



350 S. St. Charles St. Jasper, In. 47546

Ph. 812.482.2932 Fax 812.634.6632

[www.ridetech.com](http://www.ridetech.com)

**Part # 11050198**  
**58-64 Impala Level 1 Air Suspension Package**

**Front Components:**

- |   |          |   |
|---|----------|---|
| 1 | 11051099 | Front CoolRide Kit for Stock Lower Arms     |
| 1 | 11050501 | HQ Series Front Shock Kit w/ Bolt-on Mounts |

**Rear Components:**

- |   |          |  |
|---|----------|--|
| 1 | 11054099 | Rear CoolRide Kit for Stock Lower Arms |
| 1 | 11050701 | HQ Series Rear Shocks                  |

**Compressor System:**

- |   |          |   |
|---|----------|---|
| 1 | 30154100 | 5 gallon RidePro Compressor Kit (Analog Gauges) |
|---|----------|---|



350 S. St. Charles St. Jasper, In. 47546

Ph. 812.482.2932 Fax 812.634.6632

[www.ridetech.com](http://www.ridetech.com)

**Part # 11051099**

**58-64 Impala Front CoolRide Kit**

For Use with Stock Lower Arms

**Components:**

2	90006873	F6873- Firestone air spring (224c)
2	90000013	Upper air spring cup bracket
2	90000012	Lower air spring plate

**Hardware:**

2	99371001	3/8" x 3/4" USS bolt	Air spring to lower plate
4	99371003	3/8" x 1" USS bolt	Lower plate to control arm
10	99372002	3/8" USS Nylok nut	Air spring mounts
14	99373003	3/8" SAE flat washer	Air spring mounts
2	99373005	3/8" lock washer	Air spring to lower plate
2	99435002	7/16" x 8" studs (customer will cut off to 6 1/2 inches)	
2	99433002	7/16" USS flat washer	Upper cup to frame
2	99432001	7/16" USS Nylok nut	Upper cup to frame
2	99371011	3/8" x 6 1/2" USS bolt	Sway bar end link



## Installation Instructions

1. Raise and support car at a safe, comfortable working height. Let the front suspension hang freely
2. Remove coil spring and shock absorber. Refer to factory service manual for proper disassembly procedure.



3. Bolt the lower air spring plate to the lower arm. The two outer holes will align with the factory bump stop holes. The inner two holes must be drilled.

**Note:** The factory bump stop may be reused but is not needed. It is acceptable to allow the suspension to bottom out on the air spring.



4. Insert air fitting into air spring using tread sealant. Place the upper cup onto the studs on the air spring and tighten using two 3/8" nyloc and flat washers. Thread the 8" stud into nut in bottom of air spring cup.

5. Install air spring assembly into the coil spring pocket with the tall side of the bracket towards the wheel. With the stud protruding through the OEM shock hole secure the assembly with the supplied hardware. (The airline must also be routed at this time.)



6. Bolt the bottom of the Air Spring to the Lower plate, in the center hole, using a 3/8" x 3/4" Bolt, Lock washer and Flat washer.

7. To correct the sway bar alignment the endlink must be shorten to 2" tall. A 3/8" x 6 1/2" bolt is supplied.

8. Ride height on this air spring will occur around 5" tall.

9. Trimming the coil spring pocket is generally not necessary on this car. However, be sure to check air spring clearance through full suspension travel.



350 S. St. Charles St. Jasper, In. 47546

Ph. 812.482.2932 Fax 812.634.6632

[www.ridetech.com](http://www.ridetech.com)

**Part # 11050501**

**58-64 Impala HQ Series Front Shock Kit**

For Use w/ CoolRide

**Shock:**

2	22849999	HQ Smooth Body Shock Cartridge
2	70011138	3/4" ID Shock Bushing
2	90002103	5/8" ID Inner Sleeve

**Components:**

4	70011140	Stem Bushings
4	70011141	Stem Washers
1	90000483	Upper shock bracket
1	90000484	Upper shock bracket
2	90000471	Aluminum shock spacer
2	90001619	Shock stud

**Hardware:**

12	99373007	3/8" x 1" thread forming bolt	Upper shock mounts
4	99372006	3/8" - 24 Jam Nut	Upper Shock Stud

# COOLRiDE<sup>®</sup>

by Air Ride Technologies

## Installation Instructions



1. Position the upper shock mount on the frame so the hole in the bracket aligns with the hole in the side of the frame and the tab is against the bottom of the frame. You may have to trim some of the inner fender well for clearance. On manual shift cars you may have trim the bottom of the Z-bar clutch bracket on the driver's side.



