Interior Opening Mechanism for ULISES Ø27 Assembly Instructions

1. Drill hole in the panel

Fix the lock base. Drill through hole in the panel Ø8.5mm. Use the hole in the lock base as a guide (***Figure 1***).

> ***Note:*** *The hole drilled in the panel (**Ø8.5mm**) must be perpendicular to the plane of the Base.*

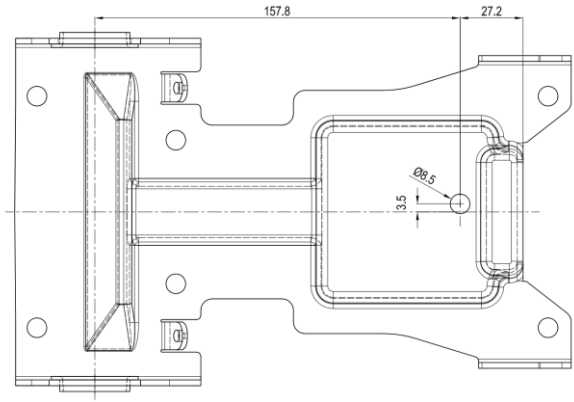

Figure 1: *Plan view of Ulises Ø27 Base (reference 202840209-C)*

2. <u>Remove panel material (on the interior side of the panel) Ø100mm and 30mm depth</u> necessary to position the tray for the internal opening mechanism.

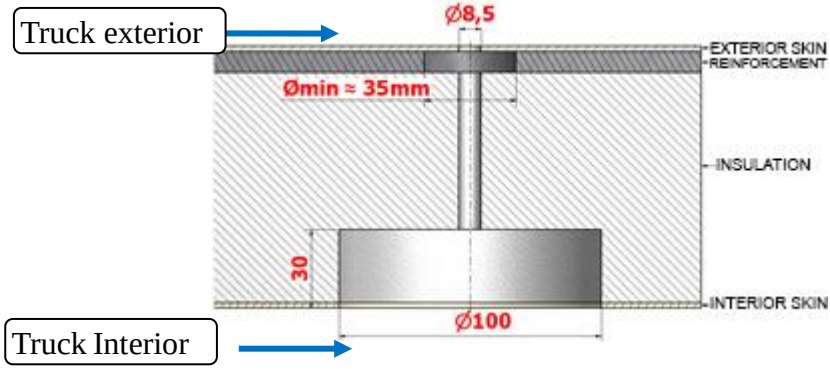

Figure 2: Detail of removal of panel *Ø100*

Note: *If the panel has internal reinforcement, it is advisable to drill a hole in the position of the axis of the internal opening with a minimum diameter of 35mm (depending on the pressure in the positioning of the reinforcement in the panel), to avoid interference with the assembly of the internal opening mechanism. (**figure 2**)*

3. **<u>Ø30 MM Drilled Hole</u>** from interior side of the panel (truck interior), Be careful not to breach the exterior skin of the panel.

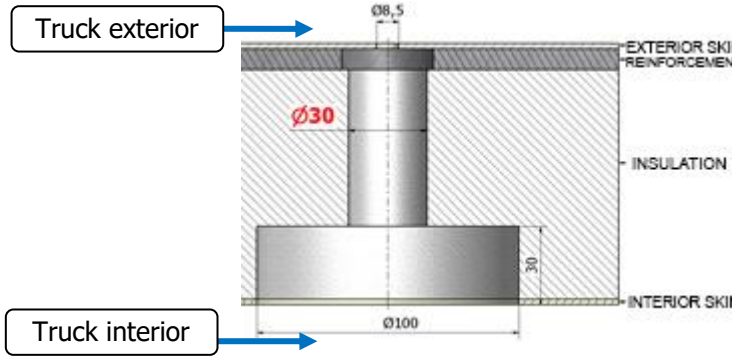

Figure 3: *Detail of removal of panel section Ø30*

4. **<u>Ø20±0,5 mm Drilled Hole</u>** through the exterior skin only.

