



HYPERCHARGER FOR TWIN CAM 9987

BLACK BODY WITH BLACK BLOOD GROOVE TRAP DOOR AND BLACK BUTTERFLIES

FITS: '99-'06 TWIN CAM WITH CV CARBURETOR AND '06-UP TWIN CAM WITH DELPHI EFI.

PART#	INCLUDED
	1 Black Hypercharger Assembly
	1 Black Blood Groove, Lettered Trap Door
	2 Black Butterflies
408332	1 Support Bracket
909975	1 Breather Hardware Kit, including: <ul style="list-style-type: none"> 1 1-1/4" Breather Bolts (pr) 1 Breather Hoses (pr) 4 Shim Washers, 0.030 thickness
	1 Twin Cam Breather Kit, Including: <ul style="list-style-type: none"> 1 Breather Adapter/Spacer 1 90° Barbed Fitting 1/8 NPT 2 180° Barbed Fitting 1/4-28 1 16" Vacuum Hose 1 Barbed "T" Fitting 3 1/4-20 x 1-1/2" SHCS, Patched 1 Gasket with Adhesive 2 Gasket without Adhesive 4 4" Nylon Cable Ties
909999	1 Delphi Vacuum Adapter
	1 Installation Instructions

Please read and understand entire instructions before starting installation.

THANK YOU FOR CHOOSING KURYAKYN!

WARNING! THE POSSIBILITY OF CONTACT BETWEEN THE HYPERCHARGER AND THE FUEL TANK EXISTS ON '06-LATER DYNA MODELS. THE FOLLOWING STEPS MUST BE TAKEN DURING INSTALLATION TO ENSURE ADEQUATE CLEARANCE:

- Apply downward pressure to the right (front cylinder) side of the support bracket as the breather bolts are tightened. At the same time, you must ensure that the three 1/4"-20 threaded holes in the throttle body line up with the corresponding holes in the support bracket.
- Rotate the Hypercharger assembly clockwise and down as the three 1/4"-20 x 1-1/2" socket head cap screws are tightened to provide maximum fuel tank clearance.
- Immediately after installation, verify there is adequate clearance between the Hypercharger assembly and the tank with motorcycle at idle and under load.

NOTE KURYAKYN WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED BY FAILURE TO ENSURE PROPER CLEARANCE.

CAUTION! The installation of any high performance air cleaner and/or exhaust system can cause a "lean" fuel/air mixture. A "lean" fuel/air mixture can cause engine overheating resulting in severe engine damage. Kuryakyn recommends having the motorcycle tuned by a competent technician.

CUSTOMER SERVICE

877.370.3604 (toll free)

INSTALLATION QUESTIONS

techsupport@kuryakyn.com
or call 715.247.2983

LIMITED WARRANTY

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

- 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).
- The product must be properly installed, maintained and operated under normal conditions.
- Kuryakyn makes no warranty, expressed or implied, with respect to any gold plated products.
- Kuryakyn shall not be liable for any consequential and incidental damages, including labor and 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 and a customer.
- 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.
- Kuryakyn electrical products are warranted for one (1) year from the date of purchase by the consumer. Components of Kuryakyn products containing L.E.D.s will be warranted for defects in materials and workmanship for 3 years from the date of purchase.
- Kuryakyn makes no warranty of any kind in regard to other manufacturer's products distributed by Kuryakyn. Kuryakyn will pass on all warranties made by the manufacturer and where possible, will expedite the claim on behalf of the customer, but ultimately, responsibility for disposition of the warranty claim lies with the manufacturer.

ABOUT OUR CATALOG

You'll find all our innovations for H-D, GL and Metric Cruisers in our annual catalogs. Order online today—select the "CATALOGS" icon. Each Kuryakyn product comes with a Proof-of-Purchase good for a complimentary catalog. Details in packaging.

Be sure to ask your local dealer about other Kuryakyn products, the motorcycle parts and accessories designed for riders by riders.

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ATTENTION! A factory service manual is necessary for performing this installation. Do not attempt to perform this installation if you are not confident in your ability to complete all steps in the procedure; consult a trained technician.

NOTE It is the installers' responsibility to make sure all fasteners (including pre-assembled) are tightened before operation of motorcycle. Kuryakyn will not warranty components that are lost due to improper installation. Periodic maintenance may be required.

NOTE Some of our high performance air cleaners extend beyond the stock/OEM unit to achieve smoother air flow and better performance. Riding position may be affected.

FOR '06-UP FUEL INJECTED MODELS ONLY

NOTE The following photos show the throttle body removed from the motorcycle for clarity. You **DO NOT** have to remove the throttle body to perform this installation.

