

# Compliant Conveyor Crowder

## Data Sheet

for PN 22296082

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### Purpose

Mounted on the rear conveyor rail, the Compliant Conveyor Crowder extends to press and hold product flush against the front conveyor rail. The crowder retracts to allow product to enter and exit the work area. The leading edge of the crowder is spring-loaded to deflect approximately 0.381 mm  $\pm$  0.127 mm (0.015"  $\pm$  0.005").

### Adjustments

Refer to mechanical assembly drawing 22296056 (see page 2) during the following procedures.

#### Stroke Adjustment

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To adjust how far the Conveyor Crowder opens and closes, adjust the position of the thumb screws located in the end of each Crowder Base Block (Items 6 & 7) as needed. The thumb screws act as a stop for the Actuator Shaft (Item 9).

#### Align Conveyor Crowder with Conveyor Rail

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To adjust the lateral alignment of the conveyor crowder so it is parallel with the conveyor rail, loosen and tighten the cap screw (Item 27) and set screw (Item 35) located in the Y-Axis Alignment Plate (Item 12). The screws push/pull the position of the Alignment Plate.

### Maintenance

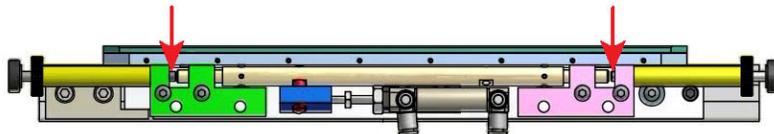
#### Monthly

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It is recommended that you lubricate each end of the actuator shaft on a monthly basis.

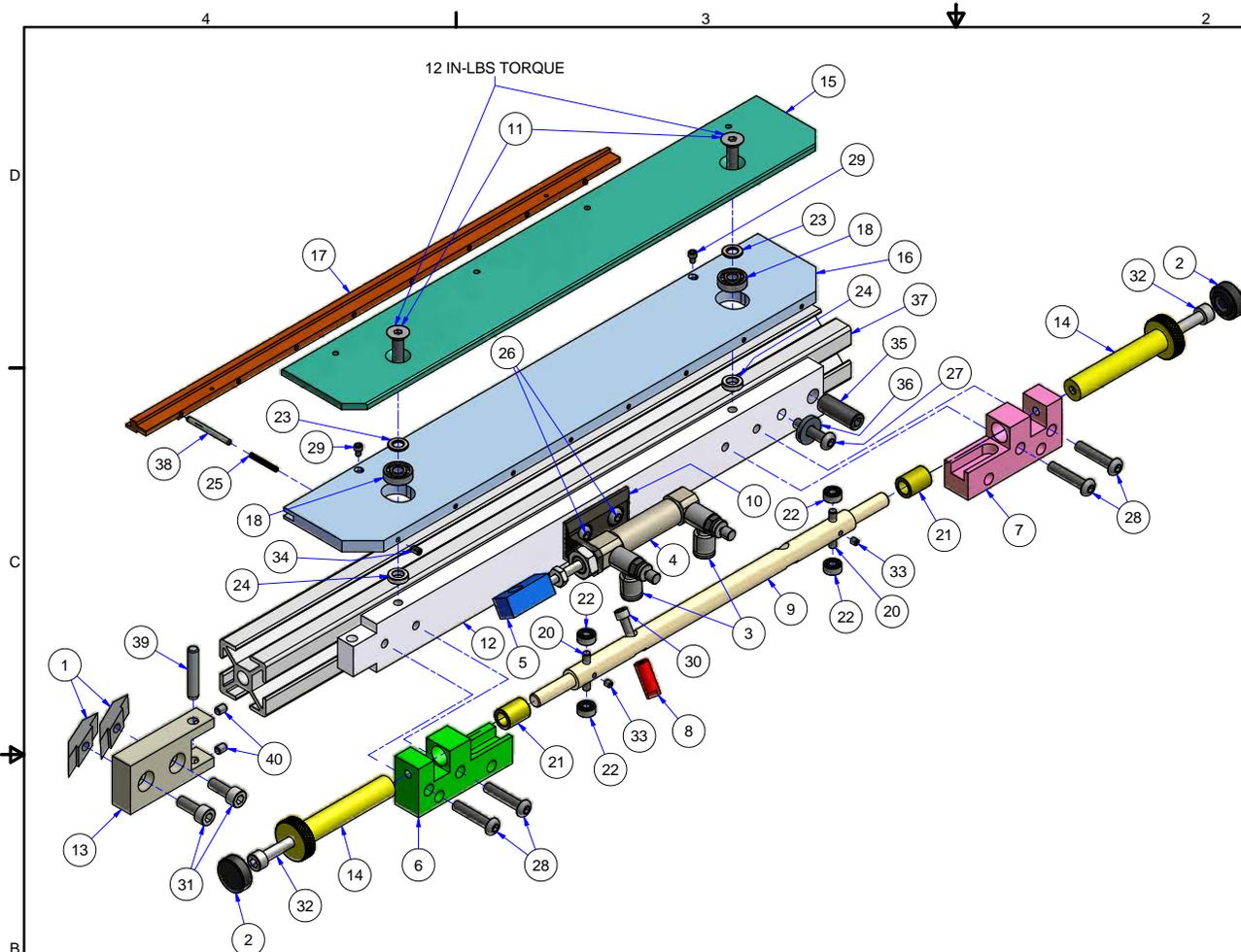
Refer to mechanical assembly drawing 22296082 (see page 2) during the following procedure.

