

INSTRUCTIONS

Kit Number RJ10014-00

2000-2001 ROAD KING™ CRUISE CONTROL KIT

GENERAL

This cruise control kit is designed for installation on 2000-2001 Road King Model Motorcycles. See attached service parts list for kit contents.

WARNING

Failure to correctly install this kit may adversely affect the function of your motorcycle. If you are unsure of your capabilities to correctly install this kit, or if you are lacking any of the proper facilities, manuals, or tools you must have this kit installed by a qualified service technician. **IMPROPER INSTALLATION AND VEHICLE REASSEMBLY MAY RESULT IN PROPERTY LOSS, BODILY INJURY OR DEATH!**

WARNING

It is imperative that the kill switch (on the right hand control) operates properly. After installation, and before each vehicle operation, the kill switch must be tested. In the event the kill switch does not function correctly, do not operate the vehicle until proper operation has been restored. Never under any circumstance remove right hand from controls. In the event the cruise control or vehicle malfunctions, immediately stop the engine with the kill switch. Always use kill switch to shut off motorcycle, so that you're are familiar with it's position and operation. **IMPROPER KILL SWITCH OPERATION MAY RESULT IN PROPERTY LOSS, BODILY INJURY OR DEATH!**

Service Manual Required

This instruction sheet refers the installer to the appropriate Road King service manual for many

procedures. Therefore, you must not attempt to install this kit without having a copy of the Road King service manual applicable to your vehicle.

NOTE

If you do not have the correct service manual for your motorcycle, please contact your Harley-Davidson dealer to obtain one.

Shop Supplies Required

- Materials for splicing wires (refer to service manual for proper materials)

Specialty Tools Required

- DO NOT ATTEMPT CRUISE CONTROL INSTALLATION WITHOUT PROPER TOOLS
- Tools for splicing wires (refer to service manual for proper tools)
 - As per service manual, tools to remove and install the following: fuel tank, hand controls, headlight, battery, and seat.

INSTALLATION

1. Remove seat, battery, gas tank, headlight and left-side access panel under seat (see service manual), and air cleaner assembly. Removing left-side bag (but not chrome frame) will improve accessibility to install cruise control module and route wiring harness.
2. Replace right and left hand control with new hand controls from kit (see service manual). As part of replacing right hand control, install the idle cable supplied with kit (with roll-off switch). Use new wiring retainers included in this kit. Make sure to adjust idle cable tension according to the service manual.
3. See Figure 1 and Figure 2. Mount cruise control module on outside of battery box using the three grommets and nuts included in the

kit (larger part of grommet towards the inside). The Cruise Control Cable will be fed through the hole in the frame crossmember plate.

