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# **Manual Drawer Belt Drive Retrofit Instruction Manual**

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**TOOLS NEEDED**

**5/8 WRENCH**

**1/8 ALLEN WRENCH**

**7/16 WRENCH**

**1/4 NUT DRIVER**

**1/16 ALLEN WRENCH**

**NEEDLE NOSE PLIERS**

**FLATHEAD SCREWDRIVER/ OR SMALL PRY BAR**

**SNAP RING PLIERS**

**BLUE LOCTITE**

**WIRE BRUSH**

## PARTS LIST

#NUM	QTY.	PART #	DESCRIPTION
1.	1	13023011	MD LEVER MOUNT PLATE
2.	4	13038011	MD PULLEY
3.	1	13013012	MD LOWER LEVER
4.	1	13012012	MD PULLEY AXLE
5.	1	13024011	MD LEVER AXLE 3/8
6.	2	95006003	1/4 X .10 SHORTENING SHIM
7.	1	94248800	3/16 X1.5 ROLL PIN
8.	6	95005072	1/4 RETAINING RING ZINC
9.	2	95005005	1/4-20 ACORN NUT
10.	1	94083933	10-32X1/2 BUTTON SOCKET
11.	2	95042032	1/4-20X1/4 SET SCREW CUP POINT
12.	1	92062032	#6-32X3/8 SOCKET SET SCREW
13.	2	97016002	.376X.562-.0625 SHIM
14.	8	04255011	1/4 FLANGED BEARING
15.	2	00141013	3/8 FLANGED BEARING
16.	1	13012052	MD RETROFIT STAND OFF 3 *REAR UPPER
17.	1	13012062	MD RETROFIT STAND OFF 4 *REAR LOWER
18.	1	13012042	MD RETROFIT STAND OFF 2 *FRONT LOWER
19.	1	13012032	MD RETROFIT STAND OFF 1 *FRONT UPPER
20.	1	13006021	MD DRAWER TO BELT BRACKET
21.	2	13031051	MD SPRING RETAINER BELT END
22.	1	13031061	MD SPRING RETAINER MOUNT END
23.	2	13039051	MD BELT CLAMP 5
24.	1	13039031	MD SPRING END BELT CLAMP A
25.	1	13039041	MD SPRING END BELT CLAMP B
26.	1	13039061	MD FIXED END BELT CLAMP A
27.	1	13039071	MD FIXED END BELT CLAMP B
28.	2	92038604	1/8X3/32 OVAL TUBULAR RIVET
29.	4	91062121	4-40 PHIL FLAT HEAD MS
30.	8	90062230	2-56X3/8 SOCKET HEAD CAP SCREW
31.	4	92006002	AN960 #6 FLAT WASHER
32.	1	90088001	3/32-1/2 COTTER PIN
33.	1	13040691	MD SPRING END DRIVE BELT
34.	1	13040591	MD FIXED END DRIVE BELT
35.	2	93064321	8-32X3/8 HEX THREAD ROLLER
36.	1	04191011	BLUE/GREEN GREASE

## **Customer Door Removal**

To make installation of the BELT DRIVE RETROFIT KIT, easier from the inside, it is possible to remove the customer door. Run the drawer out until the teller door is closed and the Customer Door Pivot Posts are exposed. Carefully remove the "E" clips and washers from each side. Take the arms off the pivot posts by gently spreading the Customer Door actuator arms outward until they clear the pivot posts. Remove the customer door

Access to the inside of the drawer is through the back (Figure 1). There are three screws on the face and two on the bottom that hold the back panel in place. After removing the screws, tilt the bottom of the back panel out, and then drop it down to clear the lip of the top panel.

## **Drawer Removal**

To remove the drawer it is necessary to disconnect the drawer to cable bracket from the right side of the drawer. There are (2) #8-32 machine screws that have to be removed. (See FIGURE 2) After removing the screws, pull the Red bin back slowly. Remove the Teller door, place off to the side to where it cannot be damaged. Continue to remove the Red bin, place off to the side.

## **Cable drive Parts Removal**

Please refer to the diagram on the next page.

