COIN TEST LINE CIRCUIT

GENERAL

- 1.01 The Coin Station Test line is usable on coin lines not equipped with dial long line units. It allows the installation or repair forces to make the following operational tests without tying up local test desk facilities or requiring services for an operator:
 - Coint Detection and Ground Removal (single slot sets)
 - Ground and Loop Resistance
 - · Loop Leakage
 - Coin Collect
 - · Coin Return
 - Coin Relay Operating Time
- 1.02 The test line should be used in conjunction with the 8 or 10 step coin station routine outlined in Issue 2 of the Coin Maintenance Check booklet or Section 506-900-503, Issue 2. Troubles listed under failures in the coin test line procedure refer to the Trouble Analysis Tables in Issue 2 of the Booklet or Section 506-900-503, Issue 2, i.e. (B-1) indicates Table B, trouble 1.
- 1.03 All tests provided by the test line may be made at coin stations having a single-coil coin relay.
- 1.04 Tests are based on an initial rate of ten cents, when called for. A nickel deposit is required when making the Coin Return test except with single slot sets in coin first (CF) mode.
- as shown in the Test Line Procedure. Tests may be repeated by dialing the assigned digit when the test line is in the "Test Selection Mode" (interrupted dial tone). Once the Relay Time test has been dialed (digit 5), the test can be recycled as often as necessary by tripping hopper trigger or redepositing the initial rate. The Coin Detection

- and Ground Removal tests require disconnect and reseizure of the test line if retest is desired.
- 1.06 If no action is taken for approximately 60 seconds after the reception of the "Test Selection Tone" (interrupted dial tone) during any phase of the sequence, the test line will automatically disconnect and restore the circuit to normal.
- 1.07 Tones are used to indicate a required action by the craftsman as follows:
 - Alternating high and low tone (Tone C)—requires deposit of coin or operation of hopper trigger.
 - Steady high tone (hang-up tone)—request to restore handset to on-hook condition. In some tests high tone replaces tone C upon deposit of coin or operation of trigger.
 - Interrupted dial tone (test selection tone)—proper digit should be dialed (2 through 5) depending on test desired.
- 1.08 Test results are returned to the craftsman in the form of coded beeps or rings which are repeated three times i.e., 1 beep repeated 3 times. When called for in the sequence, the handset should be taken off-hook before the 3rd signal or the test line will disconnect.
- 1.09 The Coin Test Line is capable of testing rotary or TOUCH-TONE® dial stations.

2. PREPARATION

- **2.01** The following apparatus is required:
 - P5M cord (Fig. 1)—Used to connect upper housing to lower housing in 200-type sets with transfer contacts
 - P10B cord—Used to connect upper housing to lower housing in 236 and 1234 sets
 - P11C cord—Used to connect cover unit assembly or door and faceplate assembly to

coin chassis in 235-, 1235-, 1A/1C-, or 2A/2C-type sets

- KS-20950, L1 parking tool (Fig. 2)—Used to hang cover unit assembly of 1A/1C-type set on side of housing, eliminating the need for a P11C cord
- 146B bias margin gauge—Collect and Return Test
- 1011B or 1013A hand test set—Connect to receiver circuit when upper housing or cover unit assembly is on floor or to verify coin signals on 1A/1C- and 2A/2C-type sets
- KS-14995, L3 tool—Placed between coin chute and hopper in single slot sets during Collect test to prevent collection of coins (Fig. 3)
- Two dimes, one nickel, one quarter

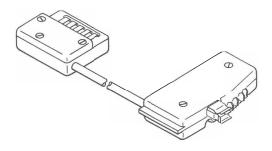


Fig. 1-P5M Cord

2.02 Prepare coin station as follows:

- (1) Remove upper housing of 200-type sets, cover unit assembly of 1A/1C-type sets. or open door and faceplace assembly of 2A/2C- and 235/1235-type sets.
- (2) If P11C cord is used, invert handset on switchhook of 1A/1C-type sets to prevent armored cord pushing handset off-hook when cover unit assembly is set down.

(3) Where possible, place upper housing or cover unit assembly on level surface in a



Fig. 2-KS-20950, List 1 Cover Parking Tool

position that will permit deposit, dialing, and handset removal. If upper housing or cover unit assembly must be placed on floor it may be necessary to connect hand test set leads to receiver circuit on dial and housing assembly and use in lieu of handset when making tests.

- (4) Connect upper housing, cover unit assembly, or door to lower housing or chassis using proper cord (2.01).
- (5) When testing 1C- or 2C-type sets, ensure that totalizer connector (PP-DTF) or CF-DTF mode switch, is in the proper position.

