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# EasyStreet Digital Controller Kit No. 27600

MN-628  
(06603)  
ECR 5607

*Please read these instructions completely  
before proceeding with installation*

*Failure to read these instructions can result in mis-installation*

### **Installing the Digital Controller**

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***“The Choice of the Professional Installer”***

### **WARNING:**

**In case of battery failure- unplug the controller  
before jump starting vehicle!**

## System Requirements

### Amperage

Do not exceed three amps of current per each one of the installed valves.

### Gross Vehicle Weight Rating (GVWR)

**IMPORTANT:** The installation of this kit does not alter the GVWR or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

**Gross Vehicle Weight Rating** - The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number - along with other weight limits, as well as tire, rim size and inflation pressure data - is shown on the vehicle's Safety Compliance Certification Label.

**Payload** - The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. It is GVWR minus the Base Curb Weight.

## ECU Diagram



A	All Lowered
B	Ride Height and Access Menu Features
C	All Raised
D	Right Rear Deflate
E	Right Rear Inflate
F	Left Rear Inflate
G	Left Rear Deflate
H	Left Front Inflate
I	Left Front Deflate
J	Right Front Inflate
K	Right Front Deflate
L	Display Screen

## Setting the Features - A Quick Guide

### Tune Feature

*Using the tune feature must be done before attempting any other function. The tune feature will allow the controller to learn the exact pressures needed to lift your vehicle. By knowing this, it will prevent the system from over-shooting your preset ride height.*

1. Make sure your tank is full and your vehicle is at 0 PSI. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Tune". Turn the tune feature on by pressing the Left Rear Inflate button (F). Exit out of the Edit Options menu by pressing the Ride Height button (B). Wait for the controller to learn your vehicle. This may take a few minutes.

### Setting Ride Height

*Tank pressure must be over 145 PSI to set the ride height.*

1. Make sure your tank is full. Set your vehicle to ride height manually using the individual wheel control buttons. We recommend inflating all four corners and slowly deflating each one at a time until the desired ride height is achieved. Ride height must be set above 30 PSI.
2. Press and hold the Ride Height button (B) for 1-3 seconds. Your settings are now saved. You may now achieve ride height by pressing the Ride Height button (B).

## Operational Instructions (Continued)

If **Ride Ht** is enabled, the system will set the airbag pressures to the saved setting values on start-up. If **Auto** is enabled, the system will then enter auto-mode. If **Auto** is not enabled, the system will then go to manual-mode after the pressures are properly set.

### User Interface:

#### Front and rear button groups:

- These eight (8) buttons open the corresponding solenoid valve when pressed.
- In auto-mode, the system returns to the manual-mode if any of these buttons are pressed.
- In option-mode, the right-front buttons scroll through the options, while the left-rear buttons modify the displayed option's value.

#### All-up/all-down buttons:

- Open all fill or dump solenoid valves when pressed.
- In auto-mode, the system returns to manual-mode if either of these buttons are pressed.

#### Ride-height button:

- The ride-height button has different functionality based on the length of time it is pressed.
- **Short Press** (less than 1 second)
  - If in auto-mode, the system returns to manual-mode.
  - If not in auto-mode, the system engages ride-height using the previously saved ride-height settings. If auto-pressure-regulation is enabled, the system enters auto-mode and maintains the airbag pressures automatically. If auto-pressure-regulation is not enabled, the system reverts to manual-mode after the airbag pressures are set. If the air tank pressure is too low (less than 135 psi), "Low Air" will be displayed and the system will remain in manual mode.
    - If any air bag pressure is at less than 30 psi, the system will initially attain pressures that are 10 psi greater than the ride height settings. The system will establish the desired ride height setting in approximately 15 seconds.
- **Medium Press** (between 1 and 3 seconds - "Set Ride Ht" is displayed)
  - If the system is in auto-mode, "Set Ride Ht" is not displayed and the system remains in auto-mode at the current settings.
  - If the system is not in auto-mode, it reads the current air bag pressures, saves these as the new settings, and then engages ride-height. If auto-pressure-regulation is enabled, the system enters auto-mode and maintains the air bag pressures automatically. If auto-pressure-regulation is not enabled, the system reverts to manual-mode after the air bag pressures are set.
  - If the airbag pressures are outside the allowed range for ride height (30-120 psi) "Range" will be displayed and the system will not accept the new settings.
- **Long Press** (greater than 3 seconds - "Edit Options" is displayed)
  - The system enters option-mode to allow editing of the system options. Use the right-front buttons to select an option, the left rear buttons to change the option-setting.
  - Press the ride-height button to exit option editing and to return to the previous operating mode. If system was in auto-mode but "Auto" is now disabled, it returns to manual-mode.

