

**Northern Telecom Practice (NTP) ..... Section 502-9011-201**

**Issue Date : ..... March 3<sup>rd</sup>, 1978**

**Decorator Telephone Sets.**

**Type : ..... QSQM460 Mickey Mouse Telephone**

**Purpose : ..... Identification; Connection; Maintenance**

**Source : Bell Canada Station Installation & Repair Manual - 1981**

**OCR : Yes**

**DECORATOR TELEPHONE SETS\*****QSQM460-Type Mickey Mouse Telephone  
Identification, Connection and Maintenance****Fig. 1—QSQM460-Type Mickey Mouse Telephone Set**

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**1. GENERAL**

1.01 This section provides the identification, connection, and maintenance procedures for the QSQM Mickey Mouse Phone telephone set.

**2. IDENTIFICATION**

2.01 The Mickey Mouse Phone telephone set is approximately 15½ inches (394 mm) tall and the base is approximately 8½ inches (216 mm) square. The Mickey Mouse figure holds a standard telephone handset in its right hand.

**TABLE A**  
**QSQM460-TYPE TELEPHONE SET**  
**CODES AND DESCRIPTION**

CODE	DESCRIPTION
QSQM460AX	Rotary dial plug-ended telephone
QSQM2460AX	DIGITONE* dial plug-ended telephone
QSQM3460AX	DIGIPULSE* dial, plug-ended telephone

2.02 The QSQM460-type Mickey Mouse Phone (see front page) is the rotary-dial telephone set. The QSQM2460 and QSQM3460 are the Touch Calling configurations. The telephones are factory-wired for individual party service and can also be modified for use with NE-1A1 or NE-1A2 Key Telephone Systems (KTS).

### 3. CONNECTIONS

3.01 Schematic diagrams for the 460-type telephone sets are presented in Fig. 3, 4 and 5.

3.02 A 4-conductor, NE-D4Bd mounting cord is required to provide A-lead control for use with NE-1A1 or NE-1A2 KTS. See Tables E and F.

3.03 Connections for all classes of residential service are shown in Tables C and D.

### 4. MAINTENANCE

4.01 Maintenance of customer-owned apparatus is the responsibility of the customer. For maintenance of company-owned apparatus, field maintenance should be limited to cleaning and adjusting line switch contacts and replacing components listed in Table B.

Information about the assembly of parts is given in Fig. 6, 7 and 8 and parts identification in Table G.

4.02 All plastic parts and the cords may be cleaned with a soft cloth dampened with a mild, diluted detergent. They may then be polished with a soft, dry cloth, as can be the gold-plated dial.

### 5. COMPANION\* HANDSFREE CONNECTION

5.01 Connections of the QUS1A COMPANION handsfree unit to the telephone set are made inside the set. A 2-conductor spade-tip-ended mounting cord and two QCM12A connectors are required. Connect as follows: (Fig. 2).

- Connect the leads on one end of the 2-conductor mounting cord to the QCM12A connectors.
- Connect the black (BK) and yellow (YL) leads of the handsfree unit mounting cord to the QCM12A connectors.
- Connect the red (R) lead of the handsfree unit mounting cord to terminal 2L of the network. Connect the green lead to the QCM15B connector which is connected to 1L.

5.02 For more information regarding handsfree connections refer to 512-6251-400.

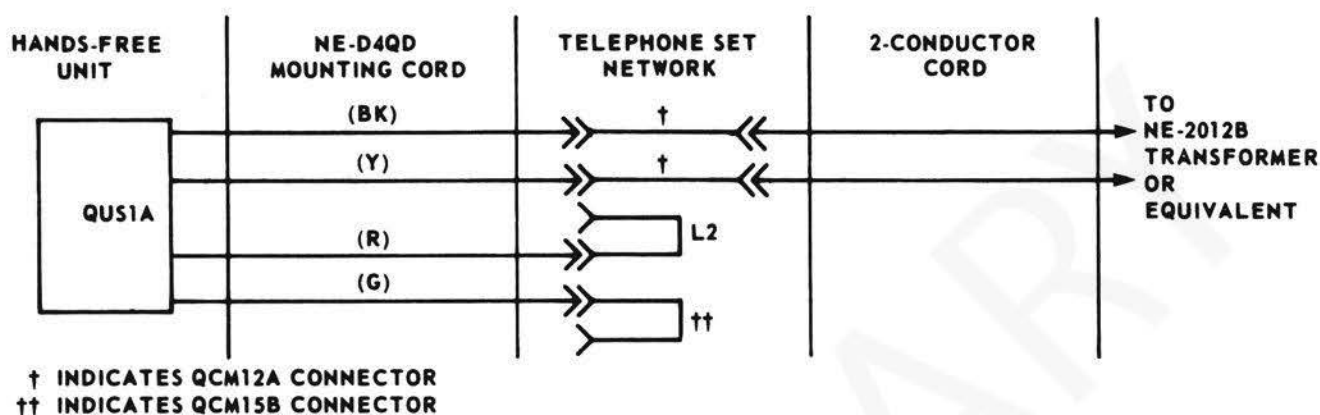


Fig. 2—Hands-Free connections

## 6. TELEDIALER\* 32 CONNECTION

6.01 Connections of the QDM2A1, TELEDIALER 32 to the telephone set are made inside the set. A QCM12A connector is required for all sets. In addition, a QCM15B connector is required for the QSQM3460 for tip party service.

