



23 Cedarhill Rd.
Bellingham, MA 02019

877-642-3722

INSTALLATION INSTRUCTIONS, HARLEY-DAVIDSON

NOTE; PLEASE BE VERY CAREFUL WHEN HANDLING SMALL PARTS IN CRUISE-MATE PACKAGE, SPRING AND SHOULDER SCREW ARE VERY HARD TO FIND IF DROPPED.

1. Loosen throttle return cable adjusting jam nut and back off cable adjusting nut (fig 1).
2. Install a 5/32 shim (cardboard shim or Allen wrench works fine) in brake lever as shown in (fig. 2).
 - a. This step is important to avoid damaging the brake light switch.
3. Remove the 2 bolts holding switch housing halves together and loosen two bolts holding master cylinder halves to handlebar.
4. Separate top half of switch housing from bottom half.
5. Remove cables from grip (fig 3) being very careful not to loose brass cable end ferrules.
6. Remove forward cable from switch assembly.
 - a. Applying a small amount of oil (we use WD 40) around cable end inside switch housing cavity and wiggling cable while gently pulling down will help remove cable from switch assembly.
7. Remove throttle lock plastic friction shoe from inside lower half of switch housing (fig.4), friction shoe not reused.
8. Remove "C" clip from thumbscrew stud (fig. 5).
9. Remove thumbscrew from switch housing.

The next two steps involve enlarging the original thumbscrew hole. If you're not confident you can drill and tap the hole straight we **STRONGLY** recommend using our drill jig to drill and tap your switch housing.

If you're drilling and tapping the control housing free hand (without installation jig) carefully enlarge the existing star wheel hole using a 21/64ths drill bit and use a 3/8-24 tap to thread hole (very important hole is threaded perpendicular to control housing). To ensure threads are perpendicular to control housing check tap from two sides (front and one side) while tapping hole to ensure the tap is square to housing.

10. Insert ¼ X 2 ½ bolt into the forward cable hole in switch housing. Install washer and nut and hand tighten (see jig assembly figure below).
11. Install alignment pin in drill jig, screw pin into original thumbscrew hole in lower switch housing then tighten 1/4 jig bolt wrench tight.
12. Remove alignment pin from drill jig and install plastic guide bushing in place of pin. Using plastic bushing as a guide for drill bit, carefully drill original hole with 21/64-drill bit.
13. Remove plastic bushing from drill jig and using hole in jig to guide tap straight, tap the newly drilled hole with 3/8-24 tap.

CAUTION;

- **be sure to remove all metal chips from switch housing before proceeding with CRUISE-MATE installation.**

15. Apply Loctite to the 3/8-24 threads of stainless steel bushing on Cruise-Mate cartridge and install cartridge into the 3/8-24 threaded hole (fig. 6).
 - a. **Caution; over tightening bushing may strip threads in switch housing.**
16. Unscrew Cruise-Mate insert until pressure is removed from spring.
17. Replace throttle cables in switch housing and re-assemble control.
 - a. Before reinstalling grip, check to see if there is a raised line on the bottom of plastic throttle tube (raised line left from molding process), if there is a noticeable line remove with file or sandpaper.
 - b. When re-assembling brake and switch housing assemblies, ensure tab on switch housing mates with notch in brake housing assembly (fig 7).
18. Return cable-adjusting nut to original position and tighten adjuster jam nut.
19. Screw CRUISE-MATE cartridge into switch housing until you feel resistance then stop and install CRUISE-MATE handle, spring and bolt.
 - a. Apply a drop of LocTite to threads of handle shoulder bolt to ensure bolt won't vibrate out.

You are now ready to adjust CRUISE-MATE for operation. Once installed, CRUISE-MATE is extremely reliable and easy

to operate. Simply push lever forward (towards front of bike) and set your throttle where you want it. Push lever all the way toward rear of bike and throttle returns to normal operation. See adjustment procedures below.

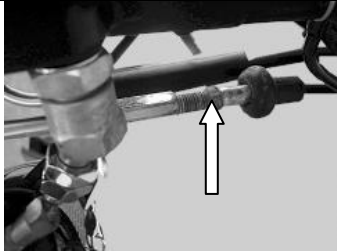


Figure 1; loosen jam nut and back off adjusting nut.

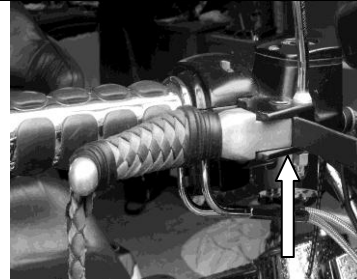


Figure 2; Insert 5/32 shim



Figure 3; remove cables and brass ferrules from grip.

