

**\*\*\*\*The typical installation time is 2 hours\*\*\*\***

\* CA Proposition 65 "known to the state of CA to cause [cancer] [birth defects or other reproductive harm]" see [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov) for details

## **2014-2020 Touring® models**

**#IA 1 1XX-X Iride Intelligent Ride Control (Rear Only)**

**#IA 2 1XX-X Iride Intel. Ride Control (Rear with Front manual control with auto maintain)**

**#IA(1or2) 2XX-X (bikes with short turn out 2-1 exhaust or V&H® HO Mufflers)**

**2021-2024 Touring® models (non Center Cooled®) add a -1 to the end of the part # IA1123-B-1**

**2023.5 - 2024up Touring® models (Center Cooled®) add a -4 to the end of the part # IA1123-B-4**

(see page 4 for part number clarification, for future orders)

**Please read through the following instructions before beginning the installation procedure. Record serial number NOW, for later use registering your product.**

### **iRIDE Installation**

**1:** Remove both saddlebags, side covers and the seat. Remove the main 50 amp fuse.



**2:** Stabilize the motorcycle, remove and replace the left shock with the supplied coil over and (2) 1/2"-13 x 2" SHCS bolts. Use the retained flat washers; 1 on each side of shock at the top & bottom. The I-ride logo goes on top facing outward from bike. Apply 1 drop of blue loctite to each of the bolts slide them through the OE lock (if there) & flat washers, then slide them through the Stainless Steel shock bushings and a flat washer on the inside. Hand start the bolts and torque to 63 - 70 ft-lbs (as per OE specification 17' up). Check the dampening adjustment dial on the bottom, a good starting point is at 20 clicks, which is the middle of the adjustment. Looking down the shock rotating the dial counter clockwise stiffens the dampening, clockwise softens the dampening.

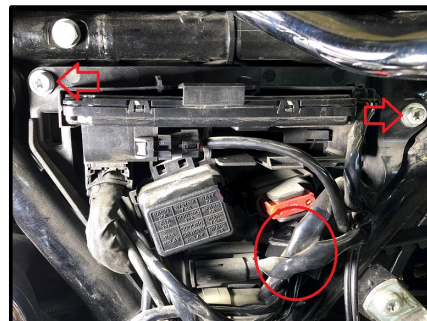
Locate set screw, loosen before turning spring collar. Over tightening or failing to loosen prior to turning, will cause the spring collar to seize and require replacing the coil over shock!



**3:** Bolt the control assy on to the right fender strut ; by inserting the (2) 1/4-20 x 3/4" stainless steel bolts through the 1/4" SS washers. Apply 1 drop blue loctite on bolt threads align the controller bracket on the back side of the fender strut slotted holes and start the bolts. Torque the (2) bolts to 7 - 8 ft lbs.



**4a: 14-20, 21-24 non Center Cooled:** Remove the (2) bolts retaining the left electrical caddy, shift the caddy to gain space to route the 12 position connector harness connector, power wire and ground wire through (in front of the battery) to the right of the motorcycle just in front of the ABS module. Route the red power wire towards the positive side of the battery and the ground wire towards the frame ground lug at the right hand side of the bike just in front of the battery. These will be connected later.



**4b: 24up Center Cooled:** Unplug the **S**tock connector from the IMU. Plug the I-Ride in-line harness to the IMU and the stock connector, it will only connect 1 way.

**4c: 24up Center Cooled:** Route the red power wire towards the positive side of the battery and the ground wire towards the frame ground lug at the right hand side of the bike just in front of the battery. Tuck the extra wire & fuse block into the space to right above the IMU. These will be connected later.

**5: ALL:** Route the 12 position controller harness and the 2 position compressor harness along the upper frame rail, then to the outside of the fender / fender strut area and to the IRC controller.

**6a: 14-20, 21-24 non Center Cooled** Place the relay/fuse assy towards the lower right side of the electrical caddy and zip tie in place (left side of bike). Apply 1 drop of blue loctite to the (2) caddy bolts, start and torque to 7 - 9 ft-lbs.

**6b: 14'-20'** Connect the **Black** 6 position connector into the data port connection.

**21'- 24 (non Center Cooled)** Connect the **Red** 6 position connector into the red data port connection

**6c: ALL:** The 8" 2 position black connector is not connected. This connection is for future expansion.

**7: ALL:** Apply di-electric grease (supplied) to the harness connector female terminals to help maintain vital conductivity, and to the outer housing to prevent binding upon installation in the controller. Insert (ThunderMax logo inward / blank or I-Ride logo outward) into controller housing connector port and tighten screws (no loctite).



**8: ALL:** Continue routing the compressor harness (2 wire connector) along the fender strut, towards the P&A brake light cut out in the lower part of the fender strut.

