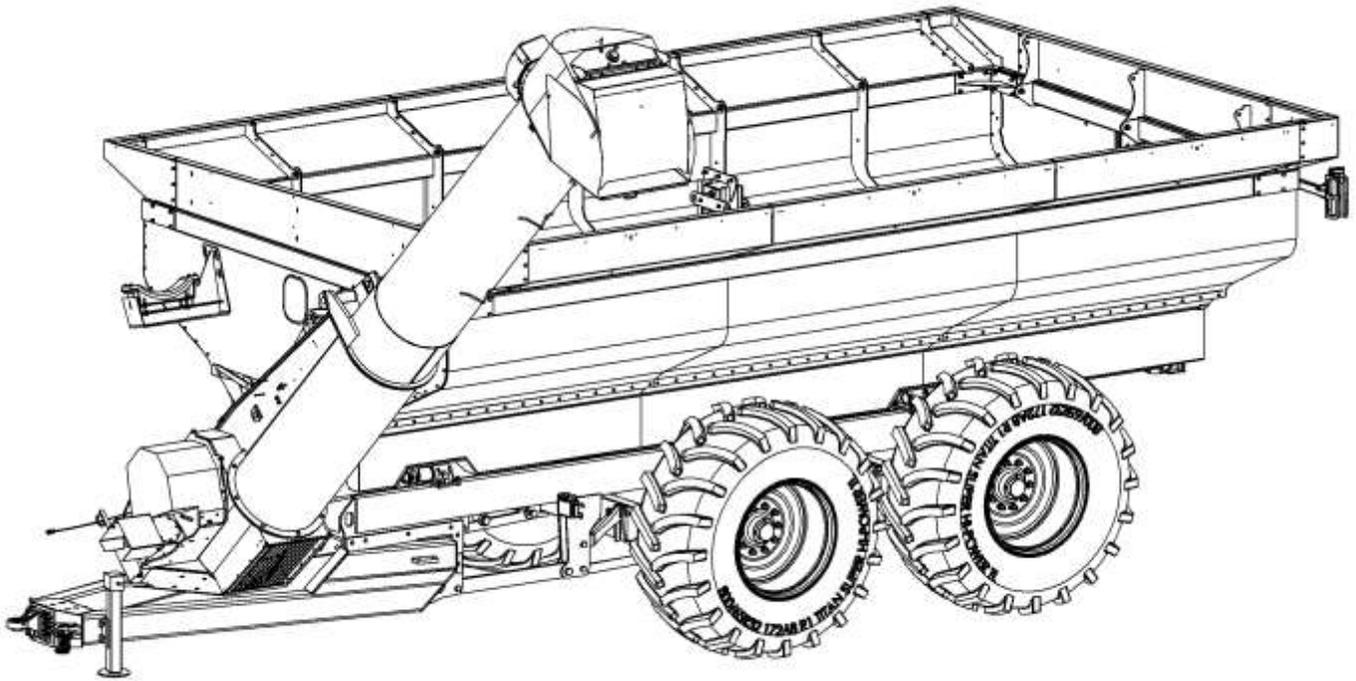


THE
FIELD FLOATER
High Capacity *Grain Carts*

Assembly Instructions



July 2012



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Accuracy

Balzer Inc is dedicated to providing the most reliable and durable AG related products. Balzer Inc has made every attempt to provide the most accurate and readily understandable information on our equipment. Due to our continuing efforts to produce the best products available, upgrades and improvements to our equipment may precede the manual updates. Therefore, contents of this manual are based on information in effect at the time of publication and are subject to change without notice.

Field Floater IV Grain Cart



WARNING

Contents of container may have shifted during transit. Use caution while unpacking grain cart components.

Once individual components have been removed from shipping container, the next step is to fold down the grain cart side panels. This will provide access to parts that have been stored in grain cart box.



DANGER

Make sure all personnel are positioned away from side of grain cart being lowered. Side panels are extremely heavy and may fall suddenly.

Lower side panel till it stops. Side panel will stay in this position. Attach crane to opposite side panel. Remove temporary side brace and lower into place. Remove any temporary strapping on components inside the grain cart. Items from inside grain cart can now be removed from cart. Proceed to a full inventory of parts.

Inventory



The individual components of the Field Floater IV grain cart that need to be installed have been broken down and are labeled with part numbers. Hydraulic hoses are marked on one end or tagged. Individual shipping configurations will vary due to options ordered with the Field Floater IV grain cart.

BAG LABEL	QTY	DESCRIPTION	PART #
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BOX A

OILER	6	5/16X1	1185
	4	5/16 FL WASHER	1597
	6	5/16 WIZNUT	2081

HOSE HOLDER	2	5/16X1	1185
	2	5/16 WIZNUT	2081
	2	5/16 FL WASHER	1597

PTO SHEILD	2	5/8X1	1287
	2	5/8 LK WASHER.	1640

CLUTCH COVER	3	3/8X1 1/4	1207
	5	3/5 WIZNUT	2082
	2	3/8 FL WASHER	1598

OPEN & CLOSED IND	2	1/4X1	1164
	2	1/4 WIZNUT	2080

ROUND COVERS	8	1/2X1 1/4	1249
	8	1/2 WIZNUT	2084

CROSS BRACE	3	1/2X1 1/2	1250
	3	1/2 TP LOCK	2539

LADDER	2	5/8X2	1291
	2	5/4 FLAT	1602
	2	5/8 TOP LK	2546
	2	1/2X1 1/2	1250
	2	1/2 FLAT	1600
	2	1/2 WIZNUT	2084

Inventory



BAG LABEL	QTY	DESCRIPTION	PART #
BOX A Continued			
LIGHTS	4	3/8X3 1/2	1216
	8	3/8 WIZNUT	2082
	8	1/4X1 1/4	1165
	8	1/4 WIZNUT	2080
AUGER HOUSING TO HOPPER	16	5/8X2	1291
	16	5/8 TOP LK	2546
AUGER TO UPPER AUGER HOUSING	8	5/8X1 1/2	1289
	2	5/8 TOP LK	2546
UPPER AUGER TO HOPPER	4	3/4X3	1315
	8	3/4 FL WASHES	1603
	4	3/4 TOP LK	2593
AUGER LOWER BEARING	4	5/8X3	1295
	4	5/8 TOP LK	2546
LOWER AUGER UPPER BEARING	4	1/2X1 3/4	1251
	4	1/2 FL WASHER	1600
	4	1/2 TOP LK	2539
GREASE BANK COVER	2	1/4X1	1164
	4	1/4 FL WASHER	1596
	2	1/4 WIZNUT	2080
MANUAL HOLDER	4	1/4X1	1164
	4	1/4 FL WASHER	1596
	4	1/4 WIZNUT	2080
UPPER AUGER MOTOR MOUNT	4	1/2X1 1/2	1250
	4	1/2 TOP LK	2539
UPPER AUGER DEFLECTOR	6	3/8X3/4	1204
	6	3/8 TOP LK	2496
MOTOR GEAR SHEILD	2	3/8X1 1/4	1206
	2	3/8 WASHER	1598
	2	3/8 WIZNUT	2082
AUGER SADDLE	4	5/8X1 1/2	1289
	4	5/8 WIZNUT	2085

Inventory



BAG LABEL	QTY	DESCRIPTION	PART #
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BOX A Continued

HOPPER RH	48	3/8X1 STB	1586
	20	3/8X1 EXTRA	1206

HOPPER LH	48	3/8X1 STB	1586
	15	3/8X1 1/4 EXTRA	1207

HOPPER FRONT	27	3/8X1	1206
	5	3/8X1 1/4	1207
	102	3/8 WIZNUT	2082

HOPPER REAR	32	3/8X1	1206
	10	3/8X1 1/2 EXTRA	1208

BAG LABEL	QTY	DESCRIPTION	PART #
-----------	-----	-------------	--------

BOX B

CORNERS	35	5/8X5	1301
	35	5/8 TOP LK	2546

Inventory



BAG LABEL	QTY	DESCRIPTION	PART #
-----------	-----	-------------	--------

BOX 1550 & 1325

1500 & 1300	QTY	DESCRIPTION	PART #
	14	3/4X2 1/4	1312
	2	3/4X3	1315
	32	3/4 FL WASHER	1603
	16	3/4 TOP LK	2593
	25	3/8 STB	1586
	25	3/8X1 3/4	1209
	60	3/8X1	1206
	70	3/8 FLAT	1598
	100	3/8 WIZNUT	2082

2000 .	QTY	DESCRIPTION	PART #
	14	3/4X2 1/4	1312
	2	3/4X3	1315
	32	3/4 FL WASHER	1603
	16	3/4 TOP LK	2593
	50	3/8 STB	1586
	50	3/8X1 3/4	1209
	70	3/8X1	1206
	100	3/8 FLAT	1598
	120	3/8 WIZNUT	2082

BOX GEAR TOWERS	QTY	DESCRIPTION	PART #
	24	3/4X5	2624
	24	3/4 TOP LK	2593

IND TANDEM/TRI AXEL GEAR A	QTY	DESCRIPTION	PART #
	28	1X5	33488
	12	1X3	2534
	6	1 1/4X8.5	33870

IND TANDEM/TRI AXEL GEAR B	QTY	DESCRIPTION	PART #
	49	1 NUT LOCK	33487
	3	1X10	85936
	8	1 1/4 LOCK NUT	11479
	6	1X6	33494
	2	1 1/4X6 TAND BR	2569

Assembly

Front and Rear End Panels



NOTE

It is recommended to have either planking or plywood sheets to line box of grain cart. It is much easier to move around inside of cart with stable footing.

Required Hardware

(56) 3/8" X 1 1/4" Bolt P# 1207
(56) 3/8" Locknut P# 2496

Required Tools / Equipment

Crane Lifting Tackle Ratchet Strap
Center Punch Wrenches

There must be one person inside of cart and one person on outside of cart to complete this procedure. Place a ratchet strap or come-along between two side panels and apply enough pressure to help align bolt holes later. Attach crane to front end panel P# 85762. Raise into place and secure with bolts P# 1207 and lock nuts P# 2496. Using a center punch, start inserting bolts into holes in upper part of side panel. See Figure 1.

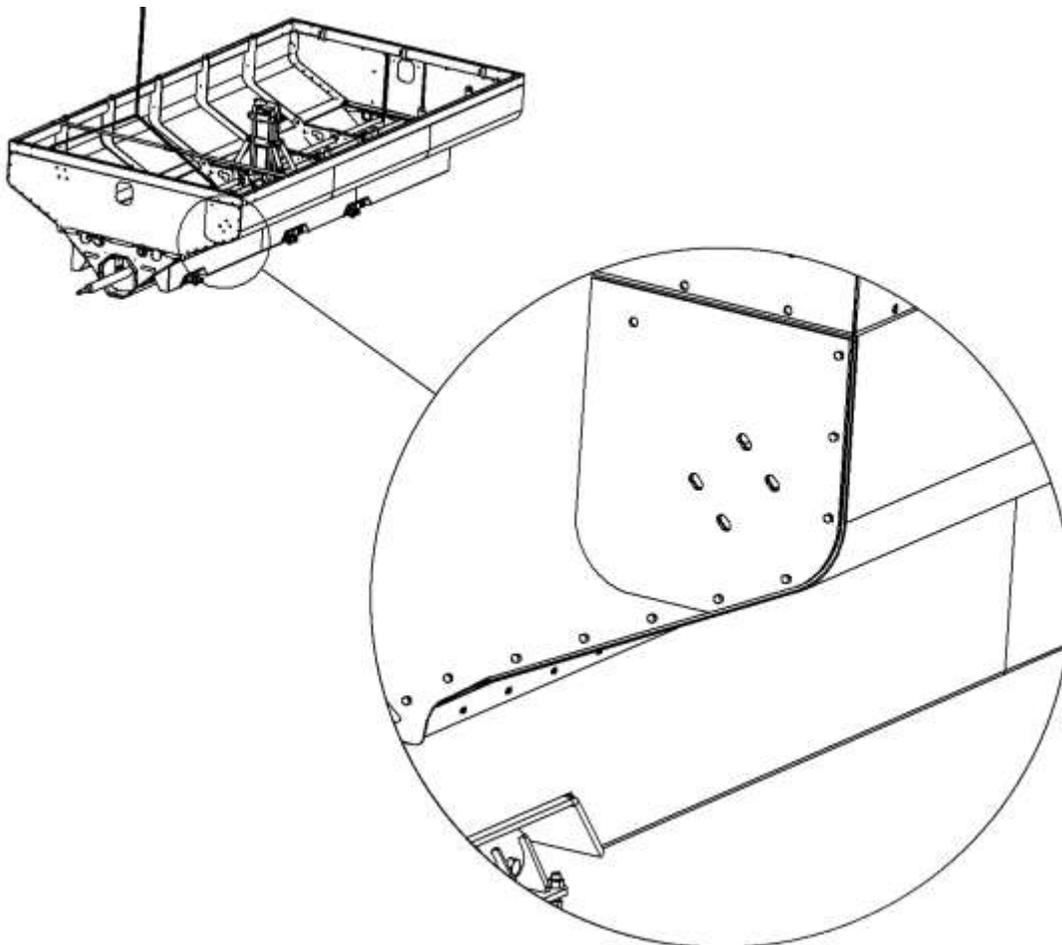


Figure 1

Assembly

Front and Rear Panels Continued

Required Hardware

- (64) 3/8" X 1 1/4" Bolt P# 1207
- (64) 3/8" Locknut P# 2496
- (8) 3/8" Flat Washer P# 1598

Required Tools / Equipment

- | | | |
|--------------|----------------|---------------|
| Crane | Lifting Tackle | Ratchet Strap |
| Center Punch | | Wrenches |

Once all nuts and bolts have been inserted, repeat steps for rear panel. See Figure 2. Insert bolt into lower part of panels. See Figure 3.

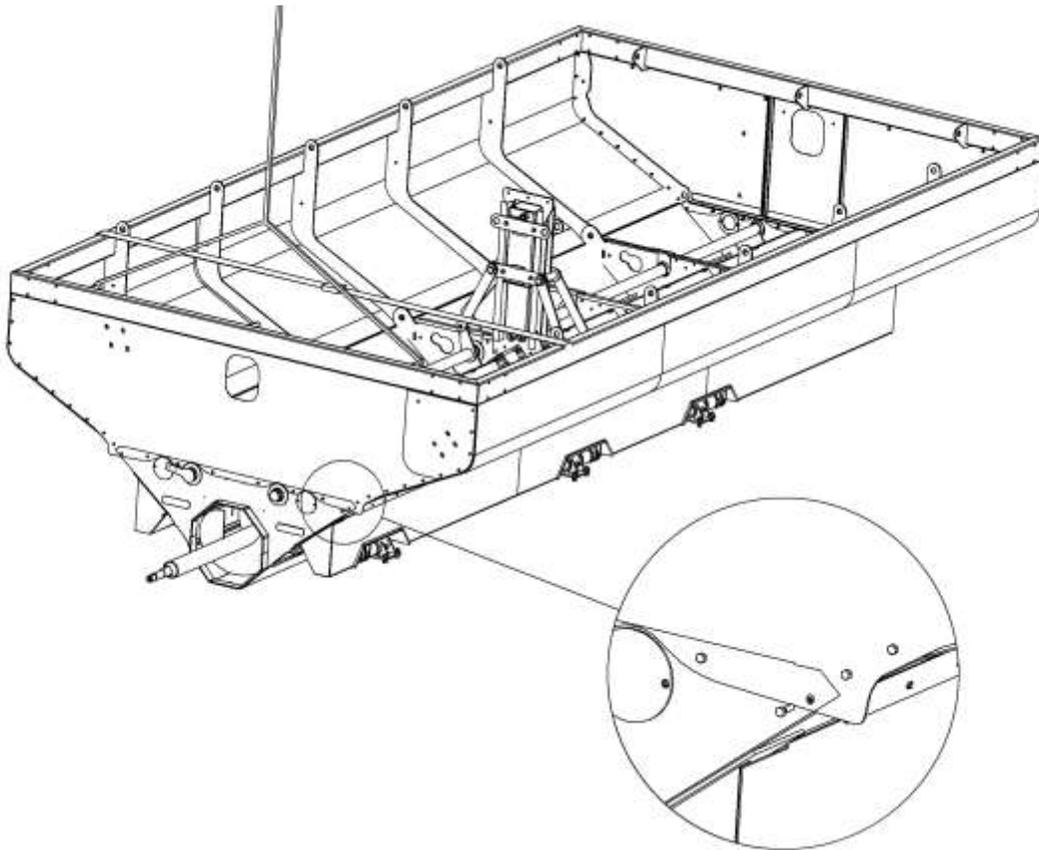


Figure 2

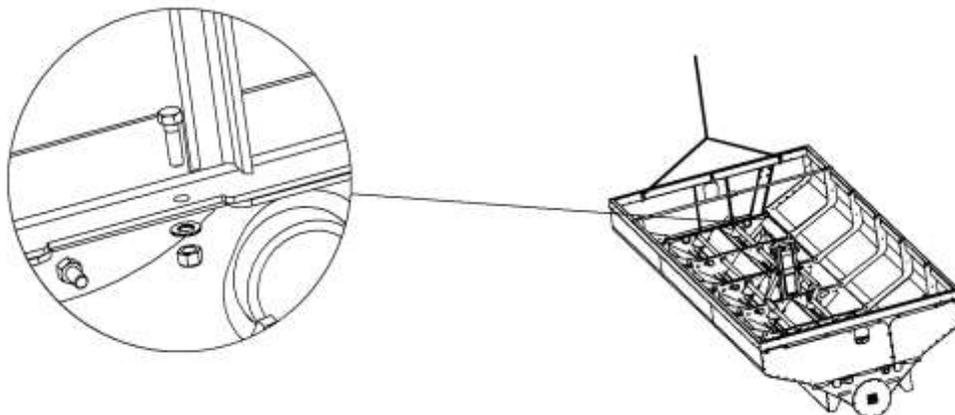


Figure 3

Assembly

Side Panels

Required Hardware

(96) 3/8" X 1" Self Tap Bolt P# 85892

Required Tools / Equipment

Center Punch

Wrenches

Using a center punch, start inserting self tapping bolts P# 85892 into holes in lower portion of side panels. Start towards the middle or wherever the holes are close. See Figure 1.

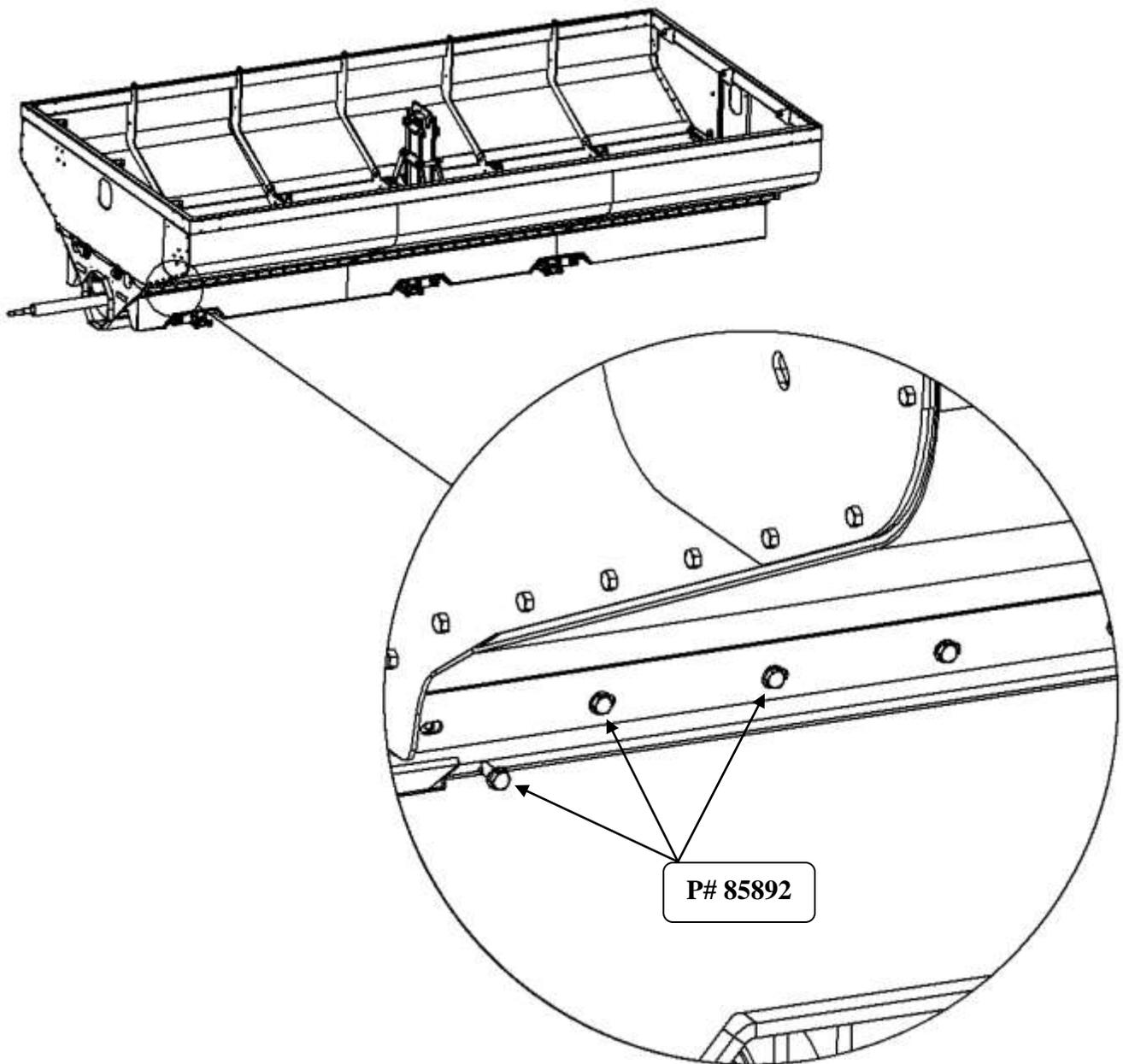


Figure 1

Assembly

Corner Brackets

Required Hardware

- (32) 5/8" X 5" Bolt P# 1301
- (32) 5/8" Locknut P# 2546

Required Tools / Equipment

- | | | |
|---------------------------|----------------------|---------------------|
| Hoist | Ratchet Strap | Wrenches |
| Adjustable C-Clamp | | Center Punch |

The corner brackets need to make side and end panels fit tightly together. Position outside corner bracket on one corner of cart. Insert bolts P# 1301 through front of bracket. Insert inside corner bracket and loosely secure with locknuts P# 2546. At this point you may need to use a combination of center punch, adjustable C-clamp and ratchet strap in order to align the holes in side panel. Tighten all corner bracket hardware. Tighten all front and rear end panel hardware. See Figure 1.

