

ROI Cabmate®
Cab Suspension

LINK®

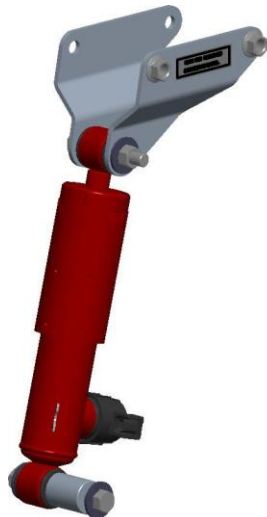
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**QUESTIONS?
CALL CUSTOMER
SERVICE
1-800-222-6283**

INSTALLATION INSTRUCTIONS

Cab Suspension
INTERNATIONAL LT SERIES
SLEEPER CABS
MODEL YEAR 2017 & NEWER

LINK PART NO.
26302020



IMPORTANT: IT IS IMPORTANT THAT THE ENTIRE INSTALLATION INSTRUCTIONS BE READ THOROUGHLY BEFORE PROCEEDING WITH SUSPENSION INSTALLATION.






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 situation which if not avoided, will result 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 indicates a potentially hazardous situation which, if not avoided, may result in property damage.
	TORQUE indicates named fasteners are to be tightened to a specified torque value.
NOTE:	A Note provides information or suggestions that help you correctly perform a task.

3. SAFE WORKING PRACTICES:

3.1 CAUTION

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

3.2 CAUTION

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 CAUTION

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 CAUTION

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 owner's 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 6.75". 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

Mount the control box to the cab bracket using the (4) 1/4 X 5/8 flange head bolts provided (FIG.2).

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

5.6

Mount the height control sensor bracket to the control box using the (2) 1/4 X 5/8 flange head bolts provided (FIG.2).

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

5.7

Mount the height control sensor to the bracket on the control box using the (2) M5 X10mm screws provided (FIG.2).

 **TORQUE** M5 fasteners to 4-5 FT-LBS

5.8

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

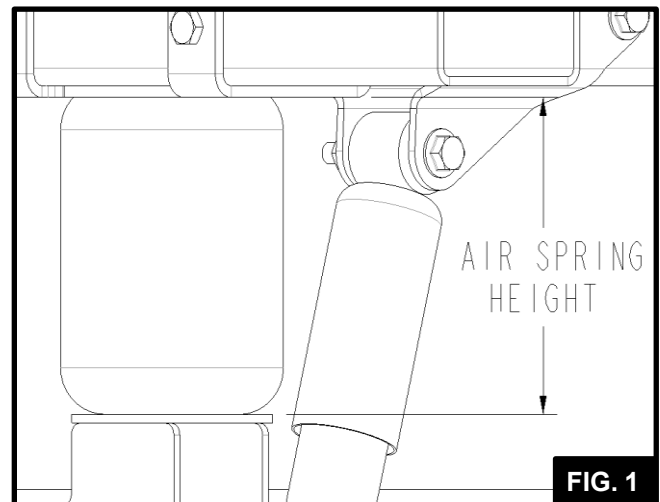


FIG. 1

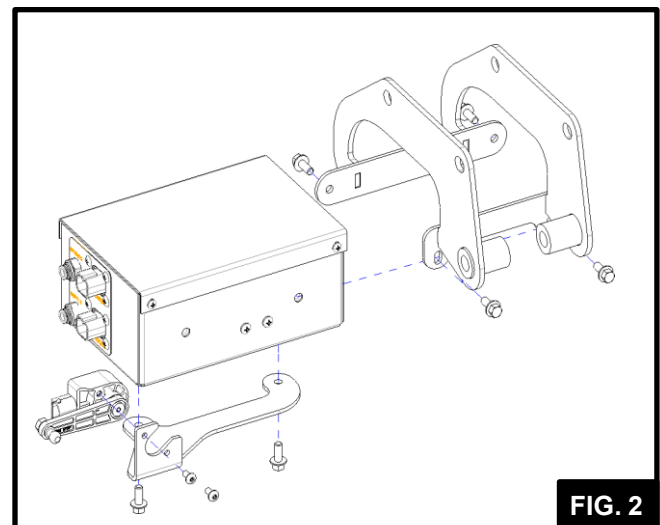


FIG. 2

6. REMOVE EXISTING CAB SUSPENSION

6.1

Starting on the passenger side of the vehicle, remove the upper shock bolt. This part is not reused and may be discarded (**FIG.3**).

6.2

Remove the lower shock nut and washer then remove the shock. The standoff spacer and bolt can now be removed. These parts are not reused and may be discarded. (**FIG.3**).

6.3

Remove the (2) bolts holding the cab bracket plates to the cab channel. Retain the bolts for reuse, the cab bracket plates may be discarded (**FIG.3**).

