

# **EDUCATOR LAMINATOR**

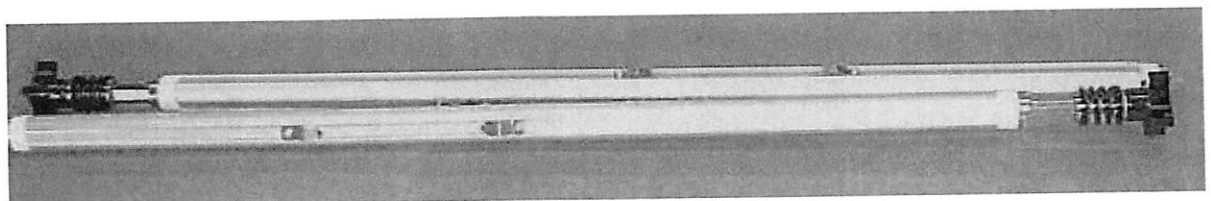
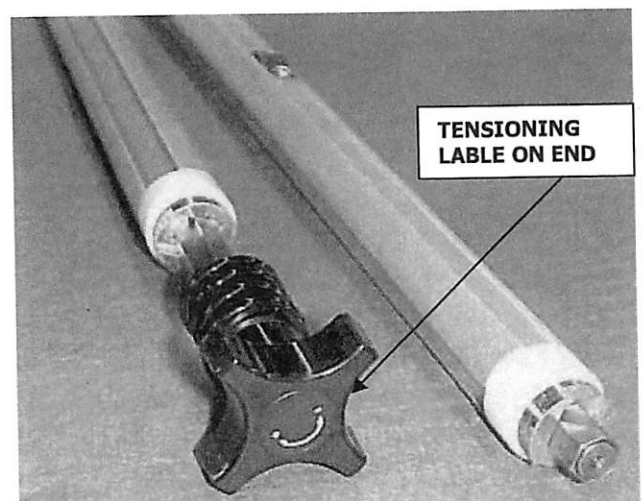
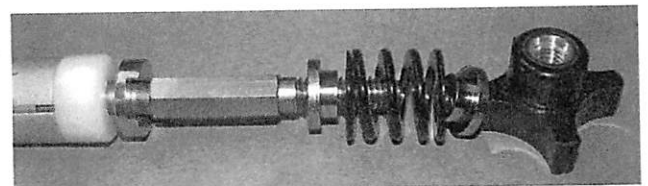
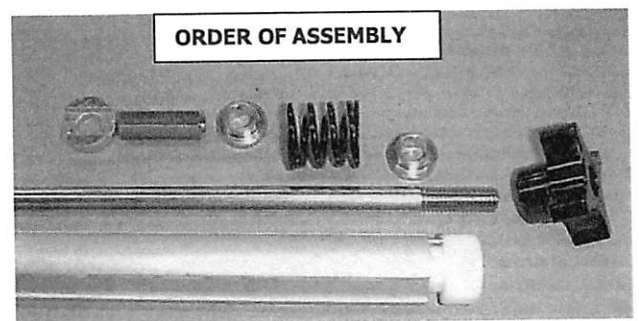
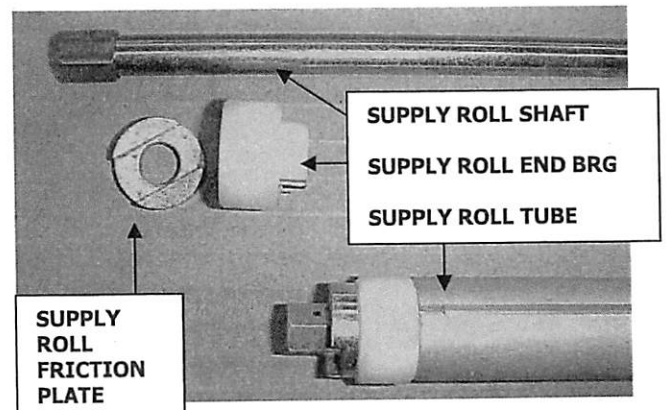
**AND 220VOLT ADDENDUM**

**ASSEMBLY  
PROCEDURES**

**UPDATED OCTOBER 2014**

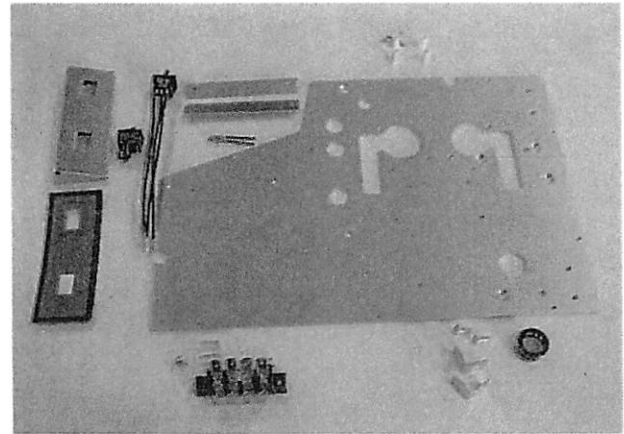
# EDUCATOR SUPPLY ROLL ASSEMBLY

- 1) TWO SUPPLY ROLLS USED ON THE EDUCATOR. ALL PARTS ARE ON SUPPLY ROLL CART LD01. USE THE FOLLOWING PROCEDURES FOR "IN HOUSE" ASSEMBLY.
- 2) TAP (2) SUPPLY ROLL END BEARINGS (LC25 100.4) CONTAINING SET PIN INTO PIN CATCH ON BOTH ENDS OF THE EXTRUDED SUPPLY ROLL TUBE (LC25 002.4A).
- 3) THREAD (4) SUPPLY ROLL DOGS-REV A (0285 015.4A) USING 6-32 X  $\frac{1}{2}$  PH <sup>3/16</sup> INTO SUPPLY ROLL TUBE. THE POINTED DOG ENDS FACE INWARD. <sup>PH</sup>
- 4) SLIDE SUPPLY ROLL FRICTION PLATE (0285 025.4) ONTO SUPPLY ROLL SHAFT (0500 011.4) TO FIT OVER PINNED HEX AT END OF SHAFT.
- 5) ADD SUPPLY ROLL TUBE WITH BEARING ONTO SHAFT. PLACE ANOTHER SUPPLY ROLL FRICTION PLATE WITH SMOOTH SIDE NEXT TO BEARING.
- 6) PLACE A SUPPLY ROLL HEX BUSHING (0285 027.4) ONTO SHAFT, FITTING INTO FRICTION PLATE. ADD A SUPPLY ROLL SPRING BUSHING (0285 026.4), TENSION SPRING (PRS234) AND ANOTHER SUPPLY ROLL SPRING BUSHING, SO TENSION SPRING IS HELD BETWEEN THEM FITTING INTO SPRING BUSHING RECESS.
- 7) THREAD A SUPPLY ROLL KNOB (PRK170) ONTO THE END OF THE SUPPLY ROLL SHAFT.
- 8) ADHERE A SUPPLY ROLL TENSIONING LABEL (XS24) INTO RECESS OF KNOB.

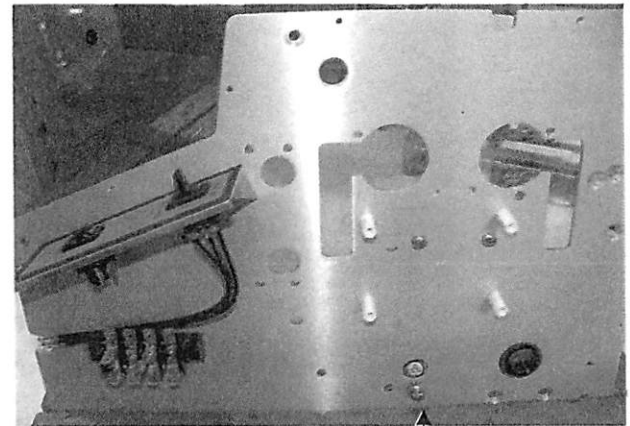


# EDUCATOR RIGHT SIDE PANEL ASSEMBLY

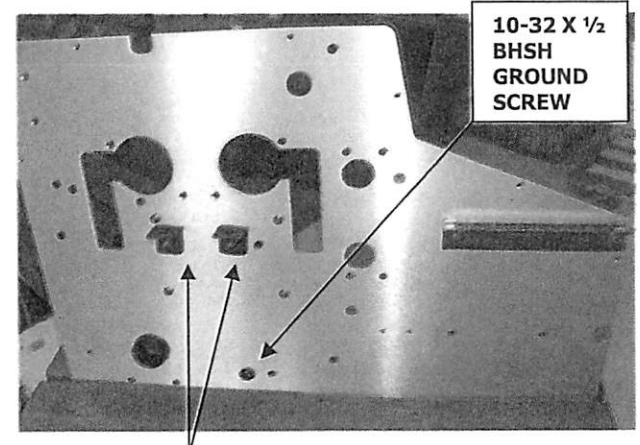
- 1) PLACE RIGHT SIDE PANEL (LC25 090.4R) LD10 IN WOODEN BLOCK. ATTACH SWITCH BRACKET (LC25 122.4) LD09 TO OUTER SIDE PANEL WITH (3) 1/8 DIA FH POP RIVET THROUGH COUNTERSUNK HOLES. *SWITCH BRACKET MUST GO ON BEFORE FEED TABLE BRACKETS.*
- 2) ON *INNER* SIDE PANEL ATTACH TOP FEED TABLE BRACKET (LC25 098.4T) LD09 AND BOTTOM FEED TABLE BRACKET (LC25 098.4B) LD09 WITH (2) 1/8 DIA FH POP RIVETS.
- 3) ADD 90 DEGREE TERMINAL (PRT308) LD09/AS09 WITH END SCREW ON TERMINAL BLOCK (PRT301.5) LD09/LD01. ORIENT THE 90 DEGREE TERMINAL TOWARD THE FRONT OF THE *OUTER* SIDE PANEL AND SECURE WITH (2) 8-32 X 1/4 RH MS.
- 4) ADHERE AN INTERNATIONAL GROUND SYMBOL (LAB06) LD09 ABOVE GROUND SCREW LOCATION ON *OUTER* PANEL. FROM INNER PANEL TIGHTEN A 10-32 X 1/2 BSHS WITH A #10 STAR WASHER. ADD #10 STAR WASHER TO OUTER PANEL AND A #10 ACORN NUT.
- 5) INSERT SNAP BUSHING (PRB064) LD09/AS07 FROM *OUTER* SIDE PANEL.
- 6) THREAD (4) NYLON HEX STANDOFFS (LC25 010.4) LD09 ONTO *OUTER* SIDE PANEL WITH (4) 4-40 X 3/8 PH MS.
- 7) ATTACH (2) TINNEMAN BRACKETS (PRT319) LD09/LD01 TO *INNER* RIGHT SIDE PANEL WITH (2) 8 X 1/2 PH SMS.
- 8) ADHERE SWITCH LABEL (LAB57) LD09 CAREFULLY ALIGNED OVER HOLES.
- 9) SNAP IN DRIVE SWITCH (PRS312) LD09 WITH PRINTING FACING OUTWARD.
- 10) SNAP IN RED LIGHTED ROCKER SWITCH (PRS311) LD09, PRINTING OUTWARD.



RIGHT SIDE PANEL & FIXTURES



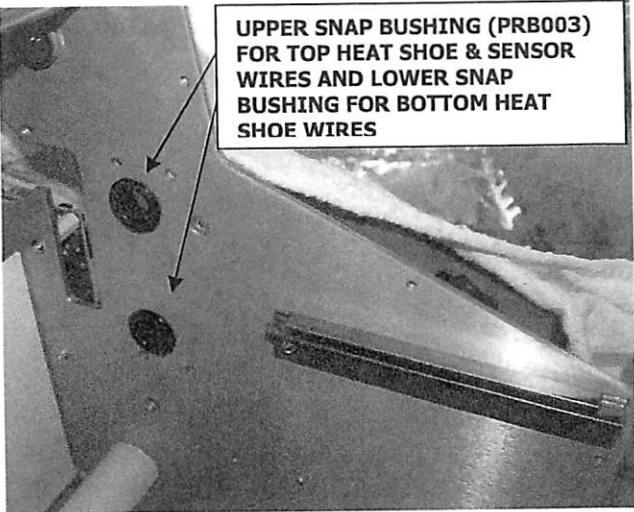
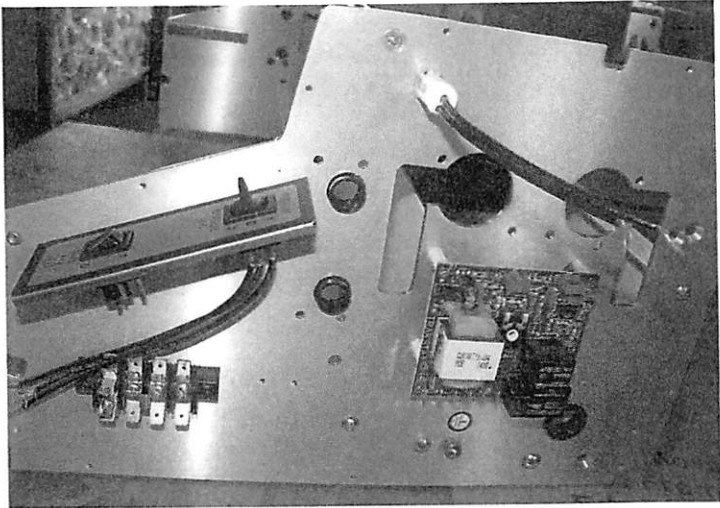
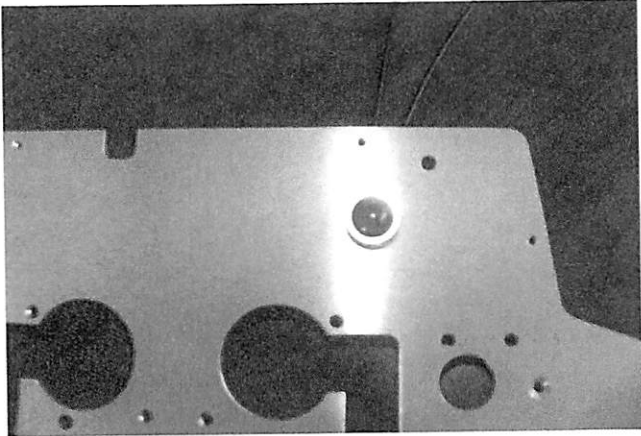
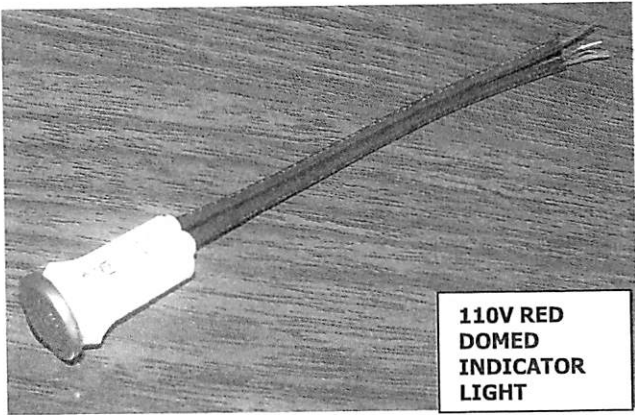
OUTER RIGHT SIDE PANEL: GROUND SCREW & LABEL



TINNEMAN BRACKETS ON *INNER* RIGHT SIDE PANEL

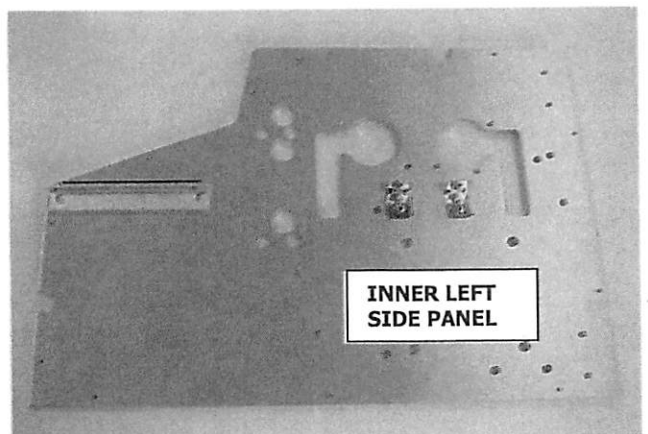
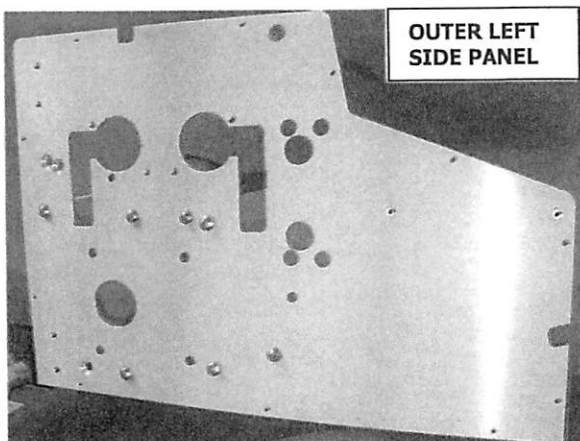
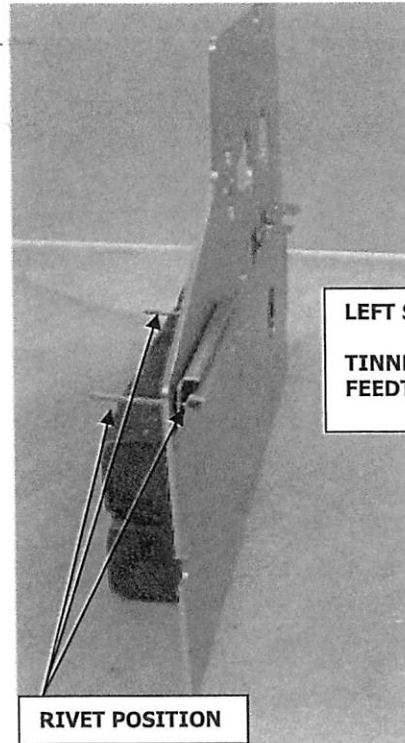
Item/Components	Description	T	Quantity	Per U/M U	Unit Cost	Effectivity	Dates
					Extended Cost	From	To
9025200TU	EDUCATOR LAM. 220V LAMINATOR				0.00000		
0285 015.4A	LD SUPPLY ROLL DOG BENT	M	8.00000	EA U	0.00000		
Revision: 0					0.00000		
0285 025.4	SUPPLY ROLL FRICTION PLATE C	M	4.00000	EA U			
0285 026.4	LD SUPPLY ROLL SPRING BUSHING - COMPLETE	M	4.00000	EA U			
0285 027.4	SUPPLY ROLL HEX BUSHING	M	2.00000	EA U			
Revision: A							
LC25 011.5	LD SUPPLY ROLL SHAFT Assembly	M	2.00000	EA U			
Revision: A							
LC25 002.4A	SUPPLY ROLL EXTRU CUT TO LGTH AND CA	M	2.00000	EA U			
Revision: A							
LC25 100.4	LD SUPPLY ROLL END BEARING (REV.B)	M	4.00000	EA U			
Revision: B							
PRK170	DK57 KNOB LD SUP ROLL	M	2.00000	EA U			
PRS234	SUP ROLL TEN SPRG PTD BLACK 9-1604-11	M	2.00000	EA U			
LC25 090.4R	RIGHT SIDE PANEL DWG #LC25 090.4R REV. G	M	1.00000	EA U			
Revision: G							
LC25 090.4LA	EDUCATOR SIDE PANEL (MOLON-MEKO) REV.B	M	1.00000	EA U			10/21/97
Revision: B							
LC25 010.4	STANDOFF-NYLON,5/8x1/4HEX,4-40THREAD	M	4.00000	EA U			
PRF110	FUSE HOLDER (LITTELFUSE H3453LS1)	M	2.00000	EA U			
PRT301.5	ED TERM BLK 110V SUBASSY	M	1.00000	EA U			
PRB064	SNAP BSHG LG .875HOLE/.125T/.625ID	M	1.00000	EA U			
LAB57	SWITCH LABEL LC LAM	M	1.00000	EA U			
LAB06	INTERNATIONAL GROUND SYMBOL LABEL	M	1.00000	EA U			
LAB115	EDUCATOR THREADING DIAGRAM LABEL	M	1.00000	EA U			
LAB144	LIFT HERE LABEL	M	2.00000	EA U			
PRS251	25B19 SPROCKET W/1/2"BORE & SET SCREW	M	1.00000	EA U			10/21/97
PRS311	ROCKER SWITCH, RED LIGHTED	M	1.00000	EA U			
PRS312	CARLING LC SWITCH DRIVE 611112-73-0-ON	M	1.00000	EA U			
PRM229A	MOLON GEAR MOTOR - EM5H-15-4 - 110 VOLT	M	1.00000	EA U			
PRM229B	CAPACITOR - 5uf - FOR PRM229A, 2MDV4	M	1.00000	EA U			
PRT321A	ISOLATION TRANSFORMER N77U P4	M	1.00000	EA U			
PRM216B	CAPACITOR BRACKET FOR DAYTON MOTOR 2MEV1	M	1.00000	EA U			10/21/97
LAB555	EDUCATOR PACKAGING CHECKOFF LABEL	M	1.00000	EA U			03/26/99
Lc25 060.4	25" LIGHT DUTY HEATSHOE - See Note/P4	M	2.00000	EA U			
Revision: A							
LC25 093.4D	EDUCATOR BOTTOM MTR CVR - 220V VERSION	M	1.00000	EA U			
prc117	CORD RECEPTACLE, PANEL MOUNT	M	1.00000	EA U			
prf116	FAN CORD SET 4YD80	M	1.00000	EA U			
prf133	AXIAL FAN FOR EDUCATOR 120V	M	1.00000	EA U			
prh147	25" 120V UL HTR 650W UL/CSA LISTED.	M	2.00000	EA U			
PRC090	CHROME PLUG BUTTON, (100/pack)	M	1.00000	EA U			
LC25 008.4	25" IDLER TUBE	M	1.00000	EA U			
LC25 009.4	LD IDLER BEARING	M	2.00000	EA U			
LC25 011.4	25" STABILIZER BAR	M	2.00000	EA U			
LC25 122.4	SWITCH BRACKET	M	1.00000	EA U			
LC25 098.4T	TOP FEED TABLE BRACKET	M	2.00000	EA U			

- 11) SNAP IN THE 110V DOMED RED INDICATOR LIGHT (PRL194A) LD01 FROM THE INNER RIGHT SIDE PANEL, SO THE WIRES WILL BE ON THE OUTER SIDE PANEL.
  