### Remove and Discard

#11-Drawer to Cable bracket

#27- MD Pulley Axle x2

#28-1/4x1/2 Shoulder bolts

#29-Compression Spring Assembly

#30- MD Spring Cable

#31-MD Stationary Cable

#32-Cable Idler Pulley

#34-MD Hex Spacer x2

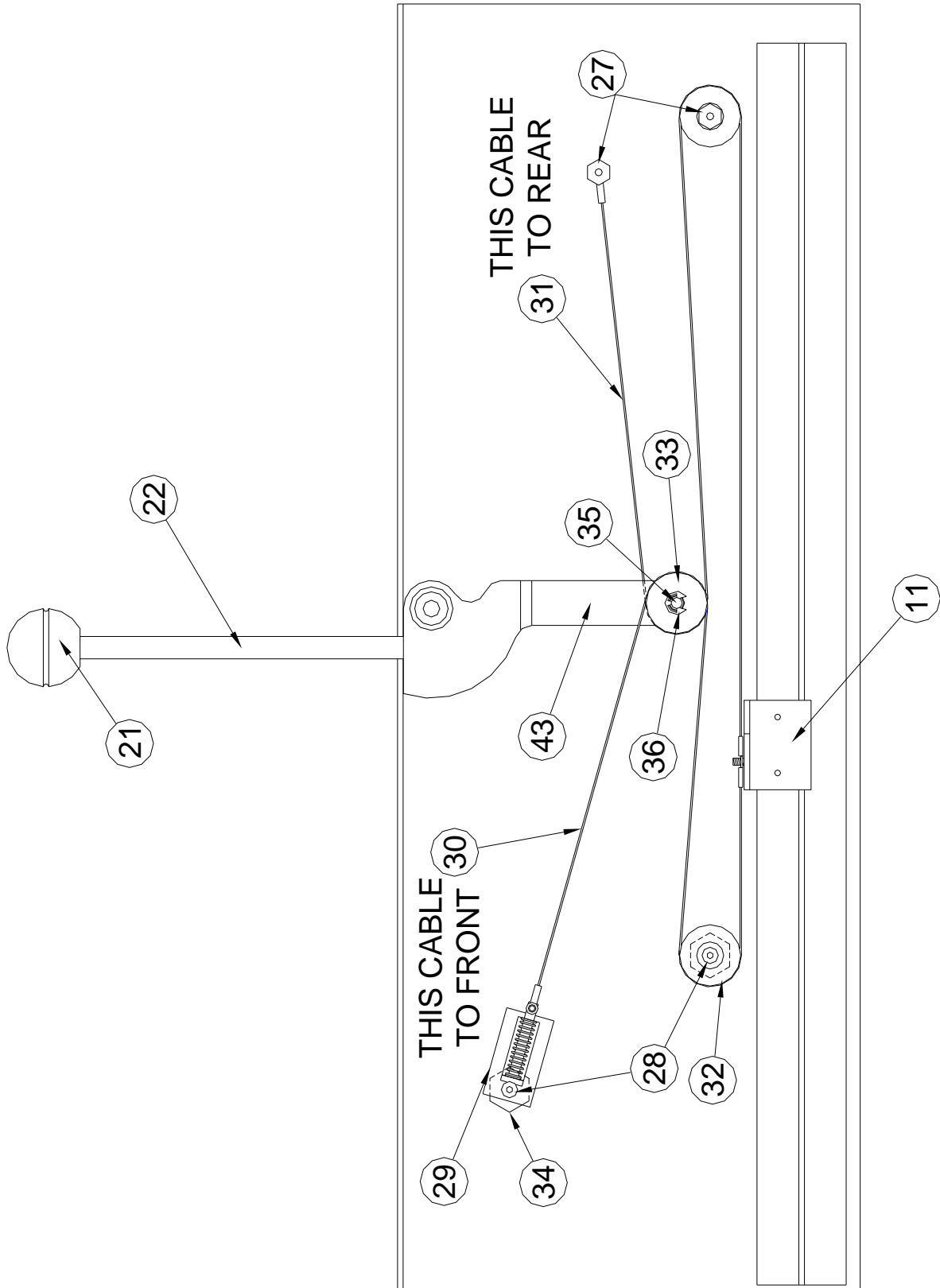
#43 MD Lower Lever. Will Remove #36 #35 #33

KEEP THE STANDOFFS THAT COVER THE 1/4-20 STUDS AT THE TOP OF THE SHELL. THEY WILL BE NEED FOR REASSEMBLY. (SEE FIGURE 3)

**REMOVE AND KEEP # 21 AND #22 -MD UPPER LEVER AND KNOB BY LOOSENING THE 1/4-20 SET-SCREWS WITH AN 1/8" ALLEN WRENCH. (SEE FIGURE 14)**

**CLEAN 10-24 STUDS IN SHELL WITH WIRE BRUSH.**

Note: the numbers on this page do not reflect any numbers in the parts list for this install. They are only placed to help with disassembly.





## **LEVER REPLACEMENT**

Take the new lower lever assembly, and apply the grease supplied to lever axle. (A little goes far) (SEE FIGURE 7)

Verify that the spacers are over the 1/4-20 studs for the lever mounting plate.

With the lever mounting plate being held so the holes are near the bottom, slide the lower lever, from inside the shell, up into the space cut out of the teller door guide track. (See figure4) When the lever is high enough, insert the mount plate with the lever axle attached, through the 3/8 bearings in the lower lever. Making sure the.0625 shims are between the mount plate and bearing, and the shell and the bearing. (See figure5)

Use acorn nuts provided, and with blue Loctite, and snug bolts to lock down plate. (See Figure 3&6)

## **STANDOFFS**

### **NOTE: APPLY BLUE LOCTITE TO 10-24 STUDS IN SHELL**

There are four standoffs that need to be placed over the 10-24 studs in the MD shell. Two short hex standoffs are located to the rear inside of the shell, with the thin hex located at the bottom rear, near the track. This hex holds the rear stationary belt pulley. The other short hex, the thicker of the two, is to be located on the upper rear stud. This standoff holds the brass belt clamp of the stationary belt.

The taller standoffs are located near the front of the drawer shell, (outside end of the shell).

Take the tall hex with the long axle and place it over the 10-24 stud located near the outside end just above the sliding bin guide track. This standoff holds the Spring Drive Belt Pulley.

Next take the tall standoff with the short shaft and place it on the last 10-24 stud located near the upper part of the shell. This Standoff holds the Belt Drive Spring Assembly.

