

# INSTALLATION

# **ELECTRO-MAGNETIC CRUISE ASSIST 6280**

FITS: '96-UP H-D MODELS (EX. '04-UP XL OR ANY MODELS EQUIPPED WITH HYDRAULIC CLUTCH)

## **PARTS INCLUDED**

- 1 Control Housing Assembly
- 1 Cruise Clamp
- 1 Armature Plate
- 1 Circuit Board Housing with Harness
- 1 ISO-Grip, Throttle
- 1 ISO-Grip, Clutch
- 1 Brake Side Lever
- 1 Clutch Side Lever
- 1 Hardware Kit, including:
  - 2 #10-32 x 5/8 Socket Head Cap Screw (SHCS)
  - 10 4" Cable Tie
  - 4 Female Tap Connector
  - 1 Grip Glue
- 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 ATTENTION NOTES REGARDING THE USE AND CARE OF THIS PRODUCT.

CAUTION! This indication alerts you to the fact that ignoring the contents described herein can result in potential injury or material damage.

ATTENTION! This indication alerts you to the fact that ignoring the contents described herein may negatively affect product performance and functionality.

## **TOOLS SUGGESTED**

A service manual is highly recommended as well as a tank cover or blanket for this installation. Set of hex wrenches, Torx bits, sockets or drivers, needle nose pliers, combination wrenches, snap ring pliers, utility, 80-100 grit sandpaper or emery cloth, adhesive solvent, window cleaner, test light

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

## **CLUTCH AND BRAKE LEVER PROCEDURE**

**STEP 1** Park the motorcycle on a hard, level surface; turn off the ignition.

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#### **CUSTOMER SERVICE**

877.370.3604 (toll free)

## INSTALLATION QUESTIONS

techsupport@kuryakyn.com or call 715.247.2983

#### **LIMITED WARRANTY**

Küryakyn warrants that any Küryakyn 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:

· Küryakyn 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.

· Küryakyn makes no warranty, expressed or implied, with respect to any gold plated products.

 Küryakyn shall not be liable for any consequential and incidental damages, including labor and paint, resulting from failure of a Küryakyn product, failure to deliver, delay in delivery, delivery in nonconforming condition, or for any breech of contract or duty between Küryakyn and a customer.

> Küryakyn products are often intended for use in specific applications. Küryakyn makes no warranty if a Küryakyn product is used in applications other than intended.

Küryakyn electrical products are warranted for one
(1) year from the date of purchase by the consumer.
Components of Küryakyn products containing L.E.D.s
will be warranted for defects in materials and
workmanship for 3 years from the date of purchase.

Küryakyn makes no warranty of any kind in regard to other manufacturer's products distributed by Küryakyn. Küryakyn 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 Küryakyn product comes with a Proof-of-Purchase good for a complimentary catalog. Details in packaging.

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

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**STEP 2** With a snap ring pliers, remove the snap rings located on the bottom of each lever pivot pin (See FIG.1).

**STEP 3** Carefully remove the existing brake lever from the master cylinder. Refer to Service Manual – If lever is not removed properly, damage to the brake switch will occur. Set aside this brake lever, it will not be reused.

**STEP 4** Remove the rubber boot or cover and loosen the clutch cable adjuster so the maximum amount of slack is obtained. Pull the clutch cable ferrule straight out from the perch until it is clear of the recess then rotate the cable forward through the slot in the lever and perch, shown in <u>PIC.1</u> and <u>PIC.2</u>.

**STEP 5** Remove the pivot pin to free the lever from the perch. Remove the nylon cable anchor/pivot pin to separate the lever from the cable (see <u>FIG.2</u>.) Refer to service manual.

**NOTE** Now is a good time to lube your clutch cable!

**STEP 6** Smear a dab of grease on the pivot pin, make sure the bushing is in place in the new lever, and reassemble in the reverse order of disassembly. Replace the snap ring on the pivot pin.

**STEP 7** Adjust the cable so there is about 1/16" to 1/8" of free play between the clutch cable ferrule and the clutch perch. Tighten the adjuster locknut and replace the rubber boot or cover. (See <u>PIC.3</u>.)

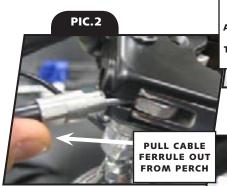


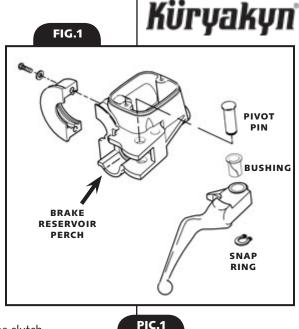
**STEP 1** Roll or slide the rubber throttle cable adjustment covers to gain access to the adjusters. See <u>PIC.4</u> (next page).