6.02 **Note:** Information enclosed in parentheses () indicates changes for tip party service. For QSQM460 and QSQM2460 connect as follows:

- Remove red mounting cord lead from 2L (1L) on network.
- Connect red TELEDIALER lead and red mounting cord lead together with a QCM12A connector.
- Connect yellow TELEDIALER lead to 2L (1L) on network.
- Connect green TELEDIALER lead to QCM15B connector which is connected to L1 on network. (Connect green TELEDIALER lead to 2L on network.)

6.03 For QSQM3460 connect as follows:

- Remove red mounting cord lead from 2L on network.
- Connect red TELEDIALER lead and red mounting cord lead together with a QCM12A connector.
- Connect yellow TELEDIALER lead to 2L on network.
- Connect green TELEDIALER lead to QCM15B connector which is connected to 1L on network. (Remove green mounting cord lead from 1L on network. Connect green mounting cord lead and green TELEDIALER lead to QCM15B connector and connect the QCM15B connector lead to 1L on network.)

6.04 For more information regarding TELEDIALER connections refer to 512-1311-200.

**TABLE B**  
**FIELD-REPLACEABLE COMPONENTS**

PART NO.	ITEM
NE-D4QH-87	Mounting Cord
NE-H4CJ-20	Handset Cord (5 ft, 6 in)
NE-6QD	Dial (Gold)
NE-M1A	Ringer
QNB18C	Network
NE-U1 or QUU1A	Receiver Unit
NE-T1	Transmitter Unit
NE-35Q3L2X or	Dial (DIGITONE)
NE-35Q3L1X	
NE-35QA1X	Dial (DIGIPULSE)
These items must be cleared and adjusted during field maintenance.	

**TABLE C**  
**CONNECTIONS FOR QSQM460 and 2460 TELEPHONE SETS**

	LEAD DESIG'N	COLOR	INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY	TIP PARTY 2650Ω IDENT
Mounting Cord at Network	Ring Tip Grd Aux	R G Y BK	2L 1L G1 *	2L 1L G1 *	1L 2L G1 *	1L 2L G1 *
Ringer		BK S S-R R	‡ * * A	G1 * * A	G1 * * A	G1 * B A
*Indicates insulate and store using PO97L403 insulator. †Indicates a QCM15B connector.  <b>Note:</b> If the telephone set is the only set on the premises, the ringer output may be increased by placing the ringer biasing in the high tension notch.						

**TABLE D**  
**CONNECTIONS FOR QSQM3460 TELEPHONE SETS**

	Color	Individual or Bridged	Ring Party	Tip Party	Tip Party 2650Ω Ident
Mounting Cord at Network	R G Y BK	2L 1L G1 *	2L 1L G1 *	2L 1L G1 *	2L 1L G1 *
Ringer	BK S S-R R	‡ * * A	G1 * * A	G1 * * A	G1 * † A
Jumper	G G	K 2L	K 2L	K ‡	K ‡
Line Switch	S S-Y S-BR S-G S-W	* † C ‡ RR	* † C ‡ RR	* † C ‡ RR	* ‡ RR † B
Dial	BL	†	†	†	C
<p>*Indicates insulate and store using PO97L403 insulator  †Indicates a QCM12A connector  ‡Indicates a QCM15B connector</p> <p><b>Note:</b> If the telephone set is the only set on the premises, the ringer output may be increased by placing the ringer biasing in the high tension notch.</p>					

**TABLE E**  
**NE-1A1 or NE-1A2 KTS CONVERSION**  
**FOR QSQM460 and 2460 TELEPHONE SETS**

	LEAD DESIGNATION	COLOR	REMOVE FROM NETWORK TERMINAL	NETWORK TERMINAL
Mounting Cord	T R A1 A	G R Y BK	— — — —	1L 2L G1 †
Line Switch		S S-Y S-BR S-G S-W	K 2L C ‡ RR	* G1 † 2L C
NE-M1W Cord or Equivalent			Strap K to L2	
<b>Notes:</b> 1. Use a NE-D4BJ mounting cord. 2. *Indicates insulate and store using PO97L403 insulator. 3. †Indicates a QCM12A connector. 4. ‡Indicates a QCM15B connector.				

**TABLE F**  
**NE-1A1 or NE-1A2 KTS CONVERSION FOR QSQM3460-TYPE TELEPHONE SETS**

	LEAD DESIGNATION	COLOR	REMOVE FROM NETWORK TERMINAL	CONNECT TO NETWORK TERMINAL
Mounting Cord	T R A1 A	G R Y BK	— — — —	1L 2L G1 †
Line Switch		S-Y S-BR	† C	G1 †
Dial		BL	†	C
<b>Notes:</b> 1. Use a NE-D4QM-87 mounting cord. 2. †Indicates a QCM12A connector.				



## 7. PART REPLACEMENT PROCEDURE CHARTS

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### CHART 1 REMOVING THE BASE ASSEMBLY

STEP	PROCEDURE
1	Remove the handset from the hookswitch.
2	Lay the Mickey Mouse phone on its back.
3	Loosen, but do not remove, the four screws holding base to the housing.
4	Carefully lift the housing from the base.
	To reassemble, reverse Steps 1 through 4.

### CHART 2 SUBSTITUTION OF THE MOUNTING CORD

STEP	PROCEDURE
1	Remove housing from base according to Chart 1.
2	Remove mounting cord leads from network.
3	Remove mounting cord.
4	Replace mounting cord by reversing Steps 1 through 3.