## Operational Instructions

### Three Basic Operation Modes:

<b>Manual-Mode</b>	The system displays the actual airbag pressures, and the user controls the pressure manually.
<b>Auto-Mode</b>	The system displays the pressure settings and automatically maintains the prescribed airbag pressures.
<b>Option-Mode</b>	The user can examine and change all option settings.

The system keeps the user's option settings in non-volatile memory so that they will be maintained each time the system is powered up. On power-up, the options settings are read and acted on appropriately.

### Settings:

<b>Ride Ht</b>	The system will immediately restore the airbag pressures to the saved setting values on power-up.
<b>Auto</b>	When ride-height is selected (either through "Ride Ht" option setting or user selection during operation), the system will automatically maintain the airbag pressure at the current settings.
<b>Leak</b>	The system will display detected leaks in any of the airbag circuits. A leak is shown by the letter "L" next to the pressure reading.
<b>Volts</b>	The display will show the system voltage. If both "Volts" and "Tank" are enabled, the display will alternate between them every 20 seconds.
<b>Tank</b>	The display will show the current tank pressure. If both "Volts" and "Tank" are enabled, the display will alternate between them every 20 seconds.
<b>Bright</b>	Controls the display intensity. If the display intensity is changed while it is dimmed automatically by the vehicle lights connection, it will remain at the selected brightness until the next time the vehicle lights are turned on.
<b>Seq</b>	The system will perform pressure regulation on the airbags sequentially (left front, right front, left rear, right rear). If not enabled, the system will simultaneously adjust all airbag pressures.
<b>Tune</b>	To use the TUNE function, the tune option must be set to ON and it must be displayed when the ride height button is used to exit option-mode. The TUNE function will test the response of the system by exercising the airbags individually. The results are stored by the system for use in accurately controlling airbag pressures. The TUNE function must only be accomplished in a stationary vehicle on level ground.

## To Add a Second Compressor

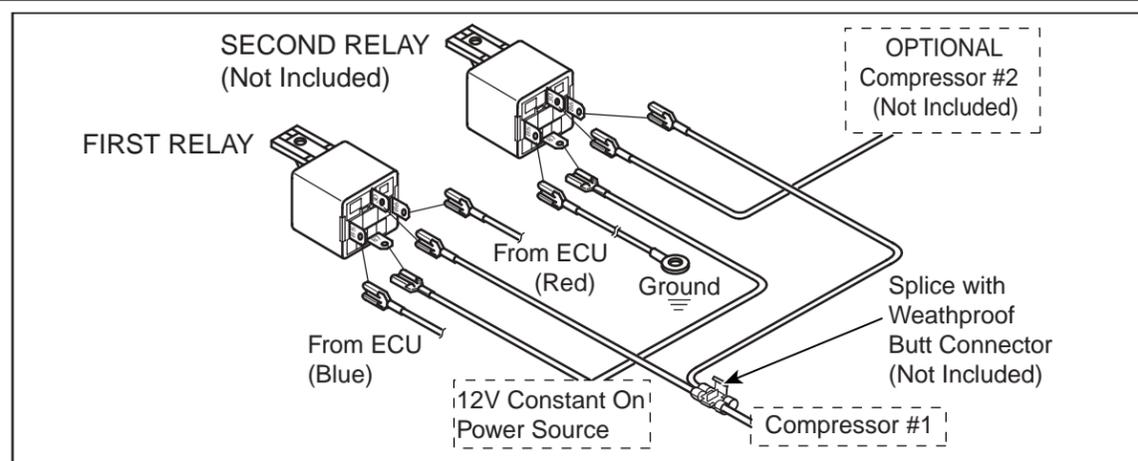


Figure 10

## Setting the Features (Continued)

### Using the Voltmeter

1. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Volts". Turn the voltmeter on by pressing the Left Rear Inflate button (F).

### Adjusting the Brightness

1. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Bright". Adjust the brightness by pressing the Left Rear Inflate button (F) to increase the brightness and the Right Rear Deflate button to decrease the brightness.