- 12) FROM INNER SIDE PANEL, INSERT (2) SNAP BUSHINGS (PRB003) RACK 8 LOCATED ABOVE EACH OTHER, TO PROTECT TOP HEATER & SENSOR WIRES AND BOTTOM HEATER WIRES.



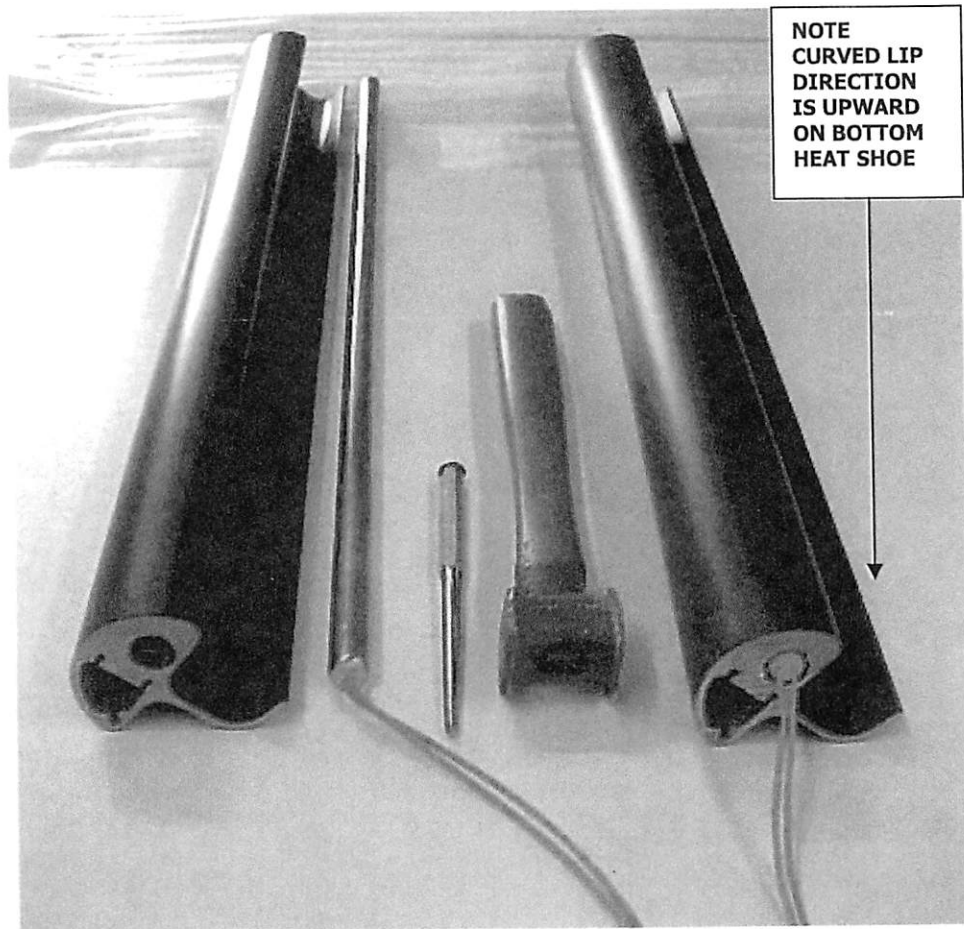
# EDUCATOR LEFT SIDE PANEL ASSEMBLY 9/2011

- 1) PLACE LEFT SIDE PANEL (LC25 090.4LA) LD03 IN WOODEN BLOCK. ALIGN HOLES ON TOP FEED TABLE BRACKET (LC25 098.4T) LD01 AND BOTTOM FEED TABLE BRACKET (LC25 098.4B) LD01 CREATING A CHANNEL FOR FEED TABLE TO SLIDE IN. SECURE BRACKETS TO INNER SIDE PANEL WITH (2) 1/8 DIA FH POP RIVETS.
- 2) ATTACH (2) TINNEMAN BRACKETS (PRT319) LD01 TO INNER SIDE PANEL WITH (2) 8 X 1/2 PH SMS FROM OUTSIDE. SEE PHOTOS.



# EDUCATOR BOTTOM HEAT SHOE ASSEMBLY

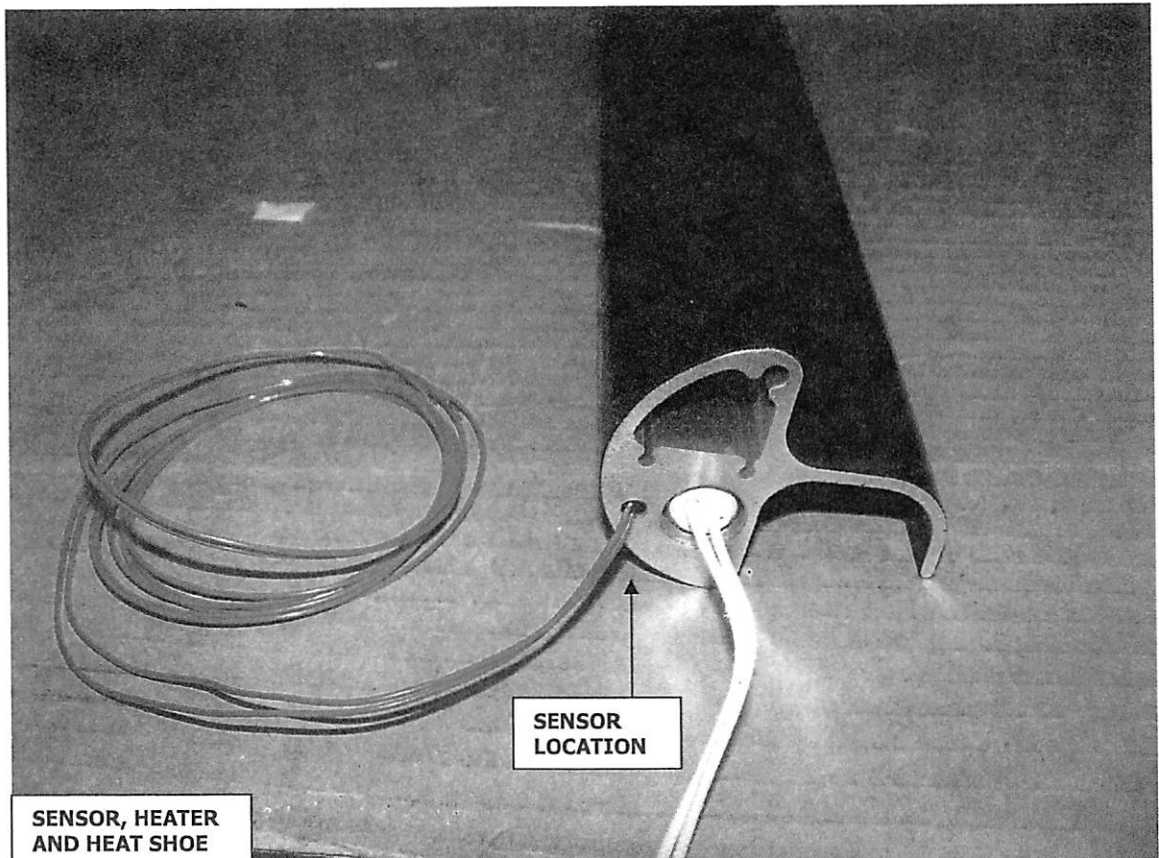
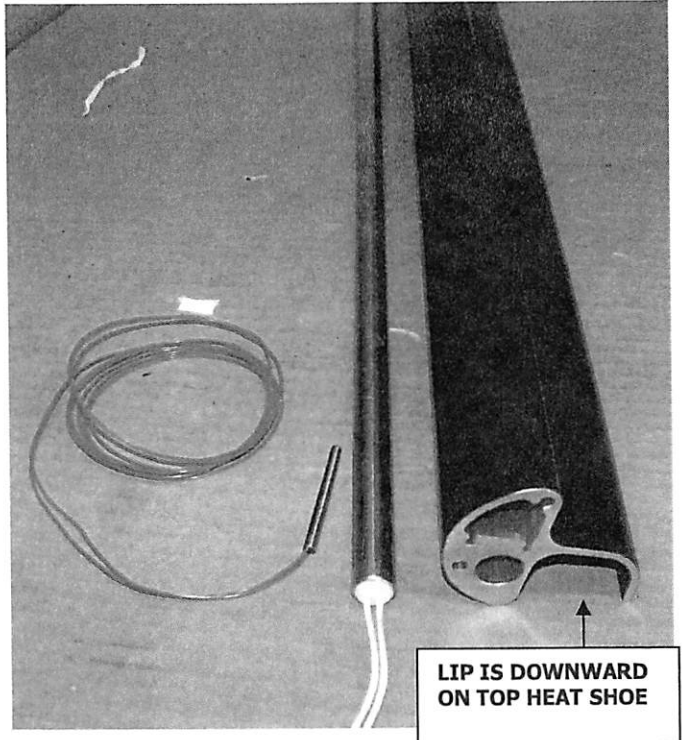
- 1) PLACE 25" LIGHT DUTY HEAT SHOE (LC25 060.4) LD00 ON CUSHIONED SURFACE, ORIENTED TO PHOTO.
- 2) INSERT HEATER (PRH147) LD00 AND STAKE BOTH ENDS TO SECURE.
- 3) STAGE AT FRAMING AREA.



HEAT SHOE, HEATER, STAKE & HAMMER: ASSEMBLED BOTTOM HEAT SHOE

# EDUCATOR 110V TOP HEAT SHOE ASSEMBLY 2011 WITH RED SENSOR WIRE

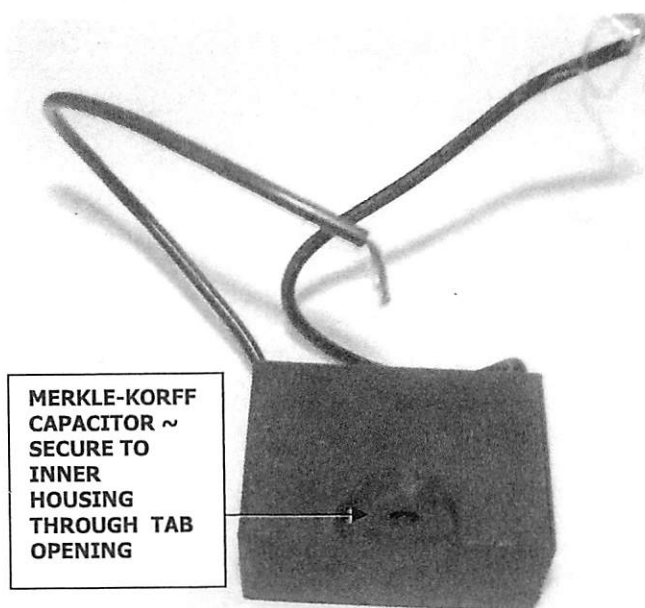
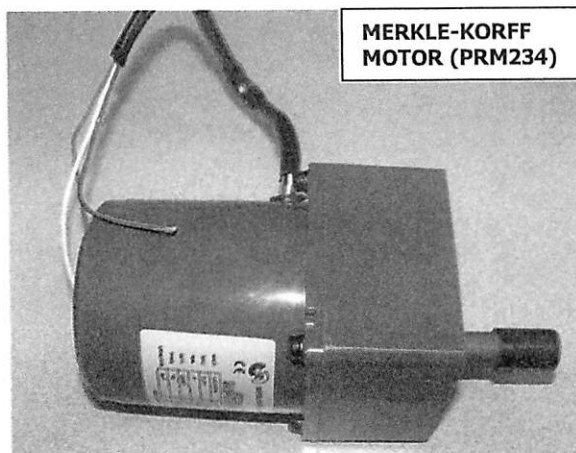
- 1) PLACE 25" LIGHT DUTY HEAT SHOE (LC25 060.4) LD00 ON CUSHIONED SURFACE ORIENTED WITH LIP DOWNWARD TO THE RIGHT.
- 2) INSERT HEATER (PRH147) LD00 FROM END WITH SENSOR HOLE.
- 3) OPEN SENSOR HOLE, IF NECESSARY, WITH #11 DRILL, BE CAREFUL NOT TO DAMAGE INTEGRITY OF CAVITY.
- 4) INSERT SENSOR (PRC2121) LD00 WHICH HAS RED WIRES. CUT THE WIRES TO TWICE THE LENGTH OF THE HEATER WIRES. CLIP TERMINALS OFF TO RECYCLE.
- 5) STAKE SENSOR AND BOTH ENDS OF HEATER WITH TOOLS PICTURED.





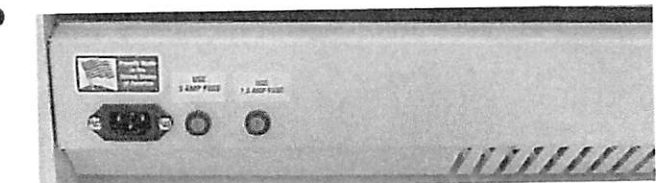
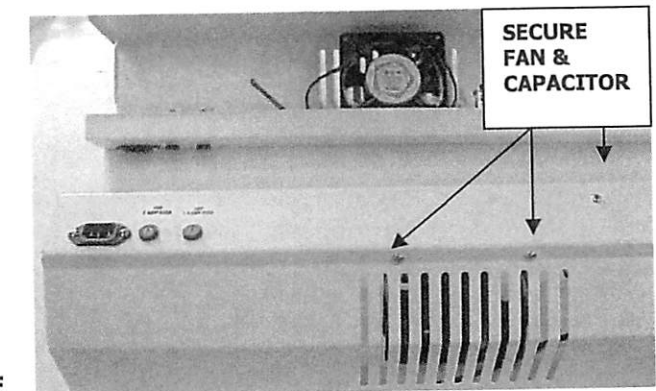
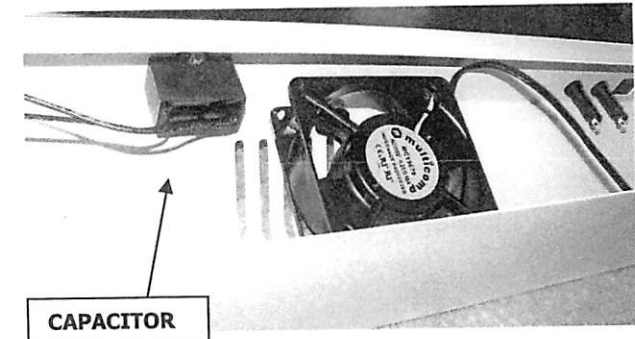
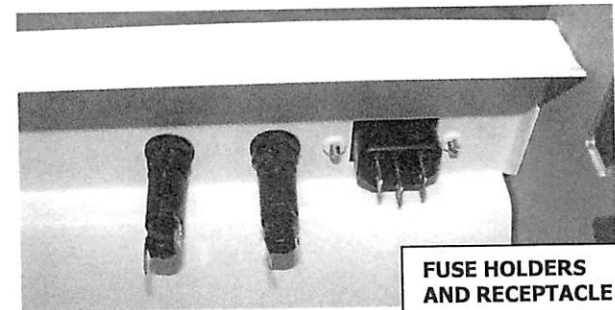
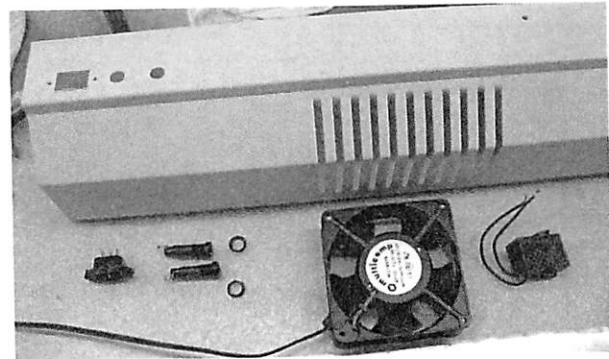
# EDUCATOR 110V CAPACITOR FOR PRM234 MERKLE-KORFF

- 1) THE EDUCATOR CAPACITOR IS INCLUDED WITH THE MERKLE-KORFF MOTOR (PRM234) LD12.
- 2) OPEN MOTOR BOX AND REMOVE THE CAPACITOR.
- 3) THE CAPACITOR WILL BE SECURED TO THE INNER BACK, BOTTOM MOTOR COVER USING AN 8-32 X 3/4 PH MS WITH AN 8-32 KEPS HEX NUT ON THE INNER COVER.
- 4) THE MOTOR WILL BE SECURED TO THE INNER LEFT SIDE PANEL.



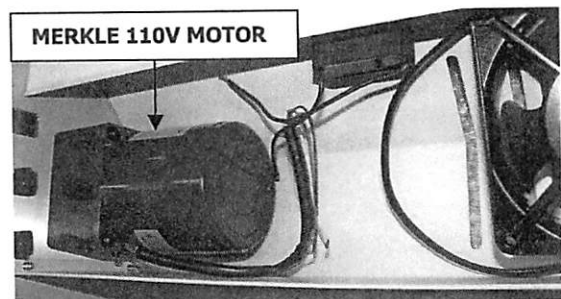
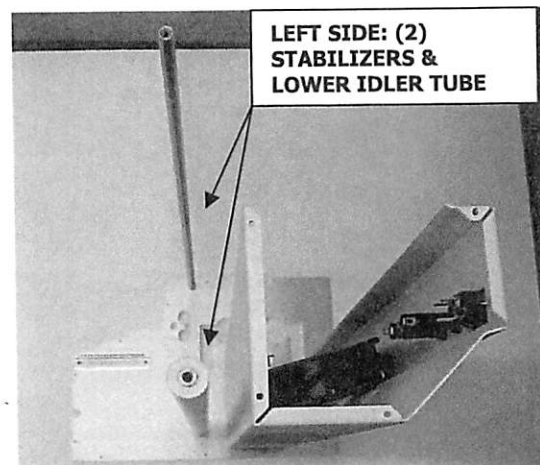
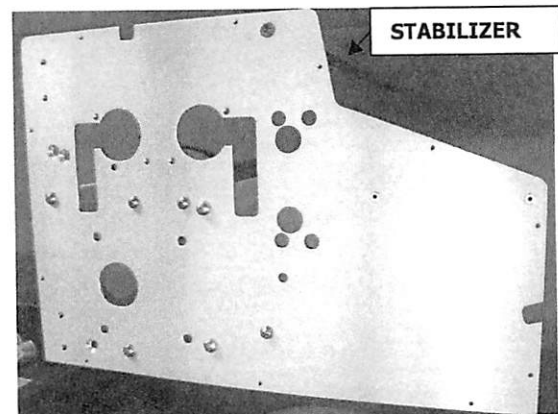
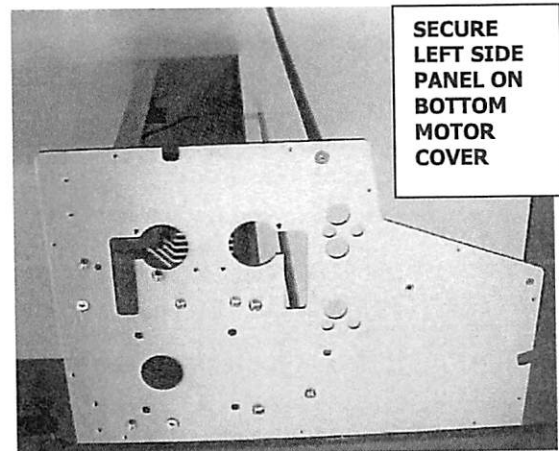
# EDUCATOR BOTTOM MOTOR COVER 110V 12/14

- 1) PLACE BOTTOM MOTOR COVER (LC25 093.4C) LD09 ON WORKTABLE, FACE RECEPTACLE OPENING UP, ON LEFT.
- 2) INSERT RECEPTACLE PANEL MOUNT (PRC117) AS08 WITH SINGLE GROUND TERMINAL POST FACING DOWNWARD. SECURE WITH (2) 6-32 X 5/8 TRMS INTO THREADED PEM NUTS.
- 3) INSERT (2) FUSE HOLDERS (PRF110) LD11 WITH TERMINAL POST FACING INWARD ON BOTTOM MOTOR COVER. BEND POSTS IN LINE WITH HOLDER. THREAD NUT ON FUSE HOLDER WITH FLAT SIDE OF NUT BY MOTOR COVER.
- 4) FROM LD11/AS07 INSERT A 3 AMP LITTLEFUSE (PRF127) INTO CARRIER. PUT CARRIER IN FUSE HOLDER, BY RECEPTACLE MOUNT. INSERT 1 1/2 AMP LITTLEFUSE (PRF128) INTO CARRIER AND INSERT FUSE HOLDER BY LOUVERS. SECURE CARRIERS WITH SLOTTED SCREWDRIVER, GENTLY INWARD AND QUARTER TURN RIGHT.
- 5) ADHERE "USE 3 AMP FUSE ONLY" LABEL (LAB09) LDB2 ABOVE 3 AMP FUSE AND "USE 1.5 AMP FUSE ONLY" (LAB07) LDB2 ABOVE 1 1/2 AMP FUSE.
- 6) TERMINATE THE FAN CORD (PRF116) LD03 ON THE AXIAL FAN (PRF133) LD01. ORIENT FAN WITH AIRFLOW ARROW *INWARD* AND FAN CORD FACING FUSES. SECURE FAN OVER LOUVERS ALONG BACK OF MACHINE. USE (2) 10 X 1/2 PH SMS.
- 7) FOR 110V ED USE CAPACITOR WITH MOTOR (PRM234). FOR 220v USE (PRM229B) LD02. SECURE EITHER CAPACITOR WITH BRACKET UPWARD, ALONG INSIDE OF MOTOR COVER. USE A 10-32 X 3/8 RH MS ON OUTSIDE AND #10 KEPS NUT ON INSIDE. TIGHTEN WITH WRENCH.
- 8) ADHERE A MADE IN AMERICA LABEL (LAB06) LDB2 ABOVE RECEPTACLE.

