I-CAR NEW ZEALAND technical report

The Hyundai TB Getz

This edition we will look at some of the do's and don'ts when repairing the Hyundai TB Getz, and we thank Hyundai NZ for their assistance in putting this overview together.

The Hyundai Body Repair Manual shows the locations where body members can be structurally sectioned and states that all of the repair recommendations have been performed using equipment currently available in Auto Body shops. It also states that the vehicle should not be sectioned in locations other than those illustrated and that these repair procedures DO NOT apply to any other vehicle.

Individuals performing the work assume full responsibility for their workmanship and that these repair techniques have been developed to provide a repair that has strength properties equivalent to those of the original design and manufacture, these should be performed by a qualified technician.

Body construction will sometimes differ depending on specifications and country of destination, therefore information contained herein is for general destination.

So, what are some of the features and the recommendations we should be aware of when repairing the Getz?

Steels used

- They only show a combination of two different steels for the TB body structure, Zinc galvanised and HSS (High Strength Steel). The differing strengths of the HSS is not given, however illustrations show that it is used for all cross beams and reinforcement panels that make up the A pillar, B pillar, Sill, Front and Rear rails along with some exterior body panels.

Welding

- Inverter Spot Welding is the preferred method of welding for Hyundai, although some earlier model repair manuals only show MIG welding, (as is with the Getz model we are looking at) Hyundai have confirmed that Inverter Spot can be used when suitable, on all models. They also say, that if welding with MIG use 0.23" AWSER70S-6 wire; and that I-CAR recommendations for welding should be followed. Specifications give detailed examples of the required method, how many and where the welds should be made. They make comment that welds should not be ground down excessively as this will weaken the joint.

Using heat

- They do not have heat limitations but industry standards should be adhered to.

Torque settings

- Torque settings are not shown in the body repair specification section but are available from the dealership workshop technical information manual.

Electronic awareness

- The information for disarming Airbags states that once all electrics are disconnected wait at least another 30 seconds before starting work. Because the electronics of the Getz and any other current model vehicle is now very complex, it is advised that the manual should be consulted and checked with the correct diagnostic equipment when any major collision repair work is completed.

Corrosion protection

- Anticorrosion agents are required for all welded joints; this includes weld through primers, using two pack epoxy primer on completed welds and joints, seam sealers, and body wax.

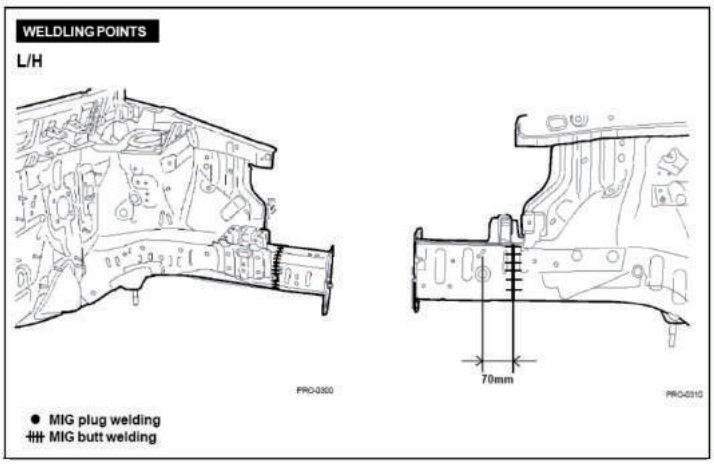
Adhesives & NVH foams

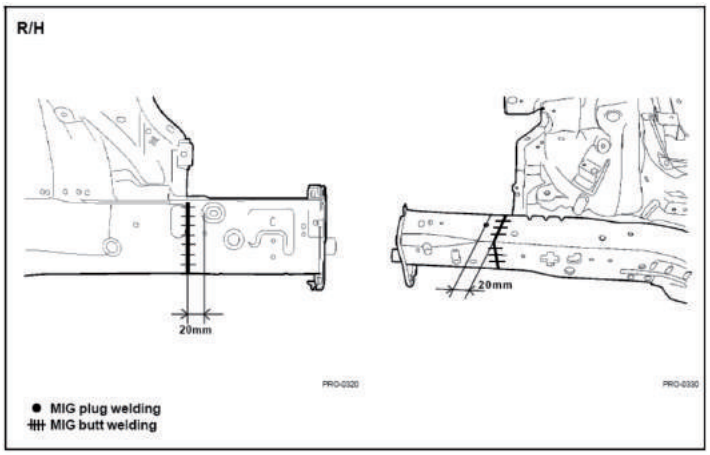
- The location or recommendation of adhesives is not given except for when replacing door skins; however they do have a very detailed section on replacing sealers and NVH sheeting. The brand of product is not given however duplicating the same or equivalent as OEM would be recommended when these are required.

