



MOTOROLA

INSTALLATION INSTRUCTIONS

Second Microphone Adapter Cables

For

MCS 2000 Mobile Radios

Motorola Kit Numbers

HKN6129() and HKN6130()

Introduction

NOTE: The empty parentheses at the end of the kit numbers and part numbers mentioned in this document stand for the alphabetical character (A, B, etc.) that denotes the revision level of the kit or part. The revision level of the kits and/or parts may change from time to time without affecting the validity of these installation instructions.

The Second Microphone Adapter Cables, Motorola Kit Numbers HKN6129() and HKN6130(), allow an additional push-to-talk (PTT) microphone, which can be used away from the primary PTT microphone, to be connected to the control head of the radio. PTT control of the radio is by whichever of the two microphones has its PTT pushbutton pressed first.

NOTE: Second Microphone Adapter Cables, Motorola Kit Numbers HKN6129() and HKN6130(), are not field repairable

NOTE: Refer to MCS 2000 Installation Manual, Motorola Publication 68P02058U20 for information about all parts and kits referred to in this document.

Installation Instructions



68P81109C92-A

Description

The Second Microphone Adapter Cable consists of a eight-conductor cable that has an 8 pin modular (TELCO) jack on one end and eight connector pins that fit into the MCS 2000 accessory plug on the other end.

The adapter cable can be used with accessory microphone Motorola Kit Number HMN1074() or HMN4069().

NOTE: Refer to FCC Channel Monitor Regulations on page 5 of this document.

The Second Microphone Adapter Cable is connected to the radio using the accessory plug, which mates with the accessory connector located on the bottom side of the radio.

Only one microphone (i.e., second microphone or visor microphone) can be connected at one time to the accessory connector of the MCS 2000 Radio.

Contents of Kits

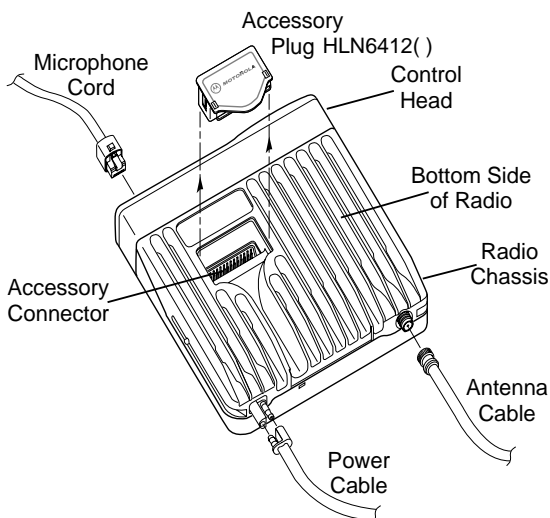
The contents of the Second Microphone Adapter Kits are as follows:

- Kit Number HKN6129() contains a 5 meter (17 foot) Second Microphone Adapter Cable.
- Kit Number HKN6130() contains a 12 meter (40 foot) Second Microphone Adapter Cable.

Installation Procedure

To connect a second microphone to the MCS 2000 Radio, perform the following steps in the order listed:

1. Refer to illustration below and locate accessory plug [Motorola Kit Number HLN6412()] and mating accessory connector on bottom of radio.



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2. Route the Second Microphone Adapter Cable in the vehicle so that the end of the cable equipped with the modular jack is located near the intended location for the second microphone, and the end of the cable equipped with eight copper clad terminals is located near the accessory connector on the bottom of the radio.



Caution

In step 3 below, be careful to avoid damaging or otherwise disturbing any accessory leads that are connected to the accessory plug.

NOTE: On low power radio, strain relief device is a plastic ring, which can be snapped out of radio body by using hand pressure in a direction perpendicular to radio body.

On mid power radio, strain relief device is a plastic hairpin-like device, which can be compressed and then slid off of heat fin of radio by using hand pressure in a direction parallel to radio body.

On high power radio, strain relief device is a Nylon tie-down strap, fastened to radio mounting tray.