6.4

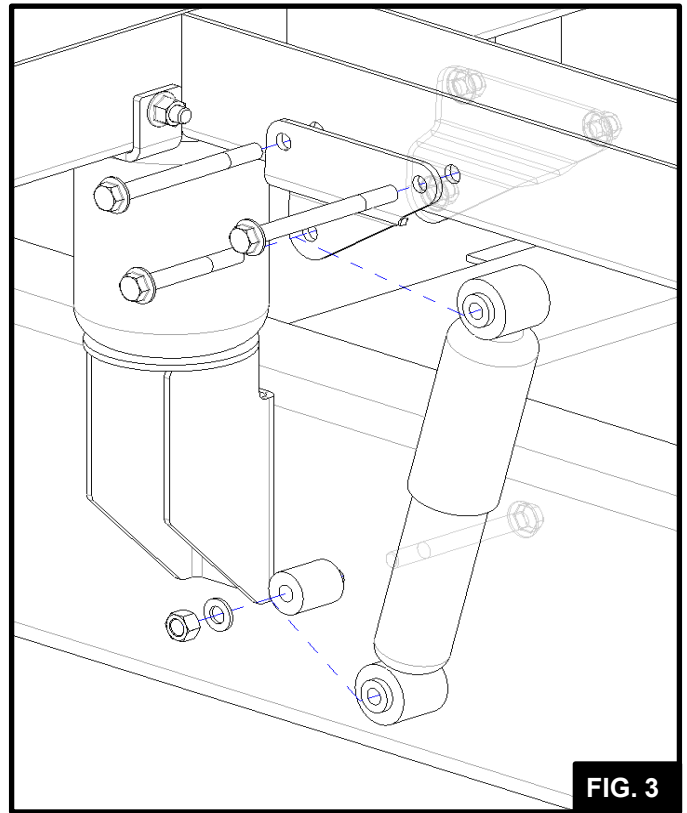
Repeat steps 6.1 through 6.3 on the driver side of the vehicle.

6.5

Remove the bolt and washer from the upper height control linkage connection. These parts are not reused and may be discarded (**FIG.4**).

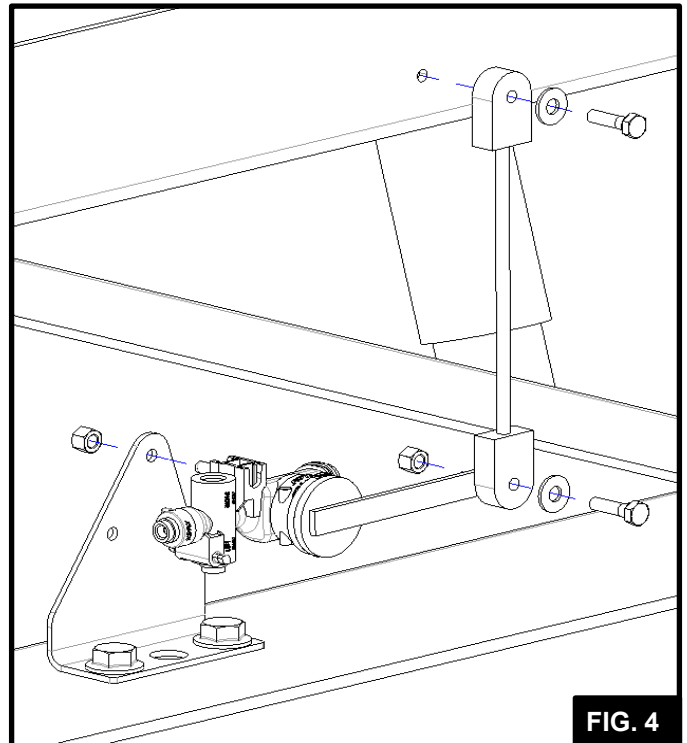
6.6

Remove the (2) frame mounting bolts from the height control valve bracket. The bracket, valve and linkage are not reused and may be discarded (**FIG.4**).



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.



7. INSTALL NEW CAB SUSPENSION COMPONENTS

7.1

Attach the cab bracket with the control box on the passenger side of the cab reusing the (2) M12 bolts removed in step 6.3 and (2) M12 flange nuts provided (FIG.5).

TORQUE M12 fasteners to 60-70 FT-LBS.

7.2

Mount the shock to the cab bracket using the (1) 1/2 X 6 bolt, (1) 1/2 lock nut and (2) washers provided (FIG.6).

TORQUE 1/2" fasteners to 60-70 FT-LBS.

7.3

Mount the shock to the frame using the (1) 1/2 X 4 1/2 bolt, (1) 1/2 lock nut, (2) washers and (1) spacer bushing provided. The spacer is placed between the frame and the shock (FIG.6).

TORQUE 1/2" fasteners to 60-70 FT-LBS.

7.4

Mount the (2) cab bracket plates on the driver side of the cab using the (2) M12 bolts removed in step 6.3 and the (2) M12 flange nuts provided (FIG.7).

TORQUE M12 fasteners to 60-70 FT-LBS.

7.5

Mount the shock in between the cab bracket plate using the (1) 1/2 X 3 1/4 bolt, (1) 1/2 lock nut and (2) washers provided (FIG.7).

TORQUE 1/2" fasteners to 60-70 FT-LBS.

7.6

Mount the shock to the frame using the (1) 1/2 X 4 1/2 bolt, (1) 1/2 lock nut, (2) washers and (1) spacer bushing provided. The spacer is placed between the frame and the shock (FIG.7).