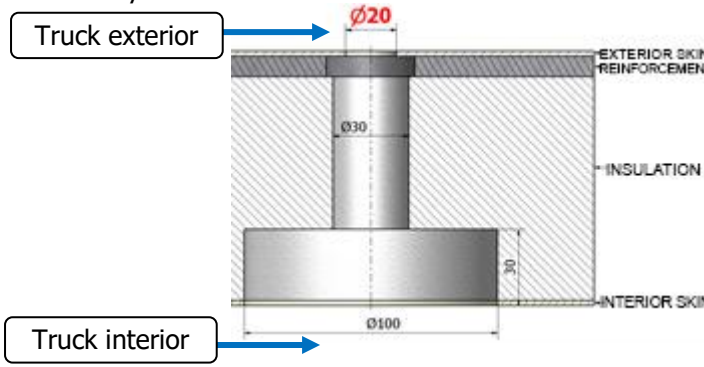

Figure 4: *Detail of removal of panel section Ø20*

Note: ***Step 4*** *is not necessary if the mechanism is not fitted with the exterior and interior cover; in this case, drill the Ø30mm hole from* ***step 3*** *through*

5. Cutting of the square shaft.

Position the square shaft and internal opening tray on the interior side of the panel, position the base of the lock on the exterior side and mark the cutting height of the shaft.

Note: *Cut out the square shaft, leaving it at the same height as the embossing of the lock base., as shown in the picture (****figure 5****), otherwise interference problems could arise between the shaft and the tongue when locking the lock with the key.*

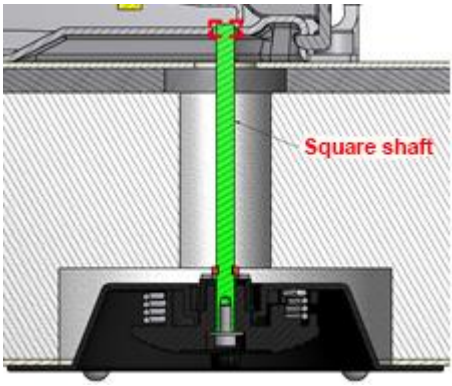

Figure 5: *Detail Cutting length of square shaft*

6. Assembly of exterior and interior covers

Assemble the exterior and interior shaft covers and attach them to the internal opening tray (***figure 6***). Position the mechanism (tray + shaft + covers) on the interior side of the panel (***figure 2***) until the interior cover touches the exterior skin of the panel. Now the tray can be fixed using Ø5 mm (***figure 7***) screws or rivets.

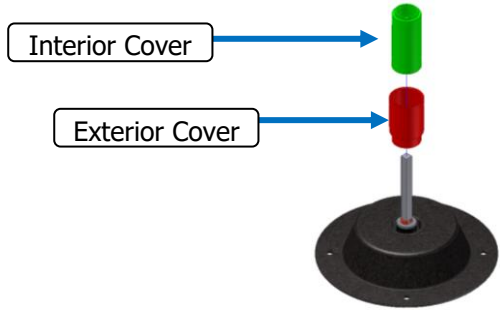

Figure 6: *Exploded view tray + covers*

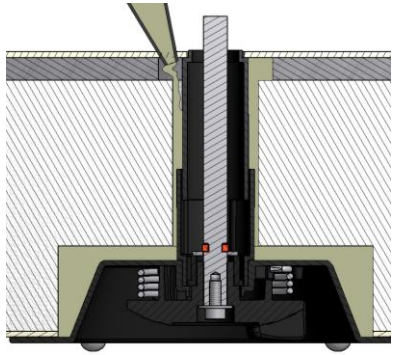

Figure 8: *Detail view of insulation injection*

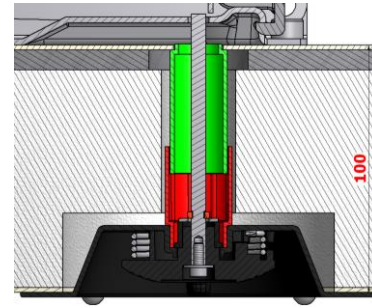

Figure 7: *Detail view of cover installation*

Note: *The design of the covers allows for adjustment of the mechanism according to the width of the panel* ***(maximum panel thickness is 100mm):***

If the panel thickness is less than the sum of the 2 covers, the installation can overlook the exterior cover and use only the interior cover; If necessary, the interior cover can be cut to match the thickness of the panel.

