

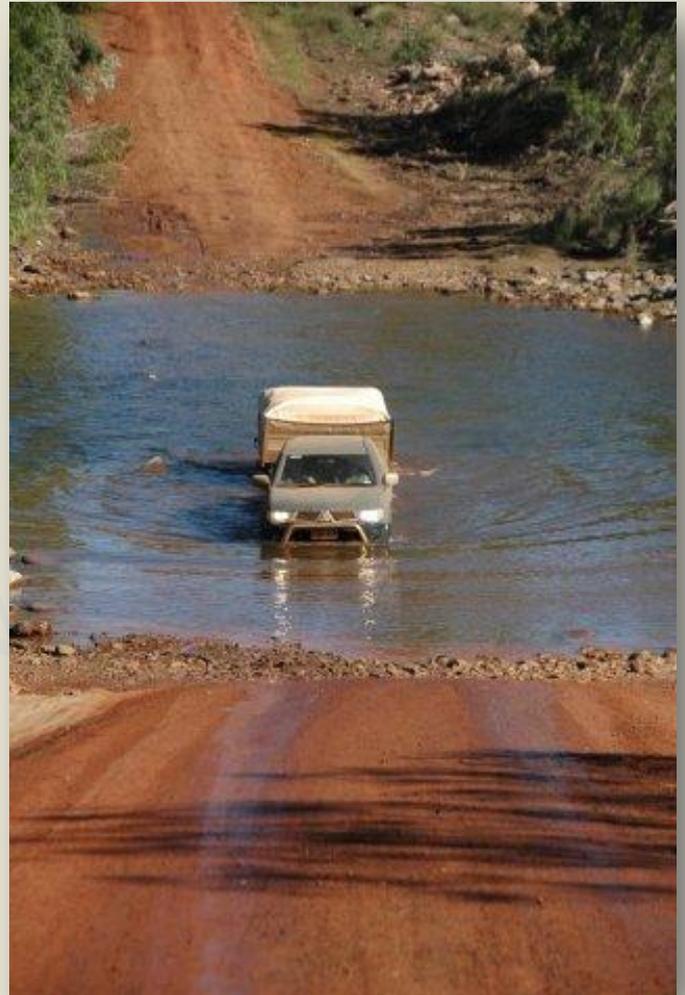
EZ Connector

The EZ Connector survives where others have failed. This product could be the ideal connector for camper trailers that go where others fear to dunk.

During our recent Camper Trailer Torture Test we suffered repeated electrical problems and most involved connectors. On a typical Great Dividing Range, Cape York, Kimberley or Gulf, trip it's common to dip towing vehicles and trailers in and out of creeks that have steep banks on both sides. In these situations the trailer coupling and the electrical connectors go underwater, with or without the added spice of the connectors being dragged through sand and gravel, or banged on rocks.

The common multi-pin and Anderson electrical connectors don't do well in these demanding circumstances. Part of the problem is the common, but stupid, location of connectors on brackets attached to the lower edges of towbars. (Land Rover is the only maker to do it right, recessing trailer connectors inside the rear bumpers of Discos and Rangies.)

Another issue is that seven-pin and 12-pin trailer light and braking connectors and two-pin Anderson plugs that are commonly used for powering trailer batteries aren't water or damage resistant. Dunk them in creek water and they can short-out.



Quite often, the failure isn't noticed until the end of a driving day, when it's discovered that the trailer battery is flat, having run the fridge all day without any charge from the car alternator. Another possibility is no trailer braking, in the case of electric brakes.

Clearly, what's needed is a waterproof, more rugged connector that can withstand the rigours of bush travel.

EZ Connector is a US-made product that's being supplied to demanding customers, including the US military and is available here from Queensland-based Mobile Energy Australia.

The initial EZ Connector release in Australia is the seven-pin model that's designed to replace any flat or round seven-pin connector. You notice the difference between this unit and conventional connectors when you pick it up: it's heavier and bulkier, so it needs a solid mounting bracket.



Construction is moulded, fibre-reinforced nylon plastic.

Asking people to separate the two halves of the EZ Connector became my favourite party trick, before we mounted it on our test vehicle. The male and female halves connect through the attraction of two rare-earth magnets and it takes a fair amount of effort to pull them apart.

When the halves join they can do so only when an indexed lug and slot line up and this can be done by feel, without the need to check pin alignment visually.



The female (vehicle) side has seven recessed, spring-loaded brass pins that press against seven brass contacts in the male section. A dummy plug and socket are provided for clean connector stowage when vehicle and trailer aren't coupled, but the latest product release is a pair of connector halves with hinged closing pieces.



Also available is an additional male connector and 200mm lead, for fitment to an additional trailer. Early in 2011 EZ Connector expects to have a 14-pin version and a two-pin, 100-amp-capacity connector set to replace Anderson-type connectors. The two-pin model is currently being validated by the US Army.

EZ Connector Test

We started off by repeatedly dropping the unmounted, but connected, EZ Connector plugs and leads onto a hard surface from a two-metre height and then we kicked them around, soccer-ball fashion for a while. We dropped the coupled unit on grass and drove over it and then we plopped the coupled connectors into a bucket of water and ran a current through the assembly. No problem.

Then we gave the EZ Connector test set to Phil Poulter of 4WD Off Road Driver Training, who took it to ARB St Peters in Sydney, where the female half was mounted on the rear of his Troopy and the male half, on the front of his Track Camper trailer.

The chosen mounting point for the vehicle half was on a Kaymar swing-away spare wheel carrier and that thick metal played havoc with a hole saw blade. However, the finished job saw the plug rigidly recessed into the Kaymar channel.



Phil took the EZ Connector on a bush trip with his Track camper in tow, over stony, corrugated roads, through creek crossings and into thick bulldust.

No contamination and no shorting-out.



When he got back we blasted the current-carrying connector with a hose and still couldn't get a drop of moisture inside the housing. At that point we made the decision that this would be the only connector we'd buy in future.

RRP for the EZ Connector is \$165

More information visit:

www.mobileenergyaustralia.com.au

