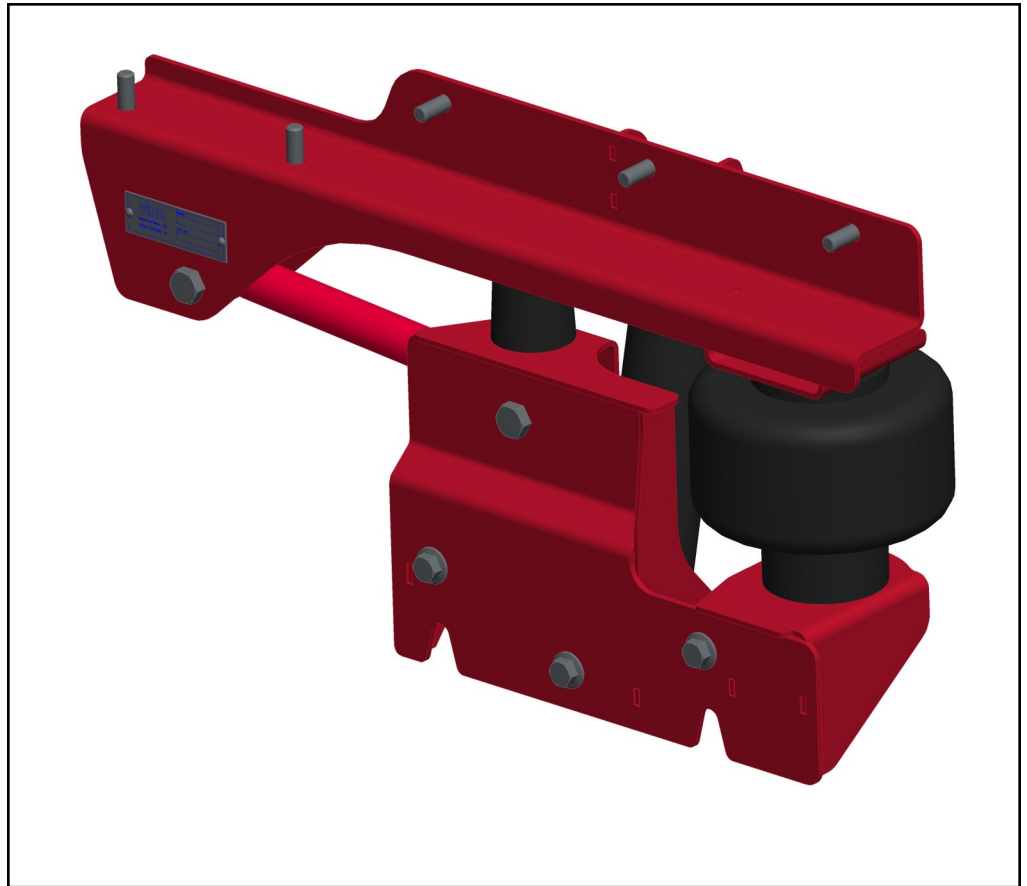


INSTALLATION INSTRUCTIONS



FRTM2106-160
(22312000)



The **CABMATE MODEL 22312000** fits the 2003 and later Freightliner M2-106 day cabs with 160 cab heights. It replaces the original rear cab mounting.

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

UNIT WEIGHT: 20 lbs

22310017
Dec 30, 2014

1. INTRODUCTION





Thank you for choosing a Link CabMate 22312000 cab suspension system. We want to help you to get the best results from the suspension and to install and operate it safely. This manual contains information to introduce you to the Link CabMate 22312000 and to assist you with its operation. The 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. Contact Link at (800) 222-6283 for information on recent changes to products.

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

2. SAFETY SYMBOLS, TORQUE SYMBOL, and NOTES

IMPORTANT: IT IS IMPORTANT THAT THE ENTIRE OPERATION INSTRUCTIONS BE READ THOROUGHLY BEFORE USING THIS SYSTEM.

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
 WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
	The torque symbol alerts you to tighten fasteners to a specified torque value.

3. SAFE WORKING PRACTICES:

3.1 CAUTION

The operation of the CabMate 22312000 involves moving parts. During the course of travel pinch points may exist between components. Keep hands and fingers clear of moving components during operation.

3.2 CAUTION

Practice safe lifting procedures. Consider size, shape, and weight of objects being moved. Obtain help or the assistance of jacks or lift straps when lifting heavy assemblies. Make certain the path of travel is clear.

