



*Standard Sawtooth  
Dual-Cut*

**SERIES 3.0**

**OPERATING  
&  
INSTALLATION INSTRUCTIONS  
PARTS LISTS**

FOR  
NEW HOLLAND  
890 & 892 FORAGE HARVESTERS

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.

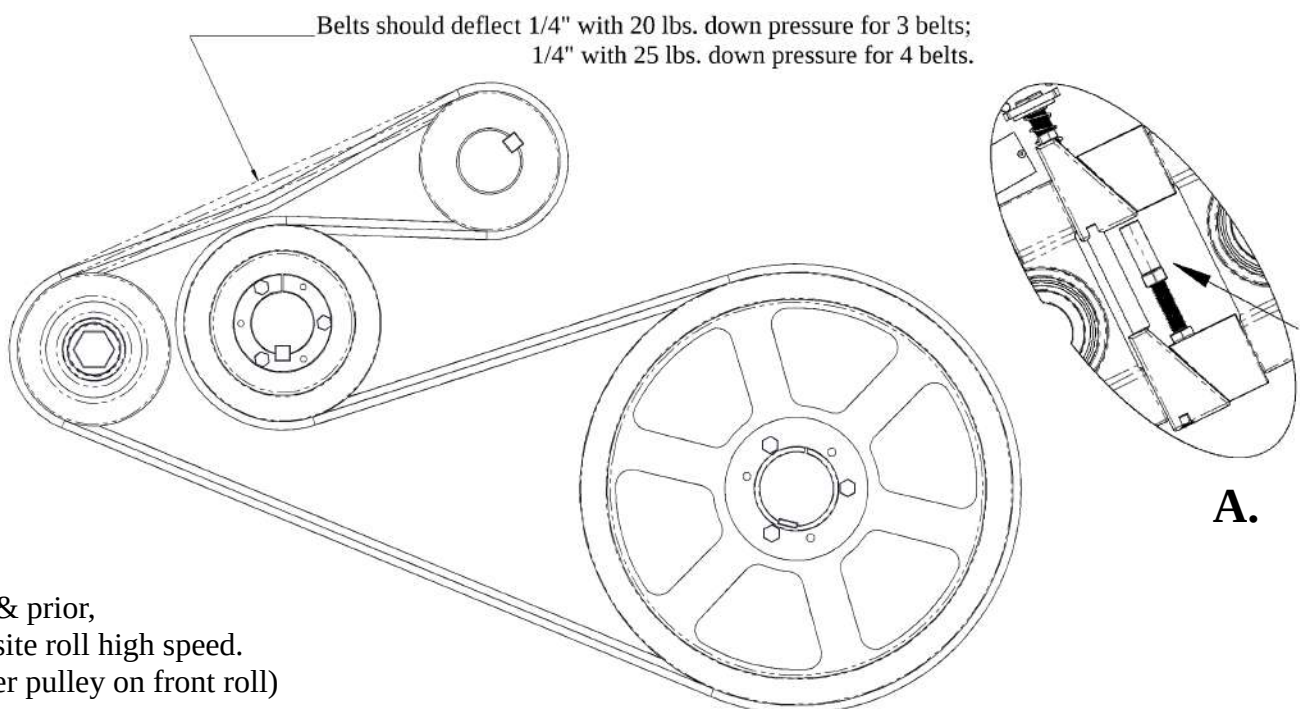
## CHANGEOVER TO HAYLAGE

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. Remove belts for haylage.
3. Note: When putting pan back in for corn, make sure bottom end of pan is on top of step.

