

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

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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

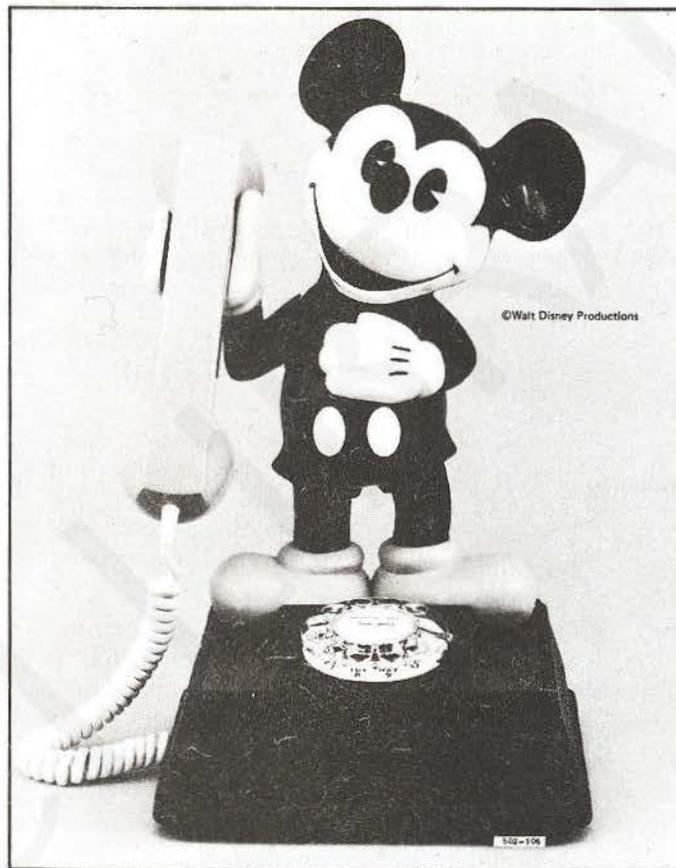


Fig. 1—QSQM460-Type Mickey Mouse Telephone Set

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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 15¹/₂ inches (394 mm) tall and the base is approximately 8¹/₂ 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 QSQM2460AX QSQM3460AX | Rotary dial plug-ended telephone DIGITONE* dial plug-ended telephone 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.

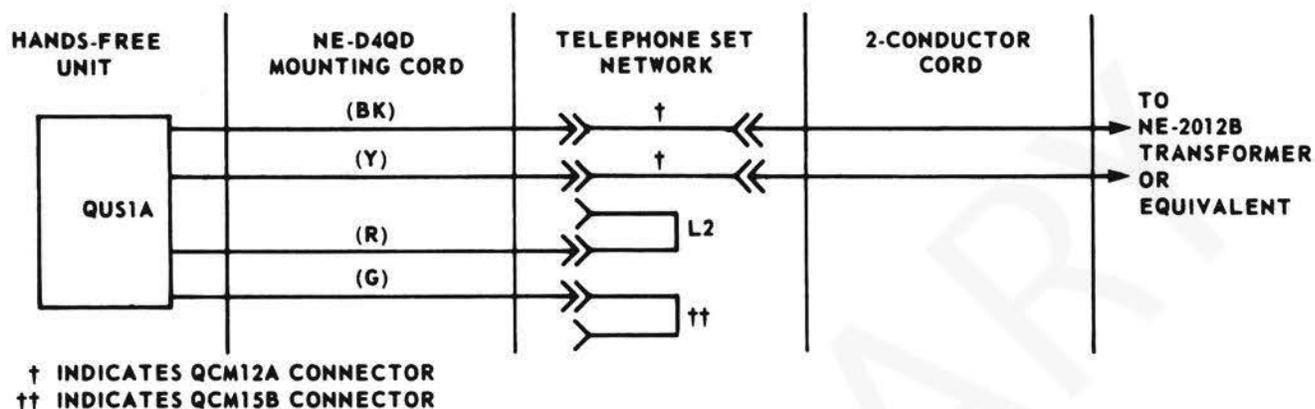


Fig. 2—Hands-Free connections

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 NE-35Q3L1X | Dial (DIGITONE) |
| 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 |
| <p>*Indicates insulate and store using PO97L403 insulator. †Indicates a QCM15B connector.</p> <p>Note: 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 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>Note: 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 | |
| Notes: | | | | |
| 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 |
| Notes: | | | | |
| 1. Use a NE-D4QM-87 mounting cord. | | | | |
| 2. †Indicates a QCM12A connector. | | | | |