2. Mark the hole in the bottom of the frame and drill with 5/16" bit. Use the 3/8" self-tapping bolts supplied and bolt the bracket to the frame. Mark and drill the remaining holes.

Picture shows alignment hole on side of frame.





**When using factory lower arms:**

3a. Drill a 1/2" hole in the lower control arm approximately 7 3/4" from the cross shaft bolt. Insert the shock stud through the lower shock eye and then place the aluminum spacer onto the stud. The step on the spacer will go into the arm. Slide the stud through the lower arm and secure w/ nut and washer.



**When using lower StrongArms:**

3b. Insert the shock stud through the lower shock eye and then place the aluminum spacer onto the stud. The step on the spacer will go into the arm. Slide the stud through the tab on the lower arm and secure w/ nut and washer.



350 S. St. Charles St. Jasper, In. 47546

Ph. 812.482.2932 Fax 812.634.6632

[www.ridetech.com](http://www.ridetech.com)

**Part # 11054099**  
**58-64 Impala Rear CoolRide Kit**  
For Use w/ Factory Lower Arms

**Components:**

2	90006873	Rear air spring
1	90000463	Driver side upper air spring bracket
1	90000464	Passenger side upper air spring bracket
2	90000465	Lower air spring bracket
2	90000472	1.5" O.D x 1.5" long aluminum bump stop spacer
2	90001082	Short bump stop

**Hardware:**

2	99435001	7/16" x 6" stud	Upper air spring bracket to frame
2	99433002	7/16" SAE flat washer	Upper air spring bracket to frame
2	99432001	7/16" USS Nylok nut	Upper air spring bracket to frame
4	99372002	3/8" USS Nylok nut	Upper air spring bracket
8	99373003	3/8" flat washer	Air spring mounting / Bump stop
2	99371003	3/8" x 1" USS bolt	Bump stop
2	99371001	3/8" x 3/4" USS bolt	Lower air spring bracket
4	99373005	3/8" lock washer	Lower air spring bracket / Bump stop
2	99311001	5/16" x 1" SAE bolt	Lower air spring bracket to arm
2	99312003	5/16" Nylok nut	Lower air spring bracket to arm
2	99313002	5/16" flat washer	Lower air spring bracket to arm



# COOLRiDE<sup>®</sup>

by Air Ride Technologies

## Installation Instructions

\*\*\*\*\*Must be used w/ RideTech shock kit\*\*\*\*\*

1. Raise and support vehicle at a safe and comfortable working height.
2. Support axle then remove coil spring, shock, and bump stop. Refer to service manual for proper disassembly procedure.



**3. Apply thread sealant to the air fitting and screw it into the top of the air spring.**

4. Place the upper cup bracket on top of the air spring and secure with two 3/8" Nylok nuts and flat washers.

5. Thread the 6" stud into the nut in the bottom of the cup.

6. Place the air spring assembly into the coil spring pocket with the tab on the side of the cup aligning with the factory bump stop mount.



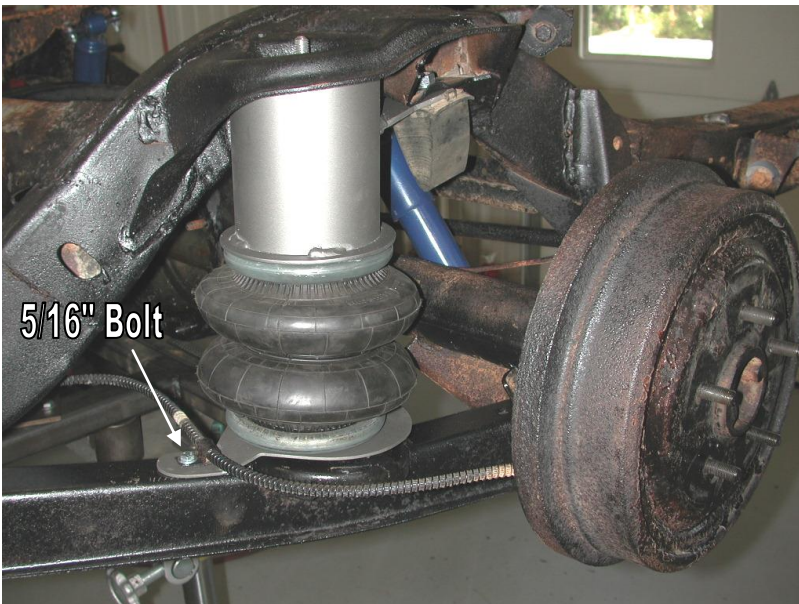
7. The stud should poke through the hole in the upper coil spring pocket. Some cars may not have this hole and it must be drilled. Fasten with a 7/16" Nylok nut and flat washer.

