



INSTRUCTIONS

J04902

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ROAD TECH ZUMO GLOBAL POSITIONING SYSTEM (GPS) FAIRING MOUNTING KIT

GENERAL

Kit Number

92238-09

Models

This kit is required when using a Road Tech™ Zumo® GPS unit on specific model motorcycles.

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Additional Parts Required

A Road Tech Zumo GPS Kit (Part No. 92115-09) or a Road Tech Zumo North America GPS Kit (Part No. 76000573) is required. This item is available from a Harley-Davidson dealer.

If the wires of circuit [29B] are already in use, a black-wire multiple accessory harness (Part No. 70458-05) and an orange/white-wire multiple accessory harness (Part No. 70459-05) will need to be purchased. These items are available from a Harley-Davidson dealer.

For FLHT standard models without radio: See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for a selection of Genuine Motor Accessory ear bud speakers, helmet headsets or radio receiver options that will allow use of the turn-by-turn voice instruction feature of the Road Tech Zumo.

⚠ WARNING

Rider and passenger safety depend upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333b)

NOTE

This instruction sheet refers to service manual information. A service manual for this year/model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Electrical Overload

NOTICE

It is possible to overload the vehicle's charging system by adding too many electrical accessories. If the combined electrical accessories operating at any one time consume more electrical current than the vehicle's charging system can produce, the electrical consumption can discharge the battery and cause damage to the vehicle's electrical system. (00211d)

⚠ WARNING

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)

The Road Tech Zumo 660 requires up to **2.0 A** additional current from the electrical system.

Kit Contents

See Figure 5 and Table 1.

INSTALLATION

NOTE

Do not use solvent-based chemicals or waxes directly on the plastic or rubber components as they can affect the overall performance and appearance of the plastic and rubber.

Installing the Mounting Bracket

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

1. Refer to the service manual and follow the instructions given to remove the main fuse.
2. Remove the outer fairing and windshield. Refer to the service manual.



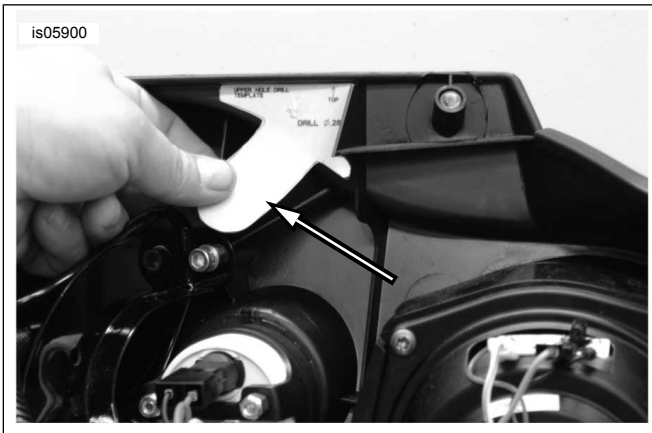


Figure 1. Road Tech Zumo Drilling Template Placement

3. See Figure 1. Obtain the drilling template from the kit.
4. Position the template on the back side of the inner fairing, in the upper left corner above the fuel gauge, aligning the template to the top of the inner fairing and the plastic rib as shown.
5. Drill a 8 mm (5/16 in) diameter hole through the inner fairing per the template.
6. See Figure 5. Position the gasket (2) and GPS mount (1) onto the face of the inner fairing, aligning the upper hole in the mount with the hole drilled in the previous step.
7. Temporarily install one of the screws (4) through the upper hole to help align the GPS mount.
8. See Figure 3. Mark the location of the lower mounting hole on the face of the inner fairing, using the GPS mount and gasket as a template. Mark the location of the wire routing hole using the guide hole (3) in the gasket as a template.
9. Remove the screw, GPS mount and gasket from the inner fairing.
10. Drill a 8 mm (5/16 in) diameter hole through the inner fairing in the lower mounting location. Drill an 17 mm (11/16 in) diameter hole through the inner fairing in the wire routing location.

NOTE

See Figure 2. For the Zumo 590 Installation: To pass the larger harness over-mold through the wire routing hole, the 17 mm (11/16 in) hole will require additional trimming. Trim toward the inboard side, away from the inner fairing rib.