## 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 20 lbs. down pressure (3-belt model), and 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<br>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 LIST

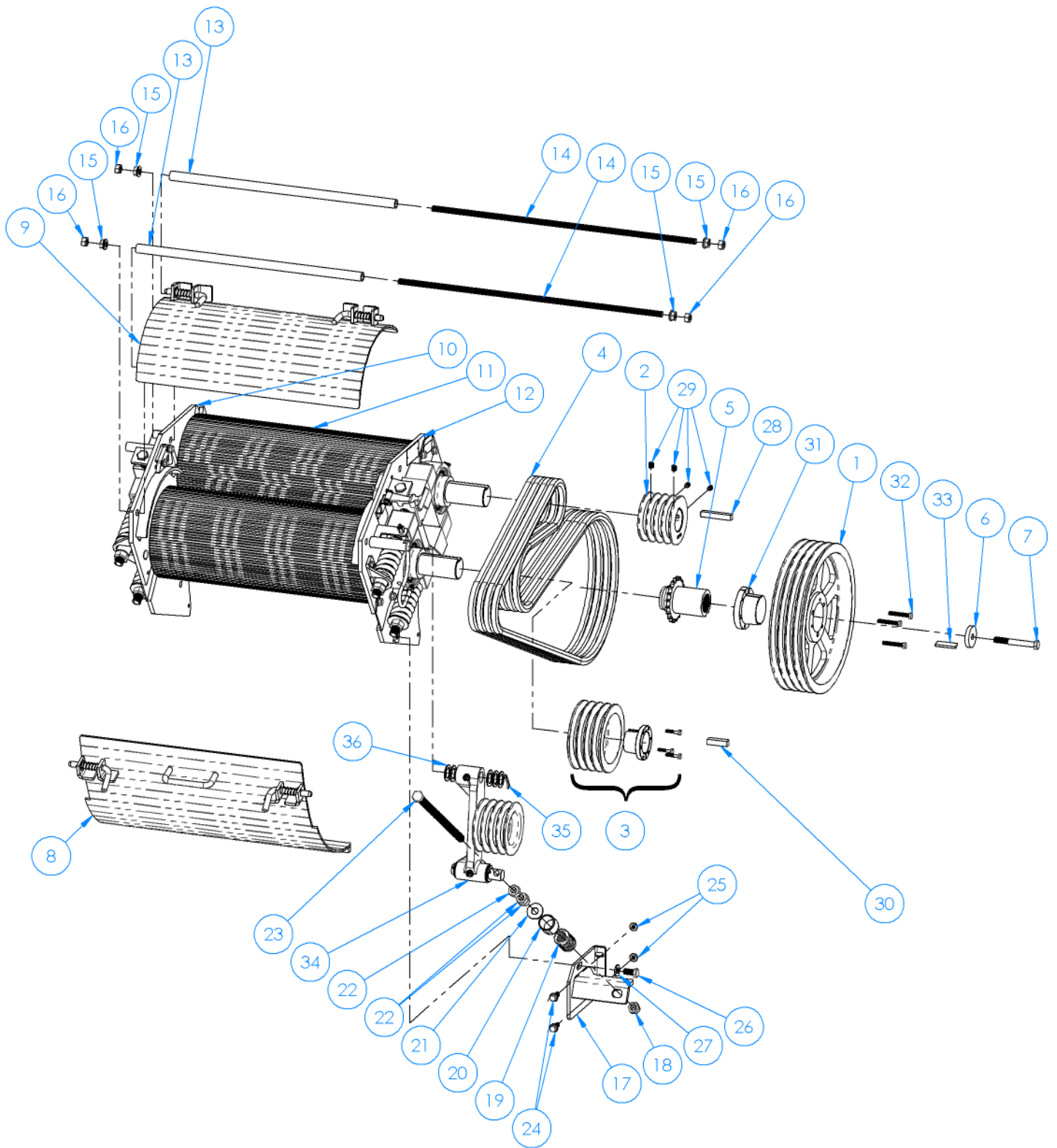
| ITEM NO. | PART NUMBER | DESCRIPTION                                    | QTY. |
|----------|-------------|--|------|
| 1        | S2107       | NH 892 Right shield                            | 1    |
| 2        | S2106       | NH 892 Top Center shield                       | 1    |
| 3        | S2105       | NH 892 Left shield                             | 1    |
| 4        | S2121       | NH 892 Lower back lid                          | 1    |
| 5        | CB14x12     | 1/4"x1/2" NC Carriage bolt zinc coated         | 12   |
| 6        | FN14        | 1/4" NC Serrated Flange Nut zinc               | 12   |
| 7        | 42377       | Left shield spacer                             | 2    |
| 8        | FW38SAE     | 3/8" SAE Flat Washer                           | 3    |
| 9        | CS38x4G5    | 3/8"x4" NC Gr.5 Cap screw zinc plated          | 3    |
| 10       | HC371       | Rubber Hood catcher                            | 5    |
| 11       | D1039       | Warning sharp rolls (orange & white)           | 1    |
| 12       | D1060       | Horning Kp 3.0 series for NH (yellow)New Style | 1    |
| 13       | D1004       | Small gray roll adjustment Decal               | 1    |
| 14       | D1040       | Warning rotating parts (orange & white)        | 2    |
| 15       | D1012       | NH 892 Decal                                   | 1    |
| 16       | D1065       | Yellow Horning Krop Processor Logo             | 1    |
| 17       | D1008       | Horning Address label                          | 1    |
| 18       | D1035       | 2x3 Red Reflective Decal                       | 1    |



