

## ODS Mechanism 10 Installation INSTRUCTIONS



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### SPECIFICATIONS.

#### ODS Control 10

Output: 14.4 volts  
1.5Ah NiMH

Size: H 186 mm  
W 71 mm  
D 30 mm

Weight: 450g

#### ODS Mech 10

Rated Torque: 10Nm  
Speed: 16rpm

#### ODS Charger

Output: 24V 500mA DC

**Note:** Ensure that the shutter is within the lifting zone of the ODS Mech 10. (Refer to the graph shown in Figure 6.0)

### 1. FITTING THE ODS MECH 10 TO THE END PLATE.



Figure 1.1

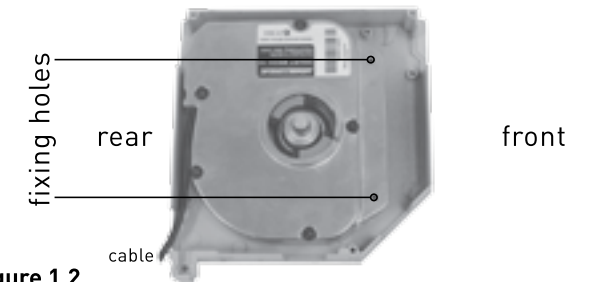


Figure 1.2

The ODS mechanism is designed to be fitted to the boss on either side end plate. In Figures 1.1 and 1.2 the mechanism has been fitted to 165 end plates. Notice that the cable is always at the rear of the end plate with the two fixing holes towards the front.

Slight modification of the end plate casting may be required. When installing to the end plate you will need to check for any protrusions that may interfere with the casing of the mechanism.

Refer to Figures 1.3 and 1.4. This brand of end plate has screw bosses moulded into the casting which foul on the mechanism and will need to be removed.

Any protrusions that interfere with the casing of the mechanism may result in an increase in noise transfer.

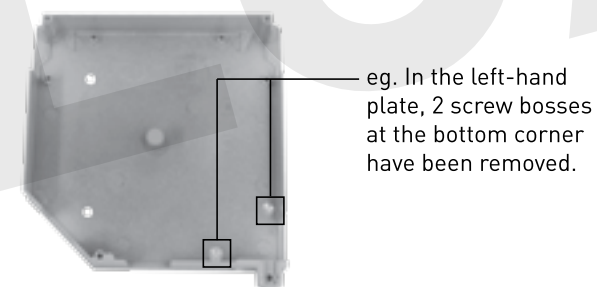


Figure 1.3

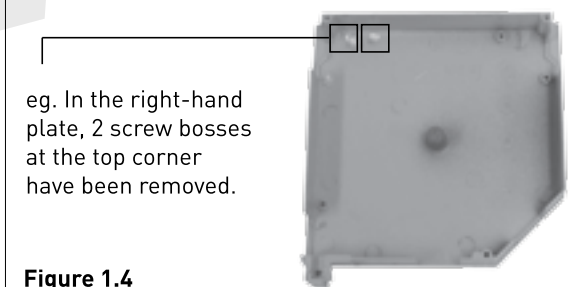


Figure 1.4

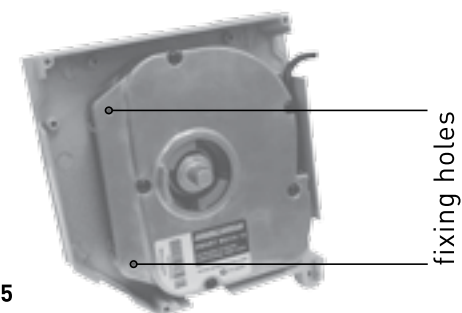


Figure 1.5

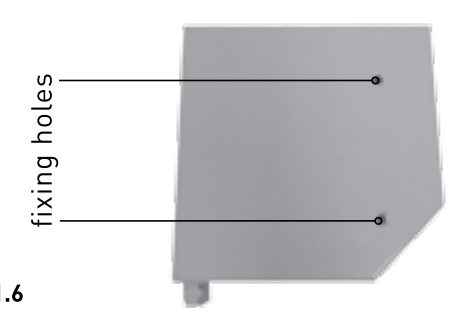


Figure 1.6

Figure 1.5 - The ODS mechanism is fixed into place using the two fasteners supplied. The two fixing holes are located towards the front of the end plate. The mechanism can be used as the drill jig when using a 1/8 drill bit.

