

Congratulations on the purchase of your new BrakeAway Motorcycle Cruise Control. At BrakeAway Products, we are committed to your complete satisfaction. With proper installation, use, and periodic maintenance, this cruise control is built for the long haul in more ways than one. Please follow all of the instructions carefully to insure your riding safety and enjoyment.

PROPER USE,

(*The following information is to be shared with any person who will be riding or buying any Motorcycle equipped with a BrakeAway Cruise Control*).

Always include your cruise control in your standard pre-ride inspection. Make sure the unit engages easily, throttle should turn with little effort but remain in position on its own. The unit should effortlessly snap to the disengaged position with a slight pull of the brake lever or tap of the Manual Release Lever. The throttle should always turn freely when unit is disengaged. Check the Cam(8) (see diagram on next page) for wear at the point of contact with the brake lever or damage of any kind. All fasteners must be tight.

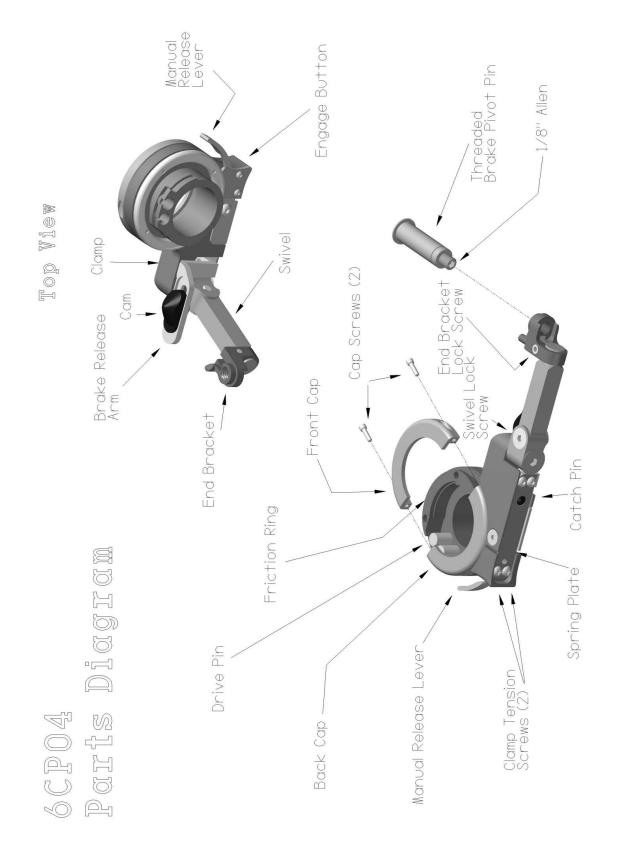
Warning! Never use this product with worn or damaged parts. All replacement parts are obtainable by contacting BrakeAway Products Inc at (503)372-9346 or e-mail <u>customersevice@brakeawayproducts.com</u>.

Once you're on the open road and ready to cruise, reach the speed you want to maintain and let your R.P.M.s level off. While holding the throttle still, reach with your right thumb only and push the engage button until it snaps. Your bike should now maintain your set speed on its own. You can make adjustments for up or downhill grades with a slight twist of the throttle while engaged.

To disengage the unit simply pull the front brake or push forward on the manual release lever with your right thumb until the unit snaps to the disengaged position. Always keep your cruise control clean and free of debris, occasionally lubricate the catch pin with WD40 or chain wax.

Never forget that you maintain control even when unit is engaged. Always be aware of your cruising speed and maintain safe distance from objects or vehicles in front of you. Never let go of your throttle. The BrakeAway cruise control is not intended for hands free or one handed riding, this unit was specifically designed to allow the rider to safely rest a cramping throttle hand on the throttle.

BrakeAway Products Inc. wishes you many years of cramp free cruising, ENJOY and ride SAFELY!!!





6CP04 BrakeAway Motorcycle Cruise Control Installation Instructions

Before you begin, Loosen the Check the action of your throttle return spring by turning your throttle and quickly releasing it. If the friction screw on the bottom of your switch housing is not tightened down and your cables are in proper working order, your throttle should snap back to idle position. Please correct any problems with the friction screw or throttle cables before installation of cruise control. **Make a mental note of the how your throttle snaps back so you have a reference at the end of the installation**.

