RUBBER PIN BOX

OPERATING INSTRUCTIONS AND OWNER'S MANUAL



Congratulations on the purchase of your MORryde Pin Box System. This revolutionary new system redefines the experience of towing a 5th wheel. No longer will you have to live with the harsh, jerky, back-and-forth motion associated with towing. You can also forget about excessive wear and tear on your truck and RV and the added strain that this puts on drivers and passengers.

Your new Pin Box System provides:

- Greatly reduced back-and-forth chucking and jerking
- Cushioned sensation over uneven road conditions
- Jerk-free starts and stops
- Smoother, more comfortable in-cab ride

Each MORryde Pin Box System has been carefully engineered to match the existing pin box that it replaces. Our pin box is fully adjustable* and maintains the king pin location established by the original trailer manufacturer. By maintaining the static king pin location, stress and strain subjected to the trailer frame structure is consistent with the original king pin location.

This manual will outline basic troubleshooting and preventative maintenance procedures associated with this system. Service manuals and instructions are provided with replacement parts.



^{*} The MORryde Pln Box is fully adjustable for most applications.

PARTS LIST

| ITEM | QTY | DESCRIPTION | PART # |
|------|-----|---------------------------------|--------------|
| 1 | 1 | UPPER MOUNTING ASSEMBLY | - |
| 2 | 1 | SHEAR SPRING | RPB707-003S |
| | | | RPB707-004S |
| | | | RPB707-005S |
| _ | | | RPB707-006S |
| 3 | 4 | 5/16-18 BUTTONHEAD BOLT | UO115-204 |
| 4 | 2 | RUBBER COMPRESSION BUMPER | RPB717-001 |
| 5 | 2 | RETAINMENT ROD | RPB712-008 |
| 6 | 8 | 7/16-14 FLANGE NUT | UO116-039 |
| 7 | 4 | ACCESS PLUG | UO136-181 |
| 8 | 1 | LOWER SKID PAD ASSEMBLY (BLACK) | |
| 9 | 4 | GLIDE PAD/DISC | RPB710-005 |
| 1 | 2 | 5/16-18 T-NUT | UO136-238 |
| 11 | 4 | 1/4-20 SELF TAPPING SCREW | UO115-219 |
| 12 | 4 | 9/16-12 BOLT | UO115-173 |
| 13 | 1 | STABILITY DISC REPLACEMENT KIT* | RPB77-009 |
| | | *Separate part available | as an add-on |
| | | 13 | 5 |
| | | | |

COMPATIBILITY

Your MORryde system is compatible with various hitch types, allowing flexibility in towing setups. Please refer to the following compatibility guidelines to ensure safe and effective operation:

1. Compatibility with Automatic Sliding Hitches

- PullRite SuperGlide Hitch: For compatibility with the PullRite SuperGlide Hitch, you will need the addition of an adaptor plate (MORryde part number RPB77-001). This adaptor plate is available directly from MORryde and is sold separately.
- Demco Hijacker Hitch: To use the Demco Hijacker Hitch with the MORryde system, please use the adaptor plate (Demco part number 6025). This adapteor is available from Demco and must be purchased separately.

IMPORTANT: Using the correct adaptor plate is essential for proper fitment and safe towing. Ensure these adaptors are installed per manufacturer instructions for optimum performance.

2. Compatibility with Coupler-Style Hitches

The following coupler-style hitches require additional reinforcement for safe usage with the MORryde system:

- Andersen Ultimate Hitch
- PullRite SuperLite Hitch

For these hitch types, the use of the RPB77-006 Reinforced Skid Plate Kit is required to ensure compatibility and to distribute weight effectively. This kit, available from MORryde, is sold separately.

IMPORTANT: Installation of the RPB77-006 Skid Plate is necessary to prevent wear and to maintain the structural integrity of the MORryde system when using coupler-style hitches.

Gooseneck Adaptors

Many customers ask about using the MORryde Pin Box with a gooseneck adaptor; it is important to know that doing so may void the frame warranty of your 5th wheel. For this reason, we recommend that you contact the trailer manufacturer to determine whether a gooseneck adaptor can be used. You should also be aware that gooseneck adaptors increase the applied torque to the frame structure of the trailer which may lead to structural failures. If you still wish to utilize a gooseneck adaptor with the MORryde Pin Box, you MUST purchase and install a MORryde heavy duty skid plate (Part # RPB77-006). Even with the installation of the heavy duty skid plate, you assume all liability and risk of property damage and personal injury associated with the use of the gooseneck adaptor. NOTE: Gooseneck adapter must be welded to the heavy-duty skid plate.

WARNING Gooseneck adaptors with an offset must **NEVER** be used with a MORryde Pin Box.



PREVENTATIVE MAINTENANCE

- Annually inspect king pin for excessive wear.
- Inspect the skid pad to ensure a neutral (centered) position. When the trailer is disconnected from the tow vehicle, an equal gap of approximately 1-1/4" should be observed between the lip of the skid pad and the rubber compression bumpers. It is normal to slightly move and twist the skid pad assembly with hand force.
- Inspect the retainment rods for excessive wear. The retainment rods may show surface scratch marks as an indication of occasional contact but the scratches, if present, should be minimal.
- Inspect the plastic glide discs for excessive wear. The glide disc thickness should be no less than 3/4".
- Repaint pin box to prevent rust and maintain its appearance. **NOTE:** Do **NOT** paint over labels.
- · Periodically check the torque values of all hardware. Torque specifications are listed below.

