

Torc Ground Anchor – Series II

Fitting Instructions for Vans/Bike Safes

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Important Requirements

Caution: Be careful that you do not drop the anchor on your foot or allow the shackle to fall on a finger!

Any security installation is only as strong as its weakest link:

The Torc Ground Anchor must be used in conjunction with an appropriately fitted Sold Secure-approved lock and chain.

The integrity of the anchor is dependent upon the quality of the surface to which it is fitted and the security of the fixings on the other side of the van floor or other metal surface.

The van floor itself and the walls of the van are vulnerable to attack. Keep the van doors locked whenever possible and minimise the time that valuables are present in the van.

If you are unsure, please contact your supplier for advice.

What Tools Will I Need?

The fitting kit includes all parts that are required. The only tools you will require for wall mounting are:

- An electric drill with at least a 12mm chuck capacity
- HSS (metal cutting) drill bits 11-12mm and 4mm (e.g.), to suit drill
- A 19mm AF spanner or adjustable wrench
- A medium sized hammer
- A centre punch for locating the drill bit
- Threadlock compound (optional)
- Eye protection – goggles or a visor should be worn
- A pencil or felt pen or similar for marking holes to drill
- Ideally a helper for tightening the bolts but this is not normally essential

How Long Should I Allow to Fit an Anchor to a Van Floor?

30-60 minutes as a guideline. Be careful and don't rush.

What Parts Should be in a Van Fitting Kit?

The Torc anchor van fitting kit contains:

- M10 x 40mm long high tensile (10.9-rated) hex socket countersunk bolts, fully threaded (qty. 4)
- M10 security shear nuts (qty. 4)
- M10 penny washers (qty. 4)
- Hardened steel ball bearings to suit bolts (qty. 4)
- 6mm hex wrench (*Allen* key)
- M8 x 50mm hex head bolt (to be used as a punch)
- These instructions

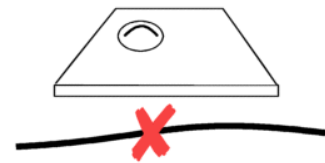
How to Fit a Torc Ground Anchor to a Van Floor

The Torc ground anchor is designed to be fitted by any competent DIY enthusiast.

You should read through these instructions in their entirety *before starting to fit an anchor*. If you are not confident of your ability, you should ask an experienced person or professional mechanic/builder to help.

In the following instructions, the term *bike* is used to mean any valuable item that you wish to secure with your ground anchor. The term *van floor* is used to mean any metal surface including the wall of a bike safe, for instance.

- 1. Check the contents of the Fitting Kit:** Ensure the fitting kit is complete (the items are listed above). Contact your supplier if there are any parts missing or damaged.
- 2. Choose a good location:** Be careful to choose an appropriate location for fitting your anchor, clear of the fuel tank and any fuel or brake pipes, cables etc. The anchor is designed for permanent installation so take time to ensure the chosen position will allow you to secure your bike with the chain etc that you have chosen. Putting the anchor near a corner or other location such that the bike restricts access to the anchor can make it a lot harder for a criminal to attack, as can keeping chains and locks off the floor. This fitting kit includes security shear nuts that expose only a smooth conical surface under the van floor but they should still be placed somewhere with restricted access to make an attack difficult. Conversely, you must choose a location that allows you enough access to tighten the bolts!



We recommend that you place the anchor loosely on the floor and check that you can get the bike into position and then ensure you can actually fit the chain & lock. Time spent now checking the intended location is much better than realising later that you can't get the bike within the range of your chain!

Remember that any anchor is only as good as the substrate it is fitted to.

- 3. Mark the holes to drill:** The fixing holes are at the corners of a rectangle measuring 100mm x 60mm. Using the anchor itself, choose the precise combination of hole positions relative to any ridges/grooves in the van floor. Bear in mind that there will be penny washers on the underside of the floor around each bolt – be sure that you allow enough room for them. Then *carefully* mark the holes to drill using a pencil or felt pen, for example.

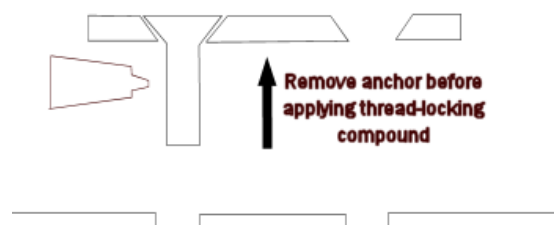
Check carefully that all four holes are marked at the centres of the bolt holes in the anchor. Accuracy is important here.