4. OPERATION 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 component is permitted without proper authorization from qualified Link personnel.
- 4.3 The Link CabMate 22312000 requires an air source sized correctly for the application.

5. INSTALLATION

⚠ WARNING

For your own safety, do not connect the cab suspension to the air source until the cab suspension is securely attached to both the cab and the truck frame.

5.1 Rear cab mount removal (Fig. 1):

5.1.1 Support the back of the cab.

Important!

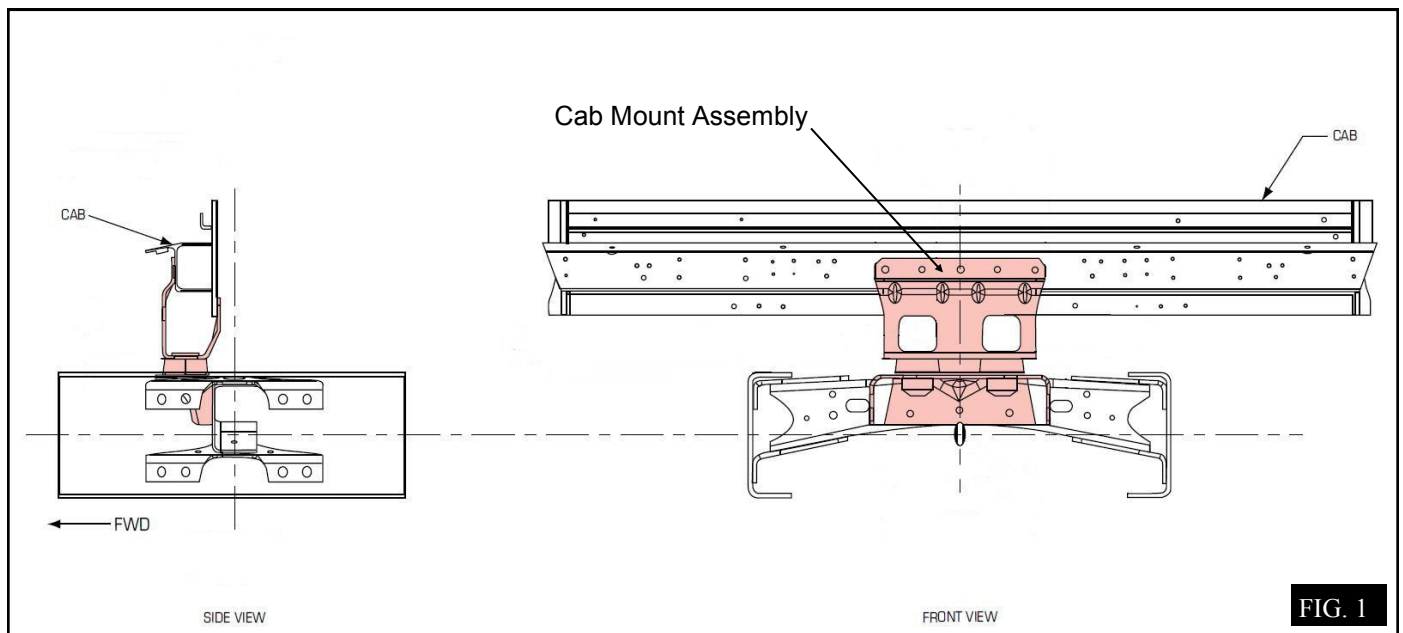
Use lift straps or a jack at each end of the rear cab sill to support and lift the cab. If jacks are used, place blocks of wood between the jack and the sill to prevent damage to the cab.

