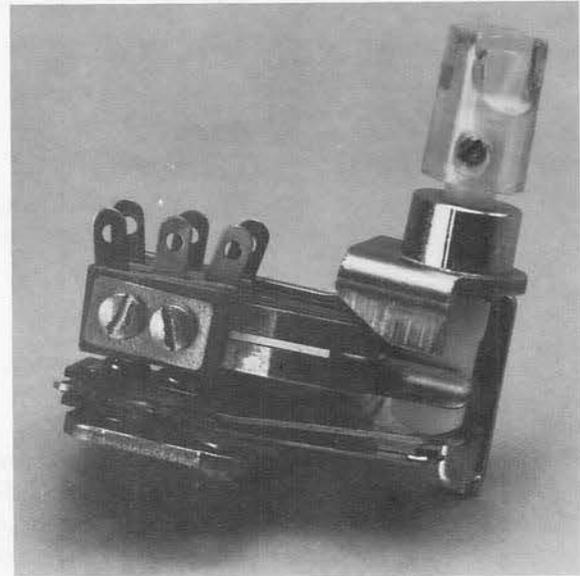


MODEL 79453 TURN-AND-PUSH KEY ASSEMBLY

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Figure 1: Model 79453 Turn-And-Push Key Assembly

1. INTRODUCTION

- 1.01 This document covers the Model 79453 turn-and-push key assembly. (See Figure 1.) A general description as well as information on removal, disassembly, replacement parts, assembly, installation, and operation is included.
- 1.02 Whenever this section is reissued, reason for reissue will be listed in this paragraph.
- 1.03 For information concerning telephones that this turn-and-push key assembly is used in, refer to the appropriate section in Volume 1 of the ITT Telephone Apparatus Practices Manual.

2. GENERAL DESCRIPTION

- 2.01 The Model 79453 turn-and-push key assembly is designed for use in the ITT two-line telephones. It provides the contacts for selecting either of the two lines, and contacts for signaling when required.
- 2.02 Line selection is accomplished by rotating the knob on the turn-and-push key assembly one quarter-turn. The switch contacts of one line are opened as the switch contacts of the other line are closed. The key will lock in either position.
- 2.03 The signaling contacts are closed by pushing down on the knob of the turn-and-push key assembly. The signaling contacts are nonlocking.
- 2.04 The turn-and-push key assembly consists of a bracket assembly, a plunger, a turn spring assembly, a push spring assembly, and a knob. (See Figure 2.)
- 2.05 The turn-and-push key assembly is attached to the telephone base with mounting screws. The associated wiring is attached to the telephone components by soldering or spade-tip lugs.

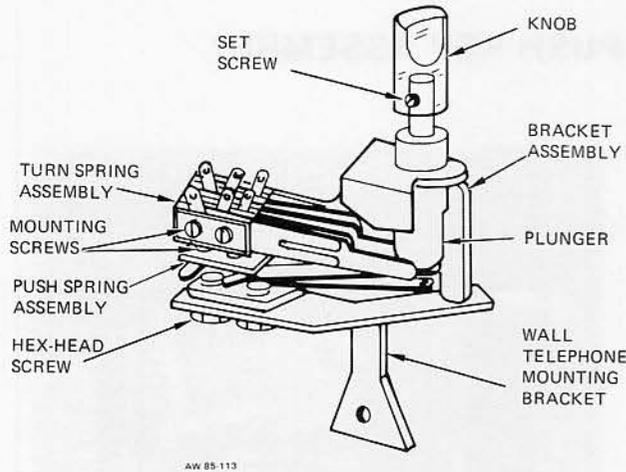


Figure 2: Model 79453 Turn-And-Push Key Assembly, Component Locations

2.06 The Model 79453 turn-and-push key assembly is available in several styles. Refer to Table A for ordering information and for an explanation of each code. The styles of the turn-and-push key assembly are briefly described in the following paragraphs.

MODEL 79453-101

2.07 The Model 79453-101 is the standard turn-and-push key assembly. It is equipped with the 79438-101 turn spring assembly, and the 79439-101 push spring assembly. Wiring is not included on this model.

MODEL 79453-103

2.08 The Model 79453-103 turn-and-push key assembly is the same as the Model 79453-101 turn-and-push key assembly, except it is equipped with the 82578-101 turn spring assembly.

MODEL 79453-106

2.09 The Model 79453-106 turn-and-push key assembly is the same as the Model 79453-101 turn-and-push key assembly, with the addition of the 79467-101 terminal board assembly and associated wiring.

