Operation Manual
ACCUAIR: Rocker Switch

Congratulations!

Thank you for purchasing the revolutionary e-Level™ system by AccuAir.

This system manages the height of up to 4 Air Springs 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 e-Level™ also manages your Air Compressor(s) to keep onboard air at an ideal pressure for your application.

To maximize functionality, the AccuAir e-Level™ 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.) ***Low/Cruise*** (Typically set at 10% of your total suspension travel).
3.) ***High/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

THE SYSTEM MUST BE CALIBRATED BEFORE USE
SEE PAGE 6.

ACCUAIR SUSPENSION™

Table Of Contents

Description	Page Number
Terms & Conditions	3
Service Disable & General Understanding	4
General Operation	5
Setup Programming	6-15
Operation Trouble Indication & Diagnosis	16-17
System Diagram	18-19

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.

⚠ **WARNING: No part of the vehicle should be able to contact the ground when all air is out of the air springs.**

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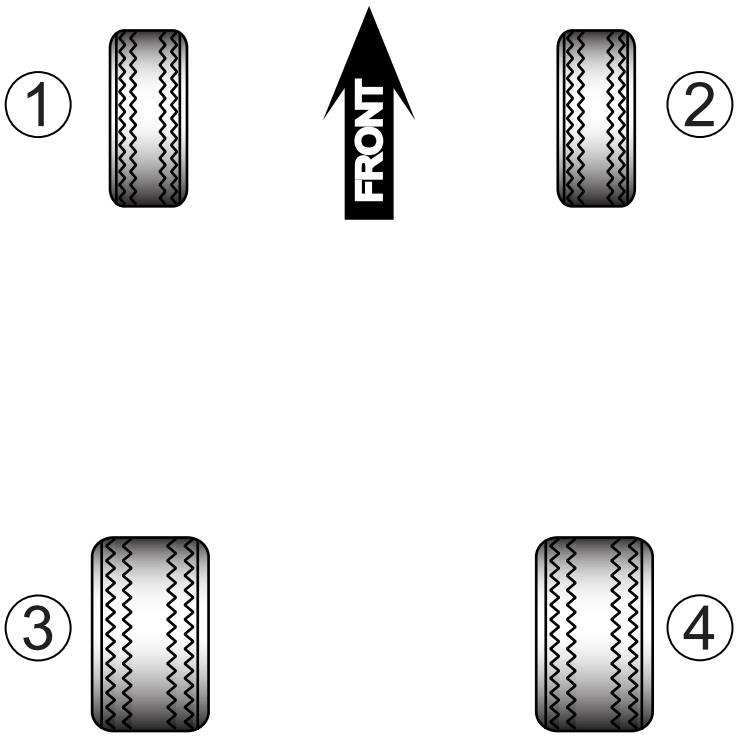
Service Disable:

⚠ **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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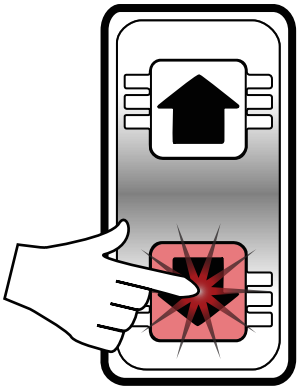
THE SYSTEM MUST BE CALIBRATED BEFORE USE SEE PAGE 6.

General Operation:

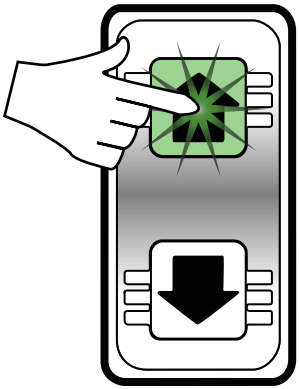


Dump/Kneel

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

Press the " ⬇ " Button momentarily.