5.1.2 Remove the bolts that join the existing cab mount to the frame crossmember.

5.1.3 Raise the back of the cab slightly.

5.1.4 Remove the cab mount bolts.

5.1.5 Remove the cab mount assembly.



5. INSTALLATION (CONTINUED)

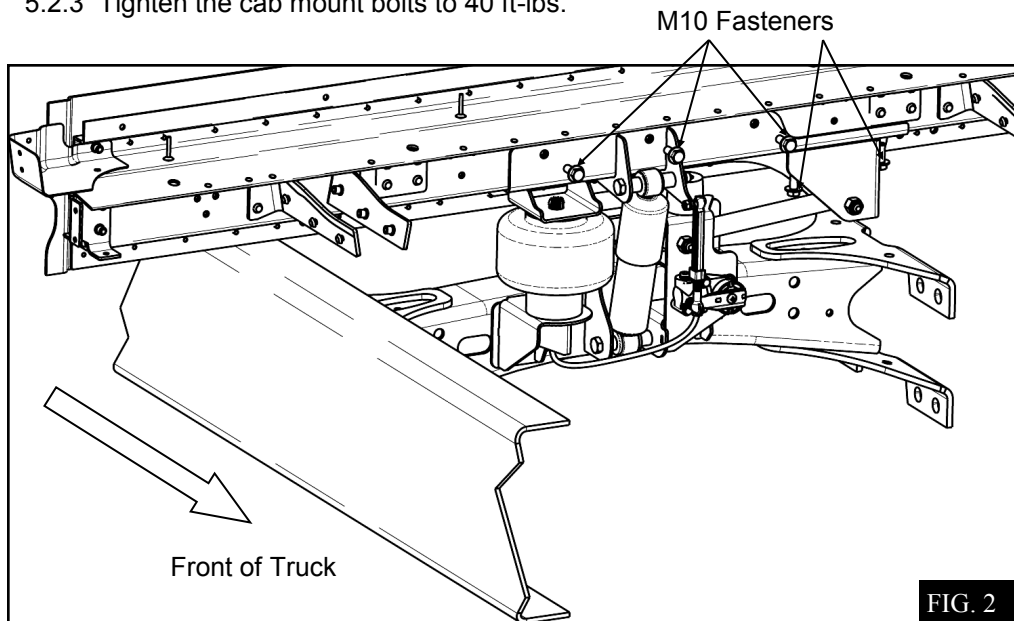
5.2 Rear cab suspension installation—Cab Side (Fig. 2):

5.2.1 Position the cab suspension against the cab sit as shown.

5.2.2 Attach the cab suspension using the supplied M10 x 1.5 x 25mm hex flange screws (Qty. 5).

Important: Do not re-use the original fasteners.

5.2.3 Tighten the cab mount bolts to 40 ft-lbs.



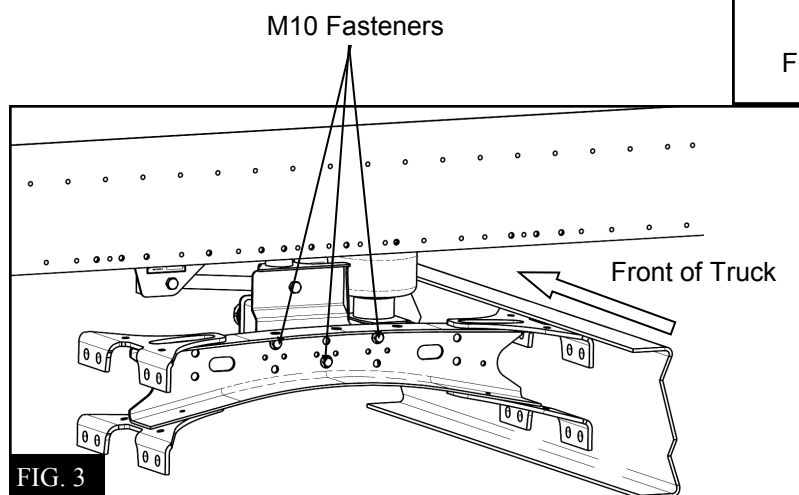
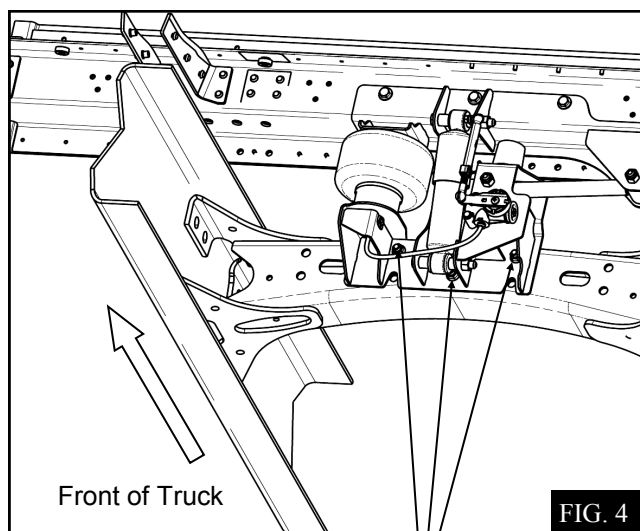
5.3 Rear cab suspension installation—Frame Side (Fig. 3 & 4):

5.3.1 Align the weld nuts on the cab suspension with the holes in the frame crossmember.

5.3.2 Attach the cab suspension using the supplied M10 x 1.5 x 25mm hex flange screws (Qty. 3).

Important: Do not re-use the original fasteners.