## FIGURE 2 PARTS LIST

| ITEM NO. | PART NUMBER | DESCRIPTION  | QTY. |
|----------|-------------|--|------|
| 1        | P1364B      | 13.6 4-B SK Sheave   | 1    |
| 2        | P424BSB**   | 4.2 4B groove 2" Straight bore                             | 1    |
| 3        | P604BK**    | 6.0 4-B SD Sheave w/SD 2" bushing and 1/2" broached keyway | 1    |
| 4        | BB108K-4    | BB108K Belts set of 4                                      | 1    |
| 5        | 42370       | NH 900 & 892 drive adapter                                 | 1    |
| 6        | 42413       | Heavy drive adapter washer                                 | 1    |
| 7        | CS12x4G8    | 1/2"x4" NC GR.8 Cap screw Z/Y                              | 1    |
| 8        | 42352       | NH 892 Pan   | 1    |
| 9        | 42358       | NH 892 Return hood   | 1    |
| 10       | 42345       | NH 892 left frame assembly                                 | 1    |
| 11       | R8923.0**   | Horning 892 3.0 Roll Several styles available              | 2    |
| 12       | 42344**     | NH 892 right frame assembly                                | 1    |
| 13       | 42316       | 892 Spacer pipe 1/2" sch. 40 Blackpipe 22 1/4" Long        | 2    |
| 14       | 42317       | 892 redi-rod for spacer pipe 1/2" NC B7 rod 26"            | 2    |
| 15       | FN12        | 1/2" NC Serrated Flange Nut zinc                           | 4    |
| 16       | N12         | 1/2" NC Nut (zinc coated)                                  | 4    |
| 17       | 42374       | 892 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       | 42327       | 5/8"x 13 1/2" NC Ready Rod W/ Nut Welded                   | 1    |
| 24       | FB38x1G5    | 3/8"x1" NC Gr.5 Serrated Flange bolt zinc plated           | 4    |
| 25       | FN38        | 3/8" NC Serrated Flange Nut zinc                           | 8    |
| 26       | CS12x1G5    | 1/2x1 Gade 5 zinc Capscrew                                 | 1    |
| 27       | FW12SAE     | 1/2" SAE Zinc Plated Flat Washer                           | 1    |
| 28       | KEY12x12x3  | 1/2x1/2x3" Key   | 1    |
| 29       | SS38x12     | 3/8"-16 x 1/2" set screw                                   | 4    |
| 30       | KEY12x12x2  | 1/2x1/2x2" Key   | 1    |
| 31       | BUSK212     | SK 2 1/2" Bushing  | 1    |
| 32       | CS516x2G8   | 5/16"x 2" NC Gr.8 full thread Cap Screw Z/Y                | 3    |
| 33       | KEY316x58x2 | 3/16"x5/8"x2" Key  | 1    |
| 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



