



**Model 500  
Torque Limiter**

**INSTALLATION, MAINTENANCE AND  
PARTS MANUAL**

to view the video "Setting a Torque Limiter"  
<https://youtu.be/qyz94Tc1Zfg>

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## MODEL 500 TORQUE LIMITER RUN IN AND PRESET TORQUE ADJUSTMENTS



Turning off power to the conveyor and properly lock out the controls, remove the guard and perform the following steps:

### Replacement (See Figure 1)

1. Remove the drive chain from the torque limiter sprocket.
2. Loosen (3) capscrews and screw off adjusting collar.
3. Remove backplate, friction discs, bushing and sprocket.
4. Reassemble by placing new friction discs on both sides of a new sprocket and a new sintered bushing.

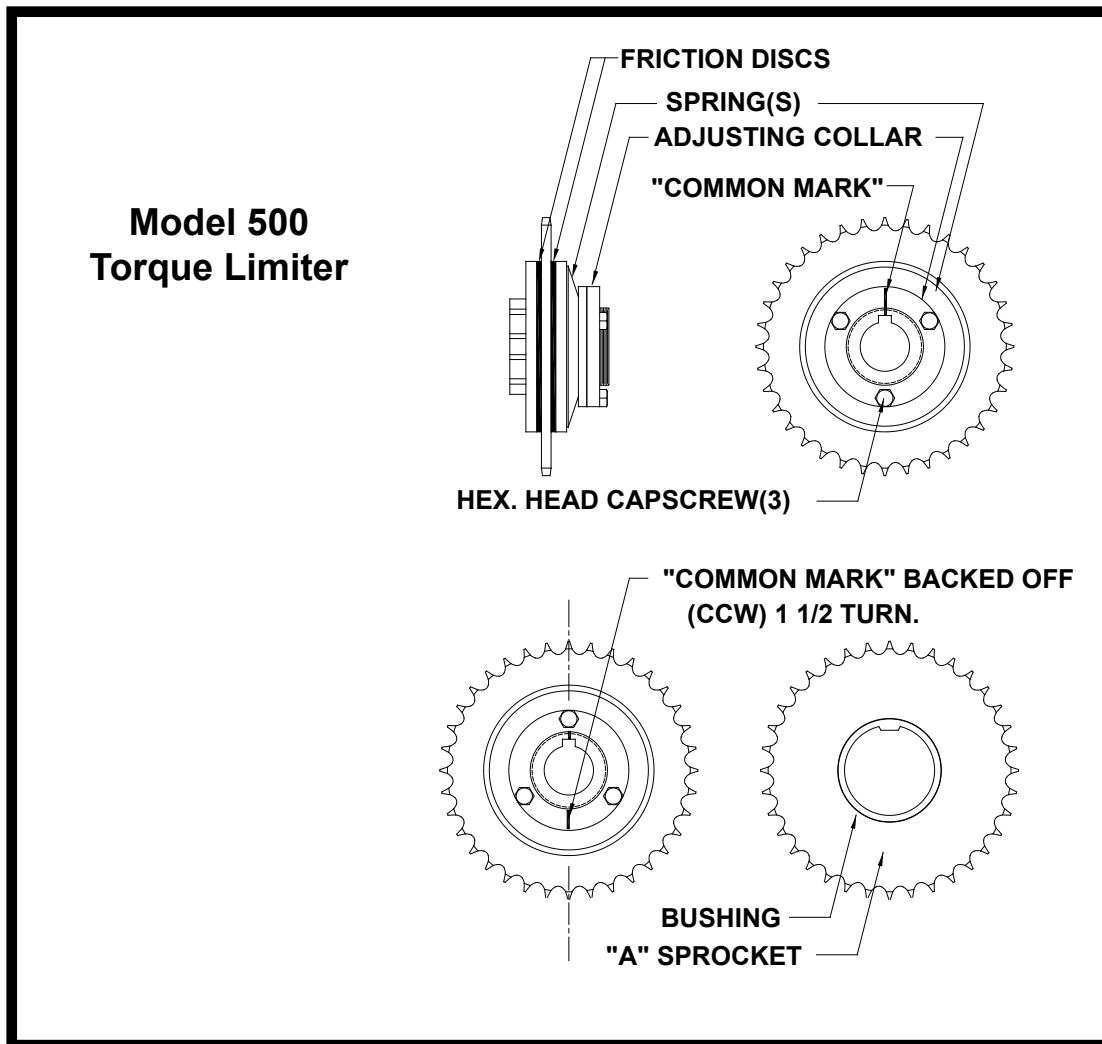


Figure 1

### Run IN

1. With (3) capscrews backed off so ends are recessed into the adjusting collar, screw on adjusting collar finger tight. Mark the adjusting collar and hub with a common mark.
2. Now back the adjusting collar off counter clockwise 1 1/2 turns. Tighten the (3) capscrews until they bottom out on the collar.
3. Replace the chain and let the sprocket slip 3 to 4 minutes.

