



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

## W21-760-2382

### 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**

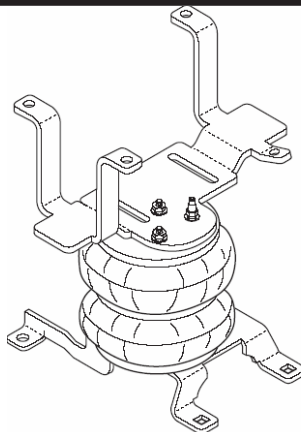
*Do not inflate this assembly when it is unrestricted. When installed, a minimum of 10 psi should be maintained in the air bellows at all times to avoid damage. Do not inflate beyond 100 psi.*

#### **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**

AIR SPRING	6397	2	3/8"-16 X 3/4" CARRIAGE BOLT	2
LEFT UPPER BRACKET	5453	1	3/8"-16 X FLANGE LOCK NUT	20
RIGHT UPPER BRACKET	5454	1	3/8"-16 NUT PLATE	2
LOWER BRACKET	5516	2	5/16" FLAT WASHER	4
LOWER BRACKET SUPPORT	5517	2	18 ft. TUBING	0938 1
AXLE STRAP	5457	2	PUSH-TO-CONNECT	
CLAMP (SHORT)	5455	2	INFLATION VALVE	3032 2
CLAMP (LONG)	5486	2	PUSH-TO-CONNECT	
BRACKET CLAMP	5181	2	MALE CONNECTOR	3055 2
3/8"-16 X 1" HEX HEAD BOLT		6	THERMAL SLEEVE	0899 2
3/8"-16 X 1 1/2" HEX HEAD BOLT		6	NYLON TIE WRAP	
3/8"-16 X 3/4" HEX HEAD BOLT		2	CAUTION TAG	
3/8"-16 X 3 1/2" CARRIAGE BOLT		4		



