These instructions must be passed on to the end user where they should be read carefully. Do not rebend rigid leads. Rebending leads might result in damage to circuit. If green ground wire present, wire must be connected to the ground. Proper protective equipment should be worn. Safety Characteristic - No alteration of any of the components is required to affect the products safety or compliance with governmental regulations.

Key Characteristics - A product characteristic whose variability could significantly affect product function and/or customer satisfaction.

Data sheet for 625 SERIES HIGH PERFORMANCE HOT SPRUE BUSHING includes electrical elements and may contain incorrect or obsolete data. Consult the DME Co. LLC. for current data. Do not use data without permission of an authorized official of the DME Company. Any data sheet is intended for use in conjunction with the drawings and 3-D model, but is not meant to replace it. Proper protective equipment should be worn.

4. Apply an anti-seize compound on the tip threads.
5. Tip and bushing threaded area must be clean of any material before threading the bushing with the tip. Consecutive thread starts may require the use of a lubricating compound.
6. Careful attention should be taken to the heater/thermocouple leads as they will affect the products safety or compliance with governmental regulations.

DME Co. LLC.
29111 STEPHENSON HWY.
MADISON HEIGHTS, MICHIGAN 48071
TOLL FREE: 1-800-540-9539
PH: +1-248-398-6000
FX: +1-248-544-5707
EM: mechanical_eng@dme.net
DATE ADDED: 7/19/2011
DATE RELEASED: 7/25/2011
REVISIONS

--- INSTALLATION DATA ---

For removal of tip from bushing, a six point deep well socket is required. For removal of tip from bushing, a six point deep well socket is required.

**RECOMMENDATIONS AND GUIDELINES:**

1. Proper protective equipment, including anti-seize compounds, must be used to ensure proper function of the bushing.
2. Do not operate product when wet. Do not operate this product in wet environments or when hands are wet.
3. Do not bend clip. End of the heater. Carefully remove the pressure of that clip allowing the heater to slip off the bushing body. Do not bend clip.
4. The above information is only given as an example, and may not represent all situations.
5. Do not connect temperature sensor to electrical power. It will damage the product and could cause fire, severe injuries or even death.

**SPECIAL INSTALLATION INSTRUCTIONS:**

b. Remove mold from press.
12. Secure wires in Top Clamp Plate wire channels with DME Wire Covers.
11. The power and thermocouple leads may be spliced in wiring channel for PA plastic insulated disconnects.
10. Power and thermocouple leads may be spliced in wiring channel for PA plastic insulated disconnects.
9. The following information is only given as an example, and may not represent all situations.
**OPERATING PROCEDURE**

1. Power source must be connected to the Smart Start system. It is important to verify proper operation of the Smart Start system before using to set point. It is essential to use controllers with the proper optimum temperature control with a Step Smart.

2. The expansion factor must be taken into consideration. During cooling, Smart Start R systems will allow heater to dissipate any moisture and then change automatically to set point. It is essential to use controllers with the proper optimum temperature control.

3. Tip and bushing threaded area must be clean of any material before inserting tip assembly. Proper thread lubrication or thread sealant must be used if required.

4. Break all sharp edges in wire channel for protection to obtain an empirical factor. Cooling factor. In some instances, it may be necessary variations may occur based on mold configuration and material.

5. Screw tip into the shank of the bushing. Torque and loosen tip from the bushing. Carefully remove the pressure of that clip allowing the tip to be turned. Caution must be taken to not damage the threads of the bushing.

6. Carefull attention should be taken to the heater/thermocouple leads as it is essential to not damage the wires or their connections. The wires must be spliced into the wiring channel properly.

7. The bushings are supplied with a High Performance heater with a Type "J" thermocouple. The white (negative) wire used in our 625 series heaters is a 2" prestripped 36" long leads.

8. The thermocouple must be inserted into the bushing and into the tip assembly. The thermocouple must be turned 180 degrees to the bushing. This ensures complete contact between the thermocouple and bushing. The thermocouple is "J" Type. The white (negative) wire used in our heaters is 2" prestripped 36" long leads. The colors of the thermocouple leads are as follows:

   - 1 T/C lead is White and negative (-) constantan (non-magnetic)
   - 1 ground lead is Green color

9. Secure locating ring over bushing onto the Top Clamp Plate. Clamp Plate for a key (customer to suit) to align with the flat on the bushing assembly.

10. If green ground wire present, wire must be connected to the ground. Power. It will damage the product and could cause fire, severe injuries or even death.

11. The power and thermocouple leads may be spliced in wiring channel for connector (see Wiring Information).

12. Carefully remove bushing from mold. Caution must be taken to not damage the wires or their connections.

13. The expansion factor must be taken into consideration. During cooling, Smart Start R systems will allow heater to dissipate any moisture and then change automatically to set point. It is essential to use controllers with the proper optimum temperature control.

14. Remove bushing from mold. Caution must be taken to not damage the wires or their connections.

15. Improvement in performance. The heating element is a high Performance heater with a Type "J" thermocouple. A 2" prestripped 36" long leads. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color.

16. Thus "A" + BE will be 3.553

17. The above information is only given as an example, to illustrate the method to determine the difference between the final and starting temperature.

18. Failure to comply will result in serious injury or death to this product.

19. Forge hardware. Use caution when operating and servicing the equipment, including eye protection, must be worn.

20. Failure to comply can result in serious injury or death to this product.

21. Improvement in performance. The heating element is a high Performance heater with a Type "J" thermocouple. A 2" prestripped 36" long leads. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color.

22. Improvement in performance. The heating element is a high Performance heater with a Type "J" thermocouple. A 2" prestripped 36" long leads. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color.

23. Improvement in performance. The heating element is a high Performance heater with a Type "J" thermocouple. A 2" prestripped 36" long leads. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color.

24. Improvement in performance. The heating element is a high Performance heater with a Type "J" thermocouple. A 2" prestripped 36" long leads. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color. The colors of the thermocouple leads are as follows: White and negative (-) constantan (non-magnetic) and Green color. The colors of the ground leads are as follows: Black color. The colors of the power leads are as follows: Red color.