Unit 626 Kilshane Avenue, North West Business Park, Ballycoolin, Dublin 15, Ireland
Telephone: +353 1 8612 632, Fax: +353 1 8612 647, email: sales@driveriteltd.com

W21-760-1130

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

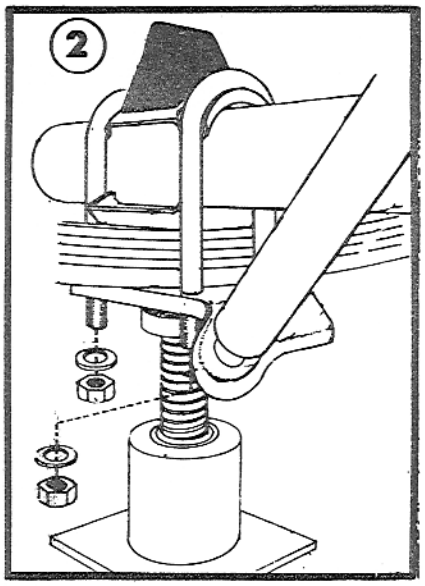
Do not inflate this assembly when it is unrestricted. When installed, a minimum of 10 psi should be maintained in the air bellows at all times to avoid damage. Do not inflate beyond 100 psi.

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.

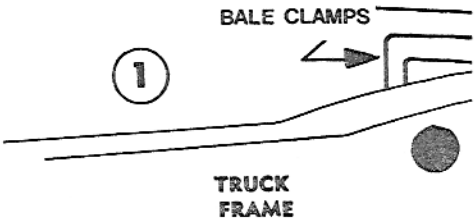
PARTS LIST

PART	NUMBER	QUANTITY
BELLOWS	21-0335	2
ELBOW CONNECTOR	21-0935	2
INFLATING VALVE	21-0931	2
HEAT SHIELD	21-1004	1
TUBING, AIR LINE	21-0938	18 ft.
UPPER BRACKET	21-0677	2
LOWER BRACKET	21-0678	2
BAIL CLAMP	21-0679	4
U BOLT	21-0680	4
HEX NUT-3/8x24	21-0059	4
HEX CAP SCREW (3/8x16x24)	21-0681	4
LOCKWASHER-3/8	21-0061	8
HEX NUT-5/16x18	21-0058	16
LOCKWASHER-5/16	21-0062	16



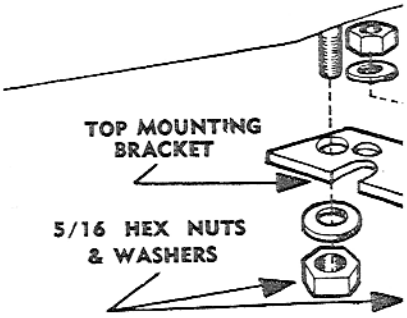
STEP 1—PREPARING THE VEHICLE

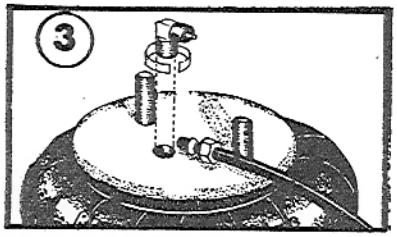
Your truck has two rubber bottoming bumbers mounted above the rear axle, one above the left leaf spring and one above the right. These bumpers must be removed before installing your Ride Rite Comfortaires. To do this support the lower shock mounting bracket as shown in figure number 2 and loosen the nuts holding the u-bolts. Lift or remove the u-bolts and remove the rubber bumper assembly. Once the assembly has been removed replace the u-bolts, nuts and washers, and tighten **to the torque specified by the truck manufacturer.** Your truck dealer can supply this torque figure.