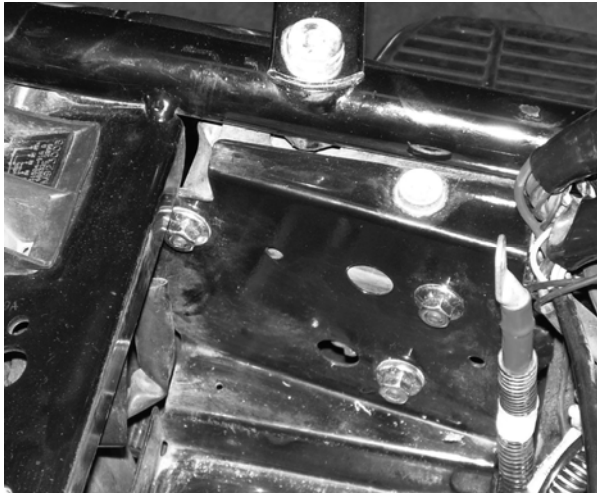


Figure 1. Mounting of Cruise Control Module

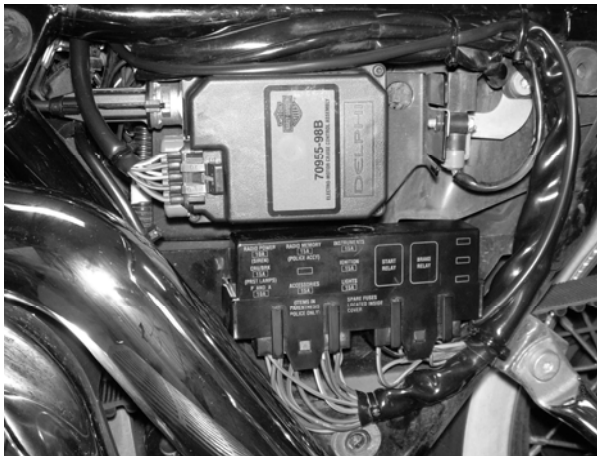


Figure 2. Cruise Control Module Mounting

4. See Figure 3. Feed Cruise Control Cable along frame and carefully between cylinder heads towards carburetor/throttle body. Install barbed end of barbed cable tie into hole in frame. Do not secure cable yet.



Figure 3. Cruise Control Cable Routing

5. Attach Cruise Control Cable to carburetor/throttle body. Place stationary part of cable in holder first, then snap clip onto throttle boss. Make sure clip is secured. Once cable is attached to carburetor/throttle body, and cable flows smoothly (not touching any part of cylinder), tighten barbed cable tie and clip off excess.

6. In area above the frame and directly under where the gas tank would be, locate the section of the main wiring harness that extends from the front left side of the battery, along the top of the frame and comes to a "Y". Note that there are two cable ties securing it to the frame. Cut the lower barbed cable tie to free the main wiring harness from the frame.

7. Feed cruise control wiring harness (CCWH) from kit up between frame and battery box (starting at the cruise control module location), along main wiring harness (where you cut the cable tie in step 6), and towards the front of the motorcycle, entering the headlight cowl on the rear right side. The single orange/violet wire will be fed back over top the cruise control module, along two other wiring harnesses, and follow the route of the harness that goes down to the fuse/relay block (see Figure 2).

8. Plug the 10-place Packard connector of the CCWH into the cruise control module making sure it locks in place.

9. See Figure 4. Plug the orange/violet and violet wires into the idle cable (it does not matter which wire goes to which terminal).



Figure 4. Throttle Roll-off Switch

WARNING

Do not operate cruise control unless idle cable equipped with functioning throttle roll-off switch is installed.

10. Inside the headlight cowl, plug the gray and black 4-place Deutsch connectors into the corresponding connectors for the hand controls making sure they are firmly seated and locked.

11. See Figure 5. Secure the 1/4" ground eyelet (black wire) under ground point in front of the battery box (7/16" nut).

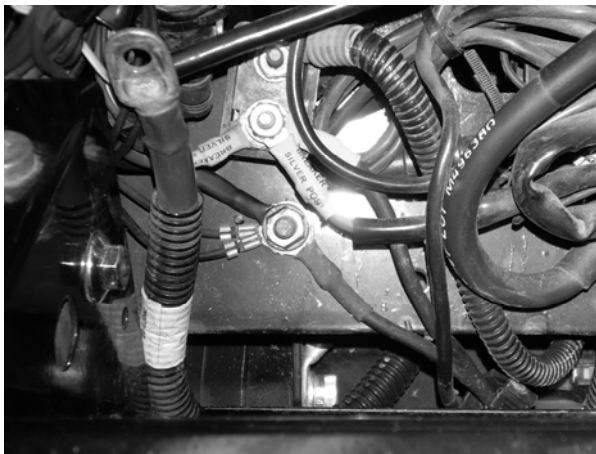


Figure 5. Ground Terminal Location

12. Secure the CCWH to the main wiring harness with included cable ties. Replace the cable tie that you cut in step 4 with a barbed cable tie (same as tie used to secure cruise control cable) included in the kit. Replace any other cable ties that you cut with ties included in the kit.

13. See Figure 6. *CAREFULLY* make a 4" slit in the protective vinyl tubing between the two cable ties you located in step 6, near where the 3 wires exit the CCWH, so that the wires inside are exposed. DO NOT cut into any of the wires themselves! You will be splicing into 3 wires here.



Figure 6. Splice Wires into Main Harness.

