8642 and 8643 2-Wire and 4-Wire 6-Key Telephone Sets

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1. GENERAL

1.01 This Practice provides basic installation and general operating information for the Wescom® 8642 and 8643 2W/4W 5-Line 6-Key Telephone Sets (Figure 1).

1.02 The installation procedure for these two Wescom telephone sets is identical; therefore, unless otherwise noted, such information applies equally to both sets. However, since the sets do employ different dialing methods, different external signaling equipment is used in their operation.

(a) The 8642 incorporates a rotary-type dial mechanism which is used in the basic Wescom 470 Series Selective Signaling System.

(b) The 8643 uses a pushbutton tone-dialing method which is intended for use with the Wescom 820 Data Station Assembly and the Wescom 47F Dual-Tone Multifrequency (DTMF) Dial Pulse Converter.

1.03 These telephone sets are equipped to show line in use with illuminated key buttons. The HOLD key socket is also factory wired for this feature. However, the socket is not equipped with
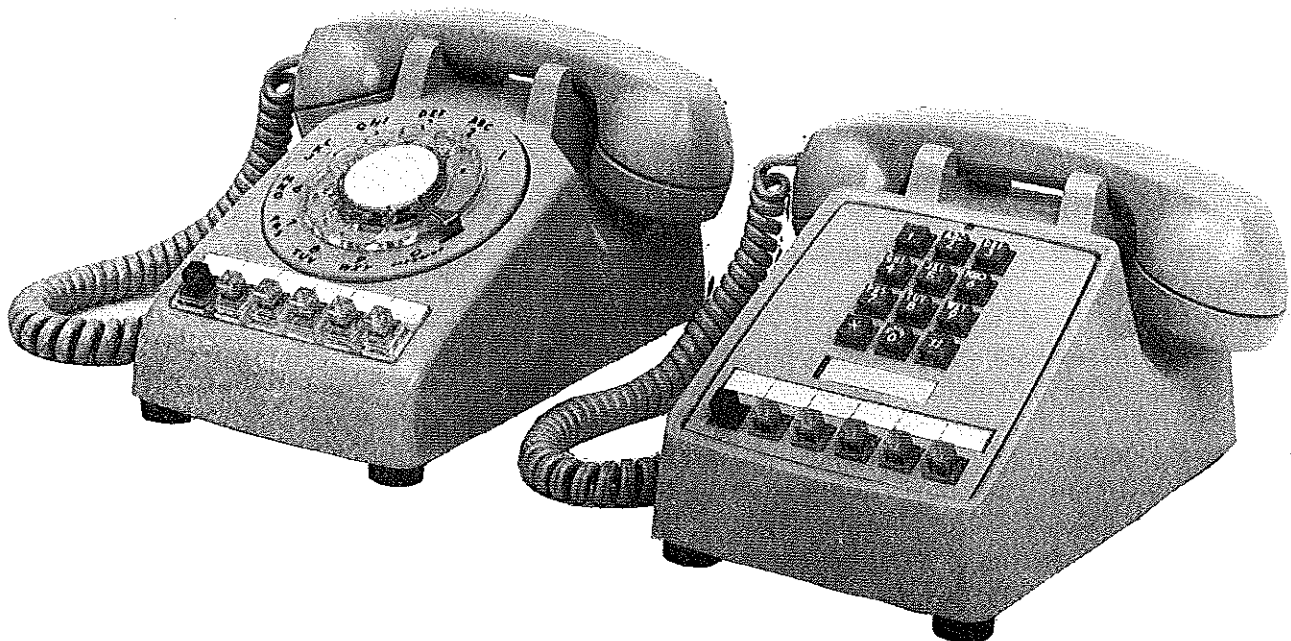

Figure 1. 8642 and 8643 2W/4W 6-Key Telephone Sets

a lamp. Should a lamp be required for the HOLD socket, it can be purchased from WECo under P/N 51A.

2.   PRODUCT DESCRIPTION

2.01   The 8642 Telephone Sets are designed for use with standard 2-wire key telephone systems. This system allows several telephones access to several lines which may include Central Office (CO), private branch exchange or interphone (private special access) lines.

2.02   The sets are equipped with six pushbutton type keys which can access (pick up) five lines with one common HOLD key. These keys are used to interface equipment consisting primarily of the 400 Series Standard Key Telephone Unit. The first two of the five pickup keys are arranged only as basic pickup keys, any type line, while the remaining three may be used for pickup or may be converted by screw options to provide pushbutton signaling.

2.03   In addition to providing standard telephone service, these telephone sets are equipped with an exclusion switch which provides the means to connect the A1 ground to auxiliary equipment. This equipment can be arranged to use the ground signal to perform the following:

(a)   Set manual privacy in SS-1A systems.

(b)   Provide local override of the privacy mode in SS-1A.