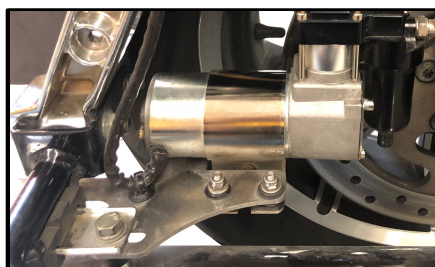
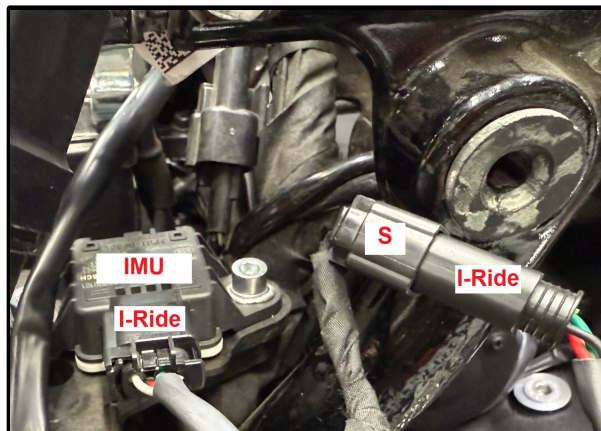
**9a: Standard exhaust bracket:** Remove the (2) 5/16-18 bolts from the rear exhaust hanger bracket.

**9b: 2021 models turn the 2 saddle bag mount bolts around (bolt head on the compressor side) picture on bottom right**

**9c:** Slide the compressor bracket between the mount strap and the muffler mounting tabs. Insert the (2) bolts through the muffler mount strap, the air compressor mount into the muffler retaining threads. Verify there is approximately 1/2" of thread engagement. Start and torque the (2) bolts to 12 - 15 ft-lbs.

**\*Optional bracket\*\*Short exhaust no muffler mounting plate used**

**9d:** Remove the 2 rear saddle bag support bracket bolts. Discard the 2 nuts apply 1 drop of red loctite to each bolt. Insert the bolts back through the holes into the compressor mount. The larger 3/8" bolt torque to 30 - 37 ft-lbs and the smaller 5/16 bolt torque to 15 - 20 ft-lbs.





**10:** Apply a thin coat of di-electric grease (supplied) to the male connector from the compressor. Then connect the compressor harness male connector to the 2 position female connector from the main harness you have routed to this area, secure with a zip tie.

**11:** Remove the right shock.

**12:** Align the IRC air spring (fitting towards rear, retaining rings towards the outside of the top and bottom sphericle bearings) insert the supplied 1/2-13 x 2" SHCS through the upper mount pivot, slide the 1/4" thick spacer over the bolt, apply 1 drop of blue loctite and only start the bolt to hold the assy. Insert the lower bolt /right height mount through the lower mount pivot, slide the 1/4" spacer over the bolt, apply 1 drop of blue loctite and tighten bolt, alternate if needed from top to bottom to keep air spring aligned. Torque the (2) bolts to 63 - 70 ft-lbs (as per OE specification 17' up). **(No washers are used in this step, the bearing is captured and can't disengage from the air spring)**

**13:** Insert the 10-32 X 3/4" Hex Head Cap Screw through the #10 lock washer, the lower ride height rod pivot, then align and start into the back of the lower air spring bolt/ride height mount and torque to **30 - 35 in-lbs.**

**14:** Insert the 5/32" x 5 1/8" long air hose into the straight push in fitting on the bottom of the controller. Insert the other end into the straight push in fitting on top of the air dryer.

**15:** Insert the 5/32" x 5 3/8" long air hose into the straight push in fitting on the right front side of the controller. Insert the other end into the 90° push in fitting on the air spring.

**16:** Check over installation, zip tie and loose wires to insure no wires or hoses are in any position to be cut, burnt, pinches, hung or damaged in any way.

**17: ALL:** Connect the red power wire to the positive terminal of the battery. Connect the black ground wire to the ground lug on the frame. (see bottom picture)

