SERVICE MANUAL

HELUX PIN BOX

SAFETY INSTRUCTIONS

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system.

Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the LCI limited warranty.

⚠ WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

Lift the trailer by the chassis. Do not go under the trailer unless it is properly supported. Unsupported trailers can fall and may result in death, serious injury or property damage.

Trailer MUST be supported per manufacturer's recommendations before working underneath. Failure to do so may result in death or serious personal injury.

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

⚠ CAUTION

The "CAUTION" symbol is a sign that a procedure has a risk involved that may cause personal injury or property damage if not performed safely and within the parameters set forth in this manual.

Moving parts can pinch, crush or cut. Keep clear and use caution.

Introduction

Curt leads the way with innovative Gooseneckpin box technology. The new Helux Gooseneck uses time-tested Curt Coil Spring technology to provide an unparalleled ride, reducing chucking and absorbing bumps. The shock absorber dampens oscillation and reduces bouncing.

Additional information about this product can be obtained from https://support.lci1.com/ or by downloading the free LippertNOW app in Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users. App Store® and iPad® are registered trademarks of Apple Inc. Google Play™ and Android™ are trademarks of Google Inc.

For additional support on this product, please visit: https://support.lci1.com/pin-boxes.

Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Tools Required

Torque wrench	Socket - 13/16" - Shock Bolt Head
Socket - 3/4"- Pivot & Stop Bolts	Socket - 7/8" - Shock Bolt Nut
SAE socket set	SAE wrenches
Tape measure	Box-end wrench set
Safety glasses	Air compressor
Level	--

Service - Torque

The spring will need to be inspected before use for any cracks or damage. If any damage is noticed, a new spring will need to be installed prior to use by a qualified installer, service agency, manufacturer or dealer.

Periodically check torque values on the Shock, Stop, Pivot and Mounting bolts. An annual check of these will assure the pin box will continue to function as intended.

- A - Shock bolts - 70+/-5 ft-lb.
- B - Stop bolts - 75 +/-5 ft-lb.
- C - Pivot bolts - 120+/-5 ft-lb.
- D - Mounting bolts - 120+/-5 ft-lb.

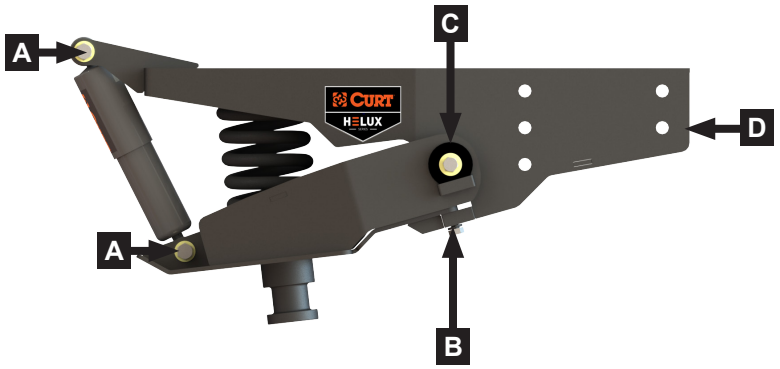

Fig. 1

PRODUCT INFORMATION

⚠ WARNING

An unsupported pin box during product removal can result in death, serious personal injury, severe product and/or property damage. Properly support pin box throughout installation.

Component Information

The Curt Helux Pin Box weighs 140 lb. Installation and removal of pin boxes requires a minumum of two people. A forklift may be used to lift the pin box into for service.

The 5th wheel should always be moved while level. The pin box should be securely supported before the landing gear is retracted to move and position the 5th wheel.

Weight Capacity - Helux Pin Box Configurations

Part Number	Pin Weight[1] (Loaded - lb.)	Min. Pin Weight[2]	Max. Pin Weight[3]
2024044568	1,880 - 2,377	1,200	2,600
2024044567	2,378 - 2,722	1,360	2,950
2024044569	2,723 - 3,165	1,610	3,500
2024122233	3,166 - 3,712	2,120	4,000
2024044570	3,713 - 4,332	2,570	4,850
2024044571	4,333 - 4,900	2,860	5,400
2024044572	4,901 - 6,000	3,290	6,200

[1]Optimal pin weight value range when choosing a Curt Helux pin box.
[2]Unloaded - No cargo and empty fresh, black, and gray water tanks.
[3]Loaded - Cargo loaded including toy hauler area, tanks travel-ready.

Note: The Curt Helux Pin Box models are determined by the weight rating of the spring used between the upper and lower jaws.

