Air Link TD Tandem Drive Suspension

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

4AL00007 Hanger Bushings



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

1. INTRODUCTION

Thank you for choosing a Link Air Link TM Suspension. We want to help you get the best results from this suspension and to operate it safely. This instruction contains information to assist in the installation of the hanger bushings for your Link Air Link TM Suspension. This instruction is intended solely for use with this product.

All information in this instruction 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

NOTE:	A Note provides information or suggestions that help you correctly perform a task.
TORQUE	TORQUE indicates named fasteners are to be tightened to a specified torque value.
NOTICE	NOTICE indicates a potentially hazardous situation which, if not avoided, may result in property damage.
▲ CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
AWARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
▲ DANGER	DANGER indicates a hazardous situation which if not avoided, will result in death or serious injury.

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

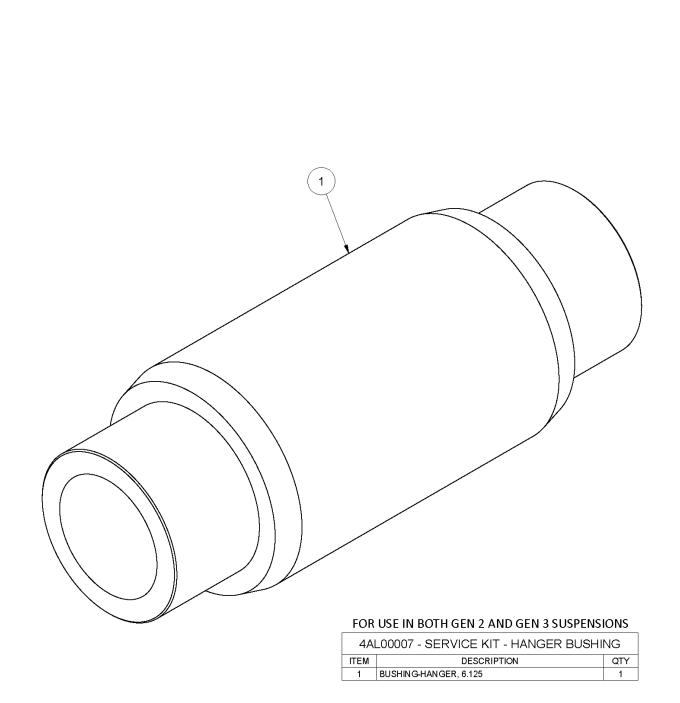
- **4.1** In order for this suspension to operate properly, it must operate in the parameters specified by Link.
- **4.2** It is the responsibility of the installer to determine the location of the suspension in order to obtain proper load distribution.
- **4.3** No alterations of any Link suspension component is permitted without proper authorization from qualified Link personnel.
- **4.4** No welding of any suspension components is permitted except when specified by Link.

4.5 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.

4.6 ACAUTION

Proper tightening of fasteners is important to the performance and safety of the suspension. Follow all torque specifications throughout the instructions.



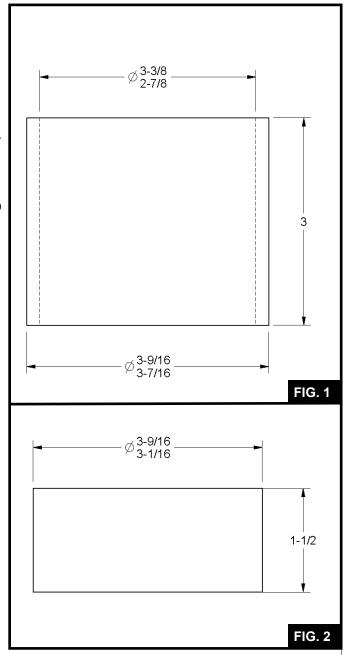
5. SPECIAL TOOLS

5.1 Required Tools

- Shop press with a capacity of 50 tons
- Press Tooling

NOTE: ALL DIMENSIONS FOR THE FIGURES ARE SHOWN IN INCHES

- ♦ Press In Tooling
 - ◆ Tooling Dimensions (Ø2-7/8 3-3/8" ID, Ø3-7/16 3-9/16", OD and 3" Length)
 (See FIG. 1)
- ♦ Press Out Tooling
 - ◆ Cylinder Dimensions (Ø3-1/16 3-9/16", OD and 1-1/2" Length) (See FIG. 2)



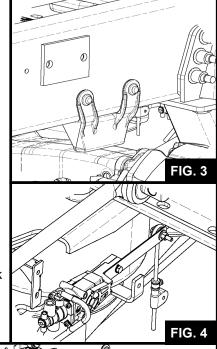
6. DISASSEMBLING FRONT HANGER (GENERATION 2)