TORQUE 1/2" fasteners to 60-70 FT-LBS

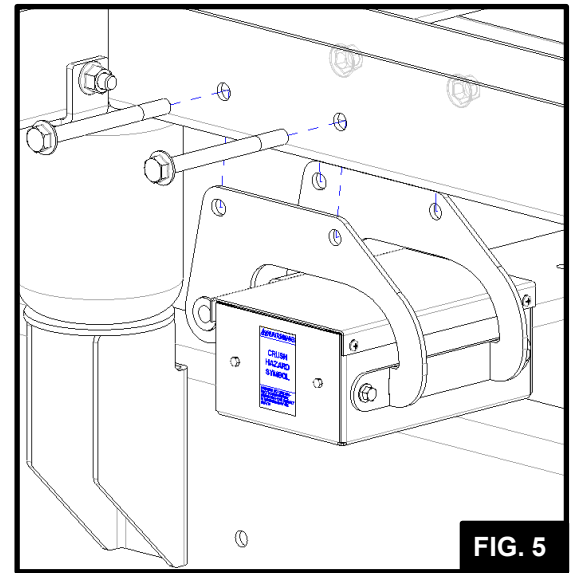


FIG. 5

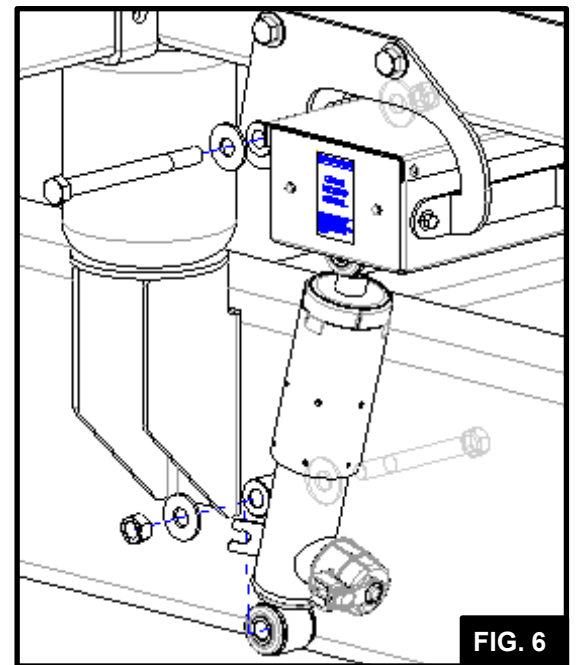


FIG. 6

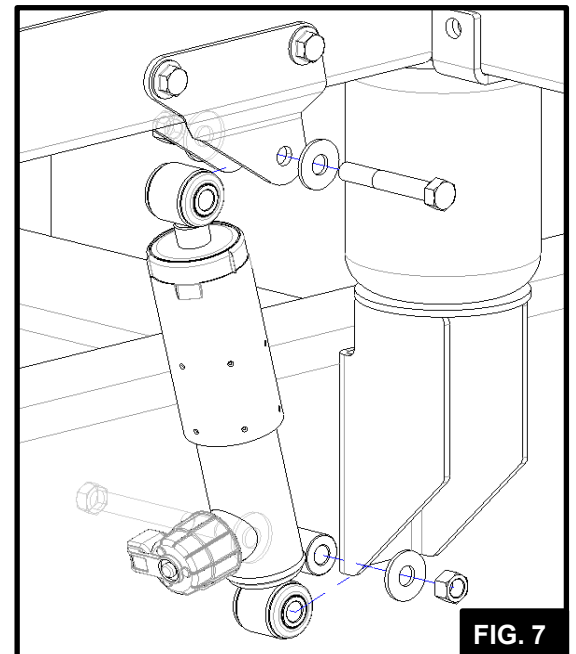


FIG. 7

8. INSTALL NEW CAB SUSPENSION ELECTRICAL AND AIRLINE COMPONENTS

8.1

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.8).

8.2

Connect the height control linkage between the pivot ball and the height control sensor (FIG.9).

8.3

Position the linkage mount clamp such that the linkage is vertical when viewed from the lateral and longitudinal directions. Tighten the two pre-assembled bolts to secure its position (FIG.8 and 9).

TORQUE 1/4" fasteners to 4-5 FT-LBS (48-60 IN-LBS).

