

# **C15 AUTOCUTTER FINISH LINE**

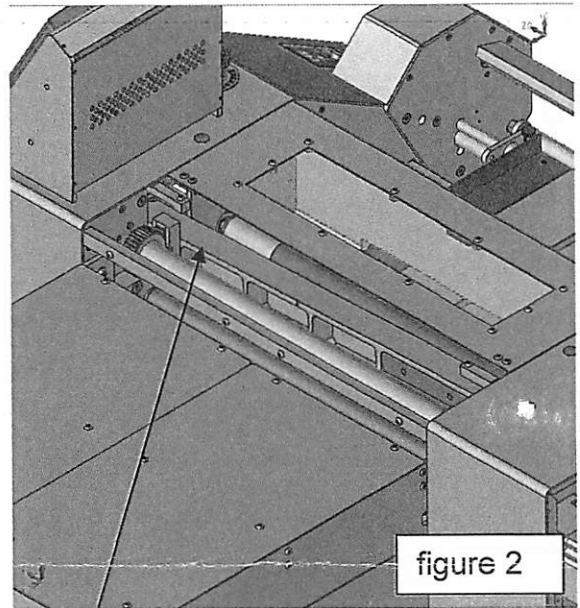
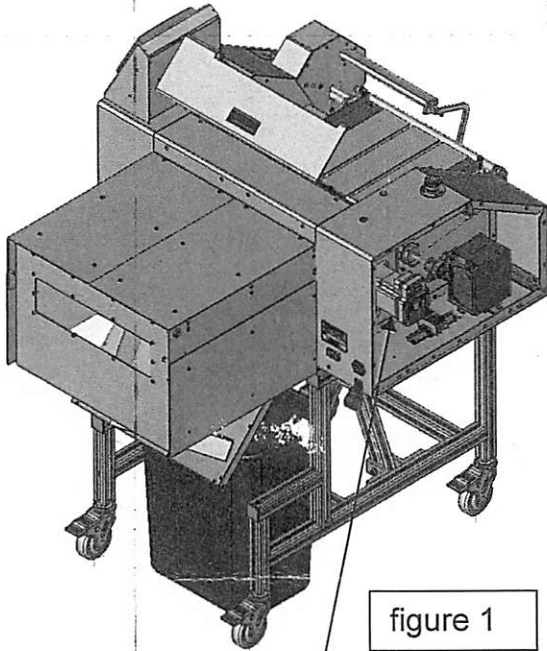
**110 VOLT**

**ASSEMBLY  
PROCEDURES**

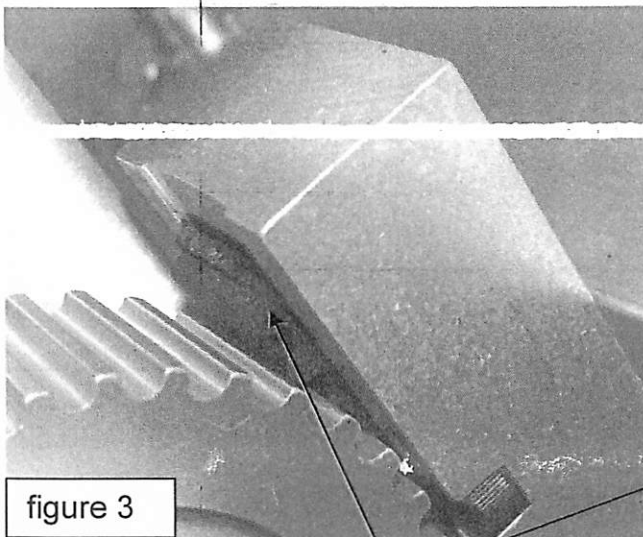
**SEPTEMBER 2017**

## Retightening of set screws in cutting motor drive system & repositioning of Rack & Pinion cutting Mechanism

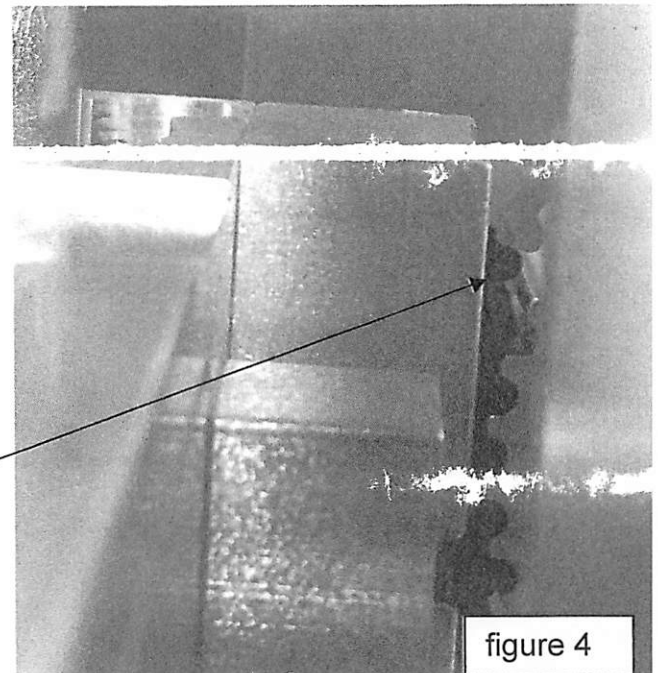
- 1) Unplug system from power outlet.
- 2) Remove Right & Left Housing Covers & Cutting Module cover exposing Cutting Motor and Cutting Module (fig. 1 & 2).
- 3) With Cutting Module in the down position verify Rack & Pinions are in the correct position by verifying the controls side and motor side Rack & Pinions have the same tooth count from top of racks (use camera on phone or small mirror for verification) (fig. 3 & 4)



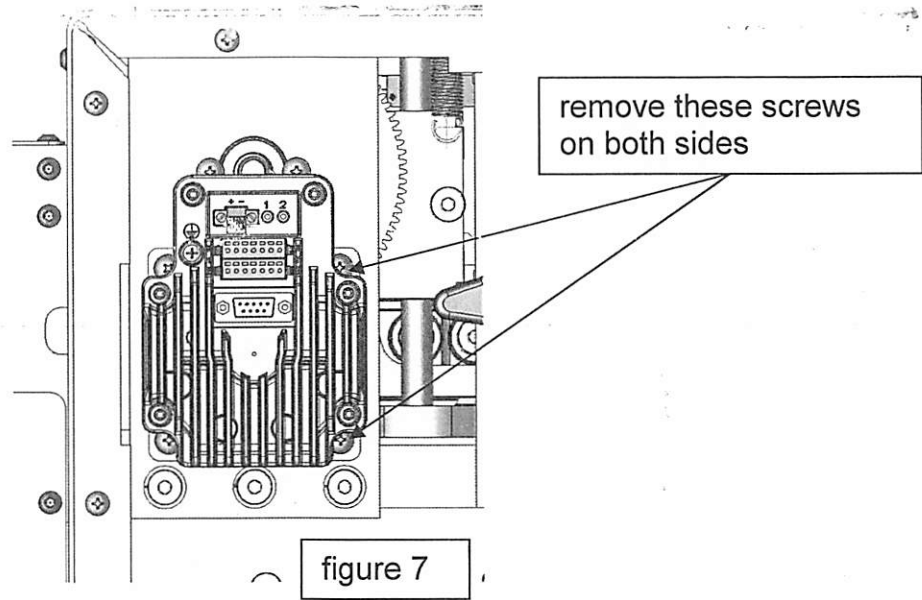
Housing covers removed, Cutting Motor & Cutting Module exposed



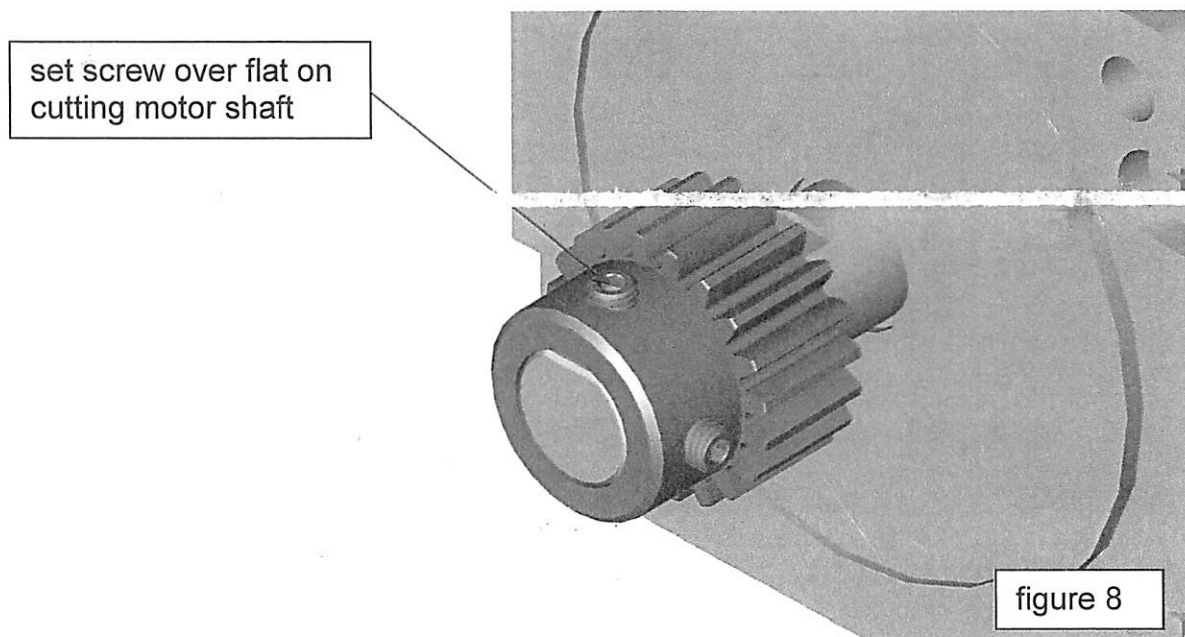
rack teeth



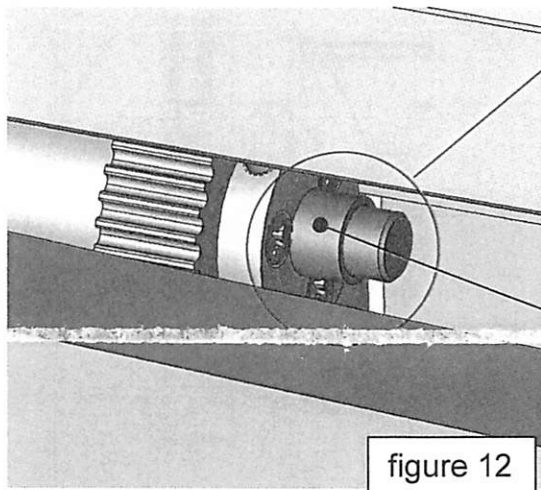
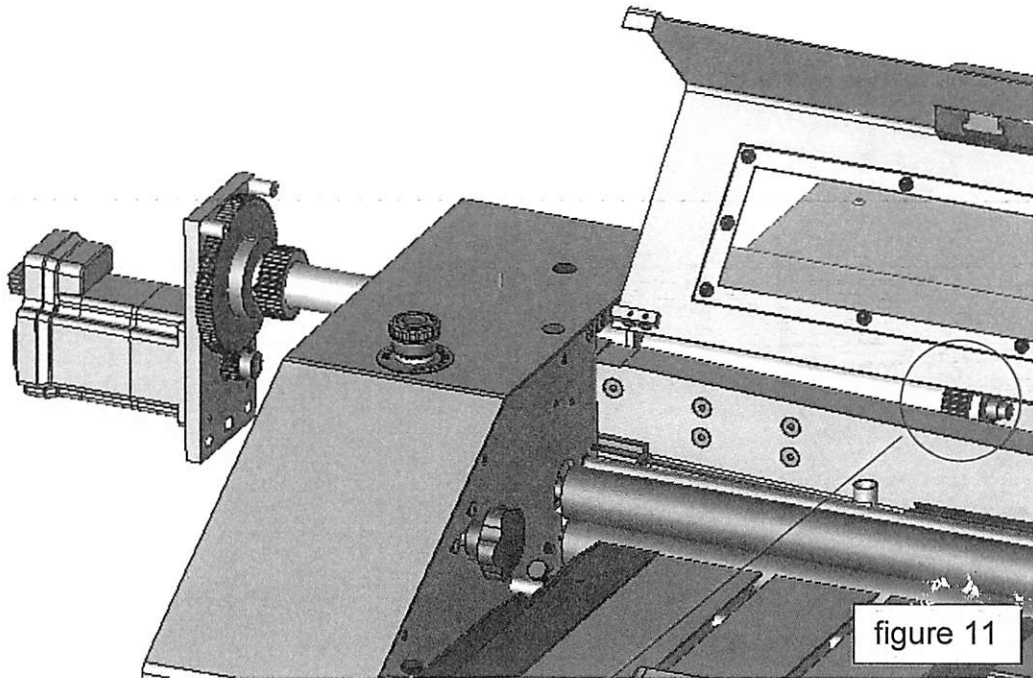
- 6) Remove cutting motor by removing 4 screws as indicated (figure 7).



- 7) Inspect and tighten set screws, **Note: one set screw must be located over flat on motor shaft to operate correctly** (figure 8). Replace cutting motor and test system, if system still not operating correctly proceed to step 5, 8-13.



- 10) Partially pull assembly out as shown in figure 11, place support under motor to keep assembly horizontal. **Note: Do not lose spacer, see figure 12.**



Spacer

set screw over flat on shafts

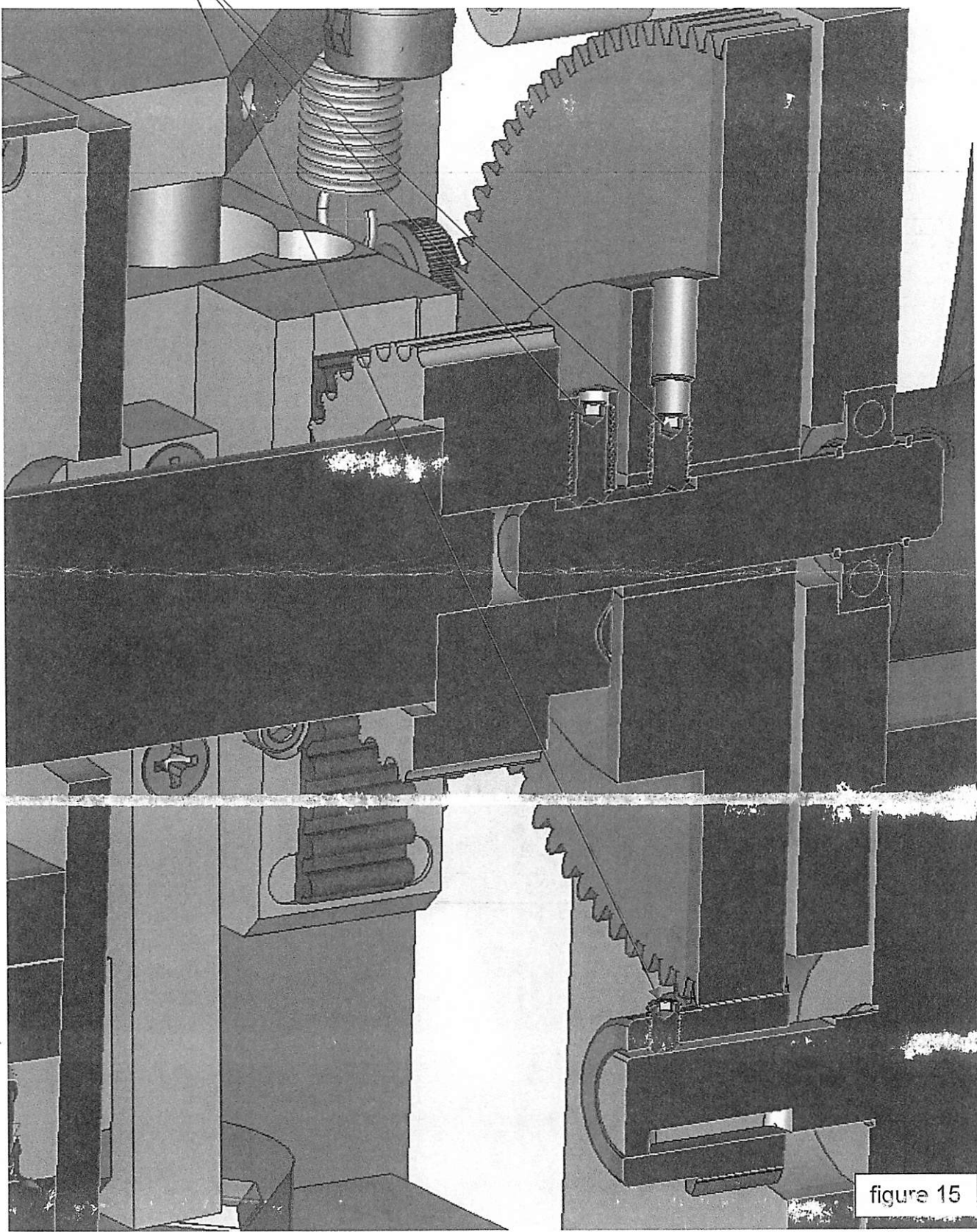
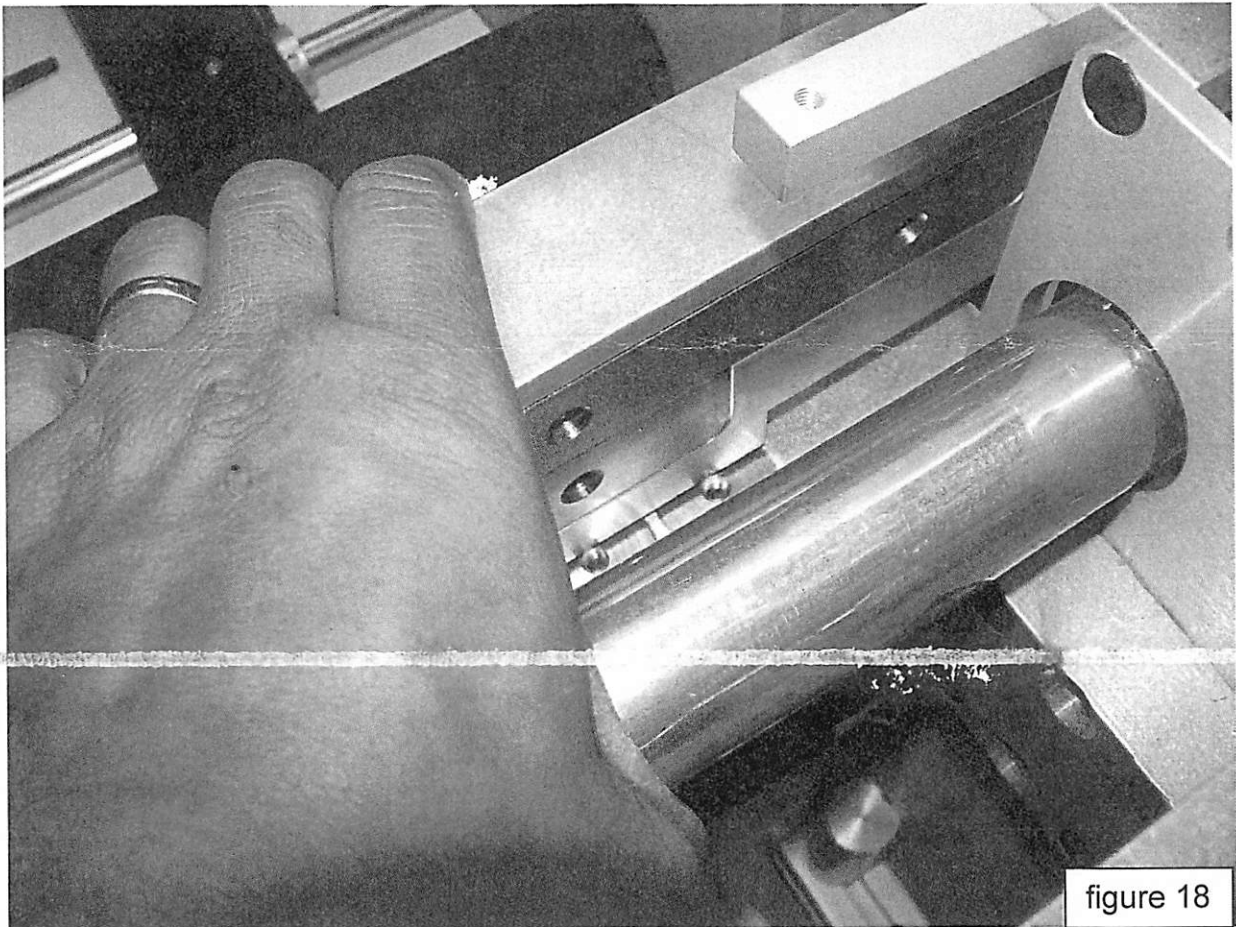
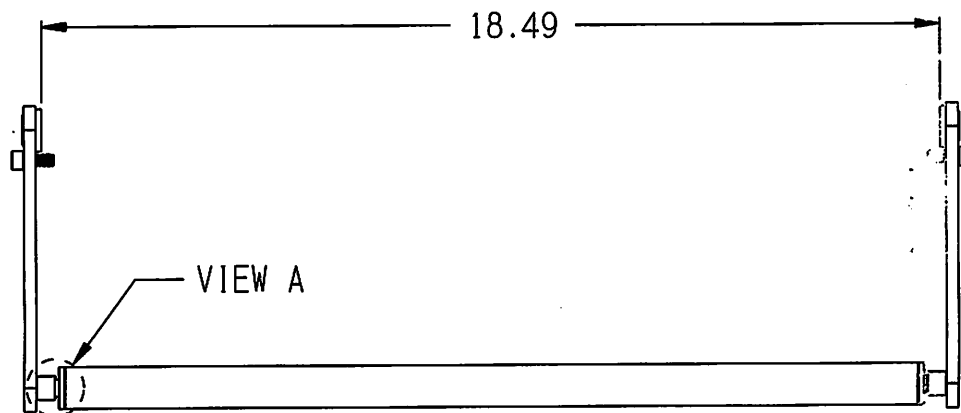
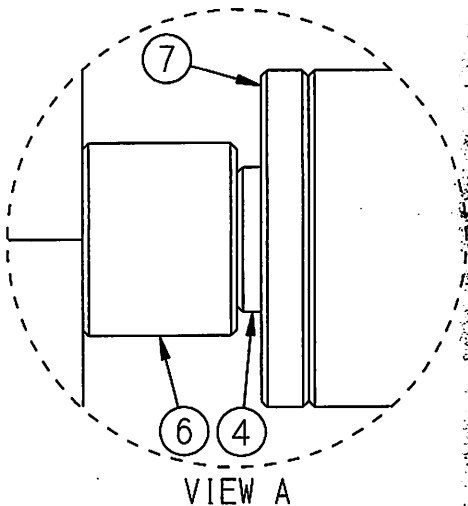
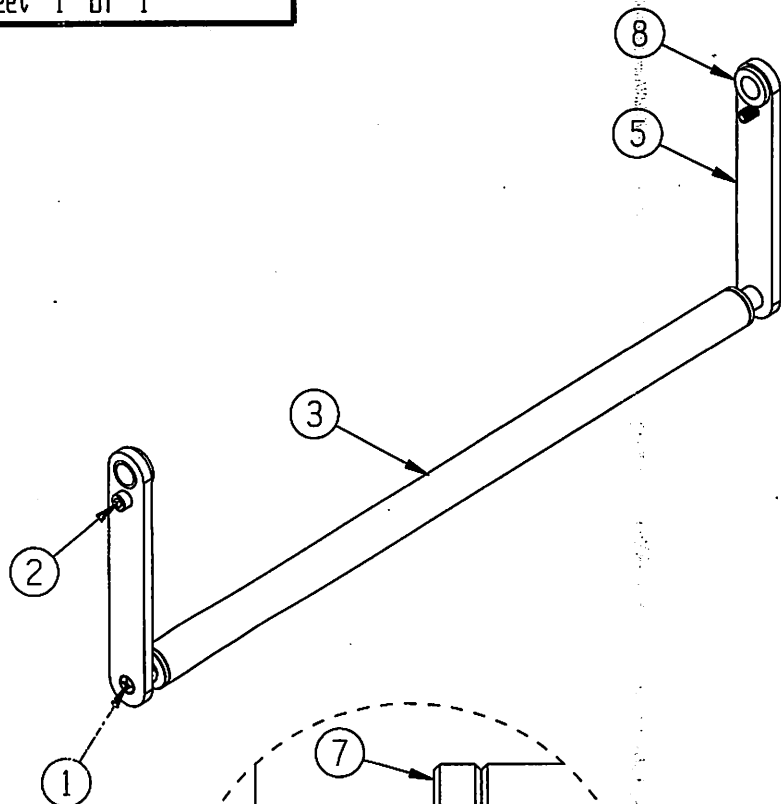


figure 15

- 13) Replace Cutting Gears & Motor Assembly, blade should be in lowest position. Starting on the Cutting Motor side and using as much force as possible squeeze the pinion shaft against the Cutting Module as shown in figure 18 and while maintaining that force secure the Cutting Motor side (fig. 20). Repeat the process for the controls side of the Cutting Gears & Motor Assembly (fig. 19). After tightening all bolts, the Cutting Motor and Cutting gear mounts should be back to or past initial scribe marks. Verify the controls side and motor side Rack & Pinions have the same tooth count from top of racks (use camera on phone or small mirror for verification) (fig. 3 & 4). Replace wiring harness and ground to cutting motor and test C15 Cutter. Tie wrap wiring harness and replace covers.



Rev.	Description	Date	App. By



Item	Part No.	Qty.	Description
1	.190BBB16	2	10-32 X 1 FH. PHIL MACH SCREW
2	.250PAA10	2	.250-20 X .625 SHCS
3	C15 008.4	1	IDLER TUBE
4	C15 011.4	1	IDLER TUBE SHAFT
5	C15 301.4	2	GUIDE TUBE MOUNTING BRACKET
6	HD15 191.4	2	SPACER, IDLER TUBE SHAFT
7	LC25 009.4	2	IDLER BEARING
8	PRB048C	2	OIL LIGHT BEARING REWORKED

Tolerances Unless Otherwise Specified

Basic Dimension	UP TO 6.000	6.001 TO 24.000	ABOVE 24.000	ANGLE
2 Place Dimension	±.015	±.025	±.031	±0° ±30'
3 Place Dimension	±.002	±.005	±.010	✓

Finish Specs:



4265 J. Main St., Hen... N.Y. 14466  
Ph # 35-367-2392 Fax # 35-367-2978

Material Specs: SEE PARTS LIST	PLUS 2 PIECES OF C15 302.4 MTG BOLT	L/W	QTY.	WGT.	Drawn By:	App. By:	Date: 10/16/2017
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# **C15 AUTOCUTTER FINISH LINE**

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**SEPTEMBER 2017**



EHR 44 135.4C  
TOP R/L WIDTH SPAN  
(2)

LEG BRACE  
HDF 15 138.4  
(2)

MIDDLE BRACE W/6 PLATE  
I 50 135.4I  
(2)

ENDCAP  
PRC 250  
(8)

UPPER LENGTH  
SPANNER  
C15 136.4  
(1)

REAR

C15 138.4  
BACK LEG  
(2) A502

BOTTOM LEFT WIDTH  
SPANNER  
C15 140.4  
(1)

FRONT LEG  
H850 135.4I  
(2)

C15 137.4  
FRONT LEG  
(2)  
A502

LOWER LENGTH  
SPANNER  
C15 135.4  
(2)

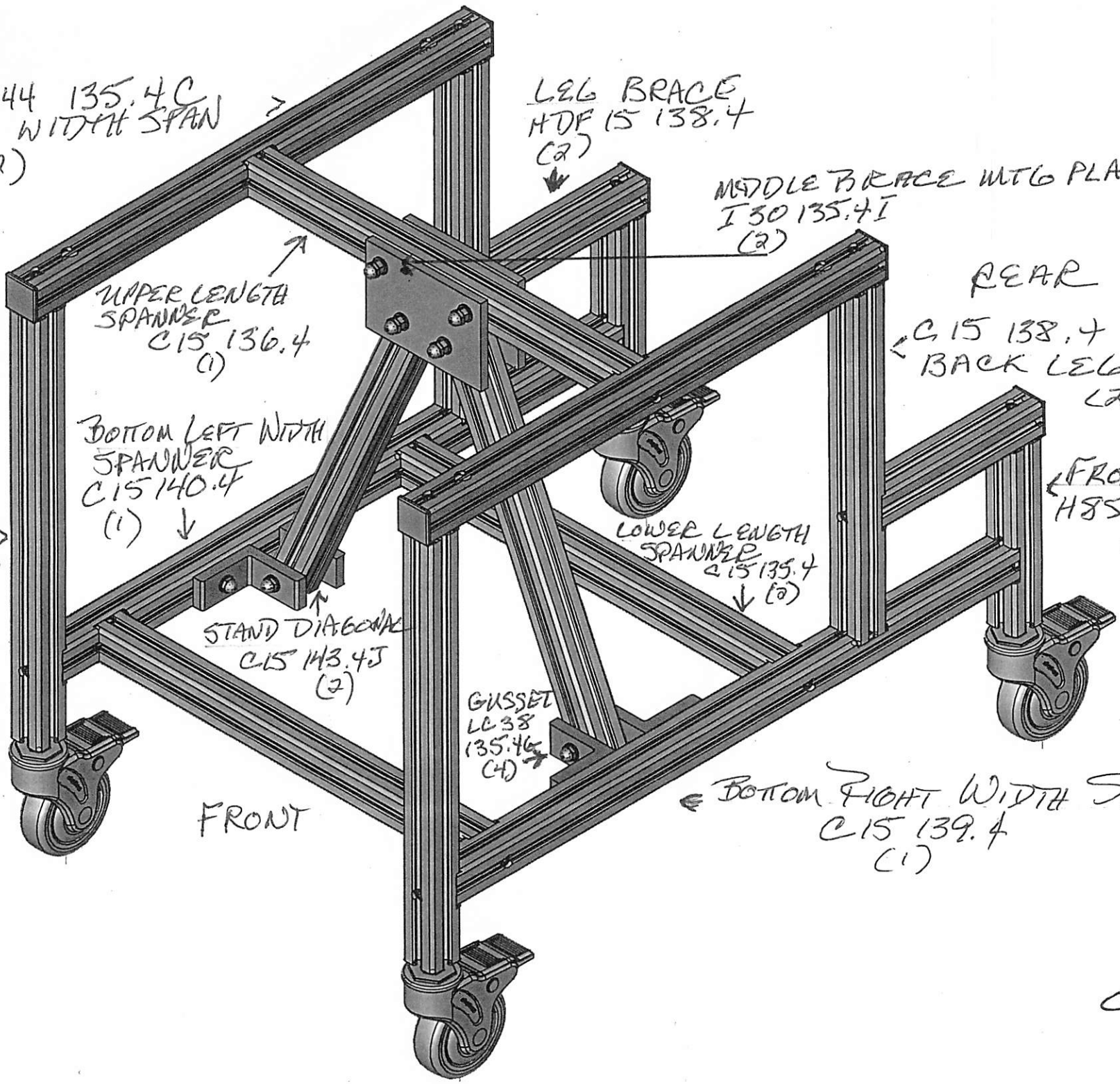
STAND DIAGONAL  
C15 143.4J  
(2)

GUSSET  
LC 38  
135.46  
(4)

BOTTOM FRONT WIDTH SPANNER  
C15 139.4  
(1)

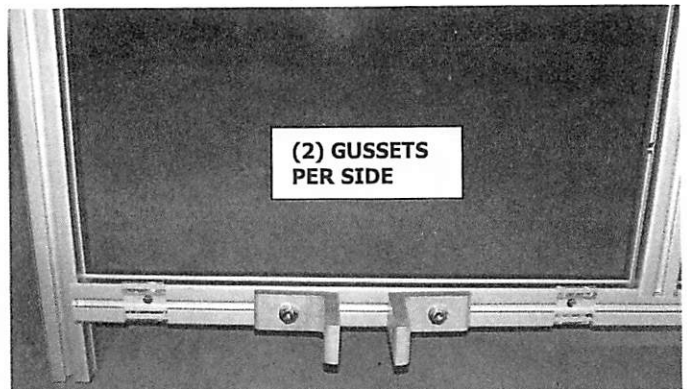
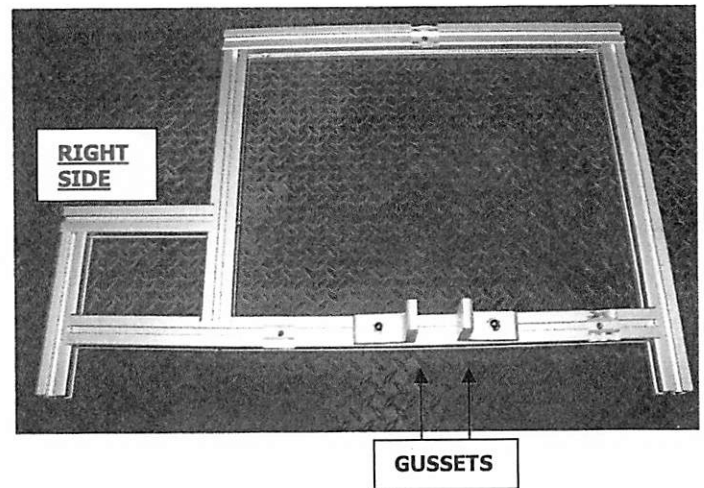
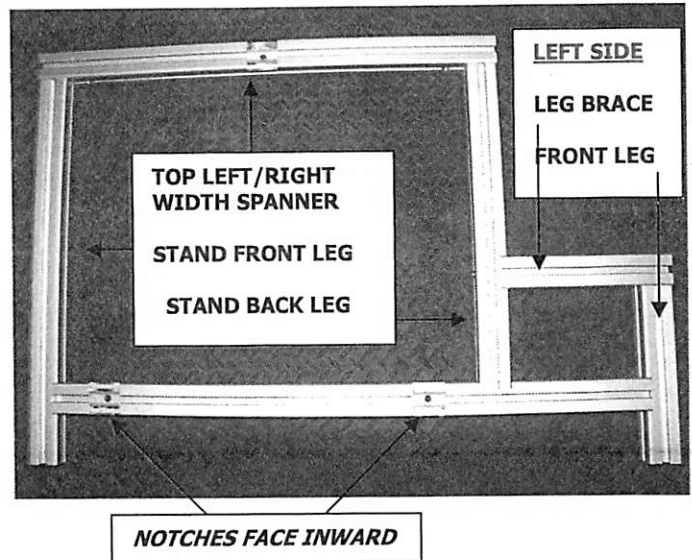
FRONT

C15



# C15 STAND WITH LEG BRACE

- 1) THE C15 EXTRUDED STAND IS BUILT WITH THE LEG BRACE SUPPORT TO THE *REAR OF THE CUTTER*, RATHER THAN THE USUAL FRONT. LOCATIONS ARE BOTH LOFT 1 AND AS02. ASSEMBLY OF THE C15 STAND IS AS FOLLOWS:
- 2) THE HARDWARD USED IS: (6) 5/16-18 X 3 SHCS, (20) 5/16-18 X 1½ SHCS, (4) (4) 5/16-18 X 1 CARRIAGE BOLTS, (16) 5/16 FLAT WASHERS, (4) 5/16 HEX NUTS AND (8) 5/16-18 ACORN NUTS.
- 3) ASSEMBLE RIGHT AND LEFT STAND ENDS. PLACE TOP LEFT/RIGHT WIDTH SPANNER (EHR44 135.4C) LOFT 1 ON A WORKTABLE; OUTER COUNTERBORE *UPWARD*, NOTCH *INWARD*. FROM AS02 SECURE THE LONGER STAND FRONT LEG (C15 137.4) AND THE SHORTER STAND BACK LEG (C15 138.4) THROUGH TOP COUNTERBORE WITH 5/16-18 1½ SHCS. ORIENT NOTCHES FACING REAR.
- 4) SECURE THE LEG BRACE (HDF15 138.4) LOFT 1 INTO THE BACK SUPPORT NOTCH, COUNTERBORE *UPWARD*, WITH 5/16-18 X 1½ SHCS. SECURE FRONT LEG (H850 135.4I) LOFT 1 TO THE FRONT LEG BRACE, NOTCH *INWARD*, USING 5/16-18 X 1½ SHCS. FROM AS02 SECURE BOTTOM LEFT WIDTH SPANNER (C15 140.4) AND BOTTOM RIGHT WIDTH SPANNER (C15 139.4) BETWEEN FRONT LEG, FRONT SUPPORT AND BACK LEG, NOTCH *INWARD*, USING 5/16-18 X 1½ SHCS. SECURE (2) STAND GUSSETS (LC38 135.4G) BY INSERTING A 5/16-18 X 1 CARRIAGE BOLT INTO THE BOTTOM SIDE SPANNER NOTCH, BREAK *INWARD*. ADD A 5/16 FLAT WASHER TO THE CARRIAGE BOLT THREADS AND SNUG A 5/16-18 ACORN NUT ONTO THREADS.

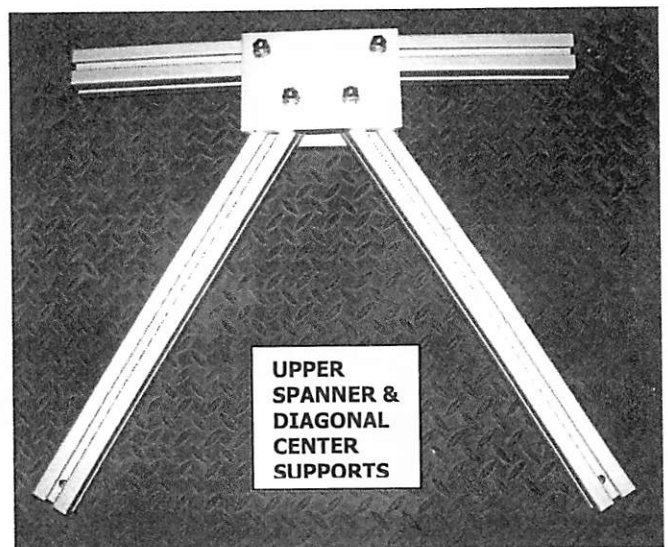
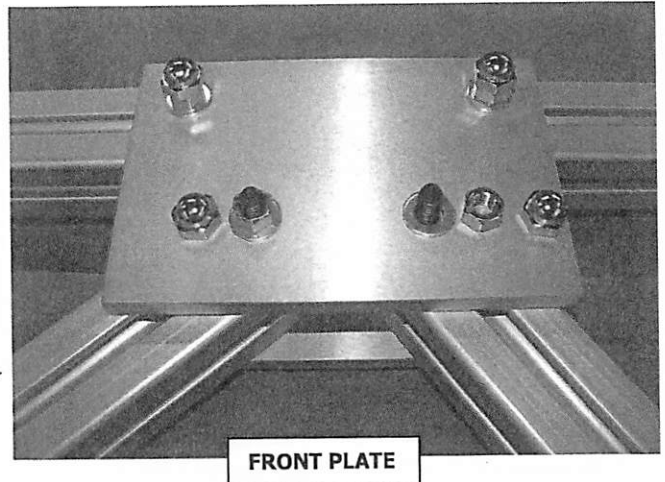
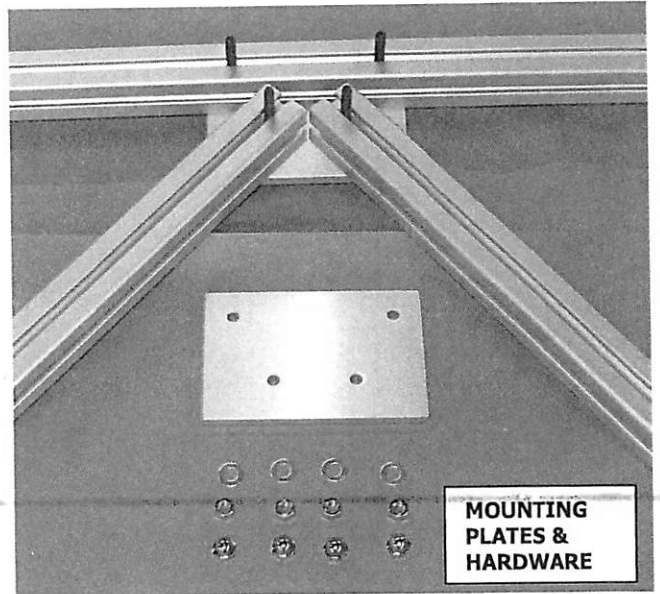


5) SECURE (2) STAND GUSSETS (LC38 135.4G) LOFT 1 BY INSERTING A 5/16-18 X 1 CARRIAGE BOLT INTO THE BOTTOM SIDE SPANNER NOTCH, BREAK INWARD. ADD A 5/16 FLAT WASHER TO THE CARRIAGE BOLT THREADS AND SNUG A 5/16-18 ACORN NUT ONTO THREADS.

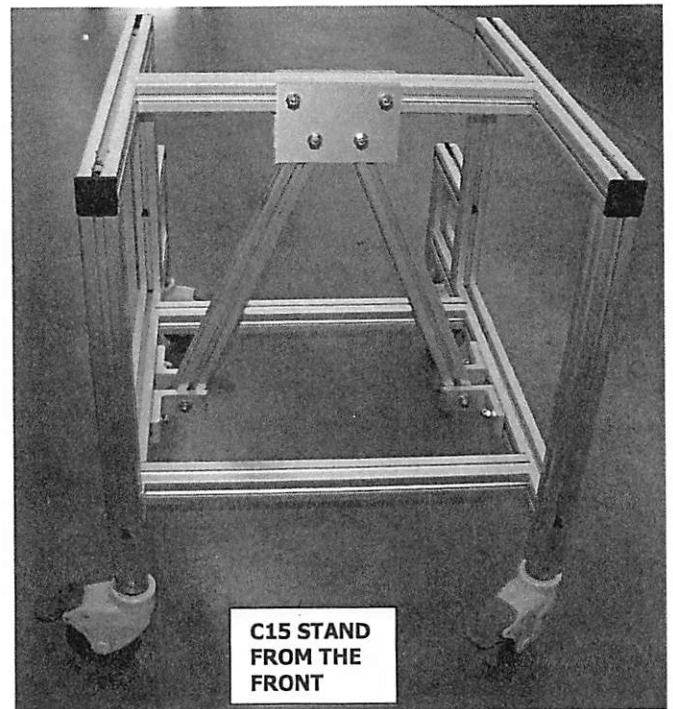
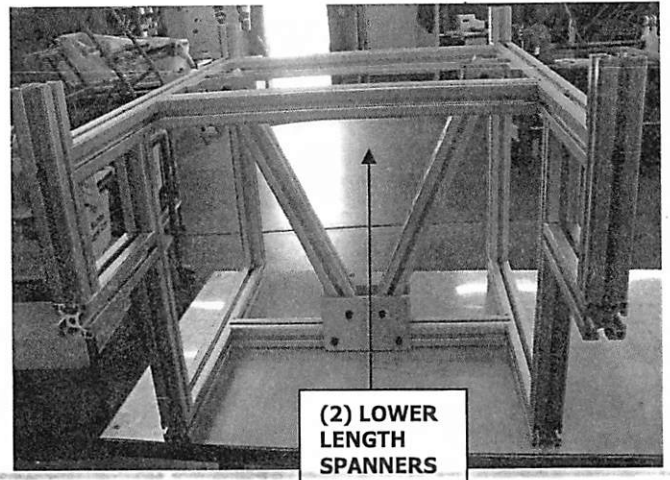
6) PLACE A 5/16 FLAT WASHER ON EACH OF (4) 5/16-18 X 3 SHCS. SET A MIDDLE BRACE MOUNTING PLATE (I30 135.4I) LOFT 1 ON THE (4) SHCS. FROM AS02 ALIGN A MACHINE STAND UPPER LENGTH SPANNER (C15 136.4) WHICH HAS TWO HOLES IN THE CENTER TO ACCOMMODATE THE MOUNTING PLATE, HOLES ARE ORIENTED FRONT AND BACK, ON MORE DISTANT HOLES. PLACE (2) STAND DIAGONAL CENTER SUPPORT (C15 143.4J) ON THE (2) CLOSER, LOWER MOUNTING PLATE HOLES. PLACE ANOTHER MIDDLE BRACE MOUNTING PLATE ON THE SHCS THREADS AND LOOSELY SECURE WITH A 5/16 FLAT WASHER, 5/16-18 HEX NUT AND A 5/16-18 ACORN NUT. THE ACORN NUTS WILL FACE THE FRONT OF THE MACHINE.

7) ROTATE THE TOP WIDTH SPANNER SO THE ACORNS ARE FACING THE FRONT AND THE STAND DIAGONALS ARE UPWARD.

8) PLACE STAND ENDS UPSIDE DOWN ON WORKTABLE. SLIDE THE UPPER LENGTH SPANNER AND THE (2) DIAGONALS IN THE END NOTCHES. *LOOSELY* SECURE THE DIAGONALS BETWEEN THE GUSSETS WITH 5/16-18 X 3 SHCS, WASHERS ON EACH SIDE AND AN ACORN NUT FACING THE FRONT. SECURE THE UPPER LENGTH SPANNER WITH 5/16-18 X 1½ SHCS.

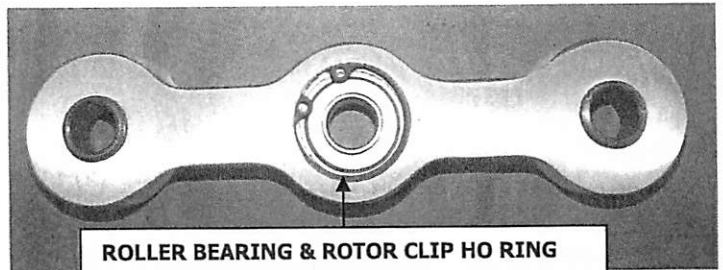


- 9) SECURE (2) LOWER LENGTH SPANNERS (C15 135.4) AS02 USING 5/16-18 X 1½ SHCS.
- 10) THREAD (4) 'IN HOUSE' CASTERS SHIPPING DEPT INTO LOWER LEGS FOR MOBILITY. PLACE STAND RIGHTSIDE UP ON FLOOR.
- 11) TAP (6) END CAPS (PRC250) LOFT 1 INTO THE EXPOSED EXTRUDED ENDS.
- 12) CHECK THAT ALL SCREWS, NUTS AND ACORNS ARE TIGHT.

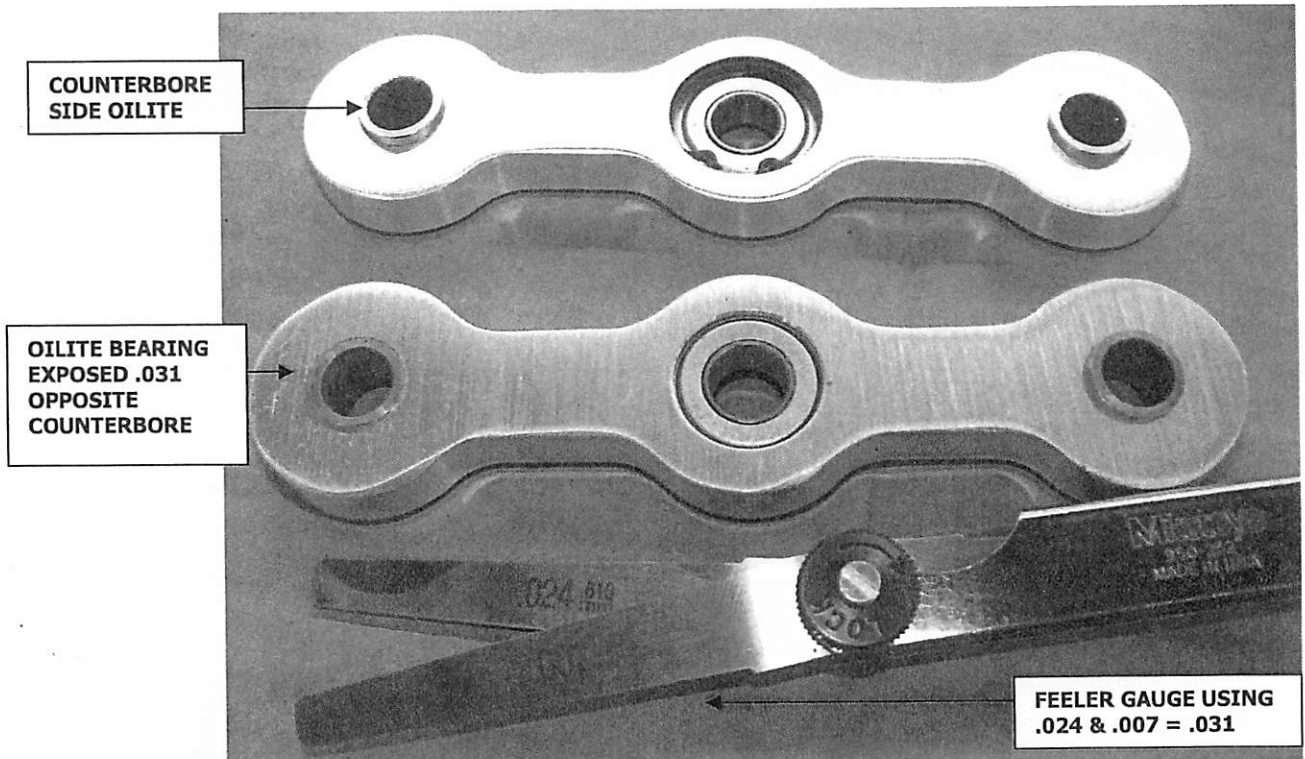


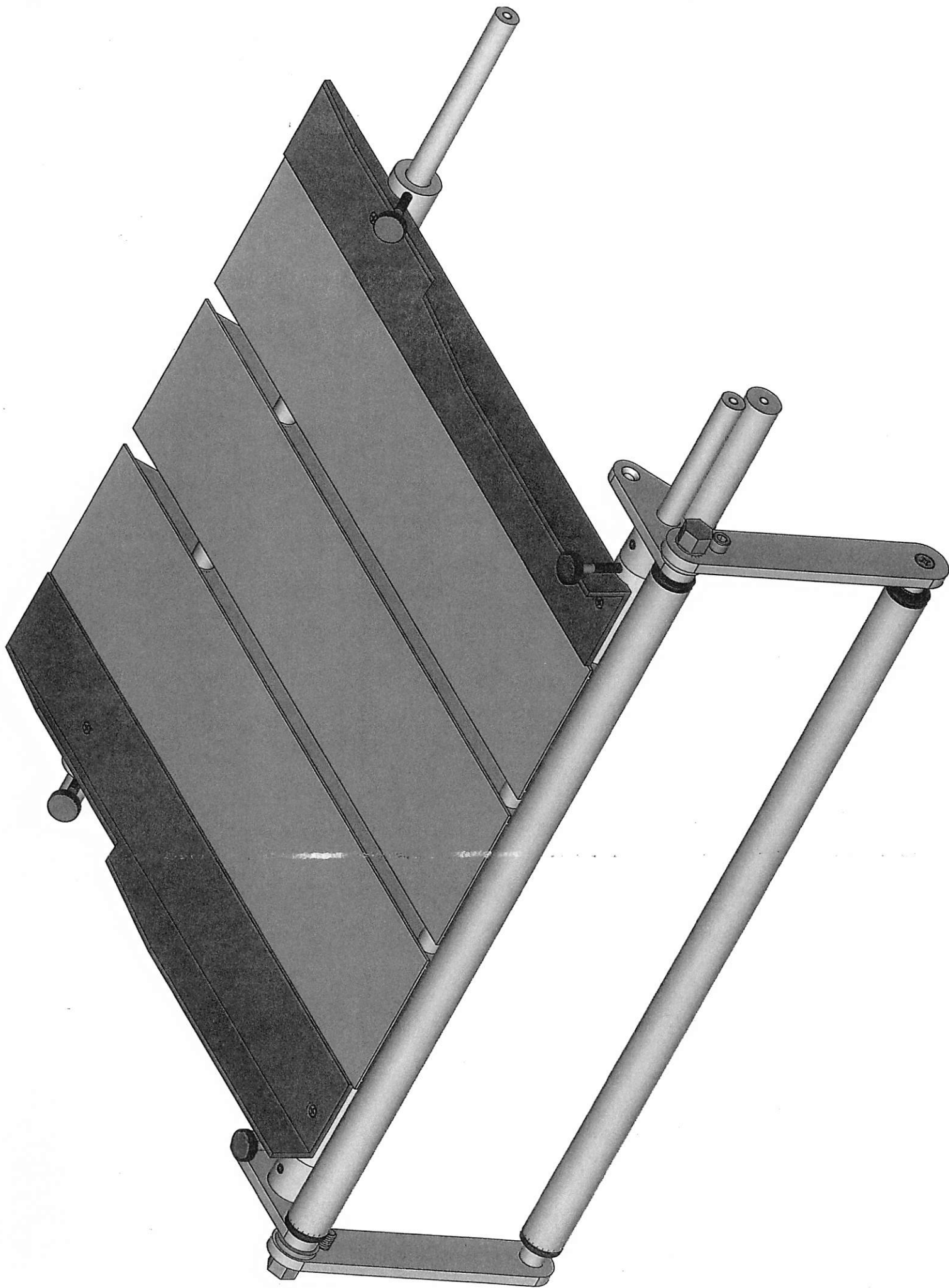
# C15 RUBBER ROLL PIVOT ARM ASSEMBLY

- 1) ASSEMBLE A RIGHT AND LEFT RUBBER ROLL PIVOT ARM (C15 056.4) RACK 24 BY ARBOR PRESSING AN R6-ZZ ROLLER BEARING (PRB075) RACK 12 FULLY INTO THE COUNTERBORE OF THE RUBBER ROLL PIVOT ARM. SECURE THE ROLLER BEARING WITH A ROTOR CLIP HO RING (PRC275) RACK 12.



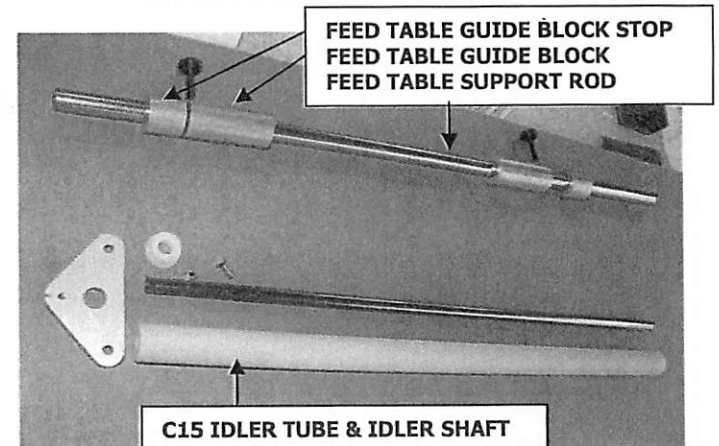
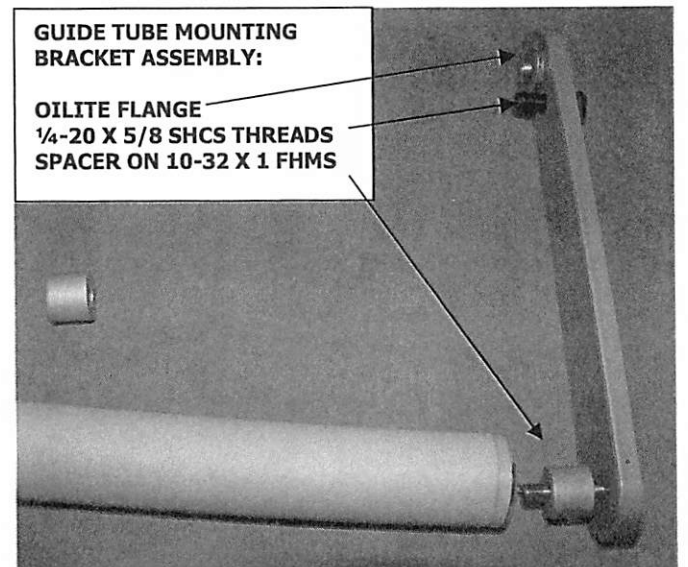
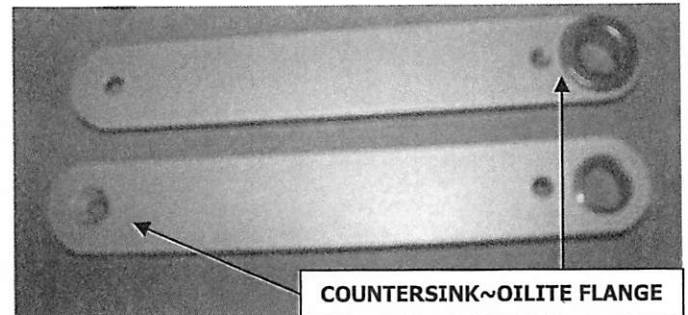
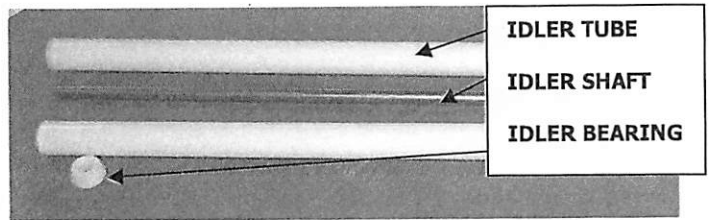
- 2) ARBOR PRESS A WORKED OILITE SLEEVE BEARING (PRB111A) RACK 12 INTO EACH END OF BOTH PIVOT ARMS FROM THE COUNTERBORED SIDE. MEASURE THE EXPOSED AMOUNT OF OILITE BEARING ON THE OPPOSITE SIDE TO .031. USE A FEELER GAUGE. WITH OUR FEELER GAUGE THE .007 AND .024 ARE HELD TOGETHER TO EQUAL .031.



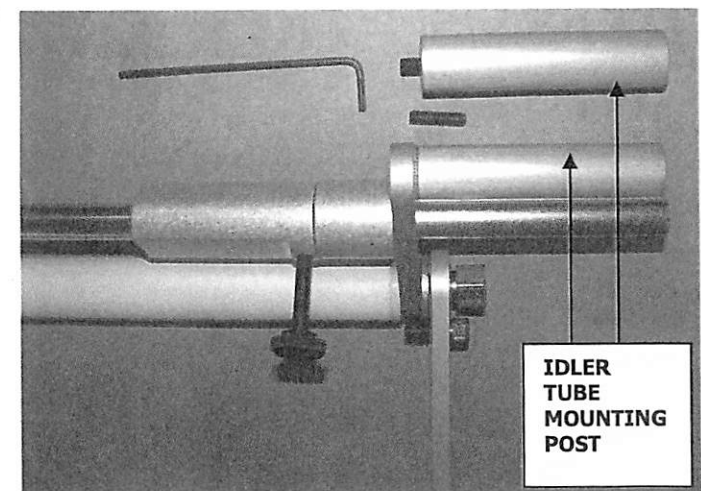
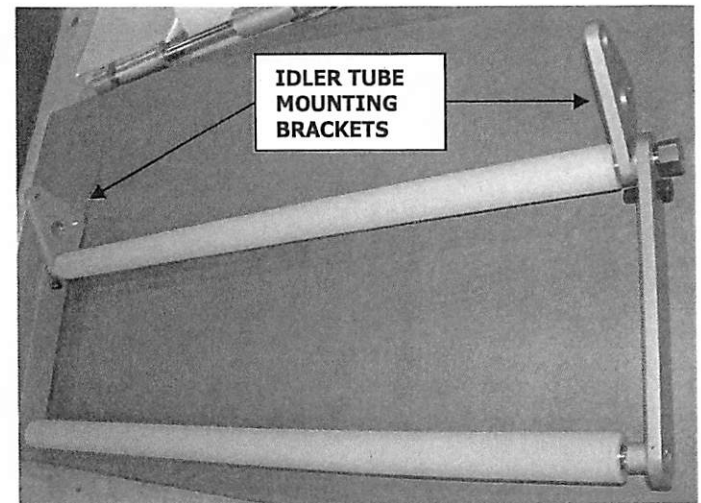
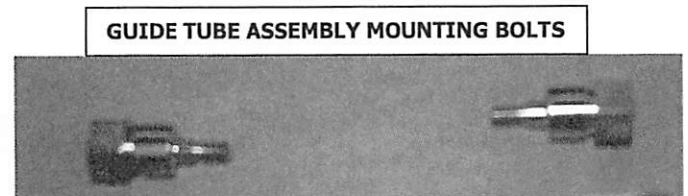
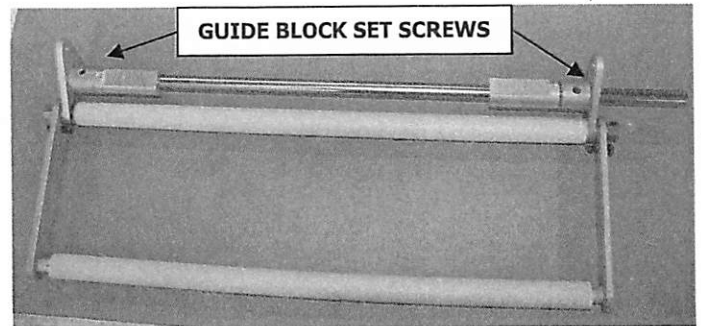


# C15 FEED TABLE ASSEMBLY

- 1) TAP A WHITE NYLON IDLER BEARING (LC25 009.4) LD12 INTO BOTH ENDS OF (2) IDLER TUBES (C15 008.4) LOFT 7.
- 2) INSERT AN IDLER TUBE SHAFT (C15 011.4) LOFT 6 THROUGH WHITE NYLON BEARINGS ON BOTH OF THE IDLER TUBES. SET ASIDE.
- 3) ARBOR PRESS A WORKED OILITE BEARING (PRB048C) RACK 24 INTO THE ENDS OF (2) GUIDE TUBE MOUNTING BRACKETS (C15 301.4) RACK 24. \*\*\*ORIENT THE OILITE FLANGE ON THE *OPPOSITE SIDE OF THE COUNTERSINK*. THE OILITE FLANGE WILL FACE *INWARD* ON BOTH BRACKETS. OPEN OILITE BEARINGS WITH A .505 REAMER.
- 4) FROM THE OUTER GUIDE TUBE MOUNTING BRACKET, BELOW THE OILITE BEARING, THREAD A 1/4-20 X 5/8 SHCS. THE INNER THREADS WILL ACT AS A "STOP."
- 5) SECURE ONE OF THE ASSEMBLED IDLER TUBES BETWEEN THE GUIDE TUBE MOUNTING BRACKET SPACERS; THE OILITE FLANGE IS INWARD, AND THE COUNTERSINK IS OUTWARD. \*\*\*TIGHTEN ON A FLAT SURFACE SO MOUNTING BRACKETS ARE LEVEL. USE 10-32 X 1 FHMS, EACH WITH A SPACER IDLER TUBE SHAFT (HD15 191.4) LOFT 6. LOCTITE THREADS.
- 6) SLIDE (2) FEED TABLE GUIDE BLOCKS (H380 100.4) AS07, WITH FLAT SECTION INWARD, OVER THE ENDS OF A FEED TABLE SUPPORT ROD (C15 196.4) AS02. ADD A FEED TABLE GUIDE BLOCK STOP (C15 101.4) RACK 24 TO EACH END. THREAD A 10-32 X 1/4 SET SCREW INTO EACH FEED TABLE GUIDE BLOCK STOP.



