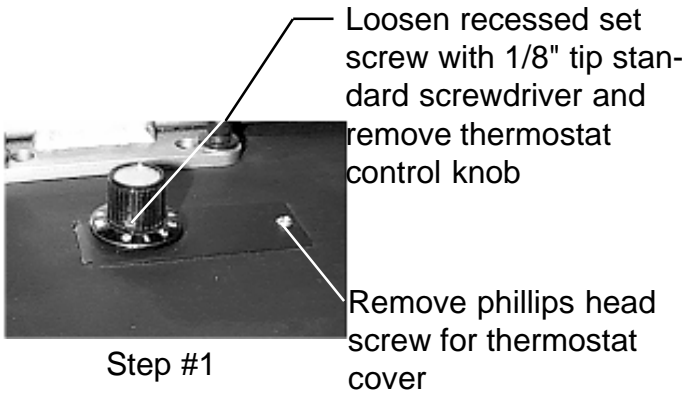


Casting Wire Replacement **CS-77**

Required Tools (All Machines)

1. Phillips head screwdriver (Size #1)
2. Standard screwdriver (1/8" tip)
3. Needle nose pliers
4. Silver solder & Flux Kit (Hix #51834)
5. Propane torch

WARNING: BEFORE MAKING REPAIRS, BE SURE ON/OFF SWITCH IS OFF AND MACHINE IS UNPLUGGED !

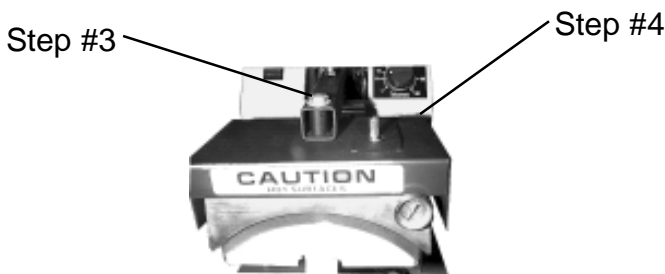


1. Remove thermostat knob and cover. The thermostat knob and cover are removed the same way on all machines. See photo left.
2. Remove heathead and heat shield by locating your machine below and following the steps.

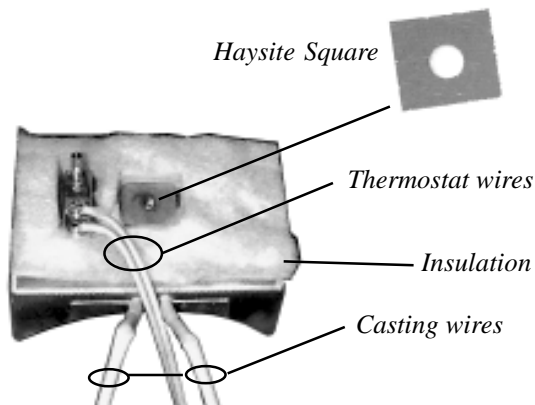
Cap Machine

Required Tools

1. 1/2" Open end Wrench



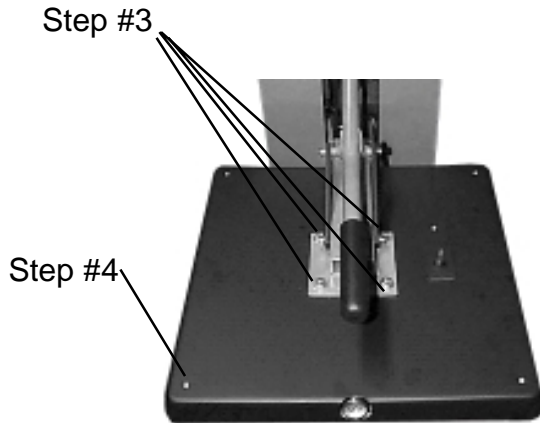
1. Using a Size #1 Phillips head screwdriver remove the back access panel of the housing.
2. From the back of the machine locate the (2) two smaller tan colored thermostat wires and the (2) two larger tan colored casting wires. Write down the wire #'s and termination location before removing the wires.
 Thermostat wire # _____ Termination _____
 Thermostat wire # _____ Termination _____
 Casting wire # _____ Termination _____
 Casting wire # _____ Termination _____
 Using a needle nose pliers gently remove these wires from their terminations.
3. Using the 1/2" Open end wrench remove the bolt holding the heat head to the main arm.
4. Carefully pull the heathead and wires out from the front of the machine noticing the path of wires as fed into the back. Lay entire headhead assembly on a sturdy surface with the casting wires facing toward you.
5. Remove the heat shield cover from the heathead.
5. Carefully remove the insulation and the haysite square and set aside.
6. Proceed to **Casting Wire Soldering Instructions**.



