

Rack Repair Kits Meets all ANSI/RMI MH16.1 Industry Standards for Rack Repair

Storage Rack System Maintenance and Repair

The storage rack system operator is responsible for the maintenance and repair of the storage rack system.

Repair and Replacement of Damaged Components

Damaged components should be repaired by qualified persons, following qualified and documented procedures. Repaired components should be at least as strong as undamaged components.

Additions, Alterations and Reconfigurations

Additions, alterations and reconfigurations should meet the same requirements as the original installation.

Owner Maintenance

The owner shall maintain the structural integrity of the installed rack system by assuring proper operational, housekeeping, and maintenance procedures. Regularly inspect for damage. If damage is found, immediately unload the affected area and replace or repair damaged column, beams, other structural components.

Rack Damage

Upon any visible damage, the pertinent portions of the rack shall be unloaded immediately by the user until the damaged portion is repaired or replaced.

Out-of-Plumb Limit

The maximum top to bottom out of plumb ratio for loaded rack column is 1/240 (for example ½" per 10' feet of height). Columns whose out-of-plumb ratio exceeds this limit should be unloaded and re-plumbed. Any damaged parts must be repaired or replaced.

Out-of-Straight Limit

The maximum out of straight ratio for a loaded rack column is 1/240 (0.05" per foot or ½" per 10 foot of height). Columns whose out-of-straight ratio exceeds this limit should be unloaded and re-plumbed. Any damaged parts must be repaired or replaced.

Does it matter if rack frame braces are damaged?

Yes. The rack frame bracing consists of horizontal and/or diagonal members that join the front column to the rear column. These members are very carefully designed by the rack manufacturer to stabilize the rack frame in the cross-aisle direction and to support each of the individual columns, also, in the cross-aisle direction. Any damage to these components could jeopardize the stability of the frames and could degrade the strength of the column.

If a frame brace is damaged, the first priority should be to immediately unload the area supported by the damaged component and to prevent placement of loads into that area. In the case of the frame braces, it may be the bays on either side of the upright which are damaged.

Contact a qualified representative for an evaluation of the effects of the damaged to the structural integrity of the rack. Only after such an evaluation (after repairs if necessary are competently completed, and after approval of the work is done) should the rack section be returned to service.

What is an acceptable repair of a damaged rack component?

The detail used to make an acceptable repair should be designed or reviewed by a qualified design engineer and installed by people who are qualified to make the repair. The rack repair should be reviewed for compliance to the ANSI/RMI MH 16.1 Specification. A good repair will result in a structural member or connection that is at least as strong as the original.

When welding is prescribed, the welders must be certified for the types of welded joint required.

COMPARE

<div>Frame Replacement<ul style="list-style-type: none">• Replacing frame is 3 times slower• Total Operational Disruption to Facility• No Future Impact Protection gains with standard replacement frame</div>	<div>VS.</div>	<div>Rack Repair Kit<ul style="list-style-type: none">• Repairing is 3 times faster• Minimal operational disruption to facility• All repair kits provide additional future impact protection</div>
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