Fig. 2

ASSEMBLY

Parts List

#	Qty	Description
1	1	Pin box assembly
2	10	Hex bolt, 5/8"-11 x 1 3/4", grade 5
3	10	Serrated-flange nut 5/8"-11, grade 5

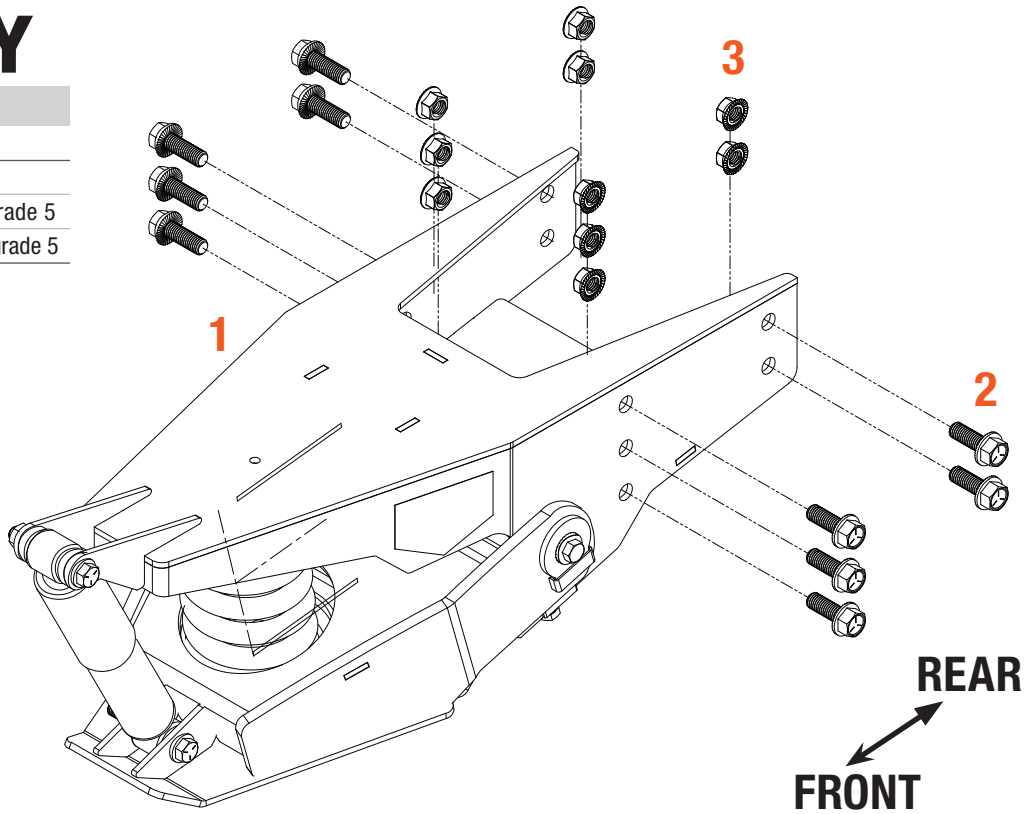

Fig. 3

INSPECTING COMPONENTS

SAFETY INSTRUCTIONS

Safety glasses should be worn at all times while installing this product.

Visual Inspection

Shock:

1. Check for any damage to the exterior of the Shock housing.
2. Be sure there is a nut present on each of the two bolts.
3. Check that the nuts and bolts are not loose or broken.
4. Look for any fluid or leakage from the shock housing.
5. Confirm that the shock is fully extended and has not collapsed.

Coil Spring:

1. Check for any damage to the exterior of the Coil Spring.
2. Check that the spring is not loose or broken.

Fig. 4

Fig. 5

Replacement Part Numbers

OEM - Helux Pin Box PN	AM - Helux Pin Box PN	Shock PN - Fig. 4	Coil Spring PN - Fig. 5
2024045001 - 2,600 lb.	2024044568	2024123043	2025044271 - 1,100 lb. rated
2024045002 - 2,950 lb.	2024044567	2024123043	2025044272 - 1,250 lb. rated
2024055116 - 3,500 lb.	2024044569	2024123043	2025044273 - 1,500 lb. rated
2024032925 - 4,000 lb.	2024122233	2024123043	2025044273 - 1,500 lb. rated
2024032926 - 4,850 lb.	2024044570	2024123043	2024123042 - 1,800 lb. rated
2024032927 - 5,400 lb.	2024044571	2024123043	2024123041 - 2,000 lb. rated
2024032922 - 6,200 lb.	2024044572	2024123043	2024123040 - 2,300 lb. rated

SHOCK REPLACEMENT

NOTICE

Shock replacement can be done with the Curt Helux Pin Box connected or disconnected from the tow vehicle.

Step 1

⚠ WARNING

Chock all tires to prevent the RV from moving during the procedure.