**CHART 3**  
**SUBSTITUTION OF THE ROTARY DIAL**

<b>STEP</b>	<b>PROCEDURE</b>
1	Remove housing from base according to Chart 1.
2	Remove four screws that hold dial spacer to the dial-mounting bracket.
3	Remove the dial leads from network.
4	Remove the three screws that hold the dial spacer to dial.
5	Install new dial by reversing Steps 1 through 3.

**CHART 4**  
**SUBSTITUTION OF THE PUSHBUTTON DIAL**

<b>STEP</b>	<b>PROCEDURE</b>
1	Remove housing from base according to Chart 1.
2	Remove the two screws that hold dial to dial mounting bracket.
3	Remove the dial leads from network.
4	Replace dial by reversing Steps 1 through 3.

### CHART 5 SUBSTITUTION OF THE HANDSET CORD

STEP	PROCEDURE
1	Remove receiver cap.
2	Disconnect leads from receiver.
3	Remove transmitter cap.
4	Disconnect leads from transmitter.
5	Remove cord from handset.
6	Remove housing from base according to Chart 1.
7	Remove cord retainer clip.
8	Disconnect leads from network.
9	Install new handset cord by reversing Steps 1 through 8.

### CHART 6 SUBSTITUTION OF THE NETWORK

STEP	PROCEDURE
1	Remove housing from base according to Chart 1.
2	Remove the screw holding network to base.
3	Disconnect the leads to the network.
4	Install new network by reversing Steps 1 through 3.

### CHART 7 SUBSTITUTION OF THE RINGER

STEP	PROCEDURE
1	Remove housing from base according to Chart 1.
2	Remove two screws that hold ringer to base.
3	Remove ringer leads from network.
4	Install new ringer by reversing Steps 1 thru 3.

### CHART 8 SUBSTITUTION OF ROTARY DIAL WITH A PUSHBUTTON DIAL

STEP	PROCEDURE
1	Remove housing from base according to Chart 1.
2	Remove rotary dial according to Chart 3.
3	Install push button dial according to Step 4 in Chart 4.

**Notes:**

1. The following items, which are listed in Table G, are required, if substituting a DIGITONE\* Dial: 18, 26, 45D and 59.
2. The following items which are listed in Table G, are required, if substituting a DIGIPULSE\* Dial: 17, 26, 45D, 59 and 65D.

## 8. Packing Instructions

8.01 Mickey Mouse telephone sets can be easily damaged in transit if they are not properly packaged. Before returning a disconnected set, carefully pack it in accordance with the following instructions.

- a) Obtain the original packing material.
- b) Position the set in one of the foam inserts as shown in Fig. 9.
- c) Position the receiver in the insert. Arrange the cord so that it rests between the receiver and the telephone set.

- d) Place the two inserts together and enter the complete assembly into the carton.

8.02 If a bubble pack is used:

- a) Take the receiver off-hook and place a large plastic bag completely over the telephone set with the bag opening at the base.
- b) Place the plastic bag completely over the receiver.
- c) Wrap bubble pack around telephone and place in container.