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

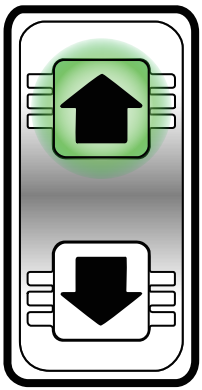


Raise/Extra Clearance:

While driving or parked, you may choose to ***Raise*** the Air Springs 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:

Automatic System Calibration: (Suggested)

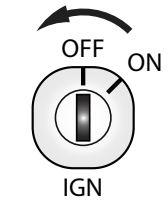
⚠ WARNING: Do NOT use this procedure for *KELDERMAN* Systems because suspension damage will occur. Use the procedure on the next page.

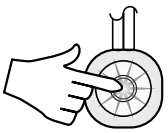
Before the system will operate, it must be calibrated to learn the vehicle characteristics. This process should be repeated if any air suspension components get changed or replaced in the future.

⚠ NOTE: Your system was shipped with the ***Tank Pressure Mode*** set at **150 PSI**. If you have High Pressure Compressor(s) you can change the ***Tank Pressure Mode*** to **175 PSI** or **200 PSI** using the Procedure on page 10, before calibrating below.

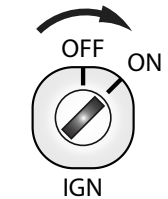
⚠ CAUTION: The system will automatically *Raise/Lower* the vehicle in the next procedure. Remove all obstructions and keep clear of vehicle before proceeding.

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.





Program Button



Automatic Calibration:

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

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).***

When calibration is complete the positions will be saved as follows:

- Position #1 = **10%** of total suspension travel.
- Position #2 = **50%** of total suspension travel.
- Position #3 = **90%** of total suspension travel.

To re-save these heights to your preference, see page 8.

Setup Programming:

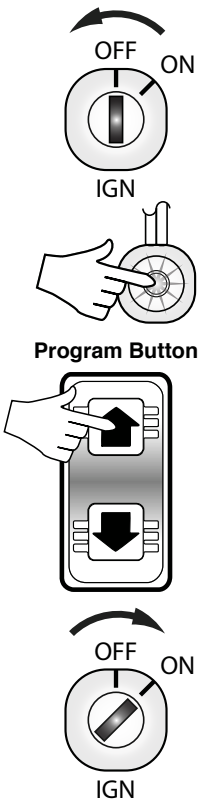
Manual Range System Calibration (Alternative to Automatic Calibration):

Maximum Height will be determined by you; instead of your mechanical suspension limits! This procedure should only be used on suspensions that are likely to over extend.

Your system must be calibrated to learn your vehicle's characteristics before the automatic leveling features can be used. This process should be repeated if any system components are changed or replaced in the future.

⚠ **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.



With the Ignition ON, use the ***Manual Raise/Lower*** on page 8 to adjust all four corners until each corner is at your preferred **MAXIMUM TRAVEL** and the vehicle is level from side to side.

Manual Calibration:
Turn the Ignition OFF. Then hold Program " ◎ " Button and the Up " ⌂ " Arrow while turning the Ignition ON.

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).***

When calibration is complete the positions will be saved as follows:
- Position #1 = **10%** of total suspension travel.
- Position #2 = **50%** of total suspension travel.
- Position #3 = **90%** of total suspension travel.

To re-save these heights to your preference, see page 8.

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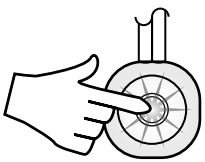
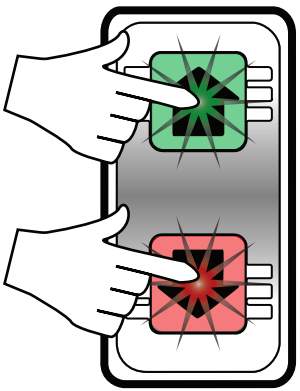
Setup Programming:

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 Spring 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 page 11.



Program Button



To Adjust Front Air Springs Together (1&2):
Press the Program " ◎ " 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 Springs.