**NOTE: SNUG STANDOFFS WITH 5/8 WRENCH. DO NOT OVERTIGHTEN!**

**GREASE ALL STANDOFF SHAFTS WITH GREASE SUPPLIED.**

(See figure7&8)

## **PULLEY MOUNTING**

Take the two pulleys in the kit and place them over the two standoffs with axles, located at the bottom front and rear of shell.

Take two of the snap rings supplied and secure them in the groove at the end of the standoff, locking the pulleys onto the standoff axles.

(See figure 9)

## **BELT ROUTING**

(SEE FIGURE 10)

Lay the belt assembly out, with the spring assembly towards the front of the shell and the brass belt clamp towards the rear of the shell.

The brass belt clamp, on the belt to drawer bracket, should be facing up.

Take the belt attached to the stationary brass belt clamp at the Drawer to Belt Bracket and guide it around the rear bottom pulley, with the black side of the belt facing up. When it wraps around the pulley the green side will be facing up. Continue to guide the belting to the lower lever, where it will go under the pulley located closest to the shell on the lower lever assembly, and then over the top of the pulley and back to the rear of the shell. Mount the brass belt clamp on the rear upper standoff and secure with snap ring.

**NOTE: MAKE SURE THERE ARE NO TWISTS IN THE BELTING.**

Next take the spring assembly belt, with the green side up, and guide it to the front pulley, go under then over, and then back to the lower lever's outer pulley. Go under and then over the pulley, before you take it to the front upper standoff, Make sure the belting does not have any twist in it and it is properly aligned with all the pulleys.

Pull the spring assembly to the front, notice that the spring is compressing.

Place the spring assembly on the upper front standoff, secure with snap ring.

(See figure 11)

**NOTE: NO GREASE OR ANYTHING NEEDS TO BE APPLIED TO BELT OR OUTSIDE OF PULLEY'S.**

## **RED BIN**

Pull the belt to drawer bracket to the rear of the shell.

Take the RED BIN and guide it into the back of the shell, making sure the slide angles are guided into the track.

It will be required to lift the belt to drawer bracket up and over the brass Customer Door pivot pins near the front of the bin. Push Red Bin 3/4 of the way in,

**AT THIS POINT, REINSTALL TELLER DOOR!**

Push the bin the rest of the way in. (See figure 12)

With this finished it will be required to hold the belt to drawer bracket against the bin with a long flat head screw driver or small pry bar. (See figure 13)

**NOTE: MAKE SURE YOUR LEVER IS PLACED AGAINST THE TRACK, AND NOT THE REAR PULLEY!**

Line the holes in the Red Bin's slide angle with the holes in the bracket; use the 8-32 Thread rollers supplied to attach the bracket to the bin.

## **UPPER LEVER**

Place the upper lever that was saved from the disassembly, into the hole in the top of the lower lever. Using a 1/8" Allen wrench tighten the two 1/4-20 set screws on the lower lever to the upper lever. (See figure 14)

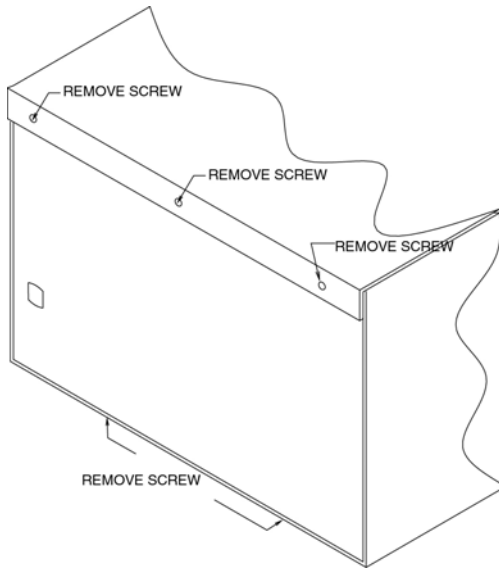
At this, point move the lever back and fourth to make sure everything is working properly. Push forward on the lever to expose the brass pivot pins out the front of the drawer.

Reinstall the customer door making sure that there are washers on both sides of each of the red arms before installing the E-clips onto the brass pivots to lock the arms onto the red bin.

Pull drawer all the way back, until the customer door pulls against the shell.

Reinstall back panel. Test lock, make sure it is working and aligned.

