

Prepare Your Car for Towing

Of course this job can be done professionally, but it is quite expensive and providing that you are a reasonably efficient do-it-yourselfer you can undertake the whole job. There are three areas of operation. Firstly the engineering to produce a strong and secure fixing for the towing ball. Secondly the necessary electrical units and wiring variations and finally the various accessories required and those which make for more comfortable towing.

Towbracket Kits are available for nearly every car on the road. Some years ago there were only two main manufacturers but these days there must be ten or more. It is interesting to note that they often have a different approach to the problems in any particular motorcar. They sometimes produce a different final height for the ball and for some you have to drill through the rear bumper. So examine the specification for the models available for your car and particularly the resulting ball height which should suit your trailer. Drop plates should be avoided if possible.

For the purpose of this article I am equipping a Ford Granada, but the basic principles are the same for any car. When the Granada first appeared here last year a towbracket was quickly run up to allow caravan journalists to test its capabilities as a tow-car. This prototype failed as it relied too heavily on the floor of the boot. Now there are quite a few satisfactory designs and I have chosen that produced by the Exhaust Ejector Co. This uses a massive and very strong square section member which passes forward underneath the car almost a quarter of the total length. It takes for its attachment two of the strongest areas. This is where the swing arms of the rear suspension are attached and also the fixing areas for the differential. For good measure it is centred and further stiffened by a reinforcement bolted through the boot floor. You can probably see all this in Photograph No. 1.

Your kit will arrive complete in every detail and the iron work will probably have a coat of black paint. Before you start give further paint protection - the colour of the car is suggested - then any parts visible will not obtrude. Now read and thoroughly assimilate the fitting directions. It is vital to follow these exactly otherwise parts will not match up properly. Any underseal on mating points must be removed. Be sure to use the locking washers supplied and when all is in place, do all the nuts up really tightly.

You now have a flat surface with the two 5/8" holes in the correct place. But before fixing the ball with the two high tensile steel bolts, position the plate (9 in photo 2) which will carry your seven pin socket.

We now turn to electrics and I must presume that you have some knowledge of auto wiring. It must be done properly with no makeshift methods. A mistake producing a short in an unfused live cable will do damage or at the worst set your car on fire. So commence by disconnecting the battery. You are going to wire up the seven pin socket mentioned above so that your trailer will comply with the law as regards road lights and you must do this even if you never propose to tow after dark. Your flashers must also operate in tune with those on the car, and at the correct speed.

If you are starting from scratch again you can obtain a kit. There is the Lucas Carafash which uses a second flasher unit in series with that on the car and requires a changeover switch to be operated when changing from solo to towing and vice versa. Or the Hella system in which you replace the unit. Here you do not need a switch and you wire in a dashboard indicator which warns you if the three indicators are not all working. Hella also make an electronic unit kit (as opposed to the mechanical) with an added advantage that in case of an emergency stop, the pressing of a button causes the car indicators when solo or the whole lot when you are towing, to flash continuously. This is a valuable safety feature, compulsory in some countries, and this is what I am fitting. Firstly find a convenient spot to fit the little indicator light and the Hazard Warning push button.

Now find the existing Flasher Unit, mark the leads and remove. Replace it with the electronic unit but for connections follow carefully the instruction sheet. The kit includes a wiring harness with the correct connectors. You have to find a live lead (fused for safety), a live lead energised only via the starter switch, a connection into the rear light circuits and into the flasher circuits. If your car has dual intensity level to flashers and stop light then you must take your tapping before the wires enter the Dual Intensity unit. If you are using a Marwood Electric Reversing Catch (see February issue) take a

lead from the unearthed side of the reversing light. All these connections are made as shown in the directions. Make a very good earth connection; this is often a cause of trouble.

It is as well to prevent water getting into the back of the socket. This can be done by means of the Tanfield Flexible Socket Seal. Photo below shows how it is fitted. This firm also makes covers for the front of the socket and also the plug itself. If you are supplying 12 volts to the caravan, use thick cable both for the car wiring and for the extension to the 'van, or you will get voltage drop.

