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

# **OWNER'S GUIDE**

8A000723 SS135

13,500 LB. CAPACITY



**DEALER / INSTALLER:** Complete this section and give to vehicle owner.

Serial No: Part No: 8A000723 Capacity: 13,500 lbs. Date Installed:

Refer to separate Installation Instructions for installation details.

80003013 FEB 07,2012

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## IMPORTANT: PLEASE READ THIS ENTIRE MANUAL BEFORE OPERATING YOUR SUSPEN-SION AND KEEP IT FOR FUTURE REFERENCE.

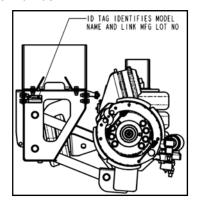
### 1. INTRODUCTION

Thank you for choosing a Link liftable suspension. We want to help you to get the best results from the suspension and to operate it safely. This manual contains information to introduce you to the Link SS135 liftable suspension and to assist you with its operation and maintenance. 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 or visit www.linkmfg.com for information on recent changes to products.

### 2. AXLE IDENTIFICATION

The axle identification tag is located on the driver's side of the suspension as shown to the right. The tag contains the suspension part number and a unique serial number.



### 3. SAFETY WARNINGS

## **A CAUTION**

Do not actuate your lift axle when traveling at speeds greater than 15 mph. This could result in component damage.

## **A** CAUTION

Do not exceed <u>13,500 lbs</u> on the lift axle suspension. Failure to heed this warning can result in improper weight distribution or component damage.

## **A** CAUTION

Do not exceed 20 psi in the lift axle's ride springs when the vehicle is <u>unloaded</u>. Failure to heed this warning can result in improper weight distribution or component damage.

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### 4. OPERATION

### 4.1 Lowering Your Lift Axle

4.1.1 To lower the axle, move the toggle switch to the "Lower" position.

## **A** CAUTION

Do not actuate your lift axle when traveling at speeds greater than 15 mph. This could result in component damage.

4.1.2 Use the regulator to adjust the air pressure as on the gauge to the appropriate air pressure for the vehicle load conditions. Refer to chart below for recommended pressures.

13.5K AIR PRESSURE AXLE LOAD CHART						
(For re	ference only. U	se scale to d	etermine actual	loads.)		
LOAD IN LBS AT GROUND	SS135 PSI		LOAD IN LBS AT GROUND	SS135 PSI		
4000	28		10000	79		
5000	37		11000	87		
6000	46		12000	93		
7000	55		13000	98		
8000	64		14000	106		
9000	73					

## **A** CAUTION

Do not exceed 20 psi in the lift axle's ride springs when the vehicle is <u>unloaded</u>. Failure to heed this warning can result in improper weight distribution or component damage.

## **A** CAUTION

Do not exceed <u>13,500 lbs</u> on the lift axle suspension. Failure to heed this warning can result in improper weight distribution or component damage.

## 4. OPERATION (continued)

## 4.2 Raising Your Lift Axle

4.2.1 To raise the axle, move the toggle switch to the "Raise" position.

## **A** CAUTION

Do not actuate your lift axle when traveling at speeds greater than 15 mph. This could result in component damage.

