ENGINEERING CHANGE NOTICE – PRODUCT BULLETIN

ECN ID#	*6967*

DATE	May 8, 2023
BRAND	Batco and Westfield
PRODUCT	Field Loader Conveyor
MODEL	CX3 1549 FMD Top Mount Conveyors

DETAILS

A running change was made to the CX3 1549 Top Mount belt idlers which will be standard on all new production units.

In addition to this change, we've established a kit which contains new idlers for both drive belts, a new belt for the gearbox to drive roller, new drive pulleys for the gearbox and drive roller, as well as all necessary hardware.

Our expectation is that this kit could be used to resolve any field issues that may remain present after the factory recommended adjustments have been made. In cases where the kit is required, AGI will provide this to the dealer at no charge with labor being provided by the dealer or end use customer.

Dealers must call to order the kit and have the serial number and shipping address for where they want the kit shipped to.

The kit part number is 15011082-BK – CX3 Top Mount Kit

To perform this upgrade, you will need to have your conveyor:

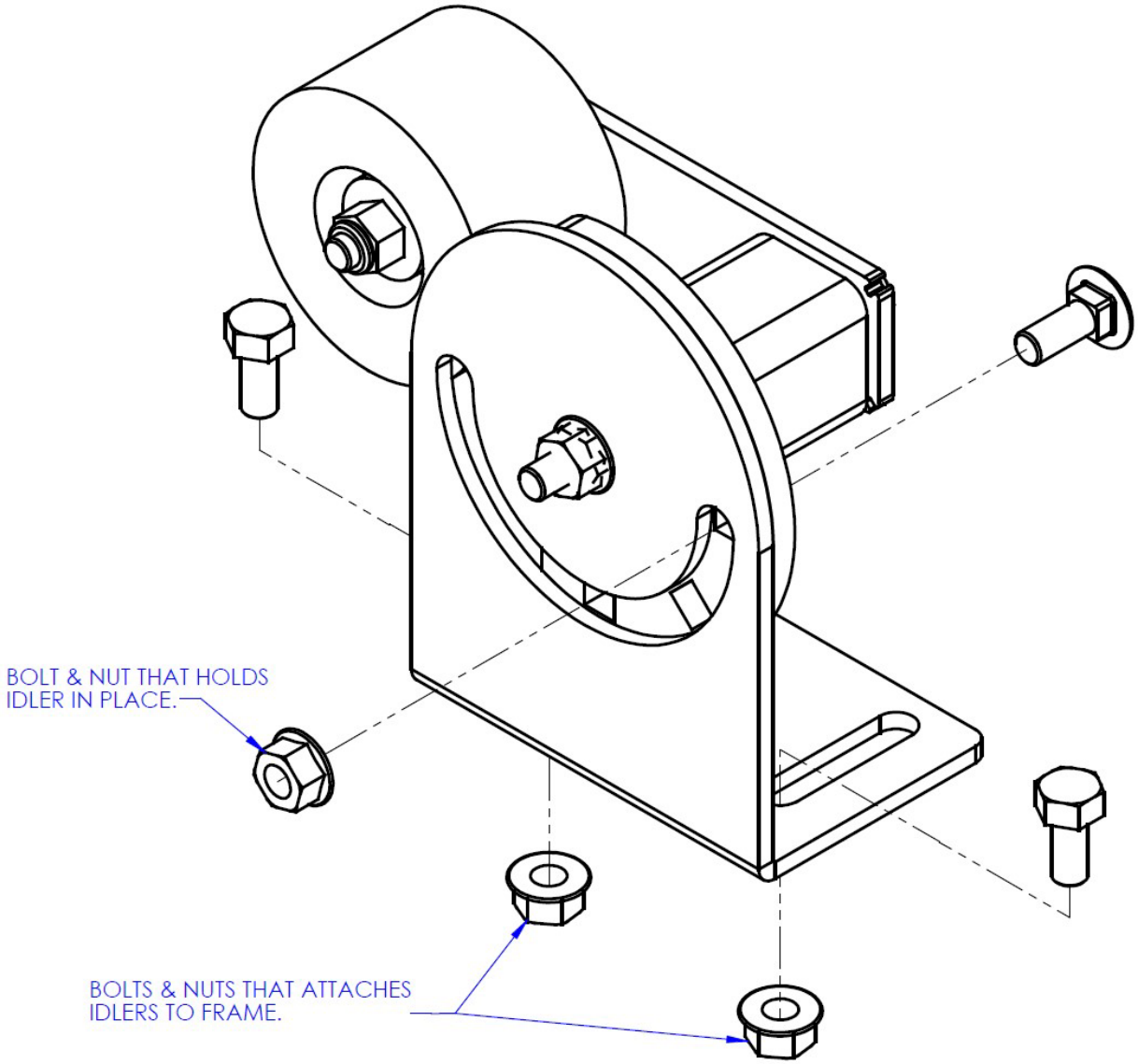
1. Parked on a level surface with the wheels chocked.
2. Have the motor shut off and locked out.
3. Have your conveyor in a position where you can easily reach the Top mount drive system.

To remove the old idlers:

1. Remove the ½" x 1-1/4" carriage head bolt and ½" flange nut that hold the idler body at an angle to apply tension to the belt.

<u>*NOTE: the idler is under tension, when removing this bolt, the idler body may spring down. Use caution when removing this bolt.***</u>**

2. Once the idler is not under tension you can loosen and remove the two ½" nuts & ½" x 1" hex bolts that attach the base of the idler to the frame.



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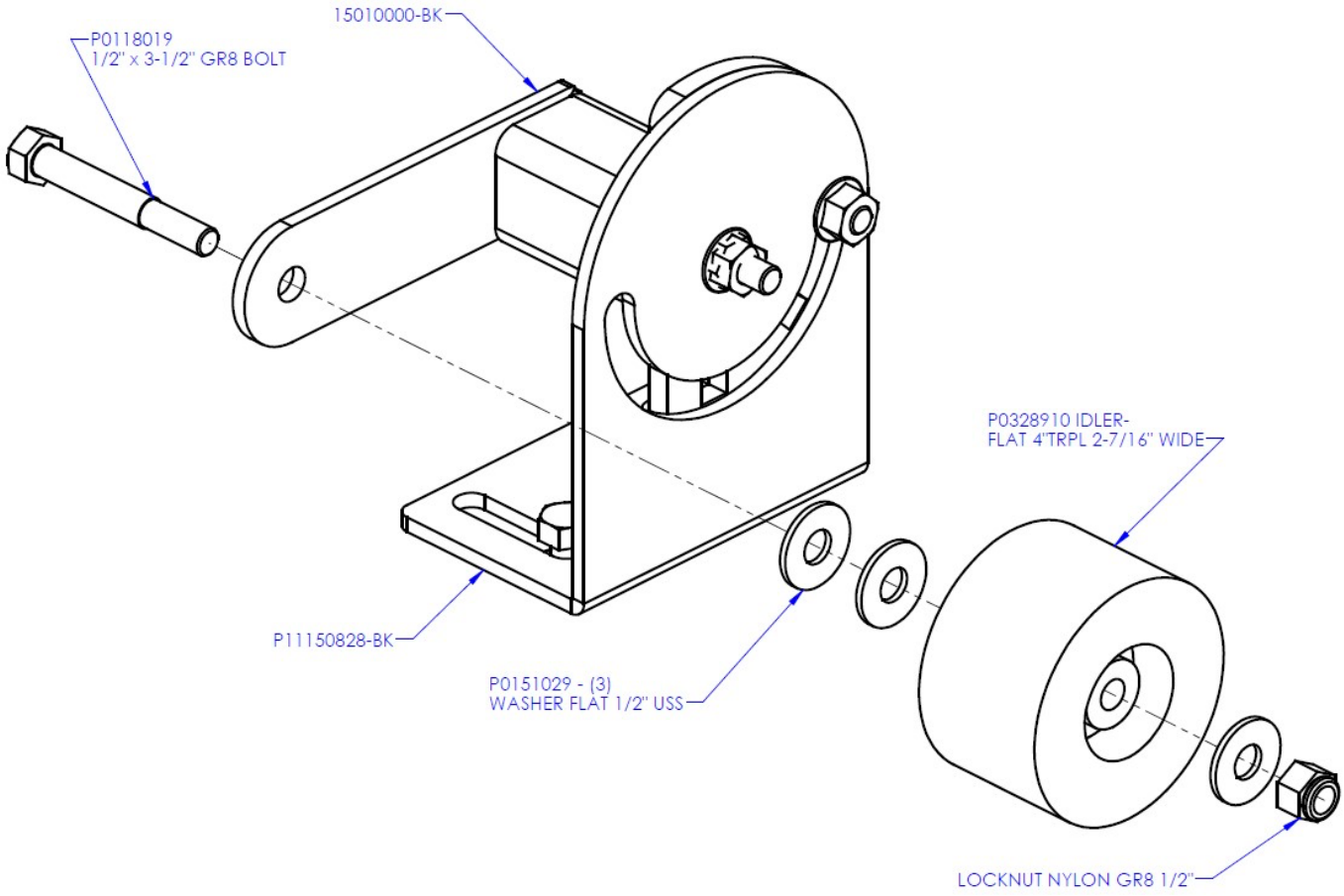
3. Once the idlers are removed from the Top mount, remove the ½" x 3-1/2" hex bolt and ½" nut holding the idler onto the assembly. Set the idler pulley (P0328910) aside as we will be using it in the new idler assembly.