8. Fasten the aluminum bump stop spacer to the frame using a 3/8" x 1" bolt, flat washer and lock washer.

9. Screw the bump stop into the spacer.



10. Bolt the lower mount to the bottom of the air spring using a 3/8" x 3/4" bolt, lock washer and flat washer. Before tightening, make sure it aligns with the lower arm.



11. The hole in the tab on the lower mount will align with the parking brake cable clamp. It will be held tight with a 5/16" x 1" bolt, lock washer, and flat washer.

12. Make sure that the air spring cannot rub on anything at anytime. This will result in air spring failure and is a not a warrantable situation.

13. Ride height on this air spring is approximately 5" tall, but may vary to driver preference.



**Part # 11050709**  
**58-64 Chevy Impala Rear HQ Series Shock Kit**

**Shock:**

2	22989999	HQ Smooth Body Shock Cartridge
2	70011139	5/8" ID Shock Bushing
2	70011138	3/4" ID Shock Bushing
2	90002103	5/8" ID Shock Sleeve
2	90002068	Wide Trunnion

**Hardware:**

4	99311001	5/16" x 1" USS bolt	Shock to frame
4	99312003	5/16" USS Nylok nut	Shock to frame
8	99313002	5/16" SAE flat washer	Shocks to frame
2	99502002	1/2" SAE Nylok Nut	Shock to lower stud
2	99503001	1/2" SAE flat washer	Shock to lower stud



# ridetech

350 S. St. Charles St. Jasper, In. 47546

Ph. 812.482.2932 Fax 812.634.6632

[www.ridetech.com](http://www.ridetech.com)



1. Attach shock T-Bar to frame using 5/16" x 1" bolts, Nylok nuts and flat washers.



2. Attach the bottom of the shock to factory shock stud using the 1/2" Nylok nut & flat washer supplied.



350 S. St. Charles St. Jasper, In. 47546  
Ph. 812.482.2932 Fax 812.634.6632  
[www.ridetech.com](http://www.ridetech.com)

**Part # 30154100**  
**4100 Series RidePro 4 Way Compressor System**  
**5 Gallon Tank – Analog Gauges**

**Components:**

2	31920020	Thomas 319 Compressor
1	31194000	RidePro 4 Way analog control panel with rocker switches (Black Face)
1	31915100	5 gallon aluminum tank
1	31934001	RidePro 4 Way valve block
1	31980005	Pressure switch – 135 On / 150 Off

**Wiring & Hardware:**

2	90001924	Fuse holder
2	90001922	20 Amp fuse
2	31900036	Wiring harness - Control panel to valve
2	31900022	30 Amp relay w/ harness
6	99104001	10-24 x 1" phillips screw
6	99102002	10-24 Nylok nut
6	99103001	#10 SAE flat washer
3	90001916	#10 x 5/16 ring terminal
3	90001913	12-10 butt connector
2	90001918	Female spade connector

**Airline & Fittings:**

2	31940002	1/4" DOT airline - 30 ft. roll - valve block to gauges
2	31940000	1/8" DOT airline - 25 ft. roll - valve block to gauges
2	31952150	1/8" npt x 1/4" tube female straight - compressor
2	31957003	2" Brass Nipple - compressor
6	31954201	1/4" npt x 1/4" tube Elbow airline fitting
7	31954000	1/4" npt x 1/4" tube Straight airline fitting
4	31952000	1/8" npt x 1/8" tube Straight fitting - manifold to gauge fitting
3	31957004	1/4" npt plug - to plug unused supply port
1	31954400	1/4" airline tee fitting-compressors to check valve fitting

**THE CHECK VALVE SUPPLIED SCREWS INTO THE AIR TANK WITH AN AIR FITTING  
THREADING INTO IT. THE COMPRESSOR LINE WILL FEED INTO THE CHECK VALVE.**





350 S. St. Charles St. Jasper, In. 47546  
Ph. 812.482.2932 Fax 812.634.6632  
[www.ridetech.com](http://www.ridetech.com)

## **ARC4100 Compressor System Instructions**

These are some general guidelines to follow when installing your new RidePro air control system. Depending on the vehicle there are many different ways to plumb the system. Start out by planning a lay out of where you want everything to be mounted. Typically we try to keep the compressor, solenoids, tank, and sending units in a central location, but they can be separated to suit your needs.

