

SERVICE BULLETIN



M-1040

February 15, 1994

NEW CRUISE SET/RESUME AND CB PUSH-TO-TALK (PTT) SWITCHES

Purpose

The purpose of this Service Bulletin is to inform you of the new sealed handlebar switches used on Ultra models.

Cruise Control Set/Resume Switch Changes

Early 1994 Ultra's used Cable Assembly, Part No. 71585-94. This assembly had a switch, Part No. 77101-90A, that was not completely water proof. To prevent a water contaminated switch from generating false inputs, resistors were added to Cruise Control Harness, Part No. 70141-94.

Late 1994 Ultra's are equipped with a new sealed SET/RESUME switch which eliminated the need for the two resistors and the resistors were removed from the harness. Removal of the resistors changes the resistance values measured during troubleshooting. The new resistance values are given later in this Bulletin. The sealed switch and harness are being made available as a kit to allow retrofitting the sealed switch assembly to earlier models. The Part No. of this kit is 77101-90B. The harness with resistors, Part No. 70141-94, will continue to be sold for replacement purposes. The sealed switch assembly, in kit Part No. 77101-90B, will function properly with a harness containing resistors or with the later harness without resistors.

NOTE

Cable Assembly, Part No. 71585-94 and SET/RES Switch, Part No. 77101-90A, are being obsoleted to prevent their installation on vehicles equipped with a Cruise Control Harness not equipped with resistors.

WARNING

Never replace a new sealed switch assembly with an earlier unsealed switch. A water contaminated switch connected to a harness with out resistors could generate false inputs to the cruise control and could cause the cruise control to operate erratically. Erratic operation could cause loss of control and possible personal injury.

REMOVAL OF SEALED SET/RESUME SWITCH FROM HANDLEBAR CLAMP HOUSING

CAUTION

The sealed switch is mounted in the handlebar housing in a different way than the earlier configuration, so follow this procedure to service the switch. Detailed procedures will be contained in Instruction Sheet 77101-90B.



Figure 1. Removing Switch Actuator (Button)

1. Remove the handlebar clamp and SET/RESUME switch following Service Manual procedures.
2. See Figure 1 and 2. Gently pry upward on the actuator (1) with a screwdriver to disengage the actuator pins from the holes in the switch tabs (2).
3. Gently pry the speednut (3) from the switch (4).

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO.1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO
INITIAL HERE									

