



*Standard Sawtooth
Dual-Cut*



SERIES 3.0

**OPERATING
&
INSTALLATION INSTRUCTIONS
PARTS LISTS**

FOR
NEW HOLLAND
FP230-FP240 FORAGE HARVESTERS
ALSO CNH FXH300

HORNING MFG LLC
301 TWIN SPRINGS CT
NEW HOLLAND, PA 17557

2020

OPERATING INSTRUCTIONS

1. Shut off all power to machine before servicing.
2. Grease all bearings and zerks every 8 to 10 hours (Roll bearings 1/2 to 1 pump each).
3. Bearings should operate under 200° F. Spit Test: If it doesn't sizzle (212°), assume normal operation.
4. New belts should be checked every hour for the first 5 hours of operation, daily thereafter.
5. Check roll clearance daily.
6. Roll clearance should be 1/16" as a starting point.
7. Increase roll gap according to moisture.
8. It may be necessary to lightly tap adjustment blocks downward when decreasing roll gap.
9. Recommended cut length for corn silage is 3/4".
10. Emergency stop (1/2" bolt with coupler nut between taper blocks) is factory set to keep rolls from hitting each other. See illustration **A**.
11. Large processor springs should be compressed to 4 7/8". (Rolls should not open under normal conditions.)
12. If knives, etc go through processor, measure springs. (Free length should be 5 1/4". Replace springs if less.)
13. Wash down unit at end of season and apply a coating of oil or grease to all unpainted surfaces, especially rolls.

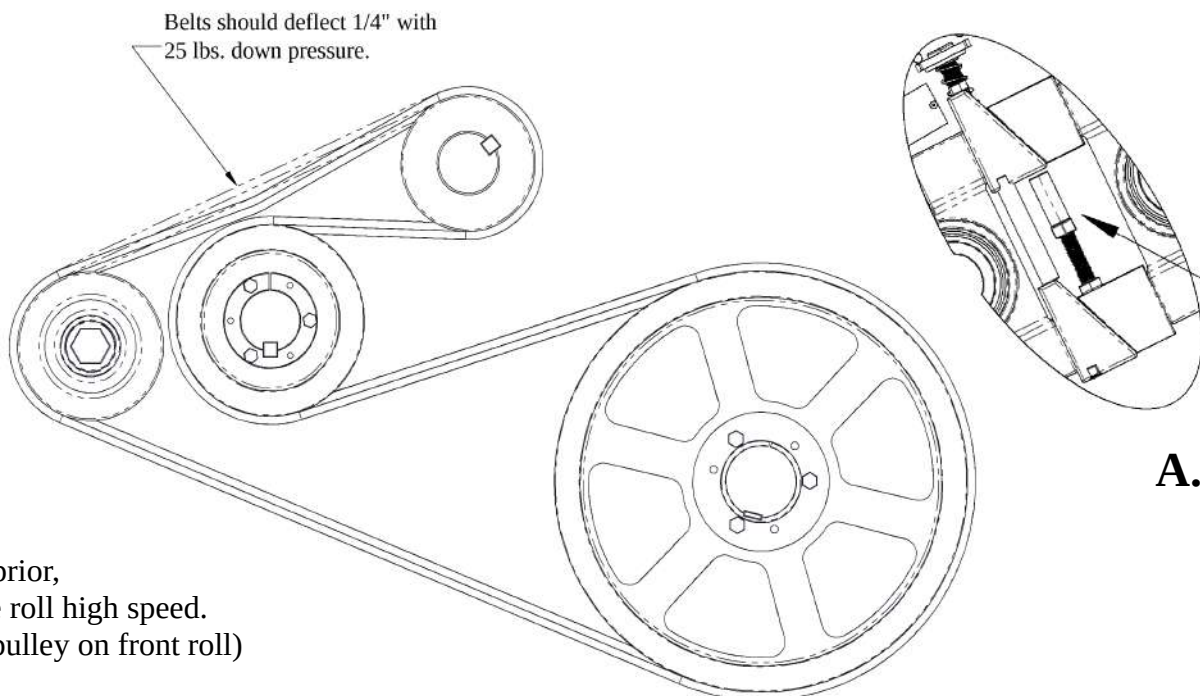
CHANGEOVER TO HAYLAGE

1. Release spring loaded pins, and remove pan between auger and processor. (You may have to rotate auger to clear pan handle and latches.)
2. Slide air gap angle underneath cutterhead all the way back to improve air flow. Refer to harvester manual.
3. Remove belts for haylage.