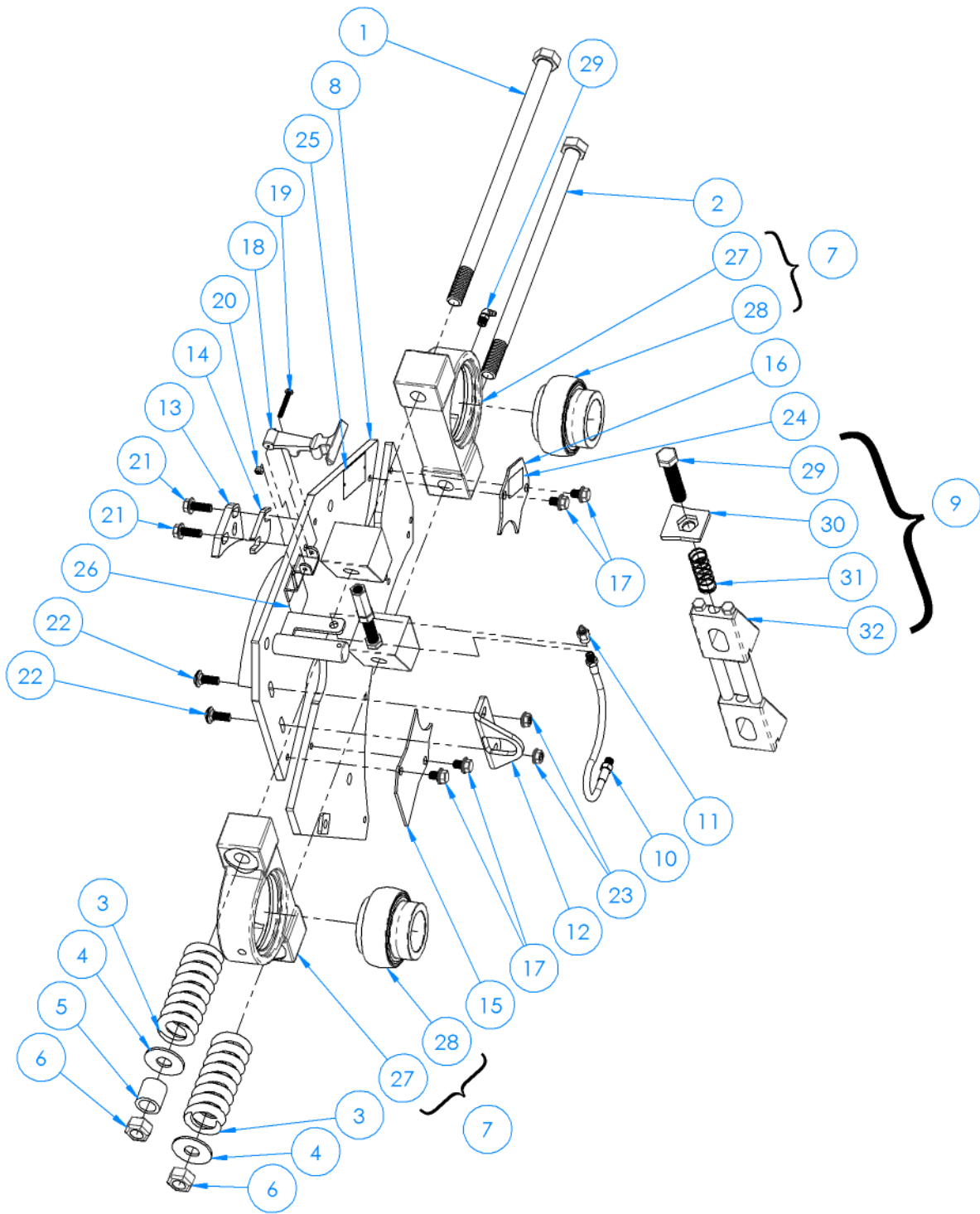
**FIGURE 2 Processor Assembly**

## 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        | 42344**     | NH 892 right end frame                                       | 1    |
| 9        | 42424       | Taper Block Assembly   | 1    |
| 10       | GH12        | 12" Grease hose 1/8"NPT Male both ends                       | 1    |
| 11       | GF1009      | 1/8" NPT straight female grease zerk                         | 1    |
| 12       | 42382       | Back end bolt support  | 1    |
| 13       | 42381**     | Return hood catcher plate                                    | 1    |
| 14       | 42380**     | Catcher plate spacer   | 1    |
| 15       | 42388**     | NH 892 & 790 Rear slot cover                                 | 1    |
| 16       | 42387**     | NH 892 & 790 Front slot cover                                | 1    |
| 17       | FB38x12     | 3/8"x1/2" Gr5 serrated flange bolt zinc plated               | 4    |
| 18       | HC371       | Rubber Hood catcher  | 1    |
| 19       | MS10-24x112 | 10-24 x 1 1/2" Pan Head Machinery Screw                      | 1    |
| 20       | LN10-24N    | #10-24 Nylon Lock nut  | 1    |
| 21       | FB38x1G5    | 3/8"x1" NC Gr.5 Serrated Flange bolt zinc plated             | 2    |
| 22       | CB38x1      | 3/8"x1" NC Carriage bolt zinc coated                         | 2    |
