# **Transport Safety Pack**

## FRONT UNDERRUN PROTECTION GUIDE

Each year across Australia around 300 road users are killed in collisions with trucks. The occupants of a car or other vehicle that goes underneath the front of a truck have very high risk of being killed or seriously injured. Crashes where vehicles go underneath a truck normally have very severe outcomes because the relatively "soft" roof of the car easily collapses exposing the vehicle occupants to serious injury.

### What is FUPs?

Front Underrun Protections (FUPs) are barriers integrated into the front of trucks or built as specially designed bull bars. Some trucks have both the integrated front FUP and an appropriate bullbar.

The benefits of FUPs are significant:

- ∞ Injuries are minimised by preventing smaller vehicles from going underneath the front of trucks.
- ∞ FUPs ensure that the crash forces and distributed evenly across the front of the car.
- ∞ FUPs ensure that the safety features of passenger cars (such as air bags and crumple zones) are activated during a collision.
- ∞ FUPs can prevent the car damaging the truck's steering allowing the truck to be brought to a controlled stop.

Australian FUPs are made to UN ECE Regulation No. 93 standards. The regulation requires that the front underrun protective device must withstand certain forces, have a smooth front to distribute the crash forces, and have a maximum ground clearance of 400 mm.

### **Bullbars**

It is important that bull bars do not interfere or compromise energy absorbing Front Underrun Protective Devices. A special bullbar has been developed that is designed to protect the vehicle from animal strike damage without compromising the energy absorption characteristics of more advanced Front Underrun Protective Devices.

### Victorian approvals

The fitment of a FUP is one of the requirements to operate a 26 metre B-Double.

For vehicles registered in Victoria, approval plates must be obtained from either an engineering signatory for vehicle modifications, truck manufacturers, or bullbar suppliers who are certified under the Vehicle Assessment Signatory Scheme (VASS).

Compliant prime movers registered outside Victoria are required to have approval plates affixed under the registering jurisdictions' procedures. For a list of from whom approval plates can be obtained in Victoria, see the VicRoads website: www.vicroads.vic.gov.au

### **Further information**

Contact VicRoads Permit Issuing Officers on (03) 9881 8853 or (03) 9302 8405.

- ∞ Visit VicRoads website: <u>www.vicroads.vic.gov.au</u>
- ∞ More information on compliance requirements for 26 metre B-Doubles can be found on the website: <a href="www.ntc.gov.au">www.ntc.gov.au</a>

This safety guide has been produced by the Transport Industry Safety Group with the support of VicRoads to improve the safety of transport workers. It is one of 18 Safety Guides and other important information including the TISG's 'A Guide to Occupational Health and Safety Transport Industry' that can be downloaded from <a href="https://www.vta.com.au">www.vta.com.au</a>



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