STEP 2—ASSEMBLY OF RIDE RITE KIT

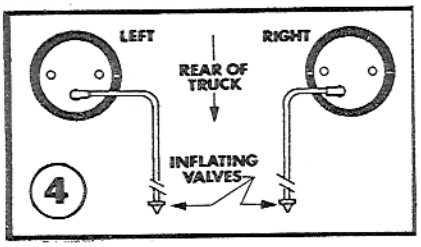
The brackets and bellows of your Ride Rite kit are symetrical and can be used for either the left or the right side. The illustrations and instructions following are for the left, or drivers side, of the vehicle. Installation of the right side is the same except for bracket orientation and air fitting alignment. **Brackets and air fittings must be attached to the bellows before installing the unit on the vehicle.**





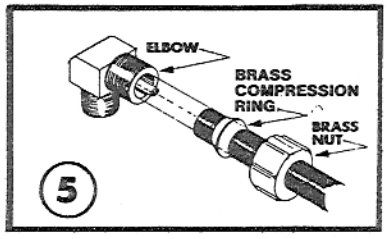
STEP 2A—INSTALL ELBOW AIR FITTING

See figure numbered 3 & 4. Use teflon tape or thread sealant and screw the elbow air fitting into the top plate of the bellows. (Top plate is the one with the studs and air entrance hole.) IMPORTANT—the elbow must face to the inboard side of the vehicle when installed. Do not over tighten the elbow and then back it to position. If you go too far for proper positioning, the elbow must be tightened another turn.



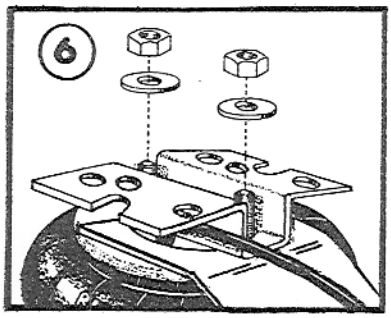
STEP 2B—INSTALL AIR LINE TO ELBOW

Cut a 5½ foot length of the flexible air line tubing. Make cuts as smooth and as square to the axis of the tubing as possible. Remove the brass fitting nut and brass compression ring from the elbow and slide them onto the tubing. See figure number 5. Insert air line into elbow and push in as far as it will go. Tighten the brass nut finger tight plus three and one half turns.



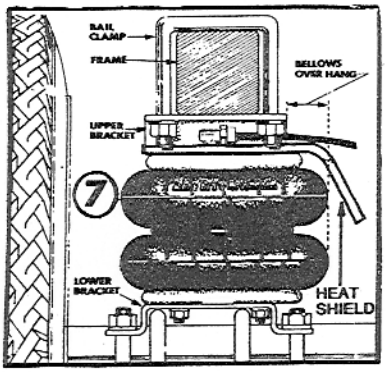
STEP 2C—INSTALL TOP BRACKET

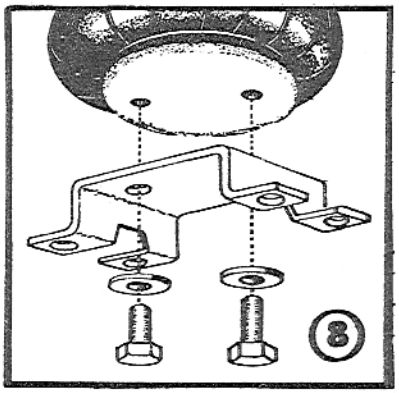
Set the heat shield and the top bracket on the top plate of the bellows. See figure number 6. Note that the bracket is off center and that the bellows extends or over hangs further on one side than the other. This bellows overhang must be on the inboard side of the truck when installed. See figure number 7. Use two 3/8" hex nuts and lock washers and tighten finger tight only.