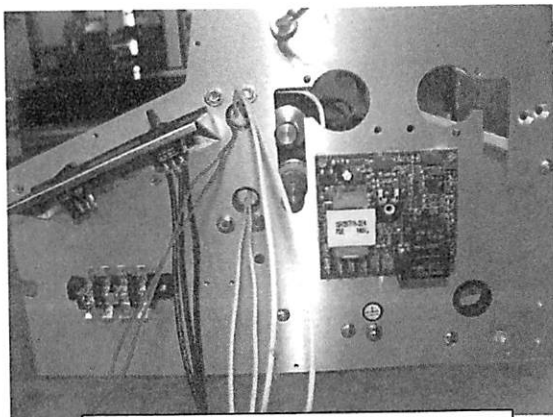
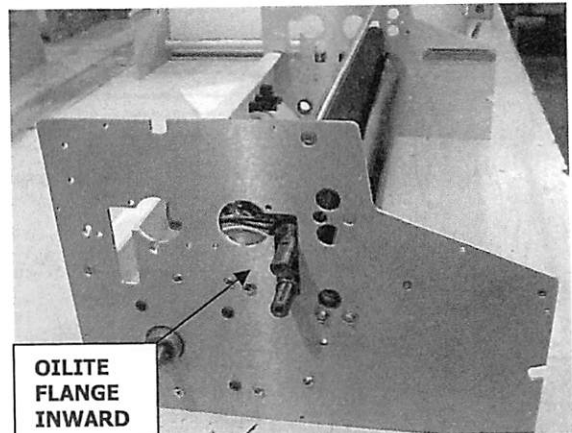
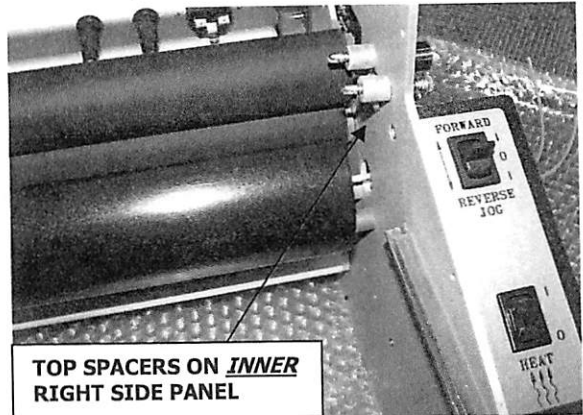
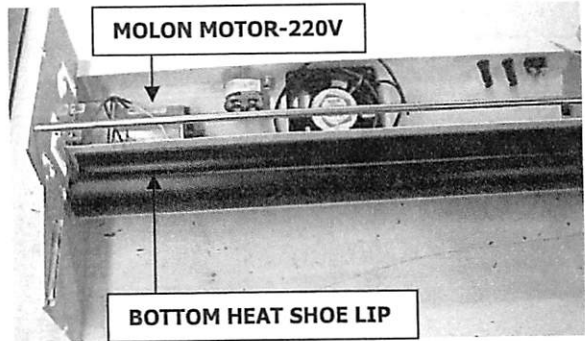


# EDUCATOR CHASSIS ASSEMBLY 2014

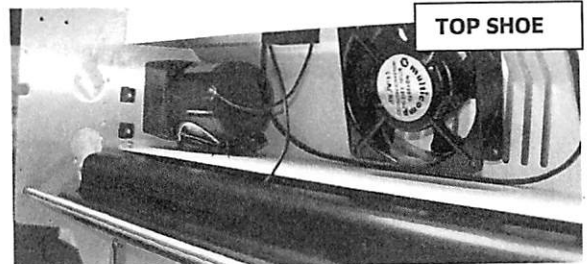
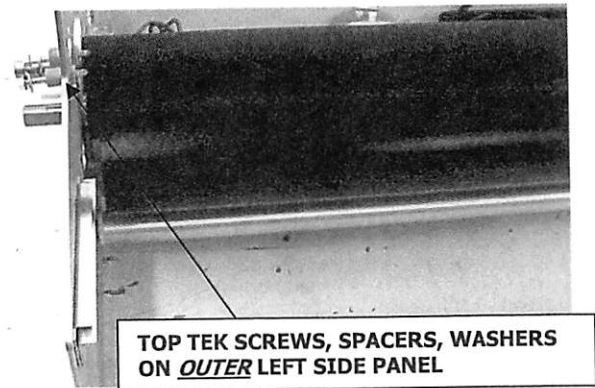
- 1) SECURE LEFT SIDE PANEL ASSEMBLY TO LEFT SIDE OF BOTTOM MOTOR COVER ASSEMBLY (OPPOSITE FUSE SIDE). USE (4) 10 X 1/2 PH SMS IN ALIGNED HOLES, INCLUDING (2) *COUNTERSUNK* HOLES.
- 2) SECURE (2) STABILIZERS (LC25 011.4A) LD12. USE A 10-32 X 3/8 FH MS ON THE TOP STABILIZER AND A 10-32 X 3/8 RH MS ON THE BOTTOM STABILIZER.
- 3) FROM LD12 PRESS (2) NYLON IDLER BEARINGS (LC25 009.4) INTO ENDS OF A 25" IDLER TUBE (LC25 008.4). SLIDE IDLER TUBE OVER BOTTOM STABILIZER. *IDLER TUBE MUST SPIN EASILY*. REAM NYLON IDLER BEARINGS IF NECESSARY.
- 4) ATTACH THE RIGHT SIDE PANEL ASSEMBLY TO THE RIGHT SIDE OF THE BOTTOM MOTOR COVER WITH (4) 10 X 1/2 PH SMS IN ALIGNED HOLES, INCLUDING (2) *COUNTERSUNK* HOLES.
- 5) PLACE FRAME ON TABLE WITH FRONT FACING YOU. INSERT MERKLE-KORFF MOLON MOTOR (PRM234) LD12 FOR 110V OR MOLON MOTOR (PRM229A) AS23 FOR 220V THROUGH LEFT SIDE PANEL. SECURE MOTOR WITH (4) 10-32 x 1/2 BSHS AND (1) OUTER, TOP REAR #10 STAR WASHER.
- 6) ON LEFT SIDE PANEL SLIDE (2) *LONGER*, LEFT HEAT SHOE SPACERS (LC25 231.4) LD12 INTO BOTTOM SPACER HOLES. INSERT (2) 8 X 1 1/4 HEX WASHERHEAD TEK SCREWS EACH WITH A #8 FLAT WASHER THROUGH SPACERS.
- 7) ON RIGHT SIDE USE (2) *SHORTER*, RIGHT HEAT SHOE SPACERS (LC25 232.4) LD12 ON *INSIDE* OF PANEL HELD WITH (2) 8 X 1 1/4 HEX WASHERHEAD TEK SCREWS AND (2) #8 FLAT WASHER.
- 8) HOLD BOTTOM HEAT SHOE IN LEFT HAND. EXIT HEATER WIRES THROUGH RIGHT PANEL, LOWER FRONT OPENING.



- 9) ON RIGHT CAREFULLY START TEK SCREWS INTO HEAT SHOE SCREW CAVITY BY HAND, HOLD HEAT SHOE LEVEL. USE PNEUMATIC DRIVER TO TIGHTEN SCREWS  $\frac{3}{4}$  WAY IN. CHANGE HANDS HOLDING HEAT SHOE AND START LEFT SIDE TEK SCREWS BY HAND. TIGHTEN WITH PNEUMATIC DRIVER. FINISH TIGHTENING RIGHT SIDE.
- 10) CLEAN (2) 25" LIGHT DUTY RUBBER ROLLS (0500-040.4) RUBBER ROLL BOX WITH DAMP CLOTH. PLACE OILITE BEARINGS (PRB048) AS08 OVER SHAFTS OF ONE RUBBER ROLL, FLANGE INWARD. INSERT JOURNALS BETWEEN FRONT SIDE PANEL CHANNEL, FLANGE INWARD, SNAP RING GROOVE ON MOTOR SIDE. ROLL FITS IN BOTTOM HEAT SHOE LIP. INSERT TOP, FRONT ROLL *WITHOUT* BEARINGS, SNAP RING GROOVE ON MOTOR SIDE, OVER FIRST RUBBER ROLL.
- 11) PREPARE THE SAME SPACERS, SCREWS AND WASHERS FOR TOP HEAT SHOE. EXIT TOP HEATER AND SENSOR WIRES THROUGH UPPER HOLE ON RIGHT SIDE. SECURE BOTTOM HEAT SHOE WITH PNEUMATIC DRIVER.
- 12) ON OUTER RIGHT SIDE PANEL SECURE A TRAKSTAT HEAT CONTROL (PRC212) LD03 TO STANDOFFS WITH TERMINAL POSTS DOWNWARD. USE (4) 4-40 X  $\frac{1}{4}$  FH.



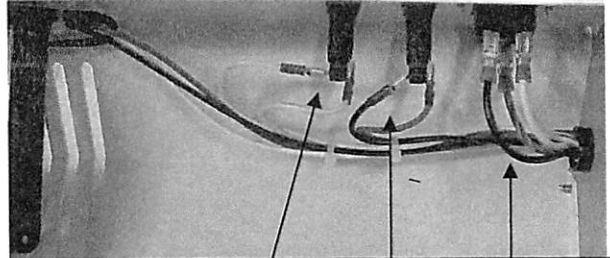
RIGHT SIDE: HEATER, SENSOR WIRES & TRAKSTAT HEAT CONTROL



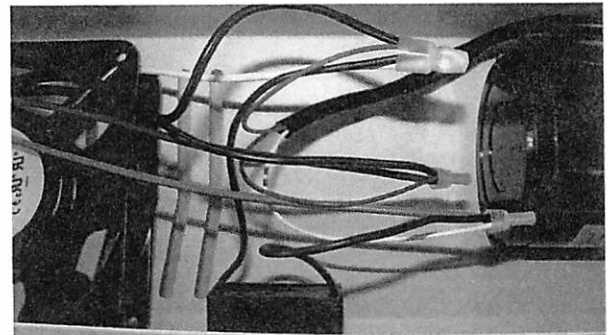
# EDUCATOR WIRING 110 VOLT

## MERKLE-KORFF MOTOR 9/2014

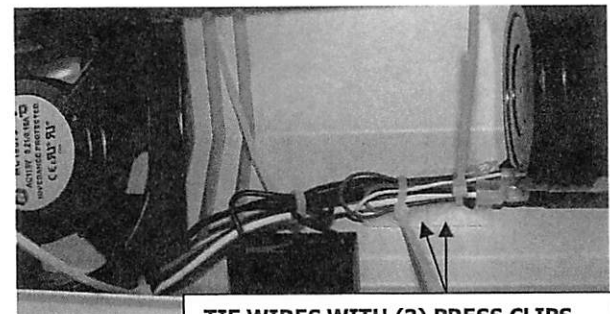
- 1) WITH REAR OF CHASSIS FACING YOU ON A WORK CART, FOLLOW WIRING DIAGRAM FOR 110 VOLT EDUCATOR. PHOTOS ILLUSTRATE EDUCATOR 110V WIRING WITH HARNESS (PRW342) LD04.
- 2) USE 14 GAURE WIRES ON RECEPTACLE: WHITE WIRE BY SIDE PANEL AND BLACK WIRE INWARD, GREEN GROUND WIRE ON LOWER POST.
- 3) WIRE 1.5 AMP FUSE WITH SMALLER FEMALE ENDS ON YELLOW WIRES. WIRE 3 AMP FUSE WITH SMALLER FEMALE END ON BLUE WIRE AND WITH THE LONGER BLACK WIRE WITH AN OPEN END.
- 4) TRIM AND DISCARD EXCESS FAN WIRE LEAVING 15" ON FAN. SPLIT FAN WIRE END APPROXIMATELY 4". STRIP ENDS TO CLOSE CAP WITH OTHER WIRES.
- 5) TWIST (3) WIRES TOGETHER AND CLOSE CAP (PRT289) MOTOR RED WIRE, OPEN ENDED LONG BLACK WIRE (JUMPER ON OTHER END) AND ONE FAN LEAD.
- 6) USE LARGER CLOSE CAP (PRT290) AND TWIST ENDS FROM MOTOR BLUE WIRE, LONG OPEN ENDED WHITE WIRE, REMAINING FAN LEAD AND ONE OF THE CAPACITOR LEADS. FOUR WIRES ARE INCLUDED IN THIS CLOSE CAP.
- 7) TWIST AND CLOSE CAP (PRT289) THE MOTOR WHITE WIRE, LONG RED WIRE, AND REMAINING CAPACITOR WIRE.
- 8) TIE FAN, CAPACATOR, MOTOR WIRES. EXIT BOTTOM MOTOR COVER WIRES THROUGH SNAP BUSHING.
- 9) TURN EDUCATOR ON CART SO WIRES FACE YOU AND SECURE GROUND WIRE WITH A #10 STAR WASHER AND ACORN NUT.



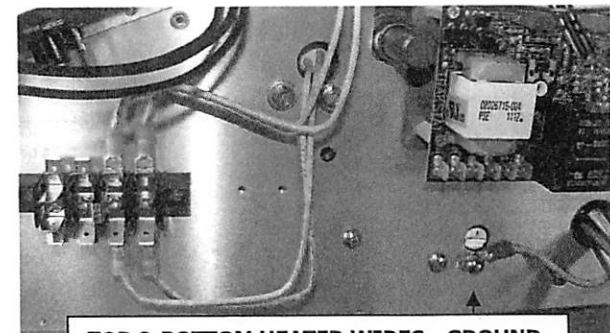
1.5 AMP FUSE, 3 AMP FUSE ~ RECEPTACLE



FAN, MERKLE-KORFF CAPACATOR & MOTOR



TIE WIRES WITH (2) PRESS CLIPS



TOP & BOTTOM HEATER WIRES - GROUND

9) SECURE GROUND WIRE WITH A #10 STAR WASHER BETWEEN PANEL AND RING CONNECTOR. USE AN ACORN NUT.

10) WIRE TRAKSTAT HEAT CONTROL: RED 14 GAUGE ON T7, ORANGE 14 GAUGE ON T6, TRIMMED SENSOR WIRES WITH (PRT302) ON T14 AND T15, DOUBLED BLACK WIRE WITH FIF BLUE FEMALE ON T3 AND ORANGE 18 GAUGE ON T2.

11) MEASURE TOP HEATER WIRES TO TOP REAR 180 DEGREE TERMINALS AND BOTTOM HEATER WIRES TO BOTTOM REAR 180 TERMINALS. CRIMP BLUE (PRT292) FEMALES ON HEATER WIRES AND SECURE TO TERMINAL POSTS.

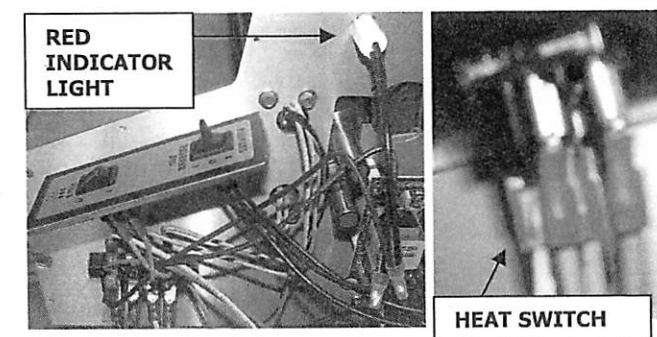
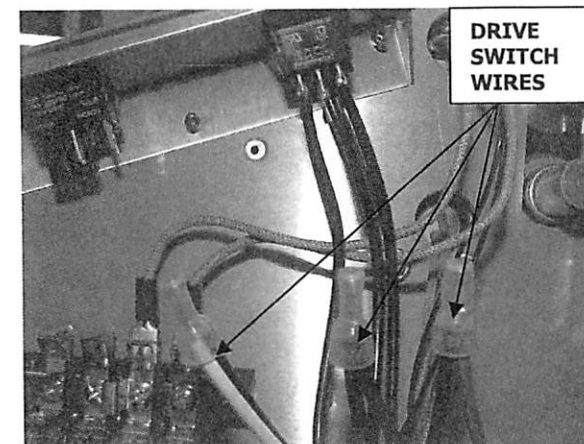
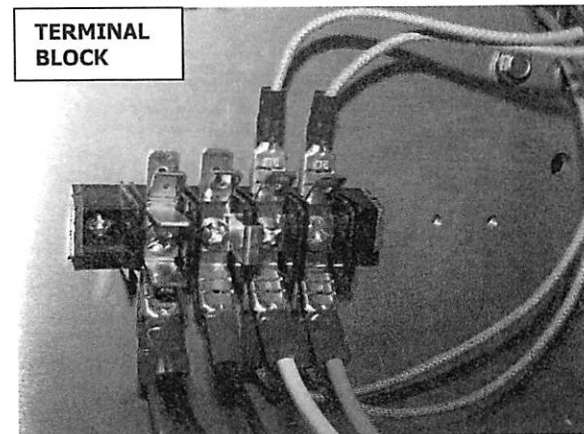
12) SECURE THE RED WIRES FROM T7 TO LOWER FRONT 180 DEGREE POST. ON THE LOWER 45 DEGREE POSTS SECURE THE ORANGE FROM T6 TO REAR, WHITE FROM RECEPTACLE BY ORANGE, BLACK FROM DOUBLED WIRE ON T3, AND BLACK FROM RECEPTACLE ON FRONT.

13) USE SMALL CLEAR CAP TO UNITE THE FORWARD/REVERSE SWITCH WIRES WITH OPEN ENDED WIRES THROUGH SNAP BUSHING: RIGHT/REAR WITH RED FROM CAPACITOR, MIDDLE WITH BLACK FROM FUSE AND LEFT/FRONT WITH WHITE FROM CAPACITOR.

14) USE SMALL CLEAR CAP TO UNITE RED INDICATOR LIGHT WITH OPEN ENED BLACK HARNESS BAG WIRES. THE FEMALE ENDS OF THE BLACK WIRES CONNECT TO TERMINAL BLOCK ON FRONT UPPER 90 DEGREE POST AND UPPER 45 DEGREE ON SECOND SCREW.

15) WIRE HEAT SWITCH WITH YELLOW ON FRONT INNER POST, ORANGE ON REAR INNER POST, SHORT GRAY ON FRONT OUTER POST AND SHORT BROWN ON REAR OUTER POST.

16) WIRE BLUE FROM FUSE TO UPPER FRONT 45 DEGREE POST AND YELLOW FROM FUSE TO UPPER FRONT 180 DEGREE.