### Using the Sequence Feature

The sequence feature allows your air suspension system to inflate your front air springs before inflating your rear springs while achieving ride height.

1. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Seq."

### Using Leak Detection

The leak detection feature will detect a leak in your air system after the manifold while auto ride height is enabled.

1. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Leak". Turn the leak detection on by pressing the Left Rear Inflate button (F).

### Tank Pressure

1. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Tank". Turn the tank pressure display on by pressing the Left Rear Inflate button (F).

### Auto Ride Height on Start

Auto Ride Height will allow your air suspension to automatically achieve ride height when you turn the key in your vehicle.

1. Press and hold the Ride Height button (B) for greater than 3 seconds until "Edit Options" appears.
2. Press the Right Front Inflate button (J) and scroll through the Edit Options menu until you see "Auto". Turn the Auto Ride Height feature on by pressing the Left Rear Inflate button (F).

## Preparing the System

1. Disconnect the red compressor power wire from the pressure switch connected to the end of the tank (Figure 1).

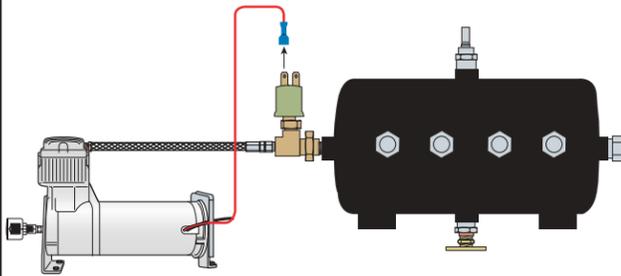


Figure 1

2. Disconnect the pressure switch from the tee on the air tank (Figure 2).

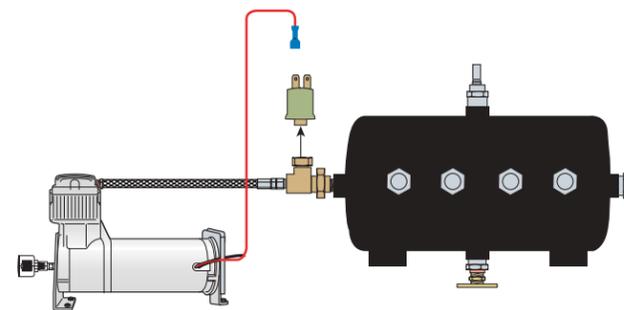


Figure 2

3. Replace the pressure switch with the transducer (Figure 3).

**NOTE:** Apply thread sealant to the threaded portion of the transducer.

**IMPORTANT:** Tighten transducer using the hex portion **ONLY**. Failure to do this will cause system failure and will void warranty.

4. Attach the steel braided leader hose from the compressor directly into the tee at the end of the air tank as shown in Figure 3.

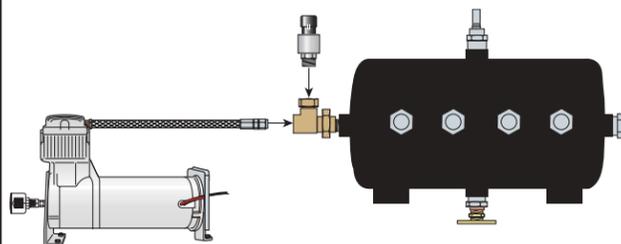


Figure 3

5. Attach the transducer wire from the ECU to the transducer previously connected to the air tank (Figure 4).

6. View Figure 7 on page 7 for valve wiring and plumbing instructions.

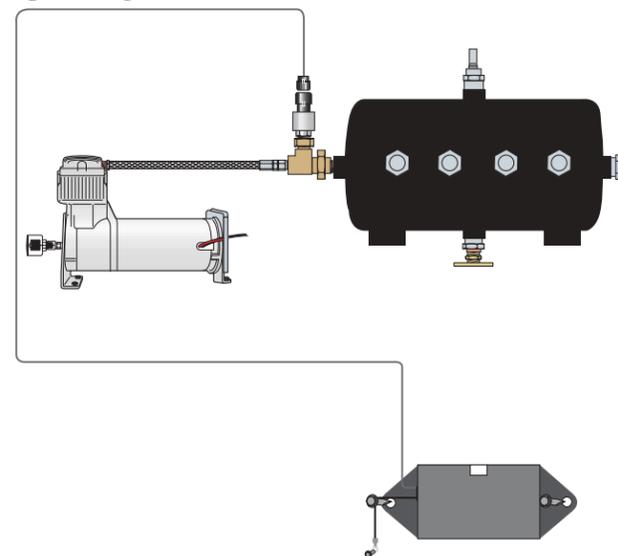


Figure 4

## Assembling the Transducers

1. Apply thread sealant to the bushing and install into the branch tee (Figure 8).
2. Apply thread sealant to the transducer and install into the bushing (Figure 8).