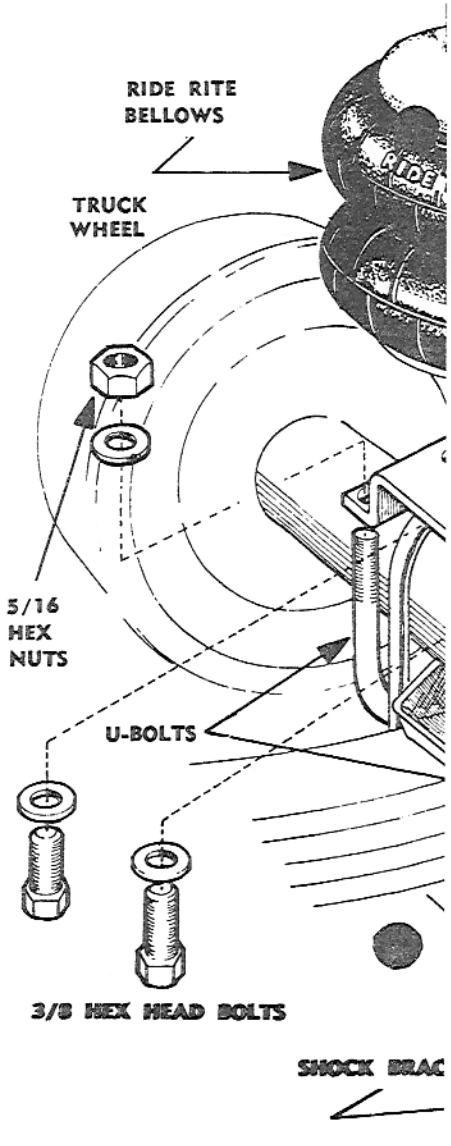


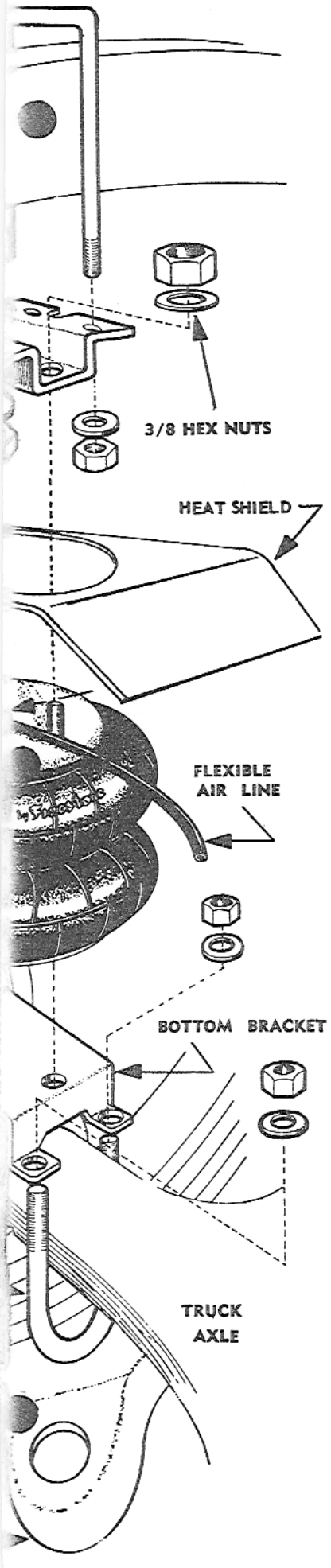
STEP 2D— INSTALL LOWER BRACKET

Note that this bracket is also off center and the bellows over hangs further on one side. Orient the bracket so that the overhang matches the top bracket and tighten securely with two 3/8" hex head bolts and lock washers. See figure number 8.