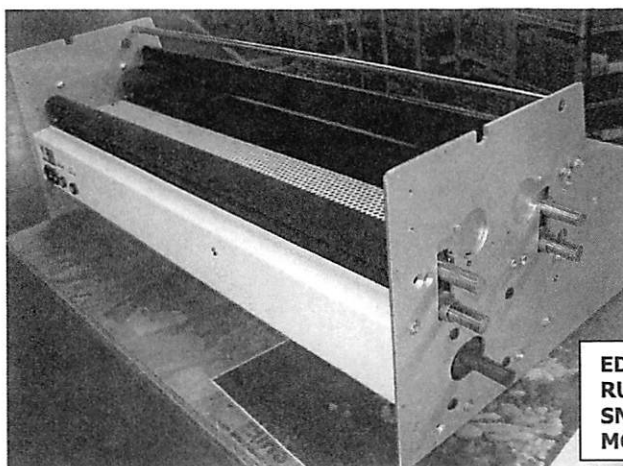
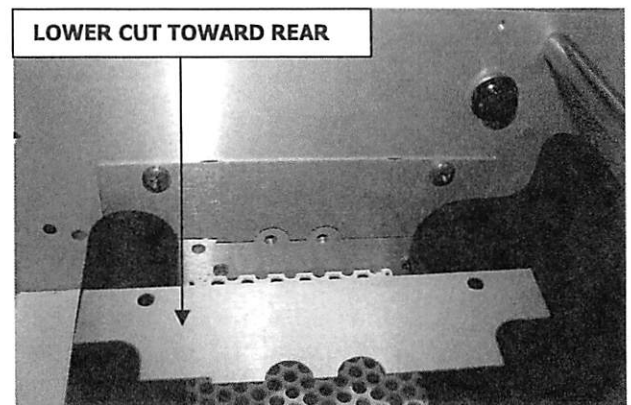
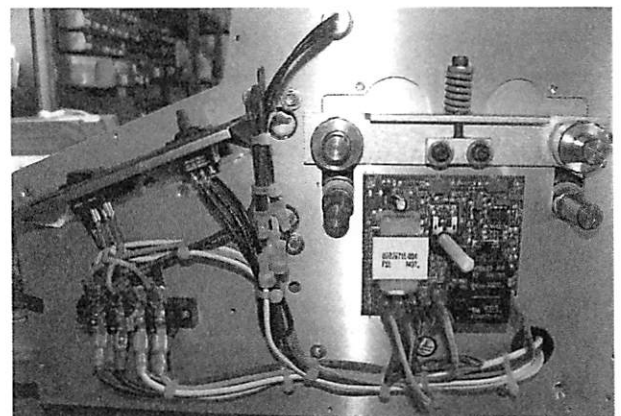
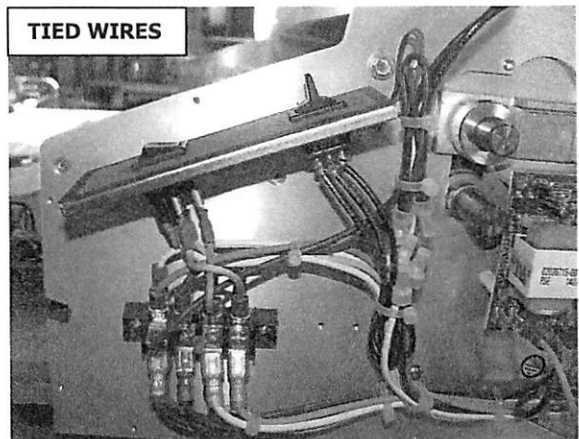


18) **PLUG IN AND TEST MACHINE FOR MOTOR SHAFT DIRECTION AND HEAT LIGHT FUNCTION. STOP WHEN FLAT OF MOTOR SHAFT IS VERTICAL TO REAR.**

19) **WIPE A RUBBER ROLL WITH DAMP CLOTH AND ADD A BEARINGS (PRB048) LD11/AS08 ON EACH JOURNAL WITH FLANGE INWARD AND SNAP RING GROOVE ON MOTOR SIDE. INSERT RUBBER ROLL IN REAR SIDE PANEL OPENING, BEARINGS INWARD. CLEAN A SECOND RUBBER ROLL AND PLACE OVER FIRST ROLL *WITHOUT* BEARINGS.**

20) **POSITION TOP MOTOR COVER (LC25 092.4) LD04 OVER TINNEMAN BRACKETS. DO NOT SCRATCH RUBBER ROLLS. SLIDE COVER TOWARD REAR AND SECURE WITH (4) 8 X 3/8 RH SMS.**

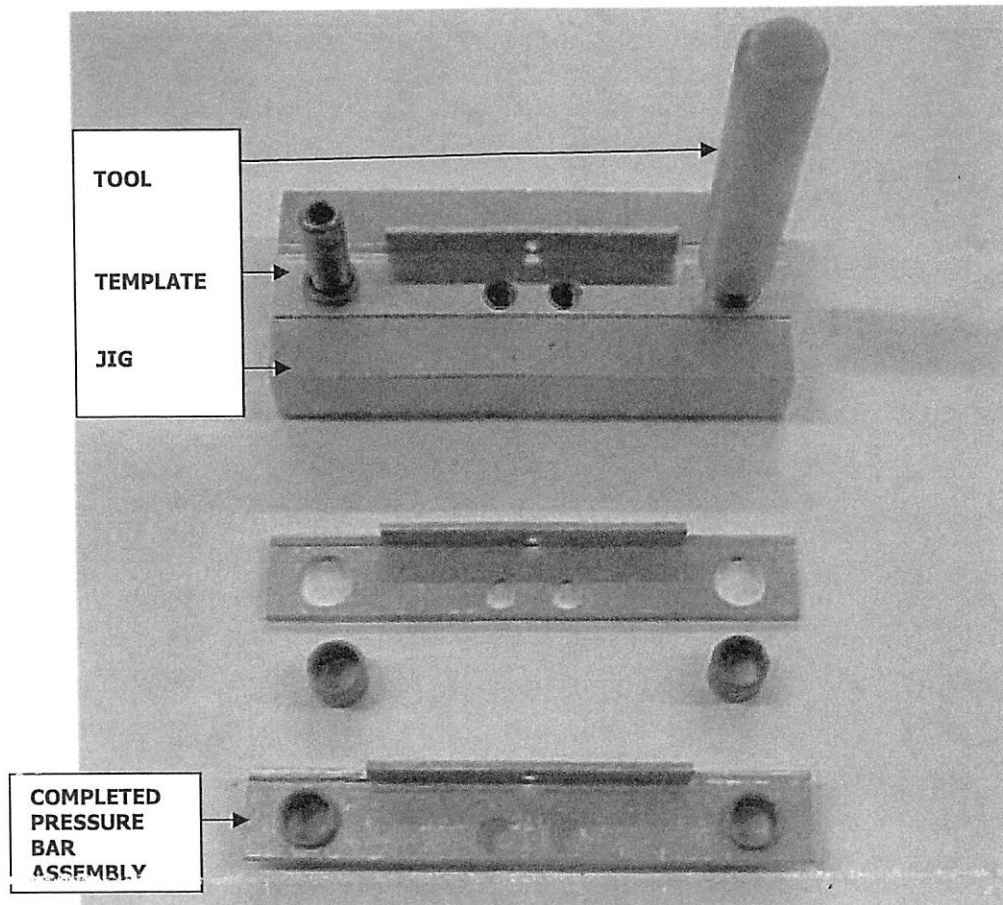
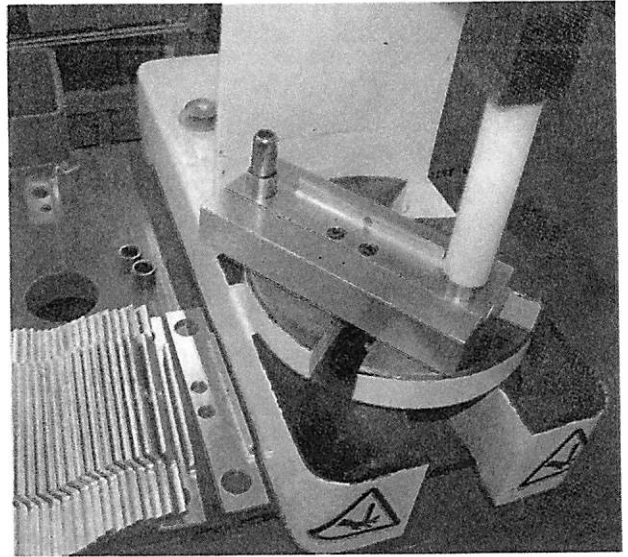
21) **ADD (2) SAFETY PLATES (LC25 034.4) LD13 ON BOTH SIDES OF TOP MOTOR COVER WITH NOTCH DOWNWARD AND BOTTOM HIGHER CUT OF SAFETY PLATE TOWARD REAR OF MACHINE. USE (4) 10-32 X 1/4 PANHEAD SCREWS.**



EDUCATOR LEFT SIDE:  
RUBBER ROLL JOURNAL  
SNAP RING GROOVE &  
MOTOR SHAFT

# EDUCATOR PRESSURE BAR ASSEMBLY

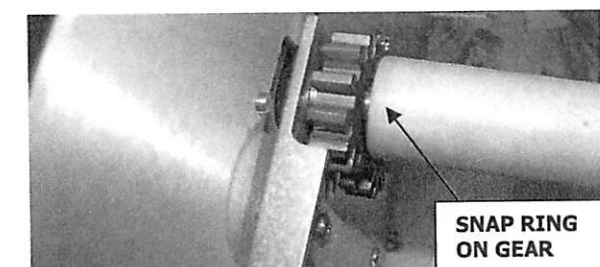
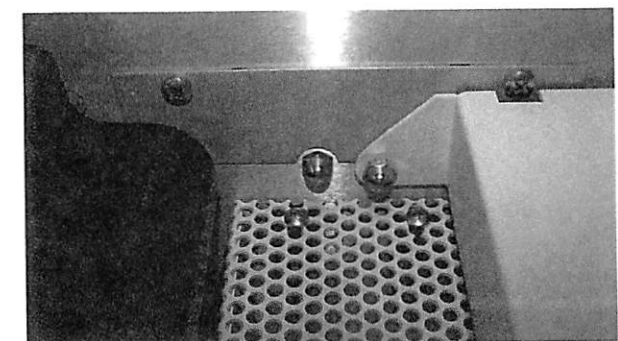
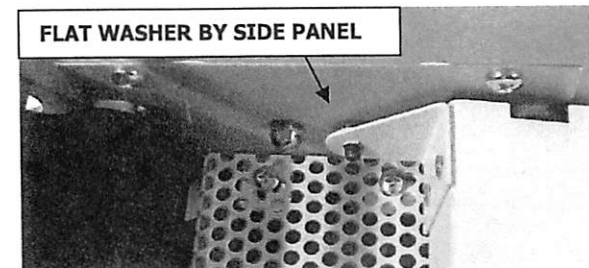
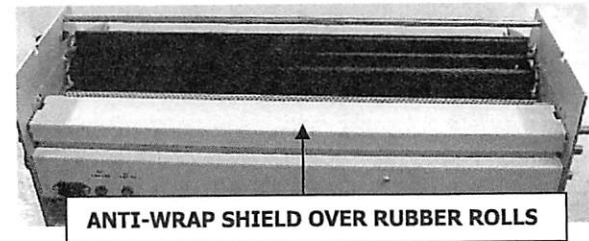
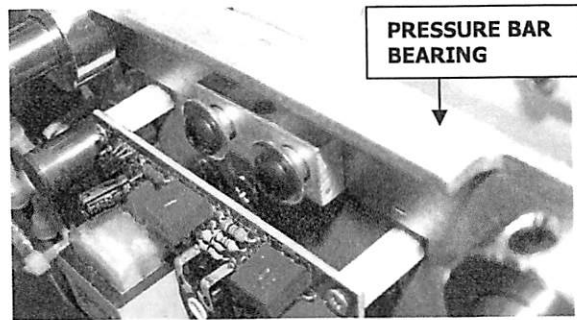
- 1) THE EDUCATOR USES (2) PRESSURE BARS (LC25 033.4) LD13. ONE FOR THE RIGHT SIDE AND ONE FOR THE LEFT SIDE.
- 2) ARBOR PRESS (2) OILITE BEARINGS (PRB043) AS08 INTO END OPENINGS ON BOTH PRESSURE BARS FROM BREAK SIDE. USE JIG, TEMPLATE AND TOOLS TO MEASURE DEPTH.





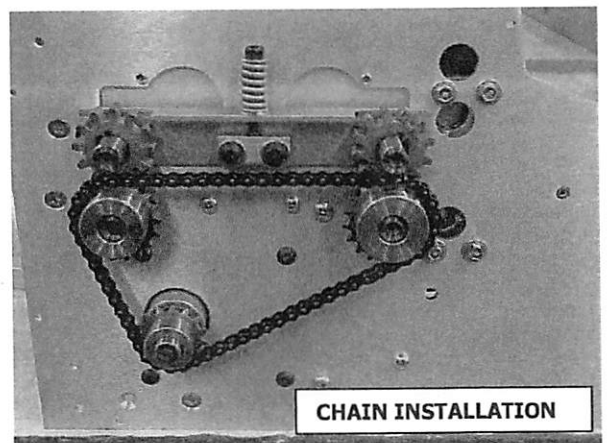
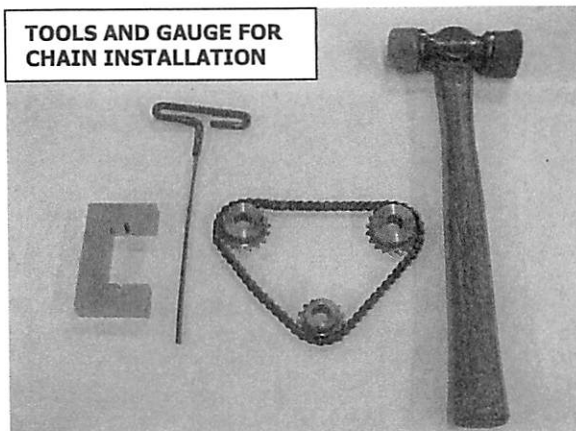
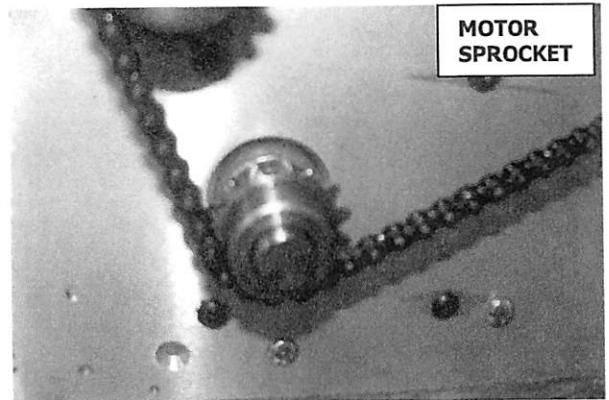
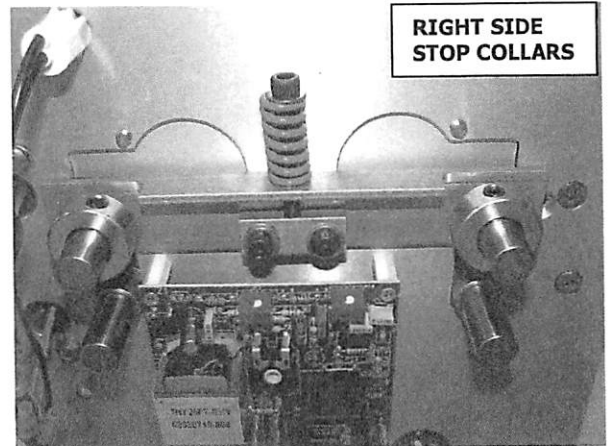
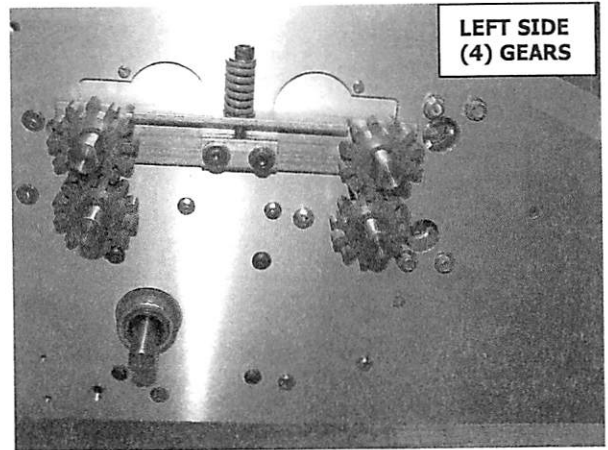
# EDUCATOR 110V GEARING 2014

- 1) SET THE BACK OF EDUCATOR TOWARD YOU AND **JIGGLE** THE PRESSURE BAR BEARINGS OVER THE TOP RUBBER ROLL JOURNALS, WITH THREADED BREAK UPWARD. SNUG TIGHT ON SIDE PANEL.
- 2) PLACE A #10 FLAT WASHER ON EACH OF (4) 10-32 X 1 BSH. ADD A SPRING HOLDER SPACER (PRS202) LD05 ONTO EACH. INSERT THE (2) BUTTONHEAD UNITS EACH INTO (2) RUBBER ROLL SPRING HOLDERS (LC25 032.4) LD05. THREAD SPRING HOLDER SCREWS THROUGH PRESSURE BARS **FLUSH** TO INNER SIDE PANELS. **TIGHTEN FRONT SPRING HOLDER BSH ONLY.**
- 3) WITH THE ANTI-WRAP SHIELD (LC25 012.4B) LD04 OVER THE REAR RUBBER ROLLS AND THE BRACKETS FACING THE FRONT, THREAD THE (2) REAR BSH ON THE RUBBER ROLL SPRING HOLDERS, JUST PAST THE INNER SIDE PANEL AND ADD A #10 FLAT WASHER TO THE THREADS. THEN CONTINUE TO THREAD THE BSH THROUGH ANTI-WRAP BRACKET. START (4) 10-32 ACORN NUTS ON RUBBER ROLL SPRING HOLDER SCREWS. SECURE BACK SECTION OF ANTI-WRAP TO SIDE PANEL WITH (2) 10 X 1/2 PH SMS. TIGHTEN ACORN NUTS.
- 4) TAP (4) 12 TOOTH GEARS (PRG131) LD13 ONE EACH ONTO MOTOR SIDE RUBBER ROLL JOURNALS, ALIGNING FLAT SIDE OF GEAR AND JOURNAL. SECURE GEARS WITH (4) RETAINING RINGS (PRR191) LD05 IN JOURNAL GROVE. SNUG THE GEARS, JOURNALS, AND PRESSURE BARS. HOLD LEFT SIDE JOURNALS AND SNUG THE RIGHT SIDE.
- 5) ON RIGHT OR CONTROL SIDE **TOP JOURNALS ONLY** TIGHTEN (2) 1/2 SHAFT COLLARS (PRC096) AS07/LD05 FLUSH WITH PRESSURE BAR, ONE PER JOURNAL.
- 6) TAKE (2) 10-32 X 1 3/4 SHCS, PUT A #10 FLAT WASHER, AN ORANGE HEFTY SPRING (LC25 031.4) LD05 AND



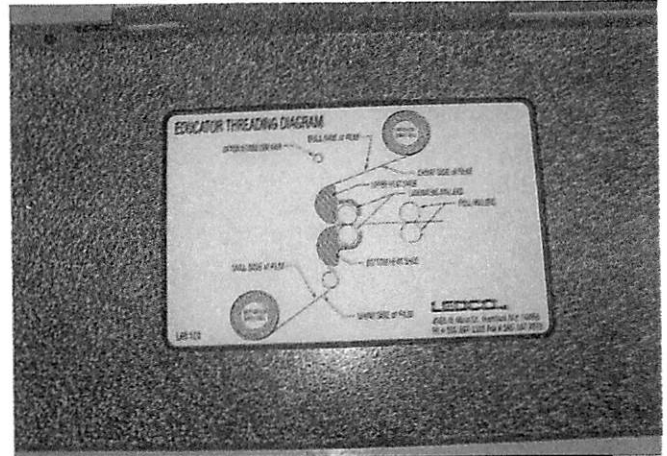
ANOTHER #10 FLAT WASHER ON EACH. ADD A DROP OF LOCTITE TO THE END THREADS AND SNUG DOWN THROUGH PRESSURE BAR INTO RUBBER ROLL SPRING HOLDER AFTER SPRING IS TOUCHING BOTH WASHERS, TIGHTEN 13 HALF TURNS ON LEFT/GEAR SIDE AND 10 HALF TURNS ON RIGHT/CONTROL SIDE.

- 7) TURN MACHINE SO GEARS ARE FACING YOU. ALIGN FLAT SIDE OF LOWER JOURNALS OUTWARD. SEAT ENDLESS CHAIN (PRC083.A) LD13 ON A 25B19 SPROCKET (PRS251) LD13, WITH *ALL HUBS OUTWARD*. SLIDE SPROCKET OVER RIGHT/FRONT LOWER RUBBER ROLL JOURNAL AND ALIGN SET SCREW WITH FLAT OF SHAFT, *DON'T TIGHTEN YET*. SEAT CHAIN ON 25B15 SPROCKET (PRS2455) LD13 AND SLIDE ON MOTOR JOURNAL, ALIGNING SET SCREW WITH FLAT OF JOURNAL. SEAT CHAIN ON A 25B18 SPROCKET (PRS249) LD13 AND TAP ONTO BOTTOM BACK RUBBER ROLL JOURNAL ALIGNED WITH FLAT SIDE.
- 8) USE GAUGE ON ALL SPROCKET TEETH AND TIGHTEN SET SCREWS ON FLAT OF JOURNALS. TIGHTEN MOTOR SET SCREW LAST. RETIGHTEN SCREWS HOLDING MOTOR TO SIDE PANEL.