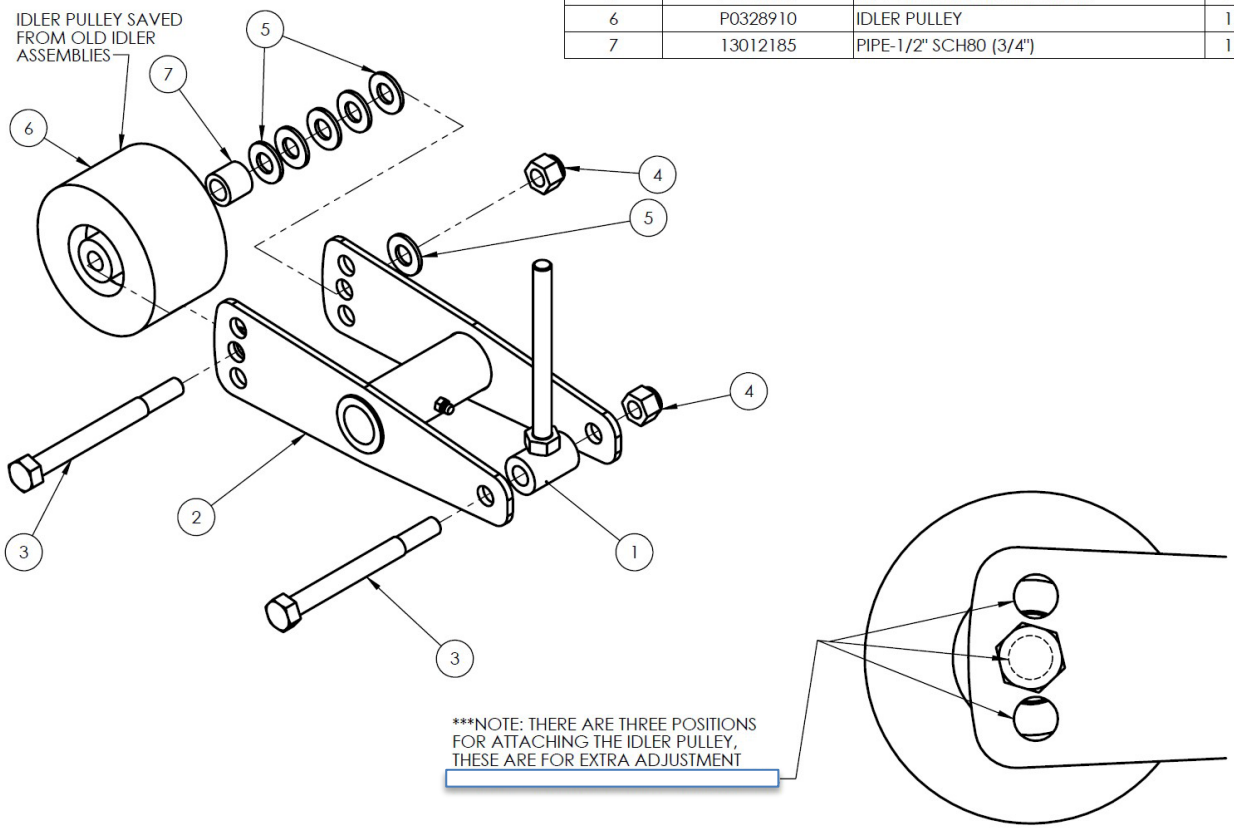
4. Using the pulleys (P0328910) you set aside, assemble them onto the idler pivot (15010150-BK) using a ½ x 5" bolt (P0118024), spacer (13012185), five ½" flat washers (P0151025) & a ½" nylock nut (P0134008) as shown in the drawing below.

5. At this point remove the spring idler tightener (15010153-BK) and the ½ x 5" bolt (P0118024) and ½" nylock nut (P0134008). These will need to be assembled onto the drive assembly separately.

NOTE: when assembling the idler pulley, note that there are three holes in the idler pivot (15010150-BK). These are to adjust and help match the length of your belt.*

NOTE: the use of five washers when assembling the pulley to the idler pivot is done so you centre the pulley on the belt.*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	15010153-BK	SPRING IDLER TIGHTENER, PT BLK	1
2	15010150-BK	IDLER PIVOT	1
3	P0118024	HEX BOLT, 1/2x5 UNC GR8 ZN	2
4	P0134008	NYLON LOCK NUT, 1/2 UNC GR8 ZN	2
5	P0151025	FLAT WASHER, 1/2 SAE STL ZN	7
6	P0328910	IDLER PULLEY	1
7	13012185	PIPE-1/2" SCH80 (3/4")	1