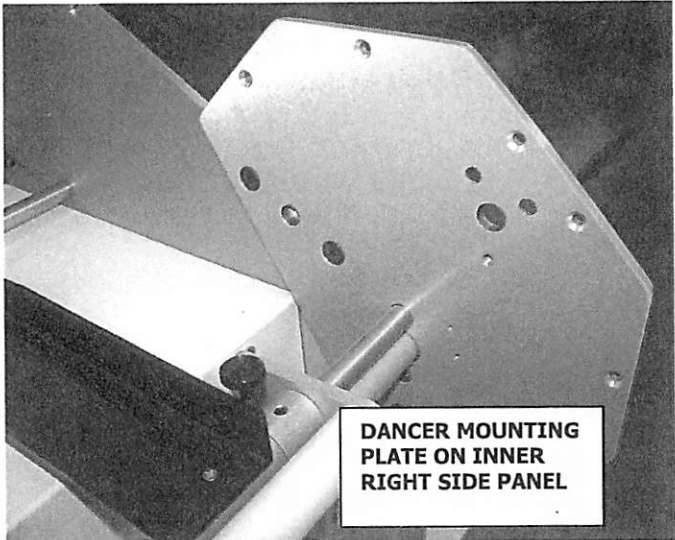
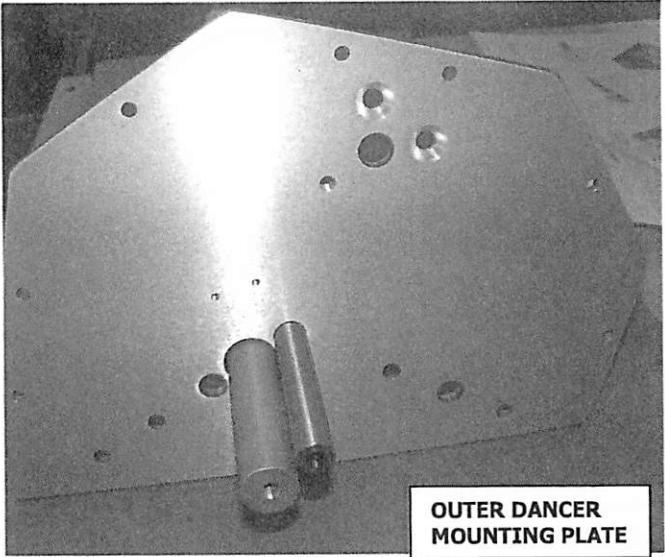
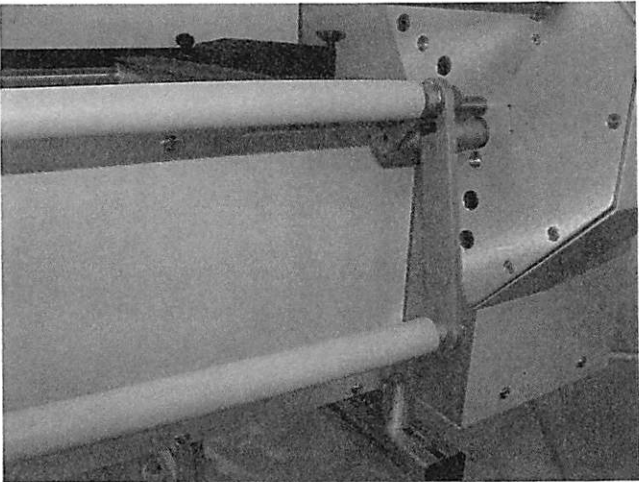
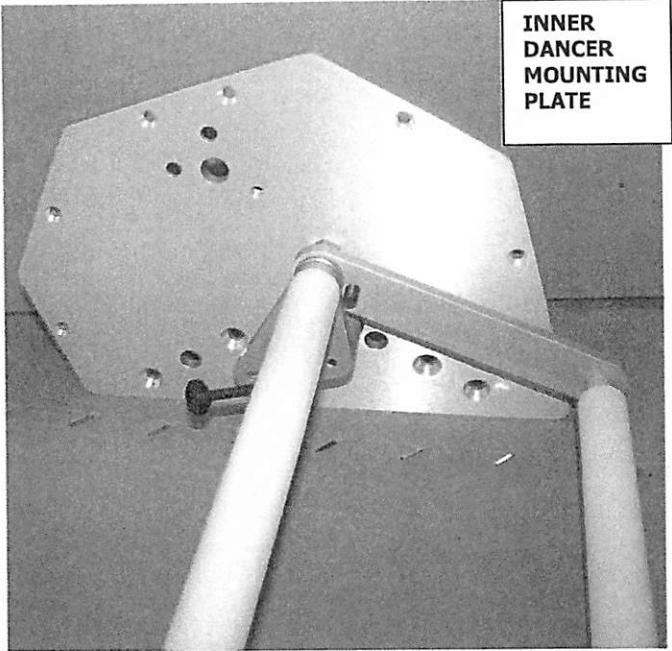
- 7) WITH THE COUNTERSINKS FACING OUTWARD, ALIGN (2) IDLER TUBE MOUNTING BRACKETS (C15 192.4) RACK 24, AND SLIDE OVER THE ENDS OF THE ASSEMBLED FEED TABLE SUPPORT ROD. FOR THE LEFT SIDE, SNUG THE GUIDE BLOCK SET SCREW NEXT TO THE MOUNTING BRACKET, WITH SUPPORT ROD FLUSH WITH OUTER MOUNTING BRACKET. ON THE RIGHT SIDE THE MOUNTING BRACKET EXTENDS PAST THE GUIDE BLOCK. LEAVE RIGHT SIDE GUIDE BLOCK LOOSE FOR NOW.
- 8) ORIENT THE (2) IDLER TUBE MOUNTING BRACKET COUNTERSINKS UPWARD AND SECURE THE SECOND ASSEMBLED IDLER TUBE BY INSERTING A GUIDE TUBE ASSEMBLY MOUNTING BOLT (C15 302.R) RACK 24: FIRST INTO THE OILITE BEARING IN THE GUIDE TUBE MOUNTING BRACKET, THEN THROUGH THE FRONT COUNTERSINK ON THE IDLER TUBE MOUNTING BRACKET, THEN THREADING INTO THE IDLER SHAFT. USE LOCTITE ON MOUNTING BOLT THREADS. KEEP BRACKETS EVEN AS YOU THREAD IN.
- 9) LOCTITE THREADS ON A 10-32 X  $\frac{3}{4}$  SET SCREW. THREAD INTO AN IDLER TUBE MOUNTING POST (C15 193.4) RACK 24. LEAVE THREADS SHOWING TO EQUAL THE THICKNESS OF AN IDLER TUBE MOUNTING BRACKET. SECURE THE MOUNTING POST UNDER THE EXTENDED FEED TABLE SUPPORT ROD, USING THE REMAINING SET SCREW THREADS.
- 10) THREAD A SPI KNOB WITH 1  $\frac{1}{4}$ " SCREW (PRK179) AS07 INTO EACH OF THE FEED TABLE GUIDE BLOCKS, ALIGNED WITH THE FLAT SIDE OF THE MOUNTING BRACKETS. SLIDE THE GUIDE BLOCKS NEXT TO THE GUIDE BLOCK STOPS AND SNUG THE SPI KNOBS.
- 11) ORIENT AND SLIDE A DANCER MOUNTING PLATE (C15 287.4) AS02 OVER THE RIGHT SIDE EXTENDED FEED





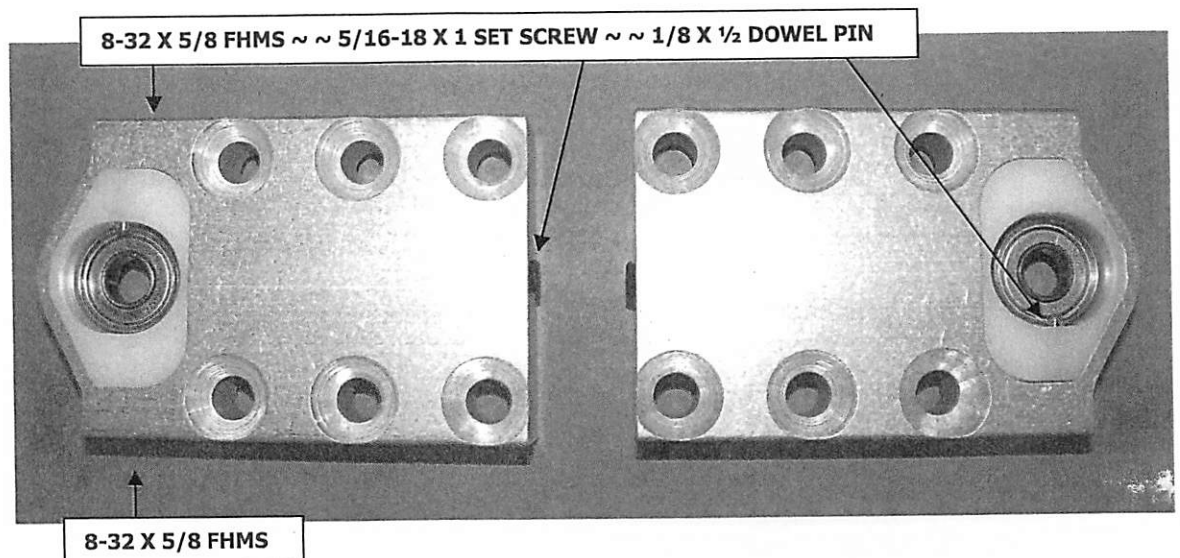
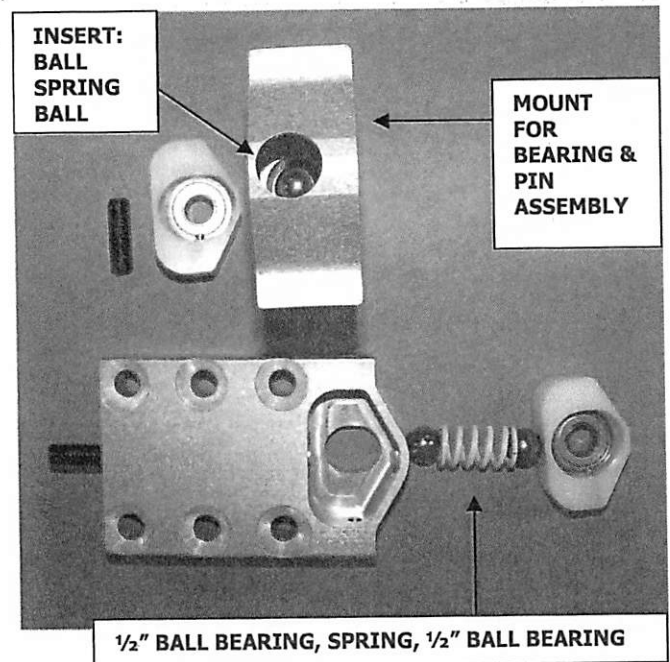
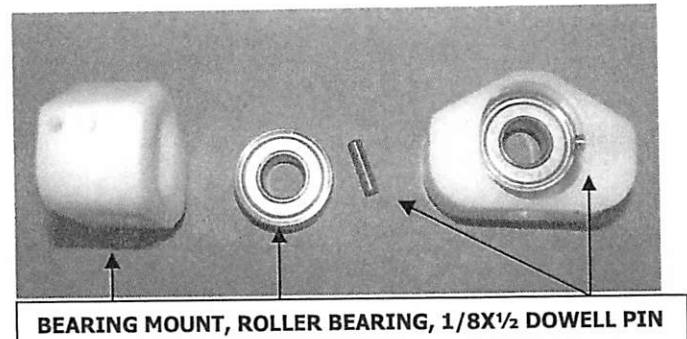
**TABLE SUPPORT ROD AND IDLER  
TUBE MOUNTING POST. NOTE HOLE  
LOCATION ON PICTURES.**

**12) THE FEED TABLE ASSEMBLY IS NOW  
READY TO ATTACH TO THE FRONT  
CHASSIS.**



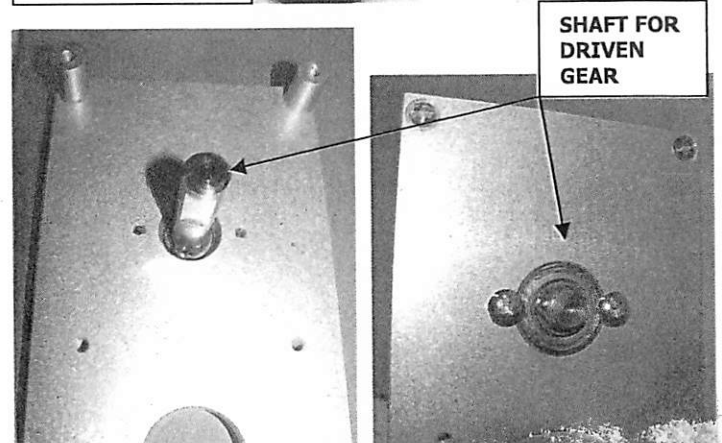
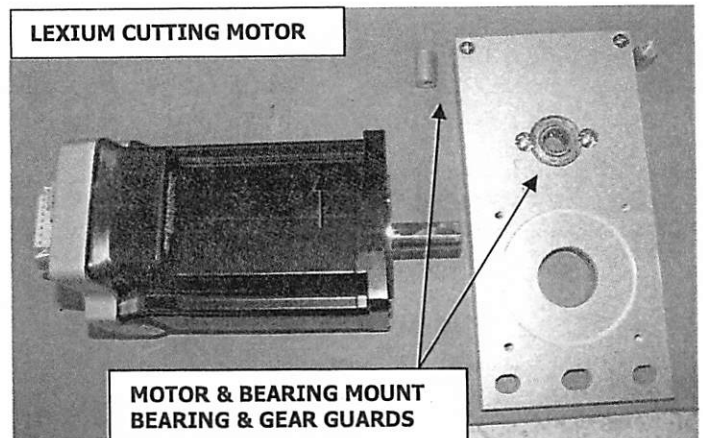
# C15 BEARING MOUNT & PIN ASSEMBLY

- 1) MAKE (2) OF THE BEARING MOUNT AND PIN ASSEMBLIES, AS FOLLOWS.
- 2) INSERT AN R6-ZZ ROLLER BEARING (PRB075) RACK 12 INTO A WHITE DELRON BEARING MOUNT (C15 408.4) RACK 24. PUSH ROLLER BEARING FULLY INTO THE COUNTERBORE.
- 3) ARBOR PRESS A 1/8 X 1/2 DOWELL PIN (.125JOP08) AS13 INTO THE OUTER, UNTAPPED END, FLUSH WITH OUTER BEARING MOUNT. THE PIN HOLDS THE ROLLER BEARING, BUT THERE IS PLAY.
- 4) SET A MOUNT FOR BEARING AND PIN ASSEMBLY (C15 409.4) RACK 24 ON END, WITH THE OPENING UPWARD.
- 5) INSERT A 1/2" DIAMETER BALL BEARING (PRB262) LOFT 6 INTO THE MOUNT OPENING, THEN INSERT A WHITE SPRING (PRS229) RACK 9, AND ANOTHER 1/2" DIA. BALL BEARING.
- 6) INSERT THE ASSEMBLED DELRON BEARING MOUNT AND PIN INTO MOUNT FITTING, WITH THE EXPOSED DOWEL PIN SHOWING OUTWARD. SNUG (2) 8-32 X 5/8 FHMS INTO DELRON BEARING MOUNT ENDS THROUGH LARGER MOUNT. THREAD A 5/16-18 X 1 SS INTO END UNTIL BALL TOUCHES DELRON BEARING.



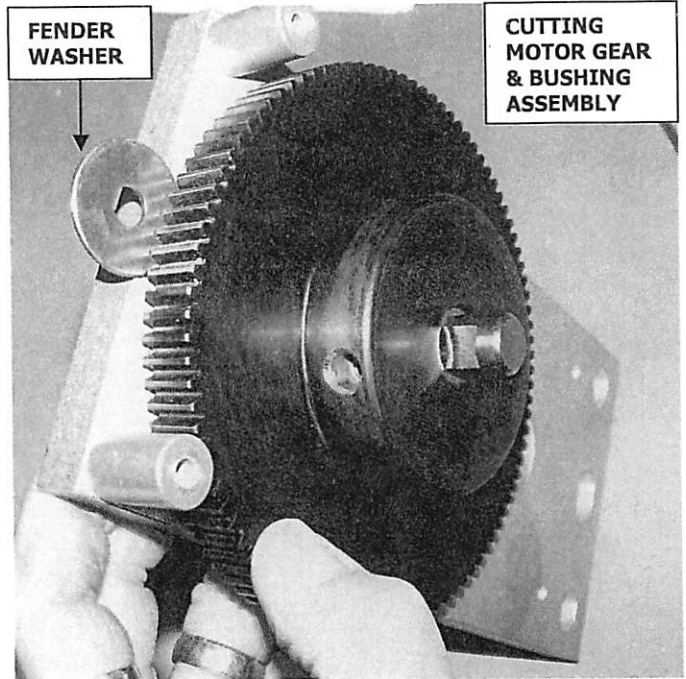
# C15 CUTTING MOTOR & ASSEMBLY

- 1) PREPARE THE LEXIUM C15 CUTTING STEPPER MOTOR, MACHINED (PRM853.4) AS02 BEFORE ADDING TO CUTTER.
- 2) ARBOR PRESS AN R8-ZZ ROLLER BALL BEARING (PRB038) RACK 21 INTO THE COUNTERBORE OF THE MOTOR AND BEARING MOUNT (C15 432.4) AS02. SECURE BEARING WITH (2) 10-32 X 1/2 THMS.
- 3) SECURE (2) GEAR GUARDS (C15 461.4) RACK 24 THROUGH THE COUNTER SINKS ABOVE THE ROLLER BEARING. USE 10-32 X 1 FHMS.
- 4) REMOVE AND RETAIN (2) 10-32 X 3/16 SET SCREWS ON A CUTTING MOTOR GEAR 14MM BORE (C15 359.4) RACK 24. SLIDE THE CUTTING MOTOR GEAR OVER THE MOTOR SHAFT, HUB OUTWARD AND TEETH INWARD. ALIGN OUTER HUB WITH THE END OF THE SHAFT. ADD LOCTITE TO ONE SET SCREW AND TIGHTEN ON THE FLAT OF THE MOTOR SHAFT. DO NOT USE KEY. LOCTITE SECOND SET SCREW AND TIGHTEN ON ROUND OF MOTOR SHAFT.
- 5) PLACE AN EXTERNAL RETAINING RING (PRR191) LD05 ON THE INNER RETAINING RING GROOVE OF A SHAFT FOR DRIVEN GEAR (C15 434.4) RACK 24.
- 6) INSERT THE SNAP RING GROOVED END OF THE SHAFT FOR DRIVEN GEAR THROUGH THE ROLLER BEARING IN THE MOTOR AND BEARING MOUNT, FROM THE SIDE WITH THE GEAR GUARDS. ADD A SECOND EXTERNAL RETAINING RING (PRR191) TO THE SHAFT GROOVE ON THE OTHER SIDE OF THE ROLLER BEARING, HELD BY THE TRUSSHEADS. THERE IS 'PLAY' BETWEEN THE TWO SNAP RINGS.



7) PUSH THE SHAFT FOR DRIVEN GEAR THROUGH THE ROLLER BEARING, SO THE EXCESS SHAFT 'PLAY' IS ON THE TRUSSHEAD SIDE. MAINTAIN THIS SHAFT POSITION. SLIDE A CUTTING MOTOR GEAR AND BUSHING ASSEMBLY (C15 460.4) AS02 ONTO THE SHAFT FROM THE GEAR GUARD SIDE, TEETH INWARD, HUB OUT. MEASURE THE DISTANCE BETWEEN THE GEAR TEETH AND THE MOTOR AND BEARING MOUNT BY PLACING A 1/4 FENDER WASHER BETWEEN THEM. ALIGN SET SCREW THREADS OVER THE FLAT OF THE SHAFT. LOCTITE A 1/4-20 X 1/2 SET SCREW AND TIGHTEN THROUGH GEAR COUNTERBORE ONTO FLAT. LOCTITE A SECOND 1/4-20 X 1/2 SET SCREW AND TIGHTEN ON SHAFT ROUND. CONFIRM GEAR DOES NOT CONTACT MOTOR AND BEARING MOUNT WHILE IN MOTION.

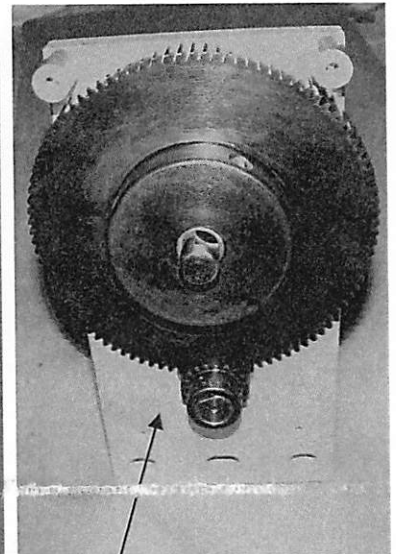
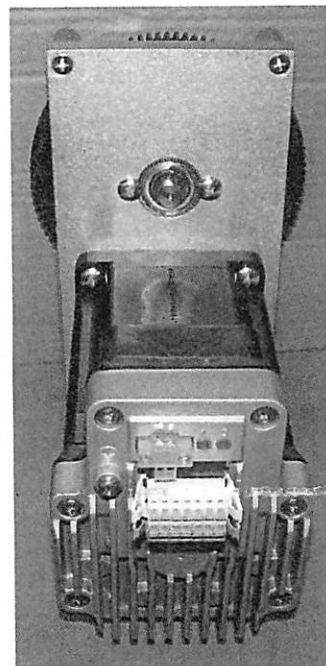
Box 24



8) USE A LONG SCREWDRIVER TO SECURE THE LEXIUM STEPPER CUTTING MOTOR TO THE MOTOR AND BEARING MOUNT, ALIGNED WITH *TERMINAL BLOCKS FACING INWARD* ON BEARING MOUNT. MESH MOTOR SHAFT GEAR TEETH WITH LARGER GEAR TEETH ON THE MOTOR MOUNT. USE (4) 10-32 X 3/4 THMS, EACH WITH A #10 STAR WASHER AND LOCTITE.

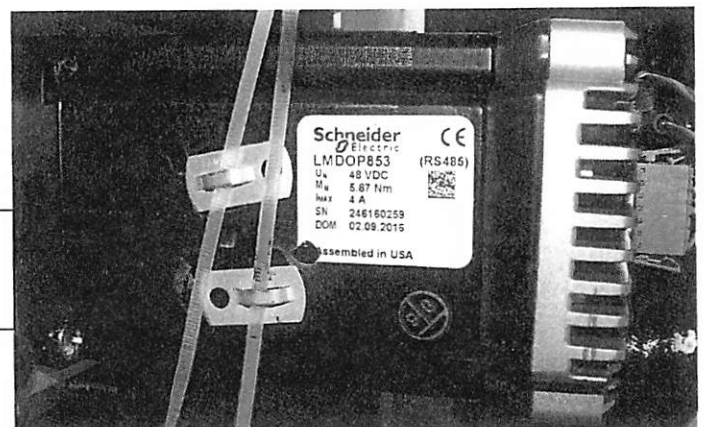
9) TURN CUTTING MOTOR ASSEMBLY SO THE UNDERSIDE SHOWS, FURTHER AWAY FROM THE TERMINAL BLOCKS, BY THE LABEL. USE PERMANENT BLACK LOCTITE GLUE TO SECURE (2) METAL CABLE TIE SCREW MOUNTS (PRC305) LOFT 6 PARALLEL WITH EACH OTHER. INSERT A CABLE TIE IN EACH, FOR USE LATER.

10) TEST GEAR ROTATION. BRUSH LITHIUM GREASE ON GEAR TEETH.



MESH GEAR TEETH BEFORE SECURING MOTOR TO MOUNT

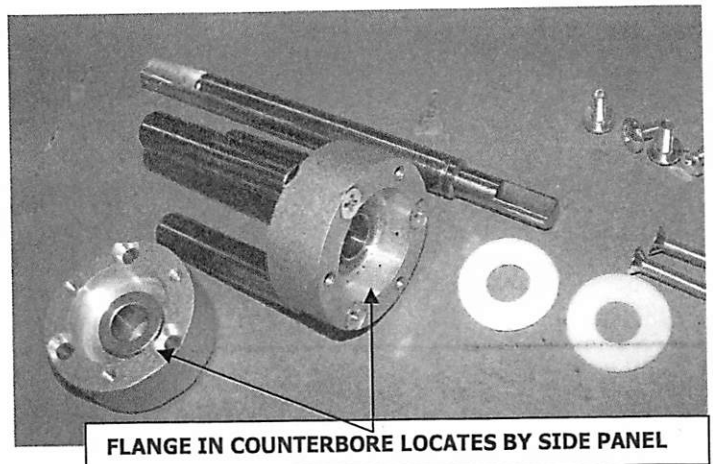
METAL CABLE TIE MOUNTS



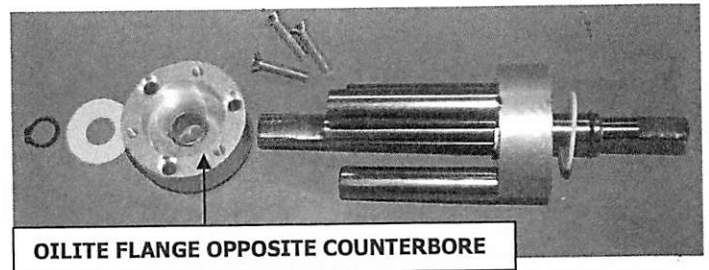
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 DOM 02.09.2016  
 assembled in USA

# C15 INSIDE FEED ROLL LIFTER ASSEMBLY

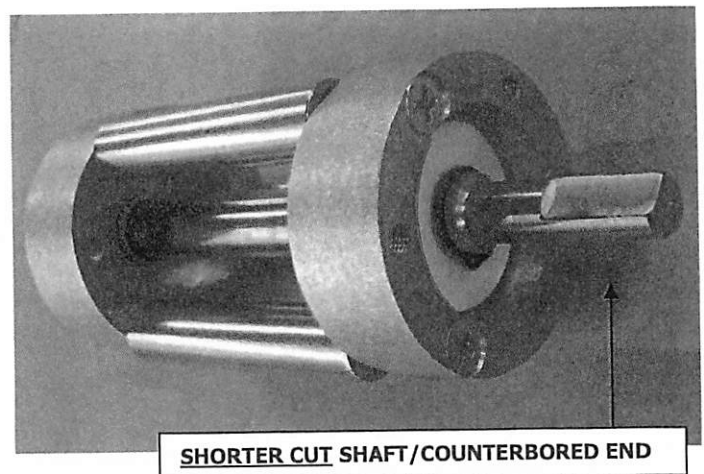
- 1) ARBOR PRESS AN OILITE BEARING (PRB048B) RACK 8 INTO EACH OF (2) LIFTER SHAFT MOUNTING BRACKETS (C15 062.4) RACK 24. THESE BRACKETS ARE UNIVERSAL. THE OILITE BEARING IS PRESSED INTO THE COUNTERBORE ON THE LIFTING SHAFT BRACKET THAT WILL BE CLOSEST TO THE SIDE PANEL. THE SECOND OILITE BEARING IS PRESSED FROM THE OPPOSITE SIDE, FLAT SIDE, ON THE LIFTER SHAFT MOUNTING BRACKET. THIS IS FOR THE SPROCKET SIDE.



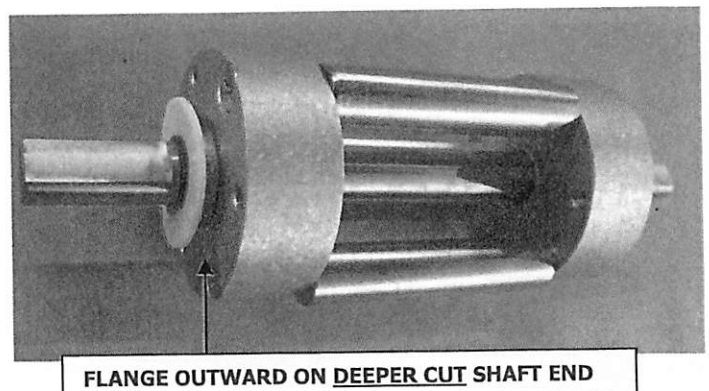
- 2) SECURE (3) SPACER BAR SHAFTS (C15 063.4) RACK 24 BY INSERTING 10-32 X 1 FHMS WITH LOCTITE ON THREAD ENDS, INTO THE COUNTERBORED SIDE. THE SHAFTS LOCATE ON THE FLAT SIDE OF THE LIFTER SHAFT MOUNTING BRACKET.



- 3) INSERT THE SHORTER FLAT CUT END OF AN INSIDE FEED ROLL LIFTER SHAFT (C15 061.4) RACK 24. THROUGH THE FLAT SIDE OF A LIFTER SHAFT MOUNTING BRACKET. SLIDE A WHITE TEFLON WASHER (PRW337) RACK 8 OVER THE COUNTERBORED END AND SECURE WITH A RETAINING RING (PRR191) LD05.

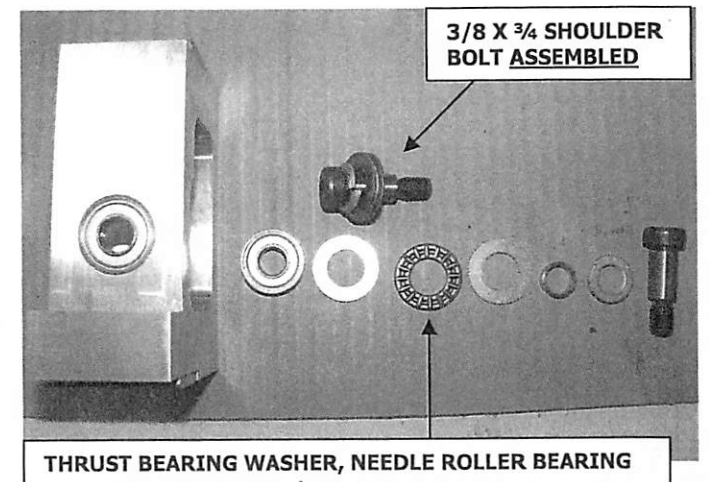
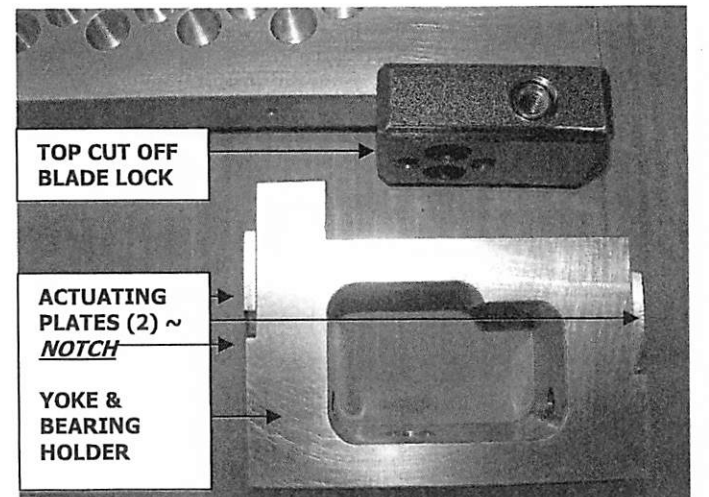
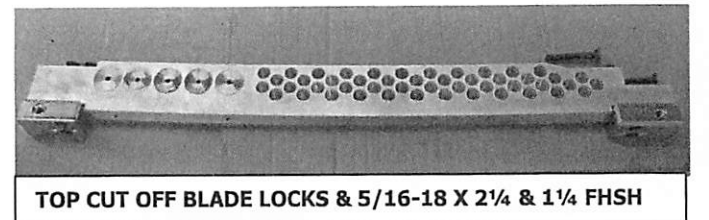
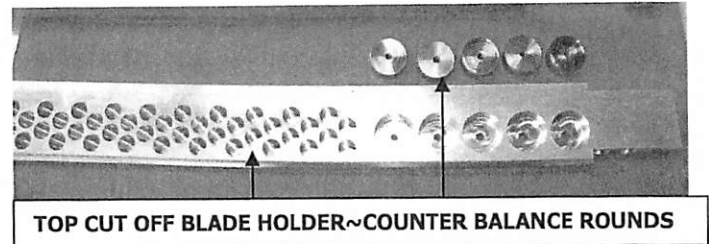


- 4) SLIDE THE SECOND LIFTER SHAFT MOUNTING BRACKET ONTO THE INSIDE FEED ROLL LIFTER SHAFT, WITH THE FLAT AND FLANGE END OUTWARD. SECURE TO SPACER BAR SHAFTS WITH (3) 10-32 X 1 FHMS, WITH LOCTITE. PLACE ANOTHER WHITE TEFLON WASHER NEXT TO THE FLANGE AND SECURE WITH A SECOND RETAINING RING.



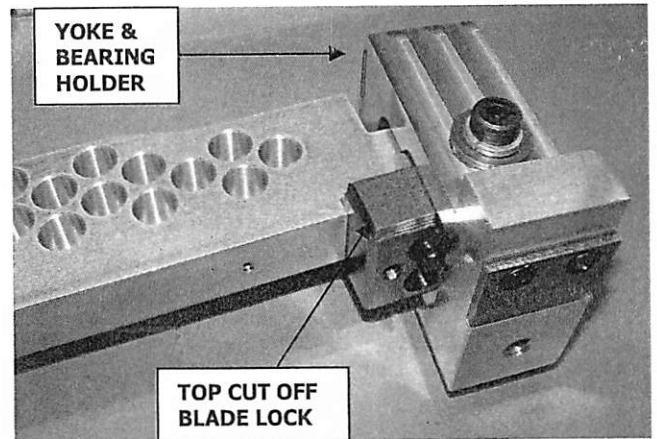
# C15 TOP CUT OFF BLADE ASSEMBLY

- 1) PLACE A TOP CUT OFF BLADE HOLDER (C15 425.4) AS02, WITH THE MULTIPLE HOLES FACING UPWARD. THE LARGER HOLES WILL BE FILLED WITH (5) BLADE HOLDER COUNTER BALANCE ROUNDS (C15 267.4) RACK 24. INSERT THE COUNTER BALANCE ROUNDS INTO THE LARGER HOLES. LOCTITE THE THREADS OF (5) 10-32 X  $\frac{3}{4}$  FSHH AND SECURE THE COUNTER BALANCE ROUNDS.
- 2) SECURE TO BOTH ENDS OF THE TOP CUT OFF BLADE HOLDER A TOP CUT OFF BLADE LOCK (C15 413.4) RACK 24. BE CERTAIN THE CHAMFER IS SMOOTH ON ALL EDGES. ORIENT WITH THE LARGER HOLES FACING INWARD. LOCTITE ALL THREADS AND USE (3) 5/16-18 X 2  $\frac{1}{4}$  FSHH THROUGH THE THICKER PORTION OF THE BLADE HOLDER AND A 5/16-18 X 1  $\frac{1}{4}$  FSHH ON SHORTER END.
- 3) FROM RACK 24 SECURE (2) ACTUATING PLATES (C15 419.4) TO A YOKE AND BEARING HOLDER (C15 218.4). USE (4) 10-32 X  $\frac{1}{2}$  SHCS THROUGH THE COUNTERSINKS. THE NOTCHED END FACES THE OFFSET PORTIONS.
- 4) PRESS (2) R6-ZZ ROLLER BEARINGS (PRB075) RACK 12 FLUSH INTO THE YOKE AND BEARING COUNTERBORES.
- 5) GATHER FROM: LOFT 6 (2) THRUST NEEDLE ROLLER BEARINGS (PRB267) AND (4) THRUST BEARING WASHERS (PRB268). RACK 24 (2) THRUST BEARING SPACERS (C15 046.4). AS12 (2) 3/8 SPLIT LOCK WASHERS (.375KKM01) AND (2) 3/8 X  $\frac{3}{4}$  SHOULDER BOLTS (.375IAC12). LIBERALLY BRUSH *LITHIUM GREASE* ON BOTH SIDES OF THE THRUST NEEDLE ROLLER BEARINGS. PLACE IN ORDER ON EACH SHOULDER BOLT: A

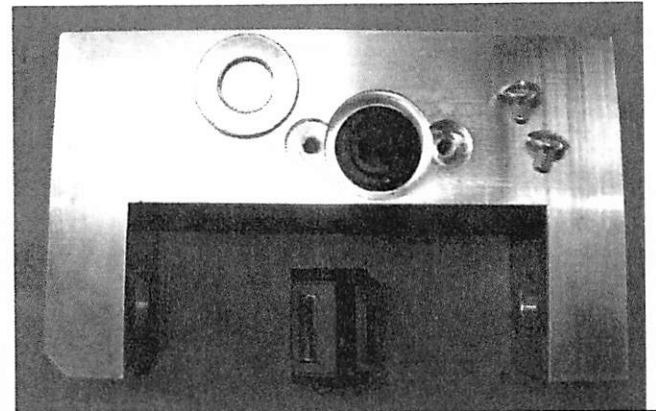


3/8 SPLIT LOCK WASHER, A THRUST BEARING SPACER, THRUST BEARING WASHER, LUBRICATED NEEDLE ROLLER BEARING AND ANOTHER THRUST BEARING WASHER. SLIDE NEEDLE BEARING AND THRUST WASHERS OVER THRUST BEARING SPACER. SET ASIDE.

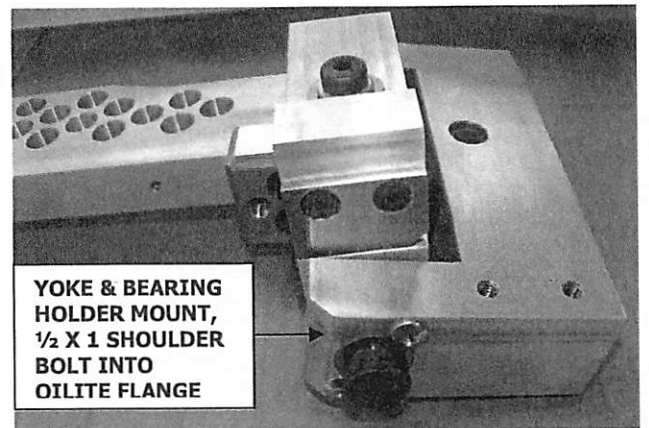
- 6) SLIDE THE YOKE AND BEARING HOLDER OVER THE TOP CUT OFF BLADE LOCK, ON SMALLER HOLE END AS PICTURED. ALIGN ROLLER BEARING OVER THREADS. THREAD THE 3/8 X 3/4 SHOULDER BOLT ASSEMBLY INTO COUNTERBORE ON CUT OFF BLADE LOCK. \*\*REPEAT PROCEDURE ON REVERSE SIDE OF THE YOKE AND BEARING HOLDER.



- 7) FROM RACK 24 PREPARE A YOKE AND BEARING HOLDER MOUNT (C15 217.4) BY INSERTING A SELF ALIGNING BALL BEARING (PRB266) INTO THE COUNTERBORED OPENING. \*\*LEAVE THE SLEEVE IN THE SELF ALIGNING BEARING TEMPORARILY, TO PREVENT BALLS FROM DISLODGING. PLACE A 1/2 FLAT WASHER SAE OVER THE SELF ALIGNING BEARING AND SECURE WITH (2) 10-32 X 1/4 THMS.

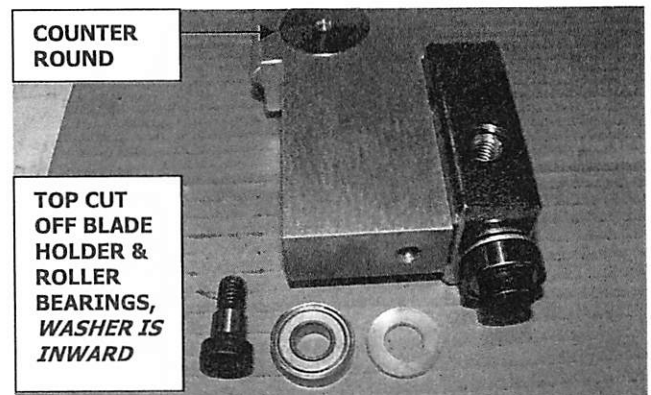


- 8) ARBOR PRESS A 1/2 X 5/8 X 3/4 FLANGED OILITE BEARING (PRB265) RACK 24 FLUSH INTO BOTH ENDS OF THE YOKE AND BEARING HOLDER MOUNT. CAPTURE THE OILITE BEARINGS WITH (2) 10-32 X 1/4 THMS DIAGONALLY.



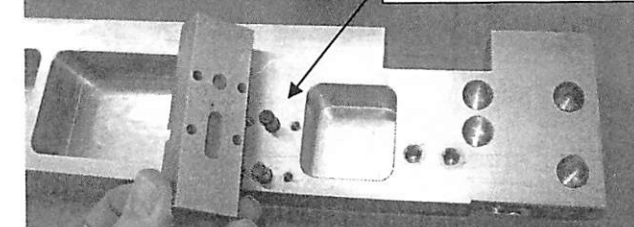
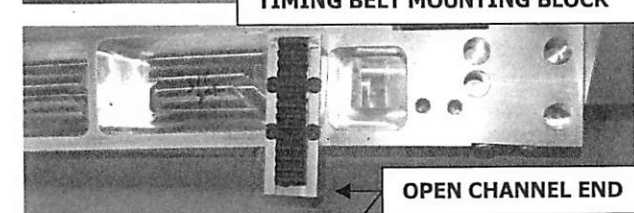
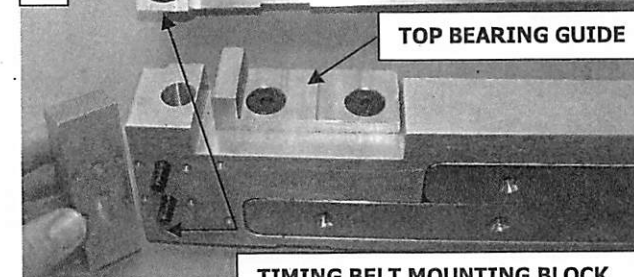
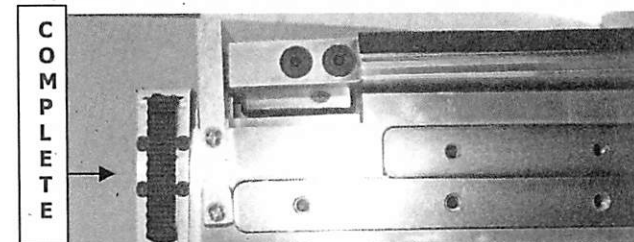
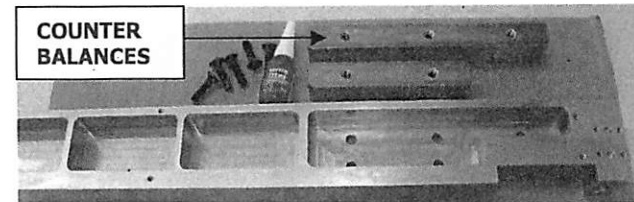
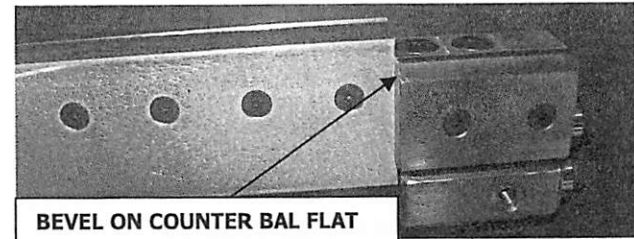
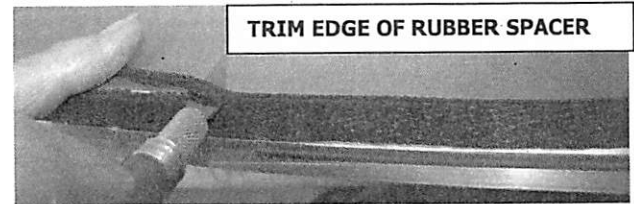
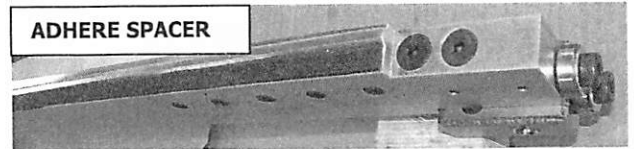
- 9) ALIGN THE ASSEMBLED YOKE AND BEARING HOLDER MOUNT WITH THE CHAMFERED CORNER INWARD ON TOP CUT OFF BLADE LOCK SIDE. INSERT A 1/2 X 1 SHOULDER BOLT THROUGH OILITE BEARINGS THREADING INTO YOKE AND BEARING HOLDER. THERE IS PLAY SO YOKE AND BEARING HOLDER MOUNT MOVES TO AND FRO.

- 10) PLACE AN R6-ZZ ROLLER BEARING (PRB075) RACK 12 ON EACH OF (2) 3/8 X 3/8 SHOULDER BOLTS. ADD A 3/8 FLAT WASHER BY EACH ROLLER BEARING. LOCTITE AND THREAD INTO END OF TOP CUT OFF BLADE HOLDER



BY COUNTER ROUNDS; ONE IN TOP CUT OFF BLADE HOLDER AND ONE IN TOP CUT OFF BLADE LOCK. ***DO NOT PINCH WASHER WHEN TIGHTENING.***

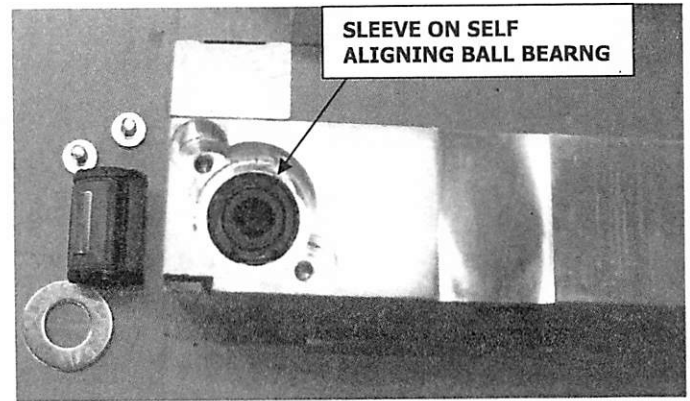
- 11) ADHERE A RUBBER, STICKY BACK SPACER FOR TOP CUT OFF BLADE HOLDER (C15 471.4) RACK 24 TO TOP CUT OFF BLADE HOLDER, FLUSH WITH OFFSET BY THE (2) FSH. ADHERE ALONG BLADE HOLDER OUTER EDGE. THE EDGE DECREASES IN WIDTH AS SPACER IS ADDED. TRIM EXCESS RUBBER SO SPACER IS FLUSH WITH OUTER EDGE OF THE BLADE HOLDER. GENTLY SAND RUBBER ALONG EDGE.
- 12) SECURE A BLADE HOLDER COUNTER BALANCE FLAT (C15 268.4) RACK 24, BEVELED EDGE TOWARD OFFSET, BY ROLLER END. USE (2) 10-32 X 3/4 FSH.
- 13) THE TOP CUT OFF BLADE MOUNTING BAR (C15 215.4) AS02 HAS A BLADE MOUNTING BAR COUNTER BALANCE SMALL (C15 266.4) RACK 24 AND A BLADE MOUNTING BAR COUNTER BALANCE LARGE (C15 265.4) RACK 24. PLACE COUNTER BALANCES IN THE PICTURED OPENINGS. SECURE FROM BACK WITH (5) 5/16-18 X 1 1/4 FSH. ***USE LOCTITE ON THREADS.***
- 14) PRESS (4) 1/4 X 3/4 DOWEL PINS FULLY INTO TOP CUT OFF BLADE MOUNTING BAR ON COUNTER BALANCE SIDE, (2) AT EACH END. PLACE A TOP BEARING GUIDE (C15 415.4) RACK 24 IN THE RECESSED END BY COUNTER BALANCE, COUNTERSINKS UPWARD. SECURE WITH (2) 5/16-18 X 3/4 FSH, ***LOCTITE.***
- 15) ALIGN A TIMING BELT MOUNTING BLOCK (C15 464.4) RACK 24 OVER THE DOWEL PINS BY COUNTER BALANCE. THE CHANNEL FITS OVER THE DOWEL PIN BY LARGE COUNTER BALANCE AND FLUSH WITH EDGE. START (4) 8-32 X 3/4 SHCS IN COUNTERBORES, TIGHTEN.
- 16) A SECOND TIMING BELT MOUNTING BLOCK FITS OVER (2) DOWEL PINS ON THE OTHER END OF THE TOP CUT OFF BLADE MOUNTING BAR. MOUNTING



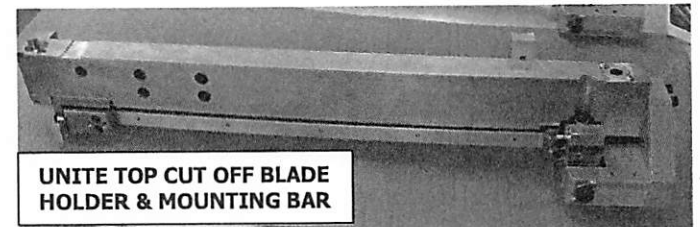


BLOCK CHANNEL LOCATES CLOSER TO THE EDGE OF THE MOUNTING BAR AND TIMING MOUNTING BLOCK IS OFFSET. USE (4) 8-32 X 3/4 SHCS TO SECURE.

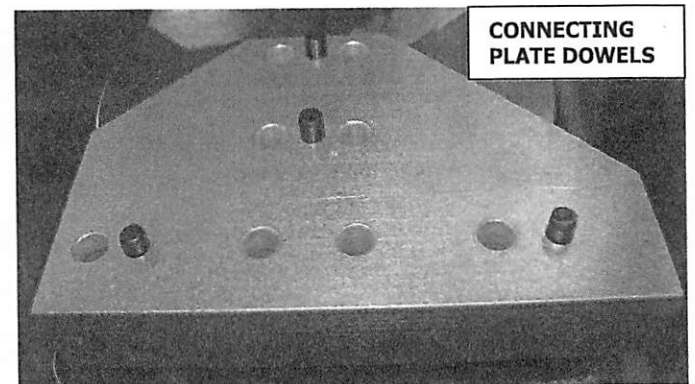
- 17) PLACE THE END COUNTERBORES LOCATED BY THE 10-32 THREADS UPWARD AND INSERT A SELF ALIGNING BALL BEARINGS (PRB266) RACK 24 INTO EACH COUNTERBORE. LEAVE THE INNER CARDBOARD SLEEVE IN THE BEARING. PLACE A 1/2 FLAT WASHER SAE OVER THE BEARING AND SECURE THE WASHER WITH (2) 10-32 X 1/4 FHMS. USE THE SAME HARDWARE ON BOTH ENDS.



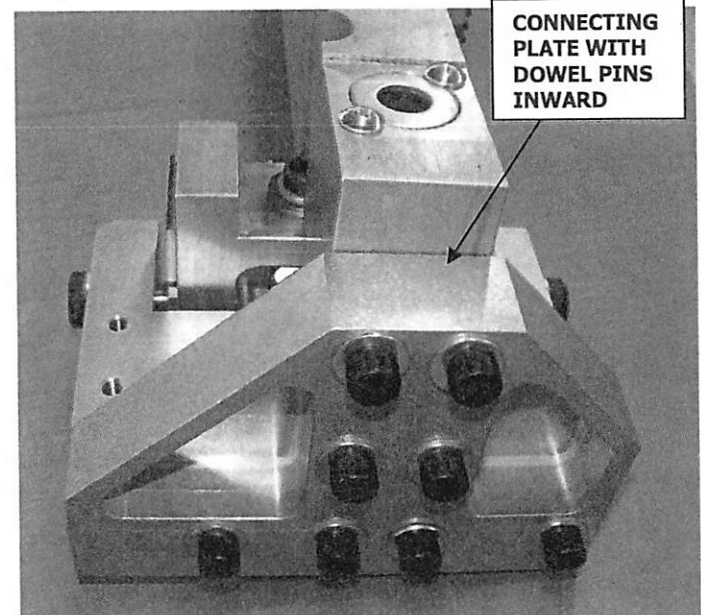
- 18) UNITE THE BOTTOM CUT OFF BLADE HOLDER TO BOTTOM CUT OFF BLADE HOLDER MOUNT. PLACE ASSEMBLED BOTTOM CUT OFF BLADE HOLDER WITH COUNTER BALANCE ROUNDS UPWARD. SET THE BOTTOM CUT OFF BLADE HOLDER MOUNT OVER THE TOP CUT OFF BLADE HOLDER, ALIGNING ENDS. THE SELF ALIGNING BEARINGS ARE UPWARD.



- 19) ARBOR PRESS (4) 1/4 X 3/4 DOWEL PINS INTO THE (4) SIDE OPENINGS OF A CONNECTING PLATE (C15 216.4) RACK 24 WITH 1/4" TO 3/8" OF THE DOWEL SHOWING.



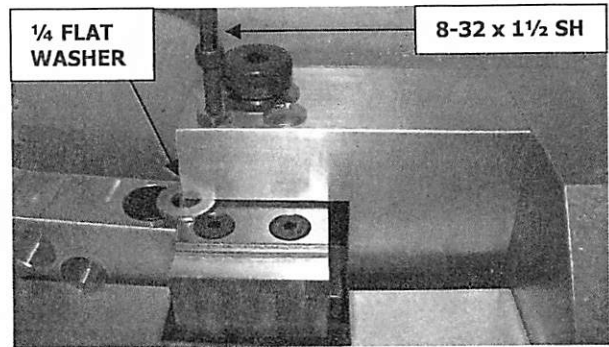
- 20) ALIGN THE CONNECTING PLATE WITH THE MORE DISTANT DOWEL PINS FITTING INTO THE BOTTOM CUT OFF BLADE HOLDER MOUNT OPENINGS AND THE CLOSER DOWEL PINS FITTING INTO THE TOP CUT OFF BLADE HOLDER MOUNT OPENINGS.



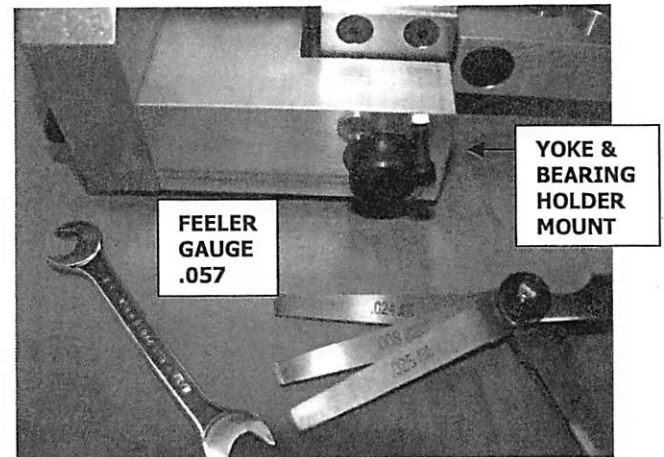
- 21) WITH LOCTITE ON THE THREADS, BEGIN (4) 5/16-18 X 1 1/2 SHCS, EACH WITH A 5/16 FLAT WASHER THROUGH THE LOWER, IN-LINE, OPENINGS OF THE CONNECTING PLATE. START THE REMAINING (4) 5/16-18 X 1 1/2 SHCS WITH 5/16 WASHERS. TIGHTEN ALL SOCKETHEADS AFTER THEY ARE STARTED.

- 22) THREAD A #8 HEX NUT ALL THE WAY UP AN 8-32 X 1 1/2 SHCS. START THIS

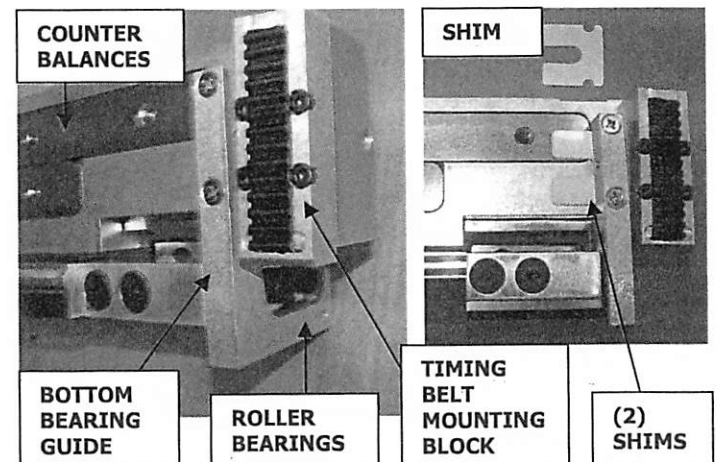
SCREW INTO THE YOKE AND BEARING HOLDER MOUNT BY THE TRUSSHEADS AND SHOULDER BOLT, ON THE SAME SIDE AS THE TIMING BELT SPACERS AND RUBBER SPACER FOR TOP CUT OFF BLADE HOLDER. THE THREADS EXTEND PAST THE INNER YOKE AND BEARING HOLDER MOUNT BY .057. MEASURE BY SLIDING A 1/4 FLAT WASHER BETWEEN PARTS OR USE A FEELER GAUGE COMBINING .024, .025 AND .008 TO EQUAL .057. HOLD THE (3) FEELERS AND THREAD UNTIL .057 IS REACHED ORE REMOVE WASHER WHEN SNUG. TIGHTEN HEX NUT. THE .057 DISTANCE IS A STOP.



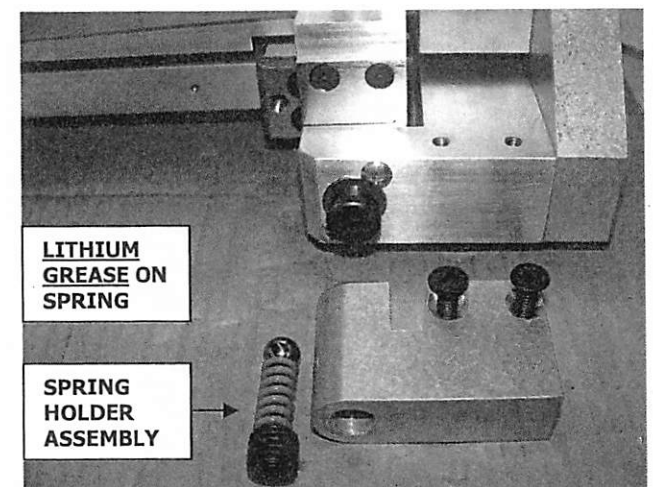
- 23) HOLD THE TOP CUT OFF BLADE HOLDER MOUNT SO LONG AND SHORT COUNTER BALANCE FACES YOU. ALIGN BOTTOM BEARING GUIDE (C15 421.4) RACK 24 BETWEEN COUNTER BALANCE AND THE TIMING BELT MOUNTING BLOCK, WITH BEND INWARD AND ROLLER BEARINGS RESTING IN BOTTOM BEARING GUIDE CHANNEL. SECURE BOTTOM BEARING GUIDE WITH (2) 10-32 X 1 FHMS THROUGH COUNTERSINKS LOCTITE THREADS. AFTER TESTING, IF NEEDED ADD (2) SHIMS (C15 474.4) RACK 24 ALIGNED WITH THREADS.



- 24) ON THE OPPOSITE END OF THE TOP CUT OFF BLADE HOLDER ASSEMBLY, THE RIGHT SIDE REAR, SECURE A SPRING HOLDER (C15 420.4) RACK 24 USING (2) 1/4-20 X 1 1/2 FHS.



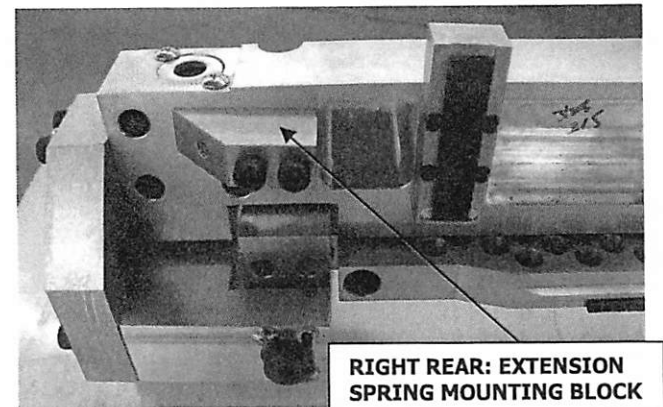
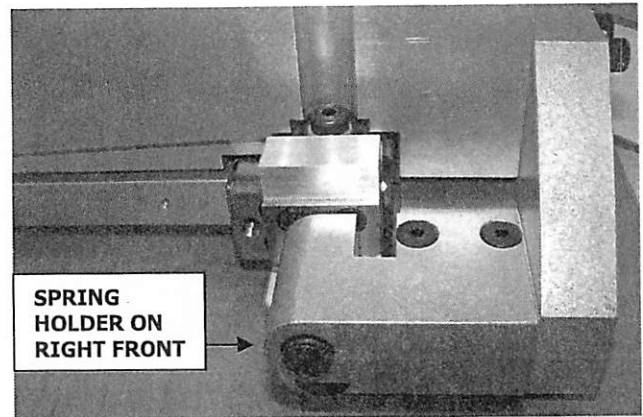
- 25) INSERT A 1/2" DIAMETER BALL BEARING (PRB262) LOFT 6 INTO THE SPRING HOLDER OPENING. SPREAD LITHIUM GREASE ON A HEAFY ORANGE SPRING (LC25 031.4) LD05 AND PLACE OVER BALL BEARING. SECURE BALL BEARING AND SPRING WITH A 5/8-11 X 5/8 SH SET SCREW (.625MAA10) AS12. THE SET SCREW TENSION ON THE ORANGE SPRING IS ADJUSTED AFTER THE TOP CUT OFF BLADE HOLDER IS INSTALLED IN CHASSIS.



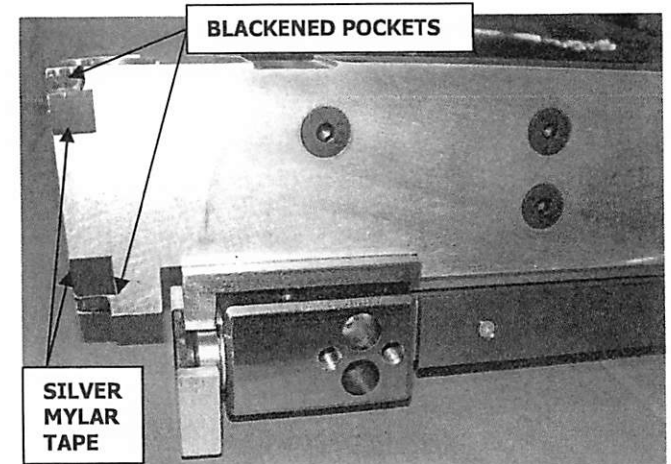
- 26) ON THE REAR OF THE RIGHT SIDE OF THE TOP CUT OFF BLADE HOLDER ASSEMBLY, LOCATED ABOVE THE

SHOULDER BOLT IN THE OILITE BEARING, SECURE AN EXTENSION SPRING MOUNTING BLOCK (C15 429.4) RACK 24. ORIENT THE POINTED END OF THE EXTENSION SPRING MOUNTING BLOCK OUTWARD. SECURE WITH (2) 5/16-18 X 1 1/2 SHCS.

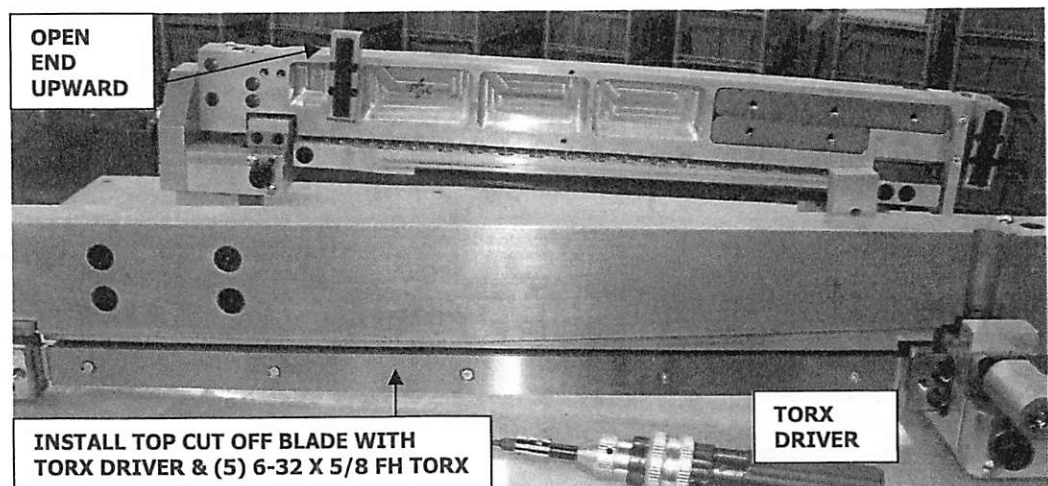
- 27) VERY CAREFULLY SECURE THE CUT OFF BLADE TOP (C15 402.4) AS02 TO THE FRONT THREADS OF THE TOP CUT OFF BLADE ASSEMBLY, WITH THE SHARP ANGLE DOWNWARD. START (5) 6-32 X 5/8 FH TORX (.138BAB10) BEGINNING WITH THE MIDDLE THREADS. BEGIN ALL THREADS. USE THE BLADE'S WEIGHT TO LEVEL THE CUTTING BLADE. WITH A TORX DRIVER, TIGHTEN THE CENTER SCREW. TIGHTEN SCREWS ON EITHER END OF CENTER AND WORK OUTWARD HOLDING THE BLADE TIGHT TO BLADE HOLDER AS YOU THREAD IN.



- 28) CUT AND ADHERE TO THE FRONT, LEFT TOP AND BOTTOM ENDS OF THE CUT OFF BLADE HOLDER, FLUSH BELOW THE BLACKENED CUT OUT POCKET CORNERS, (2) 1/2" X 1/2" SQUARES OF 1/2" SILVER MYLAR TAPE (MRO-215.4) RACK 24. THIS IS ON THE END BY THE ROLLER BEARINGS.

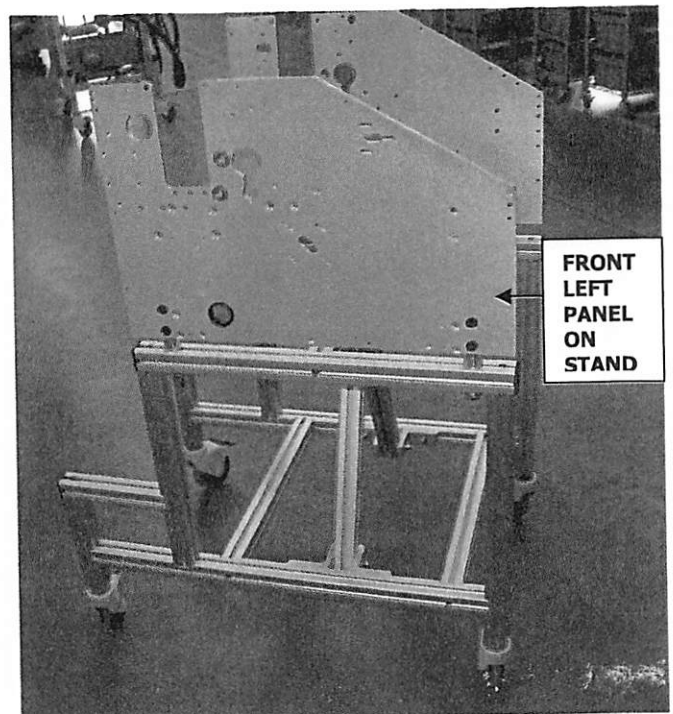
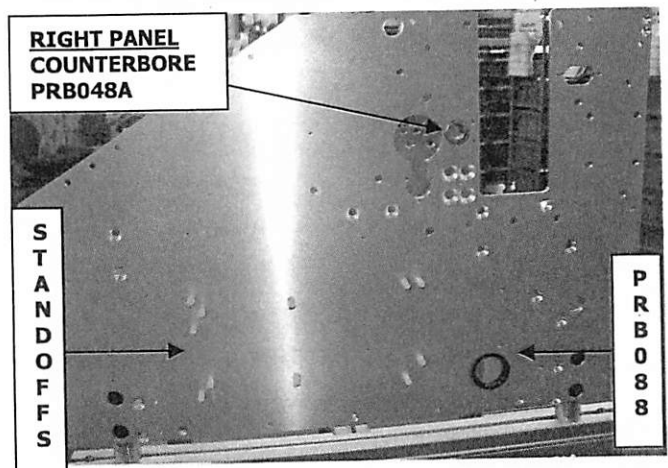
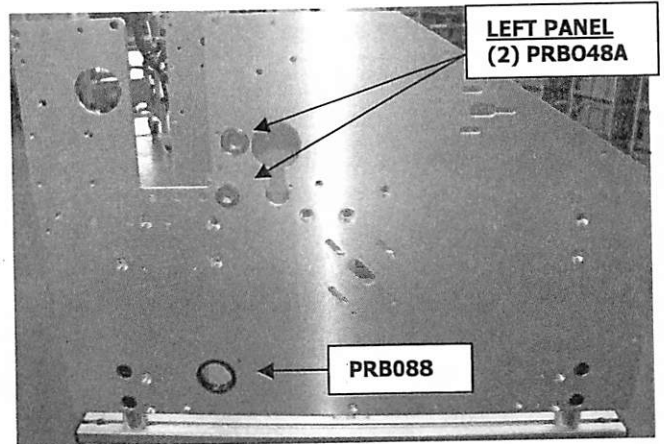


- 29) SET TOP CUT OFF BLADE HOLDER ASSEMBLY ASIDE, IN A SAFE LOCATION, UNTIL INSTALLATION.