TABLE A

ORDERING INFORMATION

CODE NUMBERS	
TURN-AND-PUSH KEY CODE NUMBERS ARE FORMED IN TWO STEPS AS FOLLOWS:	
(1) Turn-And-Push Key Model Number (See Part 1)	079453
(2) Turn-And-Push Key Style (See Part 2)	101
PART 1 TURN-AND-PUSH KEY MODEL NUMBER	
CODE	DESCRIPTION
079453	Model 79453 Turn-And-Push Key Assembly
PART 2 TURN-AND-PUSH KEY STYLE	
CODE	DESCRIPTION
101	Standard without wiring
103	Same as -101 except equipped with 82578-101 turn spring assembly
106	Same as -101 with addition of 79467-101 terminal board
107	Same as -103 with addition of 79467-101 terminal board and 84522-101 hold switch
108	Same as -107 with addition of 82577-101 hold switch
112	Same as -108 except equipped with 185337-101 knob

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MODEL 79453-107

2.10 The Model 79453-107 turn-and-push key assembly is the same as the Model 79453-103 turn-and-push key assembly, with the addition of the 79467-101 terminal board assembly and the Model 84522-101 (see Section 55-522-127) hold switch assembly.

MODEL 79453-108

2.11 The Model 79453-108 turn-and-push key assembly is the same as the Model 79453-107 turn-and-push key assembly, except it is equipped with the Model 82577-101 (see Section 55-577-127) hold switch assembly.

MODEL 79453-112

2.12 The Model 79453-112 turn-and-push key assembly is the same as the Model 79453-108 turn-and-push key assembly, except it is equipped with the 185337-101 knob.

3. REMOVAL

3.01 To remove the turn-and-push key assembly from the telephone, proceed as follows:

- (a) Remove the telephone housing.
- (b) Remove the dial to provide access to the terminal board assembly.
- (c) Disconnect the wiring of the turn-and-push key assembly. Some of the associated wiring must be unsoldered from the terminal board assembly.
- (d) Locate the two hex-head mounting screws on the rear of the telephone base.

Note: The turn-and-push key assembly inside the wall telephone is mounted on an L-shaped bracket, which is attached to the telephone base. Removal of the L-shaped bracket is required.

- (e) Loosen and remove the two hex-head mounting screws.
- (f) Remove the turn-and-push key assembly from the telephone base, or from the L-shaped bracket as in the wall telephone.

4. DISASSEMBLY

4.01 To disassemble the turn-and-push key assembly, proceed as follows while referring to Figure 2:

- (a) Remove the set screw from the knob.
- (b) Pull the knob from the plunger stem.
- (c) Loosen the turn spring mounting screws. Carefully remove the turn spring assembly from the bracket assembly.
- (d) Loosen the push spring mounting screws. Carefully remove the push spring assembly from the bracket assembly.
- (e) Remove the plunger from the bracket assembly.

5. REPLACEMENT PARTS

5.01 Replacement parts for the Model 79453 turn-and-push key assembly are listed in Table B, and shown in Figure 3.

6. ASSEMBLY

6.01 To assemble the turn-and-push key assembly, proceed as follows:

- (a) Insert the plunger stem up through the mounting hole of the bracket.
- (b) Place the knob on the plunger stem. Align the hole in the knob with the hole in the plunger stem.
- (c) Insert the set screw, and tighten it to secure the knob to the plunger stem.
- (d) Install the push spring assembly on the bracket assembly. The top contact of the push spring assembly should rest against the bottom of the plunger.
- (e) Install the turn spring assembly on the bracket assembly. The long rounded tip contacts should rest on each side of the plunger.

TABLE B

REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED					
			101	103	106	107	108	112
		Model 79453 Turn-And-Push Key Assembly						
1	079452-101	Knob	1	1	1	1	1	-
1	185337-101	Knob	-	-	-	-	-	1
2	079446-101	Bracket Assembly	1	1	1	1	1	1
3	079449-102	Plunger	1	1	1	1	1	1
4	079920-101	Bracket, L-Shaped ¹	-	-	-	1	-	-
5	180219-101	Screw, Mounting ¹	-	-	-	1	-	-
6	079474-101	Screw, Hex-Head Mounting ¹	2	2	2	4	4	4
7	079439-101	Push Spring Assembly	1	1	1	1	1	1
8	079437-101	Screw, Push Spring Assembly Mounting	2	2	2	2	2	2
9	079438-101	Turn Spring Assembly	1	-	1	-	-	-
9	082578-101	Turn Spring Assembly	-	1	-	1	1	1
10	190332-102	Screw, Turn Spring Assembly Mounting	2	-	2	-	-	-
10	082580-103	Screw, Turn Spring Assembly Mounting	-	2	-	2	2	2
11	079467-101	Terminal Board Assembly	-	-	1	1	1	1
12	095747-109	Resistor, 500 Ohm	-	-	-	2	2	2
13	079451-101	Screw, Set	1	1	1	1	1	1
	084522-101	Hold Switch Assembly (Not Shown)	-	-	-	1	-	-
	082577-101	Hold Switch Assembly (Not Shown)	-	-	-	-	1	1

NOTE:

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1. This part must be ordered separately.