Front Rail Partial Replacement

This uses an Open Butt, Staggered Off Set joint and is different between LH and RH.

FRONT SIDE MEMBER (PARTIAL)



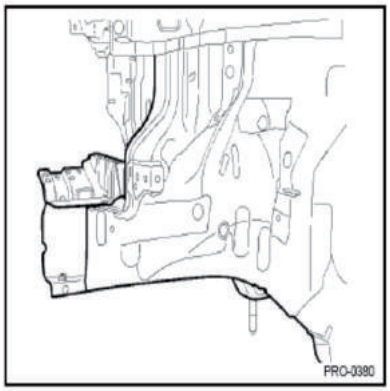


Cut through the front side member inner and outer at cutlines.

NOTE

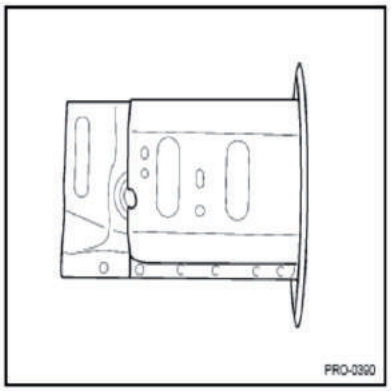
Take care not to cut through front side member inner reinforcement.

Prepare all surfaces to be welded.



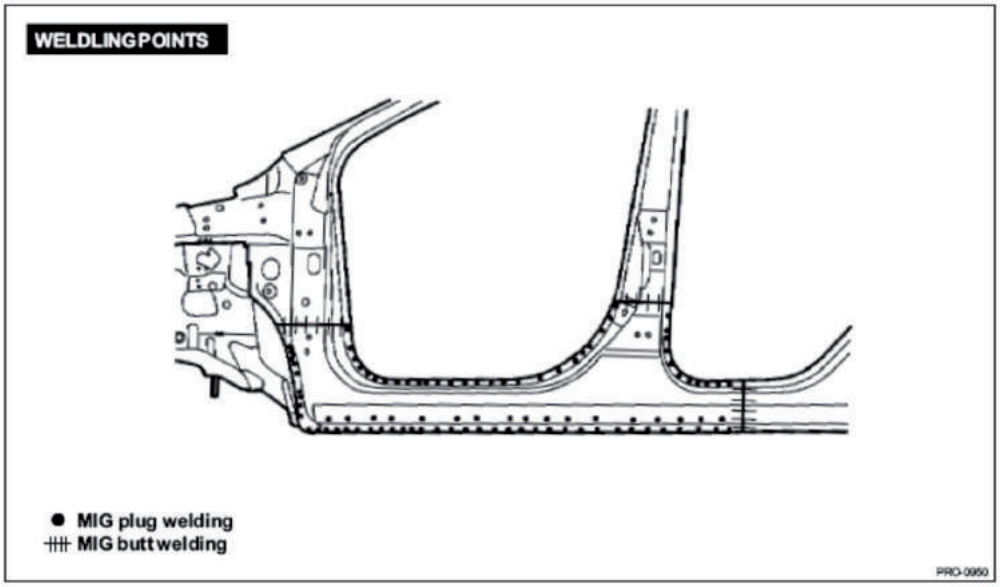
Transcribe the front side member inner and outer cutline to the new front side member, cut to length and chamfer butt end to improve weld surface.

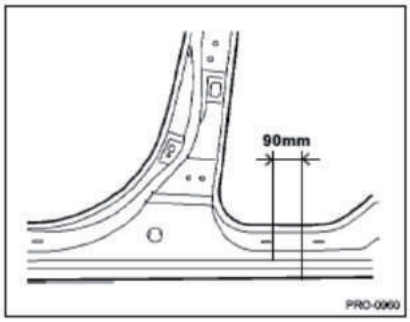
Drill 8mm holes in new front side member for MIG plug welding.

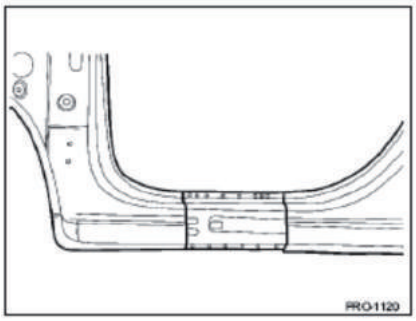


Sill Panel Replacement

The sill panel can be sectioned as shown in the illustrations.