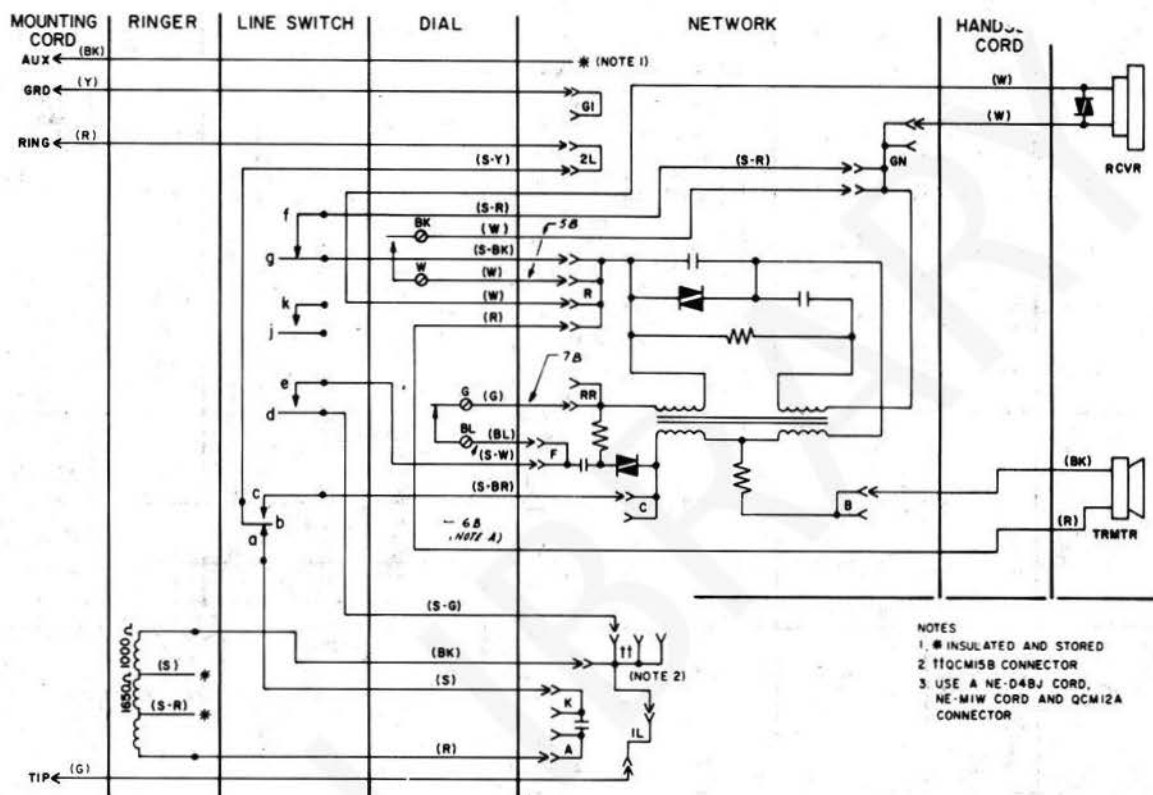


Fig. 3—QSQM460AX Telephone Set—Connections

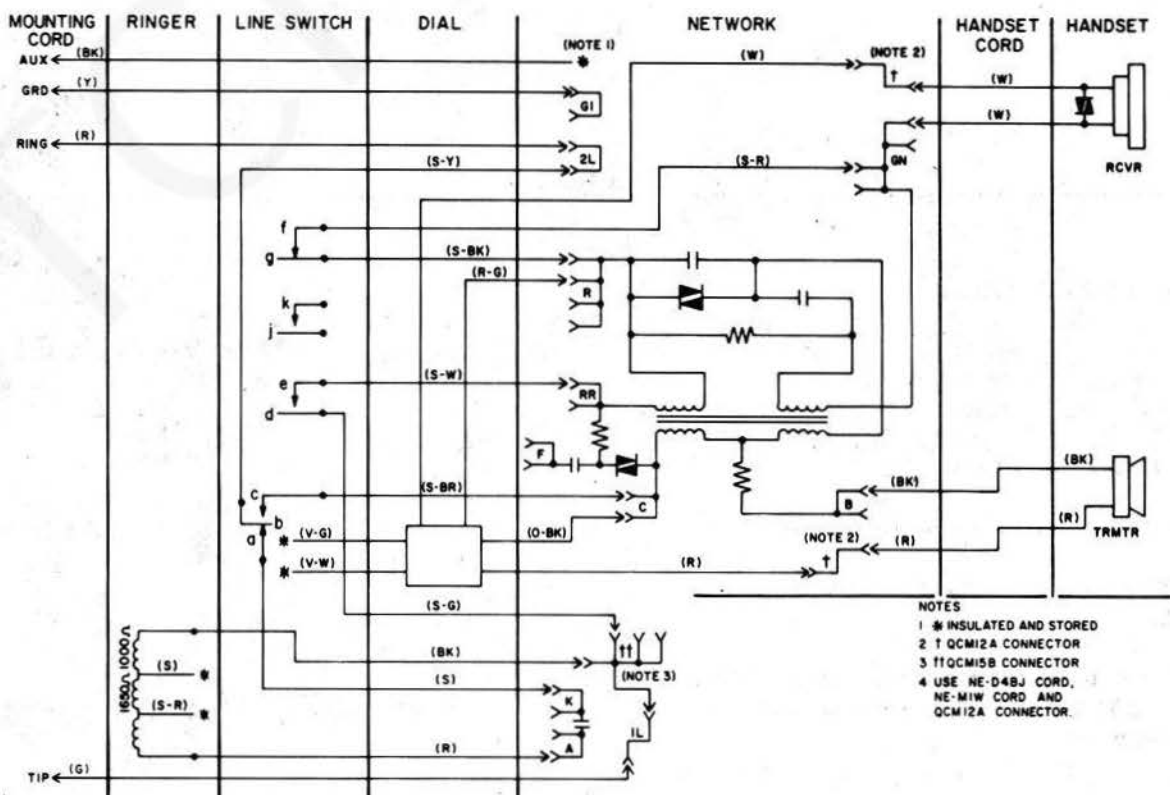
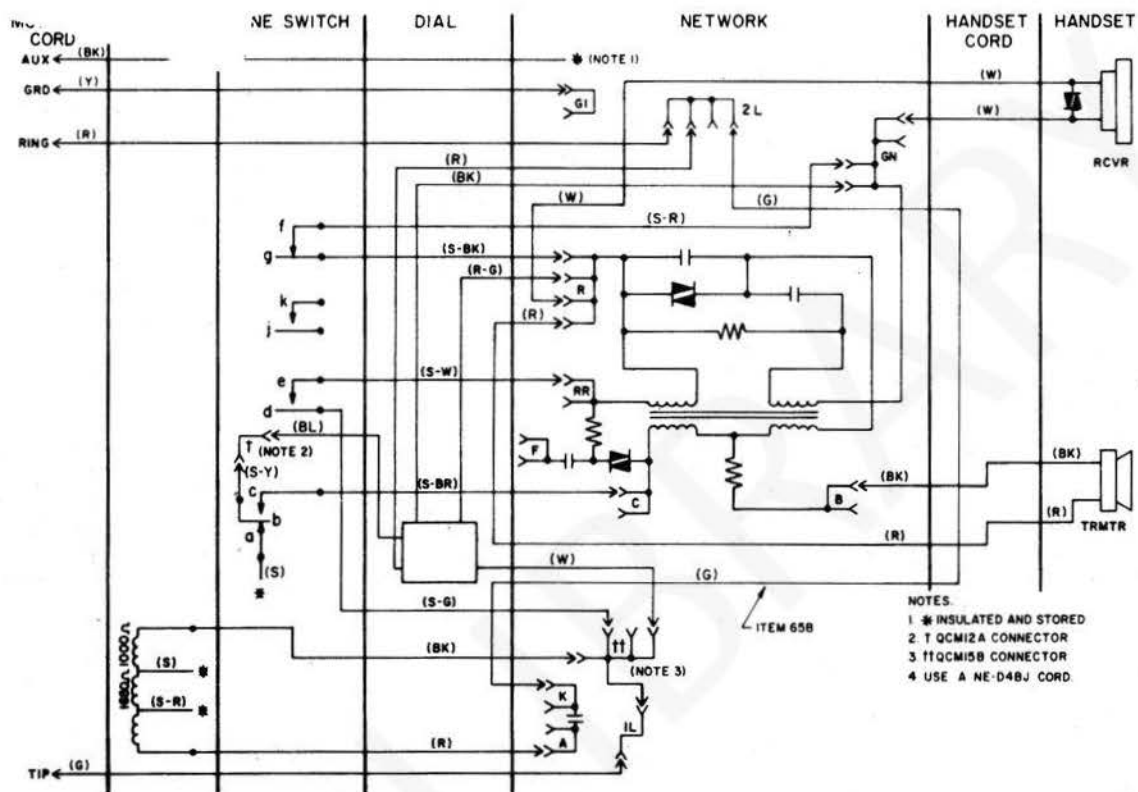