Figure 1.6 - Countersink the hole from the outside to suit the head of the supplied fasteners.  
**Do not over tighten these screws.**

Once the ODS mechanism is fixed to the end plate the shutter head box can be assembled in the normal fashion.

**Note:** When assembling the headbox. It is important that when you are drilling the rivet holes that you do not drill into the mechanism.

## 2. FITTING THE AXLE STOP ADAPTOR AND AXLE TUBE.

Figure 2.1 - Shows the Axle Stop Adaptor.

This has been designed specifically for use with a 50mm round aluminium axle tube.

The Axle Stop Adaptor is supplied as standard to suit a Right-Hand installation.

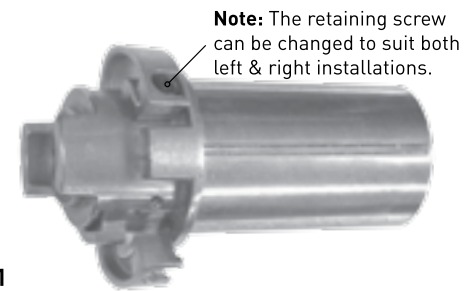


Figure 2.1

**Axle Stop Pawl set for right hand installation**

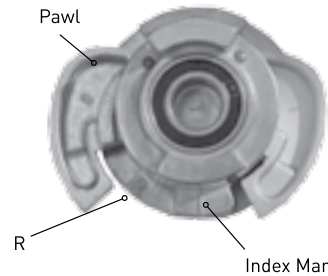


Figure 2.2

**Axle Stop Pawl set for left hand installation**

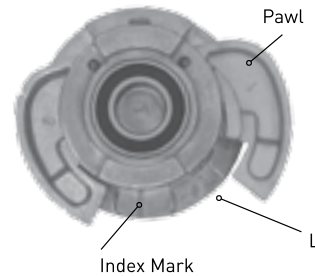


Figure 2.3

For a lefthanded installation free the "L" Pawl by removing the retaining screw, use this screw to lock down the "R" Pawl. Refer to Figure 2.3.

**Note: The Pawl is the component that provides the downward stop for the mechanism. It's setup must correspond with the hand of the ODS Mech 10 installation.**

Once the Axle Stop Adaptor has been set for your application the axle can be cut and fitted. This adaptor will also require the use of Rubber "O" Rings on the 50mm round axle. The axle tube cut length will vary depending on the type of shutter system that you use.

## 3. FITTING THE SPRING CONNECTORS.

ODS has been designed to work with the 130mm security spring for connecting the slat curtain to the axle tube. In this instance the security spring is riveted to the round axle tube.

Figure 3.1  
130mm is the actual measurement from the axle fixing point to the spring hanger.

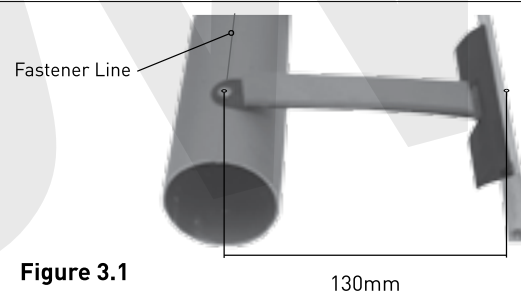


Figure 3.1

130mm springs must be used with the ODS to ensure that there is a positive alignment with the Axle Stop Pawl. If a longer spring or no spring is used the first slat in the curtain will not act's against the Pawl correctly and therefore the limit setting will not function properly.

## 4. AXLE INDEXING.

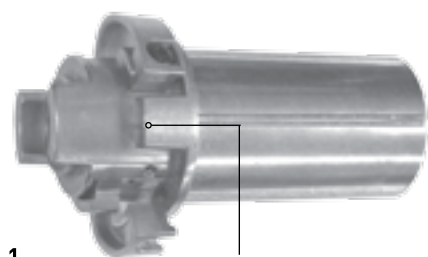


Figure 4.1

**Note:** Every Axle Stop adaptor has an index mark on the head of the adaptor. [ Figure 4.1 ]

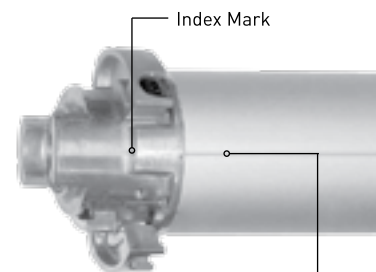
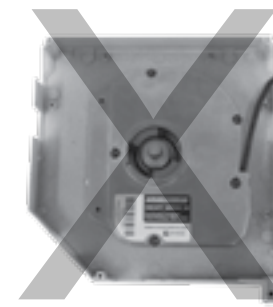