15 x 15 Manual Machine

Required Tools

1. 1/2" Open end Wrench

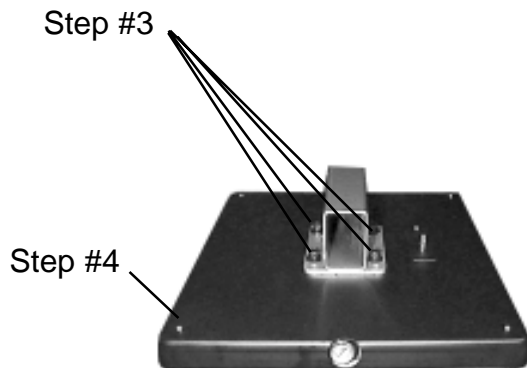


1. Using a Size #1 Phillips head screwdriver remove the back access panel of the housing.
2. From the back of the machine locate the (2) two smaller tan colored thermostat wires and the (2) two larger tan colored casting wires. Write down the wire #'s and termination location before removing the wires.
Thermostat wire # _____ Termination _____
Thermostat wire # _____ Termination _____
Casting wire # _____ Termination _____
Casting wire # _____ Termination _____
Using a needle nose pliers gently remove these wires from their terminations.
3. Using the 1/2" Open end wrench remove the (4) four bolts holding the heat head to the main arm.
4. Carefully pull the heathead and wires out from the front of the machine noticing the path of the wires as fed into the back. Lay entire headhead assembly on a sturdy surface with the casting wires facing toward you.
5. Using a Size #1 phillips head screwdriver remove the heat shield cover and (4) four spacers from the heathead.
6. Carefully remove the insulation and the haysite square and set aside.
7. Proceed to **Casting Wire Soldering Instructions.**

16 x 20 Manual Machine

Required Tools

1. 1/4" Allen Wrench

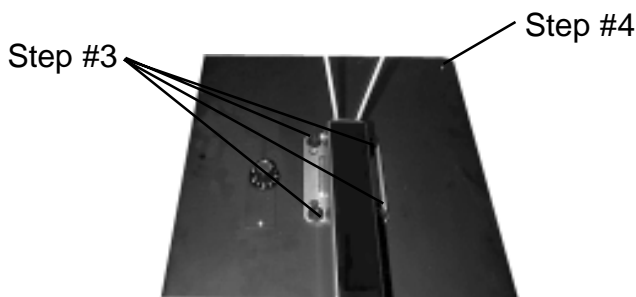


1. Using a Size #1 Phillips head screwdriver remove the back access panel of the housing.
2. From the back of the machine locate the (2) two smaller tan colored thermostat wires and the (2) two larger tan colored casting wires. Write down the wire #'s and termination location before removing the wires.
Thermostat wire # _____ Termination _____
Thermostat wire # _____ Termination _____
Casting wire # _____ Termination _____
Casting wire # _____ Termination _____
Using a needle nose pliers gently remove these wires from their terminations.
3. Using the 1/4" Allen Wrench remove the (4) four bolts holding the heat head to the main arm.
4. Carefully pull the heathead and wires out from the front of the machine noticing the path of the casting wires fed into the back. Lay entire headhead assembly on a sturdy surface with the casting wires facing toward you.
5. Using a Size #1 phillips head screwdriver remove the heat shield cover and (4) four spacers from the heathead.
6. Carefully remove the insulation and the haysite square and set aside.
7. Proceed to **Casting Wire Soldering Instructions.**

16 x 20 Air Automatic Machine

Required Tools

1. 1/4" Allen Wrench



1. Using a Size #1 Phillips head screwdriver remove the back access panel of the housing.
2. From the back of the machine locate the (2) two smaller tan colored thermostat wires and the (2) two larger tan colored casting wires. Write down the wire #'s and termination location before removing the wires.
 Thermostat wire # _____ Termination _____
 Thermostat wire # _____ Termination _____
 Casting wire # _____ Termination _____
 Casting wire # _____ Termination _____
 Using a needle nose pliers gently remove these wires from their terminations.
3. Using the 1/4" Allen Wrench remove the (4) four bolts holding the heat head to the main arm.
4. Carefully pull the heathead and wires out from the front of the machine noticing the path of the casting wires fed into the back. Lay entire heathead assembly on a sturdy surface with the casting wires facing toward you.
5. Using a Size #1 phillips head screwdriver remove the heat shield cover and (4) four spacers from the heathead.
6. Carefully remove the insulation and the haysite square and set aside.
7. Proceed to **Casting Wire Soldering Instructions.**

Casting Wire Replacement Instructions



1. Remove approximately 1/4" insulation from the casting wire. Apply flux to bare wire ends and slide the butt connector onto the end of the wire.



2. Sand the end of the calrod clean.



3. Cover approximately 1/2 the length of the calrod exposed tip with the flux supplied with the replacement kit.



4. Slide the butt connector from Step #1 over the end of the calrod tip.



5. Hold propane torch under the butt connector and continue to hold until it starts glowing dull red. Gently press the end of the sliver solder supplied with kit into the connector hole until it is full. Allow to cool.
WARNING: Overheating could cause casting wires to become brittle and break prematurely.

7. Slide sleeving over wire and calrod.
8. After cooling feed the casting and thermostat wires through the main arm the way they were removed. Replace the insulation and haysite square(s). Replace the spacers and heat shield (use a paper clip to guide screws through spacers and heatshield). Reattach the heathead assembly to the main arm. Using a needle nose pliers reconnect the thermostat wires and the casting wires to the terminations you wrote down. Replace the access panel. Plug in machine. Machine is ready for use.