## **Special Tools**

Adjusting angle set ENS 121 for Celette adjusting bench

Adjusting angle set ENS 166 for Celette adjusting bench

Guide for numbering punch

107 589 01 63 00

## Note

The front end of Type 107.04 is in principle the same as that of Types 114/115. On the replacement front end of Type 107.04 the brackets for attaching the front axle carrier need no longer be machined, and no more drilling and application of reflecting mirror is required for steering gear system. The hole for the journal bearing is no longer drilled but is included in the assembly of the bracket and journal and is welded to the side member.

To prevent distortion of the front end, the two side members are attached to 2 reinforcing struts. These struts must be separated prior to attaching front end.

## Removal

- 1 Remove all components attached to front end such as front fender, engine hood, bumper, radiator, battery, cable assembly, leads etc.
- 2 Remove front axle, engine and steering members.
- **3** Place vehicle on Celette adjusting bench (1) with rear axle installed and screw down (60.1–210).

**Note:** On Type 107.04 the rear wheels need not be removed.

**4** Drill front end from front wall (2) with 8 mm dia. drill and separate from front wall reinforcement (3) and side member connecting pieces (4) with torch (Fig. 1).

**Note:** When the front wall reinforcement (3) is dented, cutout dented section and remove from front wall (2).

- **5** Cut remaining spot weld flanges by grinding and remove.
- **6** Align all connecting points and grind bright (Fig. 1).

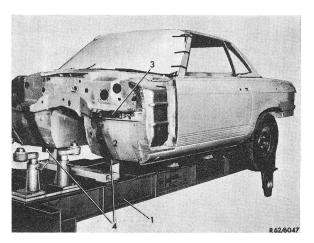


Fig. 1

- 1 Celette adjusting bench
- 2 Front wall
- 3 Front wall reinforcement
- 4 Side member connecting

## Installation

- **7** Grind all connecting points on front end (5) bright (Fig. 2).
- **8** Coat spot weld flanges on body and front end witz zinc dust paint, Part No. 000 986 34 42.

**Note:** Connecting which are not spot-welded are welded with a shielded gas welder. Do not apply zinc dust paint at these points, since this would make welding harder.

**9** Drill holes (6) with drill of approx. 7 mm dia. for plug welds on connecting points of front end (5).

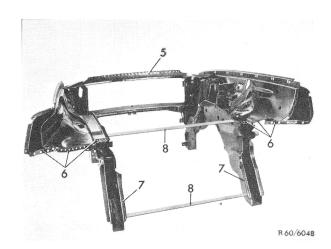


Fig. 2

- 5 Front end
- 6 Holes for plug welding
- 7 Side member
- 8 Reinforcing struts
- 10 Separate reinforcing struts (8) from front end (5
- **11** Position front end and screw to Celette adjusting bench.
- **12** Screw support for steering gear attachment (10) to Celette adjusting bench (1) (Fig. 3).

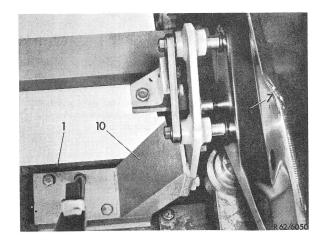


Fig. 3

- Celette adjusting bench
- 7 Side member
- 10 Support for steering gear attachment
- **13** Screw side member (7) to support for steering gear attachment (10).

**Note:** For screwing on side members, use original bolts for steering gear attachment.

Be sure to screw side member down so that it cannot be distorted while welding.

- 14 Position connecting points of front end in relation to front wall (2), as well as in relation to front wall reinforcement (3) and side member connecting pieces (4) (Fig. 1).
- 15 Mount engine hood for fitting.
- **16** Connect side member (7) to front wall (2) from inside vehicle through holes (9) by means of plug welding (Fig. 4).