Fig. 4—QSQM2460AX Telephone Set—Connections



**Fig. 5—QSQM3460AX Telephone Set—Connections**

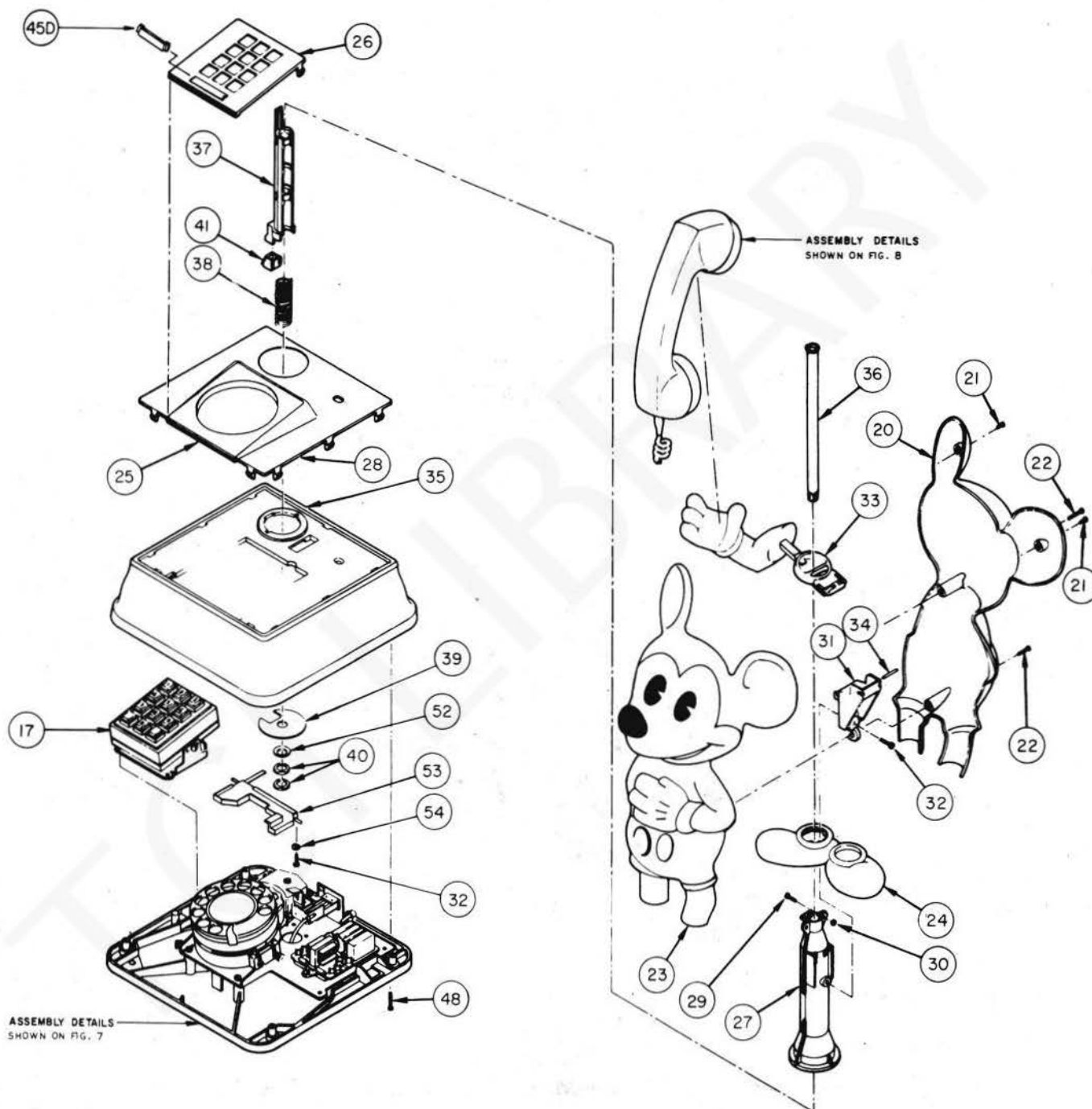


Fig. 6—Parts of 460-Type Mickey Mouse Phone (Table G)