- 4. Use a centre punch** to give a guide for the drill at each hole position.
- 5. Move the anchor out of the way** and then, using eye protection and a 4mm (or similar) HSS drill bit, carefully **drill pilot holes** at each position and then drill the final holes to 11 or 12mm diameter. It is easier to drill holes in sheet metal with a cone type drill bit (e.g. a *ConeCut*), if you have one available. Take care with swarf generated.

6. **Place the D-shaped shackle flat on the van floor and put the anchor in position on top of it so that the shackle is held in position by the cut-outs in the anchor base plate**, and taking care to line it up with the drilled holes. **DO NOT FORGET TO PUT THE SHACKLE ON THE FLOOR FIRST!!!**

7. **Fit the anchor loosely** by inserting all four bolts. Ensure that each bolt rests fully home against the countersink in the anchor. Small alignment errors can be corrected by redrilling; greater errors need you to start again or seek advice from your supplier.

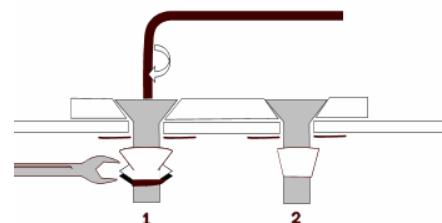
8. **Apply Threadlocking Compound to the Bolts (Optional):** If you have threadlock available (e.g. *Loctite* or equivalent), lift the anchor away from the floor, pulling out the bolts as you do so. Then, allowing for the thickness of the penny washer in addition to the thickness of the floor itself, judge where the nut will tighten and apply a small amount of threadlock to the appropriate position on each of the four bolts. Then refit the anchor by guiding the bolts through their holes.



Caution: Threadlock compounds may produce an allergic reaction and can be harmful by inhalation. After contact with skin, wash immediately with plenty of soap and water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, showing the threadlock tube.

9. **Fit the washers and Security Shear Nuts:** Ideally with the help of an assistant, fit a penny washer and then a shear nut to each bolt. The shear nut is fitted with the hexagonal head pointing *away* from the bolt. Spin the nut onto the bolt thread in each case.

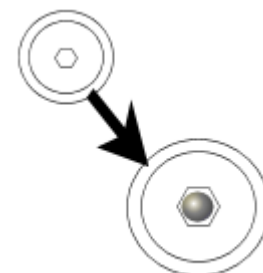
10. **Tighten the bolts:** Using the hex wrench (*Allen key*) provided and a 19mm AF spanner, tighten all four nuts evenly until they are all firm. Then tighten the nuts further until the hexagonal head shears off, leaving just the conical anti-tamper surface.



Caution: Be careful that you do not slip or graze your knuckles when the nut head shears off. Reposition the spanner or wrench regularly so that the head shearing off will result in your hand moving *away* from the other bolts etc.

If you are working without an assistant, you may be able to engage the hex wrench through the shackle of the ground anchor so that you can tighten the nuts on the other side of the floor.

11. **Insert the ball bearings:** It is recommended for maximum drill resistance that you hammer one of the ball bearings supplied into the hexagonal head of each bolt. You may find the extra M8 x 50mm bolt is useful as a *punch* to reach the bolt heads – the end of the bolt has a slight dimple that will locate on the ball bearing. The ball bearings are a very tight fit so it will take a few hammer blows to drive them into the bolt heads. Be careful not to hit your fingers! 😊



12. **The installation is complete once the threadlock has hardened (if applicable).** Ideally leave overnight. Well done 😊

Using a Torc Ground Anchor

A properly installed anchor should give you many years of trouble-free service.

Remember that you must use an appropriately fitted Sold Secure-approved lock and chain to be confident in your security provisions.

No maintenance is normally required. Do not use any abrasives for cleaning.

Remember also that the van floor itself and the walls of the van are vulnerable to attack. Keep the van doors locked whenever possible and minimise the time that valuables are present in the van.

Van Floor Fixing Queries

Is a spreader plate recommended?

If you have a metal or other surface that has no ridges in it, a load spreading plate can increase the security of the fitting. A load spreading plate is *not* included in the fitting kit but could ideally be made from some hardened sheet steel (the thicker the better), drilled to accept the mounting bolts and fitted on the underside of the floor.

Note that a spreader plate could *reduce* the security of the shear nuts if your floor has ridges in it (which most van floors do).