

# INSTALLATION INSTRUCTIONS

**Product Revision Form** Rev. A 7160-0237 CONSOLE BOX - ERGO - HYBRID

The purpose of this instruction sheet is to illustrate the manufacturer's recommended method for installing the MCS-Ergo-Hybrid console box. MCS-Ergo-Hybrid console box is a discrete solution for mounting various mobile communication control heads and radios. Included with the MCS-Ergo-Hybrid console box is one set of short Faceplate Vertical Offsets. Due to a shallow depth in the front end of the console box, these Faceplate Vertical Offsets must be used in place of the Vertical Offsets that come with Gamber-Johnson Faceplate Kits (see INST-3 included).

### **Tools Needed**

7/16 wrench or socket 5/16 hex head wrench #2 Philips head screwdriver

### **Installation**

- 1. When installing the MCS-Ergo-Hybrid console box onto a Gamber-Johnson MCS Top Plate, insert and loosely assemble four 1/4-20 carriage bolts, four 1/4" Dia. washers, four 1/4" lock washers, and four 1/4-20 hex nuts about the desired mounting slots in the bottom of the box (see Figure 1). Slots one and three from the front of the box will align with the key holes in the Top Plate. Slots two and four will also align with the key holes in the Top Plate. Orient the head of the carriage bolts below the box.
- 2. Insert the four heads of the carriage bolts into the desired corresponding key holes (see Figure 1) on the MCS-Top Plate until the bolt heads drop below the Top Plate. Place box in desired position and tighten hardware.
- 3. Due to the shallow depth of the front face, as compared to the MCS-Epic console box series, it is necessary to replace the standard Vertical Offsets with a set of shorter Vertical Offsets (1 set is included with the MCS-Ergo-Hybrid console box). The radio/radio head in the lowest position on the box will require the Short Vertical Offset. Follow instruction sheet INST-3 for assembly and installation instructions, substituting the short Faceplate Vertical Offsets (see Figure 2) with the Vertical Offsets that come with Gamber-Johnson Facplate Kits.

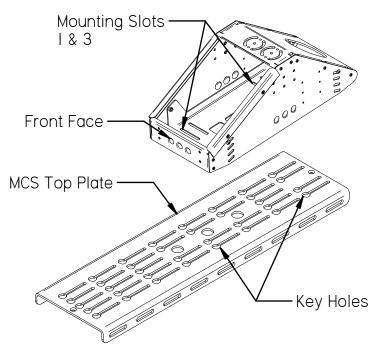


Figure 1: Align mounting slots with key holes.

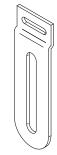


Figure 2: Short Vertical Offset

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## Adjustment

The MCS-Ergo-Hybrid console box is designed to allow adjustment of the front to back angle for the system. The box can be tilt towards the front or back by up to eight degrees in each direction (**Figure 3a and 3b**).

The MCS-Ergo-Hybrid console box is designed to allow adjustment of the height of the system by up to 2.37-inches (**Figure 3c**).

To adjust the tilt or height of the console box remove the appropriate socket head cap screws from each side of the box and tilt or lift the box into the desired position. Secure the box position with the socket head cap screws that were removed.

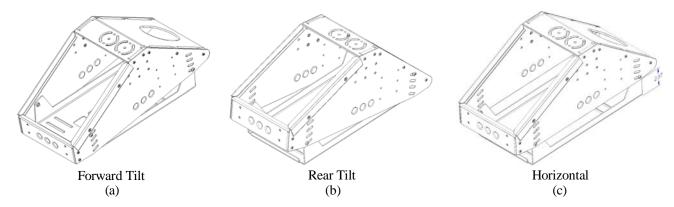


Figure 3: Tilt adjustment and height adjustment

## **Mounting Features**

#### **Motion Attachments**

The MCS-Ergo-Hybrid console box will allow a user to mount any Gamber Johnson motion attachment to the top of the box. It is recommended that all clevis attachments be mounted to the right most circle pattern to prevent interference with the clevis knob and top of the console.

#### **Electronics**

The MCS-Ergo-Hybrid console box will allow a user to mount the Lind Ruggedized Shut Down Timer (Gamber PN 13791) or the 6 Circuit Power Distribution Block (Gamber PN 7160-0110) without drilling holes.

The MCS-Ergo-Hybrid console box has nine knockout locations to allow the use of several 12V automotive power sockets (Gamber PN 7160-0063).