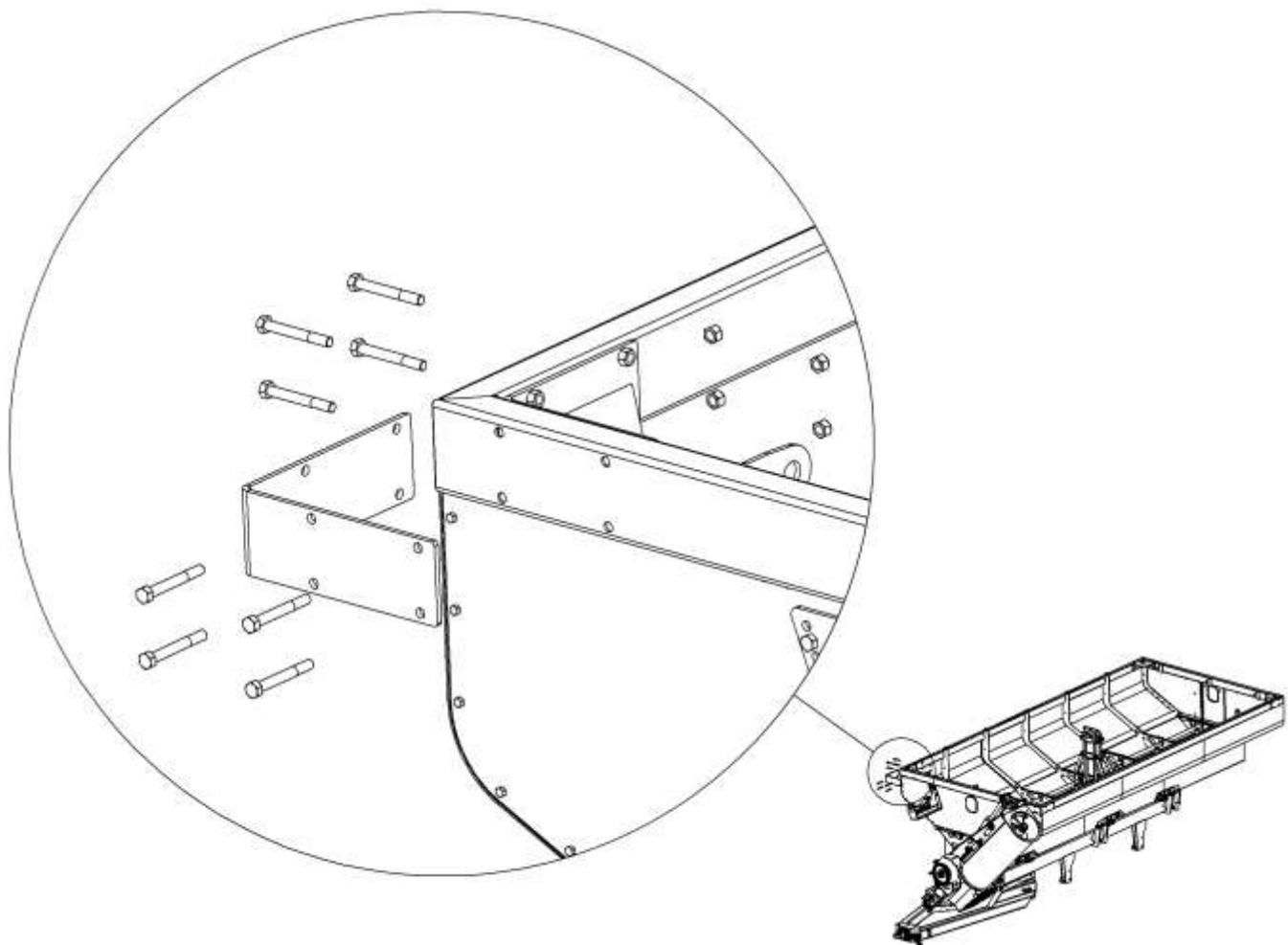


Figure 1

Assembly

Upper Vertical Auger Cradle

Required Hardware

- (4) 5/8" X 1 1/2" Bolt P# 1289
- (4) 5/8" Toplock Nut P# 2546

Required Tools / Equipment

Wrenches

Align upper auger cradle P# 85970, insert bolts P# 1289 and secure on inside of hopper with lock nut P# 2546. See Figure 1.

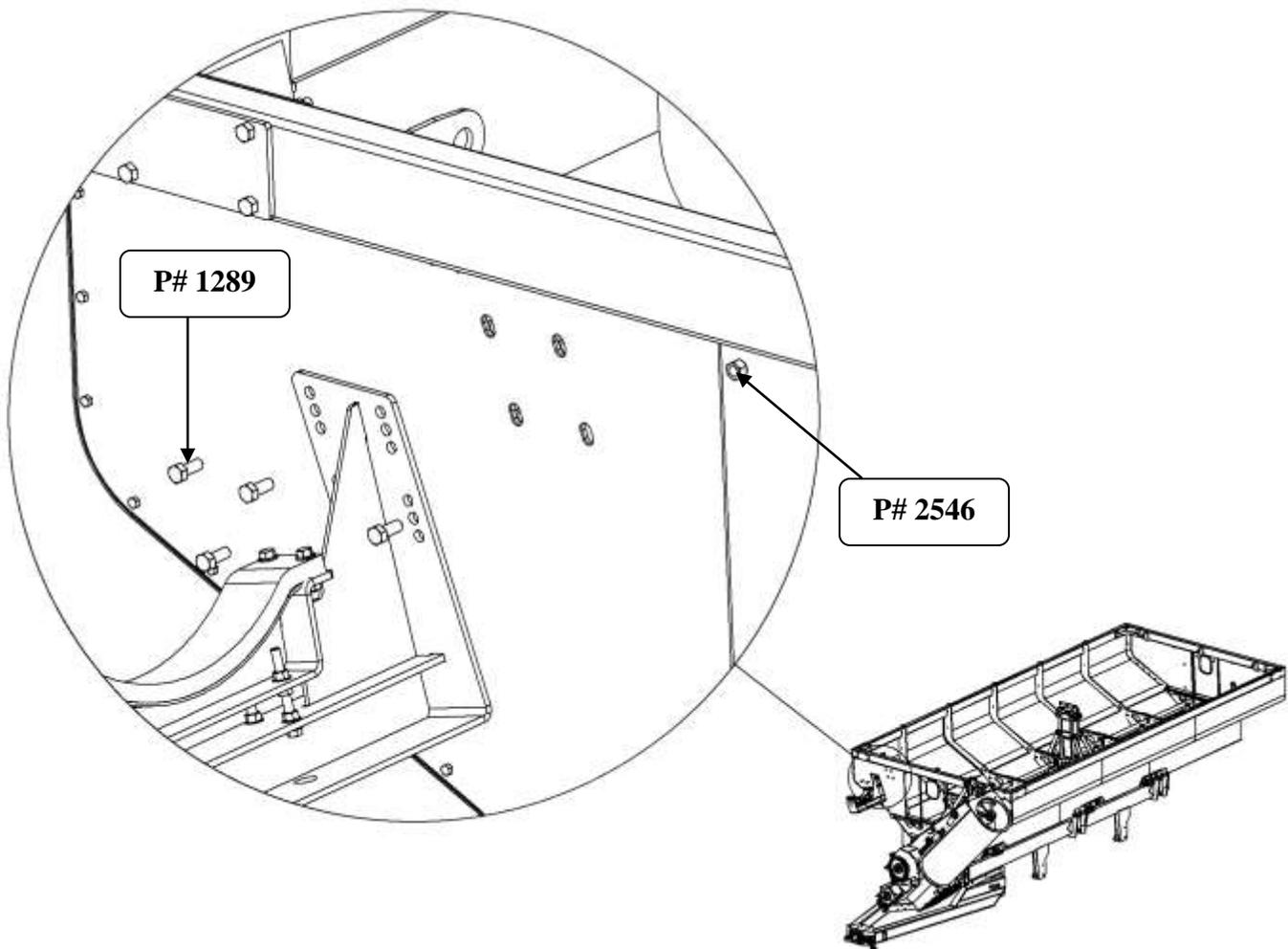


Figure 1

Assembly

Ladder

Required Hardware

- (2) 1/2" X 1 1/4" Bolt P# 1249
- (2) 1/2" Washer P# 1600
- (2) 1/2" Flange Nut P# 2084
- (2) 5/8" X 2 1/2" Bolt P# 1293
- (2) 5/8" Washer P# 1620
- (2) 5/8" Toplock Nut P# 2546

Required Tools / Equipment

Wrenches

Position ladder P# 85575 at rear of cart, insert bolts P# 1249 and washers P# 1600 through top holes and loosely secure with flange nuts P#2084 See Figure 1. Insert bolts P# 1293 and washers P# 1620 through bottom holes and secure with toplock nuts P# 2546. Tighten all bolts.

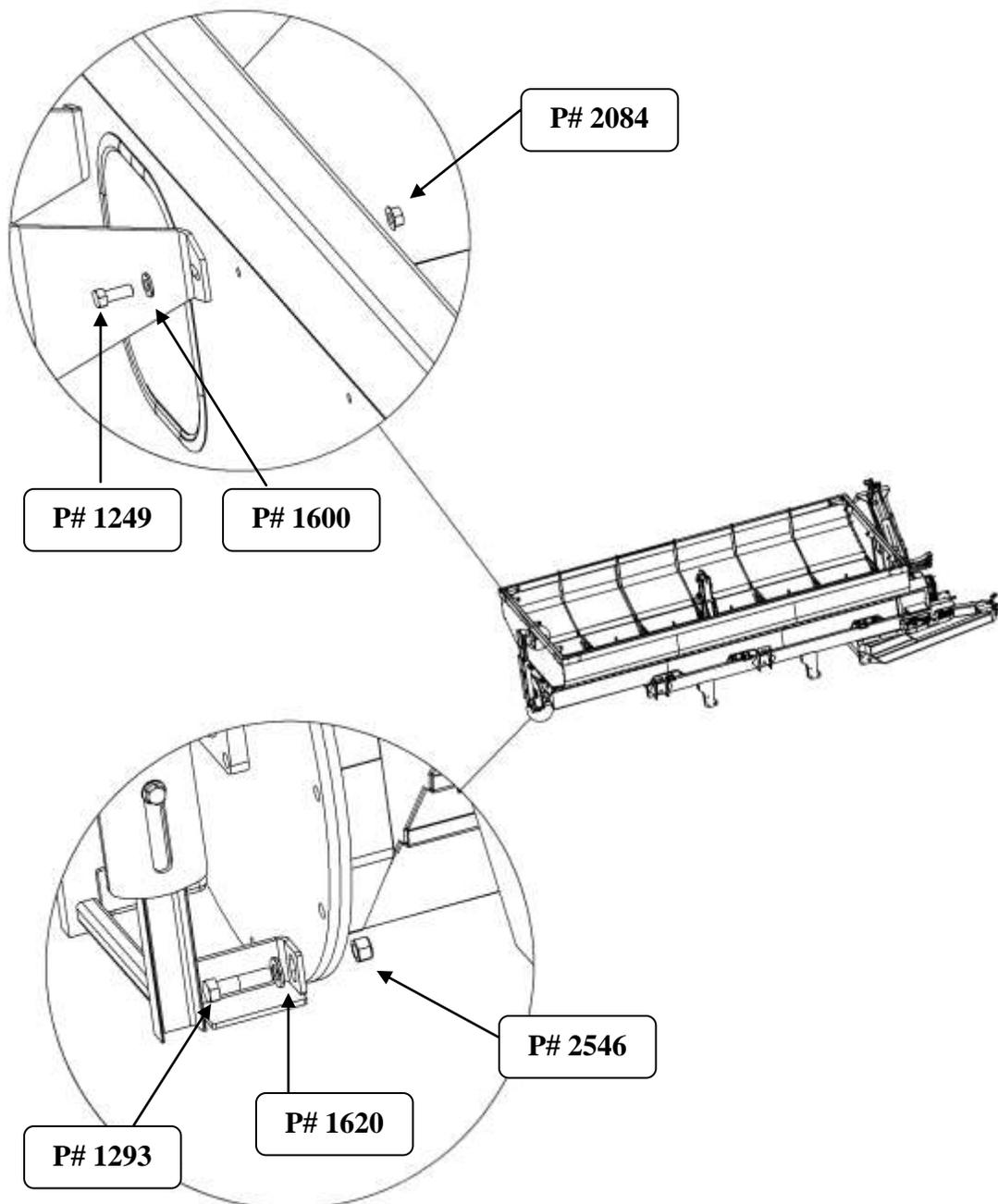


Figure 1

Assembly

Tongue

Required Hardware

- (4) 1" X 3" Bolt P# 2534
- (4) 1" Lock Nut P# 1779

Required Tools / Equipment

- Hoist
- Center Punch
- Wrenches

Attach crane to grain cart. Raise cart and block in the air. Position Tongue assembly in front of grain cart. Raise and remove temporary skids from tongue mounting bracket. The same hardware used to secure temporary skids are used to attach the tongue assembly to the lower frame bracket, P# 2534 & P# 1779. Slide tongue assembly into position and insert the bolts and locknuts, tighten securely. See Figure 1.

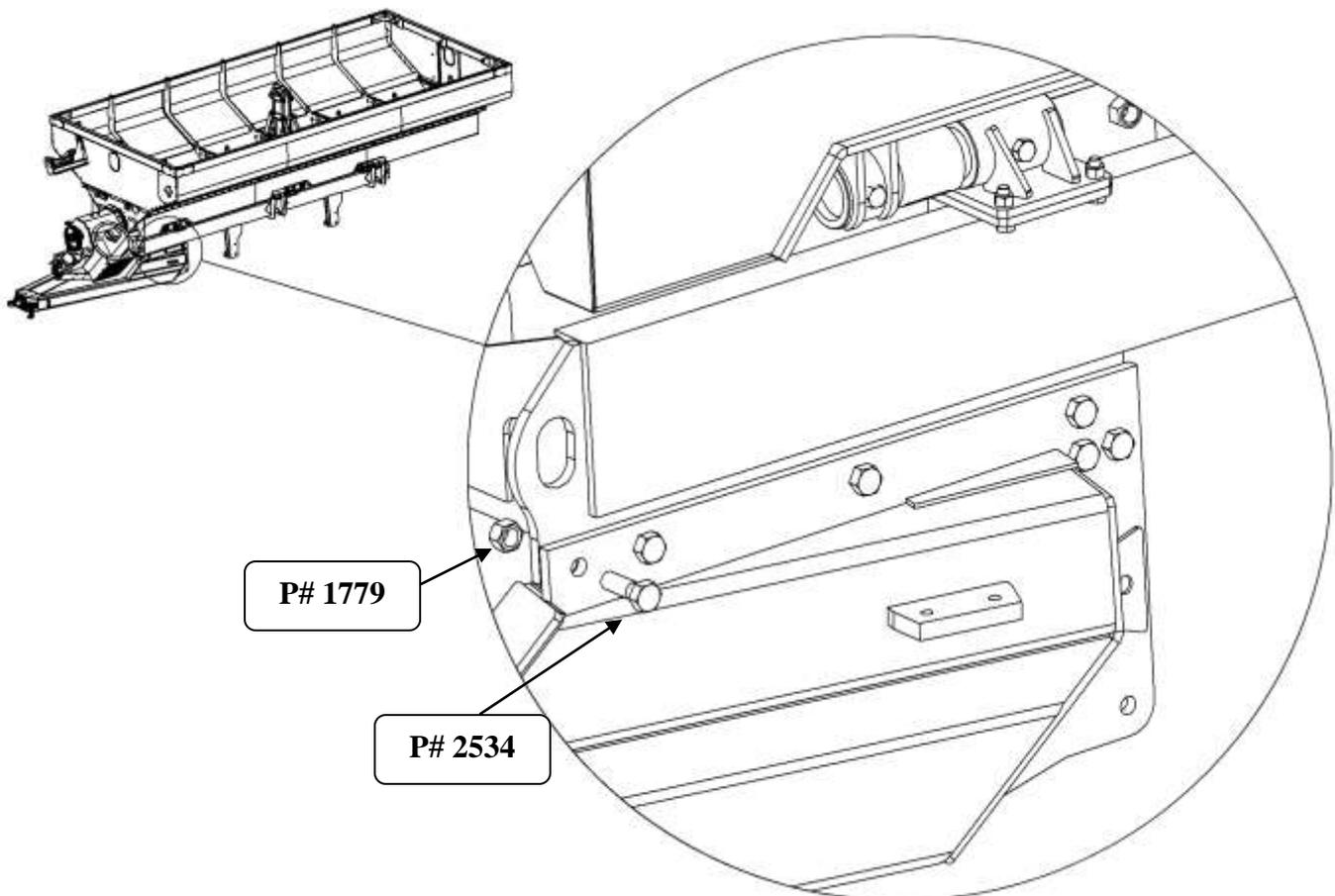


Figure 1

Assembly

Suspension Towers

Required Hardware

- (4) .75" X 5" Bolt P# 2624
- (4) .75" Lock Nut P# 2593

Required Tools / Equipment

- Hoist
- Center Punch
- Wrenches

Position suspension towers and secure with bolts P#2624 and lock-nuts P# 2593. See Figure 1. Repeat for remaining towers. Hardware totals at top of page are for individual towers only. Totals vary with Tandem and Tridem suspension.

