



INSTALLATION

CRUSHER POWER CELL for SOFTAIL

519

PARTS INCLUDED

- 1 Crusher Power Cell Exhaust Assembly with Heat Shields and Chrome Tips
- 1 Chrome Power Cell Heat Shield
- 4 3/8-16 X 1-1/4" Flange Bolts
- 1 3/8-16 X 2-1/2" Socket Head Cap Screw
- 8 3/8" ID Spacers
- 8 Small Hose Clamps
- 2 Large Hose Clamps
- 2 18mm O2 Sensor Bung Plugs—**Larger**
- 2 12mm O2 Sensor Bung Plugs—**Smaller**
- 4 5/16"-18 X 5/8" Flange Bolts
- 2 Nut Plates
- 2 3/8"-16 X 3/4" Flange Bolts
- 1 Exhaust Mounting Bracket
- 1 Installation Instructions

Please read and understand entire instructions before starting installation.

THANK YOU FOR CHOOSING KÜRYAKYN!

IN ORDER TO PROTECT YOU AND OTHERS FROM POSSIBLE INJURY AND/OR PROPERTY DAMAGE OR LOSS, PLEASE PAY CLOSE ATTENTION TO ALL INSTRUCTIONS, WARNINGS, CAUTIONS AND NOTICES REGARDING THE 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.

NOTICE

IF INSTALLING THIS PRODUCT FOR ANOTHER PARTY, PLEASE MAKE SURE THEY RECEIVE THIS COPY OF THE INSTALLATION INSTRUCTIONS SO THEY ARE AWARE OF THE IMPORTANT INFORMATION CONTAINED IN THEM.

TOOLS SUGGESTED

Standard Socket Set with Ratchet, External Snap Ring Pliers, Screwdriver, Set of Hex Wrenches, Set of Torx Wrenches, Small Pick Tool

STRICTLY OBSERVE THE FOLLOWING GUIDELINES IN ORDER TO USE THE PRODUCT PROPERLY AND AVOID POTENTIALLY DANGEROUS ACCIDENTS.

STEP 1

Read and understand all steps in the instructions before starting the installation. Park the motorcycle on a hard, level surface and turn off the ignition.

WARNING

YOU WILL BE WORKING AROUND THE ENGINE AND EXHAUST SYSTEM DURING INSTALLATION. ENSURE THAT THE ENGINE AND EXHAUST SYSTEM HAVE FULLY COOLED TO PREVENT INJURY.

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. L.E.D.'S contained in components of Kuryakyn products will be warranted for defects in materials and workmanship for 3 years from the date of purchase where as all other components shall be warranted for one(1) year. This includes, but is not limited to; control modules, wiring, chrome & other components.
- 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

For purchasing Kuryakyn® products, you can receive a complete catalog free of charge.

Send the Proof-of-Purchase below with your address to: Kuryakyn, P.O. Box 339, Somerset, WI 54025.

Please indicate either Accessories Catalog for Harley-Davidson® or GL & Metric Cruisers.

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

©2005 Kuryakyn USA® All Rights reserved.



kuryakyn.com



WARNING A FACTORY SERVICE MANUAL WILL BE HELPFUL IN PERFORMING THIS INSTALLATION. DO NOT ATTEMPT TO PERFORM THIS INSTALLATION IF YOU ARE NOT CONFIDENT IN YOUR ABILITY TO COMPLETE ALL OF THE STEPS IN THE PROCEDURE; CONSULT A TRAINED TECHNICIAN. IMPROPER INSTALLATION COULD RESULT IN SERIOUS INJURY OR DEATH.

NOTICE

The installation of any high performance 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 carbureted bikes rejetted and fuel injected bikes tuned with a TTS MasterTune tuning system (calibrations available at www.kuryakyn.com), or by an experienced tuner, on a dyno, with an exhaust gas analyzer.

STEP 2

On 07 and later bikes: Under the oil tank on the right hand side, locate the rear oxygen sensor connector. Unplug sensor connector and feed the end of wire through the frame freeing it from motorcycle. PIC 1

NOTE: Pay attention to wire routing for re-installation.

STEP 3

On 07 and later bikes: Open the plastic cover above the rectifier on front of the frame to gain access to the front oxygen sensor connector. Unplug sensor connector from harness. Remove cable tie holding the wire to the frame and feed the end of the wire through freeing it from motorcycle. PIC 2

NOTE: Pay attention to wire routing for re-installation.

