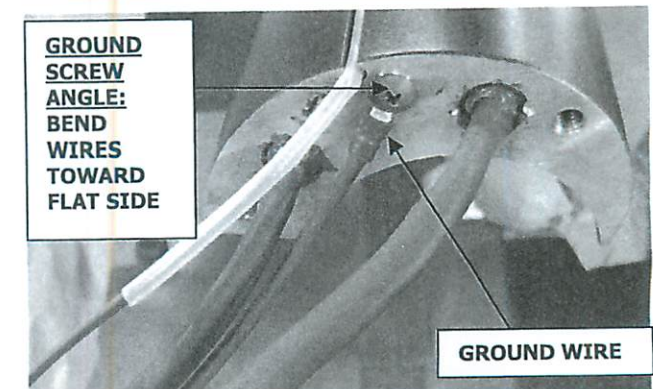
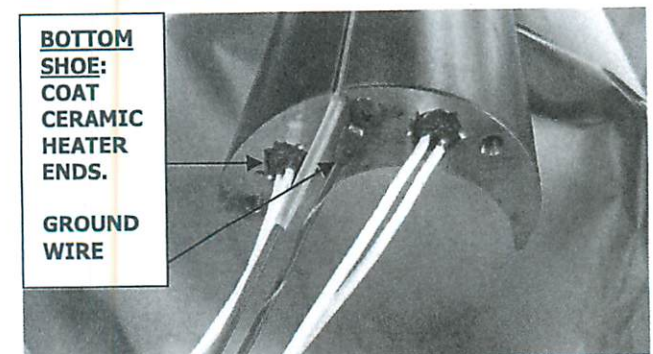
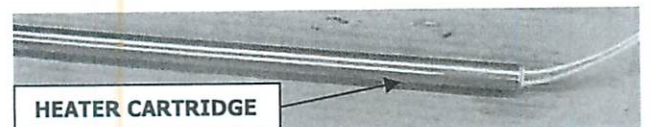


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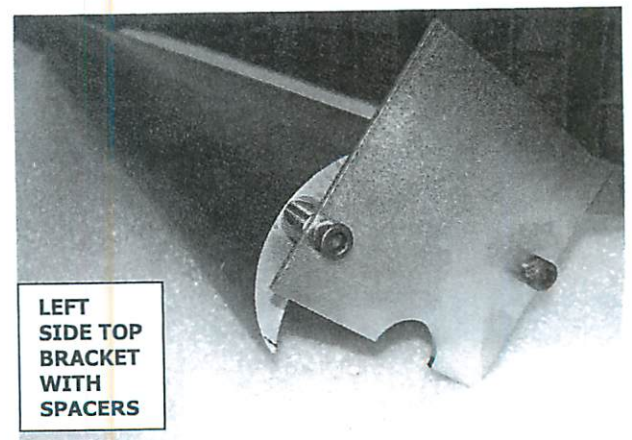
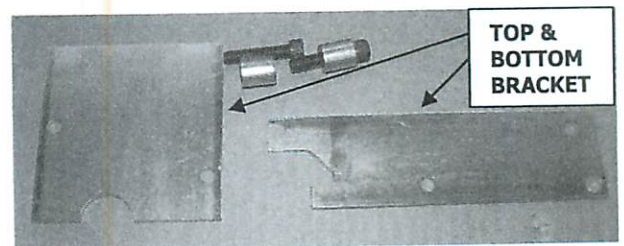
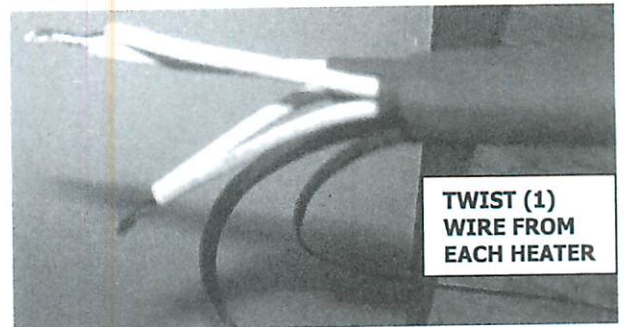
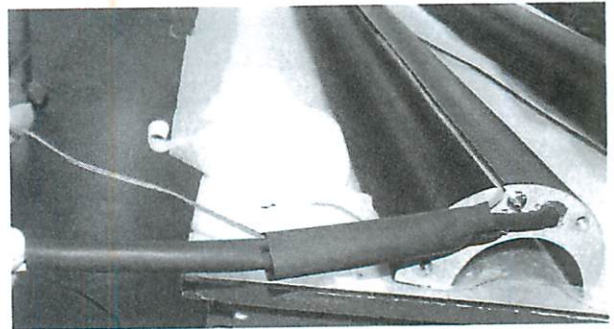
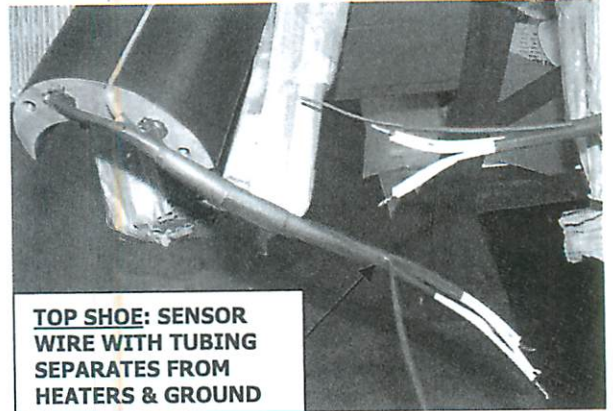
HD 60 INDUSTRIAL SERIES CARTRIDGE HEAT SHOE ASSEMBLY