3. If any accessories are already connected to radio, as indicated by wires going into accessory plug, detach strain relief device from radio (for low and mid power radios) or from radio mounting tray (for high power radio).
4. Unplug accessory plug from mating accessory connector on radio.
5. Disassemble accessory plug by following the instructions titled "Installation Instructions for Accessory Plug, MCS 2000 Radios Only" in Section 4 of Mobile Radios Installation Instructions manual, Motorola Publication Number 68P02058U20 (Revision -E or higher).
6. Examine and record the locations of any pins with accessory wires already installed in the pin housing.
7. For low and mid power radios, thread pins-end of Second Microphone Adapter Cable through hole in strain relief bracket on bottom or rear surface of radio. For high power radio, thread pins-end under Nylon cable hold-down strap in radio baseplate beneath back of radio body.

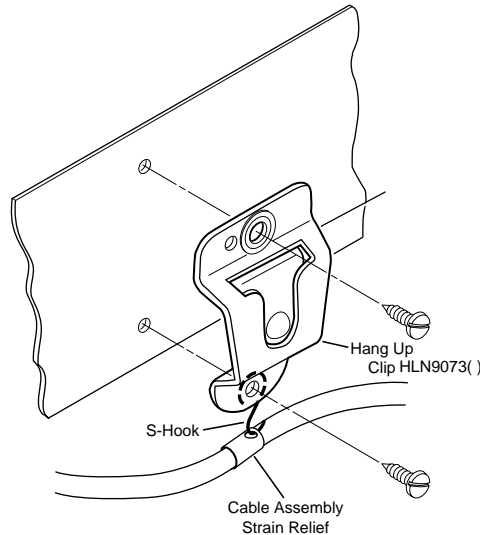
NOTE: Numbers for pin locations in pin housing of accessory plug are visible only when pin housing is removed from its shell and its wings are fully open.

8. Insert the pins on end of Second Microphone Adapter Cable into pin housing of accessory connector in accordance with Table 1 below. Then close both wings of the pin housing.

Table 1

Wire Color	Plug Pin Number	Function	Accessory Plug Pin No.
Black	1	Not used	Not Connected
Brown	2	Not used	Not connected
Orange	3	Busy	7
Blue	4	Ground	10
Red	5	Microphone high	23
Violet	6	PTT	21
Green	7	Not used	Not connected
Yellow	8	Not used	Not connected

9. Fold back and tape the wires that are not connected to the accessory connector so that the connector pins are insulated from each other and from any other possible electrical contact. These wires may be functional for future configurations.
10. Insert the pin housing back into shell in the opposite way that it was removed. Be certain that the pin housing is seated properly and completely in the shell and that it is oriented correctly for reconnection to the radio.
11. Install top cover onto accessory connector.
12. Plug accessory plug back into accessory connector on bottom surface of radio.
13. Refer to illustration below and attach the spring and bracket assembly of microphone hang-up clip [Motorola Kit HLN9073] to an appropriate surface of vehicle using the two supplied sheet metal screws.



14. Plug in second microphone [kit number HMN1074() or HMN4069()] into 8 pin modular jack on end of Second Microphone Adapter Cable. Ensure that a good seal exists between boot on modular plug on microphone cord and modular jack on control head of radio.

15. Remove bottom screw from hang-up clip and clamp microphone cable assembly strain relief S hook between bottom of hang-up clip and mounting surface on vehicle. Then replace screw.

NOTE: The cap attached to the 8 pin modular jack end of the cable is not needed while second microphone is plugged into cable. If a microphone is *not* to be attached to the cable for an extended period of time, install cap over the o-ring to protect modular jack from environment.

FCC Channel Monitor Regulations

The Federal Communications Commission (FCC) requires that conventional radio users have the capability to monitor a channel for other transmissions prior to transmitting. The MCS 2000 may be programmed so that the radio will monitor for channel activity when the primary microphone is removed from the hang-up clip. Removing the secondary microphone (connected through the accessory connector) from the hang-up clip will not cause the radio to monitor channel activity.

In order to comply with FCC requirements, one of the following options should be programmed in radio software if using the second microphone option in the Radio Service Software (RSS):

1. Monitor Button - Press the monitor button to monitor activity on the current channel. Press the monitor button again to turn monitor off.

2. Smart PTT - Smart PTT will inhibit the radio from transmitting on an active channel (when radio detects carrier). Quick-key the PTT (release and then press again within 1 second) to override the Smart PTT feature.

NOTE: Channel monitoring is not required on trunked radio systems.