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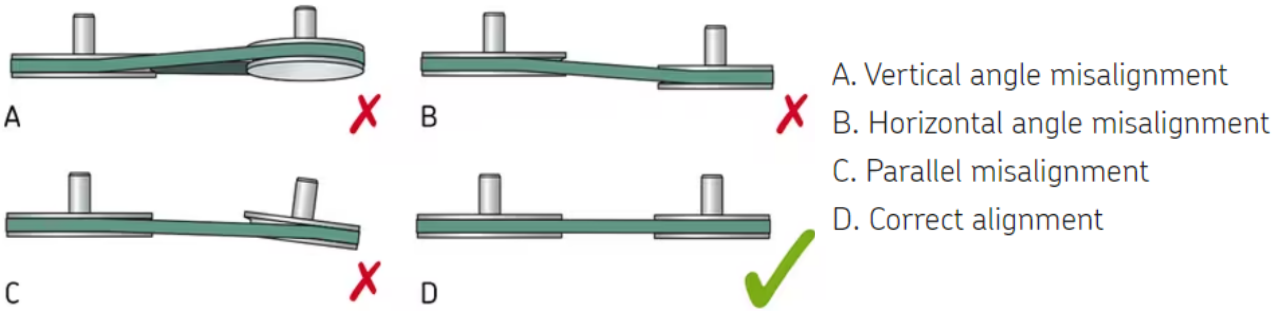
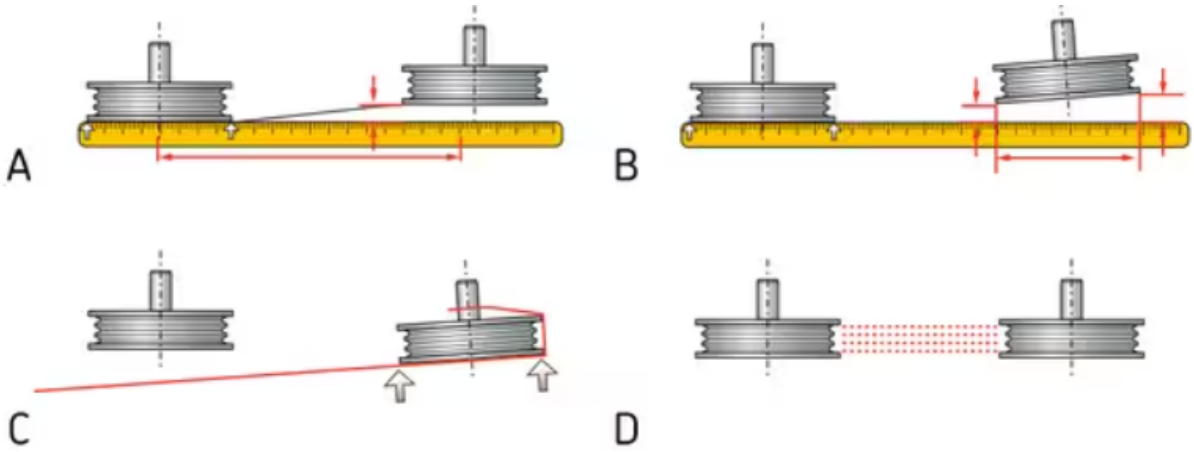
6. Before installing the idler between the clutch and the gearbox, you will need to ensure the pulleys are aligned. See next page for important pulley alignment procedure and points.

Pulley Alignment Procedure

1. There are three types of belt misalignment that must be avoided. See below.
    a. A rule of thumb is a v-belt drive system can have up to ½ degree of misalignment per foot of belt length. This would be approximately 1/16" for the clutch and gearbox pulley set up and 1/8" for S-Drive belt set Up.



2. Correct Align Procedure.
    a. As shown below place your straight edge to ensure parallel alignment as in picture A.
    b. As shown in picture B check for angular misalignment and adjust accordingly.
    c. Picture C show the use of a string to check for alignment. When using a string ensure the string is straight and makes contact on four points two on each pulley.
    d. Picture D shows Correct Alignment.



