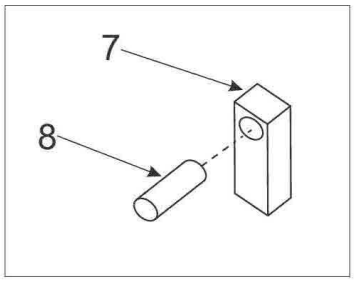
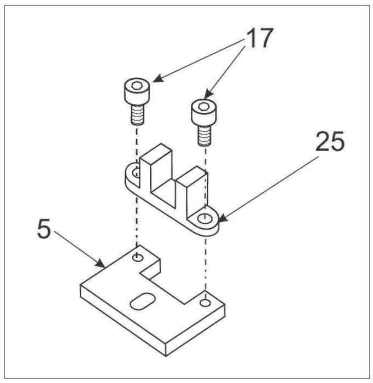
**Keyer Assembly**

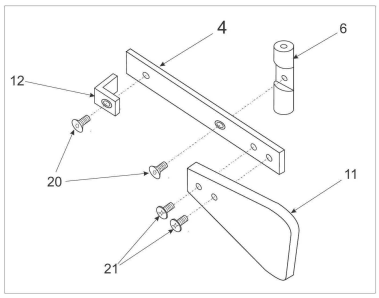
*Note: Number in [ ] refers to part numbers in the parts list.*



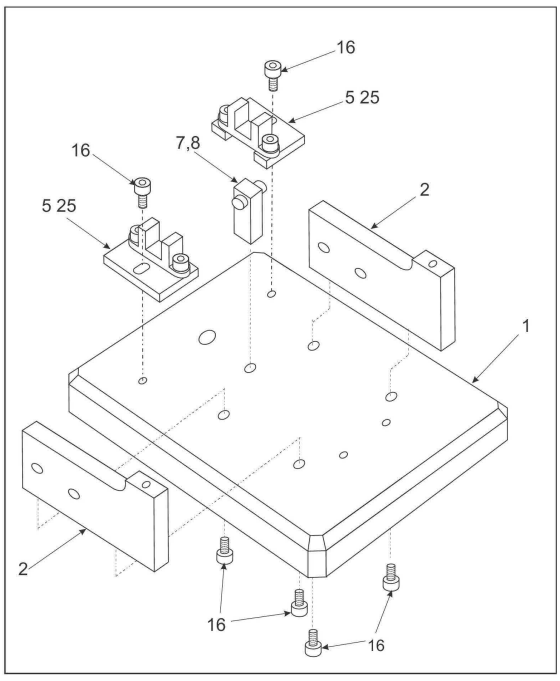

Press the Nylon stop pin [8] into the stop pillar [7] and center it that both sites are of equal length.