Note: Do not unhitch the tow vehicle with the shock disconnected.

Step 2

Lift the front of the 5th wheel to desired height.

Place jack stands (Fig. 6A) underneath the 5th wheel frame (Fig. 6B) to safely support the 5th wheel in case the landing gear fails.

Fig. 6

Step 3

Loosen and remove the lower 9/16" – 12" X 3.75" Shock Bolt (Fig. 7B) and nut first.

Loosen and remove the upper 9/16" – 12" X 3.75" Shock Bolt (Fig. 7C) and nut next.

Remove the shock from the mounting brackets.

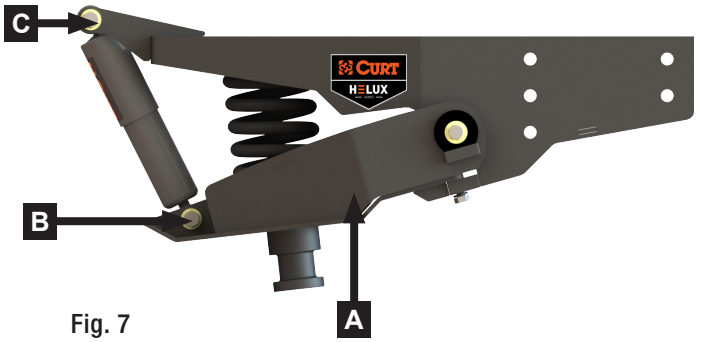

Fig. 7

Step 4

Mount the new shock in the brackets, insert the bolts, washers and add the nuts.

Tighten down the shock bolts to torque specs.

COIL SPRING REPLACEMENT

NOTICE

Coil Spring replacement must be performed with the tow vehicle disconnected from the 5th Wheel and moved a safe distance away from the RV.

Step 1

Chock all tires to prevent the RV from moving during the procedure.

The lower jaw will need to be supported with a jack or king pin stand to remove the hard stops and prevent the lower jaw from swinging freely once the stops and shock bolts are removed.

⚠ WARNING

Hard stops prevent the lower jaw from swinging down causing possible injury, death or allowing the Coil Spring to drop from it's mount.

Step 2

Loosen the stop bolt, 1/2" - 13 X 1 3/4" GR5 HHCS ZINC, and remove the stop plate (Fig. 8A).

Fig. 8

Step 3

Loosen and remove the lower 9/16" – 12" X 3.75" Shock Bolt (Fig. 7B) and nut.

Step 4

Pivot the lower pin box jaw (Fig. 7A) downward (Fig. 9A) until the coil spring (Fig. 9B) free from the mounts and remove the old or damaged coil spring.

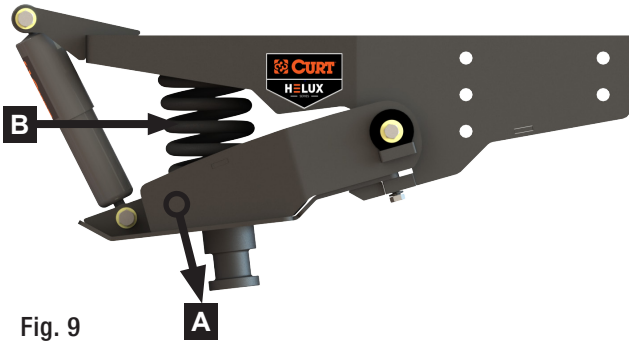

Fig. 9

Step 5

Install a new coil spring.

Bring the lower pin box jaw upward (Fig. 10A) to capture the new coil spring. Support the lower jaw of the pin box with a jack or king pin stand.

Step 6

Place the Stop Plate and the Stop Bolt (Fig. 7B) and secure them in place.

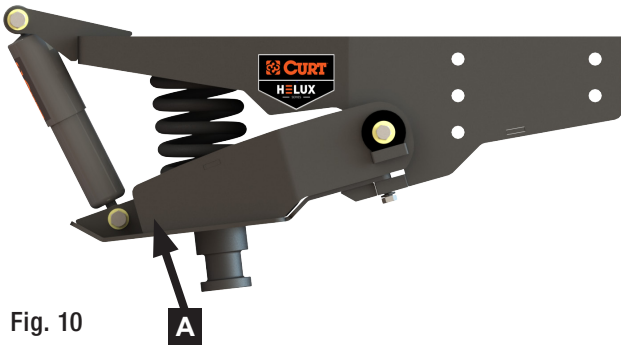

Fig. 10

Step 7

Place the shock back into the bracket and insert the shock bolt (Fig. 7B) and secure it in place with the nut.

Tighten the bolt to the specified torque rating.

Step 8

Remove the jack or stand from under the pin box.