



### BLOOD GROOVE HYPERCHARGER

9979

Thank You For Choosing Kuryakyn!

Protect yourself and others from potential injury and property damage or loss. Pay close attention to all instructions, warnings, cautions, and notices regarding the installation, use, and care of this product.

#### **WARNING**

THIS INDICATION ALERTS YOU TO THE FACT THAT IGNORING THE CONTENTS DESCRIBED HEREIN CAN RESULT IN POTENTIAL DEATH OR SERIOUS INJURY.

#### **NOTICE**

This indication alerts you to the fact that ignoring the contents described herein may negatively affect product performance and functionality or damage the product itself or the product to which it is being attached.

### **THIS PRODUCT IS NOT LEGAL FOR SALE OR USE ON POLLUTION CONTROLLED VEHICLES.**

ENSURE THAT THE FOLLOWING PARTS HAVE BEEN INCLUDED IN THE KIT:

- 1 Hypercharger Assembly with Hardware Bag Containing:
- 1 (3) 1/4"-20 X 1-5/8" (2) #6-32 X 3/8" (2) #6 Washers—NOT USED
- 1 Dual Velocity Ring in Bag Inside Hypercharger Assembly
- 1 K&N Air Filter
- 1 Hypercharger Mounting Bracket
- 1 Breather Hardware Kit, including:
  - 2 1-3/4" Breather Bolts
  - 2 Breather Hoses
  - 4 Shim Washers
  - 1 Twin Cam Adapter Kit Including:
    - 1 5/8" Twin Cam Breather Adapter
    - 1 90 Degree Elbow
    - 2 Black Nylon Fitting for 3/16" Hose or Tubing
    - 1 16" Vacuum Hose
    - 1 T-Fitting 3 1/4"-20 X 1-1/2" Socket Head Cap Screws
    - 1 Gasket with Adhesive
    - 2 Gaskets
    - 4 4" Cable Tie
- 1 Vacuum Adapter Kit Including:
  - 1 Vacuum Adapter
  - 1 Black Nylon Fitting for 3/16" Hose
  - 2 Spacers
  - 1 Vacuum Adapter Gasket
  - 2 M4 x .7 X 30mm Socket Head Cap Screws
  - 1 Installation Instructions

#### **YOU WILL ALSO NEED:**

Set of Hex Wrenches, Set of Combination Wrenches, Socket Set and Ratchet, Needle Nose Pliers, Diagonal Cutters, Long 3mm Hex Socket, Long T-20 Torx Socket, and Torque Wrench

#### **NOTICE**

These installation instructions contain important information. Ensure that the end user receives this copy and is aware of its importance for future use.

#### **WARNING**

THE END USER'S SAFETY DEPENDS UPON PROPER INSTALLATION OF THIS PRODUCT. IF A STEP IN THESE INSTRUCTIONS IS NOT WITHIN YOUR CAPABILITIES OR YOU DO NOT HAVE THE CORRECT TOOLS, HAVE YOUR DEALER PERFORM THE PROCEDURE. IMPROPER INSTALLATION OF THIS PRODUCT COULD RESULT IN DEATH OR SERIOUS INJURY.

ACCIDENTAL VEHICLE START-UP COULD CAUSE DEATH OR SERIOUS INJURY, REMOVE THE MAIN FUSE BEFORE PROCEEDING.

**STEP 1** Read and understand all steps in the instructions before starting the installation. Park the motorcycle on a hard, level surface and turn **IGN OFF**. Allow the engine and exhaust system to cool. Remove the main fuse.

**STEP 2** Remove the stock air cleaner assembly, mounting hardware, and breather hoses.

**STEP 3** Refer to **FIG 1**. Remove the stock horn; remove the upper and lower induction module mounting screws and the throttle body from the intake manifold.

**STEP 4** Test fit the vacuum adapter; ideally, the adapter should be installed so that the vacuum fitting points up, towards the rear of the bike. If this is not possible, it is acceptable for the fitting to point down, towards the front of the bike.

**STEP 5** Apply the adhesive gasket to the vacuum adapter. **IMPORTANT! Be sure to apply the gasket to the side of the adapter with the shallow-beveled bolt holes; NOT the side with the countersunk bevels.**

**STEP 6** Wet the vacuum fitting then slide the vacuum hose over the fitting.

**STEP 7** Install the gasket side of the adapter to the intake manifold. You may find it helpful to insert the top fastener through the intake manifold, then “hang” the adapter on this fastener.