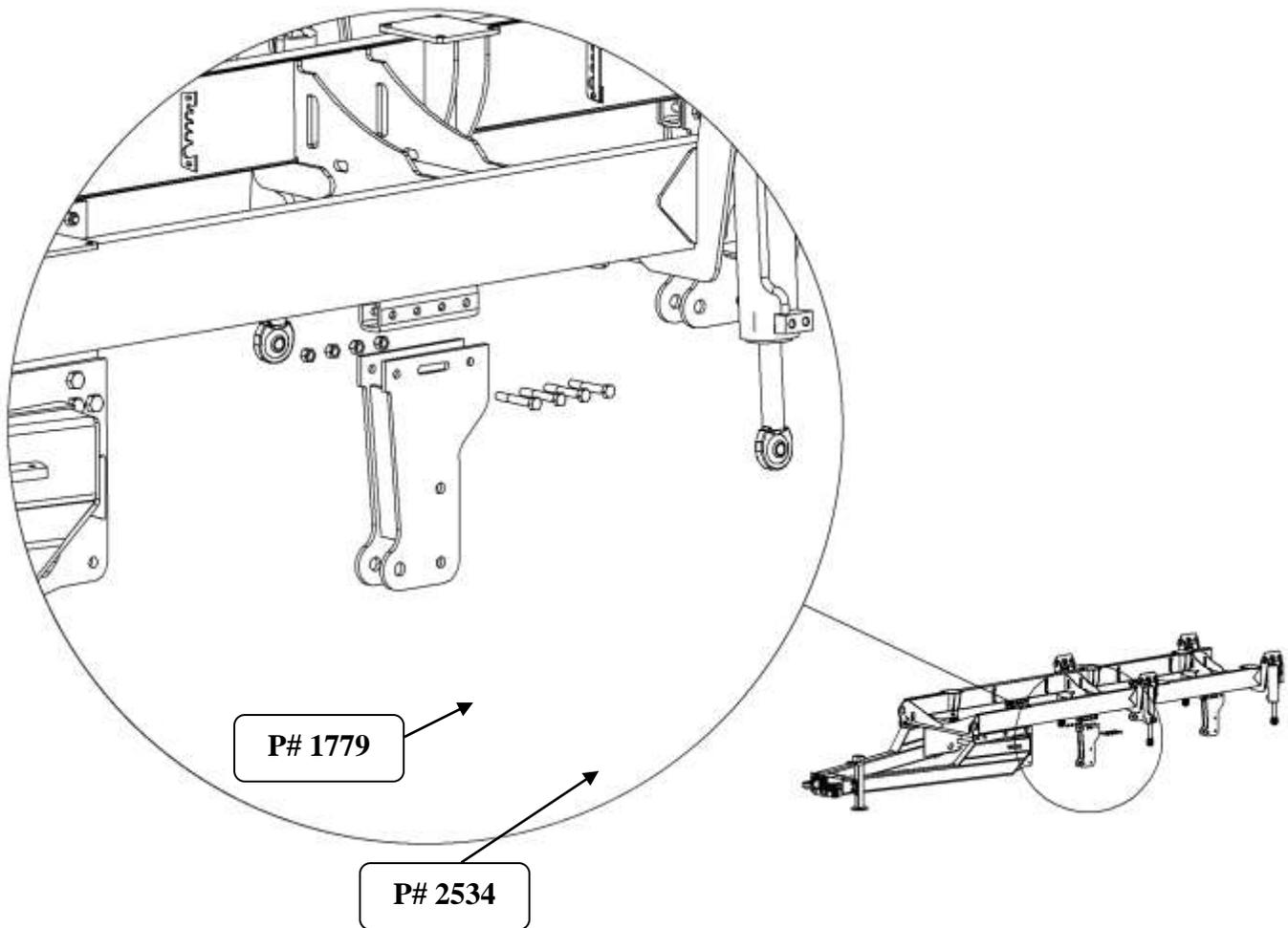


Figure 1

Assembly

Tandem Independent Suspension

Required Hardware

- (2) 1.25" X 6" Bolt P# 2569
- (2) 1.25" Lock Nut P# 1780
- (2) 1" X 5" Bolt P# 1347
- (2) 1" Lock Nut P# 1779

Required Tools / Equipment

- Hoist
- Center Punch
- Wrenches

Position Drag Link and secure to tongue with bolt P# 1347 and lock-nut P# 1779. Attach to front tower assembly with bolts P# 2569 and lock-nut P# 1780. Repeat for opposite side. See Figure 1.

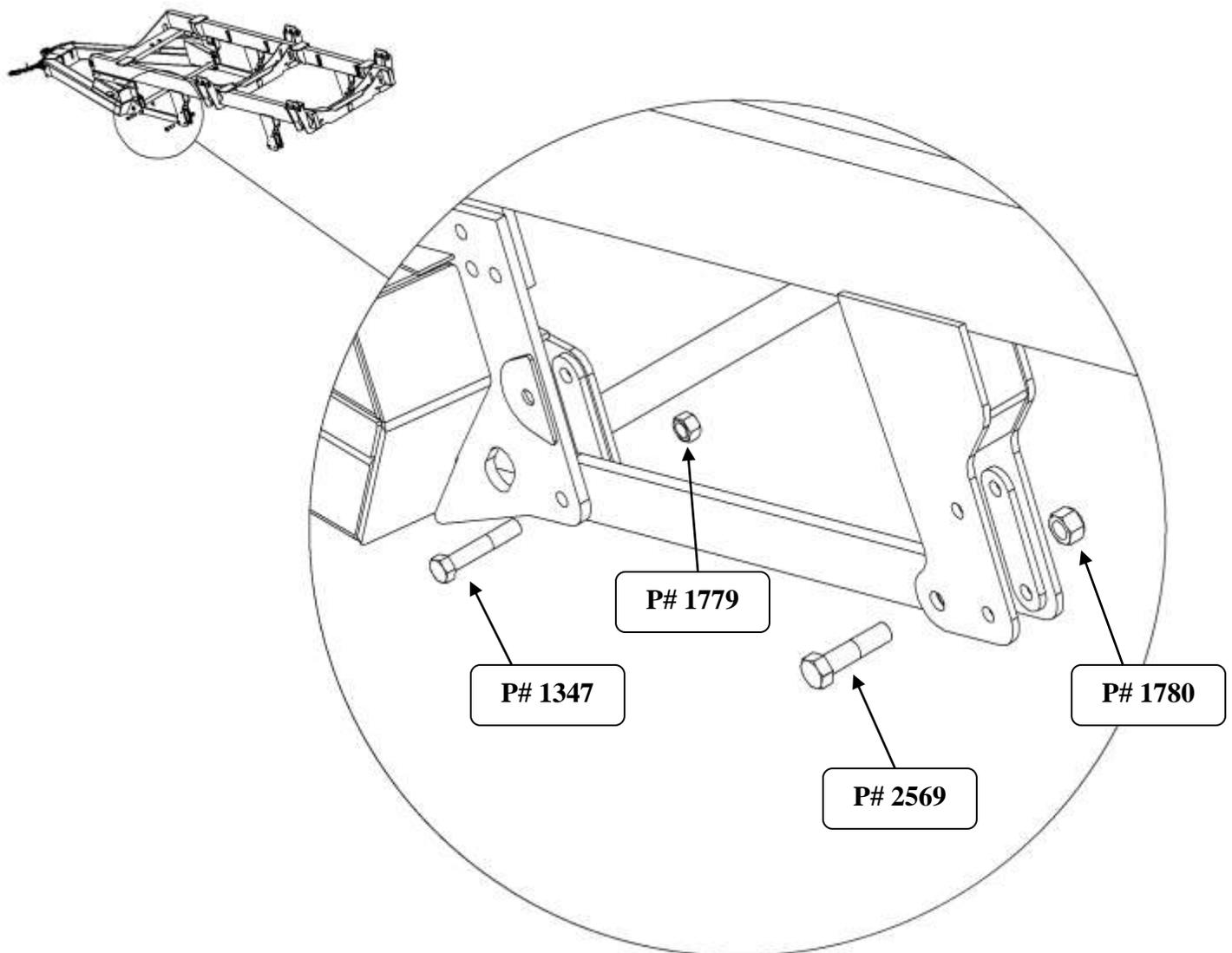


Figure 1

Assembly

Tandem Independent Suspension Continued

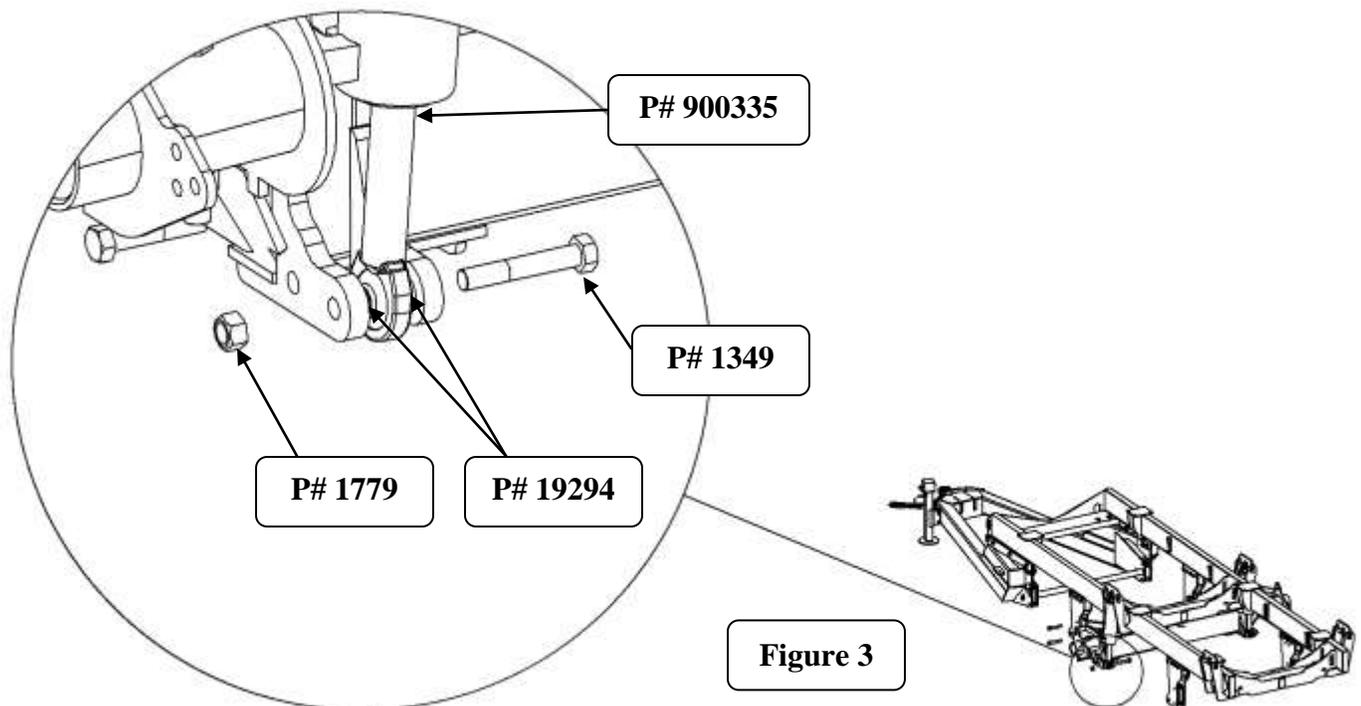
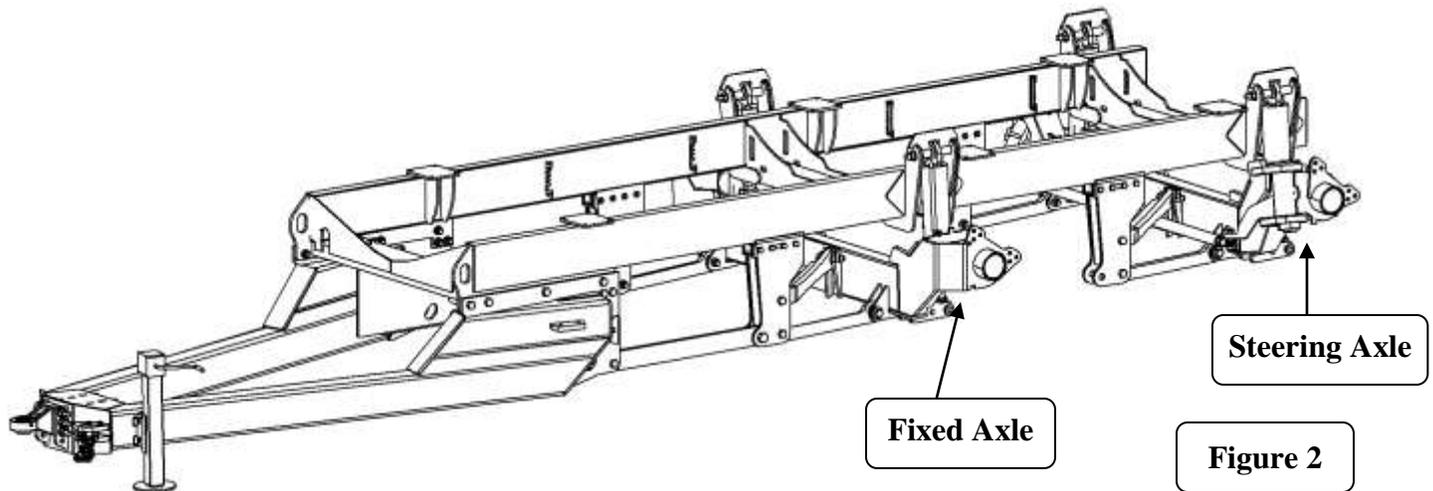
Required Hardware

- (2) 1" X 5" Bolt P# 1349
- (2) 1" Lock Nut P# 1779

Required Tools / Equipment

- Hoist
- Center Punch
- Wrenches

Position Fixed Axle and secure to suspension cylinders P# 900335 with bolts P# 1349, lock-nuts P# 1779, and spacers P#91294. Repeat for opposite side. See Figures 2 and 3.



Assembly

Tandem Independent Suspension Continued

Required Hardware

- (8) 1" X 5" Bolt P# 1347
- (4) 1" Lock Nut P# 1779

Required Tools / Equipment

- Hoist
- Center Punch
- Wrenches

Attach Upper Drag Link P# 900052 and Lower Drag Link P# 900098 with bolts P# 1347 and lock-nuts P# 1779. Repeat for opposite side. See Figure 4.

Repeat for Rear Steering Axle.

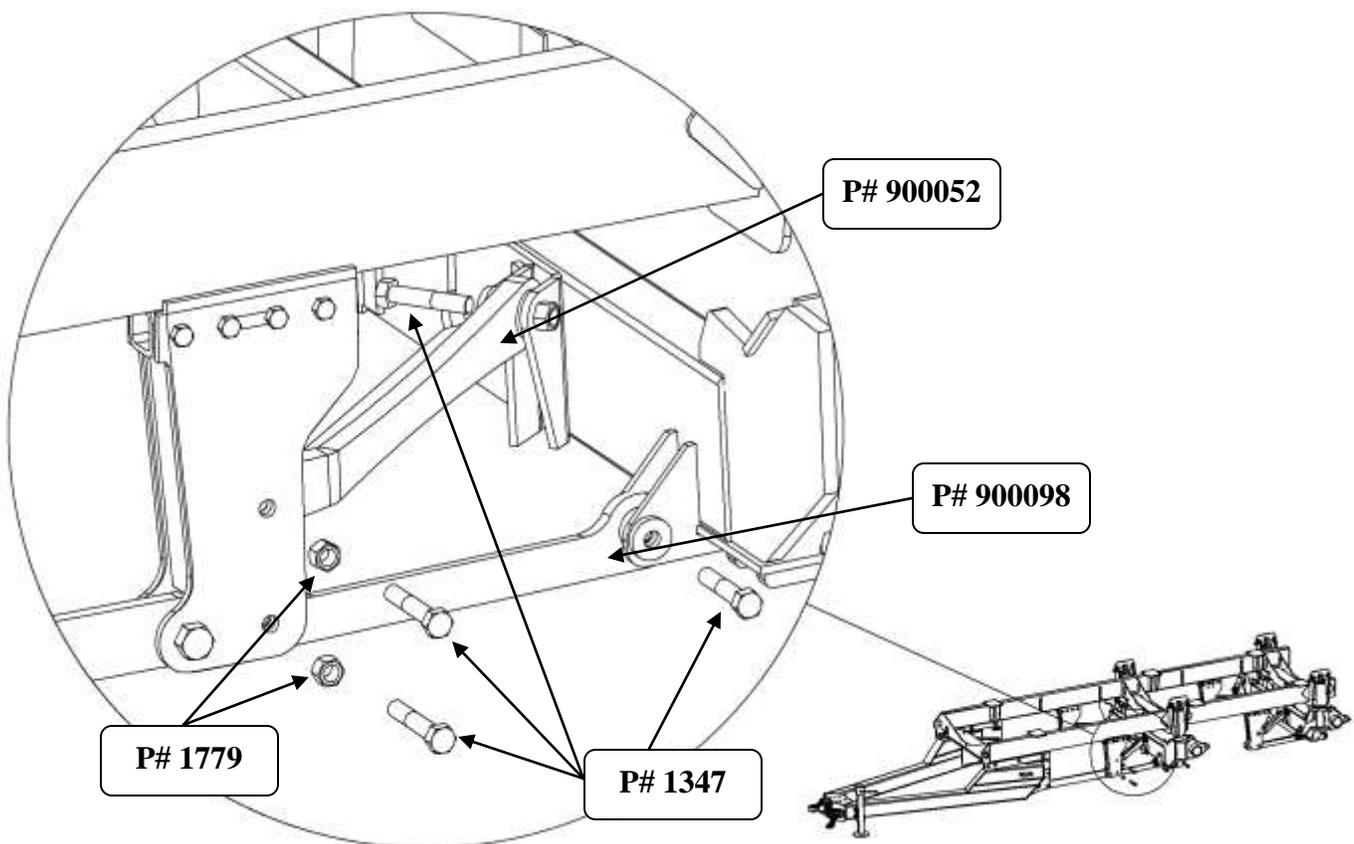


Figure 4

Assembly

Suspension Hubs and Spindles Without Brakes

Required Hardware

- (1) 1 1/4" X 8 1/2" Bolt P# 33870
- (1) 1 1/4" Locknut P# 1780

Required Tools / Equipment

Wrenches

Slide hub and spindle assembly into spindle receiver and secure with bolt P# 33870 and lock-nut P# 1780. See Figure 1. Repeat for remaining hub and spindle assemblies.