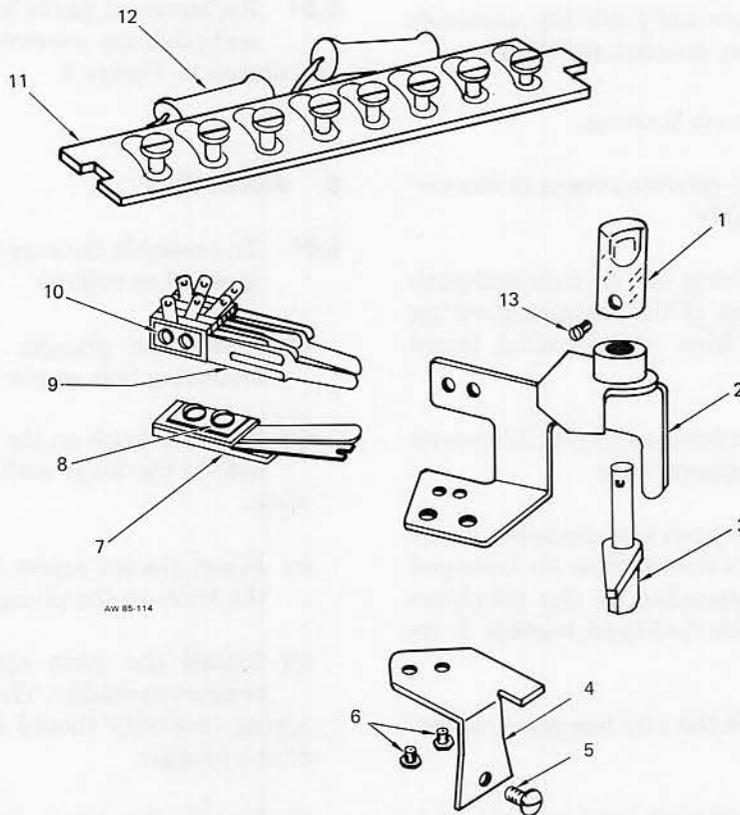


Figure 3: Model 79453 Turn-And-Push Key Assembly, Exploded View

7. INSTALLATION

7.01 To install the turn-and-push key assembly inside the telephone, proceed as follows:

- (a) Remove the telephone housing.
- (b) Remove any telephone component that may obstruct access to the mounting location and the terminal board assembly.
- (c) Install the turn-and-push key assembly to the telephone base using the two hex-head mounting screws.

Note: To install the turn-and-push key assembly inside a wall telephone, first attach the turn-and-push key assembly to the L-shaped mounting bracket using the two hex-head mounting screws. Then attach the bracket to the telephone base using the round-head mounting screw.

- (d) Attach the wiring to the telephone components while referring to the circuit label of the telephone in Volume 1 of the Telephone Apparatus Practices Manual and Figures 4 or 5 of this section.

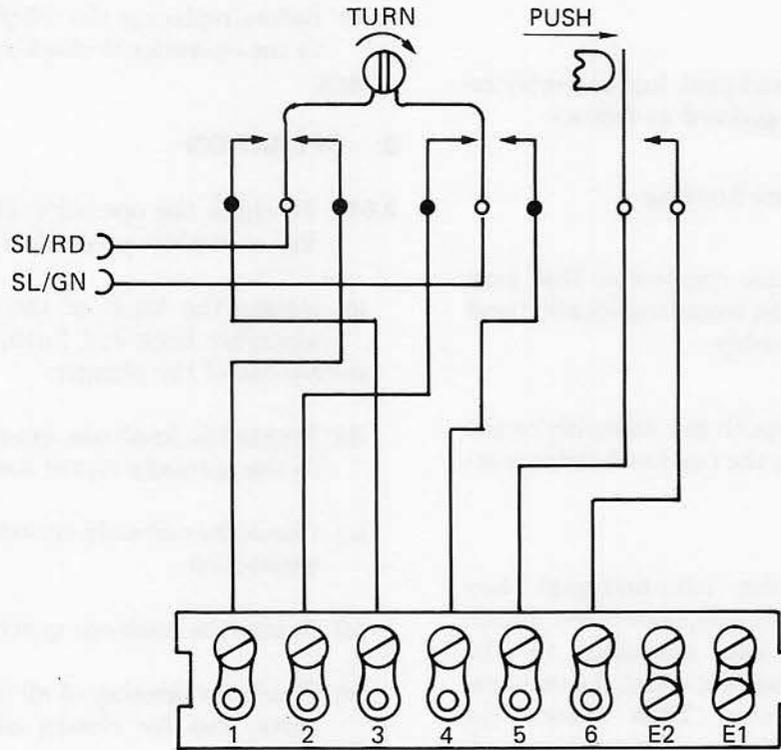
Note: Some of the wires must be soldered to the terminal board assembly, and other wires must be attached with the spade-tip lugs.