5.3.3 Tighten the cab mount bolts to 40 ft-lbs.



5. INSTALLATION (CONTINUED)

5.4 Connection of Height Control Valve to Air Supply (Fig. 5):

- ▲ **WARNING:** FOR SAFETY PURPOSES THE CABMATE MUST BE SUPPLIED FROM A PRESSURE PROTECTED CIRCUIT. IN THE EVENT OF AN AIR LEAK IN THE CAB SUSPENSION, FAILURE TO PROVIDE A PRESSURE PROTECTED CIRCUIT MAY CAUSE LOSS OF AIR PRESSURE TO VITAL SYSTEMS ON THE VEHICLE.
- ▲ **WARNING:** LOSS OR APPLICATION OF AIR PRESSURE TO CABMATE WILL CAUSE SUDDEN MOVEMENT OF THE CAB. PRIOR TO INSTALLING OR PERFORMING MAINTENANCE, BLOCK UP THE CAB TO PREVENT THE POSSIBILITY OF INJURY.
- ▲ **WARNING:** CONNECT THE CABMATE DIRECTLY TO THE MAIN AIR TANK. YOU WILL NEED AN AIR PRESSURE PROTECTION VALVE IN THE LINE. (INCLUDED IN THE PRESSURE PROTECTION KIT. LINK MFG. PART NO. 1350-0000). DO NOT USE AN AIR PRESSURE REGULATOR!

5.4.1 With the tank at 0 p.s.i., remove the existing plug or fitting from the desired port of the trucks air tank.

5.4.2 Apply joint compound to the fittings and install the pressure protection kit. DO NOT USE TEFLON TAPE. Be sure that the arrows on the valve are pointing in the direction of air flow and the vent hole is pointed down.

NOTE: Additional fittings/reducers may be required to attach the hex nipple to the main air tank.

5.4.3 Run the 1/4" airline from the shut-off valve to the CABMATE. Be sure that the airline has enough clearance so that there are no pinch points that may restrict or cut the airline. Secure the airline using the cable ties supplied by Link Mfg.

5.4.4 Tighten all plumbing fittings. Then, with the system at operating pressure (90 to 110 p.s.i.), open the Manual Shut-off Valve to supply air to the CABMATE. Check the system for air leaks.

5.4.5 Check for proper operation of the height control valve. Disconnect the valve linkage from the lever. Push the lever down 45°, air should flow into the air spring(s). Return the lever to the neutral position. Push the lever up 45°, air should exhaust from the air spring(s). Return the lever to the neutral position; no air should flow. Reconnect the valve linkage to the lever.

