

American Morse Equipment

MS2 Straight Key Kit Assembly Manual



Thank you for purchasing our MS2 Miniature Straight Key Kit! Please take a few minutes to look over these instructions before starting assembly. **Please open the parts bag over a container (bake pan, box lid, etc.); there are very small parts just waiting to leap into your carpet!** Please first check the parts against the parts list and notify us of any missing parts.

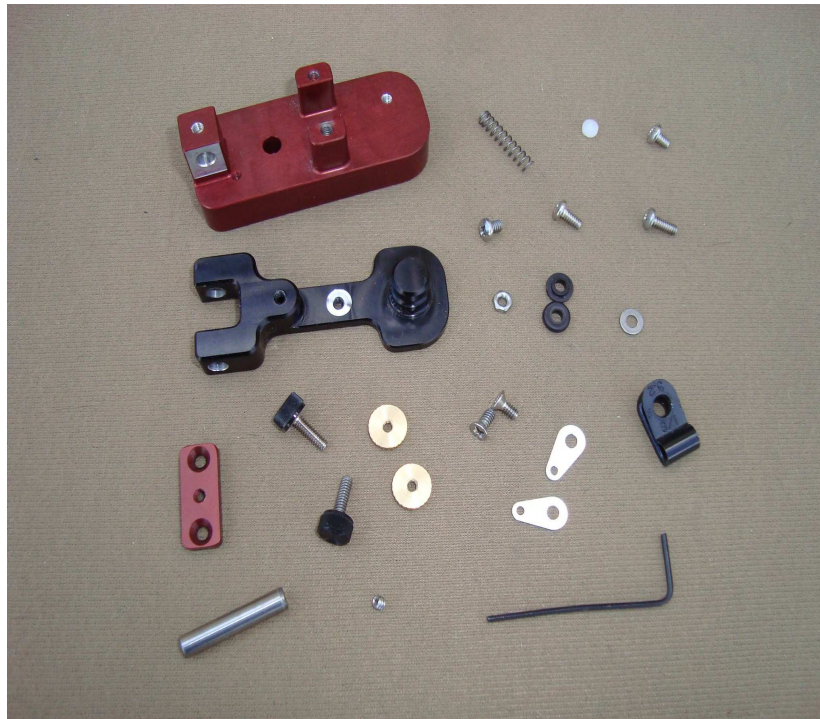
Please note, this kit is fully machined & no filing, etc. is necessary. **If parts will not fit together please do not force, file, pound together, etc.!** Notify us & we will determine the necessary action.

You will need a well-lighted area and perhaps a magnifier lamp or magnifier on stand. Tools needed include a #1 Philips screwdriver, and a 3/16" nut driver or wrench (or needle nose pliers); the .050" Allen key is included in the kit.

MS2 Parts List

Item	Qty
Base	1
Lever	1
Lever Stop	1
Dowel Pin	1
#4 Set Screw	1
Spring	1

Spring Disc	1
Thumb Screw	2
Thumb Nut	2
#4 Flathead Screw x 1/4	2
#4 Pan Head Screw x 1/4	1
#4 Pan Head Screw x 3/16	1
#4 Pan head Screw x 3/16 (Ground End)	1
#4 Pan Head Screw x 3/8 (Ground End)	1
#4 Nut	1
#4 Shoulder Washer	2
#4 Flat Washer	1
#4 Solder Lug	2
1/8 " Cable Stay	1
.050 Allen Key	1



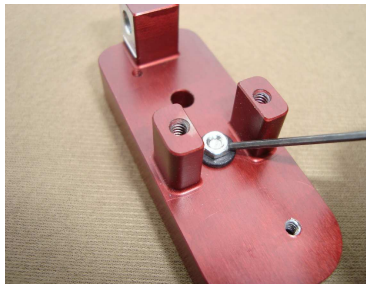
Assembly

The two shoulder washers fit into the 3/16 diameter hole through the base. The bottom one is easy to seat with your thumb; you will feel it snap into place.



The top of the hole is harder to access due to the lever stop support bosses; too narrow for your fingers. Use the side of the screwdriver shaft or other suitable blunt object to push the washer into the hole; again you will feel (and easily see) when the washer seats.

Slide one of the solder lugs over the 3/8" pan head screw and insert it through the bottom washer. Holding it in the hole with a finger, turn the base over and put the nut onto the end of the screw. This is a bit tight working between the bosses; you can use needle nose pliers, or the .050 Allen key: I carry the nut to the screw with the Allen key, slid the nut onto the screw, and start it on the threads by gently rotating the nut with the end of the Allen key. Takes a bit of finesse, but I find it easier than the pliers.



Tighten securely with the Philips screwdriver and a 3/16" nut driver or needle nose pliers. Note the position of the solder lug as you tighten the screw.



Find the 3/16 pan head screw with the unground end and put the remaining solder lug over it, and screw it into the base near the corner of the pocket, again noting the

position of the lug.



Locate the 3/16 pan head screw with the **ground** end, and screw it firmly into the lightly countersunk hole in the lever.



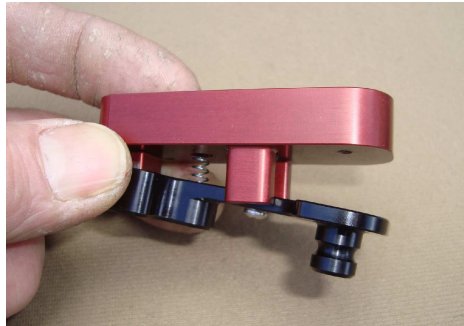
Now find the spring disc. This is a white Delrin plastic disk near 3/16 diameter. Note one end has a conical “tit” in the center; this is normal from the parting off process. Orienting the lever so the 3/16” diameter hole is up, slid the disk into the hole with the tit up.



Place the spring on top of the disc, closed end down.



Holding the lever in the inverted position, present it to the base, guiding the spring into the corresponding hole in the base as you slide the lever clevis over the pivot boss on the base. Slide the lever over the boss until the 3/16 diameter cross holes are reasonably lined up.



Turn the assembly over, and holding the assembly with one hand, insert the dowel pin into one side of the lever and thru the base, then thru the other side of the lever. It's not hard; just push the pin into the lever and against the side of the base, and while applying gentle force to the end of the pin, move the lever around to align the holes. The pin will find its way into the hole and line things up.



Find the #4 set screw and the .050" Allen key. Center the dowel pin in the lever, and clamp the pin with the set screw.



Using the two #4 flat head screws, fasten the lever stop to base.



Screw the thumb nuts onto the thumb screws.



Screw the thumb nut assemblies into the remaining hole in the lever, and into the lever stop. Go ahead and set the spring compression and the contact gap with the thumb screws.



Turn the key over; you can fasten the cable stay to the base with the 1/4" pan head screw and #4 washer, or wait until you solder your 1/8" cable to the lugs.