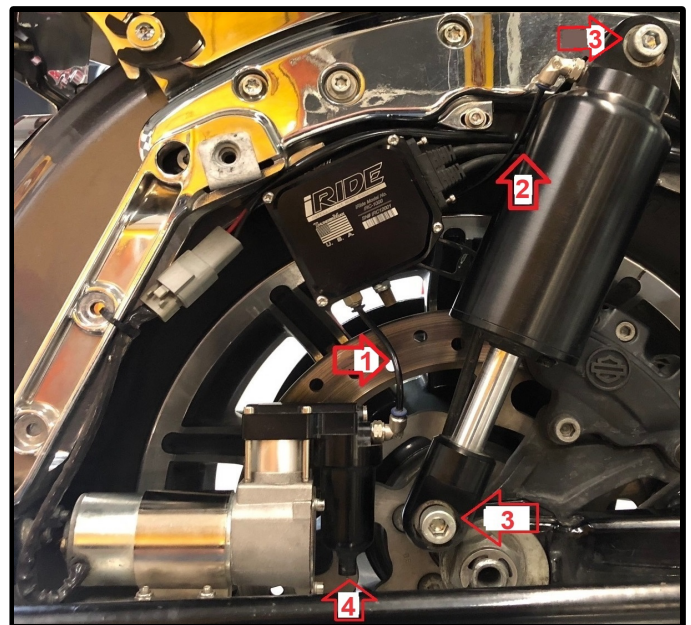
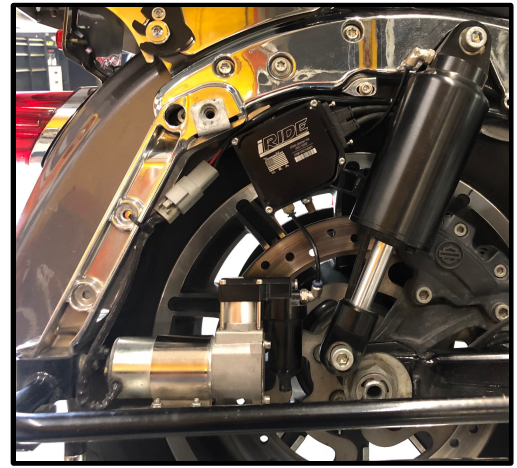
**18:** Re-install the 50 amp main fuse.

**19:** Follow the Command Center instructions for installing the CC screen and to set up your Intelligent Ride Control for your riding comfort and Display preferences.

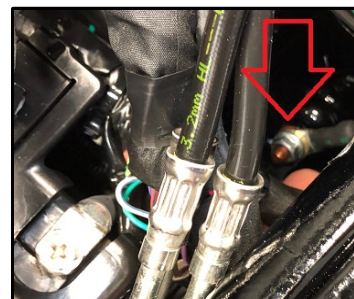
**20:** Re-install the side covers, saddle bags and seat per OEM specifications.

**Note:** After riding the bike you can further dial in the suspension with the dampening adjustment at the bottom of the coil over shock by rotating adjustment knob counter clockwise to soften or clockwise to stiffen the dampening of the shock.

**Recommended maintenance:** Intervals vary with extreme conditions (salt, water, heavy dust, humidity) Press the water drain on the bottom of the compressor water separator every 1000 miles. At every other oil change inspect/replace the water/ separator filter in the water separator canister on the compressor and the filter disc behind the inlet and rear fittings on the control module. (Also behind the Front fitting on a Front and Rear system). Kit #IA1004



- 1: Air line compressor to inlet fitting on control module
- 2: Air line control module to air spring
- 3: Retaining rings for sphericle bearing (facing outward)
- 4: Drain for water separator canister ( push upwards)



# iRIDE Part Number System

## How To Order:

Create the part number of the Suspension that you need by selecting the desired options in the boxes below and insert their code number into the part number.

## Example:

IA1123-B is rear only 2014-2020 iRIDE with a standard exhaust mounted Compressor, a 23nm spring and a black Command Center.



**IA X X X X-X-X**

"A" Style	"B" Compressor Bracket	"C" Coil Spring	"D" Finish	"E" Year
1 = Rear Only 2 = Front & Rear	1= Standard 2= Short exhaust	20= 20nm 23= 23nm	B = Black C = Chrome	Blank = 14 - 20 1 = 21-24(non Helix) 4 = 2023 1/2 up Center Cooled

### "A" Style

- Rear only comes with everything that you need to install iRIDE rear suspension. Controls rear leveling and rear ride height.
- Front & Rear comes will all components for the rear suspension and supplies control to a customer selected front suspension. This system monitors the front suspension and constantly maintains front air pressure. (Customer will supply front suspension components)

### "B" Compressor Mounting Bracket

- Standard bracket is used on applications with standard exhaust that exits behind saddle bag.
- Short bracket is used on exhaust that exits before the saddle bag.

### "C" Coil Spring

- 20nm Springs are used for riders that ride mostly 1-up and have a rider weight below 180 pounds.
- 23nm Springs are used for riders that ride 2-up or are above 180 pounds.

### "D" Finish

- Black inish Command Center
- Chrome inish Command Center

### "E" Year

- No designation is for 2014-2020 Touring
- A "1" designation is for 2021-Up Touring
- A "4" designation is for 2023 1/2 up Center Cooled platform models