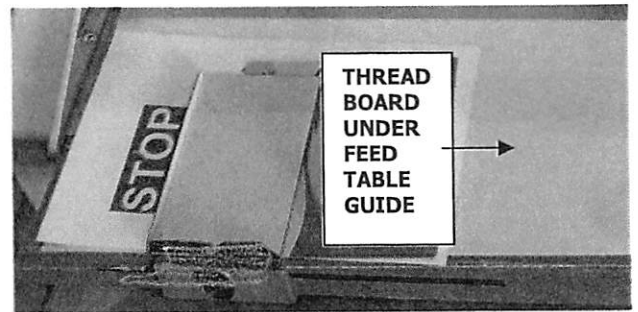


# EDUCATOR FEED TABLE ASSEMBLY

- 1) FEED TABLE PARTS, JIGS AND FASTENERS ARE IN LD00. PLACE FEED TABLE (0500 096.4) OVER JIG WITH BREAK DOWNWARD. TAP IN (2) DRIVE SCREWS (2X1/4). HOLD DRIVE SCREWS WITH NEEDLE NOSE PLIERS WHILE YOU TAP INTO FEED TABLE HOLES.
- 2) PEEL BACK PLASTIC ON LEFT FEED TABLE GUIDE (0285 097.4L) AND ATTACH TO FEED TABLE TROUGH FRONT LEFT CHANNEL WITH FEED TABLE GUIDE STABILIZER (0285 097.4S) OUTWARD AND FEED TABLE KNOB NUT (0285 099.4) ON INSIDE. SECURE KNOB NUT WITH A 1/2" SPI KNOB (PRK177) AS08 AND #10 FLAT WASHER THROUGH CHANNEL.
- 3) FROM LD07 SLIDE WARRANTY CARD (XS60) AND DIRECTIONS UNDER FEED TABLE GUIDE. ADD THREAD BOARD (XS100) LD00.
- 4) CENTER AND ADHERE TO FEED TABLE UNDERSIDE EDUCATOR THREADING LABEL (LAB115) LD09.



ADHERE LABEL TO UNDERSIDE OF FEED TABLE



COMPLETED FEED TABLE WITH GUIDE AND STABILIZER

DRIVE SCREW HOLES

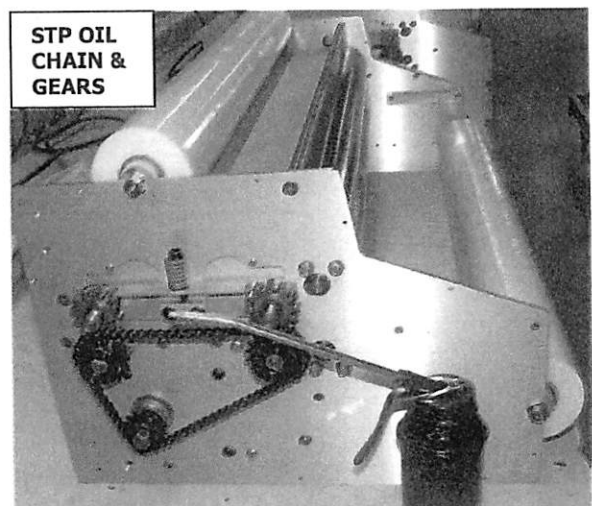
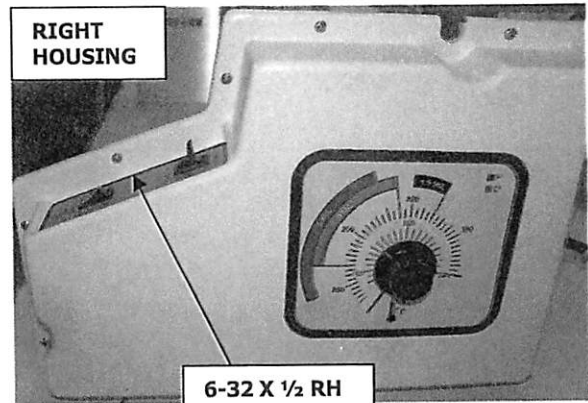
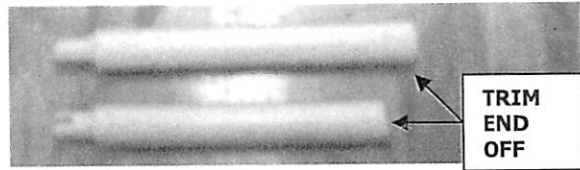
ASSEMBLY PARTS & TOOLS



# EDUCATOR 110V TESTING 9/2011

1.875"

- 1) TRIM OFF THE LINED END ON A POTENTIOMETER STEM (PRC213) LD05 AND INSERT STEM INTO TRAKSTAT.
- 2) ADHERE AN EDUCATOR TEMPERATURE DECAL (LAB55B) LD05 CENTERED OVER POTENTIOMETER EXTENSION OPENING AND SLIDE RIGHT HOUSING (LC25 094.4R) LD06 ONTO SIDE PANEL. SECURE HOUSING WITH (10) 6-32 X 3/16 PH AND (1) 6-32 X 1/2 RH LOCATED IN SAFETY SHIELD POSITION.
- 3) ROTATE POTENTIOMETER EXTENSION TO FULL LEFT AND ADD CONTROL KNOB (PRC213) LD05 ALIGNING INDICATOR MARK ON KNOB WITH LOWEST SETTING ON DECAL. SECURE STEM WITH AN 8-32 X 3/8 SET SCREW.
- 4) SET TEMPERATURE TO 260F DEGREE.
- 5) PLUG EDUCATOR POWER CORD INTO 110 VOLT OUTLET. TURN ON LAMINATOR, RED INDICATOR LIGHT COMES ON AND FAN SHOULD TURN. CHECK CHAIN DIRECTION AND FUNCTION OF HEAT SWITCH AND LIGHT.
- 6) AS CHAIN TURNS ADD A LIGHT COATING OF STP OIL TO CHAIN AND GEARS.
- 7) FILL OUT PAPERWORK: "FINAL TEST & INSPECTION CHECKLIST," CUSTOMER "TEST LAMINATE" AND JOB SHEET WITH ASSEMBLER'S NUMBER AND DATE. HEAT LIGHT GOES OFF WHEN SET TEMP OF 260F IS REACHED. CHECK SHOE TEMP ENDS AND CENTER WITH PYROMETER.
- 8) LOAD FILM ONTO SUPPLY ROLLS. THE SHINY SIDE OF THE FILM GOES NEXT TO HEAT SHOE. THE SUPPLY ROLL KNOBS ARE ON RIGHT SIDE. USE A FEED BOARD TO THREAD FILMS THROUGH MACHINE. WATCH FILM AS IT EXITS, THE FAN CAN BLOW IT BACK TO A WRAP-AROUND.
- 9) TURN OFF EDUCATOR, WAIT ABOUT 15 SECONDS, RESTART. STOP AGAIN, CUT



FILM AND CHECK DWELL LINE FOR EVENNESS AND ADHESION. IF DWELL EDGES ARE UNEVEN, TIGHTEN SPRING TENSION TO MATCH SIDE MOST SIMILAR TO CENTER OF DWELL LINE.

- 10) LAMINATE CUSTOMER'S TEST MATERIAL. CHECK FLATNESS AND EDGE SEAL. TRIM LAMINATES, LEAVING ABOUT 1/8" EDGE.

- 11) TURN OFF HEAT AND UNLOAD FILM. ALLOW HEAT SHOES TO COOL WHILE RUNNING WITH FAN ON.

- 12) ADHERE EDUCATOR LABEL (LAB56) LD05 ON THE DEPRESSED SECTION OF THE OUTER LEFT HOUSING (0285 094.4L) LD06. SECURE HOUSING TO SIDE PANEL USING (10) 6-32 X 3/16 PH AND (1) 6-32 X 1/2 RH POSITIONED TO HOLD SAFETY SHIELD.

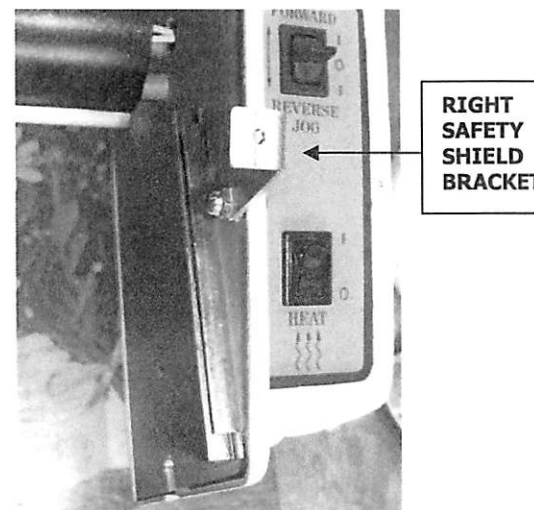
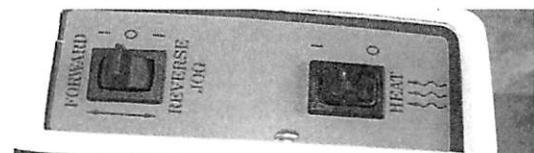
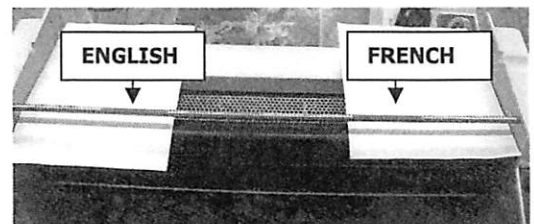
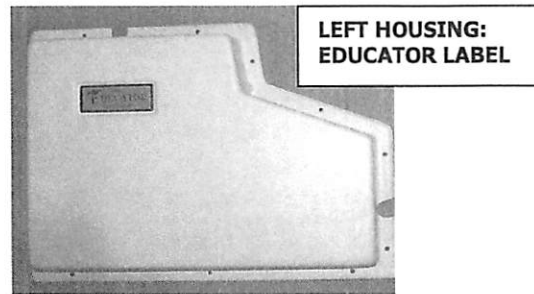
- 13) MEASURE AND ADHERE (2) RED "CAUTION" LABELS (LAB62 AND LAB62F) LD05 ONTO STABILIZER BAR ABOVE HEAT SHOES, FRENCH LABEL ON RIGHT.

- 14) PLACE A #6 FLAT WASHER ON EACH OF THE (2) 6-32 X 1/2 RH THREADS HOLDING HOUSING ON, FLUSH TO INNER SIDE PANEL. PLACE RIGHT SAFETY SHIELD BRACKET (0285 190.4R) LD06 ON THREADS. *THE LONGER SIDE OF THE BRACKET IS UPWARD*. ADD A DROP OF LOCTITE INTO (2) #6-32 ACORN NUTS. SECURE RIGHT SAFETY SHIELD BRACKET WHILE HOLDING IT UPRIGHT. USE A NUT DRIVER TO TIGHTEN ACORN NUT.

- 15) REPEAT THIS PROCEDURE ON LEFT SIDE WITH A LEFT SAFETY SHIELD BRACKET (0285 190.4L) LD06.

- 16) PEEL BACK COVERING ON THE DEEPER SET HOLES OF A 25" SAFETY SHIELD (4500 074.4) LD06. SECURE SAFETY SHIELD TO SAFETY SHIELD BRACKET WITH (2) 6-32 X 1/4 PH.

- 17) PEEL DOWN PLASTIC COVERING FROM SAFETY SHIELD. CENTER AND ADHERE AN INTERNATIONAL SYMBOL FOR "HOT" (LAB03) LD05, REPLACE PLASTIC.



LEFT SAFETY SHIELD BRACKET & SAFETY SHIELD

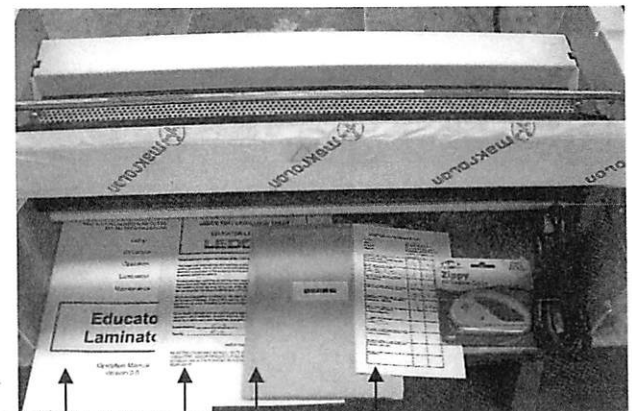
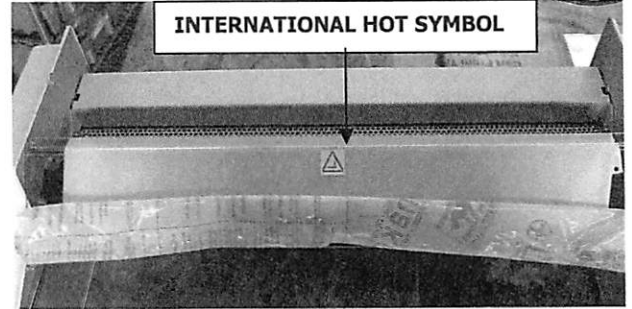
- 18) INSERT FEED TABLE ASSEMBLY BETWEEN FEED TABLE BRACKETS.
- 19) PLACE (2) SUPPLY ROLLS (LC25 002.5) LD06 IN SIDE PANEL NOTCHES.
- 20) PLACE CUSTOMER'S LAMINATED LEDCO TEST LAMINATE SHEET IN THE EDUCATOR MANUAL (XS58) LD06. PLACE ON FEED TABLE.
- 21) ADHERE AN EDUCATOR CD LABEL ONTO SHIPPING ENVELOPE AND INSERT EDUCATOR CD (CL01C) LD06. PLACE ON EDUCATOR MANUAL.
- 22) SET COMPLETED FINAL TEST & INSPECTION CHECKLIST AND LAMINATED JOB ON CD ENVELOPE.
- 23) SLIDE ZIPPY CUTTER (LC25 005.4) LD06 UNDER FEED TABLE GUIDE.
- 24) PLACE REMOVEABLE CORD (PRC118) LD06 ON FEED TABLE. PLACE SUPPLY ROLLS BETWEEN SIDE PANELS. STAGE FOR PACKING.



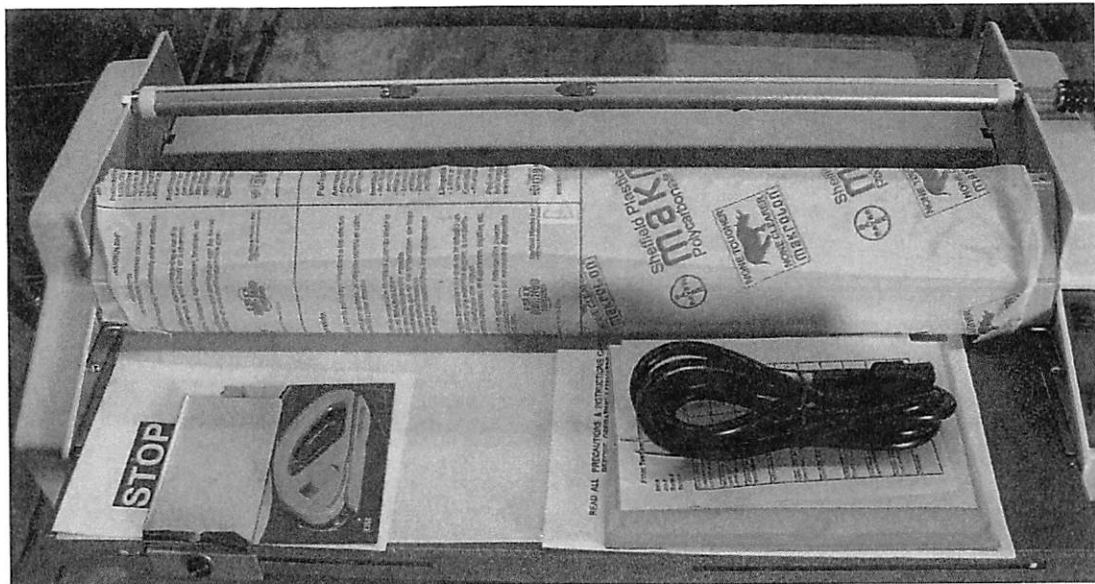
'CAUTION' LABELS IN ENGLISH & FRENCH



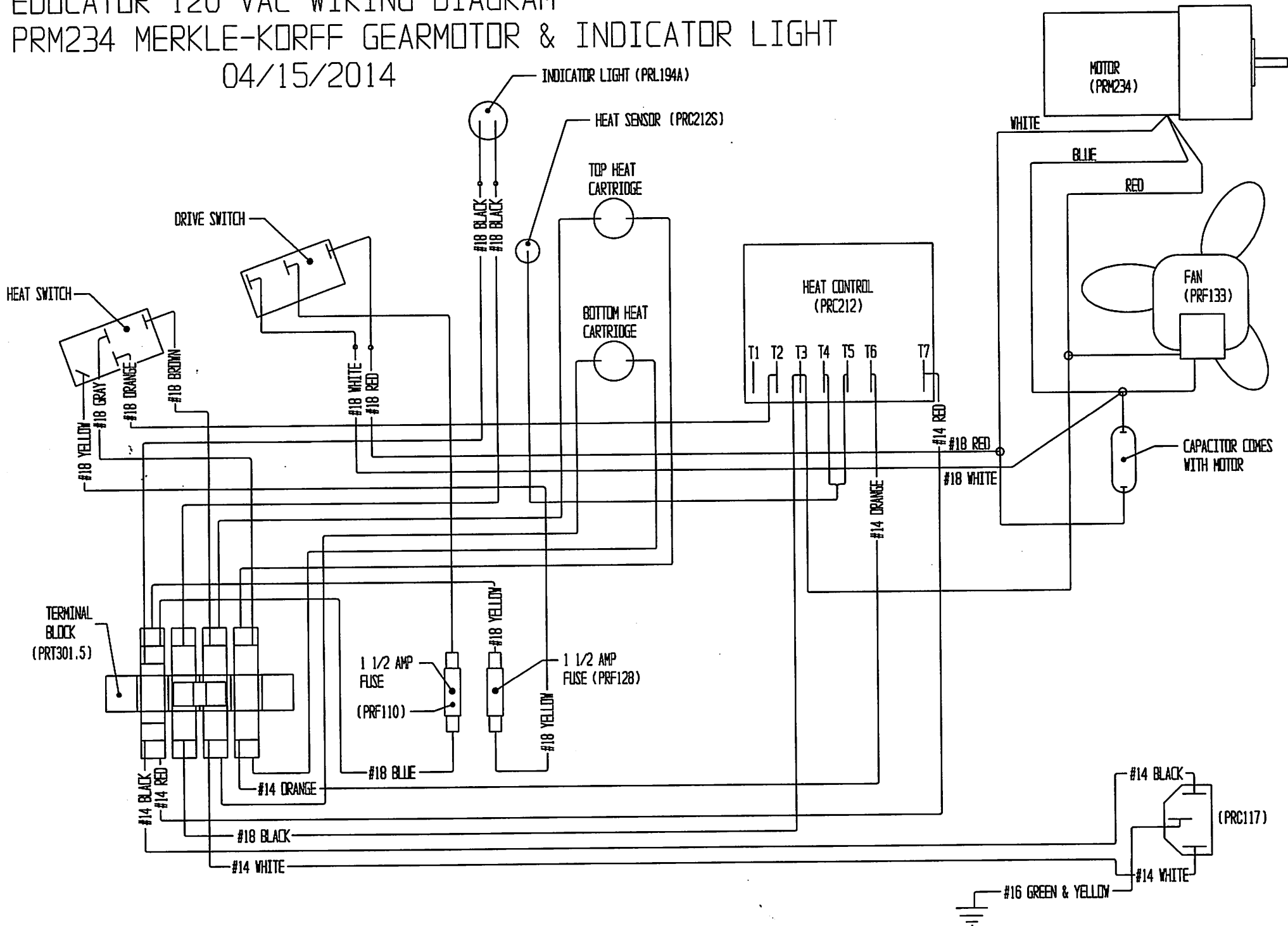
INTERNATIONAL HOT SYMBOL



MANUAL, CUST LAM, DVD, TEST CARD, ZIPPY CUTTER, CORD



# EDUCATOR 120 VAC WIRING DIAGRAM PRM234 MERKLE-KORFF GEARMOTOR & INDICATOR LIGHT 04/15/2014



# **EDUCATOR LAMINATOR**

**220 VOLT NRTL ADDENDUM**

**ASSEMBLY  
PROCEDURES**

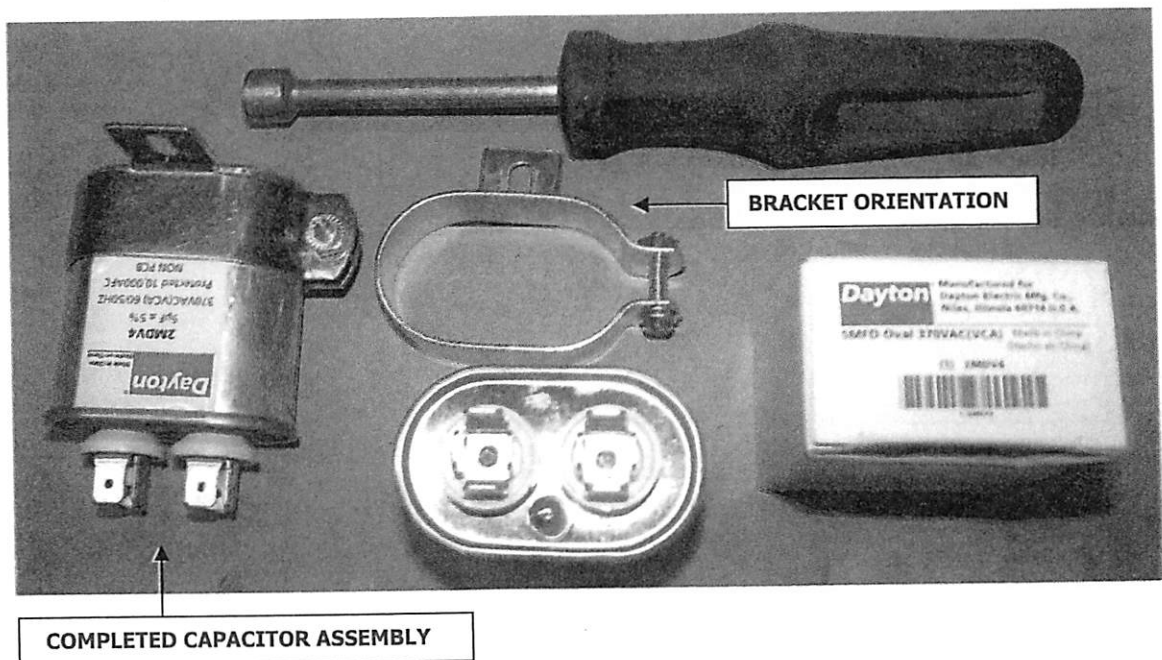
**UPDATED SEPTEMBER 2011**



# EDUCATOR 220V CAPACITOR ASSEMBLY

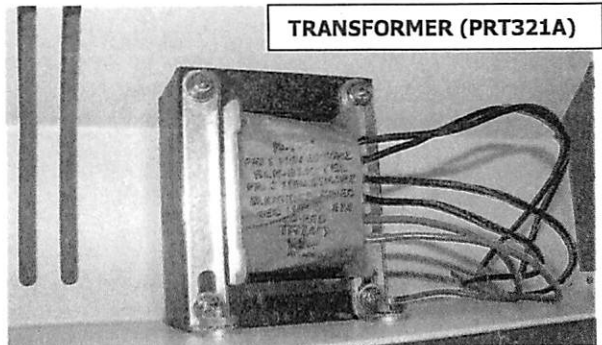
**Note: This capacitor is only used with the Molon Motor PRM229A for the 220v version.**

- 1) REMOVE CAPACITOR (PRM229A) LD02 FROM BOX.
- 2) OPEN CAPACITOR BRACKET (PRM216B) LD02 BAG. SAVE NUT AND 8-32 X 1 PH. DISCARD RUBBER COVER.
- 3) WITH #8 TAP THREAD SMALLER BRACKET SCREW HOLE.
- 4) PLACE CAPACITOR INTO BRACKET ORIENTED TO PHOTO. PUT SCREW INTO LARGER HOLE AND THREAD INTO TAPPED HOLE. SECURE WITH NUT USING NUT DRIVER.