STEP 4

On **FLSTC, FLSTF, FLSTN** and **FLSTSC** models, loosen the mounting bolts that attach the right hand floor board mount to the frame to gain clearance for exhaust removal and installation. PIC 3 (The floorboard was removed from the mount for clarity.)

STEP 5

Loosen the heat shield clamps on both front and rear exhaust pipes.

STEP 6

Remove the two exhaust flange nuts from each head pipe at the cylinder head.

STEP 7

Remove the nuts attaching the exhaust mount bracket to the frame. PIC 4

STEP 8

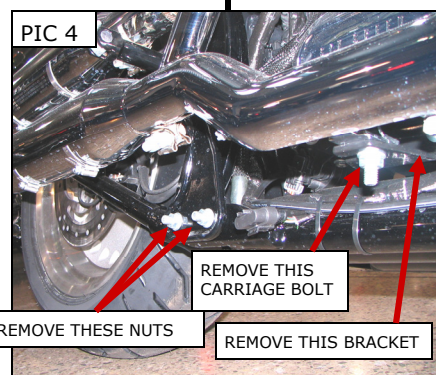
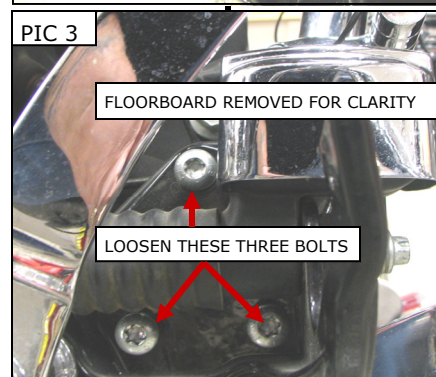
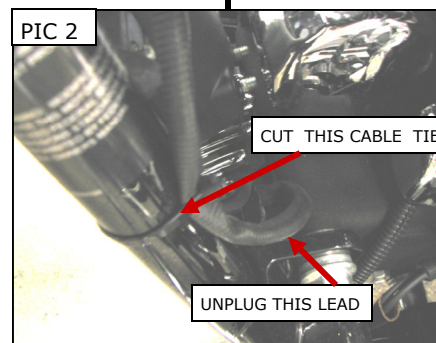
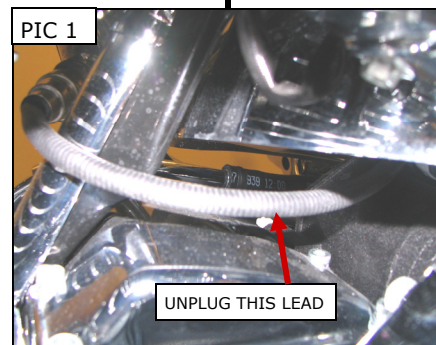
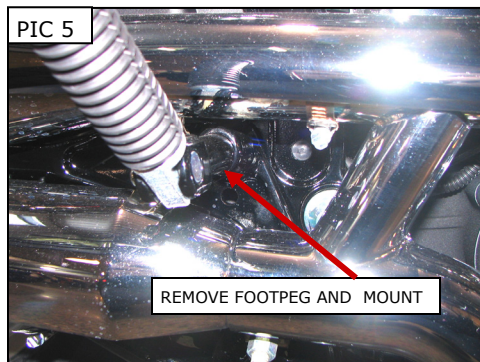
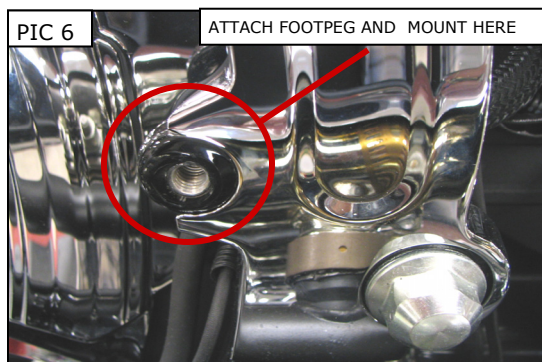
If equipped, unbolt the carriage bolt and clamp attached to the bracket under the right side transmission cover. PIC 4

STEP 9

Remove the entire exhaust system and set it aside.

