DRIVE-RITE
AIR SUSPENSION SYSTEMS
BY Firestone

Unit 626 Kilshane Avenue, North West Business Park, Ballycoolin, Dublin 15, Ireland
Telephone: +353 1 8612 832, Fax: +353 1 8612 847, email: sales@driveriteltd.com

W21-760-2437

INSTALLATION INSTRUCTIONS

All work should be carried out in a properly equipped workshop with due regard to Health and Safety Regulations. No further reference to Health and Safety Regulations will be made, but they must be considered at all times.

The kit should be opened and the contents checked against the parts list provided.

Identify the various components and familiarise yourself with them using drawings and information provided.

WARNING

Do not inflate this assembly when it is unrestricted. When installed, a minimum of 10 psi should be maintained in the air bellows at all times to avoid damage. Do not inflate beyond 100 psi.

IMPORTANT

This kit is not designed to increase the GVW of your vehicle. For your safety and to prevent possible damage to your vehicle, do not exceed the maximum load recommended by the vehicle manufacturer.

AIR SPRING	5405	2	7/8"-14 NYLON LOCK NUT		6
UPPER BRACKET	5531	2	5/8" FLAT WASHER		16
LOWER RIGHT BRACKET	5533	1	5/8" LOCK WASHER		8
LOWER LEFT BRACKET	5532	1	5/16" FLAT WASHER		4
18 ft. TUBING	0938	1	INFLATION VALVE	3032	2
3/8"-16 X 3/4" FLANGE LOCK BOLT		4	ELBOW FITTING	3031	2
5/8"-18 X 2" HEX HEAD BOLT		8	THERMAL SLEEVE	0899	2
1/2"-13 X 3-1/4" HEX BOLT		2	NYLON TIE		6
5/8"-18 HEX NUT		8	CAUTION TAG		2

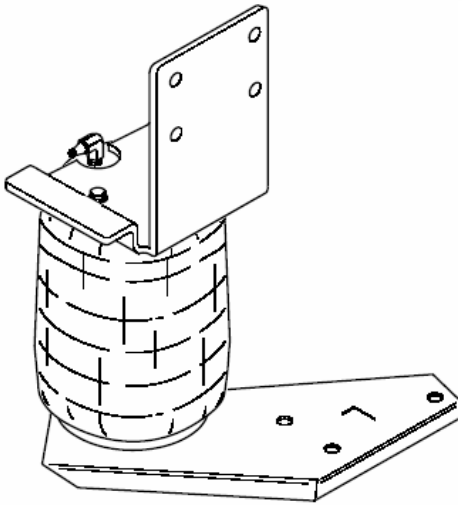
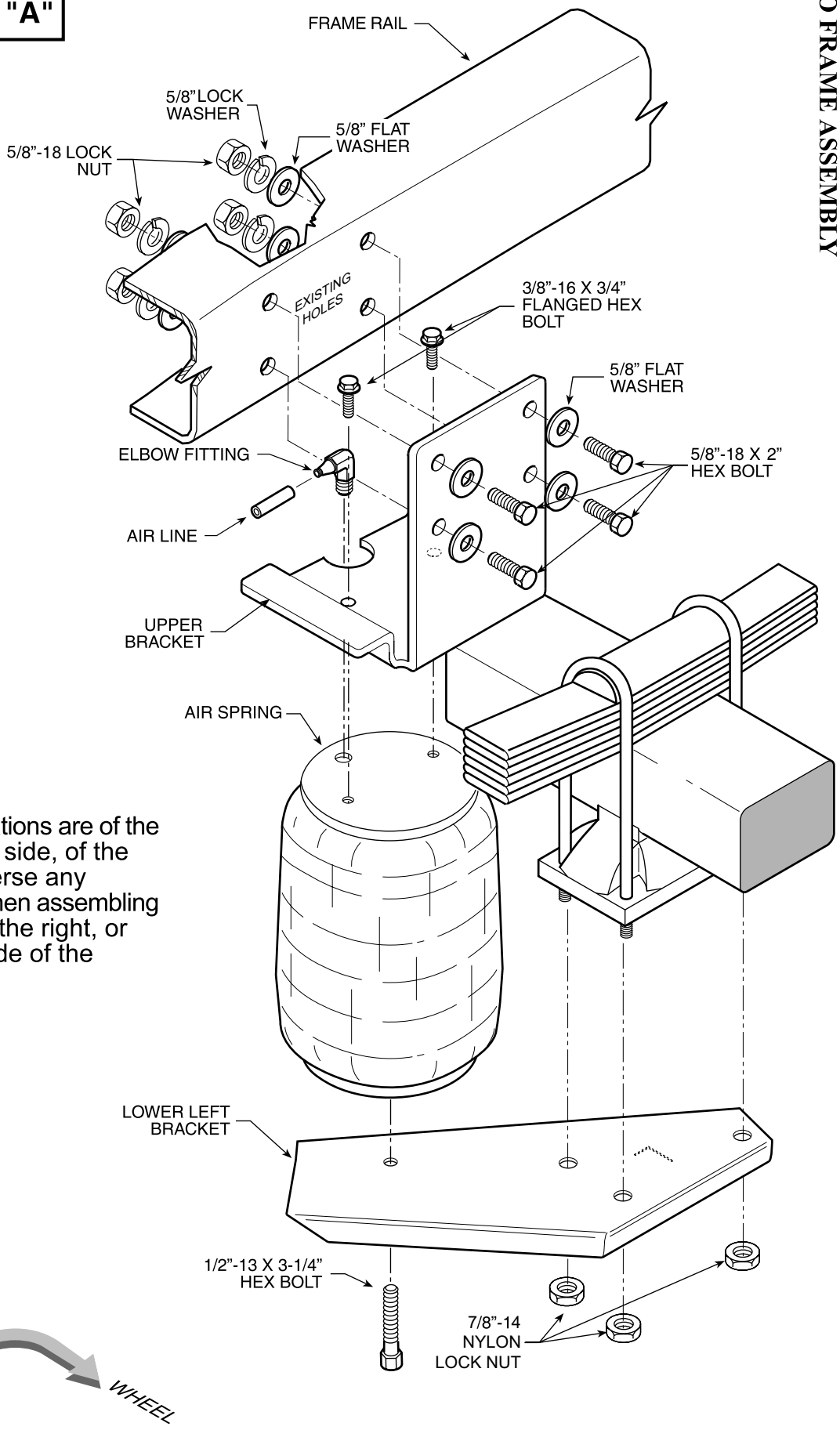