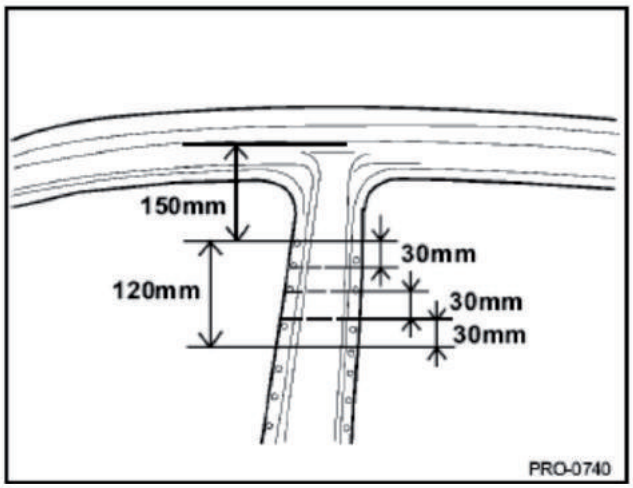


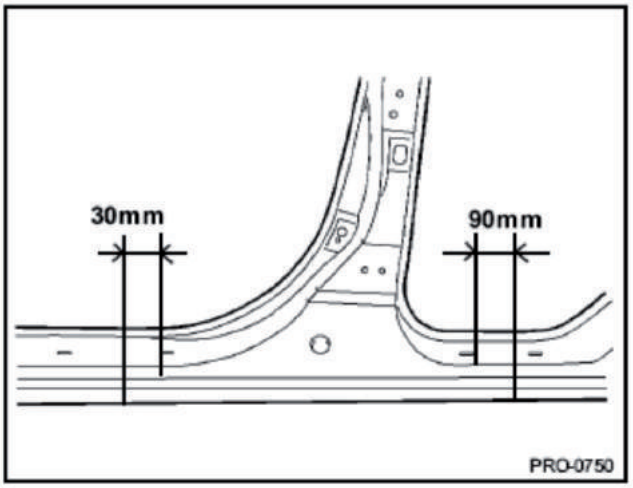


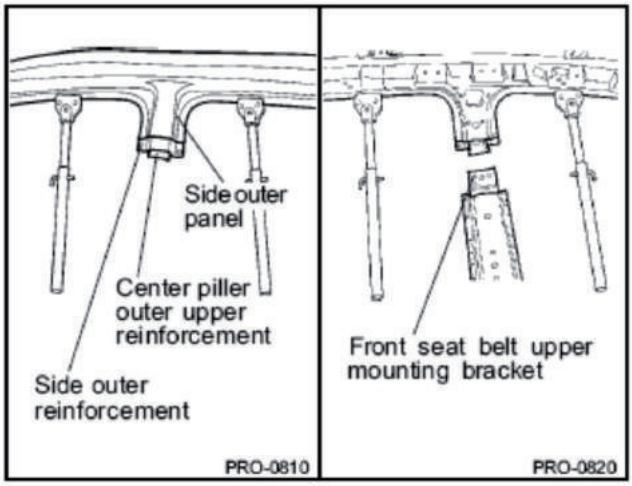


B Pillar Partial Replacement

• Note: The B pillar uses multiple inner reinforcements; care should be taken when cutting for a partial replacement, and you should **check the full procedure if undertaking this repair.**