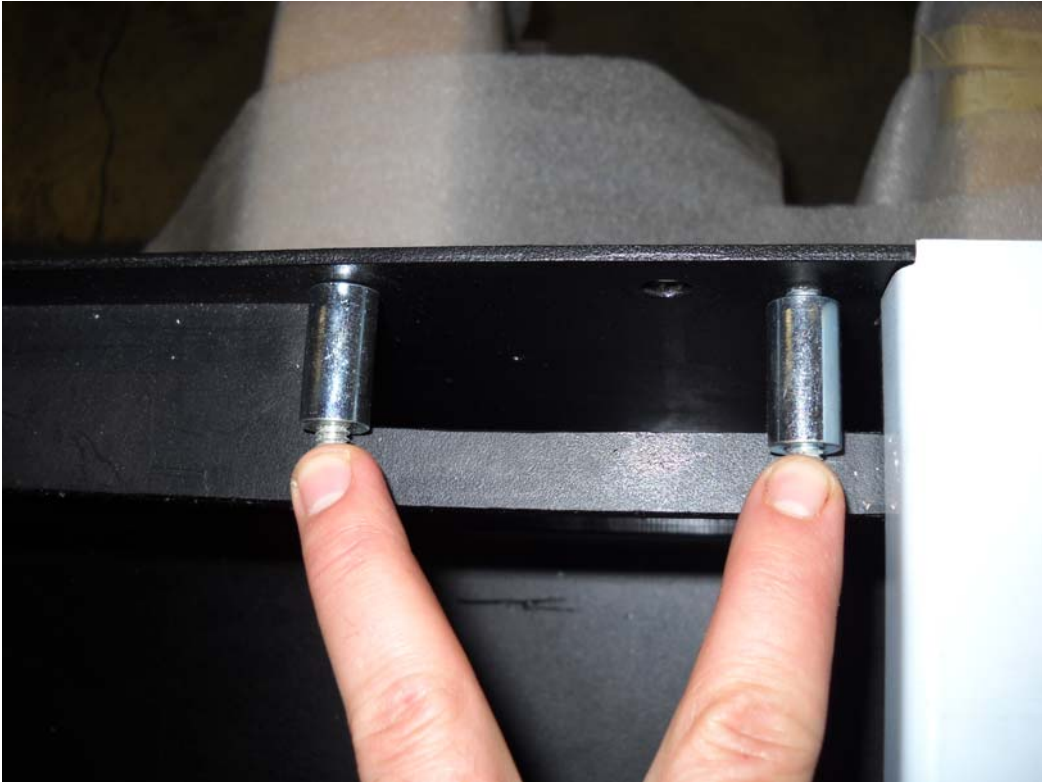
**FIGURE 1.**



**FIGURE 2.**



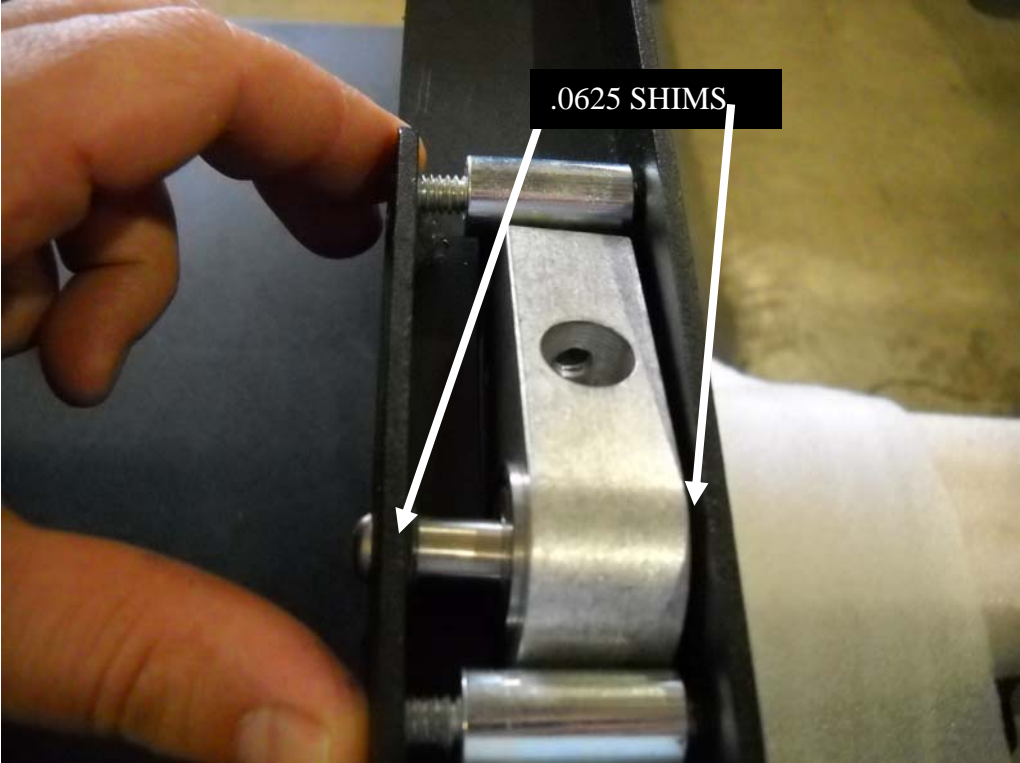
**FIGURE 3**



**FIGURE 4**



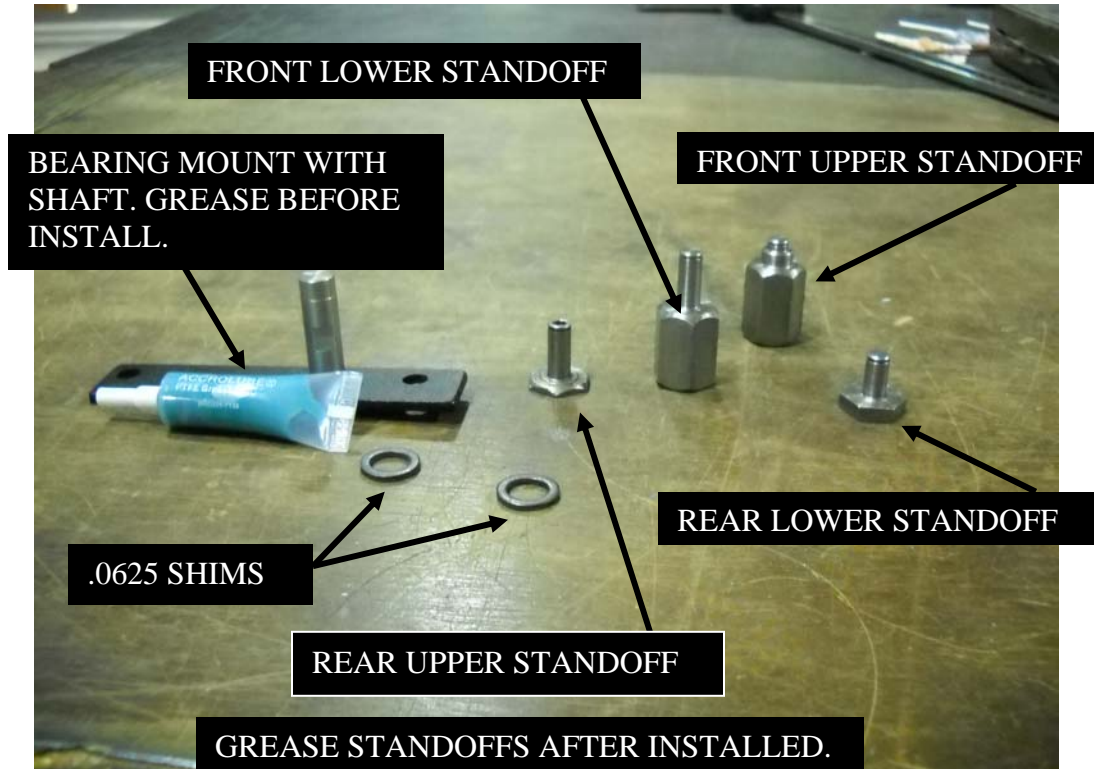
