SERVICE BULLETIN

M-1106 February 16, 2001

CRUISE CONTROL INOPERATIVE DIAGNOSTICS UPDATE

General

A new cruise control module (Part No. 70989-98A) was introduced on 1999 FLHTCU-I motorcycles. This module required an updated Cruise Inoperative Diagnostics procedure, which was inadvertently excluded from the following service publications:

- 1999 FLT Models Service Manual (Part No. 99483-99)
- 2000 FLT Models Service Manual (Part No. 99483-00)
- 2001 Electrical Diagnostic Manual (Part No. 99495-01)

This bulletin provides the updated procedure.

Also, please note that the wire color and/or functions of Terminals J and K of the Cruise Module Connector [17] were printed incorrectly in Table 7-1 of the 2001 Electrical Diagnostic Manual. The corrected version of the table is also printed here for your convenience.

For future use, please copy the attached pages and insert them into your copies of the above referenced documents.

Table 7-1. Cruise Module Connector [17A]

TERMINAL	WIRE COLOR	FUNCTION AND CONNECTION
A	Red/Green	ON/OFF switch enable
B	Blue/Black	SET input from SET/RESUME switch
C	White/Blue	RESUME input from SET/RESUME switch
D	Violet/Yellow	Idle cable disengage switch (12 vdc from 15 amp fuse)
E	Black	Cruise module ground
F	Orange/Violet	12 vdc power from 15 amp fuse
G	Red/Blue	Disengage from brake relay (12 vdc)
H	Pink	Tachometer input
J	Green/Red	12 vdc from “CRUISE” indicator in instrument panel (Module provides ground)
K	White/Green	Vehicle speed signal input

Table 7-2. Inoperative Diagnostics

NO.	ACTION	CORRECT FUNCTION	INCORRECT FUNCTION
1	Turn the Ignition/Light Key Switch to OFF. Connect Speedometer Tester (HD-41354).		
2	Enter the diagnostic mode: With the fairing cap Cruise ON/OFF Switch at ON, and the handlebar mounted Cruise SET/RESUME Switch **held** at SET, turn the Ignition/Light Key Switch to IGNITION.	The cruise engaged lamp will illuminate and remain on as long as the Cruise SET/ RESUME switch is held in the SET position. **Continue with Step 3.**	If the cruise engaged lamp remains illuminated after the switch is released, then either the switch or related wiring is shorted. See Diagnostic Note 1 for possible causes. **Continue with steps listed under Diagnostic Note 2.**
3	Push the handlebar mounted Cruise SET/RESUME Switch to RES(UME) and hold in this position.	The cruise engaged lamp will illuminate and remain on as long as the SET/RESUME Switch is held in the RES(UME) position. **Continue with Step 4.**	If the cruise engaged lamp does not illuminate at all, check for one or more of the following conditions: ● RES(UME) switch not wired correctly. ● Broken or pinched wire to RES(UME) switch or cruise module. Continue with 7.6 CRUISE CHART B: RESUME SWITCH.
4	Next, turn the throttle grip tightly closed to check the throttle grip switch.	The cruise engaged lamp will illuminate when the switch is closed, and then be extinguished when the throttle grip returns to its free position. **Continue with Step 5.**	If the cruise engaged lamp does not illuminate at all, check for one or more of the following conditions: ● Throttle grip switch not wired correctly. ● Broken or pinched wire to throttle grip switch or cruise module. ● Throttle grip switch not working correctly. Continue with 7.12 CRUISE CHART G: THROTTLE SWITCH.
5	Apply the brake hand lever.	The cruise engaged lamp will illuminate and remain on until the brake lever is released. **Continue with Step 6.**	If the cruise engaged lamp does not illuminate at all, check for one or more of the following conditions: ● Front brake switch not wired correctly. ● Broken or pinched wire to front brake switch or cruise module. ● Front brake switch not working properly. See 7.10 CRUISE CHART F-1: BRAKE LIGHTS ON (constant brake light input) or 7.11 CRUISE CHART F-2: BRAKE LIGHTS OFF (no front and/or rear brake lights).
6	Press and hold the brake foot pedal for at least 5 seconds.	The cruise engaged lamp will illuminate. After depressing and holding the brake foot pedal for 5 seconds, the lamp will be extinguished. Release the brake pedal and the cruise module will momentarily pull the throttle open slightly and then release. **Continue with Step 7.**	The cruise engaged lamp will not illuminate if any of the following conditions exist: ● Rear brake switch not wired correctly. ● Broken or pinched wire to rear brake switch or cruise control module. ● Rear brake switch not working properly. The throttle will not open if the following conditions exist: ● Cables not adjusted properly. ● Faulty cruise control module. See 7.10 CRUISE CHART F-1: BRAKE LIGHTS ON (constant brake light input) or 7.11 CRUISE CHART F-2: BRAKE LIGHTS OFF (no front and/or rear brake lights).

Table 7-2. Inoperative Diagnostics

NO.	ACTION	CORRECT FUNCTION	INCORRECT FUNCTION
7	Turn on Speedometer Tester (HD-41354), turn POWER IN/OUT Switch to OUT. To send the speed signal, press 1 on the keypad, followed by ENTER, and then press 200 followed by ENTER.	The cruise engaged lamp will flash on and off indicating that the vehicle speed signal is wired properly and working correctly. **Continue with Step 8.**	The cruise engaged lamp will not illuminate if any of the following conditions exist: ● Vehicle speed signal not wired correctly. ● Broken or pinched wire to speedometer. ● Speedometer not working properly. ● Vehicle speed signal wiring disconnected. See 7.13 CRUISE CHART H: SPEEDOMETER INPUT.
8	Turn Speedometer Tester (HD-41354), the fairing cap Cruise ON/OFF Switch, and the Ignition/Light Key Switch to OFF. Disconnect spark plug wires.	**Continue with Step 9.**	
9	Press SET/RESUME Switch to RES(UME), and hold.	**Continue with Step 10.**	
10	While holding SET/RESUME Switch at RES(UME), turn Ignition/Light Key Switch to ON and crank engine. (If weak battery or poor connections result in low system voltage, Diagnostic Mode may be aborted.)	The cruise engaged lamp flashes with RPM input. **Continue with Step 11.**	The cruise engaged lamp does not flash with RPM input. See 7.14 CRUISE CHART I: TACHOMETER INPUT.
11	While continuing to hold SET/RESUME Switch at RES(UME), turn fairing cap Cruise ON/OFF Switch to ON. Release SET/RESUME Switch.	Cruise engaged lamp blinks twice. NOTE: Lamp may go on for three seconds if RPM signal was above cranking speed. **DIAGNOSTIC ROUTINE EXITED**	
12	To restart or repeat the diagnostic sequence, return to Step 1.		

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									