Suspension 2

Link Mfg. Ltd. 223 15th St. N.E. Sioux Center, IA USA 51250-2120 www.linkmfg.com

QUESTIONS? CALL CUSTOMER SERVICE 1-800-222-6283

INSTALLATION INSTRUCTIONS

Cab Suspension

PACCAR PETERBILT 567 / 579 KENWORTH T680 / T880 / W990 SLEEPER CABS MODEL YEAR 2012 & NEWER

> LINK PART NO. 26302030





IMPORTANT: IT IS IMPORTANT THAT THE ENTIRE IN-STALLATION INSTRUCTIONS BE READ THOROUGHLY BEFORE PROCEEDING WITH SUSPENSION INSTALLA-TION.

1. INTRODUCTION

Thank you for choosing a Link ROI Cabmate Suspension. We want to help you get the best results from this suspension and to operate it safely. This manual contains information to introduce you to the Link ROI Cabmate Suspension and to assist you with its installation. This manual is intended solely for use with this product.

All information in this manual is based on the latest information available at the time of printing. Link Manufacturing reserves the right to change its products or manuals at any time without notice.

Damaged components should be returned to Link with a pre -arranged Returned Materials Authorization (RMA) number through the Customer Service Department. The damaged component may then be replaced if in compliance with warranty conditions.

2. SAFETY SYMBOLS, TORQUE SYMBOL, and NOTES

	DANGER indicates a hazardous sit- uation which if not avoided, will re- sult in death or serious injury.	
	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.	
	CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.	
NOTICE	<i>NOTICE</i> indicates a potentially haz- ardous situation which, if not avoid- ed, may result in property damage.	
TORQUE	<i>TORQUE</i> indicates named fasteners are to be tightened to a specified torque value.	
NOTE:	A Note provides information or sug- gestions that help you correctly per- form a task.	

3. SAFE WORKING PRACTICES:

3.1 ACAUTION

When handling parts, wear appropriate gloves, eyeglasses, ear protection, and other safety equipment.

3.2 **ACAUTION**

Practice safe lifting procedures. Consider size, shape, and weight of assemblies. Obtain help or the assistance of a crane when lifting heavy assemblies. Make certain the path of travel is clear.

4. INSTALLATION GUIDELINES

4.1 In order for this CabMate suspension to operate properly, it must operate in the parameters specified by Link.

4.2 No alterations of any Link CabMate suspension component is permitted without proper authorization from qualified Link personnel.

4.3 No welding of any suspension components is permitted except when specified by Link.

4.4 **ACAUTION**

The vehicle manufacturer should be consulted before any modifications are made to the frame of the vehicle. Cutting or altering the frame in certain areas may affect the manufacturer's warranty.

4.5 **ACAUTION**

Proper tightening of fasteners is important to the performance and safety of the suspension. Follow all torque specifications throughout the instructions. Refer to manufacturer's torque specifications when reinstalling any original fasteners.

4.6 NOTICE

Link Manufacturing is not responsible for optional configurations or third party equipment that restrict the installation of the ROI CabMate.

5. PREP VEHICLE FOR ROI CABMATE INSTALLATION (PRE-INSTALL STEPS)

WARNING

To prevent injury from compressed air and unintended cab motion, do not connect the cab suspension to the air source until the cab suspension is completely assembled and you have read and understood the owners manual.

Tools Required

- Pliers
- Airline cutting tool
- Metric Socket Set
- Metric Wrench Set
- Standard Socket Set
- Standard Wrench Set
- Torque Wrench
- Hex Key: 3mm

5.1

Measure the air spring height between the air spring mounting surfaces. Verify this dimension is approximately 5.25". Do not proceed with the installation if the dimension is off by more than 0.5". Record the actual measurement. When the installation is complete, the distance will be measured again to verify the air spring height has not changed (FIG.1).

5.2

Jack up the cab between the driver's side frame rail and rear of cab.

5.3

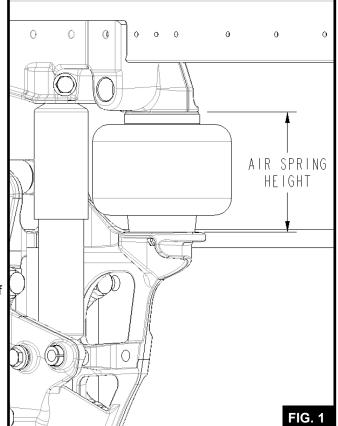
Disconnect airlines from the air springs and the height control valve.