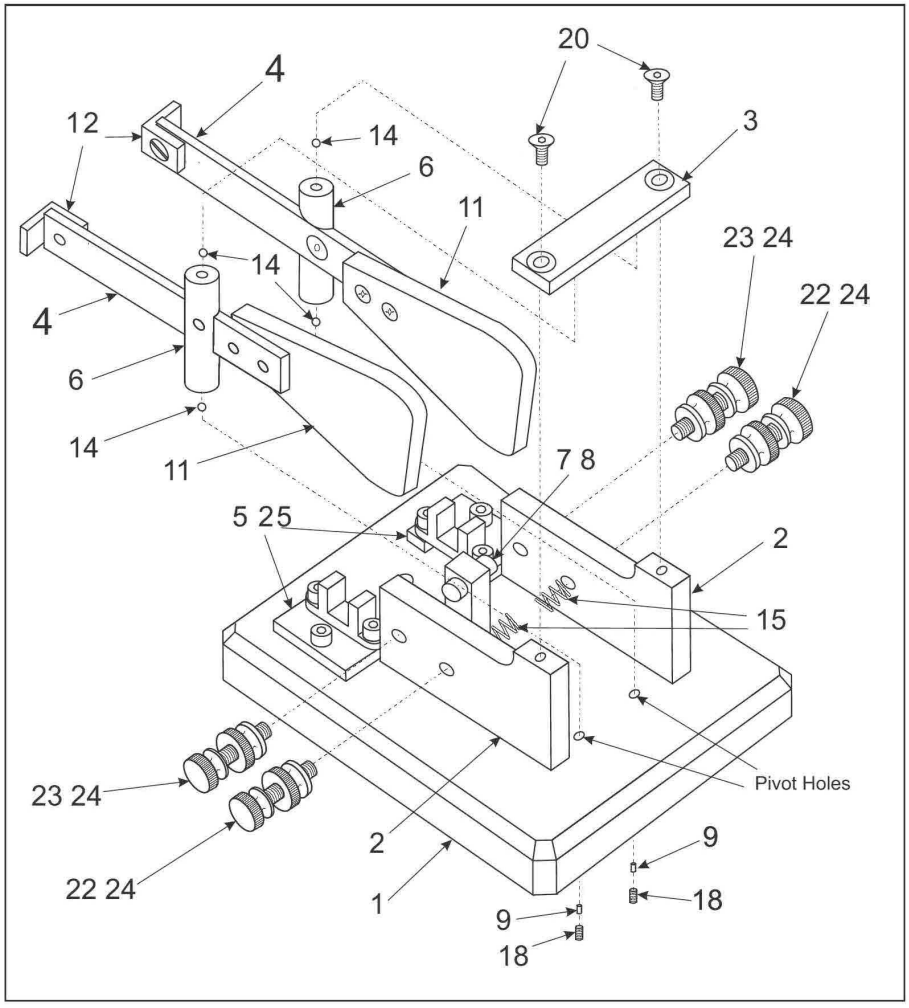

Mount the optical switch [25] to the sliding plate [5]. Make sure that the attached printed circuit board will clear the plate. (PCB has been omitted in this drawing). ‘Dot’ and ‘Dash’ plates are identical.




Fit pivot arm [4] into slot of pivot pin [6] and tighten it with a head screw [20]. Mount the paddle [11] and corner flag [12] to the pivot arm [4]. Be carfull not to overtighten the screws as the Acrylic or Vinyl might crack. ‘Dot’ and ‘Dash’ pivot arm assemblies are identical.




Mount the two lateral supports [2] to the base [1]. Before tighten the screws [16] make sure they will line up with the top support [3].
Mount the stop pillar [7] to the base so that the stop pin will face the lateral support.
Loosely screw the sliding plates [5] to the base. The final adjustment will be done after the keyer has been completely assembled.




Locate the two pivot holes on the base plate and place two steel balls [14] on top. Take the left and right pivot arm assemblies and set the pivot pins [6] onto the steel balls. Find a ca. 5mm thick small piece of cardboard or wood and place it between the two paddles [11]. Use a rubber band to wrap it around the paddles so they will stay together. Tighten the knurled contact gap adjustment screws [23 24] until the pivot arm is pressed against the stop pillar [7 8]. This will hold the pivot arm assemblies in place and allows for lining them up with the two pivot holes in the top support [3]. Place the two steel balls [14] between the pivot pins [6] and the top support and screw the top support to the lateral support [2] using two flat heat screws [20]. If the pivot arm is not freely moving, unscrew the top support and slightly increase the diameter of the pivot hole in the top support. Do not exceed steps of 0.1mm as the pivot arm might get too loose. A loose pivot arm can be adjusted by the set crew [18] and press pin [9].

Final alignment:

Connect a 5V power supply to the optical switches. The red LEDs will light up. Move the optical switch towards the corner flag [12]. The LED will turn off. Slowly move the sliding plate with the optical switch back until the LED turns on again. Tighten the crew to hold the sliding plate in this position. Adjust the dash and dot gap to your desired space.