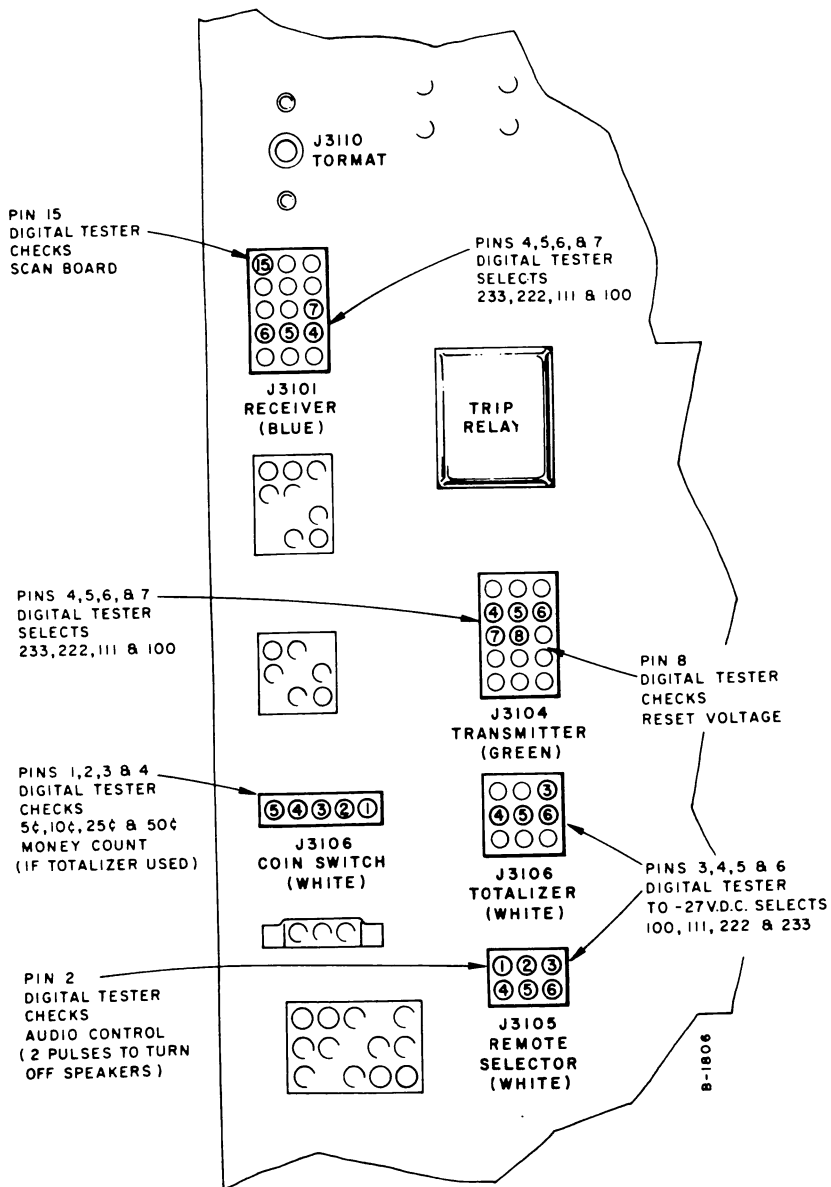


**TROUBLE
SHOOTING
GUIDE**

**DIGITAL CREDIT and
SELECTION SYSTEM**

THE SEEBURG SALES CORPORATION
CHICAGO • ILLINOIS 60622 U.S.A.