5.4

Verify the cab is fully supported.

5.5

Verify the vehicle is off and remove the key to prevent others from starting the vehicle.



6. MOUNT THE CONTROL BOX

WARNING

Failure to have rear of the cab fully supported will cause motion of the rear of the cab, which may result in operator injury. See section 5 for instructions on supporting the rear of the cab.

6.1

Locate the holes under the cab sill on the passenger side of the truck (FIG.2).

NOTE: There is a mirrored set of holes on the driver's side of the truck that can be used if the passenger's side is blocked by other equipment. See page 5 for bracket installation.

6.2

Loosely connect the front and rear brackets to the cab frame with the (4) $1/4 \times 3/4$ bolts and (2) 1/4 hex nuts provided **(FIG.3)**.

6.3

Place the control box between the two brackets. Secure the box to the brackets with the (3) $1/4 \times 5/8$ flange head bolts provided (**FIG.4**).

TORQUE 1/4" fasteners to 4-5 FT-LBS

6.4

Tighten the four bolts from step 6.2. The control box is now secured.

TORQUE 1/4" fasteners to 4-5 FT-LBS

6.5

Mount the height control sensor assembly to the control box using the (2) $1/4 \times 5/8$ flange head bolts provided **(FIG.5)**.

TORQUE 1/4" fasteners to 4-5 FT-LBS

6.6

Place the pivot ball mount clamp on the top flange of the frame rail below the height control sensor. Do not tighten the bolts **(FIG.5).**

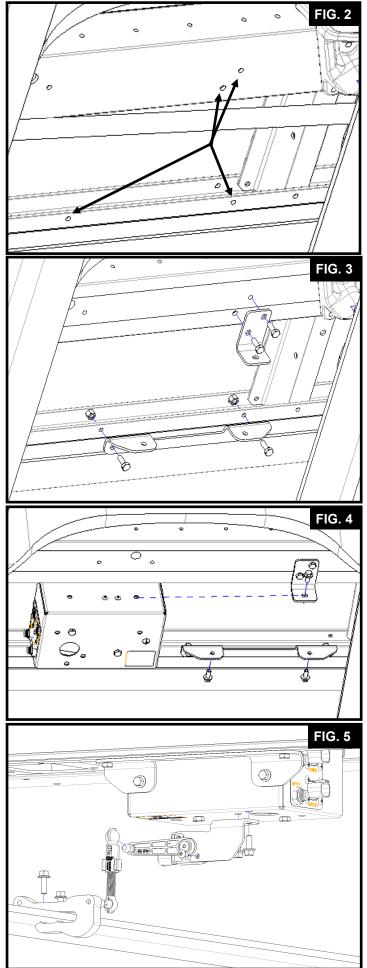
6.7

Connect the height control linkage between the pivot ball and the height control sensor (**FIG.5**).

6.8

Position the linkage mount such that the linkage is vertical when viewed from the lateral and longitudinal directions. Tighten the two bolts that have been pre-assembled to the mount to secure the position (FIG.5 & FIG.7).





6. Mount Control Box (Alternative mounting)

6.9

Locate the mirrored hole pattern on the driver side of the truck.

6.10

Follow steps 6.2-6.4 for mounting the box to the cab of the truck.

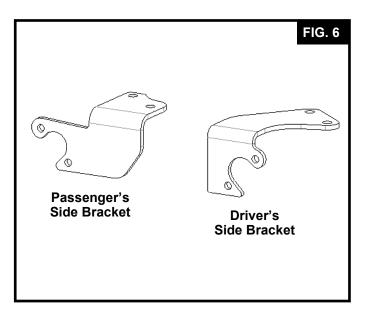
6.11

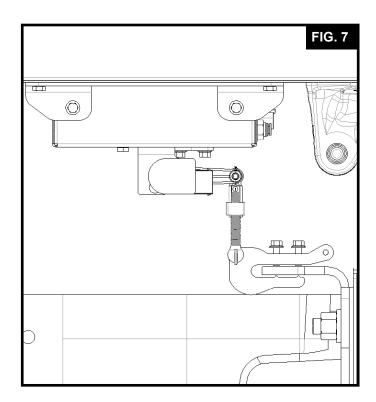
Identify the driver's side height control sensor bracket **(FIG.6)**.

