Operation Manual
KELDERMAN: Rocker Switch

Congratulations!

Thank you for purchasing the revolutionary AccuAir Electronic Leveling System (ELS).

This system manages the height of up to 4 Air Bags and offers never before seen accuracy in all applications by constantly learning your vehicle's characteristics. Through the use of advanced height monitoring techniques, this system automatically corrects for changes in load, whether driving or parked, minimizing user input and maximizing accuracy throughout your driving experience. To enhance the entire system's performance and reliability, the AccuAir ELS also manages your Air Compressor(s) to keep onboard air at an ideal pressure for your application.

To maximize functionality, the AccuAir ELS allows you to select from three distinct vehicle heights through a Rocker Switch:

1.) ***Ride Height*** (the height that you will typically drive your vehicle at).
2.) ***Dump/Kneel*** (Typically set at 10% of your total suspension travel for ease of Loading).
3.) ***Raise/Extra Clearance*** (Typically set at 90% of your total suspension travel to increase mobility and clear driving obstacles).

At AccuAir, we pride ourselves on thorough customer service, quality products, and a better driving experience through technologically superior design. Please visit our website or call us toll free to let us know if there is any way that we can help improve your AccuAir experience.

(877) AIR-DOWN
247-3 6 9 6

www.accuaircs.com

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Terms & Conditions:

AccuAir Control Systems, L.L.C. is hereby referred to as **ACCUAIR**. The Purchaser, end-user, or installer is hereby referred to as **CUSTOMER**.

Warranty

ACCUAIR will repair or replace any failed components for the life of the vehicle given that the components were installed and operated as intended by **ACCUAIR**. Upon the return of a failed component(s), **ACCUAIR** will determine the cause of failure. If it is due to improper installation, or misuse of the system, a repair charge will be assessed and the customer will be contacted before work is performed or replacement parts are shipped. If the failure is due to faulty parts, then **ACCUAIR** will repair or replace the failed components at their own discretion and in a timely manner.

Repairs and Returns

A Return Merchandise Authorization Number (RMA) is required for ALL shipments to AccuAir Control Systems. This number should be written in large letters on the shipping box. Call AccuAir to receive an RMA number and send items to:

AccuAir Control Systems, L.L.C.
Attn: Service Department/RMA # _____
1241 Johnson Ave. #355
San Luis Obispo, Ca, 93401
USA

Legal Disclaimer

•**ACCUAIR's** products must be installed by a qualified professional installation facility as recommended by **ACCUAIR**.

•System operation and installation is at the **CUSTOMER's** own risk. **ACCUAIR** accepts no liability for damage of property or persons caused by its products, components, accessories, installation instructions or otherwise.

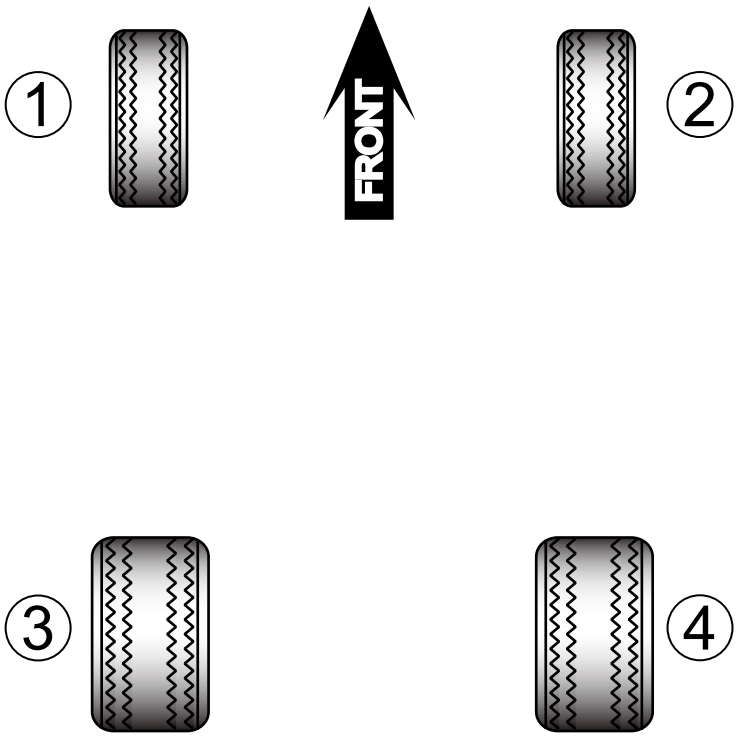
•**ACCUAIR** accepts no responsibility for systems, products or components provided by other manufacturers for use with or around the **ACCUAIR** system. For components other than **ACCUAIR's**, follow the manufacturer's instructions for installation and operation.
(Reminder: No part of the vehicle should be able to contact the ground when all air is out of the bags).