- 1) PLACE (2) HD60 HEAT SHOES COMPLETE (H360 060.4A) LOFT 3 ON A CUSHIONED TABLE. ORIENT THE HEAT SHOES WITH THE LARGE FLAT SIDE OUTWARD, LIP INWARD. WIRES WILL EXIT THE RIGHT SIDE OF THE SHOE AND CONNECT TO THE RIGHT SIDE PANEL RECEPTICLES.
- 2) PREPARE BOTH HEAT SHOES TO HOLD TYPE J THERMOCOUPLE SENSORS (PRC214J) RACK 16. MEASURE 15" INTO RIGHT SIDE SENSOR CHANNEL. STAKE INSIDE CHANNEL AT END OF TOOL. THIS WILL SECURE SENSOR FROM SLIDING INWARD.
- 3) INSERT THERMO COUPLE TYPE J SENSOR INTO STAKED AREA. REMOVE BLACK TUBING END, IF NECESSARY.
- 4) SLIDE 15" OF TEFLON TUBING (LC38 344.4) AS17 OVER SENSOR WIRE, FLUSH TO SENSOR. STAKE SENSOR ON END.
- 5) SLIDE 13" OF 1/8" TUBING (PRI162) CAB1 UP SENSOR WIRE TO SENSOR.
- 6) INSERT (2) EACH 5/8 X 60" 220V 230V 2000W CARTRIDGE HEATERS (PRH158.A) LOFT 3 INTO BOTH HEAT SHOES, FROM THE RIGHT SIDE, AS THE HEAT SHOE WILL SIT ON LAMINATOR. ALIGN HEATERS FLUSH WITH ENDS.
- 7) APPLY SUPERFLEX RED HIGH TEMP RTV SILICONE ADHESIVE SEALANT CAB1, COVERING CERAMIC HEATER ENDS AND BETWEEN HEATER WIRES.
- 8) STAKE BOTH HEATER ENDS ON SHOE.
- 9) BEND ALL HEATER WIRES AND SENSOR WIRE WITH TEFLON TOWARD THE FLAT SIDE OF THE HEAT SHOE, ON BOTH TOP AND BOTTOM SHOES. VARIOUS SIZES OF BLACK INSULATION TUBING ARE USED ON WIRES AND AS THEY ARE HEATED TO SHRINK THE TUBING, KEEP