So we reach the accessories and the first is a pair of wing mirrors. Some use door mirrors but it takes a measurably longer time with your eyes off the road ahead to use these as opposed to wing mirrors. I always use Zanetti Double Mirrors. Two mirrors in each head. The larger gives you a view to the rear, both sides. The off side small one covers the blind spot hiding the overtaking vehicle and helps when you are pulling out sharply from a parked position. The nearside small one gives your passenger a clear view back. There are extension arms available if your car is not very wide. If you buy direct from the manufacturers and say you read my recommendation in "Camping & Caravanning" they will allow you a 33+% discount.

To protect the forward facing surface of the trailer you should fit mudflaps to the rear wheels of the car. Personally I fit a pair of Tudor Universal Flaps to both rear and front wheels. The latter helps to keep the side of the car clean. At £1.50 a pair, they are shaped, made of long-lasting polyethylene and the kit includes all parts necessary for fitting.

If you enjoy plenty of fresh air but dislike draughts the answer is to fit transparent wind shields to the side windows.

There is the Windmaster, a slim aerodynamic design ideal for a wide car such as the Granada. It does not increase the overall width much. Lower priced is the Galemaster Weathershield. Both are available in designs tailored to suit all popular cars and come complete with fitting material (no drilling needed). Now you can have the window wound down on the worst of days.

I like my car rear springs to be very stiff when towing. Many car manufacturers will supply springs with a higher rate. But of course this applies when you are riding solo also. So I am fitting Aeon Rubber Springs. For most cars they are easy to fit as they simply replace the bump stops. Their advantage is that, when running light they do not affect the suspension at all. But add the noseweight of a caravan and maybe a spare gas cylinder in the boot, then they come into action and give a very stiff suspension. Ideal for when we get that 50 mph.

Finally a safety fitting well worth considering. On my towbracket I am adding a Stadium Fog Rear Light. A brilliant red warning light that can be switched on in fog conditions. The law says that rear lights shall not exceed 21 watts. But it does not lay down a maximum in lumens. So the more light under that wattage the better in fog. This can be attained by fitting a quartz iodine bulb. The lumens output is much higher than a conventional tungsten filament can give and the Stadium No. 846 carries such a bulb.

Addresses of the manufacturers:

EETCo Towing Bracket. The Exhaust Ejector Co., Wade House Rd., Sheff. Halifax.

Socket Waterproofing. Tanfield Towing Bracket Co.. Guildford Road, Horsham, Sussex.

Joseph Lucas Ltd., Birmingham 18.

He/la Ltd., Hanworth Lane, Chertsey, Surrey.

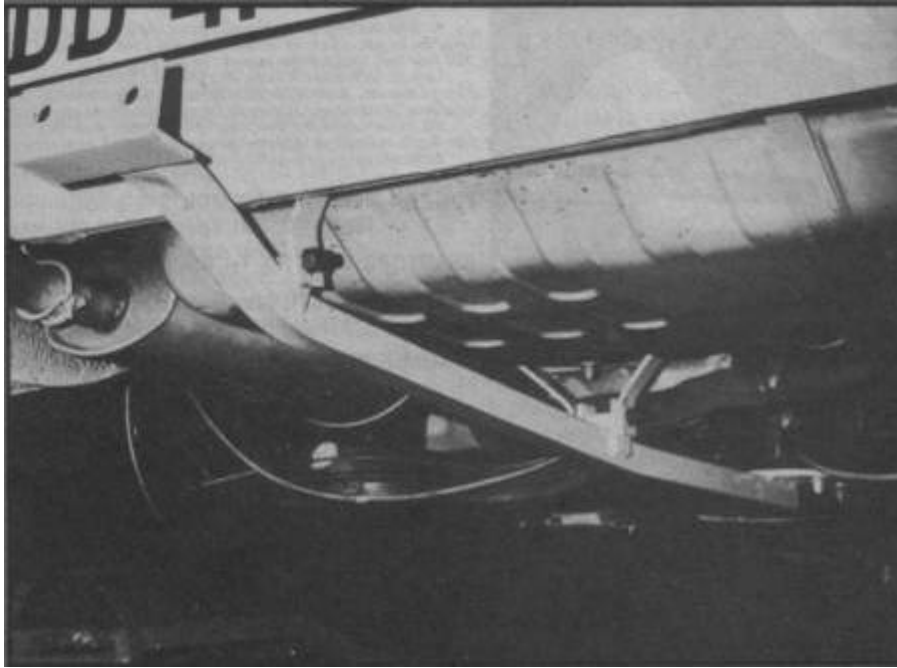
J, Zanetti Ltd., 277 Staines Road, Hounslow, Middx.