| 23       | FN38        | 3/8" NC Serrated Flange Nut zinc                             | 2    |
| 24       | D1045       | Belt part # BB108k-4 decal                                   | 1    |
| 25       | D1064       | Custom serial # plate (Aluminum)                             | 1    |
| 26       | D1018       | Belt Routing decal   | 1    |
| 27       | M4538       | 211's Heavy Duty Pillowblock bearing casting                 | 2    |
| 28       | BR2112      | SKF 211's 2" Eccentric Lock Wide race Bearing insert         | 2    |
| 29       | TB58x3NFG8  | 5/8"x3"NF Gr.8 Tapping bolt                                  | 1    |
| 30       | 42423       | Adjustment Lockplate   | 1    |
| 31       | SP250       | Lock plate Spring  | 1    |
| 32       | 62055       | Taper Block Assembly   | 1    |

\*\* 2013 & prior, see page 12





**FIGURE 3 Right End Frame**

Note: All parts on left end frame are also in this view.

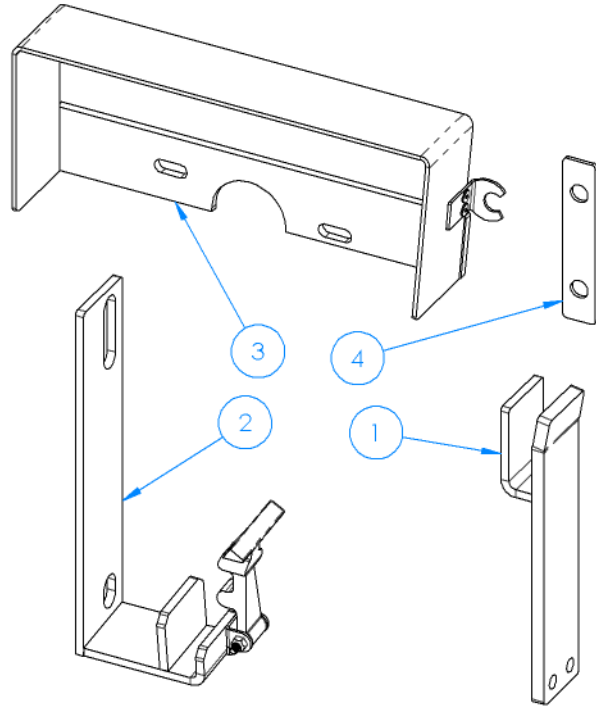
## FIGURE 4 PARTS LIST

| ITEM NO. | PART NUMBER | DESCRIPTION                      | QTY. |
|----------|-------------|----------------------------------|------|
| 1        | 42418       | 892 Bot. R. front Shield bracket | 1    |
| 2        | 42419       | 892 R. rear shield bracket       | 1    |
| 3        | 42420       | Upper Front R. 892 Bracket       | 1    |
| 4        | 42421       | 890 Belt tightener spacer        | 2    |

