

# **ENDO-CVT**<sup>TM</sup>

***INSTRUCTION MANUAL***



## TERMS & CONDITIONS:

AccuAir Control Systems, L.L.C. is hereby referred to as ACCUAIR. The Purchaser, end-user, or installer is hereby referred to collectively as CUSTOMER. By purchasing and installing the ACCUAIR products, systems, or components to which this Installation Manual relates, CUSTOMER is deemed to agree with and accept the terms and conditions below.

### **2 Year Compressor Warranty**

ACCUAIR will repair or replace any defective products or components of the ENDO-CVT™ excluding the air compressor itself (see compressor warranty below) for the life of the vehicle on which they were originally installed, provided that the products or components were installed exactly as instructed herein, not modified or altered, and operated as expressly intended by ACCUAIR. ACCUAIR will repair or replace the air compressor if it is proven defective within a 2-YEAR time period from the date of purchase. Upon the return of a failed component(s) at CUSTOMER's expense, ACCUAIR will determine the cause of failure. If it is due to improper installation or misuse of the system, as determined by ACCUAIR, 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 defectively manufactured parts, then ACCUAIR will either repair or replace the failed components, at their own discretion and in a timely manner. There are no other warranties, express or implied, except as contained in this paragraph.

### **Repairs and Returns**

A Return Merchandise Authorization Number (RMA) is required for ALL shipments to ACCUAIR. 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 # \_\_\_\_\_**  
**831 Buckley Rd.**  
**San Luis Obispo, Ca, 93401**  
**USA**

### **Legal Disclaimer (IMPORTANT – PLEASE READ CAREFULLY)**

- ACCUAIR's products are intended and designed for off-road use. If a customer chooses to use ACCUAIR's products on a highway, CUSTOMER understands that they do so at their own risk.
- ACCUAIR's products must be installed by a qualified professional installation facility, as recommended by ACCUAIR.
- ACCUAIR's products may void or limit any manufacturer's warranty or service contract covering CUSTOMER's vehicle. ACCUAIR shall have no liability for any effect that installation of its products may have on such warranties or service contracts.
- ACCUAIR's products may drastically alter the performance characteristics of CUSTOMER's vehicle and may cause it to operate in a manner not intended by the vehicle's original manufacturer. System operation and installation is at the CUSTOMER's own risk.
- CUSTOMER is responsible for periodically inspecting any and all ACCUAIR products or components installed on CUSTOMER's vehicle, to ensure they remain safe and functional. ACCUAIR shall have no liability for any loss or injury caused by CUSTOMER's failure to inspect.
- ACCUAIR shall have no liability for damage to property or persons caused by its products, components, accessories, installation instructions, or otherwise. CUSTOMER alone assumes all such risks and liabilities.
- 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.
- ACCUAIR's liability, if any, shall be limited to the replacement cost of the purchased product or component.
- Any and all disputes between ACCUAIR and CUSTOMER relating to the purchase or installation of an ACCUAIR product or component must be resolved through final and binding arbitration, applying the laws of the State of California, and conducted pursuant to the California Arbitration Act (California Civil Code sections 1280, et seq.). Arbitration shall take place in San Luis Obispo, California, and CUSTOMER consents to personal jurisdiction in California.



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



# INSTALLATION AND OPERATING INSTRUCTIONS

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## WHAT TO EXPECT FROM ENDO-CVT™

**Congratulations** on purchasing the highly innovative ENDO-CVT™ (Compressor Valve Tank). Carefully follow these instructions to ensure years of safe and reliable operation of your ENDO-CVT system. CVT is unique in multiple ways from conventional air compressor systems and highlighted below are some of the distinctions to expect:

**POWER WIRING** - The ENDO-CVT™ comes with 4 ft (1.2 m) long ground cable and 7.5 ft (2.3 m) long power cable adequate for rear mounted battery scenarios. When extending the cable for front mounted batteries, AccuAir suggests using a 6 awg cable size for running up to an additional 20 feet (6 m). AccuAir sells a power extension harness if desired.



**WARNING:** Improper grounding of the ENDO-CVT™ ground cable can cause poor system performance and even potential damage to your ENDO-CVT™. If you are unsure how to achieve a proper ground, please contact AccuAir tech support at 877-247-3696.

**LOW VOLTAGE SHUTOFF** - The ENDO-CVT™ automatically monitors the supplied battery voltage. If the battery voltage reaches below 9.0 volts, the compressor will turn OFF until the battery voltage is increased to above 11.0 volts. The compressor pumps fastest while the vehicle is running and charging (13.8 volts or higher).

**PRESSURE RANGE** - The ENDO-CVT™ will begin pumping anytime the pressure is below 160 psi (11 BAR), the vehicle ignition switch is turned ON, and the compressor head temperature is below the maximum limit. After starting, the compressor will continue to pressurize the reservoir until 200 psi (13.6 BAR) (the status indicator will flash green more quickly as pressure builds) and then purge off between 5 and 30 psi depending on the current climate and humidity level and the condition of the internal desiccant air dryer.



**NOTE:** You may notice that the reservoir will drop pressure after it has gotten extremely hot and then cooled. This IS NOT an air leak, instead this is due to the Joseph Gay-Lussac Gas Law ( $P_1/T_1 = P_2/T_2$ ) ie compressed air loses pressure as it cools.

**HEAT** - It is normal for your entire ENDO-CVT™ to become warm or even hot to the touch as the reservoir acts as a massive heat sink for the compressor. AccuAir has built-in a compressor head temperature sensor and an automatic shut-off when the compressor head temp reaches 203F (95C) indicated by a slow red flash on the status indicator. If you reach the 95C shut-off while you are in a precarious situation and require a little more air immediately, you can cycle your ignition OFF then ON within a 30 second time period to force the compressor to run until 221F (105C) if required, indicated by a fast red flash on the status indicator.



**WARNING:** Your ENDO-CVT™ may become HOT to the touch after repeated operations.

**NOISE LEVEL** - AccuAir has gone to great extents to engineer the most quiet and vibration-free air compressor system on the market. Don't be surprised if your air compressor gets slightly more quiet after break-in and also be aware that it is common for the compressor to have a slightly different tone while it traverses the pressure range.



**WARNING:** For proper noise and vibration isolation, the ENDO-CVT™ must be mounted as shown on page 9 & 10 only. Side mounting is not recommended and will generate more noise.

**INLET FILTER** - AccuAir suggests routing the supplied inlet air line and filter just outside the vehicle to reduce noise in the drivers compartment. Keep in mind that the filter will often emit moisture during the purge cycle, so mounting it outside the vehicle and pointed toward the ground is suggested.



**WARNING:** Operating your ENDO-CVT™ without the supplied air filter may damage your compressor and void your warranty.



**NOTE:** Extending the length of your inlet air line is not suggested as it can affect the efficiency of the desiccant purge.



## ENDO-CVT™ INSTALLATION CHECKLIST

Read the entirety of this manual to familiarize yourself with what is involved for a successful installation. When you are ready to install your ENDO-CVT tank you can reference the checklist below for a step-by-step guide through the manual.

✓	Step #	Description	Page #
	1	Mount Tank	8,9,10
	2	Hookup air spring plumbing and plug unused ports on tank	4
	3	Connect Control harness to CVT and install CVT Adapter Module	5
	4	Connect Ignition Wire from Control harness to vehicle ignition source	5
	5	Connect Adapter Module valve harness connector to e-Level ECU	6
	6	Connect Adapter Module trigger wire (yellow) and pressure signal wire (green) to e-Level ECU	6
	7	Hookup Power harness	5
	8	Change Tank Pressure Setting on e-Level system	15
	9	Adjust Flow Controls if desired to make vehicle move up and down level front to rear	11,12
	10	Calibrate the e-Level system	

## AIR PRESSURE LIMITS / SYSTEM FEATURES

ENDO-CVT are DOT rated for **200 psi maximum pressure (13.6 bar)**. Failure to observe maximum rated pressure could result in tank rupture and consequent property damage or personal injury or death.