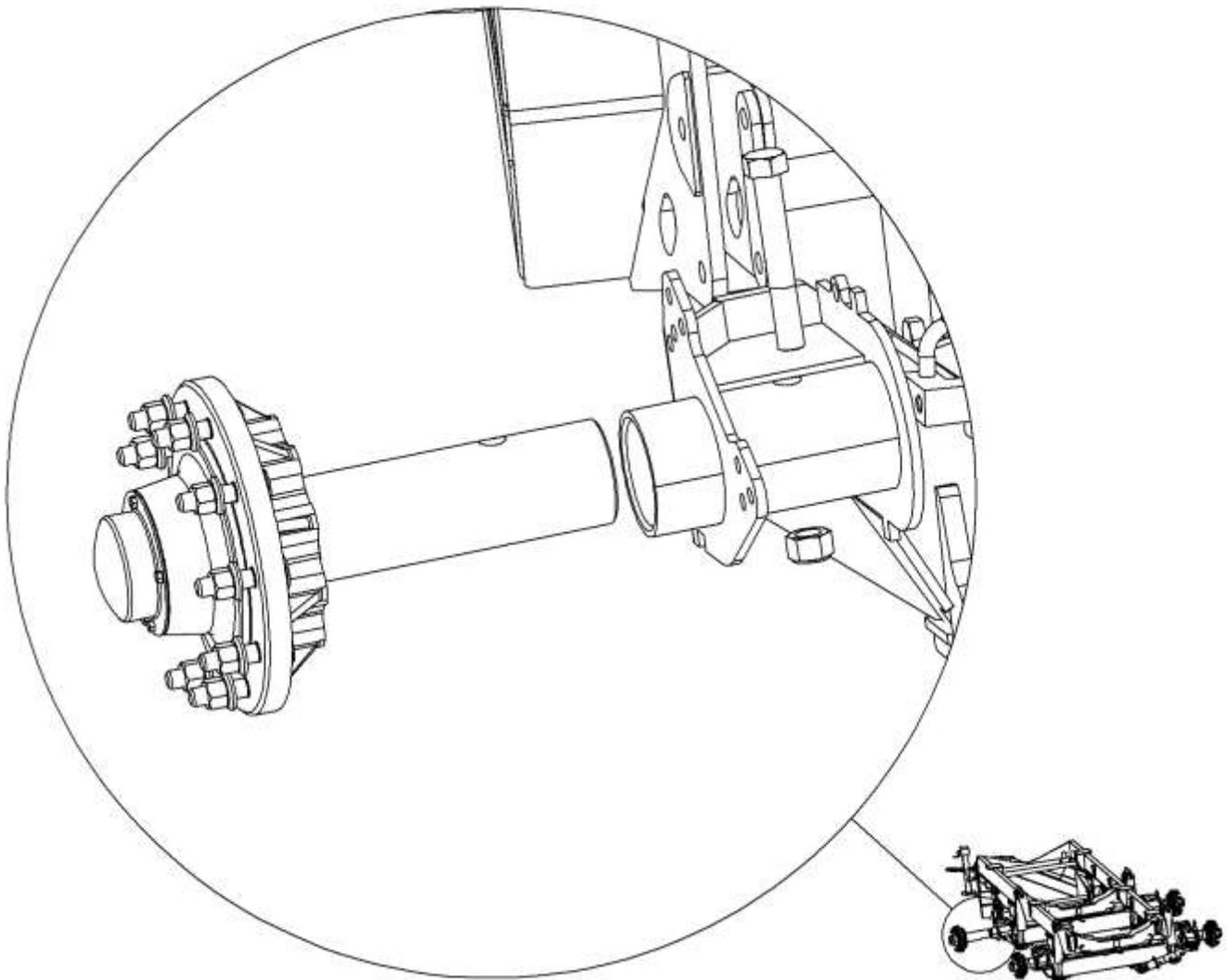


Figure 1

Assembly

Tridem Independent Suspension

Required Hardware

- (8) 1" X 5" Bolt P# 1347
- (2) 1" X 6" Bolt P# 1349
- (6) 1" Lock Nut P# 1779

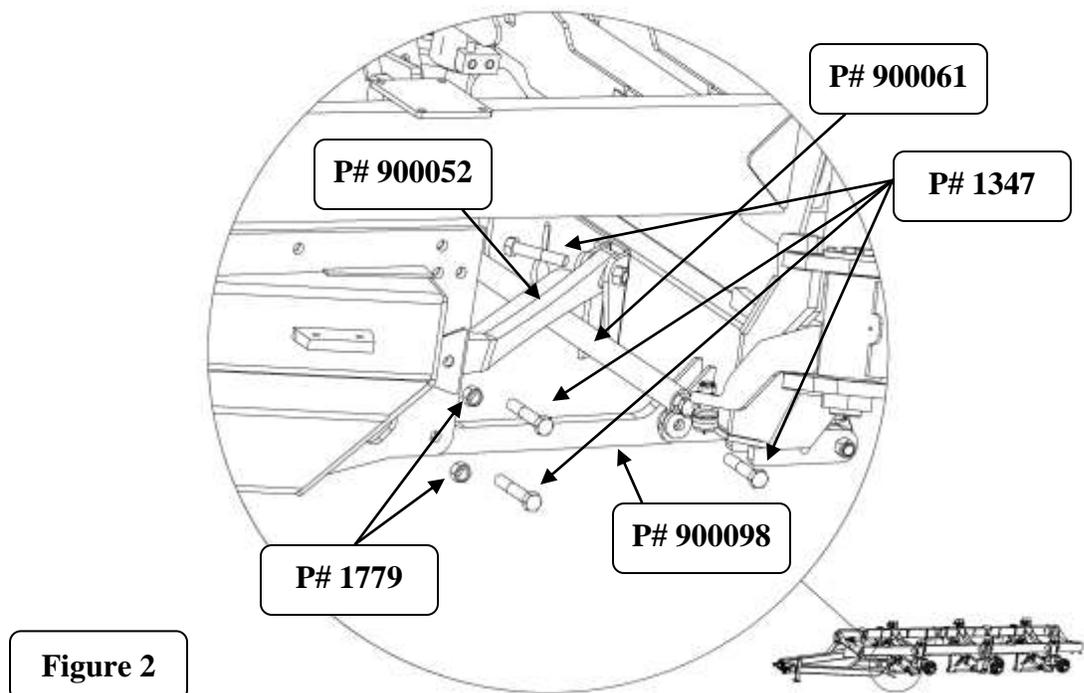
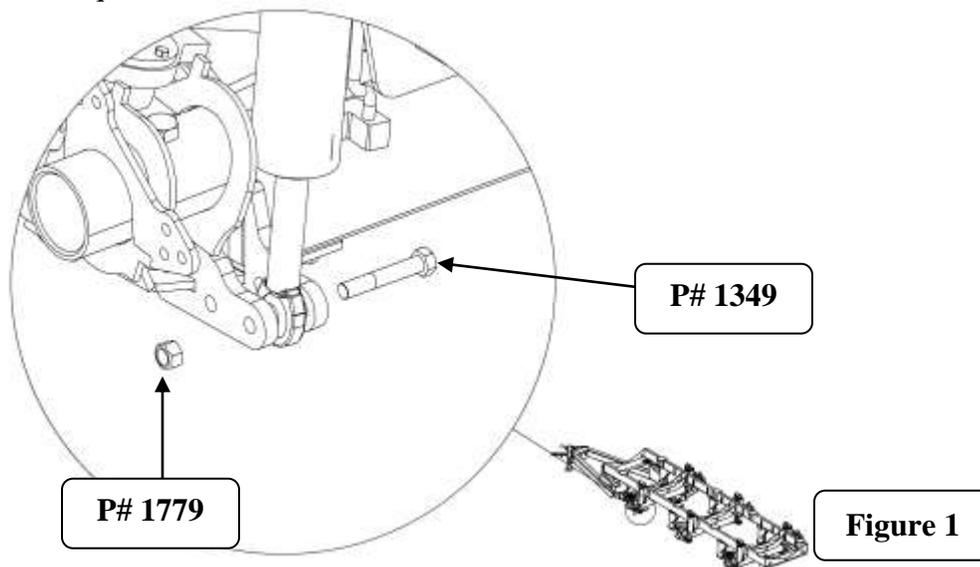
Required Tools / Equipment

- Hoist
- Center Punch
- Wrenches

Position Front Steering Axle and secure to suspension cylinders P# 900335 with bolts P# 1349 and lock-nuts P# 1779. Repeat for opposite side. See Figure 1.

Attach Upper Drag Link P# 900052 and Lower Drag Link P# 900098 with bolts P# 1347 and lock-nuts P# 1779. Repeat for opposite side. See Figure 2.

Repeat for Rear Steering Axle and Middle Fixed Axle. Attach Tie-rod #900061 to both to steering arms and torque to 160ft lbs or 217Nm



Assembly

Suspension Wheels

Required Hardware

(10) 3/8" Lug nut P# 91849
(PER TIRE)

Required Tools / Equipment

Crane
Center Punch
Lifting Tackle
Wrenches

Secure tire to hub with lug nuts P# 91849.

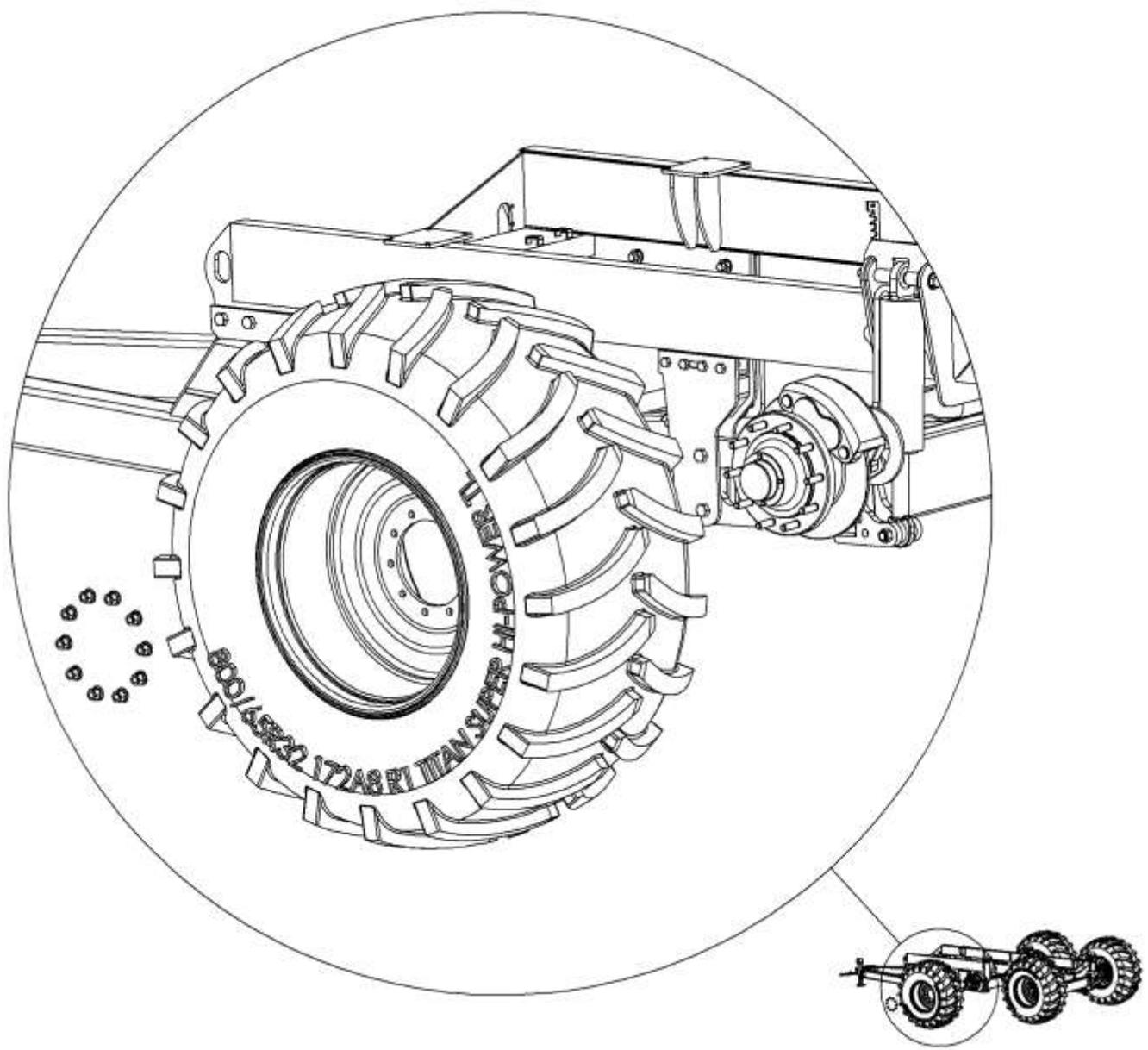


Figure 1

Assembly

Jack

Required Hardware

N/A

Required Tools / Equipment

N/A

Align jack P# 83338 with mounting bracket on tongue assembly. Insert Pins P# 90646. See Figure 1. Crank jack till bracing can be removed.

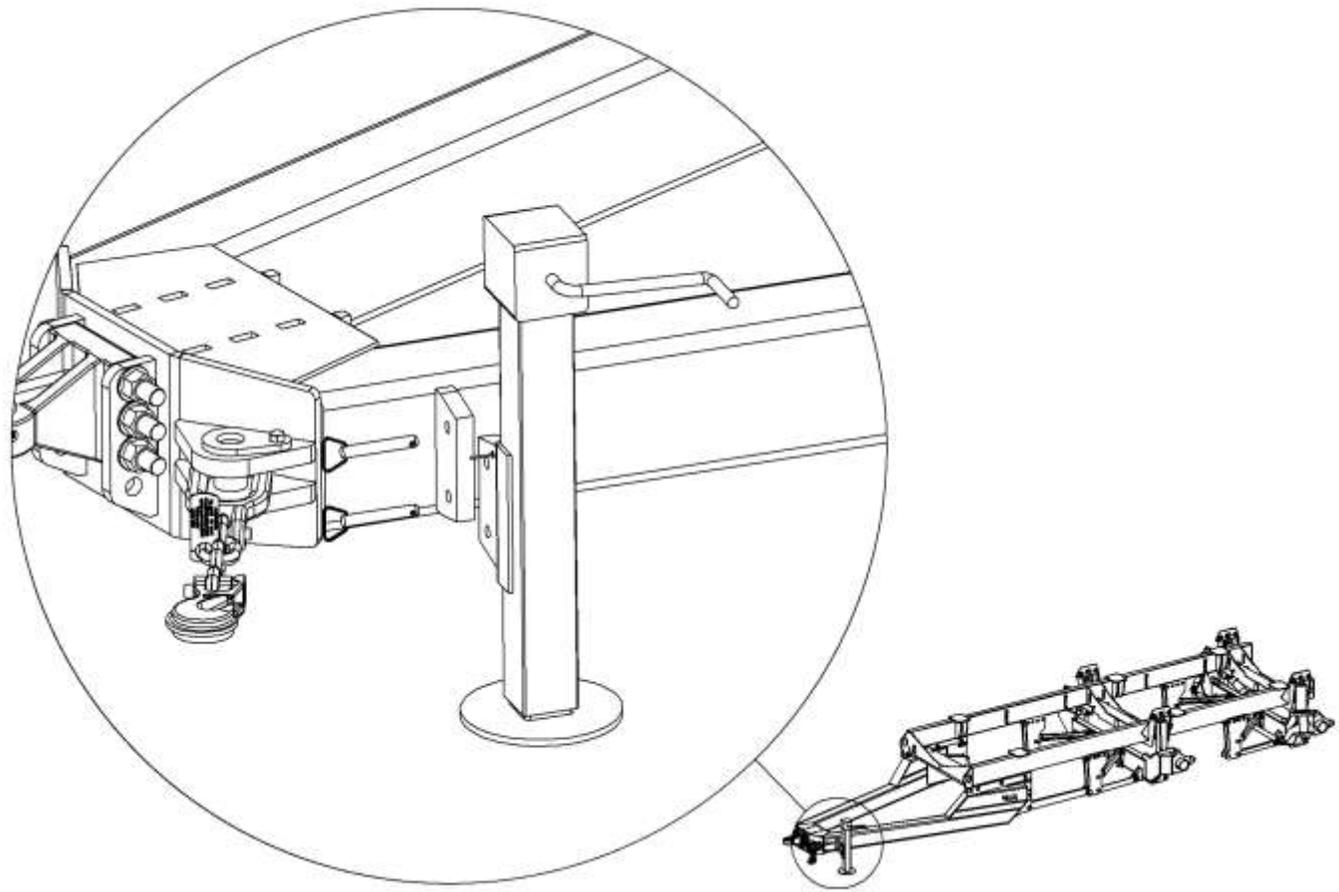


Figure 1

Assembly

Lower Vertical Auger

Required Hardware

- (16) 5/8" X 2" Bolt P# 1291
- (16) 5/8" Locknut P# 2546

Required Tools / Equipment

- | | |
|--------------|----------------|
| Crane | Lifting Tackle |
| Center Punch | Wrenches |

With adequate blocking under front end of grain cart, place wheel chocks on wheels to keep grain cart from moving. Attach crane to lower vertical auger assembly and apply upward pressure.



NOTE

Extreme care must be taken to ensure that lower auger assembly does not move forward. If it does, the mid bearing for horizontal auger will slip out and have to be re-inserted.

Remove bolts holding lower auger assembly to grain cart box. See Figure 1. Rotate auger to correct position and re-install all bolts P# 1291 and lock nuts P# 2546. See Figure 2.

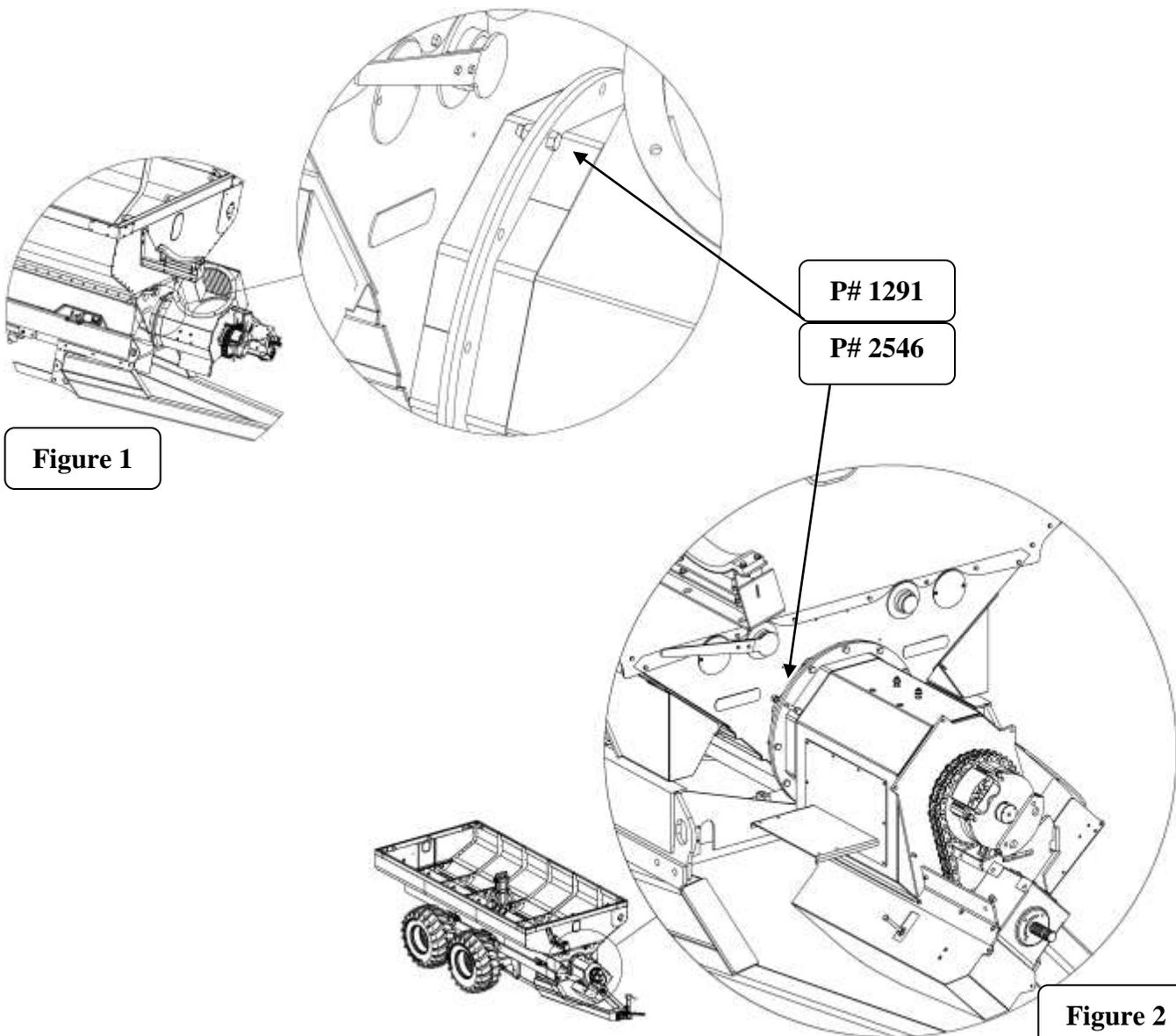


Figure 2

Assembly

Lower Vertical Auger Continued

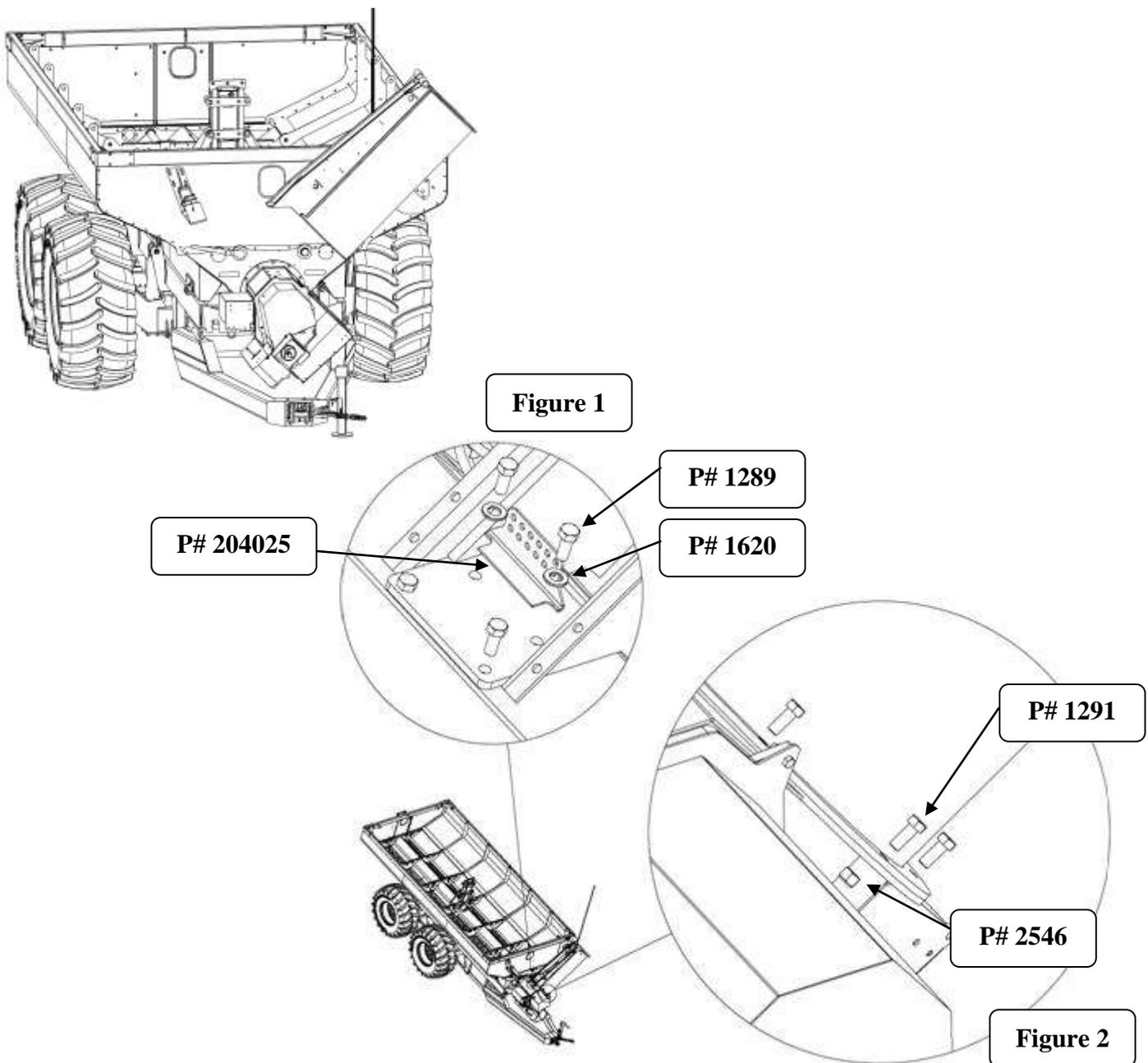
Required Hardware

- (12) 5/8" X 2" Bolt P# 1291
- (2) 5/8" Locknut P# 2546
- (4) 5/8" X 1 1/2" Bolt P# 1289
- (2) 5/8" Washer P# 1620

Required Tools / Equipment

- | | |
|--------------|----------------|
| Crane | Lifting Tackle |
| Center Punch | Wrenches |

Attach crane to lower vertical auger tube. Raise into position and insert bolts P# 1291/1289 and lock nuts P# 2546 to secure upper auger tube to housing. The two front and back middle bolt positions need lock nuts. See Figures 1 and 2. Secure grease tab P# 204025 with bolts P# 1289 with washers P# 1610.