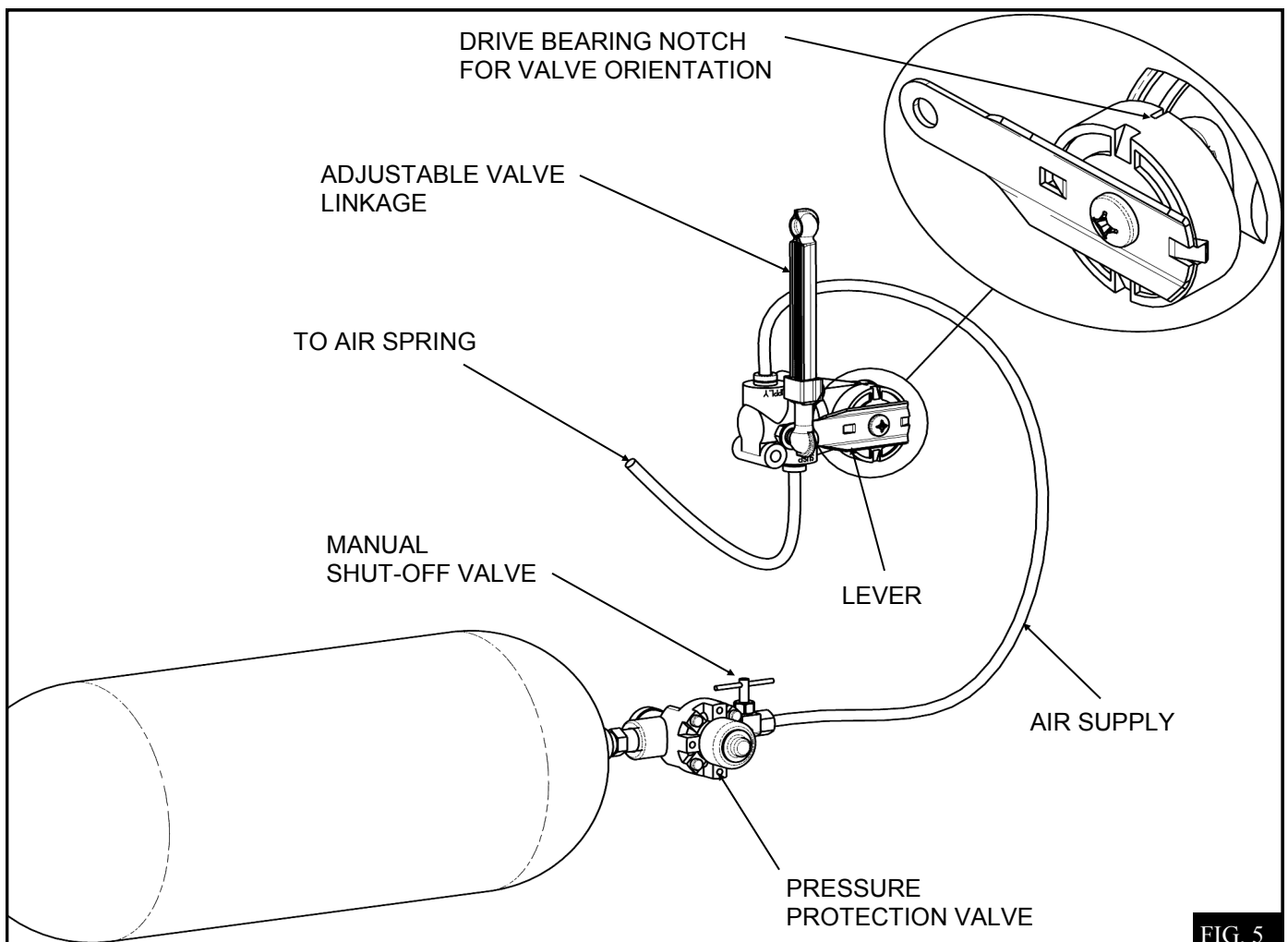


FIG. 5

5. INSTALLATION (CONTINUED)

5.5 Final Installation and Adjustment:

5.5.1 Measure the distance from top and center of the crossmember to the underside of the cab sill.

5.5.2 For the cab to set level with the frame, the nominal dimension is 4.91" (see Fig. 6).

5.5.3 To make adjustments to the height:

▲ WARNING: ADJUSTMENT OF THE HEIGHT CONTROL VALVE WILL CAUSE SUDDEN MOVEMENT OF THE CAB. PRIOR TO ADJUSTMENT, BLOCK UP THE CAB TO PREVENT THE POSSIBILITY OF INJURY.

5.5.3.1 Support the back of the cab.

5.5.3.2 Disconnect the height control valve linkage from both ends.

5.5.3.3 Measure the distance from the center of the cups on the linkage.

5.5.3.4 Remove the clip that holds the linkage together and adjust the linkage as necessary to obtain the desired ride height.