ENDO-CVT includes a Pressure Relief Valve (see Figure 1) set for 400 psi (27.2 bar). This opening pressure exceeds any normal operating pressure and is in place to protect against extreme conditions.

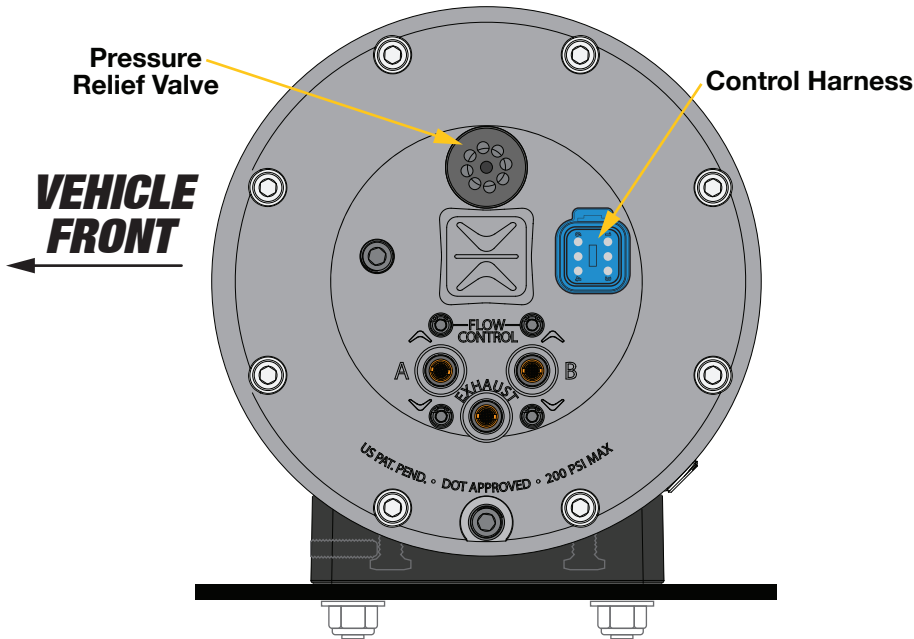
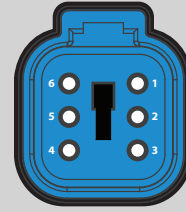


Figure 1: Standard Pressure Relief Valve and Control Harness Plug.



Control Plug	Description
1.) Red	COMM +12V
2.) Black	COMM Ground
3.) Orange	Ignition +12V
4.) Blue	Tandem CVT Wire
5.) White	COMM TX
6.) Green	COMM RX

**Tandem CVT's:** Connect multiple CVT's together with the Blue Wire through Terminal #4 on each tank.

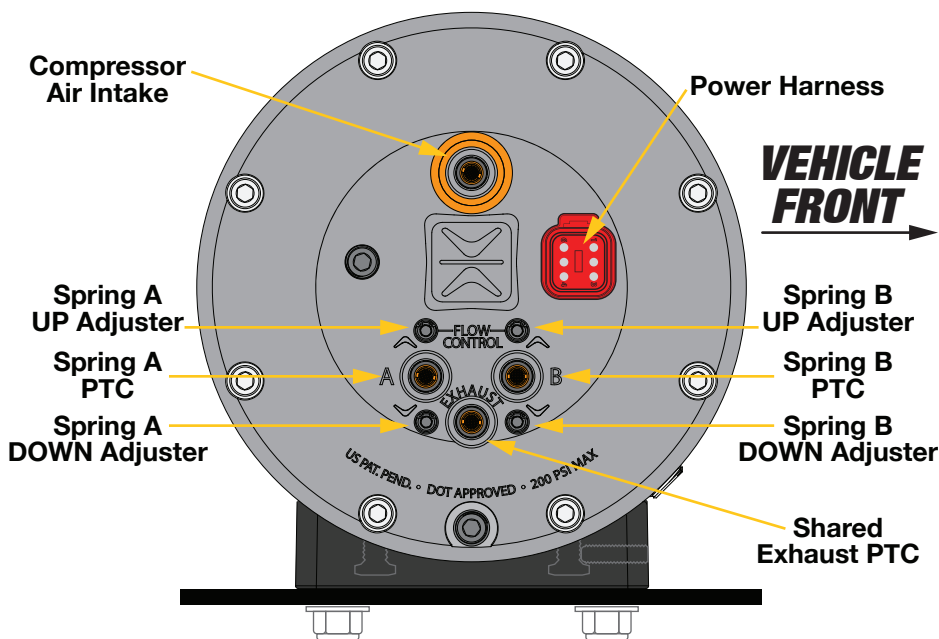
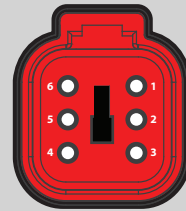


Figure 2: Compressor Air Intake, Power Harness Plug & PTC Fittings



Power Plug	Description
1.) Red	+12V Battery
2.) Red	+12V Battery
3.) Red	+12V Battery
4.) Black	Ground
5.) Black	Ground
6.) Black	Ground

# SPECIFICATIONS

## Physical Specifications

Product	Diameter	Length	Air Spring Ports
ENDO-CVT23	6.62in (168mm)	18.3in (465mm)	2
ENDO-CVT25	6.62in (168mm)	29.3in (745mm)	2
ENDO-CVT43	6.62in (168mm)	18.4in (468mm)	4
ENDO-CVT45	6.62in (168mm)	29.5in (750mm)	4

**Table 1:** ENDO-CVT physical specifications

## Torque Specifications

Fastener	Torque
Quick Release (QR) Pins	40 in-lbs (3.3 ft-lbs, 4.5 N-m)
Quick Release Base Mounting Bolts	120 in-lbs (10.0 ft-lbs, 13.5 N-m)
Quick Release Set Screw	40 in-lbs (3.3 ft-lbs, 4.5 N-m)
ENDO Cap Bolts	200 in-lbs (16.7 ft-lbs, 22.6 N-m)

**Table 2:** ENDO-CVT Fastener torque specifications

## Electrical Specifications

Component	Voltage Requirement	Amperage Requirement	QUIESCENT CURRENT	Ingress Protection
CVT	9-16V 0-20V (Withstand)	35.0 AMPS (Typical) 50.0 AMPS (Max)	0.075 A (first 24 hours) 0.008 A (after 24 hours)	IP67

**Table 3:** Electrical specifications for the ENDO-CVT product line

# ENDO-CVT PTC FITTINGS

- Basic operation
  - Air line installation – Cut the end of the air line as square as possible with a sharp blade or air line cutting tool. Make sure the cut end is free from burrs. Insert the end of the air line into the PTC fitting until it “bottoms out.” Pull firmly to test the connection. If the air line pulls out, re-insert and then pull the PTC collet outward from the face of the ENDO-CVT cap. Pull firmly on the air line to test the connection.
  - Air line removal – Press the PTC collet back toward the face of the ENDO-CVT cap and hold it there while pulling firmly on the air line.
- Pro-Tip:** Use a 3/8" open-end wrench to hold the collet back while you pull to remove the air line.
- Acceptable size and types of air line:
  - Plastic - 3/8" O.D. US DOT approved plastic air brake tubing
  - Aluminum - 3/8" O.D., 1/4" I.D. tubing

**WARNING:** Stainless steel tubing will not be retained by the PTC fitting and will disconnect under pressure. **Do not use stainless tubing with the ENDO-CVT.**

# INSTALLING NPT PLUGS

- Identify the NPT plugs necessary for your application from the selection provided with your ENDO-CVT product.
- Apply the thread sealant (Loctite 565 or equivalent) provided with your ENDO product to the NPT fitting prior to installation.
- Thread the plug into the hole until it is “finger tight” then tighten between 0.5 and 1.5 full turns.
- Wait until the 565 is cured before pressurizing your system.