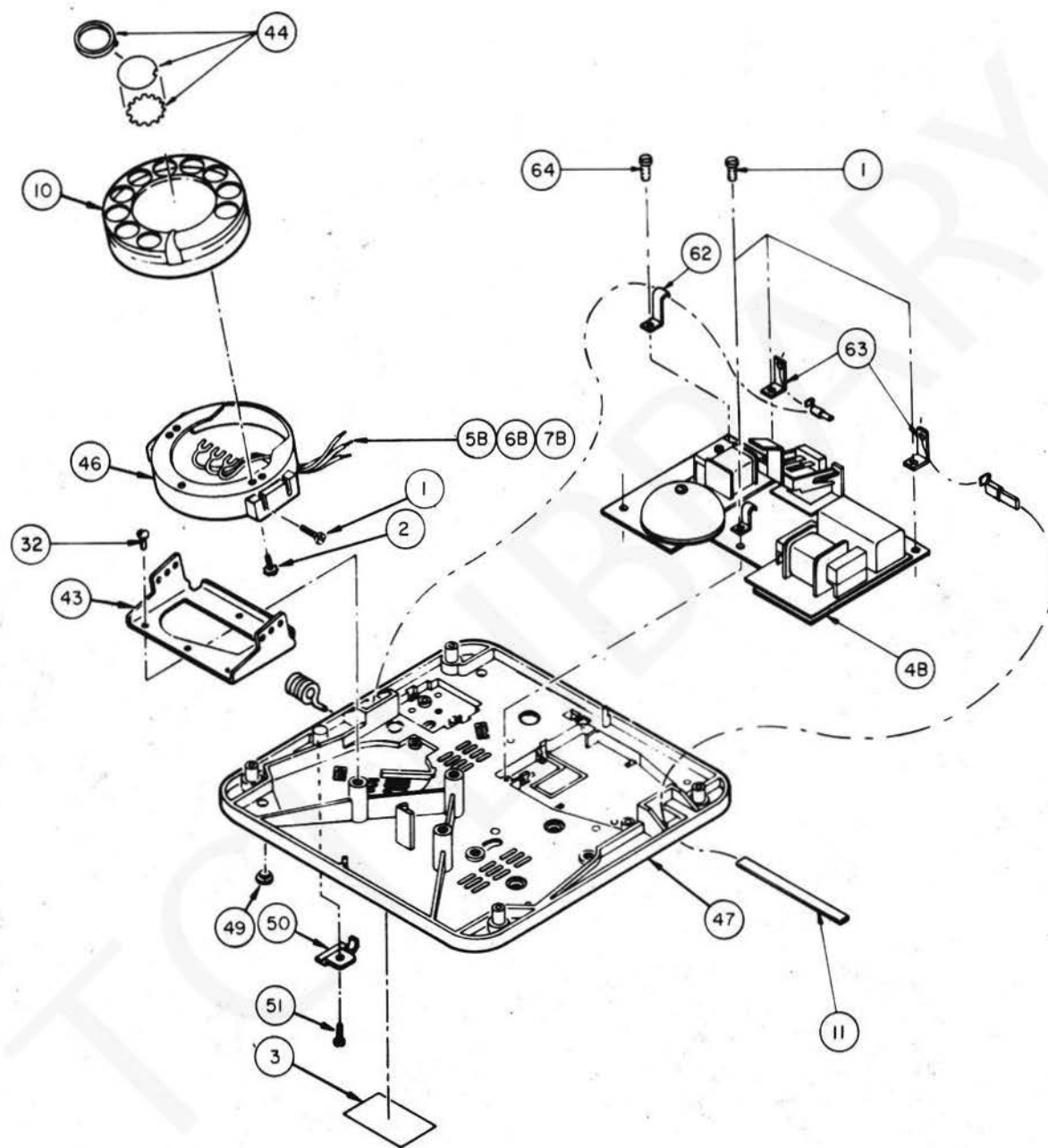


Fig. 7-460-Type Mickey Mouse Phone Assembly of Base



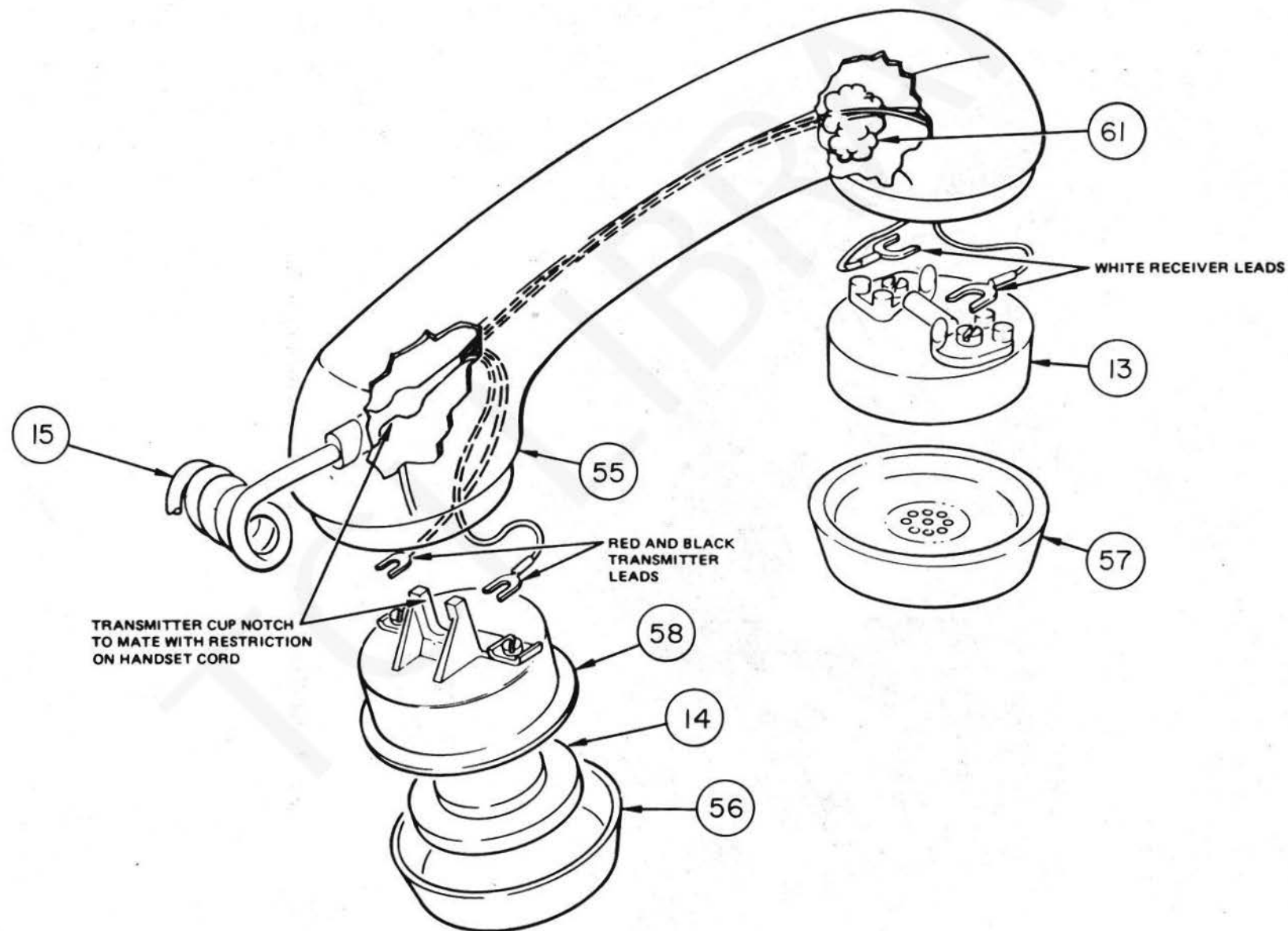


Fig. 8-460 Type Mickey Mouse Phone Assembly of Handset

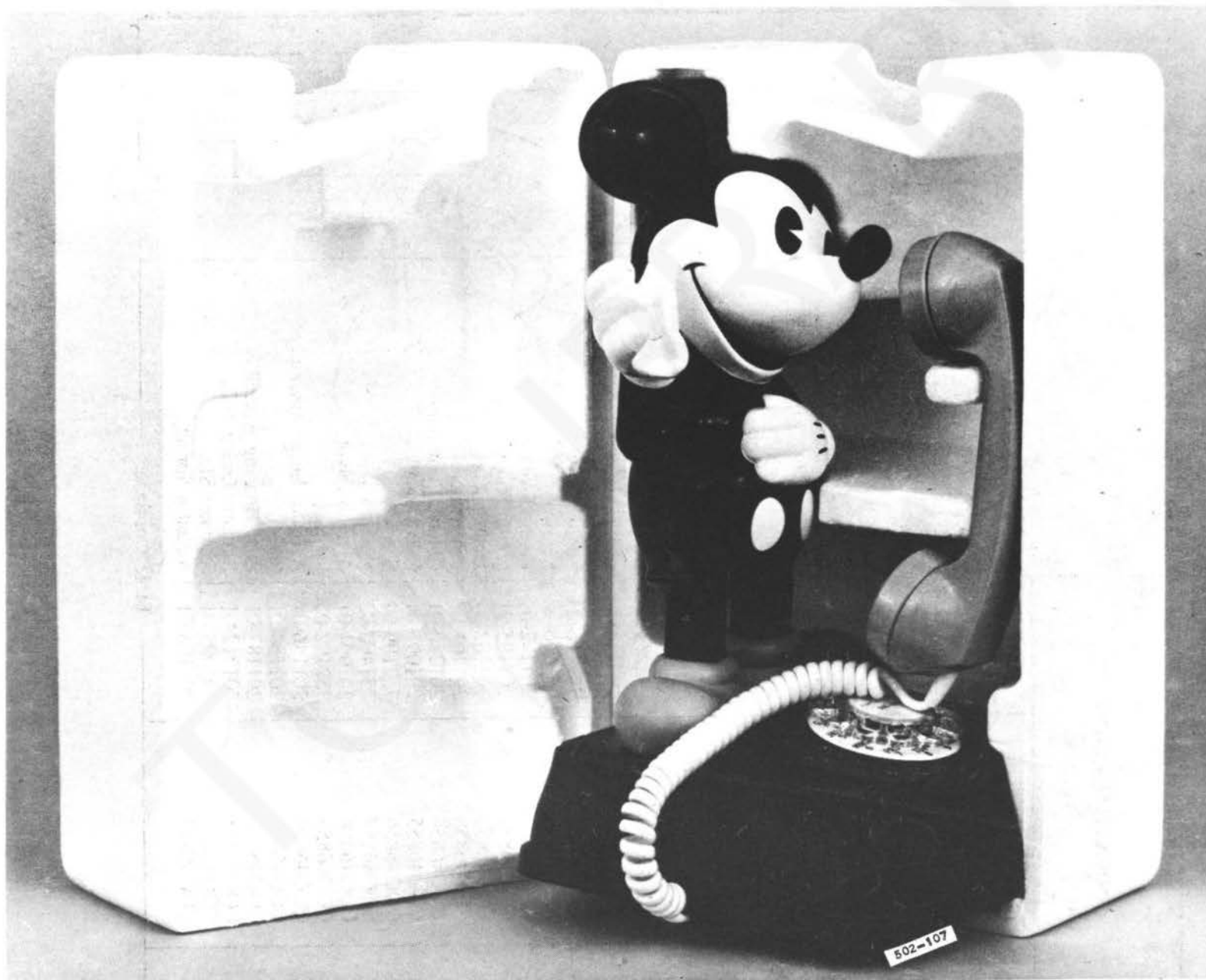


Fig. 9—Mickey Mouse Phone Telephone Set When Properly Packed

**TABLE G**  
**460-TYPE TELEPHONE SET**  
**IDENTIFICATION OF PARTS**

IDENTIFICATION			DESCRIPTION	Q S Q M 4 6 0 A	Q S Q M 2 4 6 0 A	Q S Q M 3 4 6 0 A
ITEM	NT PART NUMBER	ATC PART NO.				
1	PO502646	—	Screw	4	4	4
2	PO125035	—	Screw	3		
4B	PO575845	—	Base Assembly	1	1	1
5B	PO43A518	—	Lead Assembly Note 1	2	2	2
6B	PO43A517	—	Lead Assembly Note 1	1	1	1
7B	PO43A516	—	Lead Assembly Note 1	1	1	1
10	NE-6QD-41	—	Dial, Rotary	1		
11	NE-D4QH-87	—	Cord, Mounting	1	1	1
13	NE-U1 or QUU1A	—	Receiver	1	1	1
14	NE-T1	—	Transmitter	1	1	1
15	NE-H4CJ-20 5'6"	—	Cord, Handset	1	1	1
16	QCM15B	1	Connector	1	1	1
17	NE-35QA1X	—	Dial, DIGIPULSE			1
18	NE-35Q3L1X	—	Dial, DIGITONE		1	
20	COO46847	201190-01	Figure Back	1	1	1