6.12

Follow steps 6.5–6.8 for installing the height control sensor and, linkage and pivot ball mount clamp (FIG. 5 & FIG.7).

Note: The installation steps are the same only in a mirrored orientation.





7. Replacing shocks

7.1

Starting on the passenger side of the truck, remove the bolt, nut and washers from the lower shock mount. Retain these parts as they will be reused **(FIG.8)**.

7.2

Remove the bolt from the top shock mount. Retain the bolt as it will be reused (FIG.8).

7.3

Remove the shock. The upper shock joint contains a machined hole for a press fit split bushing. Ensure the shock sleeve is free of this hole before attempting to remove the shock. The shock will not be reused and may be discarded **(FIG.8)**.

7.4

Repeat steps 7.1-7.3 on the drivers side of the truck.

7.5

Using the (2) black straps provided, slip one around the length of each new ROI shock (**FIG.9**).

WARNING The straps are required to meet or exceed the tensile requirements of the stock suspension. The straps do not contribute or interfere with the functionality of the ROI Cabmate.

7.6

Starting on the passenger side of the truck, place the ROI shock into the cab and frame mounts (FIG. 9).

NOTICE The ROI shock is gas-charged and may require the cab to be raised slightly to allow the free length of the shock to align with the mounting holes.

7.7

Complete the upper shock connection using the bolt removed in step 7.2 (**FIG.9**).

NOTE: Refer to manufacturer's torque specifications

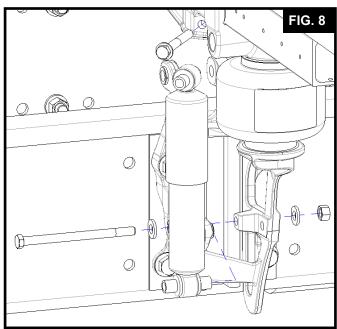
7.8

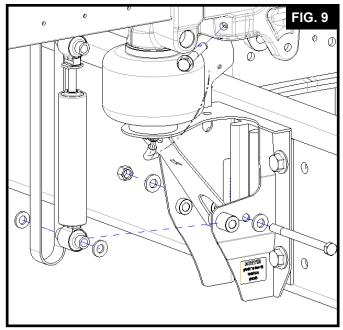
Using the spacers provided, place one on each side of the lower shock sleeve. Complete the lower shock connection using the bolt, nut and washers removed in step 7.1 (FIG.9).

NOTE: Refer to manufacturer's torque specifications. **NOTE:** The spacers can be glued to the side to the shock bushing for easier installation.

7.9

Repeat steps 7.6-7.8 on the drivers side of the truck.





8. INSTALL NEW CAB SUSPENSION ELECTRICAL AND AIRLINE COMPONENTS

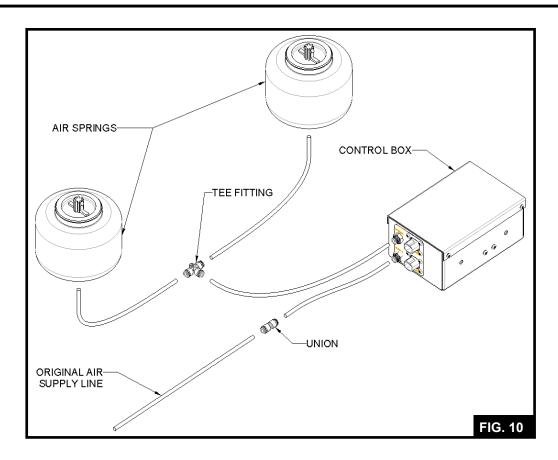
NOTE: Steps 8.1 - 8.5 will use the parts from the integration kit detailed below on page 11.

8.1

Use the provided airline and airline fittings to connect the vehicle air supply and air spring to the control box (FIG. 10).

WARNING

Connecting airlines to the vehicle supply and connecting to vehicle power may cause the cab air springs to inflate, resulting in cab movement. To prevent injury, ensure cab is blocked up and no operators are in the path of cab motion.