## Set Up

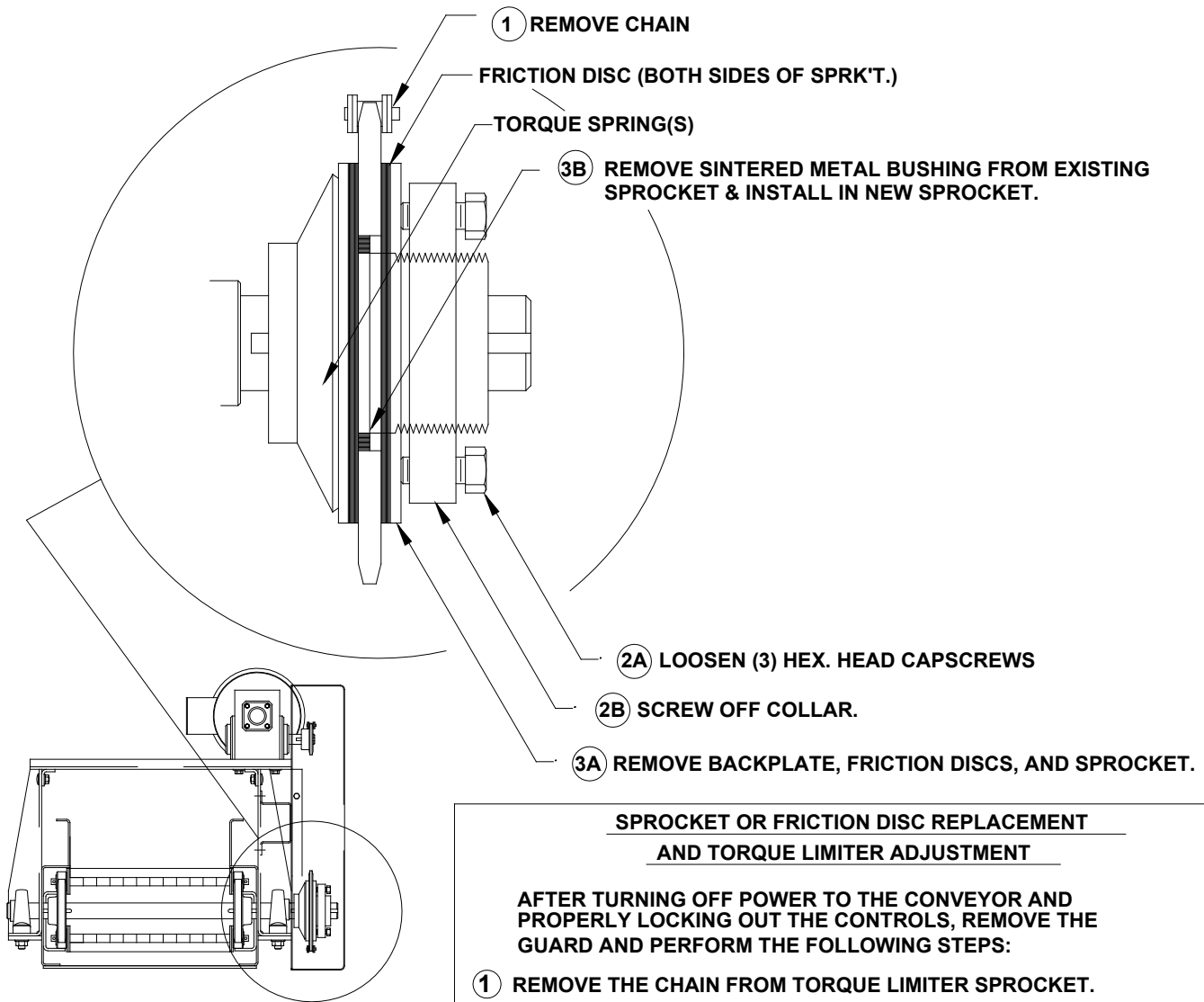
4. With "Run In" complete, loosen (3) capscrews as before and rotate the adjusting collar clockwise 1/2 turn. Tighten (3) capscrews until they bottom out on the collar and test for slippage under normal load.
5. Repeat, if necessary, until the sprocket doesn't slip. Refer to the chart below for approximate torque ratings based on rotations counter clockwise off of "finger tight".

<b>Model</b>	<b>Approximate Break Away Torque</b>			
<b>500 1 Spring</b>	90 LB FT	150 LB FT	200 LB FT	250 LB FT MAX
<b>500 2 Springs</b>	120 LB FT	300 LB FT	350 LB FT	400 LB FT MAX
<b>TURNS</b>	1 1/2	1	3/4	0

**CLEANING**      If, under normal load, the torque limiter begins to slip, check the sprocket and friction facings to ensure they are free of oil, grease, moisture, or rust. Clean or adjust if necessary and return to service.