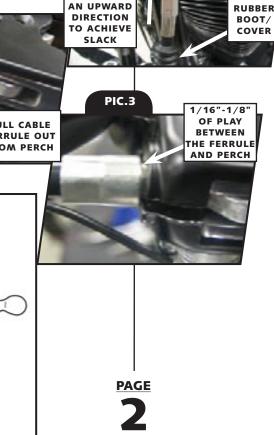
**STEP 2** Loosen the jam nuts on the adjusters on both cables; turn the jam nuts and adjusters until the cables are at their loosest point. See <u>PIC.4</u> (next page).

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FIG.2







MOVE

CABLE IN

PIVOT PIN

BUSHING

CLUTCH SNAP RING

**ELECTRO-MAGNETIC CRUISE ASSIST** 

**INSTALLATION** 

**STEP 3** Separate the switch housings by removing the two Torx or hex screws (depending on the year of your motorcycle); set the screws aside, they will be re-used.

**STEP 4** Lift up on the rear cable where it fits into the throttle sleeve; this will provide enough slack in the cable to remove the cable end and brass ferrule from the throttle sleeve. See PIC.5.

NOTE Do not loose the brass ferrules; they are not permanently attached to the

**STEP 5** With both cables removed, slide the existing throttle grip off the handlebar; set it aside. it will not be re-used.

**STEP 6** Align the tabs on the armature ring with the rectangular slots on the throttle sleeve flange. The tabs on the armature ring must float in the slots for proper operation.

**STEP 7** Place the Control Housing Assembly over the cable side of the included throttle grip. (See PIC.6)

**STEP 8** Slide the new throttle grip and housing assembly onto the handlebar, assuring armature ring is engaged on the tabs.

**STEP 9** Connect the throttle cables and brass ferrules to the new throttle sleeve in the reverse order they were removed.

**STEP 10** Loosen the two Torx (OEM) or Socket Head Cap Screws fasteners securing the front brake perch to the master cylinder assembly. Carefully, slide the brake control away from the switch housing.

**STEP 11** Reconnect the switch housing halves with the fasteners removed in STEP 3, leaving loose for the time being. Ensure that the wires from inside the switch housing are routed correctly and are not pinched or stretched when installed.

**STEP 12** Remove the two fasteners and the brake reservoir perch clamp. Have an assistant hold the master cylinder assembly or allow it to rest on a soft cloth or towel until reassembled. Set the clamp aside, it will not be re-used.

Avoid damage to the motorcycle. Protect painted surfaces with a soft cloth or blanket.

**STEP 13** Hold the included Cruise Clamp in place and loosely fasten it to the master cylinder assembly.

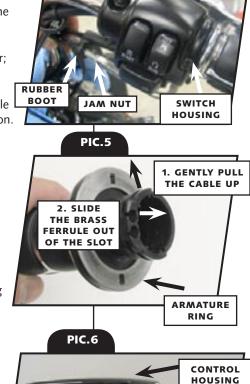
**STEP 14** Secure the Control Housing Assembly and the Cruise Clamp together with the two included #10-32 x 5/8 SHCS. Leave finger tight for now.

**STEP 15** Ensure that the wiring harness from the switch housing locates in the handlebar recess and is not pinched or stretched in any way.

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

**STEP 16** Align the Control Housing Assembly and tighten the two fasteners from STEP 14 first, then tighten the two fasteners for the clamp from STEP 13.

**NOTE** It is important to tighten in this order to ensure proper alignment.



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CRUISE CLAMP

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**STEP 17** Adjust the throttle cables so there is proper free play in the cables. Refer to your specific model owner's manual for more information.

**STEP 18** Smear a dab of grease on the pivot pin, verify the bushing is in place in the supplied lever, and install the supplied lever.

**STEP 19 NOTE: DO NOT FORCE IT!** Make sure the thin tab on the lever is positioned at the end of the master cylinder plunger and be careful not to damage the brake light switch.

**STEP 20** Gently squeeze the brake lever a few times and verify proper operation and stop light function. Replace the snap ring on the pivot pin.

**STEP 21** Remove the seat and/or side covers to find a suitable location to stow the Circuit Board Housing Harness. It should be located out of the way of pinch points, extreme heat, moving parts, etc when the seat is in place.

**STEP 22** Make sure ignition switch is in "Off" position. Connect the black wire from the Circuit Board Housing Harness to the negative post on the battery.

**STEP 23** Use a test light to locate a "keyed power" (12 volt power with key in the on position) source in the bike's wiring harness. Clamp an included female tap connector to the "keyed power" wire; ensure that the connector fully closes over the wire. (The orange wire is the accessory power wire on your bike and is often a good choice. The blue wire powers the tail light and other running lights and may also be used. Refer to your specific model service manual for more information if necessary.)

