

Norco Gearbox Drip Tray Installation

The information and instructions in a Keystone Service Bulletin (KSB) are intended to inform RV dealership Service Managers/Technicians of situations that may occur with some Recreational vehicles so dealership personnel can perform proper and efficient service. KSB's are intended to be used by trained RV technicians with the knowledge, tools and equipment to do the job properly and safely, not "do-it-yourselfers".

- Information is not presented as a repair guaranteed to be covered by warranty.
- Keystone's P & P (Policy & Procedures) must be followed for any requested warranty work.
- Do not assume this repair is covered by warranty.
- Not every unit listed requires a repair.

This process describes the repair where under certain temperature conditions the Norco slide cable system gearbox may leak oil/grease on the slide roof membrane. The following procedure describes how to install a drip pan to prevent damage to the roof membrane, and make repairs if necessary.

Affected Production Dates: Keystone, Dutchmen, and CrossRoads units with Norco slides produced in 1/1/2017 through 3/31/2018 and 8/1/2018 through 9/30/2018.

Parts Required: See below under each option.

Tools Required: - Screw gun - Stanley knife - Hand Roller

This KSB requires a Pre-Authorization & Photograph

When performing this KSB, please make certain that appropriate Personal Protective Equipment (PPE) is used.

The remedy is to add a drip pan to the existing leaking Norco gearbox. If the Norco gearbox grease has affected the roof membrane, use one of the following 3 options:

- Option 1 is to clean the membrane to eliminate any further bubbling.
- Option 2 is to remove the affected bubble in the membrane and cover over the affected area with roof membrane tape using a short piece of tape as outlined below.
- Option 3 is to remove the affected bubble in the membrane and apply roof tape along the complete roof edge as outlined below.

NORCO GEARBOX REPAIR INSTRUCTIONS FOLLOW



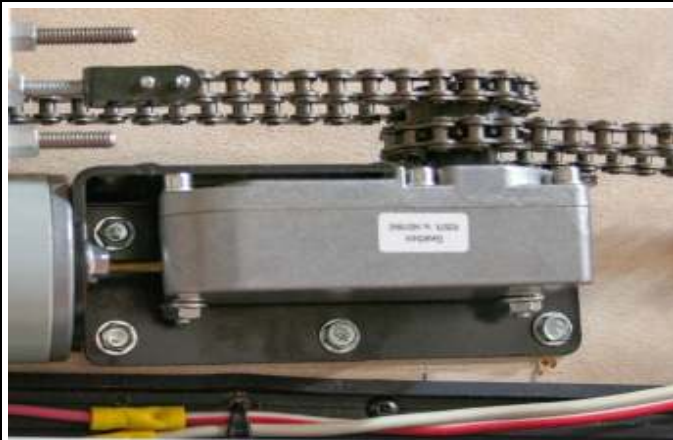
NORCO INDUSTRIES WORK INSTRUCTION

Title:

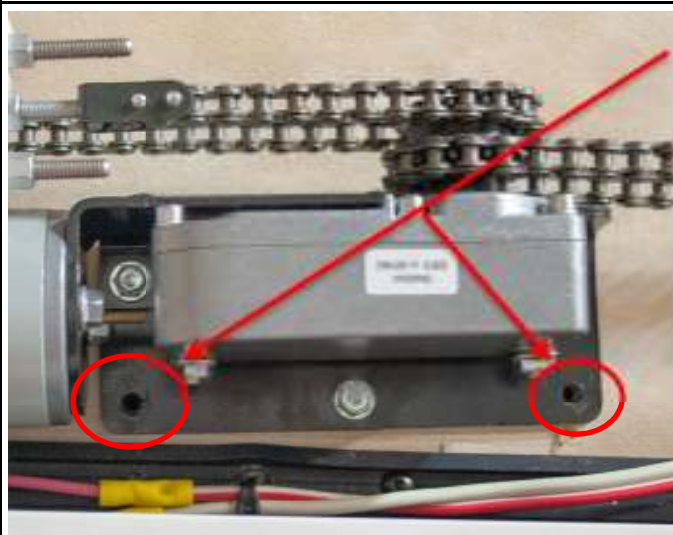
Drip Tray

Date:

11/5/2018



Motor/gearbox installed in unit.



Remove the 2 bottom screws.
Leave the center screw attached.



Attached drip tray with the 2 screws that
you removed in the previous step.

*~ Note: In some cases, a section of fascia board
may need to be removed to gain access to the
motor/gearbox bracket.*



MEMBRANE REPAIR INSTRUCTIONS

OPTION 1

Parts Required:

- Each Slide Motor: 1 - KRV # 580894 – Mechanism - Drip Tray

Step 1

Locate the trailer on a level, flat, hard surface. Chock the wheels.