1. Lubricate each end of Actuator Shaft (Item 9) with a general purpose oil.

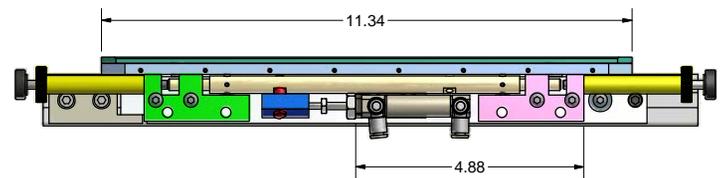


VIEW FROM OUTSIDE OF RAIL

2. Distribute the oil by actuating the conveyor crowder assembly several times using the I/O Viewer. Use the "Crowder" I/O listed under the "Work Area" class. For detailed instructions, refer to *I/O Viewer* in the *Appendices* section of the *FLOware Software Guide*.



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	3	10/3381	T-NUT 5MM (ACCEPTS 10-32 THREAD)
2	2	10/4329	THUMB KNOB,#10 CAP SCREW
3	2	10_4847	CONTROL_FLOWOUT_ELB_10-32MX5-32 HOSE
4	1	10_4862	AIR CYLINDER, 3/8 BORE, 1/2 STROKE
5	1	22150148	BLOCK,AIR CYLINDER
6	1	22150312	CROWDER BASE BLOCK-LEFT
7	1	22150313	CROWDER BASE BLOCK-RIGHT
8	1	22150317	CROWDER SHAFT SIDE PIN
9	1	22206087	ACTUATOR SHAFT, CROWDER
10	1	22206091	CROWDER MOUNT MT BRKT
11	2	22206275	FHCS,10-32X5/8 - MODIFIED
12	1	22206281	ALIGNMENT PLATE Y AXIS
13	1	22206282	PIVOT BLOCK, Y AXIS ALIGNMENT
14	2	22206365	NUT_FINGER_EXTENDED_10-32
15	1	22206370	TOP PLATE_UPSTOP ACCEPTABLE_3mm BELT
16	1	22206371	CROWDER PLATE_COMPLIANT_3MM_11.34"
17	1	22206372	CROWDER FACE_COMPLIANT_3MM_11.34"
18	2	B8011	BEARING, BALL, RADIAL_3/16 ID X 1/2 OD
20	2	DA12075	DOWEL PIN 1/8 X 3/4 LONG
21	2	L0316	BUSHING, BRONZE_1/4ID X 1/2L
22	4	L0916	BEARING, 125 ID X 312 OD
23	2	M5537	BEARING SPACER_1.0 THK X 5.0ID X 9.0OD
24	2	M5538	BEARING SPACER_2.5 THK X 5.0ID X 9.0OD
25	8	S0053	COMPRESSION SPRING
26	2	SABS1032037	SCREW,BUTTON HEAD,10-32 X 3/8 SST
27	1	SABS1032075	SCREW,BUTTON HEAD,10-32 X 3/4 SST
28	4	SABS1032087	SCREW,BUTTON HEAD,10-32 X 7/8 SST
29	2	SACSN0256018	SCREW,BUTTON HEAD,2-56 X 3/16 SST
30	1	SACSN0632037	SCREW.ALLEN,CAP,SS_6-32 X 3/8
31	2	SACSN1032050	CAP SCREW 10-32 X 1/2LG SST
32	2	SACSN1032300	CAP SCREW 10-32 X 3 LG SST
33	2	TACSN0440012	SCREW_SET_SST_CUP PT_4-40 X 1/8
34	8	TACSN0440018	SET SCREW_CUP PT_SST_4-40 X 3/16
35	1	TACSN3124087	SET SCREW 5/16-24 X 7/8
36	1	WFRBH010	#10 HARD WASHER
37	-	-	CONVEYOR RAIL (SHOWN FOR CLARITY)
38	8	DA09100	DOWEL PIN 3/32 X 1 LG
39	1	DA18100	DOWEL PIN 3/16 X 7/8 LG
40	2	TACSN0632018	SET.A.CU.SST_6-32 X 3/16



VIEW FROM OUTSIDE OF RAIL



TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	INCH	METRIC
X/XX	± 0.015	0 MM ± 0.4 MM
X/XXX	± 0.005	0.1 MM ± 0.4 MM
ANGULAR	± 0.5°	0.00 MM ± 0.1 MM
RUNOUT	± 0.003 T.I.R.	
FINISH	N/A	
HEAT TREATMENT	N/A	
DWG SIZE	C	

LAST REVISED 7/2/2015

**GPD Global**

DESCRIPTION  
CROWDER, CONVEYOR, EXTRUDED RAIL ASSEMBLY

MATERIAL  
N/A

DWG NO  
22296082

DRAWN BY ALJ 4/27/2015 SHEET 1 OF 1