7. PART REPLACEMENT PROCEDURE CHARTS

| CHARTS | Page No. |
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| Chart 8—Substitution of the Rotary Dial with Push Button Dial | 10 |

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**

| STEP | PROCEDURE |
|-------------|--|
| 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**

| STEP | PROCEDURE |
|-------------|--|
| 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.

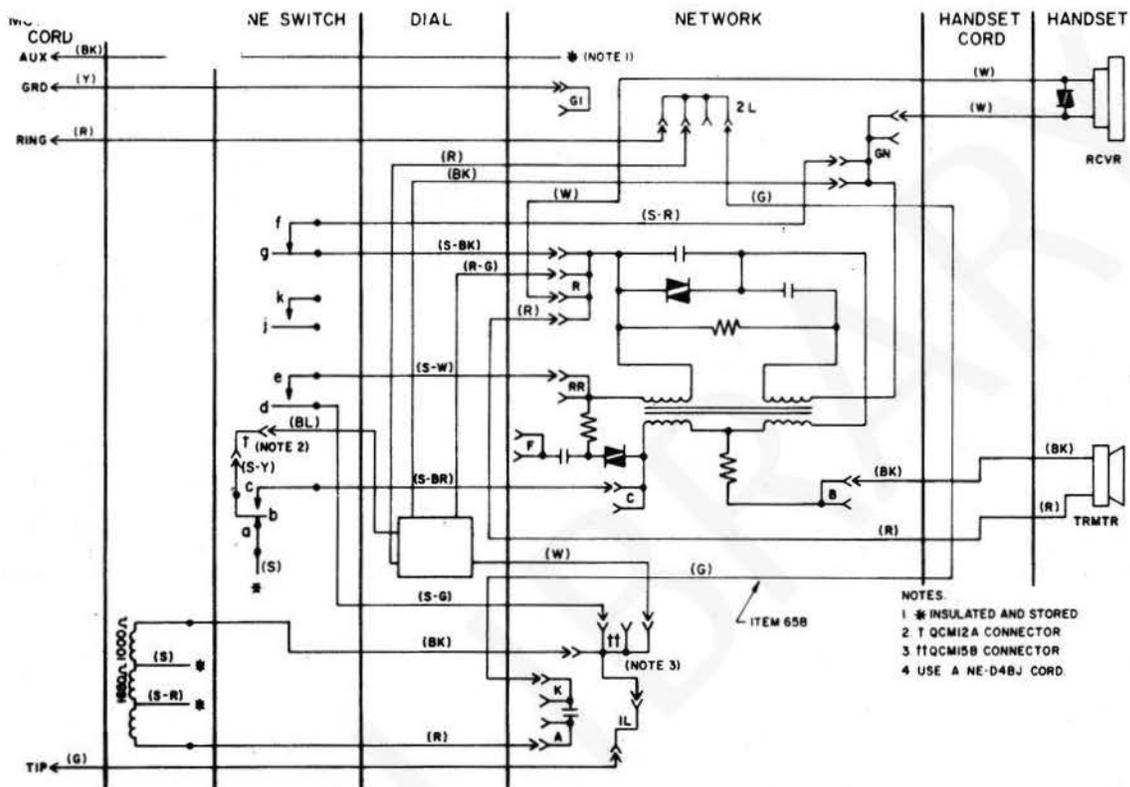


Fig. 5—QSQM3460AX Telephone Set—Connections

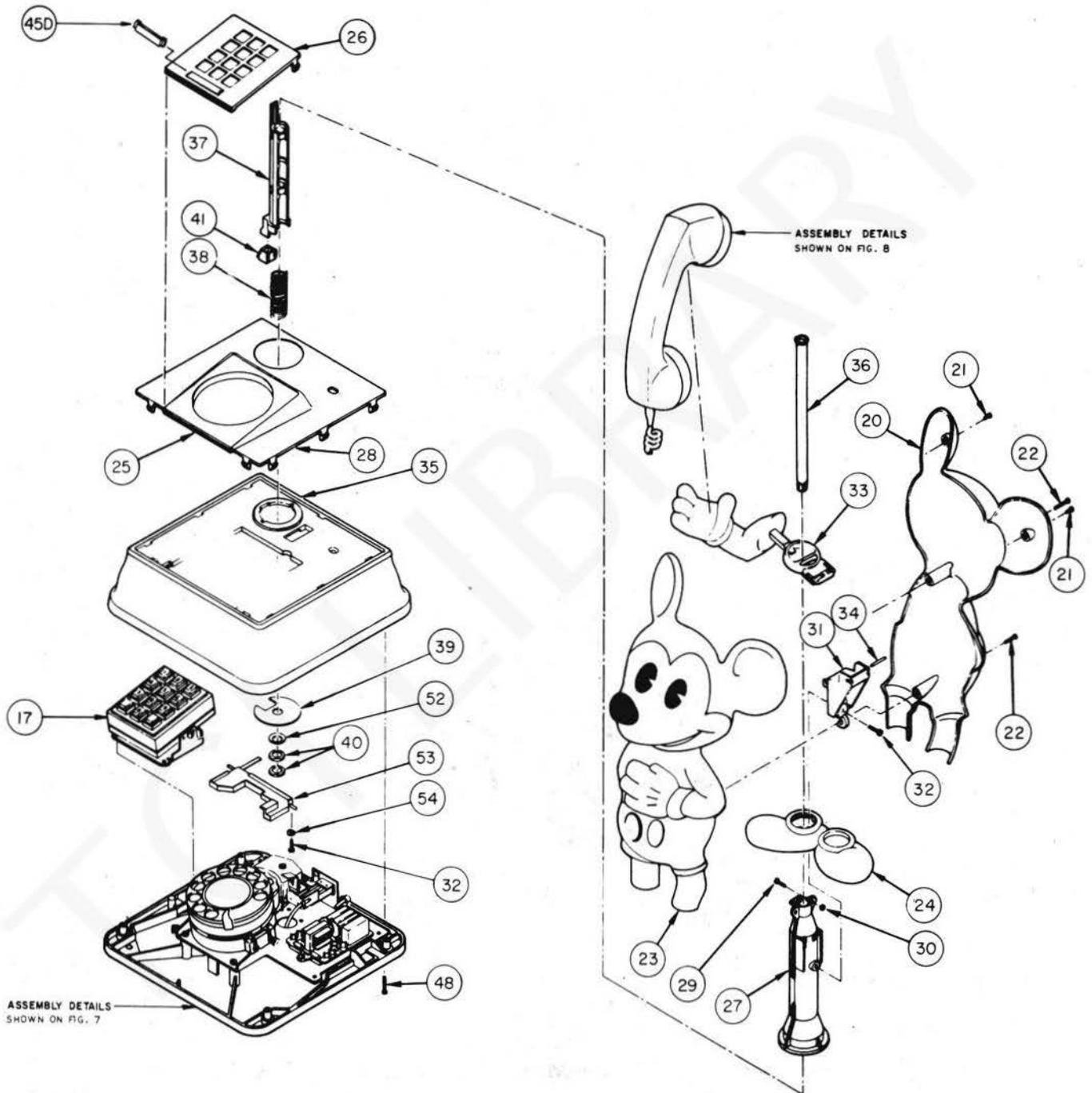


Fig. 6—Parts of 460-Type Mickey Mouse Phone (Table G)