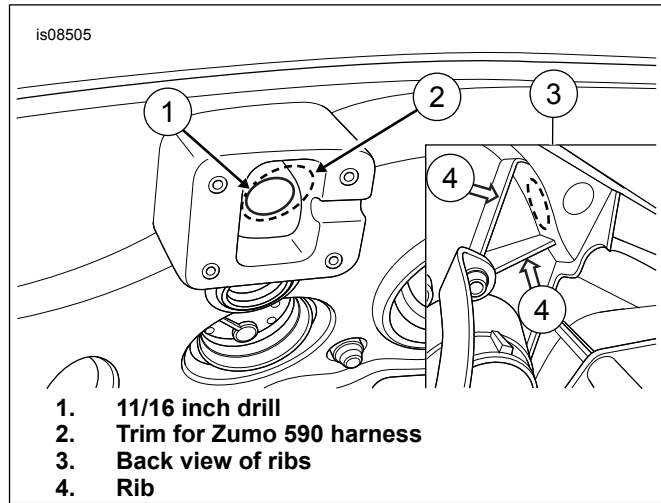


Figure 2. Avoid Ribs While Trimming

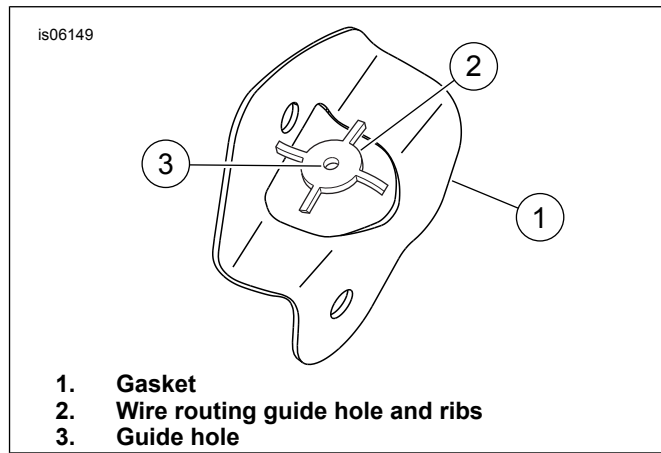


Figure 3. Remove Gasket Ribs and Guide Hole

11. See Figure 3. Remove the wire routing guide hole and four ribs (2) from the gasket (1).
12. See Figure 5. Install the GPS mount and gasket to the inner fairing with screws (4) flat washers (5) and locknuts (6). Tighten to 5.6–6.8 N·m (50–60 in-lbs) .
13. Obtain cradle with harness from GPS system kit.

NOTE

The fuse holder on the harness, and USB connector on Zumo 590, must be opened to fit through the hole.

14. Insert harness through the 17 mm (11/16 in) diameter hole drilled earlier.
15. Insert the split grommet into the 17 mm (11/16 in) diameter hole around the harness.

Installing the Cradle

1. See Figure 5. Install four bushings (H) from the GPS system kit and insert them into the back of the cradle mounting holes.
2. Position the cradle to the GPS mount. Direct the harness out through the slot (G) of the mount.

3. Insert a button head screw (3) through one of the holes in the cradle and into the corresponding hole in the GPS mount, but do not fully tighten.
4. Install the remaining three button head screws (3). Incrementally tighten the four screws to 1.58–2.26 N·m (14–20 in-lbs).
5. **For models WITH radio:** Plug the 3.5 mm jack plug on the audio cable into the AUDIO OUT port in the harness. **For models WITHOUT radio:** Plug the earbud or earphone jack into the AUDIO OUT port on the side of the GPS unit.

NOTE

The harness (and audio cable, if so equipped) lengths may need to be adjusted by pulling more harness and cable through the fairing.