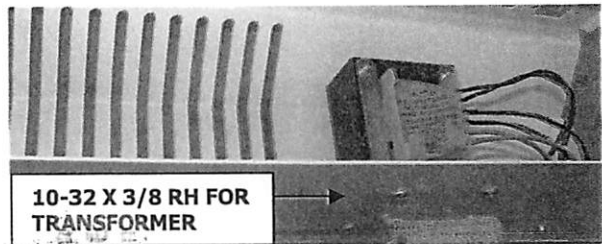


# EDUCATOR BOTTOM MOTOR COVER NRTL 220V ASSEMBLY

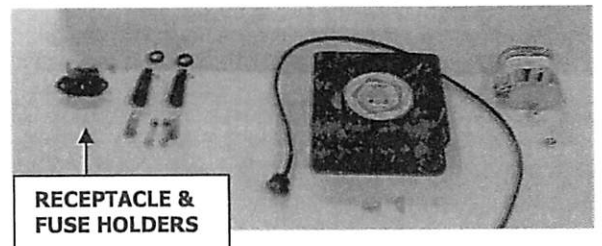
- 1) ALIGN THE 6-WIRE TRANSFORMER (PRT321A) AS13 TO THE RIGHT FRONT PREDRILLED BOTTOM MOTOR COVER (LC25 093.4C) LD09. LOCATE THE TRANSFORMER BETWEEN AND ACROSS FROM THE FUSES AND FAN LOCATION. ORIENT THE TRANSFORMER WITH THE WIRES FACING OUTWARD, AWAY FROM LOUVERS. SECURE WITH (4) 10-32 X 3/8 RHMS FROM THE OUTER MOTOR COVER AND (4) #10 KEPS HEX NUTS ON THE INNER MOTOR COVER.



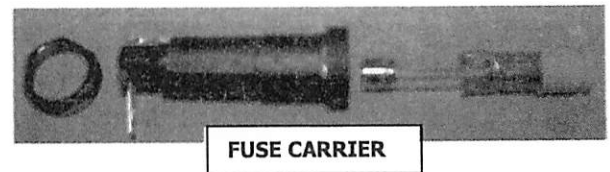
- 2) INSERT THE RECEPTACLE PANEL MOUNT (PRC117) LD11/AS07 INTO THE REAR MOTOR COVER, ORIENTED WITH THE SINGLE GROUND TERMINAL POST DOWNWARD. SECURE RECEPTACLE WITH (2) 6 X 3/8 TH MS AND A #6 HEX NUT.



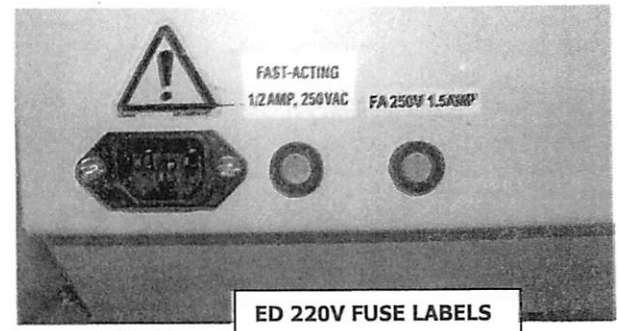
- 3) INSERT (2) THREE-PART FUSE HOLDERS (PRF110) LD11 INTO THE REAR BOTTOM MOTOR COVER, WITH THE TERMINAL POSTS FACING INWARD. BEND POSTS IN LINE WITH HOLDER. SECURE FUSE HOLDER BY THREADING THE NUT WITH FLAT SIDE NEXT TO MOTOR COVER. USE A WRENCH TO TIGHTEN.



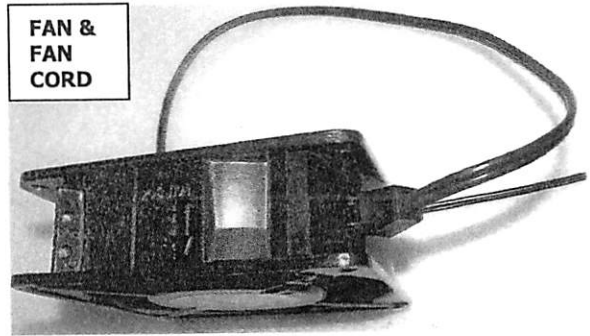
- 4) FROM AS07 SLIDE A 1/2 AMP FUSE (PRF136) INTO CARRIER AND INSERT INTO HOLDER BY RECEPTACLE. SLIDE A 1 1/2 AMP FUSE (PRF128) IN CARRIER AND PUT INTO INNER HOLDER. SECURE CARRIERS IN HOLDERS WITH SLOTTED SCREWDRIVER BY DEPRESSING A CLOCKWISE QUARTER TURN, INWARD TO THE RIGHT.



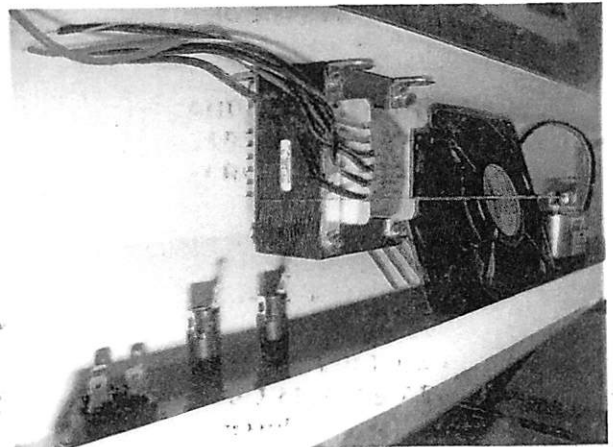
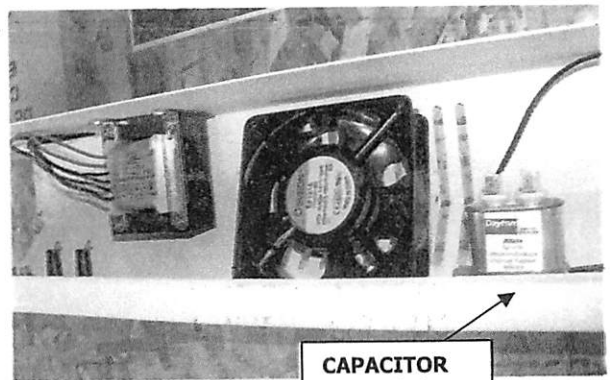
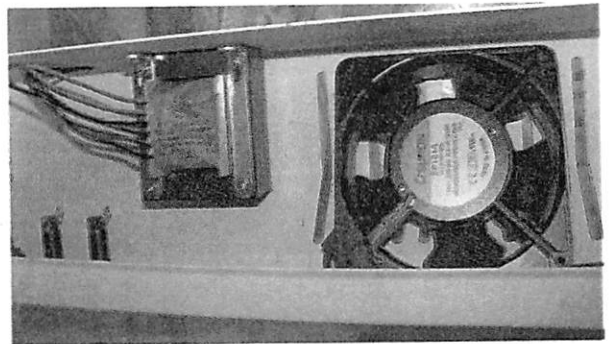
- 5) ADHERE A .5 AMP FUSE LABEL (LAB109) RACK 5 ABOVE FUSE BY RECEPTABLE AND 250 VOLT 1.5 AMP FUSE LABEL (LAB124) AS09 ABOVE INNER FUSE HOLDER.



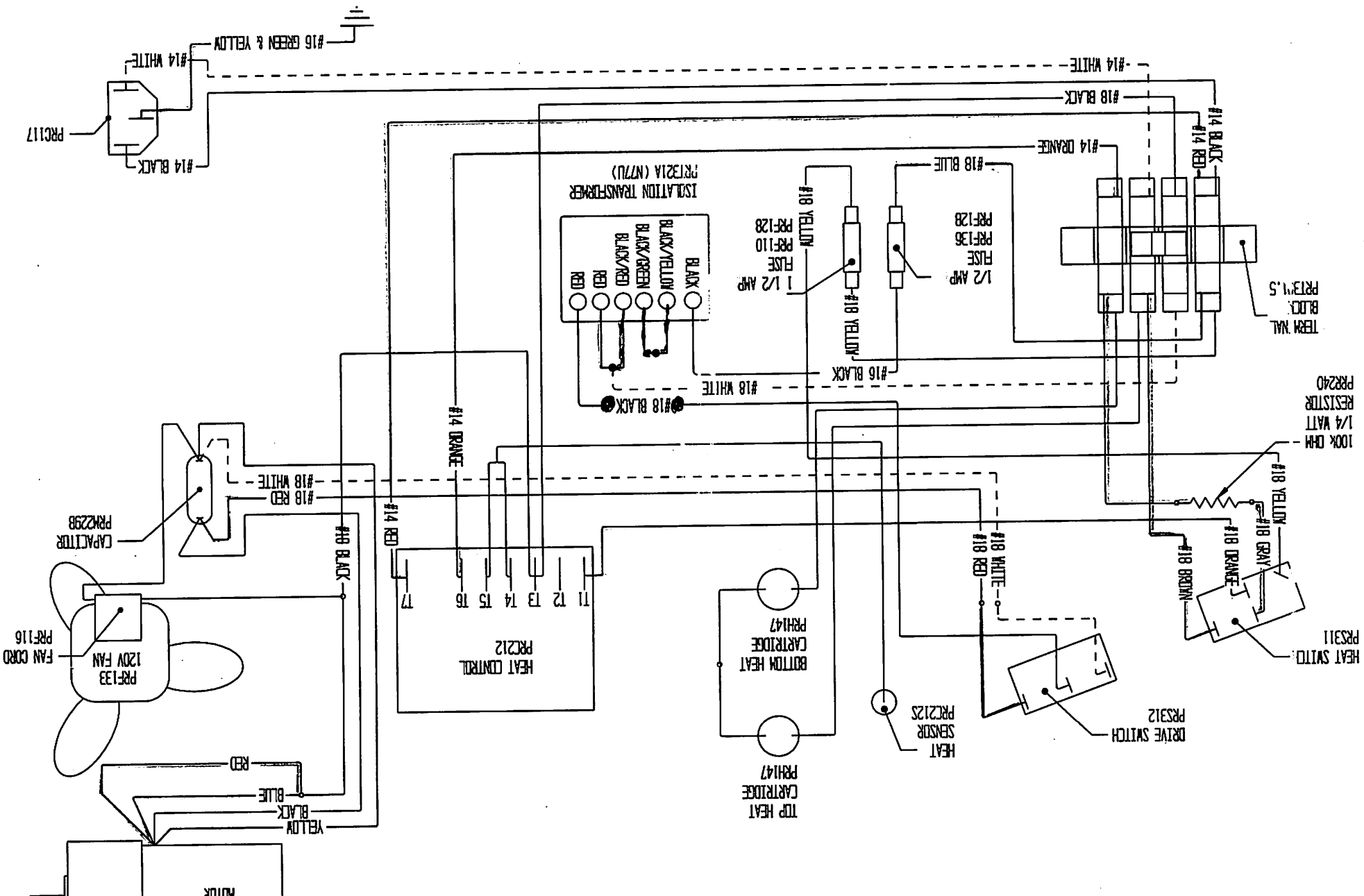
6) FROM LD03 TERMINATE THE FAN CORD (PRF116) PLUG ONTO THE TERMINAL POSTS OF THE AXIAL FAN (PRF133). ORIENT FAN IN THE BOTTOM MOTOR COVER WITH *AIR FLOW ARROW INWARD* AND THE FAN CORD FACING THE FUSES. SECURE FAN OVER LOUVERS USING (2) 10 X 1/2 PH SMS.



7) ALIGN THE CAPACITOR AND BRACKET TO THE REAR OF THE BOTTOM MOTOR COVER, BETWEEN THE FAN AND THE MOTOR LOCATION. ORIENT THE CAPACITOR WITH THE BRACKET *UPWARD*, RESTING FLAT ALONG THE INSIDE OF BOTTOM MOTOR COVER. SECURE THE CAPACITOR WITH A 10-32 X 3/8 RH MS ON OUTER MOTOR COVER AND A #10 KEPS NEX NUT ON THE INNER MOTOR COVER. WRENCH TIGHTEN.

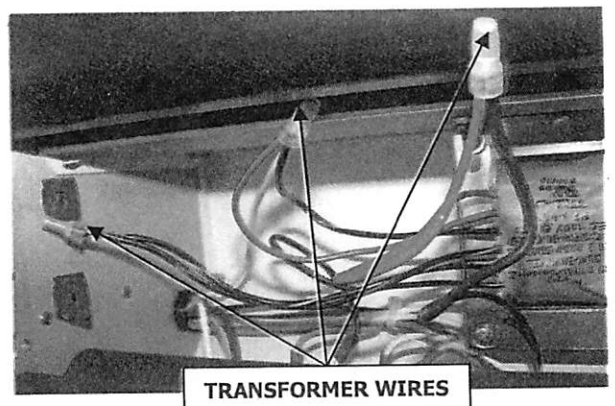
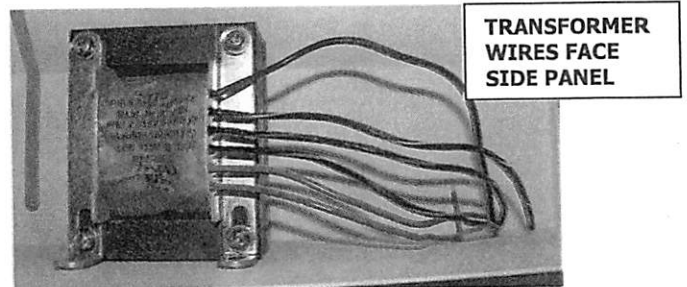
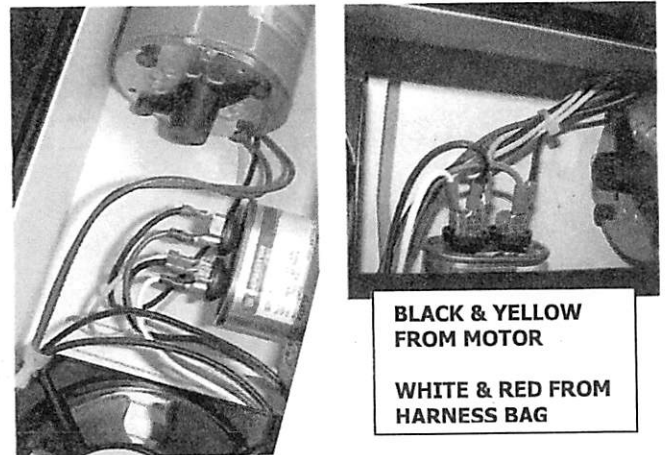
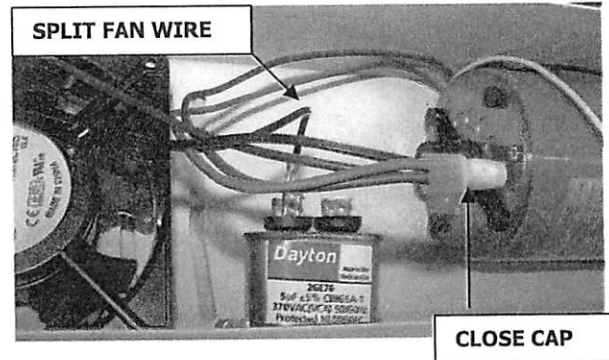


EDUCATOR 208/240 VAC WIRING DIAGRAM NRTL  
PRM229A MOLDN GEARMOTOR

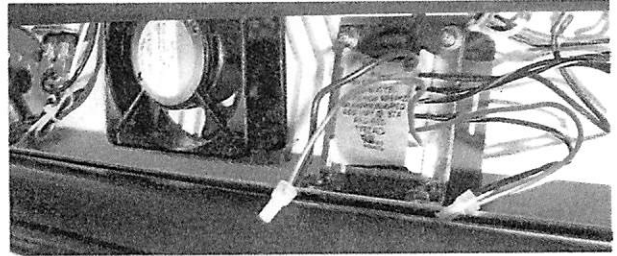


# EDUCATOR NRTL 220V WIRING 2011

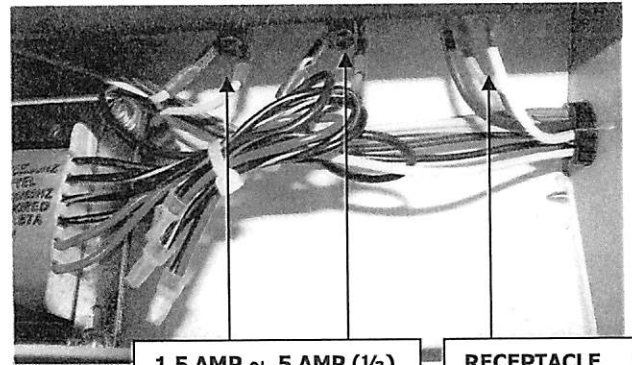
- 1) PLACE CHASSIS ON WORK TABLE WITH REAR FACING YOU. FOLLOW 220V NRTL EDUCATOR WIRING DIAGRAM DATED 6/20/2011 AND PHOTOS. USE 110V WIRING HARNESS (PRW342) LD04 WITH SOME MODIFICATIONS.
- 2) TRIM FAN WIRE LEAVING 15" ON FAN. SPLIT REMAINING FAN WIRE END APPROXIMATELY 4". CRIMP A FEMALE (PRT302) ONTO ONE OF THE SPLIT FAN WIRES AND CONNECT TOP, INNER CAPACITOR POST ON THE *FAN SIDE*.
- 3) USE LARGE CLOSE CAP (PRT290) AND CRIMP (4) WIRES TOGETHER: RED AND BLUE MOTOR WIRES, SPLIT FAN WIRE AND LONG BLACK OPEN ENDED WIRE FROM HARNESS, WHICH CONTINUES TO HEAT CONTROL T3 AND HAS A JUMPER FROM T3 TO LOWER 45 DEGREE FRONT/MIDDLE TERMINAL BLOCK.
- 4) CRIMP A FEMALE (PRT302) ONTO EACH OF THE BLACK AND YELLOW MOTOR WIRES. CONNECT BOTH TO CAPACITOR: YELLOW TO THE INNER, *FAN SIDE* TERMINAL POST GROUP AND BLACK TO OUTER, *MOTOR SIDE* TERMINAL POST.
- 5) CRIMP A FEMALE (PRT302) ONTO ONE END OF THE LONG WHITE AND RED LONG HARNESS WIRES. CONNECT RED TO CAPACITOR *MOTOR SIDE* POST AND WHITE TO INNER, *FAN SIDE* POST.
- 6) THE 6-WIRE NRTL TRANSFORMER (PRT321A) AS13 SECURES TO FRONT BOTTOM HOUSING ACROSS FROM FUSES, ORIENTED WITH TRANSFORMER WIRES FACING RIGHT SIDE PANEL.
- 7) WIRE TRANSFORMER: CRIMP A SMALL CLOSE CAP (PRT289) UNITING THE OUTER, FRONT RED TRANSFORMER WIRE WITH A BLACK 14" BAG WIRE THAT CONTINUES TO THE MIDDLE DRIVE SWITCH WIRE ON OUTER SIDE PANEL



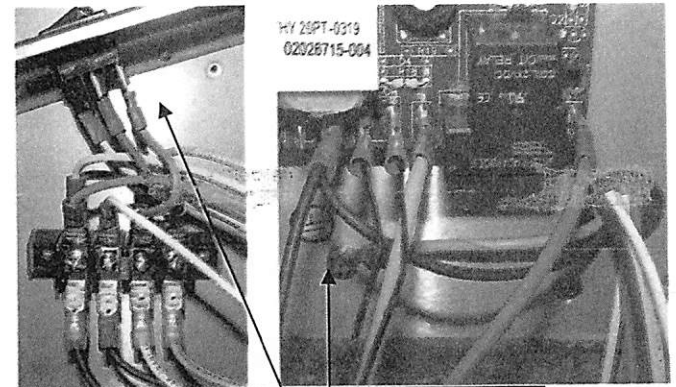
AND IS CLOSE CAPPED WITH IT. CLOSE CAP TOGETHER (3) WIRES: THE REMAINING TRANSFORMER INNER RED WIRE, THE BLACK/RED WIRE AND AN 18 GAUGE WHITE WIRE WHICH YOU ADD AND CONTINUES TO UPPER 180 DEGREE TERMINAL BLOCK POST, *SECOND FROM FRONT*. CLOSE CAP TOGETHER THE TRANSFORMER BLACK/GREEN AND BLACK/YELLOW. CRIMP A FEMALE (PRT2911) ONTO THE BLACK TRANSFORMER WIRE AND TERMINATE THE BLACK WIRE ON OUTER .5 AMP (1/2 AMP) FUSE, BY RECEPTACLE.



