



INSTALLATION



PRO HYPERCHARGER FOR YAMAHA 9409

FITS: ALL YAMAHA VSTAR 1100

PART #	INCLUDED
500185	1 Pro Hypercharger Assembly
400542	1 K&N Filter
609423	1 Manifold and Bracket Kit including:
	1 Rubber Intake Duct
	1 Mounting Bracket
909423K	1 Mounting and Hardware Kit Including:
	3 Tapered Bolt Caps
	3 M6 x 1.0 x 16mm Socket Head Cap Screw
	1 M6 Flange Nut
	1 Step (Reducer) Washer
	3 1/4"-20 x 5/8" Socket Head Cap Screw
	3 1/4"-20 Flange Nuts
	1 12" Length of Vacuum Hose
	8 M4 x 10mm Socket Head Cap Screw
	1 90 Degree Elbow
	2 .020" Thick Needle Shim
	1 Clamp Hook Galvanized Steel
609423JK	1 Jet Kit Includes the Following Four Items:
	1 125 Main jet
	2 1.2 Pilot Air Bleed
	1 120 Main Jet
	1 122.5 Main Jet
309409	1 Installation Instruction

THANK YOU FOR CHOOSING KURYAKYN!

DISCLAIMER - PLEASE READ BEFORE PROCEEDING:

Any modifications to a motorcycle's exhaust or intake tract require carburetor re-jetting to achieve maximum performance and maintain drivability. If you are uncomfortable with the process of tuning your carburetor, we recommend that you bring your motorcycle to a qualified motorcycle mechanic to have this kit installed. The jets included in this kit were selected based on test results with various combinations of components that we felt would represent the majority of the customers purchasing this kit. However, no two motorcycles are exactly alike. Depending on the individual case, additional jets may need to be purchased from an outside source. Kuryakyn warrants the parts included in this kit to be free of defects in materials and workmanship, but makes no claim whatsoever in regard to costs associated with installation or tuning.

NOTE

This installation requires re-jetting of the carburetors. This is an involved procedure that we recommend be performed by a qualified service technician. If you choose to attempt this procedure yourself, refer to the carburetor removal, disassembly, reassembly, and installation procedures outlined in your V-Star service manual.

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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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TOOLS SUGGESTED

Standard and Metric set of Hex Key Wrenches, 7/16", and 12mm Sockets and ratchet, #1 Phillips screwdriver, Soapy water solution, Factory service manual for this motorcycle.

PROCEDURE

STEP 1 Remove the driver and passenger seats from the bike. Remove the negative battery cable from the battery and tuck it out of the way to reduce the possibility of sparks.

STEP 2 Remove the two, rear tank mounting bolts. Remove the plastic tank mounting snap stud. (Push in on the center of it to release). Slide the tank back to expose the top of the engine. Make sure the tank is secured so it does not fall! You may remove the tank completely if so desired.

STEP 3 Remove the stock air cleaner cover, element, and backing plate. The top and rear mounts are secured with screws, the front mount "snaps" into a grommet.

STEP 4 See [PIC.1](#) and [PIC.2](#). Remove the grommet from the bracket.

STEP 5 Placing your long handled Phillips screwdriver as shown in [PIC.3](#), loosen the clamp on the air duct and remove the duct. Remove the clamp from the duct and set it aside, as it will be reused.

Now is a good time to proceed with re-jetting of the carburetors. Consult your factory service manual for this procedure. We have supplied jets to cover most common applications.

Jetting Recommendations: See [FIG.1](#) (page 3) for jet locations.

With stock exhaust or Cobra Slip-On Mufflers

- 1.2 Pilot Air Bleeds in both carbs
- One .020 shim added to raise each needle
- 122.5 Main Jet in the front cylinder's carb
- 120 Main Jet in the rear cylinder's carb
- Pilot Mixture Screw (PMS) 2 turns out from lightly bottomed

With Vance & Hines, Samson, or open "Drag" pipes

- 1.2 Pilot Air Bleeds in both carbs
- One .020 shim added to raise each needle
- 125 Main Jet in the front cylinder's carb
- 122.5 Main Jet in the rear cylinder's carb
- Pilot Mixture Screw (PMS) 2 turns out from lightly bottomed

NOTES

A) The factory installed plug covering the PMS will have to be removed in order to access the screw.

B) Because the float bowl screws are easily damage during removal, we have included 8 replacement float bowl screws with socket heads, just in case they are needed.