Routing and Connecting the Wiring

1. See Figure 4, and the interconnect harness wiring diagram in the service manual. Proceed according to the availability of the black (1) and orange/white (2) wires of the position lamp circuit [29B] of the vehicle main harness, located near the headlamp: **If the wires of circuit [29B] are unused, and the female tab connectors on the wire ends are intact:** **If the wires of circuit [29B] are already in use:**
 - a. Remove the tape tying the black (1) and orange/white (2) wires of circuit [29B] to the vehicle main harness.
 - b. See Figure 5. Obtain the male tab terminals (9) and housings (10) from the kit. Follow the service manual instructions to crimp the terminals onto the free ends of the Road Tech Zumo power harness (F). Insert a terminal and wire into each tab housing.
 - c. Connect the red wire/tab housing from the power harness to the orange/white wire and tab housing from the unused circuit [29B].
 - d. Connect the black wire/tab housing from the power harness to the black wire/tab housing of circuit [29B].
 - e. Disconnect any existing accessories from connector [29B] of the vehicle main harness.
 - f. See Figure 5. Obtain the multiple accessory Y-harnesses (items D and E, purchased separately).
 - g. Connect the single-terminal end of each harness to the corresponding color wire terminal on connector [29B].
 - h. Connect all accessories to the two available connectors on each Y-harness.

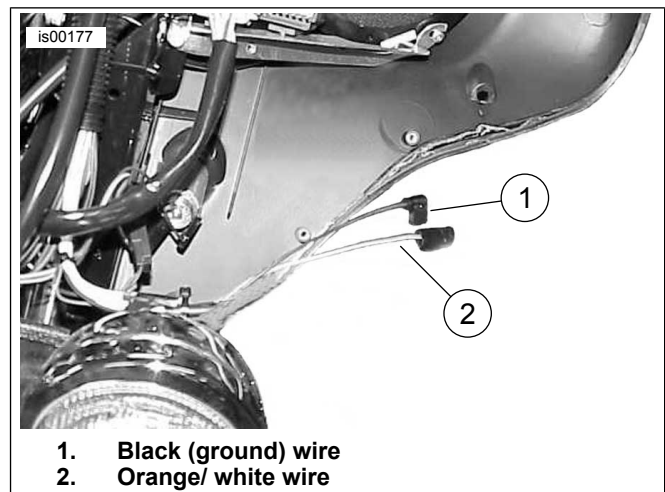


Figure 4. Wires for GPS Connection

2. Obtain one of the 2A fuses (11) from the kit (the second is a spare), and open the cover of the fuse holder on the GPS harness. Plug the fuse into the fuse holder and close the cover.
3. **For models with radio:** Route the audio cable out of the inner fairing through the hole for the handlebars. Use a clip (12) to retain the cable along the inner fairing.

NOTE

When installing the jack plug to the radio port socket:

- Roll back the outer lip of the rubber seal.
- Install the plug into the AUX port on the front of the radio unit.
- Gently roll the seal back to its original shape to form a seal over the radio unit port.

This will help eliminate "spring-back" of the plug out of the socket.

4. Plug the 3.5 mm stereo jack (with rubber boot attached) on the audio cable into the AUX port on the front of the radio.
5. Use three cable straps (13) to keep the wires clear of gauges and other items under the fairing.
6. **ALL models:** Install the Road Tech Zumo GPS unit into the cradle mount per the instructions in the GPS kit.

NOTE

Verify that the ignition/light key switch is in the OFF position before installing the main fuse.

7. Verify that the ignition/light key switch is in the OFF position. Refer to the service manual and follow the instructions given to install the main fuse.
8. Test the Road Tech Zumo unit for proper operation.
9. Install the outer fairing and windshield. Refer to the service manual.