In these instructions, all references to **Front** refers to the **Front** (headlight end) and **Back** refers to the **Back** (taillight end) of the Motorcycle.

Section 1 Preparation and Disassembly

- 1.1 If your bike is not fuel injected, turn off the fuel supply before you begin.
- 1.2 Remove the C clip from the bottom of your brake pivot pin (Figure 1). Do not remove the pin yet. Compare the C clip to the two threaded brake pivot pins supplied in your kit. Select the pin that fits your C clip and set it within arms reach for the next step.
- 1.3 Remove the stock brake pivot pin by pushing it upward from the bottom and then pulling it out from the top (Figure 2). While carefully holding the brake lever in place, install the appropriate replacement pin (Figure 3). Re-install the C clip onto the new replacement pin.





Figure 2

Figure 3

- 1.4 Pull the brake lever and insert a wood shim or piece of cardboard into the gap shown (Figure 4). This will hold the brake lever slightly closed to prevent damage to the brake light plunger switch during the disassembly and assembly of the switch housing.
- 1.5 Slide the two rubber boots down the throttle cables to expose the cable adjusters (Figure 5). Measure the length of threads showing on each cable (Figure 6). Make a note of each length for the front cable and the **back cable** so you can return them to the same positions during the installation of the cruise control. *The 3/8" length in figure 6 is just an example. Make a note of the actual thread lengths on your cables.*



Figure 4

Figure 6

- 1.6 Use two 3/8" wrenches to loosen the cable adjuster jam nuts (Figure 7). Run the nuts all the way down to the end of the threads followed by the cable adjusters (Figure 8).
- 1.7 Loosen the Harley star screw. (bottom of the switch housing between the cables). Turn it down counterclockwise a few turns. This screw will no longer be needed but there is no need to remove it. Remove the upper and lower switch housing screws (T-25 Torx) to separate the upper from the lower housing(Figure 9). (We tied the upper switch housing back with a zip tie to keep it out of the way)

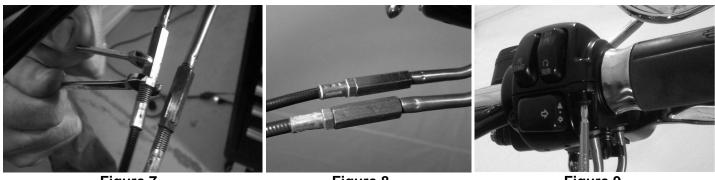


Figure 7

Figure 8

igure 9

1.8 (Reference how the cables are hooked onto the grip, you will be re-attaching them to the cruise control the same way)

Turn the throttle back so you can unhook the rear cable from the throttle grip. Hold onto the brass ferrule as you pull the cable off (Figure 10) and then carefully remove the ferrule from the cable (Figure 11).



Figure 10

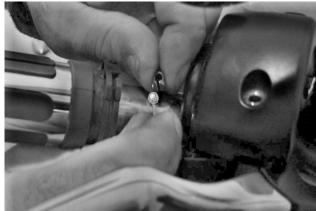


Figure 11

1.9 Place a small flathead screwdriver under the front cable and pull the cable up as you rotate the throttle towards idle position. (Figure 12). Remove the cable and ferrule and slide the throttle grip off of the handlebar. (Figure 13)





Figure 12

Figure 13

Section 2 Grip Installation

2.1 Remove the BrakeAway cruise control from the package. Disengage the unit by pushing on the manual release lever until the clamp pops open. (See Parts Diagram for reference). Rotate the friction ring to expose the two cap screws. Remove the two cap screws and pull the front cap off as shown in the parts diagram. Rotate the ring so you can remove the back cap (Figures 14 & 15).

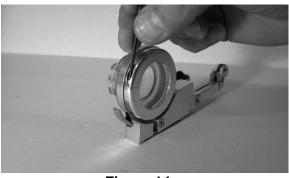


Figure 14



Figure 15

2.2 Remove the 1 3/8" O ring from your wrench bag and install it onto your throttle grip as shown. (Figure 16 &17) This will work as a spacer to keep the grip firmly mounted inside the friction ring. Line up the ferrule holes in your throttle grip with the two drive pins as shown (Figure 18) Push the grip all the way into the friction ring pocket as far as it will go so the holes receive the two drive pins. Make sure the grip is all the way to the bottom of the pocket.



