

# Headlight Adjustment

Job No.

82—2

When the headlights are adjusted, the car must be in normally loaded condition ( $6 \times 65 \text{ kg} + 45 \text{ kg}$  luggage in the trunk compartment). Various efficient headlight adjustment devices are marketed by firms specialising in accessories. These devices can be employed to adjust headlights quickly and effortlessly at any time of the day. The instructions given in each case by the manufacturer should be observed when using these devices.

If no such device is available, the headlights can be adjusted according to the following procedure.

## A. Adjustment of Main Headlights

1. Load the car with  $6 \times 65 \text{ kg} + 45 \text{ kg}$  luggage in the trunk compartment and push the car backward and forward several times so that the front and rear wheels adjust themselves to the load.
2. Stand the car on an even surface 5 m from a vertical headlight adjustment screen (Fig. 82—2/1).
3. Mark on the adjusting screen the height  $H$  of the headlights (center of beam) above the ground and their distance  $B$  or  $\frac{B}{2}$  (symmetrical) from the longitudinal axis of the car. This gives two adjusting crosses (see Fig. 82—2/1). Then 5 cm below the adjusting crosses draw in the boundary line for the lower beam (see Fig. 82—2/3).
4. Remove the ornamental rings from both headlights (see Job No. 82—1, Section A).
5. Switch on the upper beam and by turning the adjusting screw (2) adjust each headlight in the lateral plane (Fig. 82—2/2) so that the brightest spot on the illuminated area lies on the perpendicular which passes through the adjusting cross (Fig. 82—2/1). When adjusting, cover the other headlight.

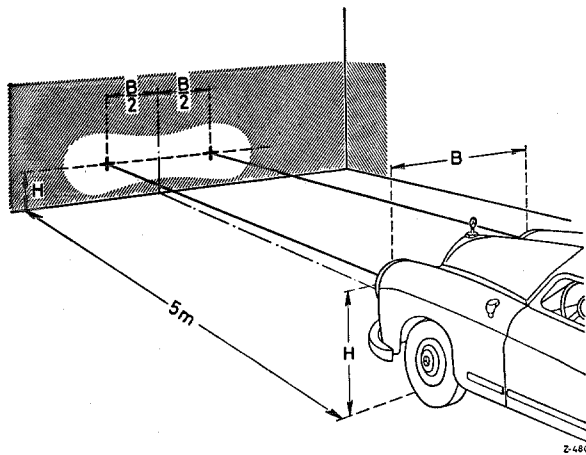


Fig. 82—2/1

3. Mark on the adjusting screen the height  $H$  of the headlights (center of beam) above the ground and their distance  $B$  or  $\frac{B}{2}$  (symmetrical) from the longitudinal axis of the car. This gives two adjusting crosses (see Fig. 82—2/1). Then 5 cm below the adjusting crosses draw in the boundary line for the lower beam (see Fig. 82—2/3).

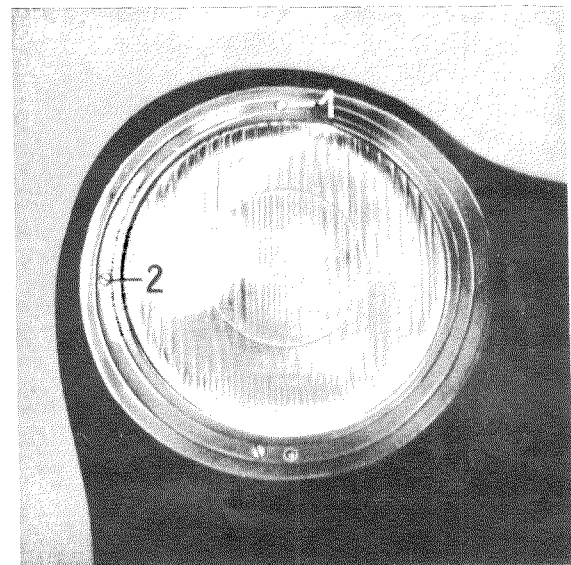


Fig. 82—2/2

1 Vertical plane adjusting screw 2 Lateral plane adjusting screw

6. Switch on the lower beam. By turning the adjusting screw (1) adjust the headlights in

the vertical plane so that the highest point on the light-dark boundary lies on the boundary line for the lower beam (Fig. 82—2/3).

**Note:** The term "light-dark boundary" is used to denote the zone of the light beam where the transition from the upper dark to the lower bright part of the lower beam appears most distinct to the eye.

The light-dark boundary must run as horizontally as possible; small patches of light in the middle of the lower beam which are reflected up over the boundary can be disregarded. When carrying out this adjustment, it is advisable to stand directly beside the headlight.

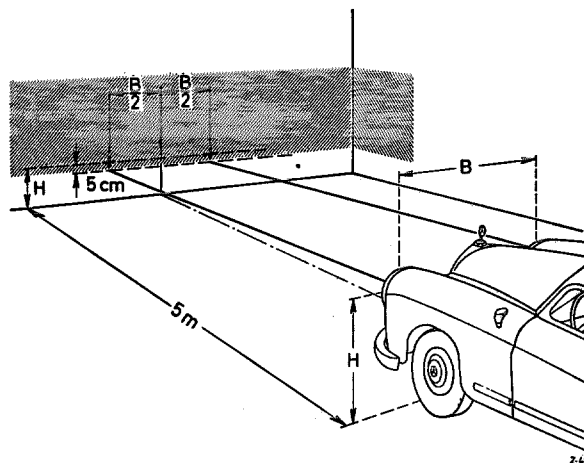


Fig. 82 — 2/3

7. Reinstall the ornamental rings after adjusting the headlights.

### B. Adjustment of Fog Lights

1. Load the car with  $6 \times 65 \text{ kg} + 45 \text{ kg}$  luggage in the trunk compartment and push it backward and forward several times so that the front and rear wheels adjust themselves to the load.

2. Again place the car 5 m from the adjusting screen.

3. On the adjusting screen mark the height H of the fog lights. Underneath this, draw in the adjusting line at the distance (h) marked on the ornamental ring of the fog lights (Fig. 82 — 2/4).

The distance (h) for

Bosch Fog Light

Part No. 000 544 30 06 is 18 cm

Hella Fog Light

Part No. 000 544 30 06 is 26 cm

**Note:** For districts which are subject to frequent, thick fogs it is advisable to direct the fog lights down a further 7 cm, i. e.:

Bosch Fog Light 25 cm,

Hella Fog Light 33 cm.

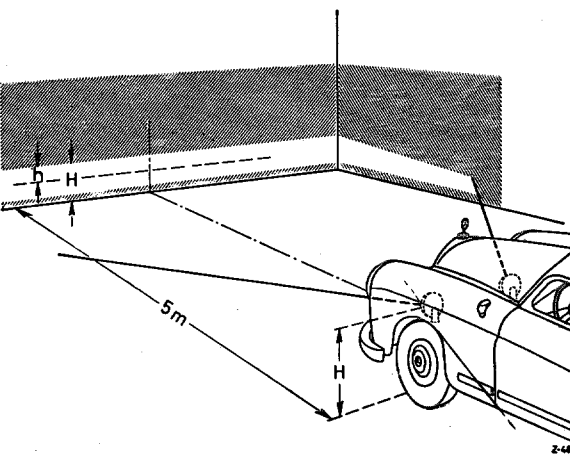


Fig. 82 — 2/4