**REPLACEMENT**      After continued slipping it is possible that there is sufficient wear to warrant part replacement. Install new friction discs, reset and run the conveyor.

**USE THE FOLLOWING INFORMATION IN FIGURE 2 TO ADJUST THE TORQUE SETTING OR FIGURE 3 FOR PART REPLACEMENT.**



**SPROCKET OR FRICTION DISC REPLACEMENT  
AND TORQUE LIMITER ADJUSTMENT**

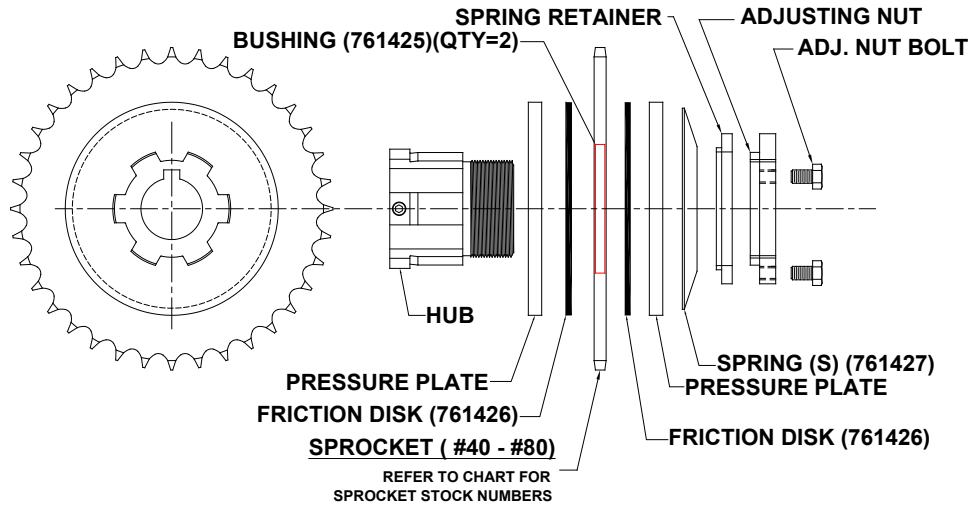
**AFTER TURNING OFF POWER TO THE CONVEYOR AND PROPERLY LOCKING OUT THE CONTROLS, REMOVE THE GUARD AND PERFORM THE FOLLOWING STEPS:**

- ① REMOVE THE CHAIN FROM TORQUE LIMITER SPROCKET.**
- ② LOOSEN (3) CAP SCREWS AND SCREW OFF COLLAR.**
- ③ REMOVE BACKPLATE, FRICTION DISCS, AND SPROCKET. EXCHANGE THE BUSHING FROM OLD SPROCKET TO NEW SPROCKET.**
- ④ REPLACE THE FRICTION DISCS ON EITHER SIDE OF THE SPROCKET AND REASSEMBLE ONTO TORQUE LIMITER.**
- ⑤ NEXT, WITH (3) CAP SCREWS BACKED OFF SO ENDS ARE RECESSED IN THE COLLAR, SCREW ON COLLAR FINGER TIGHTEN CAPSCREWS UNTIL HEADS BOTTOM OUT.**
- ⑥ REPLACE GUARD AND TEST RUN CONVEYOR. IF SLIPPAGE OCCURS, BACK OFF CAPSCREWS, AND SCREW DOWN COLLAR ANOTHER HALF TURN, RETIGHTEN CAPSCREWS AND TEST FOR SLIPPAGE. USE THIS TRIAL & ERROR METHOD UNTIL BELT DOESN'T SLIP UNDER FULL LOAD.**

**NOTE! DO NOT COMPLETELY DEPRESS THE TORQUE SPRING(S) AS THIS WILL CAUSE SLIPPAGE AND QUICKLY WEAR OUT FRICTION PADS.**

*FIGURE 2*

## MODEL 500 TORQUE LIMITER PARTS LIST



<b>60 CHAIN SPROCKETS</b>	
NON-STOCK SPROCKET SIZES	
SPROCKET SIZE	TITAN STOCK NUMBER
60A25 x 3"	660131
60A26 x 3"	660133
60A27 x 3"	660134
60A29 x 3"	660130
60A33 x 3"	660132
60A35 x 3"	660135

<b>80 CHAIN SPROCKETS</b>	
NON-STOCK SPROCKET SIZES	
SPROCKET SIZE	TITAN STOCK NUMBER
80A19 x 3"	690025
80A21 x 3"	690024
80A25 x 3"	690026

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