BELT TENSION

Tensioner spring should be compressed to 1/8" gap between spacer and washer. If your machine doesn't have a spacer, press down all belts at once. Belts should deflect 1/4" with 25 lbs. down pressure (4-belt model). See illustration below.

For ease of belt installation adjust rolls completely together.



2013 & prior,
Opposite roll high speed.
(Larger pulley on front roll)

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
Hot Bearings	Side strain from improper installation	Loosen locking collars to release strain, then re-tighten
	Over greasing	Use only ½ to 1 pump of grease per bearing
Plugging in front of rolls	Feed pan not installed properly	Position properly
	Dried material on pan from previous season	Clean pan
	Knives too far from pan	Reset knives
	Roll teeth worn dull	Replace rolls
Processor rattles excessively when under load, from springs opening up	Springs too loose or smashed From foreign material	Measure free length of springs. If less than 5 1/4", replace springs.
	Too long cob pieces	Reduce cut length to 3/4"
	Rolls set too close for volume of crop	Adjust roll gap
Belts twisting, breaking, or getting hot	Misaligned sheaves	Align sheaves
	Belts too tight	Properly adjust belt tension
	Pan bent or out of line	Replace pan

Contact your dealer about any additional problems.

Note: To check pan alignment, lay flexible ruler on inside of pan when installed. Slide ruler up toward roll till it hits, then feel where ruler is hitting on roll. Should be within a 1/4" of center of rolls. Always wear gloves.

PARTS LISTS

FIGURE 1 PARTS for FP230

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	S2112	NH FP230 & 240 Right shield	1
2	S2113	NH FP230 Top Front shield	1
3	S2110	NH 900 & FP230 Center shield	1
4	S2111	NH FP230 & 240 Left shield	1
5	S2123	FP230 Lower back lid	1
6	42377	Left shield spacer	2
7	FW38SAE	3/8" SAE Flat Washer	3
8	CS38x4G5	3/8"x4" NC Gr.5 Cap screw zinc plated	3
9	42379	Rubber foot spacer	1
10	CB14x12	1/4"x1/2" NC Carriage bolt zinc coated	6
11	FN14	1/4" NC Serrated Flange Nut zinc	6
12	HC371	Rubber Hood catcher	2
13	D1039	Warning sharp rolls (orange & white)	1
14	D1060	Horning Kp 3.0 series for NH (yellow)New Styl	1
15	D1004	Small gray roll adjustment Decal	1
16	D1040	Warning rotating parts (orange & white)	2
17	D1008	Horning Address label	1
18	D1065	Yellow Horning Krop Processor Logo	1
19	D1035	2x3 Red Reflective Decal	1

FIGURE 1 PARTS for FP240

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
2	S2114	NH FP 240 Top Front shield	1
3	S2115	NH FP 240 Top Back shield	1
5	S2124	FP240 Lower back lid	1