3. COIN TEST LINE PROCEDURE

3.01 Perform test per following flow charts:

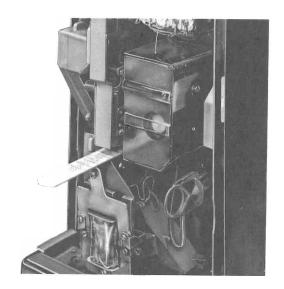
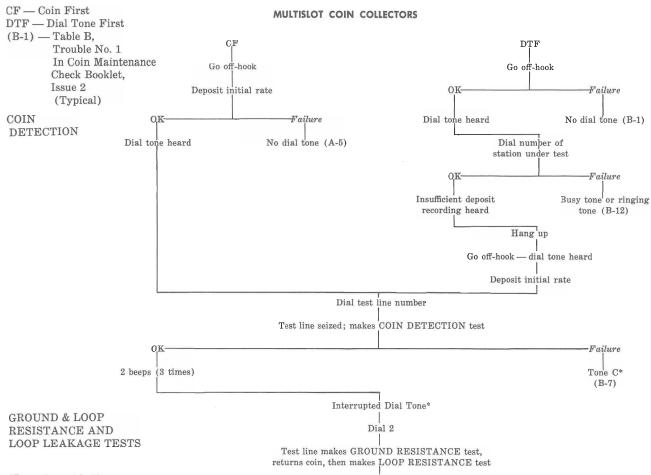
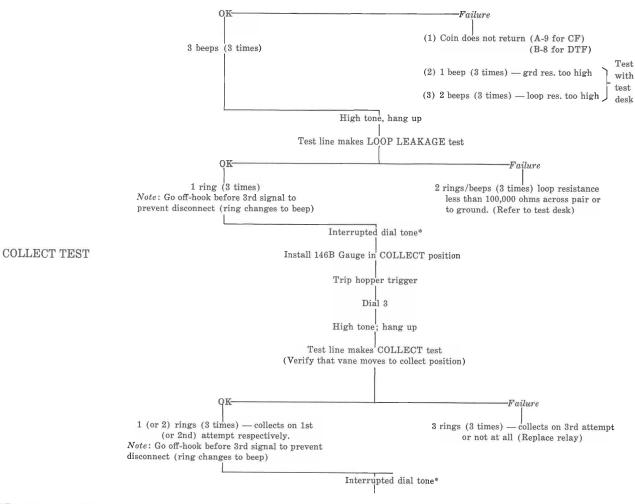


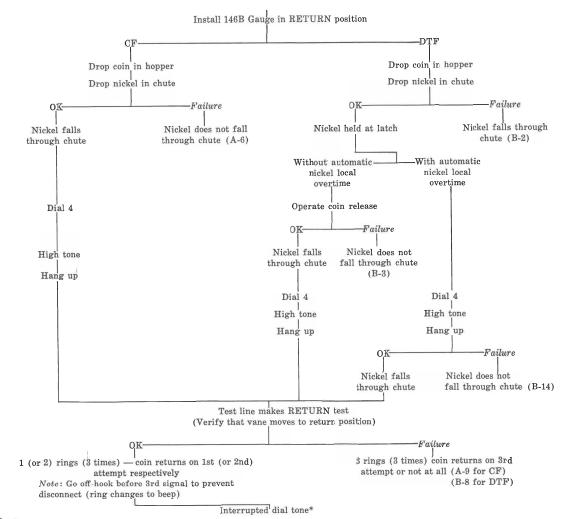
Fig. 3—KS-14993, List 3 Tool—In Position for Collect Test

LEGEND



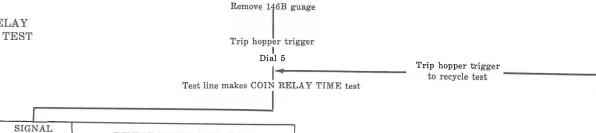
^{*}Tones time out in 60 sec.





^{*}Tones time out in 60 sec.





SIGNAL (Coin relay operate time)	TEMPERATURE of Coin Relay				
	Below 20°	20-60°	60-100°	Above 100°	
4 Beeps (Above 500 milliseconds)	Refer to Adjust Chart	Too	Slow — Ref	er to	
3 Beeps (475-500 milliseconds)				Chart	
STEADY TONE (425-475 milliseconds)			OK		
2 Beeps (400-425 milliseconds)	TOO FA	st—			
1 Beep (Below 400 milliseconds)	Refer to Chart	Adjust			

Temperature	Adjusting Procedure	
Above 100°	Adjust to steady tone and turn armature screw clockwise until first indication of 2 beeps is acquired	