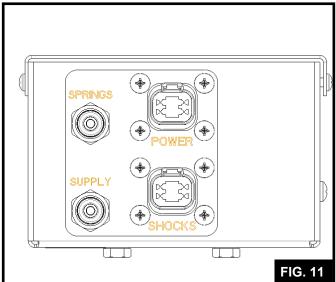


8.2

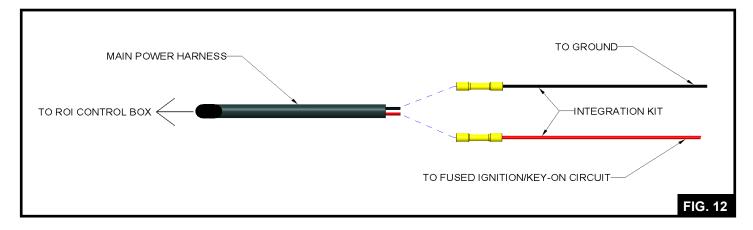
Connect the shock extension harness into the 'SHOCKS' plug on the control box. Route one end of the harness to each shock absorber and connect. Ensure there is appropriate slack in the harness to account for the vertical suspension travel. Loop excess harness length and secure (FIG. 11).

8.3

Run the main power harness from the 'POWER' connector of the control box (**FIG. 11**) into the cab. Route the harness through the dash and to the tiein location. Loop and strap any excess harness. Strip the wires at the ends of the extension harness. Crimp to the mating color wire in the Integration kit (**FIG. 12**).



8. INSTALL NEW CAB SUSPENSION ELECTRICAL AND AIRLINE COMPONENTS (CONT.)



8.4

See below for possible tie-in locations. Verify the vehicle key is in the off position. Insert the red wire into the tie-in location in an available ignition/key-on circuit and fuse at 10 amps using the fuse provided. If there are no open circuits, an existing circuit may need to be spliced. Be sure the overall circuit rating is appropriate and fused to handle both loads. Fuse each branch independently, using the 10 amp fuse provided and an inline fuse holder (not provided) for the ROI CabMate branch. Fuse the other branch per the equipment manufacturer's instructions.

8.5

Insert the black wire into the tie-in location in an available ground location.

 NOTICE
 The information provided here is for reference only and was populated based on successful installations of the ROI CabMate. An appropriate tie-in location on your vehicle will need to be determined, which may be different than what is provided here. Link Manufacturing does not accept responsibility for failures caused due to inappropriate connection to vehicle electrical circuits.

 Possible Vehicle Connection locations select Peterbilt and Kenworth models are as follows:

Ignition Tie-in: Body builder connector P096 behind driver's side kick panel. Wire labeled Ignition Fuse 1. Fuse location K13..

Ground Tie-in: Ground splice pack behind driver's side kick panel (near grounding stud).

9. VERIFICATION OF INSTALLATION

9.1

Verify the position sensor arm is above horizontal indicating that the suspension is below design height. At design height the sensor arm should be horizontal and perpendicular to the linkage. You may need to lower the jack(s) supporting the cab to achieve this (FIG.13).

9.2

Turn on the vehicle and allow the air tanks to fill. The cab air springs should now fill to design height.

9.3

Measure the air spring height as shown in (**FIG.1**) and verify it measures the same as recorded in step 5.1. If the design height is not correct, shut the vehicle off, adjust the linkage length accordingly, then restart the vehicle and repeat this step.

9.4

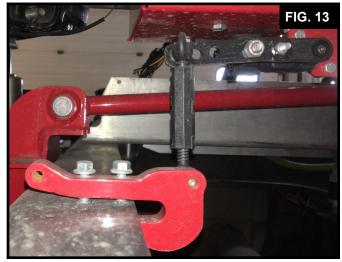
Verify the LED on the controller is flashing steadily, which indicates no faults. If the LED is not flashing steadily, see the Owner's Manual for troubleshooting information (**FIG.14**).