# C15 SIDE PANEL & CHASSIS ASSEMBLY

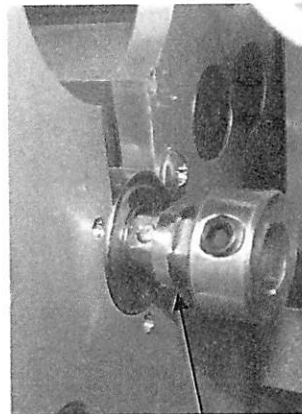
- 1) SOME SIDE PANEL ASSEMBLY CAN BE PERFORMED BEFORE SIDE PANELS ARE PLACED ON THE STAND. TO ORIENT THE SIDE PANELS, THE LOWER PORTION FACES THE FRONT OF THE C15. UNLIKE MOST STANDS, THE SUPPORTIVE LEG BRACES FACE THE REAR OF THE C15.
- 2) THE LEFT SIDE PANEL (C15 450.4) AS01 *MOTOR SIDE* HAS (2) 3/16 WORKED OILITE BEARINGS (PRB048A) RACK 14. THE ONE ON TOP IS PRESSED INTO A COUNTERBORE. BOTH HAVE THE FLANGE OUTWARD. BOTH OILITE BEARINGS ARE FLUSH INWARD ON THE SIDE PANEL.
- 3) INSERT A SNAP BUSHING (PRB088) AS09 IN LOWER LEFT SIDE PANEL, FLANGE OUTWARD.
- 4) PRESS ANOTHER OILITE BEARING (PRB048A) RACK 14 INTO OUTER RIGHT SIDE PANEL (C15 349.4) AS01 WITH FLANGE IN COUNTERBORE.
- 5) INSERT A SNAP BUSHING (PRB088) AS09 IN BOTH LOWER SIDE PANELS FOR WIRES, FLANGE OUTWARD.
- 6) FROM THE INNER RIGHT SIDE PANEL, THROUGH THE SMALL COUNTERSINKS, INSERT (11) 4-40 X 3/8 FHMS AND ON THE OUTER SIDE PANEL THREAD ON (11) 5/8 X 1/4 HEX NYLON STANDOFF (LC25 010.4) LD09. TIGHTEN STANDOFFS WITH SCREWDRIVER.
- 7) SECURE (2) FEET MOUNTING STAFT EXTENSIONS (LC38 048.4) AS09 TO EACH LOWER SIDE PANEL THROUGH OUTER COUNTERSINKS. USE (8) 5/16-18 X 3/4 FHS (LC312BAA12).
- 8) PLACE FEET EXTENSIONS OVER THE STAND OPENINGS. *LOOSELY* SECURE WITH (4) 1/2-13 X 2 1/2 HEX BOLTS (.500HDA40), EACH WITH A 1/2 FLAT WASHER SAE.



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PANELS SECURE BOTH ROLLER BEARINGS WITH (3) 6-32 X 3/8 THMS.

- 16) PUSH RUBBER ROLL FLUSH TO THE RIGHT SIDE PANEL. ON THE RIGHT JOURNAL ADD A TOP RUBBER ROLL PULLEY SPACER (C30 046.4) RACK 11. SECURE ON JOURNAL FLAT WITH A 3/8 SHAFT COLLAR (PRC095) LD03.



RIGHT SIDE: C30 046.4 & 3/8 SHAFT COLLAR

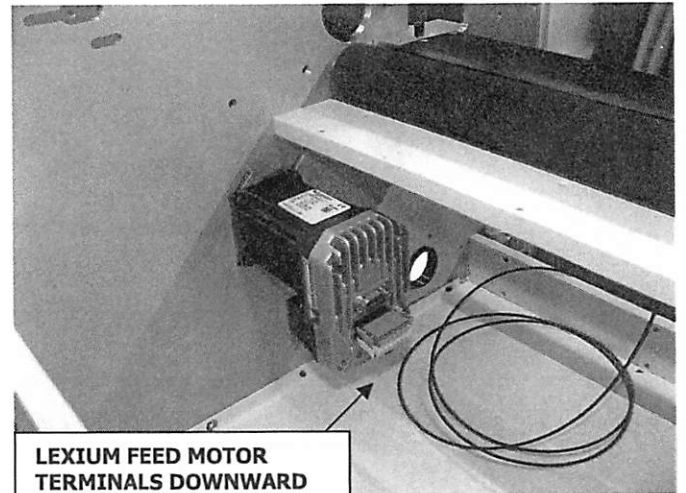


LEFT SIDE: C30 046.4

- 17) ON LEFT SIDE BOTTOM RUBBER ROLL JOURNAL SLIDE A TOP RUBBER ROLL PULLEY SPACER (C30 046.4) RACK 11. TAP A #303 WOODRUFF KEY (PRK155) RACK 12 INTO KEYWAY, BY SPACER.

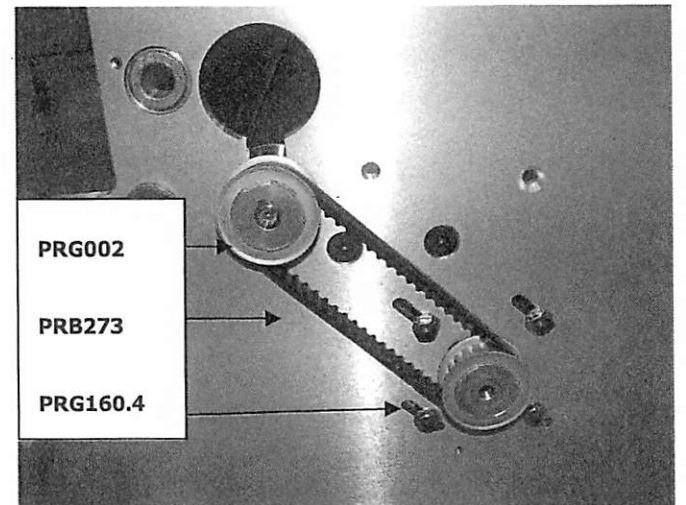
- 18) PLACE A RUBBER ROLL DRIVE PULLEY (PRG002) RACK 12 OVER THE KEY \*\* *BUT NOT TOUCHING THE TRUSSHEADS*. TIGHTEN THE (2) 8-32 X 3/8 SET SCREWS ON THE PULLEY.

- 19) INSERT (4) 10-32 X 3/4 BHCS THROUGH CLEARANCE HOLES ON A LEXIUM C15 FEED MOTOR (PRM573) AS02. WITH THE TERMINAL BLOCK DOWNWARD, THE MOTOR SHAFT EXITS THE LEFT SIDE PANEL. HOLD MOTOR UPWARD IN THE CHANNELS AND PLACE A #10 FLAT WASHER ON THE BHCS THREADS, SNUG ON A #10 KEPS HEX NUT. MOTOR WILL BE ADJUSTED LATER.



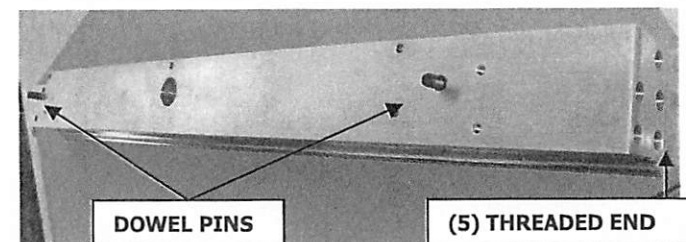
LEXIUM FEED MOTOR TERMINALS DOWNWARD

- 20) FROM RACK 24 PLACE A XL URETHANE TIMING BELT (PRB273) OVER THE RUBBER ROLL PULLEY AND OVER A 20T REAMED TIMING BELT PULLEY (PRG160.4). SLIDE THE TIMING BELT PULLEY OVER THE FEED MOTOR SHAFT. MEASURE EQUAL DISTANCE OF PULLEYS FROM SIDE PANEL AND TIGHTEN TIMING BELT BY DROPPING THE MOTOR. NEEDS TO BE SNUG.



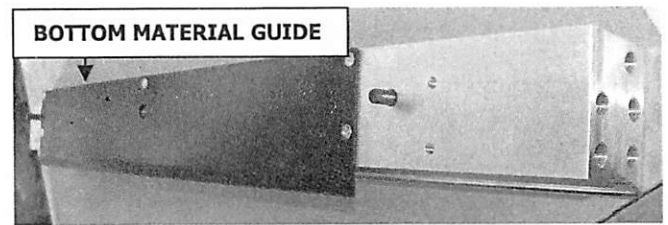
- 21) ASSEMBLE A BOTTOM CUT OFF BLADE MOUNTING BAR (C15 110.4) AS02 BEFORE INSEYING BETWEEN SIDE PANELS. ORIENT BOTTOM CUT OFF BLADE MTG BAR WITH THE (5) THREADED ENDS TO THE RIGHT SIDE PANEL, (3) THREADS ARE DOWNWARD. ASSEMBLE AS FOLLOWS.

- 22) ARBOR PRESS (2) 1/4 X 3/4 DOWEL PINS INTO THE UPPER ENDS OF THE BOTTOM CUT OFF BLADE MTG BAR.

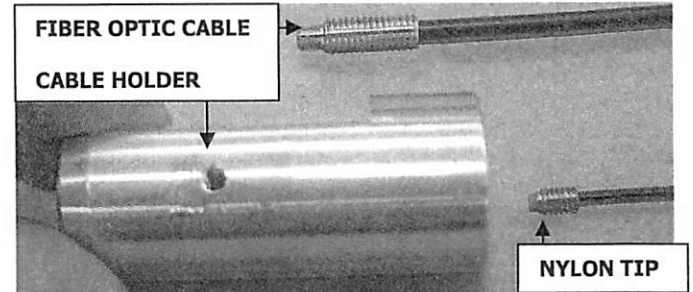


Inserting

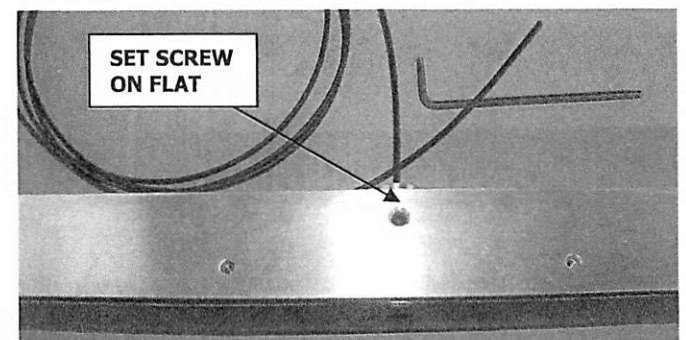
- 23) PLACE A BOTTOM MATERIAL GUIDE (C15 296.4) AS02, COUNTERSINKS UPWARD, OVER CUT OFF BLADE MTG BAR. THE BEVELED EDGE FACES THE FRONT. LOOSELY SECURE WITH (5) 6-32 X 3/8 FHMS. BOTTOM MATERIAL GUIDE MUST BE FLAT ON BAR.



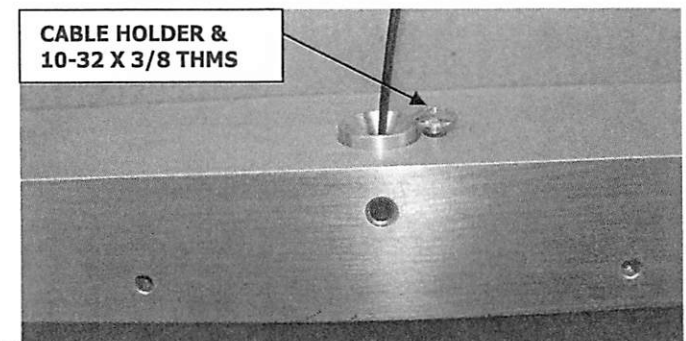
- 24) ALIGN THE FLATTENED SECTION OF THE THREADS ON AN OMRON FIBER OPTIC CABLE (PRC277) RACK 12 UNDER THE THREADED PORTION OF A FIBER OPTIC CABLE HOLDER (C15 278.4) RACK 24. HOLD IN PLACE AND SECURE WITH A NYLON TIP 4-40 X 3/16 SET SCREW (.112MAA03ST).



- 25) BEGIN THREADING A 1/4-20 X 1/2 SS INTO THE REAR BOTTOM CUT OFF BLADE MTG BAR. INSERT THE FIBER OPTIC CABLE HOLDER FLUSH WITH MATERIAL GUIDE, THIS WILL BE JUST UNDER TEFLON. HOLD CABLE HOLDER FLAT SECTION UNDER THE SET SCREW. SECURE CABLE HOLDER WITH SET SCREW AND ADD A 10-32 X 3/8 THMS TO SUPPORT EXPOSED CABLE HOLDER. TIGHTEN ALL (5) SCREWS ON BOTTOM MATERIAL GUIDE. GUIDE MUST BE FLAT AND FLUSH WITH REAR OF BOTTOM BLADE HOLDER MTG BAR. FILE IF NECESSARY.



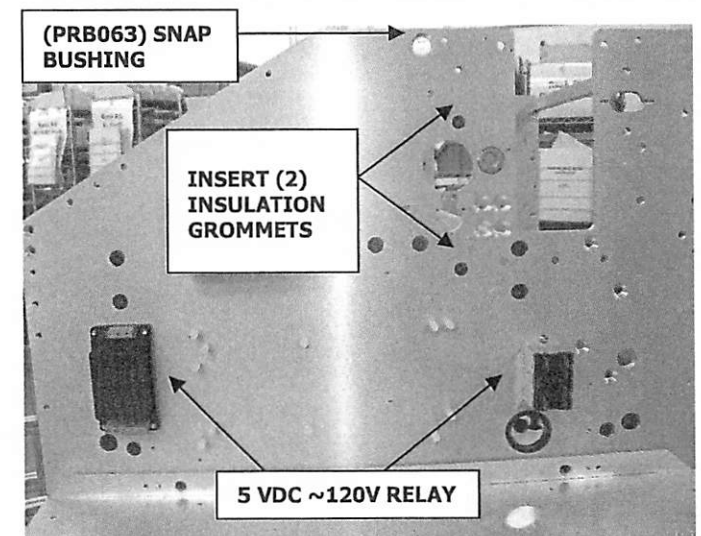
- 26) FROM THE UPPER, INNER RIGHT SIDE PANEL, INSERT A SNAP BUSHING (PRB063) RACK 8 WITH THE FLANGE ON THE INNER SIDE PANEL.



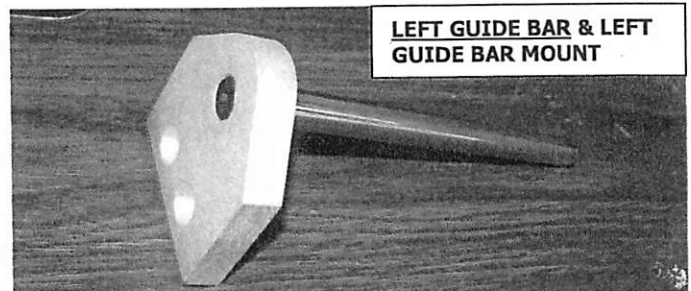
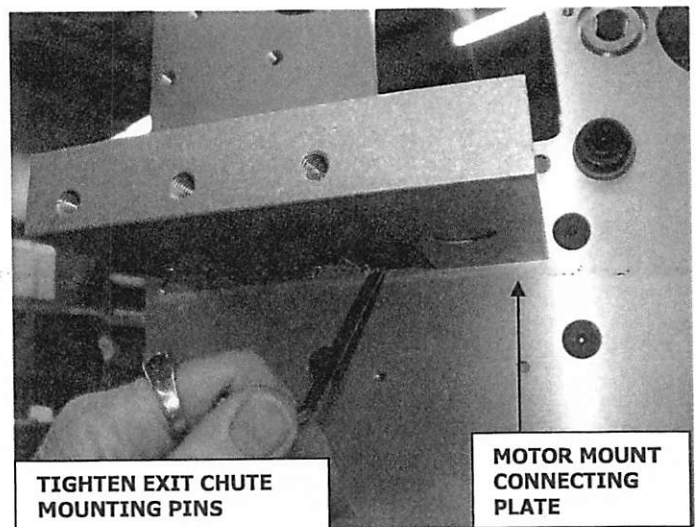
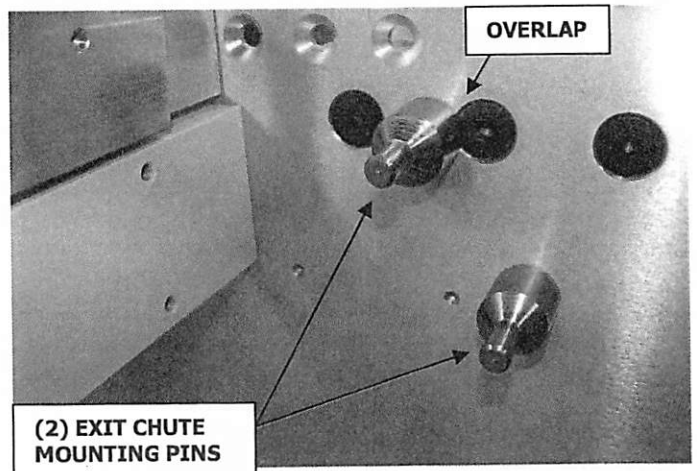
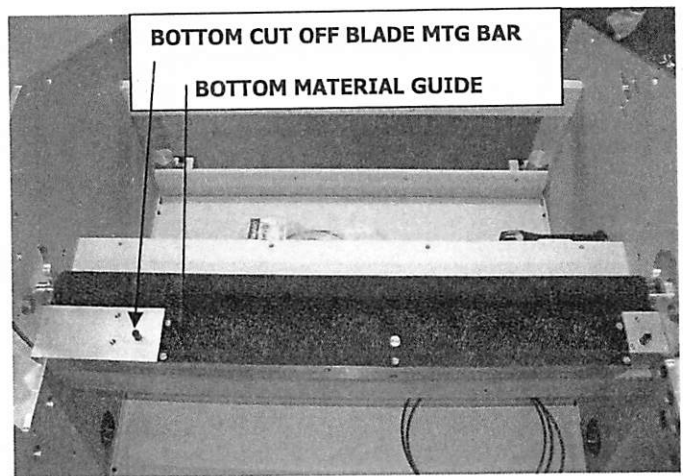
- 27) INSERT (2) INSULATION GROMMETS (PRB105) RACK 12 INTO RIGHT SIDE PANEL. WORK GROMMETS THROUGH HOLES WITH A SMALL SCREWDRIVER, SO A GROMMET FLANGE IS ON BOTH SIDES OF THE PANEL.

- 28) SECURE A 120V COIL RELAY (PRR150) RACK 12 TO THE LOWER RIGHT SIDE PANEL, THE (4) TERMINAL POSTS FACE RIGHT/REAR. USE (2) 8-32 X 1/4 RHMS.

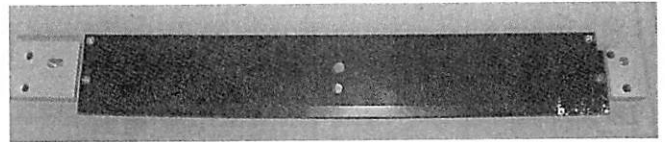
- 29) SECURE A 5VDC POWER SUPPLY (PRC0325) RACK 24 TO FRONT, RIGHT SIDE PANEL. ORIENT SMALLER, GREEN TERMINAL BLOCK UPWARD. USE (4) 4-40 X 1/2 SHCS.



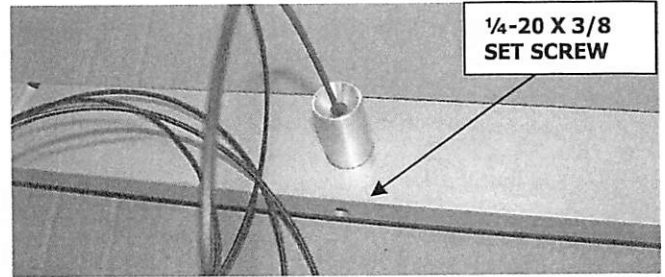
- 30) VERY CAREFULLY ADD THE BOTTOM CUT OFF BLADE MOUNTING BAR ASSEMBLY BETWEEN SIDE PANELS. THIS MAY REQUIRE TWO PEOPLE. *DO NOT DAMAGE THE FIBER OPTIC CABLE!!* SECURE ASSEMBLY WITH (4) 5/16 X 1 1/4 FSH ON THE RIGHT PANEL, THE LOWER REAR THREADS ARE NOT USED, AND ADD A 1/2 X 5/8 SHOULDER BOLT, THROUGH THE OILITE BUSHING ON THE LEFT PANEL.
- 31) FROM THE REAR, INSERT (2) 1/4-20 X 3/4 FSH THROUGH THE OUTER LEFT SIDE PANEL COUNTERSINKS. ON THE LOWER THREADS TIGHTEN AN EXIT CHUTE MOUNTING PIN (C15 150.0) RACK 24. ON THE UPPER THREAD LOOSELY SNUG ANOTHER EXIT CHUTE MOUNTING PIN. FROM THE INNER LEFT PANEL INSERT (3) 5/16-18 X 1 FSH. THE INNER PIN OVERLAPS THE MIDDLE FLATHEAD.
- 32) SECURE THE MOTOR MOUNT CONNECTING PLATE (C15 433.4) RACK 24 TO THE OUTER LEFT SIDE PANEL, ORIENTED WITH HOLE TO THE FRONT AND NOTCH DOWNWARD. USE (3) 5/16-18 X 1 FSH FROM THE INNER COUNTERSINKS.
- 33) TIGHTEN THE OVERLAPPED EXIT CHUTE MOUNTING PIN USING AN ALLEN WRENCH THROUGH THE MOTOR MOUNT CONNECTING PLATE UNDERSIDE NOTCH.
- 34) ADD (2) EXIT CHUTE MOUNTING PINS TO THE INNER RIGHT SIDE PANEL, DIRECTLY ACROSS FROM THE LEFT SIDE EXIT CHUTE MOUNTING PINS. USE 1/4-20 X 3/4 FSH TO SECURE.
- 35) PLACE A 1/4-20 X 1 FSH IN THE COUNTERSUNK POINTED END OF A BOTTOM LEFT GUIDE BAR MOUNT (C15 230.4) RACK 24. THREAD A LEFT GUIDE BAR (C15 231.4) RACK 24 ONTO THE MOUNT AND TIGHTEN.
- 36) FROM RACK 24 PLACE A 1/4-20 X 1 BHCS IN THE COUNTERBORED CHANNEL OF A *BOTTOM* RIGHT GUIDE BAR MOUNT (C15 233.4), EITHER SIDE.



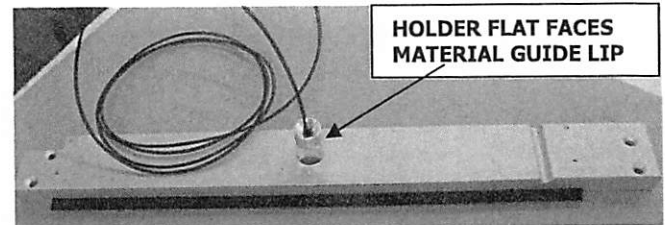
42) PREPARE A TOP MATERIAL GUIDE MOUNT (C15 397.4) AS01 BY SECURING A TEFLON TOP MATERIAL GUIDE (C15 396.4) AS02 WITH (5) 6-32 X 3/8 FHMS. FLATHEADS MUST BE BELOW THE TOP MATERIAL GUIDE, SO CUTTING MATERIAL DOESN'T CATCH. THE COUNTERSINKS CAN BE OPENED BY CAREFULLY REMOVING TEFLON.



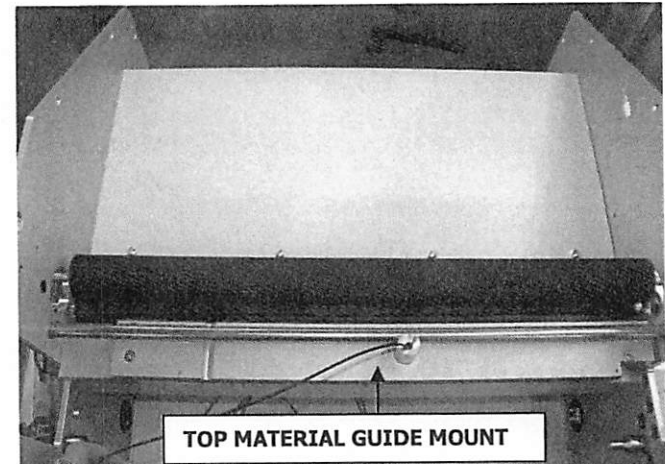
43) SECURE REMAINING FIBER OPTIC CABLE IN A FIBER OPTIC CABLE HOLDER (C15 278.4) RACK 24 WITH A NYLON TIP 4-40 X 3/16 SET SCREW, SNUG ON FLAT OF CABLE THREADS.



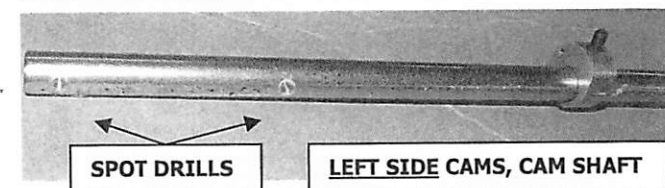
44) INSERT THE FIBER OPTIC CABLE HOLDER THROUGH THE COUNTERSUNK SIDE OF THE TOP MATERIAL GUIDE MOUNT, FITTING JUST UNDER THE TEFLON TOP MATERIAL GUIDE OPENING. THE FLAT SECTION OF THE CABLE HOLDER FACES THE FRONT, TO ACCOMMODATE THE CAM SHAFT. SECURE THE CABLE HOLDER WITH A 1/4-20 X 3/8 SET SCREW ON THE CABLE HOLDER ROUND PORTION.



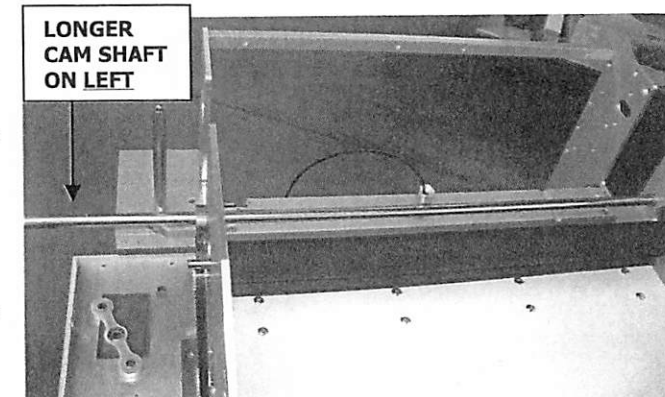
45) PLACE THE TOP MATERIAL GUIDE MOUNT OVER THE DOWEL PINS ON THE BOTTOM MATERIAL GUIDE MOUNT, WITH THE TEFLON TOP MATERIAL GUIDE DOWNWARD AND THE LIP FORWARD. SECURE THE TOP MATERIAL GUIDE MOUNT ON BOTH ENDS WITH (4) 10-32 X 1 1/4 FHMS.



46) START A 10-32 X 3/4 SET SCREW IN (2) FEED ROLLER LIFT CAMS (C15 133.4) RACK 24. ORIENT DEEPER RECESSED OPENING ON A CAM SHAFT (C15 057.4) AS02 UPWARD, TO THE LEFT WITH (2) SPOT DRILLS FACING YOU. \*THE CAM SHAFT HANDLE IS ON C15 LEFT SIDE. SLIDE FEED ROLLER LIFT CAM OVER LEFT SIDE SHAFT, ORIENTATION CAM HOLE UPWARD AND AWAY FROM YOU. TIGHTEN SET SCREW INTO CAM SHAFT.



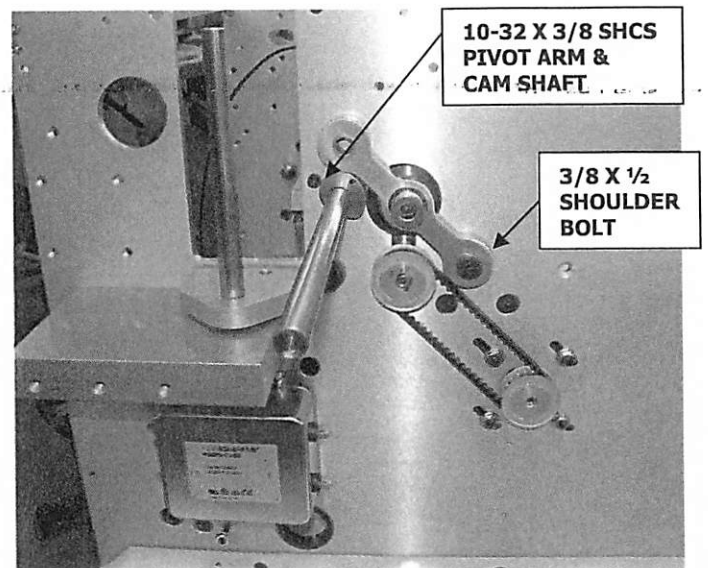
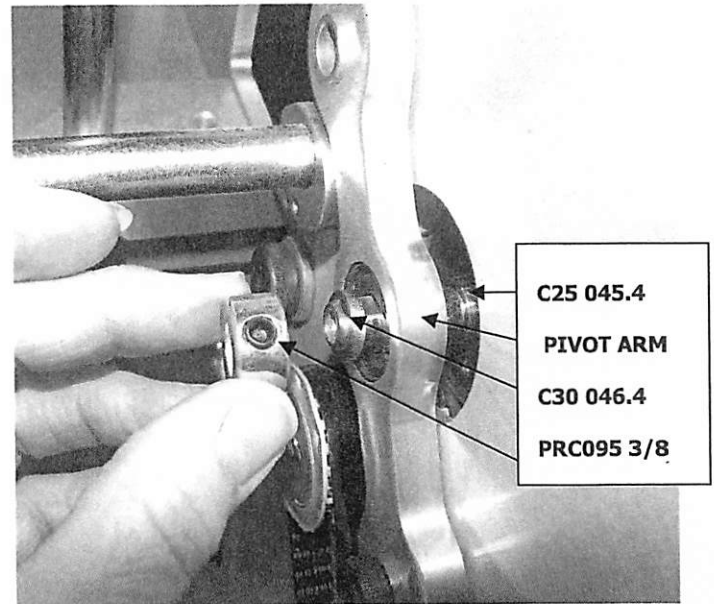
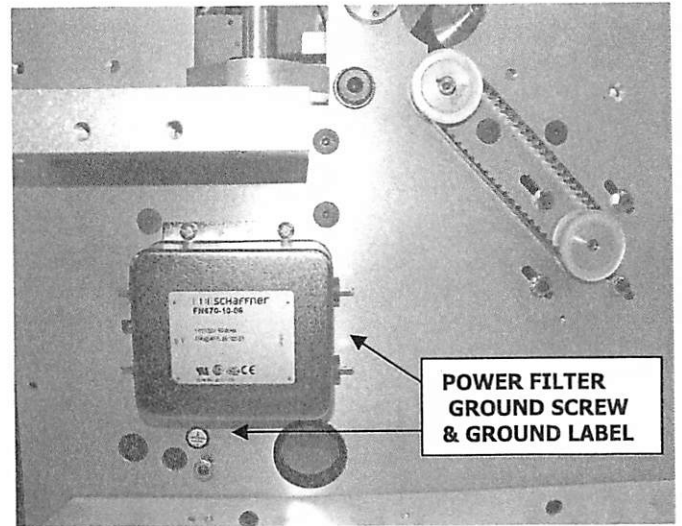
47) INSERT THE CAM SHAFT FROM THE LEFT SIDE PANEL, THROUGH THE COUNTERBORED OILITE BEARING, CONTINUING IN FRONT OF FLAT SIDE ON FIBER OPTIC HOLDER AND FINALLY THROUGH THE RIGHT SIDE PANEL OILITE BEARING. SECURE RIGHT SIDE



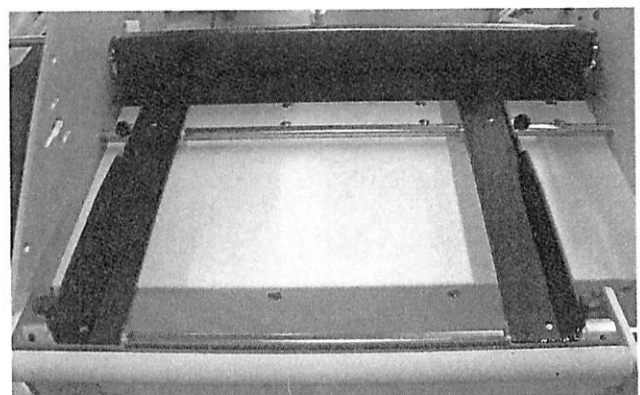
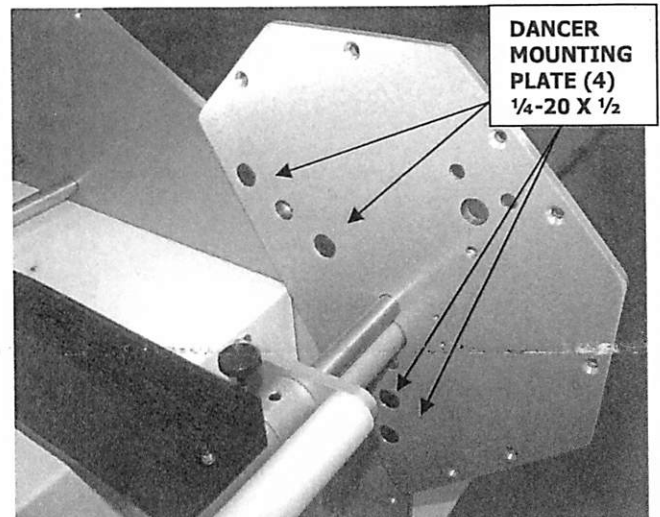
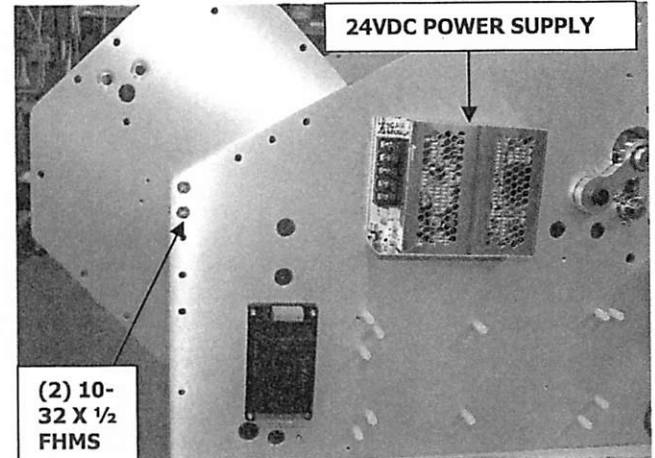
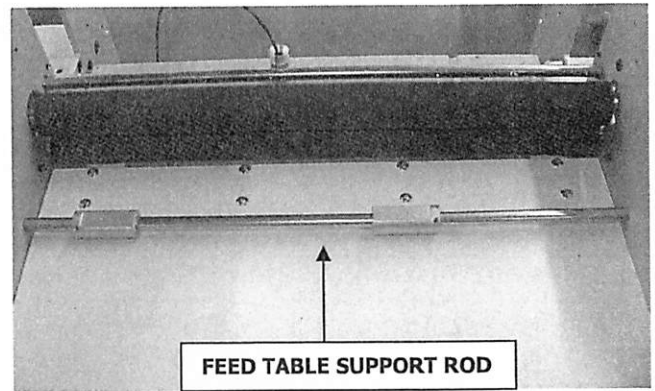


FEED ROLLER LIFT CAM TO THE CAM SHAFT HOLE WITH A 10-32 X 3/4 SET SCREWS. ADD ANTI-SEIZE TO CAMS.

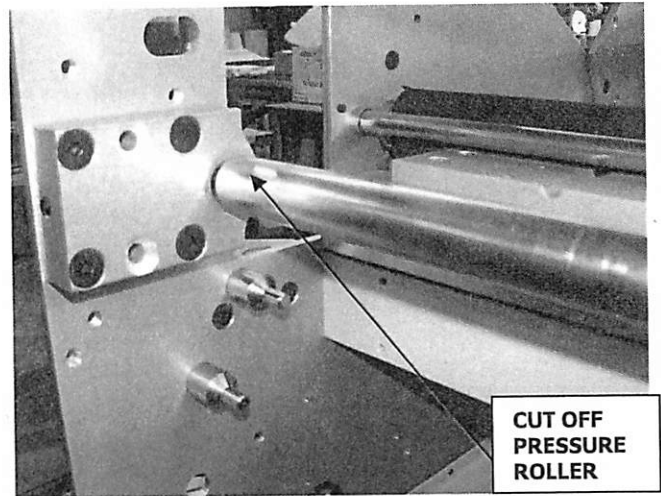
- 48) PLACE A CLEAN TOP RUBBER ROLL (C15 043.4) AS02 OVER THE BOTTOM RUBBER ROLL, ALIGN ROLLS.
- 49) SECURE A POWER FILTER (PRF142) AS08 TO THE OUTER LEFT SIDE PANEL BELOW THE MOTOR MOUNT CONNECTING PLATE. ORIENT THE (3) TERMINAL POSTS TO THE REAR. USE (4) 10-32 X 1/4 RHMS WITH (2) DIAGONAL #10 STAR WASHERS.
- 50) FROM INNER LEFT SIDE PANEL INSERT A 10-32 X 1 BHSH WITH A #10 STAR WASHER AS A GROUND SCREW. ON THE OUTER SIDE PANEL ADD ANOTHER #10 STAR WASHER AND LOOSELY THREAD A #10 KEPS HEX NUT.
- 51) ADHERE A GROUND SYMBOL (LAB06) LD09 ABOVE THE GROUND SCREW.
- 52) SLIDE A TOP RUBBER ROLL SPACER (C25 045.4) RACK 11 ONTO BOTH TOP RUBBER ROLL JOURNALS, FLUSH INWARD. CENTER RUBBER ROLLS.
- 53) SLIDE THE ASSEMBLED RUBBER ROLL PIVOT ARM ROLLER BEARING OVER BOTH JOURNALS, THE SNAP RING IS OUTWARD. SECURE LOWER FRONT SECTION OF PIVOT ARMS WITH A 3/8 X 1/2 SHOULDER BOLT (375IAC08) THREADED INTO THE SIDE PANEL.
- 54) ADD A TOP RUBBER ROLL PULLEY SPACER (C30 046.4) RACK 11 TO EACH JOURNAL BY OUTER PIVOT ARM ROLLER BEARING.
- 55) CENTER RUBBER ROLL. SECURE ENDS WITH 3/8 SHAFT COLLAR (PRC095) LD03 ON JOURNAL FLAT. THE SHAFT COLLAR EXTENDS PAST JOURNAL END, SET SCREW IS AT ENDS. THERE IS NO PLAY IN TOP RUBBER ROLL.
- 56) FROM OUTER PANEL THREAD A 10-32 X 3/8 SHCS BEHIND BOTH CAM SHAFT OILITE BEARINGS, BELOW THE REAR PIVOT ARM, AS A PIVOT ARM STOP.



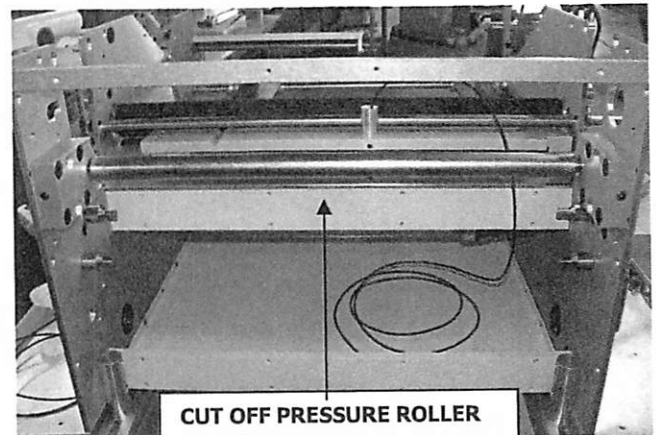
- 57) SLIDE (2) FEED TABLE GUIDE BLOCKS (C15 100.4) RACK 24 ONTO A FEED TABLE SUPPORT ROD (C15 196.4) AS02, WITH GUIDE BLOCK FLATS INWARD/ UPWARD. SECURE OVER TOP MOTOR COVER USE 10-32 X 1/2 FHMS WITH LOCTITE.
- 58) SECURE A 24VDC POWER SUPPLY (PRC0323) RACK 13 TO THE OUTER RIGHT SIDE PANEL ABOVE THE STANDOFFS, WITH TERMINALS TO LEFT/FRONT. USE (2) 6-32 X 3/8 THMS AT DIAGONAL CORNERS.
- 59) LOOSELY SECURE THE FRONT FEED TABLE ASSEMBLY BETWEEN INNER SIDE PANELS ALIGNING THE DANCER MOUNTING PLATE AND FEED TABLE SUPPORT ROD BETWEEN SIDE PANELS. ON THE RIGHT START THREADS OF (4) 1/4-20 X 1/2 FHS. THE ROD AND IDLER TUBE MOUNTING POST HAVE TO BE IN THE DANCER MOUNTING PLATE TO FIT BETWEEN PANELS.
- 60) START (4) 10-32 X 1/2 FHMS WITH LOCTITE ON THE RIGHT SIDE INTO THE FEED TABLE SUPPORT ROD AND IDLER TUBE MOUNTING POST AND ON THE LEFT SIDE INTO THE FEED TABLE SUPPORT ROD AND IDLER TUBE MOUNTING BRACKET. TIGHTEN ALL SCREWS.
- 61) FROM AS02 PLACE A FEED TABLE GUIDE RIGHT (C15 099.4) AND A FEED TABLE GUIDE LEFT (C15 098.4) OVER THE FRONT AND REAR FEED TABLE GUIDE BLOCKS. ALIGN THE FRONT AND REAR GUIDE BLOCK THREADS AND SECURE THE GUIDES TO THE BLOCKS WITH 4-40 X 3/16 FHMS. USE LOCTITE ON THE THREADS. THE GUIDES MUST SLIDE BACK AND FORTH EASILY. IF THEY DO NOT, REAM THE REAR FEED TABLE GUIDE BLOCK THAT SHOWS RESISTANCE.
- 62) SNUG (2) 1 1/4" SPI KNOBS (PRK179) AS07 INTO THE FRONT THREADS OF THE FEED TABLE GUIDE BLOCKS LOCATED CLOSER TO THE RUBBER ROLLS. THESE SPI KNOBS ARE AT AN ANGLE FORWARD.



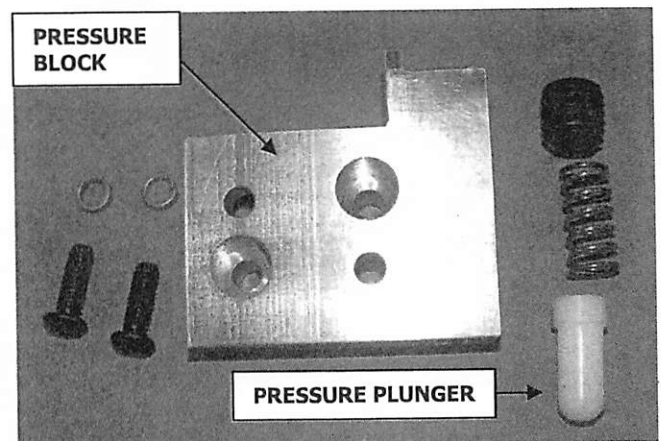
63) PLACE THE RIGHT AND LEFT SIDE MOUNT FOR BEARING AND PIN ASSEMBLIES, ORIENTED WITH THE DELRON BEARING MOUNT AND PIN OUTWARD, WHICH WILL BE BY THE SIDE PANELS, ONTO THE END SHAFTS OF A CUT OFF PRESSURE ROLLER (C15 404.4) AS02. FIT THE SHAFT ENDS INTO RIGHT AND LEFT ROLLER BEARINGS.



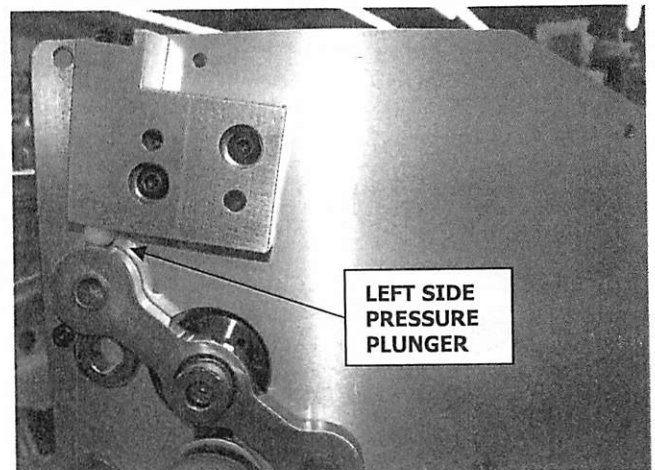
64) GATHER (8) 5/16-18 X 1 1/4 FSHH. FROM THE REAR OF THE CUTTER SLIDE THE CUT OFF PRESSURE ROLLER ON THE MOUNTS BETWEEN THE SIDE PANELS. ORIENT THE CUT OFF PRESSURE ROLLER TOWARD THE FRONT AND THE FLAT OF THE MOUNT TO THE REAR. SECURE EACH MOUNT WITH (4) 5/16-18 X 1 1/4 FSHH. THERE SHOULD BE PLENTY OF MOVEMENT WITH THE CUT OFF PRESSURE ROLLER.



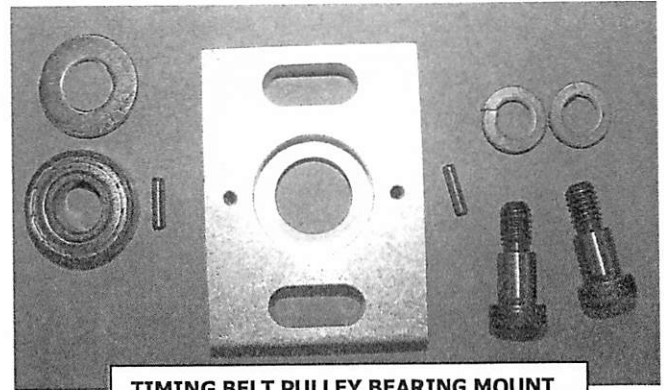
65) MAKE (2) UNIVERSAL PRESSURE BLOCK ASSEMBLIES FOR THE RIGHT AND LEFT SIDE. ADD LITHIUM GREASE TO A WHITE DELRON PRESSURE PLUNGER (C15 059.4) RACK 24. INSERT THE ROUNDED END INTO A THE LITHIUM GREASED THREADED END OF A PRESSURE BLOCK (C15 058.4) RACK 24. ADD A SILVER IDLER TENSIONING SPRING (PRS070) RACK 23 INTO THE PRESSURE BLOCK, NEXT TO PRESSURE PLUNGER. THREAD DOWN A 5/8-11 X 5/8 SET SCREW (.625MAA10) AS12. THE SPRING TENSION WILL BE ADJUSTED LATER.



66) SECURE ONLY THE LEFT SIDE PRESSURE BLOCK ASSEMBLY TO REAR, UPPER, OUTER LEFT SIDE PANEL WITH ROUNDED TIP OF PRESSURE PLUNGER ON UPPER REAR PIVOT ARM. THE PRESSURE BLOCK IS SLIGHTLY ANGLED FORWARD. SECURE THE LEFT PRESSURE BLOCK WITH (2) 1/4-20 X 3/4 BHCS, EACH WITH A 1/4 SPLIT LOCK WASHER, THROUGH COUNTERBORED OPENINGS ON THE PRESSURE BLOCK INTO SIDE PANELS. \*\*\*\*THE RIGHT SIDE PRESSURE BLOCK IS ADDED AFTER THE TOP CUT OFF BLADE ASSEMBLY IS INSTALLED.

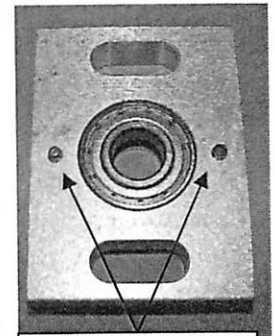
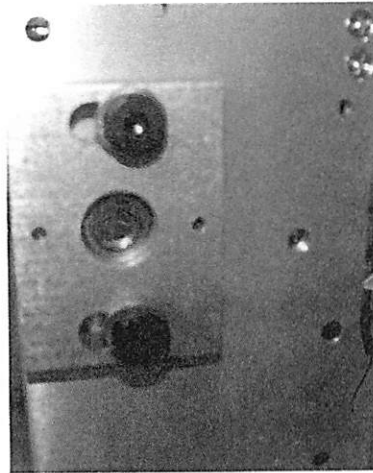


- 67) PREPARE A TIMING BELT PULLEY BEARING MOUNT (C15 254.4) RACK 24 BY PRESSING AN 8ZZ ROLLER BEARING (PRB038) RACK 21 FULLY INTO THE COUNTERBORE. PRESS (2) 1/8 X 1/2 DOWEL PINS (.125JOP08) INTO THE SAME SIDE AS THE COUNTERBORE, LEAVING 1/8" OF THE DOWEL PIN EXPOSED. THE THICKNESS OF A 1/2 FLAT WASHER CAN BE USED WHEN PRESSING IN THE DOWEL PIN TO MEASURE THE EXPOSED 1/8" DISTANCE.



TIMING BELT PULLEY BEARING MOUNT

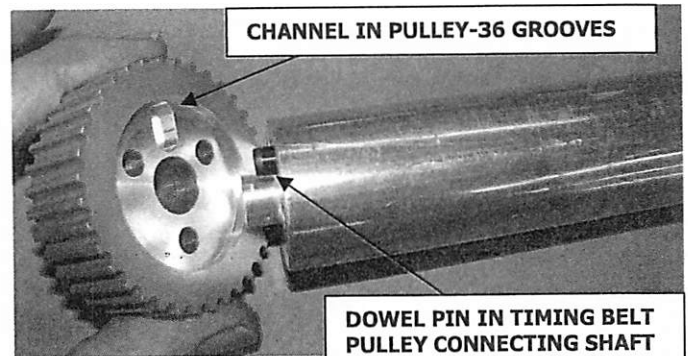
- 68) PLACE THE PREPARED TIMING BELT PULLEY BEARING MOUNT ON THE OUTER, UPPER RIGHT REAR SIDE PANEL, CATCHING THE EXPOSED DOWEL PINS IN THE SIDE PANEL CHANNELS. LOOSELY, SECURE THE TIMING BELT PULLEY BEARING MOUNT TO THE SIDE PANEL WITH (2) 3/8 X 1/2 SHOULDER BOLTS, EACH WITH A 3/8 SPLIT LOCK WASHER (.375KKM01).



EXPOSED DOWEL PIN CATCHES IN SIDE PANEL

- 69) INSERT A 1/4 X 3/4 DOWEL PIN (.250JPO12) INTO EACH END OF THE TIMING BELT PULLEY CONNECTING SHAFT (C15 257.4) AS02.

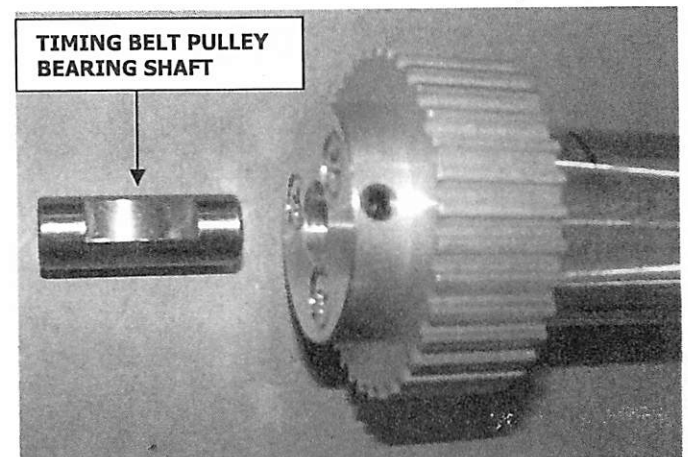
- 70) ALIGN THE CHANNEL IN THE COUNTERBORE OF A TIMING BELT PULLEY-36 GROOVES (C15 456.4) RACK 24 WITH THE 1/4 X 3/4 DOWEL PIN IN THE END OF THE TIMING BELT PULLEY CONNECTING SHAFT. INSERT THE DOWEL PIN INTO THE CHANNEL. SECURE THE COUNTERSUNK PULLEY HUB TO THE THREADED PULLEY SHAFT END WITH (3) 10-32 X 1 1/4 FHMS.



CHANNEL IN PULLEY-36 GROOVES

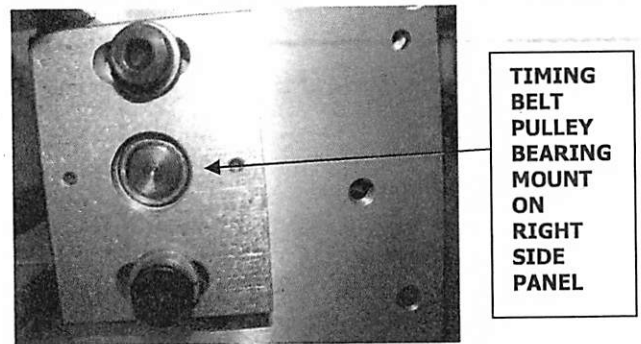
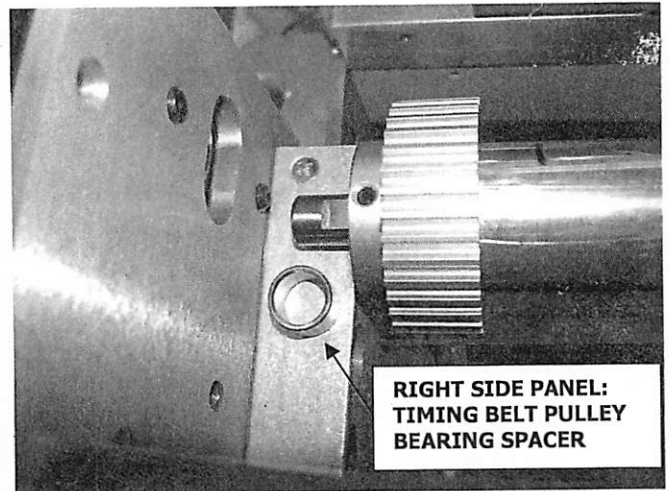
DOWEL PIN IN TIMING BELT PULLEY CONNECTING SHAFT

- 71) ALIGN THE SET SCREW UPWARD ON THE TIMING BELT PULLEY. **FULLY** INSERT A TIMING BELT PULLEY BEARING SHAFT (C15 255.4) RACK 24, WITH THE FLAT CUT UPWARD, UNDER THE SET SCREW. UNTHREAD THE PULLEY 1/4-28 X 3/8 SET SCREW, ADD A DROP OF LOCTITE AND RETHREAD ON THE BEARING SHAFT FLAT. UNTHREAD THE SECOND SET SCREW, ADD LOCTITE AND TIGHTEN ON BEARING SHAFT.

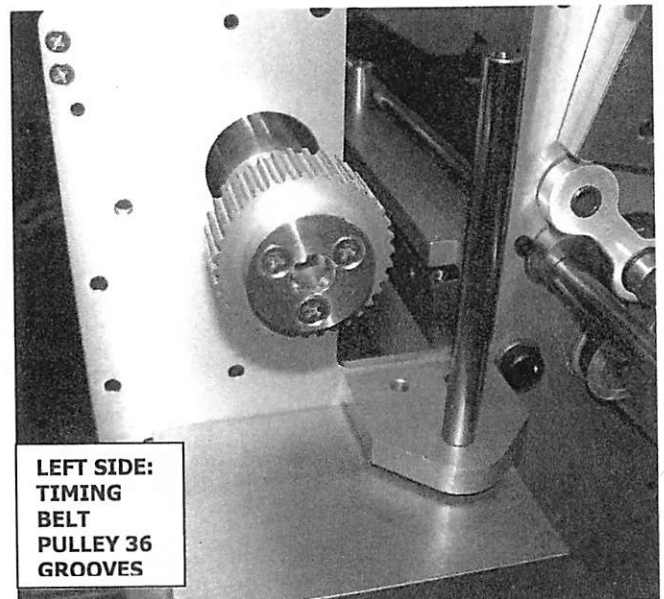


TIMING BELT PULLEY BEARING SHAFT

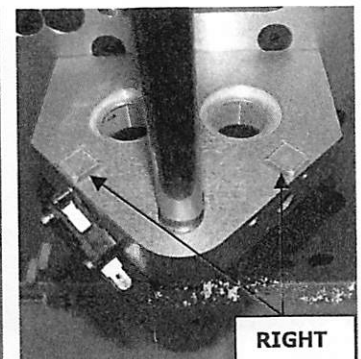
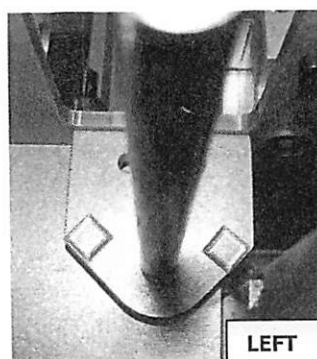
- 72) STAND BEHIND THE CUTTER, PLACE THE UNASSEMBLED TIMING BELT PULLEY CONNECTING SHAFT END THROUGH THE INNER LEFT SIDE PANEL \*\*WHICH IS ON YOUR RIGHT AND WILL BE THE STEPPER CUTTING MOTOR SIDE. THE 36 GROOVE PULLEY ALREADY ON THE CONNECTING SHAFT IS BY THE RIGHT SIDE PANEL SIDE. PLACE A TIMING BELT PULLEY BEARING SPACER (C15 253.4) RACK 24 OVER THE TIMING BELT PULLEY BEARING SHAFT AND INSERT THE SHAFT INTO THE ROLLER BEARING ON THE TIMING BELT BEARING MOUNT. THE SHAFT IS ABOUT FLUSH WITH THE OUTER ROLLER BEARING.



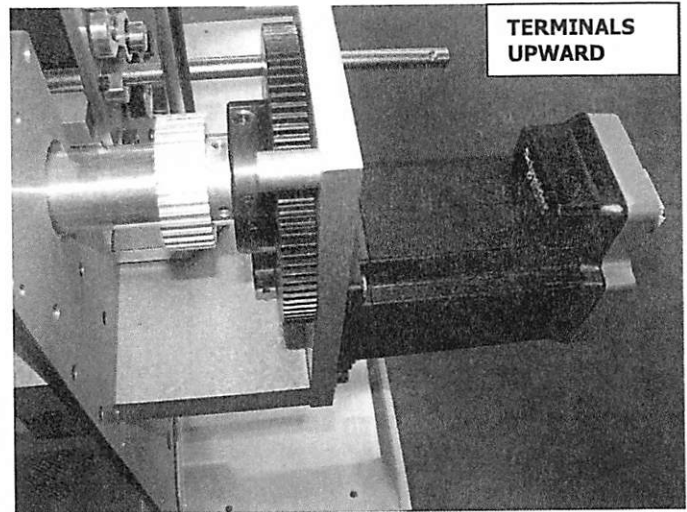
- 73) ADD ANOTHER TIMING BELT PULLEY 36 GROOVES (C15 456.4) RACK 24 TO THE UNASSEMBLED END OF THE TIMING BELT PULLEY CONNECTING SHAFT. ALIGN THE DOWEL PIN INTO THE PULLEY COUNTERBORE CHANNEL. SECURE THE PULLEY THROUGH THE (3) COUNTERSINKS ON THE PULLEY HUB WITH 10-32 X 1 1/4 FHMS.



- 74) ADD (4) STICK ON RUBBER BUMPERS (PRR266) RACK 5, (2) EACH ON THE BOTTOM GUIDE BAR MOUNTS. ON THE LEFT MOUNT ALIGN AS PICTURED, FLUSH TO THE OUTER RADIUS CORNER BEND. ON THE RIGHT MOUNT ALIGN 5/8" OUTWARD FLUSH FROM THE RADIUS CORNER BEND.



75) SECURE THE CUTTING GEARS AND MOTOR ASSEMBLY TO THE LEFT SIDE OF THE CUTTER. THIS IS EASIER WITH TWO PEOPLE. ALIGN THE FLAT CUT OF THE DRIVEN GEAR SHAFT UPWARD AND ALIGN A SET SCREW THREAD ON THE LEFT SIDE TIMING BELT PULLEY OVER THE SHAFT FLAT. INSERT THE SHAFT AND SECURE WITH A 10-32 X 3/8 SET SCREW WITH LOCTITE ON THREADS.

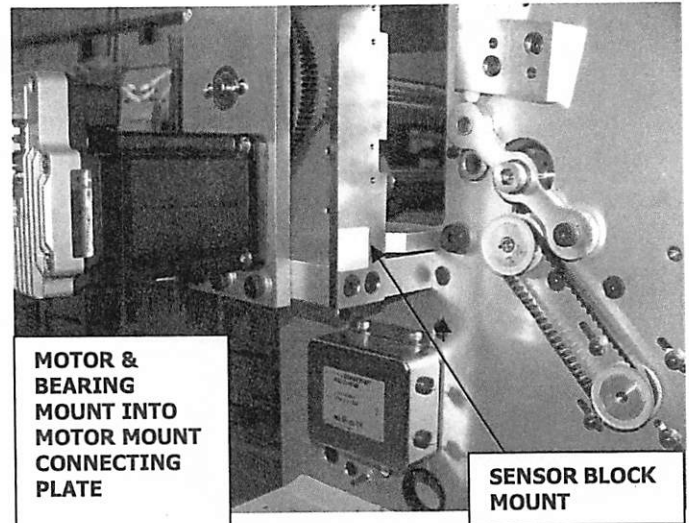


76) LET ONE PERSON HOLD THE STEPPER CUTTER MOTOR WHILE THE SECOND PERSON THREADS (3) 3/8 X 3/8 SHOULDER BOLTS, EACH WITH A 3/8 SPLIT LOCK WASHER THROUGH THE LOWER MOTOR BEARING MOUNT AND INTO THE THREADED MOTOR MOUNT CONNECTING PLATE.

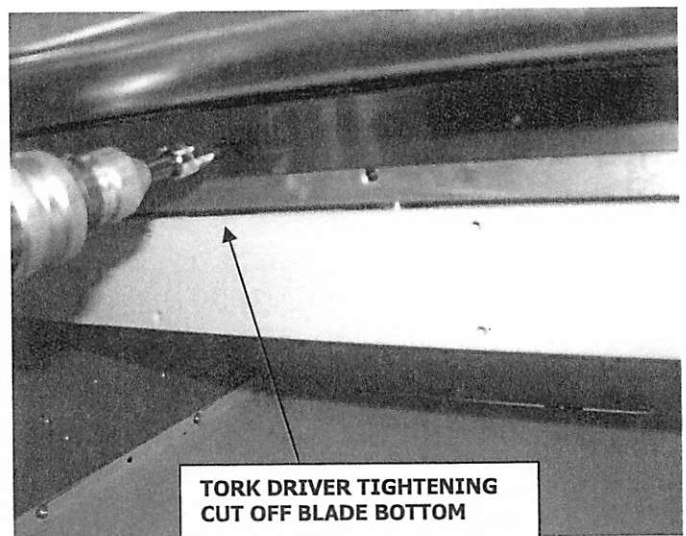
77) TIGHTEN ANOTHER 10-32 X 3/8 SET SCREW WITH LOCTITE ON THREADS IN THE SECOND LOCATION ON THE TIMING BELT PULLEY. THIS IS ON THE SHAFT ROUND.

78) TEST THE COMPLETE 360 DEGREE ROTATION OF THE GEARS FOR SMOOTHNESS, BACK AND FORTH.

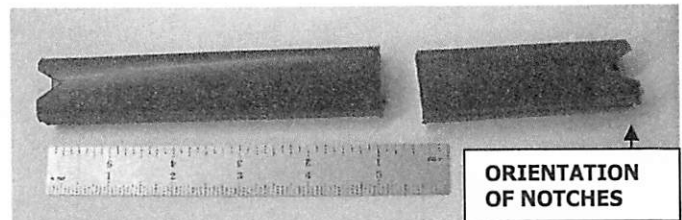
79) SECURE THE SENSOR BLOCK MOUNT (C15 322.4) RACK 24 TO THE FRONT OF THE MOTOR MOUNT CONNECTING PLATE. USE (2) 1/4-20 X 3/4 FHMS.



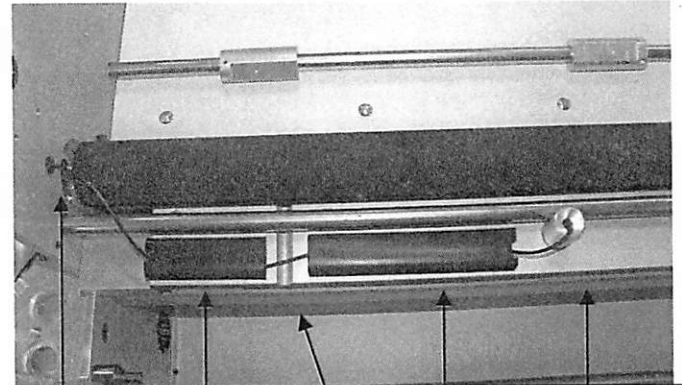
80) ORIENT THE 5 DEGREE BOTTOM BLADE EDGE UPWARD ON A STATIONARY CUT OFF BLADE BOTTOM (C15 403.4) AS02 TO THE BOTTOM CUT OFF BLADE HOLDER AND SECURE USING (5) 6-32 X 5/8 FH TORX (.138BAB10) AS11. \*START THE MIDDLE THREADS AND BEGIN REMAINING THREADS. USE THE BLADE'S WEIGHT TO LEVEL CUTTING BLADE. WITH A TORK DRIVER, TIGHTEN THE CENTER SCREW. TIGHTEN THE SCREWS ON EITHER SIDE OF CENTER AND WORK YOUR WAY OUTWARD.



- 81) MEASURE AND CUT A 3" AND 5" PIECE OF ELECTRICAL RACEWAY (PRC076) AS16. THE RACEWAY WILL GUIDE AND PROTECT THE TOP SENSOR CABLE. CUT AND TRIM A NOTCH ON THE OUTER ENDS OF BOTH PIECES TO HOLD THE SENSOR CABLE AWAY FROM THE CUTTER BLADE.