5.5.3.5 Install the lock clip and reinstall the height control valve linkage.

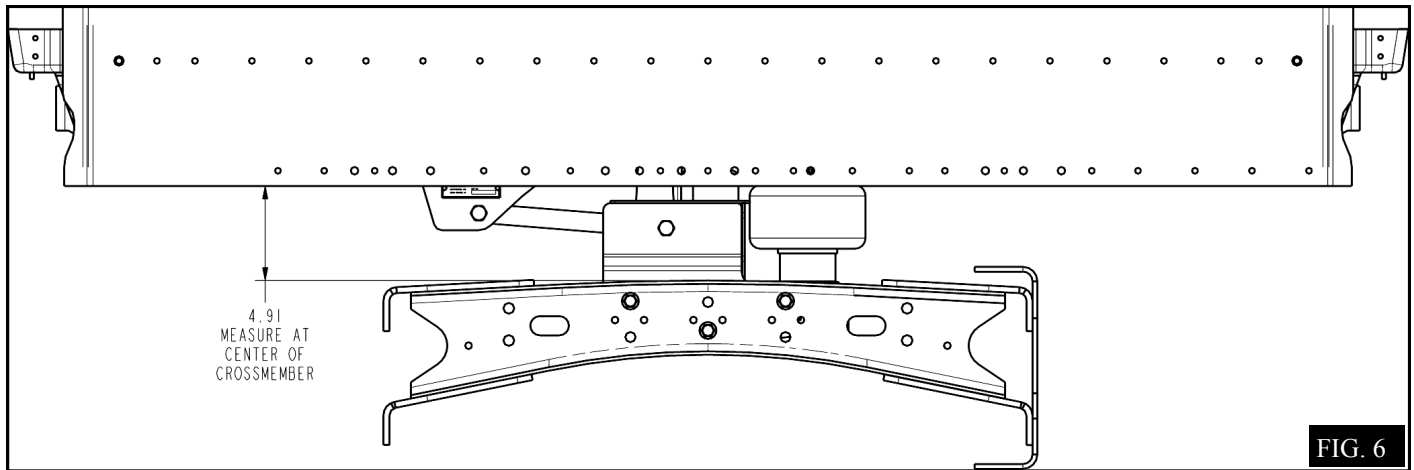


FIG. 6

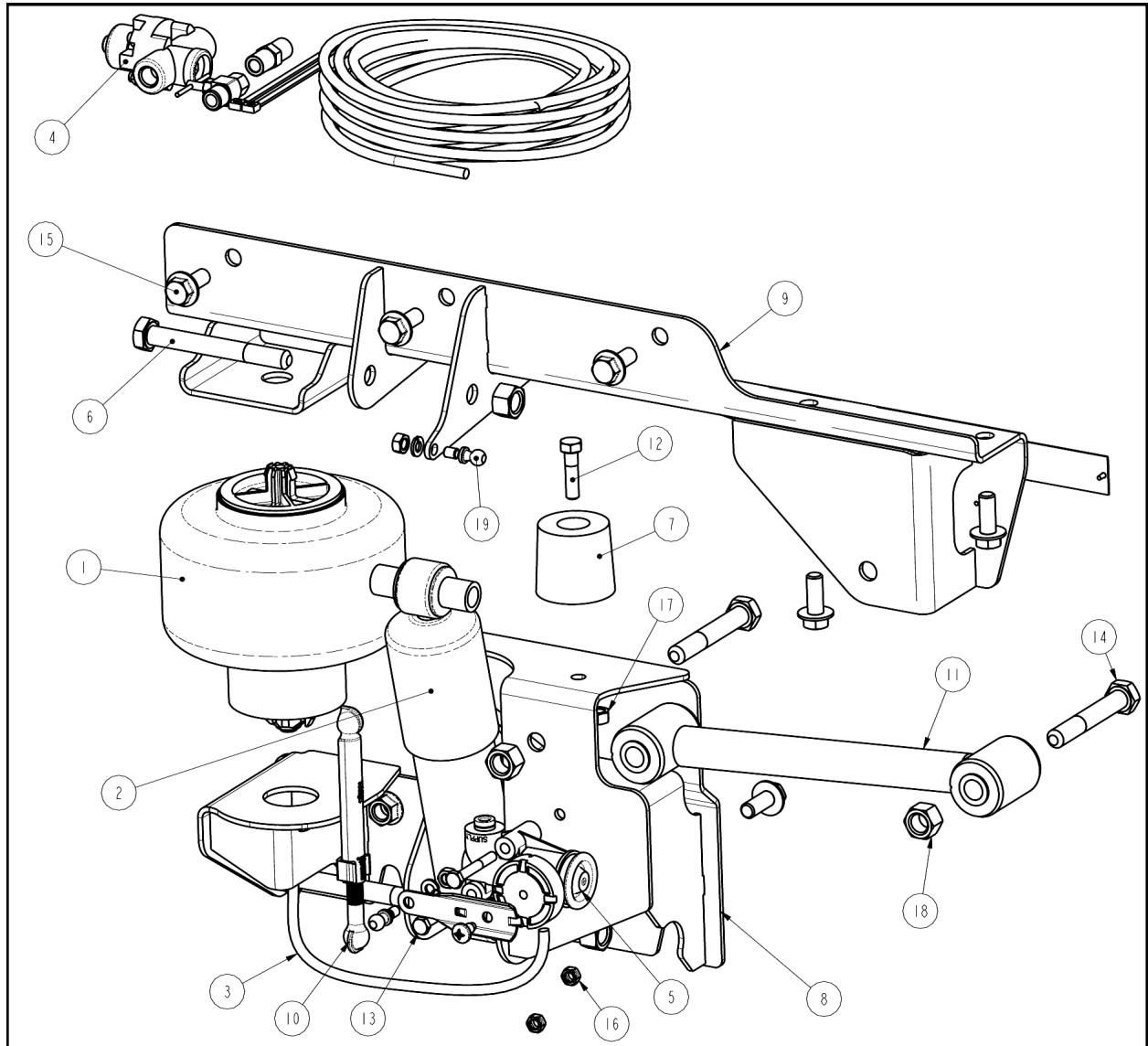
MAINTENANCE

CABMATES need no lubrication and little maintenance. The following components should be checked at the time the truck is being serviced. However, immediate corrective action should be taken if a serious malfunction occurs.

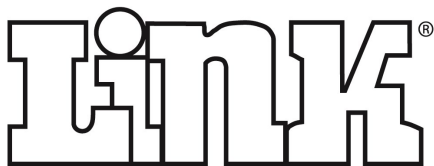
COMPONENT	POSSIBLE PROBLEM	CORRECTIVE ACTION	TORQUE
Airlines	Air leaks	Replace airline	Compression Nut Hand Tight + 1 Turn
Fittings	Air leaks	Remove fitting and apply fresh joint compound. Reinstall fitting, but Do Not Overtighten. Do not use teflon tape.	Threaded into: Metal 15 Ft. Lbs. Plastic Hand Tight + 1 Turn
Air Springs	A. Improper height B. Air leakage	A. Adjust valve linkage to maintain proper air spring height. B. Replace air spring.	
Height Control Valve	Air spring(s) will not inflate when weight is added to the cab; OR Air spring(s) will not deflate when weight is removed from the cab.	A. Inspect valve to insure drive bearing notch is located on "SUPPLY" port side of valve. If not, loosen lever screw (but do not remove completely) and pull lever loose from drive bearing, rotate drive bearing until the bearing notch is in the correct position and resecure lever by tightening lever screw. B. Replace Valve	M6 Mount Fasteners 8 Ft. Lbs. Bearing Screw 40-50 InLbs.
