How to Mount Axon Light Assembly Using Bolt on Reliance Base

User Manual

, Rev. ,

ADB SAFEGATE

Fixing Hardware

Before You Start

Gather all necessary tools and equipment for installation, as detailed in the product manual.

Ensure the shallow base is installed in accordance with the manufacturer's recommendations.

Using the Right Fixing Hardware

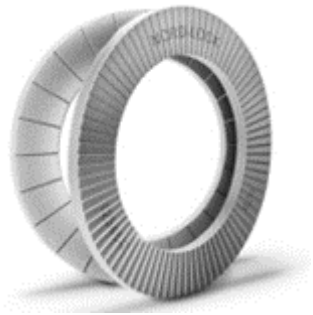
WARNING

Only use fixing hardware from the same type as the one originally supplied with the base or adapter ring!

Since mid-2006, the shallow bases supplied by ADB Safegate include an indication of the type of thread on the bottom or flange of the base.

To determine the correct type of fixing hardware, note the following:

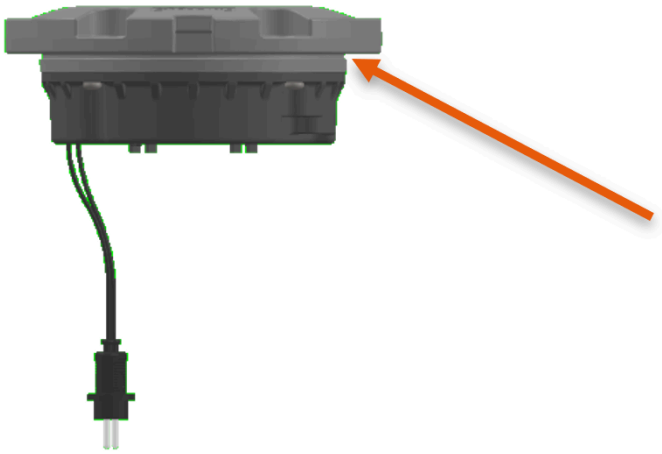
- M10 bolts require the use of a 17mm socket, supplied by ADB Safegate.
- Nordlock anti vibrant washers are composed of two washers facing each other. If they are separate, make sure to place them in the correct orientation.

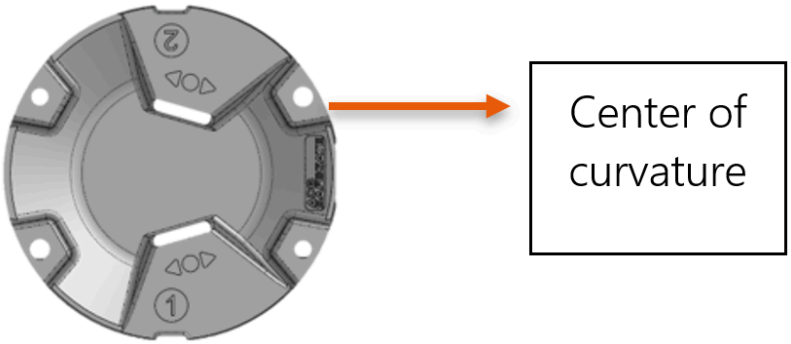
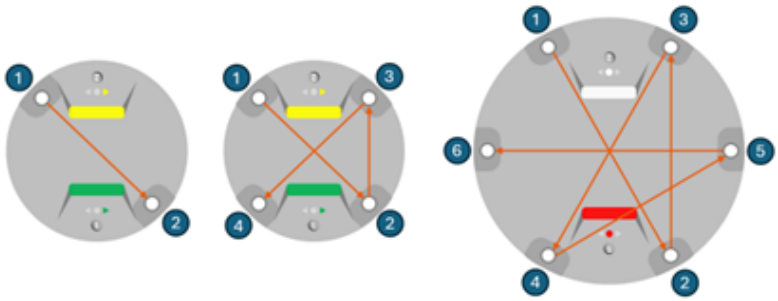


- HPI and Eurobase bases require the use of Loctite 2701 or 638.
- Reliance bases are equipped with Helicoil screwlocks that have a polygonal spire in the middle to prevent the Bolt from unscrewing.