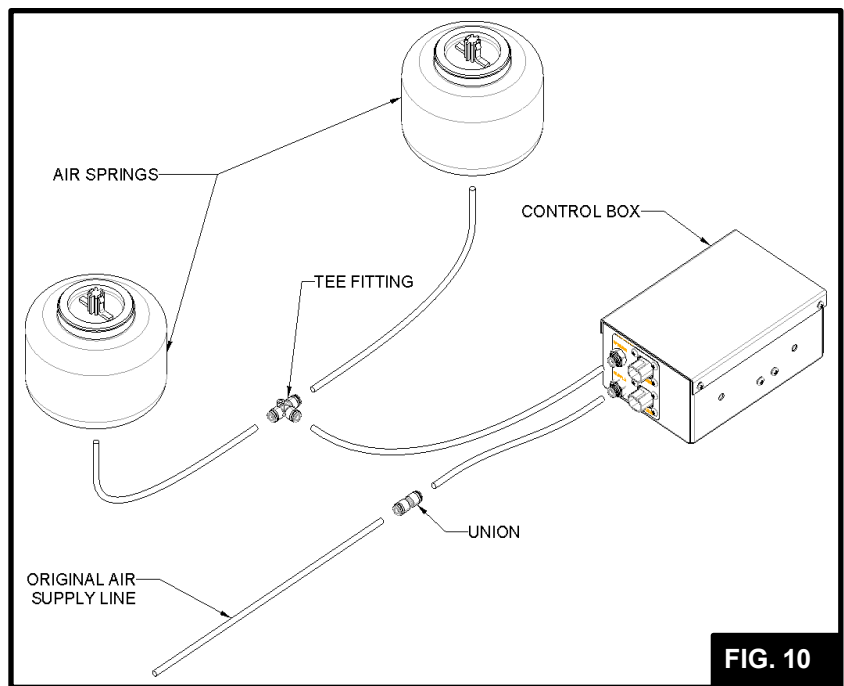
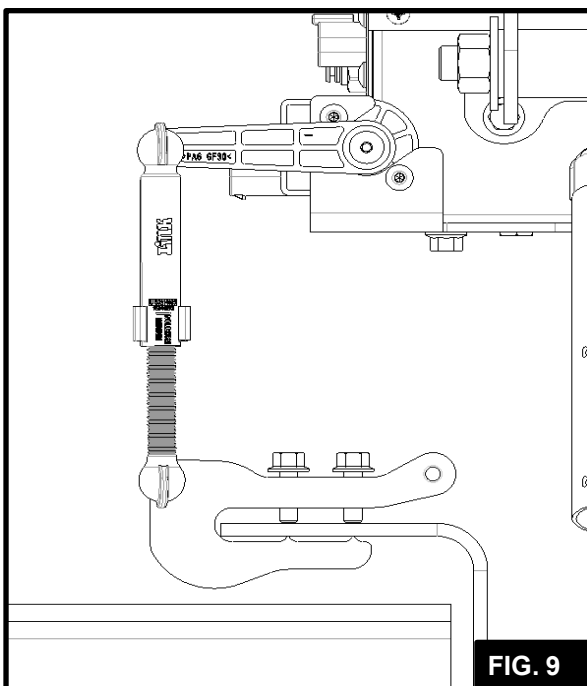
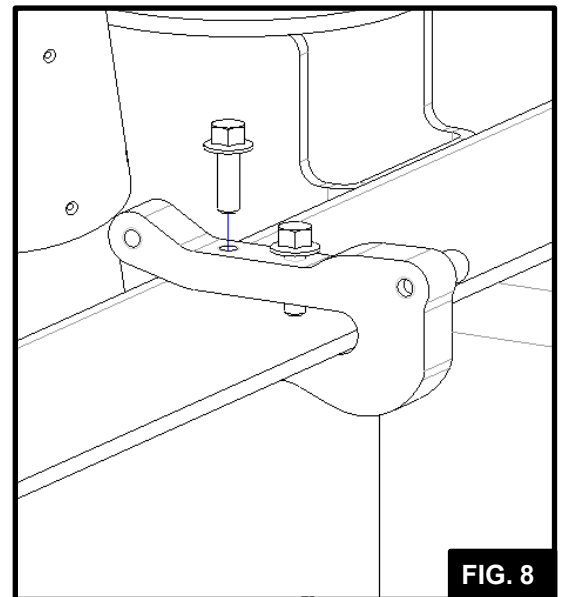
NOTE: Steps 8.4-8.8 will use the parts from the integration kit detailed below on page 11.

8.4

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

WARNING

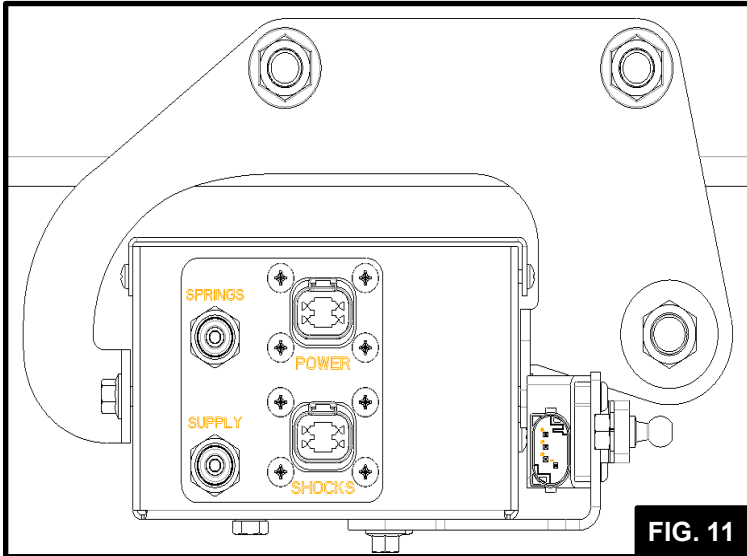
Connecting airlines to the vehicle supply and connecting to vehicle power may cause the cab air springs to inflate, resulting in cab movement. To prevent injury, ensure cab is blocked up and no operators are in the path of cab motion.