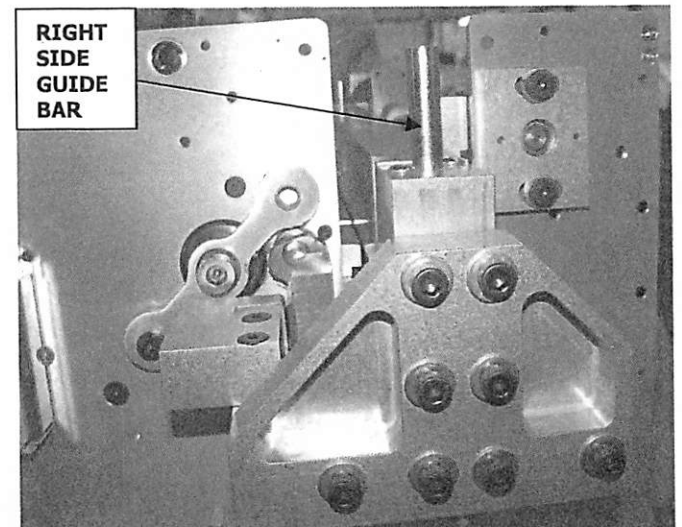


- 82) ALIGN RACEWAY WITH NOTCHES OUTWARD AND OPENING CLOSURE TOWARD THE FRONT OF THE CUTTER. CENTER THE 5" RACEWAY BETWEEN SENSOR HOLDER AND GROOVE IN TOP MATERIAL GUIDE MOUNT. INSERT SENSOR CABLE AND CLOSE RACEWAY. ADHERE 5" RACEWAY BETWEEN MATERIAL GUIDE MOUNT AND CAM SHAFT, SO CAM SHAFT AND CUTTER ASSEMBLY MOVEMENT WILL NOT RUB. INSERT SENSOR CABLE INTO THE 3" RACEWAY AND OUT THROUGH SIDE PANEL GROMMET. ADHERE 3" RACEWAY ON OPPOSITE SIDE OF SENSOR HOLDER BAR.

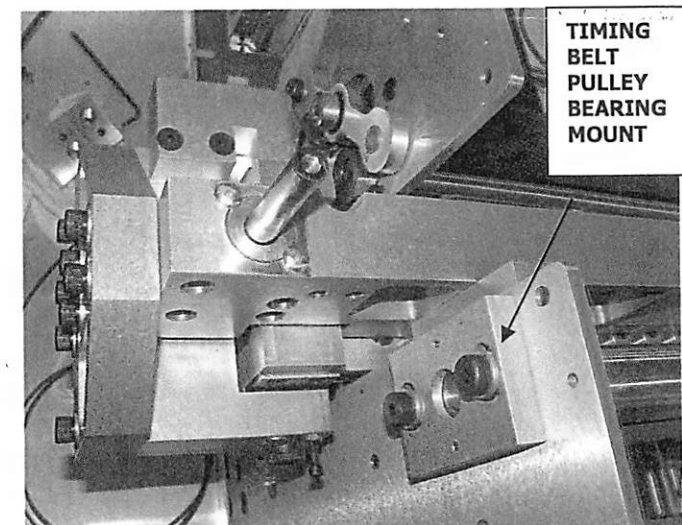


GROMMET~ 3" RACEWAY~GROOVE~5" RACEWAY~SENSOR

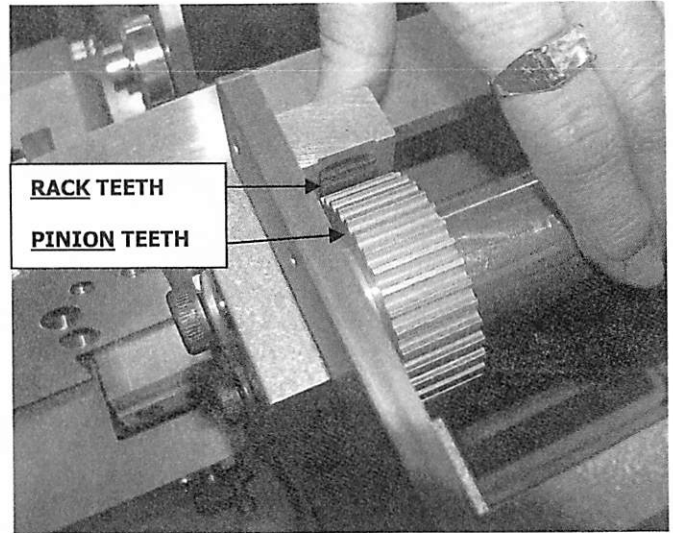
- 83) BEFORE ADDING THE TOP CUT OFF BLADE ASSEMBLY TO CHASSIS: A) IF BLADES ARE ON, DO NOT LET THEM TOUCH EACH OTHER DURING INSTALLING, CAUSING CHIPS OR DULLING BLADES. B) REMOVE SHOULDER BOLTS IN RIGHT SIDE TIMING BELT PULLEY BEARING MOUNT AND SET MOUNT ASIDE. REPLACE MOUNT AFTER TOP CUT OFF BLADE ASSEMBLY IS INSTALLED.



- 84) FROM THE REAR OF THE CUTTER, ONE PERSON CAN ALIGN THE TOP CUT OFF BLADE ASSEMBLY OVER THE RIGHT AND LEFT GUIDE BARS. A SECOND PERSON CAN ALIGN THE GUIDE BARS INTO THE LOWER SELF ALIGNING BALL BEARINGS. THE (3) CARDBOARD CYLINDERS IN THE SELF ALIGNING BALL BEARINGS WILL POP OUT WHEN INSTALLED, DISCARD THEM. EVENLY SLIDE THE ASSEMBLY DOWNWARD. THE LEFT/MOTOR SIDE TOP BLADE SHOULD BE SLIGHTLY LOWER THAN THE LEFT SIDE BOTTOM BLADE.



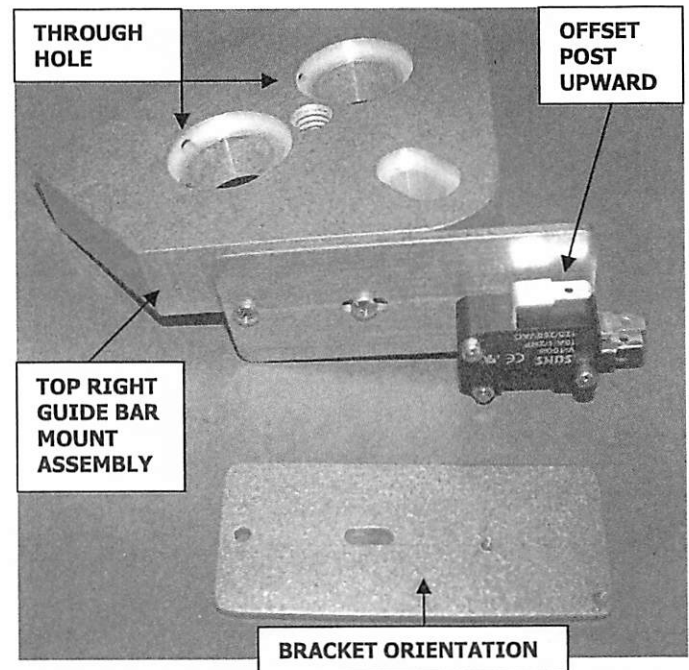
85) ONE PERSON CAN MESH THE HEAVY RUBBER 'RACK' TEETH ON THE RIGHT AND LEFT TIMING BELT MOUNTING BLOCKS WITH THE TIMING BELT PULLEY 'PINION' TEETH, WHILE HOLDING THE TOP CUT OFF BAR TO THE REAR. AFTER BOTH SIDE TEETH MESH, THE SECOND PERSON CAN TIGHTEN THE BUTTONHEAD SCREWS ON THE UNDERSIDE OF THE RIGHT AND LEFT GUIDE BARS.



86) TIGHTEN THE (3) SHCS BELOW THE MOTOR, HOLDING MOTOR MOUNT TO THE MOTOR MOUNTING PLATE.

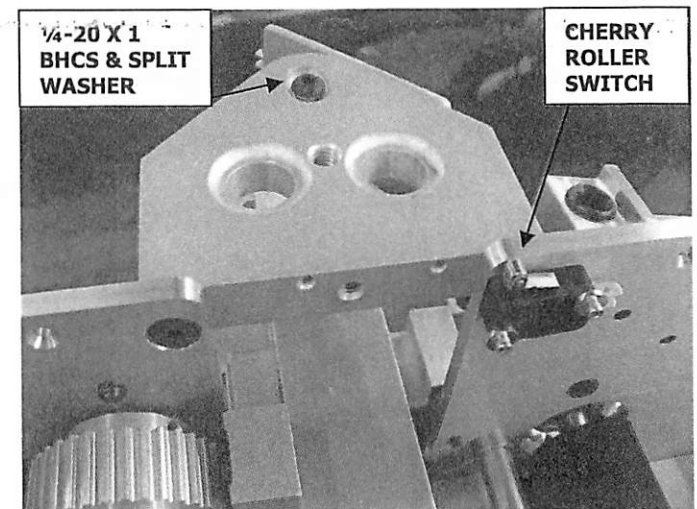
87) REPLACE AND TIGHTEN TIMING BELT PULLY BEARING MOUNT SHOULDER BOLTS, INSERT PULLY SHAFT.

88) ADD THE RIGHT SIDE PRESSURE BLOCK ASSEMBLY, ABOVE THE PIVOT ARM. SECURE WITH (2) 1/4-20 X 3/4 BHSC, EACH WITH A 1/4 SPLIT LOCK WASHER THROUGH COUNTERBORES INTO THE SIDE PANEL.



89) SECURE A CHERRY MINI ROLLER SWITCH (PRS370) RACK 13 TO A CUTTING MODULE SAFETY SWITCH BRACKET (C15 234.4) RACK 24. HOLD BRACKET WITH THE CHANNEL TO THE LEFT AND THE DIAGONAL THREADS TO THE LOWER RIGHT. THE OFFSET SWITCH TERMINAL IS UPWARD. USE (2) 4-40 X 1/2 SHCS.

90) WITH THE 'THROUGH HOLE' IN THE COUNTERBORES UPWARD, ON A TOP RIGHT GUIDE BAR MOUNT (C15 233.4) RACK 24, SECURE CUTTING MODULE SAFETY SWITCH BRACKET AND SWITCH TO THE FRONT RIGHT GUIDE BAR MOUNT. USE (2) 4-40 X 1/4 PHMS, THREADS ARE DOWNWARD.



91) PLACE THE TOP RIGHT GUIDE BAR MOUNT ASSEMBLY OVER THE RIGHT GUIDE BAR. SECURE TO SIDE PANEL THROUGH INNER COUNTERSINKS WITH (2) 1/4-20 X 3/4 FHMS.

92) PLACE A 1/4 SPLIT LOCK WASHER ON A 1/4-20 X 1 BHCS AND INSERT THROUGH RIGHT GUIDE BAR MOUNT



CHANNEL, THREADING INTO RIGHT GUIDE BAR, TIGHTEN.

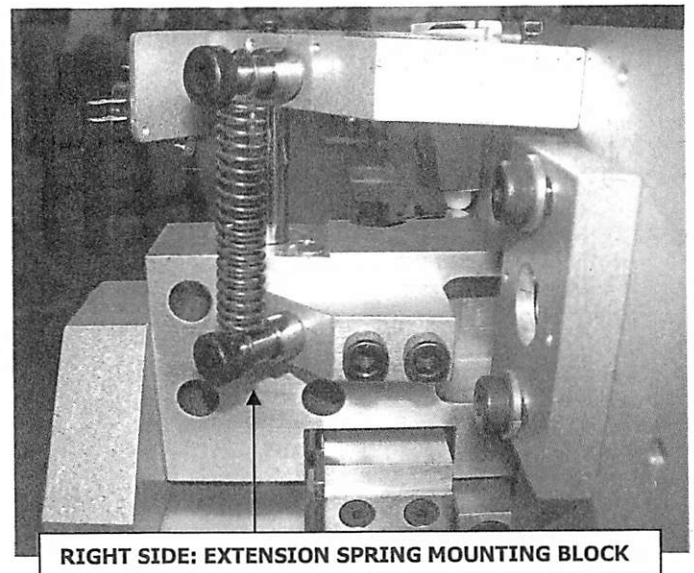
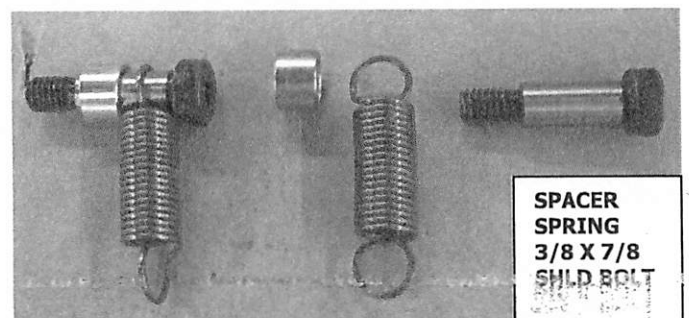
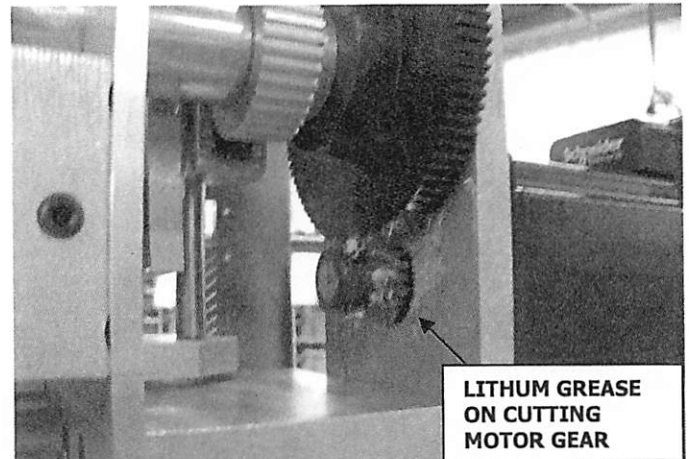
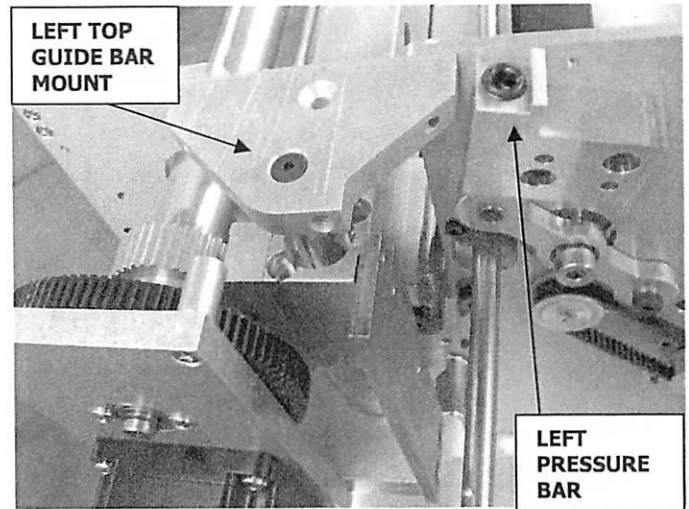
- 93) SECURE A CHERRY MINI ROLLER SWITCH (PRS370) ROLLER UPWARD TO THE INNER RIGHT SIDE PANEL, COVERING THE FRONT  $\frac{1}{4}$ -20 FHSB HOLDING TOP RIGHT GUIDE MOUNT. USE (2) 4-40 X  $\frac{3}{4}$  SHCS EACH WITH A POP RIVET WASHER FOR THICKNESS.

- 94) PLACE LEFT TOP GUIDE BAR MOUNT (C15 221.4) RACK 24 OVER THE LEFT GUIDE BAR. SECURE TO SIDE PANEL THROUGH INNER COUNTERSINKS WITH (2)  $\frac{1}{4}$ -20 X 1 FHSB. PLACE ANOTHER  $\frac{1}{4}$ -20 X 1 FHSB THROUGH THE OUTER, TOP COUNTERSINK AND SECURE LEFT TOP GUIDE MOUNT TO THE LEFT GUIDE BAR.

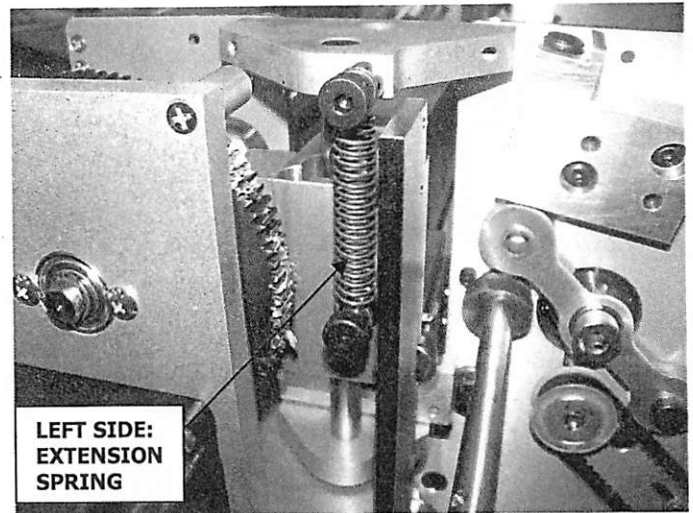
- 95) BRUSH LITHIUM GREASE CAB1 ON LEFT SIDE, CUTTING MOTOR GEAR TEETH. LIFT TOP BLADE HOLDER TO ROTATE THE GEAR. THE UPPER, LARGER GEAR DOES NOT MAKE A FULL ROTATION WHEN THE CUTTER IS COMPLETELY ASSEMBLED. THEREFORE, ADD LITHIUM GREASE ONLY WHERE THE TEETH MEET THE CUTTING MOTOR GEAR TEETH.

- 96) GATHER PARTS TO CONNECT RIGHT AND LEFT SIDE EXTENSION SPRING (PRS510) RACK 24. THE RIGHT AND LEFT SIDE EXTENSION SPRING IS HELD WITH (4)  $\frac{3}{8}$  X  $\frac{7}{8}$  SHOULDER BOLTS (.375IAC14), EACH WITH A TOP RUBBER ROLL SPACER (C25 045.4) RACK 11. SPACER LOCATES BY THE SHOULDER BOLT THREADS.

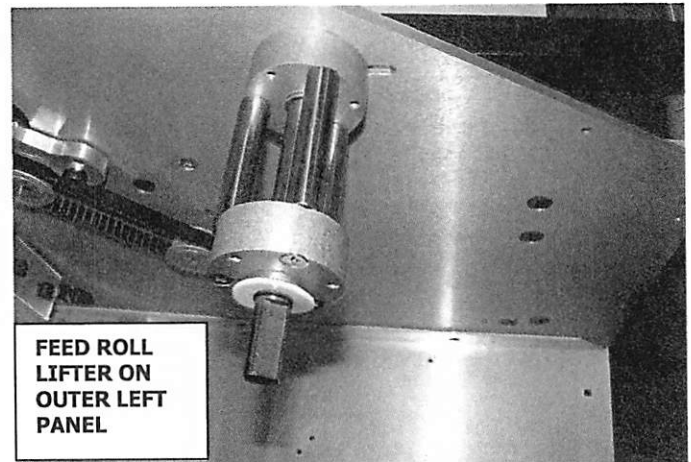
- 97) LOOP EXTENSION SPRING END OVER THE SHOULDER BOLT ADD SPACER BY THE THREADS, INSERT THE LOWER SHOULDER BOLT INTO RIGHT SIDE EXTENSION SPRING MOUNTING BLOCK AND TIGHTEN SHOULDER BOLT. THE UPPER EXTENSION SPRING AND SPACER CONNECT TO TOP RIGHT GUIDE BAR MOUNT. A  $\frac{3}{8}$  X  $\frac{7}{8}$  SHOULDER BOLT IS USED SO SPRING DOES NOT GET PINCHED BETWEEN SHOULDER BOLT HEAD AND SPACER WHEN THE SPRING RETRACTS.



- 98) ON THE LEFT/MOTOR SIDE OF THE CUTTER, THE LOWER EXTENSION SPRING, SPACER AND SHOULDER BOLT ARE THREADED INTO THE OUTER TOP CUT OFF BLADE HOLDER ASSEMBLY, IN FRONT OF THE LARGER GEAR. THE UPPER SHOULDER BOLT, EXTENSION SPRING, AND SPACER ARE THREADED INTO THE LEFT TOP GUIDE BAR MOUNT. AFTER THE SPRINGS ARE ATTACHED, VERIFY THAT THE RACK AND PINION TEETH ARE MESHED.



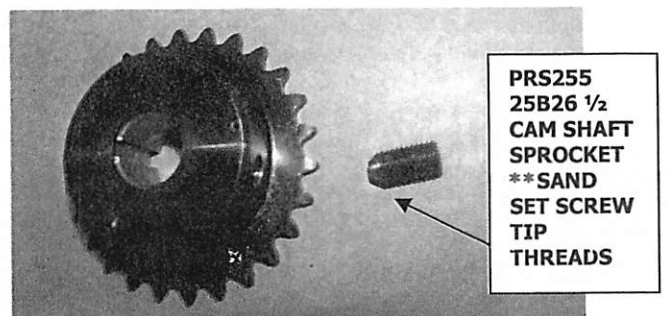
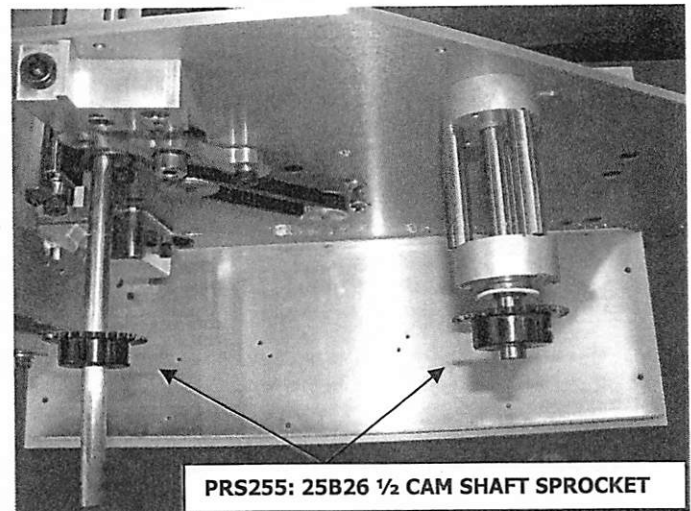
- 99) SECURE THE INSIDE FEED ROLL LIFTER ASSEMBLY TO THE OUTER LEFT SIDE PANEL. INSERT THE SHORTER CUT SHAFT END ON THE COUNTERBORED MOUNTING BRACKET SIDE THROUGH THE SIDE PANEL OPENING. ON THE INNER LEFT SIDE PANEL, LOOSELY SECURE THE INSIDE FEED ROLL LIFTER ASSEMBLY WITH (3) 10-32 X 1/2 THMS, EACH WITH A #10 STAR WASHER. THE CHANNELS IN THE SIDE PANEL WILL ALLOW CHAIN ADJUSTMENT LATER.



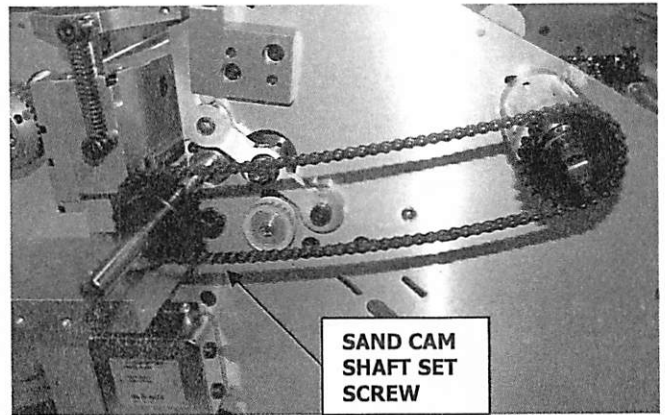
- 100) START A 1/4-28 X 1/2 SET SCREW IN A 25B26 1/2 BORE SPROCKET (PRS255) RACK 21. ON LEFT SIDE SLIDE THIS SPROCKET WITH TEETH INWARD AND HUB OUTWARD, OVER THE DEEPER CUT, OUTER FEED ROLL LIFTER SHAFT. DO NOT TIGHTEN SPROCKET YET.

- 101) SAND OFF A COUPLE OF THREADS ON THE TIP END OF A SECOND 1/4-28 X 1/2 SET SCREW. SANDING WILL BETTER ACCOMMODATE THE CATCH DEPTH IN THE CAM SHAFT.

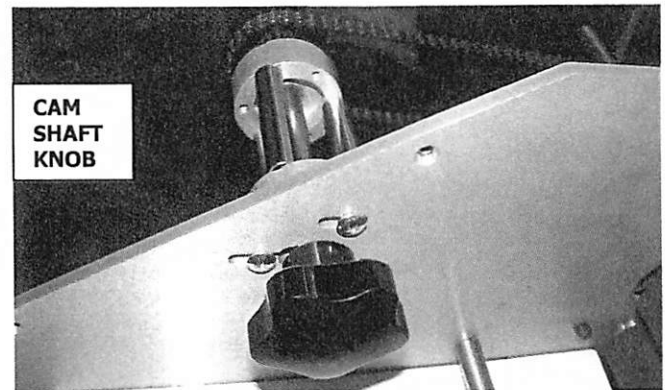
- 102) WITH TEETH INWARD AND HUB OUT, SLIDE A SECOND 25B26 1/2 BORE SPROCKET (PRS255) OVER CAM SHAFT. TIGHTEN *TRIMMED* SET SCREW INTO CAM SHAFT CATCH, WHICH MEASURES ABOUT 4 1/2" FROM THE SIDE PANEL. MEASURE THE SPROCKET TEETH ON THE FEED ROLL LIFTER SHAFT TO AN EQUAL DISTANCE AND TIGHTEN THE SET SCREW ON THAT SPROCKET.



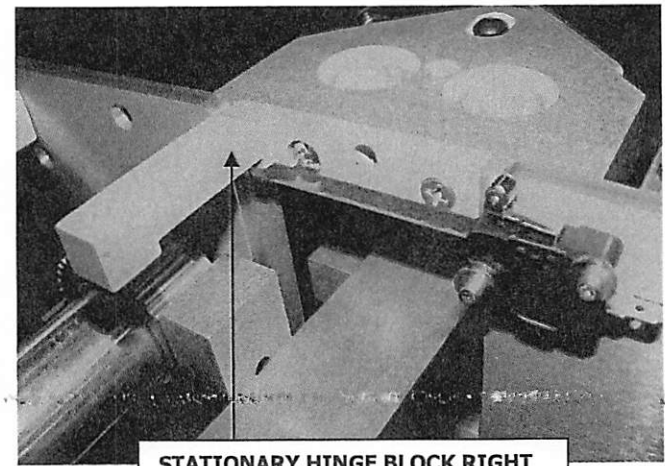
- 103) CUT 24" OF #25 CHAIN ROLL (PRC083.1) WORK TABLE BY D-02. PLACE THE CHAIN OVER THE 25B26 SPROCKETS AND CONNECT USING A #25 CHAIN CONNECTING LINK (PRC084) AS09. THE CHAIN IS ADJUSTED BY SLIDING THE FEED ROLL LIFTER ASSEMBLY IN THE SIDE PANEL CHANNELS. \*\*\* THE CHAIN SHOULD BE LOOSE ENOUGH THAT THERE IS NO STRESS ON THE CAM SHAFT AND IT DROPS EASILY.



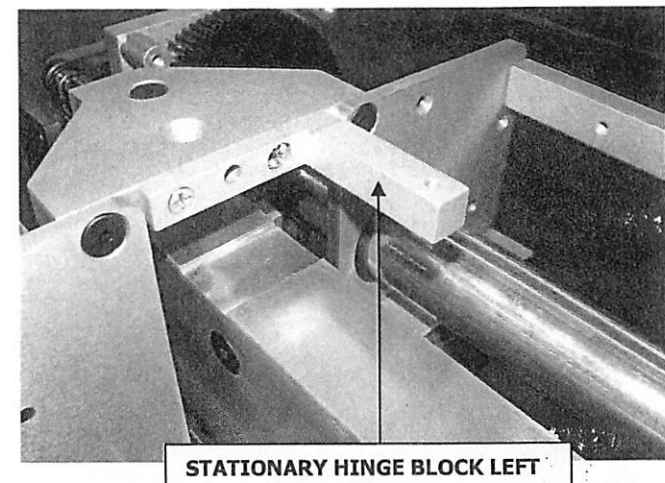
- 104) SECURE A LD CAM SHAFT KNOB (PRK175) LD05 TO THE FLAT CUT PORTION OF THE INNER SHAFT ON THE FEED ROLL LIFTER ASSEMBLY, OVER THE MOTOR COVER. USE A 1/4-20 X 3/8 SET SCREW ON THE SHAFT FLAT.



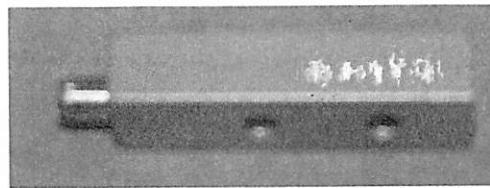
- 105) SECURE THE STATIONARY HINGE BLOCK RIGHT (C15 073.4) RACK 24 TO THE UPPER, INNER TOP RIGHT GUIDE BAR MOUNT, ALONG INNER SIDE PANEL, ABOVE THE TOP CUT OFF BLADE HOLDER ASSEMBLY. THE RIGHT STATIONARY HINGE BLOCK HAS THE CUT OUT NOTCHES DOWNWARD, TO THE REAR, ON THE PORTION THAT EXTENDS INWARD. USE AN 8-32 X 1/2 PHMS IN THE COUNTERBORED OPENING AND AN 8-32 X 1/2 FHMS IN THE COUNTERSUNK OPENING.



- 106) SECURE THE STATIONARY HINGE BLOCK LEFT (C15 071.4) RACK 24 TO THE UPPER, INNER TOP LEFT GUIDE BAR MOUNT, ALONG THE INNER PANEL, ABOVE THE TOP CUT OFF BLADE HOLDER ASSEMBLY. THE LEFT STATIONARY HINGE BLOCK HAS THE INWARD EXTENDING PORTION TO THE REAR OF THE CUTTER. USE AN 8-32 X 1/2 PHMS IN THE COUNTERBORED OPENING AND AN 8-32 X 1/2 FHMS IN THE COUNTERSUNK OPENING.

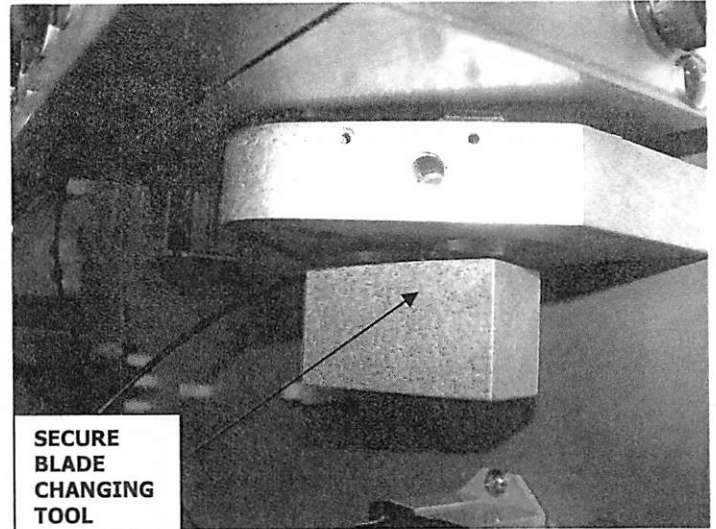


107) ARBOR PRESS A 3/16 X 1/2 DOWEL PIN (.187JOP08) INTO THE OPEN END OF (2) ROTATING HINGE BLOCKS (C15 072.4) RACK 24. THE ROTATING HINGE BLOCKS WILL BE USED TO SECURE THE SAFETY SHIELD WHICH IS ADDED AFTER THE CUTTING BLADES ARE TESTED, IN THE "WIRING AND HOUSING" SECTION. SET THE ROTATING HINGE BLOCKS ASIDE.

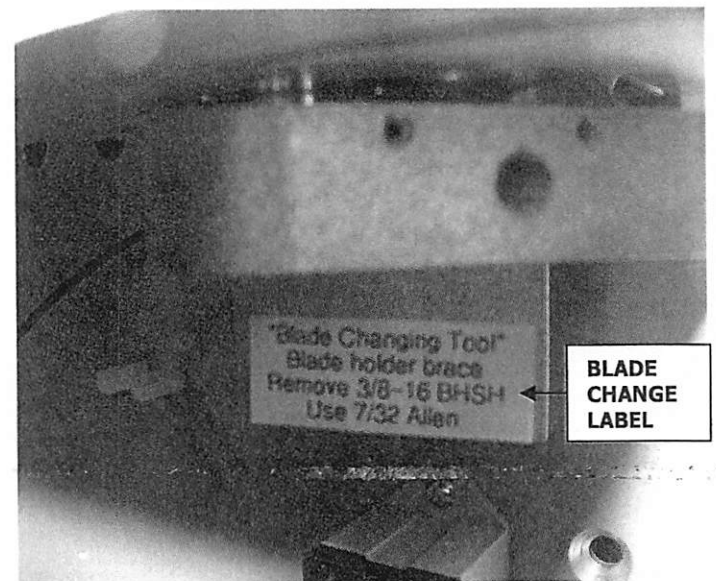


ROTATING HINGE BLOCK & 3/16 X 1/2 DOWEL PIN

108) SECURE THE BLOCK CALLED A BLADE CHANGING TOOL (C15 399.4) RACK 24 TO THE RIGHT GUIDE BAR MOUNT BOTTOM, CENTER THREADS USING A 3/8-16 X 1 1/4 BSHH (.375AA020). ADHERE INSTRUCTIONAL LABEL TO THE BLADE CHANGING TOOL BLOCK. LABELS ARE LOCATED IN THE BOX WITH CHANGING TOOL AND ARE PRINTED AT LEDCO.



SECURE BLADE CHANGING TOOL



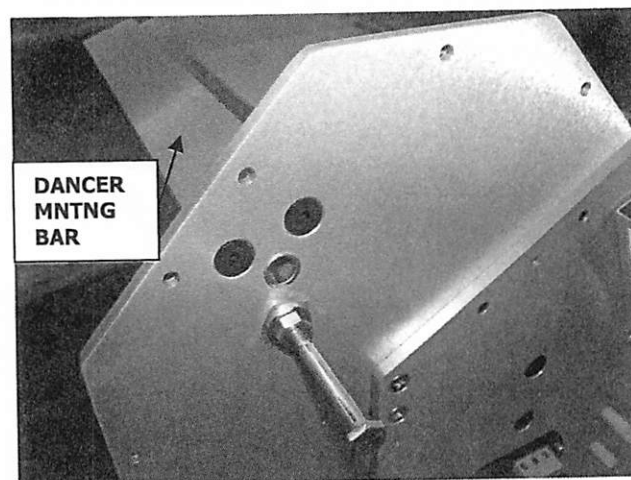
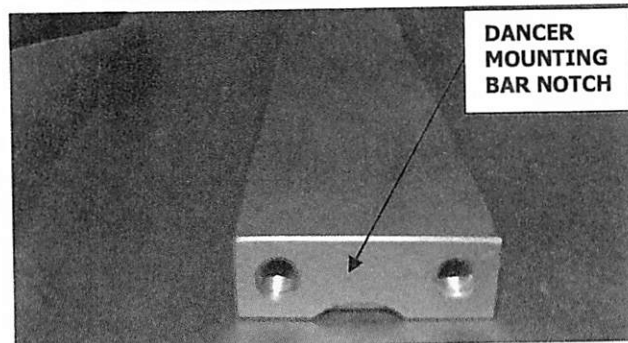
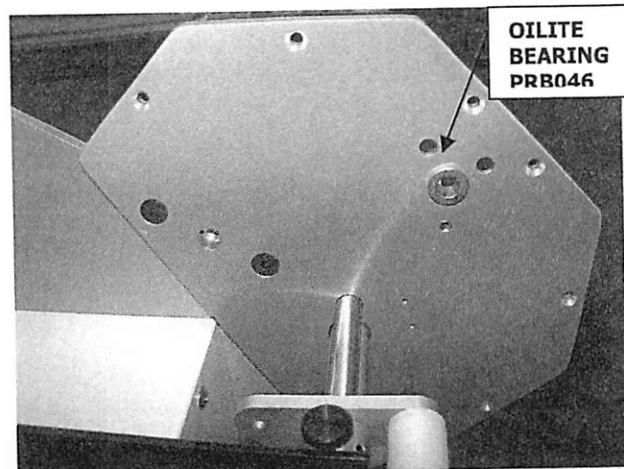
BLADE CHANGE LABEL



Blade Changing Tool  
Blade holder brace  
Remove 3/8-16 BSHH  
Use 7/32 Allen

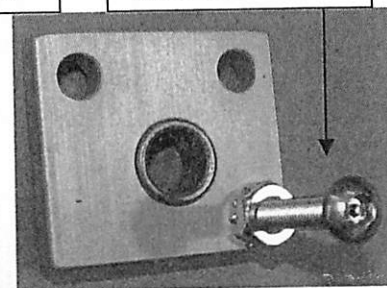
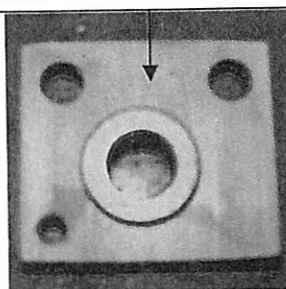
# C15 DANCER ASSEMBLY 2017

- 1) THE DANCER ASSEMBLY PURPOSE IS TO STOP THE CUTTER. THE DANCER ROLLER RAISES AS THE LAMINATE TIGHTENS. WHEN THE DANCER ROLLER REACHES A CERTAIN HEIGHT THE FAIL-SAFE ENGAGES.
- 2) TAP AN OILITE BEARING (PRB046) RACK 21 INTO THE INNER FRONT OF DANCER MOUNTING PLATE, LOCATED ABOVE FRONT IDLER TUBE, WITH THE OILITE BEARING *FRANGE INWARD* ON IDLER TUBE SIDE. REAM WITH .3800.
- 3) LOOK AT THE TAPPED ENDS OF A DANCER MOUNTING BAR (C15 288.4) AS02. THERE IS A NOTCH BETWEEN THE THREADS THAT WILL FIT OVER THE OILITE BEARING FLANGE ON THE DANCER MOUNTING PLATE. THE TWO ENDS OF THE DANCER MOUNTING BAR *ARE UNIVERSAL* AND EITHER SIDE WILL FIT THE DANCER MOUNTING PLATE OILITE BEARING FLANGE.
- 4) ALIGN THE DANCER MOUNTING BAR OVER THE OILITE BEARING FLANGE ON THE INNER DANCER MOUNTING PLATE. SECURE WITH (2) 1/4-20 X 3/4 FHS.
- 5) ARBOR PRESS ANOTHER OILITE BEARING (PRB046) RACK 21 INTO A DANCER STOP PLATE (C30 295.4) RACK 11 ORIENT FLANGE ON THE SIDE WITH (2) LARGER HOLES UPWARD AND THE SMALLER, THREADED OPENING TO THE LOWER LEFT. REAM WITH .3800.
- 6) START A 10-32 KEPS HEX NUT UP THE THREADS OF A 10-32 X 1 1/4 BH TAMPER PROOF HEX (.1900FB20). THREAD THE TAMPER PROOF HEX FROM THE SIDE *OPPOSITE THE FLANGE* ON THE DANCER STOP PLATE UNTIL IT IS FLUSH ON THE FLANGE SIDE. TIGHTEN THE KEPS HEX NUT WITH A WRENCH. THIS MAY NEED TO BE REMOVED WHILE SECURING THE DANCER-CURVED TO THE ASSEMBLY.

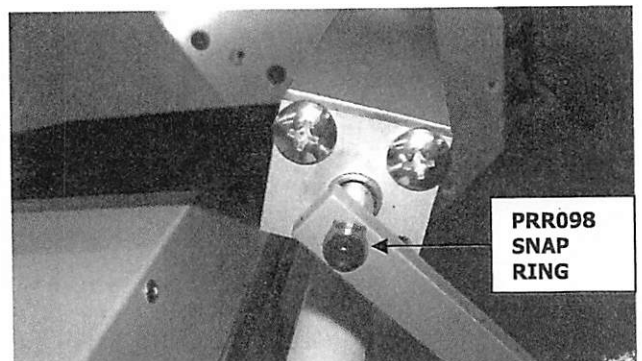
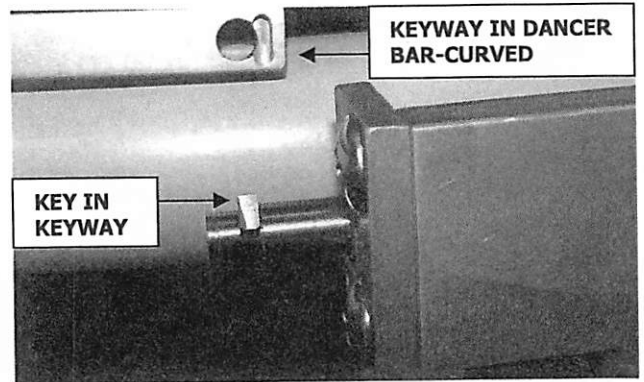
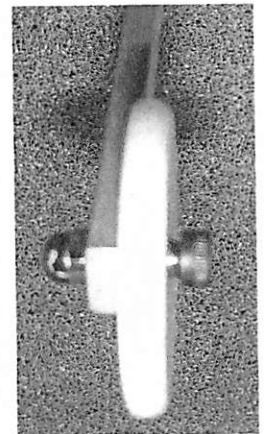
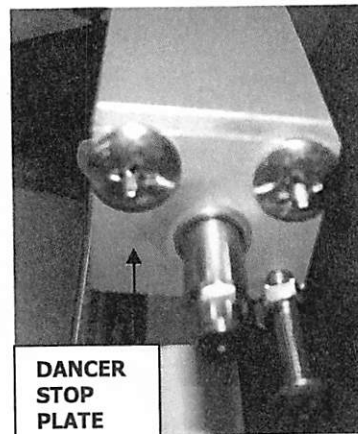


DANCER STOP PLATE, FLANGE

TAMPER PROOF HEX

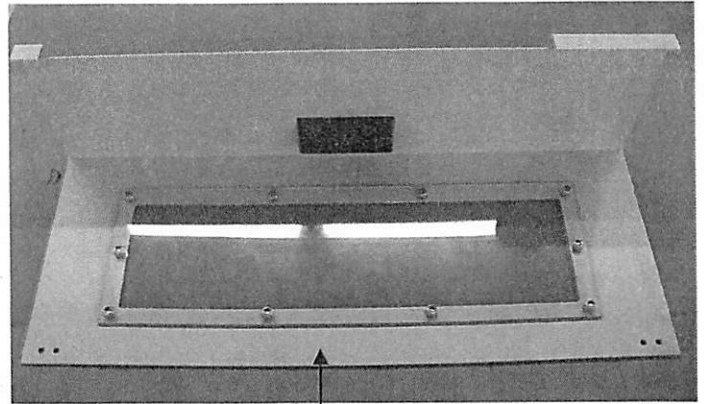


- 7) EXAMINE THE DANCER MOUNTING SHAFT (C15 294.4) RACK 24 AND INSERT THE *SPLIT END OF THE SHAFT* THROUGH THE INNER DANCER MOUNTING PLATE OILITE BEARING FLANGE, LOCATED BELOW THE DANCER MOUNTING BAR.
- 8) SLIDE THE DANCER STOP PLATE, WITH OILITE FLANGE TOWARD THE DANCER MOUNTING PLATE, OVER THE DANCER MOUNTING SHAFT END LOCATED UNDER THE DANCER MOUNTING BAR. THE TAMPER PROOF BH HEX IN THE DANCER STOP PLATE FACES AWAY FROM THE DANCER MOUNTING SHAFT. SECURE THE DANCER STOP PLATE TO THE DANCER MOUNTING BAR USING (2) 1/4-20 X 3/4 THMS THE DANCER MOUNTING SHAFT MUST SPIN EASILY. IF IT DOES NOT SPIN FREELY, REMOVE AND SAND THE OILITE FLANGE OR DEEPEN THE JOURNAL END.
- 9) PREPARE THE DANCER BAR FOR TOUCHSCREEN, CURVED (C30 289.4A) RACK 11 BY FIRST SECURING A DANCER ROLLER (C30 292.4) RACK 11 THROUGH THE THREADED END, WHITE ROLLER ON KEYWAY SIDE. INSERT A 1/4 X 5/16 SHOULDER BOLT (.250IAC05) INTO THE WHITE DANCER ROLLER AND THREAD INTO THE DANCER BAR FOR TOUCHSCREEN, CURVED. SECURE THE SHOULDER BOLT THREADS WITH A 10-32 ACORN NUT OPPOSITE THE KEYWAY. LOCTITE AND TIGHTEN WITH WRENCH.
- 10) PLACE A 1/8 SQ X 1/4 LG STRAIGHT KEY (H850 178.4) RACK 9 \*\*\*\*\* CHOOSING THE SHORTEST KEY IN THE BOX ON THE RACK, INTO THE KEYWAY OF THE DANCER MOUNTING SHAFT. SOME SANDING MAY BE REQUIRED.
- 11) SLIDE THE KEYWAY OF THE DANCER BAR-CURVED OVER THE KEY IN THE DANCER MOUNTING SHAFT. SECURE THE DANCER BAR-CURVED TO THE DANCER MOUNTING SHAFT WITH AN EXTERNAL RETAINING RING (PRR098) RACK 12. THE DANCER BAR CURVED WILL REST ON THE TAMPER PROOF BH HEX IN THE DANCER STOP PLATE.



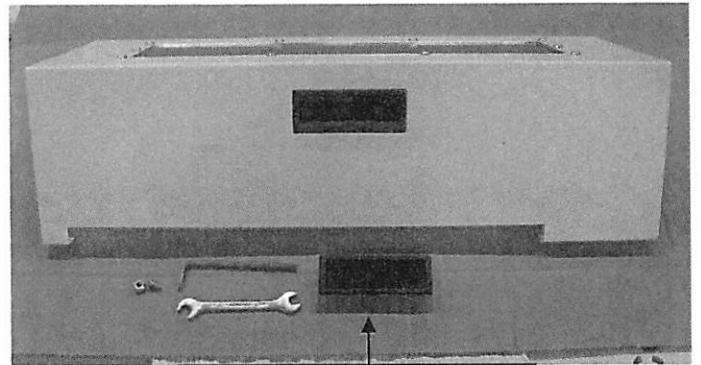
# C15 SAFETY SHIELD ASSEMBLY

- 1) PREPARE THE SAFETY SHIELD (C15 074.4) AS02 BY FIRST SECURING A WINDOW SAFETY SHEILD (C15 077.4) AS02 TO THE INNER BEND. START (10) 10-32 X 3/8 TORX SCREWS THROUGH SAFETY SHIELD AND WINDOW WITH A 10-32 NYLON INSERT NUT ON THE INSIDE. SNUG NUTS WITH A T25 TORX ALLEN WRENCH. IF NUTS ARE TOO TIGHT, THE WINDOW WILL CRACK.

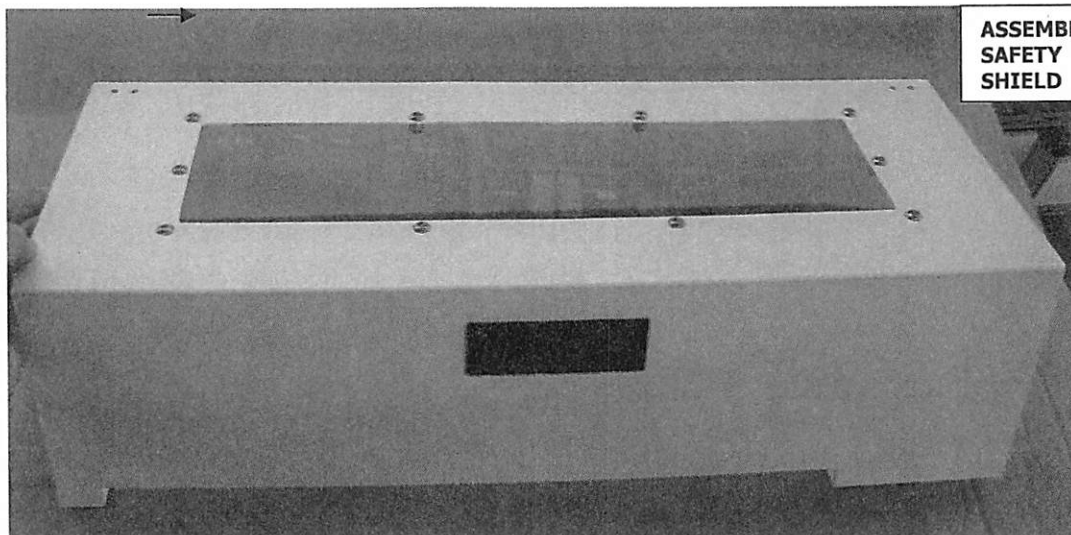


WINDOW SAFETY SHEILD: 10-32 X 3/8 TORX & NYLON NUT

- 2) SNAP A POCKET PULL FLUSH HANDLE (PRH150) RACK 12 INTO THE CUT OUT OPENING UNDER THE SAFETY SHIELD WINDOW. THE SMALLER HANDLE LIP IS UPWARD.



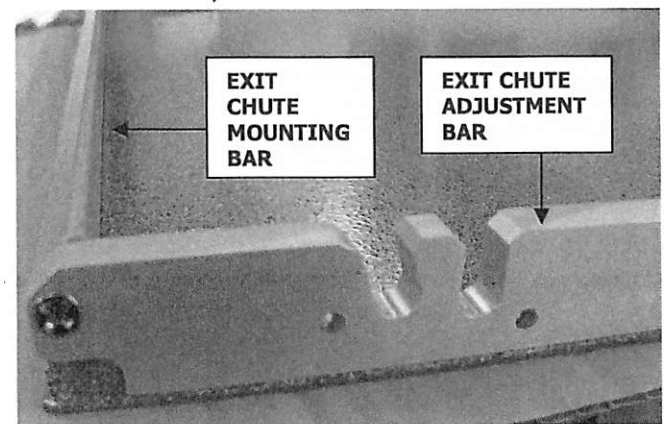
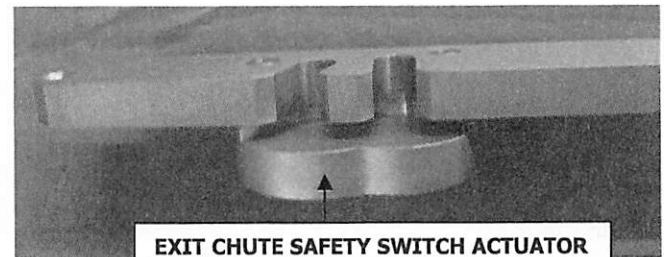
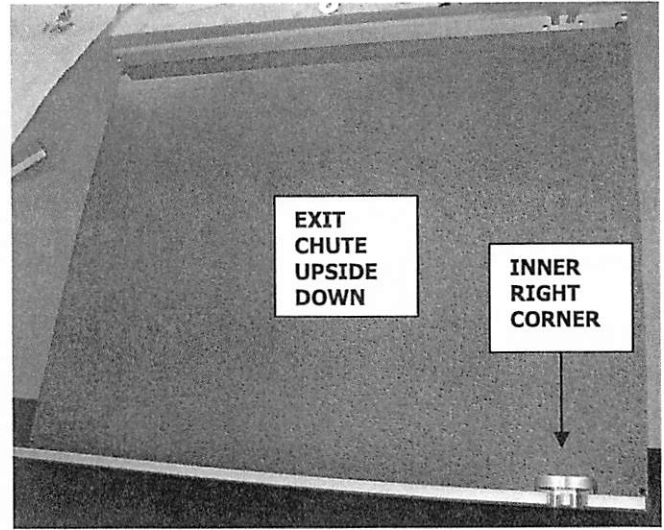
POCKET PULL FLUSH HANDLE



ASSEMBLED SAFETY SHIELD

# C15 EXIT TRAY ASSEMBLY

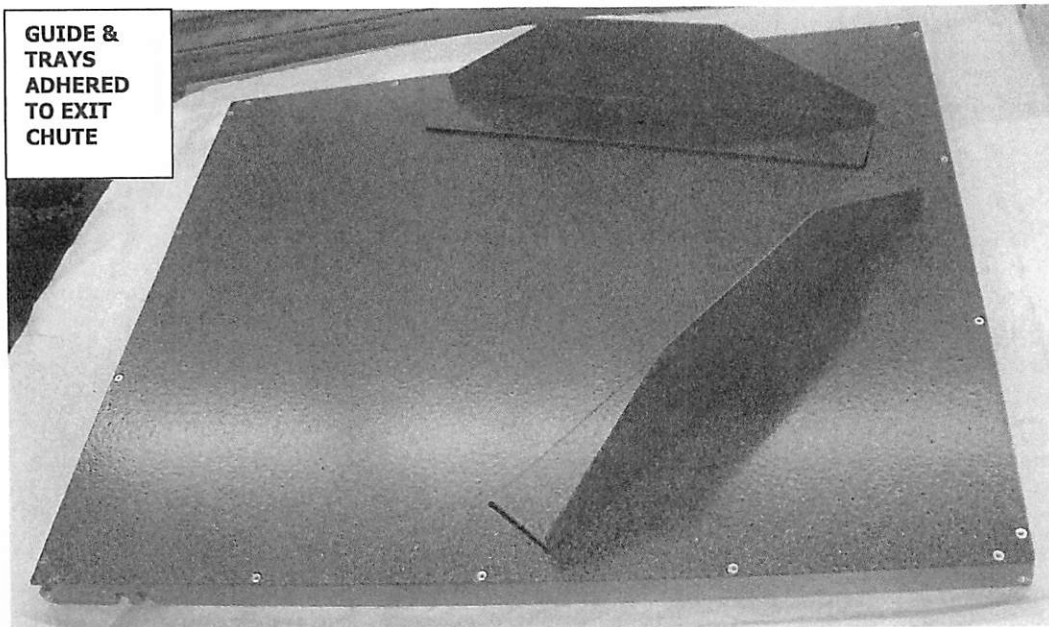
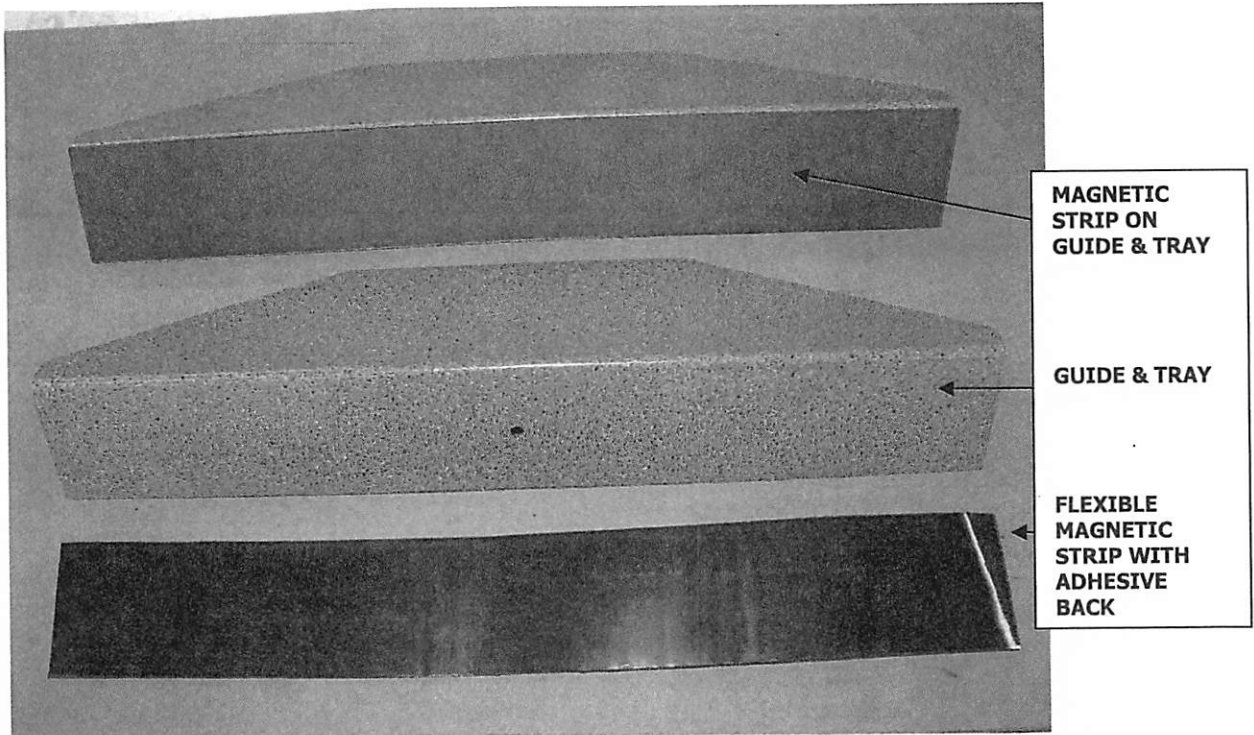
- 1) PLACE THE EXIT CHUTE (C15 153.4) AS02 ON A WORKTABLE, WITH THE COUNTERSINKS DOWNWARD.
- 2) SECURE AN EXIT CHUTE SAFETY SWITCH ACTUATOR (C15 155.4) RACK 24 TO THE *INNER RIGHT SIDE* OF A UNIVERSAL EXIT CHUTE ADJUSTMENT BAR (C15 151.4) AS02, BY THE NOTCHES. NOTE PICTURE FOR ORIENTATION. THE MACHINED SIDE OF THE SAFETY SWITCH ACTUATOR IS NEXT TO THE EXIT CHUTE ADJUSTMENT BAR. USE (2) 6-32 X 5/8 FH TORX. *110*
- 3) ALIGN (2) EXIT CHUTE ADJUSTMENT BARS ALONG THE LONG SIDE OF THE EXIT CHUTE. THE NOTCHES ARE ON THE SAME END, OUTWARD, WITH THE SAFETY SWITCH ACTUATOR ON THE RIGHT SIDE, WHEN EXIT CHUTE IS INSTALLED, IN ORDER TO ACCESS THE CHERRY MINI ROLLER SWITCH ON THE SIDE PANEL. START BOTH SIDES OF THE ADJUSTMENT BARS WITH (10) 6-32 X 5/8 FH TORX.
- 4) WITH THE BEVELED EDGE INWARD, PLACE AN EXIT CHUTE MOUNTING BAR (C15 152.4) AS02 BETWEEN THE ENDS OF BOTH EXIT CHUTE ADJUSTMENT BARS. SECURE THE EXIT CHUTE MOUNTING BARS TO THE EXIT CHUTE ADJUSTMENT BARS WITH AN 8-32 X 1/2 FHMS ON EACH END.
- 5) TURN THE EXIT CHUTE TRAY ASSEMBLY RIGHT SIDE UP AND START (4) 6-32 X 3/8 FHMS ON EACH EXIT CHUTE MOUNTING BAR. AFTER THE TORX SCREWS ARE STARTED, TIGHTEN ALL OF THEM ON THE MOUNTING BARS AND ADJUSTMENT BARS.
- 6) PREPARE (2) CHUTE GUIDE AND TRAY ASSEMBLIES. USE A PRE-CUT TO LENGTH FLEXIBLE MAGNETIC STRIP WITH ADHESIVE BACK (C15 157.4) RACK 24. PEEL OFF THE PROTECTIVE COVERING ON THE ADHESIVE SIDE OF





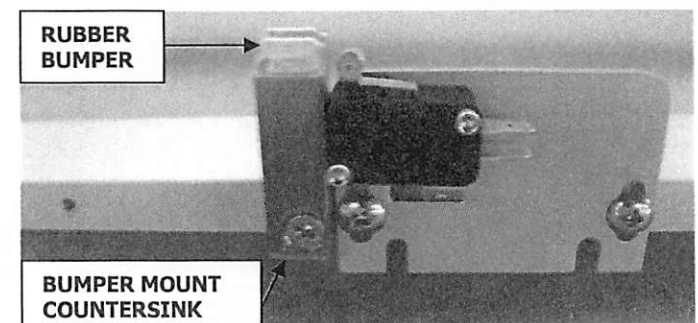
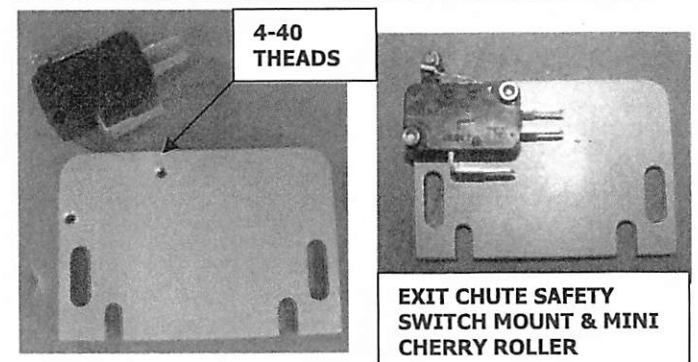
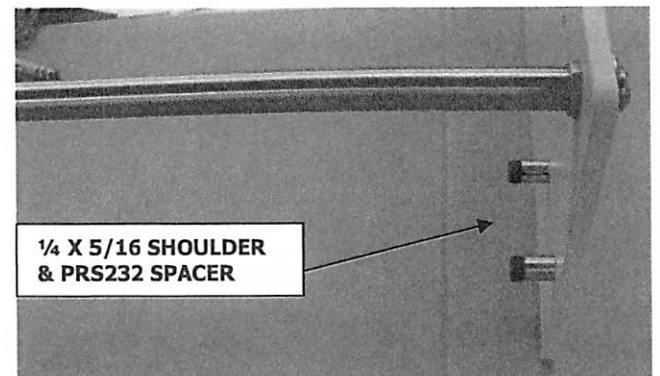
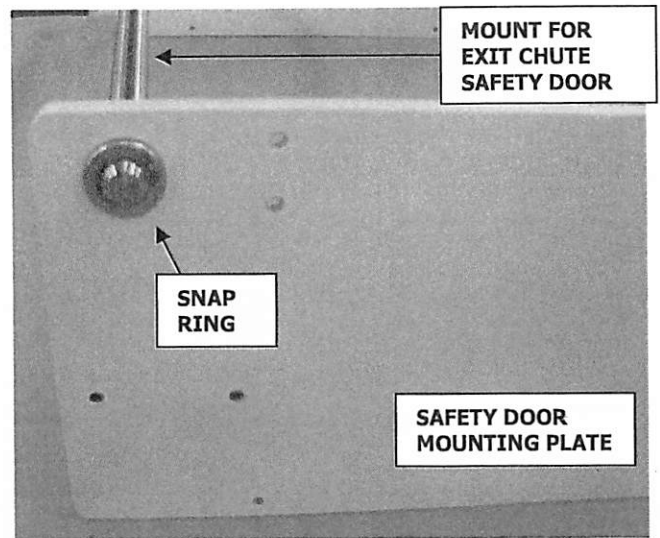
**THE MAGNETIC STRIP. CENTER AND ADHERE THE MAGNETIC STRIP TO THE OUTER BREAK OF (2) GUIDE AND TRAYS (C15 158.4) AS02.**

- 7) PLACE THE GUIDE AND TRAYS ON THE EXIT CHUTE, HELD BY THE MAGNETIC STRIP. ADJUSTMENT IS MADE BY THE CUTTER OPERATOR WHEN IN USE.**



# C15 EXIT CHUTE ASSEMBLY

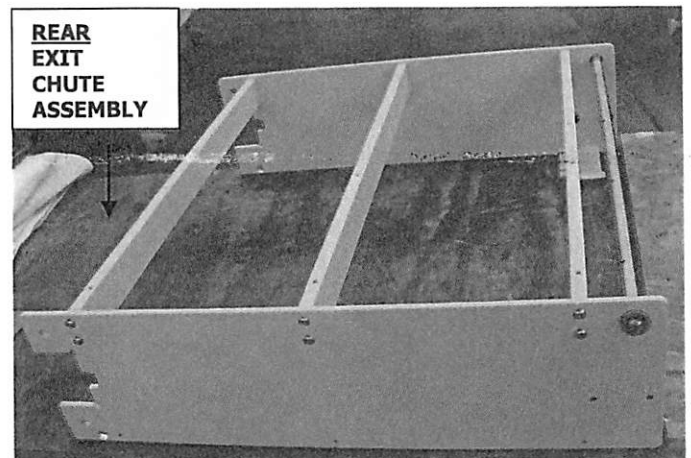
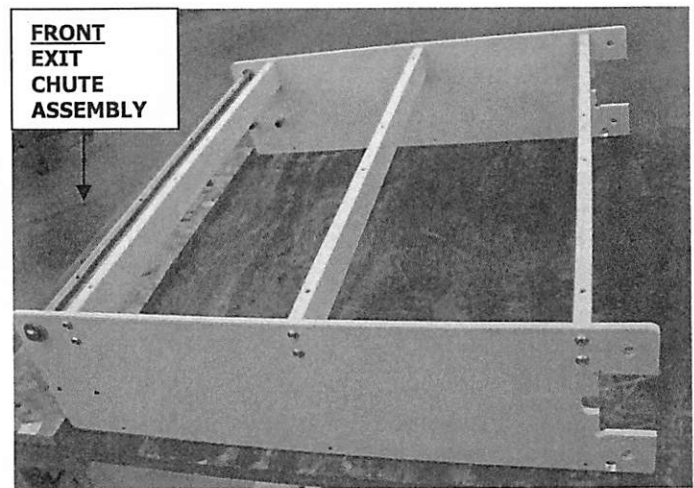
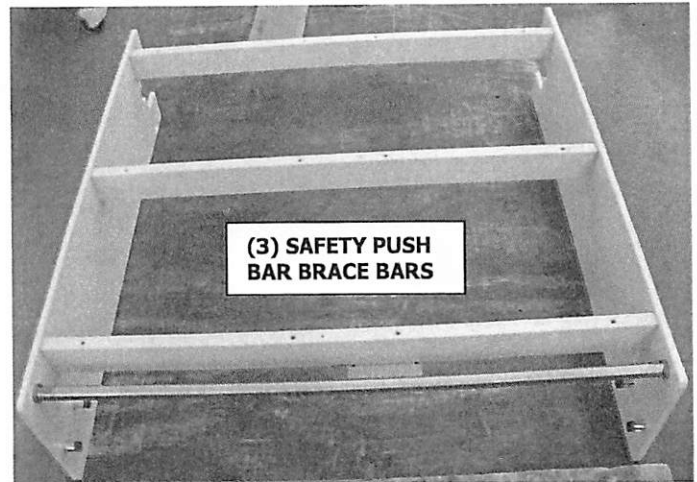
- 1) PLACE (2) PAINTED UNIVERSAL SAFETY DOOR MOUNTING PLATES (C15 473.4) AS01 ON A WORKTABLE. ORIENT THE LARGER CORNER HOLE UPWARD, ACROSS FROM EACH OTHER. ARBOR PRESS AN OILITE BEARING (PRB048B) RACK 8 INTO THE CORNER OPENINGS, FLANGE OUTWARD ON EACH. REAM BEARINGS WITH A .505.
- 2) INSERT A MOUNT FOR EXIT CHUTE SAFETY DOOR (C15 369.4) AS02 BETWEEN THE OILITE BEARINGS, *FLANGES ARE OUTWARD*. SECURE THE MOUNT FOR EXIT CHUTE SAFETY DOOR WITH A SNAP RING (PRR191) LD05 BY OILITE FLANGE IN GROOVE ON BOTH SIDES OF EXIT CHUTE SAFETY DOOR.
- 3) BELOW THE OILITE BEARINGS ARE (2) PARALLEL THREADS. PLACE A 7/16 LONG STEEL SPACER CEM (PRS232) AS07 ON EACH OF (4) 1/4 X 5/16 SHOULDER BOLTS. TIGHTEN THE SHOULDER BOLTS INTO THE PARALLEL THREADS FROM THE INNER SAFETY DOOR MOUNTING PLATES.
- 4) PLACE AN EXIT CHUTE SAFETY SWITCH MOUNT (C15 154.4) RACK 24 ON A TABLE WITH THE 4-40 THREADS TO THE UPPER LEFT AND THE NOTCHES DOWNWARD. SECURE A CHERRY MINI ROLLER SWITCH (PRS370) RACK 13 OVER THE THREADS, WITH ROLLER UPWARD, OFFSET POST DOWNWARD. SECURE WITH (2) 4-40 X 1/2 SHCS.
- 5) ORIENT A SAFETY PUSH BAR BRACE BAR (C15 362.4) AS01 WITH THE MORE INWARD THREADS DOWNWARD. SECURE THE CHERRY ROLLER ASSEMBLY TO BRACE BAR THROUGH SAFETY SWITCH MOUNT CHANNELS USING (2) 8-32 X 3/8 THMS.
- 6) SECURE A BUMPER MOUNT (C15 370.4) RACK 24 THROUGH THE BUMPER MOUNT COUNTERSINK WITH AN 8-32 X



5/8 FHMS, USE LOCTITE ON THREADS. THE ANGLED END OF THE BUMPER MOUNT IS OUTWARD BY THE SWITCH ROLLER. ADHERE A STICK ON RUBBER BUMPER (PRR266) RACK 5, CENTERED ON THE ANGLED END.