BE SURE TO VENT THE FLOAT BOWLS TO THE BACK OF THE HYPERCHARGER — THIS IS NECESSARY FOR BEST DRIVABILITY AND MAXIMUM PERFORMANCE!!!! (See STEP 12.)

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PIC.1



PIC.2



PIC.3



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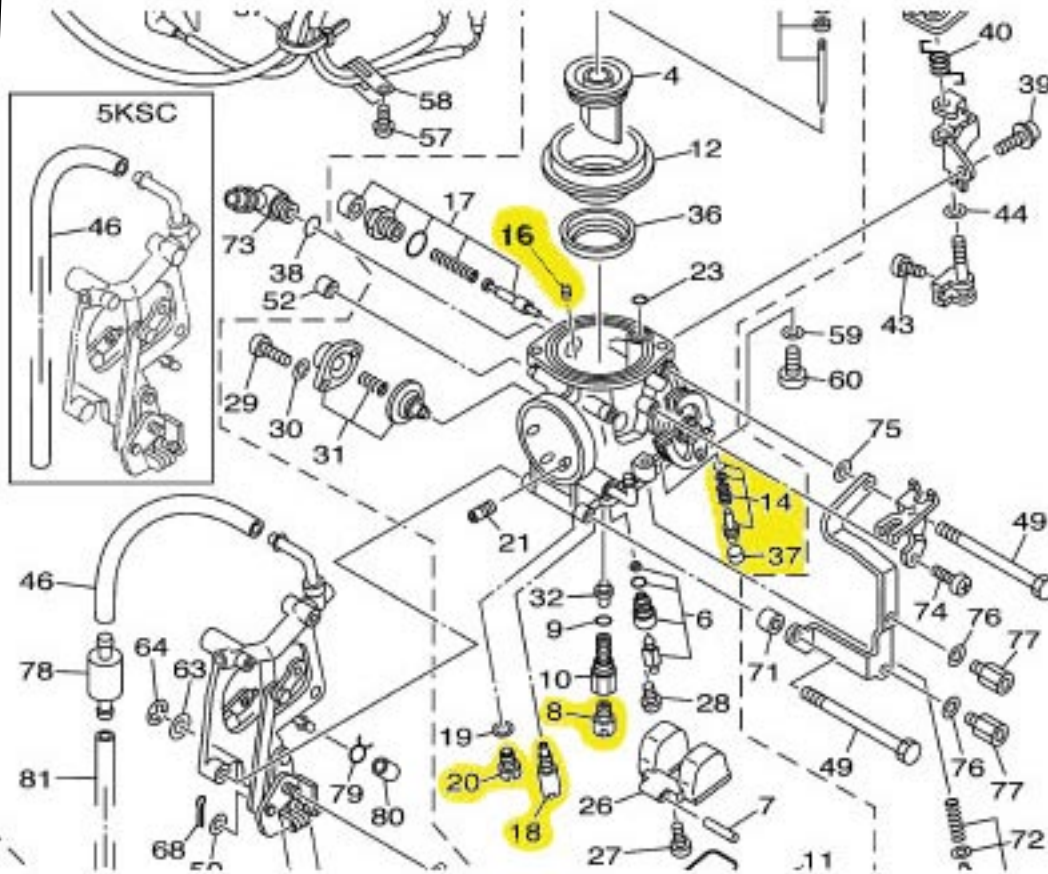
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PRO HYPER FOR YAMAHA

INSTALLATION

FIG.1

V-Star 1100



- 8 - Main Jet
- 14 - Pilot Mixture Screw (pms)
- 16 - Pilot Air Bleed, Jet
- 18 - Pilot Jet
- 20 - Enrichener Jet, 42.5 reference only
do not change
- 37 - Plug

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STEP 6 See [PIC.4](#). Insert both flanges of the rubber air duct through the opening in the mounting bracket. Place the galvanized clamp hook on the duct clamp as shown in [PIC.4A](#). You will need to flatten this hook on the clamp. Place the Stock duct clamp on the new intake duct — the clamp screw should face forward. See [PIC.4B](#).

STEP 7 Install the mounting bracket and duct assembly using the supplied M6 x 1.25 x 15mm socket heads and tapered socket head bolt caps. The front mounting point will also use the step (reducer) washer and M6 flange nut. Make sure the intake duct is in position on the air box inlet. Tighten the bracket securely, but leave the clamp on the intake duct loose for now. See [PIC.5](#).