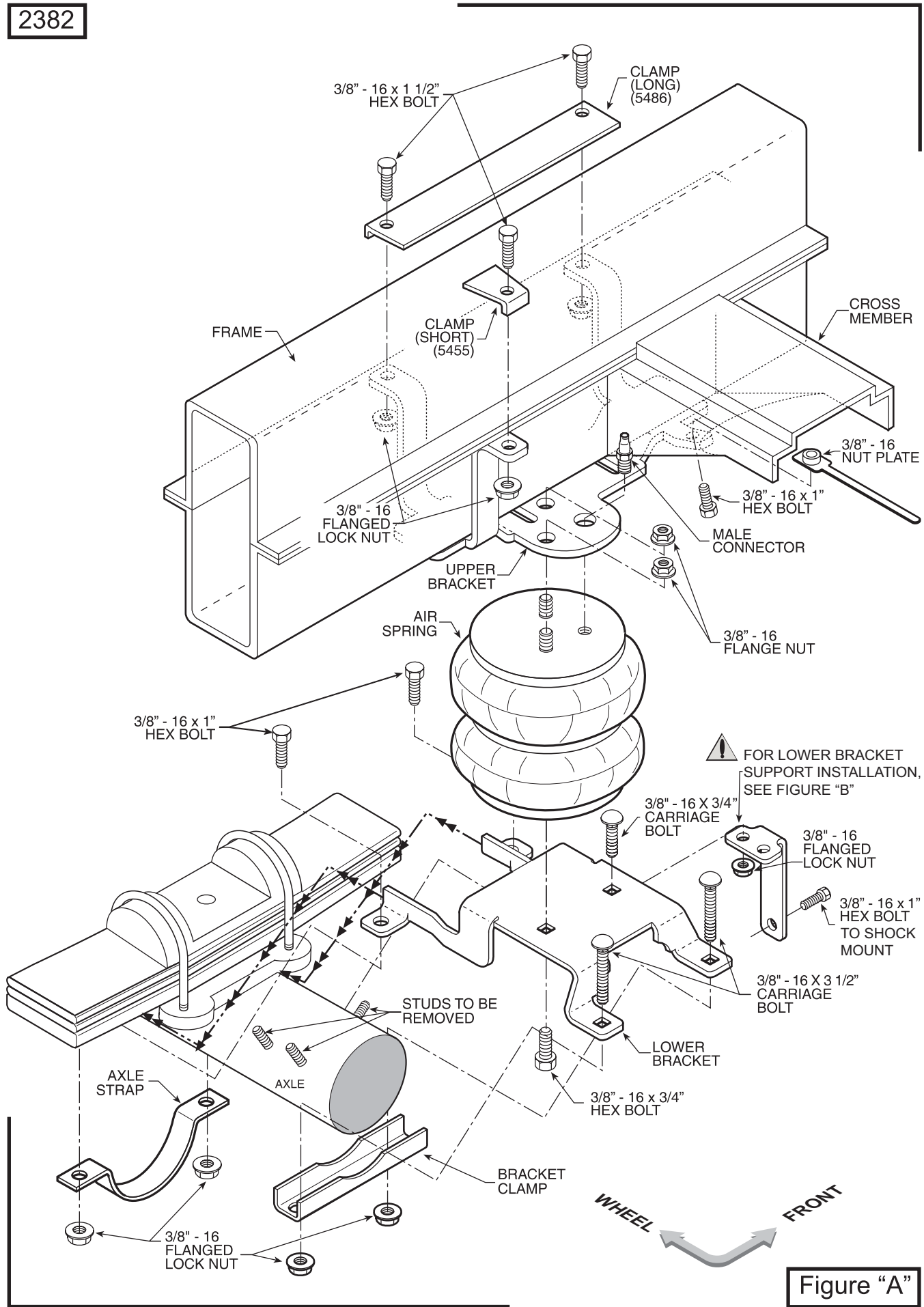
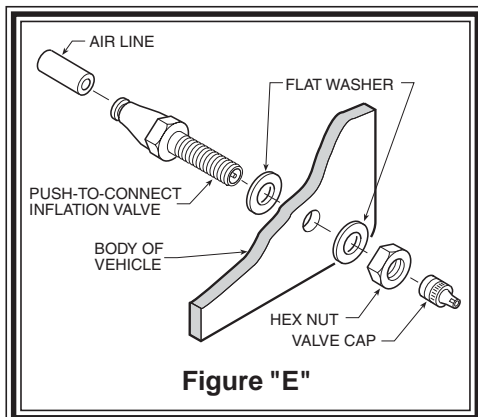
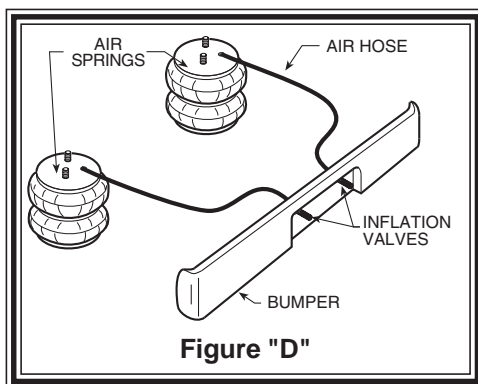
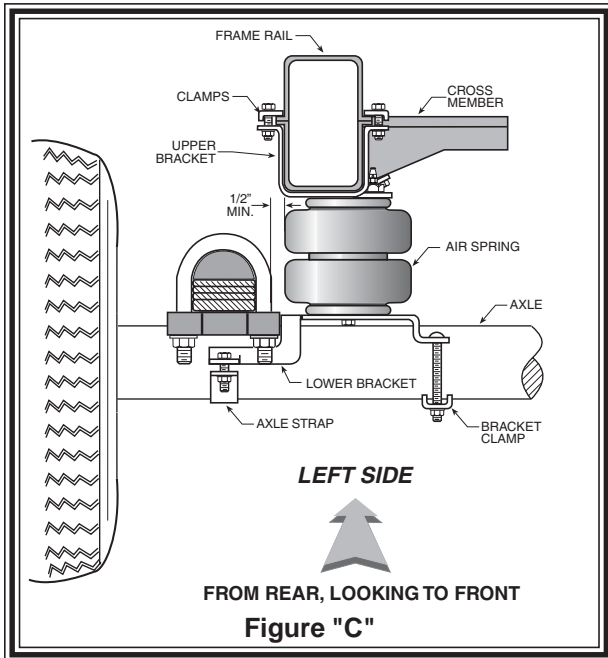
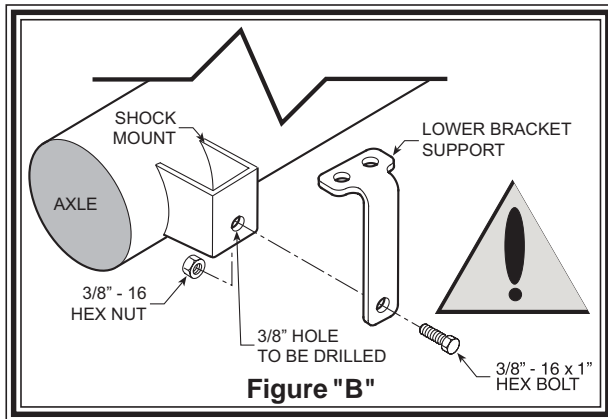


Figure "A"



**NOTE:**

Please read through this manual completely before installing the air spring kit to your vehicle. All illustrations reference the left side of the vehicle. Reverse all orientations for the right side.