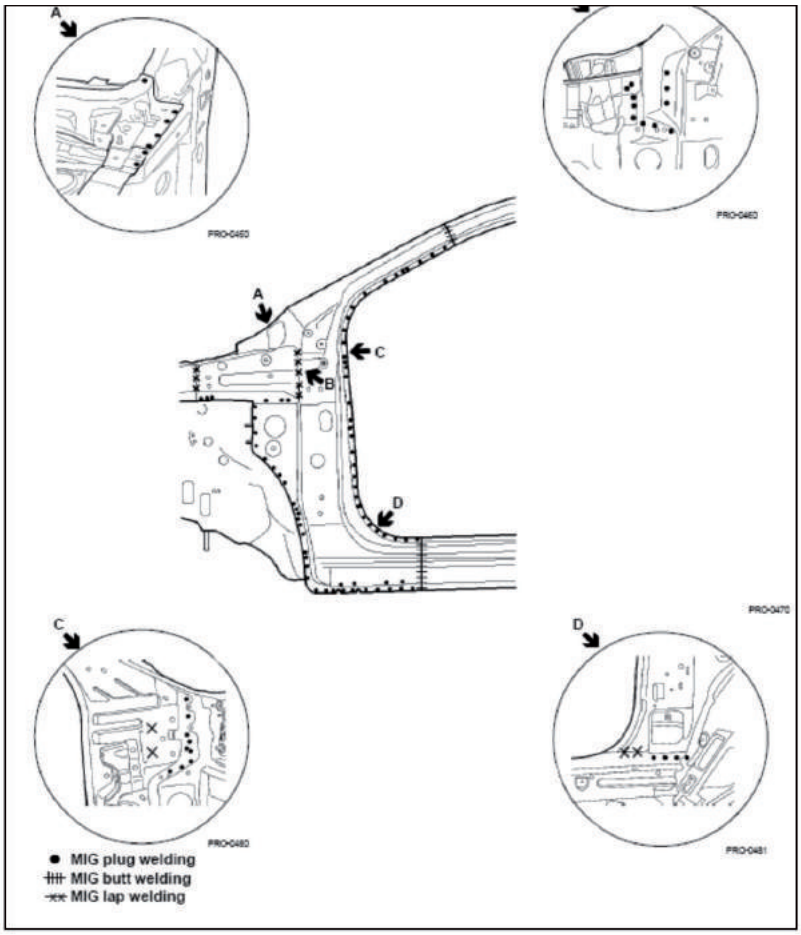






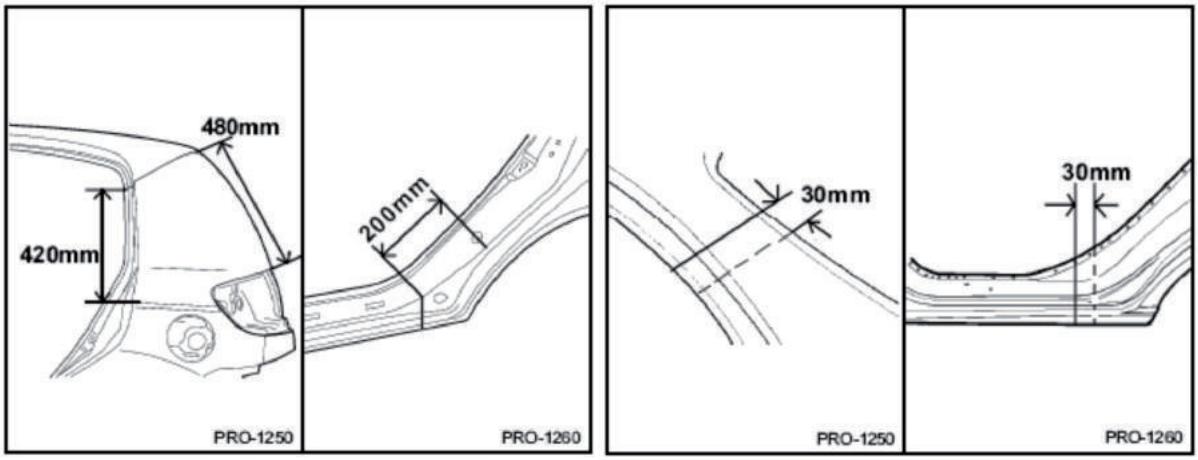
A Pillar Partial Replacement

The A pillar replacement has the option of outer only or full replacement including the reinforcement panels. Check the full specifications if reinforcements are required these are very detailed. Notice that a Lap W is used for a few of the joints.



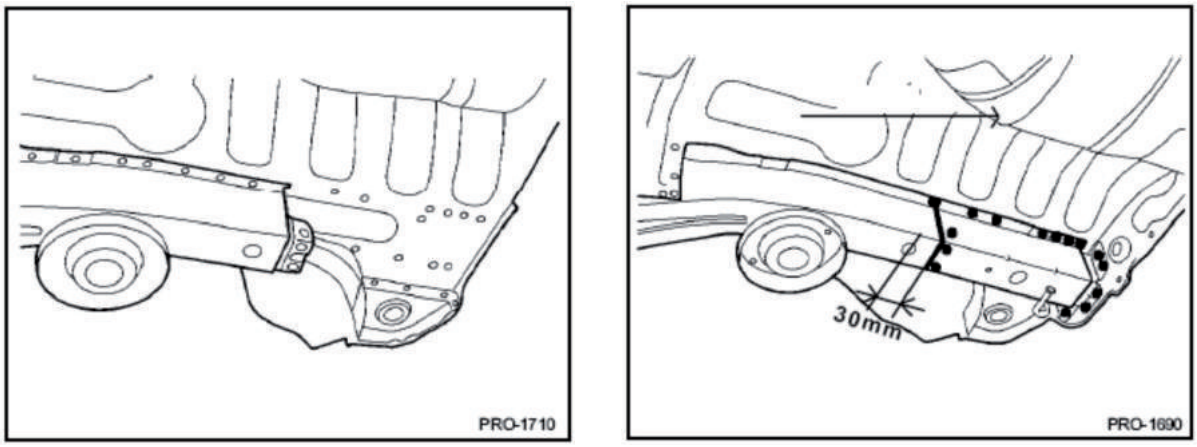
Rear Guard Partial Replacement

Note: This uses a lap weld joint that requires a 30mm overlap.



Rear Rail Partial Replacement

- Note: Hyundai state that this partial replacement procedure should only be used for one rear rail, if both are damaged and need replacement then the procedure of rear side members and boot floor section should be followed.
- Take care not to cut the reinforcement shown in the illustration PRO-1710 (below left).



Front Apron Partial Replacement