

## AMERICAN MORSE EQUIPMENT

### DCP PRECISION IAMBIC PADDLE KIT

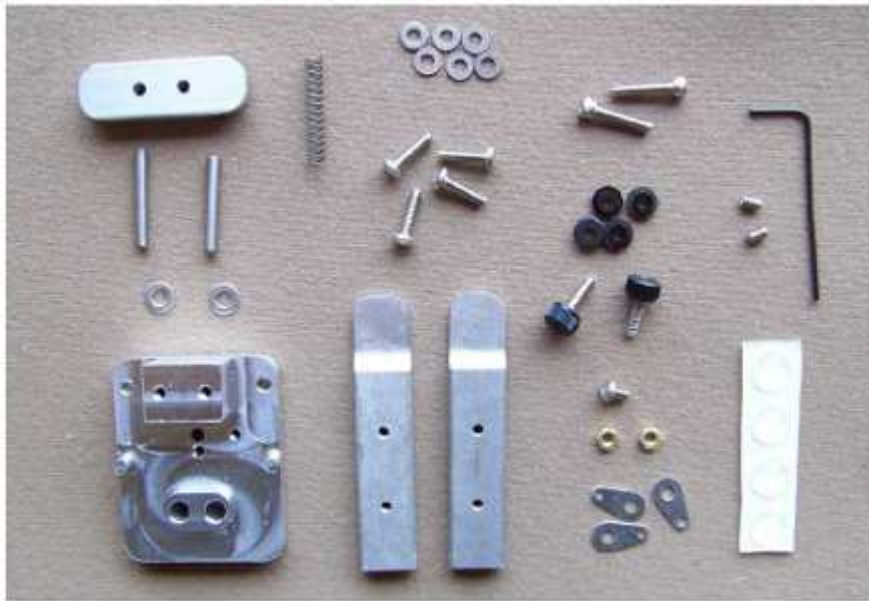


Thanks for purchasing an American Morse Equipment DCP kit. It is a precision kit machined to tight tolerances, designed to be easily assembled after a few preliminary steps. Check the parts list first to make sure they are all there, making sure to open the small parts bag over a container - there are tiny parts in there just waiting to spring into your carpet, never to be found.

You will need a #1 Philips screwdriver and a 3/16 inch box or open end wrench, or needle nose pliers in addition to the .050 inch Allen wrench supplied with the kit. Tweezers may also be helpful. A fine file and finishing materials such as Scotchbrite or wet-or-dry paper will be helpful. Aluminum wheel polish such as Semichrome or Mother's can produce an almost mirror finish.

#### DCP Parts List

Item	Quantity
Base	1
Lever, Left	1
Lever, Right	1
Pin Retainer	1
Dowel Pin	2
Washer, #5	2
Machine Screw, 4-40 x 7/16	4
Spring	1
Washer, #4	8
Thumb Screw	2
Set Screw, 4-40 x 3/16	2
Socket Head Cap Screw, 4-40 x 5/8	2
Shoulder Washer	4
Nut, 4-40	2
Solder Lug	3
Machine Screw, 4-40 x 3/16	1
Bumper, Clear	4
Allen Wrench, .050 Inch	1



#### PREPARATION

Start by deburring the machined parts. Holes are chamfered, and some parts are tumble deburred, but there are still some burrs. You can use a small, fine file or fine grit wet-or-dry paper, or Scotchbrite to take the thin burrs off the edges. You can use also a small knife or deburring tool if you are good with them. There are probably some thin burrs on some of the levers, on the edge of the radiused ends. These can be removed with the careful use of a file or small knife.

You may want to clean up the lever sides, as the tumbler leaves a rather flat finish. Easiest is to put a piece of Scotchbrite, or fine grit wet-or-dry- or emery- or sandpaper on a flat surface, and draw the levers back and forth, keeping the lever parallel to the motion of your stroke to produce the best finish (aluminum has a definite grain). Polish to a high shine with aluminum polish. Same with the pin retainer.

#### ASSEMBLY

Locate the socket head cap screws, nuts, two solder lugs, and shoulder washers. Place the four shoulder washers into the holes the contact boss, top & bottom.



Now locate the two socket head cap screws, and after placing a #4 washer under the head of each screw, insert them through the top shoulder washers. Turn the base over and put a solder lug and 4-40 nut on each & tighten. Secure the ground solder lug with the 4-40 x 3/16 screw.



Turn the base back over & insert the two dowel pins in their holes & place one of the #5 washers over each, smooth side up.



The base is now ready to receive the levers, so we'll prepare them next. Each lever gets one of the 4-40 X 7/16 screws thru the hole closest to the dowel pin bore. The other hole on each gets a thumb screw. Locate the 4-40 set screws and the .050 Allen wrench. Screw the set screw into the tapped hole at 90 degrees to each thumb screw.



Slide each lever over it's respective dowel pin. Note the lever must fit inside of the lever stops integral to the base.



Locate the pin retainer & place it over the pins, locking in place with the two remaining 4-40 x 7/16 screws.

Now the fun part. Locate the spring and the #4 stacking washers. The washers are used to set the spring compression; put one or two over each of the 4-40 screws in the levers & slide the ends of the spring over the screws. A pair of needle nose pliers or tweezers are a help here.



Turn the base over and install the plastic bumpers in the corners of the bottom of the base. Assembly is now complete; adjust the contact gap with the set screws, and preload the spring with the washers to your taste. Mount to rig or heavy base using either the 4-40 tapped or thru hole in the paddle base.