14. See Figure 6. Splice the 3 wires of the CCWH into the corresponding colored wire of the main wiring harness. There may be more than one white/green wire in the main harness - you may use either one.

15. See Figure 7. Secure 1" looming from kit over main wiring harness with four cable ties so that it covers and protects main wire harness and splices.

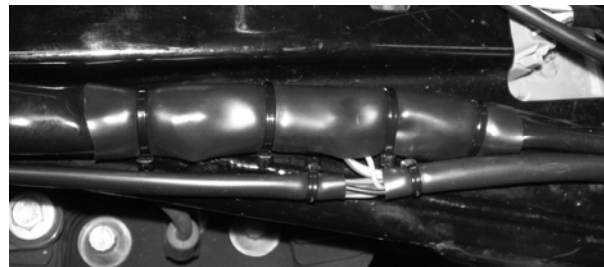


Figure 7. Protect Splices

16. See Figure 8. At the fuse/relay block, splice the orange/violet wire of the CCWH into the orange/violet wire that runs a short distance from the back of a fuse to the brake relay. You may need to cut the cable tie on the main wire harness to expose this wire and make it easier to splice into. Trim the orange/violet wire on the CCWH as needed. Replace cable ties with ties included in the kit. *NOTE: the fuse/relay block detaches from the frame to make this step much easier. Reinstall fuse/relay block onto frame if removed.

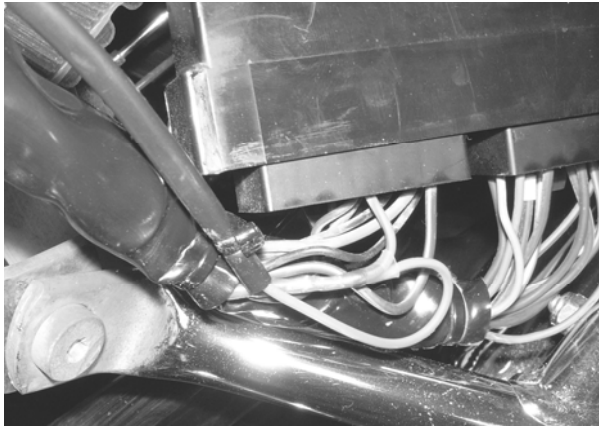


Figure 7. Splice Orange/Violet Wire at Fuse Block

17. Before reassembling removed components, a quick check can be made to confirm cruise unit is operational. Connect ignition switch panel/speedometer (if removed) and reinstall battery. Make sure Run/Stop switch is in the "Run" position, and Cruise Control On/Off switch is in the "On" position.

Hold Set/Resume switch to the "Set" position while turning ignition switch to "On". The green light next to the Set/Resume switch should illuminate. Release Set/Resume switch and turn ignition off.

If the light does not illuminate, check splices and confirm that the 10-place connector is securely plugged into the cruise control module, and that the 4-place and 6-place Deutsch connectors on each hand control is securely plugged in and locked. You may also want to verify that no pins/sockets in these connectors is bent or pushed back – they are fairly durable connectors, but sometimes this can happen.

One other cause for failure of the test is that the roll-off switch may be closed due to an over-tight throttle/idle cable adjustment, or binding. Remove one of the terminals and repeat the above test. If the light illuminates, the idle cable roll-off switch is at fault and needs to be further investigated before you continue.

18. If everything checks out okay, remove the ground terminal from the battery before reassembling the motorcycle.
19. Reinstall headlight, gas tank, left access cover under seat and left bag according to service manual.

WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

20. Reconnect battery, positive cable first.
21. Install seat (refer to Service Manual).

WARNING

Make sure seat is properly installed according to procedure in service manual. Failure to install seat properly may result in injury or death.

Cruise Cable Adjustment and Final Test

22. Perform cruise cable adjustment. See service manual for "Cruise Control Cable Lash Initialization".
23. Refer to service manual or operator's manual for cruise control operating instructions.
24. Verify proper function of all hand controls.

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25. Test ride motorcycle and verify cruise control is operating properly. If cruise control acts inappropriately immediately stop engine with kill switch. **Do not operate the vehicle until proper operation has been restored.**