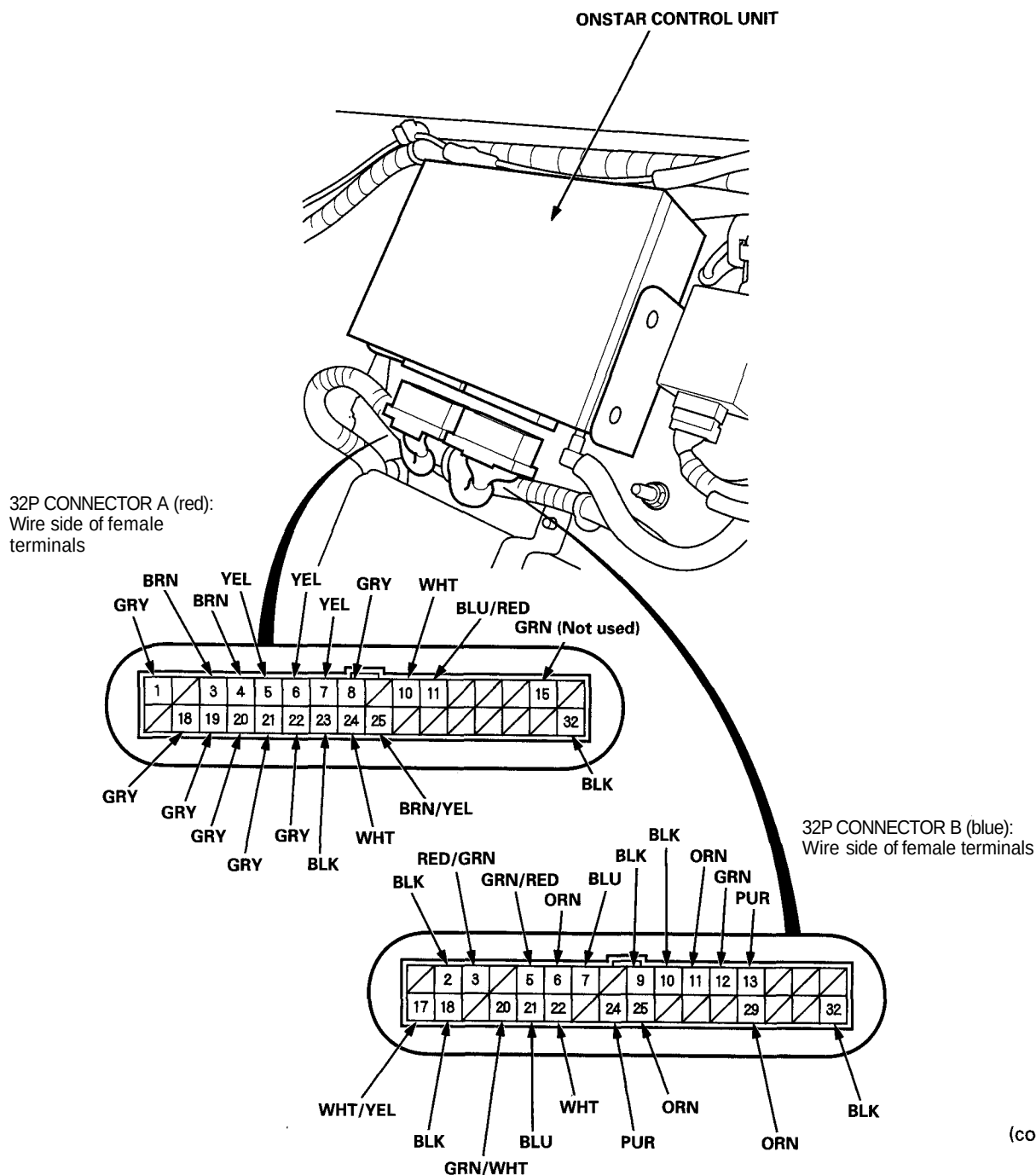


OnStar Control Unit Input Test

1. Remove the rear seat (Refer to the '96 - '01 3.5RL Service Manual, P/N 61SZ305, for the items not shown in this section).
2. Disconnect the 32P connectors from the OnStar control unit.
3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, make the following input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the control unit must be faulty; replace it.



(cont'd)

OnStar System ('02 Model USA)

OnStar Control Unit Input Test (cont'd)

Disconnect the connectors from the unit

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B17	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	- Blown No. 56 (7.5 A) fuse in the under-hood fuse/relay box - An open in the wire
B22	WHT	Ignition switch in ACC (I)	Check for voltage to ground: There should be battery voltage.	- Blown No. 4 (10 A) fuse in the under-dash fuse/relay box - An open in the wire
A32	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	- Poor ground (G601) - An open in the wire
B6	ORN	Under all conditions	Connect to ground: All horns should sound.	- Blown No. 39 (15 A) fuse in the under-hood fuse/relay box - Faulty horn relay - Either horn faulty - Poor ground (G201) - An open in the wire
B3	RED/GRN	Under all conditions	Connect to ground: The taillights should come on.	- Blown No. 1 (15 A) fuse in the under-dash fuse/relay box - Faulty taillight relay - Faulty taillight system - An open in the wire
B2 B9 B18 B32	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	An open in the wire

