

# Installation Guide for Custom Offroad diff protectors (INEOS) made from 4mm stainless steel

Read through all this Installation Guide before starting work. We suggest you install the front diff protector, then the rear diff protector.

# INSTALLING THE FRONT DIFF PROTECTOR

- 1. Remove the plastic bungs from the pre-drilled holes on the FRONT diff on your INEOS Grenadier or Quartermaster (QM). **Tip:** long nose pliers easily remove the plastic bungs.
- Ensure all threads in the pre-drilled holes are clean. Tip: using a <u>metric tap</u> can clean away any debris. Warning: in Australia, the fine red dust can get past the plastic bung and deposit enough dust to clog up the thread. A bung can also fall out, allowing debris into the thread.
- 3. Remove the protective plastic covering from the diff protector.
- 4. Two M12 bolts and two M10 bolts are used to secure the FRONT diff protector. **Tip:** have within reach the FRONT diff protector, the needed bolts and your 16mm and 18mm sockets/spanners.
- 5. Get under the car. Orientate the FRONT diff protector so the two M10 bolts holes are close together face towards the back of the car, the two M12 bolt holes face the front of the car.
- 6. While holding the diff protector in place, take a M12 bolt, washer and split washer and hand-tighten the bolt in place. Leave plenty of play. Next hand-tighten the second M12 bolt, again allowing plenty of play. Tip: it is good practice to use a suitable <u>anti-galling lubricant</u> like Tef-Gel on all bolt threads. <u>Tef-Gel stops corrosion, galling and seizing</u>. It is non-toxic. Copper Grease is also commonly used.
- 7. Next hand-tighten the two M10 bolts in place. You need some play to ensure you get all four bolts inserted.
- 8. Align the diff protector. Now ensure the FRONT diff protector is pushed towards the rear of the car as far as possible to ensure the Grenadier's (or QM's) front stabiliser bar does not touch the FRONT diff protector.
- 9. Fully tighten all four bolts. **Tip:** suggested torque setting for the M12 bolts is 77Nm and the M10 bolts is 44Nm.

# INSTALLING THE REAR DIFF PROTECTOR

- 1. Remove the plastic bungs from the pre-drilled holes on the REAR diff on your Grenadier or QM. **Tip:** long nose pliers easily remove the plastic bungs.
- 2. Ensure all threads in the pre-drilled holes are clean.
- 3. Remove the protective plastic covering from the diff protector.
- 4. Four M10 bolts are used to secure the REAR diff protector. **Tip:** have within reach the REAR diff protector, the needed bolts and your 16mm socket/spanner.
- 5. Get under the car. Orientate the REAR diff protector so the two M10 bolts holes close together face towards the front of the car.



- 6. While holding the diff protector in place, take a M10 bolt, washer and split washer and hand-tighten the bolt in place. Leave plenty of play. Next hand-tighten the second M10 bolt, again allowing play. **Tip:** it is good practice to use a suitable <u>anti-galling lubricant</u> on all bolt threads.
- 7. Next hand-tighten the remaining two M10 bolts in place. You need some play to ensure you get all four bolts inserted.
- 8. Once all bolts are hand-tightened and the diff protector aligned, fully tighten all bolts. **Tip:** suggested torque setting for the M10 bolts is 44Nm.

## SUPPLIED PARTS

FRONT diff protector made from 4mm stainless steel, with protective plastic covering in place.

REAR diff protector made from 4mm stainless steel, with protective plastic covering in place.

M12 bolts x two (2). Specs are M12 x 1.5 (thread) x 30mm (bolt length). Use the 18mm socket/spanner. They are metric bolts and threads.

M10 bolts x six (6). Specs are M10 x 1.5 (thread) x 25mm (bolt length). Use the 16mm socket/spanner. They are metric bolts and threads.

**Note:** all threaded holes are pre-drilled, in factory, on the Grenadier or QM's front and rear diff housings.

### **TOOLS NEEDED**

Long nose pliers (to remove the plastic bungs on the Grenadier or QM).

18mm socket/spanner (for the M12 bolts).

16mm socket/spanner (for the M10 bolts).

Torque wrench.

A mat to lie on, while under the car.

Anti-galling lubricant (Copper Grease is one commonly used).

Metric tap and dye set (only if needed).

# CUSTOM OFFROAD GRENADIER TRAILING ARM PROTECTORS

If you also bought the <u>Custom Offroad Grenadier Trailing Arm</u> Protectors (made from 4mm stainless steel) you are supplied with four (4) bolts whose size is: M6 x 1 (thread) x 25mm (bolt length). Use a 10mm socket/spanner for the M6 bolts. **Tip:** suggested torque setting for the M6 bolts is 10Nm.

### CONTACT

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