**NOTE:** If using the AccuAir supplied NPT plugs, these should assemble flush with the tank surface. Other plugs will install differently. Do not over tighten as this can cause damage to the tank or NPT fitting.

**NOTE:** At this point, patience should be exercised as the liquid thread sealant needs time to cure. Applying air pressure to the tank may disturb the curing process resulting in leaks. Read the directions on the thread sealant package and wait the recommended cure time.

**Pro-Tip:** Remove excess Loctite 565 with a Q-tip dipped in brake-clean or other solvent.

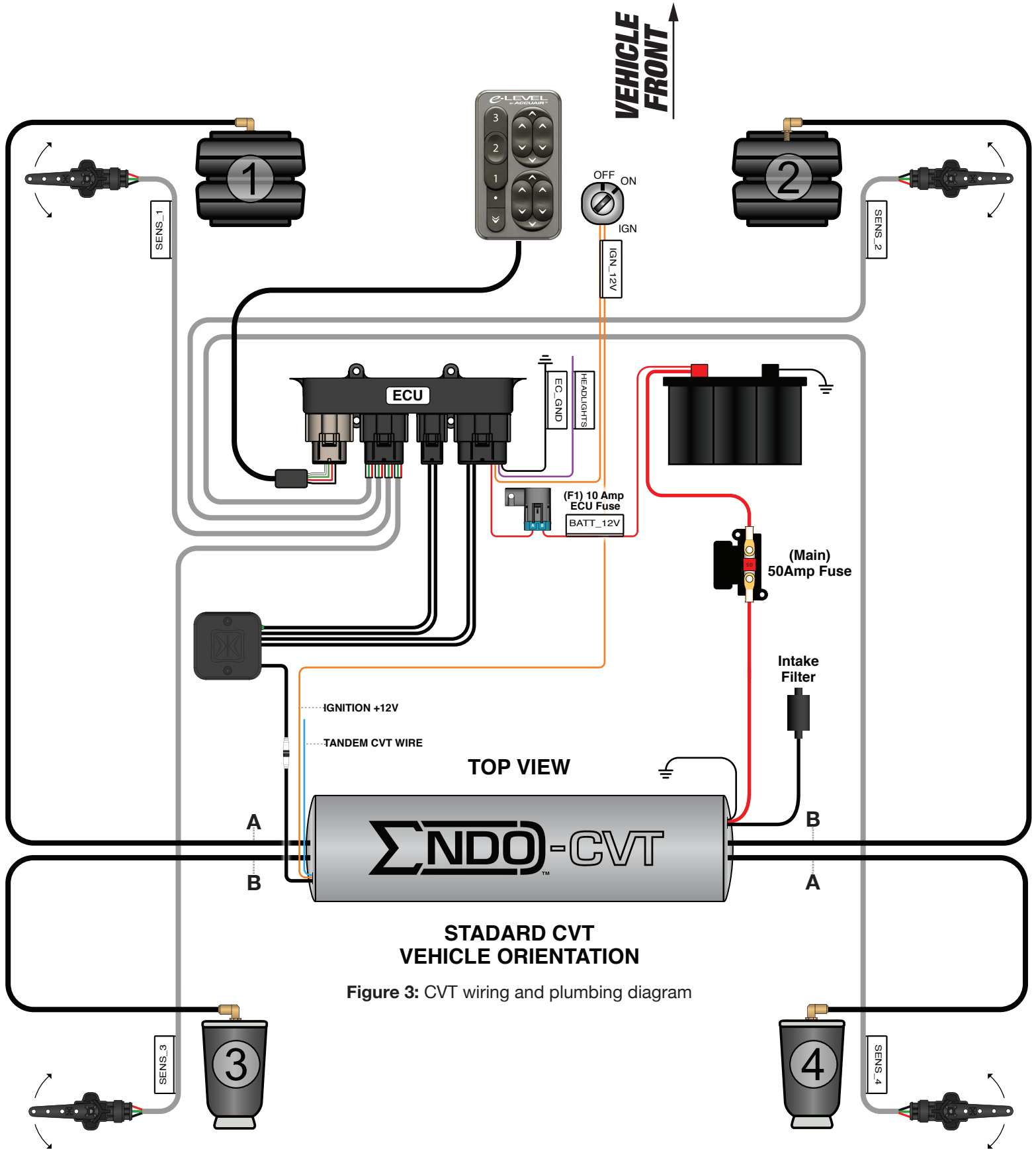
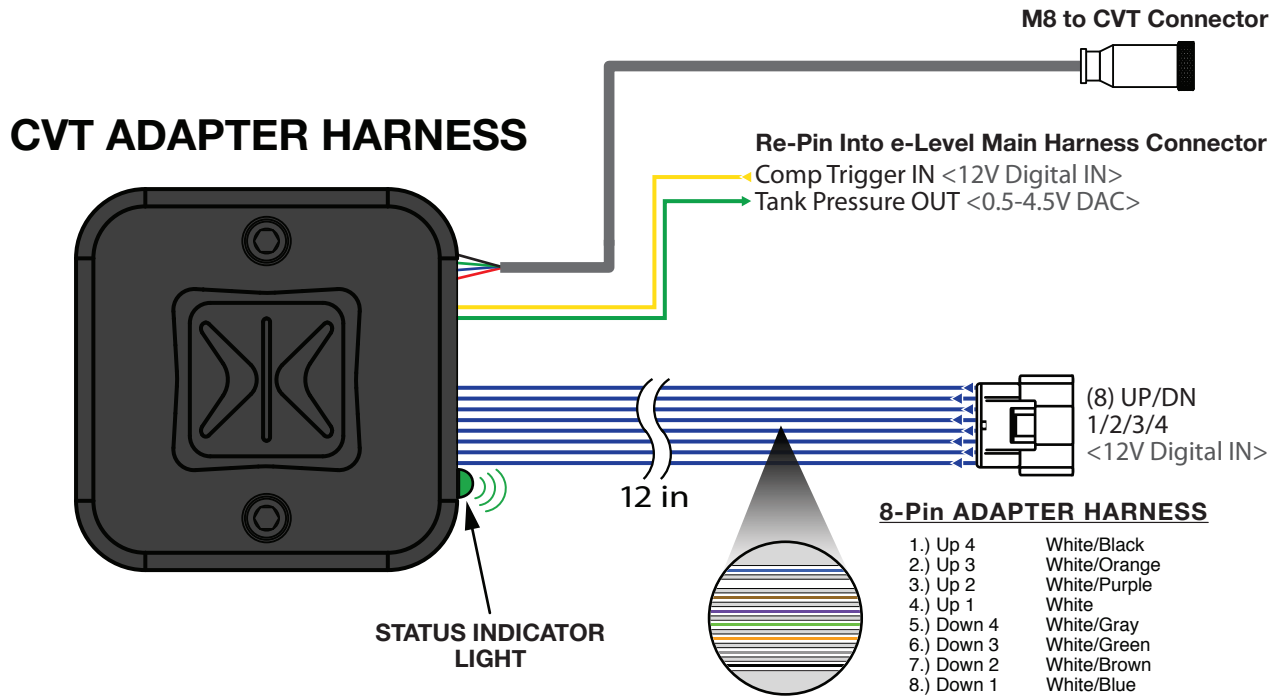