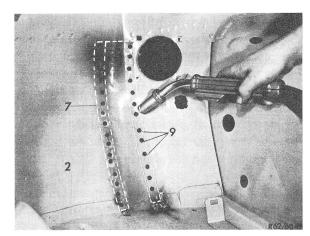


Fig. 4

- 2 Front wall
- 7 Side member
- 9 Holes for plug-welding
- 17 Weld side member (7) to side member connecting piece (4) (Fig. 5).

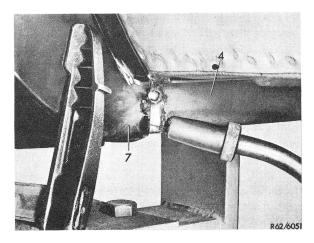


Fig. 5

- 4 Side member connecting piece
- 7 Side member

**18** Connect upper flange (11) of side member (7) to front wall reinforcement (3) by plug welding (Fig. 6).

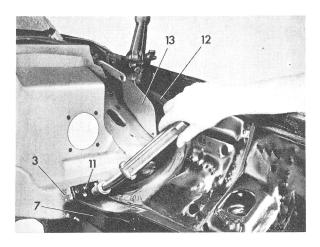


Fig. 6

- 7 Side member
- 11 Flange
- 3 Front wall reinforcement 12 Wheel housing sheet metal 13 Front wall column inside panel
- 19 Connect wheel housing sheet metal (12) to front wall reinforcement (3) by plug welding (Fig. 7).
- 20 Connect wheel housing sheet metal (12) to front wall column inside panel (13) by bead welding (string bead) (Fig. 6).
- 21 Spot weld wheel housing strut (15) to connecting panel (14) (Fig. 8) and connect to front wall reinforcement (3) by plug welding (Fig. 7).

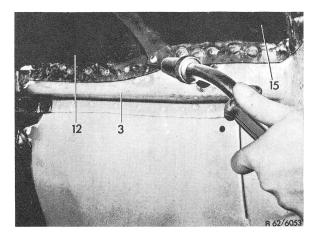


Fig. 7

3 Front wall reinforcement 15 Wheel housing strut 12 Wheel housing sheet metal

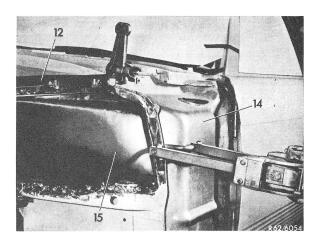


Fig 8 12 Wheel housing sheet metal 15 Wheel housing strut 14 Connecting panel

22 Fit bracket (16) for steering damper to side member (7), screw to support (17) and weld to side member (Fig. 9).

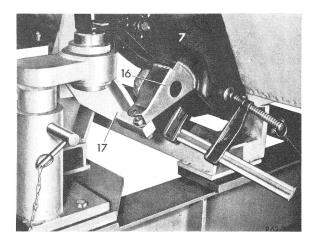


Fig. 9 7 Side member 16 Bracket

17 Support

- 23 Fit bracket with bearing (18) to side member (7) and lock in position with control plug (19) (Fig. 10).
- 24 Tack bracket with bearing to side member, pull out control plug and finish welding.
- 25 Release vehicle from adjusting bench, put down and remove engine hood.

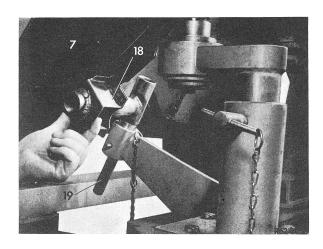


Fig. 10
7 Side member
18 Bracket with journal bearing
19 Control plug

- **26** Use numbering punch guide, Part No. 107 589 01 63 00, to punch chassis number into radiator reinforcement.
- **27** Coat all welding seams with zinc dust paint and prime.
- 28 Carefully caulk all welding seams (96.1–100).
- **29** Paint front end and provide with permanent underfloor protection, also complete preservation of cavities.
- 30 Insert closing plates in front end (60.1-100).
- 31 Reinstall units and removed components.