FIGURE "A"



NOTE: Illustrations are of the left, or drivers side, of the vehicle. Reverse any orientations when assembling and installing the right, or passenger, side of the vehicle.

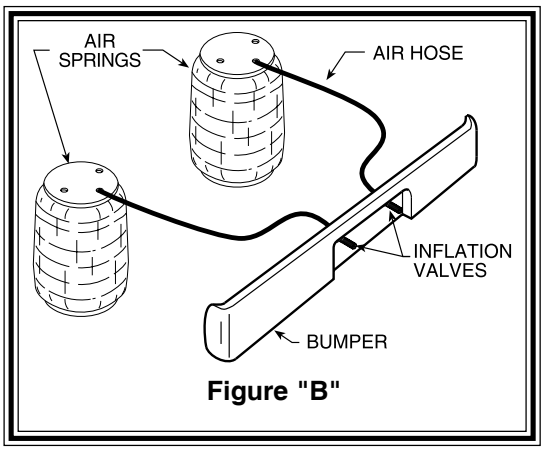


Figure "B"

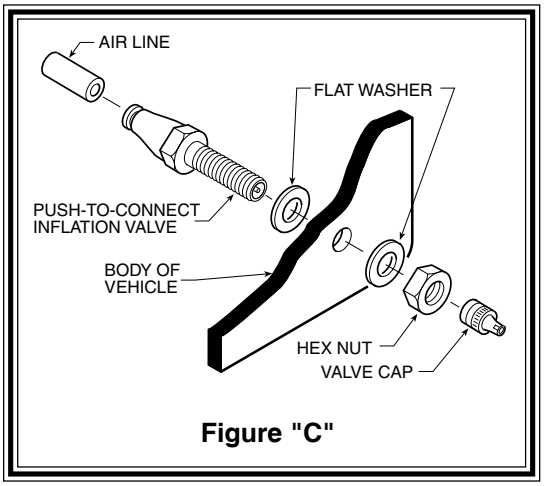


Figure "C"

STEP 1 - PREPARE THE VEHICLE

With the vehicle on a solid, level surface chock the wheels. This kit does not require the vehicle to be jacked up. Make sure the negative battery cable is disconnected from the battery. Remove two of the axle U-bolt nuts on the front side of the axle and one on the rear of the axle closest to the tire.