## 5. MAINTENANCE

After first month or 1,000 miles	□ Check for loose suspension fasteners (Tighten to values given on Torque Table on following page).
Every month or 1,000 miles	<ul> <li>□ Check wheel bearing oil level and inspect wheels for leaks (SAE 80W-90 Mineral Based Gear Lube).</li> <li>□ Check suspension for debris rubbing air springs.</li> <li>□ Check for worn steering stabilizer shocks.</li> </ul>
Every three months or 2,500 miles	□ Grease camshaft bushings (Multipurpose NLGI 2). □ Check for worn suspension bushings. □ Check for loose suspension fasteners (Tighten to values given on Torque Table on following page). □ Check brake lining wear and replace any cracked, broken or oil soaked linings. □ Inspect brake drums for heat checks, grooves, hot spots, glazing, cracks and out of round and replace if necessary. □ Inspect wheel ends for excessive play.
Every twelve months or 10,000 miles	Grease slack adjusters (Multipurpose NLGI 2).  Replace wheel bearings lubricating oil (SAE 80W-90 Mineral Based or SAE 75W-80 Synthetic Gear Lube).  Check brake chambers and slack adjusters for proper function and excessive wear.  Inspect brake rollers, roller shafts, anchor pins and bushings for excessive wear and replace if necessary.  Check shoes for bent shoe ribs, cracks in shoe table welds and elongated rivet holes and replace if necessary.  Inspect suspension air controls for proper function and leaks.

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## 5. MAINTENANCE (continued)

TORQUE TABLE SUSPENSION PIVOT F FRAME MOUNT FASTE HANGER FASTENERS AIR SPRING NUT AIR SPRING BOLT	ENERS	5/8 UNC 1/2 UNC 3/4 UNC 1/2 UNC	160-180 FT-LBS . 90-120 FT-LBS 40-50 FT-LBS 20-30 FT-LBS
CROSS REFERENCOMMON REPLATITEM LIFT AIR SPRINGS LOAD AIR SPRINGS	CEMENT F LINK 11030019	FIRESTONE	<b>CONTITECH</b> FD 200-19724 161524

## 6. TROUBLESHOOTING GUIDE

TROUBLE	PROBABLE CAUSE	REMEDY	
Axle will not stay up	Loose Air Fittings	Check and retighten.	
	Damaged Air Lines	Check for excessive wear. Replace if worn or damaged.	
	Damaged or Worn Air Springs		
Punctured Load Air Springs Other Components too close to Air Spring Check for clearance all around air spring under full load and Move anything coming in contact with air springs.		Check for clearance all around air spring under full load and deflated.  Move anything coming in contact with air springs.	
Loose Convolution Ribs Under Extended Air Springs–Improper ride height		Check for proper ride height. A) Use smaller tires.	
Air Spring Separation at End Plates  Over Extended Air Springs-Improper ride height Check for proper ride height. A) Use bigger tire		Check for proper ride height. A) Use bigger tires. B) Lower suspension.	
Lift Air Spring Wear or Broken Bumper	Over Extended Load Springs–Crushes lift bag	Check for proper ride height. A) Use bigger tires B) Lower suspension.	

### 7. WARRANTY

Link warrants their suspension's fabricated structural components against failure under normal use for a period of three (3) years from date of installation by the original purchaser. Under this warranty Link will replace or repair any part that by it's inspection is determined to be defective. In addition, for a period not to exceed one (1) year,\* Link will provide a labor allowance, using guidelines, which it determines to be adequate to properly replace or repair defective structural parts and/or components within constraints as noted below.

All parts and components thought to be defective must be returned with company authorization, freight prepaid, to Link. These returns must be accompanied by a complete written explanation of claimed defects and circumstances of failure, the serial number, and date of installation. Labor allowance must be authorized by Link prior to initiation of repairs.

\*Purchased components and/or accessories other than the fabricated structure (axle and axle assemblies, air springs, wheel end equipment, brake and brake components, and air control parts) are warranted in accordance with warranty coverage provisions from date of installation.

#### LIMITATIONS

Link accepts no warranty responsibility for:

- Incidental or consequential damages or loss of time or profits resulting from product failure.
- Damage resulting from owner or operator abuse, misuse or neglect.
- · Failure due to improper installation.
- · Component parts manufactured by others for Link, beyond those companies' implied or expressed warranty.