Service Disable:

⚠ CAUTION: For all under vehicle maintenance, you must first disable the air system by removing the main system fuse located near the battery.

General Understanding:

For simplicity of use and understanding we refer to the four wheels of a vehicle by number. Instead of using “Left Front”, or “Right Front” etc. Refer to the following diagram for labeling:



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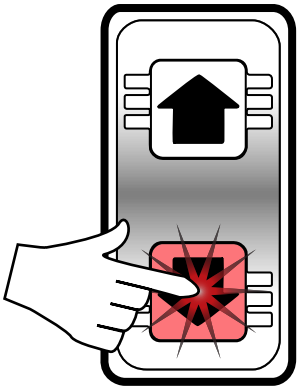
General Operation:

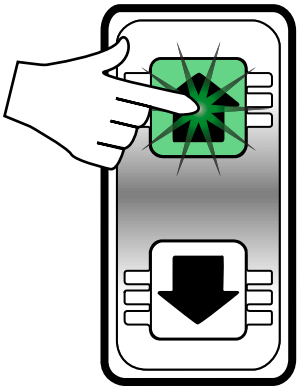


Dump/Kneel

While driving or parked, you may choose to ***Dump/Kneel*** the Air Bags to 10% of their total travel for loading, etc.

Press the " ⬇ " Button momentarily.

The " ⬇ " Arrow will flash until ***Ride Height*** is resumed.

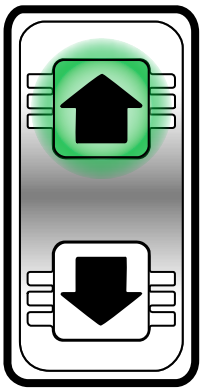


Raise/Extra Clearance:

While driving or parked, you may choose to ***Raise*** the Air Bags to 90% of their total travel to clear an obstacle.

Press the " ⬆ " Button momentarily.

The " ⬆ " Arrow will flash until ***Ride Height*** is resumed.



Return To Ride Height:

From ***Dump/Kneel*** Position :
Press the " ⬆ " Button momentarily.
From the ***Raised/Extra Clearance*** Position:
Press the " ⬇ " Button momentarily.

The " ⬆ " Arrow will stay ON while at ***Ride Height.***

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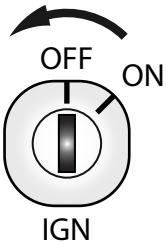
Setup Programming:

System Calibration:

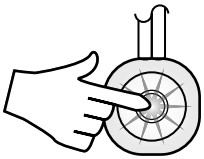
⚠ CAUTION: The system will automatically *Raise/Lower* the vehicle in the next procedure. Remove all obstructions and keep clear of vehicle before proceeding.

The vehicle needs to be on level ground with the wheels pointed straight ahead. Leave vehicle running to power the Compressor(s) during this procedure.



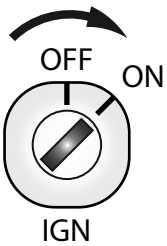
Turn the Ignition ON. Use the " ▼ " or " ▲ " Arrow to ***Raise/Lower*** all four corners until each corner is at your preferred **MAXIMUM TRAVEL** and the vehicle is level. If you need to adjust one corner at a time, see the ***"Manual Raise/Lower"*** Instructions on page 8.

Turn the Ignition OFF. Then hold Prog " ◎ " Button while turning the Ignition ON.



Program Button

The system will then begin adjusting the vehicle throughout its total travel. This process requires no user interaction and should take no more than 15 minutes depending on the size of your Compressor(s) and Tank(s).



Both the " ▲ " and " ▼ " Arrow will flash slowly during calibration. The " ▲ " Arrow will be on when calibration is complete, indicating that the system is at ***Ride Height*** (currently saved at 50% of your total travel).

