

The 'Anderson connector' is a 12 volt electrical plug that is located next to the battery. The battery is located at the rear of the front near-side (left) wheel arch and is accessed by removing the road wheel and the plastic battery compartment cover. The grey plug is fixed to the battery tray and can be seen/accessed just behind the front near-side wheel. Its purpose is to provide an electrical connection directly to the battery without the need to remove the wheel or battery cover.

A good idea in principle, but its exposed location allows it also be a recipe for disaster and a known cause of electrical fire when the plastic casing deteriorates and/or the cables corrode. The plug should have a plastic cover to protect it from the elements, held in place by a steel lanyard, but these are often missing.

The Anderson connector should be one of the first items a new owner checks. Some owners remove them completely, relocate them to the engine bay or replace them with solid battery posts in a more secure location.

In order to assess the integrity of the connector plug, it's best to remove it as cracks in the casing can't be seen easily from under the car:

1. Remove the front n/s road wheel ( use axle stands )
2. Remove the plastic battery compartment cover.
3. Disconnect the battery terminals, +ve connector first.
4. Remove the battery.

The Anderson connector is bolted to the battery tray and connected directly to the battery.

#### Other jobs to look at while you're in there:

- the battery is (very) close to the exhaust. There should be a rubber protector on or over the positive terminal that is closest to the engine to prevent it from touching the chassis rail. (Some owners have actually turned the battery around or fit a battery with different terminal configuration, but this involves replacing the main feed to the starter motor).
- Check the integrity of any heat shield materials.
- Clean the battery compartment, treat any rust, repaint as necessary.
- Clean the battery terminals.
- Make sure the battery is secure – some add a nylon 'ratchet strap' if the metal clamp plate is damaged or missing.

#### Renewing the Anderson connector

It seems somewhat pointless replacing the connector in its original position due to the known problems and it's not a difficult job to make up a new connector and locate it in the engine bay (especially if your car has a hinged bonnet conversion). You will need access to a heavy-duty

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*I am an enthusiastic amateur with over 40 years of experience of DIY car maintenance. Views and methods shown worked for me on my own vehicle(s). If in doubt always consult a qualified (and insured) mechanic or auto-electrician. However, I've always found that one of the best ways to get to grips with this sort of thing is to don a pair of overalls and get stuck in.*

terminal crimping tool, or be confident with your soldering abilities – if in doubt some suppliers offer a 'make up' service.



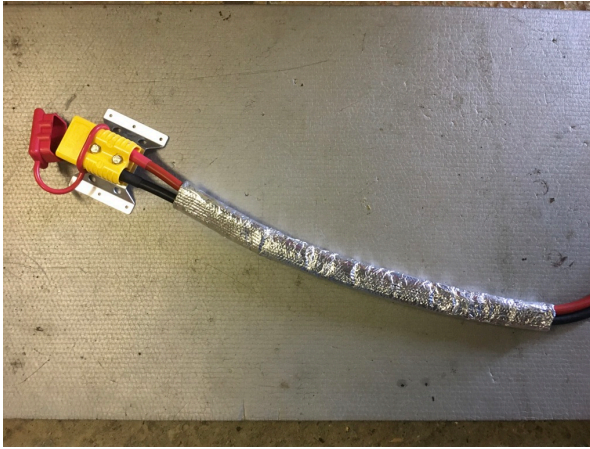
Anderson connector as removed from a 2001 Tuscan. Heavy corrosion on both terminals and casing disintegration. Danger of short circuit leading to electrical fire and/or moisture causing battery to discharge.



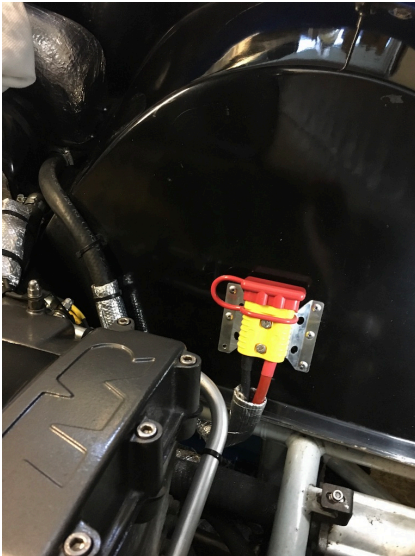
Battery compartment behind n/s/f wheel. Note heat sleeving on new Anderson leads (top) and feed to starter motor.

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New connector, mounting bracket, cover and heat-resistant sleeving.



New location on inner wheel arch sufficiently distant from exhaust heat and protected from water spray from road.

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