Figure 16

Figure 17

Figure 18

- 2.3 Use a small Allen wrench to push the O ring all the way into the groove in the friction ring **(Figure 19).** The O ring needs to be pushed in flush with the face of the friction ring all the way around.
- 2.4 Lay the cruise control on a bench with the installed grip standing straight up. Turn the two drive pins up, away from the cruise control body. Position the back cap (*Threaded Half, no thru holes*) as shown (Figure 20) and slide it all the way onto the friction ring as shown (Figure 21)



Figure 19

Figure 20

Figure 21

2.5 Slide the front cap onto the friction ring until the ends of the two halves come together (Figure 22). Make sure that your ring caps are installed just as they are in figure 22. Re-install and tighten the two cap screws (Figure 23)

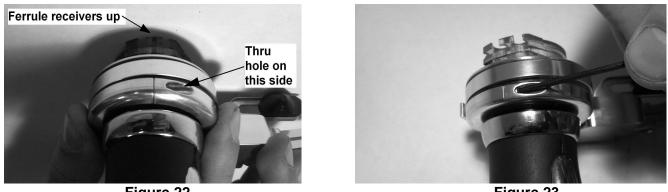


Figure 22

Figure 23

2.6 Slide the entire assembly over the handlebar (Figure 24) until the ferrule receivers are inside of the switch housing. Replace the brass ferrule on the front cable and line it up with the front receiver hole in the friction ring. Place a small flathead screwdriver to lift the front cable up while holding the ferrule in place (Figure 25 & 26) Push the ferrule in and lay the cable in the center slot as shown (Figure 27). Re-install the back cable (Figure 27)



Figure 24

Figure 25

Figure 26

Figure 27

- 2.7 Return both cable adjusters back to their original positions and tighten the jam nuts. Refer to your measurements taken in step 1.5 (Figure 28). Slide the rubber boots back into position
- 2.8 Re-Assemble the upper and lower switch housing (T-25 Torx). (Figure 29)
- 2.9 Remove the shim from your brake lever at this time. Do not proceed to the next step with shim in place or your brake release cam will be set to an incorrect position! (Figure 30)



Figure 28

Figure 29

Figure 30

Section 3 Cam Adjustment and Final Assembly

- 3.1 Loosen the swivel lock screw (Refer to Parts Diagram) and rotate the swivel out of the way. Engage the cruise control by squeezing it together with your thumb and index finger until the clamp snaps into the engaged position (Figure 31)
- 3.2 With the clamp closed in the **engaged** position, loosen the cam lock screw on the bottom of the black Delrin cam. Position the brake release arm approximately ¼" below the brake lever and slide the cam in the slot until it makes contact with the brake lever as shown (Figure 32). Tighten the cam screw to secure this position. Do not over tighten, the threads are into the Delrin cam and can be stripped if over tightened.



Figure 31



Figure 32

3.3 Loosen the end bracket lock screw (Refer to Parts Diagram). Disengage the cruise control and rotate the swivel so the threaded hole in the end bracket lines up with the threaded end of the brake pivot pin. (Figure 33)

If you are using the smaller of the two pins, please skip to 3.3B at this point.

Place the supplied 1/8" Allen wrench through the threaded hole of the end bracket and rotate the pin counterclockwise from the bottom to thread the brake pivot pin down into the end bracket (Figure 33). Tighten the end bracket against the shoulder of the pin.

Make sure you align the threads to go straight into the end bracket. It will go into the threads easily if it is straight. Do not force it or you can cross thread it and damage the aluminum threads.

3.3B If using the smaller of the two pins, you will need to add the supplied 10-32 nut for the brake pivot pin to thread into. Drop the threaded part of the pin completely though the larger threaded hole in the end bracket. Thread the supplied 10-32 nut onto the brake pivot pin to get it started.

Drop the end bracket down to allow the nut to become encapsulated into the pocket in the end bracket. Thread the pin in **counterclockwise** from the bottom with the Allen wrench as shown (Figure 34) until it tightens the end bracket up to the shoulder of the pin..