**STEP 8** Check that the stock O-ring is in place between the induction module and the vacuum adapter, then start both fasteners and alternately torque the fasteners to **7-33 IN LBS.**

**STEP 9** Remove the backing from the included adhesive backed gasket and attach it to the mouth of the throttle body, lining up the holes. Place the chrome support bracket across the mouth of the throttle body and loosely attach it to each head with the included breather bolts. Make sure all three mounting holes and the float bowl vent hole (10-o'clock position) are centered in the corresponding slots in the support bracket.

**NOTE:** **Be sure the support bracket contacts each head when it is in place across the front of the throttle body. If there is a gap between the heads and the support bracket, use the included shim washers to eliminate this gap. Tightening the breather bolts when a gap is present here will likely result in a broken bracket within a short period of time.**

**STEP 10** When you have the support bracket properly fit, tighten the breather bolts securely.

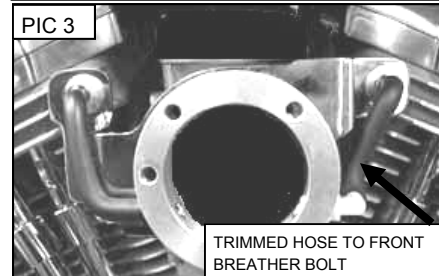
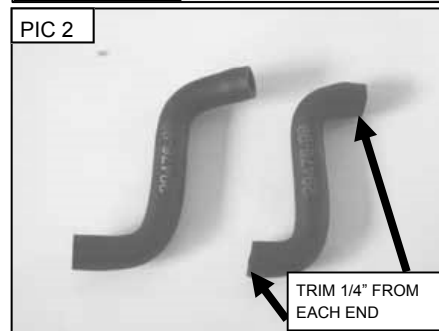
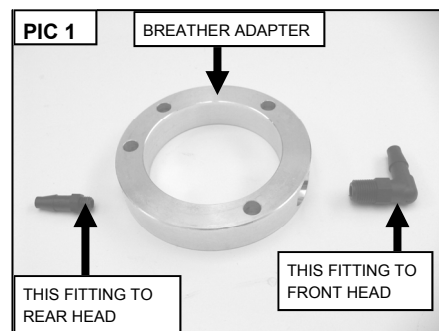
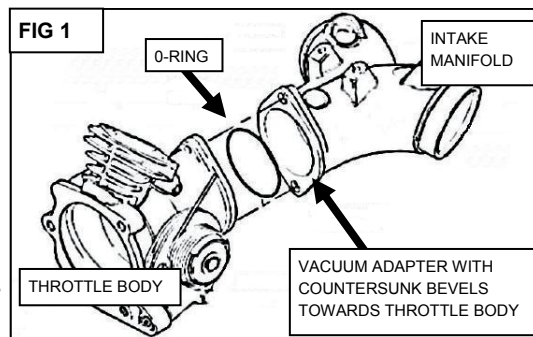
**STEP 11** Refer to **PIC 1**. Assemble the breather by attaching the 90 degree elbow to the front port. This is the hole on the side of the adapter that will face the front of the bike. Tip this elbow slightly upward and towards the motor. Attach one of the straight nipple fittings to the rear port on the adapter.

**STEP 12** Refer to **PIC 2 and 3**. Trim 1/4" from each end of ONE of the included breather hoses. Install this hose between the front head and the 90° fitting on the breather adapter.

**STEP 13** Refer to **PIC 3**. Install the remaining breather hose between the rear breather bolt and the straight barbed fitting on the breather adapter. Secure the ends of the two hoses with the supplied cable ties; trim the cable tie ends.

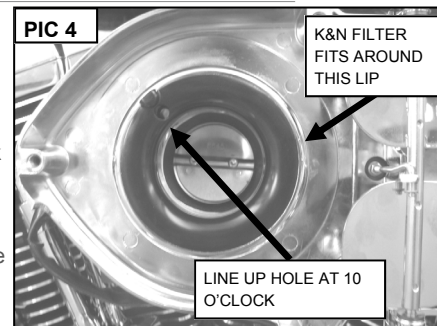
**STEP 14** Locate the Hypercharger Back Plate. Insert the three 1/4"-20 X 1-1/2" socket head cap screws through the mounting holes in the back plate from the inside. Place one of the included non-adhesive backed gaskets over the three mounting screws now protruding from the back of the Hypercharger back plate. **DO NOT** place a bolt through the float bowl vent hole - this hole is the one in the 10-o'clock position.