Figure 4.2

The spring connectors must then be attached to the axle using this mark as an alignment guide. [ Figure 4.2 ]

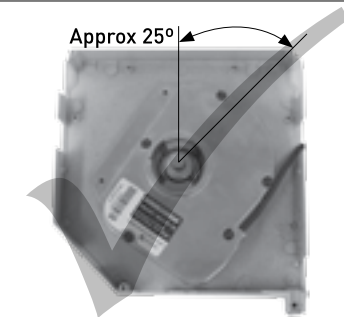
## 5. FITTING TO A LARGER END PLATE.

Figure 5.1



205 End Plate

Figure 5.2



205 End Plate

When fitting the ODS mechanism to 205mm end plates, the above principles remain the same, including the 130mm spring fastener. This size spring will be slightly short of reaching the back of the head box in the normal position. Therefore the mechanism will need to be rotated slightly.

Figure 5.1 - shows the ODS mechanism fitted to the plate in the normal location as would be the case for a 165mm or 180mm end plate.

Figure 5.2 - shows that the mechanism is rotated by approx 25°. This allows for the axle to rotate more so that the spring fastener can reach the back of the head box.

## 6. THE OZROLL DRIVE SYSTEM - LIFTING CAPACITY

LIFTING CAPACITY - AR400 Slat Profile (4kg/m<sup>2</sup>) on a 50mm Round Axle.

- Minimum head box sizes are: 165 in the BC/SQ range or 160 in the RD range.
- Lifting capacity will be reduced for larger axle sizes.
- Larger shutters can be split utilising multiple OZRoll Drive motors.

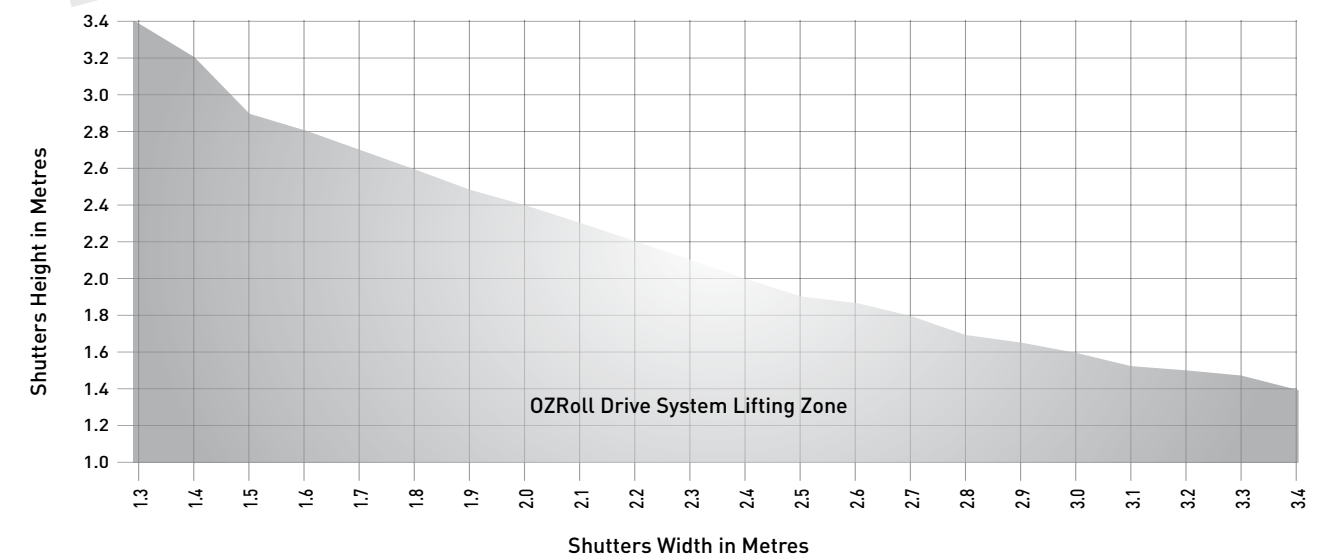


Figure 6.0

## 7. BOTTOM BAR STOPPER

The OZRoll Drive System utilises the Bottom Bar Stopper to stop the upward travel of the curtain. As this stopper needs to withstand some load, we strongly recommend that these components are closely inspected on Retro-Fit applications. If there is any doubt about the integrity of these existing components they should be replaced or substituted.