

Toddco Door Razor

Installation instructions for the Razor Electric Drive Kit.

IMPORTANT: The following information is based on the assumption that the Toddco door is being fitted by a competent Toddco door installer.

The Razor electric door kit can be fitted to new and existing trailers and rigid vans.

The kit comes with the following components:

- Shaft mountable motor/gear drive complete with torque bracket.
- Razor electronic motor controller.
- Razor power kit.
- 2 Vertical operational key pads.
- Wiring harnessing and hard ware kit.
- Installation instructions and drilling patterns.

Please Note: For installation to an existing Toddco door it will be necessary to remove the balance spring shaft and spring assembly.

FITTING INSTRUCTIONS

Motor/gear door drive and Vertical key pad. (Razor dwg Door Drive Motor/Installation)

1. Slide the motor/gear drive onto the balance spring shaft.
2. Drill 1x 25mm and 1x12mm holes in trailer door pillar. These holes are to install the wiring for vertical key pad and the motor/gear drive, respectively.
3. After mounting balance spring shaft with motor/gear drive attached, locate torque bracket position and fasten to trailer roof lining.
4. When the door has been adjusted to operated correctly manually, 'loctite' and tighten 2 securing grub screws on the motor/gear drive shaft and the torque bracket bolt.
5. Mount the vertical key pad with pop rivets to inboard face of door pillar after feeding wiring down through pillar. Silicon should be used to protect wiring from chaffing around drilled holes for both the vertical key pad and the motor/gear wiring.

Razor motor controller and Razor power kit.

6. The motor controller and power kit need to be mounted adjacent to each other, close enough to allow the two wiring loam plugs to connect. It is recommended they be mounted to the trailer chassis by drilling to the patterns provided and fastened with the hardware supplied.

Connecting the wiring harnesses. (Razor dwg Razor Power Door System)

7. Take the 5mm 2 core wire from the motor/gear drive and using the plug and 2 core tail supplied connect together with the heat shrink crimps supplied. Be sure to connect Red to Red and Black to Black.
8. The **General Arrangement** drawing supplied will show all the correct plug fitments.
9. The charge Harness PN0005D is connected to the clearance light circuit on the trailer. This connection can be performed at the closest clearance light for convenience or anywhere on the trailer harness into **the Brown wire +** and the **White wire -**. The charge harness PN0005D 2 core is **Red+** and **Black-**.
10. On completion of the plug connections fasten loose wiring securely to trailer to prevent chaffing using standard methods.

NOTE: The razor battery charger will not operate if the charge harness is in reverse polarity. On testing the system for operation, a blinking green light on the Razor motor controller will verify the charge harness is connected correctly, when the clearance lights are illuminated on the trailer.

The Razor electric drive kit comes with 2 vertical key pads and a "Y" piece connector. The key pad mounted on the vertical door pillar is for dock height door activation. The second key pad would be mounted for ground height activation. This location can be chosen for operator convenience either on the rear of the trailer or toward the rear on either side of the trailer.

OPERATING THE DOOR

Simply press the up (blue) button or down (green) button once, from any key pad location including the motor controller key pad and the door will drive itself in that direction. The smart electronics will turn the motor off once the door is in the fully up or fully down position.

The door can be stopped at any time by pressing the STOP button or the button opposite the direction of door travel.

IMPORTANT: Confirm the razor battery charging electronics are operational by turning on the trailer clearance lights and observing the green LED is active. If the power kit is charging the green LED will be blinking, if the green LED is solid this indicates the power kit is fully charged.

The charge harness PN0005D will accept 12V/24V supply.

Once the charging has been confirmed, the installation is complete and the door is fully operational and self maintaining.