**STEP 24** Plug the Grey wire with male connector from the Circuit Board Housing Harness into the female tap connector installed on the "keyed power" wire.

**STEP 25** Use a test light to locate a "brake power" source in the bike's wiring harness (commonly a red wire). Clamp an included female tap connector to the "brake power" wire; ensure that the connector fully closes over the wire. (See PIC.7.)

**STEP 26** Plug the blue wire with male connector from the Circuit Board Housing Harness into the female tap connector installed on the "brake power" wire. (See PIC.7.)

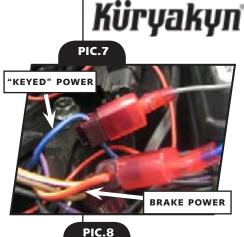
## STEP 27 CLUTCH SWITCH EQUIPPED MODELS ONLY (see PIC.8)

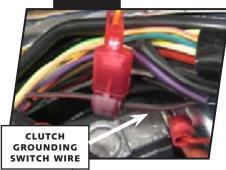
- **A.** Locate the black wire with a red tracer (from the clutch switch). (Note grounding switch). There may be similar colored wires in the main harness. Ensure that it is the correct wire with a test light. This wire should only have ground when the clutch lever is pulled in completely to disengage the clutch. (Refer to your specific model service manual for more information if you have difficulty locating this wire.)
- **B.** Clamp an included female tap connector onto the black wire with red tracer from STEP 27A.
- **C.** Plug the orange wire with male connector from the Circuit Housing Harness into the female tap connector from STEP 27B.

**STEP 28** Route the wiring harness from the Cruise Assist assembly down the bars, under the tank, and under the seat. Use the included cable ties to secure the wiring harness up and out of the way of pinch points, extreme heat, moving parts, etc.

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

**STEP 29** Connect the two connectors from the Control Housing Assembly to the two connectors from the Circuit Board Housing Harness.





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**ELECTRO-MAGNETIC CRUISE ASSIST** 

**INSTALLATION** 

- **STEP 30** Turn the ignition on; do not start the engine.
- **STEP 31** Press the power button (pwr) on the Cruise Assist to turn it on.
- **STEP 32** Twist the throttle control half way open and press the set (set) button on the Cruise Assist. The throttle should hold the position selected.
- **STEP 33** Depress the rear brake pedal; the throttle control should immediately return to closed position.
- **STEP 34** Repeat STEP 31 and STEP 32 and depress the front brake lever; the throttle control should immediately return to closed position.
- **STEP 35 MODELS EQUIPPED WITH CLUTCH SAFETY SWITCH** Repeat STEP 31 and STEP 32 and depress the clutch lever; the throttle control should immediately return to closed position.
- **STEP 36** If the throttle does not return to full closed position when the brake levers or clutch lever (clutch switch equipped models only) are depressed, ensure that all electrical connections are secure and installed correctly.

### **CLUTCH SIDE ISO-GRIP PROCEDURE**

CAUTION! Avoid damage to the motorcycle. Protect painted surfaces with a soft cloth or blanket.

- **STEP 1** Remove the clutch side grip. A sharp utility knife may be used to cut the grip lengthwise allowing you to "peel" the existing grip from the handlebar.
- **STEP 2** Sand the clutch side handlebar surface with 80-100 grit sandpaper or emery cloth to remove any previous glue or rubber residue. This provides a pristine metal surface for the new adhesive and the roughness provides the adhesive a better surface to adhere too.
- **STEP 3** Clean the exposed handlebar with solvent and allow the area to dry completely.
- **STEP 4** Clean inside the grip with a mild solvent, such as window cleaner, to remove any grime or residue. Allow to dry completely.
- **STEP 5** Apply glue to the inside of the clutch side grip. Distribute the glue evenly inside the grip for the best adhesion. (Do not touch glue with fingers Harmful to paint & skin.) Additional warnings and safety information are on the adhesive label.
- **STEP 6** In one smooth motion, slide the grip onto the handlebar and into position. Rotate it back and forth slightly as you slide it on to help distribute the glue evenly and keep the grip from "plowing" the glue up against the switch housing. You must work quickly to get the desired position before the glue sets up. (Approx. 6 seconds).
- **STEP 7** Once in place, squeeze the grip firmly to press the rubber against the bar and hold for 15 seconds. Allow a minimum of ten minutes to cure before operating the motorcycle.
- **STEP 8** Ensure proper operation and clearance before operating the motorcycle.
- CAUTION! Ensure that the installation of this product does not interfere with the proper operation of the motorcycle before riding.

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Ride On!

**ELECTRO-MAGNETIC CRUISE ASSIST** 

**INSTALLATION** 

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