9.5

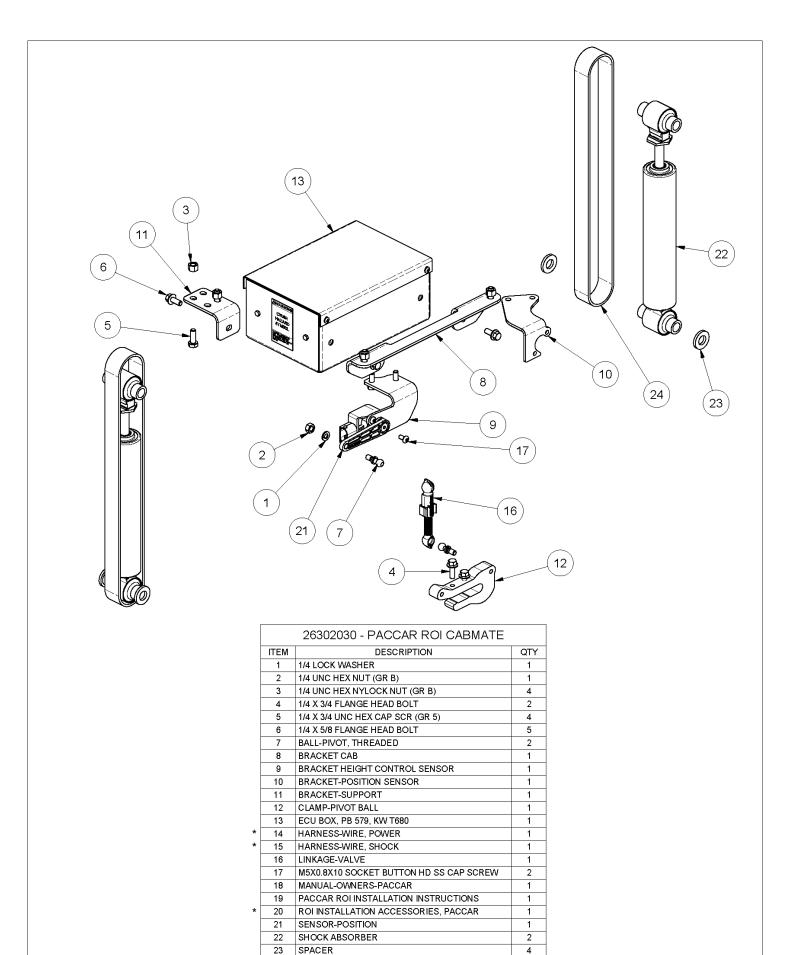
Check airline connections for air leaks and ensure all wire harnesses and airline is routed and secured appropriately.

9.6

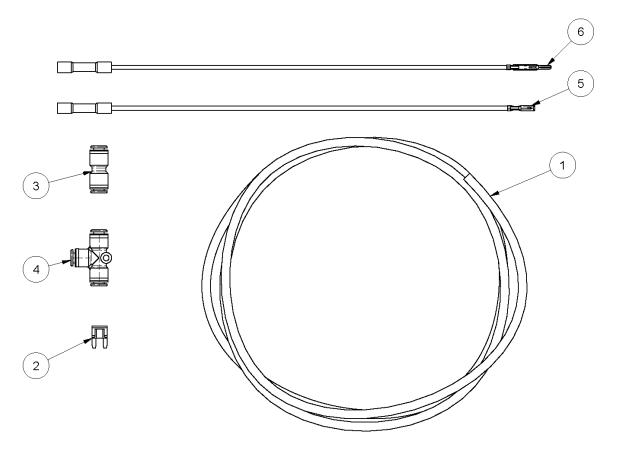
Your ROI Cabmate installation is now complete. We hope you enjoy the ride. Please visit **www.ROICabmate.com** for more information or contact us at **info@linkmfg.com** if there is anything we can help you with.







STRAP-RETENTION
*NOT PICTURED



263	303003 - ROI INSTALLATION ACCESSORIES, PACC	AR
ITEM	DESCRIPTION	QTY
1	AIRLINE-NYLON, .250 O.D., BULK (FEET)	10
2	FUSE-MINI AUTOMOTIVE, 10 AMP	1
3	UNION H, 1/4 TB	1
4	UNION TEE, 1/4 TB	1
5	WIRE-NEGATIVE, FL NC/ PACCAR	1
6	WIRE-POSITIVE, PACCAR	1



LINK MANUFACTURING, LTD. 223 15TH ST. NE, SIOUX CENTER, IA 51250 1-800-222-6283 www.linkmfg.com