

A. OM 636

The mechanical-electrical glow starter and stop switch is a rotary switch with four switch positions: stop position, driving position, pre-heating position, and starting position. Furthermore, a locking device has been incorporated in the glow starter and stop switch, which allows the removal of the key only in the stop position of vehicles with steering lock.

The Figure 15-33/1 shows the electrical wiring diagram of the individual parts participating in the starting procedure. In this wiring diagram the glow starter and stop switch is shown in driving position (0).

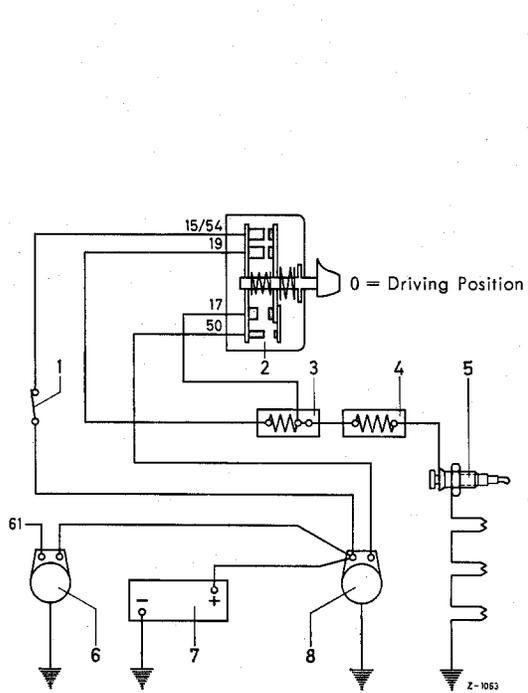


Figure 15-33/1

- | | |
|--------------------------------|-------------|
| 1 Main switch | 5 Glow plug |
| 2 Glow starter and stop switch | 6 Generator |
| 3 Glow control light | 7 Battery |
| 4 Series resistance | 8 Starter |

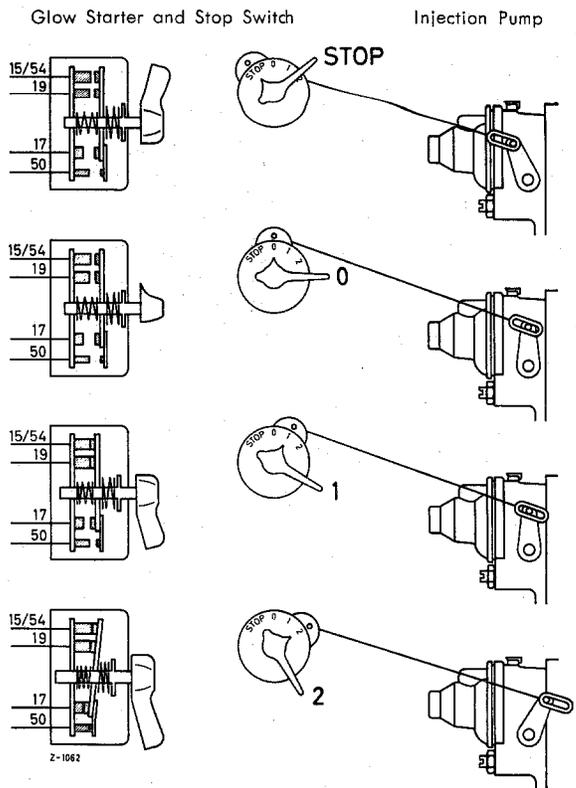


Figure 15-33/2

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|--------------------------|
| S = Stop position |
| 0 = Driving position |
| 1 = Pre-heating position |
| 2 = Starting position |

Description of the four Switch Positions (see Figure 15-33/2):

The entire system is ready for operation only with the closing of the main switch (1). This is done by turning the key to the position "Fahrt" (driving) (see Figure 15-33/1).

a) STOP = Stop Position

In the stop position the handle of the rotary switch is turned fully counter-clockwise and the adjusting lever at the injection pump is pulled fully towards the rear by way of the bowden

cable. In this position of the adjusting lever the control rod is in the stop position, the plungers of the pump elements are set to no delivery, the engine no longer receives fuel and stops. The terminals 19, 50 and 17 are dead in this position.

The key of the main switch can be removed.

b) 0 = Driving Position

In the driving position the slotted eye of the bowden cable at the adjusting lever is set in such a way that the pin of the adjusting lever is located approximately in the center of the eye, the adjusting lever will therefore not be actuated. In this position the terminals 19, 50 and 17 are dead.

The key of the main switch **cannot** be removed.

c) 1 = Pre-heating Position

Turn the handle of the rotary switch from the driving position clockwise until a noticeable resistance can be felt at position 1. The switch must be held in this position until the pre-heating is completed (depends on the outer temperature and the operating temperature of the engine). In this position the terminal 19 is supplied with power which causes the glowing of the glow plugs (5) by way of the glow control light (3) and the series resistance (4) (Figure 15-33/1). The terminals 50 and 17 are dead in this position.

In the pre-heating position the slotted eye of the bowden cable is set in such a way that the eye does not touch the adjusting lever, i.e., the adjusting lever is not actuated.

d) 2 = Starting Position

After the completion of the pre-heating operation the handle of the glow starter switch is turned fully clockwise past the resistance indicating position 1 and is pressed against the stop until the engine starts.

In the starting position the pin of the adjusting lever rests against the other end of the eye (compared to stop position) and presses the adjusting lever fully towards the front. By this the control rod is moved fully in direction "full" beyond the full load stop and the injection pump injects the starting fuel quantity.

In addition to the terminal 19, the terminals 50 and 17 are supplied with power. The starter (8) functions via the terminal 50. The glow plugs (5) are still supplied with power by way of the terminal 17 during the starting position, the glow control light (3), however, is bridged via the lead (17) and therefore out of operation (see Figure 15-33/1). The switching-off of the glow control light prevents that the heat output of the glow plugs is reduced too much during the starting operation.

If the handle of the rotary switch is released after the engine has started, the handle will go back to the driving position, position 0.