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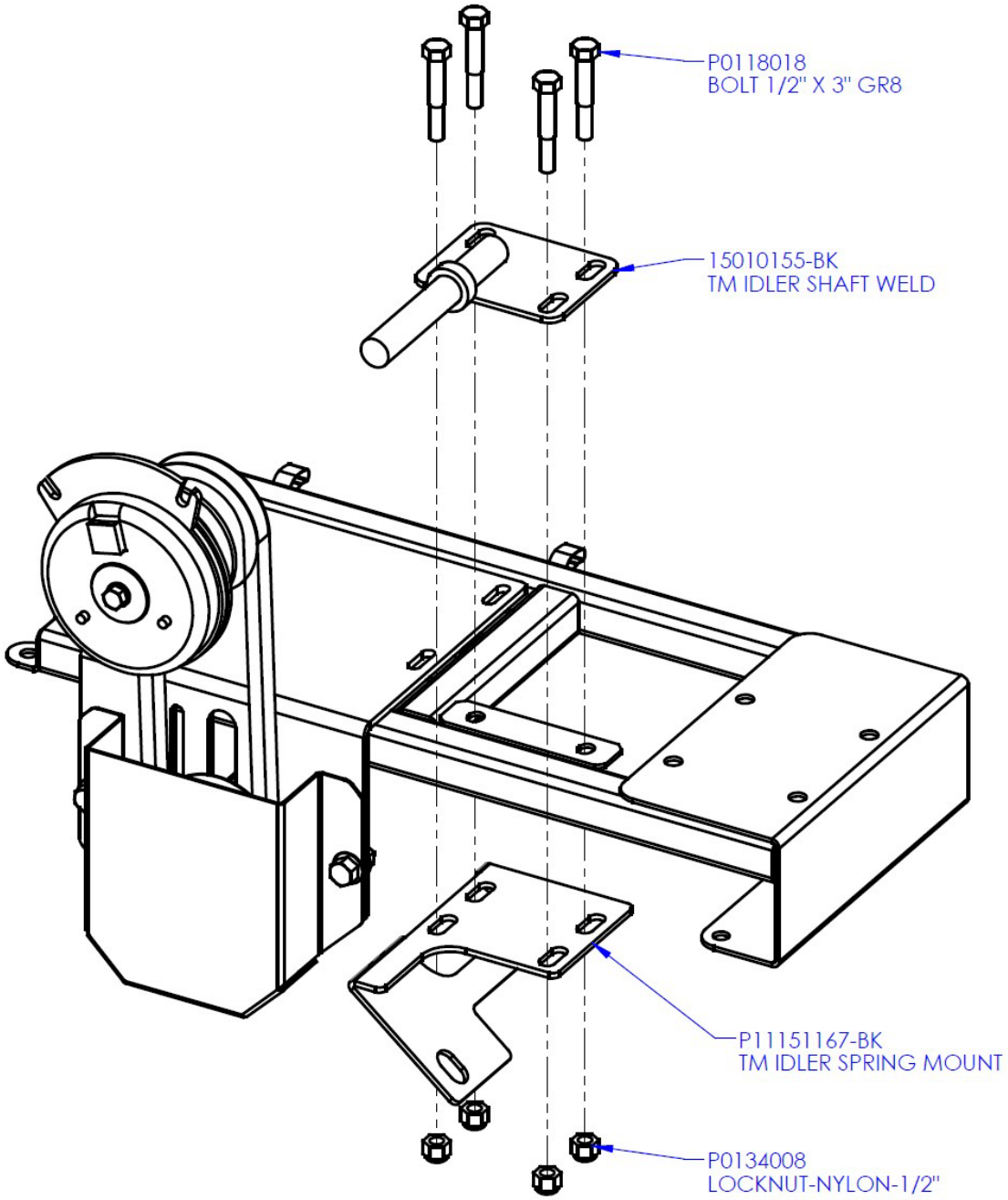
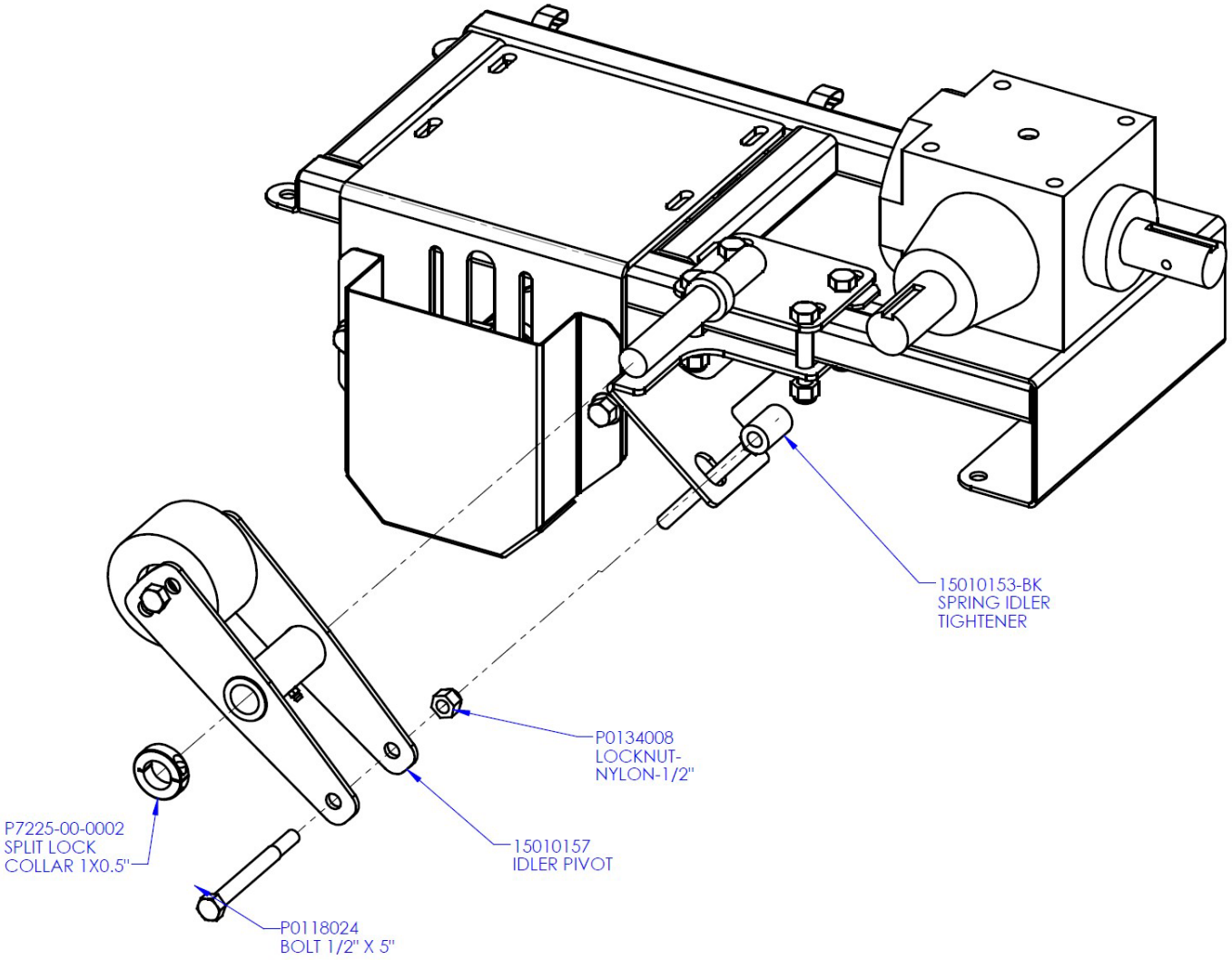
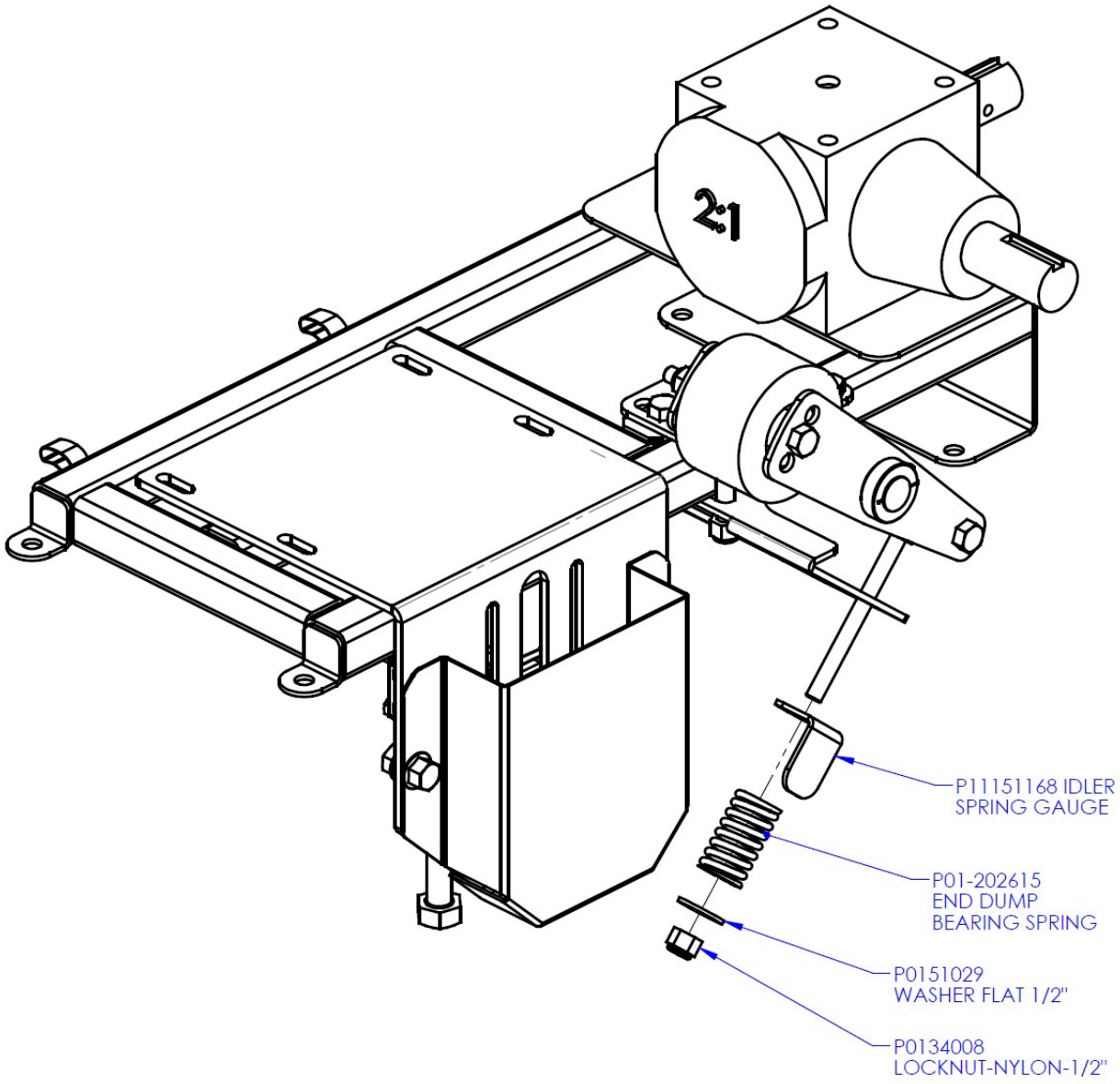
7. To install the new idler between the clutch and gearbox, take the idler mounts 15010155-BK (TM Idler shaft weld) and P11151167-BK (TM idler spring mount) place them on the frame aligned with the mount holes and bolt them together using the ½" x 3" hex bolt and ½" hex nut.