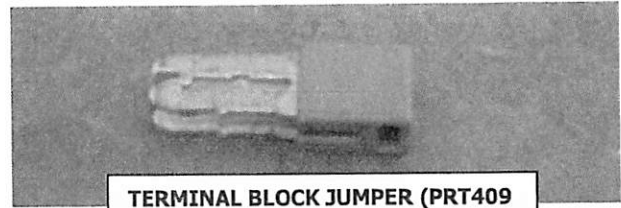
- 7) PLACE THE SAFETY PUSH BAR BRACE BAR WITH THE CHERRY ROLLER DOWNWARD AND OUTWARD BETWEEN SAFETY DOOR MOUNTING PLATES AND BEHIND THE MOUNT FOR EXIT CHUTE SAFETY DOOR. LOOSELY SECURE BETWEEN MOUNTING PLATES WITH 10-32 X 1/2 TORX USING T25 ALLEN.

- 8) ADD (2) MORE SAFETY PUSH BAR BRACE BARS, *BOTH WITH THE SAME THREADS UPWARD AND ALIGNED,* BETWEEN THE MOUNTING PLATES AND LOOSELY SECURE WITH 10-32 X 1/2 TORX. TIGHTEN TORX WITH T25.



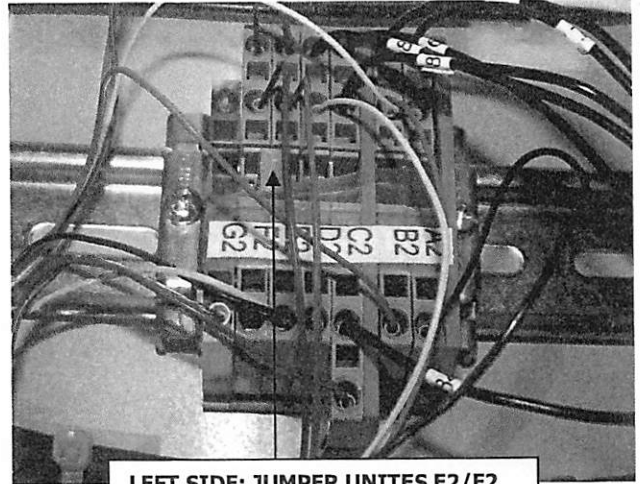
# C15 TERMINAL JUMPER CHECK

- 1) BEFORE WIRING THE C15, CHECK THE RIGHT AND LEFT BOTTOM HOUSING TERMINAL BLOCKS FOR JUMPER LOCATIONS; ONE JUMPER ON THE LEFT AND FIVE ON THE RIGHT.

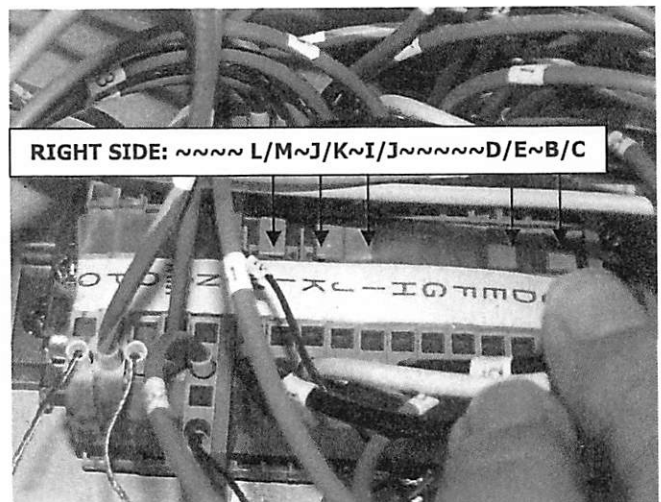
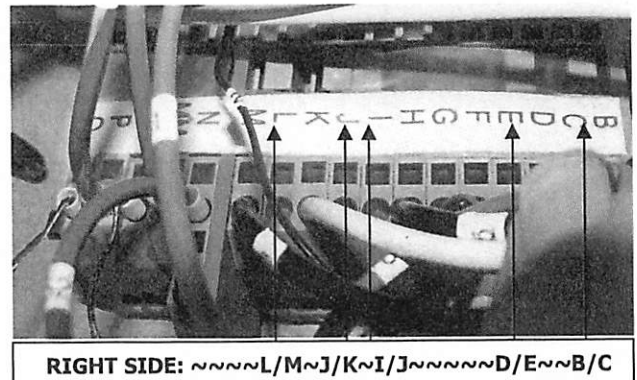


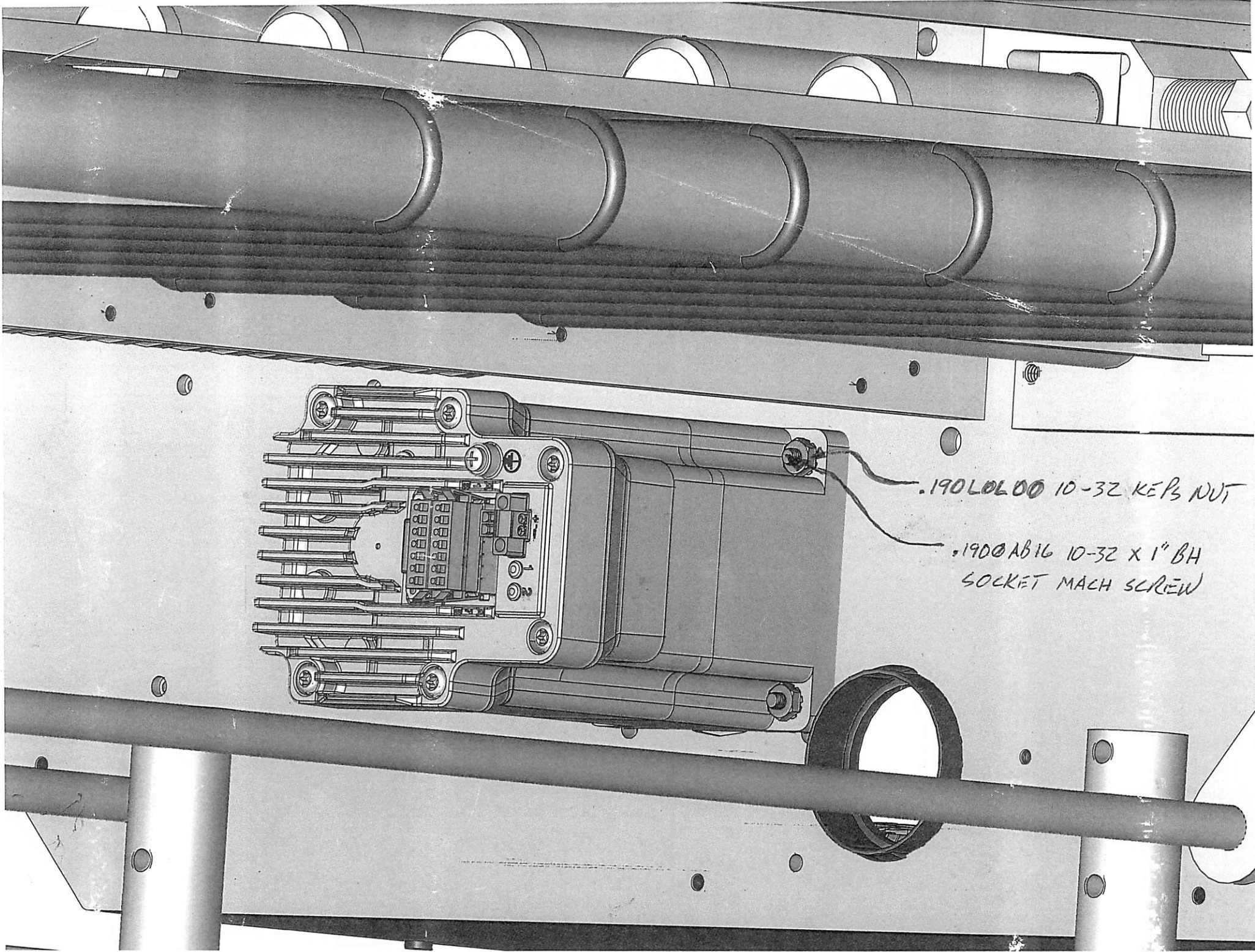
- 2) THE TERMINAL BLOCK JUMPERS (PRT409) ARE LOCATED ON RACK 13.

- 3) ON THE LEFT BOTTOM HOUSING THERE IS ONE TERMINAL BLOCK JUMPER LOCATED TO UNITE E2/F2 ON THE TERMINAL BLOCK.



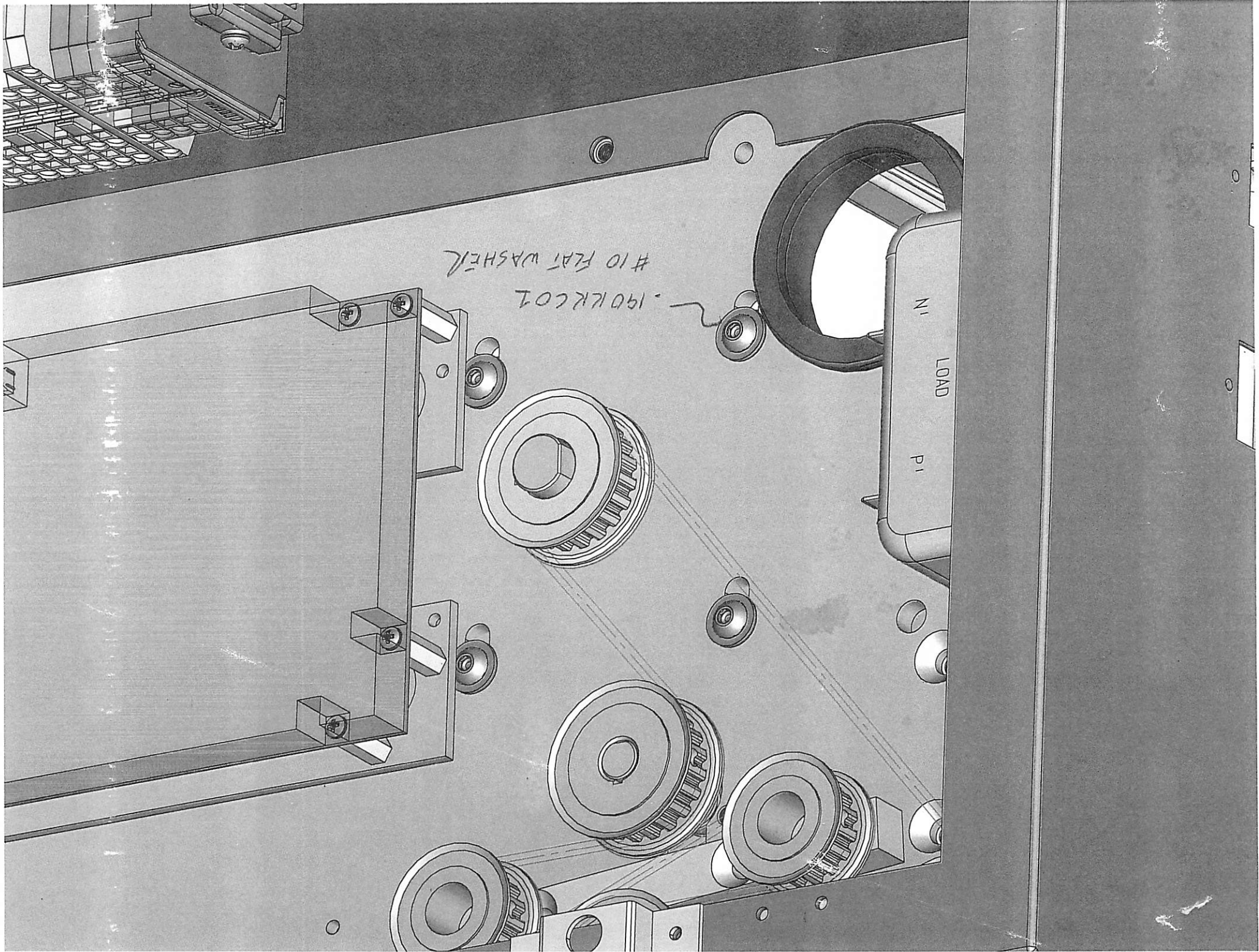
- 4) ON THE RIGHT BOTTOM HOUSING THERE ARE FIVE TERMINAL BLOCK JUMPERS. THESE JUMPERS ARE LOCATED TO UNITE: B/C, D/E, I/J, J/K AND L/M.





.190L0L00 10-32 KEPS NUT

.1900AB16 10-32 X 1" BH  
SOCKET MACH SCREW



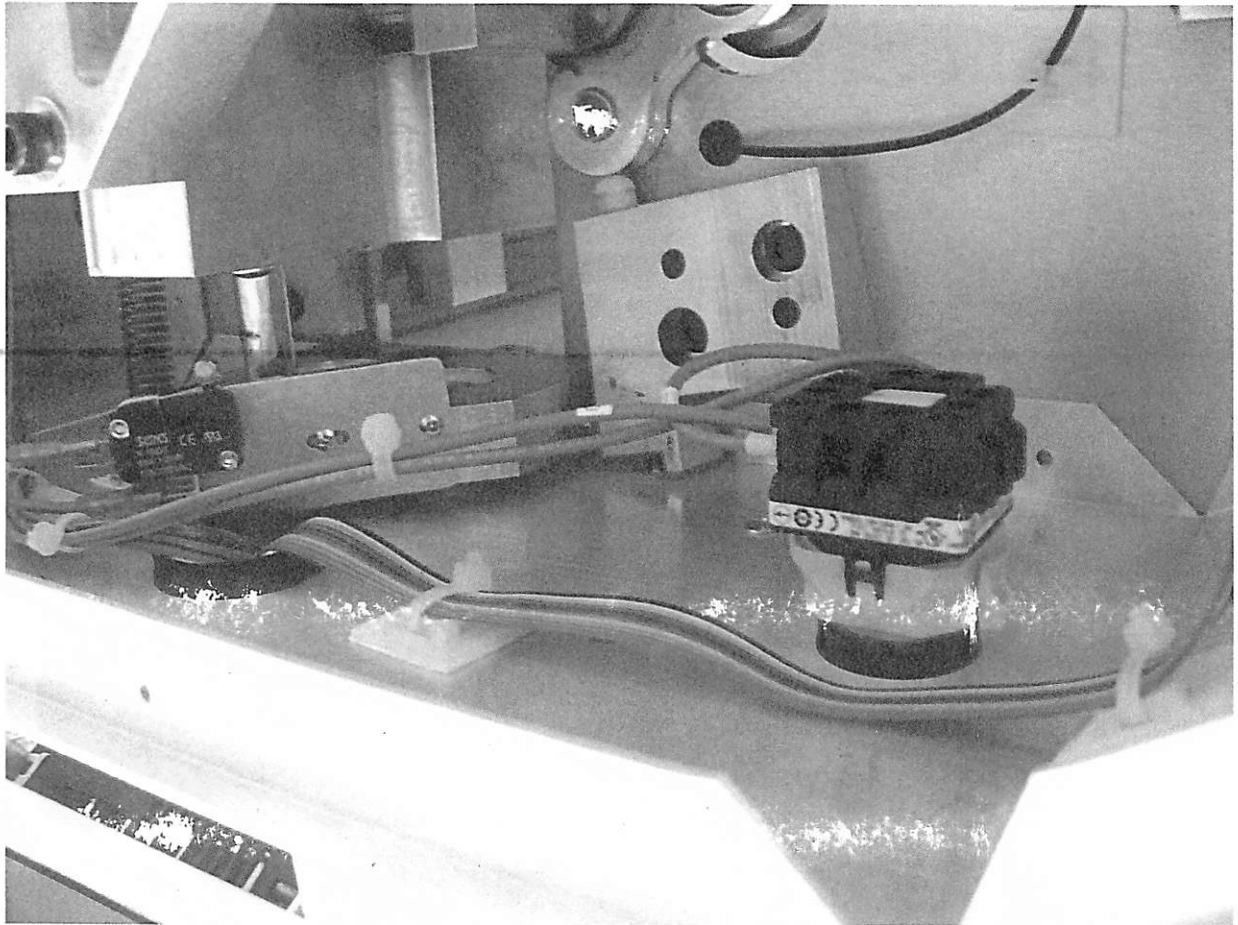
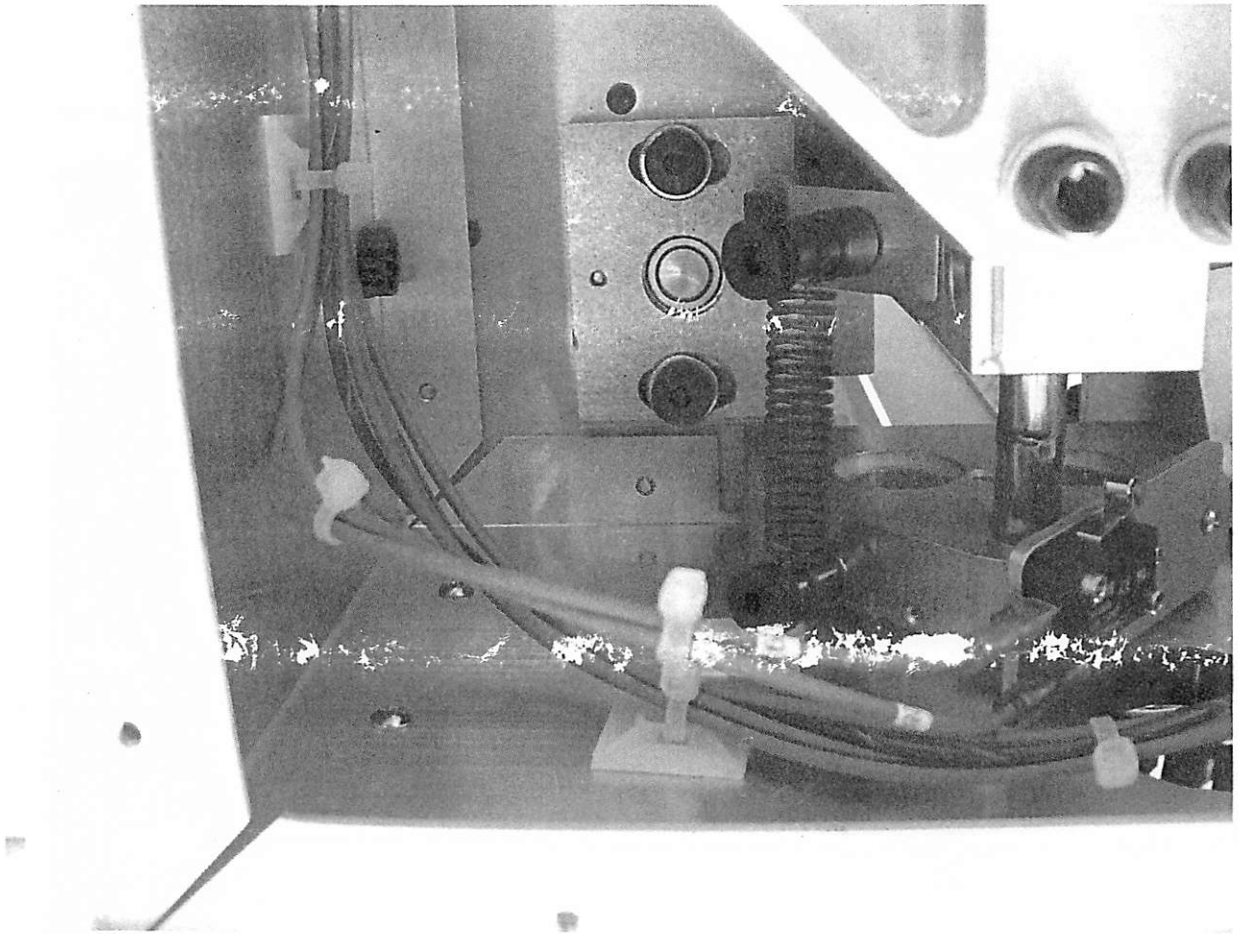
#10 FLAT WASHER

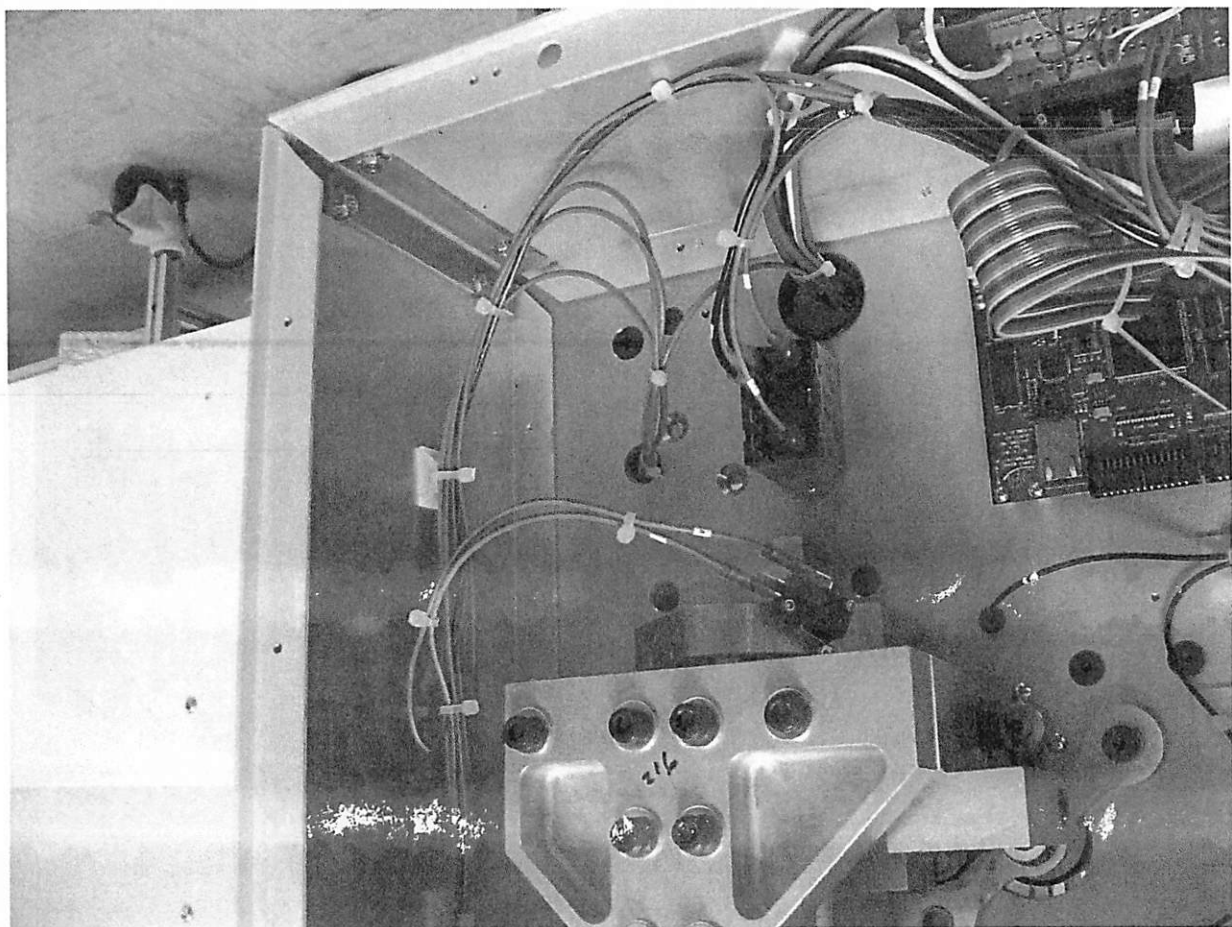
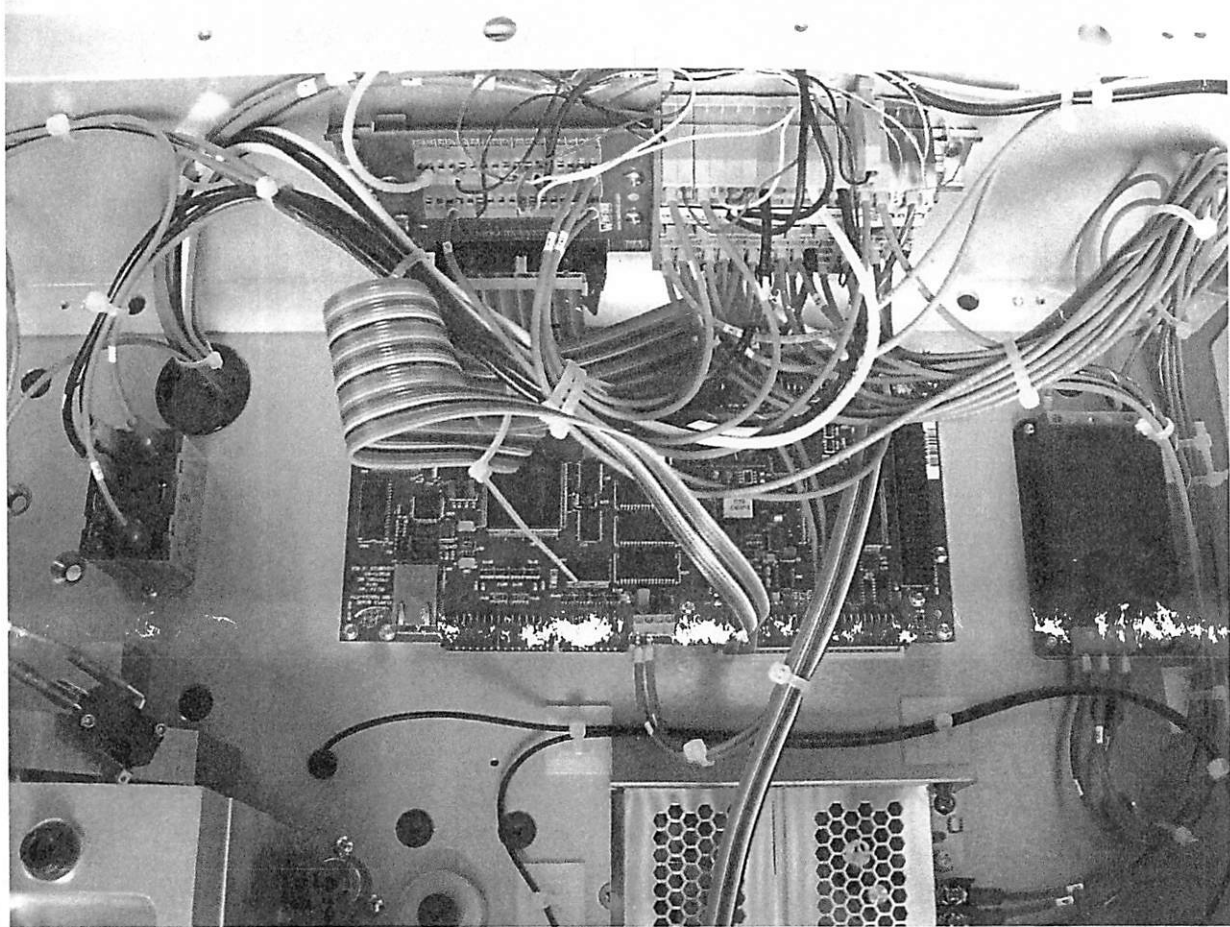
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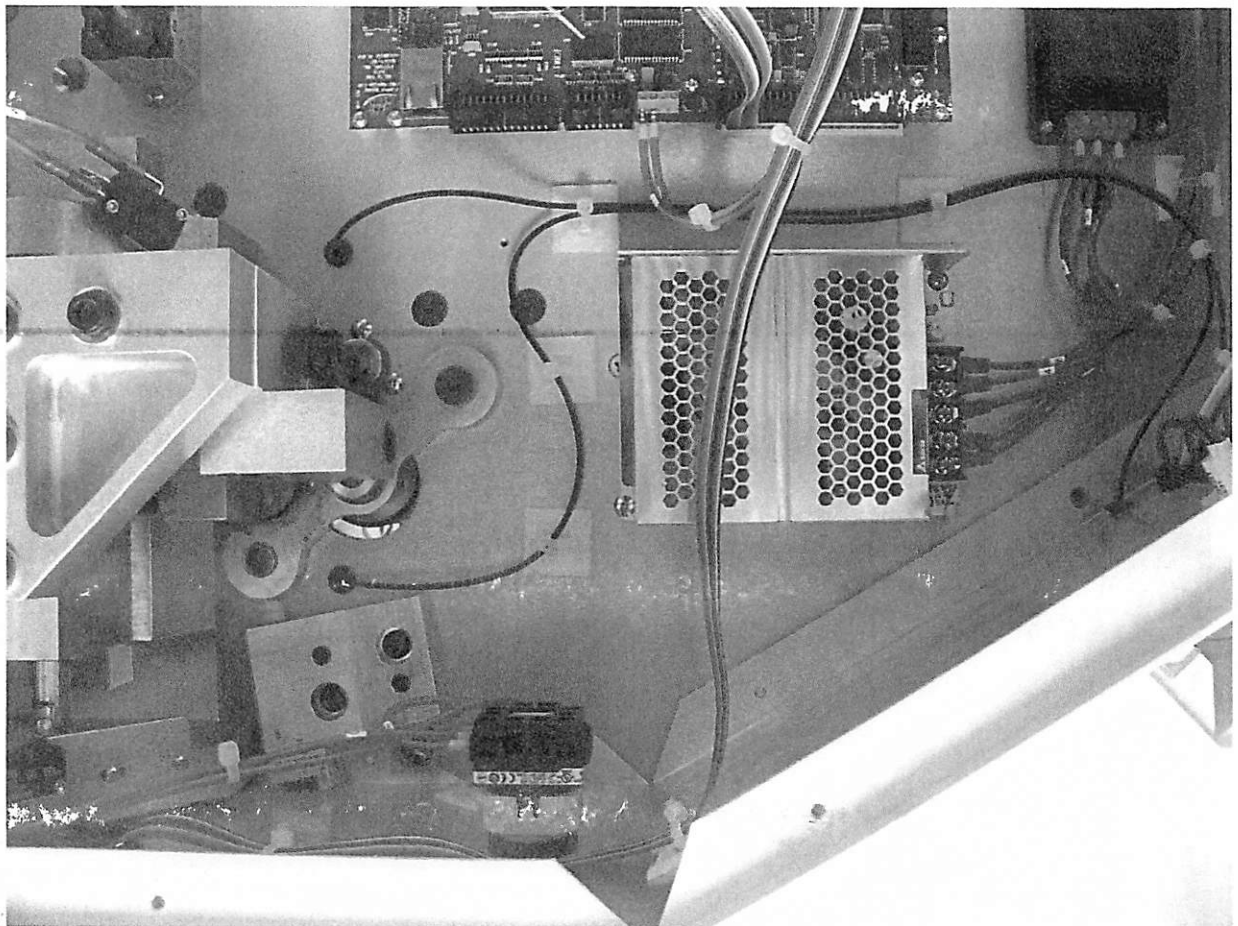
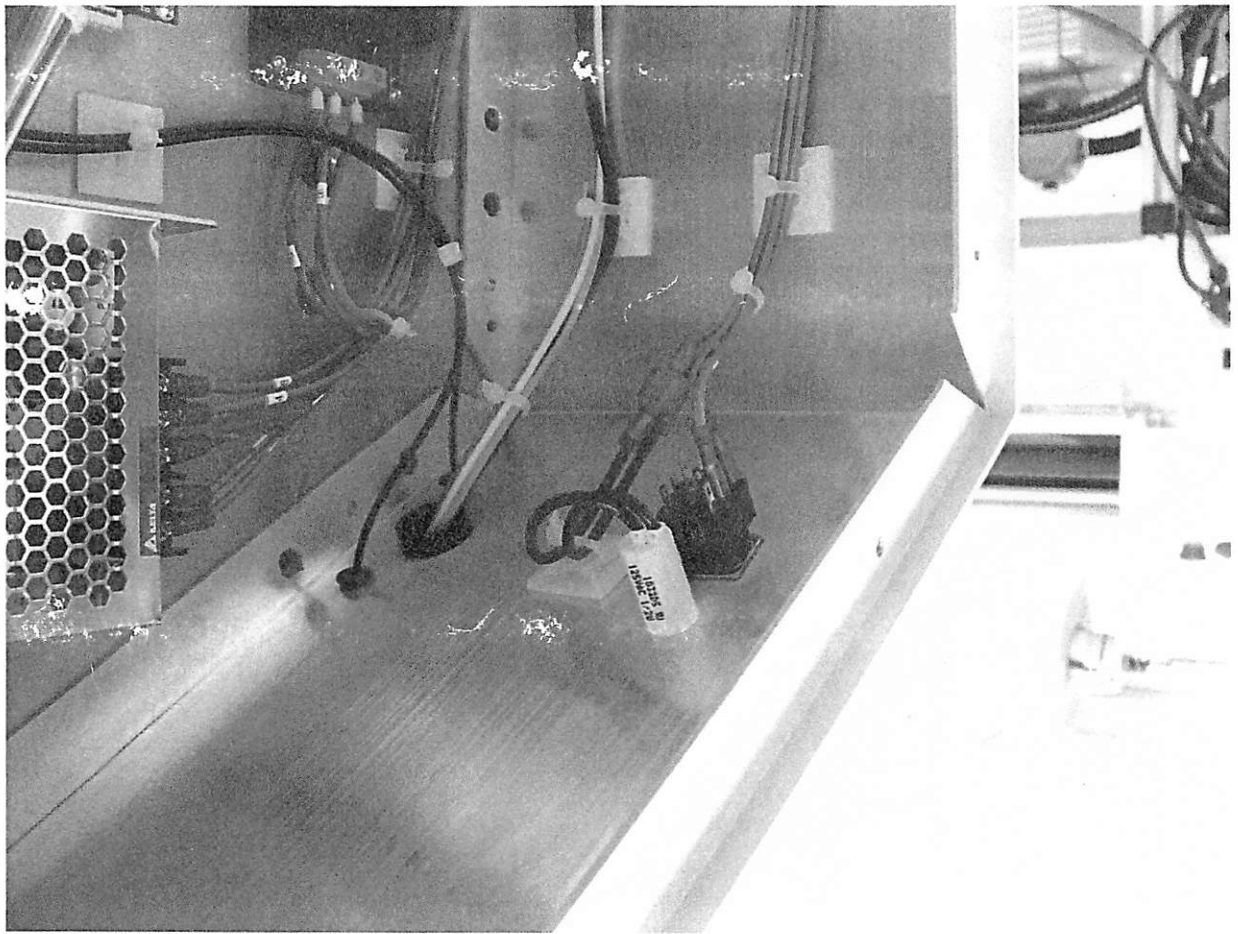
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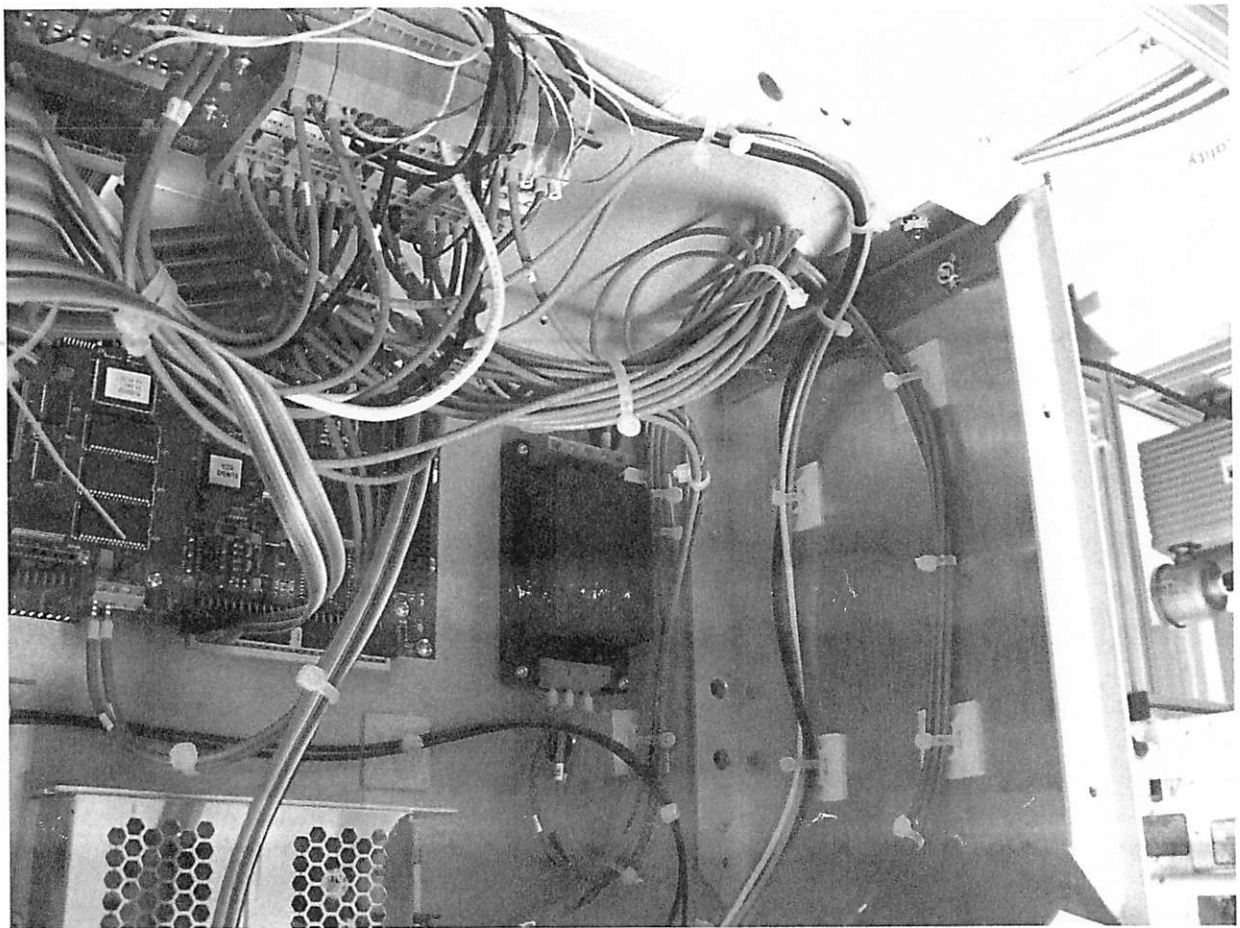
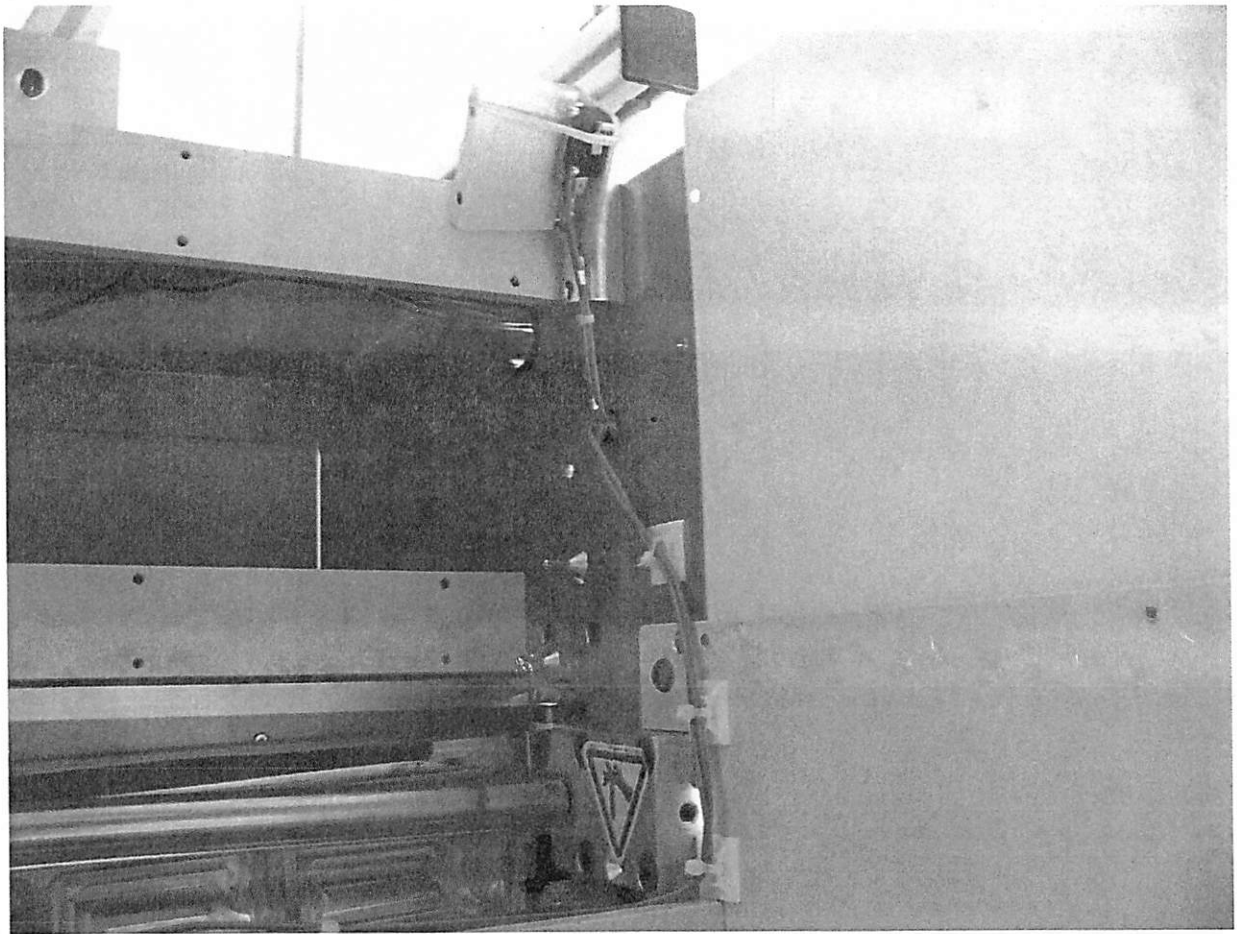
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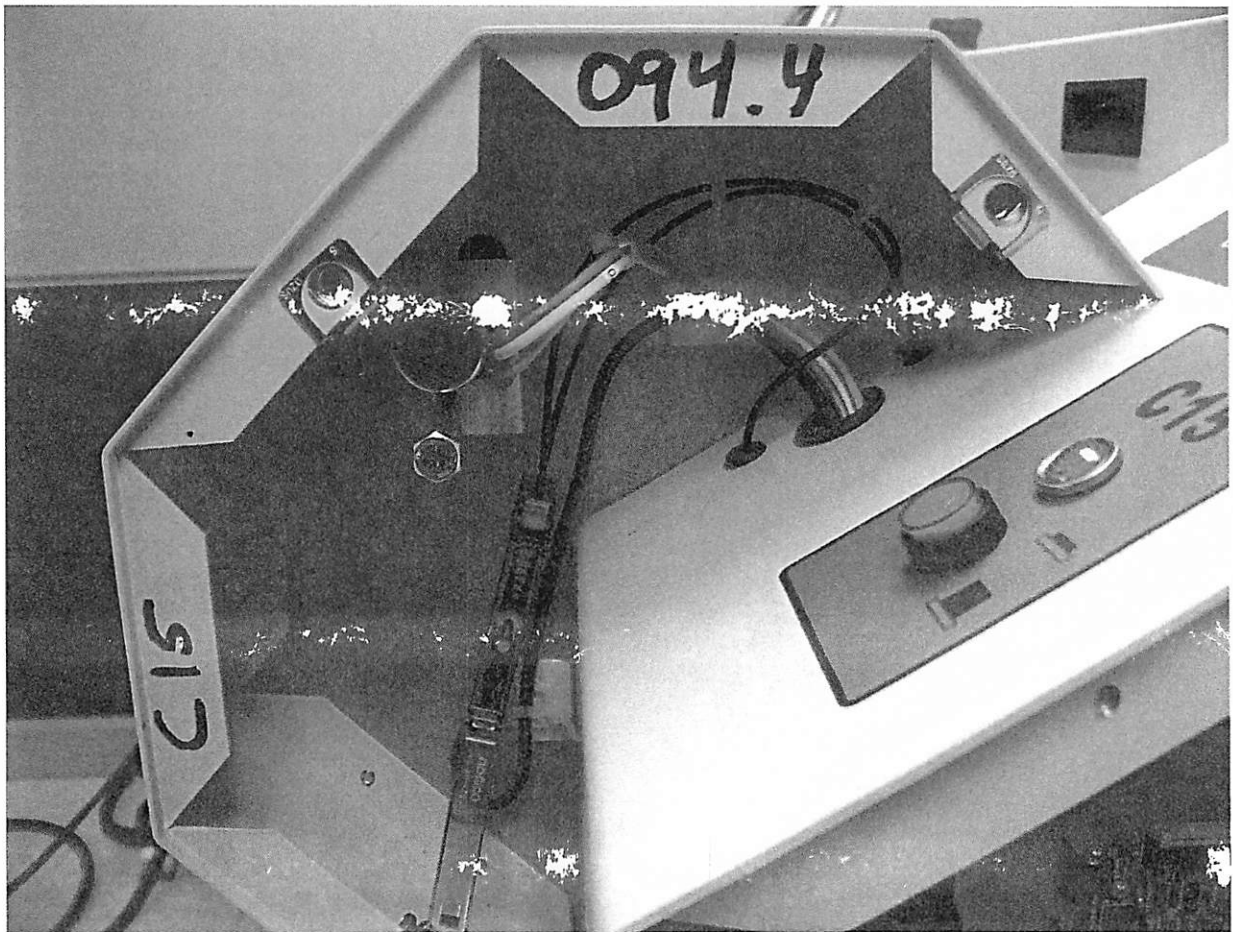
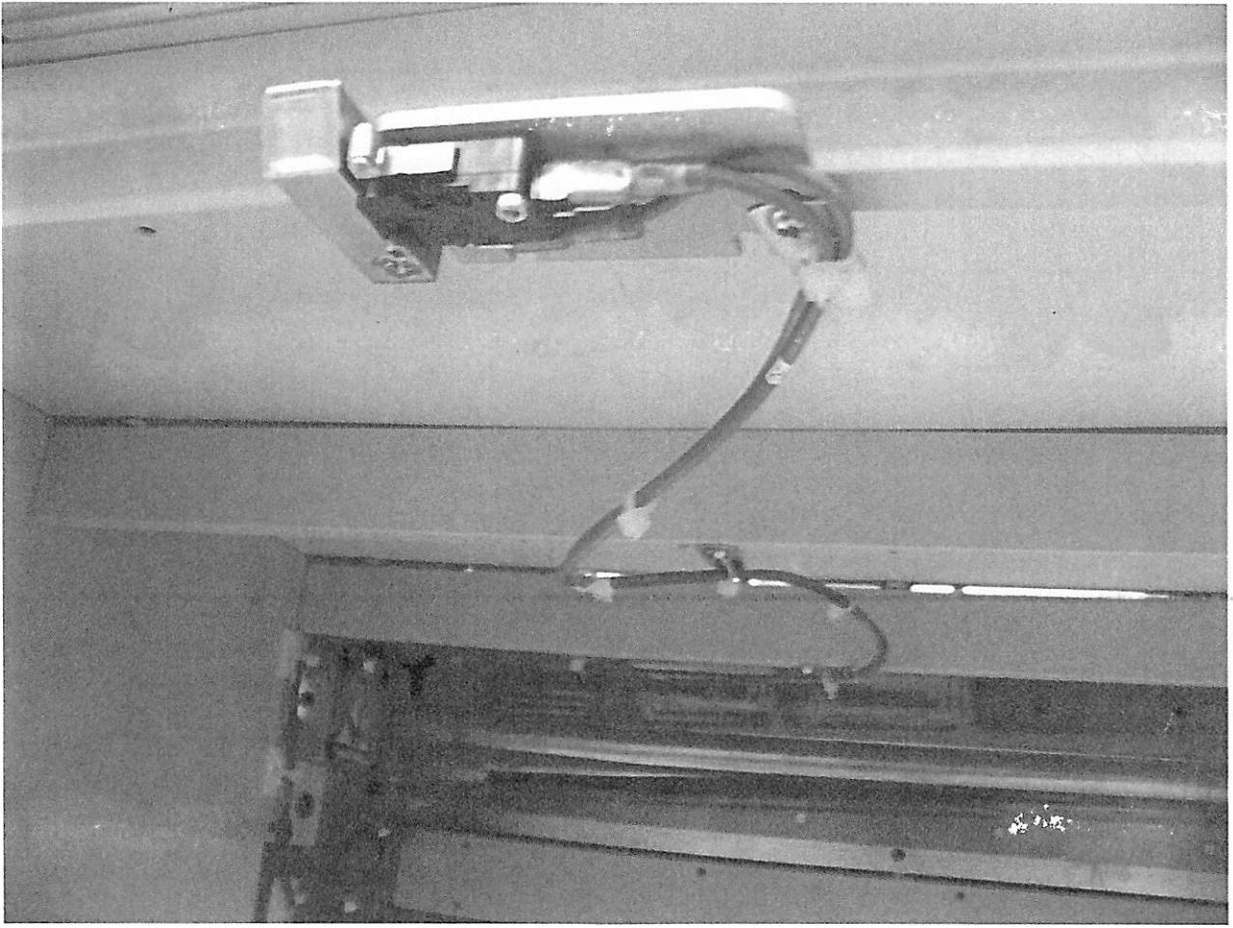


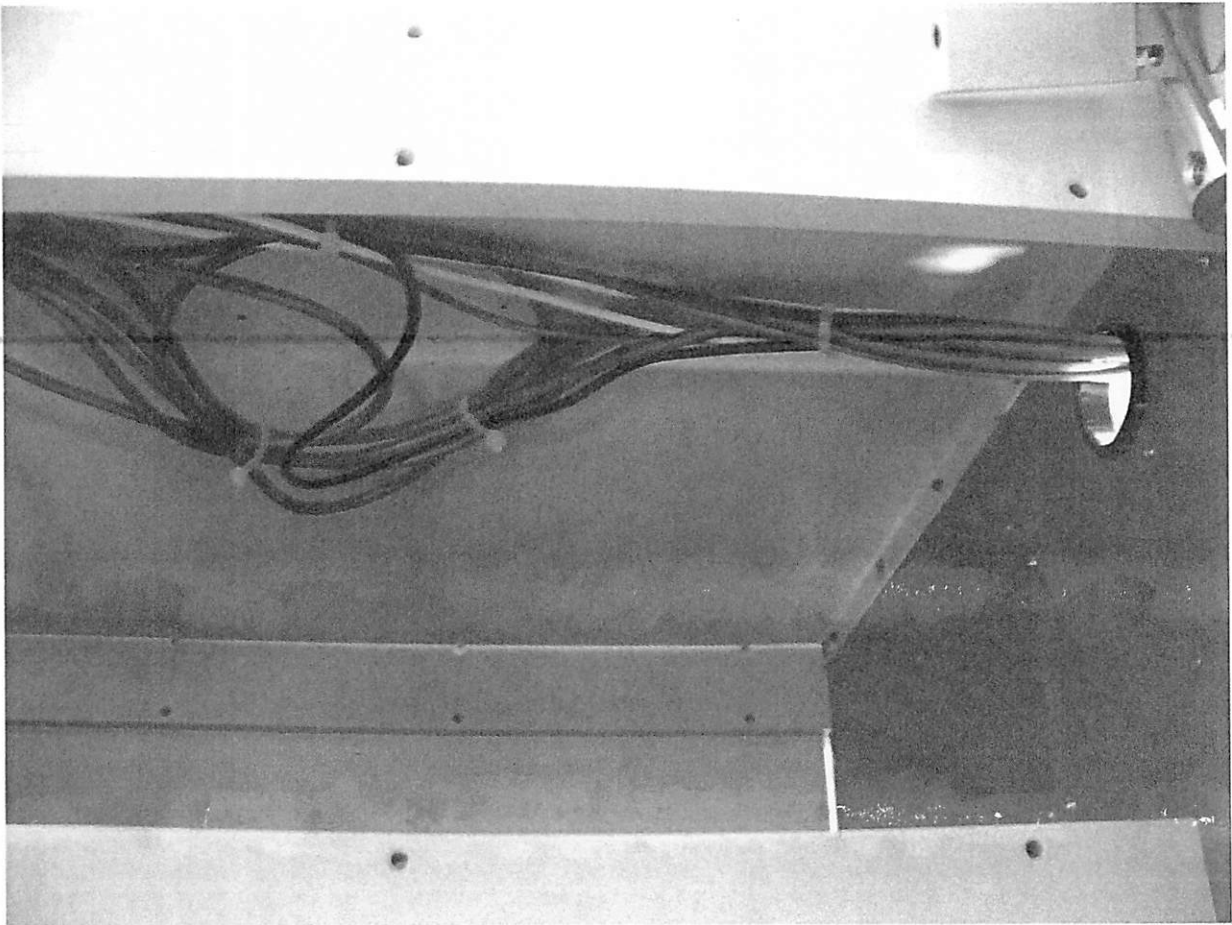
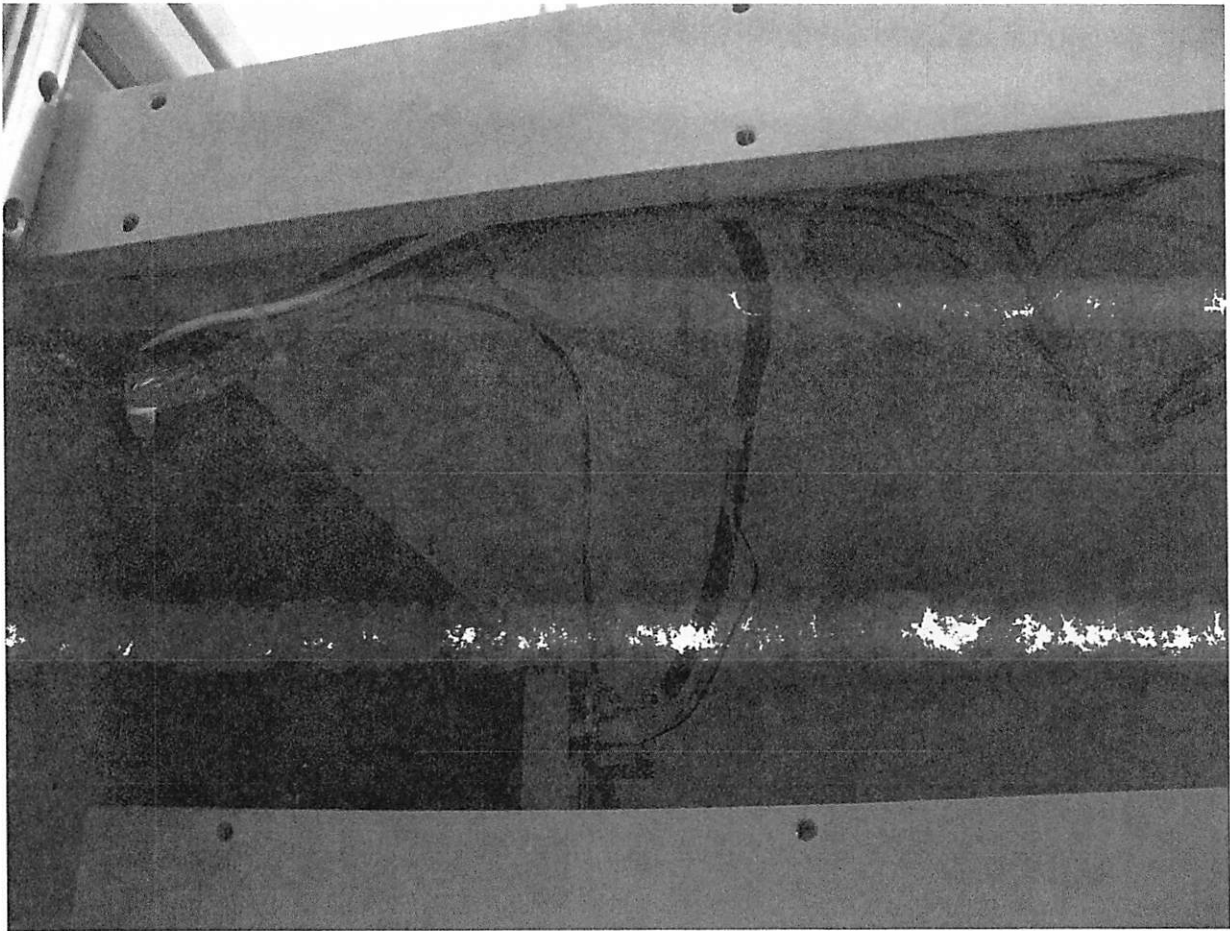


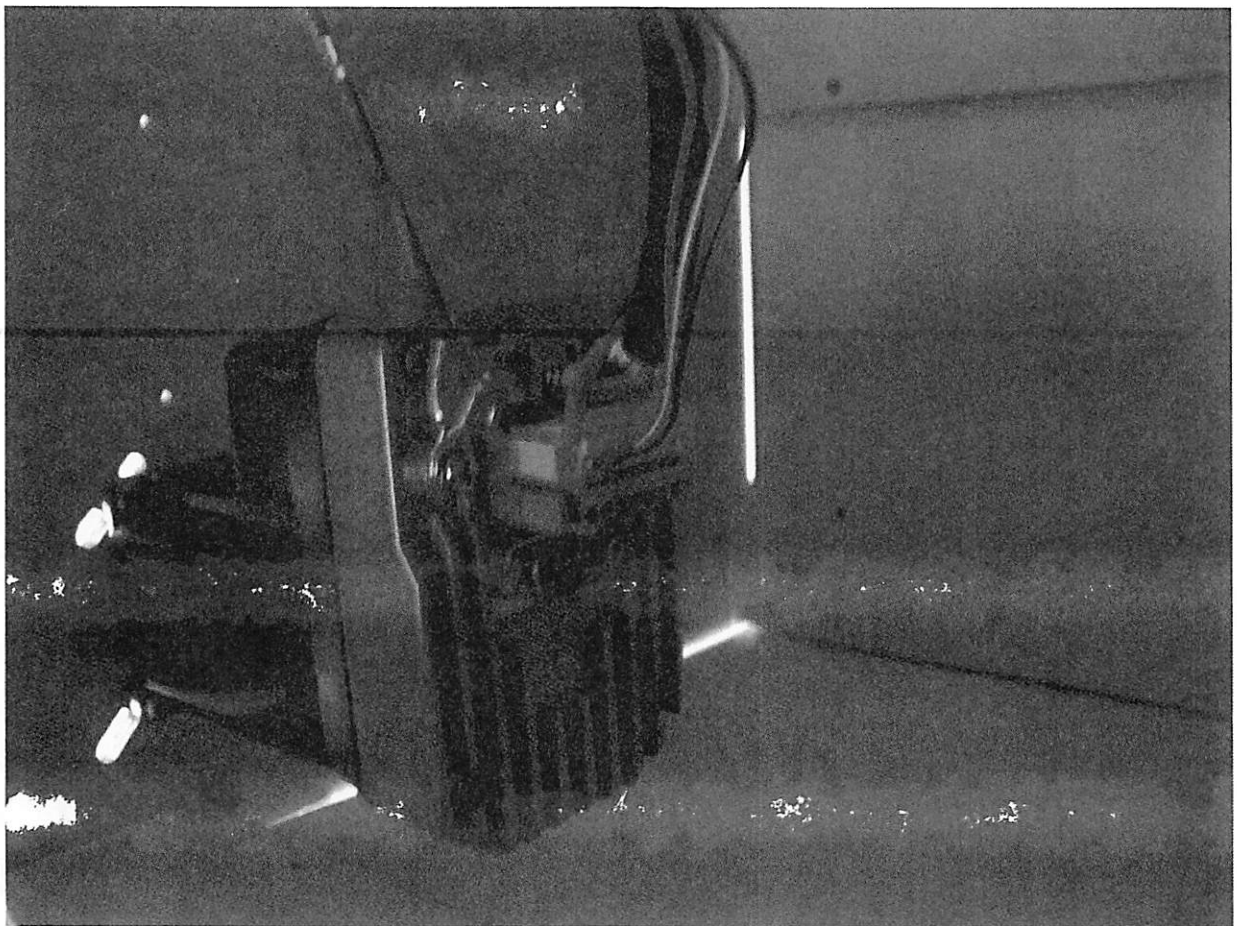
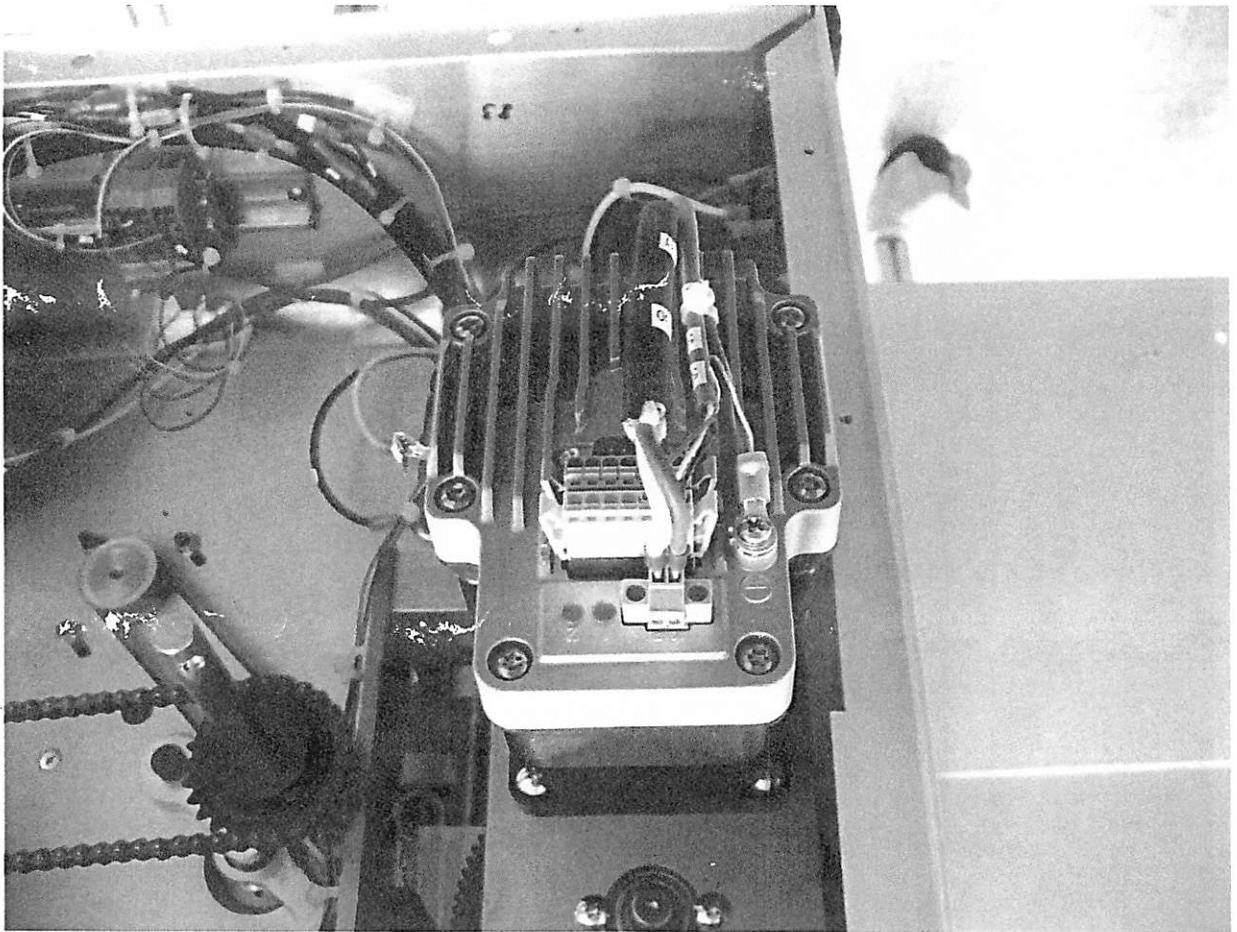