**IMPORTANT:** Tighten the transducer using the hex portion **ONLY**. Tighten hand-tight plus 1 turn.

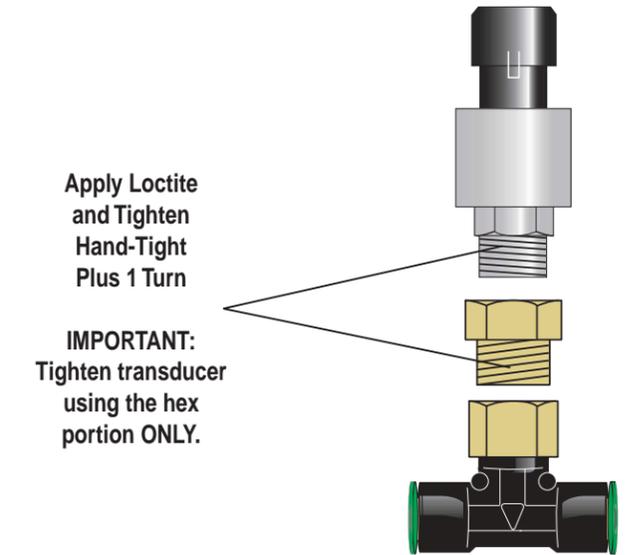


Figure 8

## Attaching the ECU and Display Panel

1. Choose a mounting location inside the cab of the vehicle for mounting the ECU.

**NOTE:** This can be under the dash panel.

2. Attach the bracket to the chosen mounting location using the provided screws (Figure 9).
3. Attach the brackets to the display panel using the provided screws and attach the bracket to a chosen mounting location.

4. Tighten the ECU and display panel hardware.
5. Connect one end of the CAT 5 cable to the ECU and the other to the display panel (Figure 9).