8. Take the idler tensioner (15010153-BK) and slip it through the hole in the idler mounts.
9. Slide the idler pivot (15010157) onto the shaft of the mount, attach the split lock collar (P7225-00-0002) to the end of the shaft to hold the idler pivot in place. Ensure that the idler pulley is centered on the belt, loosen the bolts on the mount and adjust if needed.
10. Apply grease to the zerk until grease starts to come out both sides. Rotate the idler as much as possible to get the grease all the way around the shaft.
11. Attach the spring idler tensioner (15010153-BK) to the idler pivot (15010157) using the ½" x 5" bolt and ½" nylock nut.

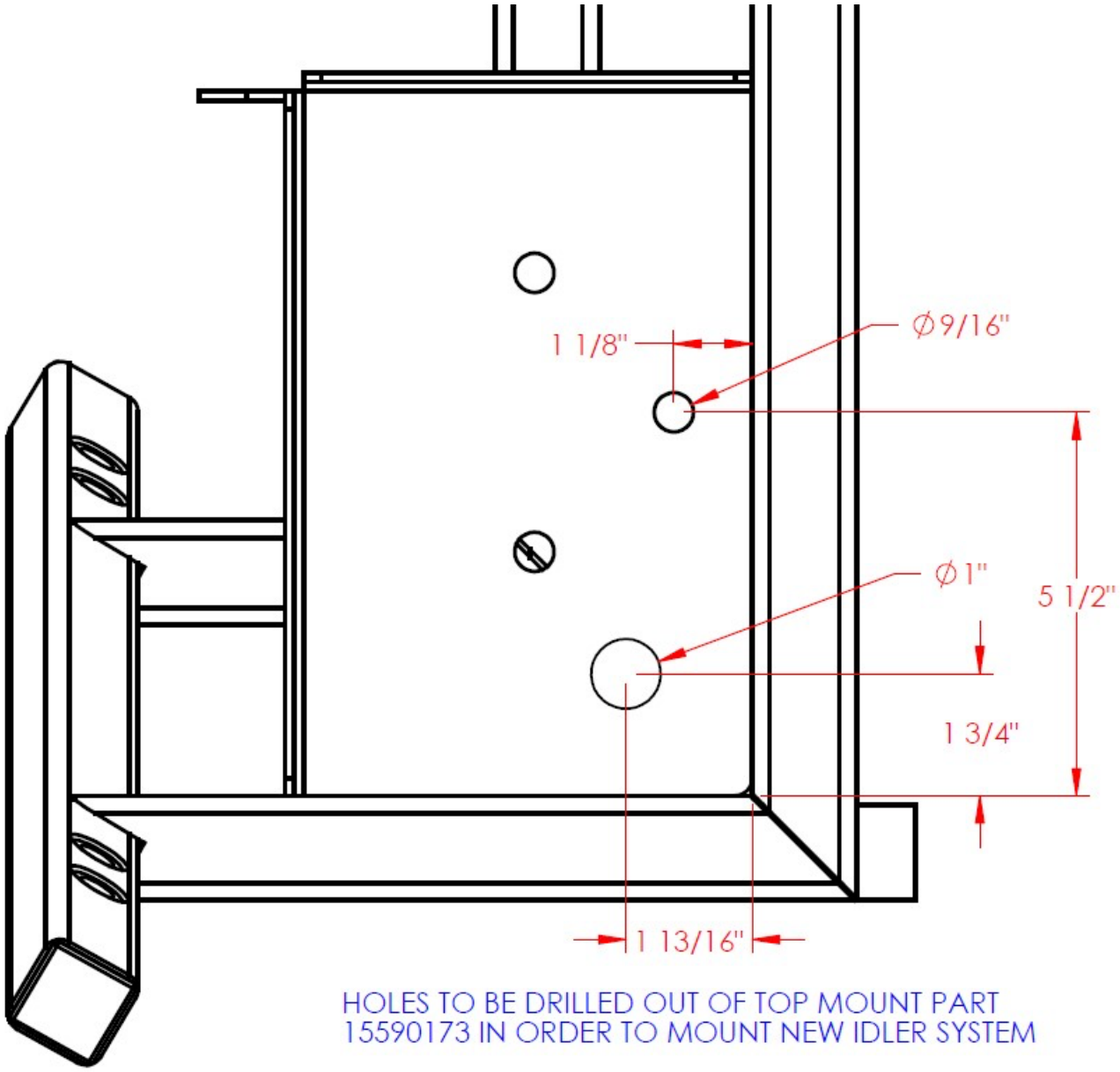


12. Assemble the idler spring gauge (P11151168), End Dump Beaaring Spring (P01-202615), washer flat ½" (P0151029) and then thread on the ½" nylock nut (P0134008).



13. Tighten down the nylock nut (P0134008) until the compressed spring edge is flush with the edge of the idler spring gauge (P11151168).

14. To install the new idler between the gearbox and drive roller, you will need to drill two holes in the plate in the Top Mount cage Right (15590173-BK).