### **Mounting the Compressor/ Pressure Switch**

- **Remove the negative battery cable before beginning installation.**
- All of our compressors are sealed for moisture and dust resistance so they can be mounted anywhere on the vehicle. Although it is best to mount it in a place out of direct contact with rain and snow. It is OK to mount it underneath the vehicle but keep it inside the frame rails away from water and debris thrown off the tire.
- This is a dry compressor; therefore it is maintenance free and can be mounted in any position.
- It is best if mounted to something solid to reduce vibration and noise. If mounting it to sheet metal or the bed of a truck, use sound deadening material between the compressor and the mounting surface.
- Use the rubber grommets supplied on the feet of the compressor to reduce vibration.
- Apply thread sealant to the pressure switch and screw into the tank.
- 20 amp fuses/holders are supplied and must be installed within 1 ft. of the battery.

### **Mounting the Air Tank**

- The air tank can be mounted anywhere on the vehicle in any position.
- A template is supplied to aid in drilling the holes. Check the template with the tank before drilling the holes.
- If your air system is used frequently you may want to remove the tank once a season to drain any excessive accumulation of water.

## Mounting the RidePro Air Valves

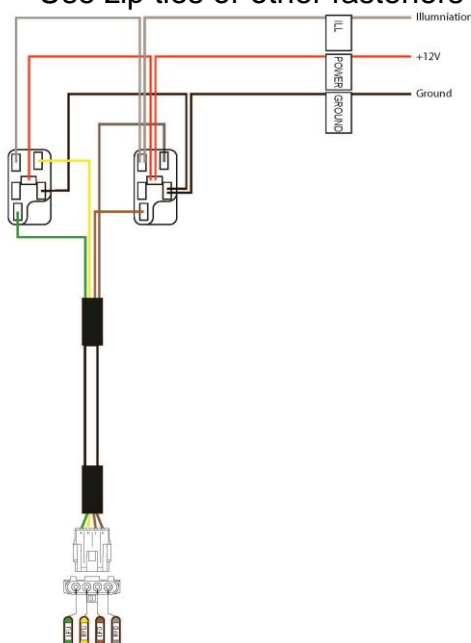
- The valves, like the compressor, are sealed and can be mounted in the same locations. Although if the vehicle will be exposed to freezing temperatures it is a good idea to mount them in the engine bay if possible to reduce the possibility of freezing.
- They can be mounted in any position.
- Mount the valves higher than the tank to avoid moisture build up. This could cause the air pressure sensors to give a faulty reading.
- Attach the ground strap to a good, clean ground (preferably the frame).
- The exhaust port will be left open.
- The valve is held closed with the pressure in the tank. If tank pressure drops below air spring pressure they will equalize deflating all 4 air springs.
- 

## Wiring Harness

- Red Wire- The red wire on the harness will connect to 12 volt switched.
- Gray Wire- This power for the light in the switch- this wire goes to the light circuit(dash lights) of the vehicle. This wire needs 12 volt when the lights are on or the key is on. The gauge light should be hooked to the same circuit as this wire.
- Black Wire- This wire is ground for the light in the switch. It goes to a good ground.

## Routing the Airline and Fittings

- Make all airline cuts with a razor or tubing cutter. It must be clean and straight or it will not seal.
- All fittings are DOT approved push-to-connect style. They are very simple to use and are reusable. Firmly push the airline into the fitting to attach. To release the airline pull the collar on the fitting back towards the fitting and pull the airline out.
- Use thread sealant on all fittings.
- Do not over tighten the fittings. This could result in breaking the fitting or damaging the air spring.
- All of our airlines are DOT approved so they are very strong. But keep them away from any sharp edges. Also when passing through a hole in the frame use a grommet.
- Keep away from intense heat including mufflers and exhaust manifolds.
- Use zip ties or other fasteners to secure the airline.