**DIGITAL SELECTION PHONOGRAPH
 "CONTROL CENTER PLUG & PIN DIAGRAM"**

SEEBURG TROUBLE SHOOTING GUIDE

DIGITAL CREDIT and SELECTION SYSTEM

TROUBLE	SYMPTOM	CORRECTION PROCEDURE
<p>1. FAILURE TO ADD CREDIT PROPERLY</p> <p>(Always check plugs and cables for pin alignment and broken wires)</p>	A. For Manual Credit Switch	<p>1. <u>Check Coin Switch Plugs and Service Switch Assembly.</u></p> <p>A. <u>Reverse Coin Switch Plugs;</u> solid colored wire plug to solid colored wire jack. (Does not apply to LS3).</p> <p>B. <u>Service Manual Credit Switch.</u></p>
	B. For particular coin	<p>1. <u>Check Slug Rejector Alignment and Coin Switch Adjustment.</u> See "Service Manual" and "Installation and Operation Manual"</p> <p>2. <u>Check Black Box (DTP1) and Pricing Program Board Operation.</u></p> <p>A. <u>Insert Digital Tester probe</u> into pin of Black Box (DTP1) coin switch jack of suspect coin wire and ground alligator clip.</p> <p>B. <u>Replace Pricing Program Board</u> if no credit is established and any of the diodes front to back resistance measures open or shorted with an Ohm meter. See service manual.</p> <p>C. <u>Replace Black Box (DTP1)</u> if Pricing Program Board was replaced and trouble persists.</p>
	C. For all Coins and Manual Credit Switch or Credit established when Power is turned on.	<p>1. <u>Check Control Center Voltages, -27VDC, -13VDC and Reset Voltage</u> (main power off and on 2 second delayed -27VDC).</p> <p>A. <u>Measure with a DC Voltmeter or Digital Tester</u> between ground and the -27V and -13V Test Points on Control Center chassis TB3100.</p> <p>B. <u>Replace Control Center</u> if the difference between -27VDC and -13VDC is greater than 15.5 VDC.</p> <p>C. <u>Connect Alligator Clip of Digital Tester to ground and insert Probe</u> in pin 8 of the wire side of the green plug.</p> <p>D. <u>Replace Control Center</u> if there is no delay in lighting the Digital Tester Lite when main power is turned on.</p> <p>2. <u>Check the Black Box (DTP1) and Pricing Program Board.</u></p> <p>A. <u>Replace Pricing Program Board</u> if any of the diodes are defective as above.</p> <p>B. <u>Replace Black Box (DTP1)</u> if Pricing Program Board was replaced and trouble persists.</p>
<p>2. FAILURE TO SUBTRACT CREDIT PROPERLY (Reset Lamp May or May Not Light)</p>	A. On Singles, on Albums, or on Both.	<p>1. <u>Check the Control Center -27VDC and -13VDC.</u></p> <p>A. <u>Measure voltages in Control Center</u> as above.</p> <p>B. <u>Replace Control Center</u> if difference of -27VDC and -13VDC is greater than 15.5VDC as above.</p> <p>2. <u>Check the Key Board - Main Trigger Switch, Number Button Contacts and Album Single Switches</u> if used.</p> <p>A. <u>Adjust Main Trigger Switch</u> if 1st and 2nd Digit Light comes on with one button push or if main trigger switch closes early turning on Reset Light.</p> <p>B. <u>Replace Key Board or Clean and Lubricate Button Contact Printed Circuit Board</u> if Main Trigger Switch is closing properly and the Reset Light comes on. Special Contact Lubricant, Part No. 53042.</p> <p>C. <u>Replace Album Single Switch Board (if used)</u> or Clean and Adjust Switches or Reset Light comes on when pushing 2nd Digit or Extra Credit is accumulated when making a selection.</p> <p>3. <u>Check the Black Box (DTP1) or Pricing Program Board.</u></p> <p>A. <u>Replace the Pricing Program Board</u> if any diode is defective as above.</p> <p>B. <u>Replace Black Box (DTP1)</u> if Pricing Program Board was replaced and trouble persists.</p>
<p>3. FAILURE TO PICKUP SELECTED RECORD.</p> <p>(Always check plugs and cables for pin alignment and broken wires)</p>	A. Credit is subtracted but mechanism does not scan. Mechanism does not scan when service is operated.	<p>1. <u>Check Motor Power, Control Power and Play Control Assembly.</u></p> <p>A. <u>Service Motor Power- 117 VAC</u> if Play Control add coil pulls in and sets ratchet two teeth.</p> <p>1. Motor On/Of Switch, Play Control Assembly in Control Center.</p> <p>2. Reversing Switch, Mechanism.</p> <p>3. Auto Speed Relay Contacts or Dummy Plug (if used).</p> <p>B. <u>Service Control Power - 25VAC</u> if Play Control Add Coil fails to pull in.</p> <p>1. 15 Amp Fuse - Control Center.</p> <p>2. Bind in Play Control Assembly.</p>