How to Mount Axon Light Assembly Using Bolt on Reliance Base

Mount and Connect the Light Assembly

Step	Action
1	Carefully clean and de-grease the contact surfaces of the light fixture and base or adapter ring, ensuring surfaces are clean and smooth.
2	In case a light has already been mounted on the base previously, ensure that the thread is clear from any debris. Use a metal brush made to clean M10 threads or a restoration device (chasing tool) that does not cut. Do not use a normal tapping tool, it would cut material out of the locking spire of the helicoil cancelling its effect. Inspect the thread for any apparent damage and or excessive wear. If the Helicoil needs replacing, please refer to the guideline "How to Replace HELICOIL® on Reliance Base" **CAUTION** If a solvent or oil based product has been used to clean the thread, make sure the product has been completely cleaned out. Those products could damage the o-ring.
3	If the O-ring is not installed, use a new, clean one, positioned in the dedicated groove of the light fixture.  For an 8" Axon light on a reliance base, use the red O-ring providde by ADB Safegate. Never re-use an O-ring.
4	Do not lubricate the O-ring. **CAUTION** "Never lubricate the gasket with silicone or any other kind of grease. Avoid the use of soap containing silicone or glycerine. " Make sure the surface that will be in contact with the O-ring is free of any solvent or oil.
5	Connect the light by inserting its plug into the receptacle of either the shallow base or the secondary cable of the transformer. If applicable, connect the earth bonding to the light fixture grounding screw or lug, and torque to 2.5 Nm.

Step	Action
6	Gently install the light fixture; press it firmly into the adapter ring or base and ensure it is correctly seated. Make sure not to drop the light fixture or to pinch the secondary or ground wires between the base and light fixture. **CAUTION** Verify the contact surfaces are clean and free from debris and the light fixture is seated correctly onto the base or adapter ring. **CAUTION** For curved lights, make sure that the logo on the top of the light is pointed towards the centre of curvature of the taxiway. 
7	Align the correct ADB Safegate approved bolt with the anti-vibrant washer by hand. **CAUTION** Never use a high speed tool or shock wrench for tightening or untightening.
8	Torque down the bolt using a calibrated torque wrench. When reaching 5 Nm switch to the next bolt following a star sequence as shown below. When all bolts are torqued to 5Nm continue the star sequence adding 60° of turn to each bolt until you reach the final torque of 21 Nm. Take additional care not to exceed 35rpm when tightening the bolt to avoid galling between the bolt and the thread.  **CAUTION** Do not use high speed or impact tools for tightening and untightening.

Step	Action
9	Perform an additional torque check on each bolt to ensure the required torque is achieved. This also helps to seat the fitting within the base.
10	Ensure that the bolt and washer are flush to the light once the required torque has been achieved.
11	Visually inspect the installation to ensure the fixture is evenly seated in the base. Ensure all items including tools are accounted for.
12	Refer to the light fixture recommended maintenance program for optimal service life. The recommendation is based on movement area categorisation and annual air traffic movements. We further recommend a re-torque* of lights & visual inspection 1 week after installation to check for any installation anomalies and bedding in. If inspection is successful, we recommend moving to the instruction manual recommendation. If anomalies are noted, continue with a 1 week inspection regime and investigate potential cause. This is a recommendation only and should be risk assessed locally and adapted according to local data driven analysis. We further recommend the use of a CMMS, such as ADB Safegate CORTEX Service, to electronically schedule and track maintenance and provide audit traceability and data analysis of maintenance & inspection tasks in accordance with ICAO and FAA standards. **Note** Break loose torque may drop below the recommended torque within the 1 week. This is typically due to slight settlement following installation. 

Empowering the Airside Evolution

SMARTER. BETTER. NOW.

ADB SAFEGATE

www.adbsafegate.com