(c)   Activate auxiliary equipment, such as data information control.

2.04   To activate the exclusion switch, remove the handset (off-hook) and lift the left hand line switch plunger. By returning the handset to an on-hook condition, the exclusion switch is deactivated which returns the telephone set to standard operation.

2.05   The 8642 and 8643 are able to switch (see schematic diagram, Figures 2 or 3) the receiver for use with a 4-wire line from a 2-wire line mode via FW relay action as follows:

(a)   On 2-wire lines, contacts on the unoperated FW relay connect the receiver to the network and allow the handset and network to function as a common battery subscriber station circuit.

(b)   When the telephone sets are used on 4-wire lines, the FW relay is energized by external control circuit providing -24V on the FW lead. This relay action disconnects the receiver from the network and connects it to the RR and RT leads of the line cord. The transmitter and network continue to function as a common battery subscriber station transmitter circuit. The receiver RR and RT leads are connected to the Wescom 400 Series 4-Wire Private Line Station Equipment and the associate private line circuits.

FW Relay Kit

2.06   If field modifications of existing 2-wire telephone sets is required, the Wescom FW 4-Wire Relay Kit P/N A97-000202 can be ordered and used for this purpose. This kit is complete with the FW relay assembly, mounting bracket, and instructions for converting a 2-wire set to 4-wire operation.

NOTE
If the converted telephone is to be used with a series 400 SS-1A Signaling System, a hands free (speakerphone) dial is required to provide proper signaling and must be ordered from the telephone set manufacturers.

3.   INSPECTION

3.01   Inspect the equipment thoroughly as soon as possible after delivery. If the equipment has been damaged in transit, immediately report the extent of damage to the transportation company.

3.02   Wescom equipment is identified by a model and issue number imprinted on the front panel. Each time a major engineering design change is made on the equipment, the issue number is advanced by one number on any following models that are manufactured. Therefore, be sure to include the issue number along with the model number when making inquiries about the equipment.

4.   INSTALLATION

4.01   The 8642 and 8643 telephone sets are equipped with plug-ended connectorized line cables which are installed by mating them with appropriately pre-wired receptacles of a standard key system.

4.02   These sets have been factory wired for use with 2- and 4-wire common battery telephone lines.

5.   OPTIONS

5.01   For telephone set modifications, refer to Figures 2 and 3, which also illustrate the 66E type connecting block, lead color code (shown in parentheses) and pin numbers and letter designations. Colors and pin numbers for the connectorized cable are the same as the mounting cord which may be plugged directly into the receptacle-ended running cable.

(a)   For a bridged ringer on any line connect (R) lead to ring and (BK) ringer lead to tip of the line involved.

(b)   If the capacitor is not required in the ringer circuit, connect the (SR) ringer lead to K of the network.

(c)   To permanently silence the ringer, connect (R) ringer lead to A and (BK) ringer lead to K of the network.

5.02   The last three keys are convertible from pickup (locking) to pushbutton signaling (non-locking) by removing the screw options which are associated with the mechanical portions of the key assemblies. To convert a key from a locking to a non-locking function, remove the telephone set's housing and remove the screw option which is associated with the key to be converted.

6.   WARRANTY

6.01   STANDARD WARRANTY: Wescom products are warranted to be free from defects in material, workmanship, and design given proper installation and regular maintenance. Wescom's obligations under this warranty are limited to correction and replacement at Wescom's production facility of any defective items received by Wescom, transportation prepaid, for a period of 18 months from the date of original shipment. Warranty and remedies on products not manufactured by Wescom are in accordance with the warranty of the respective manufacturer. WESCOM MAKES NO OTHER WARRANTY OF ANY KIND WHATEVER, EXPRESSED OR IMPLIED; AND ALL IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEEDS THE AFORESAID OBLIGATIONS IS HEREBY DISCLAIMED BY WESCOM.

6.02   Field repairs involving the replacement of components within a unit are not recommended. If an item is found to be defective, contact Wescom, Inc., by telephone or TWX, for instructions regarding replacement or repair.

6.03   If a replacement unit is required, it will be shipped in the fastest manner consistent with the urgency of the situation. Upon receipt of a replacement unit, return the defective unit in the carton in which the replacement was shipped, using the shipping label provided, to:

Wescom, Inc.
8245 Lemont Road
Downers Grove, Illinois 60515

Canadian Customers:

    Wescom Canada, Ltd.
    287 Glidden Road
    Brampton, Ontario L6W1H9
    Canada

Repair or Exchange Services

6.04   In addition to the standard Wescom War-
ranty Service, Wescom offers a repair or
exchange service for those items out of warranty.

Under this arrangement, faulty units may be shipped to Wescom for either complete repair and quality testing or exchanged for a replacement unit. To obtain details of this service and a schedule of prices, contact your local Wescom Sales Representative.