MicroComm Intercom Station ICS-400 Repair Kit

Table of Contents

| **MicroComm Intercom Station ICS-400 Repair Kit** |

1.   Intent & Scope

This document describes the installation procedures for SRK-400 Station Repair Kit. The kit is used to replace damaged parts in 400 series Intercom Stations

2.   Description

The intercom station repair kit is designed for field repair of 400 series intercom stations. This will save the end user the expense and time delay of sending intercom stations back to the factory for repair. The kit comes complete with the following items:

   i)   printed circuit board with pigtails

   ii)   a speaker with pigtails

   iii) two springs

   iv)   two marrette connectors

   i)   two white 6-32 x 7/8" male - female nylon standoffs

The parts of the speaker assembly that are reduced consist of:

   i)   stainless steel faceplate

   ii)   blue speaker gasket

   iii)   metal subplate

   iv)   switch actuator

   v)   four #6 flat washers

   vi)   two 6-32 hex nuts

   vii)   four tooth washers

   viii) e-clip

3.   Dismantling the Intercom Station

Dismantling the Intercom Station is straight forward.

   1.   Remove the two hex nuts holding the printed circuit board in place.

   2.   Either cut or unsolder the two speaker wires that run from the pc board to the speaker.

   3.   Unscrew the two nylon standoffs.

4. Remove the two hex nuts holding the speaker and sub plate in place.

5. Remove the speaker.

6. Remove the small switch spring.

7. Remove the e-clip.

8. Remove the sub plate and the plunge spring.

4. Installing New Components
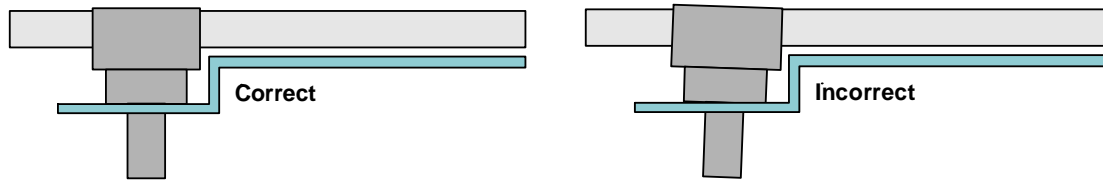
4.1 Switch Actuator Installation

Place the switch plunger return spring on the switch actuator and then slide the switch contact actuator through the sub-plate hole. Once the switch actuator is through the sub-plate, attach the E-clip to the switch actuator using the E-clip installation tool (or needle nosed pliers). Now slide the switch spring onto the end of the switch actuator.

4.2 Standard Faceplate Assemblies
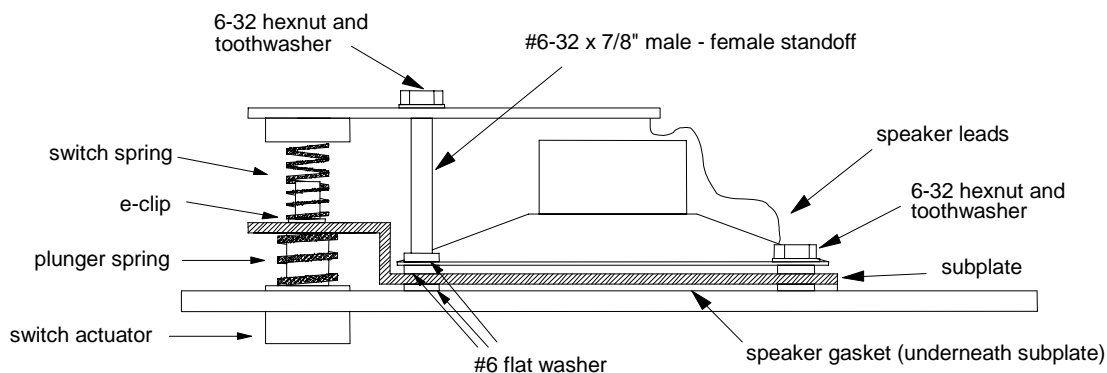
Figure 1: Side View of a Typical Standard Station Assembly

1. Place the speaker gasket over the studs on the faceplate.

2, Place one Flat washer on each of the four faceplate studs. Align the gasket so the four washers fall into the four holes in the gasket, and then place the sub-plate assembly onto the faceplate studs.

3. Place one flat washer on each of the faceplate studs, followed by the speaker, with its leads furthest from the bend in the sub-plate as shown in Figure 1.

4. Place tooth washers and hex nuts on the two studs closest to the edge of the faceplate. Place a Flat washer and a 7/8" nylon standoff on each of the other two studs. Hand tighten the two stand-offs slightly. Do not completely tighten the hex nuts yet.

5. Adjust the sub-plate on the faceplate until the switch actuator is perpendicular to the faceplate and does not bind. The switch actuator should travel freely when pressed and released. Ensure that when the switch is pressed down, it is not skewed at an angle to the faceplate. Refer to Figure 2 below (Not applicable to Tighten down the stand-offs and the hex nuts on the speaker. **(Do not over-tighten).**

Figure 2: Actuator alignment

6.   For assemblies using the mushroom head switch actuator, insert the actuator through the hole in the faceplate from the front and then place the switch plunger return spring on the back between the sub plate and the faceplate.

7.   Attach the e-clip to the actuator using the e-clip installation tool (or needle nosed pliers) and slide the switch contact spring onto the end of the actuator.

8.   Using the Marrette connectors connect the green22-gauge wires from CN2 on the station PC board to the green wire connected to the speaker. Similarly use a Marrette connector to connect the two black wires.

9.   Mount the station module PCB on the stand-offs, and route the speaker wires so they wrap around the speaker on the side opposite the transformer. Ensure that the wires do not extend past the edges of the sub-plate.

10. Fasten the PCB with the appropriate tooth washers and hex nuts.