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

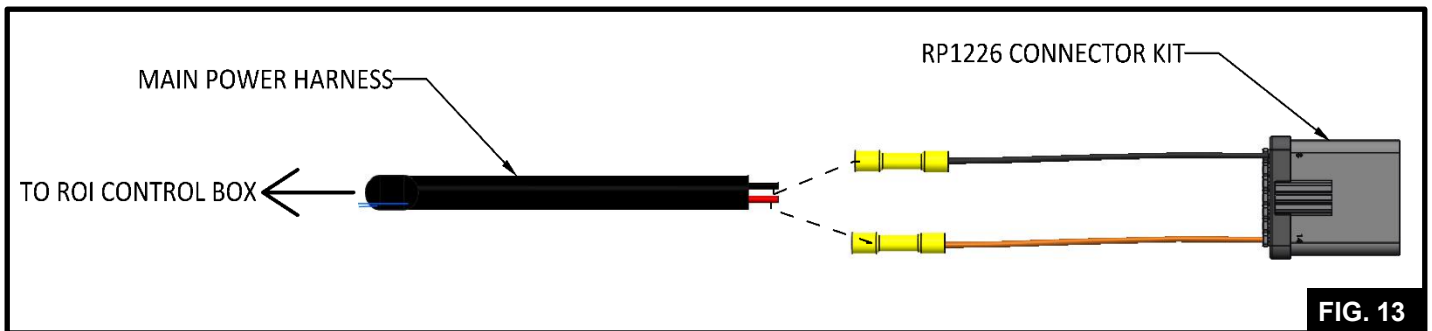
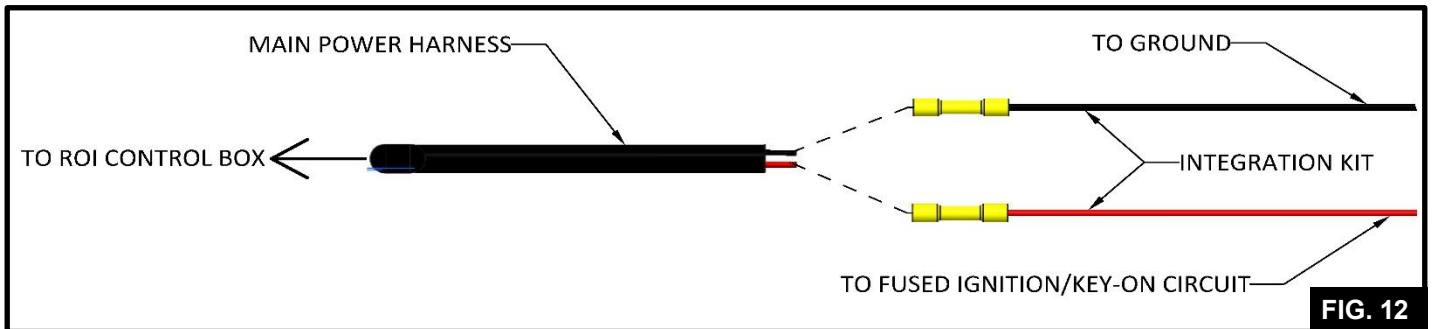
8.5

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**).



8.6

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 tie-in location. Loop and strap any excess harness. Strip the wires at the ends of the extension harness.



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

8.7

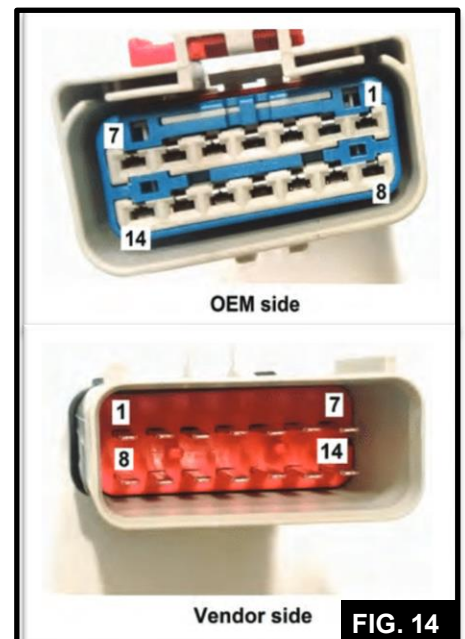
Option 1 RP1226 Connector

Verify the vehicle key is in the off position. Verify location of OE RP1226 connectors prior to continuing the installation. The RP1226 connector is a standardized electrical interface optionally provided by vehicle manufacturers to facilitate connection of the vehicle J1939 CAN bus to aftermarket vehicle accessories such as Electronic Logging Devices. The OEM may provide multiple RP1226 connectors to support additional accessory devices. Connecting multiple devices to the CAN signals of an RP1226 connector using Y-adaptors or splices is a violation of the TMC RP1226 and SAE J1939 standards because doing so could cause signal interference (**FIG. 14**). Tie in the RP1226 connector to the mating tie-in location on the vehicle and crimp the ignition and ground wires to the power harness. If the RP1226 connector is not available, proceed to step 8.8. Ensure the overall circuit rating is appropriate and fused to handle all loads. Fuse each branch independently, using the 10-amp fuse provided, and proceed to step 9.

8.8

Option 2 F32-D Connector

If there are no available RP1226 connector, use the secondary option F32-D connector. Crimp the power harness wires to the mating color wire in the F32-D Connector Kit. 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. Fuse each branch independently, using the 10-amp fuse provided, and proceed to step 9.