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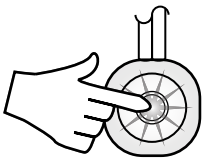
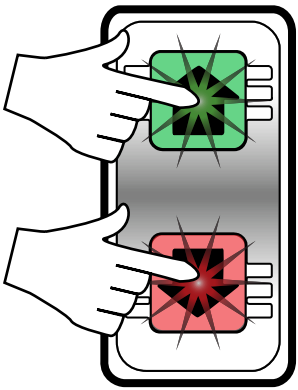
Setup Programming:

Manually Raise/Lower:

Manual Adjustment to a New Height:
In order to save a ***New Favorite Ride Height,*** you must first manually adjust each Air Bag to the height that you wish to save using the procedure outlined below. Once you have achieved the desired height on all corners, see ***"Saving A New Ride Height"*** on the next page.



Program Button



To Adjust Front Air Bags Together (1&2):
Press the Prog " ◎ " Button *1-Time*;
the " ▼ " Arrow will flash *1-Time* per second.
Then within 5 seconds press the " ▲ " Button to fill or the " ▼ " Button to empty the Air Bags.

To Adjust Rear Air Bags Together (3&4):
Press the Prog " ◎ " Button *2-Times*;
the " ▼ " Arrow will flash *2-Times* per second.
Then within 5 seconds press the " ▲ " Button to fill or the " ▼ " Button to empty the Air Bags.

To Adjust Air Bag # 1:
Press the Prog " ◎ " Button *3-Times*;
the " ▲ " Arrow will flash 1-Time per second.
Then within 5 seconds press the " ▲ " Button to fill or the " ▼ " Button to empty Air Bag # 1.

To Adjust Air Bag # 2:
Press the Prog " ◎ " Button *4-Times*;
the " ▲ " Arrow will flash *2-Times* per second.
Then within 5 seconds press the " ▲ " Button to fill or the " ▼ " Button to empty Air Bag # 2.

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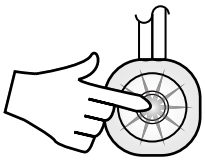
Setup Programming:

Manually Raise/Lower, Cont.:

To Adjust Air Bag # 3:
**Press the Prog " ◎ " Button *5-Times*;
the " ⌂ " Arrow will flash *3-Times* per second.
Then within 5 seconds press the " ⌂ " Button
to fill or the " ⌄ " Button to empty Air Bag # 3.**

To Adjust Air Bag # 4:
**Press the Prog " ◎ " Button *6-Times*;
the " ⌂ " Arrow will flash *4-Times* per second.
Then within 5 seconds press the " ⌂ " Button
to fill or the " ⌄ " Button to empty Air Bag # 4.**

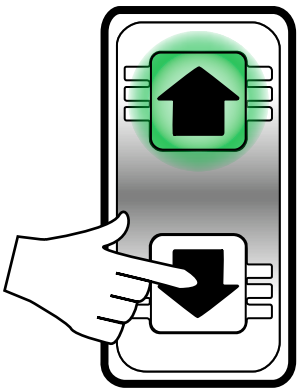
If you pass this 5 second window, simply start the process over. When you get finished adjusting one corner, you may increment to the next corner by simply pressing the Prog " ◎ " Button *1-Time* within the 5 second window.



Program Button

Saving A New Ride Height:

Saving A Ride Height:
Once you have manually adjusted each Air Bag to the height that you wish to save:
**Hold the Prog " ◎ " Button for 3 seconds.
Both the " ⌂ " and " ⌄ " Arrow will
light. While still holding the Prog " ◎ " Button
press the " ⌄ " Button momentarily.**
The " ⌂ " Arrow will stay ON once the new height has been saved.



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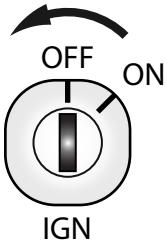
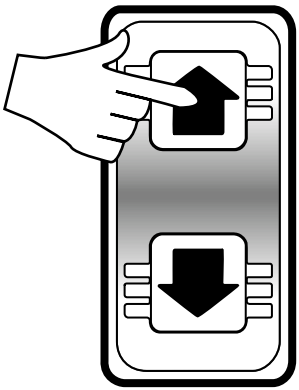
Setup Programming:



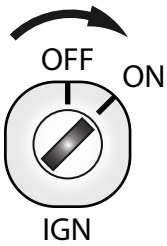
Turning Ride-Height-On-Start ON/OFF:

Your system was shipped with ***Ride-Height-On-Start*** enabled (ON). You may wish to disable (OFF) or re-enable (ON) this feature. When this feature is ON, the system will automatically re-level the vehicle to ***Ride Height*** every time that the IGN is switched ON. When this feature is OFF, the system will remain at the last height the vehicle was at when the IGN is switched ON.