STEP 2 - INSTALLING THE LOWER BRACKET

Install the left lower bracket underneath the axle retaining plate using the three 7/8" hex nuts, as shown in ***Figure "A"***.

STEP 3 - INSTALLING THE AIR SPRING

Install the upper bracket by aligning the threaded holes on the air spring with the small holes on the upper bracket. Fasten the upper bracket to the air spring using 3/8" flanged hex bolts, as shown in ***Figure "A"***. Install the fitting as shown in ***Figure "A"***. Tighten the air fitting securely to engage the orange thread sealant. Position the elbow so as to point in the anticipated location of the air inflation valves, see ***Figures "A" and "B"***. Place the air helper spring on the lower bracket and install the 1/2" hex bolt.

STEP 4 - INSTALLING THE UPPER BRACKET

Align the four holes in the upper bracket with the existing holes in the frame rail. Attach the upper bracket using the 5/8" hex bolts, flat washers, lock washers, and the hex nuts to the frame rail, **see** ***Figure "A"***.

STEP 5- INSTALLATION OF THE PASSENGER'S SIDE ASSEMBLY

Follow steps 1-4 for assembly and installation of the right side assembly. Note: reverse any orientations for the right side installation.

STEP 6- INSTALL THE AIR LINE AND INFLATION VALVE

Uncoil the air tubing and cut it into two equal lengths. *DO NOT FOLD OR KINK THE TUBING.* Try to make the cut as square as possible. Insert one end of the tubing into the elbow fitting installed in the top of the air helper spring. Push the tubing into the fitting as far as possible refer to ***Figure "A"***.

Select a location on the vehicle for the air inflation valves. The location can be on the bumper or the body of the vehicle, as long as it is in a protected location so the valve will not be damaged, but maintain accessibility for the air chuck *(**see Figure "B"**)*. Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports *(**see Figure "C"**)*. Run the tubing from the air helper spring to the inflation valve, routing it to avoid direct heat from the engine, exhaust pipe, and away from sharp edges. Thermal sleeves have been provided for these conditions. If a thermal sleeve is required simply slide the sleeve over the air line tubing to the location requiring protection. The air line tubing should not be bent or curved sharply as it may buckle. Secure the tubing in place with the nylon ties provided. Push the end of the air line tubing into the inflation valve as illustrated *(**see Figure "C"**)*.

STEP 7 - CHECK THE AIR SYSTEM

Once the inflation valves are installed inflate the air helper springs to *50 psi.* and check the fittings for air leaks with an applied solution of soap and water. If a leak is detected at a tubing connection then check to make sure that the tube is cut as square as possible and that it is pushed completely into the fitting. The tubing can easily be removed from the fittings by pushing the collar towards the body of the fitting and then pulling out the tube. If a leak is detected where the brass elbow fitting screws into the spring, remove the tubing (see trouble shooting section of the operating instruction manual for removal procedure),then screw the elbow into the spring one additional turn or until the leak stops. Reinstall the tubing and reinflate the air springs and check for leaks as noted above.

This now completes the installation. Re-attach the negative battery cable and remove the wheel chocks from the front wheels. Before proceeding, check once again to be sure you have proper clearance around the air springs. With a load on your vehicle and the air helper springs inflated, you must have at least 1/2" clearance around the air springs. As a general rule, the air helper springs will support approximately 65 lbs. of load for each psi. of inflation pressure (per pair). For example, 60 psi. of inflation pressure will support a load of 3900 lbs. per pair of air helper springs. *FOR BEST RIDE* use only enough air pressure in the air helper springs to level the vehicle when viewed from the side (front to rear). This amount will vary depending on the load, location of load, condition of existing suspension and personal preference.

NOTE:

Too much air pressure in the air helper springs will result in a firmer ride, while too little air pressure will allow the air helper spring to bottom out over rough conditions. Too little air pressure will also not provide the improvement in handling that is possible. ***TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 10 psi. IN THE AIR HELPER SPRINGS AT ALL TIMES.***

NOTE:	
MIN PRESSURE	**10 PSI**
MAX PRESSURE (LOADED)	**100 PSI**

DRIVE-RITE
AIR SUSPENSION SYSTEMS
BY Firestone

www.riderite.com