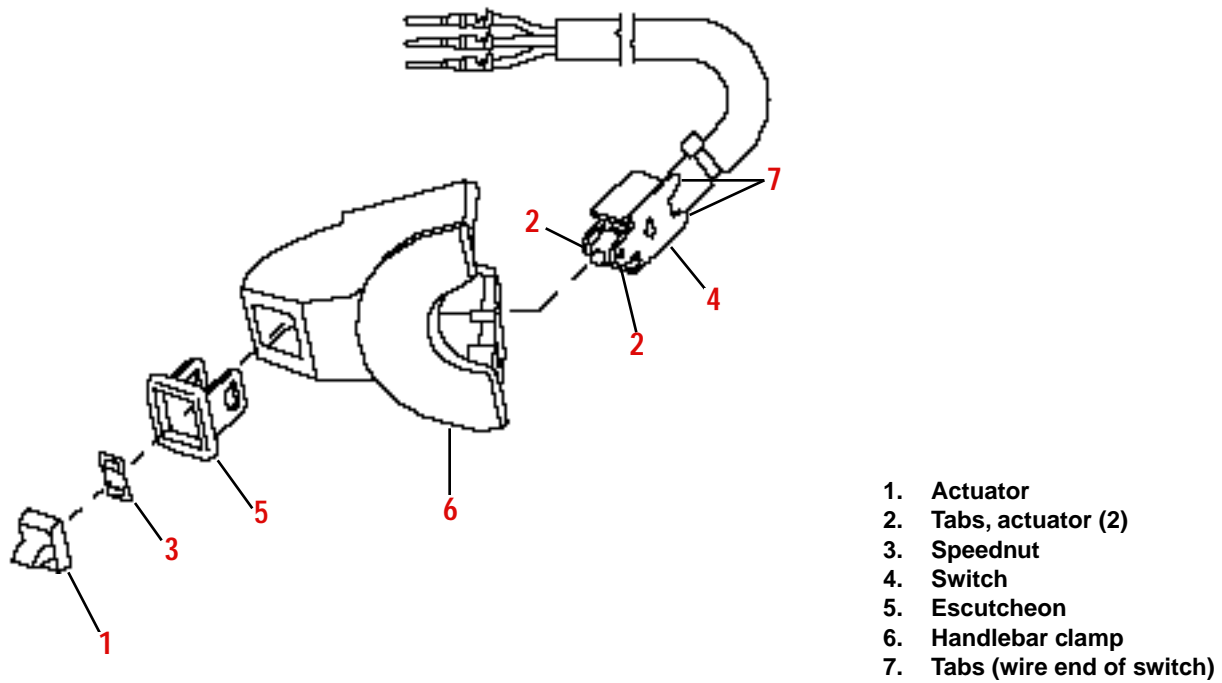


Figure 2. Cruise Control SET/RESUME Switch Assembly

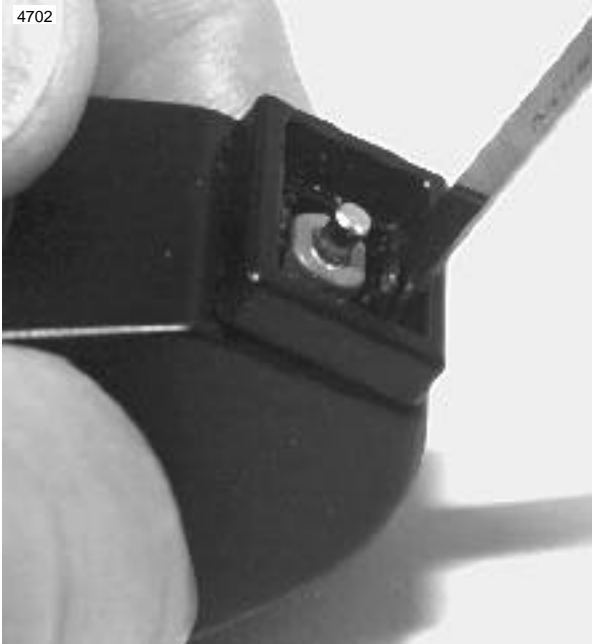


Figure 3. Releasing Left Latch With Steel Rule



Figure 4. Releasing Right Latch With Screwdriver

4. See Figure 3. Unlatch the left latch, as viewed from front of switch, on the escutcheon (5) by inserting a steel rule or a thin (0.020 in. thick) metal strip (1/4 in. wide X 3 in. long) between the left switch tab and inner wall of the escutcheon (5).
5. See Figure 4. Lift right latch of escutcheon with a small screwdriver inserted from rear of handlebar clamp.
6. Switch (4) may be removed from rear of handlebar clamp and escutcheon (5) from front.

INSTALLATION OF SET/RESUME SWITCH INTO HANDLEBAR CLAMP HOUSING

1. See Figure 2. Insert the escutcheon (5) into the handlebar clamp (6).
2. Insert switch (4) with side having two tabs (7) positioned as shown in Figure 2.
3. Press switch into escutcheon (5) until it latches into position.
4. Install speednut (3), place actuator (1) on switch rod and press until actuator pins enter holes in switch tabs (2).

ELECTRICAL CONNECTIONS-1994 MODELS

1. Refer to the "DEUTSCH ELECTRICAL CONNECTORS-1994" section of the Wiring Diagrams and Electrical Troubleshooting Guide, Part No. 99948-94 and disassemble the 3-place pin connector on the old SET/RESUME switch assembly. Note and record where the leads are positioned in the connector.
2. Retain the connector components and assemble the pin terminals on the new SET/RESUME switch assembly into the old connector body.

NOTE

If you forgot to record the lead positions in the connector, refer to the applicable wiring diagram for the correct lead placement. The connector cavity letters (A, B, C) are marked on the corners of the connector housing near the wire end.

ELECTRICAL CONNECTIONS-1993 MODELS

On 1993 and earlier models, the Deutsch terminals must be replaced with AMP terminals. Also the wire colors on the new switch assembly are different so carefully follow the procedures given in Instruction Sheet 77101-90B.

Effect On Troubleshooting

Removal of the resistors changes the resistance values given in CHART A CRUISE TROUBLESHOOTING and CHART B CRUISE TROUBLESHOOTING. CHART A is on page 8-64 in the FLT/FXR Service Manual, Part No. 99483-94 and on page 28 in the Wiring Diagrams and Electrical Troubleshooting Guide, Part No. 99948-94. CHART B is on page 8-66 in the FLT/FXR Service Manual, Part No. 99483-94 and on page 30 in the Wiring Diagrams and Electrical Troubleshooting Guide, Part No. 99948-94.

Pages 4 and 5 of this Bulletin contain revised CHARTS A AND B. File these pages in your shop copies of the Service Manual and Electrical Troubleshooting Guide or mark the changes in your manuals.

NOTE

The revisions in Charts A and B are identified with bold type and underlining as shown in the following sample.