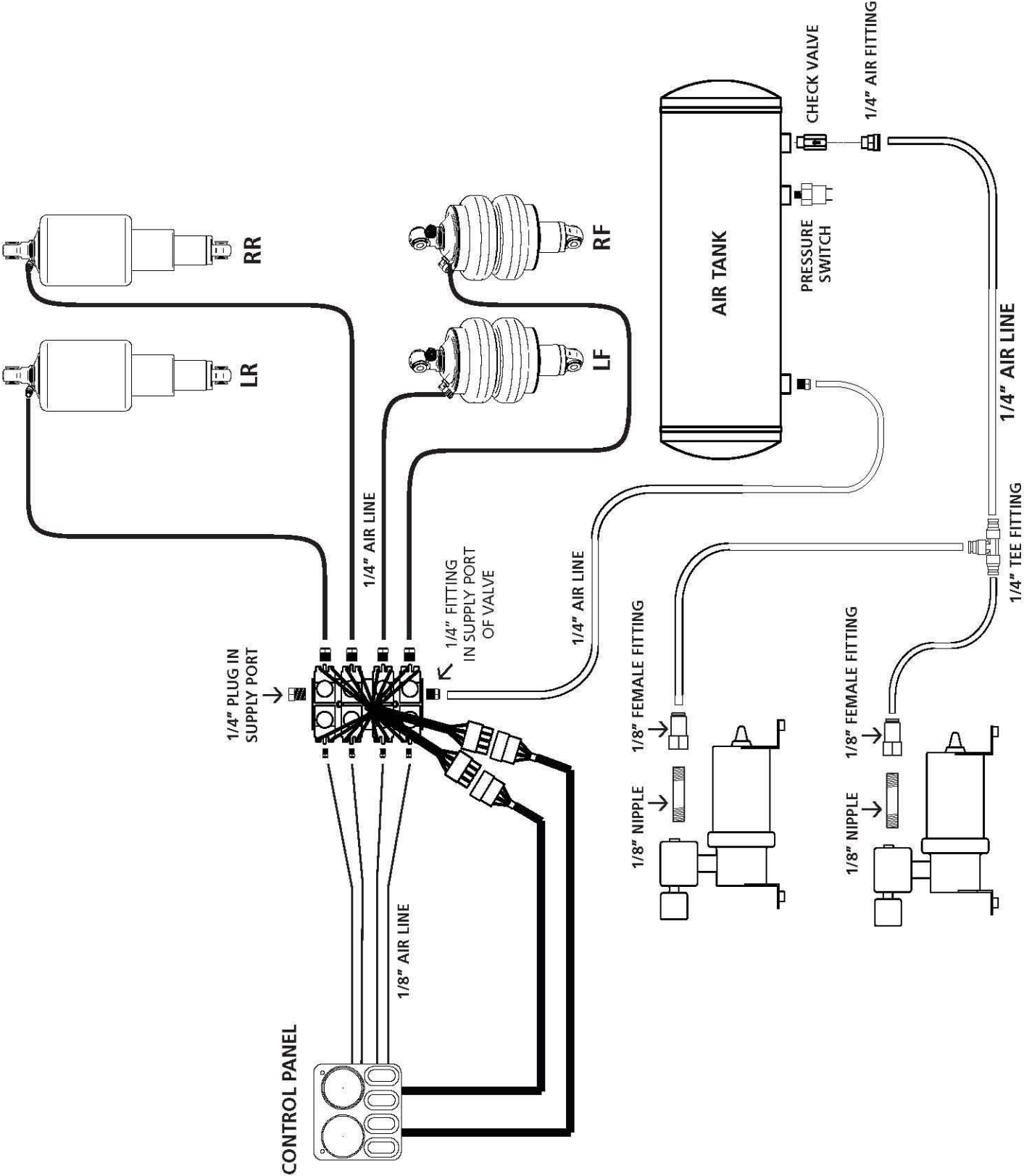
**Illumination (Gray)** - This wire provides power to the switch lights. It should be hooked up to a light circuit in the vehicle (dash lights) or it can be hooked up to a 12 volt switched source.

**+12V (Red)** - This wire is the main power for the valves. It should be hooked up to a 12 volt switched circuit. It needs 12 volt with the key on and should have no power with the key off.

**Ground (Black)** – This wire provides ground to the switch lights. It should be hooked up to a good ground source.

**Note:** The Illumination and Ground wires do not have to be hooked up for the switches to work. They do have to be hooked up for the lights in the switches to work.

Plumbing diagram



# Dual Compressor Wiring Diagram