To Turn Ride Height on Start (ON)/(OFF):
First, turn the Ignition OFF. Then hold " ⌂ " while turning Ignition ON.

If this feature was previously ON, then it will be turned OFF and the " ⌄ " Arrow will light momentarily.
If this feature was previously OFF, then it will be turned ON and the " ⌂ " Arrow will light momentarily.



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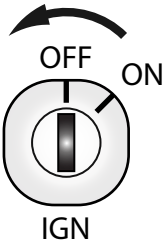
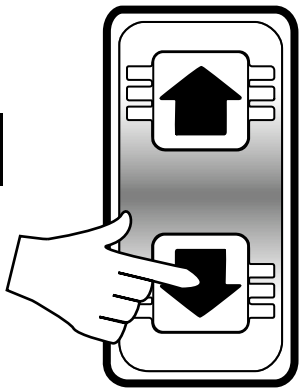
Setup Programming:

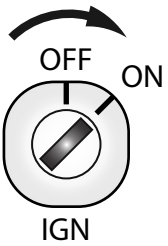


Turning Monitor Mode ON/OFF:

Your system was shipped with ***Monitor Mode*** enabled (ON). You may wish to disable (OFF) or re-enable (ON) this feature. When ***Monitor Mode*** is ON, the system will Monitor the vehicle's height whenever the IGN is ON and make adjustments for changes in load when deemed necessary. When this feature is OFF, the system will only adjust when prompted by pressing the height selection switch – It will not Monitor the vehicle's height and will not make any adjustments for changes in load.



NOTE: ***Monitor Mode*** should be left ON for maximum accuracy. The only case that it should be turned OFF is if you feel that the system is adjusting too often or inaccurately while driving. In this case, first try re-calibrating the system using the instructions on Page 6. If this does not solve the problem, turn the ***Monitor Mode*** OFF and contact the manufacturer for further assistance.



To Turn Monitor Mode (ON)/(OFF):
First, turn the Ignition OFF. Then hold " ▼ " while turning Ignition ON.

If this feature was previously ON, then it will be turned OFF and the " ▼ " Arrow will light momentarily.
If this feature was previously OFF, then it will be turned ON and the " ▲ " Arrow will light momentarily.

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Operation Trouble Indication/Diagnosis:

In the unlikely case of a system component failure during operation, both the " ▲ " and " ▼ " Arrows will flash simultaneously and sequentially to indicate the potential failures outlined below.

NOTE: This is the ONLY time that both the " ▲ " and " ▼ " Arrows will light up simultaneously during normal operation.

Warning Indication:	Diagnosis:	Possible Cause:
Low Pressure Warning		
▲ + ▼ Both Flash ***1-time*** per second	Tank pressure is not increasing after the ECU turns the Compressor(s) ON.	Verify Compressor circuit wiring connections. Check Compressor fuse F2 or F3. Verify Compressor plumbing connections. Check for Compressor relay failure. Check for Compressor failure. Check for Pressure Sensor failure.
Pressure Sensor Warning		
▲ Stays On + ▼ Flashes ***1-time*** per second	Pressure Sensor is not reading.	Verify wiring to Pressure Sensor. Check Pressure Sensor for failure.
Valve Operation Warning		
▲ Flashes multiple times + ▼ Flashes ***1-time*** per second	Valve(s) are not opening after the ECU turns them ON.	Verify Valve harness wiring connections. Verify Valves plumbing connections. Check Valves for failure.

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Operation Trouble Indication/Diagnosis:

Warning Indication:	Diagnosis:	Possible Cause:
Ride Height Sensor Warning		
Flashes ***1-time*** per second + Stays On	Ride Height Sensor #1 is not reading.	Verify wiring to Ride Height Sensor #1. Check Ride Height Sensor #1 for failure.
Flashes ***2-times*** per second + Stays On	Ride Height Sensor #2 is not reading.	Verify wiring to Ride Height Sensor #2. Check Ride Height Sensor #2 for failure.
Flashes ***3-times*** per second + Stays On	Ride Height Sensor #3 is not reading.	Verify wiring to Ride Height Sensor #3. Check Ride Height Sensor #3 for failure.
Flashes ***4-times*** per second + Stays On	Ride Height Sensor #4 is not reading.	Verify wiring to Ride Height Sensor #4. Check Ride Height Sensor #4 for failure.