21	COO46848	752116-05	Screw	2	2	2
22	COO46849	752116-10	Screw	2	2	2
23	COO46850	201192-01	Figure Front and Nose Assy	1	1	1
24	COO46851	201195-01	Figure Shoes	1	1	1
25	COO46852	201102-01	Dial Panel	1		
26	COO46853	201101-01	Dial Panel		1	1
27	COO46854	201220-01	Column Assembly	1	1	1
28	COO46855	201097-01	Decor Panel	1	1	1
29	COO46856	752109-04	Screw	2	2	2
30	COO46857	751400-02	Nut	2	2	2
31	COO46858	201094-01	Actuator pivot	1	1	1
32	COO46859	752192-06	Screw	6	6	6
33	COO46860	201186-01	Actuator Lever Assembly	1	1	1
34	COO46861	201158-01	Pivot Pin	1	1	1
35	COO46862	201187-01	Base Housing Assembly	1	1	1
36	COO46863	201212-01	Actuator Guide Tube	1	1	1
37	COO46864	201095-01	Actuator Sleeve	1	1	1
38	COO46865	201108-01	Actuator Spring	1	1	1

Table Continued

**TABLE G (Cont'd)**  
**460-TYPE TELEPHONE SET**  
**IDENTIFICATION OF PARTS**

IDENTIFICATION				Q S Q M 4 6 0 A	Q S Q M 2 4 6 0 A	Q S Q M 3 4 6 0 A
ITEM	NT PART NUMBER	ATC PART NO.	DESCRIPTION			
39	COO46866	4122	Housing Washer	1	1	1