**STEP 15** While holding a gasket in place between the breather adapter and support bracket - at this time you should have three gaskets installed, one directly behind the Hypercharger back plate, one between the breather adapter / support bracket and one between the support bracket / throttle body-secure the assembly to the throttle body. **DO NOT** over tighten the fasteners; the aluminum will strip easily.





- STEP 16** Refer to **PIC 4**. Position the black plastic Dual Velocity ring into position over the bolts at attaching the Hypercharger back plate to the carb so that the hole lines up with the empty float bowl vent hole located at the 10 o'clock position. This will snap into place.
- STEP 17** Refer to **PIC 4**. Place the K&N air filter onto the back plate ( there is a raised lip on the back plate that the K&N filter will fit around).
- STEP 18** Locate the hardware bag that was with the Back Plate. Place the Front Cover over the filter (there is a recess in the front cover that will fit over the round foam filter) and secure it to the back plate with the three 1/4"-20 X 1-5/8" fasteners finger tight. Thread one of the #6-32 X 3/8" fasteners through the top and bottom butterfly caps and into the front cover. Tighten the #6-32 X 3/8" securely. Tighten the 1/4"-20 X 1-5/8" fasteners securely.
- STEP 19** Connect the free end of the vacuum hose to the Hypercharger; be sure to route the hose away from any pinch points.
- STEP 20** Double check the tightness of all related fasteners, check for hose clearance and check throttle for correct operation, making sure it returns properly, before starting bike.



### **WARNING**

**BEFORE RIDING**, ENSURE THAT THE INSTALLATION OF THIS PRODUCT DOES NOT INTERFERE WITH THE PROPER OPERATION OF THE MOTORCYCLE.

### **NOTICE**

Proper tuning is important. Carbureted bikes should be re-jetted and fuel injected bikes should be tuned with a TTS MasterTune tuning system (calibrations available at [www.kuryakyn.com](http://www.kuryakyn.com)) or Vance & Hines FP3 (calibrations available at <http://fp3.vanceandhines.com/download>) by an experienced tuner, on a dyno, with an exhaust gas analyzer.

It is the end user's responsibility to ensure that all fasteners (including pre-assembled) are tightened before operation of the motorcycle. Kuryakyn will not provide warranty coverage on products or components lost or damaged due to improper installation or lack of maintenance. Periodic inspection and maintenance are required on all fasteners.

#### LIMITED WARRANTY

Kuryakyn warrants that any Kuryakyn products sold hereunder, shall be free of defects in materials & workmanship for a period of one (1) year from the date of purchase by the consumer excepting the following provisions:

1. Kuryakyn shall have no obligation in the event the customer is unable to provide a receipt showing the date the customer purchased the product(s).
2. The product must be properly installed, maintained & operated under normal conditions.
3. Kuryakyn shall not be liable for any consequential & incidental damages, including labor & paint, resulting from failure of a Kuryakyn product, failure to deliver, delay in delivery, delivery in nonconforming condition, or for any breach of contract or duty between Kuryakyn & a customer.
4. Kuryakyn products are often intended for use in specific applications. Kuryakyn makes no warranty if a Kuryakyn product is used in applications other than intended.
5. Kuryakyn electrical products are warranted for one (1) year from the date of purchase by the consumer. L.E.D.'s contained in components of Kuryakyn products will be warranted for defects in materials & workmanship for 3 years from the date of purchase whereas all other components shall be warranted for one (1) year.
6. Merchandise purchased directly from Internet auction sites or any other third party seller is considered sold as is & shall not carry a Kuryakyn warranty. All warranty claims must be directed to the original seller. If unsure please contact the seller to verify they are an authorized Kuryakyn retailer.

#### RETURN POLICY

Merchandise determined to be defective may be returned up to one year from the date of purchase. Returns must be processed through original seller. Returned merchandise for any other reason other than warranty claims must be in like new condition & subject to a 20% restocking fee. All returns are subject to inspection for determination of full or partial credit. Any returned part that shows evidence of being used or installed contrary to manufacturer's instructions, &/or subjected to improper handling, packaging or return shipping by the customer, will not be eligible for exchange, refund or warranty consideration. All returned electrical items will be inspected & tested. If electrical item is deemed functional, no credit will be issued & item will be returned. All sales are final on discontinued or closeout merchandise.

#### EMISSIONS NOTICE

The California Air Resources Board (CARB) does not permit the use of aftermarket emission-related parts(s) that alter the performance of OEM emission-related devices unless CARB has issued an Executive Order, other than on racing vehicles on closed courses. Check your local laws and manufacturer's information.