Figure 3: CVT wiring and plumbing diagram



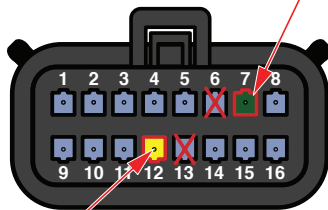


**Figure 4:** CVT Adapter harness

**NOTE:** This harness can be re-oriented for non standard CVT vehicle orientations.

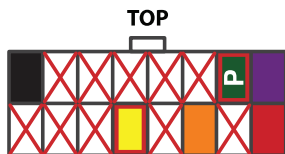
### RE-PINNING E-LEVEL MAIN HARNESS CONNECTOR

Replace with Tank Pressure OUT Adapter Harness Green Wire



Replace with Comp Trigger IN Adapter Harness Yellow Wire

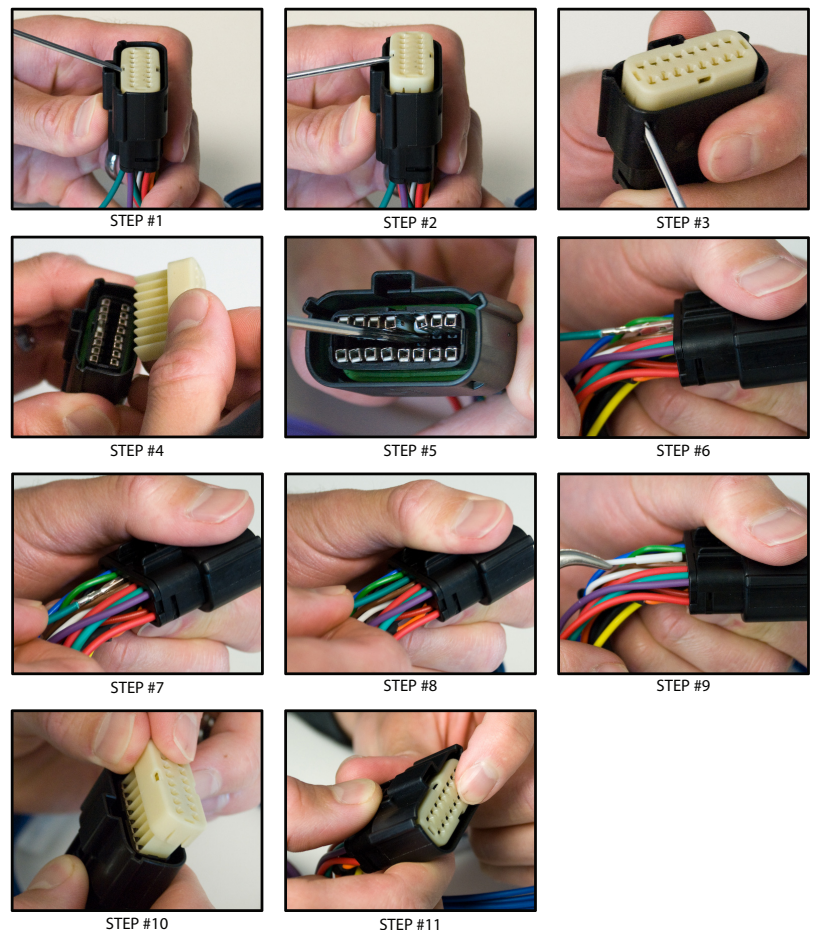
**X** Plug Terminals #6 and #13



T_W	T= Terminal	W= Wire
1_Black	to Eye-Let	EC_GND
2_		
3_		
4_		
5_		
6_Red	(P-SENS) PLUG	
7_Green	(Tank Pressure)	
8_Purple	HEADLIGHTS	
9_		
10_		
11_		
12_Yellow	to COMP Trigger IN	
13_Black	(P-SENS) PLUG	
14_Orange	IGN_12V	
15_		
16_Red	to 10 Amp Fuse	

**Figure 5:** Re-pinning e-Level™ main harness connector

### REMOVING & REPLACING AN MX150 WIRE



**Figure 6:** Removing & replacing an MX150 wire

## ENDO-CVT System Diagnostics

System Status Indicator	Action	Reset Procedure	LED Blink Sequence
Ready	None	N/A	
Standby	Compressor OFF	Turn Ignition On	
Compressor Running	None	When compressor turns OFF	
Tank Pressure sensor disconnected	Compressor OFF	When a normal tank pressure reading IS detected	
Battery Over Voltage	None	Bring Battery voltage BELOW 15 V	
Battery Over Maximum Voltage	System Off	Bring Battery voltage BELOW 15 V	
Battery Under Voltage	STOP Compressor	Bring Battery voltage ABOVE 11 V	
Compressor Line Voltage error	None	Difference in battery and motor voltage comes back below threshold when compressor is restarted.	
Compressor Over current / Stall Error	Hard Start Procedure	Compressor successfully started	
Compressor Head Temp 95°C	STOP Compressor unless forced with IGN cycle	Temperature goes below 85°C	
Compressor Head Temp 105°C	STOP Compressor	Temperature goes below 95°C	
Valve Under current	None	Valve current returns to normal in subsequent valve operation	
Valve Over current	None	Valve current returns to normal in subsequent valve operation	
Head temp communication error	None	Head temperature sensor begins to respond to commands	
RHT communication error	None	RHT Sensor begins responding to commands	
No response to ping	None	A command or ping receives appropriate response	
Data String too long for specified length	None	Message re-sent with correct string Length	
Data String too short for specified length	None	Message re-sent with correct string Length	
Incomplete data	None	Message re-sent with correct string Length	

**Table 4:** ENDO-CVT™ System Diagnostics chart

## USING THE QR MOUNT

1. Install the QR Mounts to your vehicle using the hardware and specifications included on your mounting template.
2. Align the QR mounting pins with the holes in QR mounts and insert them until the tank body is in full contact with the QR mounts.
3. Rotate the tank body on its long axis such that the QR mounting pins move away from the set screw. Continue rotation until the pins snap into place.
4. Install the set screw and tighten until it is flush with the front surface of the mounting base and torque to **40 in-lbs** (3.3 ft-lbs, 4.5 N-m).



**NOTE:** The threaded insert for the mounting base set screw has been designed with an anti-vibration feature similar to a nylon insert lock nut. There will be resistance to rotation prior to contact between the set screw and the QR mounting pins.

**Pro-Tip:** If the QR mounts seem tight, and won't "click" into final position, the set screws may be used to push the mounting pins into position.