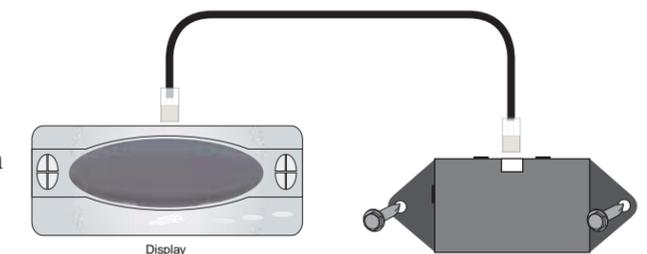


Figure 9

## Valve Wiring and Plumbing Schematic

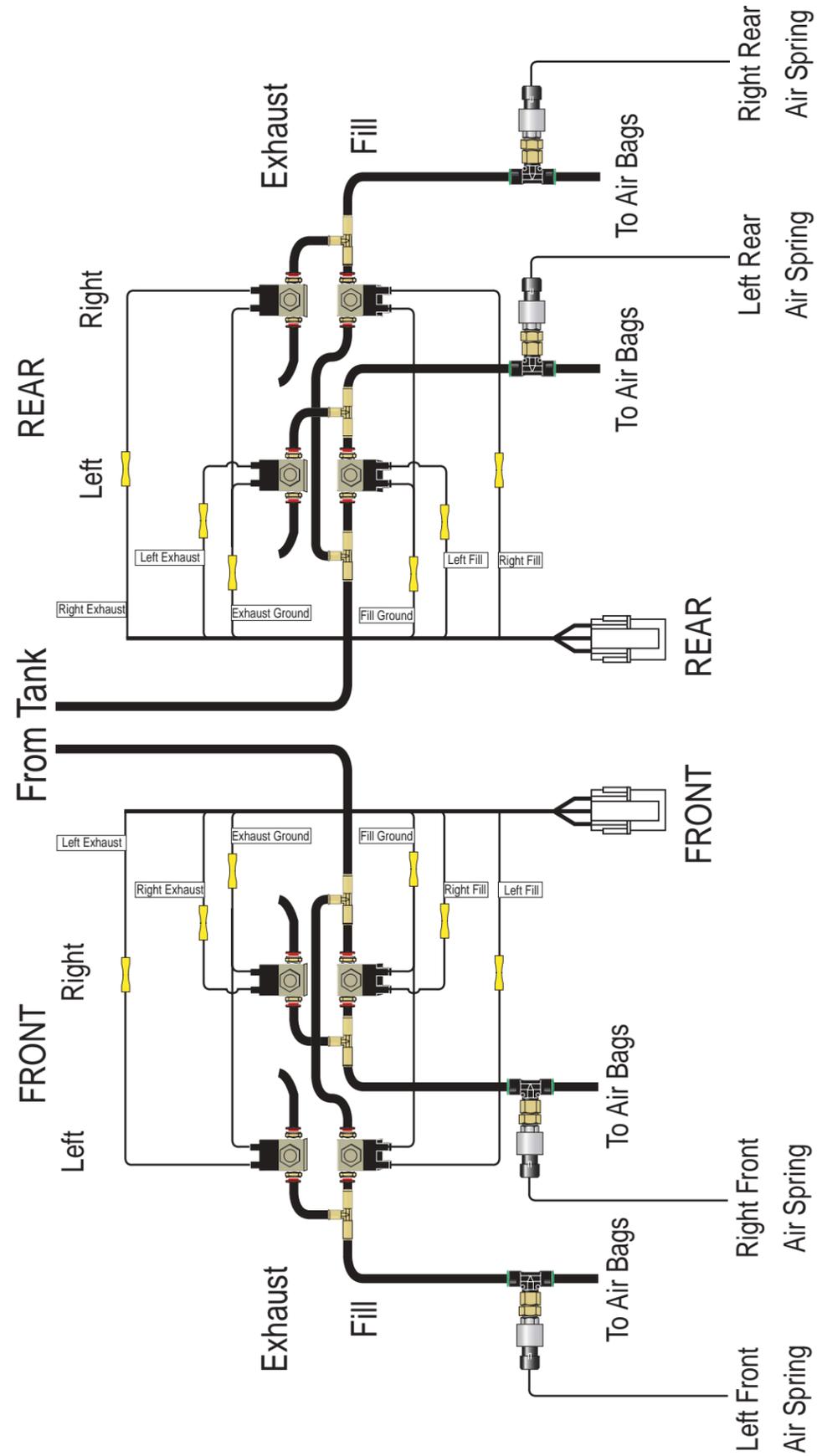


Figure 7

## Mounting the Display Panel

1. Determine the mounting location of the display panel.
2. Cut the velcro into 1" squares and attach two "hook" pieces of the velcro to the mounting bracket and attach the two corresponding "loop" pieces of the velcro to the back of the display panel.
3. Stick the display unit to the mounting bracket.
4. Attach the mounting bracket to its mounting location in the same manner. Place three "hook" pieces of the velcro onto the bracket and place three "loop" pieces of the velcro onto the chosen mounting location (Figure 5).
5. Stick the bracket to the mounting location.

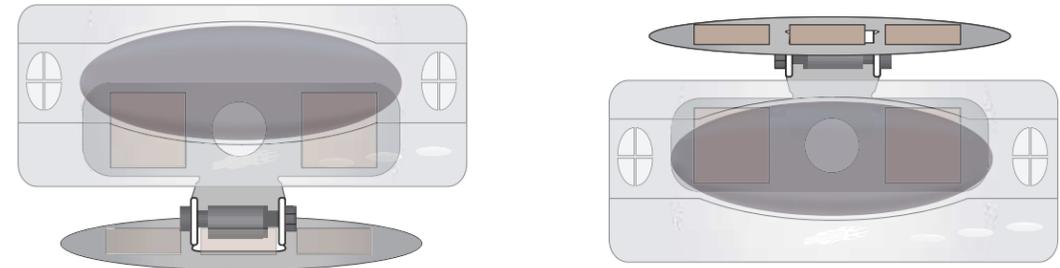


Figure 5

# Kit Diagram

## Hardware List

Item	Part No.	Description	Quantity
A	25000	Digital Control ECU/Harness	1
B	27025	Digital Controller	1
C	24001	Pressure Transducer	5
D	26440	ECU/Display Cable	1
E	10415	Display Mounting Bracket	1
F	10519	Velcro	1
H	23586	Thread Sealant	1
I	21735	1/8 x 3/8 Bushing	4
J	21932	Branch Tee	4