PROCEDURE

STEP 1 Remove the seat and fuel tank; refer to your factory service manual for specific instructions.

STEP 2 Remove the air cleaner; refer to your factory service manual for specific instructions.

STEP 3 Remove the throttle and idle cables (and cruise control cable, if fitted); refer to your factory service manual for specific instructions.

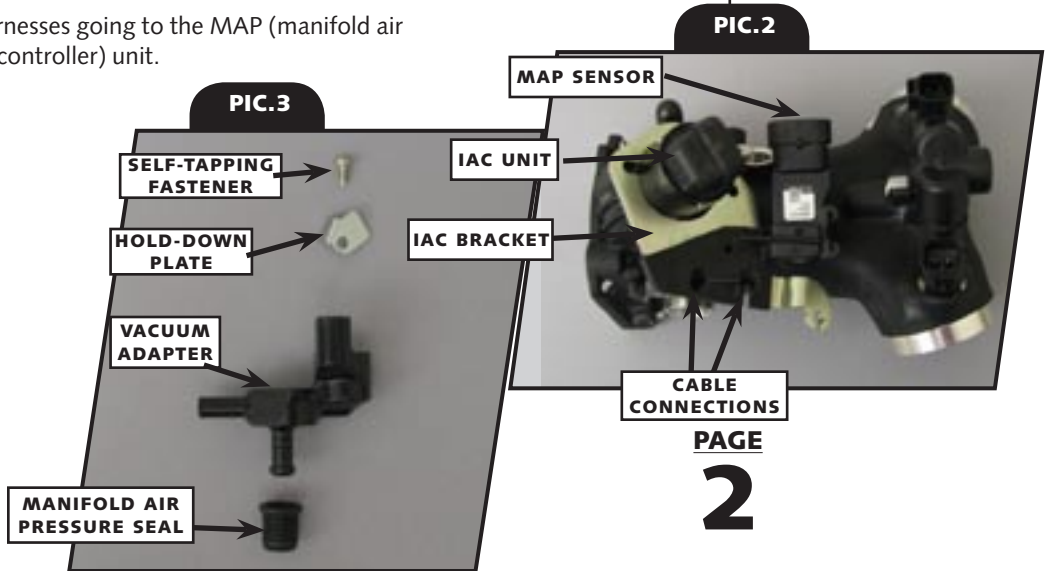
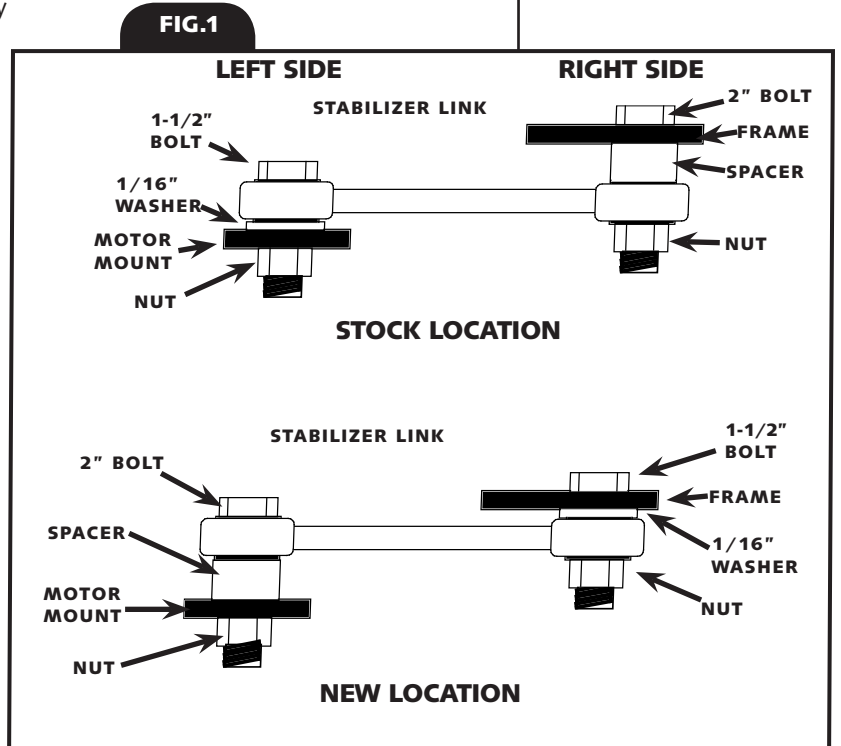
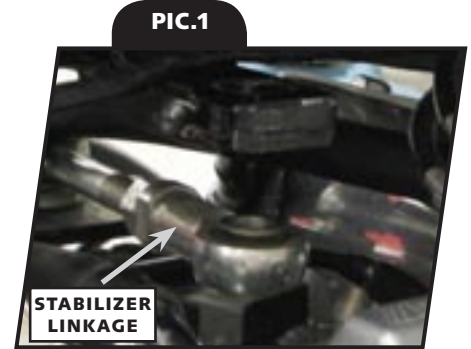
STEP 4 For FXD models only: On Dyna models, there is not adequate clearance for the MAP sensor after the vacuum adapter is installed. You must remove and reposition the stabilizer link hardware to allow sufficient clearance for the MAP sensor. Locate the stabilizer link between the frame and the motor mount. See [PIC.1](#). Remove the stock hardware and re-install in the new location following the diagram in [FIG.1](#).