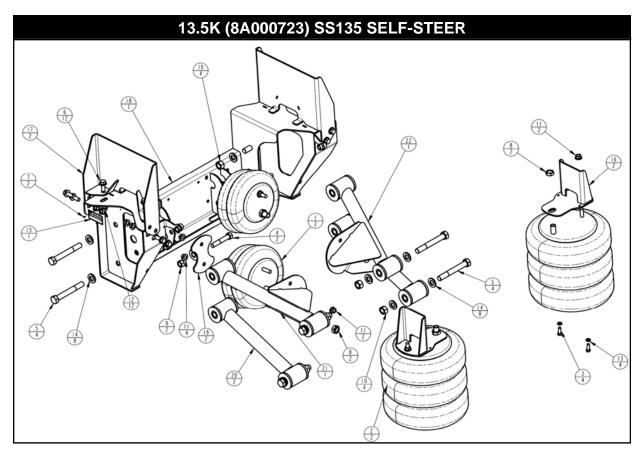
This warranty is in lieu of any other warranty, obligation, or liability on the part of Link and no other person is authorized to make any representation or warranties beyond those expressed herein. All implied warranties of fitness and merchantability for any particular purpose are hereby excluded. There are no warranties of fitness which extend beyond the description on the face hereof. This warranty does not apply to failures resulting from improper installation, neglect, accident, misuse or operation beyond the rated capability of the model or the vehicle to which it is attached, nor to any parts which have been altered or repaired without the written consent of Link Manufacturing, Ltd. In no event shall Link be liable for indirect special, incidental or consequential damages of any nature. The foregoing is Link Manufacturing's only warranty, and all other warranties, whether expressed or implied, including, but not limited to, the implied warranties or merchantability or fitness for a particular purpose, are hereby disclaimed.

### WARRANTY COVERAGE PROVISIONS

ITEM	MONTHS (WHICHEVER COMES FIRST)	MILEAGE	COVERAGE	
MAJOR STRUCTURAL	UP TO 12	UP TO 100,000	PARTS & LABOR ALLOWANCE	
COMPONENTS	12-36	100,000-300,000	PARTS ONLY	
PIVOT BUSHING	UP TO 12	UP TO 100,000	PARTS & LABOR ALLOWANCE	
	12-36	100,000-300,000	PARTS ONLY	
AIR CONTROLS	UP TO 12	UP TO 100,000	PARTS & LABOR ALLOWANCE	
AIR SPRINGS	UP TO 12	UP TO 100,000	PARTS & LABOR ALLOWANCE	
	12-36	100,000-300,000	PARTS ONLY	
LINK MANUFACTURED	UP TO 12	UP TO 100,000	PARTS & LABOR ALLOWANCE	
AXLE COMPONENTS	12-36	100,000-300,000	PARTS ONLY	
OTHER SUSPENSION AND BRAKE COMPONENTS	WARRANTY AS PROVIDED BY THE ORIGINAL EQUIPMENT MANUFACTURER			

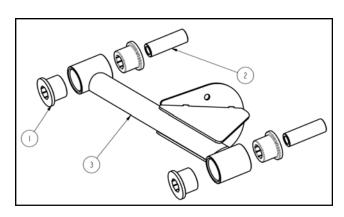
Defective or damaged components should be returned to Link with a pre-arranged Returned Goods Authorization (RGA) number through the Customer Service Department. The damaged or defective component may then be replaced if in compliance with warranty conditions.