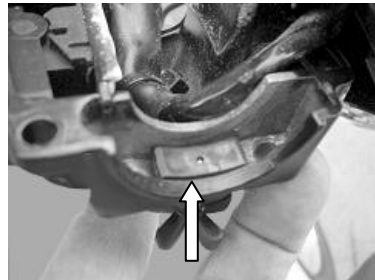


Figure 4; remove friction shoe.

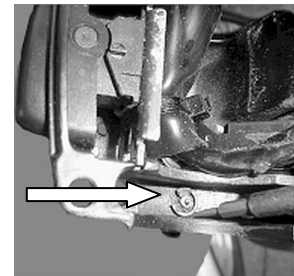


Figure 5; remove "C" clip.

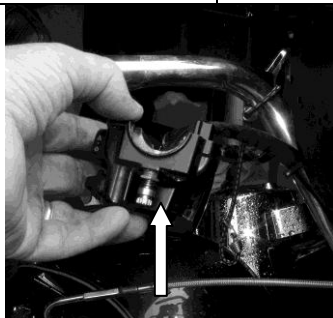


Figure 6; Apply Loctite to bushing and install Cruise-Mate cartridge in 3/8-24 threaded hole.

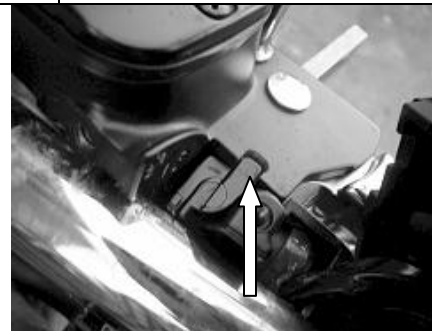


Figure 7; brake housing notch and switch housing tab

Drill Jig Assembly

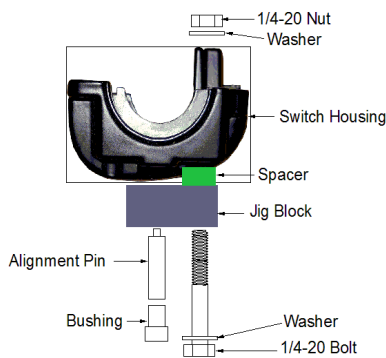
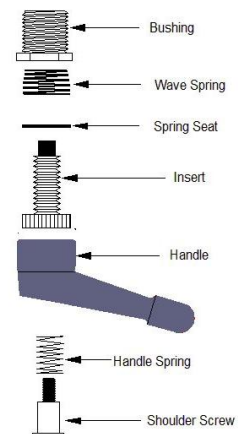


Fig 8

PARTS LIST





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ADJUSTMENT PROCEDURES

Cruise-Mate and Cruise-Mate II are intended for motorcycle warm up and service only. Under no condition do we recommend removing your hands from the handlebar while the motorcycle is moving.

With engine off open throttle approximately half way, push CRUISE-MATE handle forward (toward front of bike) approximately ¼ turn and release throttle. If throttle doesn't hold in position see "CRUISE-MATE TOO LOOSE" below. With Cruise-Mate in the off position (all the way toward rear of bike) ensure that throttle operates freely and returns to closed position when throttle is released. If it doesn't return to closed position when released see "CRUISE-MATE TOO TIGHT" below.

CRUISE-MATE TOO TIGHT

Throttle doesn't return to idle position when CRUISE-MATE lever is pointing toward rear of bike.

1. Push CRUISE-MATE lever toward rear of bike.
2. Pull down on CRUISE-MATE lever and rotate lever one tooth toward front of bike (clockwise direction looking at CRUISE-MATE from below).
3. Re-test Cruise-Mate operation as described above.
4. Repeat steps 1 thru 3 until Cruise-Mate releases control of throttle when lever is moved toward rear of bike.

CRUISE-MATE TOO LOOSE

Throttle doesn't hold in position when CRUISE-MATE is set.

1. Push CRUISE-MATE lever towards front of bike.
2. Pull down on CRUISE-MATE lever and rotate lever one tooth toward rear of bike (counter clockwise direction looking at CRUISE-MATE from below).
3. Re-test Cruise-Mate operation as described above
4. Repeat steps 1 thru 3 until CRUISE-MATE holds throttle at desired position.

CAUTION; AFTER MAKING ADJUSTMENTS TO CRUISE-MATE BE SURE TO TURN THROTTLE TO FULL OPEN POSITION WITH ENGINE AND CRUISE-MATE OFF (POINTED TOWARD REAR OF MOTORCYCLE) TO ENSURE THROTTLE MOVES FREELY THROUGH IT'S ENTIRE RANGE.

Housing not included.

Drill Jig Assembly

