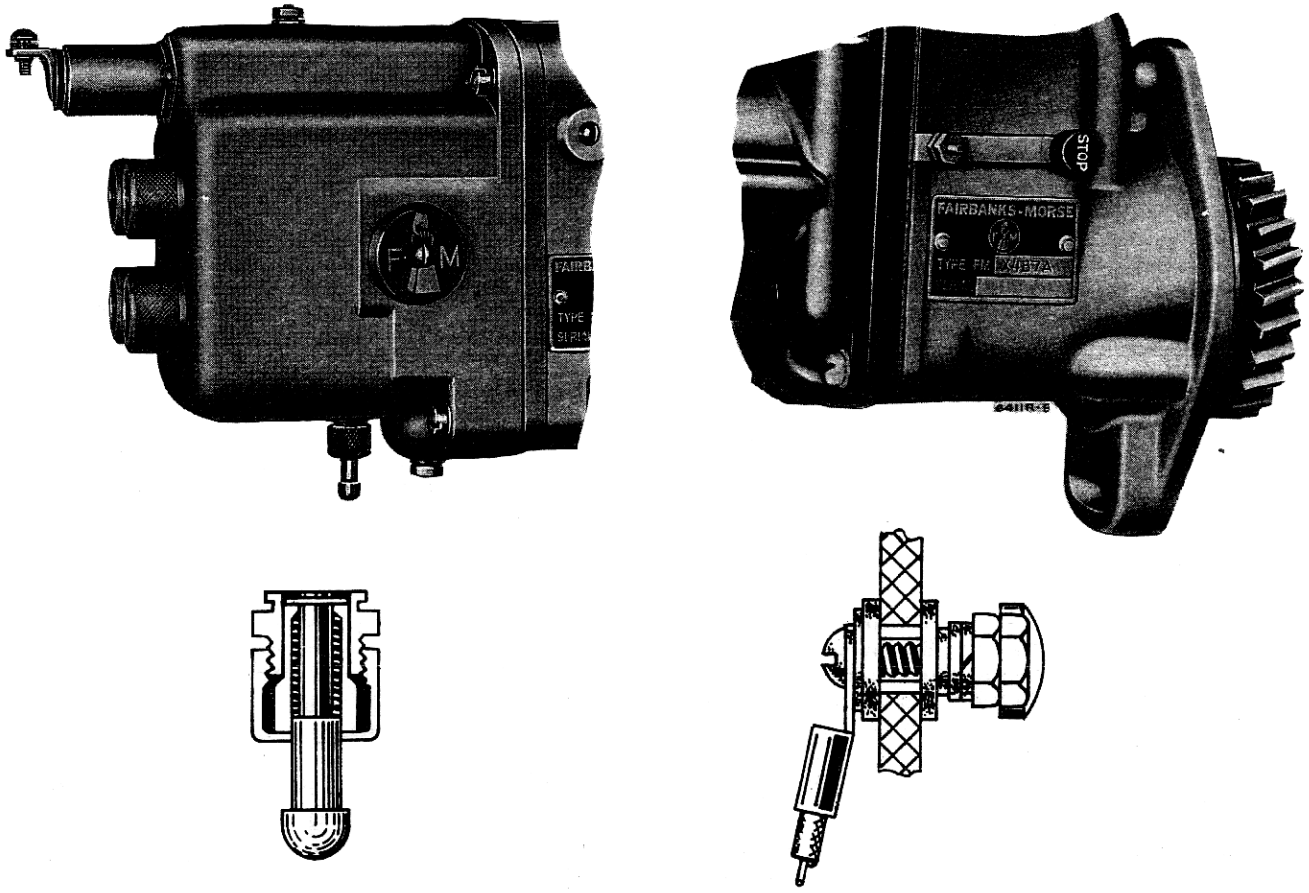


Fig. 26. Push-button and Lever Type Type Ground Switches