Ride Height Sensor Travel Warning		
Both Flash ***Rapidly.***	Ride Height Sensors travel is found to be too small during calibration.	Verify Sensor Mechanical Linkage Connections. The Ride Height Sensor needs to be remounted to a point in the suspension with more travel.

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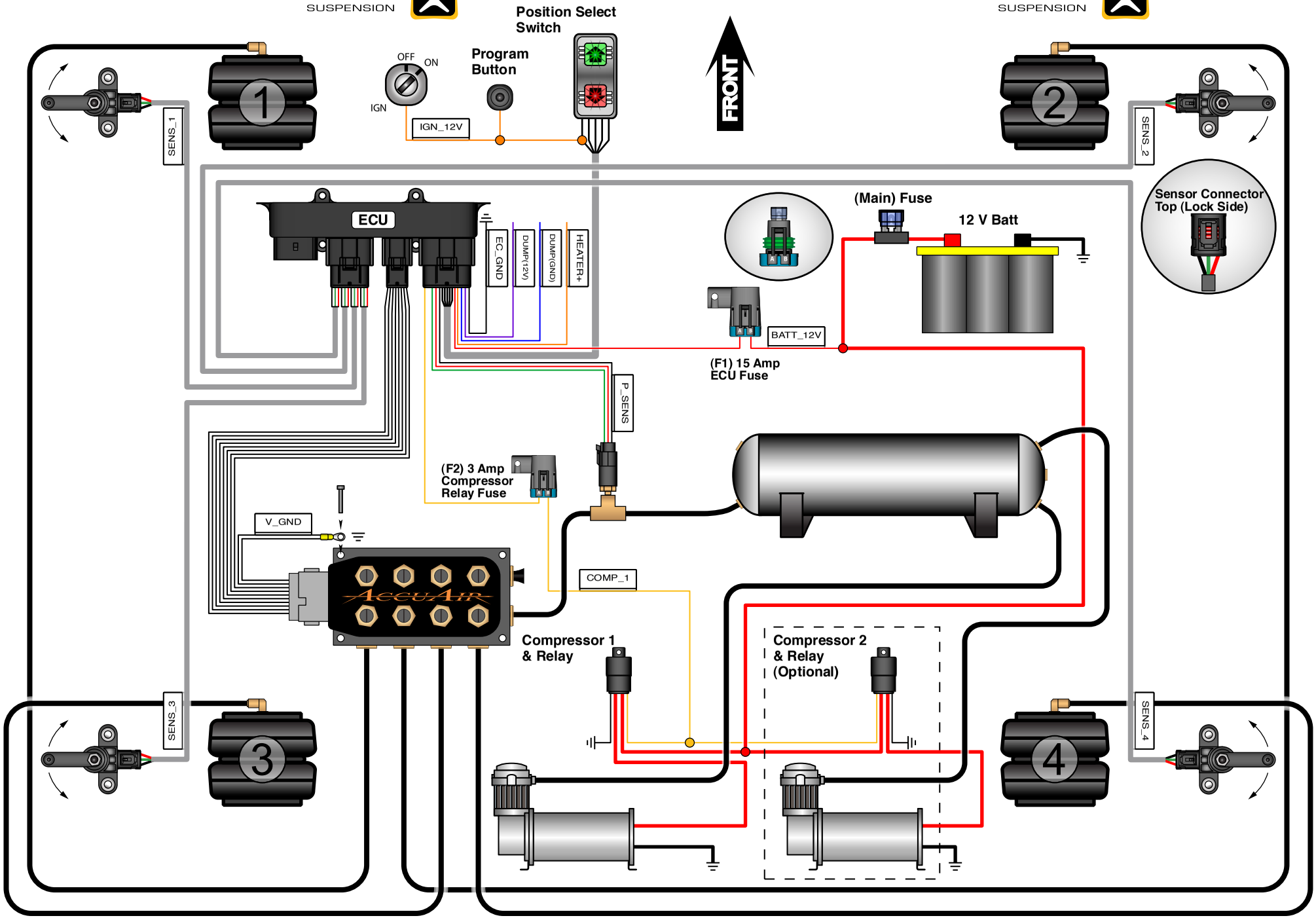

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ACCUAIR SUSPENSION

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