

Guidance for the Maintenance of the Adams Rite 910, 920 and 960 Series Exit Devices

The Range in General

All of the Adams Rite 900 series emergency escape devices have been tested in accordance with BS EN 1125 and if properly maintained, are capable of providing many years of reliable service. They share the common features of the full width touch bar and scissor mechanism that is designed to give a light easy operation when pressure is applied anywhere along the bar. As with any hardware, lack of proper maintenance and physical abuse will lead to a shorter life span and may impair the operation of the product. It is imperative that all Adams Rite emergency escape hardware receives proper and regular maintenance in accordance with the recommendations outlined in this document. It is recommended that a company competent in the maintenance of doors and architectural hardware should carry out maintenance beyond the monthly checks as well as any trouble-shooting.

The 910/920 and 960 Series

The 910 and 920 series are surface vertical rod emergency escape devices designed for commercial timber, steel (910) and aluminium doors (920). The 960 series is the concealed vertical rod version, which is designed for single chambered commercial aluminium doors. They all feature an automatic latching arrangement to keep the bottom rod clear of the finished floor and threshold when the door is opening and closing, as well as automatic relocking once the door has closed into its frame. For this reason it is recommended that the 910/920 and 960 series be used in conjunction with a quality door closer.

As with all standard versions of the Adams Rite 900 series emergency escape device, manual dogging by means of Allen type key in the touch bar is a feature.

Maintenance Procedure

Frequency

As with any architectural product, the frequency of operation and the environment of the application will influence the frequency of maintenance. A corrosive environment such as a swimming pool, close proximity to the sea as well as high usage will mean that the hardware will require the maintenance interval to be increased from annually to biannually.

In all situations it is important to consider the application as a whole rather than just the emergency escape device. The fit of the door with in its frame and the performance of the door closer will influence the operation of the emergency escape device. Therefore the door and all of its hardware should be inspected, as part of the maintenance procedure to ensure that they are performing satisfactorily.

Monthly

- Operate the emergency escape device to ensure satisfactory operation i.e. a clean release of the locking points as the bar is operated, unimpeded opening of the door and the successful engagement of both locking points as the door closes. This should occur on each operation.
- Ensure that the strike plate is free from obstruction.

Annually (biannually for high traffic and corrosive conditions)

- Carry out normal monthly checks.
- Remove the cosmetic end cap from the locking stile end of the bar and check that the screw retaining the crank onto the vertical rod mechanism is securely fastened (910/920 only).
- Check all other fixings (including the header strike) are securely fastened.
- Lubricate with high grade, lithium based grease the top of the square bolt where it bears against the stop plate on the actuator of the top bolt actuator assembly. This assembly is shown in step 10 (910/920 series) and step 9 (960 series) of the Installation Instructions.
- Lubricate all other moving parts with grease that is silicone-based.

Trouble-Shooting

- The emergency escape device does not release cleanly easily (see Section A).
- The bottom bolt drags on the threshold as the door closes (see Section B).
- The emergency escape device does not automatically relock at either of both of the locking points (see Section C).

Section A

1. Check the door is not impeded in any way, i.e. the door has dropped, the weatherstripping is over compressed etc
2. Check the position of the header strike, it may have moved under the force of the closing action. Adams Rite recommends that a local door stop is fitted on flush frame applications to reduce the load resulting from the impact of the door's closing action on the header strike. The correct position of the header strike is shown in the installation instructions for this exit device series.
3. Check that the door is not suffering from distortion or door drop causing excessive friction on the top and bottom locking points and possibly misalignment.

Section B

1. Continual dragging of the bottom bolt on an aluminium threshold will result in scoring on the threshold and could potentially damage the bottom bolt itself. The contact with the threshold will be due to either the incorrect adjustment of the bolt within its guide or to the dropping of the door since its installation. The height adjustment of the bottom bolt is retained by the bolt guide and can not change without the guide being removed. Refer to step 12 (960 series), and steps 13-14 (910/920 series) of the Installation Instructions for guidance for the positioning.

Section C

1. Check the position of the header strike against the dimensions shown in the Preparation Instructions section of the Installation Instructions.
2. Check the closing action of the door to ensure it closes fully and allows full interlocking of the header strike with the top bolt actuator. Check that a local stop has been fitted and is correctly positioned so that the door rests against it while allowing full interlocking of the header strike with the top bolt actuator.
3. Check that the weatherstripping/seals do not impede the closing action of the door.
4. Check the door for damage that may have caused twisting, which may lead to either or both locking points being out of alignment. Forcing the door into position under such circumstances will result in a side load condition that will make the exit device difficult to operate.