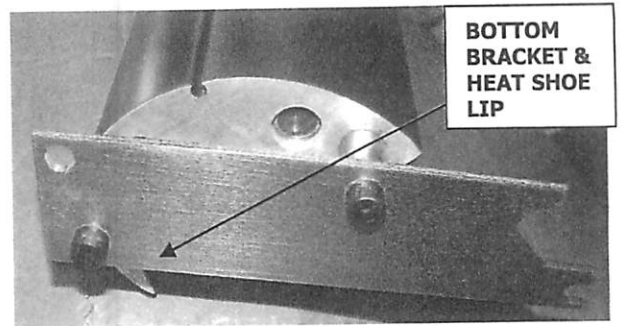


WIRES DIRECTED TOWARD FLAT SIDE OF HEAT SHOE.

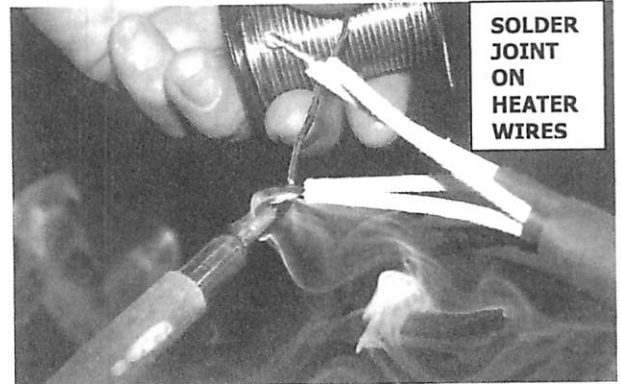
- 10) **FOR TOP HEAT SHOE AND BOTTOM HEAT SHOE: TRIM AN 8" PIECE OF BLACK 3/8" INSULATION TUBING (PRI164) CAB 1 FOR HEATER WIRES CLOSEST TO THIN LIP AND A 6 1/2" PIECE OF 3/8" TUBING FOR HEATER WIRES BY FLAT EDGE. PLACE BLACK INSULATION TUBING OVER HEATER WIRES, FLUSH WITH HEATER CORE. HOLD WIRES TOWARD FLAT EDGE, HEAT SHRINK TUBING. TRIM LONGER HEATER WIRES TO EVEN LENGTH MATCHING SHORTER HEATER WIRES. IDENTIFY ONE PAIR WITH INK.**
- 11) **CUT (2) 10" PIECES OF BLACK 1/8" INSULATION TUBING (PRI162) CAB 1. CUT AND COVER (2) 12", 16 GAUGE GREEN GROUND WIRES. GROUND WIRE MEASURES 1" LONGER THAN HEATER WIRES. THE TOP AND BOTTOM HEAT SHOES BOTH HAVE A GROUND WIRE. CRIMP A BLUE RING CONNECTOR (PRT294) ONTO BOTH GROUND WIRES AND SLIDE THE TUBING OVER WIRE TO CONNECTION POINT. HEAT SHRINK TUBING. THREAD GROUND WIRE INTO HEAT SHOES, ALIGNING THE RING CONNECTION AWAY FROM THE SENSOR ON BOTH HEAT SHOES. SECURE USING A 10-32 X 3/8 THMS WITH A #10 STAR WASHER BITING INTO THE SHOE.**
- 12) **CUT 4" OF 3/8" INSULATION TUBING (PRI164) TO COVER SENSOR WIRE TOGETHER WITH HEATER WIRE BY THIN LIP, FLUSH TO HEATER CORE. HEAT SHRINK TUBING.**
- 13) **CUT 4" OF 3/4" INSULATION TUBING (PRI166). COVER BOTH HEATER WIRE SETS, SENSOR AND GROUND. DON'T SHRINK. ****THEN SLIDE 5" OF 1/2" (PRI163) UP WIRES. EXCLUDE SENSOR WIRE. DON'T SHRINK YET.**
- 14) **STRIP 1/2" OFF HEATER WIRE ENDS AND TWIST TOGETHER' CLOCKWISE, ONE WIRE FROM EACH HEATER IN BOTH HEAT SHOES.**
- 15) **CONNECT TOP HEAT SHOE BRACKETS (H380 065.4T) RACK 6 TO THE RIGHT**