To Adjust Rear Air Springs Together (3&4):
Press the Program " ◎ " 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 Springs.

To Adjust Air Spring # 1:
Press the Program " ◎ " 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 Spring # 1.

To Adjust Air Spring # 2:
Press the Program " ◎ " 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 Spring # 2.

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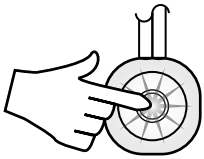
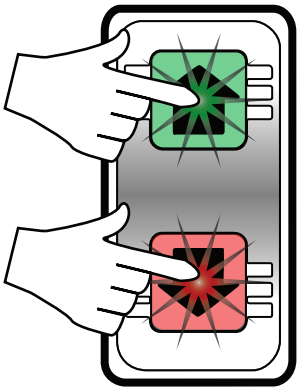
Setup Programming:



Program Button



Manually Raise/Lower, Cont.:

To Adjust Air Spring # 3:
Press the Program " ◎ " 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 Spring # 3.

To Adjust Air Spring # 4:
Press the Program " ◎ " 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 Spring # 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 Program " ◎ " Button *1-Time* within the 5 second window.

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Setup Programming:

Tank Pressure Mode:

Your system was shipped with the ***Tank Pressure Mode*** set at **150 PSI**. If you have High Pressure Compressor(s) you can change the ***Tank Pressure Mode*** to **175 PSI** or **200 PSI** using the following Procedure:

> ⚠ **NOTE:** ***The new Tank Pressure setting will NOT take affect until the system is RE-CALLIBRATED using the procedure on page 6 or 7.***

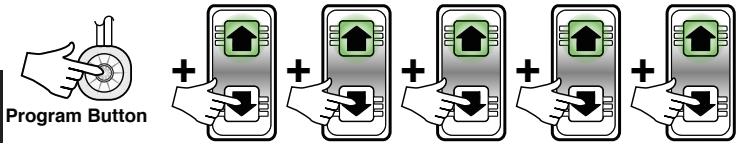
Changing Tank Pressure To 150 Mode: (Factory Setting)

Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▼ " Button *5-Times* to set the *Tank Pressure Mode* to *150 Mode*.

150 Mode:
- **110 psi ON / 150 psi OFF**

175 Mode:
- **135 psi ON / 175 psi OFF**

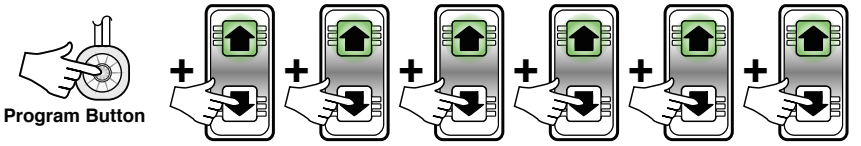
200 Mode:
- **160 psi ON / 200 psi OFF**



The " ▼ " Arrow will turn ***ON*** when in ***150 Mode***.

Changing Tank Pressure To 175 Mode:

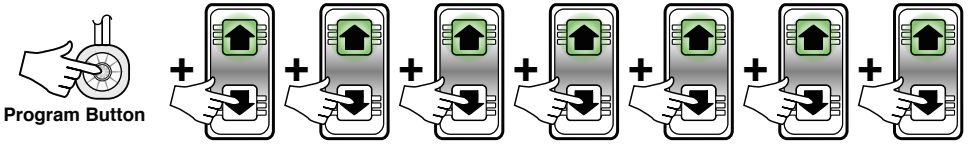
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▼ " Button *6-Times* to set the *Tank Pressure Mode* to *175 Mode.*



The " ▲ " and " ▼ " Arrows will turn ***ON*** when in ***175 Mode***.

Changing Tank Pressure To 200 Mode:

Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▼ " Button *7-Times* to set the *Tank Pressure Mode* to *200 Mode*.



