

The operation of the automatic antenna has been modified. The antenna switch has 3 positions which can only be operated with the radio turned on.

### 1. Antenna switch in mid position

The antenna extends automatically approximately 30 cm (12") when the radio is turned on. By briefly touching the switch, the antenna can be adjusted for best reception.

### 2. Antenna switch locked in fully-extended position

The antenna extends to its full length.

### 3. Antenna switch locked in fully-retracted position

The antenna remains in fully-retracted position; for example, when using the tape cassette. Or, the antenna retracts fully if it was already extended.

If the ignition or the radio are turned off, the antenna will retract fully.

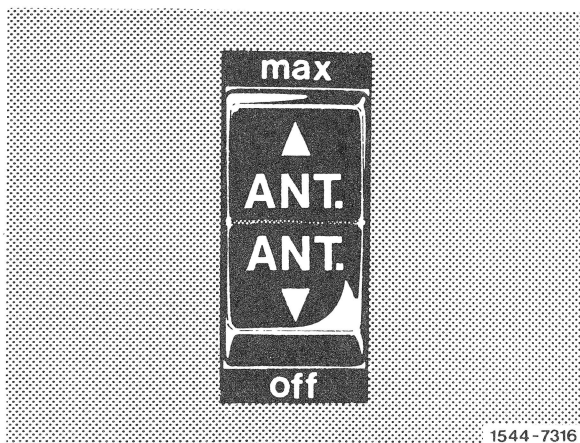


Fig. 16  
Antenna Switch

## Electrical Operation

### Antenna switch in mid position

When the radio is turned on, current flows to the relay coil "a" via the antenna switch and closes contacts "b" and "e".

The antenna motor obtains "plus" current from fuse g (term. 30) via contacts "d", "c", and "b", and "minus" current from contact "e".

The motor is actuated and the antenna extends. When the antenna has extended approximately 30 cm (12"), contact "c" is automatically opened, which breaks the electrical circuit to the motor.

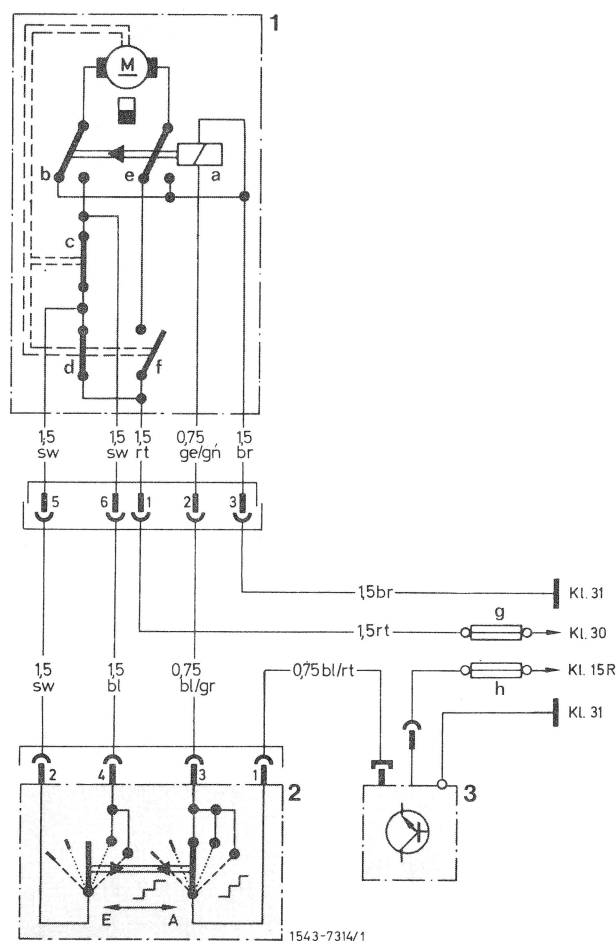


Fig. 17

### Wiring Diagram, automatic antenna

- 1 Automatic antenna
- 2 Antenna switch
- 3 Radio
- E Retract position
- A Extend position
- ... Touch position (in antenna switch 2)
- Fully depressed (locked) position (in antenna switch 2)
- g Fuse, automatic antenna (term. 30)
- h Fuse, radio (term. 15R)

**Antenna switch in touch position**

In the touch position, the contacts "d" and "c" are bridged by the antenna switch, so that the electrical circuit is closed again and the antenna can be raised or lowered by briefly touching the appropriate side of the switch.

**Antenna switch locked in fully-extended position**

In the fully-extended position, the contacts remain unchanged until the antenna is fully extended. Only then does contact "d" (stop switch) break the

electrical circuit to the motor. Contact "f" simultaneously closes.

**Antenna switch locked in fully-retracted position**

In the fully-retracted position, the antenna switch breaks the electrical circuit to the relay coil and both contacts "b" and "e" are in normal position. This causes a reversal of polarity at the motor, which rotates then in the opposite direction. When the antenna has fully retracted, the electrical circuit to the motor is interrupted by contact "f" (stop switch).