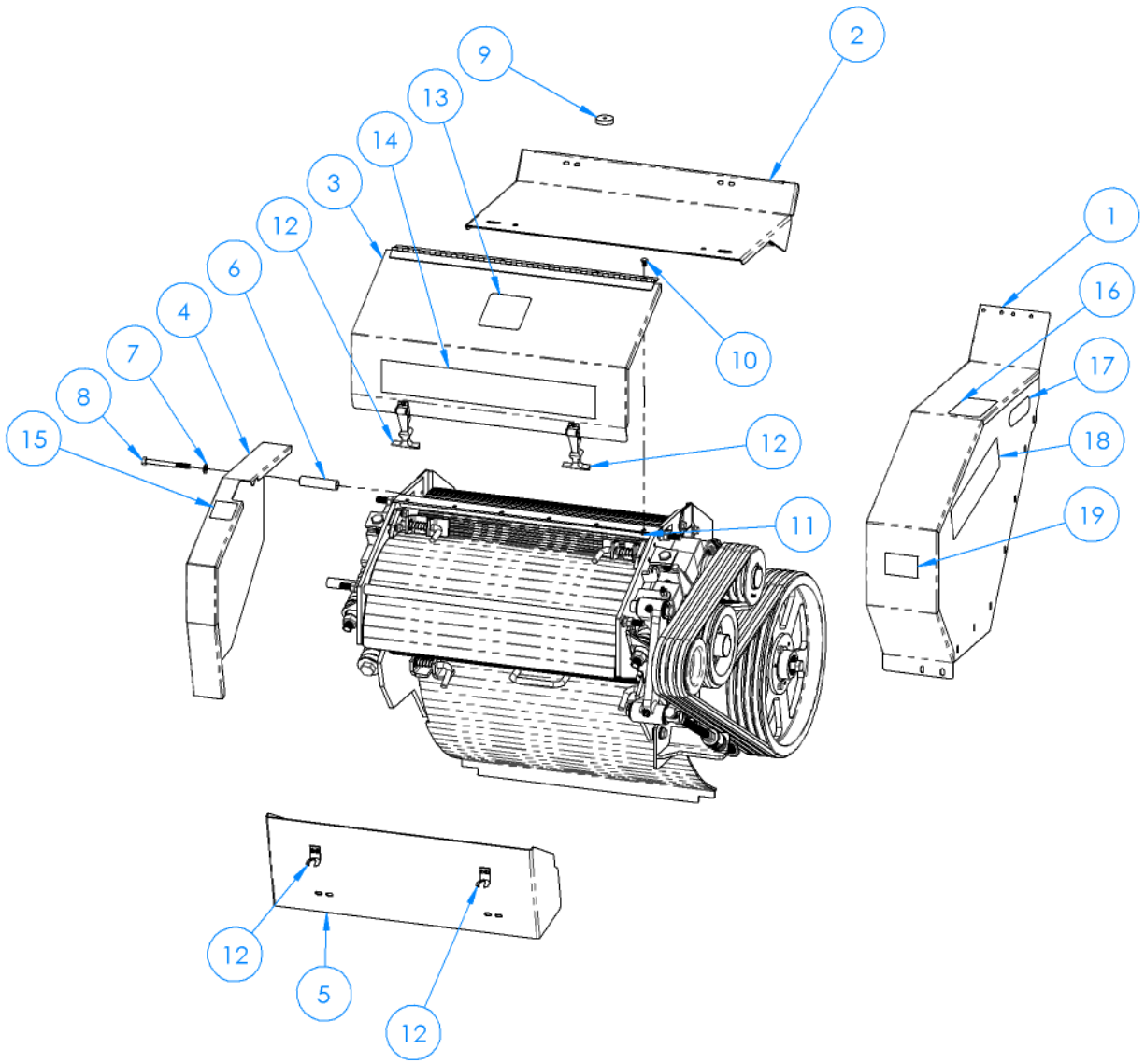


FIGURE 1 Shields

FIGURE 2 PARTS for FP230

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	P1544B**	15.4" 4-B SF Sheave	1
2	P464BSB**	4.6 4B groove 2" Straight bore	1
3	P664BK**	6.6 4B SD pulley w/SD 2" bushing and 1/2" broached keyway	1
4	BB118K-4**	BB118K Belts set of 4	1
5	42313	NH FP 230 & 240 Drive Adapter	1
6	CS58x4G5	5/8 x 4" NC Gr.5 Cap screw zinc plated	1
7	42351	FP230 & 900 Pan	1
8	42357	FP230 & 900 Return hood	1
9	R9003.0**	NH 900 or FP230 3.0 Roll Several styles available	2
10	42341**	FP left frame assembly	1
11	42340**	FP right frame assembly	1
12	42362	230 & 900 Pipe hinge holder	1
13	42330	FP 230 & 900 Spacer pipe	1
14	42331	FP 230 & 900 redi-rod for spacer pipe 1/2" NC B7 rod 28"	2
15	FN12	1/2" NC Serrated Flange Nut zinc	4
16	N12	1/2" NC Nut (zinc coated)	4
17	42332	Fp & 900 belt tightener bracket	1
18	LN58S	5/8" Stover (steel) Locknut (zinc coated)	1
19	SP542	#542 zinc/yellow Die spring Idler tightener	1
20	42320	4 Groove belt tension spacer 1.438" L	1
21	FW58	5/8" Flat washer (zinc coated)	1
22	N58	5/8" NC Nut (zinc coated)	3
23	42326	5/8"x18" NC Ready Rod W/ Nut Welded	1
24	CS12x1G5	1/2x1 Gade 5 zinc Capscrew	1
25	FW12SAE	1/2" SAE Zinc Plated Flat Washer	1
26	FB38x1G5	3/8"x1" NC Gr.5 Serrated Flange bolt zinc plated	1
27	FN38	3/8" NC Serrated Flange Nut zinc	2
28	KEY12x12x3	1/2x1/2x3" Key	1
29	SS38x58	3/8"-16 x 5/8" set screw	4
30	KEY12x12x2	1/2x1/2x2" Key	1
31	BUSF212**	SF 2 1/2" Bushing	1
32	KEY516x58x2	5/16"x5/8"x 2" key	1
33	CS38x2G8	3/8"x 2" NC Gr.8 full thread Cap Screw Z/Y	3
34	42306**	3.0 4-Groove Idler Arm	1
35	CP316x112	3/16"x1 1/2" Plated cotter pin	1
36	MW1	1" Machinery washer 14Ga.	A/R