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 for select Volvo models are as follows:

Ignition Tie-in: Option 1: RP1226 Connector
Option 2: F32-D connector beneath fuse panel.

Ground Tie-in: Option 1: RP1226 Connector
Option 2: F32-D connector beneath fuse panel.

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.15**).

9.2

With no air in the suspension, verify a minimum of 0.75 inches of clearance between the frame-mounted components and the sleeper-mounted components.

9.3

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

9.4

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

9.5

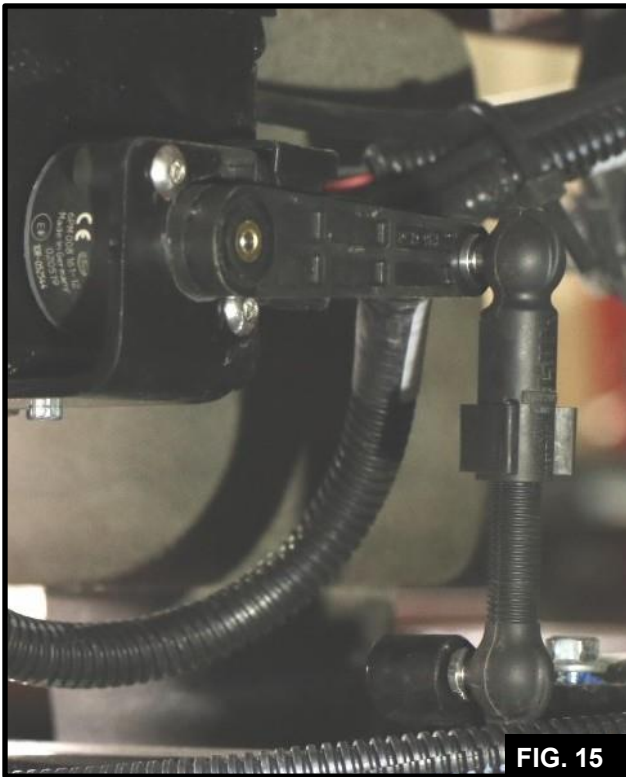
Verify the LED on the controller is flashing steadily, which indicates no faults. If the LED is not flashing steadily, see the Owner's Manual for troubleshooting information (**FIG.16**).