**FIGURE 5**



**FIGURE 6**



**FIGURE 7**



**FIGURE 8 (View from Customer end)**

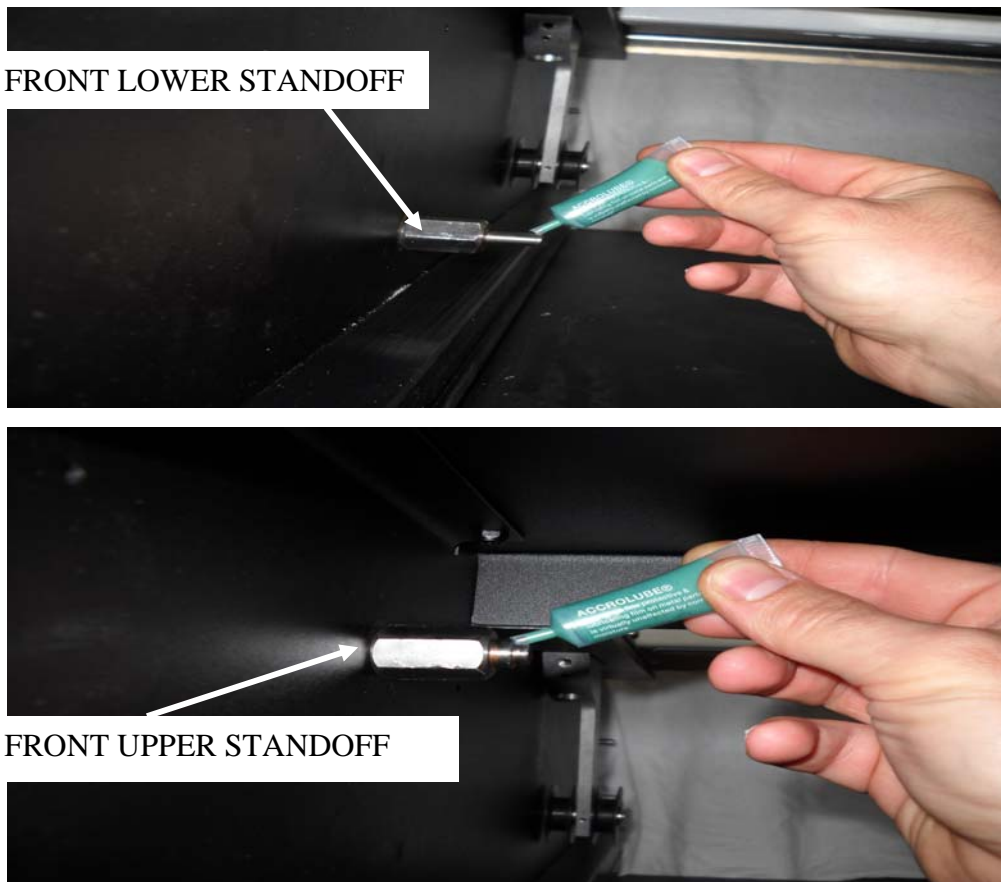
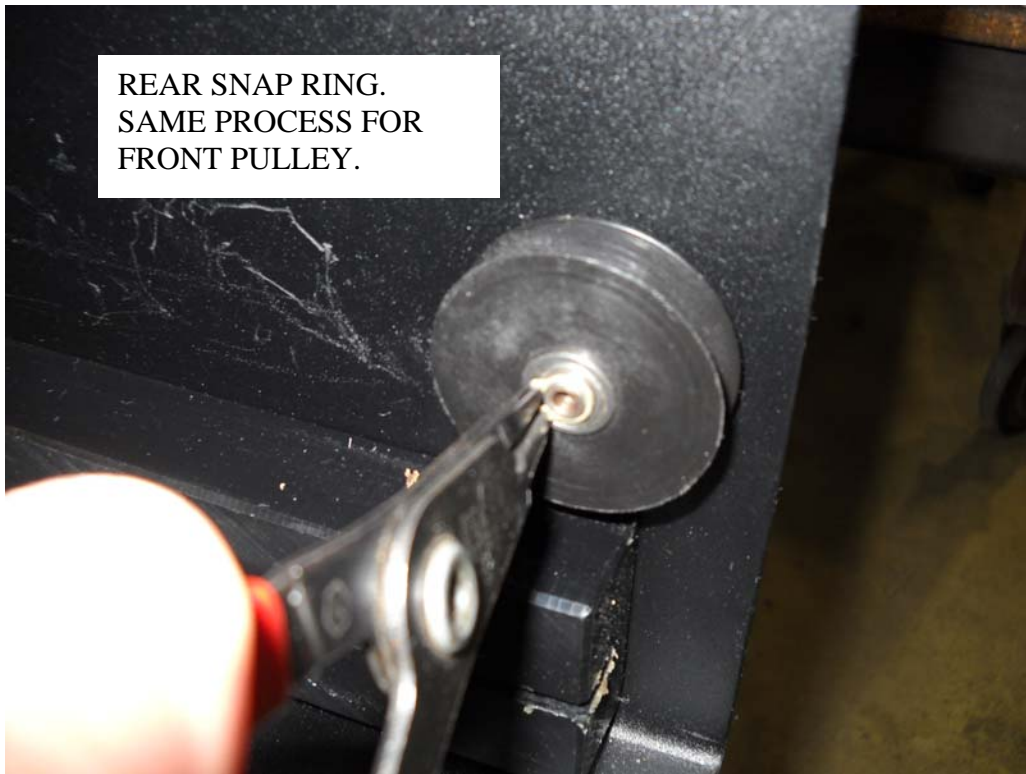


