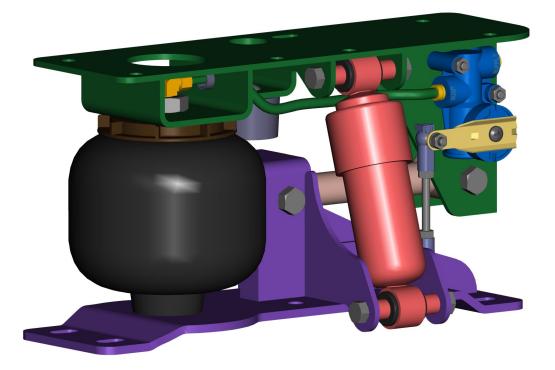
# **INSTALLATION INSTRUCTIONS**

# FRT112DC (2226A000)



The **CABMATE MODEL FRT112DC** fits most 1997 AND NEWER FL112 Business Class Day Cab Series Conventional Tractors. It replaces the original rear cab supports; Freightliner Part Nos. 680 891 04 01, 18-3978-000 & A18-31977-000.

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

**b Suspensic** 

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

UNIT WEIGHT : 25.0 LB.

NET WEIGHT ADDED: 5.2 LB.

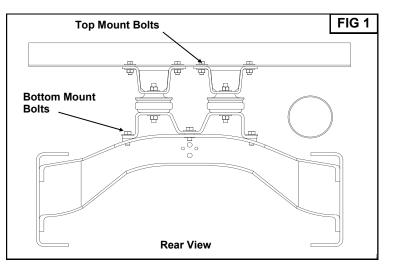
## **CABMATE MODEL FRT112DC**

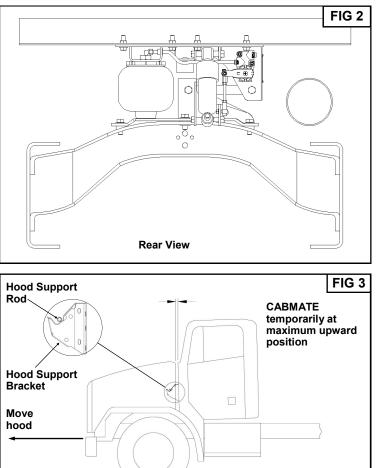
Review the Parts List on page 3 to become familiar with the different components of the CABMATE.

**IMPORTANT:** Due to many chassis variables caused by installation of special equipment or options, the fit of the FRT112DC CABMATE may be affected and should be evaluated before beginning installation.

**IMPORTANT:** Installation of the CABMATE system will allow the cab to move freely. Before starting installation, check clearances between the cab and any objects the cab may contact when it moves (1 1/2 inches of clearance should be sufficient). The clearance of components that are affected by cab movement, such as exhaust and radiator systems, must also be evaluated.

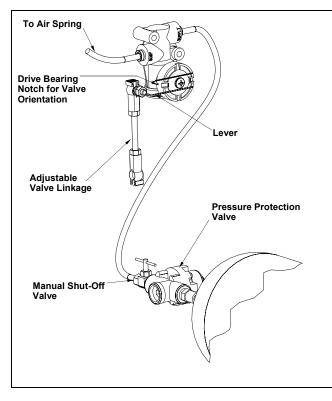
- A. Remove the eight mount bolts from the upper cab mount brackets as shown in (Fig. 1). Securely prop up the cab and remove the upper cab mount brackets. Remove the six mount bolts and the lower cab mount.
- B. Loosely fasten the Unit Bottom to the crossmember using the 1/2 X 1 1/4 Grade 8 Bolts supplied by Link Mfg. (Nos. 9 and 21 from the Parts List) (Fig. 2).
- C. Slowly lower the cab until it touches the top of the CABMATE. Fasten the Unit Top to the cab frame using the mounting hardware supplied by Link Mfg. (Nos. 8,17,20). **SECURELY TIGHTEN ALL FASTENERS.** Lower the cab completely.
- D. See page 2 for plumbing instructions and height adjustments.
- E. Raise the hood and remove the original hood brackets. Install the hood brackets supplied by Link Mfg. (Nos. 28 and 29 from the Parts List). Reaffix any components that were attached to the original hood brackets.
- F. **IMPORTANT:** After plumbing and height control adjustments are completed, hood hinge must be adjusted to satisfy the following:
- 1. Temporarily adjust the CABMATE to its maximum upward position. There must be a 1/4" to 3/8" gap between the cab and the hood.
- 2. With the CABMATE at design height, the hood support rod should be in the upper 1/3 of the hood support bracket slot (Fig.3). **NOTE**: Upper hood support bracket may also be adjusted to meet this requirement.





#### **PLUMBING INSTRUCTIONS**

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 CABMATE 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 PRESSUREPROTECTION KIT. LINK MFG. PART NO. 1350-0000). DO NOT USE AN AIR PRESSURE REGULATOR!

 $\boldsymbol{\mathsf{A}}.$  With the tank at 0 p.s.i., remove the existing plug or fitting from the desired port.

**B.** 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.

**C**. 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.

**D**. 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.

**E**. 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.

#### HEIGHT ADJUSTMENTS

Measure the design height of the air spring(s). The height should be 6.00 inches  $\pm 1/16$ . To change the height, disconnect one end of the valve linkage and adjust accordingly. Tighten the lock nuts on the valve linkage.

