



X-Eng is a division of
Foundry 4x4 Limited
The Old Bakery, Rear of Vale Terrace,
Tredegar, Gwent. NP22 4HT

LT77 Version

X-Defend Gear Lock

Thank you for choosing to buy an X-Defend Gear Lock.

Fitting and use is generally easy, though in some cases you may need to adjust the transfer linkages or gear lever position a little.

The kit has been based on the original factory positions of each, but as they are adjustable – there is no guarantee yours is standard.



We support LandyWatch

LandyWatch is a network of Land Rover owners whose aim is to assist in the recovery of stolen Land Rovers and suggest ways to make our vehicles a less attractive target to thieves.

www.landywatch.co.uk

This is the kit of parts you should have received. If any parts are missing - give us a ring and they will be in the next post.

- 1 x Silver Gear Tube
- 1 x Yellow Transfer Tube
- 1 x Lock Barrel + 2 Keys
- 1 x M6 x 3mm Grub Screw
- 1 x M10 Security Nut
- 1 x M10 Half Thickness Nut
- 1 x Plastic Peg
- 1 x Small X-Eng Label



Step 1

Press the lock barrel into the boss in the side of the yellow transfer tube from inside. It is a tight fit and may need a reasonable amount of force to push it home.

Once in place, the end of the lock barrel should not protrude in to the bore of the main tube at all. If it does, it will foul on the gear tube.

The keyhole on the barrel has an alignment slot. If you make this vertical, it's easier to line the key up when unlocking.



Step 2

Insert the grub-screw and tighten.



Step 3

Assemble the Gear lock by inserting the silver tube into the yellow housing.

The two parts are retained by the plastic peg (do not insert yet).

You can see that the peg can fit in one of three holes. These allow some adjustment for different gear & transfer lever positions.



Step 4

Unscrew your gear and transfer lever knobs and remove the rubber gaiter from the top of the transmission tunnel.

You can see that the gear lever is held in place with an M10 Nut (17mm Spanner) . Remove this nut and replace with the M10 Security nut with the hexagonal end upwards. **DO NOT Tighten yet!**

Screw the M10 Half Nut on to the Transfer lever stick. This sits underneath the knob to prevent it being pulled off.



Step 5

Replace the transfer lever knob temporarily and remove the plastic peg (if fitted) from the yellow housing.

Put the gear lever in 5th gear and the transfer box in High range with the centre diff unlocked.

Hook the yellow housing round the transfer lever as shown above. Extend the silver tube and engage on the gear lever tube as shown in the photo on page 1. Twist the yellow & silver tubes in opposite directions to fully engage.

Pull the two halves apart until you can press the button on the lock barrel fully in and it locks.

If you cannot find a position where the push button lock engages, try removing the security nut from the gear lever, lift the gear stick off it's spline and move one spline either way then try again.

The lock will have engaged in one of three receiving holes in the silver tube. This is a bit fiddly the first time, but once the plastic peg is installed, it will help the parts to line up next time.

The plastic peg can now be inserted into one of the holes on the under side of the yellow housing. Try it first in the hole closest to the gear lever, then in the middle and then in the one closest to the transfer. Push it fully in to the first hole in to which it will engage.

Step 6

Unlock the barrel using one of the keys and twist the yellow & silver tubes in opposite directions to remove the lock.

Once you are happy that the lock can be installed and removed easily, tighten the security nut until the hexagonal section snaps off.

Re-fit the rubber gaiter and the gear and transfer knobs. If they are difficult to screw on, use a little washing up liquid to lubricate.



The X-Defend Gear Lock can also be locked in the closed position. Collapse the two tubes and press the push button lock.

This renders the lock useless to anyone who may decide to steal it!

If the lock barrel is initially hard to unlock, lubricate with light oil.

Put one of the keys in a safe place!

We are unable to immediately supply replacement keys for the locks as they are randomised and there are thousands of combinations.

Keep a note of the key number as we can order a key from the lock manufacturer (Lowe & Fletcher in the UK). However a replacement key costs more than a whole lock and can take several days to arrive!

We can also supply replacement lock barrels at reasonable cost.

If you have any problems or questions, please email us at:

Xeng@foundry4x4.co.uk

And we will do our best to answer promptly.

Help! I can't make it fit!

Assuming you have the right version for your gearbox (LT77 / R380) and you have tried the adjustment in Step 5 – there is another possibility.

Transfer Lever Position. This is the most common issue. The position of the Transfer lever is adjustable. The lever connects to a diagonal threaded rod which in turn connects to the transfer box. The length of this rod can be adjusted by slackening one of the lock-nuts (with a 13mm spanner) adjusting the positions of the nuts then re-tightening one of them to lock it in place. As you move the nuts upwards away from the floor, this moves the transfer lever knob towards the rear of the vehicle. The easiest way to access this adjustment is by removing the panel under the centre seat. The adjustment is directly below.

The main adjustment is circled in **RED**. If there is not enough adjustment in the thread, The spline circled in **GREEN** may be in the wrong position. Slacken the bolt and move one spline either way.



The kit was designed to fit straight on to a vehicle as it came out of the factory. However, in particular on older vehicles, there is no guarantee these adjustments have been put back to the original factory position. After all, there is normally no need to, so most mechanics will not worry about it.