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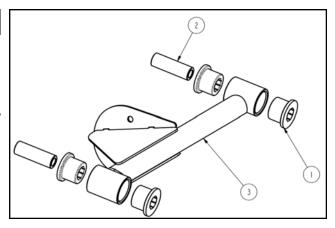
		13.5K (8A000723) SS135 SELF-STEER	
ITEM	PART #	DESCRIPTION	QTY
1	11030019	SPRING-AIR	2
2	11030056	SPRING-AIR	2
3	140B-1208	3/8 X 1 UNC HEX CAP SCR (GR 8) O&P	4
4	140D-2028	5/8 X 3 1/2 UNF HEX CAP SCR (GR 8) O&P	2
5	140D-2446	3/4 X 5 3/4 UNF HEX CAP SCR (GR 8) O&P	8
6	141A-1610	1/2 X 1 1/4 UNC FLANGE BOLT (GR 8) O&P	12
7	1455-0404	#4 X 1/4 DRIVE SCREW	2
8	1475-2402	3/4 UNF HEX JAM NUT, O&P	4
9	1477-2006	5/8 UNF HEX TOP LOCK NUT (GR C) O&P	2
10	1477-2406	3/4 UNF HEX TOP LOCK NUT (GR C) O&P	8
11	1480-1600	1/2 UNC SERRATED FLANGE NUT	8
12	1480-1604	1/2 UNC TOP LOCK FL NUT (GR G) O&P	12
13	1485-1200	3/8 LOCK WASHER	4
14	14882402	3/4 HARDENED WASHER, ZINC PLATED	16
15	15001329	PLATE-ID, SUSPENSION	1
16	*	BRACKET-MOUNT, AIRSPRING	2
17	*	BRACKET-MOUNT, FRAME	2
18	810A0099	HANGER-WELDMENT	1
19	810A0100	ASSEMBLY-SWIVEL PLATE	2
20	820A0084	ARM-CONNECTING	2
21	820A0100	ARM-CONNECTING, LH	1
22	820A0101	ARM-CONNECTING, RH	1

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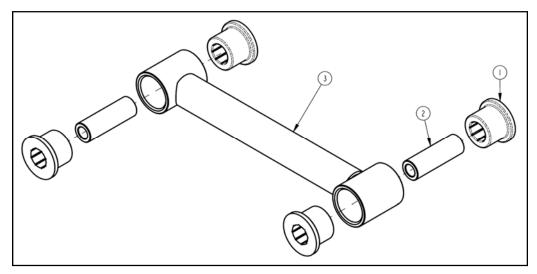


В	BILL OF MATERIALS FOR ASSEMBLY: 820A0100					
ITEM	PART#	DESCRIPTION	QTY			
1	15000890	BUSHING	4			
2	80001210	TUBE-BUSHING	2			
3	820A0044	ARM-CONNECTING, ANGLED LH	1			

ВІ	BILL OF MATERIALS FOR ASSEMBLY: 820A0101						
ITEM	PART#	DESCRIPTION	QTY				
1	15000890	BUSHING	4				
2	2 80001210 TUBE-BUSHING						
3	820A0045	ARM-CONNECTING, ANGLED RH	1				



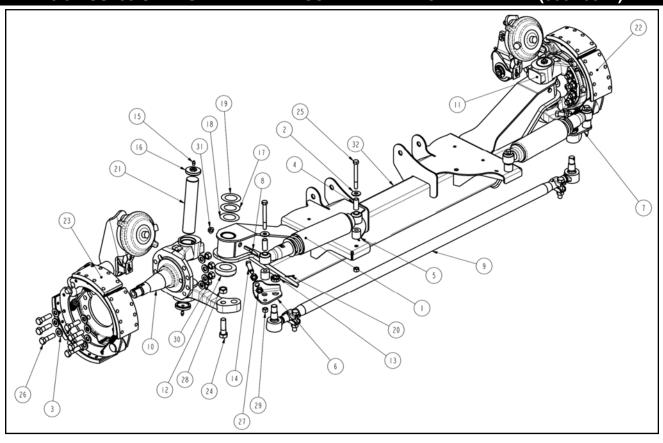
Notes:
\* Multiple options exist—call for details.



