



TF241: TERRAFIRMA HYDRAULIC BUMP STOP & MOUNTING KIT

DEFENDER 90, DISCOVERY 1 & RANGE ROVER CLASSIC

FITTING INSTRUCTIONS

Put the car into gear and apply the hand brake.

Firstly you need to fit the chassis plate which fits as shown below. On the driver's side, you will need to remove the four bolts out of the steering box, don't worry it won't fall off.



Fit the chassis plates with the vertical plate towards the back of the vehicle. Attach this using the two rear bolts only (M12x100 with washers) align the plate using the original bolts through the front holes and fully tighten the new rear bolts. Remove the front alignment bolts.

Offer the appropriate bump-stop mount up. If you still have the inner wings you will need to trim the area to allow the bump-stop and mounts to sit flat on the mounts, hence mark the area first and check twice before cutting.

Using 2x M12x110 bolts and washers loosely position the bump-stop mount. Through the two holes pointing rearwards fit 2x rear M10x30 bolts with a washer either side of the two plates and M10 Nyloc nut, fully tighten these.

Now fully tighten the front two steering box bolts.

The bump-stop tube has been zinc plated for protection however we recommend you use some oil, copper slip or similar to assist removal of the bump-stop in the future.

Fit the bump-stop with appropriate spacers, as a guide a good place to start is 1 spacer for each inch of lift, but this depends on your suspension system. Once positioned and using the black bolts with attached nuts, fully tighten this. Remember these bolts only hold the bump-stop in place and they do not need to be excessively tightened.

Much the same as the driver side but as you don't have the captive threads of the steering box, we have provided a spreader plate and appropriate M12 Nyloc nuts and washers.

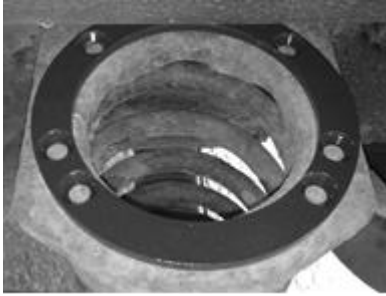
The strikers locate on the outside of the two radius arm bolts and face inwards. Depending on how your bolts have been fitted it may be as simple as removing the nuts, fitting the plate then refitting and tightening the nuts. Or you may need to remove the bolt if it has been fitted from outside in. either way ensure all nuts are tightened fully after fitting.

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**FOR THE REAR:**

Remove the spring, spring seat and any spring retaining devices fitted.

Take the round ring with the countersunk holes in it and place on top of the spring mount. There are six holes in the mount, position the ring with the four holes outwards and align them.



Mark the four holes on the outer edge of the ring. Drill these through with a 9mm drill.

The inner holes can only be accessed from underneath the spring mount, so using the countersunk bolts mount the ring underneath the spring mount (with countersunk holes downwards). Use all four bolts to locate the ring and nip them up.

Mark the inner holes and either drill through using the ring as a guide or remove the ring to drill.

Dress the holes and ensure no burrs are present as these will prevent the plate sitting flat.

Place the bump-stop mount on top of the spring mount and locate in-line with the drilled holes.

Refit the retainer ring underneath the mount and fully tighten using the M8x30 countersunk bolts with washers and nuts provided.

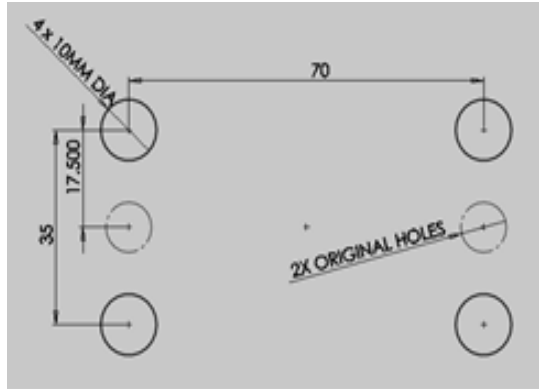
Using light oil, copper ease or similar, coat the inside of the bump-stop tube to make it easier to remove in the future.

Fit the bump-stop into the tube, using the appropriate steel spacers. As a guide two rings for a 2" lift, but this will depend on your suspension system and height.

Using two M10x50 hex bolts with washers and nuts tighten the bump-stop in place, these do not need to be excessively tightened as these don't see any strain and only hold the bump-stop in place.

Four new holes need to be drilled into each spring seat, so measure and mark the new holes as per the drawing below.

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Once marked, position the external relocation plate over on the mount and check the marked position matches up with the holes in the plate. Once you are happy with this drill through the plate using a 10mm drill bit.

Make sure you have removed any burrs from the metal before fitting the plate.

Mount the plates facing forward as below. Use the four countersunk M8x20 bolts tighten fully with washers and Nyloc nuts.



Refit the spring, placing the spring retainer plate (looks like lots of fingers) between the first and second windings top of the spring. Then using the three M10*50 bolts with washers, clamp this up to the top passing the bolts through the bump-stop mount and securing with washers and Nyloc nuts.



Repeat the process on the other side.

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