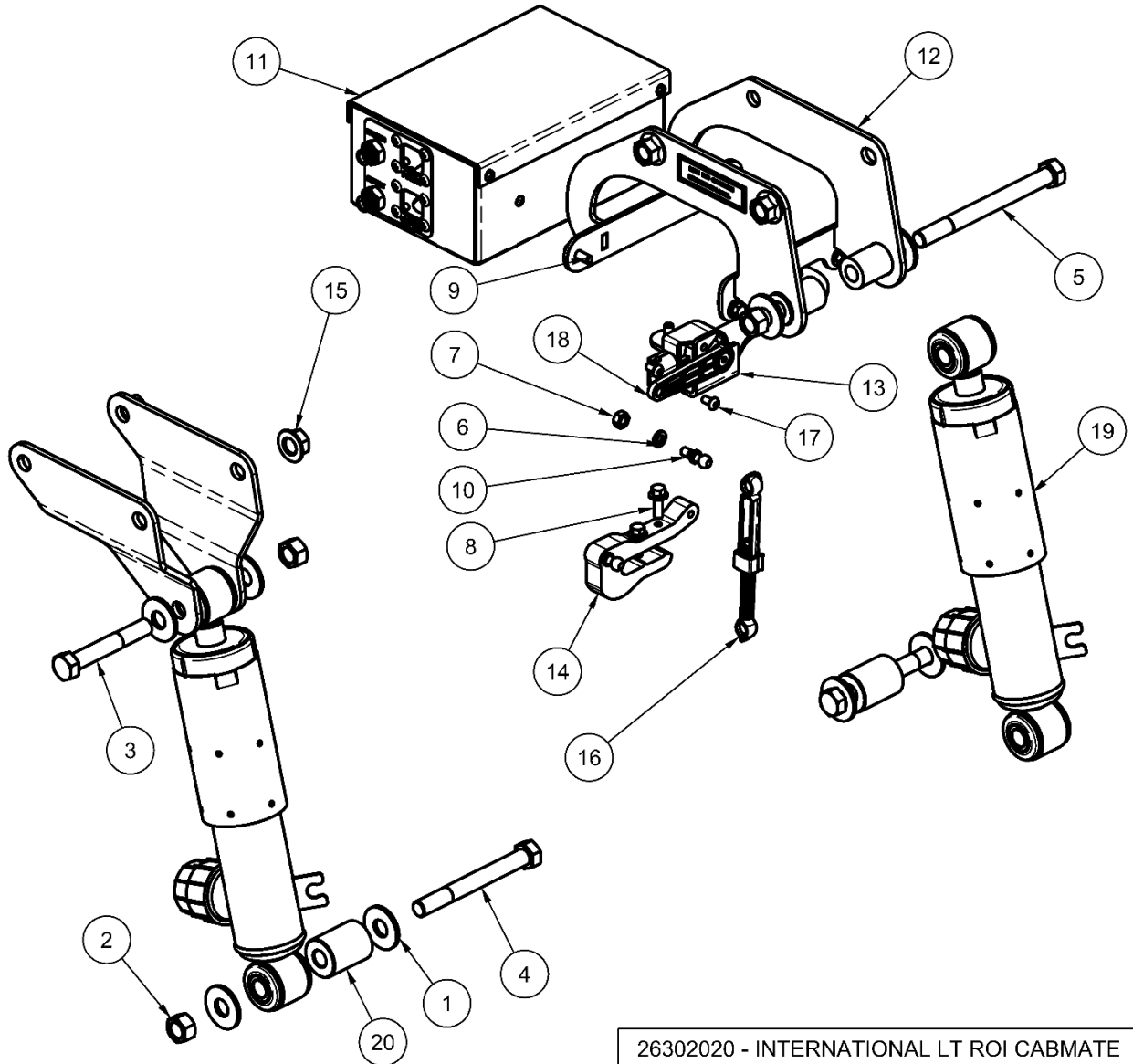
9.6

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

9.7

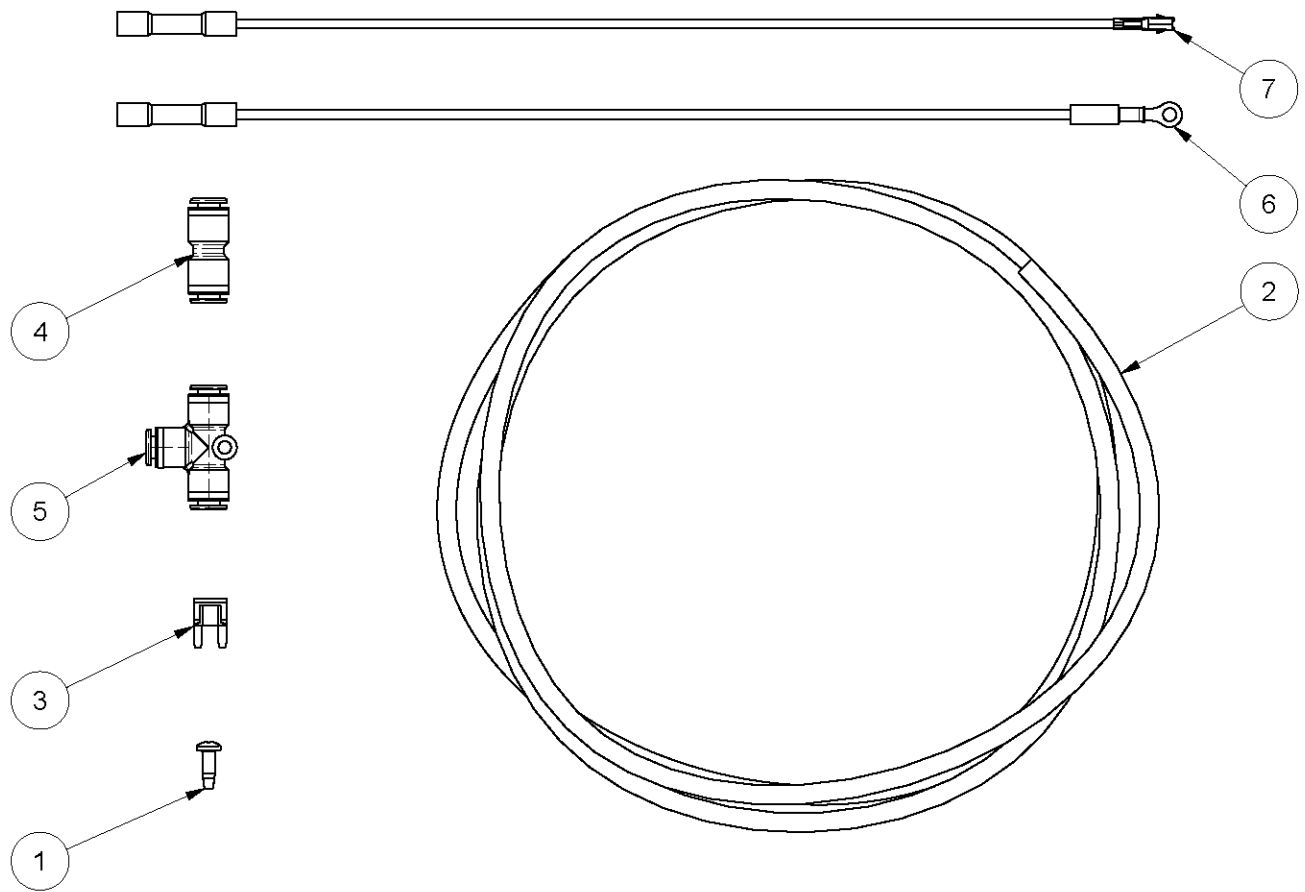
Your ROI Cabmate installation is now complete. We hope you enjoy the ride. Please visit www.ROICabmate.com for more information or contact us at info@linkmfg.com if there is anything we can help you with.