- 8) TERMINATE BOTH YELLOW WIRES FROM BAG ON INNER 1.5 AMP FUSE POSTS. CONTINUE YELLOW WIRE WITH LARGER FEMALE END TO UPPER FRONT 180 DEGREE TERMINAL BLOCK POST AND THE SMALLER FEMALE END TO INNER, FRONT HEAT SWITCH POST.

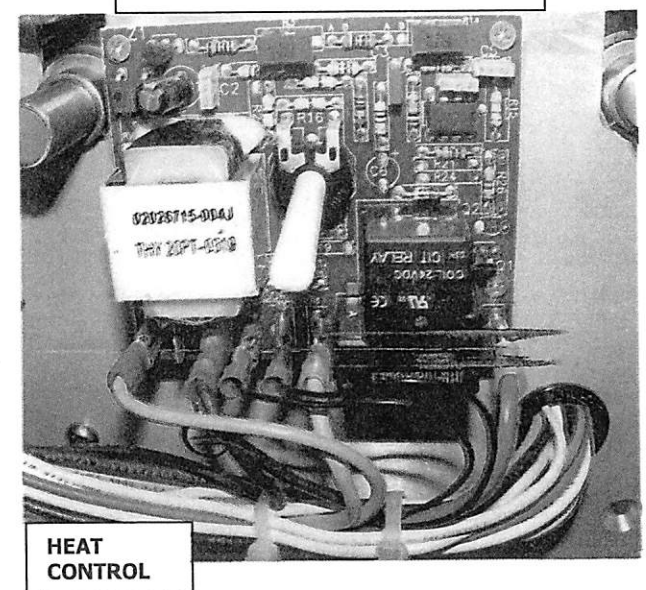


- 9) CONNECT A BLUE WIRE FROM BAG BETWEEN OUTER .5 AMP (1/2) FUSE POST, WHICH ALSO HAS THE BLACK TRANSFORMER WIRE, AND UPPER, FRONT 45 DEGREE TERMINAL BLOCK.

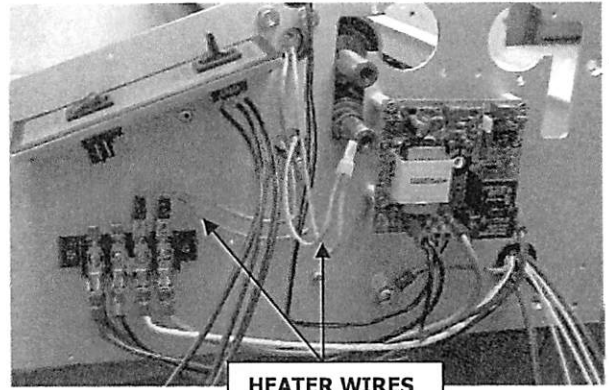


- 10) SECURE 14 GAUGE GREEN GROUND WIRE BETWEEN *LOWER* RECEPTICAL POST AND OUTER SIDE PANEL UNDER TRAKSTAT. USE A #10 STAR WASHER BETWEEN PANEL AND GROUND RING CONNECTOR. SECURE WITH #10 ACORN NUT. ADHERE INTERNATIONAL GROUND SYMBOL LABEL (LAB06) LD09 ABOVE GROUND WIRE CONNECTION.

- 11) WIRE THE TRAKSTAT HEAT BOARD CONTROL: RED 14 GAUGE ON T7 CONTINUING TO LOWER, FRONT 180 DEGREE TERMINAL BLOCK POST. ORANGE 14 GAUGE ON T6 CONTINUING TO LOWER, REAR 45 DEGREE TERMINAL BLOCK POST. PUT SENSOR WIRES ON T4 AND T5. T3 HAS DOUBLED BLACK WIRE FROM MOTOR WITH JUMPER THAT CONTINUING TO LOWER 45 DEGREE TERMINAL BLOCK POST *SECOND FROM FRONT*. ORANGE 18 GAUGE WIRE ON T1 CONTINUING TO INNER, UPPER HEAT SWITCH POST, BY SIDE PANEL.

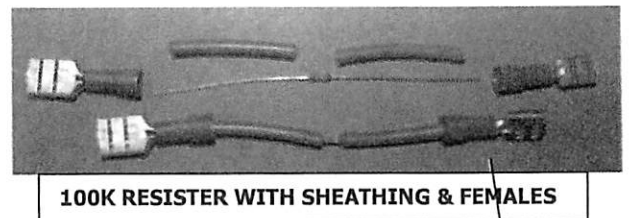


12) TRIM AND CLOSE CAP TOGETHER ONE WIRE FROM TOP AND BOTTOM HEATER. CRIMP A FEMALE (PRT292) ONTO EACH OF THE REMAINING (2) HEATER WIRES AND CONNECT TO UPPER REAR/MIDDLE AND REAR 180 DEGREE TERMINAL BLOCK POSTS, AS PICTURED.

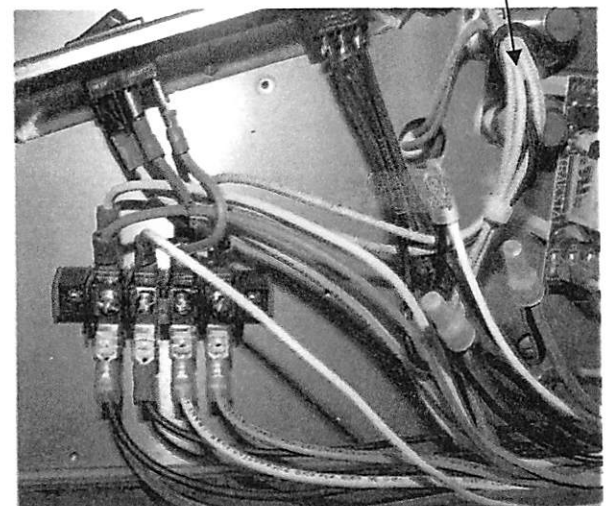


13) CONNECT WHITE 14 GAUGE WIRE BETWEEN OUTER RECEPTACLE POST AND LOWER, MIDDLE/REAR 45 DEGREE TERMINAL BLOCK, *LEFT OF ORANGE*. CONNECT BLACK 14 GAUGE BETWEEN INNER RECEPTACLE POST AND LOWER, FRONT 45 DEGREE TERMINAL POST.

14) USE A 100K RESISTER (PRR240) AS08 WITH GRAY SHEATHING OVER WIRE PORTION. CRIMP (2) FEMALES ENDS ON THE SHEATHED RESISTER; A (PRT302) AND A (PRT2911). CONNECT THE GRAY RESISTER WIRE BETWEEN OUTER, LOWER (MIDDLE) HEAT SWITCH POST AND UPPER, REAR 45 DEGREE TERMINAL BLOCK POST. CONNECT THE SHORT BROWN WIRE BETWEEN OUTER, UPPER HEAT SWITCH POST, CROSS OVER GRAY WIRE AND CONNECT ON UPPER MIDDLE/REAR 45 DEGREE TERMINAL BLOCK POST, *LEFT OF GRAY RESISTER WIRE*.



15) CLEAR CAP DRIVE SWITCH WIRES: RED CAPACITOR WIRE TO RIGHT/UPPER DRIVE SWITCH WIRE AND WHITE CAPACITOR WIRE TO LEFT/LOWER DRIVE SWITCH WIRE. THE MIDDLE DRIVE SWITCH WIRE CAPS WITH THE BLACK WIRE FROM TRANSFORMER (WHICH IS JOINED WITH OUTER TRANSFORMER RED WIRE).



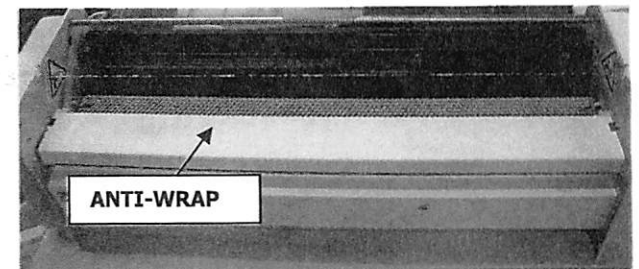
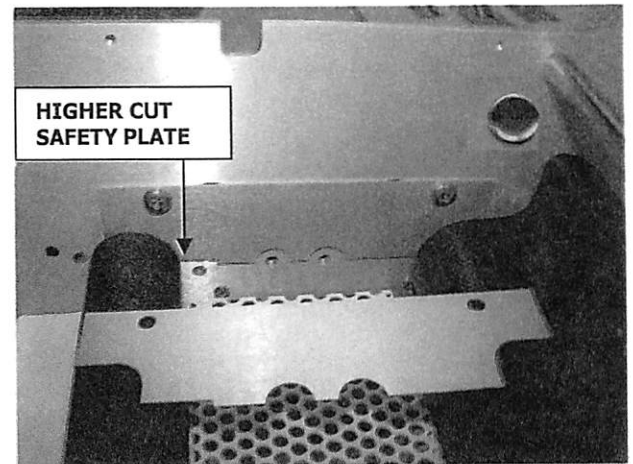
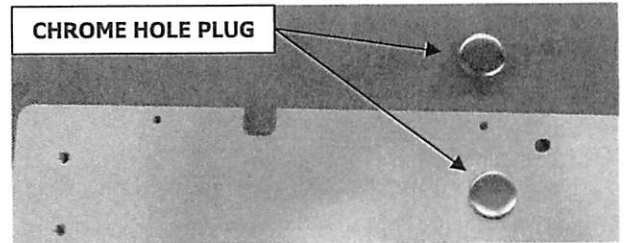
16) PLUG INTO 220 VOLT POWER SOURCE USING AN ADAPTOR. TEST MACHINE FUNCTION OF DRIVE AND HEAT SWITCHES. STOP WHEN FLAT SIDE OF MOTOR SHAFT IS VERTICAL TO REAR.

17) WIPE THE BOTTOM REAR RUBBER ROLL WITH DAMP CLOTH. ADD AN OILITE BEARING (PRB048) LD11/AS08 TO EACH JOURNAL, FLANGE INWARD AND SNAP RING GROOVE ON MOTOR SIDE. SLIP RUBBER ROLL INTO BACK SLOT OF



RUBBER ROLL INTO BACK SLOT OF MACHINE. WIPE A SECOND RUBBER ROLL AND INSERT WITHOUT BEARINGS. *REMEMBER* SNAP RING GROOVE GOES ON MOTOR SIDE.

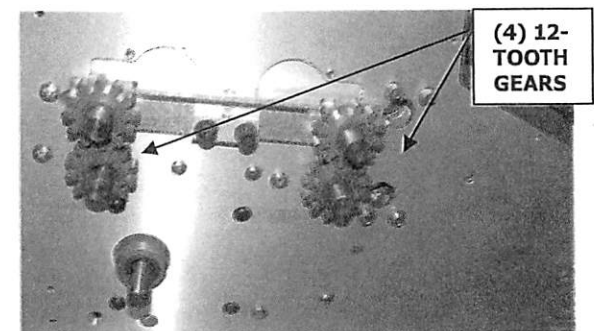
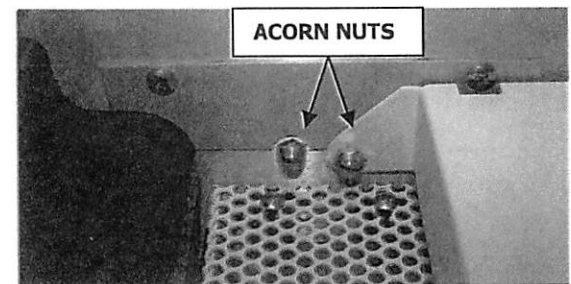
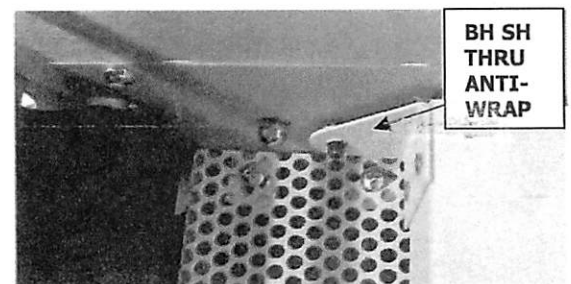
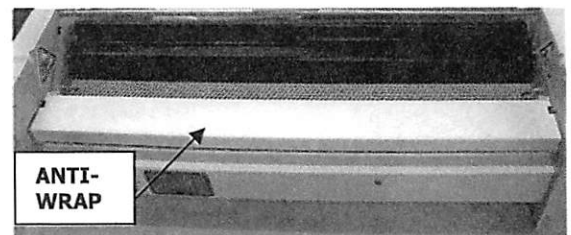
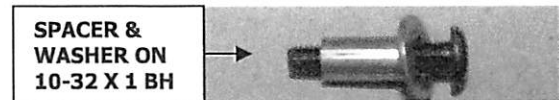
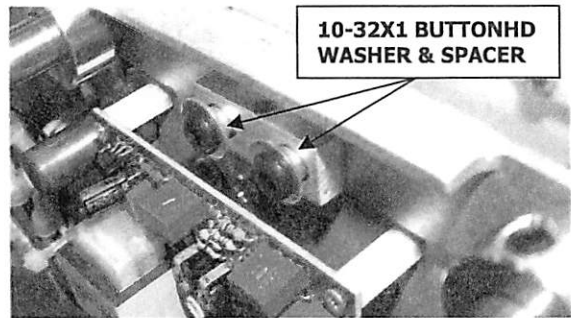
- 18) SNAP A CHROME HOLE PLUG (PRC090) AS01 INTO THE INNER RIGHT SIDE PANEL, WHERE THE RED INDICATOR LIGHT FOR A 110V WOULD LOCATE.
- 19) POSITION PERFORATED TOP MOTOR COVER (LC25 092.4) LD04 OVER TINNEMAN BRACKETS IN CHASSIS. DO NOT SCRATCH RUBBER ROLLS. SLIDE TOP COVER TOWARD REAR AND SECURE WITH (4) 8 X 3/8 RH SMS.
- 20) ADD (2) SAFETY PLATES (LC25 034.4) LD03, ONE ON BOTH SIDES OF TOP MOTOR COVER WITH NOTCH DOWNWARD AND BOTTOM HIGHER CUT OF SAFETY PLATE TOWARD REAR OF MACHINE. USE (4) 10-32 X 1/4 PH.
- 21) PLACE AN ANTI-WRAP SHIELD (LC25 012.4B) LD03 OVER THE REAR RUBBER ROLLS, WITH THE BRACKETS FACING INWARD OVER TOP MOTOR COVER.





# EDUCATOR 220V GEARING

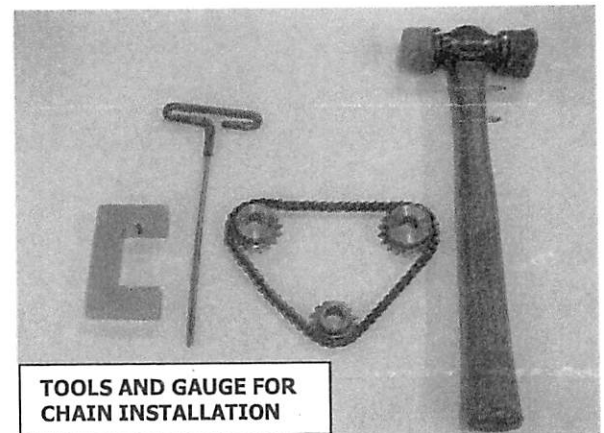
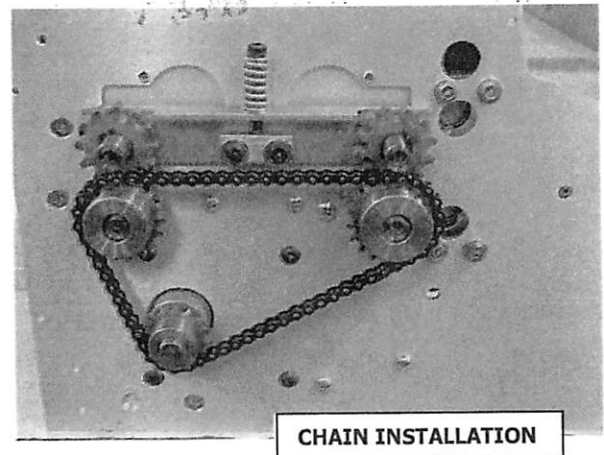
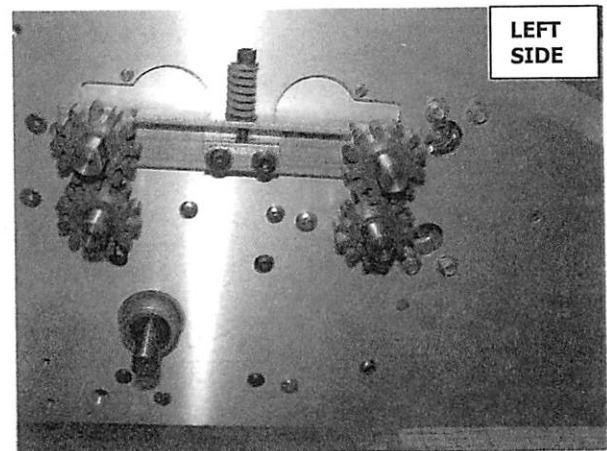
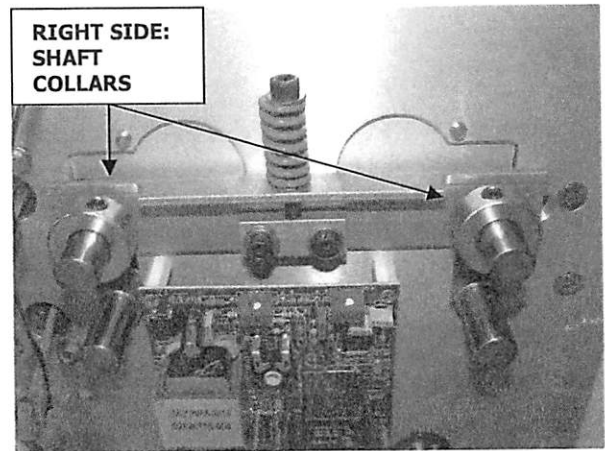
- 1) SET THE EDUCATOR BACK TOWARD YOU AND *JIGGLE* (2) PRESSURE BAR BEARINGS OVER THE TOP RUBBER ROLL JOURNALS, WITH THREADED BREAK UPWARD. SNUG TIGHT ON SIDE PANEL.
- 2) PLACE A #10 FLAT WASHER ON EACH OF (4) 10-32 X 1 BSH. ADD A SPRING HOLDER SPACER (PRS202) LD05 ONTO EACH. INSERT THESE (2) BSH UNITS EACH INTO (2) RUBBER ROLL SPRING HOLDERS (LC25 032.4) LD05. THREAD SPRING HOLDER SCREWS THROUGH PRESSURE BARS, FLUSH TO INNER SIDE PANELS. TIGHTEN ONLY FRONT SPRING HOLDER BSH TO SIDE PANELS.
- 3) WITH THE ANTI-WRAP SHIELD (LC25 012.4B) LD04 OVER THE REAR RUBBER ROLLS AND THE BRACKETS FACING THE FRONT, THREAD THE (2) REAR BSH ON REAR RUBBER ROLL SPRING HOLDERS JUST PAST INNER SIDE PANEL. ADD A #10 FLAT WASHER TO THE THREADS. THEN THREAD THE BSH THROUGH ANTI-WRAP BRACKET. TIGHTEN (4) 10-32 ACORN NUTS ON THREADS HOLDING RUBBER ROLL SPRING HOLDER.
- 4) SECURE THE BACK SECTION OF THE ANTI-WRAP TO THE SIDE PANELS WITH (2) 10 X 1/2 PH SMS INTO COUNTERSUNK HOLES.
- 5) TAP (4) 12 TOOTH GEARS (PRG131) LD13 ONTO MOTOR SIDE RUBBER ROLL JOURNALS, ALIGNING FLAT OF GEAR AND JOURNAL. SECURE GEARS WITH (4) RETAINING RINGS (PRR191) LD05. SNUG THE LEFT SIDE GEARS AND JOURNALS USING A RUBBER HAMMER.
- 6) ON RIGHT, CONTROL SIDE TOP JOURNALS ONLY TIGHTEN (2) 1/2 SHAFT COLLARS (PRC096) LD05/AS07 FLUSH WITH PRESSURE BAR.
- 7) TAKE (2) 10-32 X 1 3/4 SHCS, PUT A #10 FLAT WASHER, AN ORANGE HEFTY SPRING (LC25 031.4) LD05 AND ANOTHER #10 FLAT WASHER ON EACH. ADD A DROP OF LOCTITE TO THE END



THREADS AND SNUG DOWN THROUGH PRESSURE BAR INTO RUBBER ROLL SPRING HOLDER. WHEN SPRING TOUCHES BOTH WASHERS AND LIFTS SPRING HOLDER; TIGHTEN 12 HALF TURNS ON LEFT/GEAR SIDE, 10 HALF TURNS ON RIGHT/CONTROL SIDE.