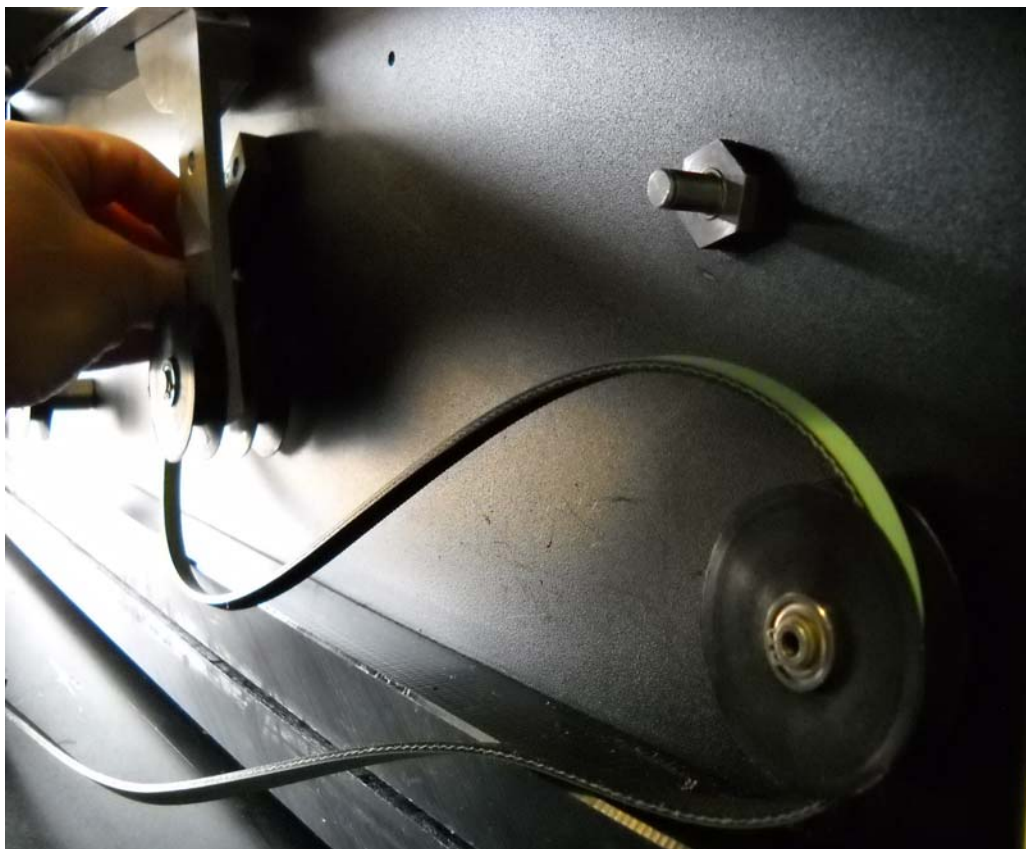
FIGURE 8 CONT. (View from Building end)