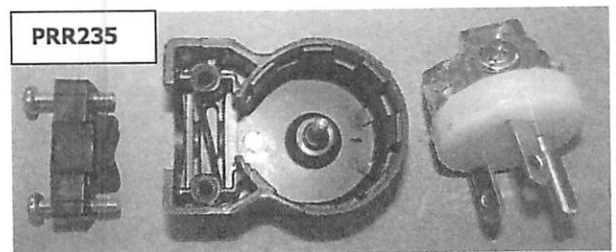
AND LEFT SIDE OF THE TOP HEAT SHOE, ORIENTED WITH THE NOTCH FACING DOWNWARD, CLOSER TO THE FLAT SIDE OF HEAT SHOE. THE SHORTER BRACKET EDGE WILL BE INWARD, TO THE HEAT SHOE FLAT SIDE. USE 5/16-18 X 1 1/2 SHCS WITH A HEAT SHOE SPACER (H380 063.4) RACK 6 ON THREADS BETWEEN BRACKET AND HEAT SHOE. DRAPE THE INSULATED WIRES BETWEEN SPACERS, UPWARD.



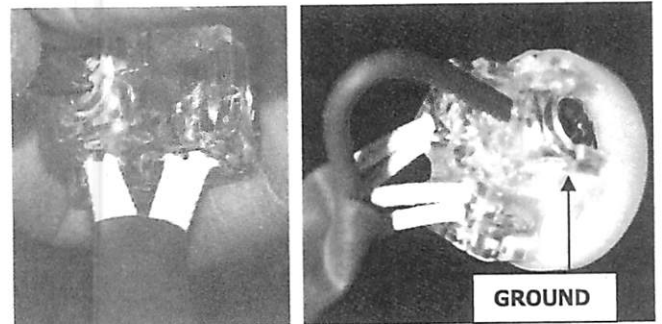
- 16) **CONNECT THE BOTTOM HEAT SHOE BRACKETS (H380 065.4B) RACK 6 TO THE BOTTOM HEAT SHOES WITH LARGE NOTCH UPWARD TOWARD FLAT. USE 5/16-18 X 1 1/2 SHCS WITH HEAT SHOE SPACERS BETWEEN BRACKET AND HEAT SHOE. DRAPE INSULATED WIRES UPWARD BETWEEN SHOE SPACERS.**



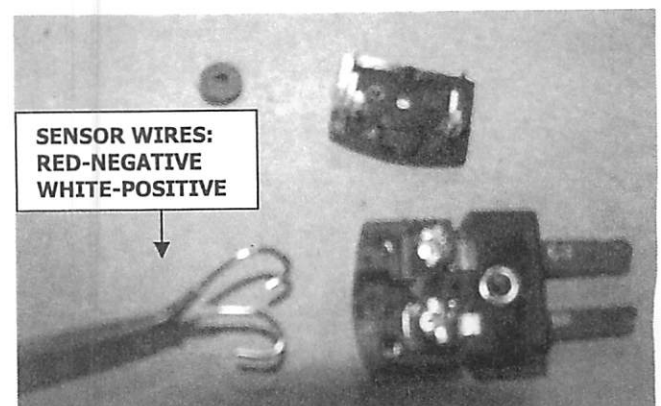
- 17) **BRUSH FLUX ON TWISTED HEATER WIRE ENDS. HEAT SOLDER IRON AND VERY LIGHTLY WICK A SOLDER JOINT ONTO TWISTED WIRES OF THE UNITED HEATERS ON BOTH HEAT SHOES.**