Adjust Chart

Adjust to 3 beeps and turn armature

60 to 100° screw clockwise until first indication of steady tone is acquired

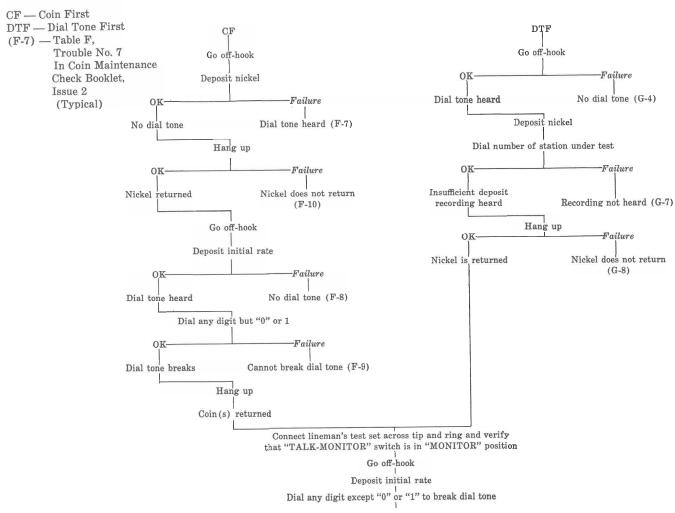
Adjust to 4 beeps and turn armature screw clockwise until first indication of 3 beeps is acquired

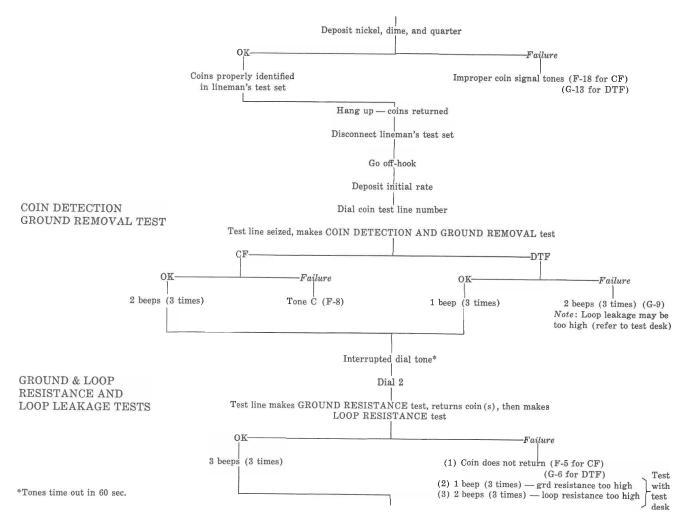
Adjust to 3 beeps and turn armature screw counterclockwise until first indication of 4 beeps is acquired—then turn screw counterclockwise an additional ¼ turn

Go on hook momentairly
Interrupted dial tone heard*
Hang up. Test line disconnects

^{*}Tones time out in 60 sec.

SINGLE SLOT COIN TELEPHONE SETS



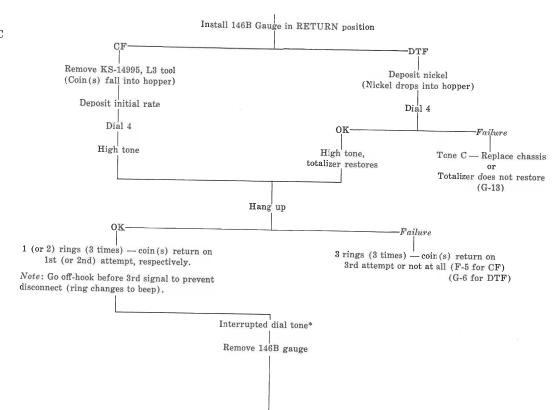




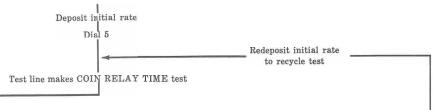
^{*}Tones time out in 60 sec.

COLLECT TEST

RETURN TEST (AND AUTOMATIC NICKEL LOCAL OVERTIME TEST DTF only)



*Tones time out in 60 sec.



SIGNAL (Coin relay	TEMPERATURE of Coin Relay				
operate time)	Below 20°	20-60°	60-100°	Above 100°	
4 Beeps (Above 500 milliseconds)	Refer to Adjust Chart	TOO SLOW — Refer to Adjust Chart			
3 Beeps (475-500 milliseconds)					
STEADY TONE (425-475 milliseconds)			OK		
2 Beeps (400-425 milliseconds)	TOO FAST — Refer to Adjust Chart				
1 Beep (Below 400 milliseconds)					

Adjust Chart

Temperature	Adjusting Procedure		
Above 100°	Adjust to steady tone and turn armature screw clockwise until first indication of 2 beeps is acquired		
60 to 100°	Adjust to 3 beeps and turn armature screw clockwise until first indication of steady tone is acquired		
20 to 60°	Adjust to 4 beeps and turn armature screw clockwise until first indication of 3 beeps is acquired		
Below 20°	Adjust to 3 beeps and turn armature screw counterclockwise until first indication of 4 beeps is acquired — then turn screw counterclockwise an additional ¼ turn		

Go on hook momentairly
Interrupted dial tone heard*
Hang up. Test line disconnects

^{*}Tones time out in 60 sec.