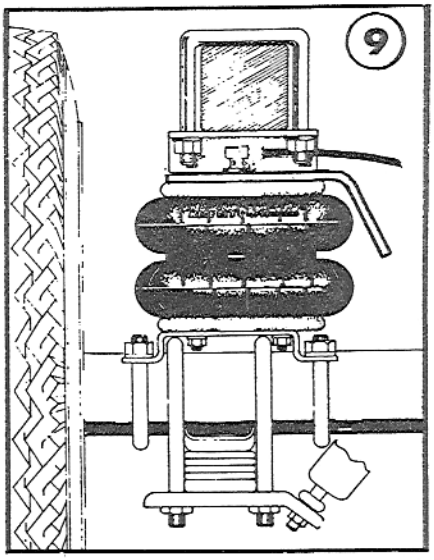






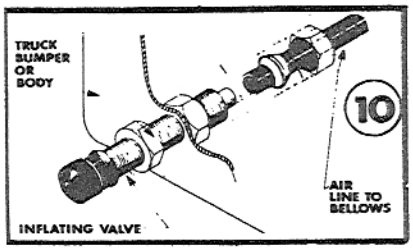
STEP 3—INSTALLING THE ASSEMBLY ON TRUCK

To make setting the unit in place on the truck easier, compress the Ride Rite assembly and attach the air inflating valve to the air line finger tight. This will keep the bellows in its compressed position. Now set the assembly in place on the axle, then unscrew the inflating valve from the air line and this will permit the assembly to assume its natural position. Rotate the heat shield so that it is facing the nearest section of the exhaust pipe. Remove the assembly and tighten the two 3/8" hex nuts securely. Reinstall the assembly per above instructions. Slide the two bale clamps over the truck frame and attach them finger tight with 5/16" hex nuts and lock washers. Next place the two u-bolts under the axle and fit them into the bottom bracket, attach them with 5/16" hex nuts and lock washers, tighten finger tight. Align the Ride Rite assembly squarely, directly above the axle—see figure number 9—Check to be sure the bellows has a minimum of one inch clearance on all sides. Remember that your Ride Rite will expand in operation and this clearance is vital. When you have the assembly positioned squarely and the required clearance tighten the bale clamps and u-bolts securely.



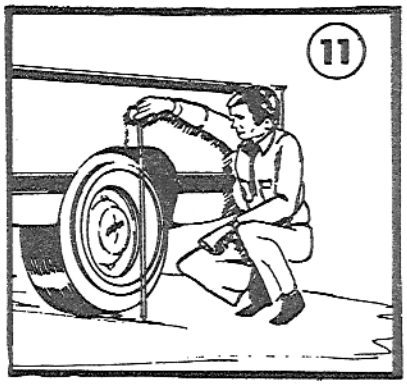
STEP 4—INSTALLING THE AIR LINE

Select locations on the vehicle for the air inflation valves. The location can be on the bumper or the body of the vehicle but be sure that it is protected so that the valve will not be damaged by the truck tailgate or other accidental damage, and still accessible for the air chuck. Drill a 5/16" hole and install the air inflating valve as per figure number 10. Run the tubing from the bellows to the valve routing it so that it will be protected from direct heat from the muffler or tailpipe, and away from sharp edges. The air line tubing should not be bent or curved sharply as it may buckle with age if the bends are too sharp. Secure the tubing in place with heavy duty friction tape. Attach the end of the air line tubing to the inflation valve as illustrated and tighten finger tight plus three and one half turns.



STEP 5—INSTALLING RIGHT ASSEMBLY

Follow the same procedure as outlined in steps 1 through 4 for installing the right assembly, except for orientation and air elbow fitting alignment. Be sure bellows overhang is to the inboard side of vehicle and that the air bellows fitting is to the rear of the assembly and pointing inboard. Attach air line and inflation valve as outlined in step number 4.