** 2013 & prior, see page 12

FIGURE 2 PARTS for FP240

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
7	42350	FP 240 Pan	1
8	42356	FP 240 Return Hood	1
9	RFP2403.0**	Horning FP240 3.0 Roll Several styles available	2
12	42363	FP 240 Spacer pipe w/ shield mount	1
13	42328	FP 240 Spacer pipe	1
14	42329	FP 240 redi-rod for spacer pipe 30"	2

FIGURE 2 PARTS for FIBER-TECH Model

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
2	P424BSB**	4.2 4B groove 2" Straight bore	1
3	P704B**	7.0" 4-B SK Sheave	1
37	BUSK2**	SK 2" Bushing	1

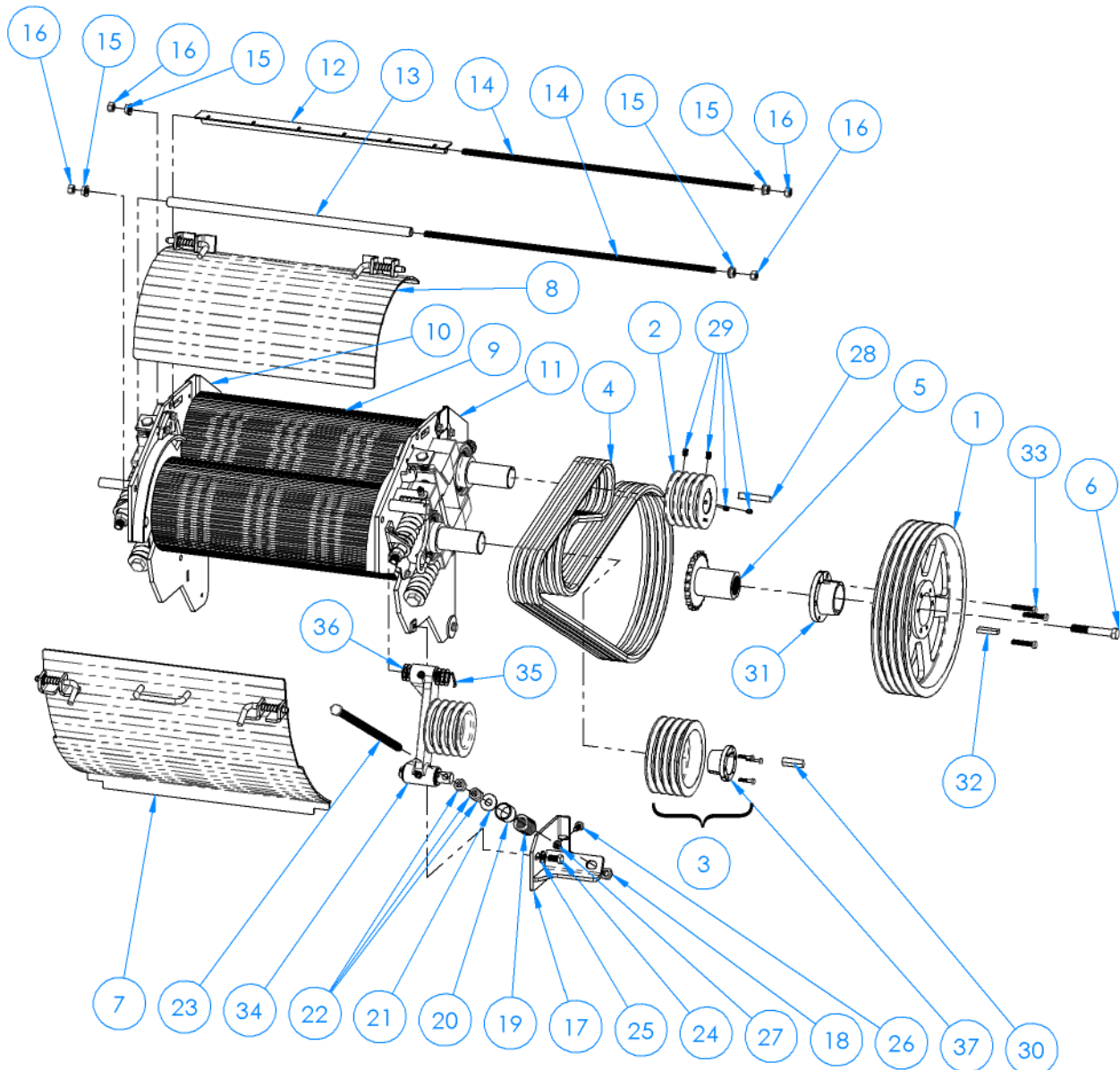


FIGURE 3 PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	CS34x15	3/4"x15" NC Gr.8 Cap screw Z/Y	1
2	CS34x14	3/4"x14" NC Gr.8 Cap screw Z/Y	1
3	SP55	Heavy 5.5" KP spring Zinc Yellow	2
4	FW34G8	3/4" Flat washer Gr.8 (Y/Z coated)	2
5	42303	Back End Bolt Support Bushing	1
6	LN34S	3/4" Stover (steel) Locknut (zinc coated)	2
7	BR2112PBHD	HD 211's 2" Eccentric Lock Wide race HD Pillow Block Bearing	2
8	42340**	Fp right end frame	1
9	42424	Taper Block Assembly	1
10	GH12	12" Grease hose 1/8"NPT Male both ends	1
11	42382	Back end bolt support	1
12	42381**	Return hood catcher plate	1
13	42380**	Catcher plate spacer	1
14	42386**	NH FP Front slot cover	1