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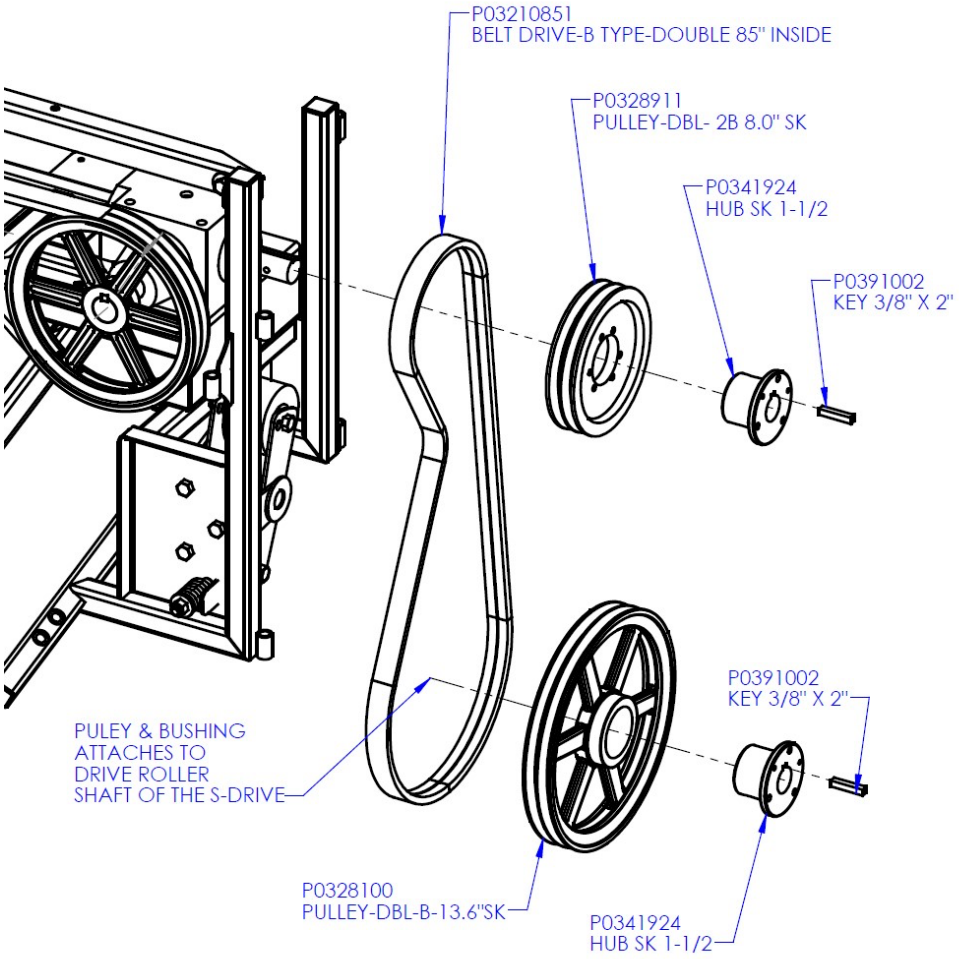
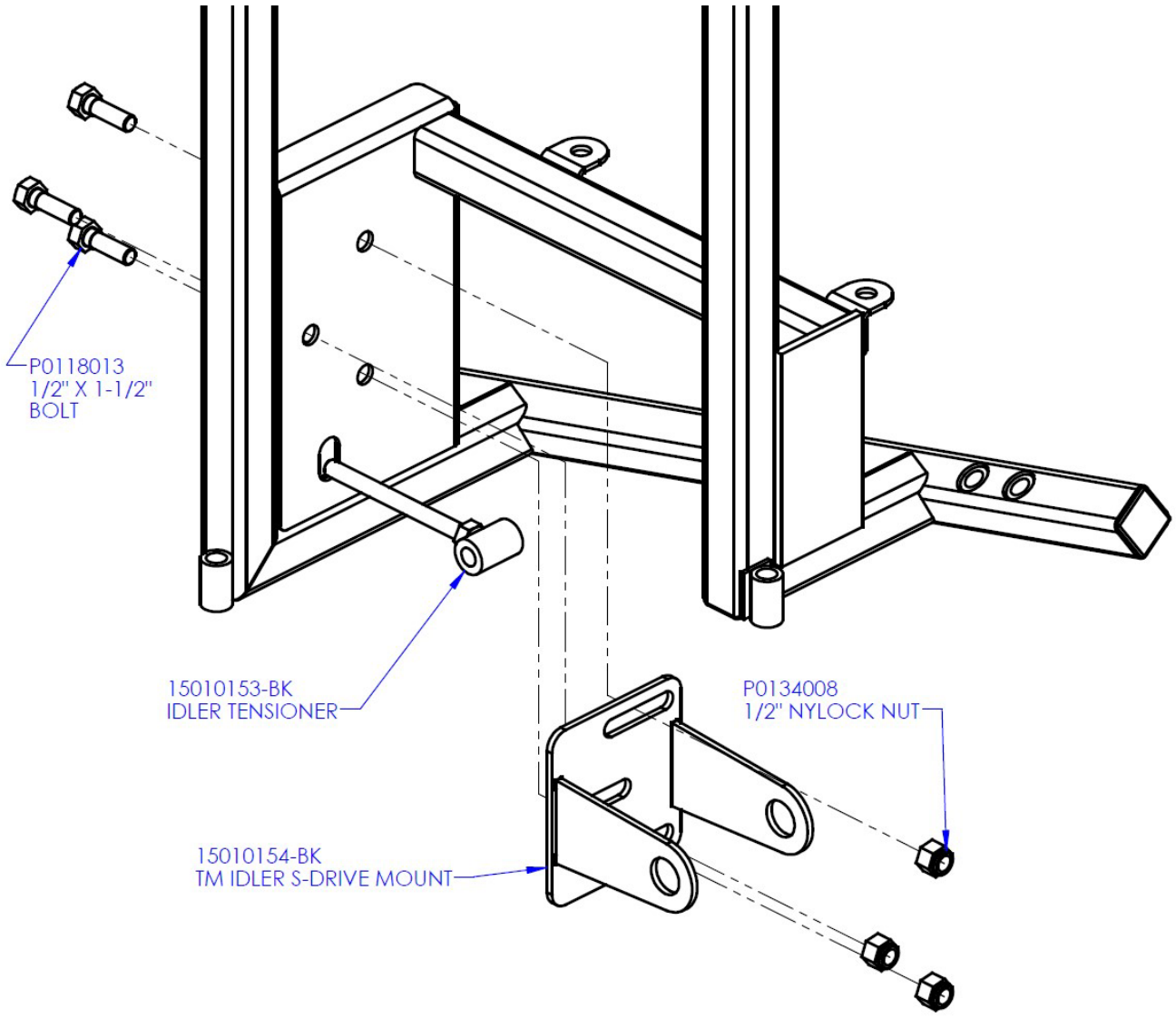
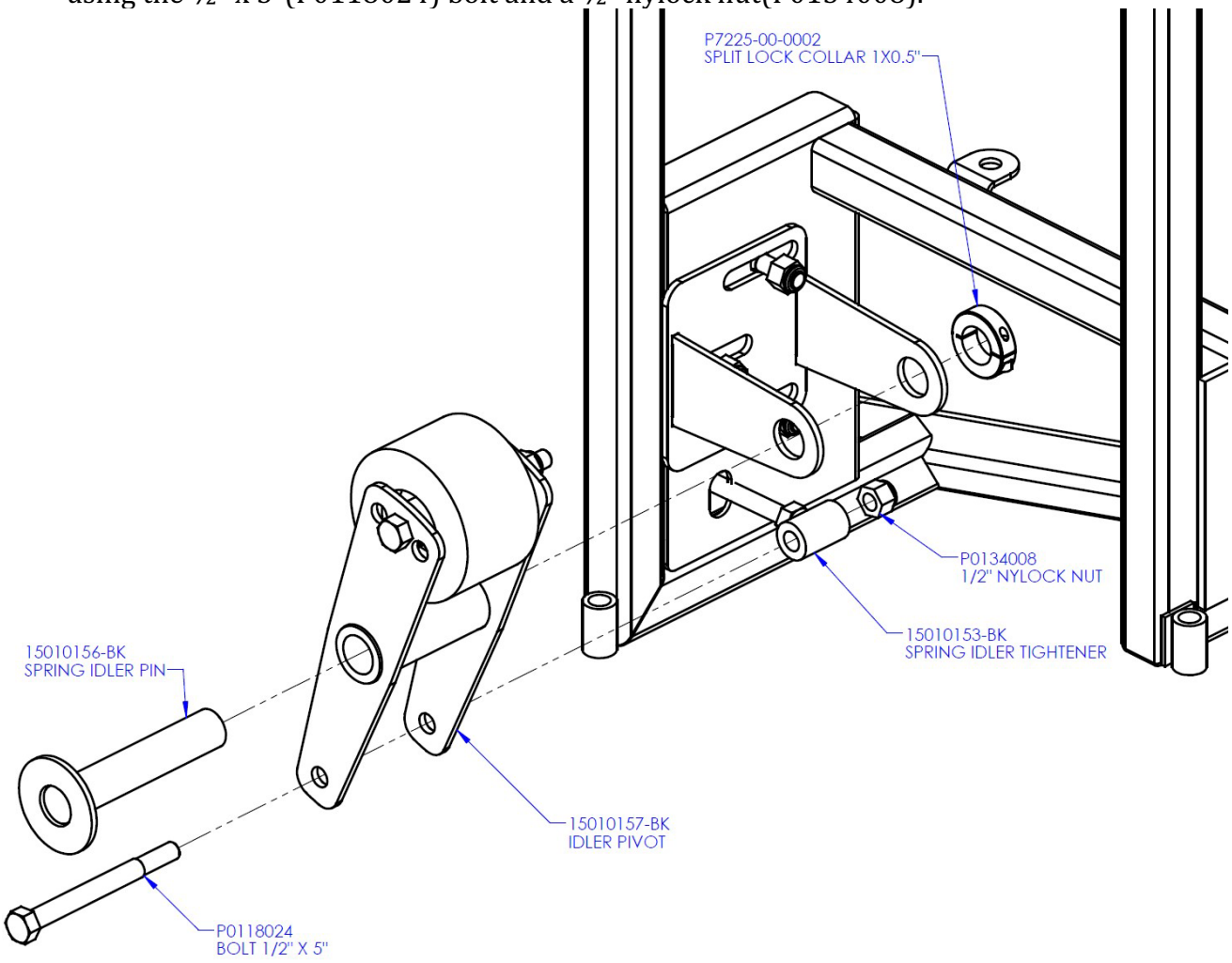
15. Before installing the idler between the gearbox and drive roller, you will need to install a new set of pulleys and belt for this connection.
16. Remove the existing belt & pulley from the gearbox.
17. Install pulley-dbl-2B 8.0 SK(P0328911) with the split tapered bushing Hub SK 1-1/2" (P0341924) and the 3/8" x 2 key(P0391002). Ensure the bushing bolts are torqued to 180 in.lbs.
18. Remove the existing pulley from the drive roller shaft of the s-drive and replace with pulley -dbl-B-13.6"SK (P0328100) with the split tapered bushing Hub SK 1-1/2" (P0341924) & the 3/8" x 2 key(P0391002). Ensure the bushing bolts are torqued to 180 in.lbs.
19. Once you have the pullies installed, using a straight edg, ensure the pulleys are aligned. Loosen the bushings bolts and adjust position if necessary.
20. Install the 2B85 belt(P03210851) onto the pullies and continue the installation of the new idlers.