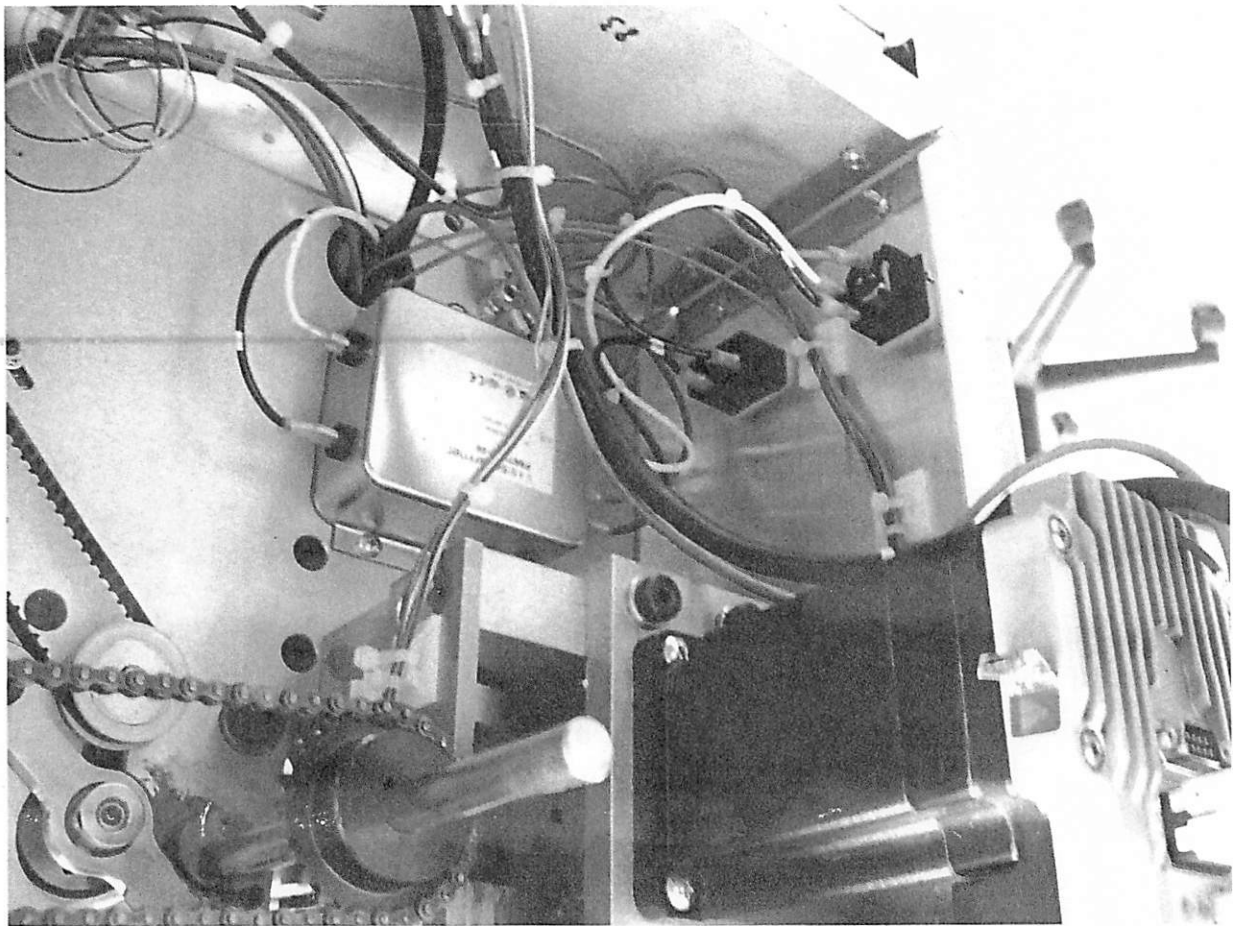
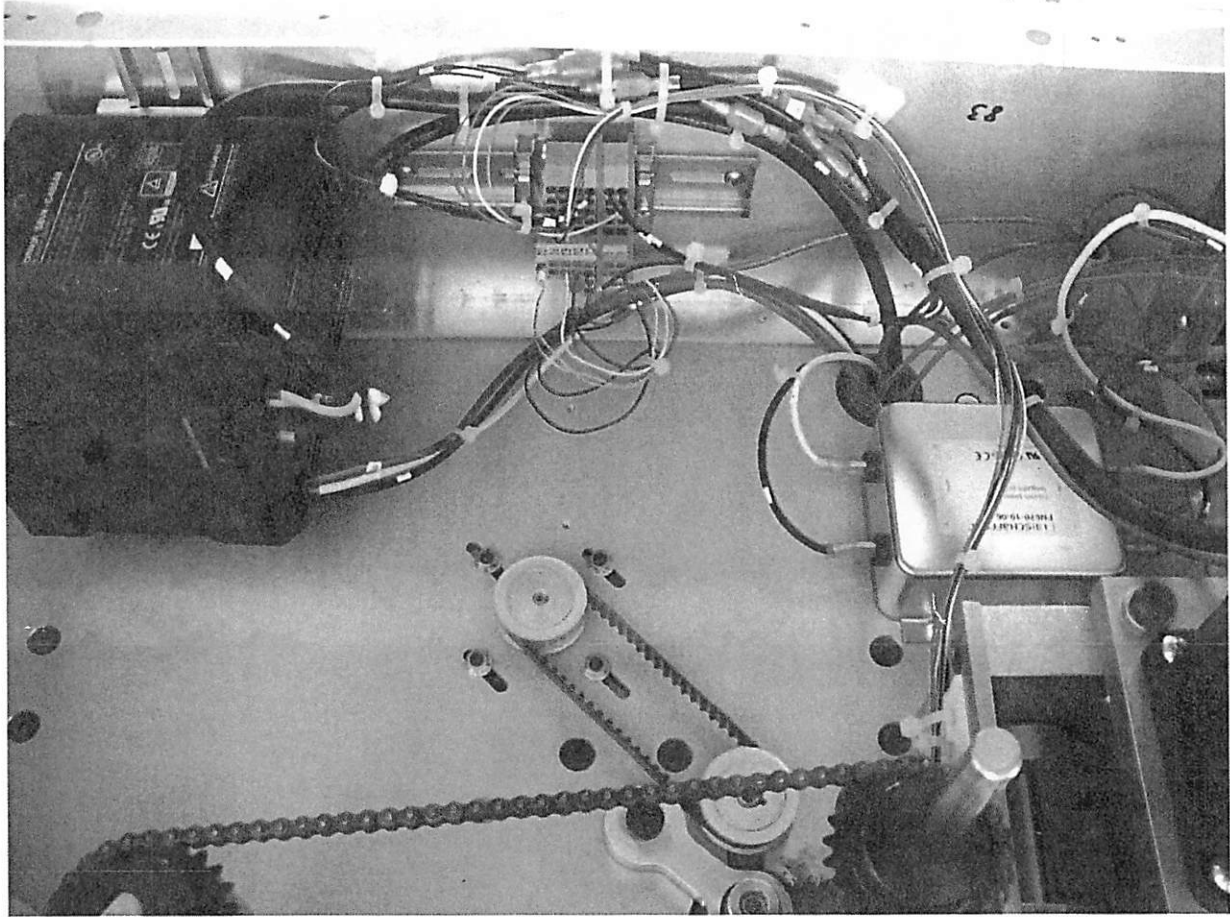


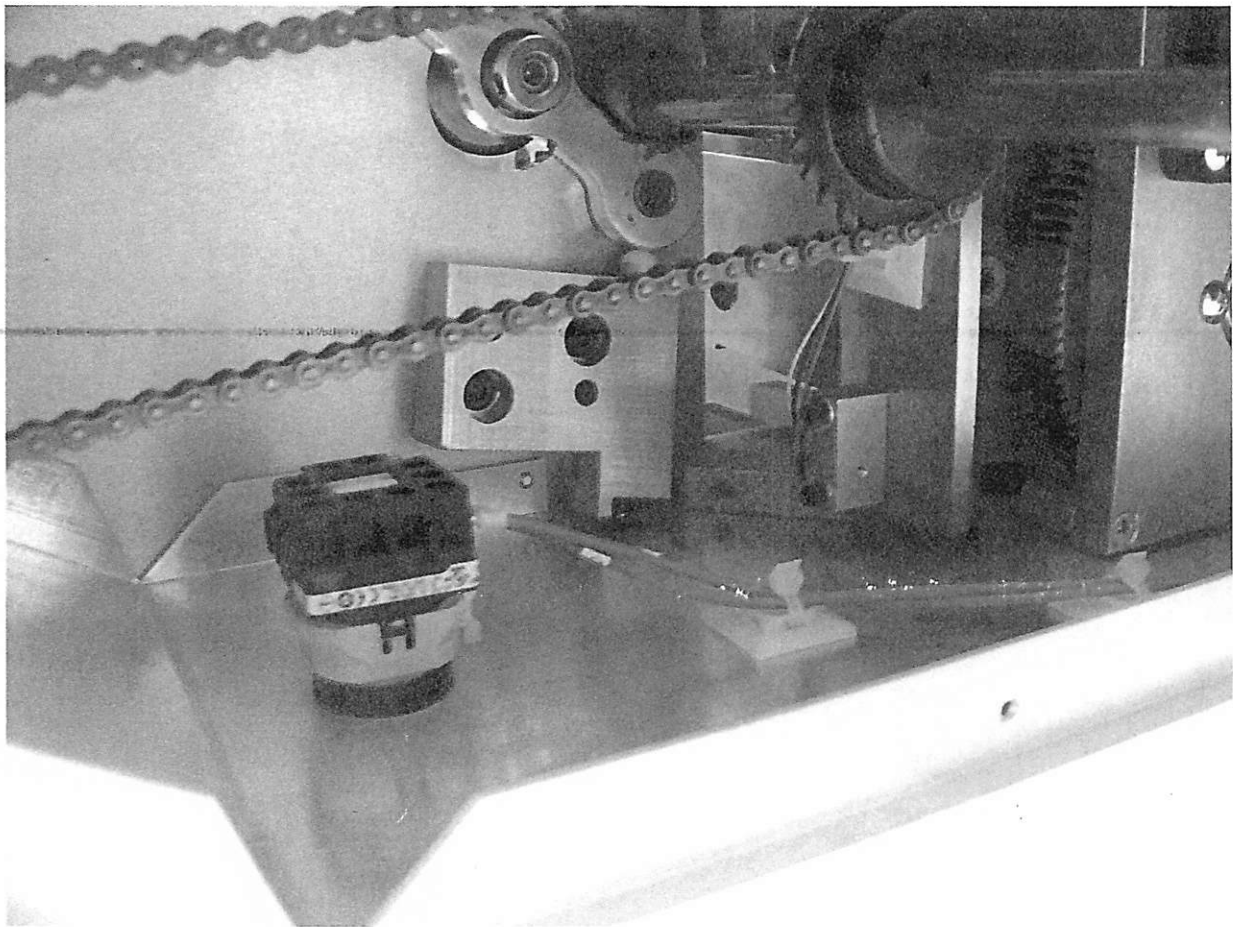
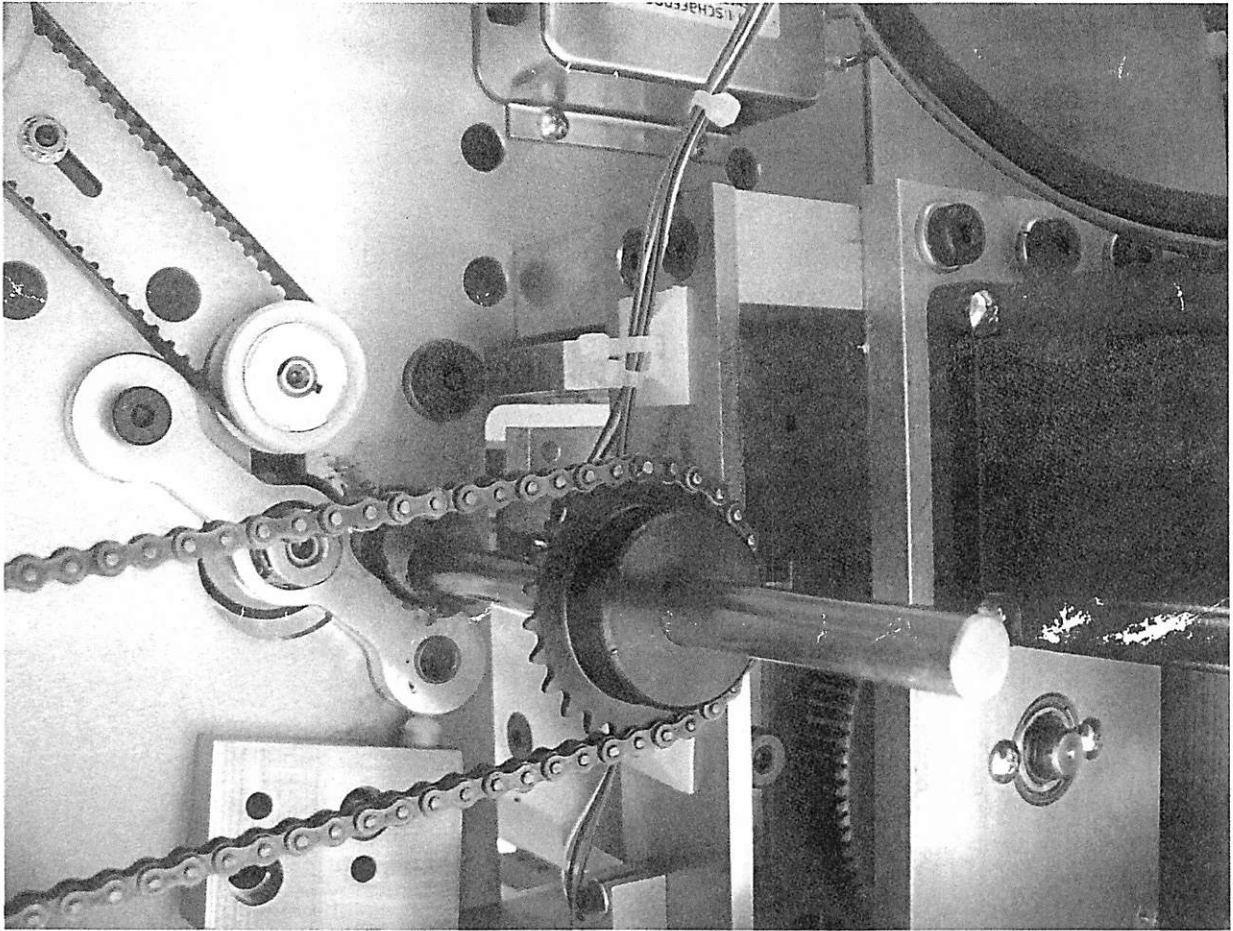


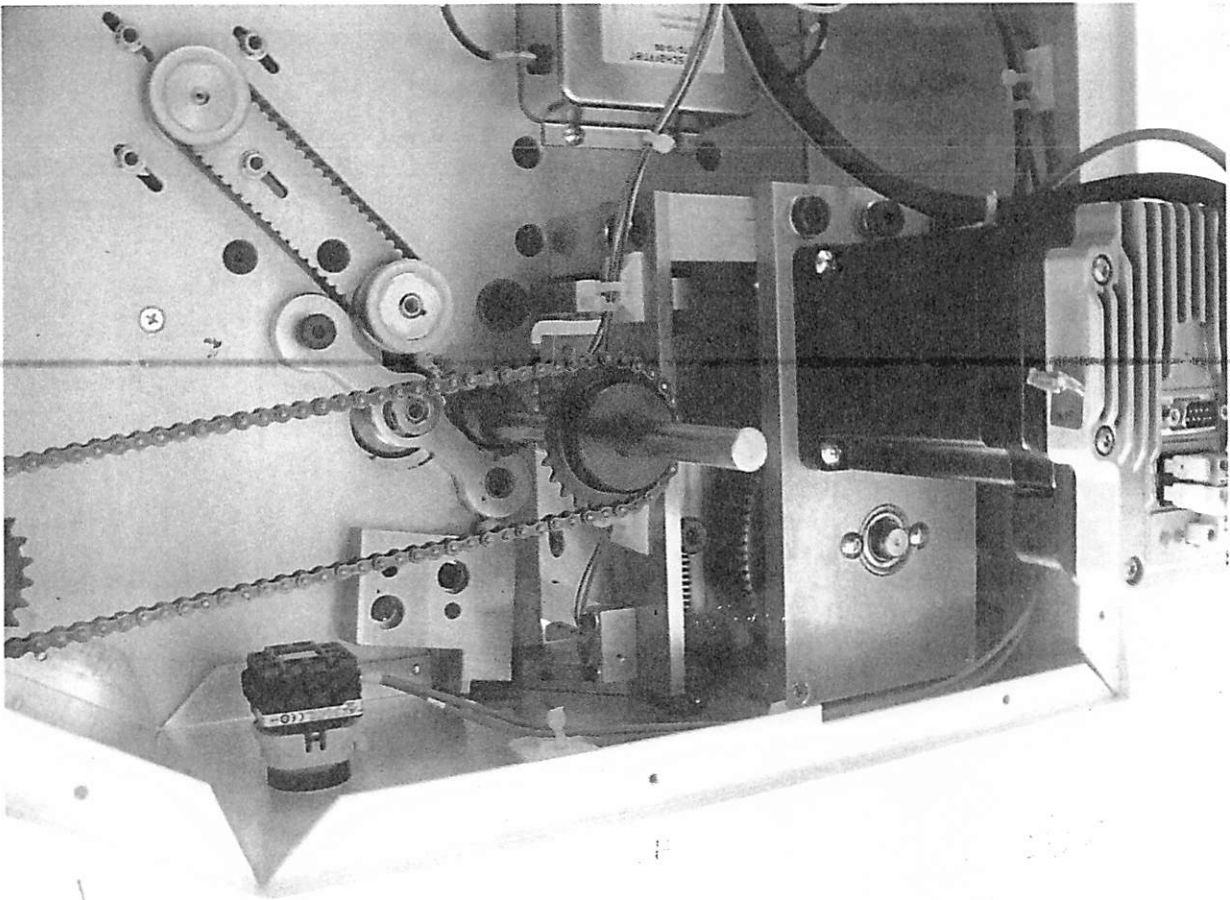








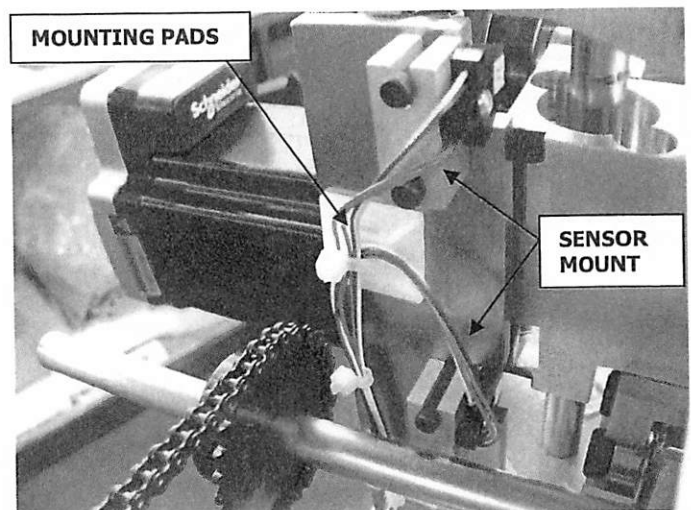
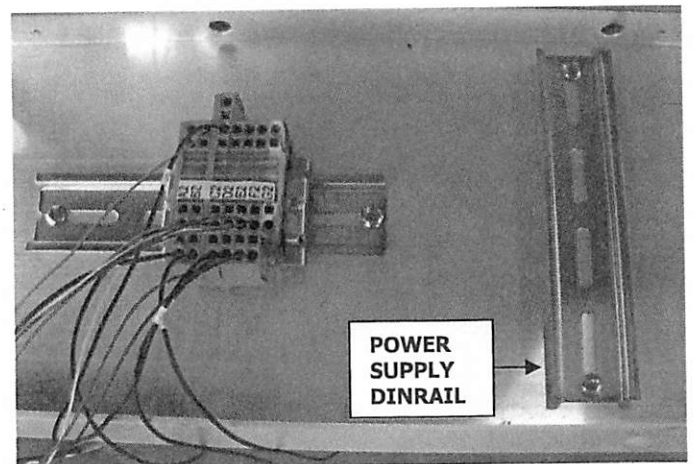
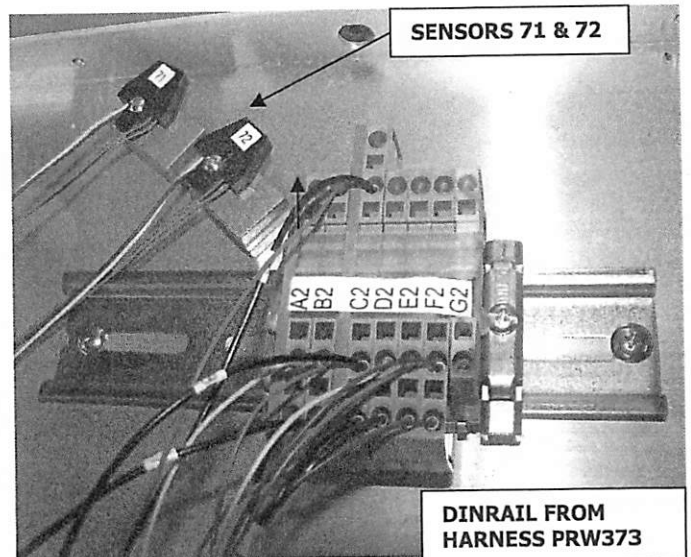




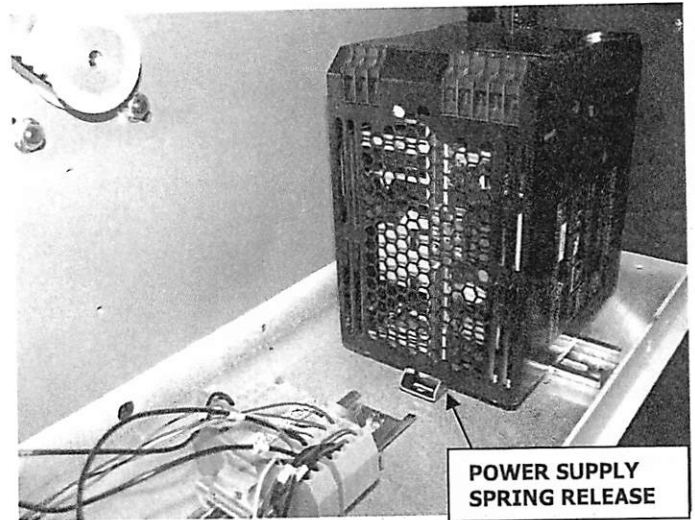


# C15 HOUSINGS & WIRING

- 1) ADD TO THE LEFT BOTTOM HOUSING (2) DINRAIL COMPONENT MOUNTING STRIPS (C15 206.4) RACK 24. ONE OF THE DINRAIL COMPONENT MOUNTING STRIPS IS IN WIRING HARNESS C15 110V CUTTER (PRW373) AS02 WITH TERMINAL A2 THRU G2 ATTACHED ALONG WITH (2) SENSORS #71 AND #72. SECURE THE DINRAIL WITH A2 FACING LEFT/REAR. USE 8-32 X 3/8 THMS WITH A #8 KEPS HEX NUT ON THE UNDERSIDE OF THE HOUSING. THE SECOND DINRAIL IS FOR A POWER SUPPLY. SECURE VERTICALLY WITH (2) 8-32 X 3/8 THMS AND #8 KEPS HEX NUTS ON THE HOUSING UNDERSIDE.
- 2) SECURE THE #71 AND #72 SENSORS EACH TO A SENSOR MOUNT (C15 229.4) RACK 24. USE A 4-40 X 3/8 PHMS THROUGH THE SENSOR CHANNEL. THE SENSORS WILL FACE THE REAR OF THE CUTTER AND THE WIRES FACE THE FRONT. SENSORS LOCATE ABOUT FLUSH WITH THE FRONT OF THE SENSOR MOUNT AND CONTINUE PAST THE SENSOR MOUNT IN THE REAR.
- 3) THE SENSOR MOUNTS WITH #71 FOR THE TOP SENSOR, SECURE THROUGH THE TOP AND BOTTOM CHANNELS TO THE SENSOR BLOCK MOUNT. THE BOTTOM SENSOR IS #72. USE (2) 6-32 X 3/4 SHCS FOR EACH SENSOR MOUNT, CENTERED IN THE CHANNEL. ONLY A FEW THREADS HOLD THE SENSOR MOUNTS.
- 4) *GENTLY* SECURE SENSOR WIRES TO THE SENSOR BLOCK MOUNT WITH 1" MOUNTING PADS (PRC081) AS09. RAISE THE BOTTOM SENSOR WIRES TO MEET THE TOP SENSOR WIRES. USE (2) MOUNTING PADS AND CABLE TIES.

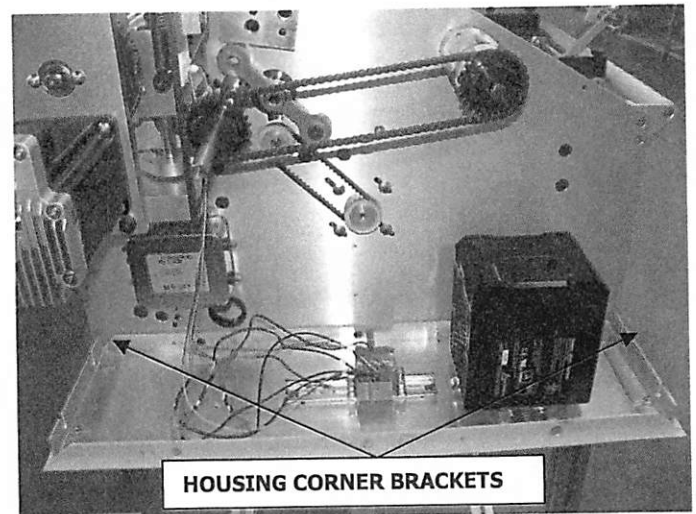


5) THE OMRON POWER SUPPLY 48V-10A (PRC310) AS02 FITS ON THE LEFT SIDE, FRONT DINRAIL. ORIENT THE UPPER TERMINALS TO THE LEFT/REAR. PULL THE SPRING RELEASE OUTWARD AND SET THE FRONT EDGE OF THE POWER SUPPLY TRACKS OVER THE DINRAIL. WITH THE SPRING RELEASE STILL OPEN, PUSH THE REAR TRACKS OVER THE DINRAIL. RELEASE THE SPRING, LOCKING IN PLACE.



POWER SUPPLY SPRING RELEASE

6) PLACE A FRONT AND REAR HOUSING CORNER BRACKET (EP30 091.4) 1MS01 ON THE RIGHT AND LEFT BOTTOM HOUSINGS, ORIENTED WITH THE BREAK DOWN AND OUTWARD. USE 10-32 X 3/8 THMS WITH A #10 KEPS HEX NUT ON THE INSIDE THREADS. SNUG THESE FITTINGS, AS ADJUSTMENT MAY BE NEEDED TO FIT THE TOP HOUSINGS.



HOUSING CORNER BRACKETS

7) PREPARE THE LEFT TOP HOUSING (C15 351.4) AS14 BEFORE SECURING.

8) INSERT (2) SLO BLO 8 AMP FUSES (PRF137) AS09 INTO A LITTLEFUSE FUSE HOLDER (PRF145) RACK 12. ONE FUSE IS A SPARE. SNAP FUSE HOLDER INTO LOWER REAR LEFT HOUSING.

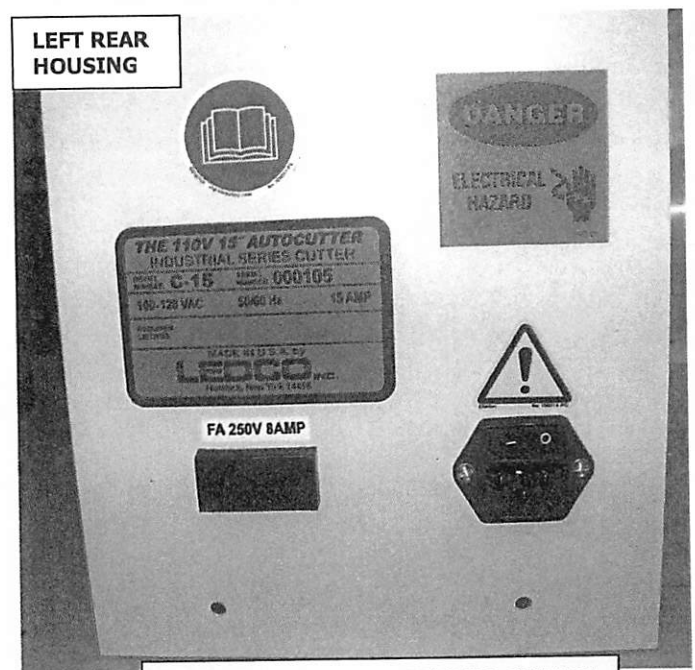
9) CENTER AND ADHERE ABOVE FUSE HOLDER AN FA 250V 8 AMP LABEL (LAB123) AS08.

10) CENTER THE GRAY C-15 SERIAL TAG 110V 15" CUTTER (LAB156) WITH JOB ABOVE THE FUSE LABEL.

11) ABOVE THE SERIAL TAG CENTER AND ADHERE A BLUE READ OPERATORS MANUAL LABEL (LAB142) AS08.

12) INSERT A POWER ENTRY WITH LINE SWITCH (PRS314) RACK 3, POSITION SWITCH UPWARD AND GROUND POST DOWNWARD. SECURE TO LOWER REAR HOUSING, RIGHT OF THE FUSE HOLDER. USE (2) 6-32 X 3/8 FHMS WITH #6 KEPS HEX NUTS ON INSIDE.

13) ABOVE THE POWER ENTRY CENTER AND ADHERE A YELLOW GENERAL DANGER LABEL (LAB52) AS08.

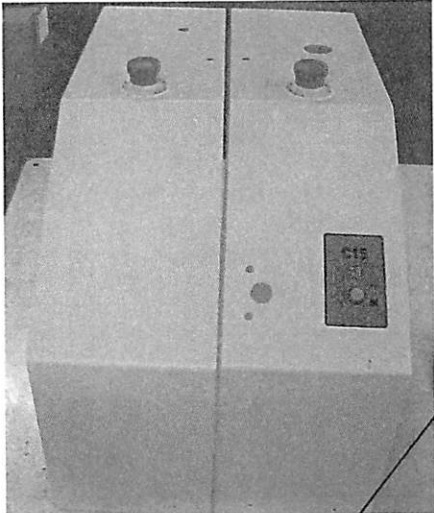


LEFT REAR HOUSING

8 AMP FUSE ~ POWER ENTRY & SWITCH

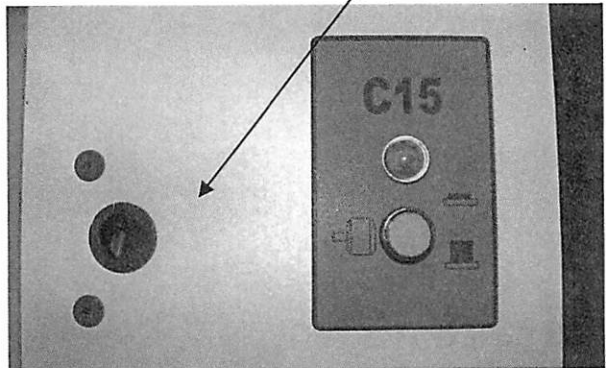
14) ABOVE THE GENERAL DANGER LABEL CENTER A RED DANGER ELECTRICAL HAZARD LABEL (LAB50) AS08.

15) BOTH LEFT AND RIGHT TOP HOUSING (C15 353.4) AS18 HAVE AN E-STOP SWITCH (PRS374) AS07 EACH WITH A YELLOW E-STOP WASHER (PRS375) AS07. ALIGN WASHER ON THE OUTER E-STOP PORTION. INSERT INTO UPPER FRONT HOUSINGS, CATCH TOOTH IN HOUSING NOTCH. THE "EMERGENCY" PRINTING FACES THE SIDES. THREAD UP WASHER AND TIGHTEN. CONNECT LOWER SECTION.