STEP 5 Remove the two wiring harnesses going to the MAP (manifold air pressure) sensor and the IAC (idle air controller) unit.

STEP 6 Remove the IAC bracket; remove the MAP sensor. See [PIC.2](#).

STEP 7 Assemble the vacuum adapter. Install the rubber manifold air pressure seal onto the adapter body. See [PIC.3](#). Install the vacuum adapter on the MAP sensor. Be sure the orientation of the hose barb is correct. See [PIC.4](#) next page.

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STEP 8 Install the IAC bracket on the throttle body. **DO NOT** tighten the fasteners yet. Be sure the peg on the bottom of the MAP sensor fits into the alignment hole on the throttle body. See [PIC.5](#).

STEP 9 Insert the MAP sensor assembly into the throttle body. The vacuum adapter body fits under the tab on the IAC bracket. Be sure the orientation of the hose fitting is correct. See [PIC.6](#). Tighten the fasteners on the IAC bracket.

STEP 10 Connect one end of the vacuum hose included with the Hypercharger to the hose fitting on the vacuum adapter.

STEP 11 Connect the wiring harnesses to the MAP sensor and the IAC unit.

STEP 12 Reconnect the throttle and idle cables (and cruise control, if fitted). Install the air cleaner, fuel tank and seat; refer to your factory service manual for specific instructions.

STEP 13 Position the chrome support bracket over the mouth of the throttle body and fasten loosely to each head with the supplied breather bolts.

CAUTION! BE SURE THE SUPPORT BRACKET IS FULLY SEATED AGAINST THE HEADS AND THAT THERE IS NO GAP, USE THE SUPPLIED SHIMS AS NEEDED. A GAP WILL RESULT IN A BROKEN SUPPORT BRACKET.

STEP 14 Slide an intake gasket between the support bracket and the throttle body mouth; be sure all the holes are aligned. Tighten the breather bolts.

STEP 15 Trim 1/4" from each end of ONE of the supplied breather hoses. Install this hose between the front head and the 90° fitting on the breather adapter.

STEP 16 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. See [PIC.7](#).

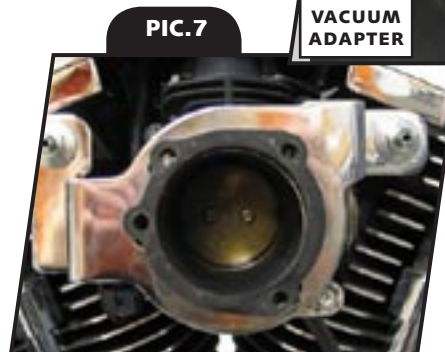
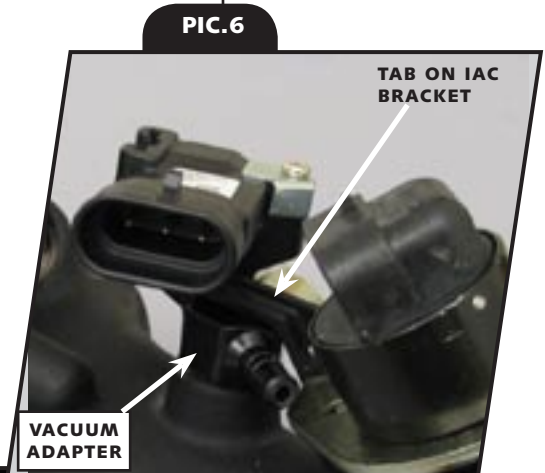
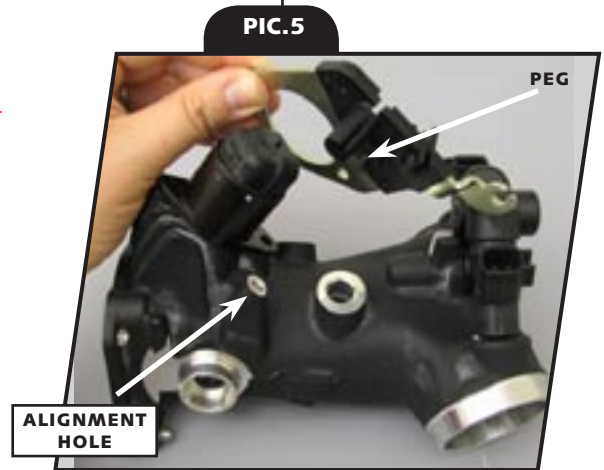
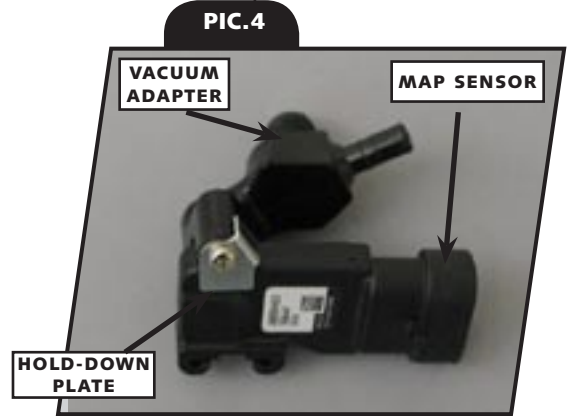
STEP 17 Remove the paper backing from the self-adhesive intake gasket and apply the gasket between the Hypercharger and the breather adapter. Be sure to align the holes.