**STEP 1 - PREPARE THE VEHICLE**

It is not necessary to raise the vehicle for installation. However, if you do, chock the front wheels and use jack stands rated to your vehicles weight. Remove the negative battery cable.

Remove the 1 1/4" studs that are along the axle on both sides of the vehicle. (see *Figure "A"*) Remove the vehicle's existing rubber jounce bumpers.

**STEP 2 - UPPER BRACKET INSTALLATION**

Install the left upper bracket marked "5453" onto the frame rail. The bracket will need to be positioned with the short tab underneath the cross member. Using one of the long clamps and one of the short supplied clamps and three 3/8"-16 X 1 1/2" hex bolts and nuts loosely bolt these to the three arms that extend to the frame flange (see *Figure "A"*). Using one of the supplied nut plates slide it down the cross member and secure it to the small tab using a 3/8"-16 X 1" hex bolt (see *Figure "A"*). Once this bolt has been secured tighten the remaining bolts.

**STEP 3 - LOWER BRACKET INSTALLATION**

Preassemble one air spring and lower bracket. Bolt the air spring to the bracket with the supplied 3/8"-16 X 3/4" hex bolt in the hole marked with an "L". Attach the lower bracket support to the lower bracket with a 3/8"-16 X 3/4" carriage bolt and flange nut as shown in *Figures "A" & "B"*. Install the preassembly onto the axle at a 45° between the leaf stack and the differential making sure that the lower bracket flanges extend under the leaf spring support casting (see *Figures "A" & "C"*). Roll the lower bracket into place until it is firmly seated on the axle tube. Using the supplied 3/8"-16 X 3 1/2" carriage bolt, bracket clamp, and 3/8"-16 flange lock nuts, secure the lower bracket to the axle tube on the side closest to the differential and tighten down. Place two 3/8" X 1" hex bolts through the holes in the flanged side of the lower bracket under the leaf spring stack and secure with the supplied axle strap (see *Figure "A"*). Align the air spring with the upper bracket and secure to the upper bracket with the supplied 3/8"-16 flange nuts. Install the male connector into the air spring and tighten to engage the orange thread sealant (see *Figure "A"*).

Using the support bracket as a template, drill a 3/8" hole into the shock mount. Fasten the support to the shock mount using a 3/8"-16 X 1" hex bolt and nut. See *Figures "A" & "B"*.

**STEP 4 - INSTALLATION OF THE RIGHT SIDE**

Follow steps 1-3 with reverse orientations for assembly and installation of the right side.

**STEP 5 - INSTALL THE AIR LINE AND INFLATION VALVE**

Uncoil the airline tubing and cut it into two equal lengths. **DO NOT FOLD OR KINK THE AIRLINE TUBING.**

Try to make the cut as square as possible. Insert one end of the airline tubing into the air fitting installed in the top of the air helper spring. Push the airline tubing into the fitting as far as possible (*see 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 "D"*). Drill a 5/16" hole and install the air inflation valve using two 5/16" flat washers per valve as supports (*see Figure "E"*). Run the airline tubing from the air helper spring to the 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. The airline tubing should not be bent or curved sharply as it may buckle. Secure the airline tubing in place with the nylon ties provided. Push the end of the airline tubing into the inflation valve as illustrated (*see Figure "E"*).

#### **STEP 6 - CHECK THE AIR SYSTEM**

Once the inflation valves are installed, inflate the air helper springs to 70 *psi* and check the fittings for air leaks. Using a spray bottle, apply a solution of soap and water to the fittings. If a leak is detected at an airline tubing connection then check to make sure that the airline tube is cut as square as possible and that it is pushed completely into the fitting. The airline tubing can easily be removed from the fittings by exhausting all the pressure in the air springs and then pushing the collar towards the body of the fitting and then, with a gentle pull, remove the airline tubing. If a leak is detected where the air fitting screws into the spring, deflate the air springs and remove the tubing, then screw the air fitting into the air spring one additional turn or until the leak stops. Reinstall the tubing and re-inflate the air springs and check for leaks as noted above. This now completes the installation. 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 50 lbs. of load for each 1 *psi* of inflation pressure (per pair). For example, 50 *psi* of inflation pressure will support a load of 2500 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 not provide the improvement in handling that is possible. **TO PREVENT POSSIBLE DAMAGE MAINTAIN A MINIMUM OF 5 *psi* IN THE AIR HELPER SPRINGS AT ALL TIMES.**



**NOTE:**

Should it become necessary to raise the vehicle by the frame, deflate both air helper springs completely. Reinflate the air springs after the vehicle is lowered to the ground.