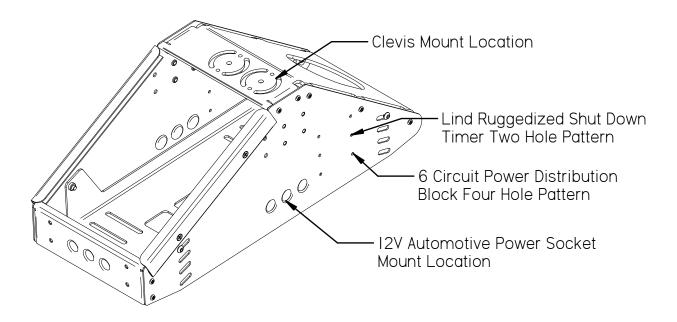


Figure 4: Motion Attachment and Electronics mounting points

## **Mounting Features Cont.**

#### **MCS** Accessories

The front of the MCS-Ergo-Hybrid console box allows the attachment of any Gamber Johnson cup holder (MCS-CUP, MCS-CUP2, MCS-CUPHOLD2) or extension box (7160-0028). The lower two threaded inserts are used for a horizontal setup. The upper two threaded inserts are used for a forward tilt setup.

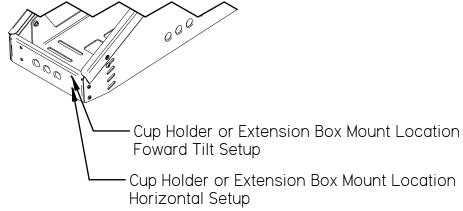


Figure 5: MCS Accessory mounting points

#### Assembling the MCS-MICPLT

The MCS-MICPLT is a kit that allows a radio microphone to be mounted in the same fashion as all Gamber Johnson Faceplates. The mic clip itself is not provided with the MCS-MICPLT kit as it is standard that a mic clip is shipped with most communication devices that use a microphone. Assemble as illustrated in **Figure 6**.

It is recommended that if using the MCS-MICPLT kit to place the finished assembly in the lowest position on the MCS-Ergo-Hybrid console box. By assembling the kit in this fashion you be able to avoid using the short Faceplate Vertical Offset (**Figure 2**).



Figure 6: MCS-MICPLT kit assembly

#### **Pole Mount**

The back of the MCS-Ergo-Hybrid console box will allow the use of a Lower Tube (DS-Lower-7, DS-Lower-9, or DS-Lower-13) as an alternate mounting location.

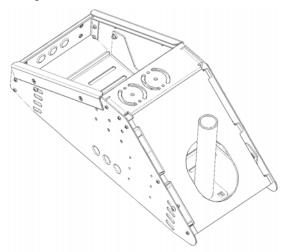


Figure 7: Lower Tube mounted in the back of the MCS-Ergo-Hybrid console box.

## INSTALLATION INSTRUCTIONS

ProductDateForm #Faceplates02/23/01INST3

## ASSEMBLING MCS FACEPLATES: (Refer to figure 1)

- 1. Check that the following pieces are present: Dual lock fastener (supplied w/console box)
  - (1) faceplate vertical offset
  - (1) faceplate top bracket
  - (1) flat washer #6
  - (1) 6-32 nut
- 2. For each faceplate, slide the faceplate vertical offset (item 1) on the stud in faceplate top bracket (item 2). Add flat washer (item 3) and hex nut (item 4). Remove the extra strips of dual lock fastener pressed onto each console box under holddown rails, cut to same length as each faceplate, remove protective film covering the adhesive strip and apply to top bracket as shown.
- 3. If the faceplates are being mounted in an older style MCS Console Box (those with threaded inserts on the top surface of the side panels/holddown screws passing through slots in existing face plates or blank panels), DO NOT attach the strip of dual lock fastener on each faceplate as described above. When installing faceplates into these MCS Console Boxes, mark any that cover the threaded inserts and drill a .312 diameter clearance hole as shown in Figure 1.

## ASSEMBLING MCS FACEPLATES TO CONTROL HEADS AND INSTALLING IN MCS CONSOLE BOXES (Refer to figures 2 & 3).

- 1. Install the faceplates on each control head as shown in figure 2. Adjust the faceplates so the mounting holes in the sides of the control head line up in the slots of the faceplate vertical offsets and so the desired amount of the control head will extend from the console. Make sure to allow enough room underneath for any connectors that may be required. Test the fit of each control head, the tallest heads may need to be installed near the higher end of the console.
- 2. Arrange the control heads in the console box as desired. Blank panels of various sizes have been provided to act as spacers between each control head, if needed. Secure in place by attaching a piece of dual lock fastener to each end of the blank panel and then pressing the strips of dual lock fastener on the faceplates, blank panels and console box together.
- 3. Attach the MCS Console Box holddowns to the sides of the console box and over faceplates with (6) 10-32 x .38 Phillips head machine screws.

