

41 02 09 (521)

New repair methods "Gluing / Riveting" on steel bodies

BMW/MINI

Situation:

Advance technical developments in the field of glues and equipment technology have made modified repair methods possible. This procedure has been tested and approved following exhaustive endurance runs and corrosion tests in the Development division.

Similar to the procedure for the rear cross panel on the F01/F02, the repair methods "welding/soldering" will change to "gluing/riveting" on various exterior skin and structural components of steel bodies from the launch of the E89 and R57. This procedure has already been introduced for repairs on the lightweight aluminium front end (GRAV) of the E60.

Repairs involving gluing/riveting will be performed, as in the past, by specialist body technicians supported by a training video.

In the future, this method will also make it possible for MINI and BMW workshops without specialised body workshops to perform body repairs.

Another positive point of this method is the significantly improved corrosion protection resulting from the wide-area gluing of the spare part coating (KTL).

Procedure:

Essentially, the following components are affected:

- Rear cross panel
- Luggage compartment floor
- Outer roof skin
- Rear side panels
- Engine subframe, parts replacement
- Support beam, parts replacement / complete

Starting with:

- MINI (R55, R56, R57)
- Z4 (E89)
- 7-Series (F01, F02), rear cross panel, outer roof skin

Extending in the course of 2009 to:

- 1-Series (E8x)
- 3-Series (E9x)
- 5-Series (E60, E61)

- 5-Series (F07)
- X1 (E84)
- X5 (E70)
- X6 (E71)
- 7-Series (F01, F02), remaining areas

Necessary workshop equipment:

- Punch rivet tongs (new)
 - Blind rivet tongs (GRAV)
 - Cartridge press for body glue
 - Universal clamping pliers (for roof ducts)
 - See Service Information SI2009-05 01 09 (523)
- "New tools and equipment for gluing and riveting"

Parts required:

- Body parts (incl. necessary reinforcement plates)
- Punch rivets
- Blind rivets
- Adhesive
- Cleaner

These parts are available as service repair packs for specific vehicles. Here, the vehicle identification number is to be entered in KSD2, the corresponding "Packages" button selected and the required job items selected in construction group 41.

Repair instructions:

The repair instructions have been revised to take account of the new repair methods:

To distinguish between the individual repair methods, a repair stage will be inserted in brackets into the titles of the repair instructions.

- Repair stage 1: Bolted parts
- Repair stage 2: Glued/riveted parts
- Repair stage 3: Welded parts

In addition, all parts required will be listed together with their part numbers in the corresponding repair instructions.

Training video:

The new methods, for example "punch riveting", will be described on a training video that

will be distributed to subsidiaries.

Please make sure the training video is made available to the staff who will be performing this work and, should you not perform body work in your own workshop, to the staff of your specialist body workshop.

Time studies:

Time allowances have been revised to take account of the new repair methods, and shall apply retrospectively.