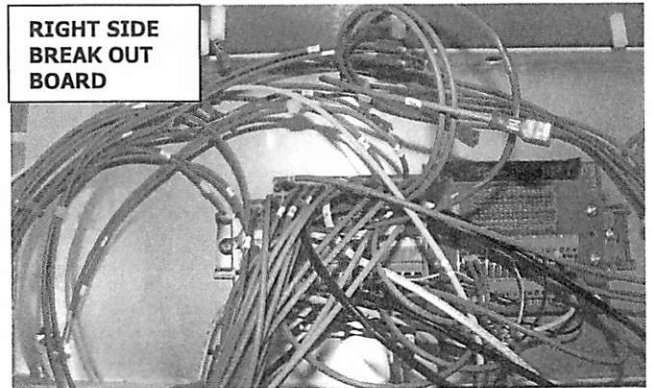
LEFT & RIGHT TOP HOUSINGS  
~~~  
GROMMETS & BUSHING

16) CENTER, ADHERE RIGHT TOP HOUSING FRONT LABEL C15 DRIVE SWITCH WITH NAME (LAB151) RACK 24. LEFT OF THE LABEL INSERT SNAP BUSHING (PRB064) AS09. ADD (2) INSULATION GROMMETS (PRB105) RACK 12.



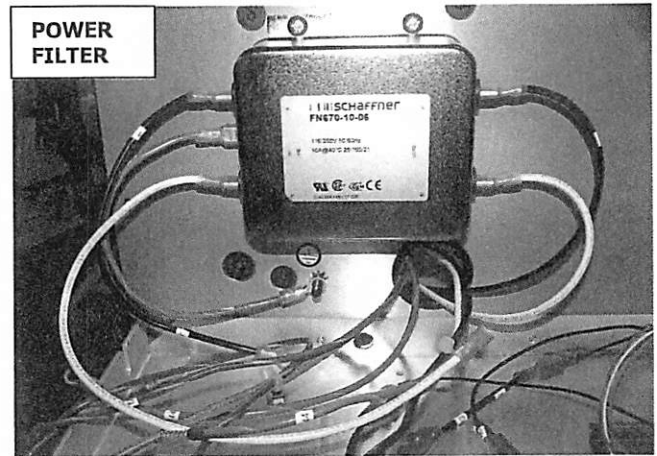
17) INSERT GREEN 110V LOW PROFILE INDICATOR LIGHT (PRL198) RACK 8 INTO UPPER OPENING OF C15 LABEL.

18) BELOW THE GREEN INDICATOR LIGHT, INSERT A POSITIVE GREEN DRIVE SWITCH (PRS080) RACK1. UNTHREAD TOOTHED KEEPER ON GREEN SWITCH AND INSERT INTO HOUSING WITH THE LARGER TOOTH UPWARD. SNAP TERMINAL SECTION ON, 'COMMON' POST WILL BE DOWNWARD.



RIGHT SIDE  
BREAK OUT  
BOARD

19) FROM THE WIRING HARNESS SECURE THE WIRED GREEN BREAK OUT BOARD DINRAIL TO THE BOTTOM RIGHT HOUSING, WITH THE GREEN BOARD SECTION TO THE RIGHT/REAR. USE (2) 8-32 X 3/8 THMS WITH A #8 KEPS HEX NUT ON THE BOTTOM HOUSING UNDERSIDE.

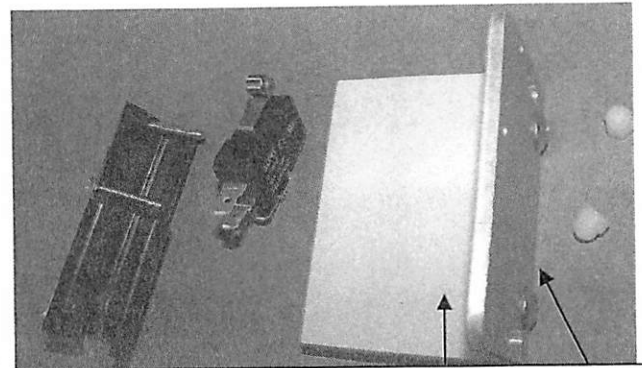


POWER  
FILTER

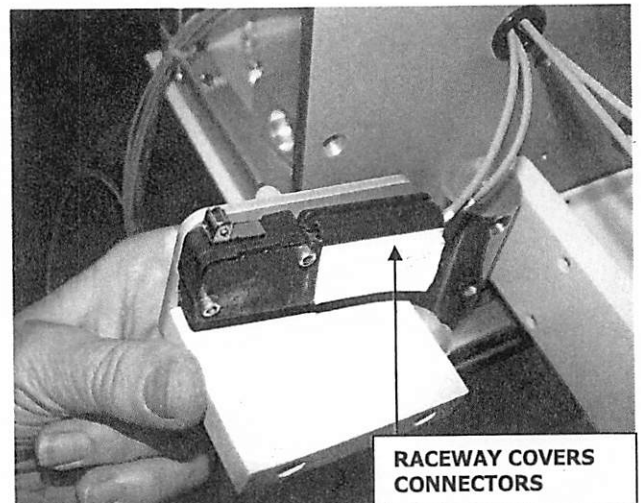
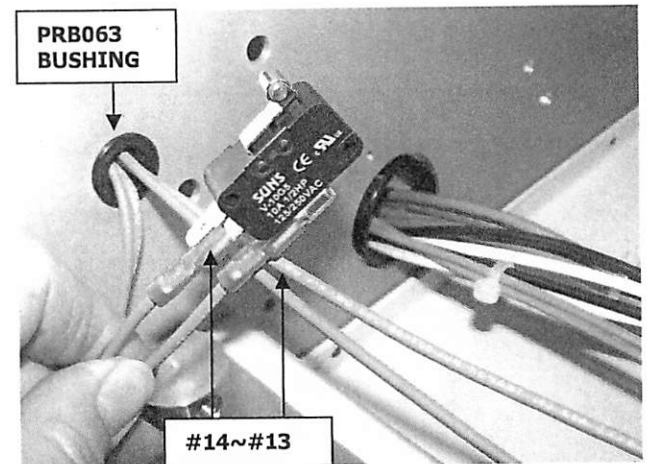
20) THROUGH THE LARGE SNAP BUSHING, RUN SOME OF THE BREAK OUT BOARD WIRES. THE 14 GAUGE BLACK #6 AND WHITE #5 WIRES CONTINUE TO THE POWER FILTER 'X'. CONNECT WHITE #5 TO LOAD 'N' POST AND BLACK #6 TO LOAD 'P' POST. FROM SMALL BAG CONNECT BLACK #4 WIRE TO LINE 'P'

AND WHITE #1 TO LINE 'N.' THE LINE GREEN GROUND WIRE IS #11.

- 21) FROM THE REAR, INNER RIGHT SIDE PANEL INSERT A MEDIUM SNAP BUSHING (PRB063) RACK 8, FLANGE INWARD.
- 22) ORIENT ROUNDED CORNERS UPWARD AND 4-40 THREADS INWARD, SECURE AN EXIT CHUTE SAFETY SWITCH MOUNT (C15 154.4) RACK 24 TO A PAINTED EXIT CHUTE SAFETY SWITCH MOUNT BAR (C15 156.4) RACK 24. USE (2) 8-32 X 3/8 THMS.
- 23) THROUGH THE MEDIUM SNAP BUSHING ON THE RIGHT SIDE PANEL, INSERT THE BROWN 18 GAUGE BUNDLE OF (4) WIRES WITH THE SHORT BROWN #13 AND #14. \*\*\*\*\*THE (2) LONG BROWN WIRES EXITING THE LEFT SIDE PANEL.
- 24) WITH ROLLER UPWARD, TERMINATE #13 WIRE ON THE OFFSET 'COM' POST OF AN EXIT CHUTE CHERRY MINI ROLLER SWITCH (PRS370) RACK 13 'CC'. TERMINATE #14 WIRE ON 'NO' POST, CLOSEST TO THE OFFSET POST.
- 25) TO PROTECT THE CHERRY MINI ROLLER SWITCH CONNECTORS A PRE-CUT SWITCH CONNECTORS COVER (C15 163.4) RACK 24 IS USED. ALIGN THE ROLLER UPWARD. INSERT (2) 4-40 X 3/4 SHCS THROUGH THE CUT OUT SECTION OF THE COVER AND INTO THE CHERRY ROLLER. CLOSE THE RACEWAY PORTION OVER THE CONNECTORS.
- 26) THREAD THE 4-40 X 3/4 SHCS THAT ARE THROUGH THE CONNECTORS COVER AND CHERRY MINI ROLLER SWITCH INTO THE EXIT CHUTE SAFETY SWITCH MOUNT ORIENTED WITH THE ROLLER UPWARD AND THE SWITCH ON THE INNER RIGHT ANGLE, AS PICTURED. COVER BOTH OF THE EXPOSED 4-40 THREADS WITH A 4-40 NYLON ACORN (.112LDR00).



EXIT CHUTE SAFETY SWITCH MOUNT BAR & SS MOUNT

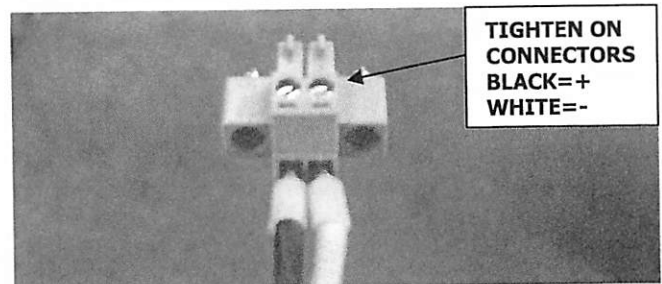


27) HOLD THE ROLLER UPWARD AND THE NYLON ACORN TOWARD THE LEFT SIDE PANEL. ALIGN THE PAINTED EXIT CHUTE SAFETY SWITCH MOUNT TO THE RIGHT SIDE PANEL OUTER COUNTERSUNK OPENINGS AND SECURE TO INNER SIDE PANEL WITH  $\frac{1}{4}$ -20 X  $\frac{3}{4}$  FSH.

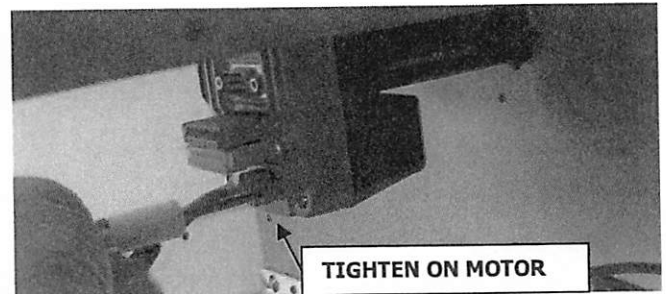


28) FROM THE BREAK OUT BOARD RUN THE GREEN GROUND WIRE SECTION ALONG WITH THE GRAY CABELS THROUGH THE LARGER SNAP BUSHING.

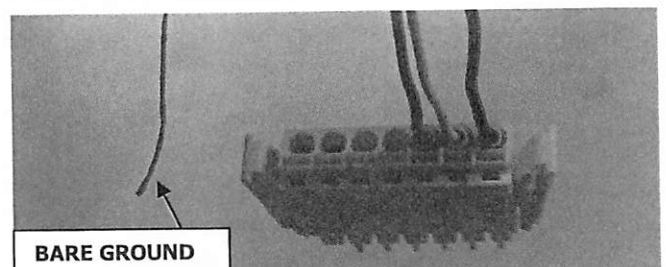
29) WIRE THE LEXIUM FEED MOTOR 'HH' LOCATED ON THE INNER LEFT SIDE PANEL. SEPARATE FROM THE WIRING HARNESS TAKE THE BLACK SHIELDED SECTION WITH #23 AND #25. REMOVE THE SMALL GREEN TERMINAL BLOCK ON THE FEED MOTOR. HOLD THE BLOCK WITH THE CONNECTION TERMINALS DOWNWARD. INSERT THE BLACK+ #23 ON THE LEFT AND WHITE- #25 ON THE RIGHT. TIGHTEN THE SCREWS ON THESE CONNECTORS. TURN THE BLOCK OVER, SO THE WIRES ARE UPWARD AND RE-INSERT THE GREEN BLOCK BACK INTO MOTOR. SECURE THE GREEN BLOCK WITH SCREWS ON THE SIDES OF THE WIRES.



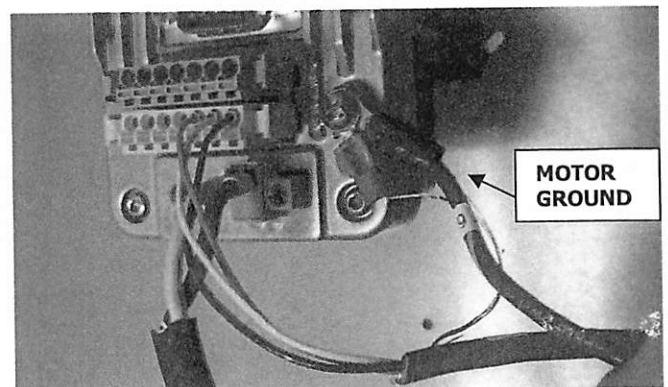
30) REMOVE THE YELLOW TERMINAL BLOCK FROM FEED MOTOR. \*\*\* WIRE FROM END CLOSEST TO GREEN TERMINAL. THIS LOOKS OPPOSITE ON WIRING DIAGRAM. FROM THE GRAY HARNESS CABLE WITH RED #24, BLACK #26, WHITE #27 SLIGHTLY TRIM TERMINAL ENDS ON ONE SIDE. INSERT BLACK #26 ON THE RIGHT, THEN WHITE #27, THEN RED #24.



31) TWIST THE BARE GROUND WIRES TOGETHER AND TERMINAGE WITH A RED #6 RING CONNECTOR (PRT296).

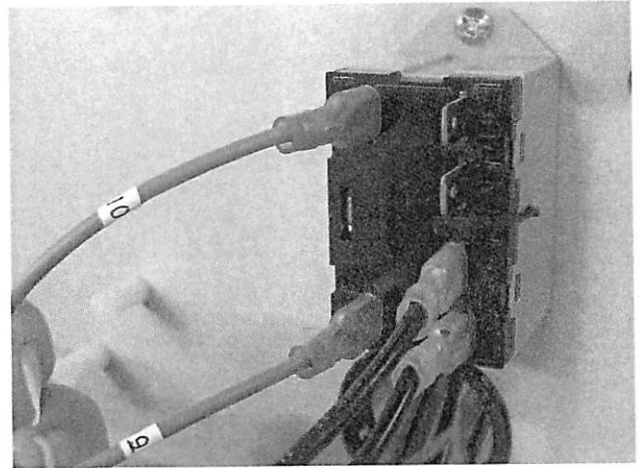


32) UNTHREAD MOTOR GROUND SCREW. LOCATE GREEN #69 GROUND WIRE. CRIMP A BLUE RING CONNECTOR (PRT276) FOR MOTOR. USE A #8 STAR WASHER, THE #69 GREEN GROUND WIRE, THEN THE BARE YELLOW

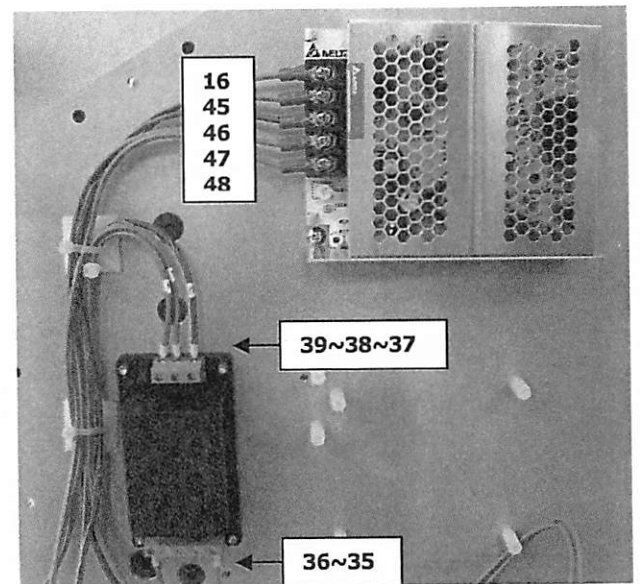


TERMINAL BLOCK GROUND WIRE.  
SECURE THE MOTOR GROUND SCREW.

- 33) ON THE RIGHT SIDE WIRE THE 110V RELAY 'Y' FROM THE BREAK OUT BOARD WIRES. RELAY 1 IS BROWN WIRE #10, RELAY 0 IS BROWN #9, RELAY 4 IS BLACK #8 AND RELAY 2 IS BLACK #7. BOTH OF THE BLACK WIRES ARE 14 GAUGE. RELAY 8 AND 6 POSTS ARE NOT USED.

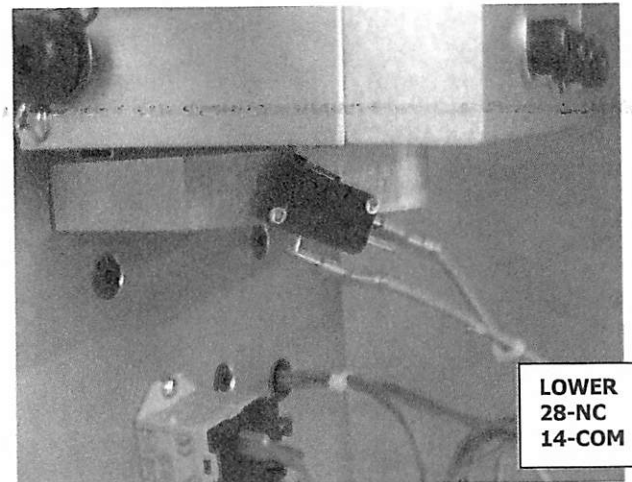


- 34) ON THE RIGHT SIDE PANEL, RUN THE FORKED BROWN AND GREEN WIRES TO THE FRONT OF THE (2) POWER SUPPLIES. WIRE THE 24VDC POWER SUPPLY 'S' USING THE FORK CONNECTORS. WORKING DOWNWARD FROM THE TOP; CONNECT THE UPPER POST WITH BROWN #16, BROWN #45, GREEN 46, BROWN #47 AND BROWN #48 ON THE BOTTOM POST.

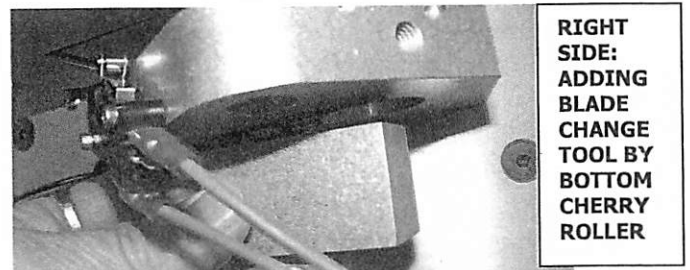


- 35) BELOW AND MORE TO THE FRONT OF THE RIGHT SIDE PANEL IS THE 5VDC POWER SUPPLY 'BB'. SLIGHTLY TRIM THE ENDS OF THE FERRULE CONNECTORS, IF NECESSARY. SECURE THE UPPER THREE WIRES STARTING FROM THE FRONT/LEFT; BROWN #39, BROWN #38 AND GREEN #37. THE LOWER, LONGER TERMINAL BLOCK HAS A WIRE AT EACH END. ON THE FRONT/LEFT POST SECURE BROWN #36 AND ON THE RIGHT/REAR POST SECURE BROWN #35.

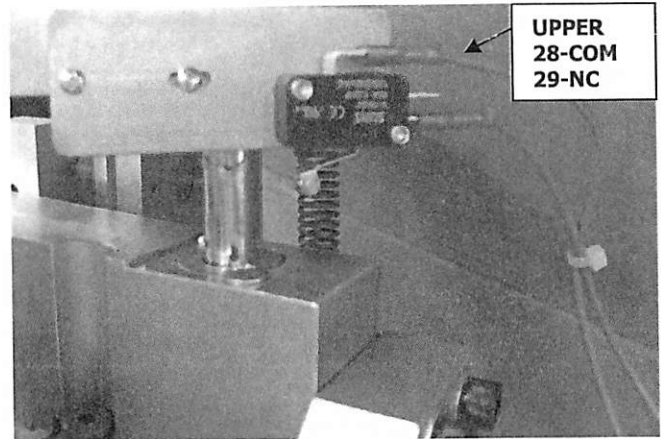
- 36) TIE AND PRESS CLIP THE (2) POWER SUPPLY WIRE BUNDLES ALONG THE FRONT SIDE PANEL AFTER THEIR WIRING IS COMPLETE.



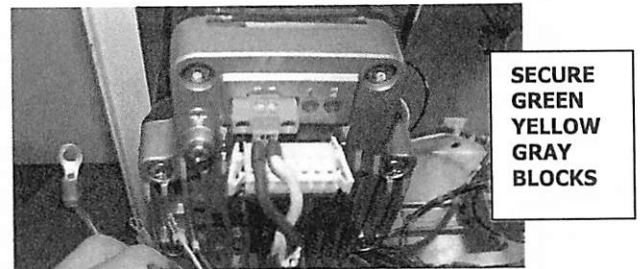
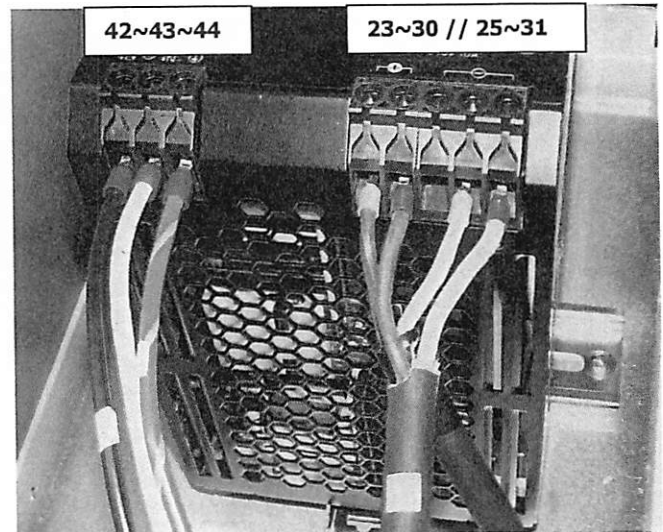
- 37) WIRE THE TOP 'JJ' AND BOTTOM 'FF' RIGHT SIDE CUTTING MODULE CHERRY ROLLER SWITCHES. THE BOTTOM CHERRY ROLLER SWITCH IS LOCATED ON THE LOWER GUIDE BAR MOUNT HAS THE ROLLER UPWARD AND THE OFFSET 'COM' POST DOWNWARD. CONNECT BROWN #14 TO THE OFFSET 'COM' POST. CONNECT BROWN #28 TO THE MORE DISTANT 'NC' POST.



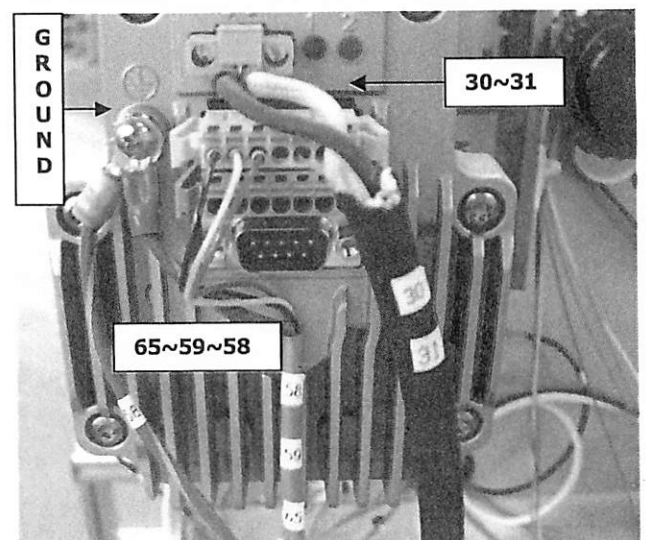
- 38) **THE TOP CHERRY ROLLER SWITCH IS LOCATED ON THE TOP RIGHT GUIDE BAR MOUNT BRACKET OF THE CUTTING MODULE. THE ROLLER IS LOCAED DOWNWARD AND THE OFFSET 'COM' POST IS LOCATED UPWARD. CONNECT BROWN #28 TO THE OFFSET 'COM' POST. CONNECT BROWN #29 TO THE MORE DISTANT 'NC' POST, CLOSER TO THE ROLLER.**



- 39) **ON THE LEFT BOTTOM HOUSING WIRE THE 48V POWER SUPPLY 'NN'. FROM THE HARNESS CONNECT BLUE FERRULE ENDS TO THE INNER (3) TERMINALS. UNTHREAD TERMINALS AND INSERT BLACK+ #42 CLOSEST TO SIDE PANEL, WHITE- #43 AND GREEN GROUND #44. TIGHTEN THE TERMINALS. THE OUTER BANK OF (5) TERMINALS CONNECT WITH (2) SEPARATE BLACK COVERED CABLES THAT RUN BETWEEN THE FEEDER AND CUTTING MOTORS. INSERT BLACK+ #23 TO THE INNER POST, INSERT WHITE- 25 TO THE 4<sup>TH</sup> POST OUTWARD. THESE WIRES HAVE YELLOW FERRULES, ARE 18 GAUGE WIRE AND ARE FROM THE FEEDER MOTOR. INSERT BLACK+ #30 BESIDE FEEDER MOTOR BLACK WIRE AND INSERT WHITE- #31 TO THE OUTERMOST POST. THIS CABLE HAS RED FERRULES, IS 16 GAUGE WIRE AND IS FROM TO CUTTER MOTOR. TIGHTEN ALL SCREWS ON THE FERRULES.**



- 40) **CONTINUE THE BLACK CABLE WITH RED FERRULE ENDS TO THE CUTTER MOTOR 'II'. SECURE GREEN, YELLOW AND GRAY TERMINAL BLOCKS, POSTS DOWNWARD ON ALL. TRIM FERRULE ENDS AND INSERT INTO THE GREEN TERMINAL BLOCK. INSERT BLACK+ #30 ON THE LEFT AND WHITE- #31 ON THE RIGHT. TIGHTEN SCREWS HOLDING FERRULES AND TERMINAL BLOCK TO MOTOR. THE YELLOW TERMINAL CONNECTIONS SPRING LOAD. INSERT THE THIN WIRES FROM THE GRAY CABLE. THE BLACK #65 IS ON THE LEFT END, CLOSEST TO THE**



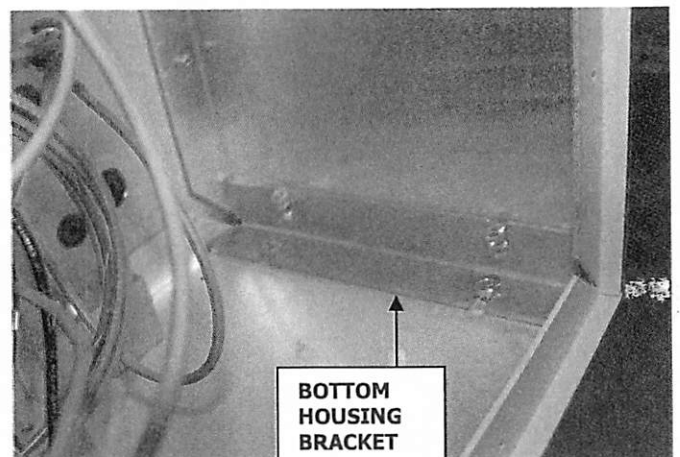
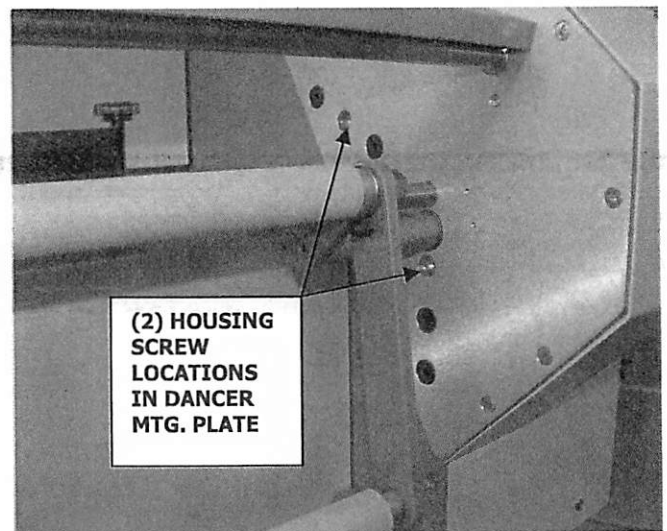
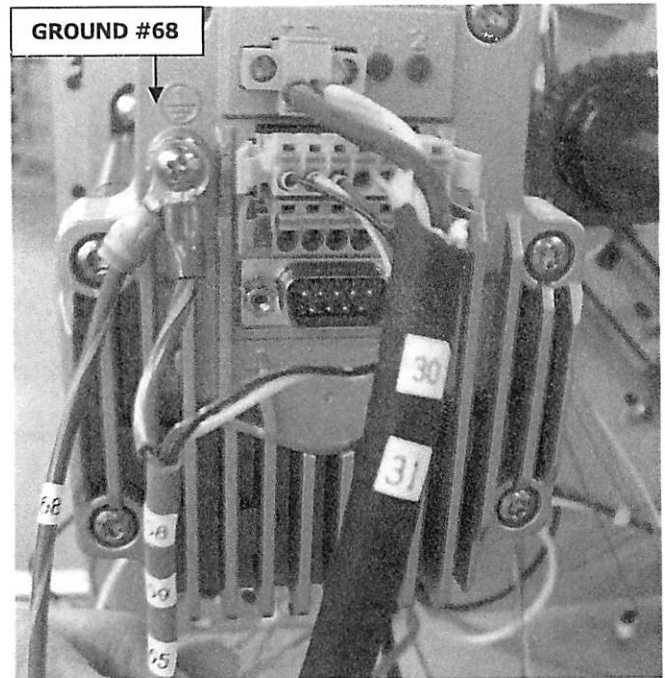
GREEN TERMINAL. WHITE #59 IS NEXT AND RED #58 IS BESIDE THE WHITE. THESE FERRULES ARE A LIGHT BLUE. PUSH ALL THE WAY INTO THE TERMINAL BLOCK. TWIST THE BARE GROUND WIRES TOGETHER, TRIM ENDS. WIRES CAN BE COVERED WITH SHEATHING OR NOT. CRIMP A RED #6 RING CONNECTOR ONTO THE GRAY CABLE GROUND WIRE. UNTHREAD THE CUTTER MOTOR GROUND SCREW. USE A #8 STAR WASHER, THE #68 GREEN GROUND WIRE AND THE CRIMPED GROUND WIRE FOR THE YELLOW TERMINAL BLOCK. RETHREAD INTO THE CUTTER MOTOR GROUND LOCATION.

41) MOVE ALL WIRES AWAY FROM SIDE PANEL EDGES AND SECURE THE RIGHT TOP HOUSINGS TO THE SIDE PANEL WITH (9) 8-32 X 1/2 FHMS FROM THE INNER SIDE PANEL COUNTERSINKS. THE DANCER MOUNTING PLATE HAS OPENINGS FOR (2) OF THE FRONT SCREWS. THREAD THESE IN WITH A LONG SCREWDRIVER.

42) SECURE THE RIGHT TOP HOUSING TO THE BOTTOM HOUSING WITH (2) 10-32 X 3/8 THMS, EACH WITH A #10 KEPS HEX NUT ON THE INNER BOTTOM HOUSING BRACKET. THE BOTTOM HOUSING KEPS NUTS MUST BE QUITE LOOSE. FIT THE HOUSING TO THE BOTTOM HOUSING BRACKET CHANNELS. USE A NUT DRIVER TO TIGHTEN ALL (4) KEPS HEX NUTS.

43) MOVE WIRES AWAY FROM SIDE PANEL EDGES AND SECURE THE LEFT TOP HOUSING THROUGH THE SIDE PANELS WITH (9) 8-32 X 1/2 FHMS.

44) SECURE THE LEFT TOP HOUSING TO THE BOTTOM HOUSING WITH (2) 10-32 X 3/8 THMS EACH WITH A #10 KEPS HEX NUT ON THE INNER BOTTOM HOUSING BRACKET, FITTING IN THE HOUSING BRACKET CHANNELS. USE A NUT DRIVER TO TIGHTEN KEPS NUTS.





45) ON THE REAR, LEFT TOP HOUSING CONNECT THE WIRES FOR THE 8 AMP FUSE 'T' AND THE POWER ENTRY WITH LINE SWITCH 'V'.

46) CONNECT THE CLOSEST 8 AMP FUSE TERMINAL POST WITH THE POWER FILTER, 'LINE' SIDE BLACK #4 WIRE. FROM THE SEPARATE BAG CONNECT THE BLACK #2 JUMPER WIRE.

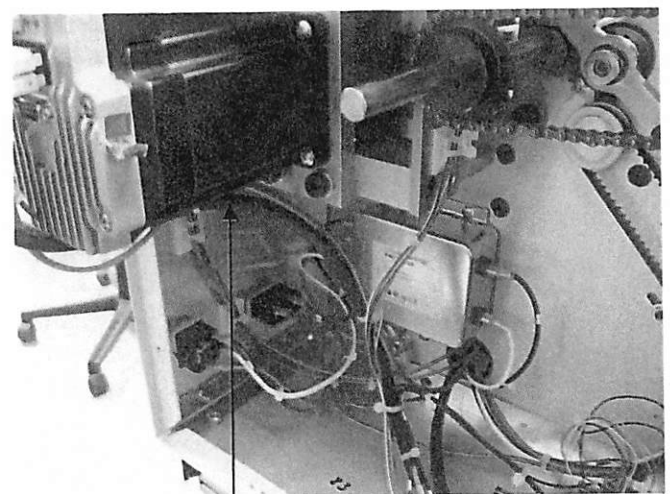
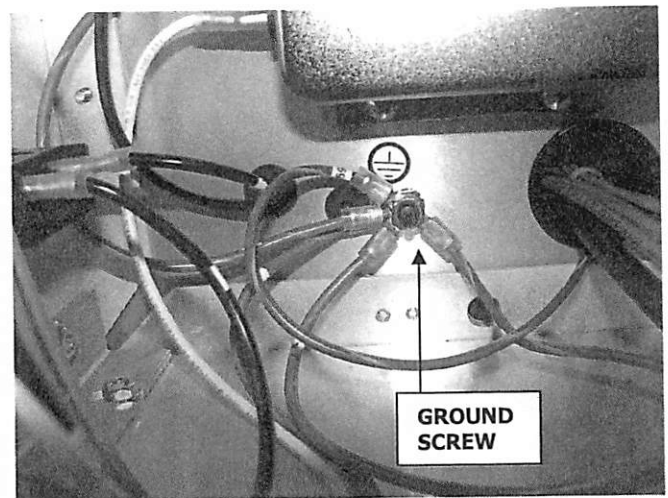
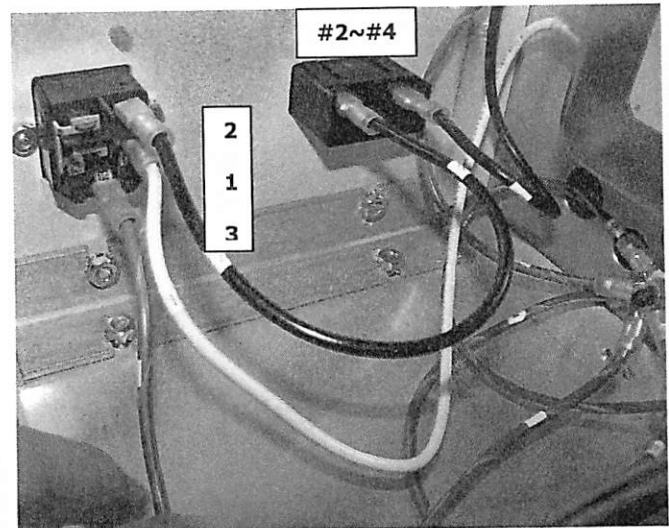
47) CONTINUE THE #2 BLACK JUMPER WIRE FROM THE 8 AMP FUSE TO THE UPPER, INNER 'L' POST ON THE POWER ENTRY WITH LINE SWITCH. FROM THE POWER FILTER 'LINE' SIDE CONNECT THE WHITE #1 'N' WIRE TO THE POWER ENTRY SWITCH POST BELOW THE BLACK WIRE. FROM THE WIRE SEPARATE BAG CONNECT THE GREEN #3 GROUND WIRE BETWEEN THE LOWER POWER ENTRY SWITCH.

48) WITH A #10 STAR WASHER ON THE SIDE PANEL GROUND SCREW, ADD THE POWER ENTRY GROUND WIRE RING CONNECTOR AND SECURE WITH A #10 KEPS HEX NUT. TIGHT WITH A NUT DRIVER. ADD THE REMAINING (4) GROUND SCREWS: CUTTING MOTOR, FEED MOTOR, POWER FILTER AND POWER SUPPLY. USE A NUT DRIVER TO SECURE THESE GROUNDS WITH A #10 HEX NUT.

49) RUN THE BROWN #50 AND #66 WIRES ALONG HOUSING TO THE LEFT SIDE E-STOP. SECURE THE YELLOW FERRULE ENDS INTO THE E-STOP.

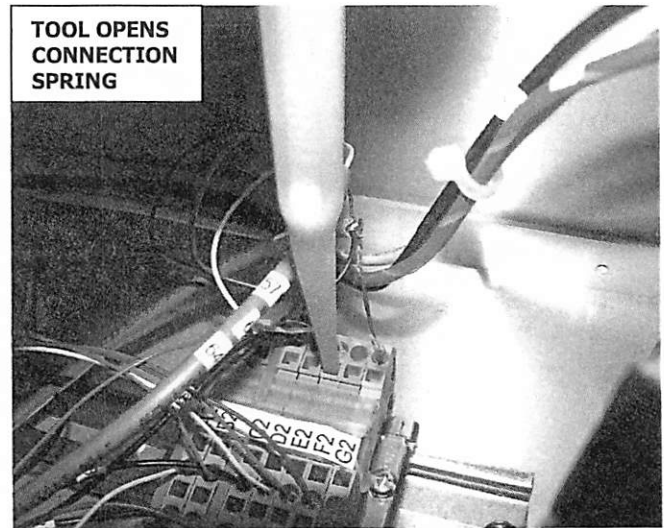
50) SECURE THE BLACK COVERED WIRES ON THE CUTTING MOTOR GREEN TERMINAL BLOCK TO THE MOTOR UNDERSIDE AND CABLE TIE TO ONE OF THE METAL CABLE TIE MOUNTS.

51) SECURE THE GRAY COVERED WIRES FROM THE YELLOW TERMINAL BLOCK ON THE CUTTING MOTOR TO THE MOTOR UNDERSIDE USING THE SECOND METAL CABLE TIE MOUNT.



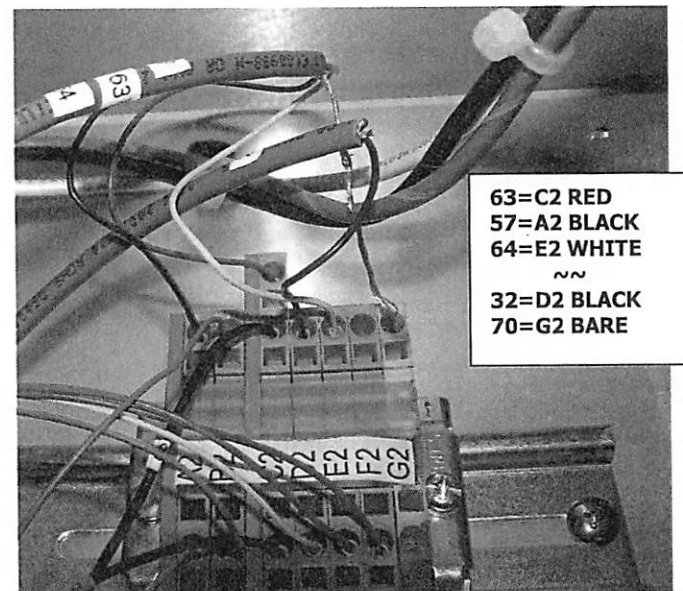
CUTTING MOTOR WIRES SECURED ON UNDERSIDE

52) ON THE LEFT BOTTOM HOUSING ARE TERMINALS FOR FERRULE CONNECTORS ON THE DINRAIL. TO OPEN THE TERMINALS USE THE WHITE PLASTIC INSERTION TOOL LOCATED AT THE WIRING STATION. OPEN TERMINALS BY INSERTING THE END OF THE TOOL INTO THE SQUARE BESIDE THE ROUND CODED TERMINAL LOCATION. DEPRESS THE TOOL IN SQUARE UNTIL YOU HEAR IT 'CLICK' OPEN, HOLD TOOL IN THAT POSITION. INSERT FERRULE END AND REMOVE TOOL, WHICH RELEASES SPRING HOLDING FERRULE.



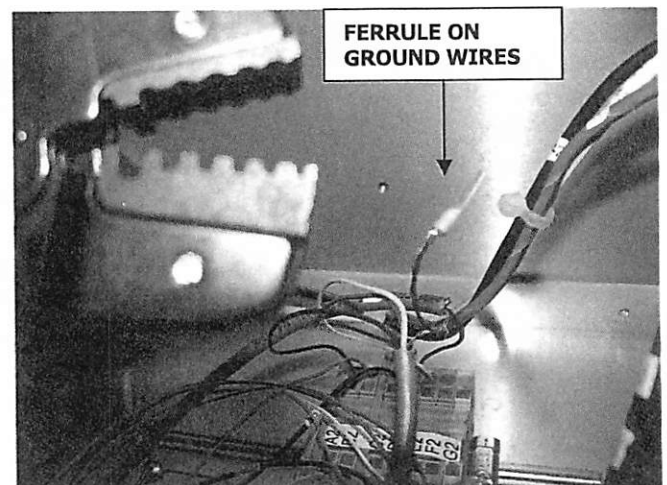
53) CONNECT THE THIN 24 GAUGE WIRES ON THE GRAY CABLES WHICH CORRESPOND TO THE NUMBERS ON THE WIRING DIAGRAM TO THE TERMINAL BANKS CLOSER TO THE SIDE PANEL.

54) THE THIN RED WIRE #63 INSERTS INTO 'C2' THE INNERMOST, SINGLE BANK. THE THIN BLACK WIRE #57 INSERTS INTO THE SECOND BANK 'A2' TO THE REAR. THE THIN WHITE WIRE #64 INSERTS INTO THE SECOND BANK 'E2' LOCATION. TEMPORARILY LEAVE THE OPEN GROUND WIRE.

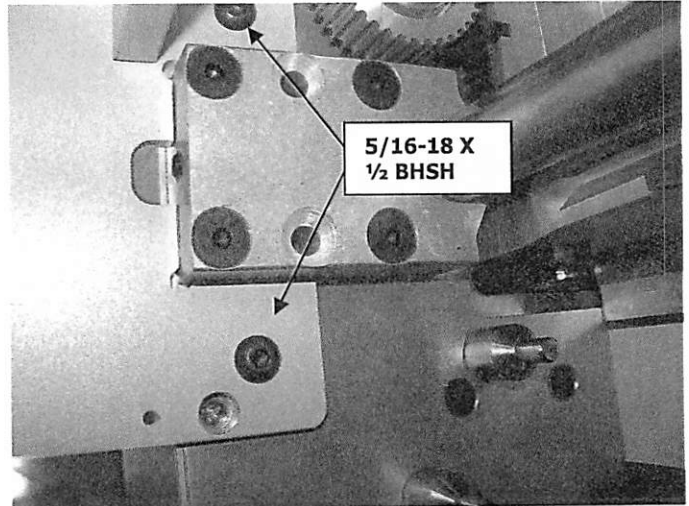


55) THE SECOND GRAY CABLE HAS ONLY ONE WIRE TERMINATED WITH A FERRULE. THIS IS BLACK #32. INSERT BLACK #32 INTO 'D2' ON THE SECOND BANK.

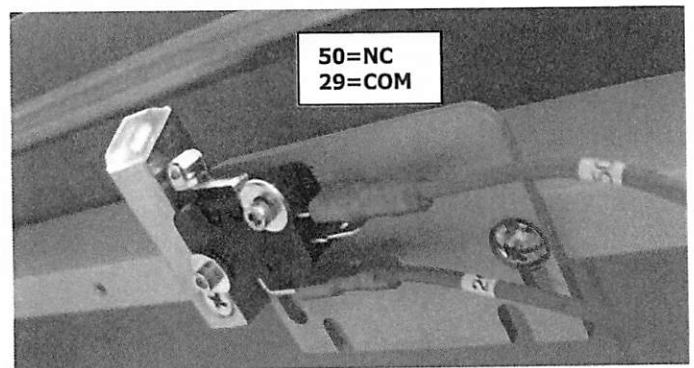
56) TWIST THE BARE GROUND WIRE FROM BOTH CABLES TOGETHER. THE GROUND WIRES THEN BECOME #70 ON THE WIRING DIAGRAM. TRIM THE ENDS OF THESE WIRES AND SECURE A LIGHT BLUE FERRULE CONNECTOR #433 TO THE GROUND ENDS. INSERT THE GROUND WIRE FERRULE INTO THE SECOND BANK 'G2' THE TERMINAL TO THE FRONT.



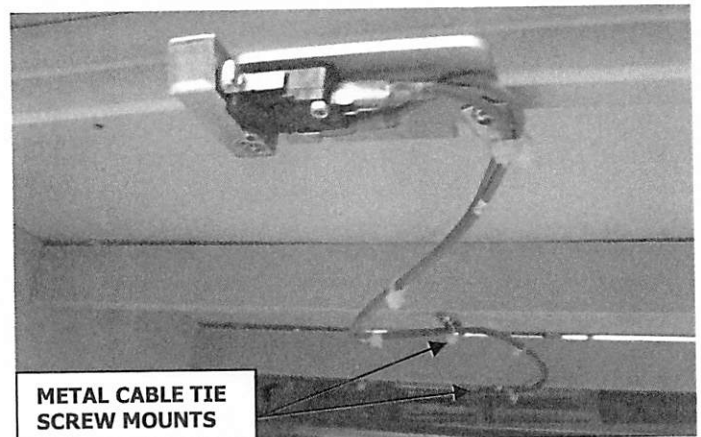
- 57) FROM THE REAR OF THE C:15 INSERT THE EXIT CHUTE ASSEMBLY, FITTING THE SAFETY DOOR MOUNTING PLATE NOTCHES OVER THE BEARING AND PIN MOUNTS ON THE RIGHT AND LEFT INNER SIDE PANELS. ALIGN SAFETY DOOR MOUNTING PLATE OPENINGS WITH THE SIDE PANEL THREADS. THIS MAY TAKE TWO PEOPLE, AS IT IS A VERY TIGHT FIT. SECURE THE EXIT CHUTE ASSEMBLY TO THE SIDE PANEL WITH (2) 5/16-18 X 1/2 BSHS ON EACH SIDE.



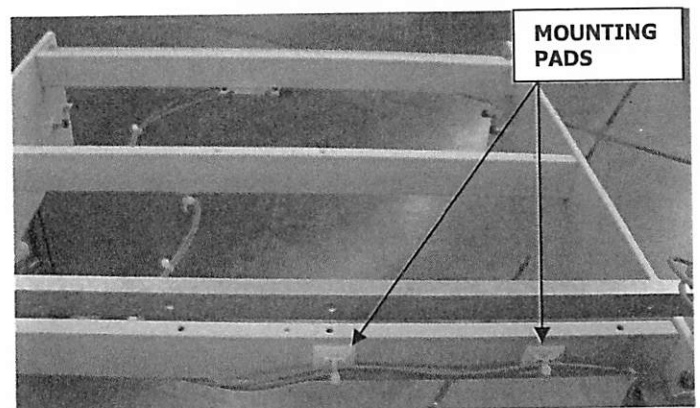
- 58) WIRE THE CHERRY MINI ROLLER SAFETY SWITCH ON THE OUTER EXIT CHUTE ASSEMBLY 'KK' WITH BROWN WIRES #29 AND #50. TERMINATE #29 ON THE OFFSET 'COM' POST. TERMINATE #50 ON THE 'NC' POST FURTHER AWAY AND CLOSER TO THE ROLLER.



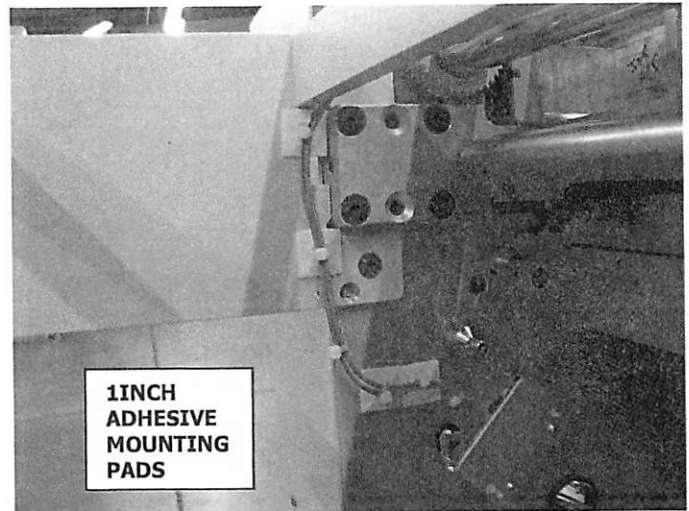
- 59) SECURE THE BROWN WIRES #50 AND #29 TO THE UNDERSIDE LIP OF THE EXIT CHUTE ASSEMBLY BRACE BARS. USE A METAL CABLE TIE SCREW MOUNT (PRC305) LOFT 6 ON THE MIDDLE AND INNER BRACE BAR HELD WITH AN 8-32 X 3/8 THMS, LOCTITE THREADS. THEN CABLE TIE THE BROWN WIRES TO THE METAL SCREW MOUNT.



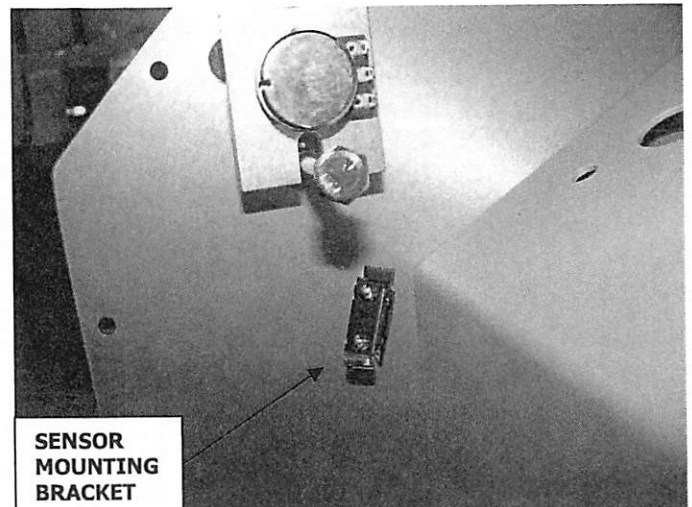
- 60) ON THE FRONT SIDE OF THE INNER EXIT CHUTE BRACE BAR ADD (2) 1" MOUNTING PADS (PRC081) AS09 ALONG THE LOWER SECTION AND CABLE TIE THE BROWN WIRES.



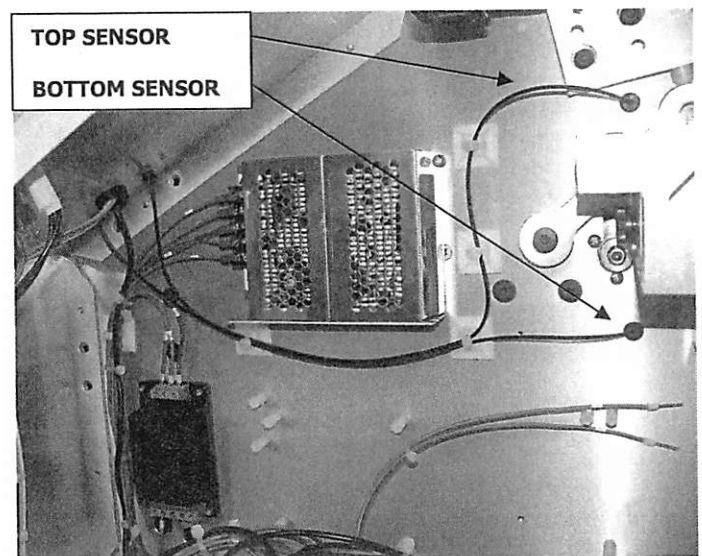
- 61) PLACE (2) ADHESIVE MOUNTING PADS ON THE INNER EXIT CHUTE DOOR MOUNTING PLATES AND (2) HORIZONTALLY ON THE INNER SIDE PANEL JUST ABOVE THE CHERRY MINI ROLLER SWITCH.



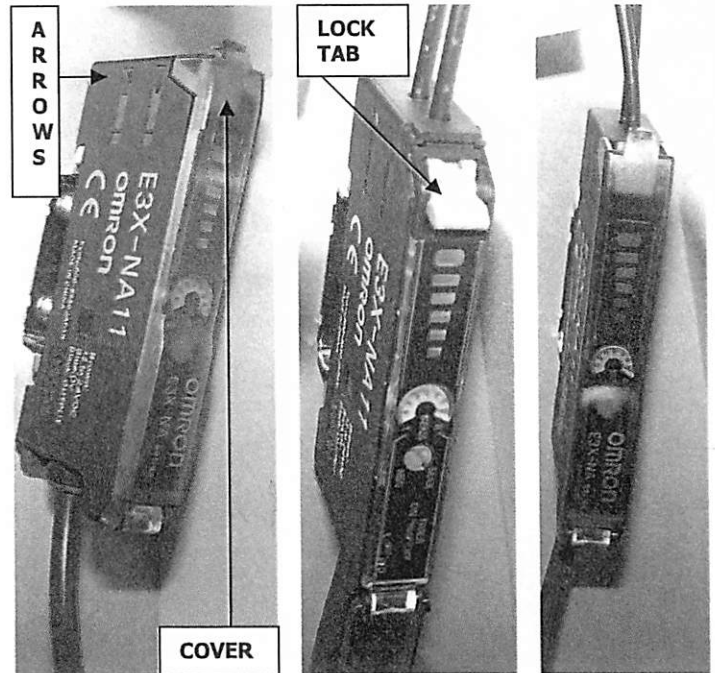
- 62) SECURE A SENSOR MOUNTING BRACKET (PRC276M) RACK 12 TO THE OUTER DANCER MOUNTING PLATE, LOCATED BELOW THE POTENTIOMETER. ORIENT THE BRACKET WITH THE BREAK CLOSER TO THE SIDE PANEL AND THE OPEN SIDE OUTWARD. USE (2) 4-40- 1/4 PHMS TO SECURE BRACKET.



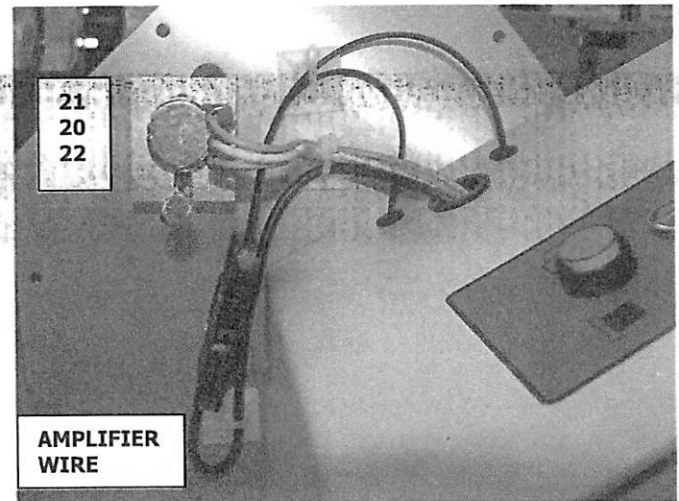
- 63) ON THE OUTER RIGHT SIDE PANEL, ALIGN THE TOP AND BOTTOM SENSOR CABLES TO THE INSULATION GROMMETS IN THE TOP HOUSING. USE 1" ADHESIVE MOUNTING PADS STUCK TO THE SIDE PANEL TO HOLD CABLES. BE *VERY CAREFUL* NOT TO BEND OR PINCH CABLE AS YOU WORK THEM TO THE GROMMETS. FOLLOW THE PATTERN SHOWN ON THE ACCOMPANYING PICTURE. USE (3) MOUNTING PADS BY THE POWER SUPPLY, RUN CABLE BELOW POWER SUPPLY, WITH ANOTHER MOUNTING PAD. EXIT THE TOP SENSOR CABLE THROUGH THE UPPER GROMMET. EXIT THE BOTTOM SENSOR CABLE THROUGH THE LOWER GROMMET.



64) WITH THE CABLE DOWNWARD, SNAP AN AMPLIFYING PHOTOELECTRIC SWITCH (PRC276) RACK 12 ONTO THE SENSOR MOUNTING BRACKET. THERE ARE ARROWS TO INDICATE TOP AND BOTTOM SENSOR LOCATION. THE UPWARD FACING ARROW IS FOR THE TOP SENSOR CABLE AND THE DOWNWARD FACING ARROW IS FOR THE BOTTOM SENSOR CABLE.



65) UNSNAP THE AMPLIFIER COVER OF AND LET IT DROP DOWN. UNSNAP THE TAB WHICH OPENS THE CABLE LOCKS. MEASURE THE CABLE TO LEAVE A COMFORTABLE LOOP AT THE TOP AND CUT THE CABLE WITH THE TOOL SUPPLIED. USE ANY OF THE THREE LARGER HOLES TO CUT THE CABLE, BUT USE EACH HOLE ONLY ONCE. INSERT THE TOP SENSOR CABLE TO THE 'ARROW UP' INNER HOLE. INSERT THE LOWER SENSOR CABLE INTO THE 'ARROW DOWN' OUTER HOLE. CLOSE THE TAB TO LOCK CABLES. CLOSE THE COVER. SECURE THE SENSOR CABLES TO DANCER MOUNTING PLATE WITH ADHESIVE MOUNTING PAD.



66) WIRE POTENTIOMETER '00' TERMINALS WITH GRAY, YELLOW AND ORANGE WIRES FROM BREAK OUT BOARD, THROUGH SNAP BUSHING IN HOUSING. TERMINATE ORANGE #22 ON THE LOWER POST. TERMINATE YELLOW #20 ON THE MIDDLE POST. TERMINATE GRAY #21 ON THE UPPER POST.

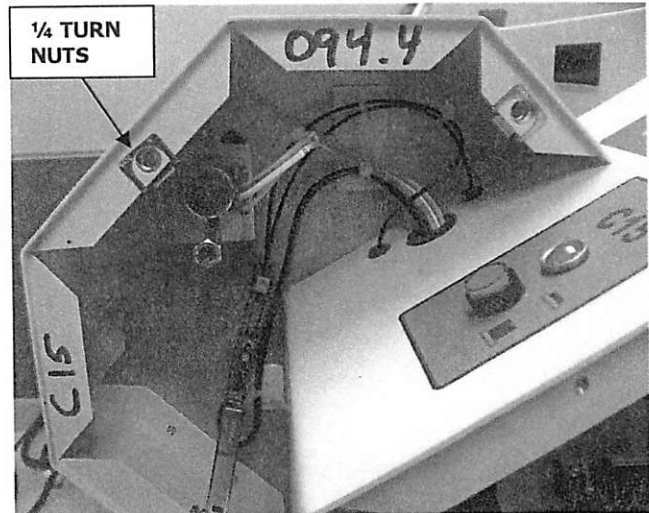
67) PLACE AN ADHESIVE PAD UNDER THE AMPLIFIER WIRE AND RUN IT UP WITH THE POTENTIOMETER WIRES THROUGH THE SNAP BUSHING.

68) ALIGN THE LIP OF A POTENTIOMETER HOUSING (C15 094.4) AS01 ALONG THE OUTER DANCER MOUNTING PLATE. THE HOUSING LIP RESTS ON THE DANCER MOUNTING PLATE. SECURE THE POTENTIOMETER HOUSING THROUGH THE



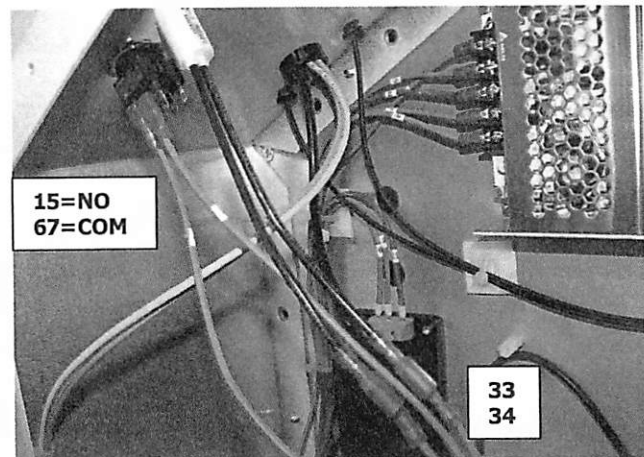
COUNTERSUNK OPENINGS ON THE INNER MOUNTING PLATE. USE (7) 8-32 X 3/8 FHMS. HOUSING ENDS MAY NEED SANDING TO MEET UP WITH DANCER PANEL COUNTERSINKS.

- 69) SNAP (3) 1/4 TURN LATCH NUTS (PML002) AS07 OVER THE OUTER LIP OF THE POTENTIOMETER HOUSING.

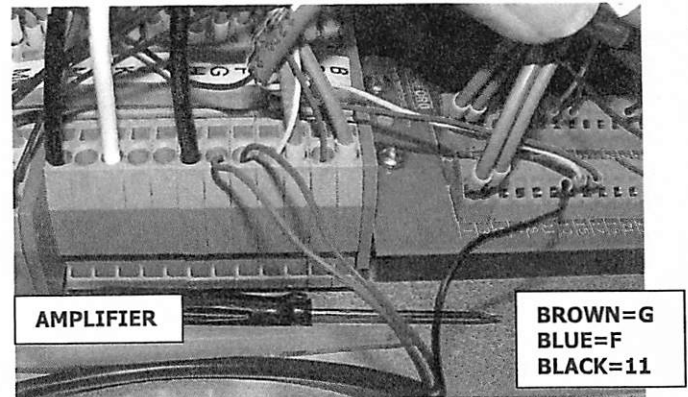


- 70) CRIMP A RED MALE CONNECTOR (PRT330) ON EACH OF THE LOW PROFILE GREEN LIGHT 'W' WIRES. CONNECT THESE MALE ENDS WITH BROWN WIRES #33 AND #34 FROM THE BREAK OUT BOARD.

- 71) TERMINATE BROWN WIRES ON THE POSITIVE DRIVE SWITCH 'EE' FROM THE BREAK OUT BOARD. ON OUTER, LOWER 'COM' POST CONNECT #67. ON THE 'NO' OUTER, MIDDLE POST, BESIDE THE 'COM' CONNECT #15.

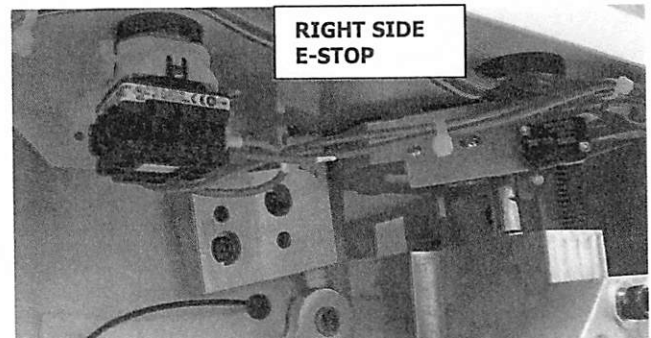


- 72) TERMINATE THE BLUE #61, BLACK #60 AND BROWN #62 WIRES ON THE AMPLIFYING PHOTOELECTRIC SWITCH 'R'. THE NUMBERS ARE INDICATED ON THE WIRING DIAGRAM SHEET 1. BE CERTAIN THE WIRES WILL REACH BETWEEN THE GREEN AND GRAY BREAK OUT BOARDS BEFORE TERMINATING WIRES WITH LIGHT BLUE FERRULES (PRT433) LDW1.



- 73) LOOSEN THE SCREW ON THE GREEN BREAK OUT TERMINAL #11 AND INSERT THE BLACK WIRE #60. TIGHTEN SCREW TO HOLD. ON THE GRAY BREAK OUT TERMINALS USE PLASTIC INSERTION TOOL AND CONNECT BLUE WIRE #61 INTO OUTER 'F' POST. INSERT THE BROWN WIRE #62 INTO THE 'G' POST.

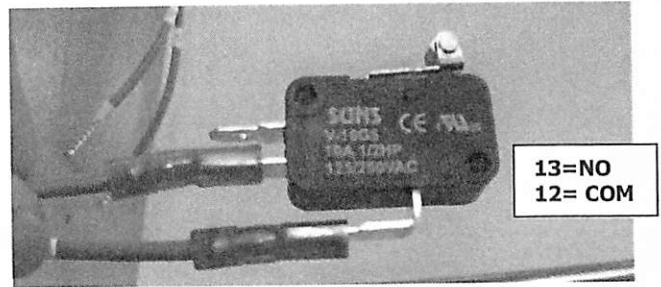
- 74) CONNECT YELLOW FARRULES ON BROWN HARNESS WIRES #10 AND #12 TO THE RIGHT SIDE E-SWITCH 'LL' BY TOUCHSCREEN.



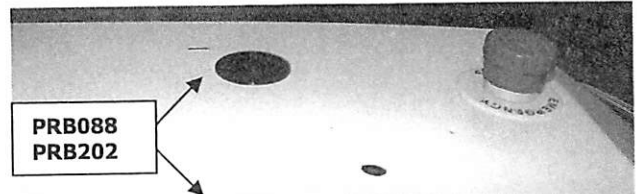
- 75) CONTINUE BROWN #12 FROM THE E-STOP AND #13 FROM THE HARNESS THROUGH THE SMALL SNAP BUSHING

IN THE SIDE PANEL TO THE CHERRY MINI ROLLER SWITCH 'AA'.  
TERMINATE #12 ON THE OFFSET 'COM'  
POST AND #13 ON THE 'NO' POST IN  
THE MIDDLE, CLOSER TO "COM' POST.

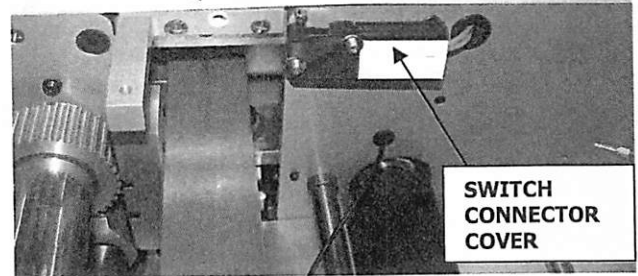
- 76) BEFORE SECURING THE WIRED CHERRY MINI ROLLER SWITCH TO THE SIDE PANEL, ALIGN A SWITCH CONNECTORS COVER (C15 163.4) RACK 24, OVER TERMINALS, WITH THE RACEWAY CLOSING UPWARD. SECURE SWITCH AND COVER TO RIGHT INNER SIDE PANEL WITH (2) 4-40 X 3/4 SHCS AND POP RIVET WASHERS.



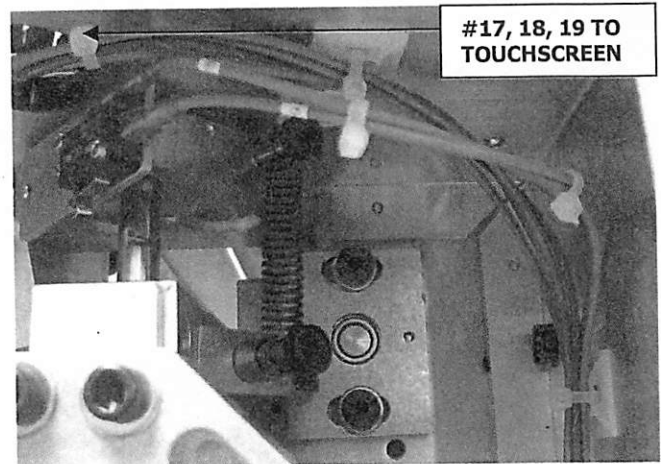
- 77) INSERT A SNAP BUSHING (PRB088) AS09 INTO THE UPPER RIGHT HOUSING. EXIT HARNESS WIRES; THE GREEN GROUND #17, BROWN #18 AND BROWN #19 THROUGH THE SNAP BUSHING FOR TOUCHSCREEN.



- 78) INSERT A 3/16" NYLINER BEARING (PRB202) RACK 1 INTO THE RIGHT AND LEFT STATIONARY HINGE, BETWEEN THE SCREWS.



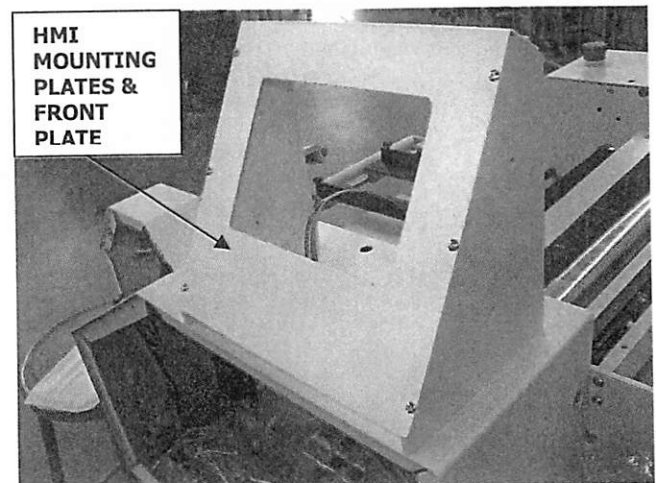
- 79) ADHERE MOUNTING PADS AND CABLE TIES TO THE INNER HOUSING TO HOLD WIRES AND PREVENT STRESSING CONNECTIONS. RUN WIRES DOWN THE INNER REAR HOUSING.



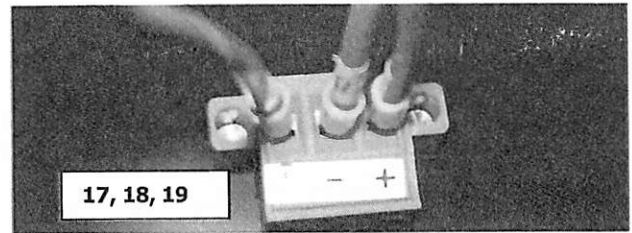
- 80) ORIENT (2) PAINTED UNIVERSAL HMI MOUNTING PLATES (C15 364.4) AS02 TO THE RIGHT TOP HOUSING, WITH THE LONGER ANGLED SIDE OUTWARD TO ACCOMMODATE AN ANGLE FOR THE TOUCHSCREEN. SECURE THE PLATES THROUGH THE HOUSING WITH (3) 6-32 X 1/4 PHMS ON EACH.