Tudor Accessories Ltd., 5 Llanvanor Rd., London N.W.2.

Aeon Rubber Springs Ltd., 11-21 Northdown St., London NI 9BW.

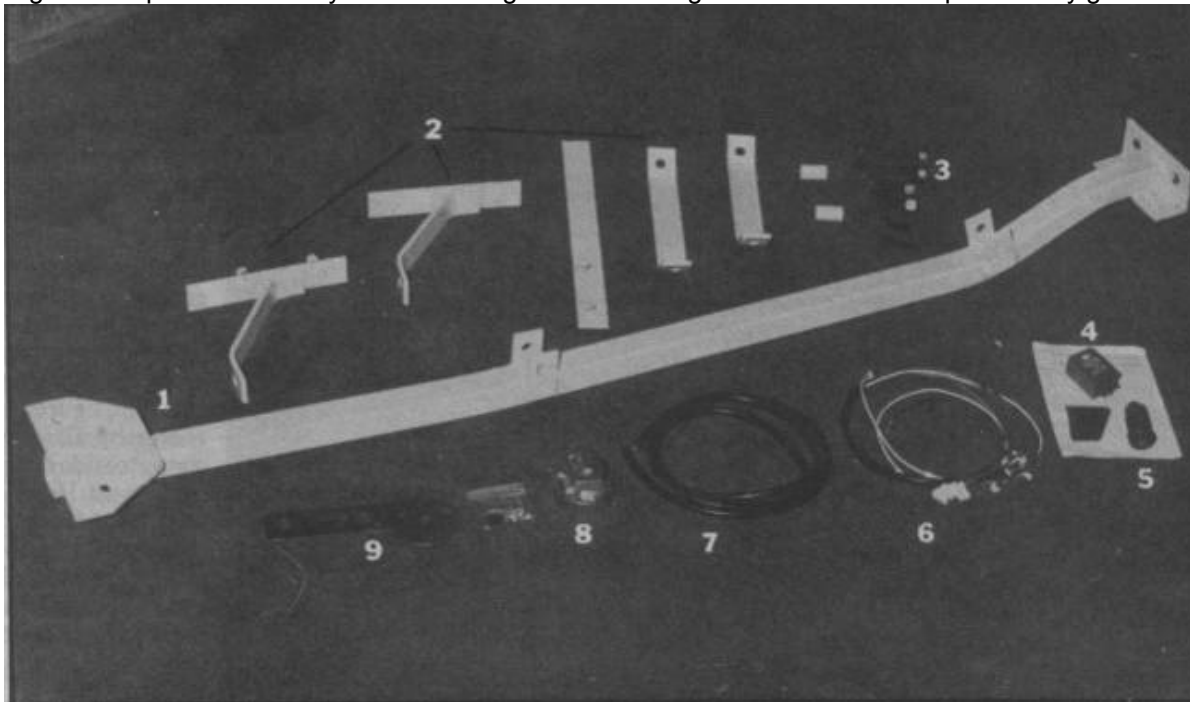
Stadium Ltd.. Queensway, Enfield, Middlesex EN3 4SD.

Most of the items recommended can be obtained from your local car accessory shop or caravan dealer, but if not then write to the manufacturer.



Left: EECo. Towing Bracket for Granada. Note three point fixing.

Right: An exploded assembly' view of towing socket showing the Tanfield weatherproof safety gasket.



Some of the parts required. 1. EECo Towing Bracket. 2. Fixing Brackets. 3 High Tensile Bolts. 4. Hella Flasher Unit. 5 Hella Hazard Warning Flasher. 6. Wiring Harness. 7. Core Cable. 8. Hella 7-pin Socket. 9. Socket carrying Plate.