"Resistance should be between 250-300 ohms on 93 and early 94 models. On late 94 models resistance must be 0 to 1 ohm."

Push-To-Talk (PTT) Switch Changes

See Figure 5. On late 1994 models the PTT switch was changed to a sealed configuration. The new switch and harness is being made available in kit form under Part No. 77100-89B. Follow the REMOVAL/INSTALLATION given previously for the SET/RESUME switch to service the PTT switch. Detailed instructions for PTT switch will be covered in Instruction Sheet 77100-89B.

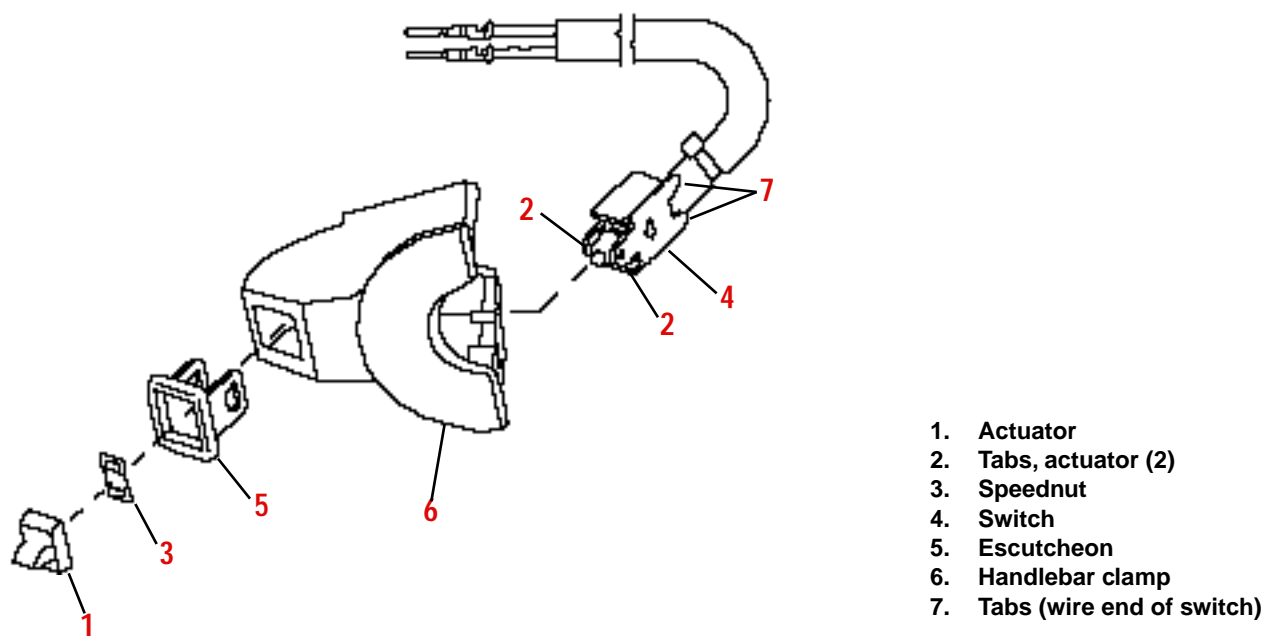
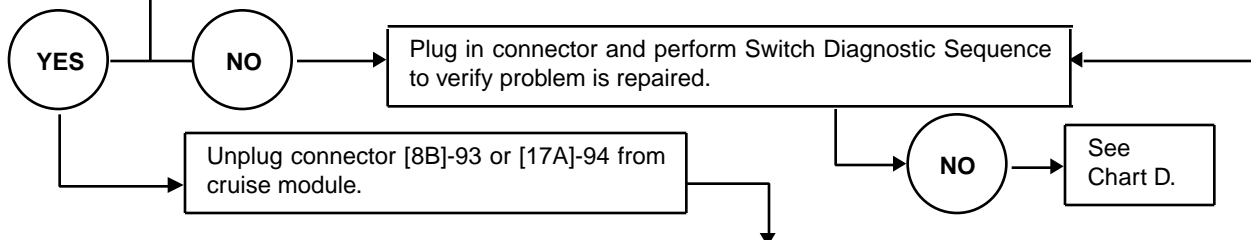


Figure 5. CB Push-To-Talk (PTT) Switch Assembly

CHART A CRUISE TROUBLESHOOTING

Remove left saddlebag and sidecover. Is 10-pin connector [8B]-93 models or [17A]-94 models plugged into cruise module?