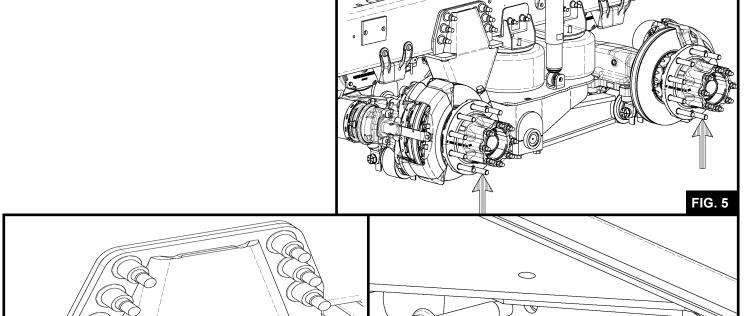
- **6.1** Place wheel chocks at the front wheels of the vehicle.
- **6.2** Dump air out of the suspension air springs such that the forward and rear axle stops come into contact with the forward and rear axles (See FIG. 3).
- **6.3** Disconnect the height control valve linkage (See FIG. 4).
- **6.4** Raise the rear of the vehicle frame and rear axles such that wheels on the rear axles can be removed.
- **6.5** Support the rear of the frame at this height and support the axles (wheel ends) such that the trailing arm is in the level position (See FIG. 5).
- **6.6** Remove the 1" bolt and washer that fasten the clamp blocks around the hanger bushing (See FIG. 6).

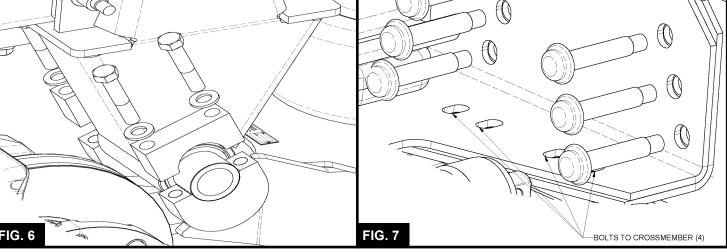
NOTE: If you have a Generation 2 Air Link [™] Suspension continue with this section, if you have a Generation 3 Air Link [™] Suspension, skip to page 6 of this manual.

6.7 Remove the 6 bolts or huck fasteners connecting the front hanger to the truck frame and the 4 bolts connecting the crossmember to the truck frame (**See FIG. 7**).

When removing the bolts connecting the front hanger to the truck frame take care to support the walking beam so that it does not fall and result in injury.

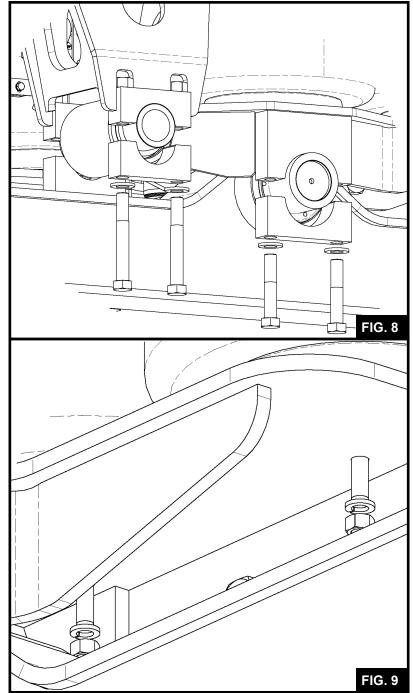






7. REMOVAL OF GENERATION 3 TRAILING ARM

- **7.1** Remove the bolts that fasten the clamp blocks around the hanger bushing (See FIG. 8).
- **7.2** Remove the bolts that fasten the clamp blocks around the walking beam center bushing (See FIG. 8).
- **7.3** Remove the air springs from the trailing arm by removing the nuts and lock washers from the bottom of the trailing arm connecting the bottom of the air springs (See FIG. 9).



8. REMOVAL AND INSTALLATION OF FRONT HANGER BUSHING

- **8.1** Place the hanger or trailing arm bracket in a hydraulic shop press with the hanger or trailing arm bracket securely supported on the bed of the hydraulic press.
- **8.2** Using bushing press out tooling, press on the bushing until it is fully removed from the bracket.
- **8.3** Inspect the inner bore of the bracket metal sleeve. If the sleeve is damaged in any way a new bracket is required. Do not re-bush a damaged hanger bracket.
- **8.4** Clean the inner bore of the metal sleeve to remove any metal build up resulting from the bushing removal.
- **8.5** Measure the inner diameter of the metal sleeve to ensure that the diameter is in tolerance (Ø3.616" Ø3.619").
- **8.6** Place hanger or trailing arm bracket in hydraulic shop press with the bracket adequately supported and the metal sleeve square and in line with the shop press.
- **8.7** Grease the new bushing and the inner diameter of the metal sleeve with Greenlee Textron Cable Cream.
- **8.8** Install the new bushing by pressing on the on the outer sleeve of the bushing with the tool until the bushing is centered in the metal sleeve.

9. INSTALLATION OF FRON HANGER GENERATION 2 OR TRAILING ARM GENERATION 3

NOTE: If using a Generation 2 suspension follow the steps below. If using a Generation 3 suspension skip to step 3.

- **9.1** Re-install hanger bracket on to vehicle frame by using a torque to tighten bolts contact chassis manufacturer for torque specifications for frame bolt connections.
- **9.2** Re-install clamp blocks around the hanger bushing.
- TORQUE 250 FT-LBS
- **9.3** Place trailing arm back in suspension with the clamp blocks loosely fastened around the front hanger and walking beam center bushings.
- **9.4** Re-install air springs on to trailing arm air spring hardware.
- **9.5** Re-install hanger bracket and center bushing clamp blocks.

TORQUE 250 FT-LBS