Assembly

Lower Vertical Auger Continued

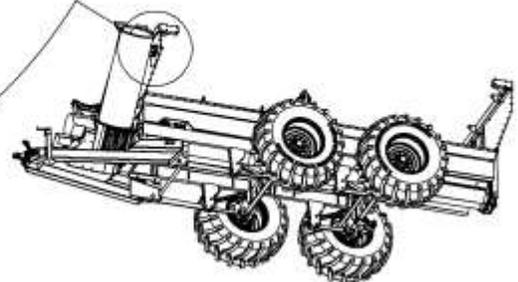
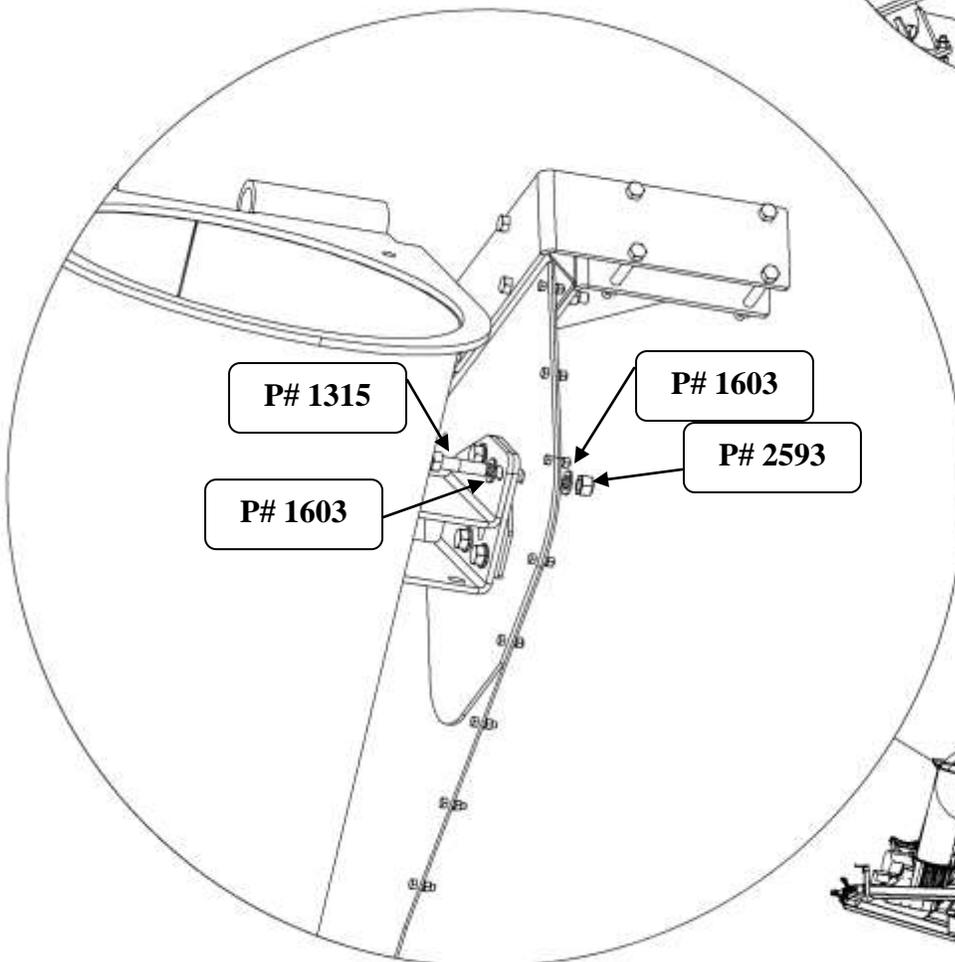
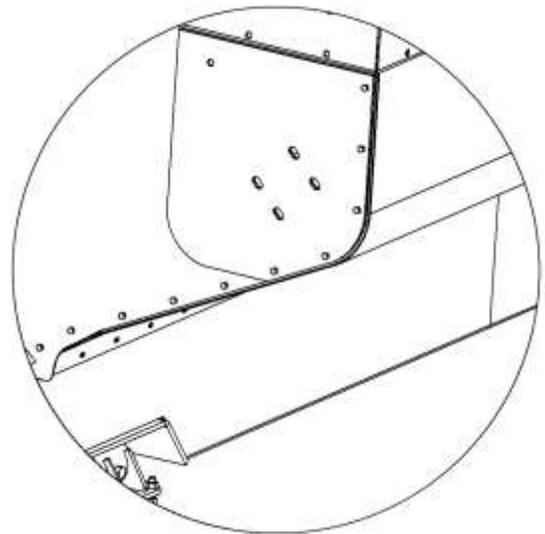
Required Hardware

- (4) 3/4" X 3" Bolt P# 1315
- (4) 3/4" Locknut P# 2593
- (8) 3/4" Washer P# 1603

Required Tools / Equipment

- Crane
- Center Punch
- Lifting Tackle
- Wrenches

Insert bolts P# 1315, washers P# 1603 on bolts and before lock nuts P# 2593. Tighten after securing bolts and lock nuts around flange. See Figures 1 and 2.



Assembly

Lower Vertical Auger Continued

Required Hardware

- (1) 5/8" X 7 1/2" Bolt P# 52097
- (1) 5/8" Locknut P# 2546
- (2) 5/8" Washer P# 1620

Required Tools / Equipment

- Crane
- Lifting Tackle

Attach crane to auger. See Figure 1. Raise auger and then insert into auger tube. See Figure 1.

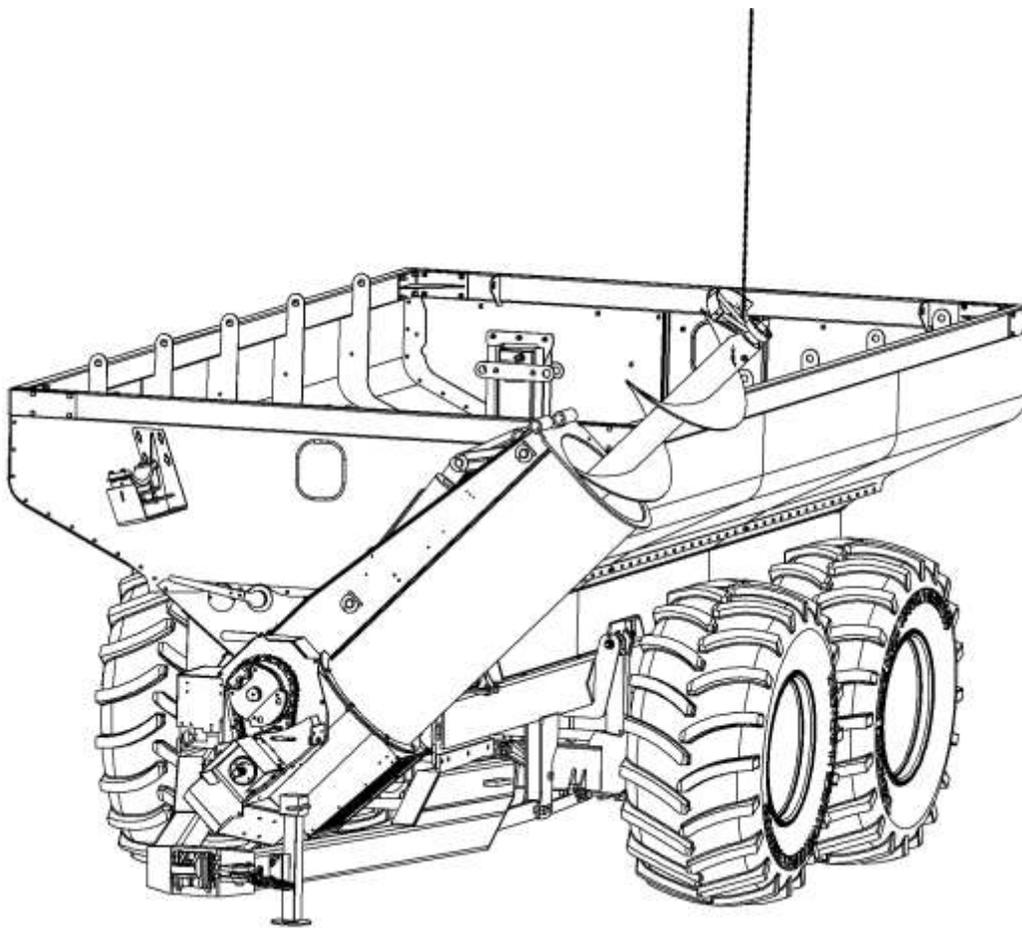


Figure 1

Assembly

Lower Vertical Auger Continued

Required Hardware

- (4) 5/8" X 3" Bolt P# 1295
- (4) 5/8" Locknut P# 2546

Required Tools / Equipment

Wrenches

Remove Side Chain Shield P# 202204. See Figure 1. Slide rubber seal P#835500 and lower vertical auger bearing P# 84492 onto auger shaft and secure with bolt P# 1295 and locknut P# 2546. Tighten bolts enough to bring bearing tight to housing. Figure 2. Attach lower vertical auger bearing grease line P# 24177 to housing swivel adapter P# 22334. See Figure 2. Proceed to sawtooth coupler alignment.

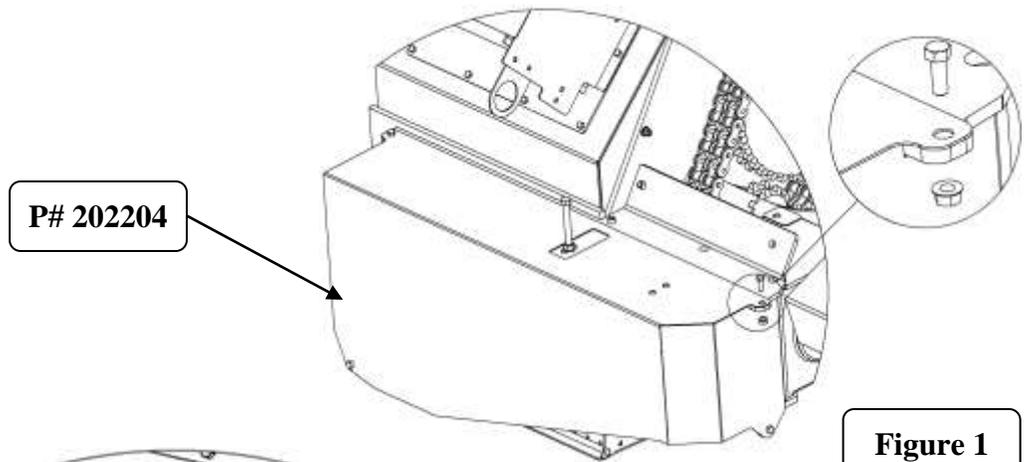


Figure 1

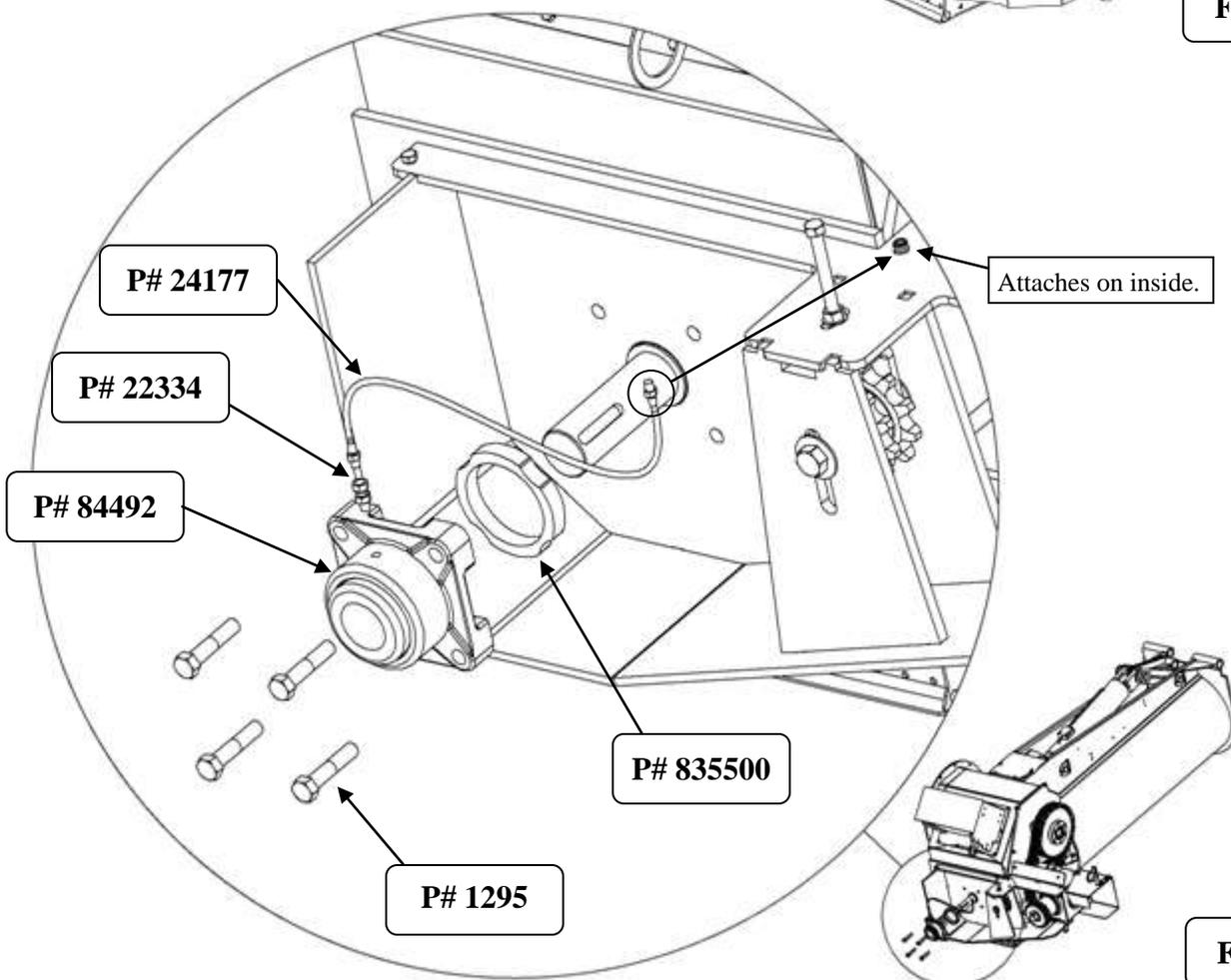


Figure 2

Assembly

Lower Vertical Auger Continued Sawtooth Coupler Alignment

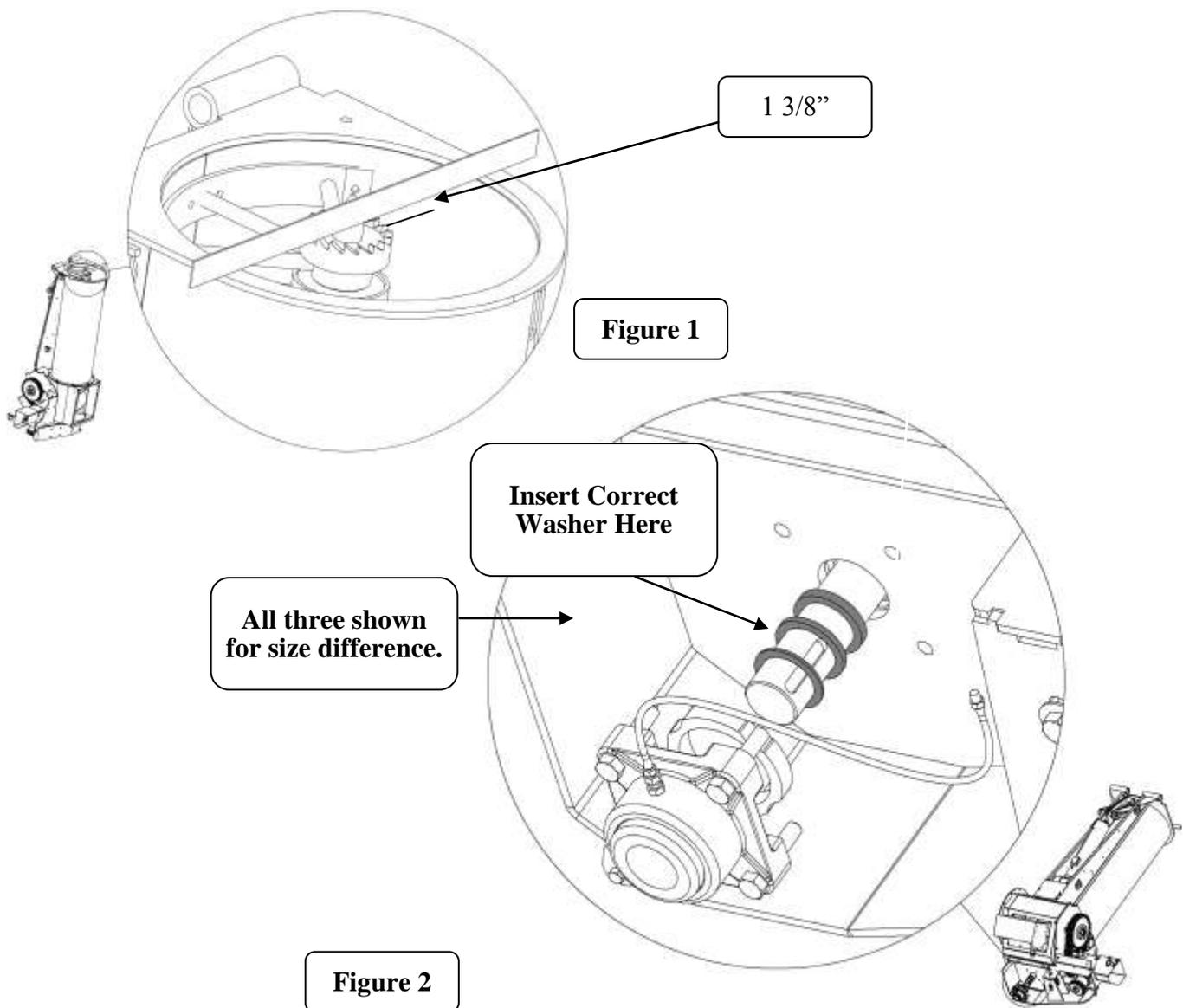
Required Hardware

- (1) .125" X 2.18" X 2.87" Washer P# 92413
- (1) .375" X 2.18" X 2.87" Washer P# 92414
- (1) .25" X 2.18" X 2.87" Washer P# 92415

Required Tools / Equipment

- Crane
- Wrenches
- Measuring Tape
- Lifting Tackle
- Straight Edge

The alignment of the sawtooth coupler is important to ensure the life of the vertical auger. Make sure auger is resting completely down. Place a straight edge across the top of the auger tube, measure the distance between the straight edge and the teeth of the sawtooth coupler. See Figure 1. The desired measurement is 1 3/8". If the measurement is less than 1 3/8", determine the washer needed to set this distance. Three washers are provided to accomplish this. See Figure 2. If a washer is needed, attach crane to auger and raise till shaft is clear of lower bearing. Loosen bolts holding bearing in place. See Figure 2. Insert single correct washer and tighten bolts on bearing. Lower auger back into bearing and check spacing on sawtooth coupler.



Assembly

Lower Vertical Auger Continued

Required Hardware

- (4) 1/2" X 1 3/4" Bolt P# 1251
- (4) 1/2" Locknut P# 2539
- (4) 1/2" Washer P# 1600

Required Tools / Equipment

- Wrenches
- Center Punch
- Pry Bar

Align holes with pry bar and center punch. See Figure 1. Insert bolts P# 1251 with washers P# 1600 through hanger bearing and secure with washers P# 1694 and lock nuts P#2539. Once all fasteners are installed, tighten securely.