The " ▲ " Arrow will turn ***ON*** when in ***200 Mode***.

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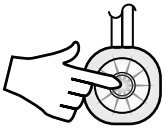
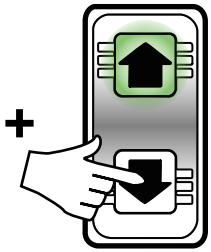
Setup Programming:

Saving A New Dump/Kneel Height:

Once you have manually adjusted each Air Springs to the height that you wish to save:
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▼ " Button *1-Time* to save a *New Dump/Kneel Height.*



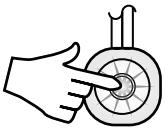
Program Button



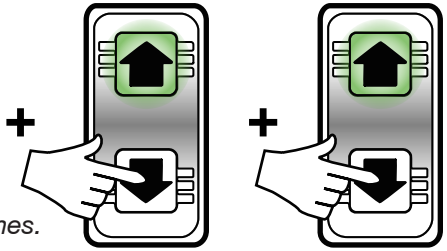
The " ▲ " Arrow will flash *1-Time.*

Saving A New Ride Height:

Once you have manually adjusted each Air Springs to the height that you wish to save:
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▼ " Button *2-Times* to save a *New Ride Height.*



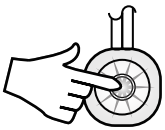
Program Button



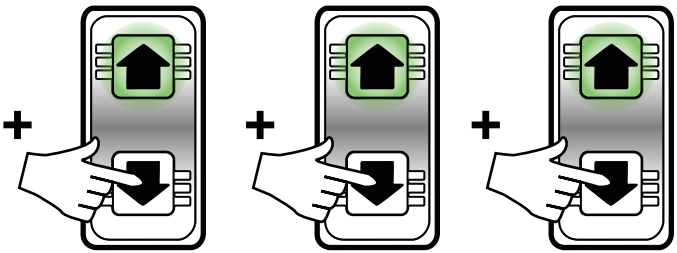
The " ▲ " Arrow will flash *2-Times.*

Saving A New Raise/Extra Clearance Height:

Once you have manually adjusted each Air Springs to the height that you wish to save:
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▼ " Button *3-Times* to save a *New Raise/Extra Clearance Height.*



Program Button



The " ▲ " Arrow will flash *3-Times.*

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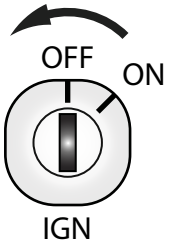
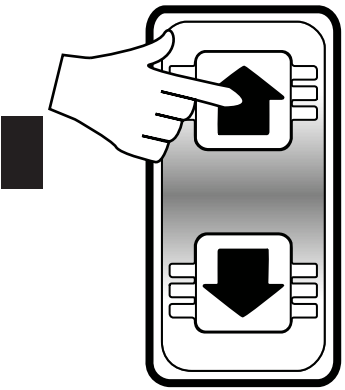
Setup Programming:



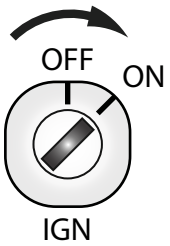
Turning Ride-Height-On-Start ON/OFF:

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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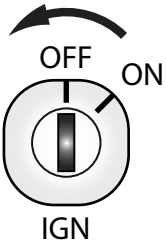
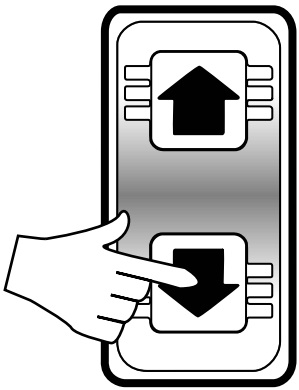
Setup Programming:

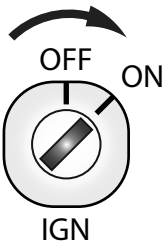


Turning RideMonitor™ Mode ON/OFF:

Your system was shipped with ***RideMonitor™ Mode*** enabled (ON). You may wish to disable (OFF) or re-enable (ON) this feature. When ***RideMonitor™ 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: ***RideMonitor™ 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 ***RideMonitor™ Mode*** OFF and contact the manufacturer for further assistance.