BII	BILL OF MATERIALS FOR ASSEMBLY: 800A0084						
ITEM	PART#	DESCRIPTION	QTY				
1	15000890	BUSHING	4				
2	80001210	TUBE-BUSHING	2				
3	820A0083	ARM-CONNECTING	1				

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## 13.5K SS135 SELF-STEER AXLE ASSEMBLY BILL OF MATERIAL (830A0312)

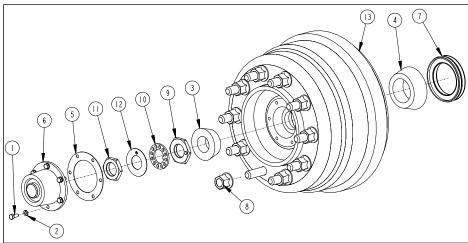


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	13.5K SS135 SELF-STEER AXLE ASSEMBLY BILL OF MATERIAL (830A0312)							
ITEM	PART #	DESCRIPTION	QTY		ITEM	PART #	DESCRIPTION	QTY
1	12100012	SHOCK ABSORBER, WIDE BODY	2		17	84001903*	SHIM (.030)	2
2	14871600	1/2 TYPE A PLAIN WASHER	4		18	84001904*	SHIM (.010)	2
3	14882003	5/8 HARDENED WASHER, PHOS & OIL	28		19	84001905*	SHIM (.005)	2
4	80000009	BUSHING-SHOCK, ACETAL	4		20	84001912*	PIN, COTTER	2
5	80001919	SPACER-MOUNT, SHOCK	4		21	84002020*	PIN-KING, 13K (1.88)	2
6	83000236	PLATE-SHOCK MOUNT, LH	1		22	84002034	ASSEMBLY-BRAKE, 13.5K RH	1
7	83000239	PLATE-SHOCK MOUNT, RH	1		23	84002035	ASSEMBLY-BRAKE, 13.5K LH	1
8	83000241*	PIN-DRAW, LOCKING	2		24	140B-2420	3/4 X 2 1/2 UNC HEX CAP SCR (GR 8) O&P	2
9	84001038	ASSEMBLY-ROD, TIE	1		25	140D-1636	1/2 X 4 1/2 UNF HEX CAP SCR (GR 8) O&P	4
10	84001243	ASSEMBLY-KNUCKLE, DANA (LEFT)	1		26	140D-2018	5/8 X 2 1/4 UNF HEX CAP SCR (GR 8) O&P	14
11	84001244	ASSEMBLY-KNUCKLE, DANA (RIGHT)	1		27	1475-2000	5/8 UNF HEX JAM NUT	4
12	84001435*	BEARING-THRUST	2		28	1476-2406	3/4 UNC HEX TOP LOCK NUT (GR C) O&P	2
13	84001696	NUT-HEX, SLOTTED, .88	2		29	1477-1606	1/2 UNF HEX TOP LOCK NUT (GR C) O&P	4
14	84001731	BOLT-STOP, STEERING	2		30	1477-2006	5/8 UNF HEX TOP LOCK NUT (GR C) O&P	14
15	84001901*	FITTING-GREASE	4		31	1480-1404*	7/16 UNC TOP LOCK FL NUT (GR G) O&P	2
16	84001902*	CAP-KNUCKLE	4		32	830A0311	AXLE-FABRICATED, 13.5K	1

<sup>\*</sup> Items included in Kingpin Kit 84001998

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ITEM	PART NUMBER	DESCRIPTION	QTY
1	1 1401-1006 5/16 X 3/4 UNC HEX CAF		6
2	1485-1000	5/16 LOCK WASHER	6
3	84001403	BEARING-ROLLER, CONE	1
4	84001404	BEARING-ROLLER, CONE	1
5	84001683	GASKET	1
6	84001684	CAP, HUB	1
7	84001687	SEAL-OIL	1
8	84001709	NUT-FLANGE, M22X1.5	10
9	84001721	NUT-INNER, JAM	1
10	84001722	WASHER-LOCK, SPINDLE	1
11	84001723	NUT-OUTER, JAM	1
12	84001724	WASHER-RETAINER	1
13	***	ASSEMBLY-HUB & DRUM, FN-15 X 4	1

Notes: \*\*\* Multiple options exist—call for details