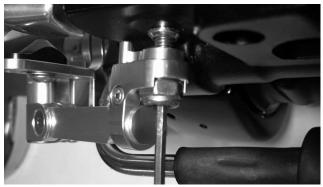


Figure 33

Figure 34

- 3.4 Engage and disengage the clamp by squeezing it together as shown in (Figure 35) and then releasing it by pushing on the manual release lever. Do this a few times, this will help align, center and seat the clamp into the groove in the friction ring. You should hear a positive snap during the engagement when the clamp is set in the correct position. You might need to wiggle the loose hardware around a little to help position the clamp. It needs to be centered and straight in the slot in the friction ring.
- 3.5 Once the clamp will engage with a positive click. **Engage it** and tighten the end bracket lock screw and the swivel lock screw as shown (Figure 36)



Figure 35

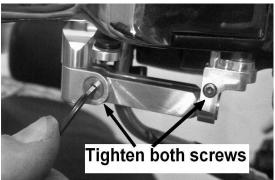


Figure 36

Testing:

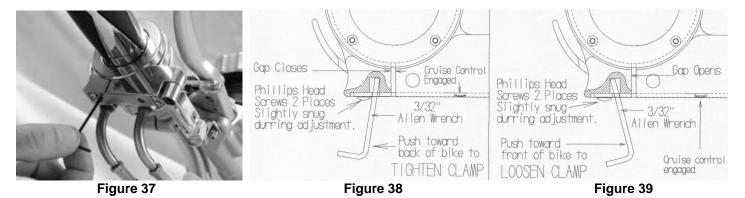
- 3.6 Disengage your cruise control by pushing on the manual release lever. Turn your throttle and let go of it. The throttle should snap back to idle just as it did before the installation. If you are satisfied with the return action of your throttle, proceed to 3.7. If the throttle hesitates, check the Harley star wheel first, make sure it has been loosened and is not touching the cruise control. If the star wheel is not causing the problem, loosen the end bracket lock screw and the swivel lock screw and return to step 3.4 until you achieve the proper clamp position.
- 3.7 Turn the throttle and engage the cruise control by pushing forward on the engage button (see parts Diagram) until the clamp snaps closed. Be careful not to touch the manual release lever during engagement. Make sure the spring plate is fully engaged with the catch pin by pushing up on the spring plate from the bottom. The plate should be all the way up. If it is, proceed to step 3.8 If the cruise control does not close with a positive snap or if the plate moves up further when you push up on it, please check to make sure the cam is not hitting the brake lever during engagement. The cam should be directly behind the brake lever but not touching it when the cruise control is engaged. If the cam is hitting, move it back. If the cam is not hitting and engagement is still not working properly, loosen the end bracket lock screw and the swivel lock screw and return to step 3.4 until you achieve the proper clamp position.
- 3.8 With the cruise control engaged the throttle should stay in place when you let go of it You can adjust the throttle position while engaged by simply turning it either direction. This is how you will adjust your speed as needed. The throttle should turn with a smooth resistance and stay where you put it. If it does, proceed to 3.9 If the throttle slips or is too hard to move, please refer to section 4 for clamp tension adjustment.
- 3.9 Engage the cruise control and then apply the front brake while pulling upward on the brake lever. The cruise control should disengage without hesitation. After the unit is disengaged, apply the front brake while pushing down on the brake lever. The brake lever should just touch the top of the cam as it rides over it. If the unit hesitates before disengaging, check the cam position. It should be set directly behind the brake lever when the unit is engaged.

Contact BrakeAway products at (<u>techsupport@brakeawayproducts.com</u>) or (503) 372-9346 if you are having problems with any of the last four steps. Do Not ride the motorcycle until all testing has been successfully completed and your cruise control is working as described.

SECTION 4: CLAMP TENSION ADJUSTMENT

Clamp tension refers to the amount of friction or resistance which is applied to the throttle when the cruise control is engaged. If your cruise control tension is too loose and will not hold reasonable throttle return spring tension, or if the factory setting ends up being too tight, follow these instructions carefully.

- **4.1** With cruise control in the **engaged** position, loosen and very lightly snug the two clamp tension screws **(See Diagram)**. Make sure the catch pin remains fully engaged in the hole of the spring plate.
- 4.2 Insert the back side of a small Allen wrench into the tension adjustment hole which is just behind and right between the two clamp tension screws. Pull the bottom of the wrench back in a prying motion, toward the back of the bike (Figure 37 & 38) to tighten, or push forward to loosen (Figure 39) while turning the throttle to test the clamp tension. Stop as soon as the clamp will hold the throttle in place. The throttle should turn smoothly with moderate resistance and stay in place when you let go of it.
- 4.3 Tighten the two clamp tension screws.