SERVICE PARTS

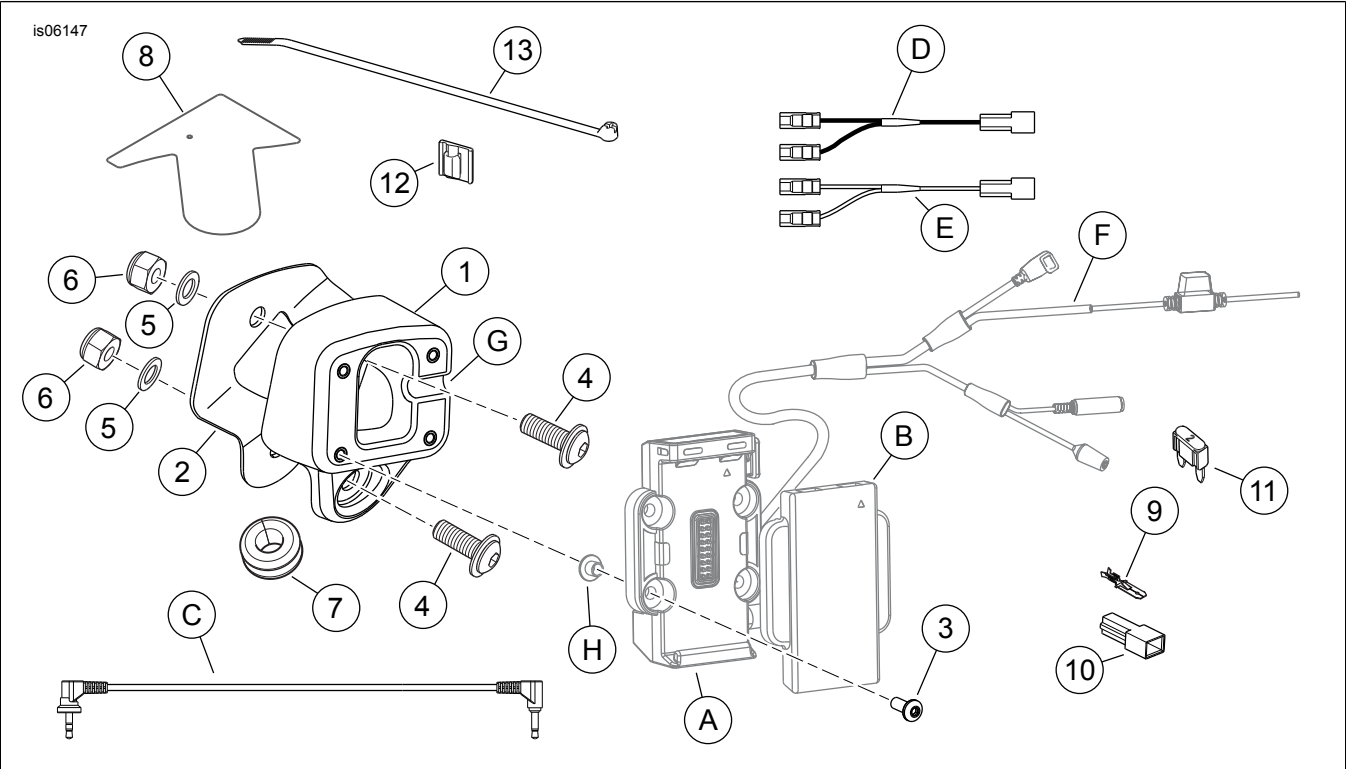


Figure 5. Service Parts, Road Tech 660 GPS Fairing Mounting Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Fairing mount, Road Tech Zumo	Not sold separately
2	Gasket, Road Tech Zumo fairing mount	Not sold separately
3	Screw, button head, lock patch, M4 x 10 (4)	Not sold separately
4	Screw, button head, SEMS	2491
5	Flat washer, 1/4 inch (6.4 mm) ID (4)	6703
6	Hex locknut, 1/4-20 (2)	7686
7	Grommet, split	Not sold separately
8	Drilling template	Not sold separately
9	Tab terminal, male, #14-18 AWG (2)	9853
10	Housing, tab terminal, male, one-way (2)	72053-92
11	Fuse, blade type, 2A (2)	54305-98
12	Clip, adhesive-backed (3)	10271
13	Cable strap (10)	10006
Reference items mentioned in text, but not included in kit (Zumo 660/665 shown):		
A	Cradle, Zumo GPS	
B	Cover, cradle	
C	Audio cable	
D	Harness, multiple accessory (black wires) (separate purchase if needed)	
E	Harness, multiple accessory (orange/white wires) (separate purchase if needed)	
F	Power harness assembly, Road Tech Zumo	
G	Slot	
H	Bushing (4)	