*The use of the covers allows for protection of the internal opening mechanism once assembled; it allows the injection of insulation material in the section of panel removed thus reducing the thermal bridge without affecting the mechanism. (The recommended area for application of the insulation material is accessed from behind the tray of the lock (**Figure 8**)).*

7. Cam and ring placement

Assembly of the cam and ring on the outside of the door, guided by the square shaft and located under the lock base.

The arrow (<) engraved on the cam will point away from the door hinges when positioning the cam, as shown in the picture. ***(Figure 10)***.

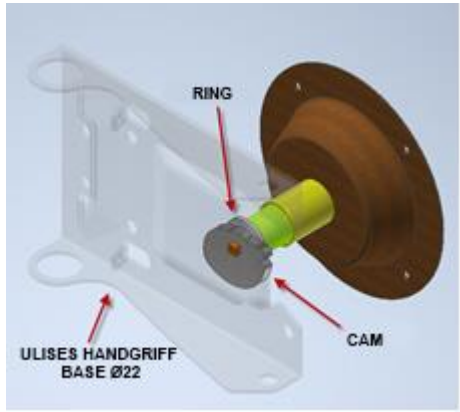

Figure 9: *Assembly of the cam and ring*

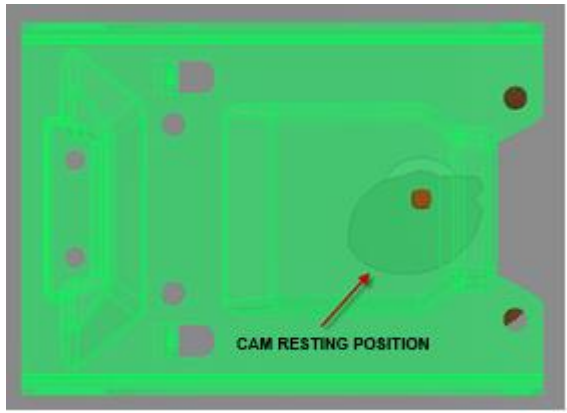

Figure 10: *Cam resting position*

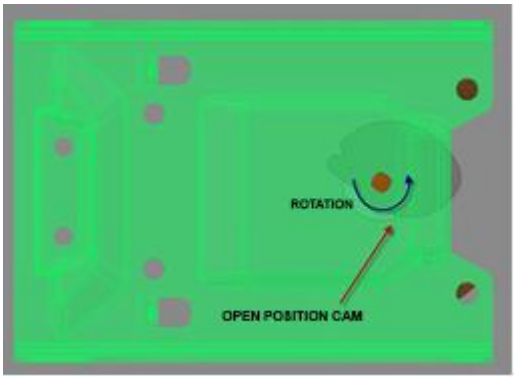

Figure 11: *Open position cam*

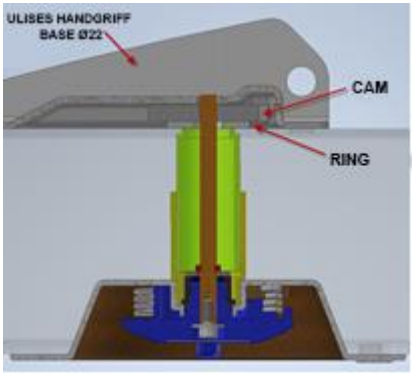

Figure 12: *Detailed section*

***Note**: Check that after fixing the recessed base with screws to the panel, the opening mechanism functions normally, **verify that after turning the knob the cam returns to its original position.** If this is not the case, the tightening torque of the screws must be reduced, as this causes a deformation in the panel which results in the cam being trapped between the base of the recessed lock and the panel, making it impossible to turn.*

Recommendations for use:

The design of the internal opening mechanism was developed to allow unlocking from the interior side of the truck in case of accidental closure from the exterior side (as long as the lock is not locked); under no circumstances, it should be used on a regular basis as the primary mechanism to open and close the doors since this will promote early wear and tear of the components and a possible malfunction.