To Turn RideMonitor™ 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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Setup Programming:

RideMonitor™ Mode Accuracy Level:

RideMonitor™ Mode Accuracy Level will determine the acceptable variation from saved height for your vehicle (in other words, the distance away from saved height that it will not make a correction for). If you decide that you would prefer that the system was more or less accurate, you can use the procedure on the following page to either increase the accuracy by 8% (Level 3), or decrease the accuracy by 15% (Level 1).

⚠ **NOTE:** ***The only time that this setting should be changed is if you feel that the system is adjusting too often, or not often enough in it's factory setting (Level 2).***

1 = Lower Accuracy & Fewest Adjustments.
2 = Moderate Accuracy & Moderate Adjustments (Factory Setting).
3 = Higher Accuracy & Most Adjustments.

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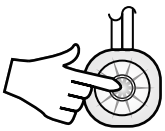
Setup Programming:

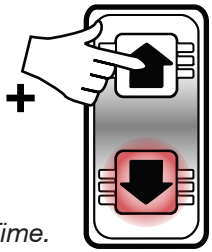
Adjusting Active Accuracy Level:

LEVEL 1 = Lower Accuracy & Fewest Adjustments:
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▲ " Button *1-Time* to set to *Active Level 1.*



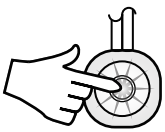
Program Button

The " ▼ " Arrow will flash *1-Time.*



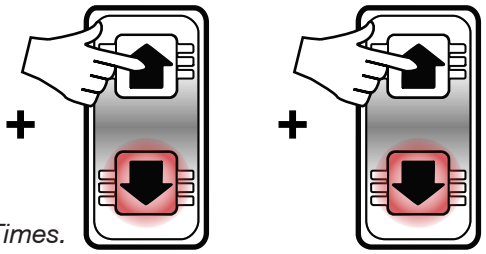
1 = Lower Accuracy & Fewest Adjustments.
2 = Moderate Accuracy & Moderate Adjustments.
3 = Higher Accuracy & Most Adjustments.

LEVEL 2 = Moderate Accuracy & Moderate Adjustments:
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▲ " Button *2-Times* to set to *Active Level 2.*

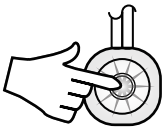


Program Button

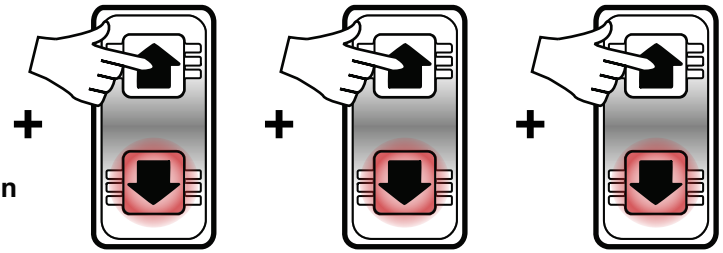
The " ▼ " Arrow will flash *2-Times.*



LEVEL 3 = Higher Accuracy & Most Adjustments:
Hold the Program " ◎ " Button for approximately 3 seconds until both the " ▲ " and " ▼ " Arrows flash; then Press the " ▲ " Button *3-Times* to set to *Active Level 3.*



Program Button



The " ▼ " Arrow will flash *3-Times.*

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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 Together ***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.

Low Voltage Warning		
Both Flash ***Alternating.***	System Voltage has dropped below 10.5V / compressor(s) have been shut OFF.	Start the vehicle to charge the battery. System will then resume normal operation.