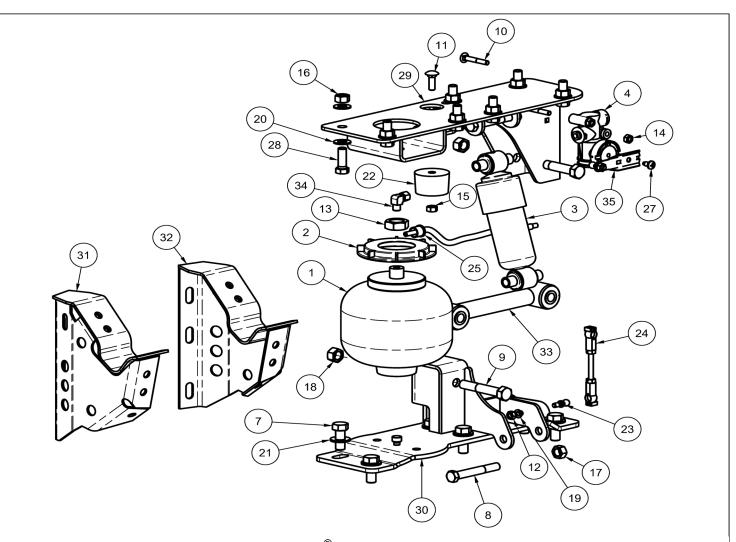
## Air Spring Design Height 6"

## 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	ut Do Not Metal Plastic		
Airlines	Air leaks	Replace airline			
Fittings	Air leaks	Remove fitting and apply fresh joint compound. Reinstall fitting, but <b>Do Not</b> <b>Overtighten. Do not use teflon tape.</b>			
Air Springs	<ul><li>A. Improper height</li><li>B. Air leakage</li></ul>	<ul> <li>A. Adjust valve linkage to maintain proper air spring height.</li> <li>B. Replace air spring.</li> </ul>	Size         Metal         Plastic           3/8         25 Ft. Lbs         04 Ft. Lbs           1/2         28 Ft. Lbs         10 Ft. Lbs           3/4         30 Ft. Lbs         10 Ft. Lbs		
Height Control Valve	Air spring(s) will not inflate when wheight is added to the cab; OR Air spring(s) will not deflate when wheight is removed from the cab.	<ul> <li>A. Inspect valve to insure drive bearing notch is located on "SUSP" 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.</li> <li>B. Replace Valve</li> </ul>	<b>1/4 Mount Fasteners</b> 10 Ft. Lbs. <b>Bearing Screw</b> 40-50 InLbs.		
Shock Absorber	Insufficient dampening effect	Replace shocks	45 Ft. Lbs.		
Lateral Control Rod	<ul> <li>A. Loose nuts on lateral control rod bolts</li> <li>B. Worn bushings.</li> </ul>	<ul><li>A. Tighten securely to clamp the inner sleeve.</li><li>B. Replace lateral control rod.</li></ul>	40 Ft. Lbs.		

**IMPORTANT:** Periodically check the tightness of all fasteners.



### CABMATE<sup>®</sup> MODEL FRT112DC PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	11020081	SPRING-AIR	1	19	14850800	1/4 LOCK WASHER	2
2	11098001	ACCESSORY PISTON-UPPER	1	20	14881401	7/16 SAE PLAIN WASHER, SS	14
3	12011044	SHOCK ABSORBER	1	21	14881601	1/2 SAE PLAIN WASHER, SS	6
4	13010055	VALVE-CONTROL, HEIGHT	1	22	15000071	BUMPER-JOUNCE, 1.25	1
5	13020090	AIRLINE-NYLON, .250 O.D., BULK (FEET)	0.84	23	15000224	BALL-PIVOT, THREADED	2
6	13021038	.25 TUBE SUPPORT	1	24	15000246	LINKAGE-VALVE, HEIGHT CONTROL (4.00)	1
-	13500000	KIT-PROTECTION, PRESSURE	1	25	15000303	SNAP BUSHING (.250 MAT'L)	1
7	14021610	1/2 X 1 1/4 UNC HEX CAP SCR (GR 8)	6	26	15000435	CORRUGATED LOOM, 1/4" BULK (FEET)	0.63
8	14031426	7/16 X 3 1/4 UNF HEX CAP SCR (GR 5)	2	27	15060050	1/4-15X1/2 PLASK H/L, PAN HEAD SCREW	1
9	14041624	1/2 X 3 UNF HEX CAP SCR (GR 8)	2	28	15060590	HHCS 7/16 X 1 1/4 GR8 ZINC AND YELLOW	7
10	14350814	1/4 X 1 3/4 UNC RND HD SQ NK BOLT (GRADE 5)	2	29	22261001	BRACKET-MOUNT, CAB	1
11	14351008	5/16 X 1 UNC RND HD SQ NK BOLT (GRADE 5)	1	30	22261002	BRACKET-MOUNT, CROSSMEMBER	1
12	14700800	1/4 UNC HEX NUT	2	31	22654000	HOOD BRACKET-DRIVER	1
13	14752400	3/4 UNF HEX JAM NUT	1	32	22655000	HOOD BRACKET-PASS	1
14	14760800	1/4 UNC HEX CTR LOCK NUT (GR B)	2	33	29932022	LATERAL CONTROL ROD, 6.88	1
15	14761000	5/16 UNC HEX CTR LOCK NUT (GR B)	1	-	32261000	KIT-DOCUMENT, FRT112DC (AFTM)	1
16	14761401	7/16 UNC HEX TOP LOCK NUT (GR C)	7	34	H13980	ELBOW, 1/4 TB 1/8 M-NPT	1
17	14771400	7/16 UNF HEX CTR LOCK NUT (GR B)	2	35	H15021	LEVER	1
18	14771601	1/2 UNF HEX TOP LOCK NUT (GR C)	2				



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