Reconnect the connectors to the unit

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B20	GRN/WHT	Front passenger's door lock key cylinder in neutral position	Check for voltage to ground: There should be battery voltage.	- Faulty front passenger's door lock key cylinder switch - Poor ground (G401, G402) - An open in the wire - Short to ground (if you don't have 5 V when you should)
		Front passenger's door lock key cylinder in locked position	Check for voltage to ground: There should be less than 1 V.	
B5	GRN/RED	Front passenger's door lock key cylinder in neutral position	Check for voltage to ground: There should be battery voltage.	
		Front passenger's door lock key cylinder in unlocked position	Check for voltage to ground: There should be less than 1 V.	
A8	GRY	Under all conditions	Check for continuity to ground: There should be continuity.	An open in the wire
A25	BRN/YEL	Under all conditions	Check for continuity to ground: There should be continuity.	An open in the wire
A10	WHT	OnStar "DOT" button pushed and human advisor voice comes on.	Check for voltage between the A10 terminal and audio unit C9 or B2 terminal: There should be 1 V or less.	- Faulty audio unit - Faulty speaker - An open in the wire
A11	BLU/RED	OnStar "DOT" button pushed and human advisor voice comes on.	Check for voltage between the A11 terminal and audio unit C8 or B3 terminal: There should be 1 V or less.	- Faulty audio unit - Faulty speaker - An open in the wire
A23	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	- Faulty OnStar buttons and microphone - An open in the wire
A24	WHT	Ignition switch in ACC (I). OnStar "DOT" button pushed. Speak into the microphone.	Check for voltage to ground: There should be about 4 V.	- Faulty OnStar buttons and microphone - An open in the wire

Reconnect the connectors from the unit

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B21	BLU	Ignition switch in ACC (I)	Check for voltage to ground: There should be no voltage.	- Faulty OnStar button system interface unit - An open in the wire
		Ignition switch turned OFF	Check for voltage to ground: There should be 10 V.	
B24	PUR	It is made to move to the malfunction mode of onstar system	Check for voltage to ground: There should be 4 V.	- Faulty OnStar button system interface unit - An open in the wire
B25	ORN	Ignition switch in ACC (I)	Check for voltage to ground: There should be less than 1 V.	- Faulty OnStar button system interface unit - An open in the wire
B29	ORN	Under all conditions	Check for continuity to ground: There should be continuity.	- Faulty OnStar button system interface unit - Poor ground (G401, G402) - An open in the wire
B7	BLU	Ignition switch in ACC (I)	Check for voltage to ground: There should be about 8 V.	- Faulty OnStar button system interface unit - An open in the wire
B10	BLK	Ignition switch in ACC (I) OnStar "DOT" button pushed	Check for voltage to ground: There should be about 8 V.	- Faulty OnStar button system interface unit - An open in the wire
B11	ORN	Ignition switch in ACC (I)	Check for voltage to ground: There should be about 8 V.	- Faulty OnStar button system interface unit - An open in the wire
B12	GRN	Ignition switch in ACC (I)	Check for voltage to ground: There should be about 8 V.	- Faulty OnStar button system interface unit - An open in the wire
B13	PUR	Ignition switch in ACC (I)	Check for voltage to ground: "DOT" button pushed: 280 mV "OnStar" button pushed: 1 V "Emergency" button pushed: 1.7 V	- Faulty OnStar button system interface unit - An open in the wire
A1	GRY	Ignition switch in ACC (I)	Check for voltage to ground: There should be about 10 V.	- Blown No. 56 (7.5 A) fuse in the under-hood fuse/relay box - An open in the wire
A18	GRY	Ignition switch in ACC (I)	Check for voltage to ground: There should be about 7 V.	- Blown No. 4 (10 A) fuse in the under-dash fuse/relay box - An open in the wire
A19	GRY	Under all conditions	Check for continuity to ground: There should be continuity.	- Poor ground (G601) - An open in the wire
A7	YEL	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be about 0 V.	- Faulty OnStar button and microphone - An open in the wire
A22	GRY	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be about 3.8 V.	- Faulty OnStar button and microphone - An open in the wire
A3	BRN	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be about 6.6 V.	- Faulty OnStar button and microphone - An open in the wire
A4	BRN	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be about 0 V.	- Faulty OnStar button and microphone - An open in the wire
A21	GRY	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be 1 V or less.	- Faulty OnStar button and microphone - An open in the wire
A20	GRY	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be 1 V or less.	- Faulty OnStar button and microphone - An open in the wire
A6	YEL	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be about 3 V.	- Faulty OnStar button and microphone - An open in the wire
A5	YEL	Ignition switch in ACC (I) OnStar "Emergency" button pushed	Check for voltage to ground: There should be about 6 V.	- Faulty OnStar button and microphone - An open in the wire