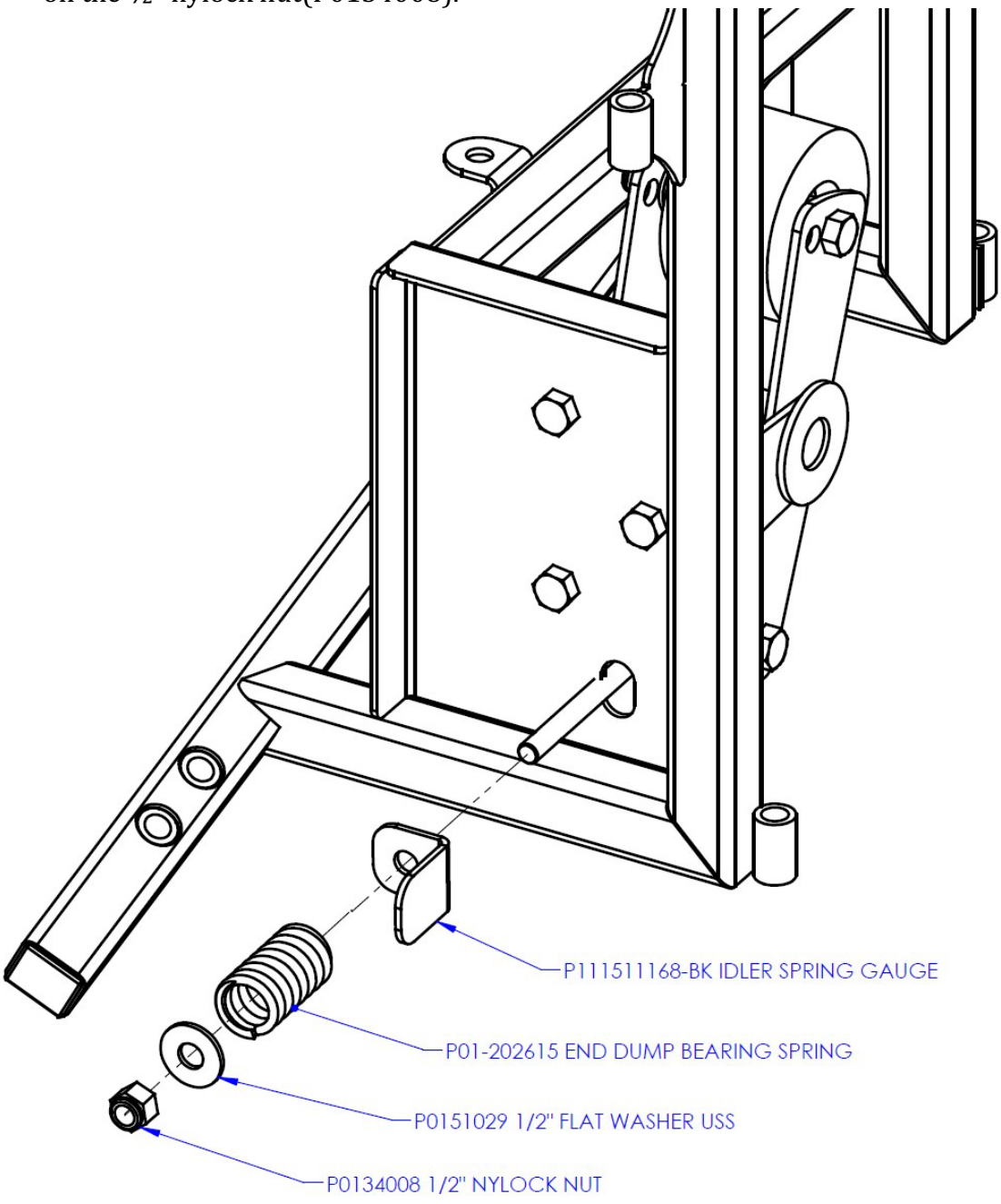
21. For the idler between the gearbox and drive roller, first install the TM idler s-drive mount (15010154-BK) using the ½" x 1-1/2" hex bolts(P0118013) and ½" nylock nuts (P0134008).
22. Slide the idler tensioner (15010153-BK) into the hole in the plate for assembling in the next step.



23. Slide the idler pivot (15010157-BK) into the mount base and attach it with the spring idler pin (15010156-BK). Attach the split lock collar (P7225-00-0002) to the end of the spring idler pin to hold it in place.
24. Apply grease to the zerk until grease starts to come out both sides. Rotate the idler as much as possible to get the grease all the way around the shaft.
25. Connect the spring idler tightener (15010153-BK) to the idler pivot (15010157-BK) using the ½" x 5"(P0118024) bolt and a ½" nylock nut(P0134008).



26. Once the idler pivot is in place, assemble the idler spring gauge (P11151168-BK), end dump bearing spring(P01-202615), ½" flat washer (P0151029) and then thread on the ½" nylock nut(P0134008).