**GRAVITY** ↓

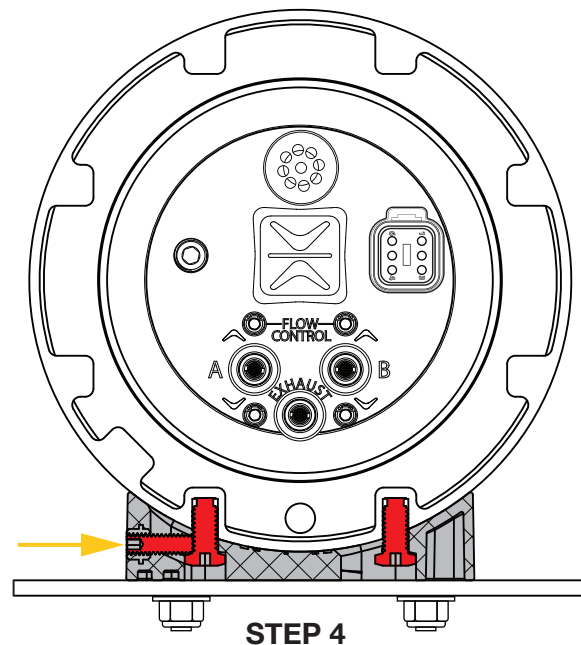
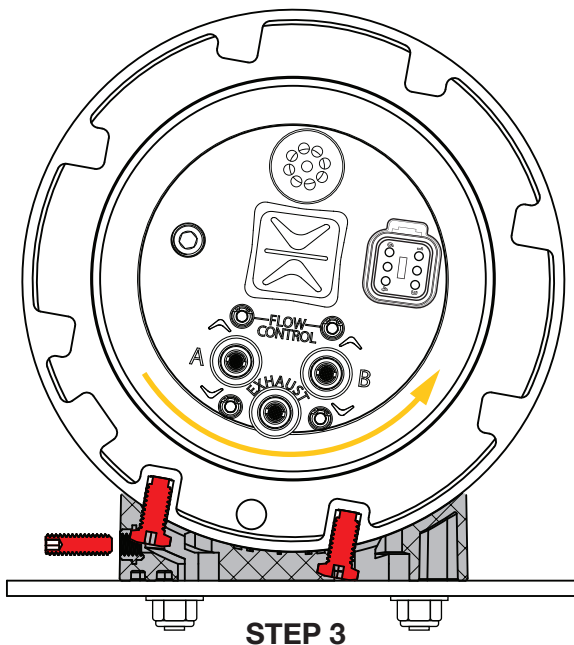
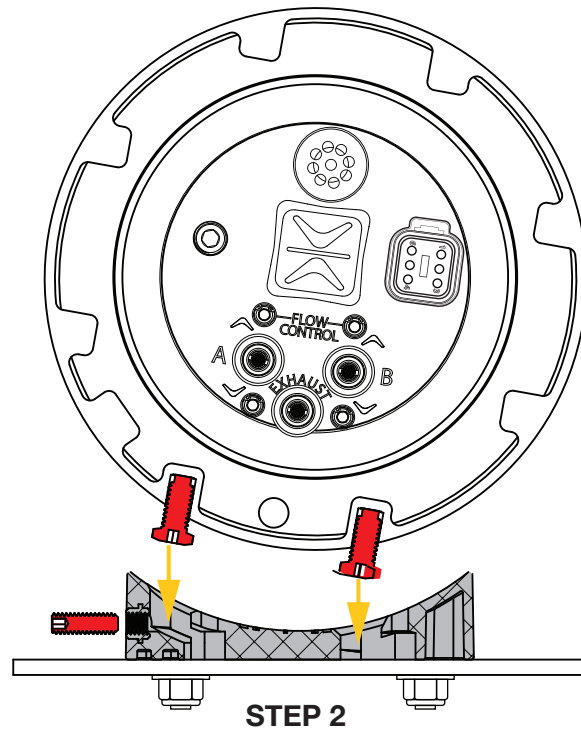
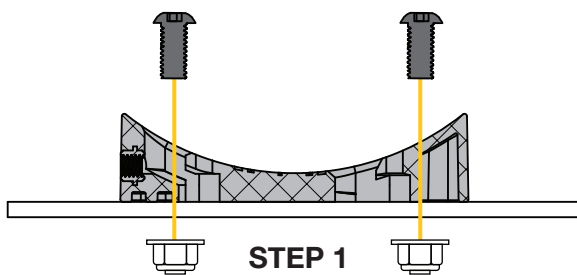
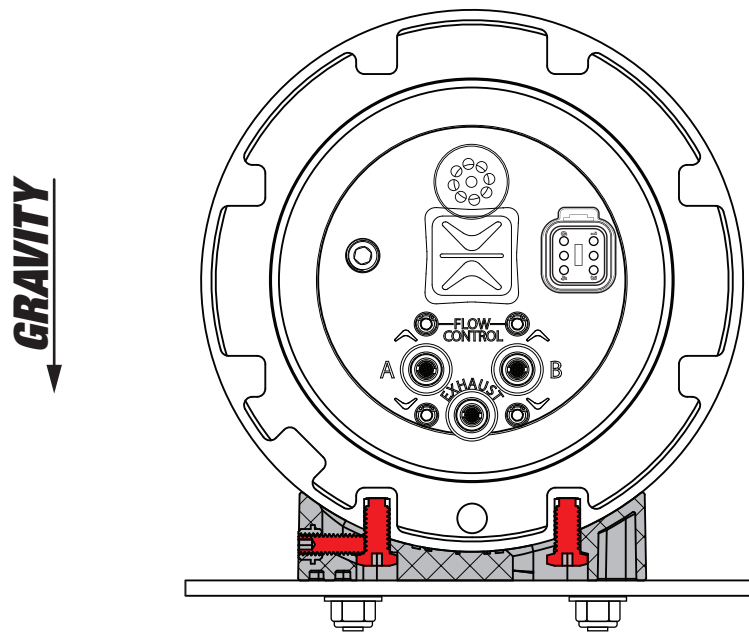


Figure 7: Four step QR operation procedure

## VEHICLE STANDARD MOUNTING

- Your ENDO Tank system has been designed to use AccuAir's unique Quick Release (QR) mounting system. The QR mounts are installed on the tank at the factory and will need to be removed prior to installation.
- The mounting template, included in the shipping carton of your ENDO system, has complete details on mounting your tank to your vehicle. Accurate location of the QR mounts is critical for a successful installation. **Read all steps** before starting your installation.

### STANDARD MOUNTING:



**Figure 8:** Standard mounting

- The QR mounting system has been designed to attach the ENDO Tank securely to a flat surface. Minor variations can be handled with shims of appropriate thickness. If your intended mounting location is significantly uneven, AccuAir strongly recommends mounting the QR bases to a suitable plate that is then installed on the vehicle.
- AccuAir recommends mounting the QR mounting bases with the included 5/16"-18 screws or 1/4"-20 self-tapping screws at **120 in-lbs** (10 ft-lbs, 13.6 N-m) torque. Use care when tightening these fasteners as over-torquing can cause the QR bases to distort.

**Pro-Tip:** On first installation of the tank, tighten the bolts between the QR mounting bases and the vehicle until they are just snug. Install the tank into its final position and let the mounts adapt, then remove the tank again to torque the bolts.



**NOTE:** The QR mounting "pins" have been pre-installed in the tank body with a thread locker. If removed, then upon re-installation apply a thread locker (Loctite 262 or equivalent) to the threads and torque to **40 in-lbs** (3.3 ft-lbs, 4.5 N-m). Significantly over-torquing these fasteners may cause damage to the tank or the fasteners.

