

Installation

It is the responsibility of the installer to ensure the slide unit is securely fastened to a base that will provide safe and reliable operation. The many variations in usage and placements of a slide unit present specific guidelines; and the following are only intended to be general in nature to provide awareness to the installer.

Usage

All slide units are designed for use only in a static and level conditions. If installed in a vehicle, they must be closed and locked prior to and during any vehicle movement. The vehicle must be parked in a level condition prior to unlocking and extending a slide unit.

Position & Check Clearances

The slide unit should be set into position. However, before attaching, check to ensure that nothing interferes with the location and operation of the slide. Check to ensure that with all compartment doors closed, there is no interference to the door itself, lock components, gas shocks, etc. Check to ensure that the slide extending out will clear the doorway edges. Allow a little gap (perhaps 1/2") to accommodate any slide deflection due to loads and slight misalignments due to the installation itself.

Shims

Many vehicle compartments have a lip on the bottom of the doorway above the floor level. Slide units may have to be shimmed up to miss the lip during extension. Shims can be many alternatives including wood, metal tubing, etc. The shims must be placed under all of the slide areas that normally contact the floor to provide necessary support.

Forces

The slide unit must be securely fastened to a base floor or other structure to resist movement. A tipping force is applied to the unit when it is extended, which is countered by the attachments at the rear and middle of the unit. Furthermore, vehicle acceleration, cornering and braking will result in forces. Impacts due to dropping a load will result in temporarily higher forces seen by the fasteners.

Fasteners

Typical slide unit attachment is by use of a nut, washer and bolt. Typical size is 3/8" diameter steel bolt. Small units may go to 5/16" diameter and heavy duty units may go to 7/16". Even small bolts can resist large forces, but the use of a larger bolt is advised to provide margin for any occurrence of misalignment, wear, corrosion, fatigue, or the like over the service life. The nut and bolt should be tightened snugly, but not excessively as this may result in distortion of the slide unit. The nut and bolt must use locking provisions such as lock washer, nylon collar nut, double nutting, locking fluid, etc. Grade 5 bolts are typically used and are identified by the

three equally spaced radial marks on the head. After installation, at least 5 threads should extend beyond the nut. See Base Floor Considerations comment also.

Attachment Points

Normally, a slide unit will have 4 to 6 points to attach to the base. A single direction slide unit must have at least the 4 rear and center points fastened and a dual direction slide must have at least the 6 points at both ends and the middle attached.

Base Floor Considerations

The base floor or other supporting structure onto which the slide unit is attached should have sufficient integrity to support the weight of the fully loaded slide unit and the ability to anchor the fasteners attaching the slide unit to it. Down the road travel of a vehicle will encounter bumps that will temporarily input higher loadings. Fasteners in a steel bar base will not normally require anything other than a normal washer under the nut or bolt head. Fasteners in sheet metal or plywood will require additional back up such as large fender washers or even as much as bar stock spanning fastener to fastener. RV compartment floors of plastic, whether flat or convoluted, may need full width bar stock spanners under the floor to adequately distribute the load into a relatively flexible floor structure.