40	COO46867	751143-01	Jam Nut	2	2	2
41	COO46868	201102-01	Actuator Button	1	1	1
43	COO46869	201105-01	Dial Mtg. Bracket	1	1	1
44D	PO896341	—	Card Holder Pts Groupe Note 2	1		
45D	PO896083	—	Card Holder Pts Group		1	1
46	COO46871	201109-01	Dial Platform	1		
47	COO46872	201104-01	Base	1	1	1
48	COO46873	4189	Screw	4	4	4
49	COO38078	2212	Foot	4	4	4
50	COO46875	1202-1W	Cord Clamp	1	1	1
51	COO45635	752192-05	Screw	1	1	1
52	COO46874	754145-01	Washer	1	1	1
53	COO46876	201188-01	Bail Assembly	1	1	1
54	COO46877	754005-01	Washer	2	2	2
55	COO46878	7237-Y	Handset Housing	1	1	1
56	COO46879	7239-Y	Transmitter Cap	1	1	1
57	COO46880	7238-Y	Receiver Cap	1	1	1
58	COO46881	7240	Transmitter Cup	1	1	1
59	QCM12A	—	Connector		2	1
60	PO97L403	—	Insulator	1	3	1
62	PO522701	—	Cord Retainer	2	2	2
63	PO535602	—	Bracket	2	2	2
64	PO180922	—	Screw	1	1	1
65B	PO895016	—	Lead Assembly			1
<b>Notes:</b> 1. Items 5B, 6B, and 7B are shown on Fig. 3. 2. Item 44D is shipped with each dial (Item 10) when ordered for replacement purposes.						