TROUBLE	SYMPTOM	CORRECTION PROCEDURE
3. FAILURE TO PICKUP SELECTED RECORD CONTINUED -	B. Credit is subtracted but mechanism does not scan. Mechanism scans and selected records are picked up when service switch is operated.	1. <u>Check Scan Board Operation</u> , by inserting Probe of Digital Tester in wire side of pin 15 of Blue Plug on Control Center and ground Alligator Clip. A. <u>Replace Scan Board</u> if Mechanism fails to Scan. B. <u>Replace Gray Box (DRD1)</u> if Mechanism scans.
	C. Credit is subtracted but mechanism does NOT scan. Mechanism scans but selected record is NOT picked up when service switch is operated.	1. <u>Check Selection Data Transmission System.</u> A. <u>Divide System</u> , insert Digital Tester Probe in pins 4, 5, 6 and 7 of wire side of Green Plug and scrape Alligator Clip on ground. B. <u>Make Four Standard Selections.</u> Check to see if Proper selections were made in sequence. 1) Pin 7 D Data Line Selects 100. NOTE: Additional selections may be obtained. 2) Pin 6 C Data Line Selects 111. 3) Pin 5 B Data Line Selects 222. 4) Pin 4 A Data Line Selects 233. C. <u>Replace Black Box (DTP1)</u> if Standard Selections are picked up. 2. <u>Check remaining Selection Data Transmission System.</u> A. <u>Divide remaining System</u> , insert Digital Tester Probe in pins 4, 5, 6 and 7 of wire side of Blue Plug and scrape Alligator Clip on ground. B. <u>Make Four Standard Selections</u> , check to see if proper selections were made as above. C. <u>Replace Control Center</u> , if all selections were picked up. D. <u>Replace Grey Box (DRD1)</u> , if any selections were missed. E. <u>Replace Control Center</u> , if all selections were missed.
	D. Credit subtracted but mechanism scans twice and stops.	1. <u>Check Write In, Read Out, Sense, and Trip.</u> A. <u>Charge Memory Unit</u> with 1-1/2 Volt battery, tip of Sense Loop to negative case of battery, positive post of battery to ground. B. <u>Re-insert Sense Loop Plug</u> into Control Center and scan Mechanism. 2. <u>Write In Trouble</u> , if all selections are picked up. A. <u>Replace Grey Box (DRD1)</u> , if Write In voltage is less than 105 V measured at test point 4 on Control Center with a DC voltmeter. 3. <u>Sense or Trip Trouble</u> if no record is picked up. A. <u>Service 2M1 Contact (if used)</u> when no record is picked up with Alligator Clip of Digital Tester is grounded and Probe placed on Trip Relay Test Point of Control Center and Mechanism is scanned. B. <u>Replace Control Center</u> if no record is picked up when probe of Digital Tester is inserted into Sense Socket of Control Center, Alligator Clip on Positive Post of 1-1/2 volt battery, Negative Case Grounded and Mechanism scanned. 4. <u>Read Out Trouble</u> if no or only a few records are picked up. A. <u>Replace Control Center</u> if Mechanism picks up all Records with Read Out Link <u>Pivoted</u> to Trip Relay Test Point. B. <u>Service Detent Switch (7M1) or Contact Block</u> if Mechanism fails to pick up all Records with Read Out Link <u>Pivoted</u> to Trip Relay Test Point. (Inspect Read Out wiring on Mechanism)
4. PICKS UP WRONG SELECTIONS (Make Standard Selections to develop Symptom Pattern-100, 111, 222, 233, 144, 155, 166, 177, 178, 179, 101, 102, 103, 110).	A. Group 1 Failure - 100, 111, 222, 233.	1. <u>Check Selection Data Transmission System.</u> (Trouble procedure 3, Symptom C). 2. <u>Replace Grey Box (DRD1)</u> if more than the Standard Selections play.
B. Group 2 Failure - 144, 155, 166, 177, 178, 179.	1. <u>Repair or Replace Keyboard</u> if one or more Number Buttons causes repeated wrong Selections (such as when 177 is selected, 100 plays). 2. <u>Replace Grey Box (DRD1)</u> if more than the Standard Selections play or if any are missed.	
C. Group 3 failure -101, 102, 103, 110.	1. <u>Replace Black Box(DTP1)</u> if any Standard Selections fail to play. (See Trouble procedure 3, Symptom C).	