STEP 10

On 07 and later models: carefully remove the O2 sensors from the stock head pipes and save for re-use with the new system.



STEP 11

On **FLSTN, FLSTF** and **FXSTD** models, you will need to remove the right side passenger footpeg and hanger, as this is attached to the exhaust mount bracket. PIC 5
Attach the passenger foot peg assembly using the included 3/8" x 2-1/2" Socket Head Cap Screw to the frame of the bike. PIC 6

STEP 12

Carefully remove exhaust port flanges and retaining rings from the stock exhaust system using an external snap ring pliers. PIC 7

NOTE: Replace bent or damaged retaining rings. Check exhaust port gasket condition. Kuryakyn recommends replacing the exhaust gaskets with part number 482 for best performance

NOTICE

Every effort is made for Kuryakyn Exhaust Systems to provide improved cornering clearance. However, due to design and space limitations on some motorcycle models, ground and cornering clearance may not be improved and in some cases may be reduced. Be sure to follow proper installation instructions.

NOTICE

When installing new chrome exhaust, make sure your hands are clean and free of grease and oil. After installation, thoroughly clean pipes with a soft clean cloth and cleaning solvent that will leave no residue (glass cleaner, alcohol, ammonia, etc...) before starting the motorcycle.

STEP 13

On **07 and Later models:** Apply a small amount of anti-seize compound to the threads of the O2 sensors and install them into the new header assembly. Tighten securely.

NOTE: Be careful not to get anti-seize on the sensor tip, it may affect sensor function.

ON '86-'06 MODELS: Install the both sets of included O2 Sensor Bung Plugs.

ON '07-'11 MODELS: Install the included 12mm (smaller) O2 Sensor Bung Plugs.

ON '12-LATER MODELS: Install the included 18mm O2 sensor Bung Plugs.

Apply a small amount of anti-seize compound to the threads of the P/N 509 and/or P/N 540, O2 Sensor Bung Plugs, and thread them into the bungs for the O2 Sensors. **Failure to do so will result in a severe exhaust leak through the O2 bung!**

STEP 14

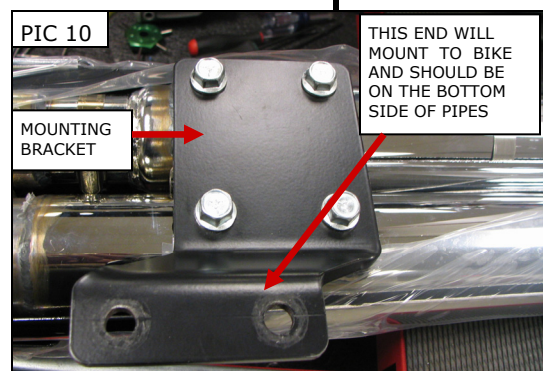
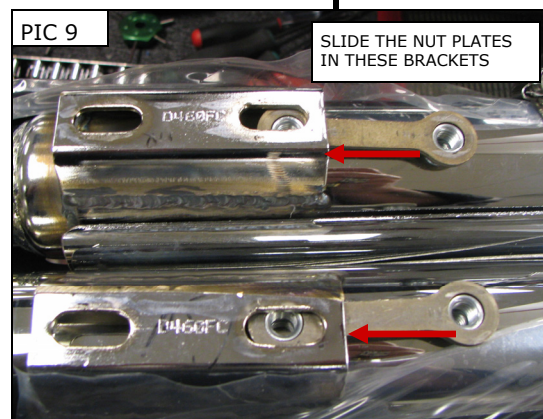
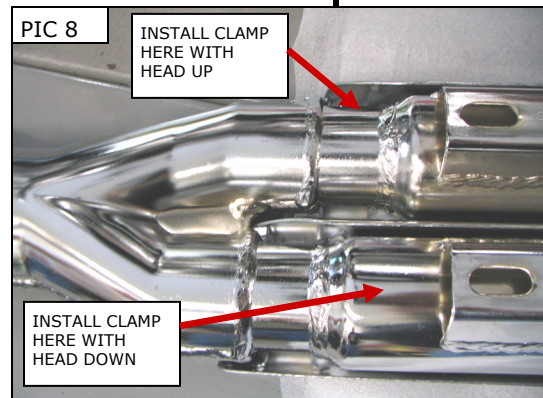
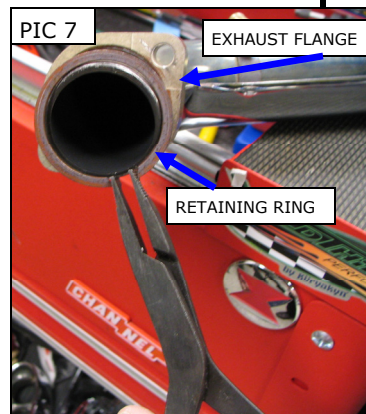
Install exhaust port flanges and retaining rings (removed in Step12) onto the new head pipes. PIC 7