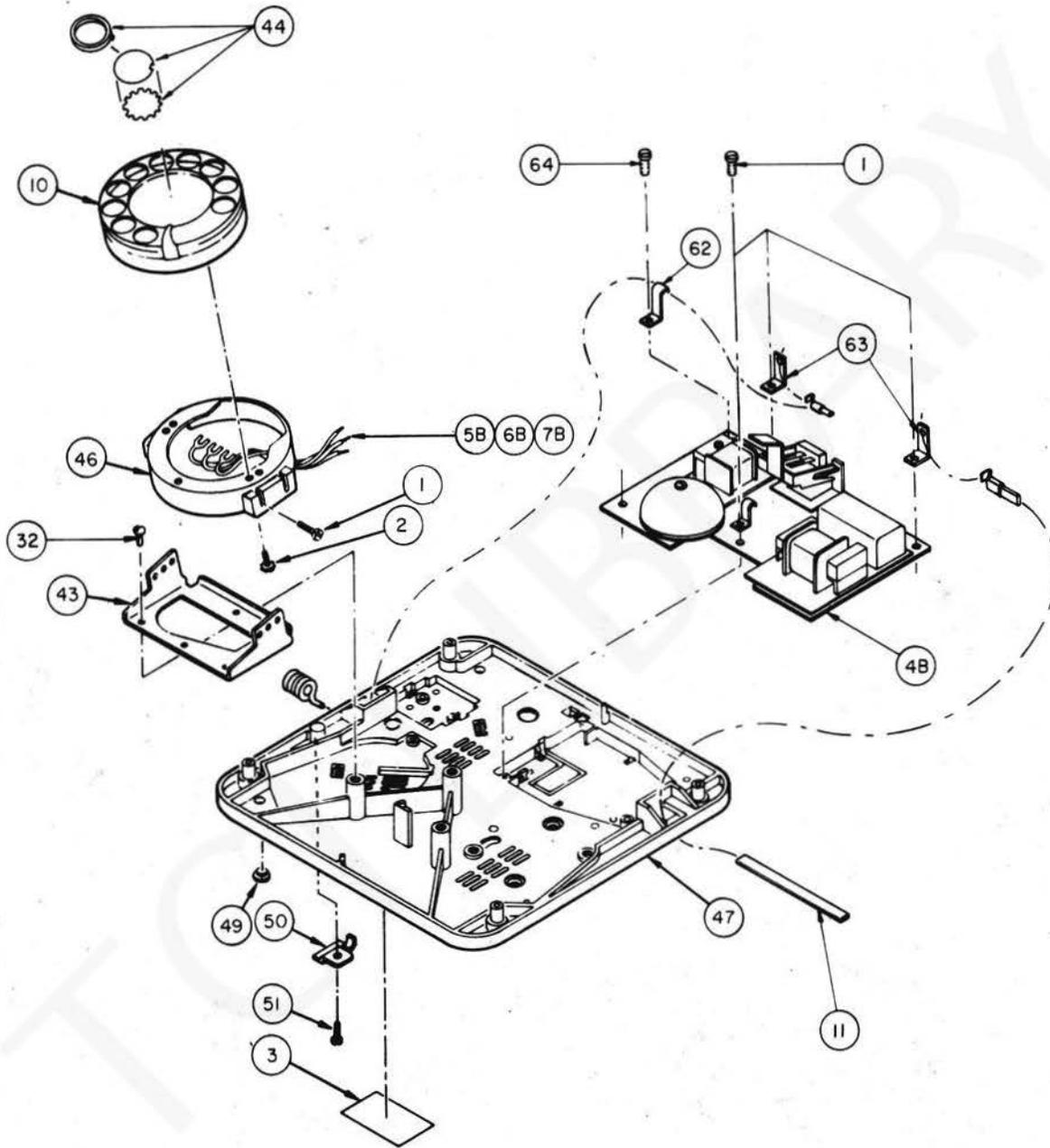


Fig. 7-460-Type Mickey Mouse Phone Assembly of Base

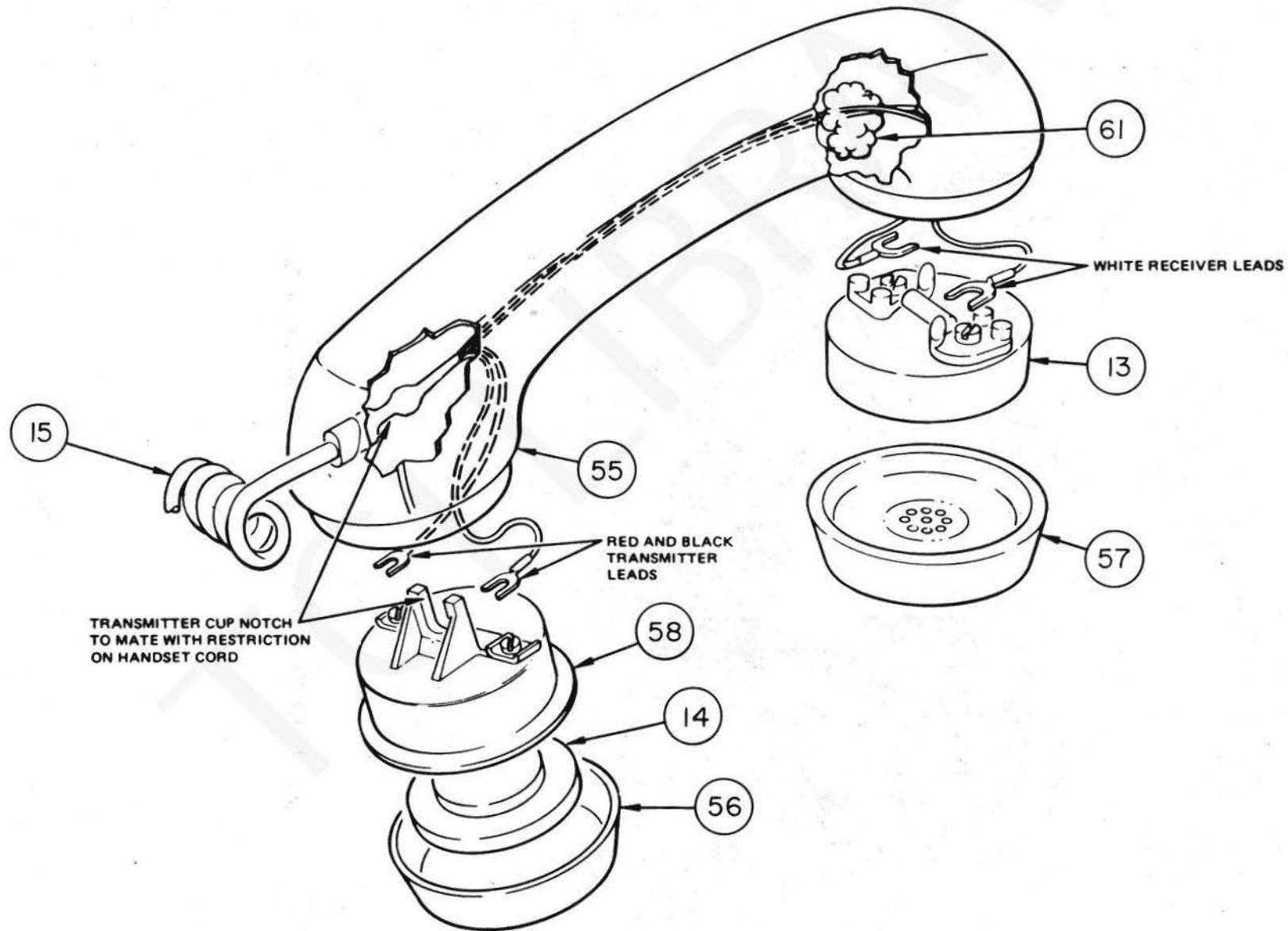


Fig. 8-460 Type Mickey Mouse Phone Assembly of Handset

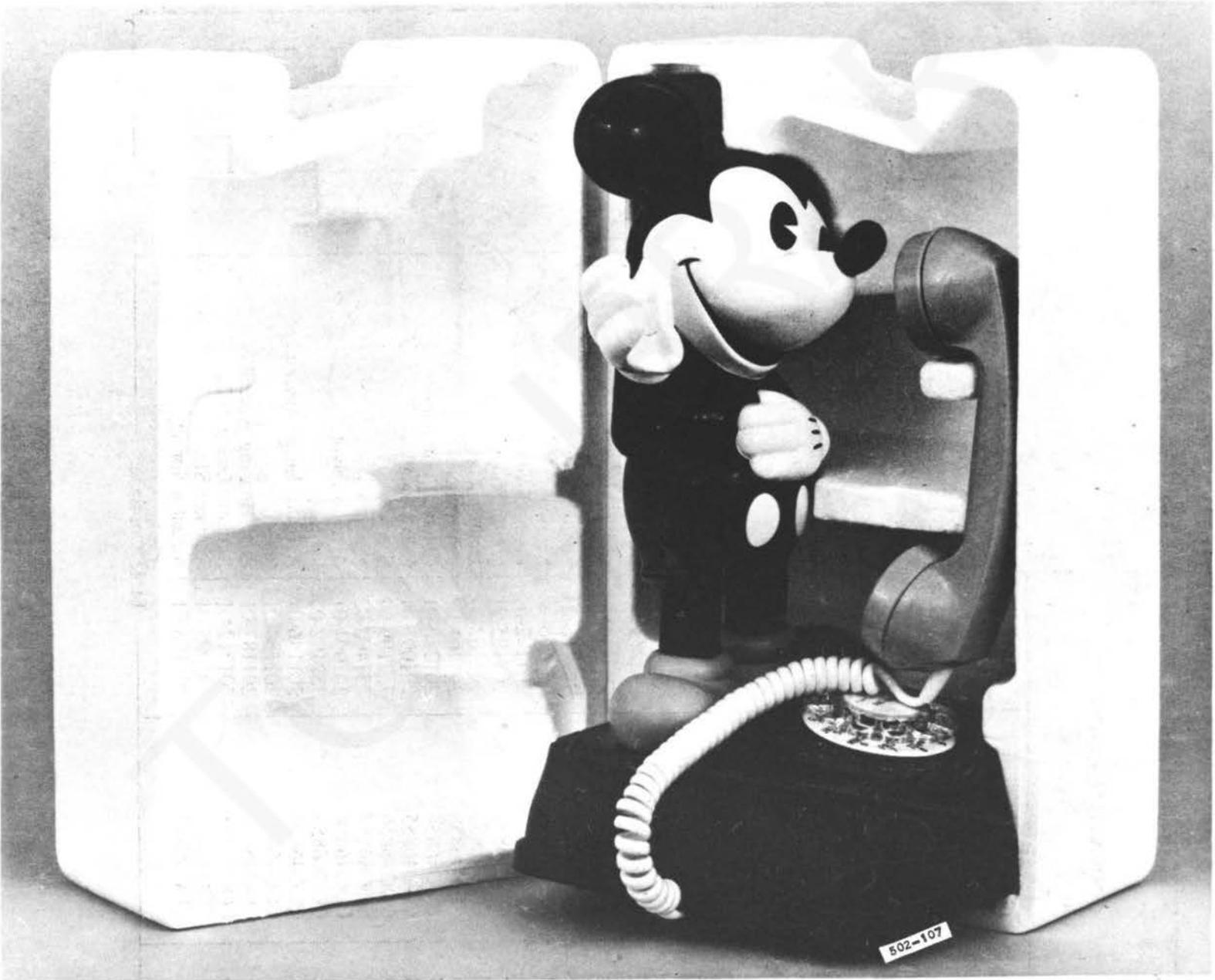


Fig. 9—Mickey Mouse Phone Telephone Set When Properly Packed

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 | | | DESCRIPTION | Q | Q | Q |
|----------------|----------------|--------------|-------------------------------|---|---|---|
| ITEM | NT PART NUMBER | ATC PART NO. | | S | S | S |
| | | | | M | M | M |
| | | | | 4 | 4 | 4 |
| | | | | 6 | 6 | 6 |
| | | | | 0 | 0 | 0 |
| | | | | A | A | A |
| 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 |

Notes:

- Items 5B, 6B, and 7B are shown on Fig. 3.
- Item 44D is shipped with each dial (Item 10) when ordered for replacement purposes.