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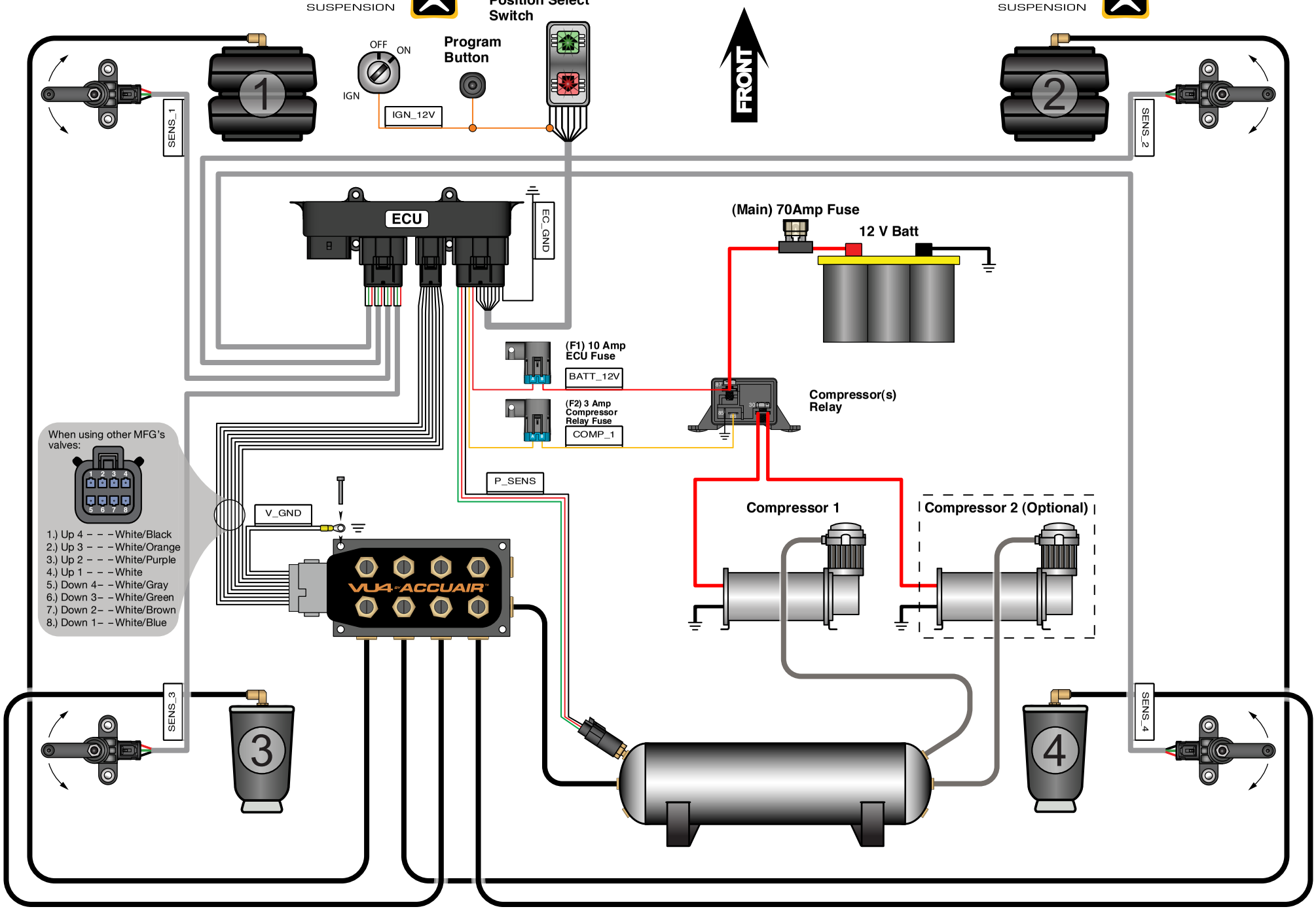

ACCUAIR SUSPENSION