- 18) **LOOSEN THE (2) STRAIN RELIEF SCREWS AND THE (1) BACK SCREW ON (2) 90 DEGREE HUBBLE PLUGS (PRR235) RACK 6. SEPARATE HUBBLE PLUG PIECES FOR WIRING. LOOSEN CONNECTING INNER PORTION SCREWS OF PLUG. INSERT THE OPEN SOLDERED HEATER WIRES BETWEEN THE SCREW AND THE METAL BRACKET AND TIGHTEN. TRIM THE GREEN GROUND WIRE 1 1/4" BEYOND HUBBLE ENTRY OPENING, STRIP BACK AND TWIST WIRE CLOCKWISE. INSERT THE OPEN GROUND WIRE BETWEEN THE GREEN SCREW INDICATED "GR" AND METAL BRACKET, SECURE GROUND WIRE WITH SCREW. ORIENT THE GROUND WIRE FURTHEST AWAY FROM STRAIN RELIEF, REINSERT CONNECTED WIRES INTO PLUG HOUSING. TIGHTEN BACK SCREW. PLACE STRAIN RELIEF WITH CURVED SIDE INWARD, OVER WIRES AND TIGHTEN (2) SCREWS.**

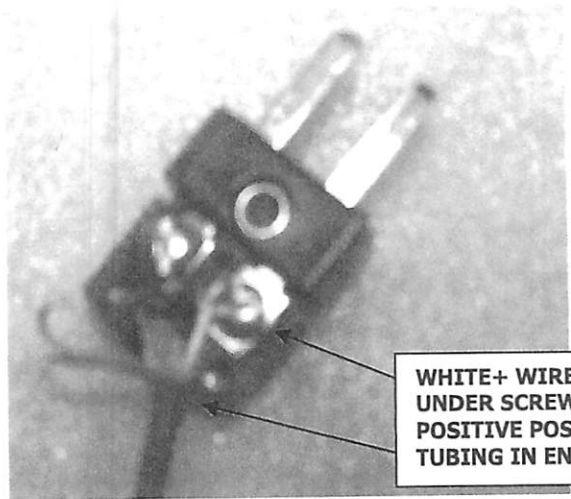


- 19) **CUT SENSOR WIRE 4" PAST THE END OF THE HUBBLE PLUG. UNTHREAD AND SAVE BOTH SMALL SCREWS ON (2) SENSOR PLUGS (PRR229) AS08. REMOVE THE SENSOR PLUG COVER AND**

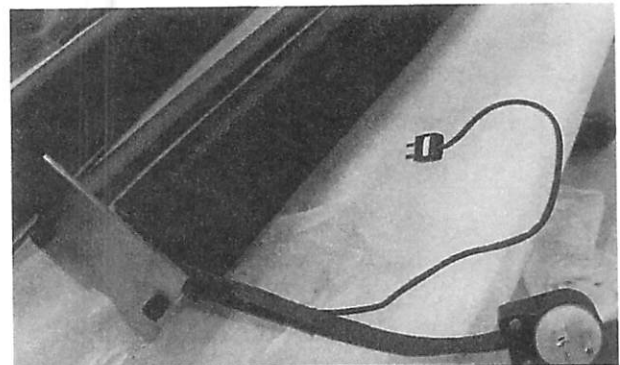


NOTE THE + AND - INDICATIONS. EITHER GROMMET OR INSULATION TUBING MUST BE IN PLUG END.

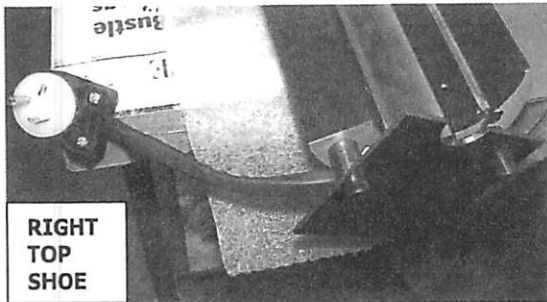
- 20) **STRIP ABOUT 3/8" OFF THE ENDS OF THE RED - (NEGATIVE) AND THE WHITE+ (POSITIVE) SENSOR WIRES. BEND EXPOSED WIRE ENDS TO MAKE SMALL HOOKS. CAREFULLY TRIM BACK INSULATION BETWEEN WIRES.**
- 21) **BEGIN TO UNTHREAD INNER PLUG SCREWS. LOOP THE WHITE (POSITIVE) WIRE ON THE + SCREW THREADS AND LOOP THE RED (NEGATIVE) WIRE ON THE - SCREW THREADS. TIGHTEN TO SECURE WIRES.**
- 22) **RUBBER GROMMET MAY NOT FIT WITH J-TYPE SENSOR TUBING. REPLACE PLUG COVER AND SECURE WITH SCREWS.**