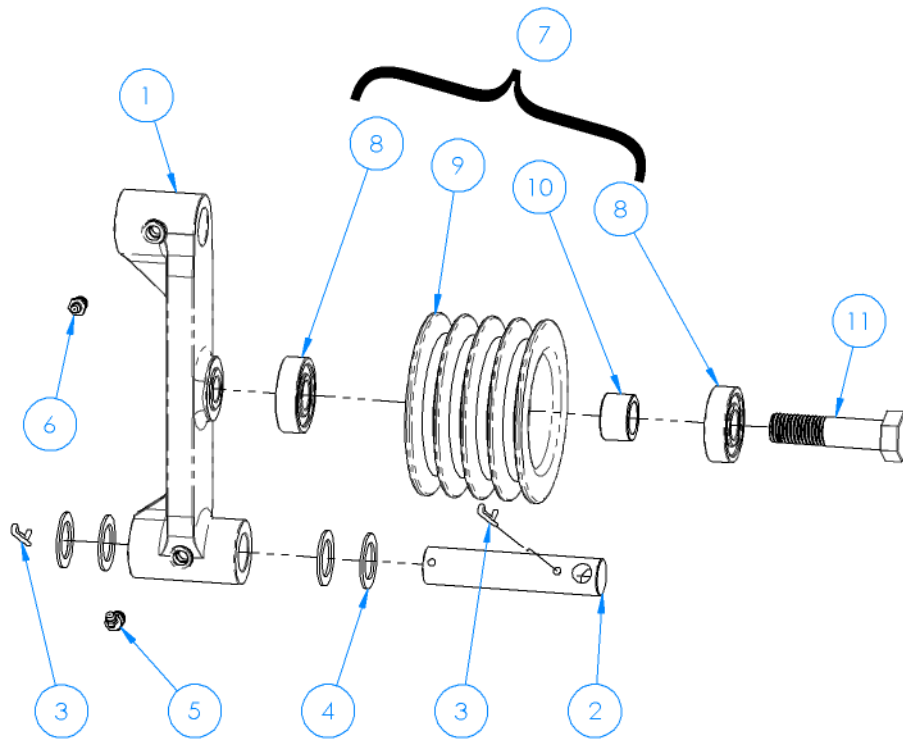
## FIGURE 5 PARTS LIST

| 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 Other Parts**



**FIGURE 5 42306 Idler Arm**

## \*\*2013 & PRIOR PARTS LIST

| PAGE/<br>ITEM NO. | CURRENT<br>PART NO. | PART<br>NO. | DESCRIPTION                                | QTY. |
|-------------------|---------------------|-------------|--|------|
| 6 / 1             | P424BSB             | P644BK**    | 6.4" 4-B SD sheave w/2" bushing and keyway | 1    |
| 6 / 2             | P604BK              | P504BK**    | 5.0" 4-B SD sheave w/2" bushing and keyway | 1    |
| 6 / 3             | R8923.0             | R892HT4**   | Horning 892 Roll (2013 & prior)            | 2    |
| 6 / 4             | 42306               | N/A         | Available as single part. See line 10      | 1    |
| 8 / 5             | 42344               | Call        | Non-stock. Must custom order               | 1    |
| 8 / 6             | 42381               | HM1240**    | Horseshoe catcher                          | 2    |
| 8 / 7             | 42380               | N/A         | Not used on 2013 & prior                   | 0    |
| 8 / 8             | 42388               | N/A         | Not used on 2013 & prior                   | 0    |
| 8 / 9             | 42387               | N/A         | Not used on 2013 & prior                   | 0    |
| 10 / 10           | M4622               | 42435**     | Kp idler arm 2013 & prior                  | 1    |