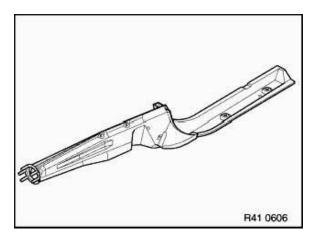
41 11 048 Replacing left engine support (partial replacement from front sub-frame) (Z3)

Instructions on body repair, refer to 41 00 Place vehicle on straightening bench.

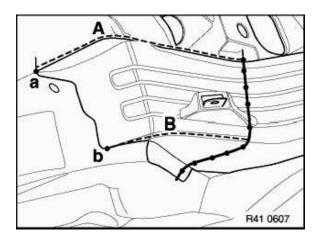


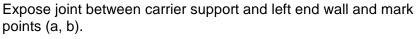
Z3
Engine support spare part

Remove or disconnect following parts:

- Complete front bumper
- Front wall
- Both headlights complete
- Front axle with engine and transmission
- Front wheel arch trim
- Complete servo unit
- Brake booster
- Front seat, left
- Mounting block for pedals
- Rocker panel strip, front left
- Front door, left

Other vehicle parts located in the repair zone or subject to damage from heat, sparks or dust, must be removed or covered.



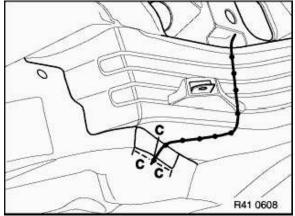


Dimension above (A) = 340 mm

Dimension below (B) = 280 mm

Note:

Measure between relevant edge of carrier support and joint.

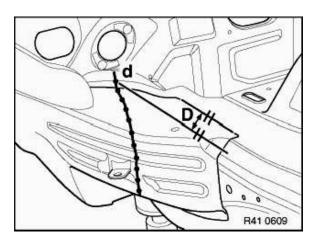


Expose joint between carrier support and left end wall and mark point (c).

Dimension (C) = 60 mm

Note:

Measure at center of bottom edge of carrier support.



Expose joint between carrier support and left end wall and mark point (d).

Dimension (D) = 115 mm

Note:

Measure parallel to edge of reinforcement plate on engine support connection point.

Point (d) is located on edge of carrier support end wall at top connection on end wall.

Join marked points (a, b, c, d) together.

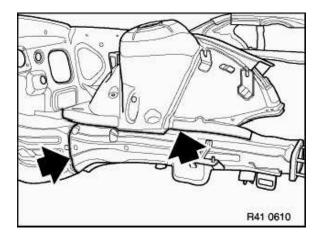
Caution!

Avoid damage to adjacent sheet metal parts.

Cut along joint between carrier support/left end wall.

Open up welding points of carrier support on left end wall and on engine support.

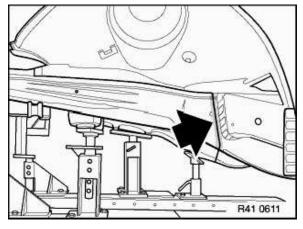
Remove carrier support end wall.



Caution!

Avoid damage to adjacent sheet metal parts.

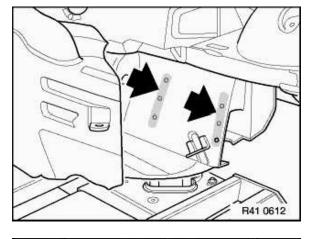
Cut away engine support in engine compartment.



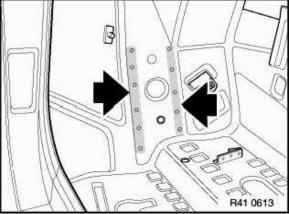
Caution!

Avoid damage to adjacent sheet metal parts.

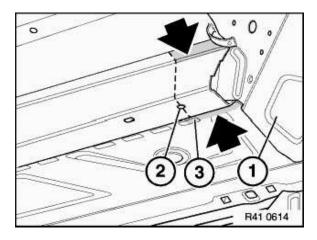
Cut away and remove engine support in wheel arch.



Drill through holes in connection for engine support/A-pillar from inside.

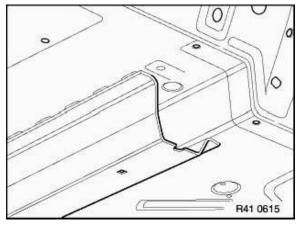


Drill out connection for engine support/end wall from inside vehicle.



Expose and mark joint on engine support.

- 1 = End wall
- $2 = Bore \varnothing 12 mm$
- 3 = Joint on engine support



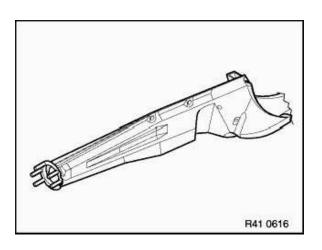
Cut engine support.

Drill off spot welding.

Remove engine carrier.

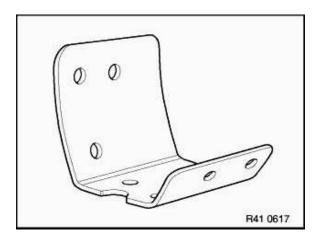
Remove scrap metal.

Straighten and grind joint surfaces.



Mark and cut spare part for engine support joint.

Dimension of joint on spare part is identical to that on vehicle.