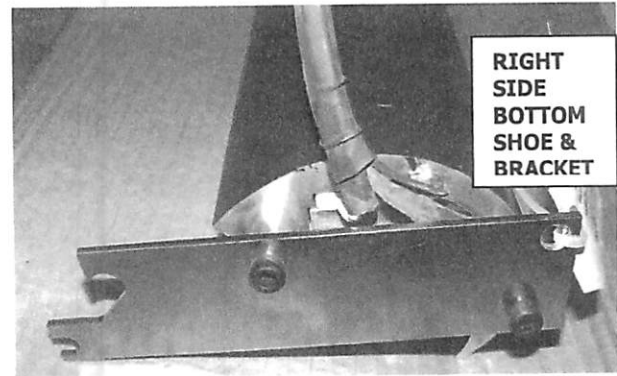
WHITE+ WIRE UNDER SCREW POSITIVE POST, TUBING IN END



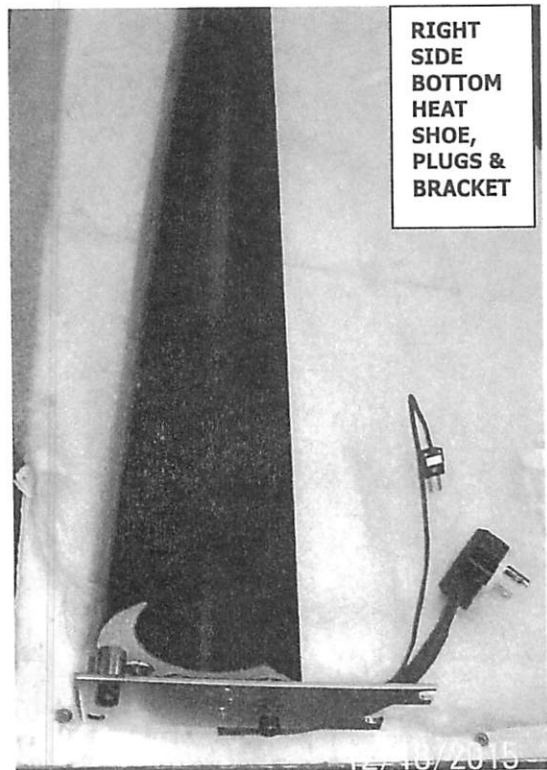
RIGHT SIDE TOP HEAT SHOE, BRACKET AND PLUGS



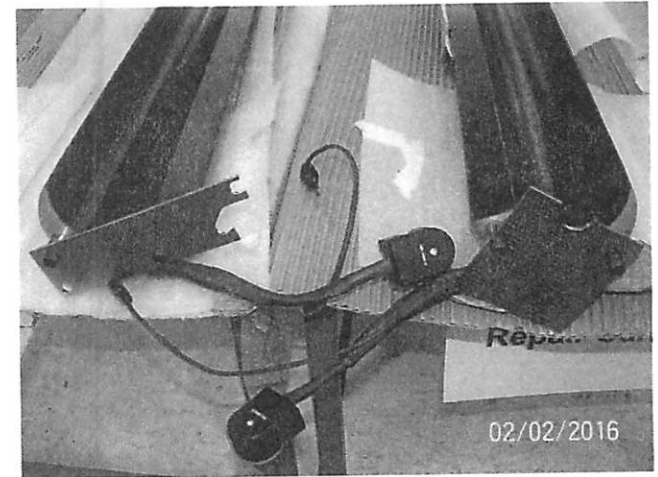
RIGHT TOP SHOE



RIGHT SIDE BOTTOM SHOE & BRACKET



RIGHT SIDE BOTTOM HEAT SHOE, PLUGS & BRACKET



02/02/2016