Shock Absorber	Insufficient dampening effect	Replace shocks	45 Ft. Lbs.
Lateral Control Rod	A. Loose nuts on lateral control rod bolts B. Worn bushings.	A. Tighten securely to clamp the inner sleeve. B. Replace lateral control rod.	80 Ft. Lbs.

IMPORTANT: Periodically check the tightness of all

6. PARTS LIST



ITEM	PART #	DESCRIPTION	QTY
1	11040020	SPRING-AIR	1
2	12010020	SHOCK ABSORBER	1
3	13020090	AIRLINE-NYLON, 1/4" BULK (FEET)	1.0 FT
4	13500000	KIT-PROTECTION, PRESSURE	1
5	13500107	SERVICE KIT-HEIGHT CONTROL VALVE	1
6	14081220	HEX CAP SCREW, M12 X 1.25 X 100, CLASS 10.9	2
7	15000070	BUMPER-JOUNCE, 1.75	1
8	22311000	WELDMENT-CROSSMEMBER MOUNT	1
9	22311001	WELDMENT-CAB MOUNT	1
10	29910052	KIT-LINKAGE, LONG	1
11	29934003	LATERAL CONTROL ROD	1
12	14011010	5/16 X 1-1/4 UNC HEX CAP SCR (GR 5)	1
13	14050609	HEX CAP SCREW, M6 X 1 X 45, CLASS 8.8	2
14	14081216	HEX CAP SCREW, M12 X 1.25 X 80, CLASS 10.9	2
15	141B1005	HEX FLANGE SCREW, M10 X 1.50 X 25, CLASS 10.9	8
16	14760607	HEX TOP LOCK NUT, M6 X 1, CLASS 8	2
17	14761000	5/16 UNC HEX CTR LOCK NUT (GR B)	1
18	14771207	HEX TOP LOCK NUT, M12 X 1.25, CLASS 10	4
19	29910026	SERVICE KIT-PIVOT BALL	2



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