## VEHICLE SIDE MOUNTING

### SIDE MOUNTING:

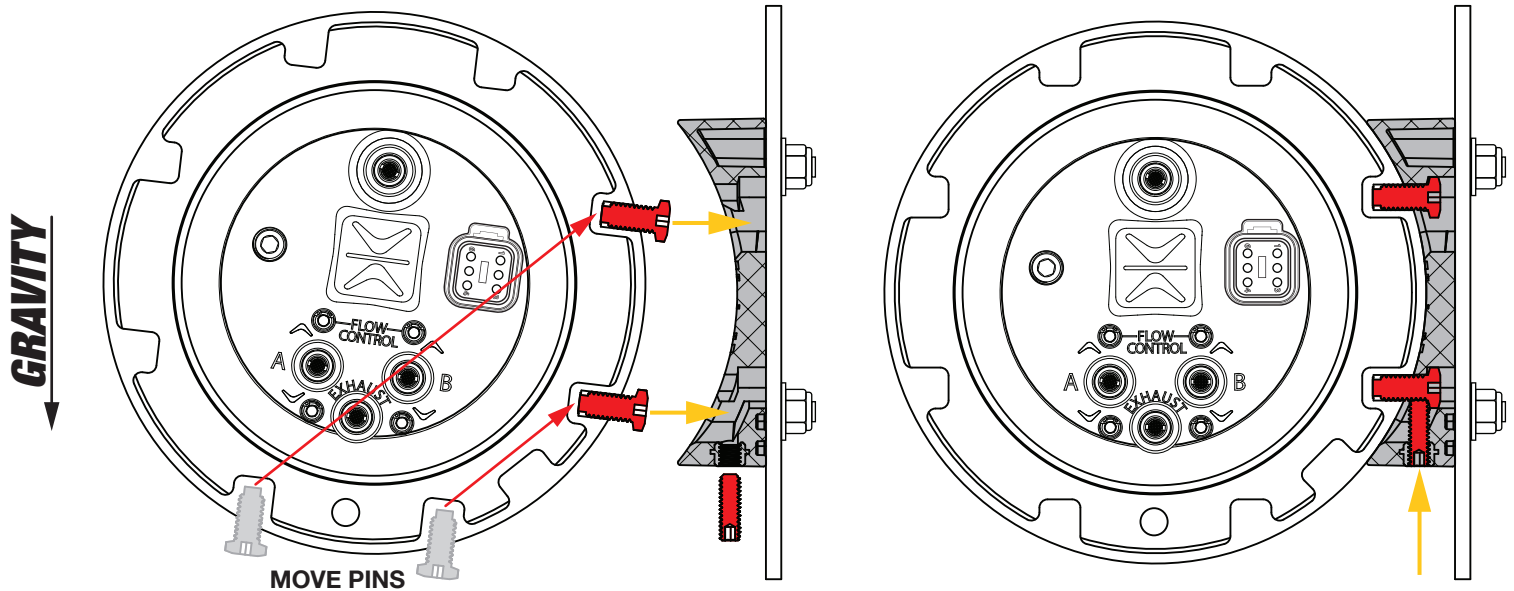


Figure 9: Side mounting

- For Side Mounting, the QR pins can be moved to what is usually the back of the tank.



**NOTE:** The QR mounting “pins” have been pre-installed in the tank body with a thread locker. If removed, then upon re-installation apply a thread locker (Loctite 262 or equivalent) to the threads and torque to **40 in-lbs** (3.3 ft-lbs, 4.5 N-m). Significantly over-torquing these fasteners may cause damage to the tank or the fasteners.

## ENDO-CVT FLOW ADJUSTMENT

The AccuAir ENDO-CVT end caps have flow adjustment screws to control the rate of airflow between the air springs and the solenoid valves. These allow speed adjustment of each corner of the car independently, both up and down, so you can adjust the front and rear to lift and lower at the same speed.

Each air spring port on an ENDO-CVT tank cap has adjuster screws for inlet and exhaust above and below (respectively) the push-to-connect fitting (see Figure 2). Each screw has 10 turns of adjustment from fully open (top) to fully closed (bottom). Adjustment is nearly linear for most of the range. For example, starting 2 turns from the bottom and backing out the adjuster 2 turns (4 turns total) will almost double the flow.

The ENDO-CVT has been shipped from the factory with all of the flow control screws set to maximum speed (top). You can choose to slow down the speed of a desired air spring in a desired direction by turning the screw clockwise toward the bottom. Match the number of turns for the paired air spring and direction (i.e., 2 turns in for the left rear “UP” should be matched at 2 turns in for the right rear “UP”).

**NOTE:** The e-Level system will need to be **RE-CALIBRATED** after flow adjustment is completed.

### ENDO-CVT FLOW ADJUSTMENT

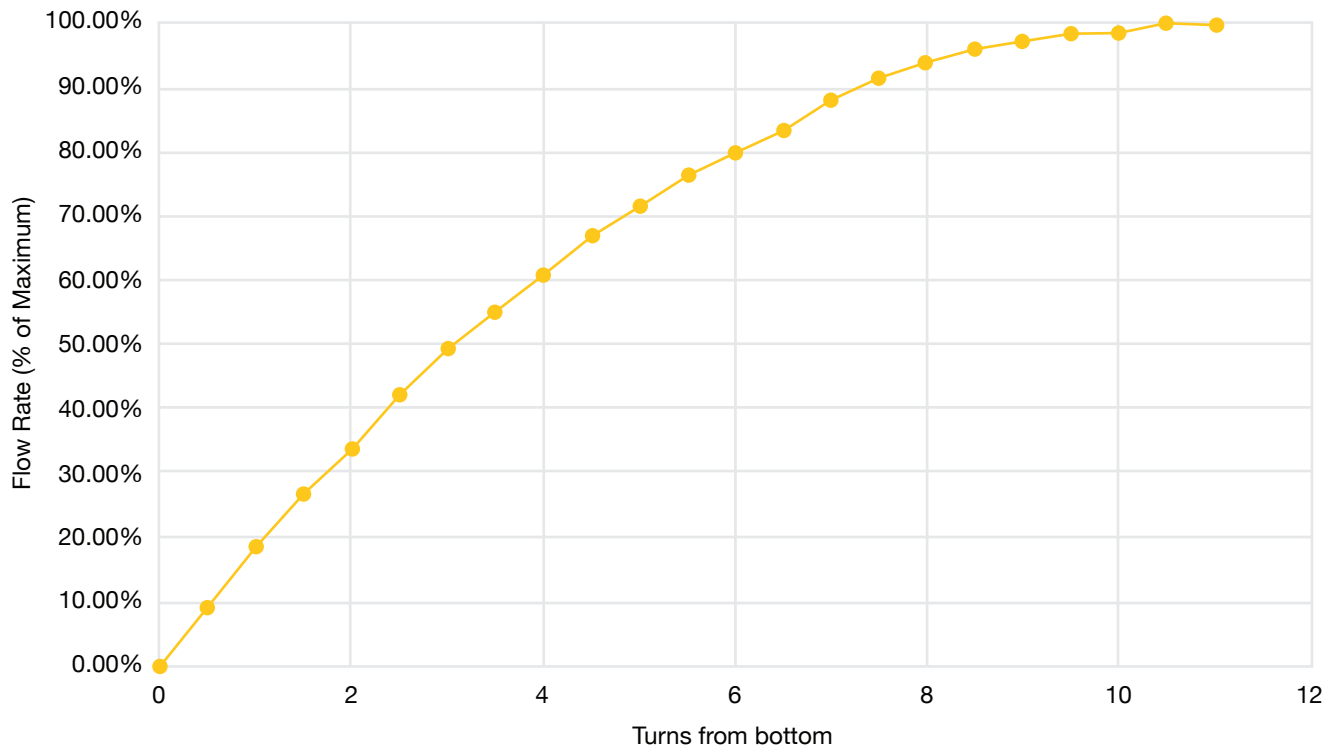


Figure 10: ENDO-CVT flow adjustment behavior

**Pro-Tip:** The light end of the vehicle (usually the rear) will naturally lift faster and lower slower than the heavy end (usually the front). Use this multi-step process to make the front and rear of your vehicle adjust level at all times.

1. Start with all of the flow control screws set to maximum speed (top).
2. Starting with the vehicle at lowest height, find the fast LIFTING end of your vehicle by pressing all four UP buttons at the same time to LIFT the vehicle. The fast end will reach the top of the travel first.
3. Slow the UP flow controls for the fast end of the vehicle by turning the flow control screws clockwise for the right and left equally (start with one turn and go to half turns as you get closer to matching the speed).
4. Repeat steps 2-3 until the front and rear of your vehicle lift at the exact same speed.
5. Starting with the vehicle at highest height, find the fast LOWERING end of your vehicle by pressing all four DOWN buttons at the same time to LOWER the vehicle. The fast end will reach the bottom of the travel first.
6. Slow the DOWN flow controls for the fast end of the vehicle by turning the flow control screws clockwise for the right and left equally (start with one turn and go to half turns as you get closer to matching the speed).
7. Repeat steps 5-6 until the front and rear of your vehicle lift at the exact same speed.
8. **If you are using an AccuAir e-Level system, make sure to recalibrate the e-Level system after you have finished adjusting your flow control screws.**



**WARNING:** Do not remove the adjuster screws with the system under pressure. Removing an adjuster screw will release the air from the associated air spring. The screws are retained by a small circlip in order to prevent accidental removal.