Step 2

Locate bubble on roof membrane. **Clear pictures are required for pre-authorization.** If the bubble is small, use a non-abrasive and solvent-free cleaner like Simple Green, Dawn Dish Soap, or Murphy's Oil Soap to clean the membrane, Figure 1.

Step 3

Proceed to Warranty Reimbursement.

OPTION 2 – TAPE ONLY AFFECTED AREA

Parts Required:

- Each Slide Motor: 1 - KRV # 580894 – Mechanism - Drip Tray
- 639360 - Sealant - Roof Tape - 6" x 50' - Alphabond TPO - White
- 647110 - Sealant - Roof Tape - Eternabond - 6" x 50' - Tan - 8RI/Cs

Step 1

Locate the trailer on a level, flat, hard surface. Chock the wheels.

Step 2

Locate bubble on roof membrane. **Clear pictures are required for pre-authorization, Figure 2.**



Step 3

Prep the surface that the roof tape is to be applied to by wiping away any oil, dirt, moisture, or other contaminants the width of the roof tape and 2"-3" on each side of the bubble, Figure 3.

Step 4

Tape down a piece of roof tape, choosing the appropriate color from those listed above, that is approximately 1" larger than the bubble and cut the section out of tape and roof membrane as noted in Figure 3. Remove the tape and the roof membrane, Figure 4.

Step 5

Peel back the clear release liner of the cut out from Step 4 and apply pressure to the tape facer in order to activate adhesive bonding to fill the space made in Step 4, Figure 5.

Step 6

Cut a piece of roof tape long enough to cover the repair at least by 2". Peel back the clear release liner and apply pressure to the tape facer in order to activate adhesive bonding, Figure 6.

**Fig. 3****Fig. 4****Fig. 5****Fig. 6****Step 7**

Proceed to Warranty Reimbursement.

OPTION 3 –TAPE COMPLETE ROOF LINE**Parts Required:**

- Each Slide Motor: 1 - KRV # 580894 – Mechanism - Drip Tray
- 639360 - Sealant - Roof Tape - 6" x 50' - Alphabond TPO - White
- 647110 - Sealant - Roof Tape - Eternabond - 6" x 50' - Tan - 8RI/Cs
- Use appropriate color of Sealant - Lap Caulk – 1010 - (color) - Non-Sag - Alpha

Step 1

Locate the trailer on a level, flat, hard surface. Chock the wheels.

Step 2

Locate bubble on roof membrane, Figure 1.

Step 3

Loosen a couple of inches of transition molding on each end of the slide room. Prep the surface that the roof

tape is to be applied to by wiping away any oil, dirt, moisture, or other contaminants the width of the roof tape and 2"-3" on each side of the bubble.

Step 4

Tape down a piece of roof tape, choosing the appropriate color from those listed above, that is approximately 1" larger than the bubble and cut the section out of tape and roof membrane as noted in Figure 2 through Figure 4. Remove the tape and the roof membrane.

Step 5

Peel back the clear release liner of the cut out from Step 4 and apply pressure to the tape facer in order to activate adhesive bonding to fill the space made in Step 4, Figure 5

Step 6

Cut a piece of roof tape long enough to cover the full length of the slide roof. The roof tape should slightly overlap the existing roof tape. Peel back the clear release liner and apply pressure to the tape facer in order to activate adhesive bonding, Figure 7.

Step 7

Re-install the transition molding at each end of the slide room roof and end wall. Cut the roof tape along the bottom edge of the transition molding and reseal the transition molding using appropriate color of Sealant - Lap Caulk – 1010 - (color) - Non-Sag – Alpha. See Figure 8.



Step 8

Proceed to
Warranty
Reimbursement.

WARRANTY REIMBURSEMENT

This KSB is for repair purposes only. If this is a warranty repair, the flat rate code is **7300942A**.

Submit an authorization then claim on Key Express with clear pictures of any damage to the roof membrane, **Flat Rate Code # 7300942A** with **KSB # 191007** noted in the customer complaint section. The time authorized for inspection and adding the drip tray is .5 hour. The time authorized for repairing the roof membrane, if bubbled, with Alphabond is .5 hour per slide room.

PARTS DISPOSITION

No part return.

If you have questions, please contact Customer Service:

Luxury (LX) **866-273-1450**
Toy Haulers (TH) **866-273-1452**
Premium (PR) **866-273-1454**
Light Weight (LW) **866-273-1456**

Traditional (TR) **855-895-4422**
Dutchmen (DM) **855-382-4100**
CrossRoads (CR) **844-361-8455**