- (e) Before replacing the telephone housing, refer to the operational check in Part 8 of this section.

8. OPERATION

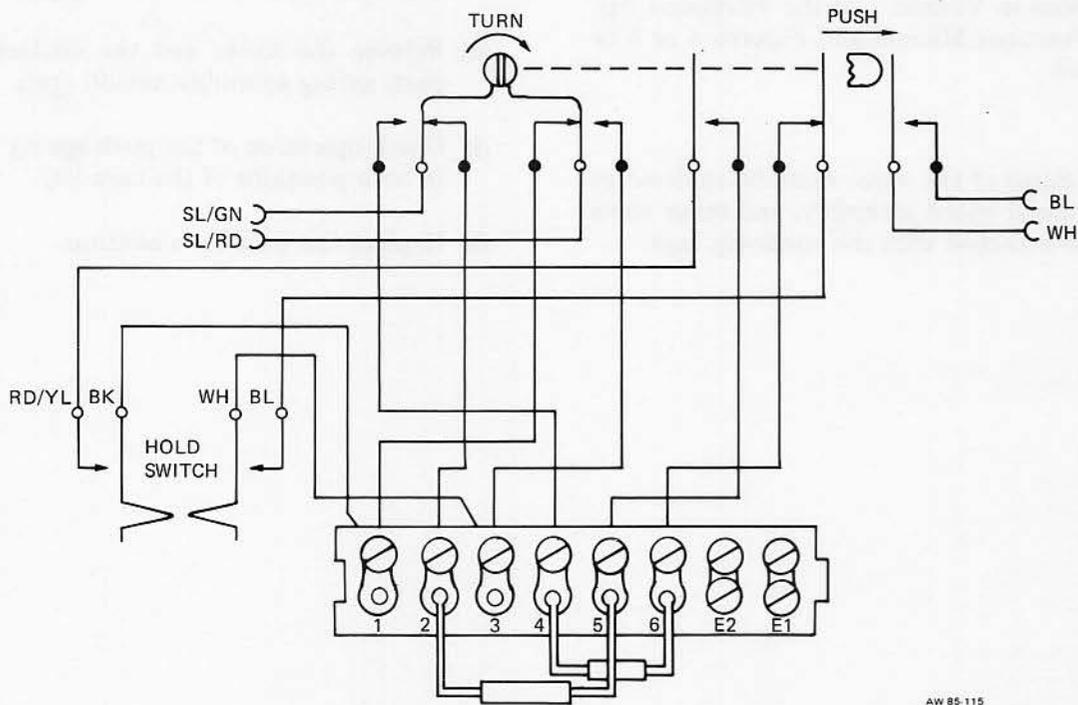
8.01 To check the operation of the turn-and-push key assembly, proceed as follows:

- (a) Rotate the knob of the turn-and-push key assembly back and forth, and check for free movement of the plunger.
- (b) Rotate the knob one quarter-turn to the left, to the normally-closed contact position.
- (c) Check the normally-closed contacts for proper connection.
- (d) Rotate the knob one quarter-turn to the right.
- (e) Check for opening of all normally-closed contacts, and for closing of all normally-open contacts.
- (f) Press down on the knob.
- (g) Check for closing of the push spring assembly contacts when the knob is fully pressed down.
- (h) Release the knob, and the contacts of the push spring assembly should open.
- (j) Check operation of the push spring assembly in both positions of the turn key.
- (k) Replace the telephone housing.



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Figure 4: Wiring Diagram for -106 Turn-And-Push Key Assembly



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Figure 5: Wiring Diagram for -107, -108, and -112 Turn-And-Push Key Assemblies