15	42384**	NH 900 & FP Rear slot cover	1
16	CB38x1	3/8"x1" NC Carriage bolt zinc coated	2
17	FN38	3/8" NC Serrated Flange Nut zinc	2
18	FB38x12	3/8"x1/2" Gr5 serrated flange bolt zinc plated	4
19	FB38x1G5	3/8"x1" NC Gr.5 Serrated Flange bolt zinc plated	2
20	D1064	Custom serial # plate (Aluminum)	1
21	D1018	Belt Routing decal	1
22	D1046**	Belt part # BB118k-4 decal	1
23	GF1009	1/8" NPT straight female grease zerk	1
24	GF1010	1/8" NPT 90 Degree Male grease Zerk	1
25	M4538	211's Heavy Duty Pillowblock bearing casting	2
26	BR2112	SKF 211's 2" Eccentric Lock Wide race Bearing insert	2
27	TB58x3NFG8	5/8"x3"NF Gr.8 Tapping bolt (chamfered end)	1
28	42423	Adjustment Lockplate	1
29	SP250	Lock plate Spring	1
30	62055	Taper Block Assembly	1

** 2013 & prior, see page 12

FIGURE 4 PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	M4622**	Cast Iron idler arm	1
2	62117	Idler Pin	1
3	CP316x112	3/16"x1 1/2" Plated cotter pin	2
4	MW1	1" Machinery washer 14Ga.	4
5	GF1012	1/8" NPT 45 deg. male zerk	1
6	GF1011	1/8" NPT Straight male grease zerk	1
7	P464BIP	4.6" 4-Groove Idler Pulley w/ Bearings	1
8	BR6304	6304 Idler bearing	2
9	M4694	4.6" 4-Groove Idler Pulley	1
10	M4517	SD Idler spacer	1
11	CS20x80MM10.9	20x80mm 10.9 zinc 2.5pitch bolt	1