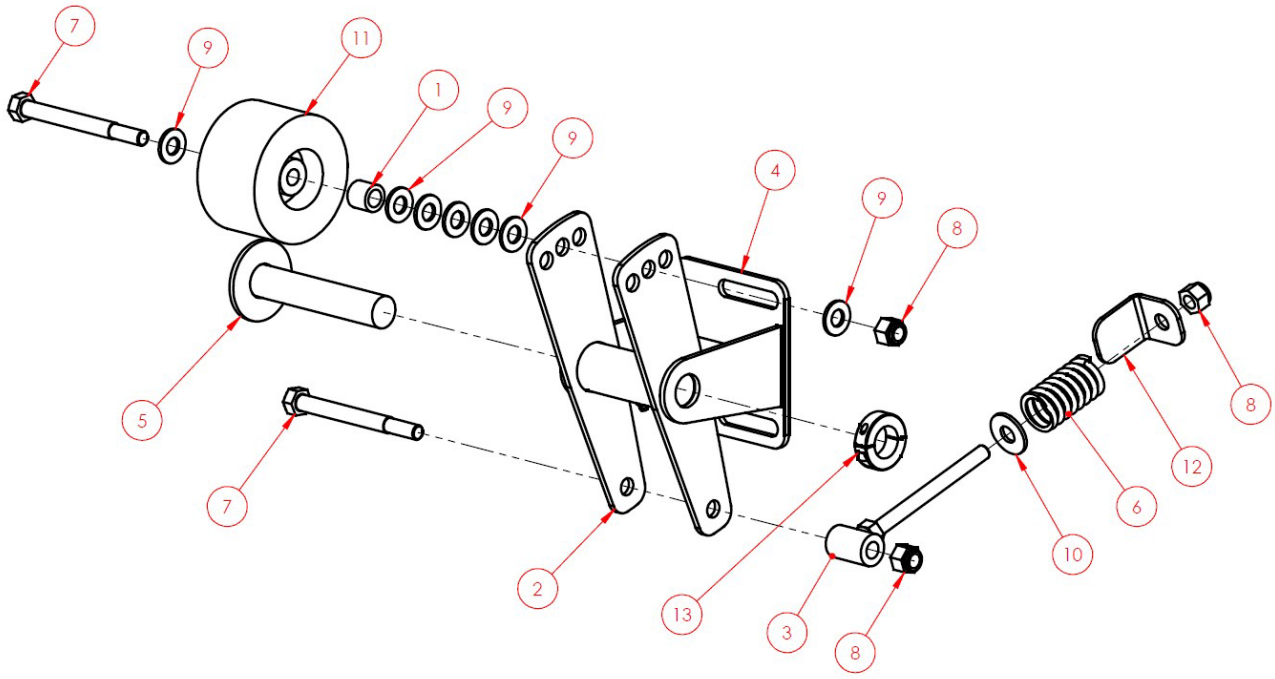


27. Tighten the ½" nylock nut until the compressed spring's edge is flush with the edge of the idler spring gauge.

1. Now that the idlers have been installed and the pulleys replaced, do a final check to ensure all hardware is tightened and belts are aligned and under tension.
2. Test run your machine starting slowly to ensure the belts are tracking properly in the center of the pulleys.
3. Re- attach the front and side guards and secure them.

***NOTE: below are exploded drawings of the idler systems as a whole, showing all parts and locations in one drawing. These are here for reference.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	13012185	PIPE-1/2" SCH80 (3/4")	1
2	15010150	IDLER PIVOT WELD	1
3	15010153	SPRING IDLER TIGHTENER	1
4	15010154	TM IDLER S-DRIVE MOUNT	1
5	15010156	SPRING IDLER PIN	1
6	P01-202615-1	DUMPER BEARING SPRING	1
7	P0118024	HEX BOLT, 1/2x5 UNC GR8 ZN	2
8	P0134008	NYLON LOCK NUT, 1/2 UNC GR8 ZN	3
9	P0151025	FLAT WASHER, 1/2 SAE STL ZN	7
10	P0151029	FLAT WASHER, 1/2 USS STL ZN	1
11	P0328910	IDLER PULLEY	1
12	P11151168	IDLER SPRING GUAGE	1
13	P7225-00-0002	SPLIT LOCK COLLAR 1X0.5"	1



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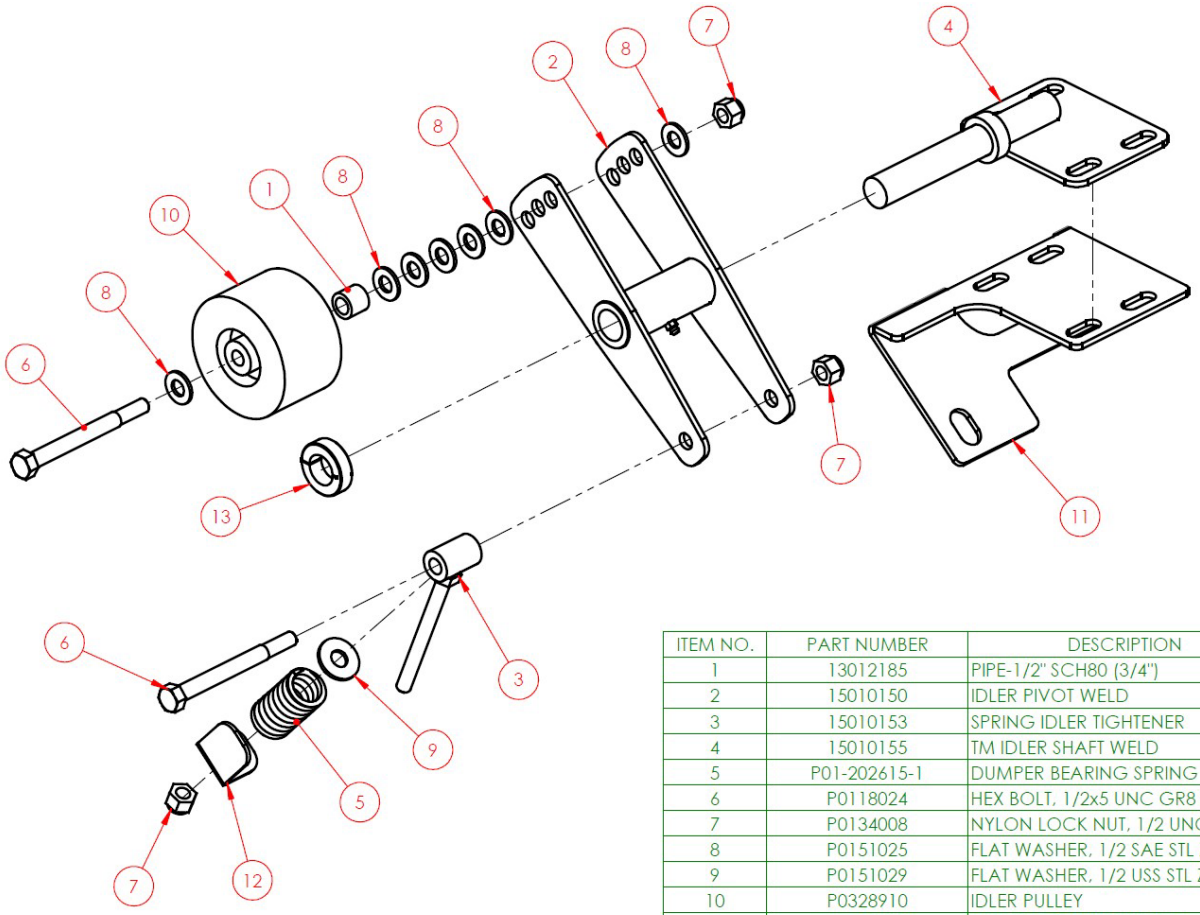

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	13012185	PIPE-1/2" SCH80 (3/4")	1
2	15010150	IDLER PIVOT WELD	1
3	15010153	SPRING IDLER TIGHTENER	1
4	15010155	TM IDLER SHAFT WELD	1
5	P01-202615-1	DUMPER BEARING SPRING	1
6	P0118024	HEX BOLT, 1/2x5 UNC GR8 ZN	2
7	P0134008	NYLON LOCK NUT, 1/2 UNC GR8 ZN	3
8	P0151025	FLAT WASHER, 1/2 SAE STL ZN	7
9	P0151029	FLAT WASHER, 1/2 USS STL ZN	1
10	P0328910	IDLER PULLEY	1
11	P11151167	TM IDLER SPRING MOUNT	1
12	P11151168	IDLER SPRING GUAGE	1
13	P7225-00-0002	SPLIT LOCK COLLAR 1X0.5"	1