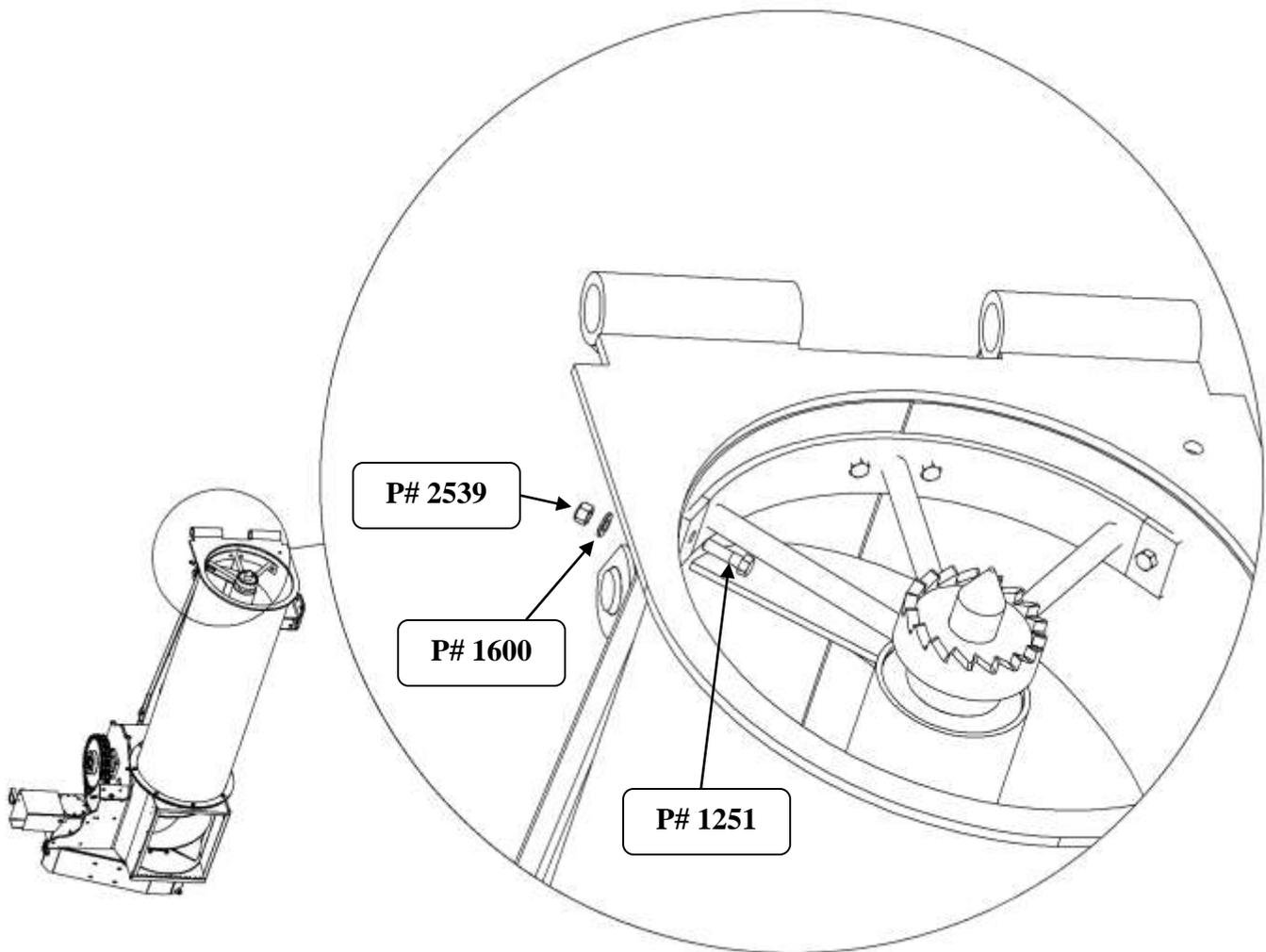


Figure 1

Assembly

Lower Vertical Auger Chain

Required Hardware

Key ½" X ½" X 2" P# 2437

Required Tools / Equipment

Allen Wrenches

Never Seize

Clean auger shaft and key P# 2437. See Figure 1. Clean taperlock bushing P# 80512. Assemble Sprocket P# 80506, Taperlock Bushing P# 80512 using Allen screws provided in box with bushing. Apply Loctight and torque screws to 68ft lbs or 92Nm.

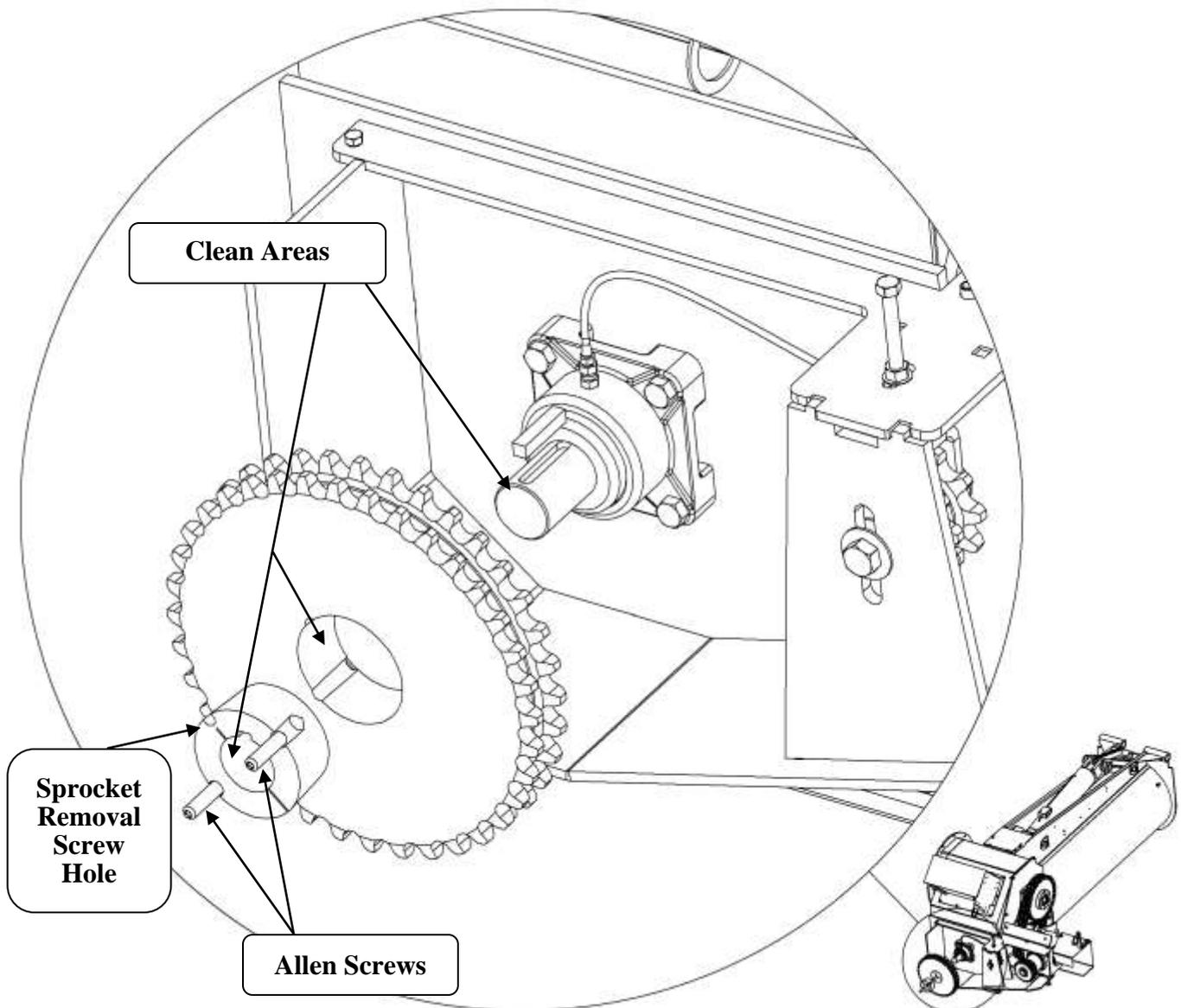


Figure 1

Assembly

Lower Vertical Auger Chain Continued

Required Hardware

Key 1/2" X 1/2" X 2 1/2" P# 2439

Required Tools / Equipment

Allen Wrenches Never Seize
Straight Edge

Slide Sprocket P# 80506 and bushing onto shaft until it hits bearing. Tighten Allen screws enough to allow for movement. This will pull sprocket away from bearing. See Figure 2.

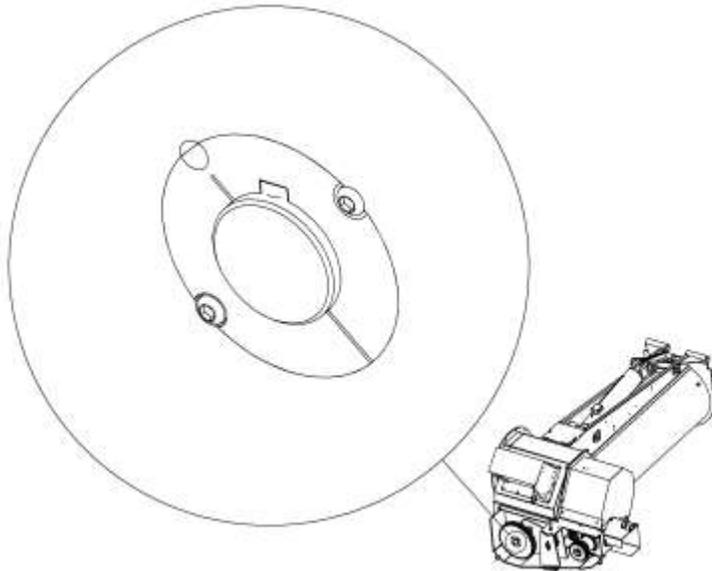


Figure 2

Clean gearbox shaft and taperlock. bushing. Assemble sprocket P# 80504, taperlock bushing. Apply thread locker (Loctite242 Blue or equivalent) to allen screws provided in box with bushing. See Figure 3. Slide sprocket onto gearbox shaft. Use a straight edge to align sprockets, apply Loc-tight and tighten Allen screws to 38ft lbs or 52Nm. See Figure 2.

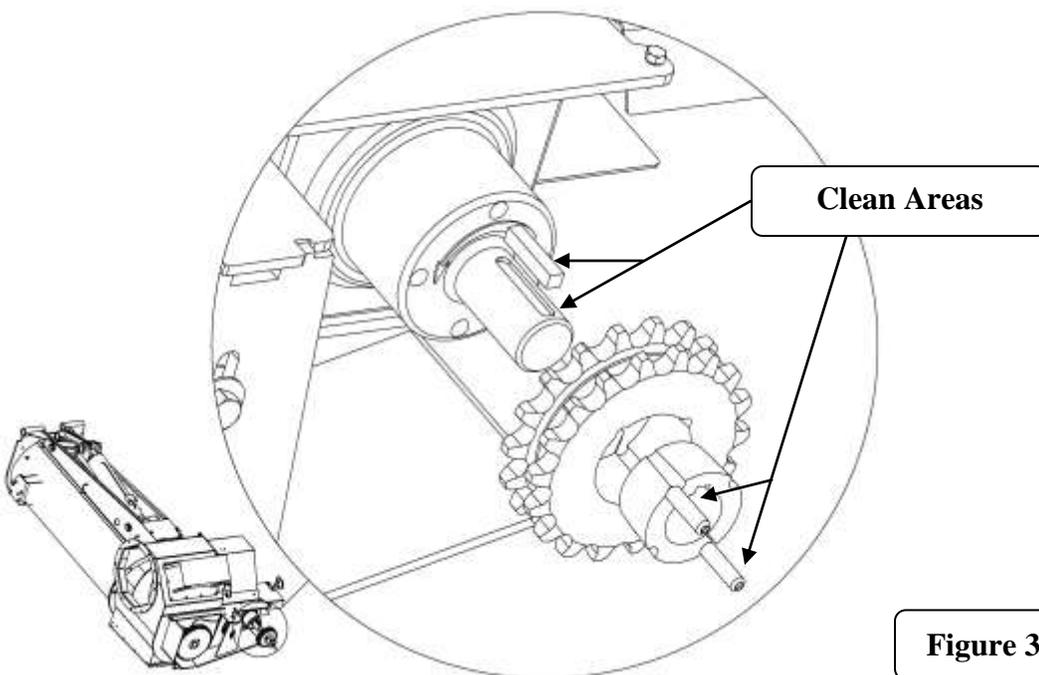


Figure 3

Assembly

Lower Vertical Auger Chain Continued

Required Hardware

Double Chain Link P# 90926

Required Tools / Equipment

Needle Nose Pliers

Pipe Wrench

Insert chain P# 80510A on top of gearbox pulley. Wrap a rag around PTO splines and use pipe wrench to rotate gearbox sprocket. Rotate gearbox PTO spline to thread chain on top of gearbox sprocket, below idler sprocket and on top of large auger sprocket. See Figure 4. Continue wrapping chain around sprockets till they meet at small gearbox sprocket.

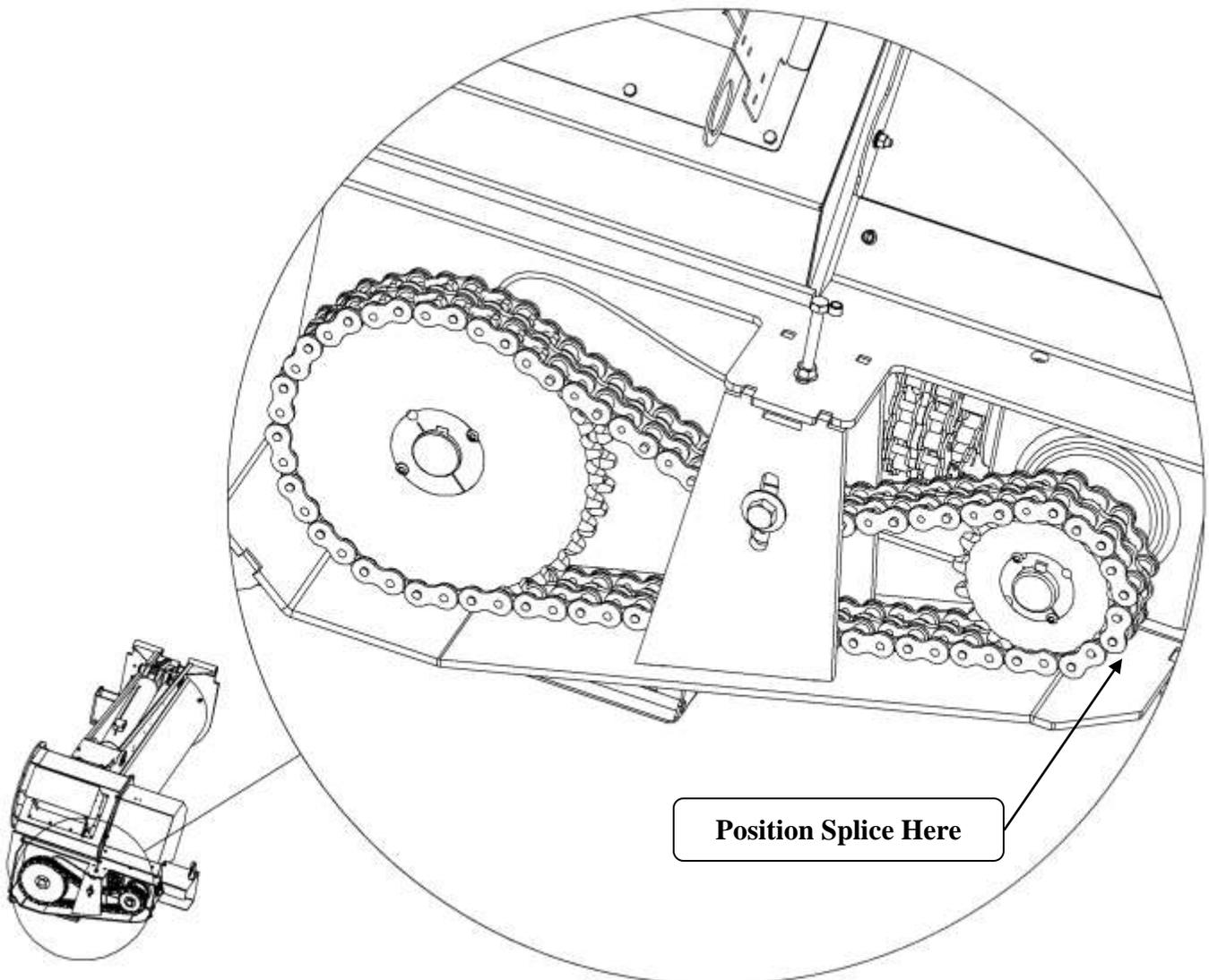


Figure 4

Assembly

Lower Vertical Auger Chain Continued

Required Hardware

Double Chain Link P# 90926

Required Tools / Equipment

Needle Nose Pliers

Pipe Wrench

Disassemble double chain connector link P# 90926. Bring both chain ends together at small sprocket. Insert double chain connector link to connect the two ends of the chain. Insert two center pieces of double chain connector link and then outer piece. Insert two cotter pins and bend so they will not catch on anything. See Figure 5.

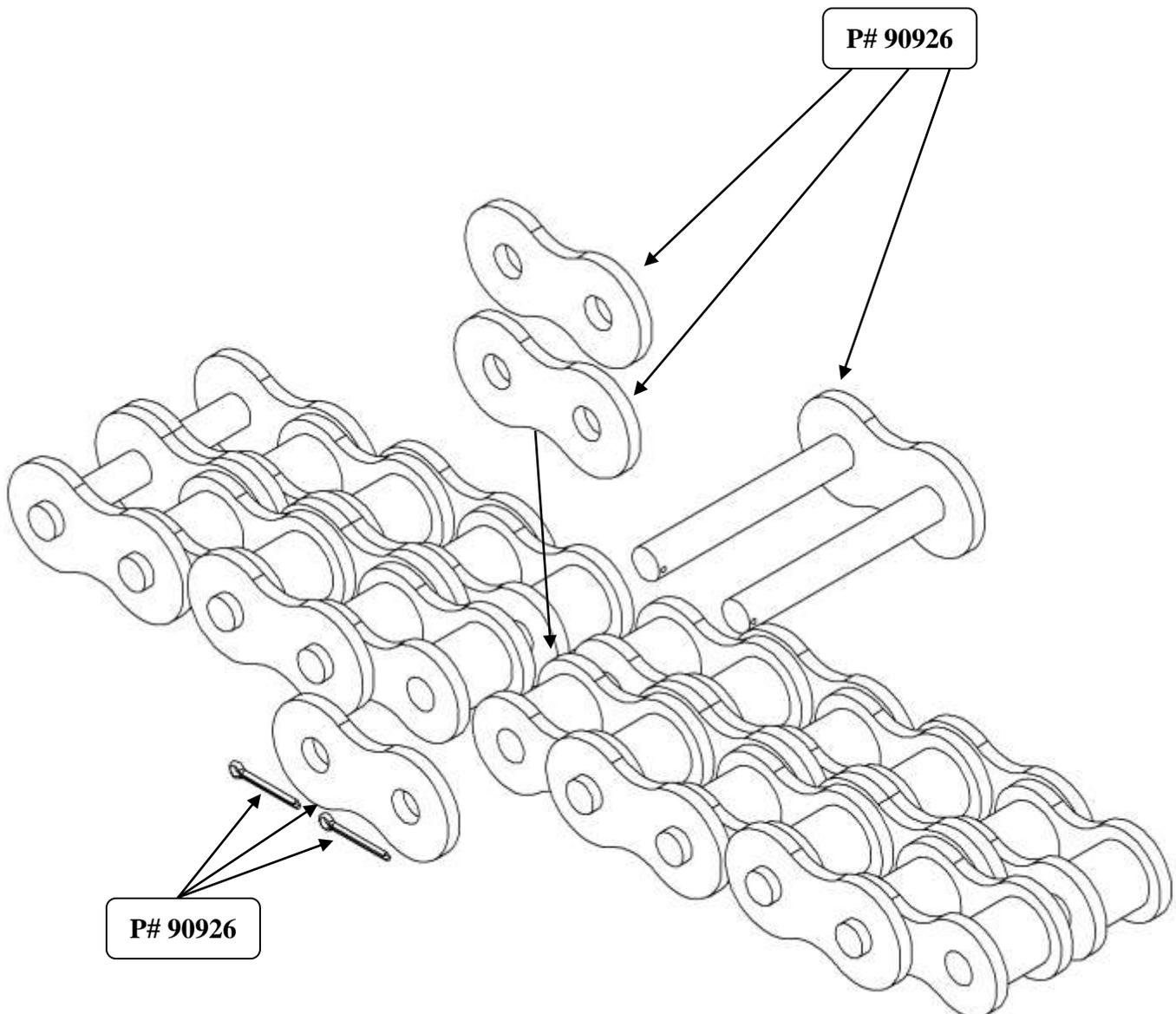


Figure 5

Assembly

Lower Vertical Auger Chain Continued

Required Hardware

N/A

Required Tools / Equipment

Needle Nose Pliers

Pipe Wrench

Align auger sprocket and gearbox sprocket to fixed position of idler sprocket. Fully tighten Allen screws for auger sprocket and gearbox sprocket. Check alignment by rotating PTO spline. Adjust tension on idler sprocket and tighten fully. See Figure 6.