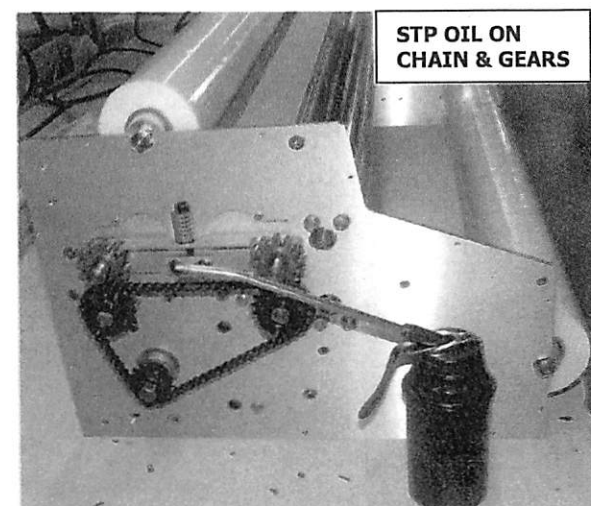
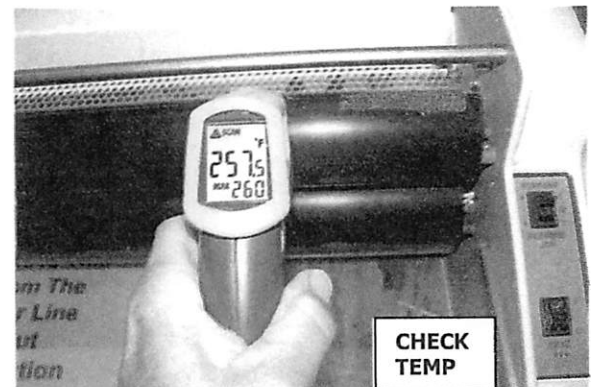
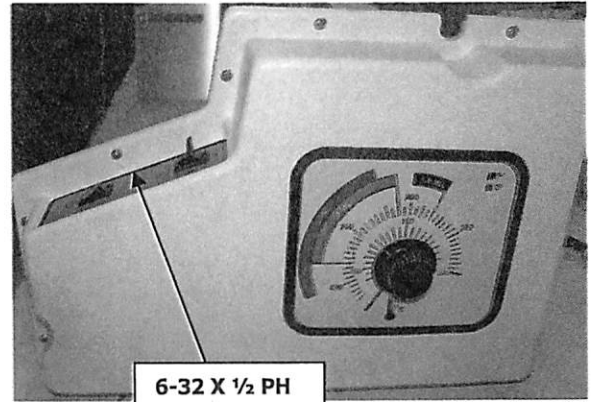
- 8) TURN MACHINE SO GEARS FACE YOU. ALIGN FLAT SIDE OF LOWER GEARS OUTWARD. LOOSEN MOLON MOTOR SCREWS. SEAT CHAIN (PRC083.A) LD13 WITH CONNECTING LINK FACING OUTWARD ON A 25B19 SPROCKET (PRS251) LD13. SLIDE SPROCKET OVER RIGHT LOWER RUBBER ROLL JOURNAL AND ALIGN SET SCREW WITH FLAT OF SHAFT, DON'T TIGHTEN YET. SEAT CHAIN ON 25B15 SPROCKET (PRS2455) LD13 AND SLIDE ON MOTOR JOURNAL, ALIGNING SET SCREW WITH FLAT OF JOURNAL. SEAT CHAIN ON A 25B18 SPROCKET (PRS249) LD13 AND TAP ONTO BOTTOM BACK RUBBER ROLL JOURNAL ALIGNED WITH FLAT SIDE.

- 9) USE DISTANCE GAUGE ON ALL SPROCKET TEETH AND TIGHTEN SET SCREWS ON FLAT OF JOURNALS. TIGHTEN MOTOR SET SCREW LAST. *RETIGHTEN SCREWS HOLDING MOLON MOTOR TO SIDE PANEL.*

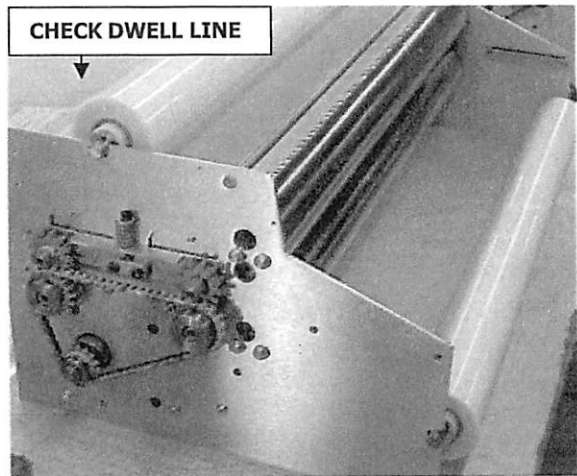


# EDUCATOR 220V NRTL TESTING

- 1) TRIM OFF THE LINED END ON A POTENTIOMETER EXTENSION STEM (PRC213) LD05 AND INSERT STEM INTO TRAKSTAT HEAT CONTROL.
- 2) ADHERE AN EDUCATOR TEMPERATURE DECAL (LAB55B) LD05 CENTERED OVER THE POTENTIOMETER EXTENSION OPENING ON A RIGHT HOUSING (LC25 094.4R) LD06. SLIDE HOUSING ONTO PANEL. SECURE HOUSING WITH (10) 6-32 X 3/16 PH AND (1) 6-32 X 1/2 RH, LOCATED IN SAFETY SHIELD POSITION.
- 3) ROTATE POTENTIOMETER EXTENSION TO THE FULL LEFT AND ADD A CONTROL KNOB (PRC213) LD05 ALIGNING INDICATOR MARK ON KNOB WITH LOWEST SETTING ON DECAL. SECURE STEM WITH AN 8-32 X 3/8 SET SCREW.
- 4) SET TEMPERATURE TO 260F DEGREES.
- 5) PLUG POWER CORD INTO 220 VOLT POWER OUTLET USING AN ADAPTER AND TURN ON LAMINATOR. FANS SHOULD TURN. CHECK CHAIN DIRECTION AND FUNCTION OF HEAT SWITCH LIGHT.
- 6) AS CHAIN TURNS ADD A *LIGHT* COATING OF STP OIL TO CHAIN AND GEARS.
- 7) FILL OUT PAPERWORK: "FINAL TEST & INSPECTION CHECKLIST," CUSTOMER "TEST LAMINATE" AND JOB SHEET WITH ASSEMBLER'S NUMBER AND DATE.
- 8) CHECK SHOE TEMPERATURE WITH PYROMETER. TEST AT 260F DEGREES.
- 9) LOAD FILM ONTO SUPPLY ROLLS. THE SUPPLY ROLL TENSION KNOBS GO ON THE RIGHT SIDE. ALIGN SUPPLY ROLLS SO THE SHINY SIDE OF THE FILM GOES NEXT TO HEAT SHOE AND TOP AND BOTTOM FILM MEET AT OUTER EDGES. USE A FEED BOARD TO START FILMS THROUGH MACHINE.

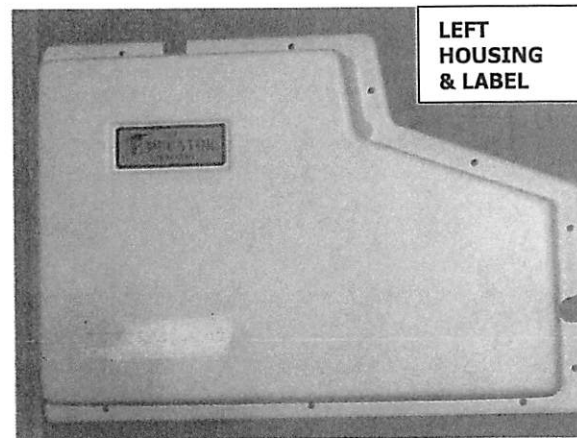


- 10) TURN OFF THE EDUCATOR, WAIT ABOUT 15 SECONDS, AND RESTART. RUN FILM THROUGH UNTIL DWELL LINE APPEARS ON FILM. STOP FILM AND CHECK DWELL LINE FOR EVENNESS AND ADHESION. IF DWELL EDGES ARE UNEVEN, ADJUST SPRING TENSION TO MATCH SIDE MOST SIMILAR TO CENTER OF DWELL LINE.



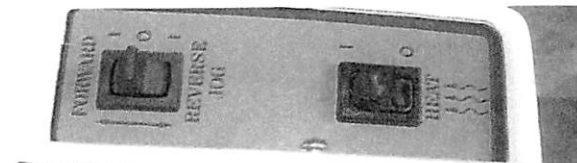
- 11) LAMINATE THE CUSTOMER'S TEST MATERIAL AND THE JOB SHEET. CHECK LAMINATES FOR FLATNESS AND EDGE SEAL. TRIM LAMINATES, LEAVING ABOUT 1/8 EDGE.

- 12) TURN OFF THE HEAT AND UNLOAD FILM. ALLOW THE HEAT SHOES TO COOL DOWN WHILE RUNNING EDUCATOR WITH FAN ON.

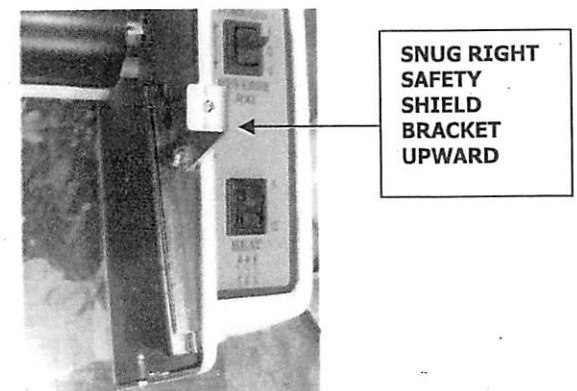


- 13) ADHERE EDUCATOR LABEL (LAB56) LD05 CENTERED INTO THE DEPRESSED OUTER SECTION OF THE LEFT HOUSING (0285 094.4L) LD06. WIPE THE LOWER SIDE PANEL EDGE WITH A RAG. SECURE HOUSING TO SIDE PANEL USING (10) 6-32 X 3/16 PH AND (1) 6-32 X 1/2 RH. THE 6-32 X 1/2 PH IS POSITIONED TO HOLD THE SAFETY SHIELD.

- 14) PLACE A #6 FLAT WASHER ON EACH OF THE (2) 6-32 X 1/2 PH THREADS HOLDING HOUSING ON. SET A RIGHT SAFETY SHIELD BRACKET (0285 190.4R) LD06 ON THE RIGHT SIDE THREADS. *THE LONGER SIDE OF THE BRACKET IS UPWARD.* ADD A DROP OF LOCTITE INTO (2) 6-32 ACORN NUTS. HOLD THE RIGHT SAFETY SHIELD BRACKET UPWARD AND SECURE #6 ACORN NUT. USE A NUT DRIVER TO TIGHTEN ACORN NUTS.



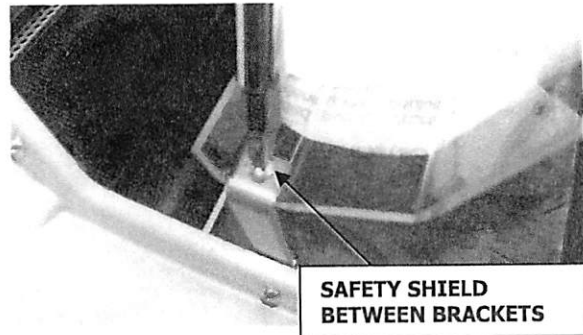
- 15) REPEAT THIS PROCEDURE ON THE LEFT HOUSING 6-32 X 1/2 RH SCREW, AND USE A LEFT SAFETY SHIELD BRACKET (0285 190.4L) LD06. TIGHTEN BRACKET IN UPWARD POSITION WITH ACORN NUT.



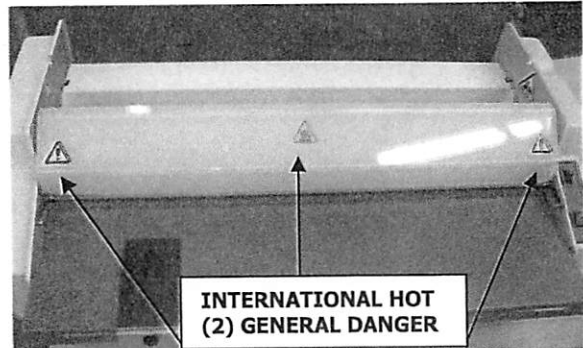
- 16) PEEL PLASTIC COVERING BACK ON THE DEEPER SET HOLES OF THE SAFETY SHIELD (4500 074.4) LD06. SECURE

**SAFETY SHIELD BETWEEN SAFETY SHIELD BRACKETS, AS PICTURED, USING (2) 6-32 X 1/4 PH. OPEN AND CLOSE THE SAFETY SHIELD A FEW TIMES, UNTIL IT MOVES SMOOTHLY.**

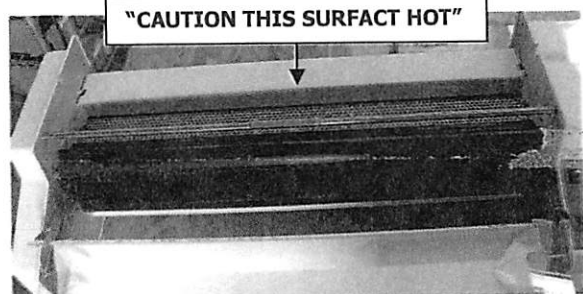
- 17) **CENTER AND ADHERE THE YELLOW "INTERNATIONAL HOT" LABEL (LAB100) AS09 IN THE MIDDLE OF THE SAFETY SHIELD, JUST BELOW THE UPPER BREAK.**



- 18) **ON BOTH OUTER EDGES OF THE SAFETY SHIELD ALIGN AND ADHERE A YELLOW "GENERAL DANGER" LABEL (LAB52) AS09 WITH AN EQUIL DISTANCE FROM EDGE ON BOTH SIDES OF THE SAFETY SHIELD.**



- 19) **CENTER AND ADHERE A RED "CAUTION THIS SURFACE HOT" LABEL (LAB62) LD05 ON UPPER STABILIZER BAR.**



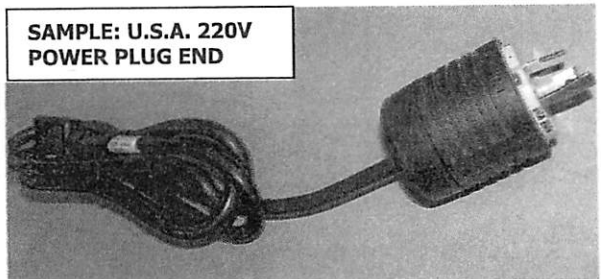
- 20) **ON BOTH INNER SIDE PANELS, LOCATED ABOVE THE SAFETY PLATES, CENTER, ALIGN AND ADHERE A YELLOW "ARM ENTANGLEMENT" LABEL (LAB51) AS09, CENTERED ABOVE THE SAFETY PLATES.**

- 21) **INSERT FEED TABLE ASSEMBLY BETWEEN FEED TABLE BRACKETS. THE FEED TABLE SHOULD SLIDE IN AND OUT OF THE BRACKETS EASILY.**

- 22) **INDIVIDUAL COUNTRIES HAVE DIFFERENT 220V ELECTRICAL PLUG REQUIREMENTS. THEREFORE, THE PLUG END OF THE REMOVEABLE POWER CORD (PRC118) LD06 IS CUT OFF AND REPLACED WITH THE SPECIFIC POWER PLUG END FOR THE COUNTRY OF DESTINATION. THE POWER PLUG FOR UK/ENGLAND IS (PRC123). IF WE ARE NOT CERTAIN OF THE PROPER PLUG, SHIP CORD WITHOUT A PLUG ON THE END OF IT.**



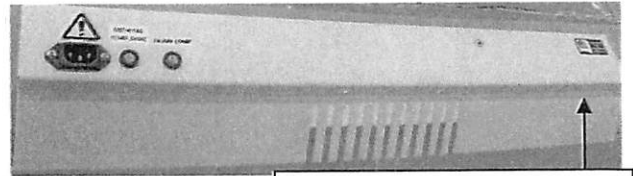
- 23) **CHECK THE LABELS ON BACK OF BOTTOM MOTOR COVER: THE 220V EDUCATOR SREIAL NUMBER WILL BE AHDRED DURING THE PACKING PROCEDURE. IT IS LOCATED RIGHT OF THE FUSE CARRIERS.**



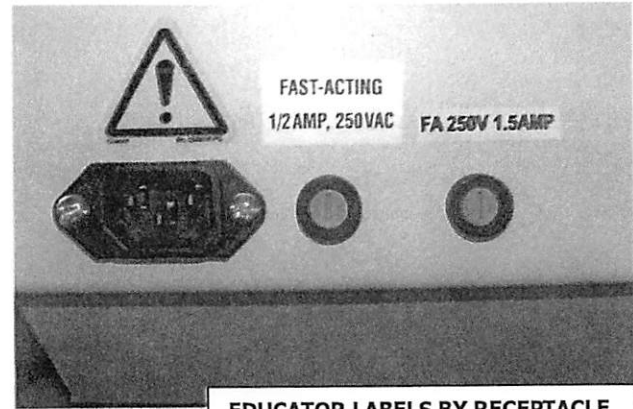
- 24) **ON THE MOTOR SIDE OF THE 220V**

EDUCATOR ADHERE THE "MADE IN AMERICA" LABEL (LAB06) LD11.

- 25) CENTERED AND ADHERE ABOVE 1/2 AMP FUSE, LOCATED RIGHT OF RECEPTACLE, A FAST-ACTING 1/2 AMP 250VAC LABEL (LAB109) RACK 5. RIGHT OF THE 1/2 AMP FUSE IS A 1.5 AMP FUSE. CENTER AND ADHERE A "FA 250V 1.5 AMP" LABEL (LAB124) AS09 ABOVE 1.5 AMP FUSE.
- 26) CENTERED AND ADHERE ABOVE THE RECEPTACLE A YELLOW "GENERAL DANGER" LABEL (LAB52) AS09.
- 27) PLACE (2) SUPPLY ROLL MANDRELS (LC25 002.5) LD06, WITH KNOBS ON THE CONTROL SIDE, BETWEEN PANELS.
- 28) INSERT CUSTOMER'S TEST LAMINATE AND SUPPLY ROLL MANUAL ADDENDUM SHEET INTO THE EDUCATOR MANUAL (XS58) LD06. PLACE ON FEED TABLE.
- 29) ADHERE EDUCATOR CD LABEL ONTO SHIPPING ENVELOPE AND INSERT CD (CL01C) LD06. PLACE ON MANUAL.
- 30) SET COMPLETED "FINAL TEST & INSPECTION CHECKLIST" AND LAMINATED JOB ON CD ENVELOPE.
- 31) SET REMOVEABLE CORD WITH PROPER PLUG ON FEED TABLE.



"MADE IN AMERICA" LABEL



EDUCATOR LABELS BY RECEPTACLE

