



RBW Industries^{Inc} Technical Service Advisory

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Troubleshooting and Repairing RBW Industries 5th Wheel Landing Gear Systems (Miter Gear Style)

Overview

This informational sheet is designed to assist in the identification of root causes of damaged miter gears in the RBW Industries Inc 5th Wheel Landing Gear System. Following the procedures outlined below will help prevent continual repairs for the same cause while fostering increased customer confidence in your service department.

Identifying the Root Cause of Miter Gear Damage

Too often at RBW Industries our Technical Support personnel hear from an owner, *"I had a jack that wouldn't lift so I took it to the shop. They replaced the gears a week ago and they're broken again."* Unfortunately, simply replacing broken gears without identifying and repairing the root cause is a temporary fix at best. The miter gears will not break without assistance of one form or another. By taking a few minutes to investigate the problem, you'll be a hero to your customer.

Below are the primary causes of miter gear failure.

First. Intentional/unintentional over retraction of the landing gear by the user. When retracting, the legs should be stopped At least 1 inch before the clevis pin holding the quick drop leg in place contacts the outer body of the landing gear. Look for indentations on the bottom of the outer body edge showing indications of contact with the clevis pin. Review proper retraction procedures with the user.

Another method of over retraction is caused by the legs being out of time with one another. Symptoms will usually manifest themselves in the follower leg.

Second. A bent leg that binds as it's extended or retracted. This will not always show up if the leg is not under load. Remove the inner leg assembly by removing the shear pin under the bottom miter gear. Inspect each face of the inner leg assembly by placing a straight edge along its length. If the inner leg is bent, the landing gear leg must be replaced.

Third. An acme nut that has damaged threads will bind under load. Dropping or dragging the coach on the landing gear as well as failure to maintain lubrication of the acme screw can cause damage to the nut. In later models of landing gear, the acme nut fits into a housing at the top of the inner leg. Simply unscrew the acme shaft and remove the nut. On earlier models, the nut is held in place with welded tabs. If the nut shows signs of damage, replace the nut and acme screw, or the complete leg assembly. Also inspect the acme screw threads for damage. This is rare, but it's better to be thorough. Whether or not you need to replace the nut, now that you have the leg apart, it's the perfect time to make sure that the acme shaft has good lubrication. Before you screw the acme shaft back into the nut, coat the shaft with some wheel bearing grease. Now screw it all the way down until the bottom of the shaft coupler is almost touching the inner leg. You'll notice that the grease has been pushed out of the threads onto the top of the nut, so you'll need to apply some more grease to the acme shaft inside the inner leg, as far up as you can get it. A yardstick or extra long grease gun hose will work well for this.

By following these guidelines you should see happier customers and a marked decrease in comebacks or negative phone calls from those customers now miles down the road.

If you have any questions, our Technical Support personnel are available to assist you Monday through Friday from 8:00 AM to 5:00 PM (Pacific) at 800-451-7821.