**NOTE:** Fully tightening an adjuster screw will disable that functionality for that air spring. For example, fully tightening the UP adjuster on “Spring A” will prevent any additional air from getting to that spring no matter the state of the solenoid valve.

## ENDO-CVT PTC SERVICE INSTRUCTIONS

Your ENDO-CVT tank has been fully assembled and tested by AccuAir. In many circumstances, it will never be necessary to service your Push To Connect fitting components. Some potential reasons for servicing your PTC fittings may include:

- A leaky fitting as the result of a damaged O-ring. The O-ring can get damaged by a burr on either soft or hard line. In this case you may choose NOT to remove the Filter Screen and Tube Stem if it is not clogged.
- A clogged filter screen as the result of too much debris present in your air springs or plumbing. In this case, you may choose to re-use the original O-ring if it is not leaking.

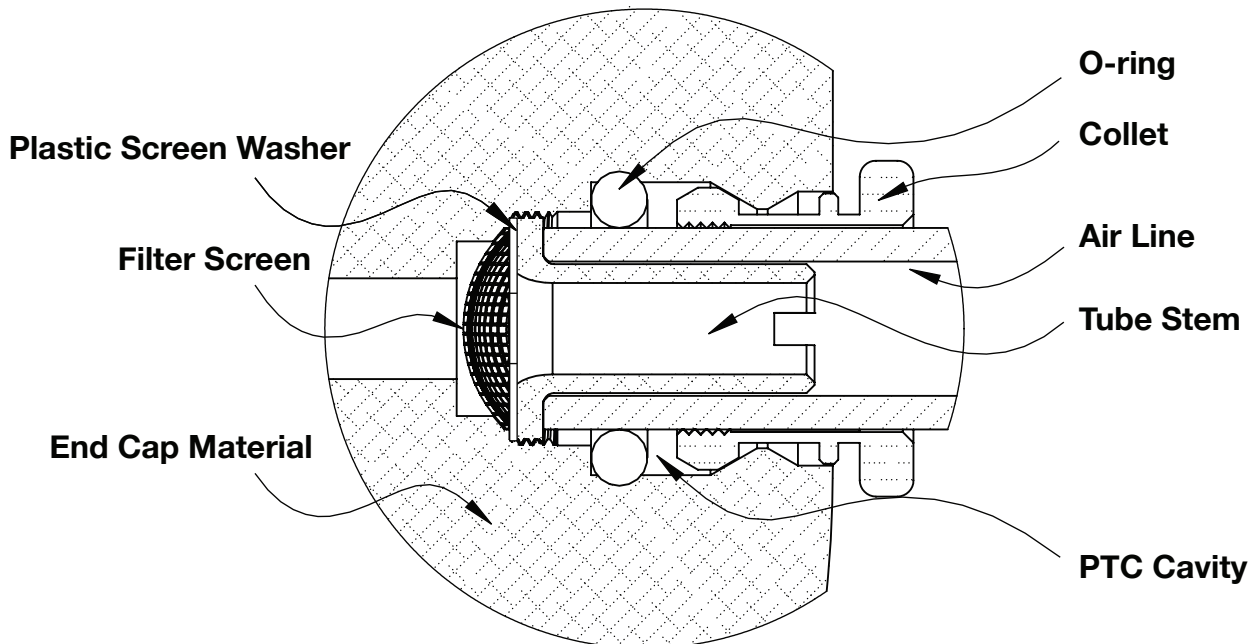


Figure 11: PTC diagram

### REMOVAL STEPS:

1. Remove the air line from the PTC fitting (Push the Collet in with a 3/8" open end wrench and pull the air line out).
2. Remove the PTC Collet from the PTC Cavity by inserting a towel covered flat head screw driver between the cap and the Collet and gently prying from side to side.
3. Use a flat head screwdriver to loosen the gold Tube Stem (CCW to remove).
4. Pull on the tube stem to bring the o-ring to the top of the PTC Cavity and hook it with a pick to remove it from the PTC Cavity.
5. Remove the gold Tube Stem from the PTC Cavity.
6. Use a pick tool to hook and remove the plastic Screen Washer from the PTC Cavity.
7. Use a pick tool to hook and remove the PTC Filter Screen.

### ASSEMBLY STEPS:

1. Remove the contents of your ENDO PTC Service Kit (Part No. AA-ENDO-PTC-SVC).
2. Gently install the new Filter Screen with a soft faced tool with the DOME oriented as shown above.
3. Install the plastic Screen Washer on top of the Filter Screen.
4. Use a flat head screwdriver to install the gold Tube Stem hand tight (CW to install).  
**(DO NOT CROSS THREAD OR OVER TORQUE THE TUBE STEM).**
5. Install the O-ring into the PTC Cavity and make sure that it lays flat.
6. Push the Collet back into the PTC Cavity.



## REMOVING THE END CAPS

Your ENDO tank has been fully assembled and tested by AccuAir. In many circumstances, it will never be necessary to remove the end caps for the life of the product. Some potential reasons for removing the end caps may include:

- If you choose to custom finish your ENDO tank, you may wish to disassemble it beforehand.
- Removal for cleaning the inlet filters or the inside of the ENDO tank.



**WARNING: Fasteners and O-rings are not reusable.** Purchase an ENDO Tank Rebuild Kit (Part No. AA-ENDO-TANK-SVC) prior to disassembly. Full instructions for cap removal and drawings for optional cap removal tools are included with the Tank Rebuild Kit. The processes described there will minimize the chance for damage to structural elements and surface finishes.



**WARNING:** Do not insert screwdrivers or any other prying tool into the gap between the tank body and end cap. Damage to both parts will result and it will fail to separate the cap from the body.

### REMOVAL STEPS:

1. Remove your ENDO tank from the vehicle and place it on a work bench.
2. Loosen the end cap bolts on only one end cap by only **3 full turns each**.
3. Lightly pressurize your ENDO tank using shop air until the cap seal disengages from the center body of the ENDO tank.
4. Let the air pressure escape fully.
5. Remove the end cap bolts entirely.
6. Remove the first cap.
7. Remove the bolts entirely from the second end cap.
8. Use a long stick to gently tap the end cap from the center body, (use caution not to damage any of the wires or components on the inside of a CVT end cap).

### ASSEMBLY STEPS:

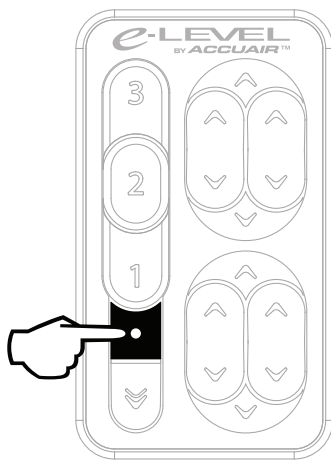
1. Remove the contents of your ENDO Tank Rebuild Kit (Part No. AA-ENDO-TANK-SVC).
2. Add an O-ring lubricant like Vaseline to the main O-ring that seals the end cap to the center body. Install the O-ring onto the end cap.
3. Use two new bolts on each end cap to properly align the end cap to the center body.
4. Lightly tap the end cap from side to side until it is fully seated in the center body.
5. Make sure that all of your new bolts included in the ENDO Tank Rebuild Kit have the yellow O-rings installed under each head.
6. Install all of the bolts hand tight.
7. Successively torque all of the end cap bolts in a star pattern up to **200 in-lbs (16.7 ft-lbs, 22.6 N-m)**.