STEP 15

Install one of the included small hose clamps on each of the preassembled muffler heat shields. Install the top with the head up and the bottom with the head down. PIC 8

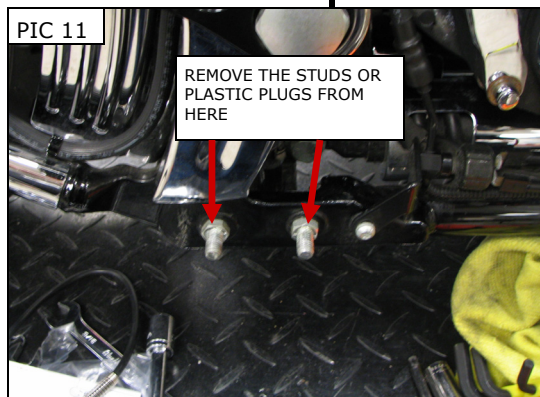
STEP 16

Slide nut plates inside brackets that are welded to the back of each muffler. PIC 9 Attach the mounting bracket using the four included 5/16"-18 X 5/8" Flange Bolts and two nut plates. PIC 10 Leave them loose at this time.



STEP 17

If equipped, plastic plugs or threaded studs must be removed from the mounting point on frame. PIC 11 Install complete assembly into exhaust ports (rear port first). Start the stock flange nuts at the heads, do not tighten at this time. Install the two included 3/8"-16 X 3/4" Flange Bolts attaching the exhaust bracket to the motorcycle right side lower frame rail. Do not tighten at this time.

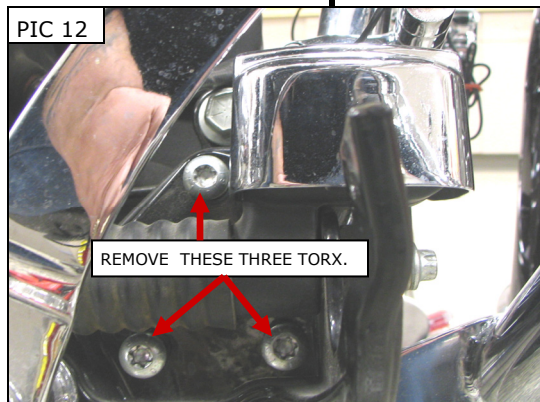

STEP 18

On **FLSTC, FLSTF, FLSTN** and **FLSTSC** models, remove the three Torx head screws (loosened in Step 4) that attach the floorboard mount to the frame of the bike. PIC 12 Using two of the supplied spacers between the floorboard mount and the frame at each hole location, PIC 13, insert one of the supplied 3/8"-16 X 1-1/4" Flange Bolts through each hole. Attach the floorboard mount back to the frame. Tighten securely.

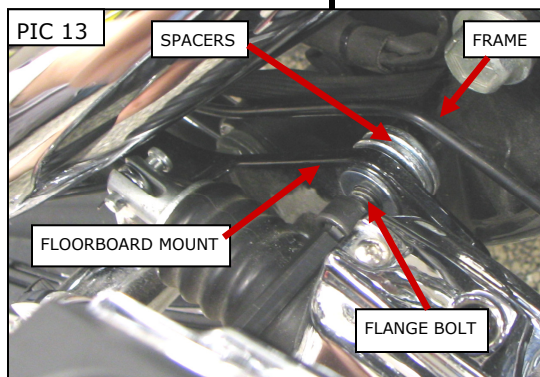
NOTE: If your bike is equipped with an engine guard, you will use the forth included 3/8"-16 X 1-1/4" Flange Bolt and the two remaining spacers to attach the engine guard to the right floorboard mount.