STEP 18 Use an 1/8" Allen wrench to remove the trap door from the Hypercharger.

STEP 19 Install the three supplied 1/4" SHCS into the Hypercharger mounting holes.

STEP 20 While holding the gaskets in place between the breather adapter, support bracket, and air cleaner, secure the assembly to the throttle body. **DO NOT** over tighten the fasteners; hand tight plus 1/4 turn with a wrench is sufficient torque to secure the fasteners.

STEP 21 Replace the trap door on the Hypercharger. Connect the vacuum line to the air jet on the bottom of the Hypercharger vacuum pod.



FOR CARBURETED MODELS ONLY – PROCEDURE

STEP 1 Remove the stock air cleaner assembly.

STEP 2 Use needlenose pliers to remove the vacuum hose from the vacuum tap on the rear of the carburetor. See [PIC.8](#). This step may require the removal of the carburetor from the intake manifold; consult your factory service manual.

STEP 3 Cut a 1-1/2" length of vacuum hose from the vacuum hose provided. Connect the vacuum lines to the barbed "T" fitting as shown in [PIC.9](#). Reconnect the vacuum line assembly to the carburetor as shown in [PIC.10](#).

STEP 4 If the carburetor was removed in STEP 2, reinstall it now. Be sure the carburetor is fully seated in the manifold; wetting the rubber seal may make this easier.

STEP 5 Position the chrome twin cam mounting bracket over the mouth of the carburetor and fasten loosely to each head with the stock breather bolts.

CAUTION! BE SURE THE SUPPORT BRACKET IS FULLY SEATED AGAINST THE HEADS AND THAT THERE IS NO GAP, USE SHIMS AS NEEDED. A GAP WILL RESULT IN A BROKEN TWIN CAM SUPPORT BRACKET.

STEP 6 Slide an intake gasket between the support bracket and the carburetor mouth; be sure all the holes are aligned. Rotate the carburetor in either direction to align the holes. Tighten the breather bolts.

STEP 7 Trim 1/4" from each end of ONE of the supplied breather hoses. Install this hose between the front head and the 90° fitting on the breather adapter.

STEP 8 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. See [PIC.11](#).

STEP 9 Remove the paper backing from the self-adhesive intake gasket and apply the gasket between the Hypercharger and the breather adapter. Be sure to align the holes.

STEP 10 Use an 1/8" Allen wrench to remove the trap door from the Hypercharger.

STEP 11 Install the three supplied 1/4" SHCS into the Hypercharger mounting holes; note that the hole in the 10 o'clock position is the float bowl vent—do not use this hole.

STEP 12 While holding the gasket in place between the breather adapter and support bracket; secure the assembly to the carburetor. Do NOT over tighten the fasteners; the aluminum will strip easily.

STEP 13 Replace the trap door on the Hypercharger. Connect the vacuum line to the air jet on the bottom of the Hypercharger vacuum pod.

STEP 14 Check for proper throttle operation.

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PIC.8



PIC.9



PIC.10



PIC.11



Ride On!

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HYPERCHARGER INSTALLATION