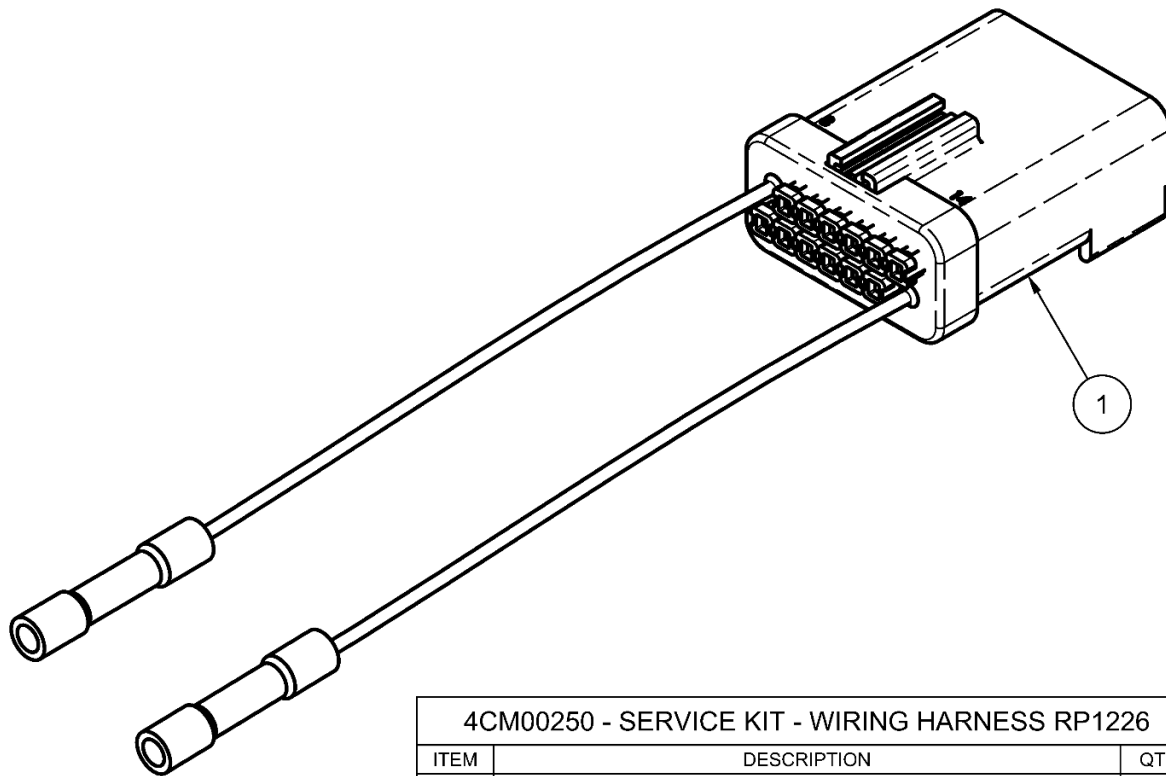
26302020 - INTERNATIONAL LT ROI CABMATE		
ITEM	DESCRIPTION	QTY
1	1/2 TYPE A PLAIN WASHER	8
2	1/2 UNC HEX TOP LOCK NUT (GR C)	4
3	1/2 X 3 1/4 UNC HEX CAP SCR (GR 8)	1
4	1/2 X 4 1/2 UNC HEX CAP SCR (GR 8)	2
5	1/2 X 5 1/2 UNC HEX CAP SCR (GR 8)	1
6	1/4 LOCK WASHER	1
7	1/4 UNC HEX NUT	1
8	1/4 X 3/4 FLANGE HEAD BOLT	2
9	1/4 X 5/8 FLANGE HEAD BOLT	6
10	BALL-PIVOT, THREADED	2
11	BOX-ECU, INTERNATIONAL LT SERIES	1
12	BRACKET-CAB	3
13	BRACKET-HEIGHT CONTROL SENSOR	1
14	CLAMP-PIVOT BALL	1
*	- HARNESS - PIGTAIL CONNECTOR, RP1226	1
*	- HARNESS-WIRE, POWER	1
*	- HARNESS-WIRE, SHOCK	1
15	HEX TOP LOCK FLANGE NUT, M12 X 1.75, CLASS 10	4
*	- INSTRUCTION MANUAL INTERNATIONAL LT	1
16	LINKAGE-VALVE	1
17	M5X0.8X10 SOCKET BUTTON HD SS CAP SCREW	2
*	- MANUAL-OWNERS-NAVISTAR	1
*	- ROI INSTALLATION ACCESSORIES, NAVISTAR	1
18	SENSOR-POSITION	1
19	SHOCK ABSORBER, ROI	2
20	SPACER	2

*NOT PICTURED



26303002 - ROI INSTALLATION ACCESSORIES, NAVISTAR

ITEM	DESCRIPTION	QTY
1	#8-18 X 1/2 CR PAN HEAD SCREW (SELF DRILL)	1
2	AIRLINE-NYLON, .250 O.D., BULK (FEET)	10
3	FUSE-MINI AUTOMOTIVE, 10 AMP	1
4	UNION H, 1/4 TB	1
5	UNION TEE, 1/4 TB	1
6	WIRE-NEGATIVE, NS LT	1
7	WIRE-POSITIVE, NS LT	1



4CM00250 - SERVICE KIT - WIRING HARNESS RP1226		
ITEM	DESCRIPTION	QTY
1	HARNESS - PIGTAIL CONNECTOR, RP1226	1



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