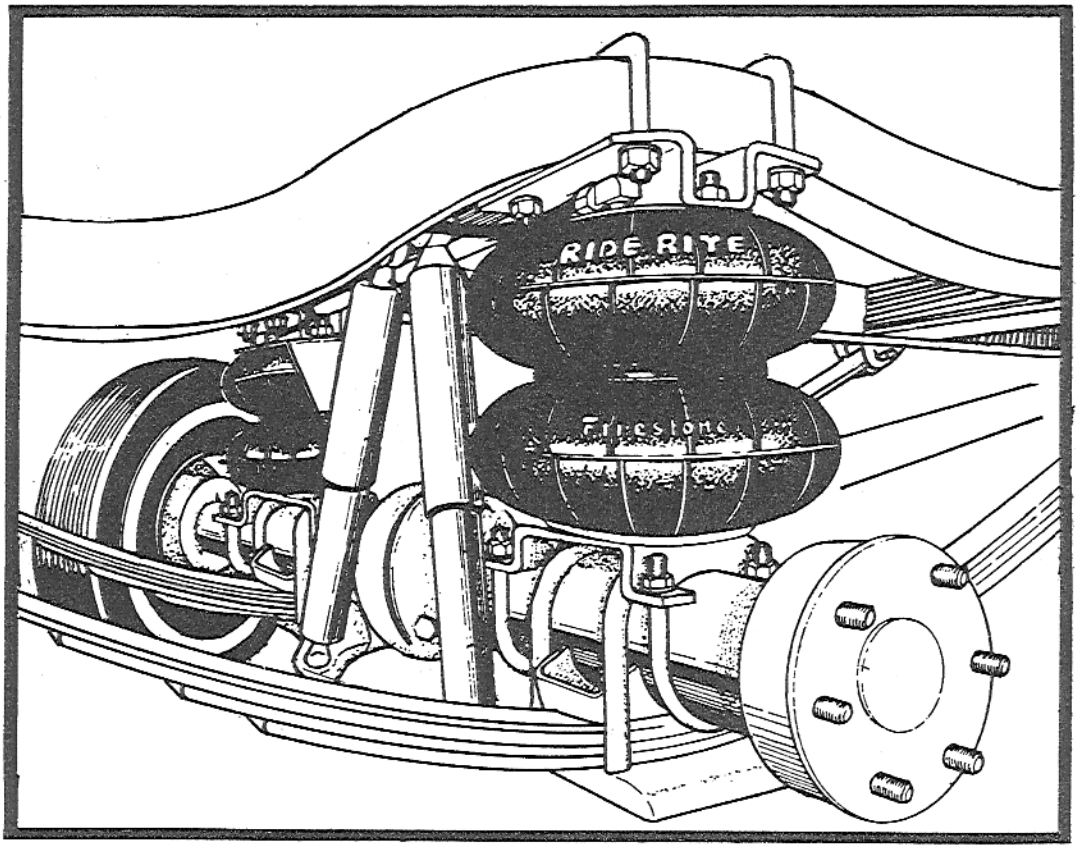
STEP 6—CHECKING THE AIR SYSTEM

Once the inflation valves are installed inflate the bellows and check the fittings for air leaks with a solution of soap and water around all connections. If a leak is detected do not try to stop the leak by further tightening of the connection. Rather disconnect the tubing and push it all the way into the connector, then tighten finger tight plus three and one half turns.

This now completes the installation. Before proceeding check once again to be sure you nave proper clearance around the bellows. With a load on your truck and the Comfortaires inflated you must have at least one half inch clearance all around the bellows.

A general rule is that the Comfortaires will support approximately 40 lbs. of load for each pound of inflation (per set). For example, 50 p.s.i. of inflating pressure will support a load of 2,000 lbs. per set of Comfortaires. FOR BEST RIDE use only enough air pressure in the Comfortaires to level the vehicle when viewed from the side, (front to rear). To determine the proper height for the rear of the vehicle, deflate the Comfortaires and measure the distance from the ground level to the rear fender well, **with the vehicle empty,** see figure 11. Inflate the Comfortaires to maintain this height under any condition of load. NOTE—Too much air pressure in the Comfortaires will result in a stiffer ride, while too little air pressure will allow the vehicle to bottom out. Too little air pressure will also not provide the improvement in handling that is possible. Normally 2 to 3 lbs. of air pressure will provide the best ride with the vehicle empty.

Happy traveling!



Enclosed with this kit are Ride Rite Operating Instructions. Please read them for proper and safe operation.

NOTE:

Once the air springs are installed it is recommended that the vehicle not be lifted by the frame. If the vehicle is lifted by the frame, over extension may occur, resulting in damage to the air spring. Should it become necessary to raise the vehicle by the frame, deflate both air springs completely.

WARNING

Do not inflate assembly when it is unrestricted. Assembly must be restricted by suspension or other adequate structure. Do not inflate beyond 100 P.S.I. Improper use or overinflation may cause assembly to burst causing property damage or severe personal injury.

Firestone Industrial Products,
Noblesville, Indiana, USA

Firestone
INDUSTRIAL PRODUCTS COMPANY