STEP 8 Loosen the clamps securing the stock rubber elbows to the carburetors and air box. Gently wiggle the airbox to ensure that the rubber intake duct is fully seated on the air box inlet (removing the air box lid makes it much easier to see if it is on completely). Once everything is situated and comfortably in place, tighten the clamp on the rubber intake duct first and then tighten the clamps on the stock rubber elbows. Replace the air box lid.

STEP 9 Remove the three fasteners that secure the front cover of the Pro Hypercharger. Also remove the two outer most socket head caps screws that secure the bearing caps on the top and bottom of the butterfly shaft. Remove the front cover of the Pro Hypercharger.

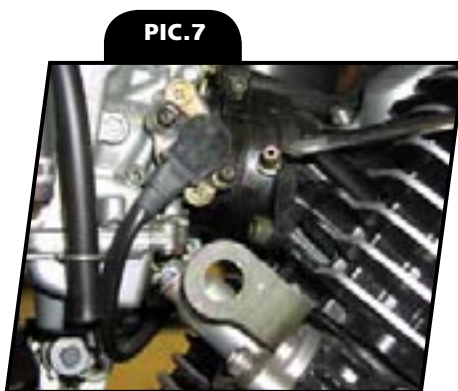
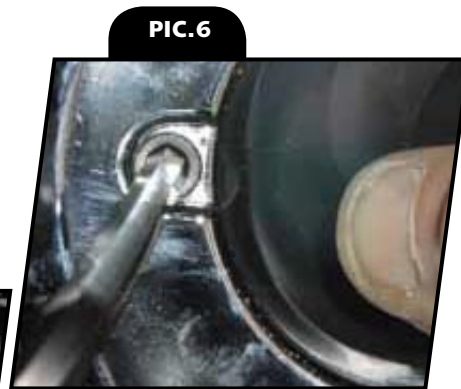
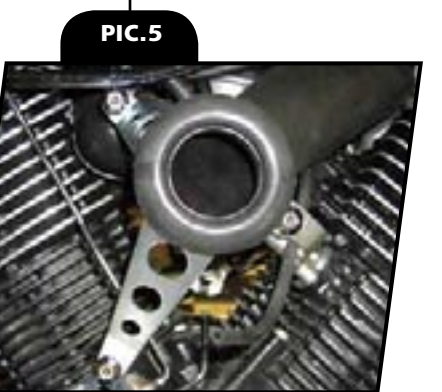
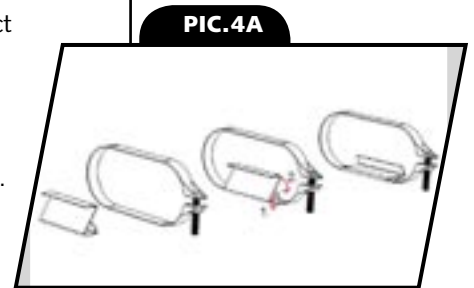
STEP 10 Wet the radius portion of the intake duct with soapy water solution and slide the Hypercharger into place on the intake assembly. It should be between the two rubber flanges on the intake duct.

STEP 11 Install the 5/16" Barb x 1/8" NPT Right Angle Fitting in the back of the Hypercharger. Using the 1/4"-20 x 5/8" socket heads and flanged nuts, bolt the Hypercharger back half into place. See [PIC.6](#). It is helpful to fold a portion of the radius back while performing this procedure.

STEP 12 Replace the front cover of the Pro Hypercharger in reverse manner as it was removed in STEP 8.

STEP 13 See [PIC.7](#). This is the vacuum nipple in the front carb. Connect the supplied vacuum hose to this nipple, and connect the remaining end to the vacuum nipple on the bottom of the Hypercharger.

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STEP 14 IMPORTANT See [PIC.8](#), [PIC.9](#), and [PIC.10](#). This is the float bowl vent hose. Connect this hose to the black right angle fitting on the back of the Hypercharger.

STEP 15 Replace the fuel tank and re-connect the positive battery cable, re-install seats.

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Ride On!

PIC.8



PIC.9



Route float bowl vent hose toward rear of bike.

PIC.10



Vent hose plugged into 90 degree fitting at rear of Hypercharger

Orientation:
Looking down at carbs,
float bowl vent hose
indicated by arrow.

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