STEP 19

Remove heat shields from protective packaging. Place each heat shield on a non-abrasive surface such as a blanket or carpet.


STEP 20

Install each hose clamp by feeding tail end of clamps into heat shield clips. Take note of clamp screw head direction. Screw head must be accessible when system is installed on motorcycle for adjustment purposes PIC 14. Use the small hose clamps on the head pipes and the large hose clamps on the Power Cell heat shield.


STEP 21

Install the heat shields onto the header assembly.

STEP 22

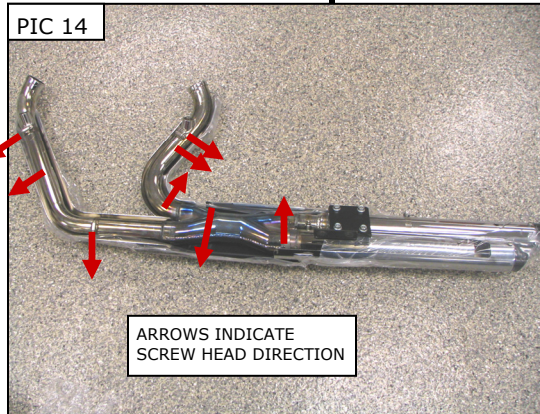
Tighten the exhaust port flange nuts and mounting bracket bolts.

STEP 23

Tighten all of the hose clamps on the head pipe and Power Cell heat shields while making sure they all remain level and aligned.

STEP 24

On 07 and later models: plug the O2 sensor wires back into the wiring harness and route wires away from hot areas of the motorcycle. Use cable ties in original locations. Reinstall the plastic rectifier cover from Step 3.


NOTICE

Secure all wiring away from any moving parts, pinch points or extreme heat. Küryakyn **WILL NOT** issue a warranty on any electrical component that fails due to pinched, crimped, broken, abraded, melted or frayed wires.

STEP 25

Check for adequate clearance between all exhaust system components and motorcycle accessories prone to heat damage

NOTICE

Proper tuning is important. We recommend carbureted bikes should be rejetted and fuel injected bikes should be tuned with a TTS MasterTune tuning system (calibrations available at www.kuryakyn.com), or by an experienced tuner, on a dyno, with an exhaust gas analyzer. 2007 and later Harley Twin Cams run especially lean combined with retarded ignition timing. Lean conditions and/or retarded ignition timing will cause high exhaust temperatures and discolor chrome exhaust.

STEP 26

All hardware must be properly tightened before starting motorcycle.

NOTICE

It is the installer's responsibility to ensure that all of the fasteners (including pre-assembled) are tightened before operation of the motorcycle. Kuryakyn will not issue a warranty on components lost due to improper installation. Periodic maintenance may be required.

NOTICE

KURYAKYN DOES NOT WARRANTY ANY CHROME EXHAUST PRODUCTS AGAINST DISCOLORATION! Discoloration is not a defect in chrome. All chrome exhaust systems will turn color. Chrome discoloration is a result of heat. The more heat the chrome is exposed to, the quicker and more severe the discoloration will be.

EXHAUST CARE

1. Proper tuning is important. We recommend carbureted bikes should be rejetted and fuel injected bikes should be tuned with a TTS MasterTune tuning system (calibrations available at www.kuryakyn.com), or by an experienced tuner, on a dyno, with an exhaust gas analyzer. 2007 and up Harley Twin Cams run especially lean combined with retarded ignition timing. Lean conditions and/or retarded ignition timing will cause high exhaust temperatures and discolor chrome exhaust.
2. Avoid long periods of idling as this can cause discoloration
3. Make sure there are no exhaust leaks at the junction of the exhaust pipes and cylinder heads. We recommend replacing the gaskets with Kuryakyn Wild Things™ - Cometic exhaust gaskets, P/N 482.
4. Make sure there are no intake leaks. Intake leaks will cause a lean condition and engine overheating. This could lead to discoloration.
5. When installing new chrome exhaust, make sure your hands are clean and free of grease and oil. After installation, thoroughly clean pipes with a soft clean cloth and cleaning solvent that will leave no residue (glass cleaner, alcohol, ammonia, etc...) before starting the motorcycle.

Ride On!

PAGE

5