SET SWITCH

Check continuity between the BK/O terminal (F) and the BE terminal (B) of connector (8B)-93 or O/V terminal (F) and BE terminal (B) of connector [17A]-94. **Resistance should be between 250-300 ohms on 93 and early 94 models and on late 94 models on which harness P/N 70141-94 (with resistors) has been installed. On late 94 models resistance must be 0 to 1 ohm.** Pressing the set button should give a reading of less than 0.5 ohms.

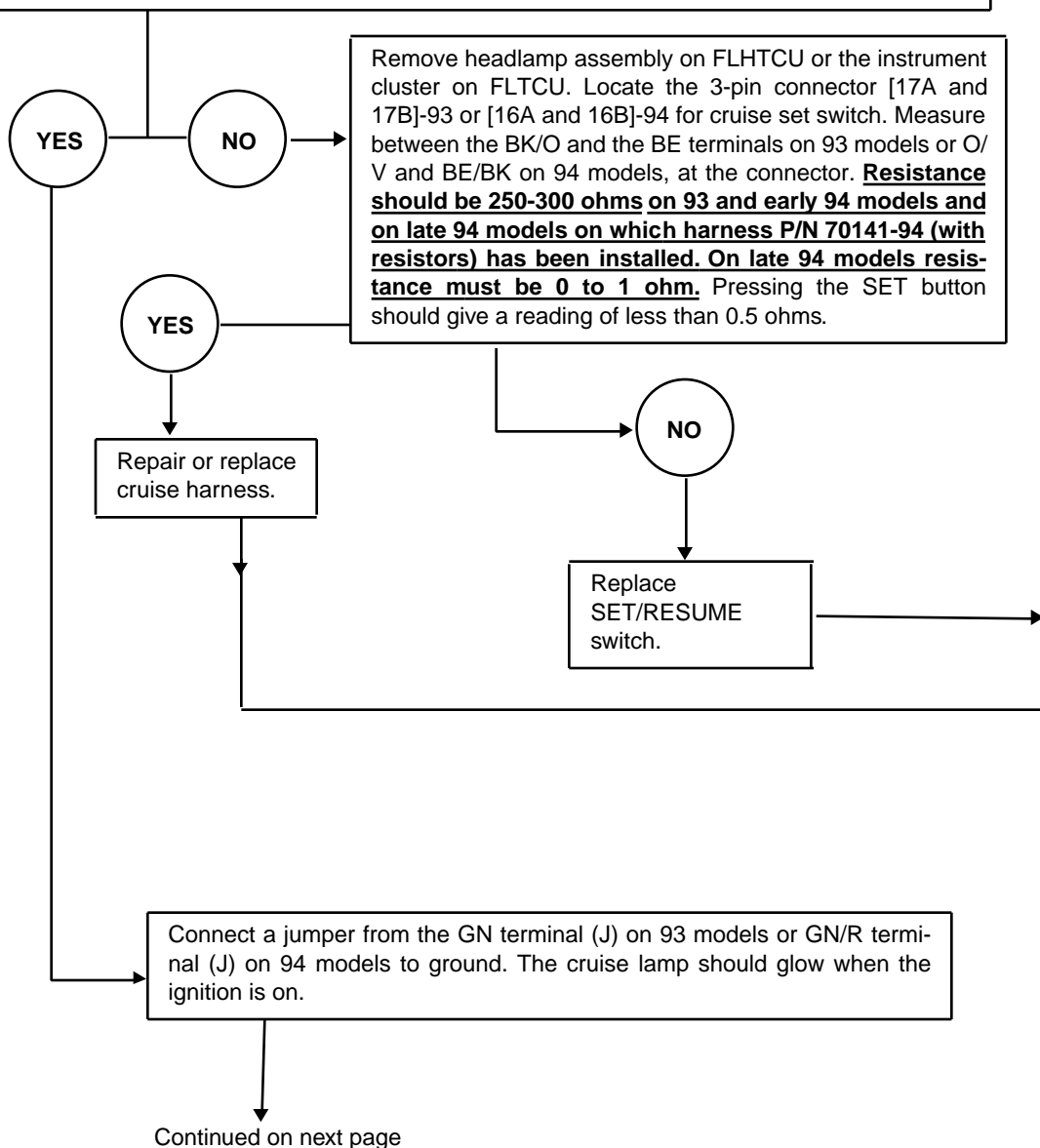


CHART B CRUISE TROUBLESHOOTING

RESUME SWITCH

Check continuity between the BK/O (93) or O/V (94) terminal (F) and the W (93) or W/BE (94) terminal (C). **Resistance should be between 250-300 ohms on 93 and early 94 models and on late 94 models on which harness P/N 70141-94 (with resistors) has been installed. On late 94 models resistance must be 0 to 1 ohm.** Pressing the SET button should give a reading of less than 0.5 ohms.