** 2013 & prior, see page 12

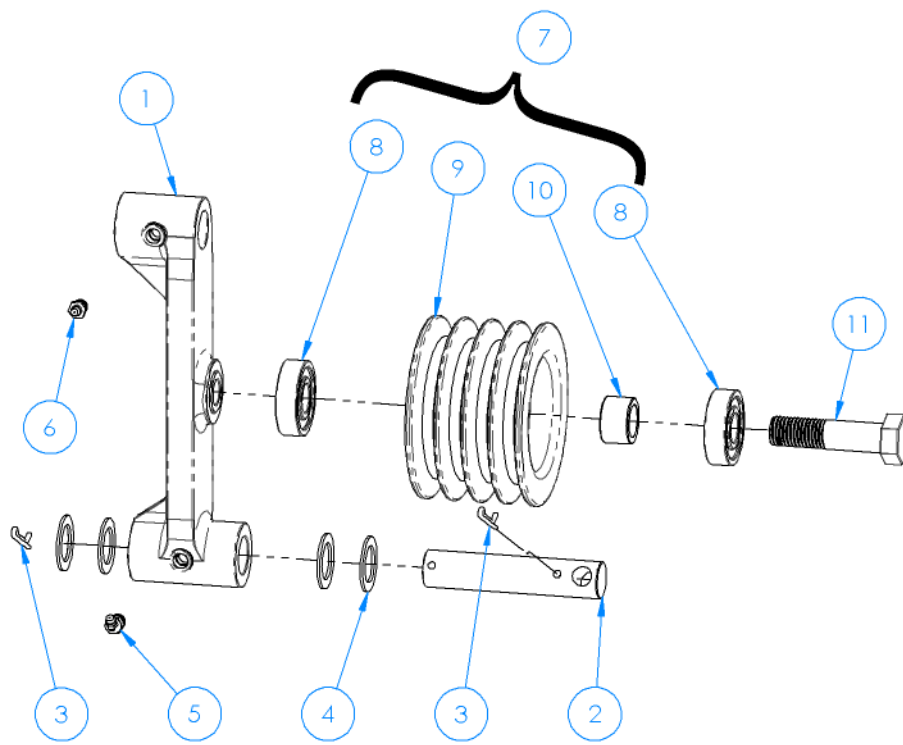


FIGURE 4 42306 Idler Arm

**2013 & PRIOR PARTS LIST

PAGE/ ITEM NO.	CURRENT PART NO.	PART NO.	DESCRIPTION	QTY.
6 / 1	P1544B	P1364B**	13.6" 4-B SK sheave	
6 / 2	P464BSB	P524BK**	5.2" 4-B SD sheave w/2" bushing and keyway	1
6 / 3	P664BK	P404BK**	4.0" 4-B SD sheave w/2" bushing and keyway	1
6 / 4	BB118K-4	BB108K-4**	BB108K Belts set of 4	1
6 / 6	R9003.0	R900HT4**	Horning 900 or Fp230 Roll (2013 & prior)	2
6 / 5	42340	Call	Non-stock. Must custom order	1
6 / 7	42341	Call	Non-stock. Must custom order	1
6 / 8	BUSF212	BUSK212**	SK 2 1/2" Bushing	1
6 / 9	42306	N/A	Available as single part. See line 19	1
7 / 10	RFP2403.0	RFP240HT4**	Horning FP240 Roll (2013 & prior)	2
7 / 11	P424BSB	N/A	Not used on 2013 & prior	0
7 / 12	P704B	N/A	Not used on 2013 & prior	0
7 / 13	BUSK2	N/A	Not used on 2013 & prior	0
8 / 14	42381	HM1240**	Horseshoe catcher	2
8 / 15	42380	N/A	Not used on 2013 & prior	0
8 / 16	42384	N/A	Not used on 2013 & prior	0
8 / 17	42386	N/A	Not used on 2013 & prior	0
8 / 18	D1046	D1045**	Belt part # BB108k-4 decal	1
10 / 19	M4622	42435**	Kp idler arm 2013 & prior	1