TORQUE SPECIFICATIONS

5/8", or 3/4" attaching bolt depending on Pin Box System

LOCATION BOLT SIZE (GR5) (GR8) 55 ft-lbs. Attaches upper mounting assembly to skid pad 7/16-14 Retainment rods 9/16-12 90 ft-lbs. 1/2-13 65 ft-lbs. Attaches upper mounting assembly to wing assembly. Uses 1/2", 5/8-11 135 ft-lbs. 170 ft-lbs.

Note: The 5/16-18 buttonhead bolt that attaches the glide disc to the upper mounting assembly should be hand-tightened so that the bolt head begins to sink into the plastic. Prior to installation, a drop of blue Loctite should also be applied to the threads on the end of this bolt.

3/4-10

220 ft-lbs.



TROUBLESHOOTING

PROBLEM REMEDY

| Trailer not level. | Adjust pin box or hitch accordingly. |
|---|---|
| Excessive bottoming of skid pad assembly. Jerky ride in tow vehicle. | Inspect to ensure that the rubber compression bumpers are in place. Check trailer brakes for proper operation. If above is satisfactory, it may be necessary to install a shear spring with a different spring rate. Contact MORryde's Parts Department for assistance; they will require your actual trailer weight to assist. |
| Skid pad assembly does not return to neutral position when disconnected from tow vehicle. | Check for loose or torn rubber shear spring. |
| Excessive noise from pin box area. | Verify that the pin box is securely attached to the 5th wheel. If the king pin is excessively worn, the skid pad will need to be replaced. Hitch mechanisms can also cause noise. Verify that unwanted noise is not coming from the hitch. Your hitch manufacturer can provide guidelines for this check. |

Are You Experiencing Chucking?

The large rubber shear spring block inside the RPB normally lasts 7-15 years. You will notice the greatest amount of movement when you take off and stop, since the trailer's weight will have the most amount of force on the rubber block at these times. Here are some items to check if you are experiencing "chucking"; the push-and-pull of the 5th wheel trailer that you feel in the cab of the pulling vehicle while towing the trailer down the road:



- 1. Grease test Put grease on the rubber bump stop and perform a normal tow/stop and a test/hard stop. It would be expected to see the grease transfer from bumper to skid pad under a test/hard stop. We would not expect the grease to transfer on a normal tow/stop. If grease was transferred in a normal tow/stop, further inspection is needed.
- **2.** Note the orange arrows in the image to the left. These arrows measure the "dust trail," which is how far the dust is pushed as it collects in the lower plate. Measure from the front edge of the puck to the end of the dust trail, then from the back edge of the puck to the end of the dust trail. You can have up to 1.5" movement fore and aft.



TROUBLESHOOTING, CONT'D

- **3.** Have you added significant weight to your fifth wheel? Consider your fully loaded weight during travel, as this will greatly affect movement of the rubber block. Added weight from ATVs, generators, washer/dryers, full tanks, etc. can make a difference in the RPB's movement. You may be out-weighing the rating of the specific rubber block that is in your RPB. Ensure you *do not* exceed the GVWR of your fifth wheel trailer.
- **4.** Are there any witness marks on the inside front edge of the lower skid plate that would indicate the pin box is moving all the way to the front and/or back of the plate? Are there any tears in the rubber block? You may need to drop the lower skid plate down to get a better view.
- **5.** Have you changed the truck you are pulling the trailer with? A new vehicle could be higher or lower than the previous vehicle, and if it is no longer level with the trailer, this will affect the RPB's performance.
- 6. Is the trailier riding level? Just an inch or two out of level will amplify chucking and prevent the RPB from working properly.
- **7.** Is the bed hitch rattling in the bed of your truck? Are the jaws of the bed hitch firmly clamping around the RPB's king pin? Slack can cause chucking.
- **8.** Ensure that your bed hitch is bolted securely to the bed rails of the truck and that it is not rocking back and forth with the stopping/starting of the truck and trailer, as this can cause chucking. Does your bed hitch have a cushion feature that is working against the RPB?
- **9.** Do you have an Andersen Ultimate or Pull Rite Superlite bed hitch? If so, they require a reinforced lower plate. If you do not have this reinforced plate, it can cause issues.
- **10.** Make sure all nuts/bolts are torqued properly (torqued to 90 ft-lbs.) and ensure the nuts that attach the rubber spring block to the sid pad and upper assembly are tightened correctly.
- 11. In general, you can turn up the "gain" of your disc brakes a little to help reduce chucking.

Still Experiencing Chucking Issues?

Please call our Parts Department at **574-293-1681** or email us at **Parts@morryde.com** for further assistance.

WARRANTY

Please visit **www.MORryde.com** for warranty information.

At MORryde, we have a passion for solving problems. Whether we're fabricating custom solutions, modifying a commercial chassis, or creating our innovative products, we answer to a wide range of markets and deliver on a variety of needs. At MORryde, it's simply about doing MORE for our customers, and it doesn't stop at the sale. We stand behind our products, believing in quality first, service always. No matter the issue, we'll be the first to respond and the last to be satisfied. In short, we build better — together.



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