**FIGURE 9**



**FIGURE 10**

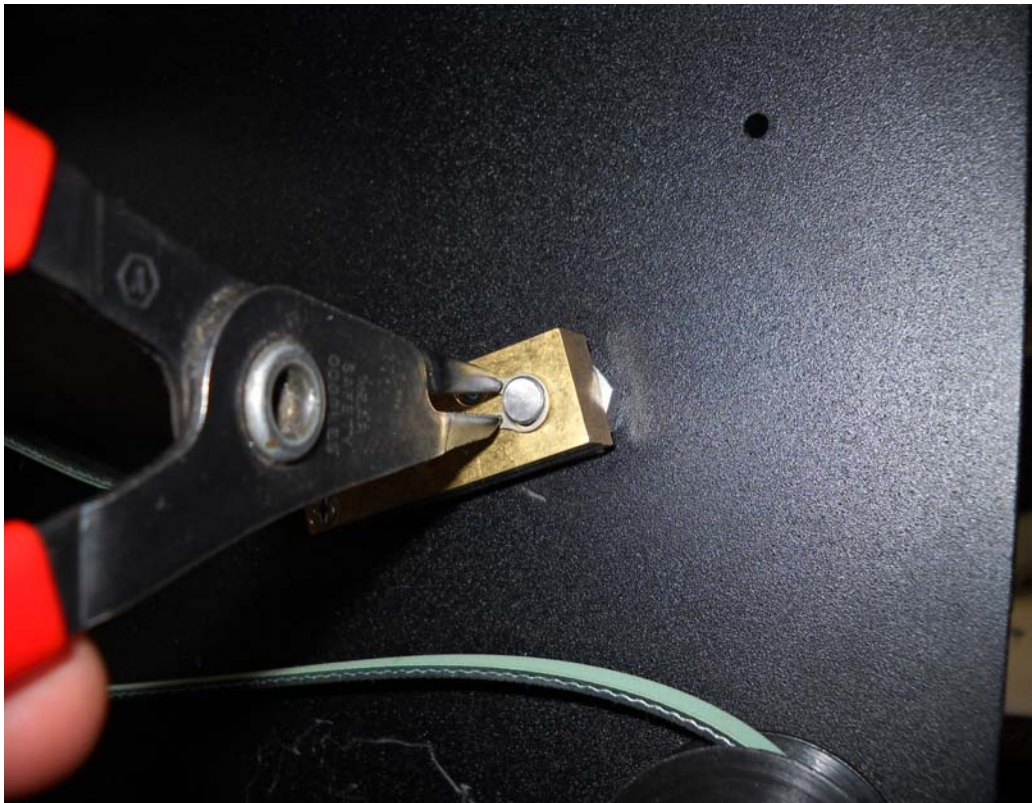




**FIGURE 10 CONT.**



**FIGURE 10 CONT.**



**FIGURE 11**



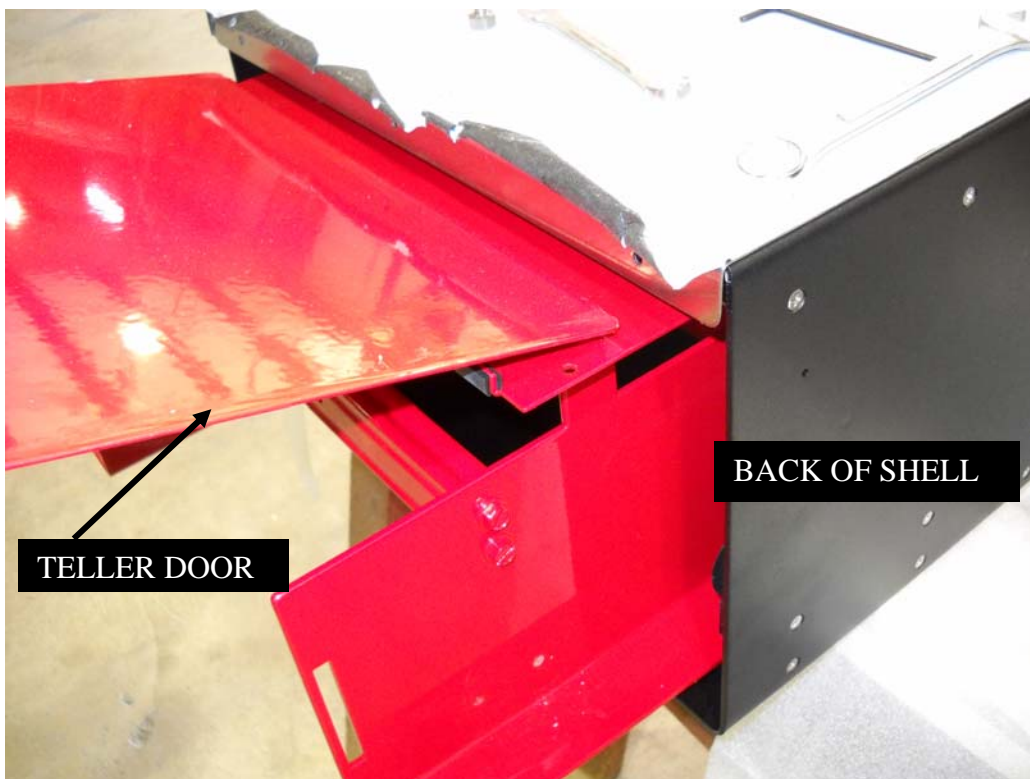
**FIGURE 11 CONT.