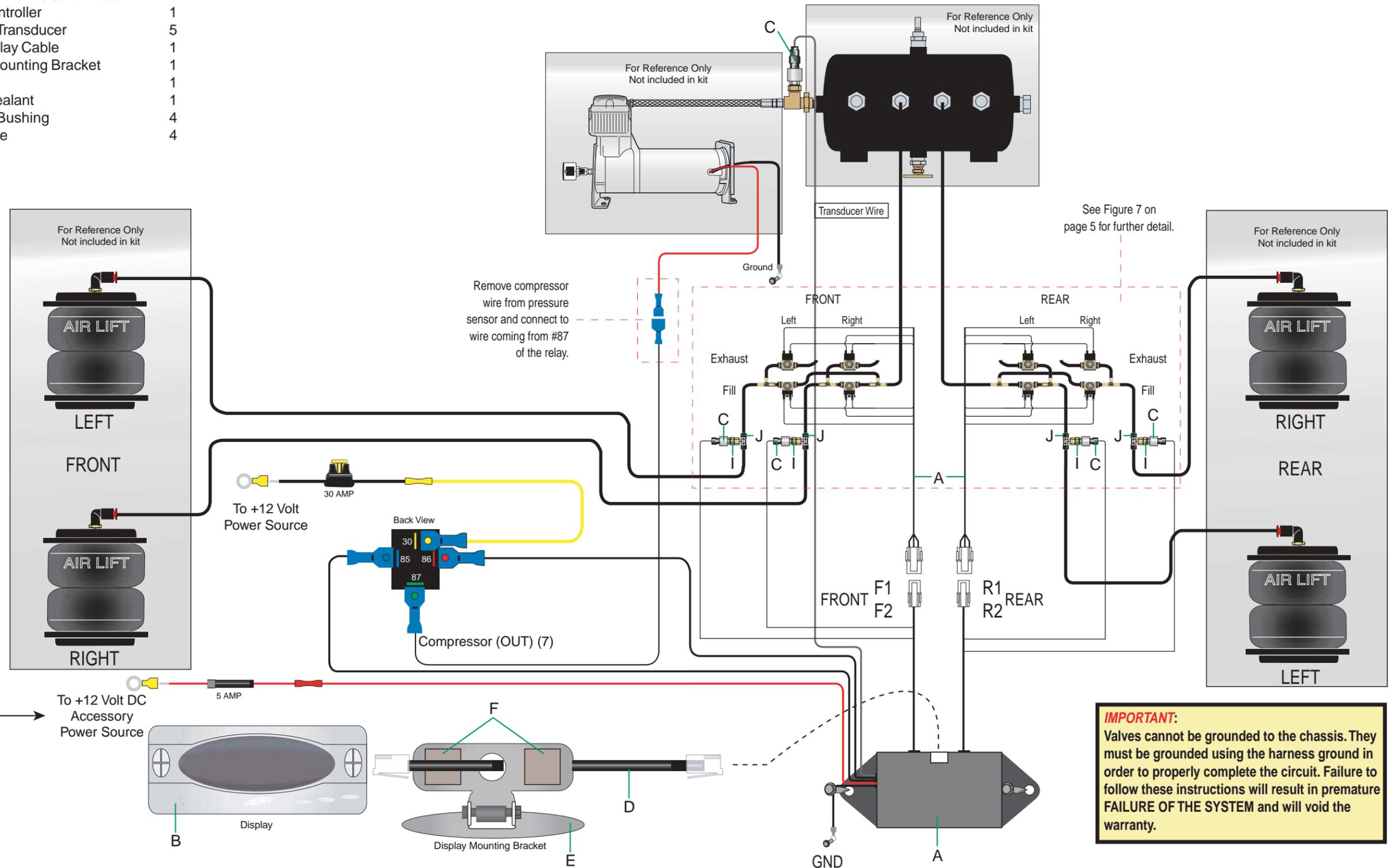


Figure 6

Installing the Digital Controller

Installing the Digital Controller