TECHNICAL BULLETIN B32
HOLDEN COMMODORE VE/
CALAIS SEDAN AND SPORTWAGON/
STATESMAN AND CAPRICE WM SEDAN
HSV E-SERIES SEDAN AND
SPORTWAGON

REPAIRS TO SPARE WHEEL WELL
LUGS USING METAL BRACKETS

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Low speed rear impacts can easily damage the spare wheel wells on Holden VE/WM-series and HSV E-series sedans and sportwagons.

Damage can occur to one or more of three (3) protruding lugs.

The lower edge of the rear bumper fascia is attached to these lugs with plastic retainers. Minor rear impacts can transfer high loadings to the lugs, which will then typically fail.

The lugs cannot be plastic welded because they are fibre-reinforced composite.

The wheel well itself is bonded into the rear of the body shell. It is difficult and time consuming to remove and replace.
The IAG Research Centre has designed metal brackets which can be fitted over the damaged lugs to avoid having to remove and replace the entire wheel-well.

These brackets reduce the cost of repairs enormously and also preserve the integrity of the original factory wheel well installation.

The following steps outline the method developed at the IAG Research Centre to restore damaged lugs to their original strength and function.

These steps should be followed closely to ensure similar future impact performance is achieved.

Note:

• Latex gloves should be worn during this operation

• The work can be done with the vehicle at ground level, or raised on a hoist
There are 14 steps:

1. Detach the rear bumper bar plastic facia and the plastic clips from the lug(s) to be repaired.

2. Remove any broken or hanging debris from the damaged lug(s).
3. Using a panel file or similar, carefully remove the ‘lip’ on the back edge of the lug(s). Ensure that the lug itself is not filed.

4. Using 180-200 grit abrasive paper, scuff each exterior surface of the damaged lug(s).

5. Clean the exterior of the damaged lug(s) with Prepsol or similar solvent to remove dust, grease or fibres.

6. Using a 180-200 grit abrasive paper, scuff each interior surface of the replacement bracket(s).

7. Clean the interior of the replacement bracket(s) with Prepsol or similar solvent to remove dust, grease and paint powder.

8. Check-fit the lug(s) to the appropriate bracket(s). To achieve a better fit with the lug(s), bend the sides of the bracket(s) in or out, as required. There should be a 1-2mm gap between the bracket and the lug surfaces for adhesive.

9. Apply Sika® Sikaflex-206 G&P surface primer to the interior surfaces of bracket(s) and exterior surfaces of lug(s) and allow to dry, according to product instructions.

10. Apply Sika® Sikaflex-206 adhesive to the interior bracket bonding surface.

11. Push bracket(s) onto lug(s) and remove excess adhesive.

12. Insert a plastic fascia fastener into the lug, to hold the bracket in place.
13. Apply the adhesive tape over the bracket(s) whilst Sika flex is curing. Allow the adhesive 48 hours to cure completely.

14. After the adhesive has completely cured, remove the adhesive tape and plastic fastener. Inspect the repair by checking for movement of the bracket. The bracket should feel quite rigid, but with a very small amount of flex (from the adhesive). The rear bar can now be reattached to the vehicle in the normal manner.