**



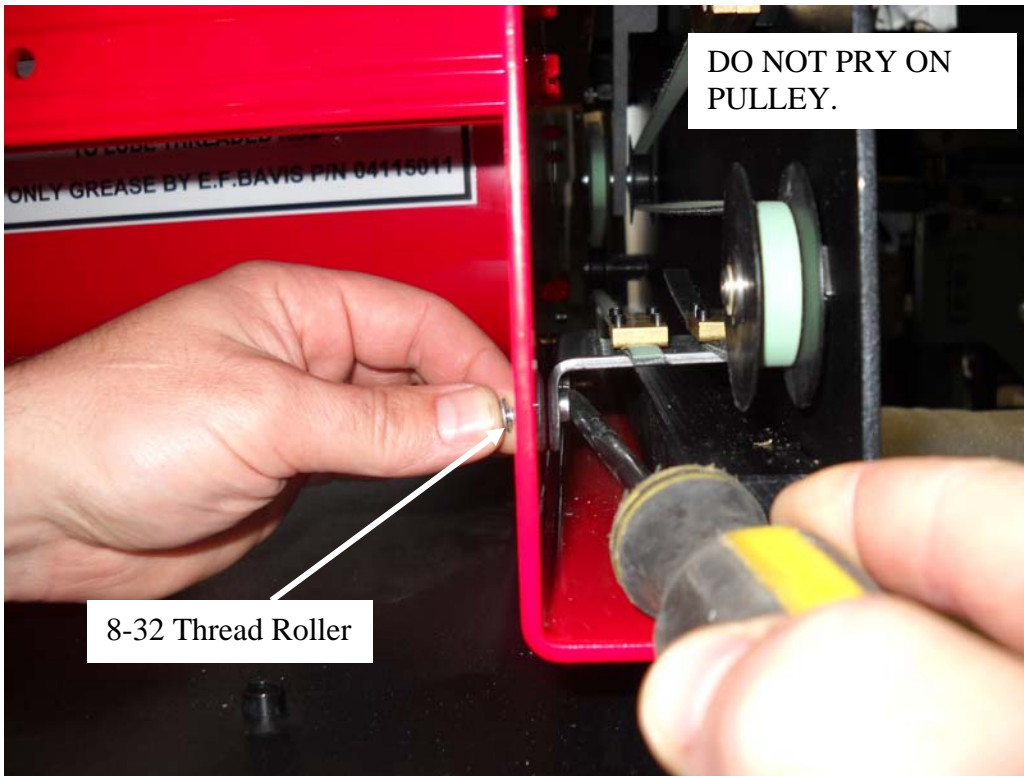
**FIGURE 12**



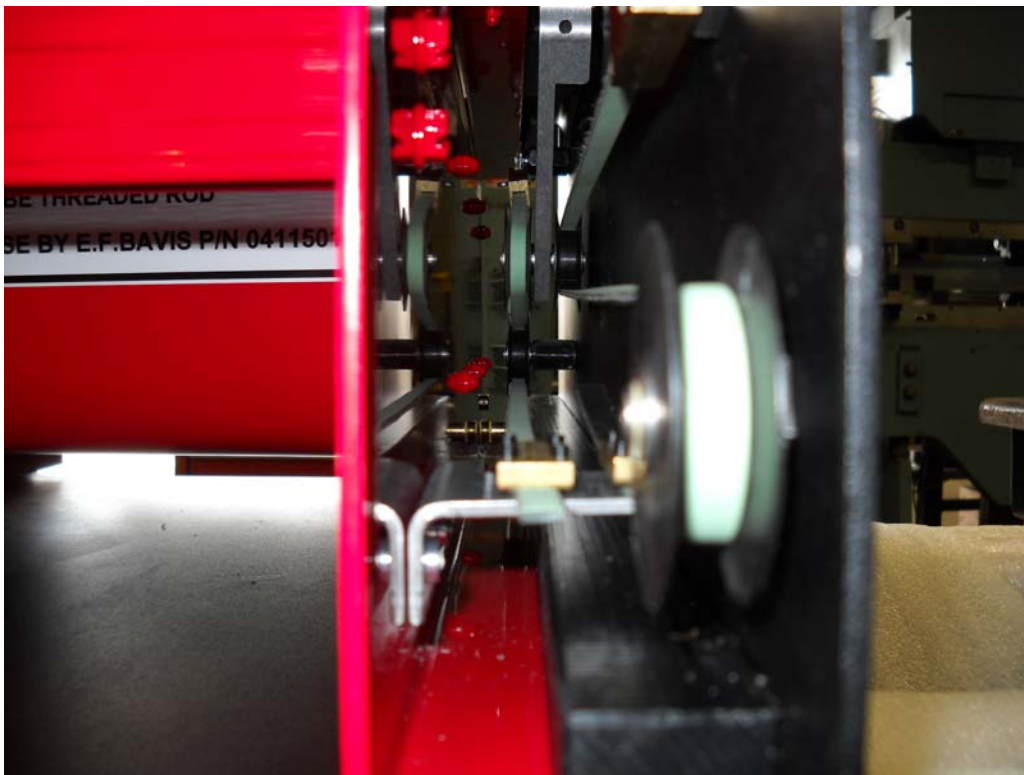
**FIGURE 12 CONT.**



**FIGURE 13**



**FIGURE 13 CONT.**



**FIGURE 14**



(See Table on Page 2)

# BELTING EXPLODE

