



## T BOLT FIXINGS

Codes, TN, TN1, TN2, TN3, TNL, TNL1, TNL2, TNL3, TNS

### USER INSTRUCTIONS



**Read instructions fully before use.**

**It is recommended that training be given on the proper use of this product.**

**Retain this manual for future reference.  
Include it with the product in the event of transfer to new users.  
Additional copies are available upon request.**

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UI1505A



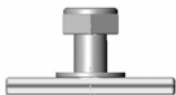
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## A. PARTS LIST

A range of parts are available to meet the desired application. The T Bolts and Spacer Bar are all sold separately. Each T Bolt is supplied with one washer and nyloc nut per stud. For M1 applications two '2 stud' fixings **must** be placed at the rear. For M2 applications 'single stud' fixings can be used all round.

### Suitable For Spacer Bar



**TN**  
Single Stud



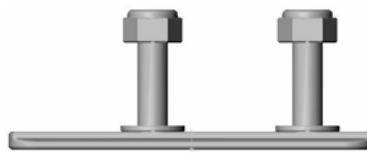
**TNL**  
Single Stud



**TNS**  
Spacer Bar



**TNL1**  
2 Stud, 1" Pitch, Long



**TNL2**  
2 Stud, 2" Pitch, Long

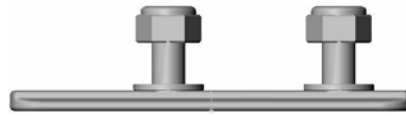


**TNL3**  
2 Stud, 3" Pitch, Long

### Not Suitable For Spacer Bar



**TN1**  
2 Stud, 1" Pitch, Short



**TN2**  
2 Stud, 2" Pitch, Short



**TN3**  
2 Stud, 3" Pitch, Short

## B. LIMITATIONS OF USE

- 1 This range of T Bolt seat fixtures have been designed for use with a variety of seats where the intention is that they are fitted into Unwin Rail in a fixed position within the vehicle to EEC Regulation 14 M1 & M2 Loading.
- 2 If seat belts are attached to the seat and the vehicle is to be sold within the EU the vehicle builder will invariably require evidence that the assembly meets appropriate Directives.

Although the T Bolt fixture has performed satisfactorily in tests where M1 loads were applied to a single seat up to 28kg, care needs to be taken in reading across testing results from one installation to another.

If in doubt regarding a particular installation exists refer to Unwin Safety Systems, the seat manufacturer or the vehicle builder.

3. The nyloc nuts are only to be used once, if the seats are moved replacement nuts are to be used. (see Spare parts/ancillary items)
4. T Bolt seat fixtures should **only** be fitted and used in the way described in this manual. If you have any queries on the installation or use of these products please contact Unwin Safety Systems.

## C. FITTING T BOLT FIXINGS ONTO SEAT FRAME

**Note that T Bolts are to be slid into the end of the rail, ensuring that the arrow marked F on the '2 stud' fixing is pointing towards the front of the vehicle, therefore this must be done whilst access is available.**

### M1 Application Only

1. Two pairs of fixings are normally required for each seat.
2. Two '2 stud' fixings **must** be placed at the rear with two 'single stud' fixings at the front. However, if it is intended that the seat should face the rear please contact Unwin Safety Systems.
3. Slide the fixings along the rail to where the seat is to be positioned.
4. Remove the washer and nyloc nuts from each fixing.
5. Place the seat on the fixings and place a washer & nut on all studs and tighten, a screw tightening torque of 40Nm (30lbft) is recommended.
6. To achieve maximum strength as an assembly the fixing studs must protrude beyond the nylon of the nyloc nut by a minimum of 1.5mm.

### M2 Application

1. As above but the 'single stud' fixing can be used all round.

### Spacer Bar (Not Suitable For TN1, TN2 & TN3)

1. The Spacer bar is used, in both M1 & M2 applications, to maintain a constant seat height when both the T Bolt and Unwin Lockable are used in the same vehicle.
2. Position the fixings in the vehicle as above and place the spacer bar over the studs in line with the rail in the floor.
3. Fit the seat frame, washers and nuts as detailed above.

## D. SPARE PARTS/ANCILLARY ITEMS

Additional washers and nuts are available

WA-M10-Z	M10 washer
NC-M10-Z	M10 nyloc nut
TN/10	M10 Plastic Nut Cap

Please contact our sales office for details.



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