WARNING!!! NEVER OVER TIGHTEN THE CLAMP TENSION. THIS PRODUCT IS DESIGNED TO RESIST ONLY THE THROTTLE RETURN SPRING TENSION. THE RIDER SHOULD ALWAYS BE ABLE TO EASILY ADJUST THE THROTTLE POSITION. OVER TIGHTENING THE CLAMP COULD CAUSE THE THROTTLE TO BE UNMANAGEABLE AND HAS THE POTENTIAL TO CAUSE BRAKE RELEASE FAILURE.

SECTION 5: INSPECTION AND MAINTENANCE

- **5.1** Check your cruise control for proper operation during your pre-ride safety inspection. Make sure all components are tight and functioning properly. Check the cam for wear or damage of any kind.
- **5.2** Occasionally lubricate the catch pin with chain wax or WD-40; Annually remove the cruise control and wash it thoroughly with warm soapy water to remove road film and then dry thoroughly and re-lube the catch pin. Inspect the cam and all other components for wear or damage. Do Not use the BrakeAway cruise control with any worn, loose or damaged parts. All components are obtainable from BrakeAway Products Inc.

(503)372-9346 or e-mail <u>customerservice@brakeawayproducts.com</u>

"WARNING !!!"

These instructions were designed as a guide line to install the BrakeAway Cruise Control. BrakeAway Products, Inc. assumes no responsibility for the competence level of the installer or the ability of the installer to determine the proper function of the BrakeAway Cruise Control. Proper installation, maintenance, and pre-ride inspection are essential to the safety of the BrakeAway Cruise Control, and are the sole responsibility of the installer and or user of the BrakeAway Cruise Control. If the installer and or user of the BrakeAway Cruise Control is unable to achieve function satisfactory to the user, or if the user is unable to maintain satisfactory function of the BrakeAway Cruise Control, it is the responsibility of the user to remove it or have it removed. You may return it to BrakeAway Products, Inc. under the terms of the warranty, within the warranty period.

Serious injury or death could result if the BrakeAway Cruise Control is installed improperly and or used irresponsibly. Hands free or one handed operation of a motorcycle is considered by BrakeAway Products Inc. to be dangerous and irresponsible and is not the intended function of this product. Do Not install this product on any motorcycle which has not been tested and listed exclusively by BrakeAway DrakeAway DrakeAway DrakeAway BrakeAway Br

Products Inc. for proper fit. See fit list on the back of package or at <u>www.brakeawayproducts.com</u> BrakeAway Products, Inc. assumes no liability for the misuse, improper installation or application of this product.

WARRANTY STATEMENT

Our warranty covers any defect in material or workmanship to the original purchaser for one year after purchase date. We reserve the option to repair or replace the defective unit. Defective product should be packaged in the original carton and packing materials. Include in the package a copy of the sales receipt or other evidence of date of original purchase. Print your name and address, along with a description of the defect, and include this in the package. Include payment for any service not covered by warranty as determined by BrakeAway Products Inc., ship via. UPS Insured or equivalent. All returns require prior Return Authorization, contact us on the web at <u>www.brakeawayproducts.com</u>

BrakeAway Products Inc. 4191 SE Witch Hazel Rd Hillsboro, OR 97123 (503) 372-9346

BrakeAway Products Inc. assumes no responsibility for units sent without prior Return Authorization.

Warranty does not cover:

* Damage from misuse, neglect, lack of maintenance, accident, improper or careless installation.

- * Products which have been modified in any way.
- * Products purchased more than 12 months prior to the current date.

Returns, Exchanges, & Refunds for Internet Orders:

* All returns/exchanges/refunds **must** be approved by **www.brakeawayproducts.com** customer service. A return /exchange /refund authorization will be issued to those with approval, and this Return Authorization number must be written on the outside of the package. All return / exchange/ refund claims **must be made within fourteen (14) days** of the customer receiving the order, and approved items must be received by BrakeAway Products, Inc., within thirty (30) days of the customer receiving the order, or return / refund will be refused, and no refund / exchange / return will be issued. All return / exchanges / refunds not due to a shipping or selling error of BrakeAway Products, Inc. are subject to a nonrefundable 15% restocking fee.

Returns, Exchanges & Refunds for Retail Purchases:

* Refer to individual store policy

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