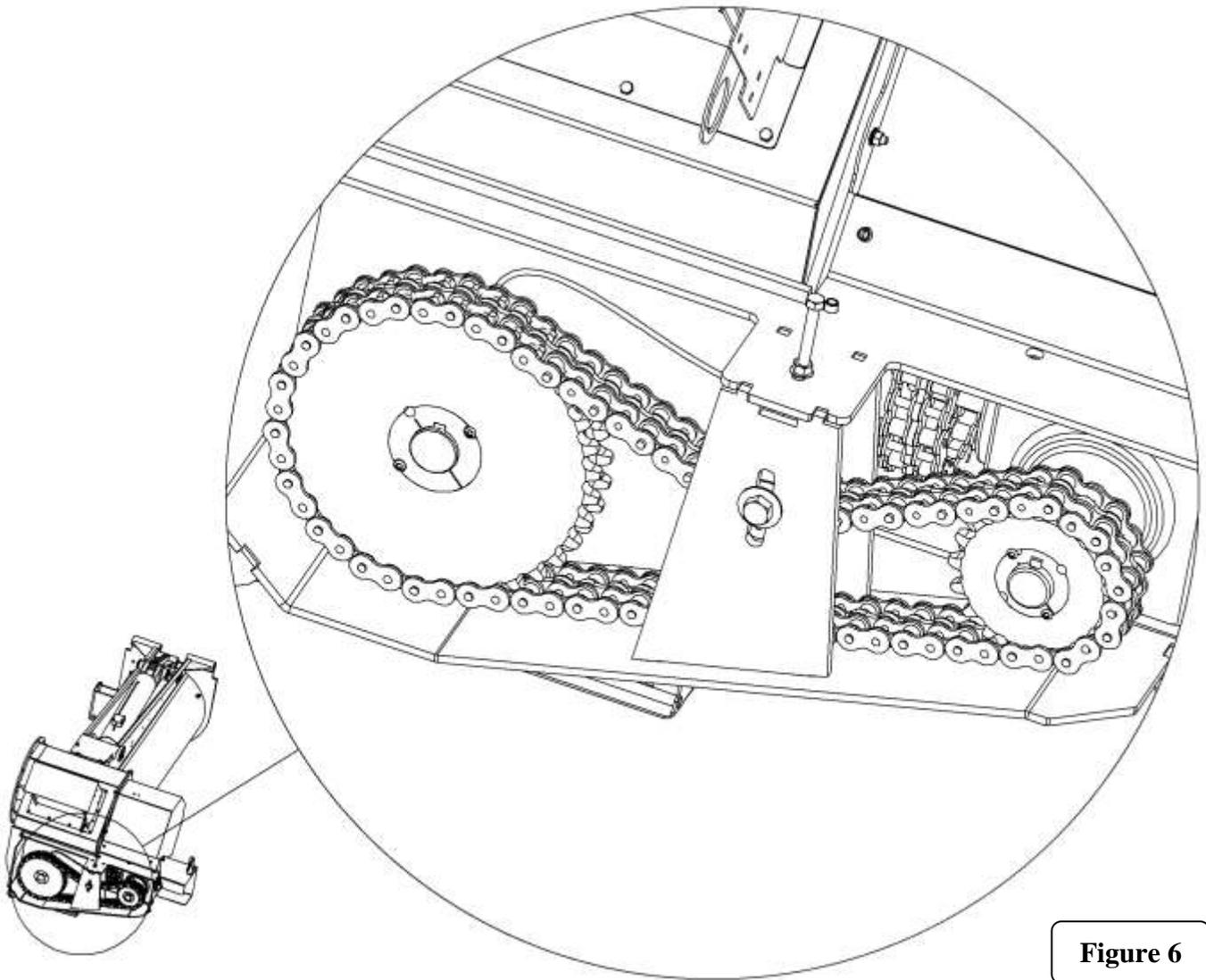


Figure 6

Assembly

Clutch Assembly

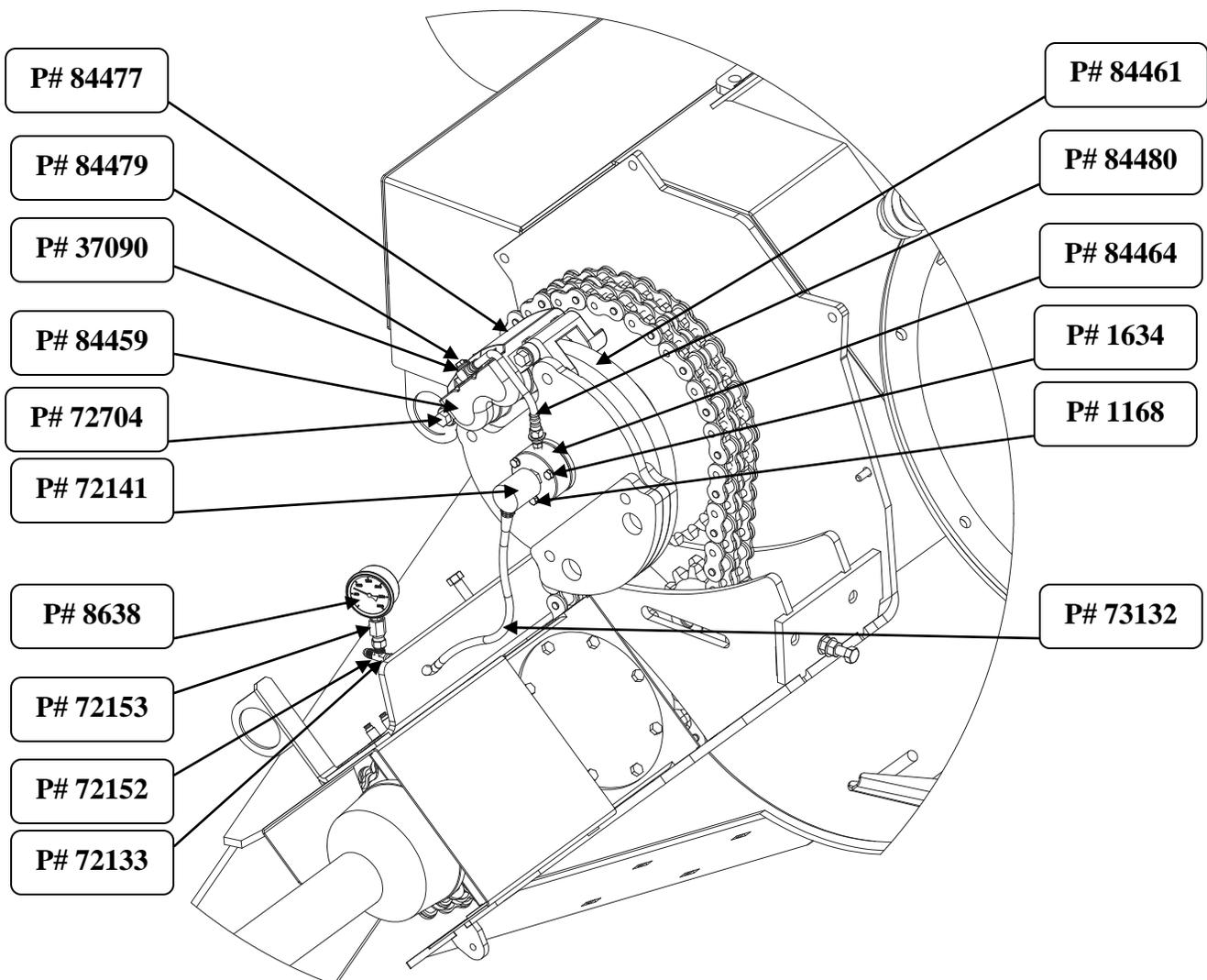
Required Hardware

- (5) 1/2" X 5" Bolt P# 1262
- (5) 1/2" Loc Nut P# 2539
- (3) 1/4" x 2" Bolt P#1168
- (3) 1/4" Loc Washer P#1368

Required Tools / Equipment

Wrenches

Position Rotor P# 84461 and secure with bolts P# 1262 and loc nuts P# 2539. Attach washer P#84476 and caliper mount P# 84458. Attach caliper P# 84459 and brake pads P# 84477 secure with bolts P#72704. Attach swivel P# 72141 with bolt and lock washer P# 1168 and P# 1634. Last attach hoses P# 73132 and P# 84464.



Assembly

Automatic Oiler Brushes

Required Hardware

(2) 1/2" Nut P# 1704

Required Tools / Equipment

Wrenches

Position oiler brushes P# 72796 and secure with nuts P# 1704 to shields P# 202203 and 202204. See Figures 1 and 2.

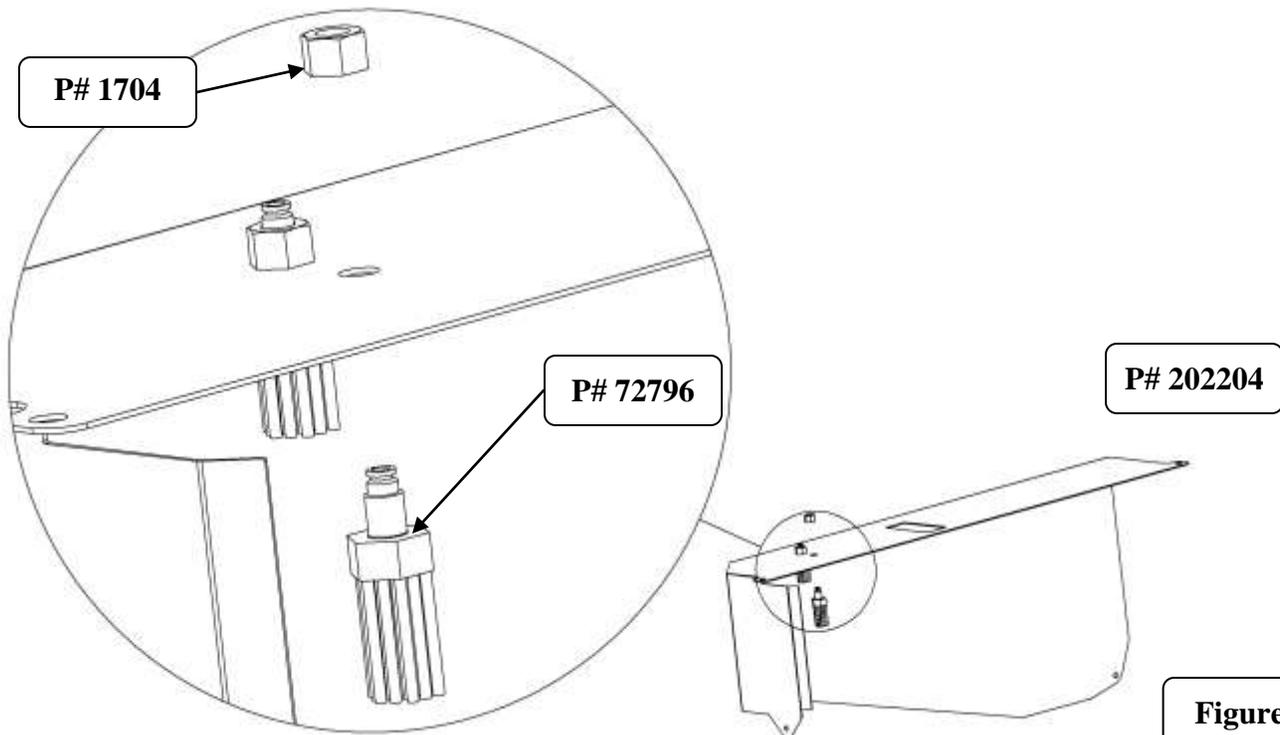


Figure 1

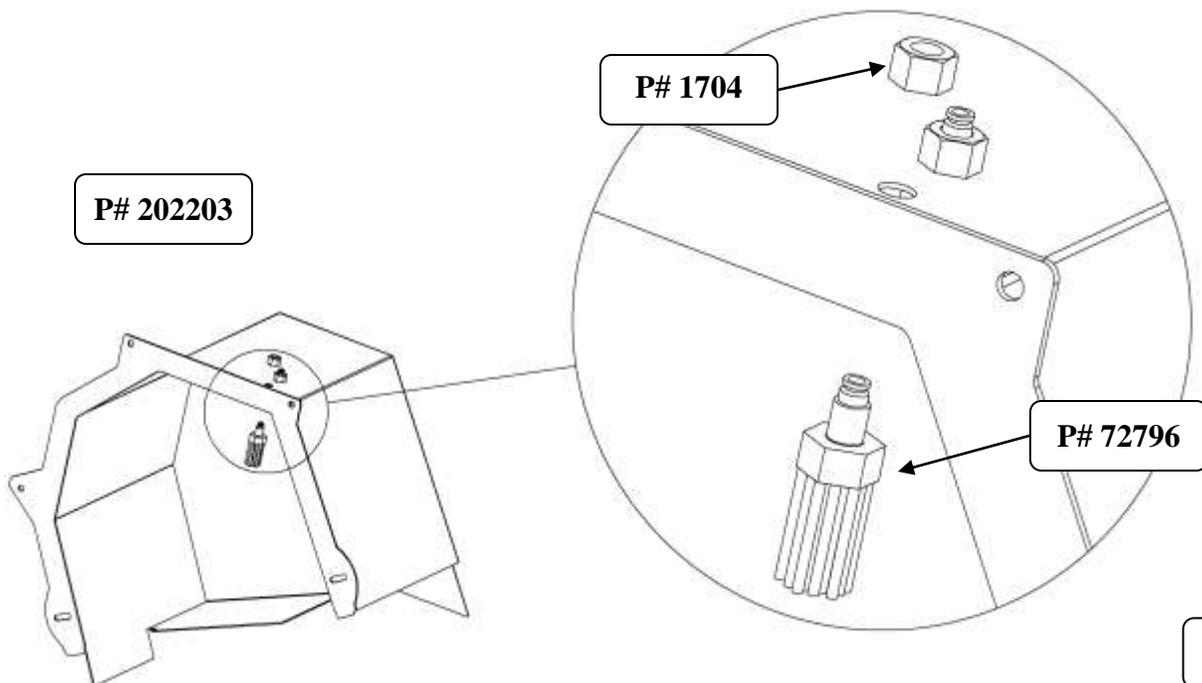


Figure 2

Assembly

Auger Shields

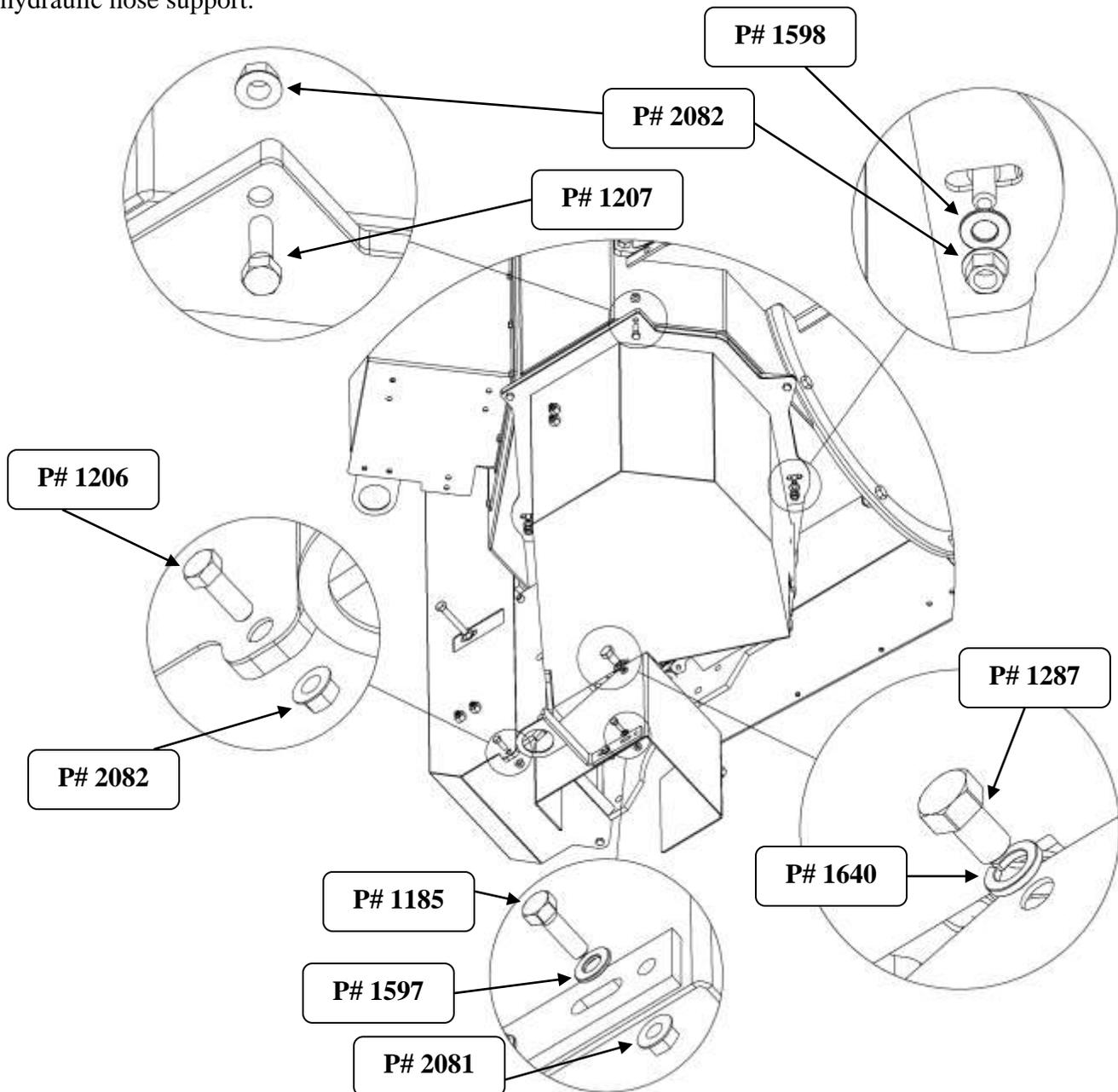
Required Hardware

- (3) 3/8" X 1 1/4" Bolt P# 1207
- (5) 3/8" Whiznut P# 2082
- (2) 3/8" Washer P# 1598
- (2) 5/16" X 1" Bolt P# 1185
- (2) 5/16" Whiznut P# 2081
- (2) 5/16" Washer P# 1597

Required Tools / Equipment

- Wrenches

Position Shield P# 202203 and secure with bolts P# 1207 and whiz nuts P# 2082 or washer# 1598 and whiz nut P# 2082. See Figure 1. Replace shield P# 202204 and secure with original hardware. Position PTO guard and secure with bolts P# 1287 and lock washers P# 1640. Position hydraulic hose support P# 22430 and secure with bolt P# 1185, washer P# 1597 Whiz nut P# 2081. Insert grommet into hydraulic hose support.



Assembly

Grain Door Indicator / Access Covers

Required Hardware

- (2) 1/4" X 1" Bolt P# 1164
- (2) 1/4" Toplock Nut P# 2564
- (8) 1/2" X 1" Bolt P# 1249
- (8) 1/2" Whiz Nut P# 2084

Required Tools / Equipment

Wrenches

Position grain door indicator P# 85354 and secure with bolts P# 1164 and toplock nuts P# 2564. See Figure 1. Install the four (4) circular access covers P# 84518 using bolts P# 1249 and whiz nuts P# 2084 tighten securely. There are two located at both front and rear of cart. See Figure 1.

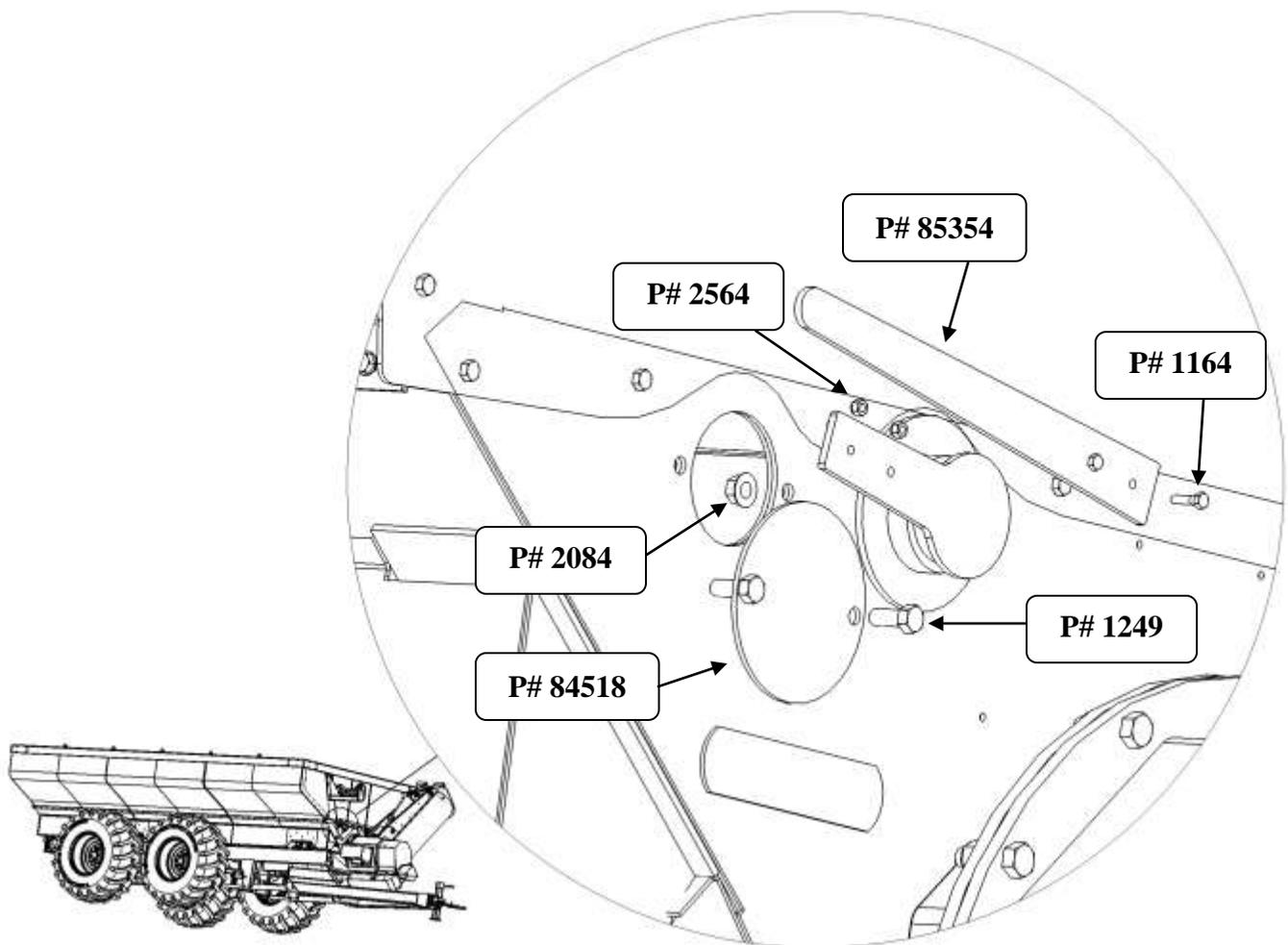


Figure 1

Assembly

Standard Upper Vertical Auger

Required Hardware

- (6) 3/8" X 3/4" Bolt P#1204
- (6) 3/8" Lock Nut P#2496

Required Tools / Equipment

- Wrenches
- Pliers

Remove hardware holding auger upper flap. See Figure 1. Raise upper flap out of the way. Align lower auger targetable downspout P# 71865 to hinge and attach with bolts P# 1204 and lock nuts P# 2496. See Figure 2. Remove pin in auger lift cylinder. Align cylinder with bracket on lower flap and insert pin and secure with cotter pin. Attach work light with supplied hardware. See Figure 2.