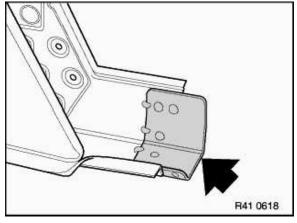


Make reinforcement plate from surplus sheet metal.

Width = 60 mm

Drill holes for plug welding.

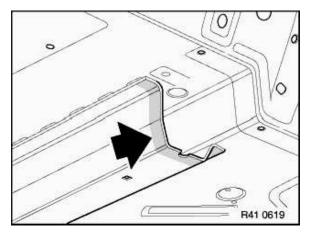
Clean connection points.



Adjust reinforcement plate in engine support spare part to fit. Clean connection points.

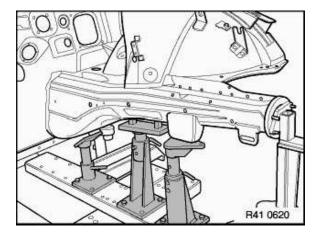
Install approx. 30 mm of reinforcement plate and weld into place.

Grind down welding point.

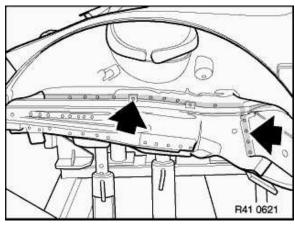


Drill holes for plug welding in vehicle engine support.

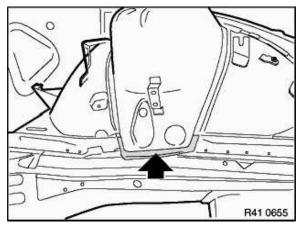
Clean connection points on engine support and coat with zinc dust paint.



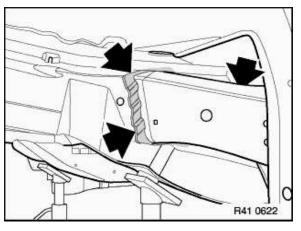
Adjust spare engine support with straightening angle set to fit.



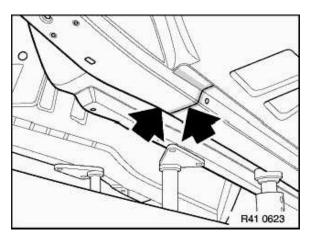
Weld engine support spare part to wheel arch.



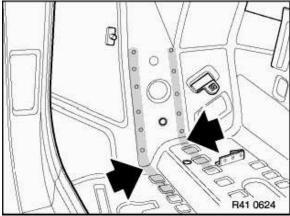
Weld engine support spare part to spring strut shock absorber.



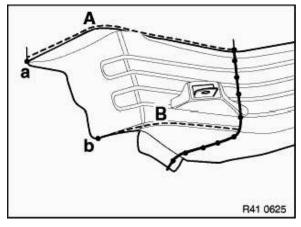
Weld engine support spare part to connection between engine support/A-pillar.



Weld engine support spare part to joint with reinforcement plates all round.



Weld connection point on engine support/end wall from inside. Grind welding spots until smooth.



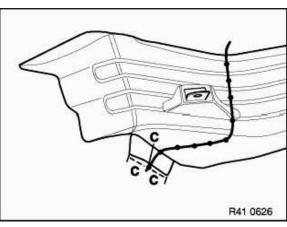
Define connection point on spare part for carrier support (left end wall) and mark points (a, b).

Dimension above (A) = 340 mm

Dimension below (B) = 280 mm

Note:

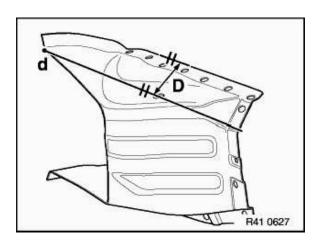
Measure between relevant edge of carrier support and joint.



Dimension (C) = 60 mm

Note:

Measure at center of bottom edge of carrier support.



Define joint on spare part for carrier support (left end wall) and mark points (d).

Dimension (D) = 115 mm

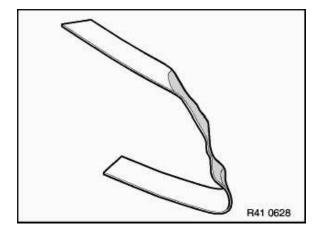
Note:

Measure parallel to edge of reinforcement plate on engine support connection point.

Point (d) is located on edge of carrier support end wall at top connection on end wall.

Join marked points (a, b, c, d) together.

Cut along joint between carrier support/left end wall.



Make reinforcement plate approx. 40 mm wide from surplus sheet metal.

Drill holes for plug welding in connection part and in spare part.

Adjust reinforcement plate to fit.

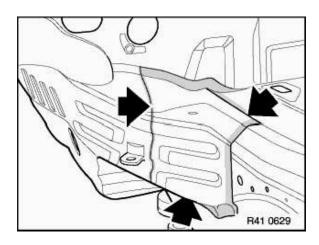
Clean connection faces.

Install approx. 20 mm of reinforcement plate, secure and weld into place.

Adjust spare part for carrier support (left end wall) to fit with reinforcement plate and mark holes for plug welding.

Remove spare part and drill holes for plug welding.

Clean connection faces.



Install spare part for carrier support (left end wall) with reinforcement plate, secure and weld.

Grind down all welding points.