- 81) PLACE A PAINTED HMI FRONT PLATE (C15 465.4) AS02 OVER THE HMI MOUNTING PLATES. START (8) 6-32 X 1/4 PHMS THROUGH THE HMI FRONT PLATE INTO THE MOUNTING PLATE, THEN TIGHTEN ALL (8).

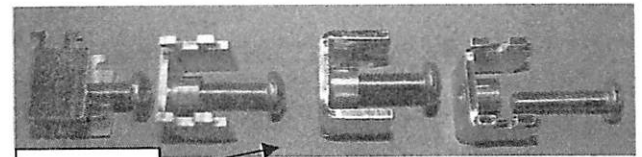
- 82) PREPARE A PARKER 6" TOUCHSCREEN (PRC2015) OFFICE. FROM THE TOUCHSCREEN HARDWARE BAG REMOVE THE GREEN SCREW



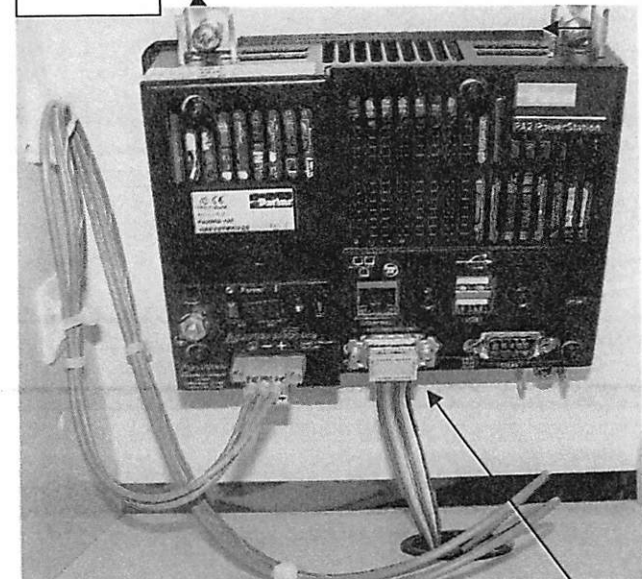
TERMINAL. WIRE THE GREEN TERMINAL BLOCK 'GG' BY INSERTING FERRULE CONNECTORS AS FOLLOWS: #17 GREEN GROUND INTO THE GROUND POSITION. INSERT #18 INTO THE MIDDLE - NEGATIVE POSITION AND #19 IN THE END + POSITIVE POSITION. TIGHTEN SCREWS.



- 83) FROM THE HARDWARE BAG, THREAD THE (4) 10-32 X 1 PHMS INTO THE MOUNTING BRACKETS, FROM THE CHANNEL SIDE. THE BRACKETS HAVE (2) SETS OF TEETH WHICH WILL ALIGN WITH THE TRACKS ALONG RECESSED SIDE OF THE TOUCHSCREEN. SLIDE IN THE MOUNTING BRACKETS AND PUSH FULLY OUTWARD.

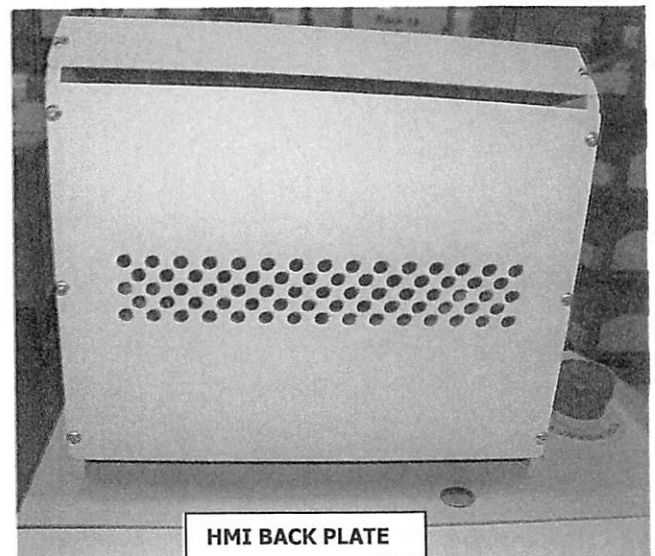


- 84) PLUG THE GREEN, WIRED TERMINAL INTO THE RECEIVER ON THE TOUCHSCREEN. THE TERMINAL ONLY FITS ONE WAY. SNUG THE (2) END SCREWS ON THE GREEN TERMINAL TO SECURE WITH A SMALL SCREWDRIVER. SECURE THE COMMUNICATION CABLE (PRC2008) LDW3 INTO THE RECEIVER CLOSER TO THE GREEN TERMINAL BLOCK. SECURE COMMUNICATION CABLE WITH (2) 4-40 X 1/4 PHMS.



- 85) INSERT TOUCHSCREEN UNIT INTO HOUSING OPENING. SNUG THE WIRED MOUNTING BRACKETS ONTO THE HOUSING. ADHERE MOUNTING PADS, CABLE TIE TOUCHSCREEN WIRES. WIRES AND CABLE CONTINUE THROUGH SNAP BUSHING.

- 86) SECURE THE HMI BACK PLATE (C15 366.4) AS02 ALIGNED WITH THE PERFORATIONS HORIZONTAL, TO THE REAR OF THE TOUCHSCREEN. THREAD (6) 6-32 X 1/4 PHMS INTO THE HMI MOUNTING PLATES. THERE IS A GAP BETWEEN THE UPPER HMI FRONT PLATE AND THE HMI BACK PLATE.





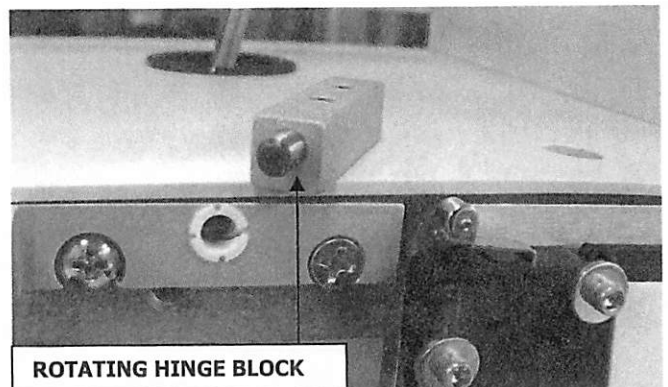
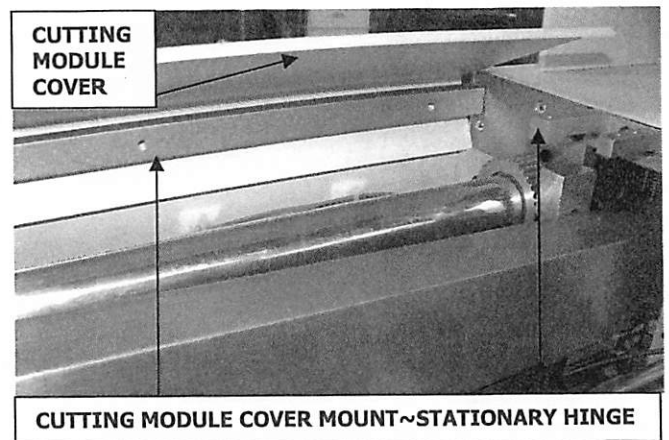
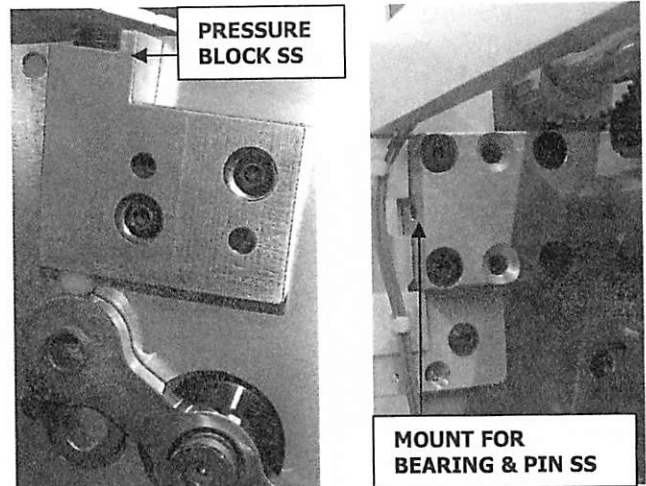
87) BEFORE ADDING THE SAFETY SHIELD ASSEMBLY, TEST AND ADJUST THE UP AND DOWN BLADE MOVEMENT. MANUALLY LIFT THE BLADE HOLDING THE REAR RECTANGULAR POCKETS. THE BLADES MUST CLEAR EACH OTHER WHEN MOVING UP AND DOWN.

88) TEST THE BLADE CUTTING ABILITY. USE 1.7 MIL UNLAMINATED FILM LOADED BETWEEN ROLLS WITH THE USE OF A SHEET OF PAPER AS A CARRIER. A SECOND PERSON CAN HOLD THE TOP BLADE UP WHILE LOADING FILM. MANUALLY ADJUST THE UPPER 'PRESSURE BLOCK' SET SCREW TO MOVE BLADES APART. ADJUST THE 'MOUNT FOR BEARING AND PIN' SET SCREW TO MOVE TOP BLADE FORWARD.

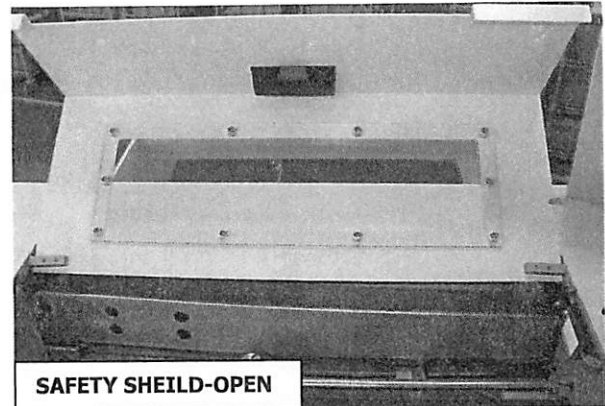
89) AFTER YOU ATTAIN A COMPLETE, SMOOTH CUT ACROSS THE FILM, SECURE THE PAINTED CUTTING MODULE ASSEMBLY COVER (C15 075.4) AS02. THIS COVER FITS OVER THE CUTTING MODULE AY COVER MOUNT IN THE UPPER REAR AND THE RIGHT AND LEFT STATIONARY HINGES. START (6) 10-32 X 3/8 PH TORX AND TIGHTEN WITH T25 TORX WRENCH.

90) PREPARE TO SECURE THE SAFETY SHIELD ASSEMBLY. INSERT THE 3/16 X 1/2 DOWEL PIN THAT IS PRESSED IN A ROTATING HINGE BLOCK INTO THE RIGHT AND LEFT NYLINER BUSHING LOCATED IN THE RIGHT AND LEFT STATIONARY HINGE BLOCK. ALIGN THE ROTATING HINGE BLOCK THREADS UPWARD, WITH THE DOWEL CLOSER TO THE TOP.

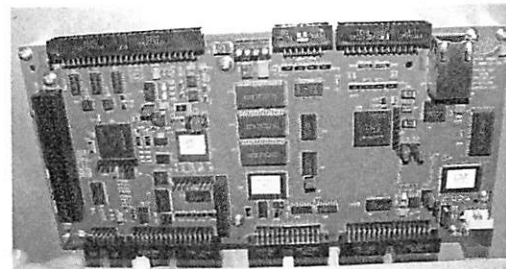
91) WITH THE SAFETY SHIELD WINDOW UPWARD, SET THE SAFETY SHIELD OVER THE ROTATING HINGE BLOCKS. START THE (4) 8-32 X 3/8 PH TORX AND TIGHTEN THE SAFETY SHIELD TO THE ROTATING HINGE BLOCKS WITH A T15 TORX WRENCH.



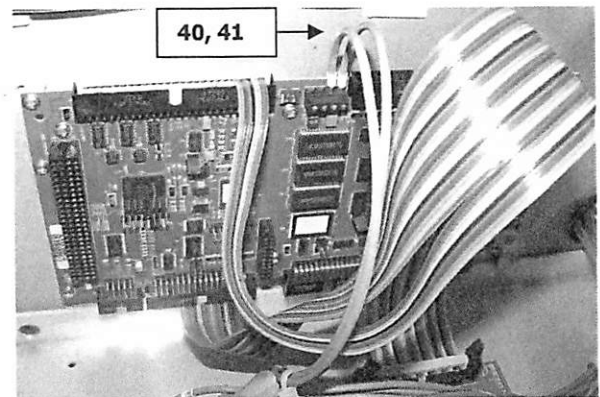
92) LIFT THE SAFETY SHIELD UP AND DOWN SEVERAL TIMES TO BE CERTAIN IT DOES NOT CATCH ON THE FRONT OF THE CUTTING MODULE COVER. ALSO BE CERTAIN IT DOES NOT SCRATCH EITHER OF THE SIDE PANELS WHEN IT IS CLOSED.



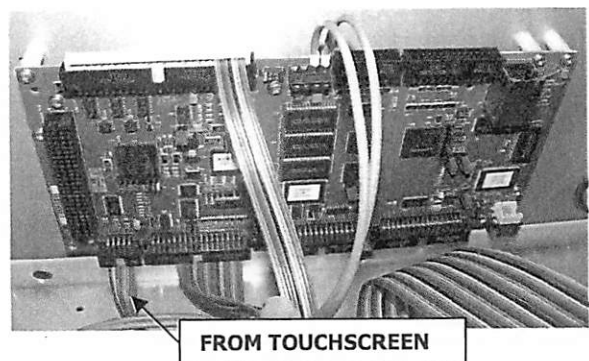
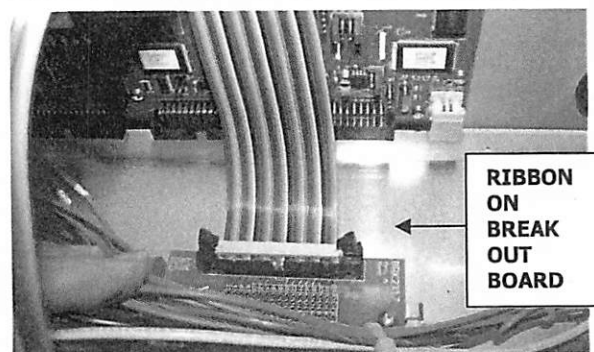
93) SECURE THE DELTA TAU CLIPPER CONTROLLER (PRC3871) OFFICE TO THE NYLON STANDOFFS ON THE RIGHT SIDE PANEL. ORIENT THE CLIPPER CONTROLLER WITH THE FOUR POST TERMINAL BLOCK UPWARD. USE (11) 4-40 X 3/8 PHMS TO SECURE.



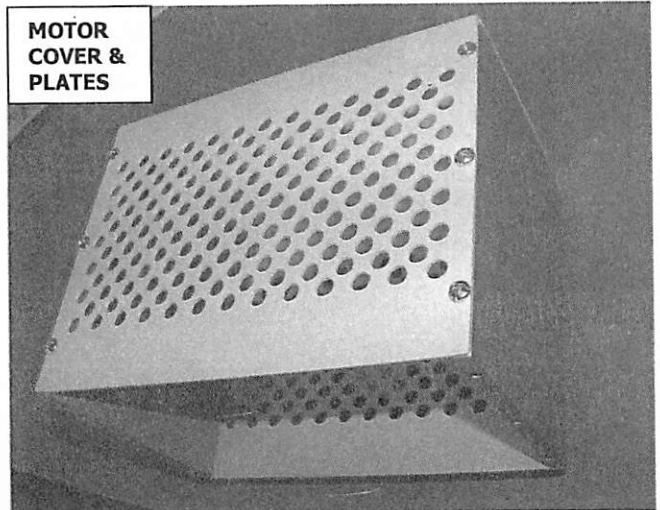
94) FROM BOTTOM HOUSING TERMINALS, INSERT THE TRIMMED FERRULE ON #40 BROWN WIRE INTO THE 3<sup>RD</sup> POST FROM THE LEFT/FRONT. INSERT THE TRIMMED FERRULE ON #41 BROWN WIRE INTO THE END POST ON THE RIGHT/REAR. TIGHTEN TERMINALS WITH SMALL SCREWDRIVER.



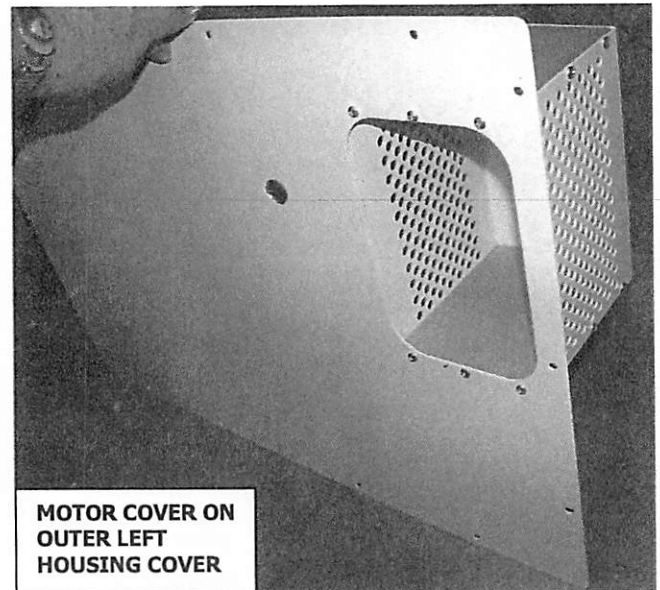
95) FROM THE HARNESS BAG TAKE THE RIBBON CABLE THAT HAS ONE END SPLIT. ALIGN KEYWAY AND PRESS THE COMPLETE UNSLPIT END ONTO THE INNER TERMINALS OF THE BREAK OUT BOARD ON BOTTOM HOUSING. THE SMALLER SPLIT END PRESSES ONTO THE UPPER LEFT/FRONT DELTA TAU TERMINALS. THE LARGER SPLIT RIBBON PRESSES ONTO THE LOWER LEFT/FRONT OF THE DELTA TAU TERMINALS. THE COMMUNICATION CABLE FROM TOUCHSCREEN PRESSES ONTO SMALLER LOWER LEFT/FRONT TERMINAL POSTS.



- 96) SECURE (2) MOTOR COVER MOUNTING PLATES (C15 272.4) RACK 24 TO THE ENDS OF A PAINTED PERFORATED MOTOR COVER (C15 273.4) AS02. FIT THE MOUNTING PLATES INTO THE MOTOR COVER ENDS. USE (16) 6-32 X 1/4 PHMS. SET ASIDE UNTIL AFTER C15 HAS BEEN TESTED.



- 97) SECURE THE MOTOR COVER ASSEMBLY TO THE OUTSIDE OF THE LEFT OUTSIDE HOUSING COVER (C15 171.4) AS02. START (6) 6-32 X 1/4 PHMS THROUGH THE INNER HOUSING COVER INTO THE MOTOR COVER MOUNTING PLATE THREADS. THEN TIGHTEN ALL SCREWS. SET ASIDE UNTIL AFTER THE C15 HAS BEEN TESTED.

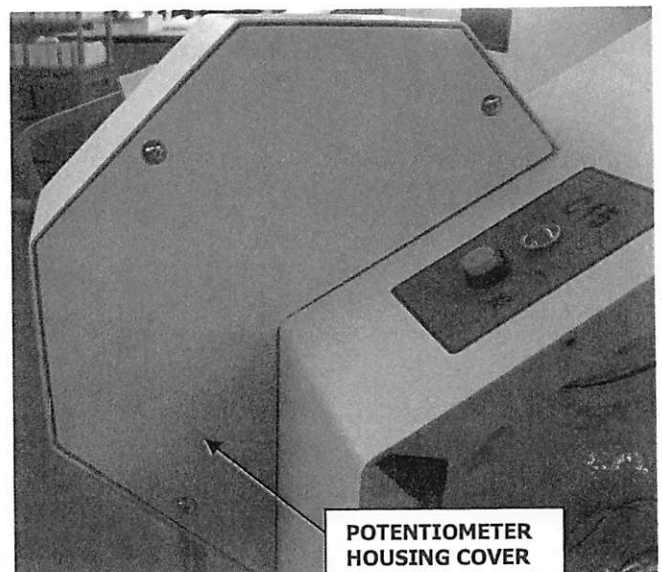
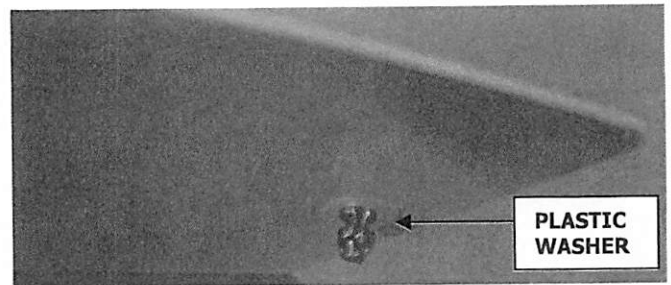
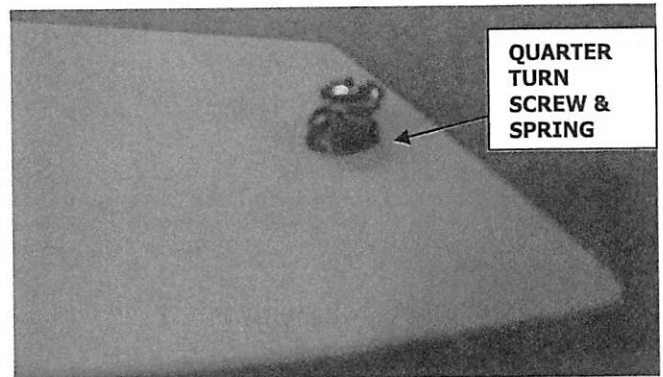
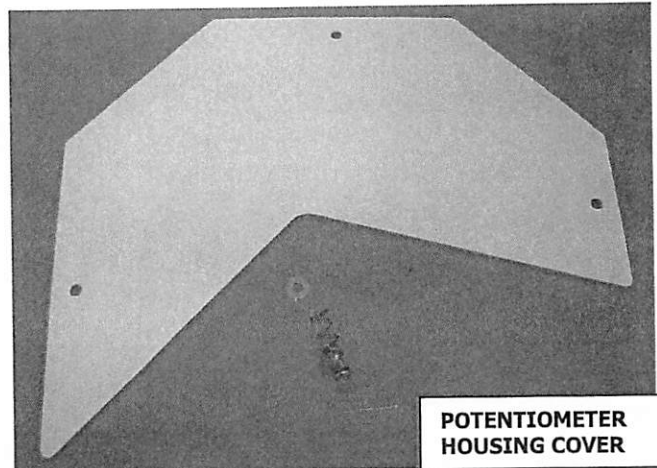


- 98) PEEL OFF AND DISCARD THE PROTECTIVE COVERING ON A WINDOW SAFETY SHIELD (C15 077.4) AS02. CLEAN BOTH SIDES OF THE WINDOW. SECURE THE WINDOW SAFETY SHIELD TO A PAINTED UNIVERSAL EXIT CHUTE SAFETY DOOR (C15 368.4) AS02. INSERT (10) 10-32 X 3/8 PH TORX THROUGH THE SAFETY DOOR INTO THE WINDOW SAFETY SHIELD. THREAD ON (10) NYLON INSERT NUTS. TIGHTEN THE NYLON INSERT NUTS WITH A T25 TORX ALLEN WRENCH. BE CAREFUL YOU DO NOT OVER TIGHTEN AND CRACK THE WINDOW.



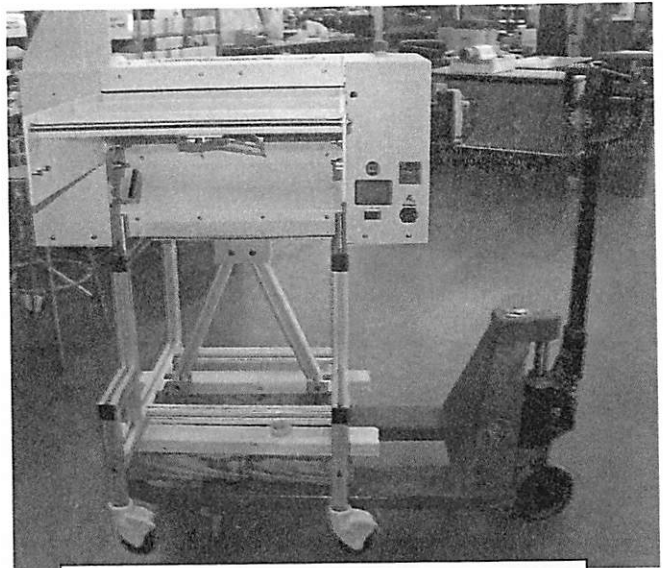
# C15 POTENTIOMETER HOUSING COVER ASSEMBLY

- 1) **ALIGN A POTENTIOMETER HOUSING COVER (C15 286.4) AS02 WITH THE POTENTIOMETER HOUSING TO CHECK POSITIONING AND OPENINGS WITH THE FASTENER NUTS.**
- 2) **FROM THE QUARTER TURN DOOR LATCH KIT (PML002) AS07 PLACE THE SMALLER END OF THE LATCH KIT SPRING ON A QUARTER TURN FASTENER SCREW. INSERT THE QUARTER TURN FASTENER SCREW WITH SPRING INTO THE POTENTIOMETER HOUSING COVER FROM THE OUTER COVER THROUGH THE OPENING. DEPRESS THE SPRING FULLY AND FROM THE INNER HOUSING COVER SLIDE THE PLASTIC WASHER OVER THE THREADS OF THE QUARTER TURN FASTENER SCREW, UNTIL THE WASHER RESTS ON SHAFT PAST THREADS.**
- 3) **SLIDE THE POTENTIOMETER HOUSING COVER INTO PLACE AND SECURE TO THE QUARTER TURN NUTS ON THE POTENTIOMETER HOUSING.**

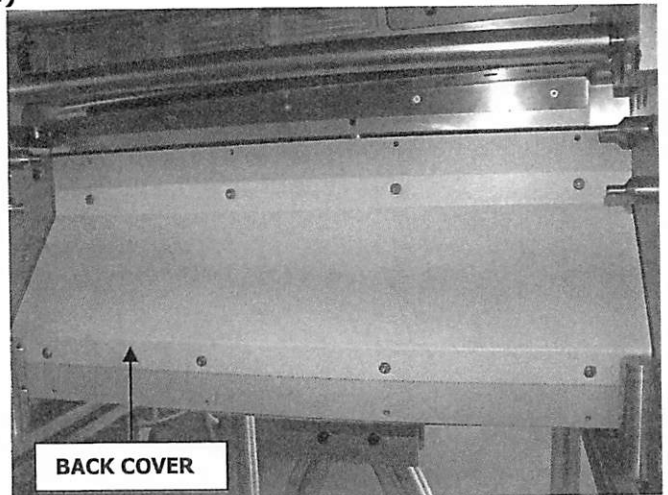


# C15 HOUSING & LABEL COMPLETION

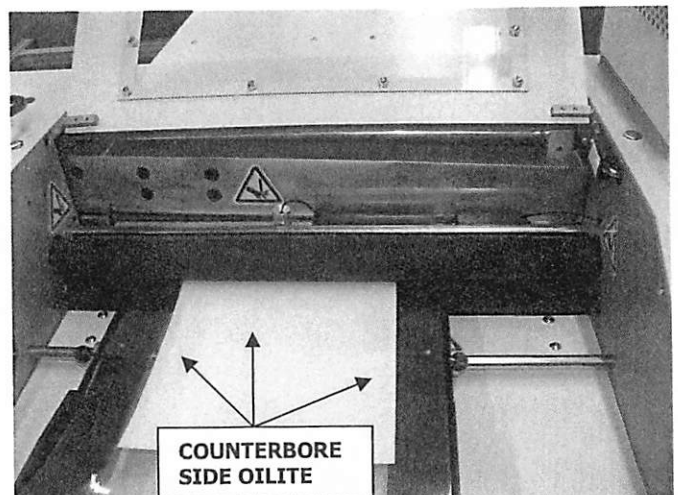
- 1) AFTER PROGRAMMING AND TESTING THE MOTOR AND SAFETY CIRCUIT FUNCTIONS, FINAL HOUSINGS AND LABELS CAN BE ADDED.
- 2) TO FACILITATE WORKING UNDER THE EXIT CHUTE, A LIFT WITH WOODEN BLOCKS CAN BE USED TO RAISE THE C15.
- 3) REMOVE THE (2)  $\frac{1}{4}$ -20 FSH HOLDING THE BRACKET FOR THE CHERRY MINI ROLLER SAFETY SWITCH LOCATED ON THE INNER RIGHT SIDE PANEL. GENTLY MOVE THE SAFETY SWITCH ASIDE WHILE ALIGNING THE BACK COVER (C15 076.4) AS02. THE LOWER BACK COVER FITS BETWEEN THE INNER MOUNTING FEET SHAFT AND THE OUTER SPACER BAR. SECURE THE BACK COVER TO THE OUTER SPACER BARS THROUGH CLEARANCE HOLES. USE (8) 10-32 X  $\frac{3}{8}$  BH TORX. REPLACE THE CHERRY MINI ROLLER SAFETY SWITCH BRACKET TO THE SIDE PANEL.
- 4) LIFT THE SAFETY SHIELD AND ADHERE (3) YELLOW CUTTING OF FINGERS OR HAND/STRAIGHT BLADE (LAB53) AS08. LOCATE ONE LABEL ON THE INNER RIGHT SIDE PANEL IN FRONT OF THE SENSOR GROMMET, DOWN ABOUT  $1\frac{1}{2}$ " FROM THE SIDE PANEL LIP. ON THE INNER LEFT SIDE PANEL ADHERE A SECOND LABEL ABOVE THE RUBBER ROLLS, DOWN  $1\frac{1}{2}$ " FROM SIDE PANEL LIP. A THIRD LABEL IS ADHERED ON THE TOP BLADE HOLDER, LEFT OF THE SENSOR HOLDER.



RAISE C15 TO WORK UNDER SAFETY CHUTE

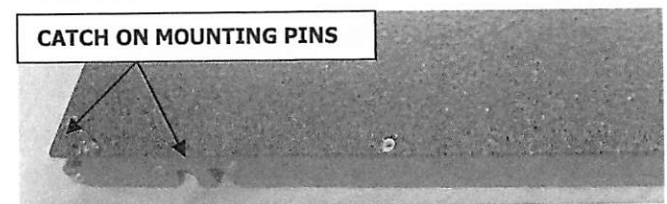


BACK COVER

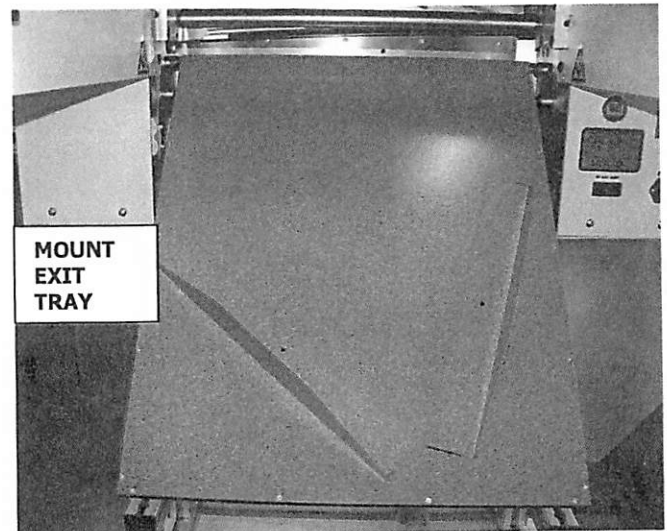


COUNTERBORE  
SIDE OILITE

- 5) TWO MORE YELLOW CUTTING OF FINGERS OR HAND/STRAIGHT BLADE (LAB53) AS08 LABELS ARE ADHERED TO THE INNER, LOWER SAFETY DOOR MOUNTING PLATES ON THE EXIT CHUTE ASSEMBLY. THERE IS ONE LABEL ON EACH MOUNTING PLATE.



- 6) INSERT THE ASSEMBLED EXIT TRAY FROM THE REAR, FITTING OVER THE EXIT CHUTE MOUNTING PINS. THE LIP OF THE EXIT TRAY FITS ON THE UPPER EXIT CHUTE MOUNTING PIN. LOWER THE EXIT TRAY UNTIL IT CATCHES ON THE ADJUSTMENT BAR NOTCH. YOU MUST HEAR THE CHERRY MINI ROLLER SAFETY SWITCH 'CLICK' INTO ACTIVATION WHEN THE EXIT TRAY CATCHES, OR THE SAFETY SWITCH MUST BE ADJUSTED UNTIL IT DOES 'CLICK.'

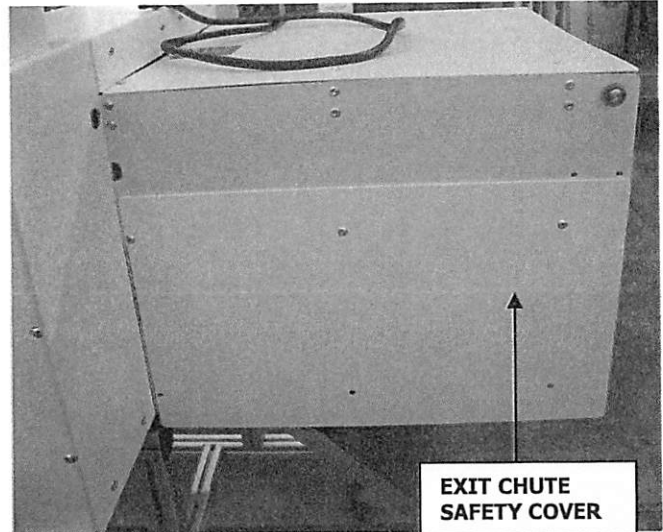


- 7) SECURE EXIT CHUTE SAFETY DOOR ASSEMBLY TO THE MOUNT FOR EXIT CHUTE SAFETY DOOR, LOCATED BETWEEN THE OILITE BEARINGS ON THE UPPER SAFETY DOOR MOUNTING PLATES. FIT UPPER SAFETY DOOR BETWEEN INNER, LOWER SPACERS TO ALLOW SWING. USE (4) 10-32 X 3/8 BH TORX.

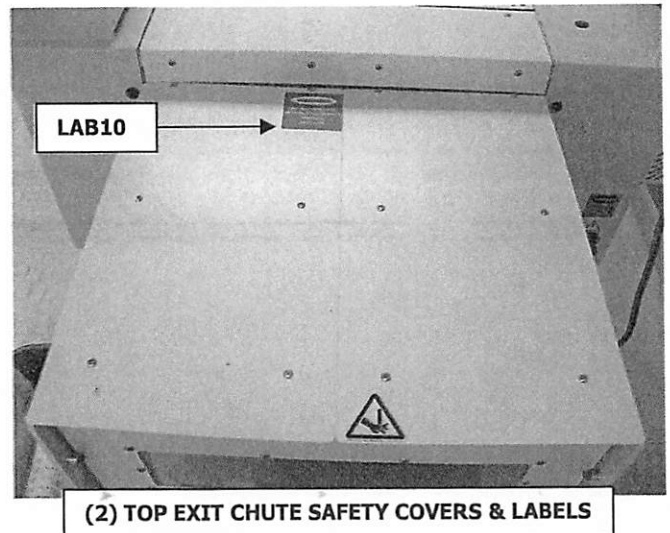
- 8) CENTER ON THE LOWER EXIT CHUTE SAFETY DOOR, ABOUT 10 1/4" FROM SIDES, A YELLOW CUTTING OF FINGERS OR HAND LABEL (LAB53) AS08.



- 9) ON THE LOWER, OUTER SAFETY DOOR MOUNTING PLATES, SECURE A RIGHT AND LEFT SIDE EXIT CHUTE SAFETY COVER (C15 363.4) AS02. USE (3) 10-32 X 3/8 BH TORX THROUGH THE CLEARANCE HOLES INTO THE MOUNTING PLATE THREADS.



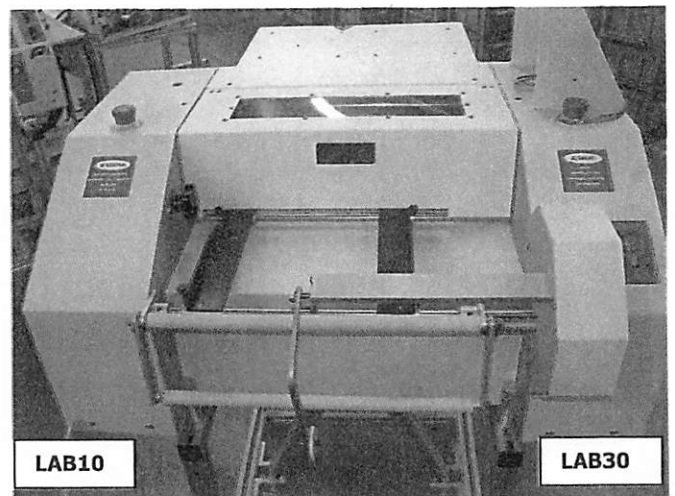
- 10) OVER THE TOP OF THE EXIT CHUTE ASSEMBLY ARE (2) MORE EXIT CHUTE SAFETY COVERS. ALIGN THE COVERS ON THE UPPER MOUNTING PLATE LIPS AND START ALL SCREWS BEFORE TIGHTENING. USE (6) 10-32 X 3/8 BH TORX ON EACH TOP EXIT CHUTE SAFETY COVER.



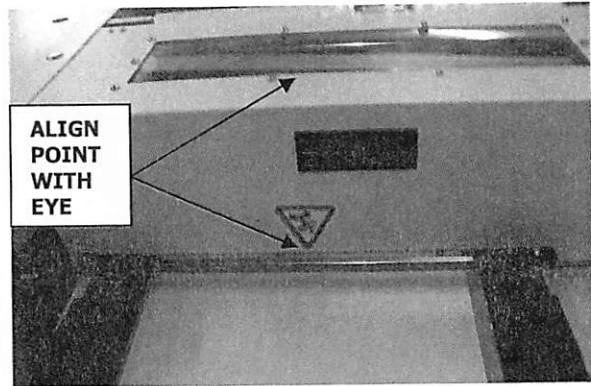
- 11) ADHERE A RED 3"X3" WARNING LABEL, SAFETY SHIELD (LAB10) AS08 ON THE INNER, LEFT TOP EXIT CHUTE SAFETY COVER. ADHERE A YELLOW CUTTING OF FINGERS OR HAND/STRAIGHT BLADE (LAB53) AS08 TO THE OUTER, RIGHT TOP EXIT CHUTE SAFETY COVER.

- 12) ON THE LEFT FRONT HOUSING MEASURE AND CENTER ANOTHER RED WARNING LABEL, SAFETY SHIELD (LAB10), ABOUT 2 1/2" DOWN FROM THE BREAK.

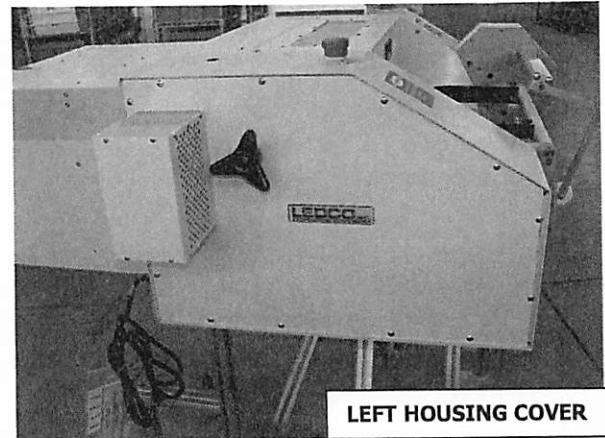
- 13) ON THE RIGHT FRONT HOUSING MEASURE AND CENTER AN ALWAYS READ INSTRUCTION MANUAL LABEL (LAB30) AS08. THIS LABEL IS DIRECTLY ACROSS FROM THE LABEL ON THE LEFT HOUSING.



- 14) A YELLOW ARM ENTANGLEMENT LABEL (LAB51) AS08 IS ADHERED WITH THE POINT BY 'HAND THROUGH ROLLERS' FACING DOWNWARD, TO THE FRONT OF THE SAFETY SHIELD, BELOW THE POCKET HANDLE. **\*\*ALIGN THE LABEL WITH THE SENSOR EYE TO INDICATE CENTER OF FILM AND PAPER.**



- 15) SECURE THE LEFT OUTSIDE HOUSING COVER (C15 171.4) AS02 TO LEFT SIDE PANEL. ADJUSTMENTS TO LINE UP SCREW THREADS ARE MADE BY LOOSENING BACK OR FRONT UPPER HOUSING BRACKETS. USE (13) 8-32 X 1/4 THMS TO SECURE HOUSING COVER.

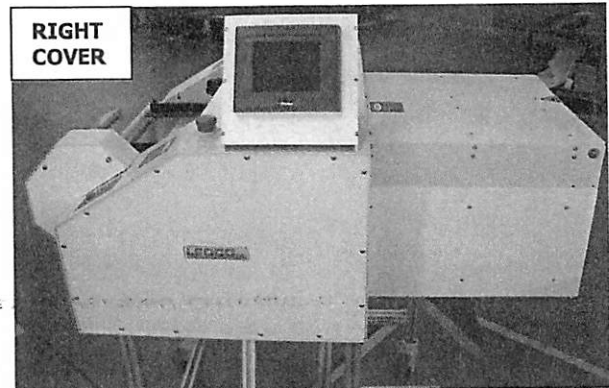


LEFT HOUSING COVER

- 16) SECURE A BLACK CAM SHAFT HANDLE (PRH140) AS02 WITH A 1/4-20 X 3/8 SET SCREW TO THE CAM SHAFT RETAINING LOCATION.

- 17) CENTER AND ADHERE A DOMED LEDCO EMBLEM (LAB05A) AS08 TO THE OUTER OUTSIDE HOUSING COVER.

- 18) SECURE THE RIGHT OUTSIDE HOUSING COVER (C15 169.4) AS02 TO RIGHT HOUSING. ADJUSTMENTS ARE MADE THE SAME WAY AS LEFT SIDE. USE (13) 8-32 X 1/4 THMS TO SECURE.

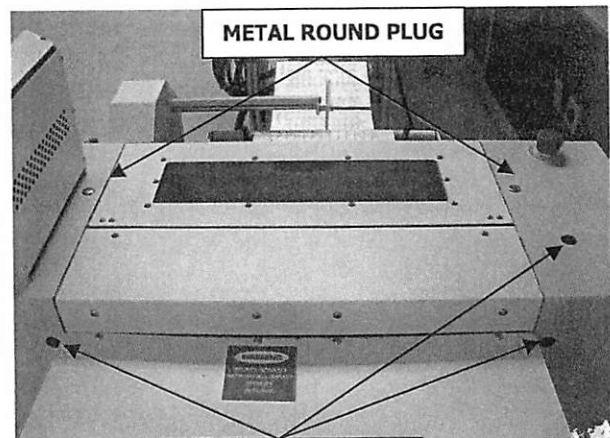


RIGHT COVER

- 19) CENTER AND ADHERE A DOMED LEDCO EMBLEM (LAB05A) AS08 TO THE RIGHT OUTSIDE HOUSING COVER.

- 20) AFTER TESTING AND CUTTING PRESSURES ARE SET, FILL THE TOP HOUSING OPENINGS USED FOR PRESSURE SETTING AND PLUGS.

- 21) ON THE TOP OF THE RIGHT AND LEFT HOUSING, INSERT A METAL ROUND PLUG (PRH213) RACK 24 TO COVER THE OPENING FOR THE PRESSURE BLOCK SET SCREW.



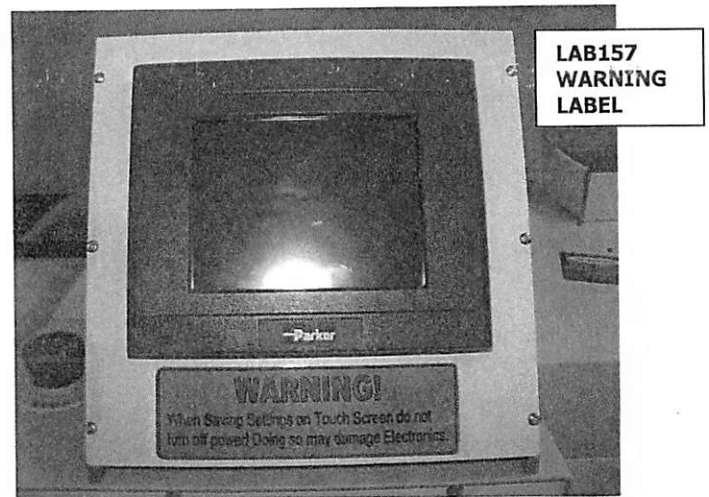
METAL ROUND PLUG

- 22) ON THE TOP OF THE LEFT HOUSING AND ON THE UPPER REAR OF THE RIGHT AND LEFT HOUSING, INSERT A 5/8" HOLE PLUG-BLACK PASTIC (PRH168) AS09.

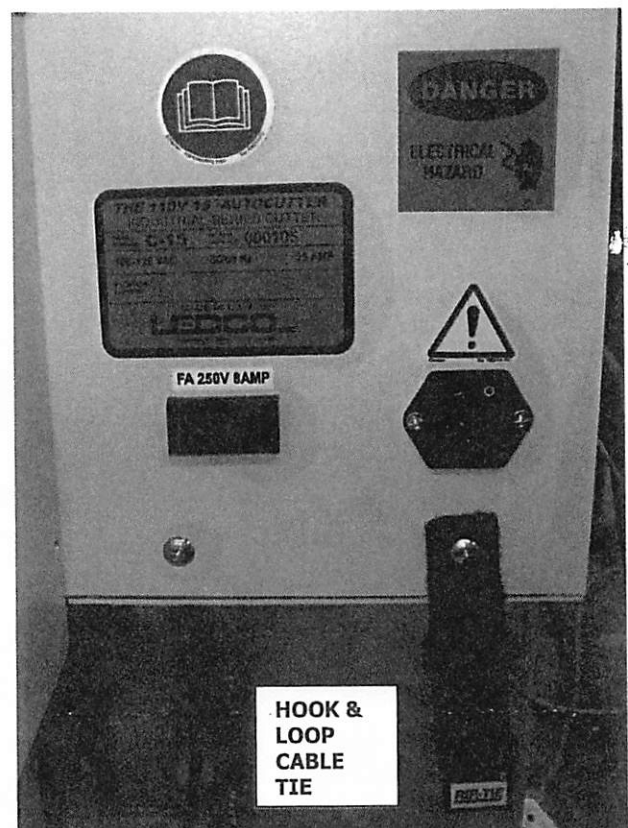
(3) 5/8" HOLE PLUG



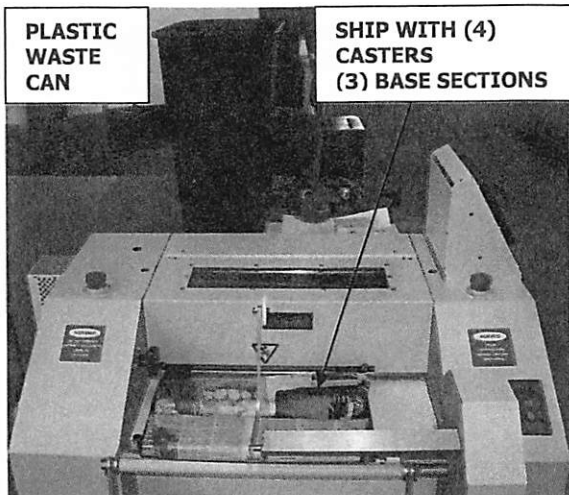
- 23) UNDER THE TOUCHSCREEN CENTER THE GRAY/RED C15 & C30 WARNING LABEL (LAB157) AS08.
- 24) ON THE REAR OF THE LEFT HOUSING, UNDER THE POWER CORD RECEPTACLE, REMOVE THE LOWER, OUTER 10-32 X 3/8 TRUSSHEAD, WHICH HAS A #10 KEPS NUT ON THE INSIDE HOLDING A TOP AND BOTTOM HOUSING BRACE BRACKET. ADD A HOOK AND LOOP CABLE TIE (PRC309) LOFT 6 TO THIS LOCATION. USE A 10-32 X 1/2 THMS AND DISCARD THE SCREW YOU REMOVED. USE THE #10 KEPS NUT ON THE INSIDE. HOLD HOOK AND LOOP CABLE TIE WHEN TIGHTENING, SO IT HANGS STRAIGHT.
- 25) THE 9' 10" LONG POWER CORD (PRC308) LOFT 6 IS SECURED USING THE HOOK AND LOOP CABLE TIE.
- 26) PREPARE (4) 1/2-13 X 1 1/2 STEM CASTERS (PRC210) AS14 EACH WITH A 1/2 USS FLAT WASHER AND A 1/2-13 HEX NUT THREADED ON CASTER STEM. THE CASTERS SHIP WITH C-15.
- 27) ADD (3) BASE SECTIONS (H385 099.4) AS06 TO THE FEED TABLE SECTION.
- 28) TEST AND SHIP WITH A PLASTIC WASTE CAN (C15 159.4) AS02.



LAB157  
WARNING  
LABEL

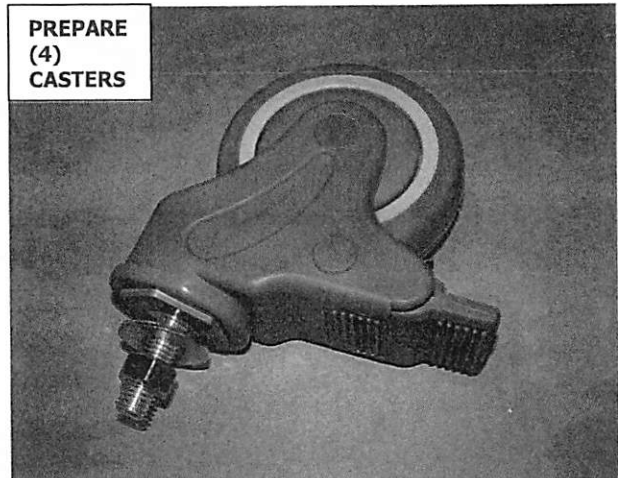


HOOK &  
LOOP  
CABLE  
TIE



PLASTIC  
WASTE  
CAN

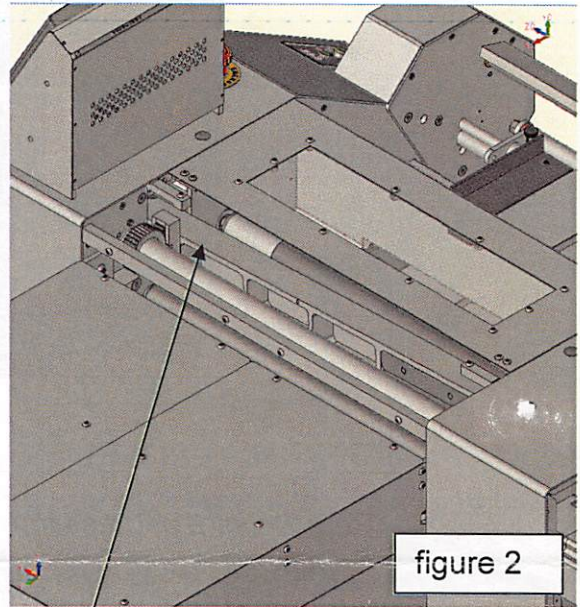
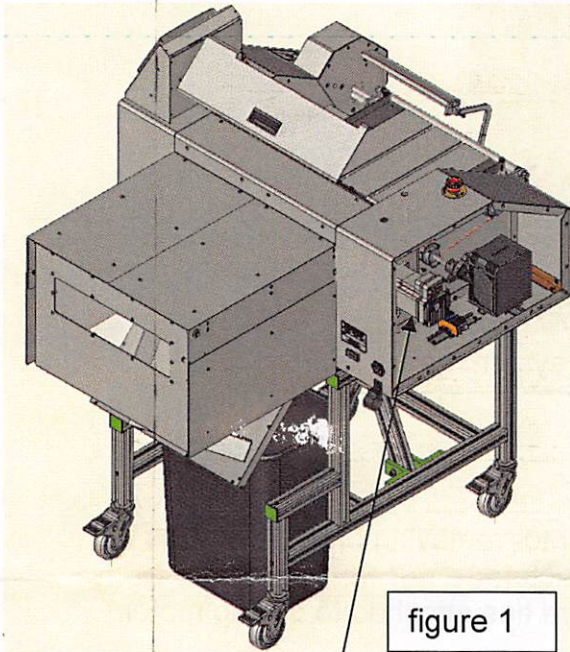
SHIP WITH (4)  
CASTERS  
(3) BASE SECTIONS



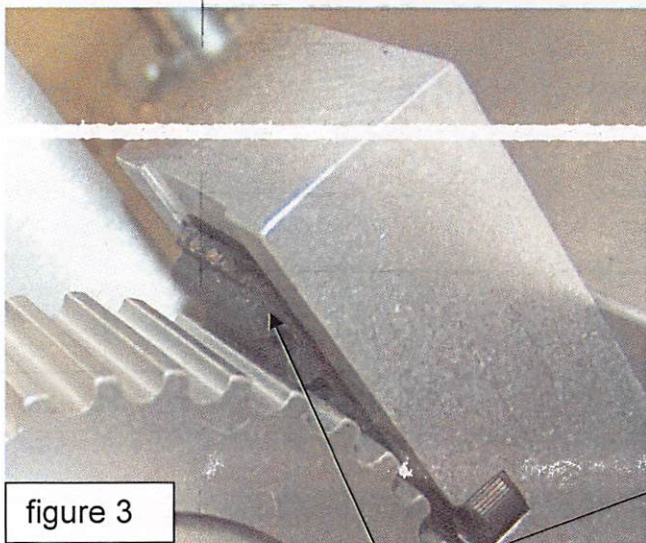
PREPARE  
(4)  
CASTERS

## Retightening of set screws in cutting motor drive system & repositioning of Rack & Pinion cutting Mechanism

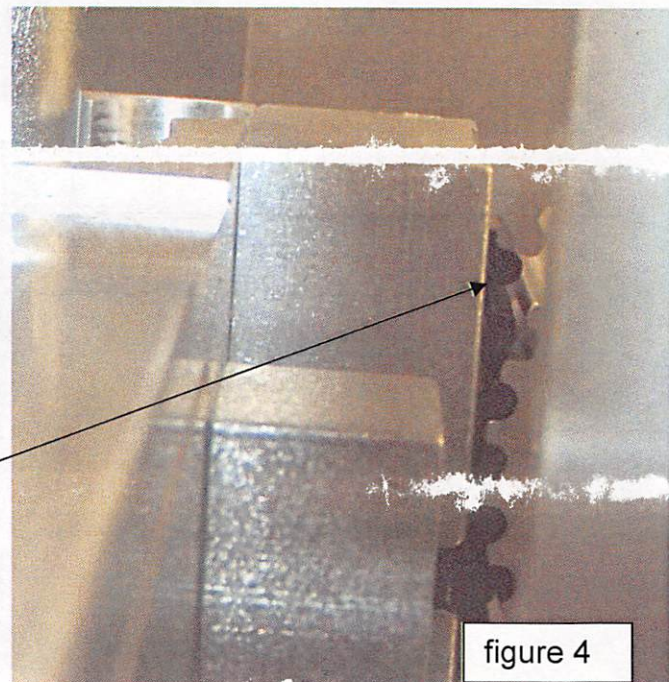
- 1) Unplug system from power outlet.
- 2) Remove Right & Left Housing Covers & Cutting Module cover exposing Cutting Motor and Cutting Module (fig. 1 & 2).
- 3) With Cutting Module in the down position verify Rack & Pinions are in the correct position by **verifying the controls side and motor side Rack & Pinions have the same tooth count from top of racks** (use camera on phone or small mirror for verification) (fig. 3 & 4)



Housing covers removed, Cutting Motor & Cutting Module exposed



rack teeth



- 4) Test for play in cutting system gear by moving gear up and down, **if no play in gear and Rack & Pinions are OK do not proceed, cutting system is correct.** If play in gear, proceed to step 5 -7 if no play in gear but racks positioned incorrectly proceed to step 6 & 8-10 (fig. 5).

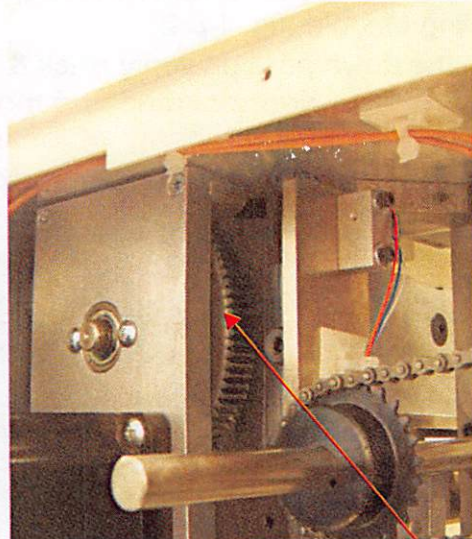
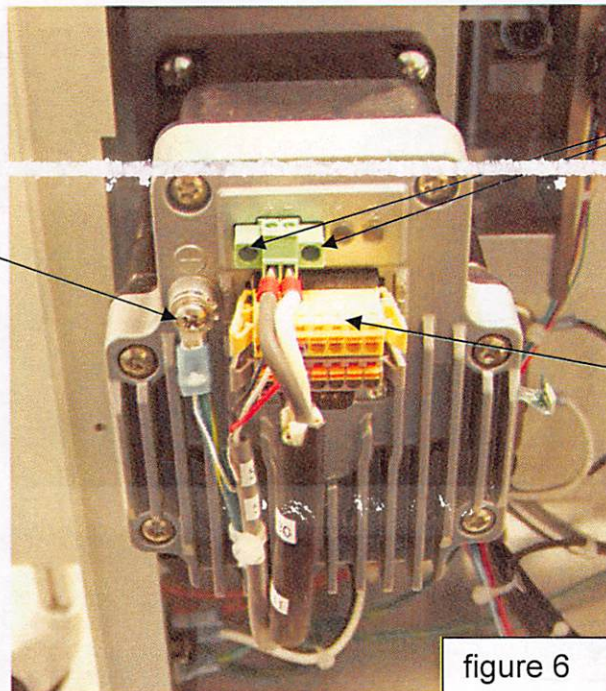


figure 5

Cutting system gear

- 5) Remove wire harness from cutting motor removing only the screws indicated in figure 6 and yellow connector, **do not remove wires from connectors**, remove any harness wire ties attached to cutting motor (figure 6)



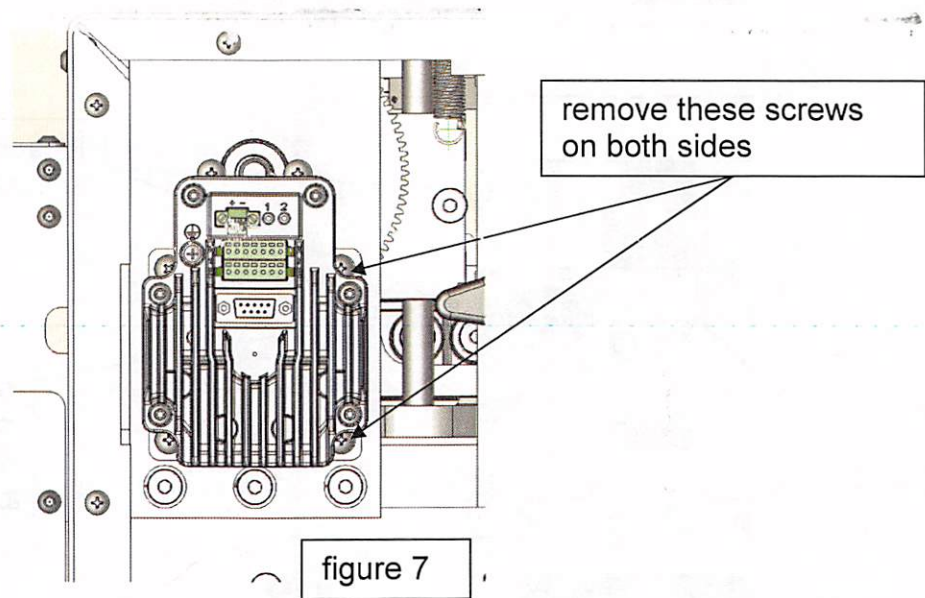
remove ground screw

remove these screws

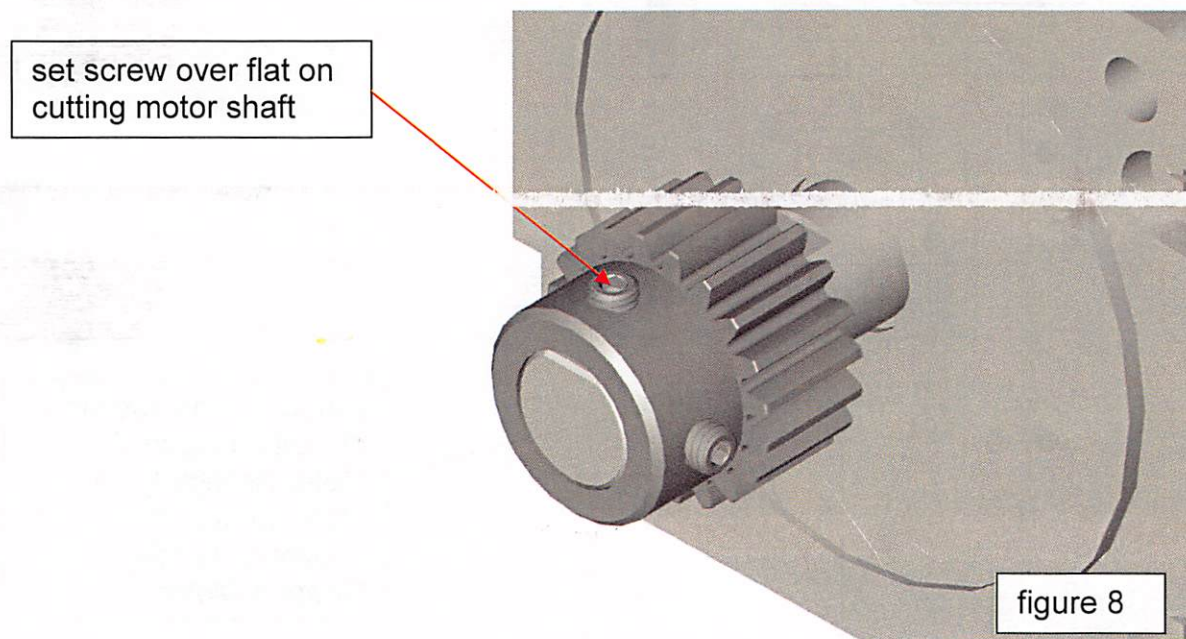
remove yellow connector

figure 6

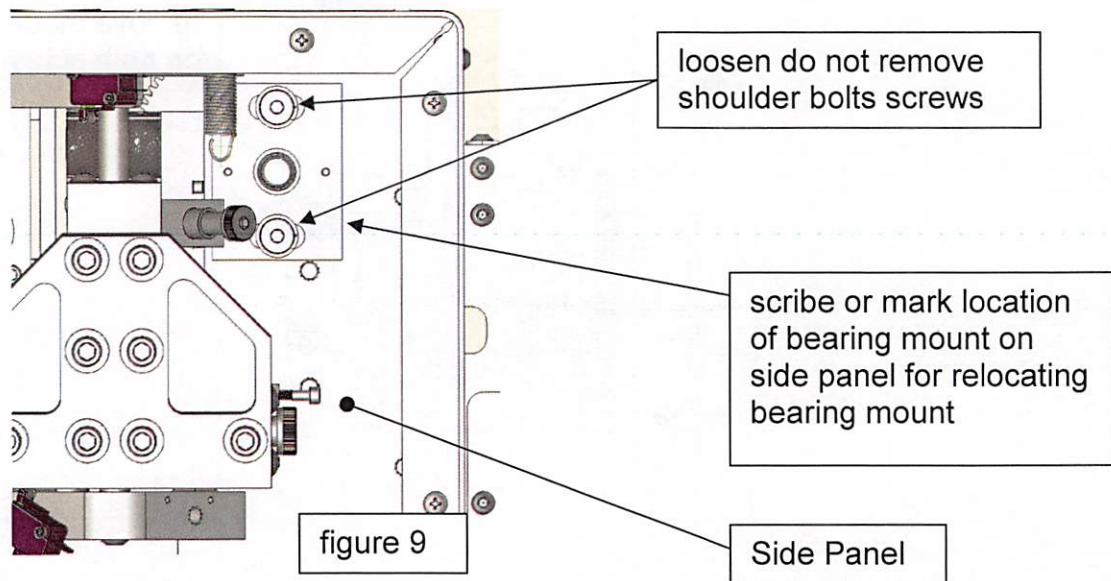
- 6) Remove cutting motor by removing 4 screws as indicated (figure 7).



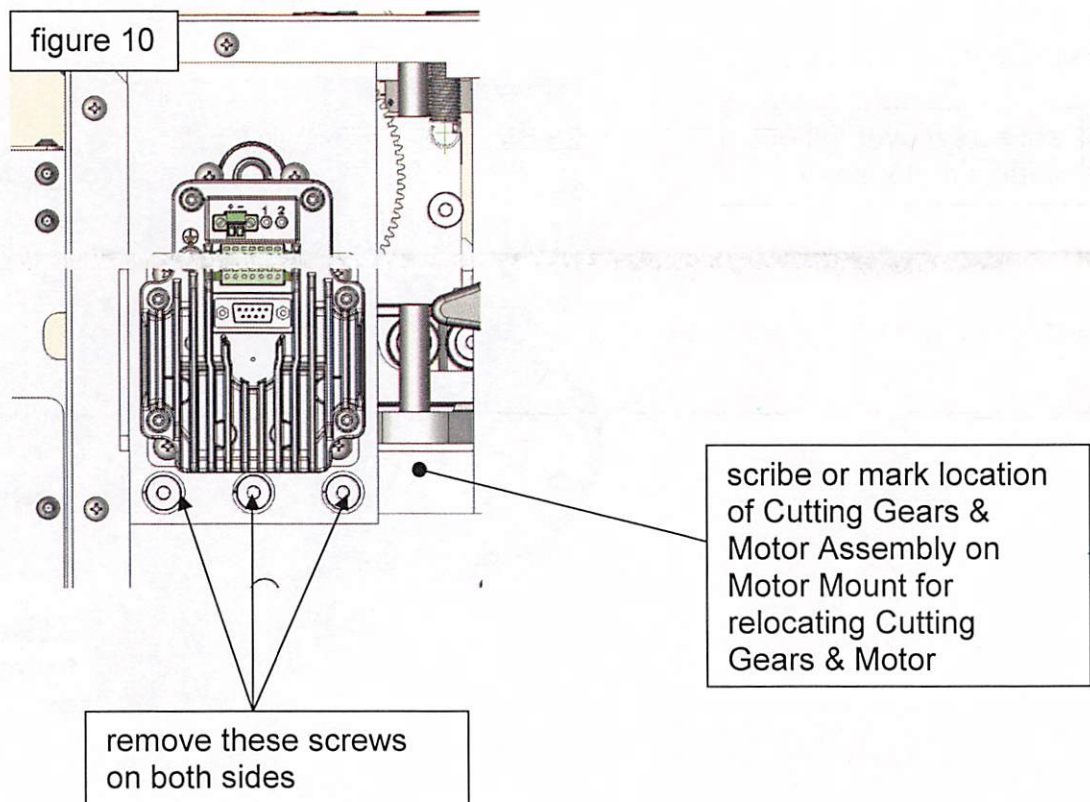
- 7) Inspect and tighten set screws, **Note: one set screw must be located over flat on motor shaft to operate correctly** (figure 8). Replace cutting motor and test system, if system still not operating correctly proceed to step 5, 8-13.



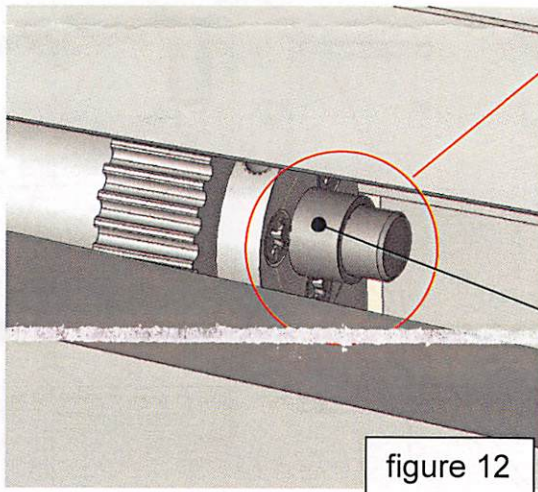
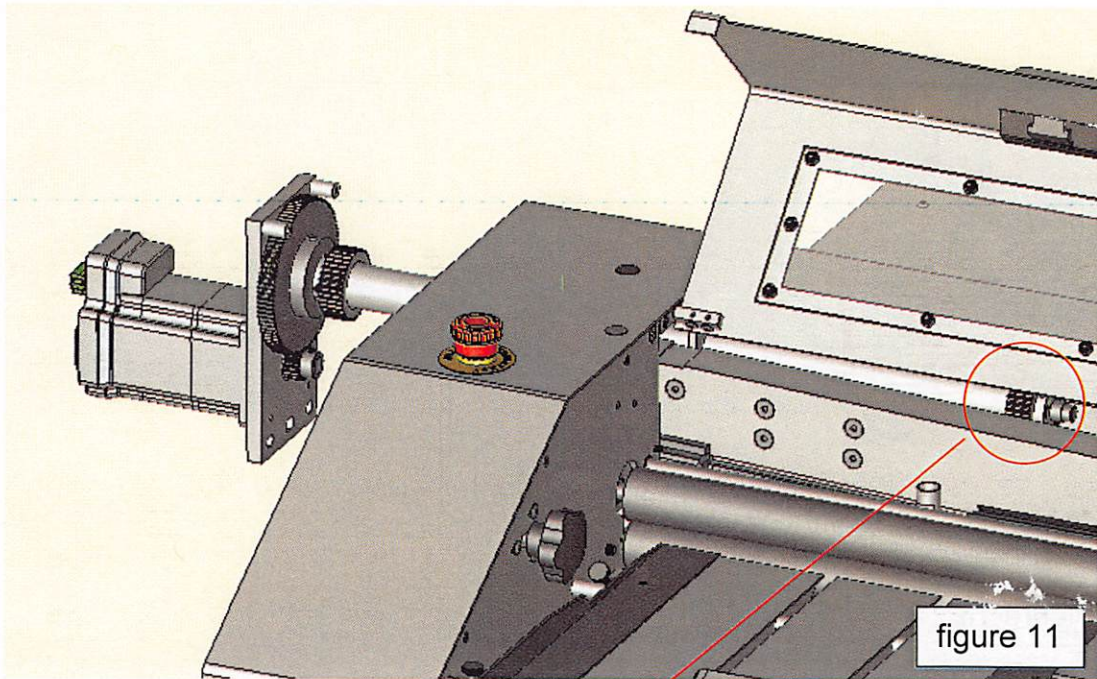
- 8) On touch screen side of cutter **scribe or mark location of bearing mount on side panel for relocation of bearing mount** then loosen 2 shoulder bolts as illustrated in figure 9.



- 9) On cutting motor side **scribe or mark location of Cutting Gears & Motor Assembly on Motor Mount for relocation of Cutting Gears & Motor Assembly** then remove 3 shoulder bolts & lock washers as illustrated in figure 10.



- 10) Partially pull assembly out as shown in figure 11, place support under motor to keep assembly horizontal. **Note: Do not lose spacer, see figure 12.**



Spacer

- 11) Inspect and tighten set screws if necessary, **Note: one set of set screws must be located over flat on shaft to operate correctly** (figure 13, 14 & 15).

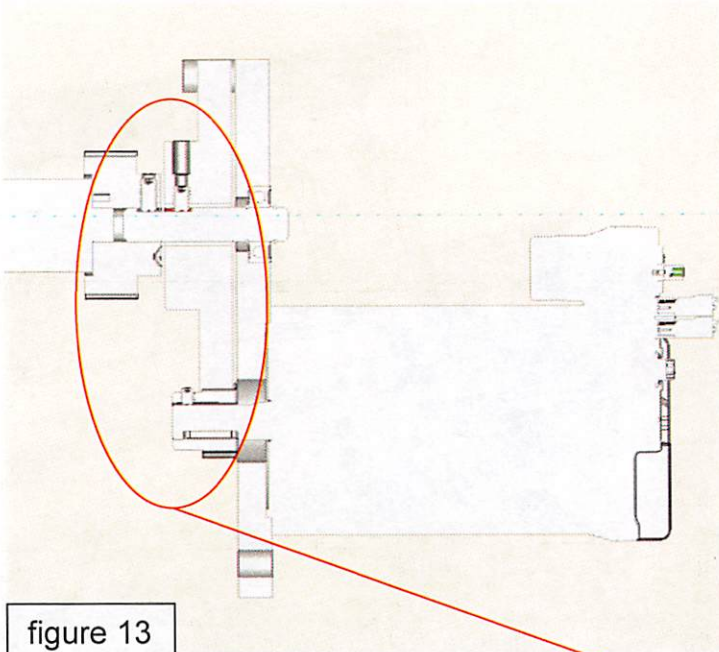
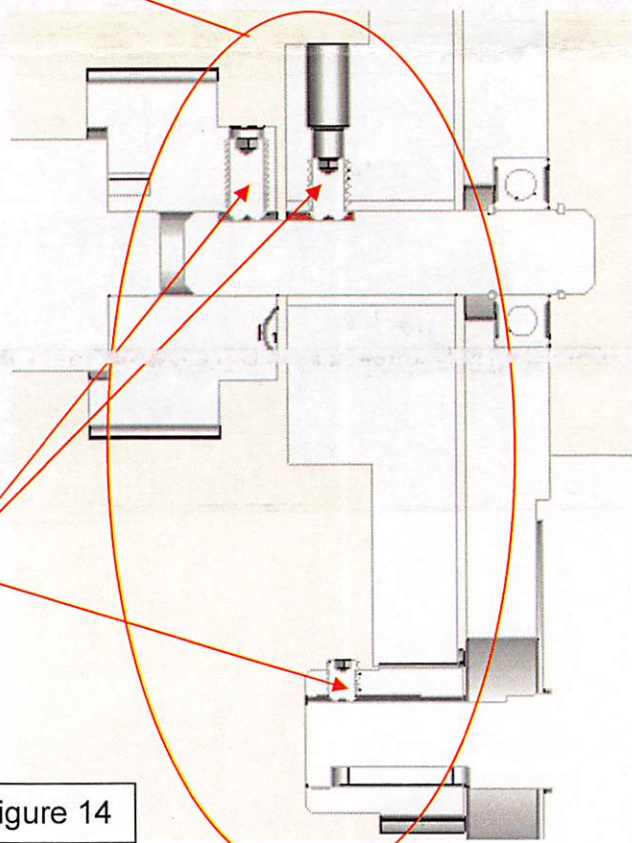


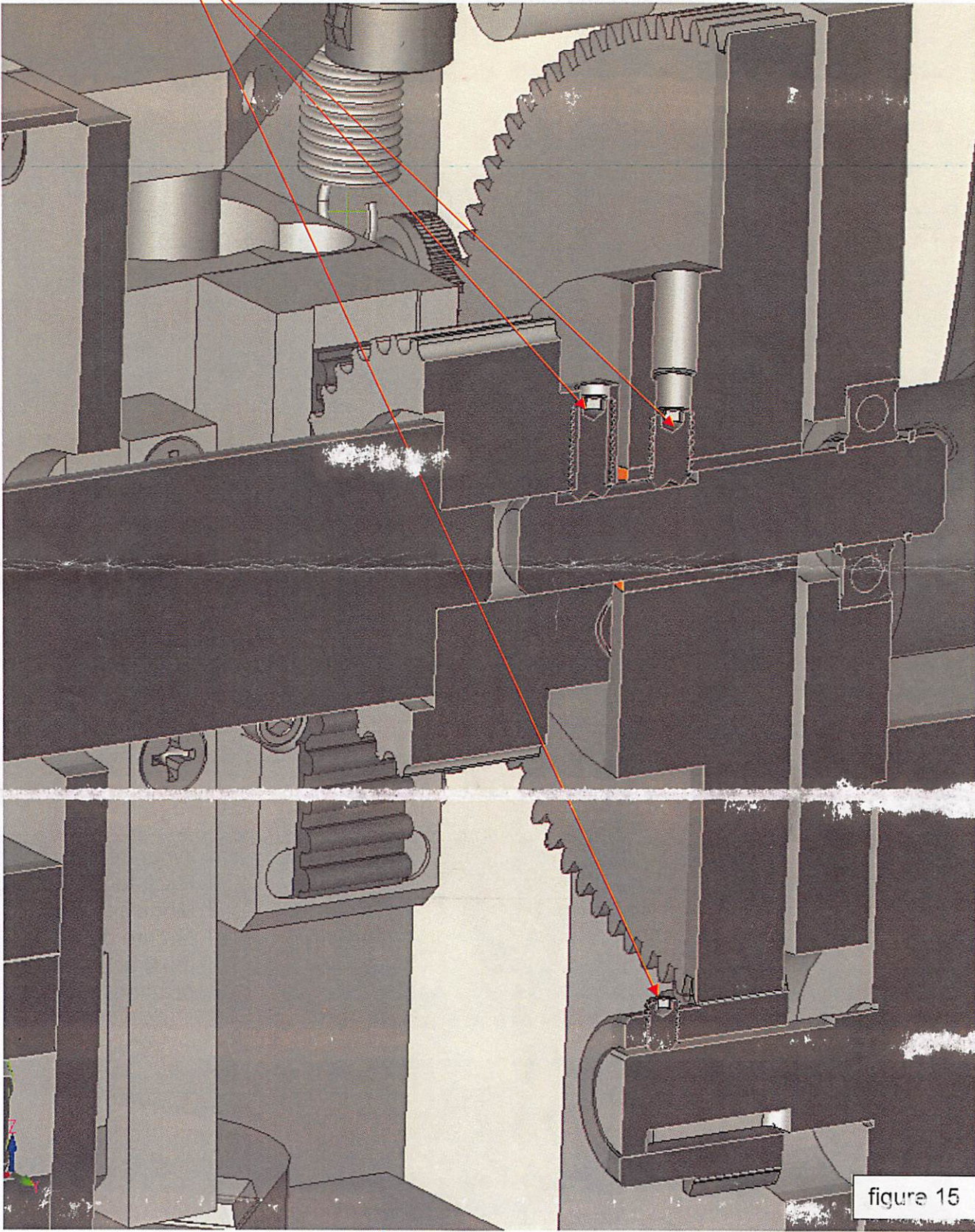
figure 13



set screw over flat on shafts

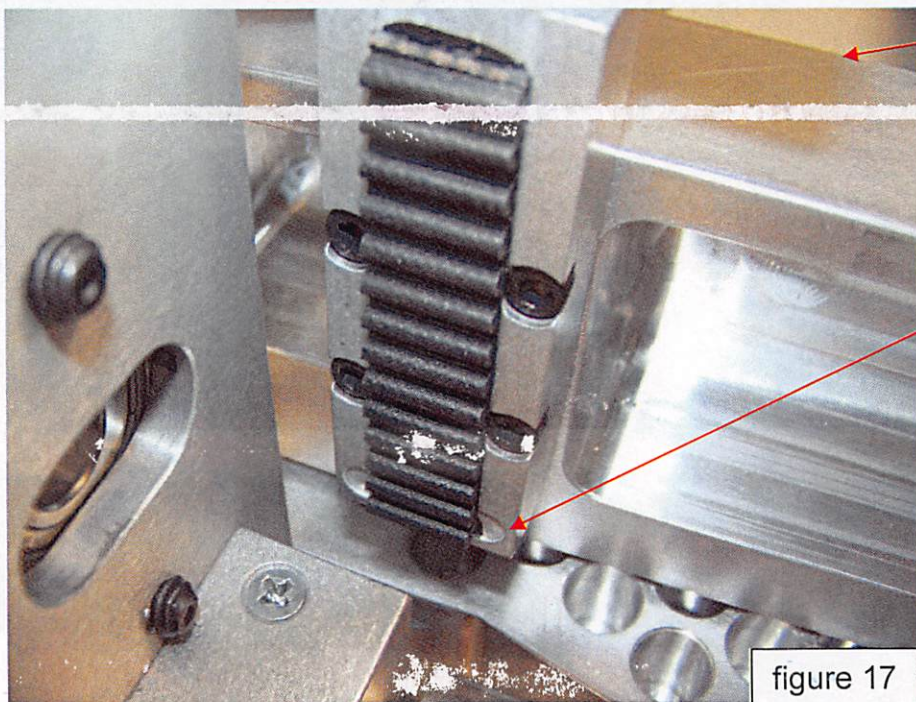
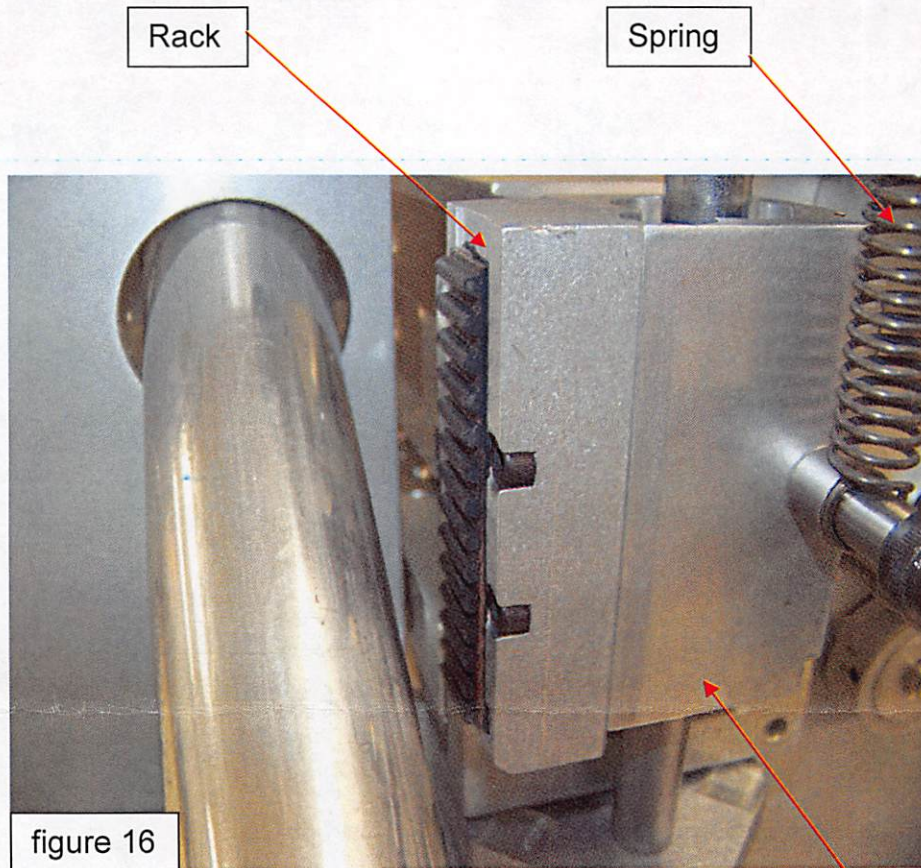
figure 14

set screw over flat on shafts

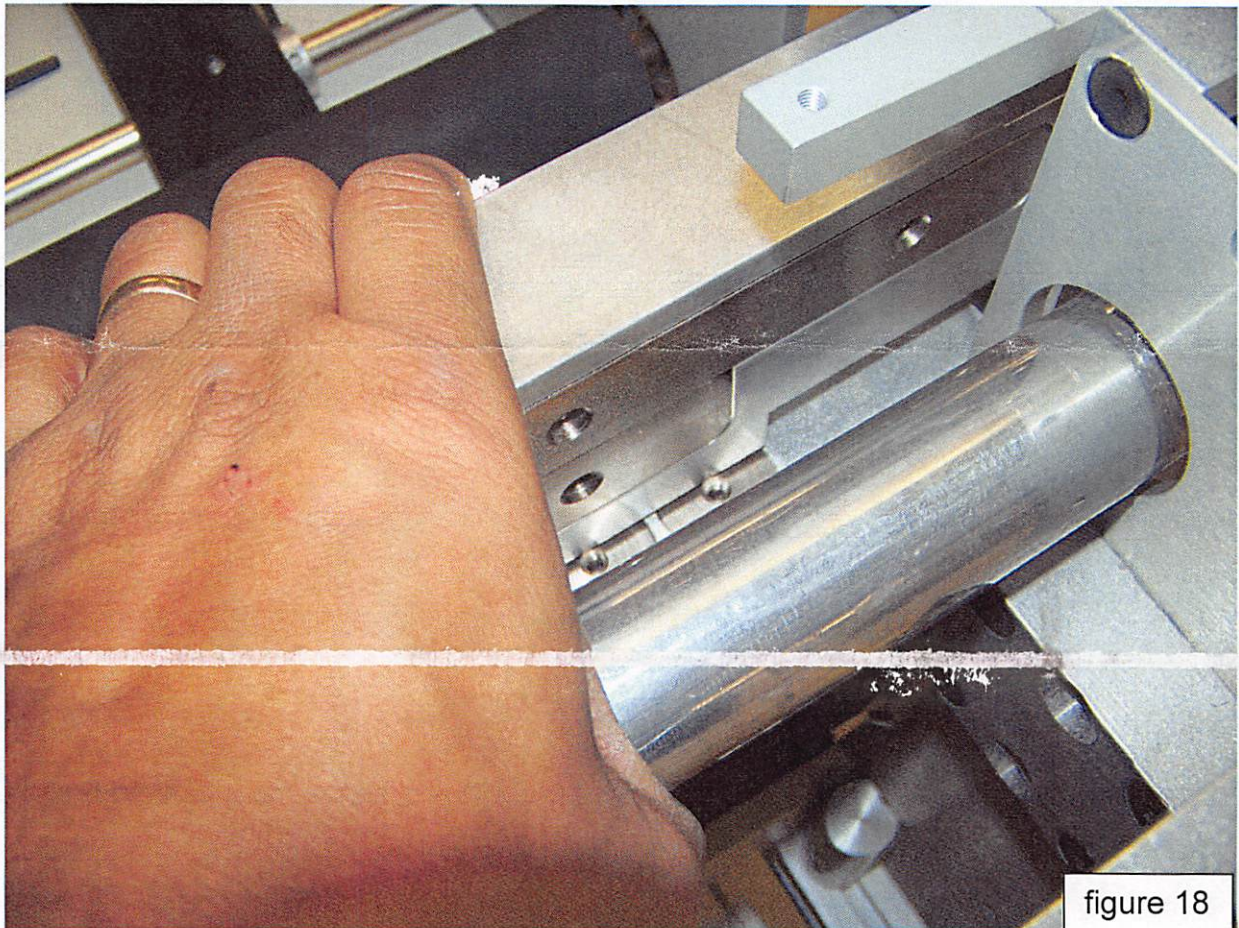


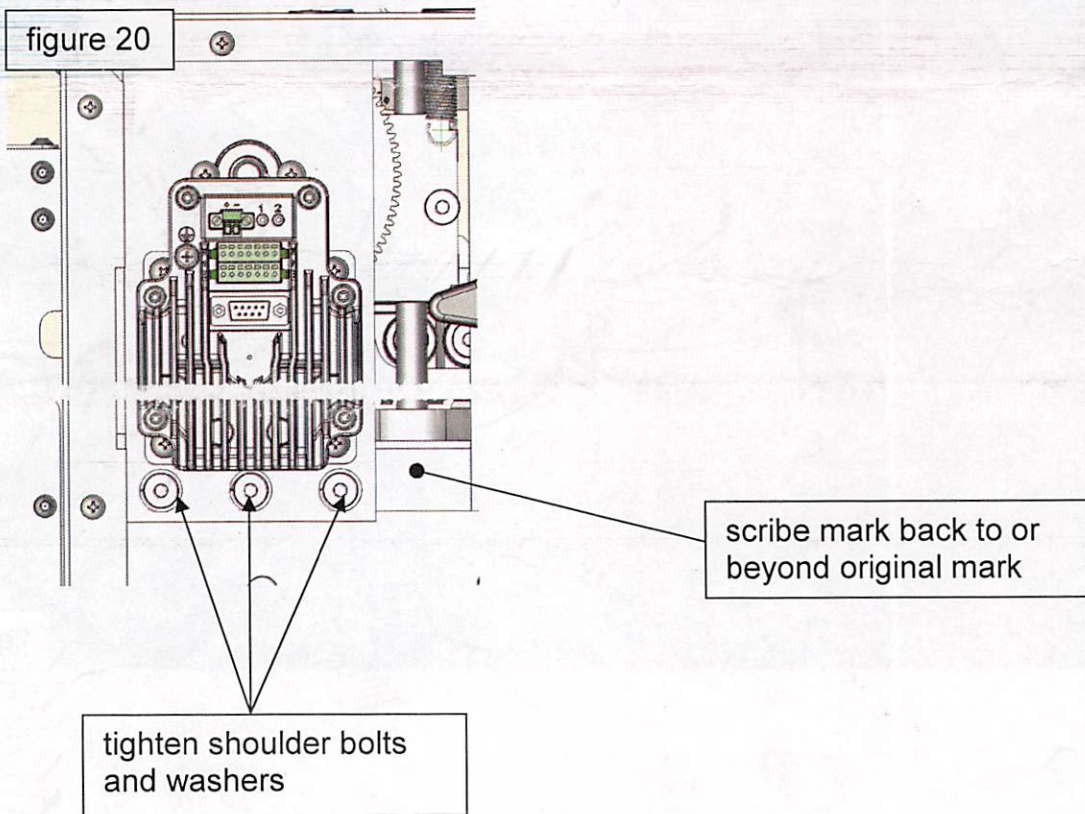
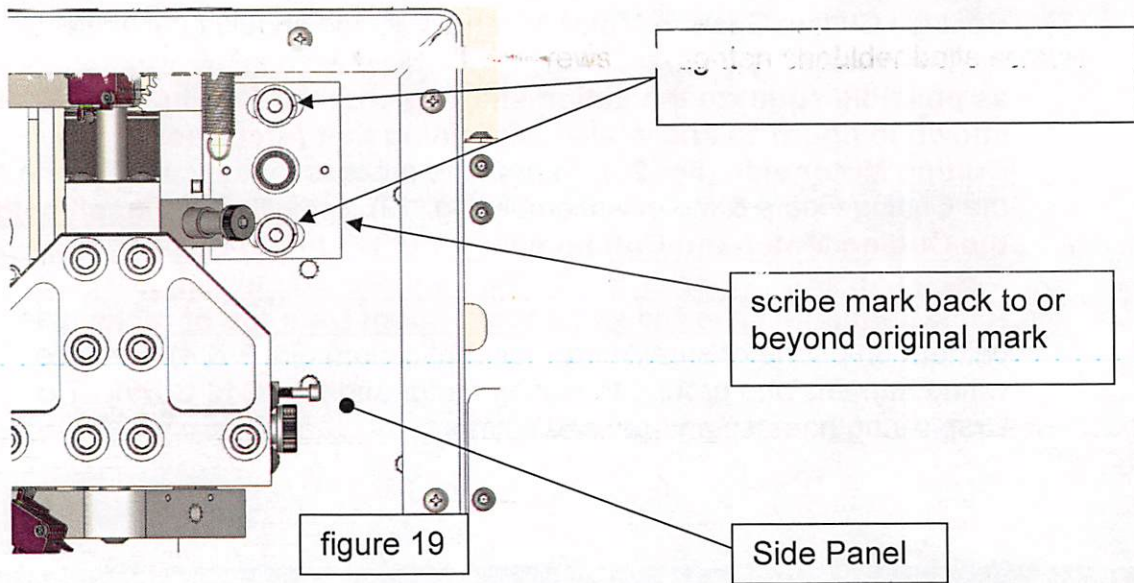


- 12) Before replacing Cutting Gears & Motor Assembly inspect Racks for any missing or damaged teeth, replace rack if necessary (Note: when replacing Rack to the Cutting Module the slot feature on the Rack must be in a down position). Also inspect springs to make sure they are attached and functioning correctly (fig. 16 & 17).

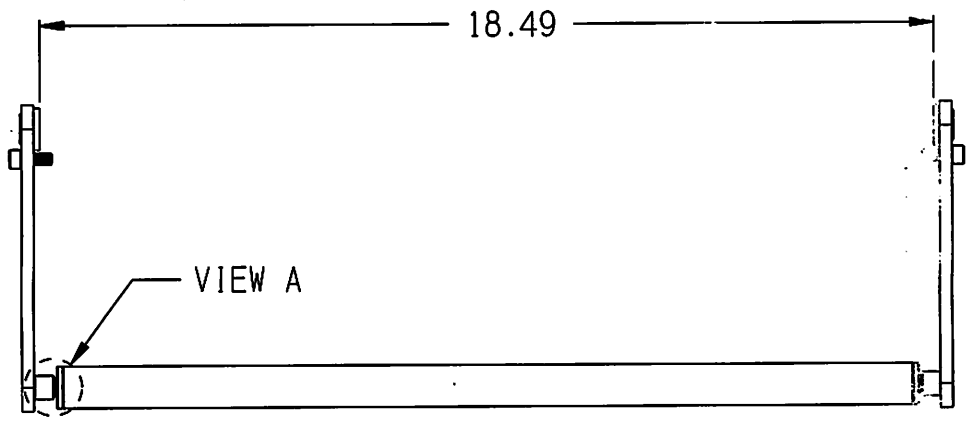
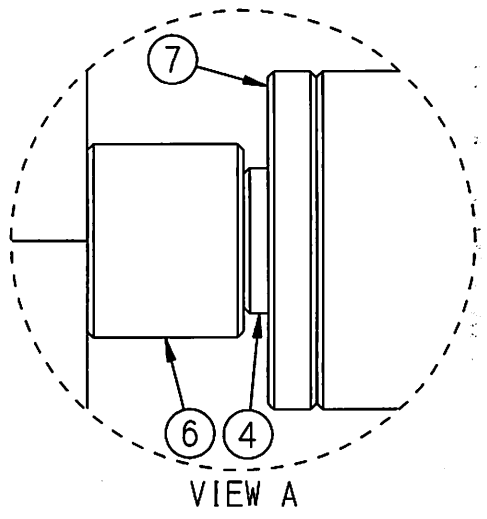
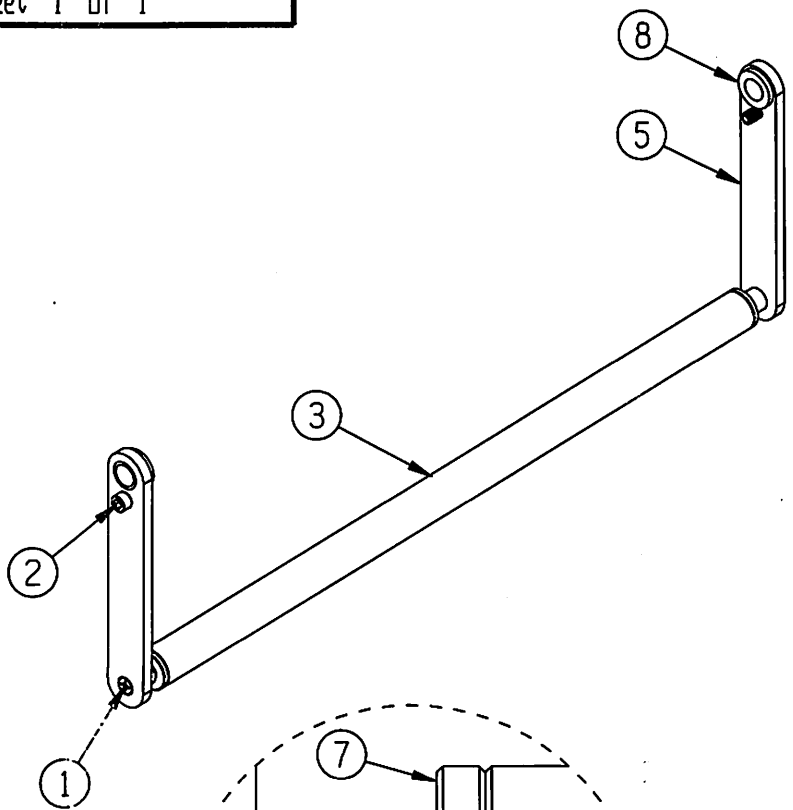


- 13) Replace Cutting Gears & Motor Assembly, blade should be in lowest position. **Starting on the Cutting Motor side and using as much force as possible squeeze the pinion shaft against the Cutting Module as shown in figure 18 and while maintaining that force secure the Cutting Motor side (fig. 20).** Repeat the process for the controls side of the Cutting Gears & Motor Assembly (fig. 19). **After tightening all bolts, the Cutting Motor and Cutting gear mounts should be back to or past initial scribble marks. Verify the controls side and motor side Rack & Pinions have the same tooth count from top of racks** (use camera on phone or small mirror for verification) (fig. 3 & 4). Replace wiring harness and ground to cutting motor and **test C15 Cutter**. Tie wrap wiring harness and replace covers.





| Rev. | Description | Date | App. By |
|------|-------------|------|---------|
|      |             |      |         |



| Item | Part No.   | Qty. | Description                  |
|------|------------|------|------------------------------|
| 1    | .190BBB16  | 2    | 10-32 X 1 FH PHIL MACH SCREW |
| 2    | .250PAA10  | 2    | .250-20 X .625 SHCS          |
| 3    | C15 008.4  | 1    | IDLER TUBE                   |
| 4    | C15 011.4  | 1    | IDLER TUBE SHAFT             |
| 5    | C15 301.4  | 2    | GUIDE TUBE MOUNTING BRACKET  |
| 6    | HD15 191.4 | 2    | SPACER, IDLER TUBE SHAFT     |
| 7    | LC25 009.4 | 2    | IDLER BEARING                |
| 8    | PRB048C    | 2    | OIL LIGHT BEARING REWORKED   |

| Tolerances Unless Otherwise Specified |             |                 |              |          |
|---------------------------------------|-------------|-----------------|--------------|----------|
| Basic Dimension                       | UP TO 6.000 | 6.001 TO 24.000 | ABOVE 24.000 | ANGLE    |
| 2 Place Digits                        | ±.015       | ±.025           | ±.031        | ±0° ±30' |
| 3 Place Digits                        | ±.002       | ±.005           | ±.010        | ✓        |

Finish Specs:



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