**WARNING: Failure to properly torque your end cap bolts may result in tank failure and/or personal injury.**


## E-LEVEL TANK PRESSURE MODE




Your e-Level system was shipped with the Tank Pressure Mode set at 150 PSI. ENDO-CVT requires you to change the e-Level Tank Pressure Mode to 200 PSI using the following procedure.

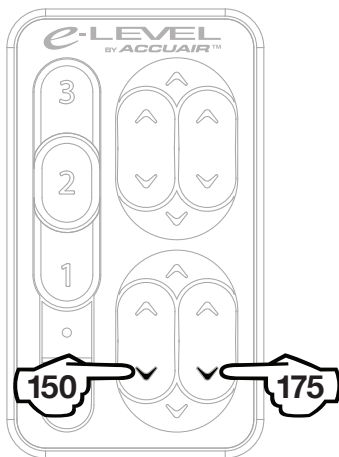


**NOTE:** The new Tank Pressure setting will **NOT** take affect until the system is **RE-CALLIBRATED**.

### To Change The Tank Pressure Mode:

With the Ignition ON, press the Program “” Button.

Next press the #3 DOWN “” Button to set Tank Pressure Mode to 150 PSI, the #4 DOWN “” Button once to set the Tank Pressure Mode to 175 PSI and the #4 DOWN “” Button again to set the Tank Pressure Mode to 200 PSI.



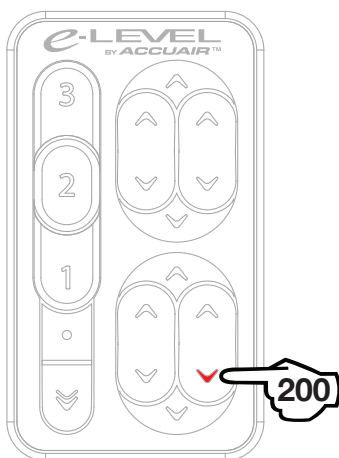
When the #3 DOWN “” Arrow is White:  
Tank Pressure Mode is at 150 PSI.

When the #3 DOWN “” Arrow and the #4 DOWN “” Arrow are alternating ON & OFF:  
Tank Pressure Mode is at 175 PSI.

When the #4 DOWN “” Arrow is Red:  
Tank Pressure Mode is at 200 PSI.

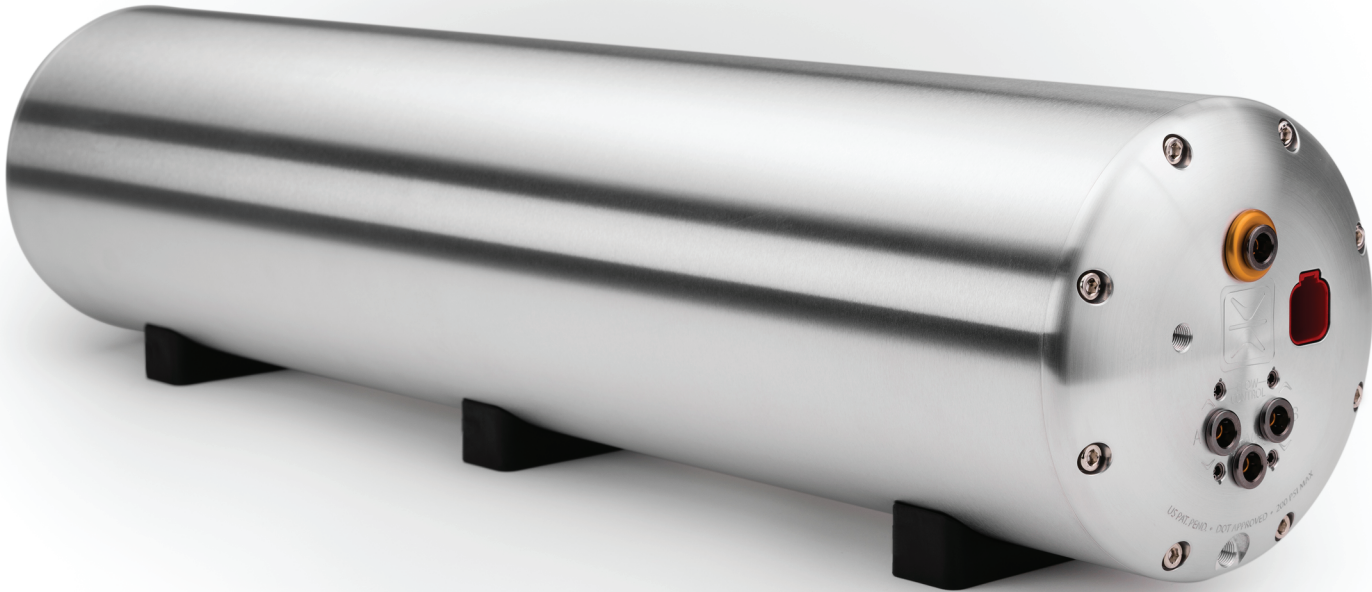


**NOTE:** Program Mode will exit after 5 seconds or can be exited by pressing the Program Button again and your changes will be saved.



**Figure 12:** 200 psi Tank Pressure Mode

## ENDO-CVT™ FEATURE OVERVIEW



AccuAir's patent pending ENDO-CVT™ takes streamlined appearance and ease of installation to an entirely new level by integrating the industry's first air compressor within the air tank as well as integrating the air spring solenoid valves directly into the air tank end caps themselves. Yet, the ENDO-CVT™ is far more than just components moved inside the air tank (which only consume 0.5 gallons of volume)... AccuAir partnered with WABCO to bring the quietest, most efficient, and moisture free air compressor that the market has ever seen. This single compressor does the work of two industry standard units at 200 psi. The ENDO-CVT™ also represents AccuAir's next generation of solenoid valve technology that includes VFC™ (variable flow control) in addition to D.O.T. approved fully filtered and rebuild-able FFPTC™ (fully-filtered push-to-connect) fittings.



### Internal Wabco™ Compressor

The internal WABCO™ compressor refills the tank with completely dry air at a rate twice as fast as the current market standard compressor.



### Digital Intelligence

Internal ECU monitors tank pressure, compressor head temperature, and ambient moisture levels to optimize compressor operation, provide maximum duty cycle, as well as regenerate the built-in desiccant air dryer as required.



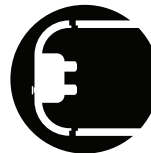
### Dual Stage Isolation

The patent pending primary and secondary isolation system that softly suspends the compressor inside the tank, eliminating compressor vibrations from being transmitted into the vehicle's body or chassis.



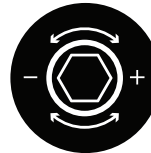
### 4-Corner & 2-Corner

Available in 4-corner and 2-corner configurations.



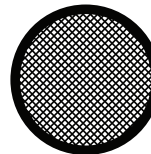
### Valve-Integrated Tank Caps

Includes the solenoid valves and air tank all in one easy to mount package.



### Adjustable Flow Control

Built-in VFC™ (variable flow control) adjusters allow for end user adjustment of the speed of each corner and each direction individually.



### Filtered Ports

FFPTC™ (fully-filtered-push-to-connect) air fittings eliminate the risk of debris-induced valve problems common with all other solenoid valves on the market.



### DOT PTC Fittings

Built-in D.O.T. approved and rebuild-able Push-To-Connect fittings.



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