

#### IMPORTANT: Read this guide carefully before installing. Please keep this guide for future reference.

Please read product manual on page 1 of the components list, if missing or damaged, please contact after-sales or local dealers.

## SYSTEM INSTALLATION AND PRECAUTIONS

# V8CU SOLENOID VALVE UNIT RC1/4 PORTS

(1) There are two groups of air passage [1] [2] [3] [4] on both sides of the valve, you can choose one of the groups to connect to the four shock absorbers as needed and seal the other group.



[1]—Front Left [2]—Front Right [3]—Rear Left [4]—Rear right

### I ΝΟΤΙCΕ

It is recommended to use supporting hexagonal plug with a small amount of Anaerobic Thread Sealant when sealed. If use PTFE thread seal tape, please make sure it cannot breathe inside the valve to block the air passage.

Valve thread are in British 1/4 tapered thread, the product supporting high pressure FKM short cone connector. The connector comes with FKM ring, do not need to seal, you can use 8mm nylon airline.

(2) The left and right sides of the valve with two connected air entrance[IN], please install the check valve in front of the entrance to prevent the pressure caused by the return of the air.



[IN] Air entrance



#### Please install the 1/4 BLACK MOISTURE FILTER between the compressor and the air tank.

The bottom of the tank is recommended to install the drain valve (The package does not contain the drain valve, the user needs to match).

(3) The valve is divided into front and rear independent air exhaust. The left side of the valve is the front air exit [F-EX], The right side is the rear air exit [R-EX].



[F-EX]—Front wheel exhaust [R-EX]—Rear exhaust



The system harness is divided into : ①MAIN HARNESS ②RIDE HEIGHT SENSOR HARNESS ③PRESSURE SENSOR HARNESS ④BLE TOUCHPAD USB CABLE ⑤ECU VALVE INTEGRATED HARNESS.



#### Installation steps are as follows:

(1) Remove the fuse from the main harness.



(2) The main harness is marked with a battery + tag as the main power cord, after the entire system wiring harness is finished, checking it to make sure installed correctly then connect to the battery positive.



(3) Connect the purple signal line marked IGN tag in the main harness to the IGN (ON) fuse. (Please carefully measure IGN and take power)



(4) Marked with the GND- tag is the ECU negative, please connect to the vehicle metal position or battery negative.



#### NOTICE

ECU negative need to be grounded separately, avoid grounding with other electronic equipment in the car.

(5) The compressor power cord is marked with COMPRESSOR1, COMPRESSOR2 label, respectively correspond to relays RELAY 1, RELAY 2; Fuses FUSE 1, FUSE 2; which are support two groups of compressors, please connect to the compressor positive. The compressor negative connected to the battery negative. If there is only one compressor, please wrap one of the unused compressor power lines around the insulation tape and remove the corresponding relay.



(6) Place the MicroUSB end of the Bluetooth harness to the center console and connected to the Bluetooth controller, the other end is connected to the ECU connector corresponding to the label interface PAD.



(7) The system provides four height sensor harnesses, of which two lengths of 7 meters. (Placed away from the remote side of the controller. If the system is installed in the rear case, it can be laid to the front wheel).
2 pieces of length 4 meters (placed closer to the controller from the end). Please connect the wiring harness to the corresponding label connector after the wiring harness is finished.



## 

# Marking both sides of the harness before finished laying out, to prevent confusion with the system interface connection causing the system to run abnormally.

(8) The 3P connector marked with the COMP tag is the control interface of IGN signal and the compressor. The 2P ECU connector marked with + - tab is ECU power connector. Please connect to the ECU harness corresponding to the label connector when finished laying out the harness.



(9) The system provides one pressure sensor harness, connect it to the pressure sensor interface PS when finished laying out the harness.



(10) ECU harness has been integrated in the valve, following the label to connect the connector after all the wiring harness is completed.

### 

- 1. Please ensure that all components are installed away from the heat source (exhaust pipe, engine, etc).
- 2. When laying lines and pipelines should be planned in advance of laying position, length and left margin.
- 3. All the sharp edges can lead to friction should be eliminated when through the bulkhead.

#### WARNINGS

- Making sure that all the fuses have been removed when laying out the line, install the fuse in the order of the compressor and ECU after the system is installed and the connector is fully connected.
- 2. Please do not privately change the line, if you can not confirm the problem, please contact aftersales or local dealers to get a solution.

Making sure that the components other than the height sensor are installed and the harness is connected. Installing the fuse in the order of the compressor and ECU. After installing the ECU fuse, the system starts to run.

### 

# No self-test after system start up, please follow the steps to complete the system debugging and then you can use all the functions of the system.

(1) After the system starts, please launch the engine, observe the Bluetooth controller, the backlight will flashing after 5 seconds. And then the compressor start working, the system has been started.



## 

The system does not connected to the height sensor, Bluetooth controller corresponding to the backlight will go out. The corresponding backlight will light up after connecting sensor.

(2) Open the MagicAir App, the system will search for available equipment. After finish searching the device, continue to press the upper right button on the Bluetooth controller, the controller pairing light starts to flash. After the device is connected successfully, the Bluetooth indicator light is always bright.



(3) Enter the setting of the pressure setting option, according to the vehicle weight and other parameters to set a reasonable pressure range value. And then can use the basic functions of the controller.

The installation of airline should try to avoid the high temperature parts of the body and the position may contact with other body parts will produce wear and tear. For example: engine, exhaust pipe, wheel.



## HEIGHT SENSOR INSTALLATION

#### 

Height sensor installation is the key link to ensure that the system is operating normally , need to be patient . The goal is try to use as much as swing range of sensors to maximize the adjustment accuracy.

#### SENSOR ORIENTATION

When installing sensors, please ensure that the sensor interface towards parallel to the ground.Do not put interface up . The following figure A, B, C are acceptable installation direction, D, E for the wrong installation direction. The F direction is not recommended.



I Allow the harness to maintain the proper bending radius to ensure proper drip loops.



#### THE SENSOR MAXIMUM SWING RANGE IS 120°



Please ensure that the suspension connection point swing travel is within the acceptable range before connecting the sensor rocker arm and the connecting arm. Any installation over sensor angle may damage the sensor or sensor rocker arm.



Green area for the sensor optimal swing range Red area for the sensor limited swing range Blue area for the sensor reached the standard swing range

#### SENSOR INSTALLATION POSITION

Height sensor rocker arm provides four holes to satisfy different suspension types. For the first time, if you can not determine the location of the hole, please measure the suspension swing firstly, then according to the sensor swing to select the right hole position.

Please ensure that the sensor rocker arm is left with a margin when using the lift. If you can't keep the margin, to continue the operation please disconnect the sensor rocker arm and the connecting arm.



#### SENSOR DEBUGGING

Accessing to the MagicAir APP, enter the "Height Adjustment" interface in the settings. In the case of guarantee adequate pressure, click on the front wheel up (the rear wheel as the same) button to determine whether the sensor readings are rising. If there is a set of numerical decline, indicating that the sensor has inverted. Simply click the switch button which on the side of corresponding reading can reverse sensor readings.