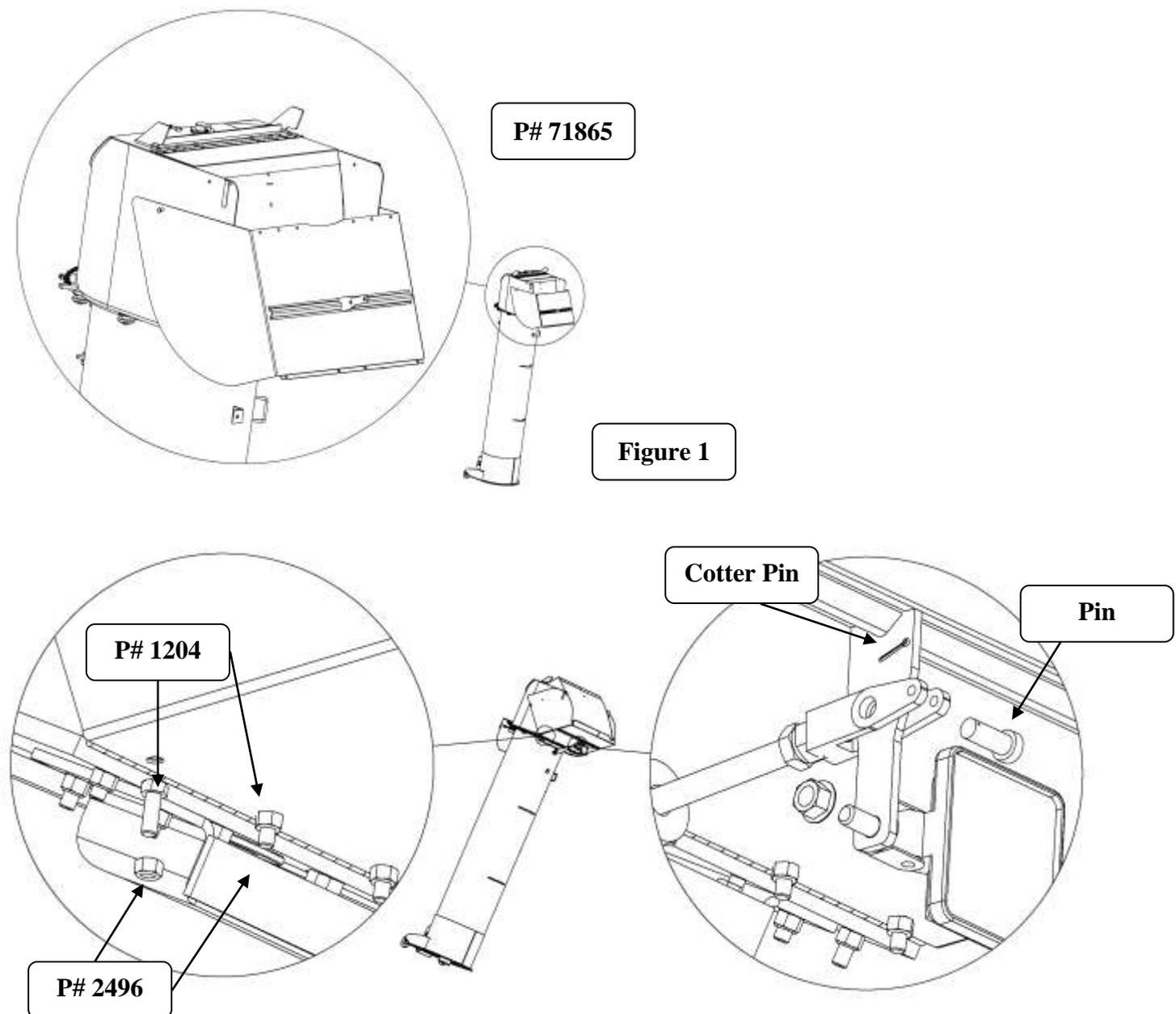


Figure 2

Assembly

Standard Upper Vertical Auger Continued

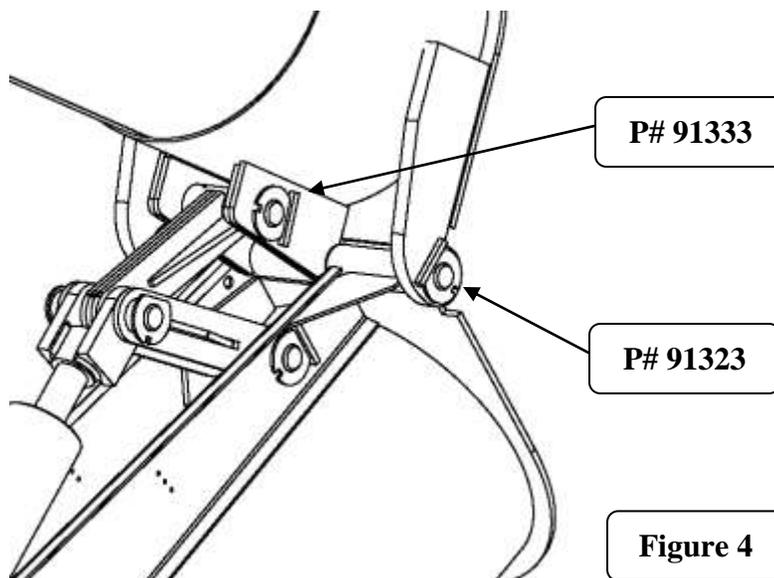
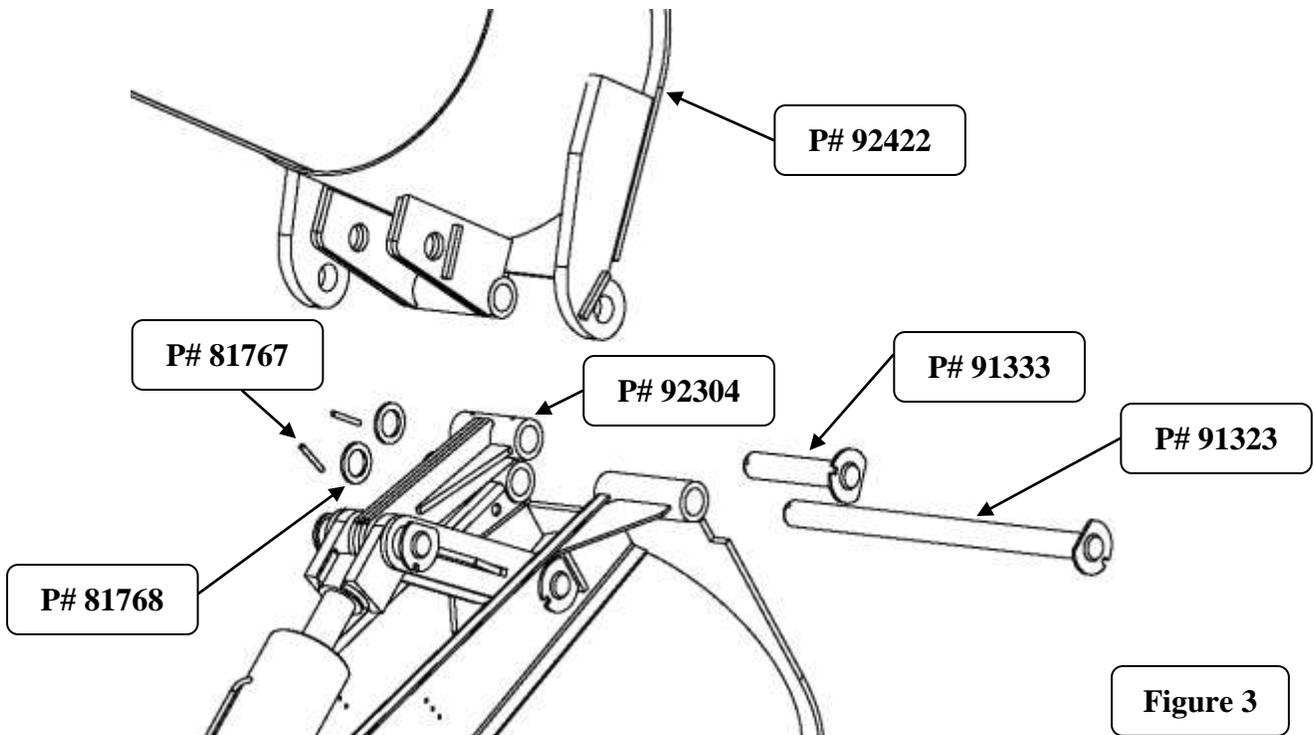
Required Hardware

- (1) Hinge Pin 29 3/4" P# 91323
- (1) Vertical Pivot Pin 9" P# 91333
- (2) Washer P# 81768
- (2) Roll Pin P# 81767

Required Tools / Equipment

- Hammer
- Lifting Tackle
- Crane
- Pin Punch

Attach crane to upper auger P# 71750 and align with lower auger pivot. See Figure 3. Insert hinge pin P# 91323, then slide washer P# 81768 over hinge pin and secure with roll pin P# 81767. Align linkage arm upper pivot P# 91304 and insert vertical pivot pin P# 91333. Slide washer over vertical pivot pin and secure with roll pin P# 81767. Lower upper auger into cradle. See Figure 4.



Assembly

Standard Upper Vertical Auger Continued

Required Hardware

- (4) 1/2" X 1 1/2" Bolt P# 1250
- (4) 1/2" Locknut P# 2539

Required Tools / Equipment

Wrenches

Install (2) hydraulic fittings P# 842000 into hydraulics motor P# 12554. See Figure 1. Install hydraulic motor and mount to upper auger using bolts P# 1250 and lock nuts P# 2539. See Figure 2.

P# 842000

P# 12554

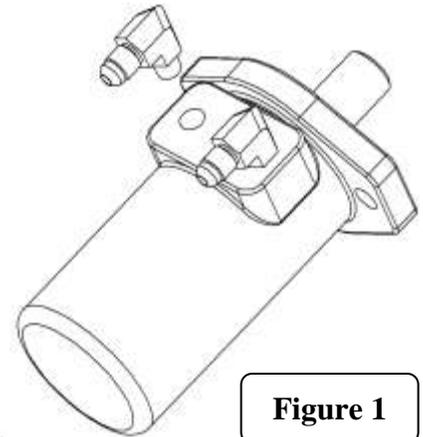


Figure 1

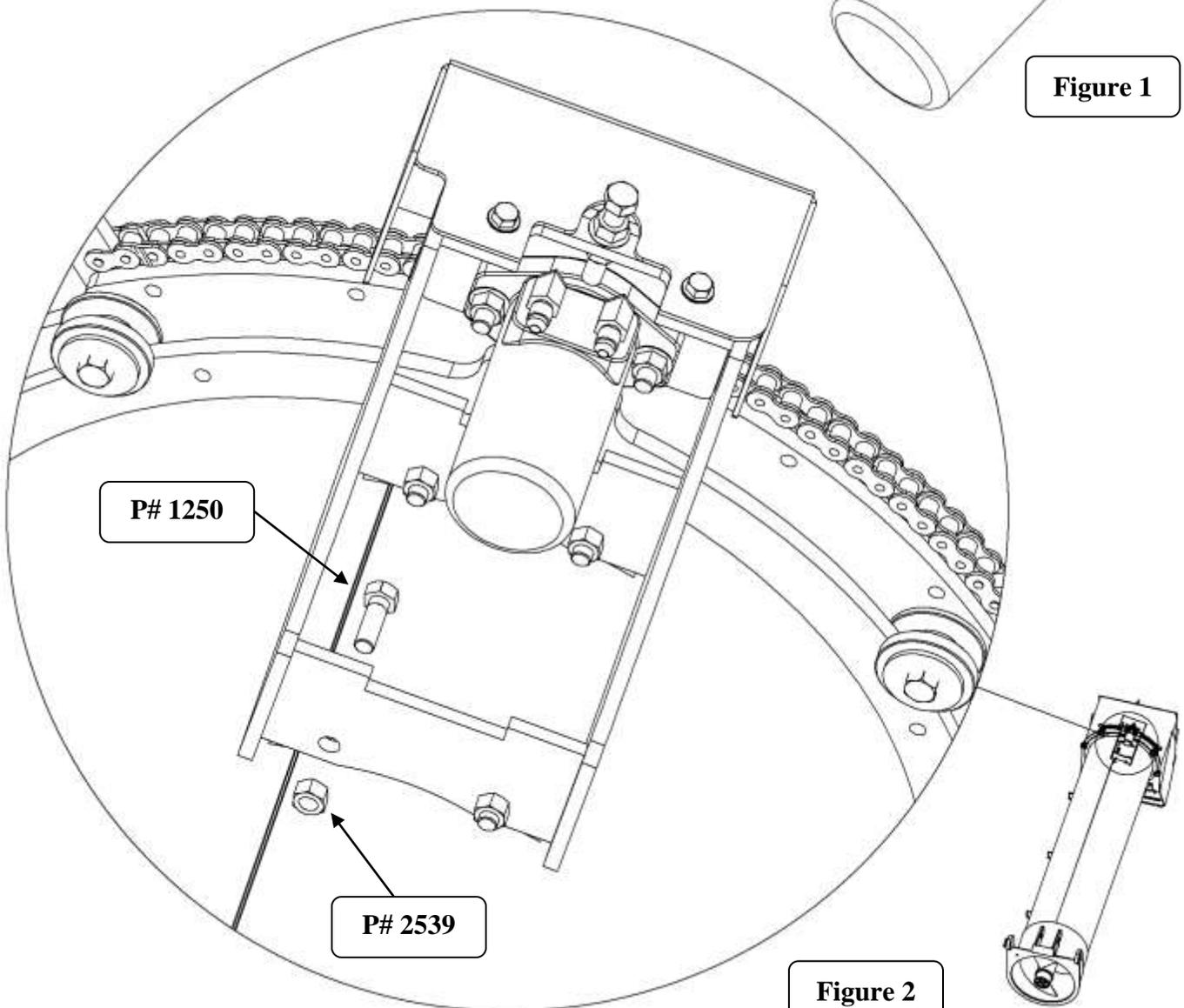


Figure 2

Assembly

Automatic Chain Oiler

Required Hardware

- (6) 5/16" X 3/4" Bolt P# 1183
- (4) 5/16" Washer P# 1597

Required Tools / Equipment

Wrenches

Position oiler tank P# 72772 and secure with bolts P# 1183, washers P# 1597 and whiz nut P# 2081. Slide connecting hose P# 72773 onto tank and secure with hose clamp P# 72813. Slide hose clamp P# 72813 onto hose P# 72773 and then slide manifold P# 72774 onto hose P# 72773. Tighten hose clamp P# 72813. Position manifold bracket P# 72775 and secure with bolts P# 1183. secure manifold to manifold bracket using hose clamp P# 72814. See Figure 1.

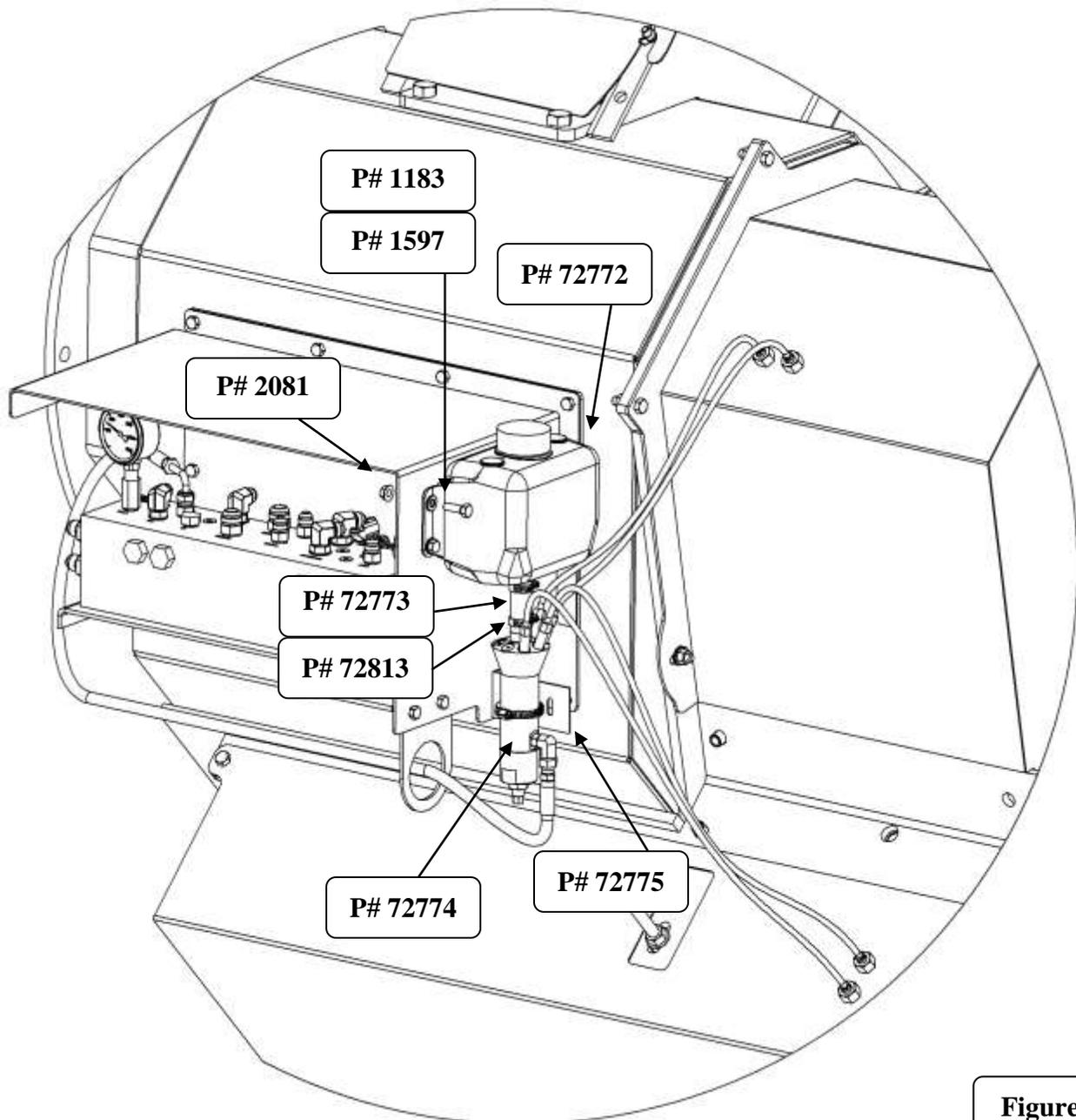


Figure 1

Assembly

Automatic Chain Oiler Continued

Required Hardware

N/A

Required Tools / Equipment

Wrenches

Route plastic tubing P# 72779 to brush positions. Push hose ends into brushes P# 72796 and manifold P# 72774. Connect hydraulic fitting P# 72817 to manifold P# 72774. Connect hydraulic hose P# 72819 to hydraulic fitting P# 72817 on oiler manifold, route hose to hydraulic control block port labeled OILER. Connect hydraulic hose P# 852060 to hydraulic bulkhead fitting P# 72133, route hose to hydraulic control block port labeled CL. Tighten all connections, but leave hydraulic hose loose till all hydraulic hoses have been installed. See Figure 2.

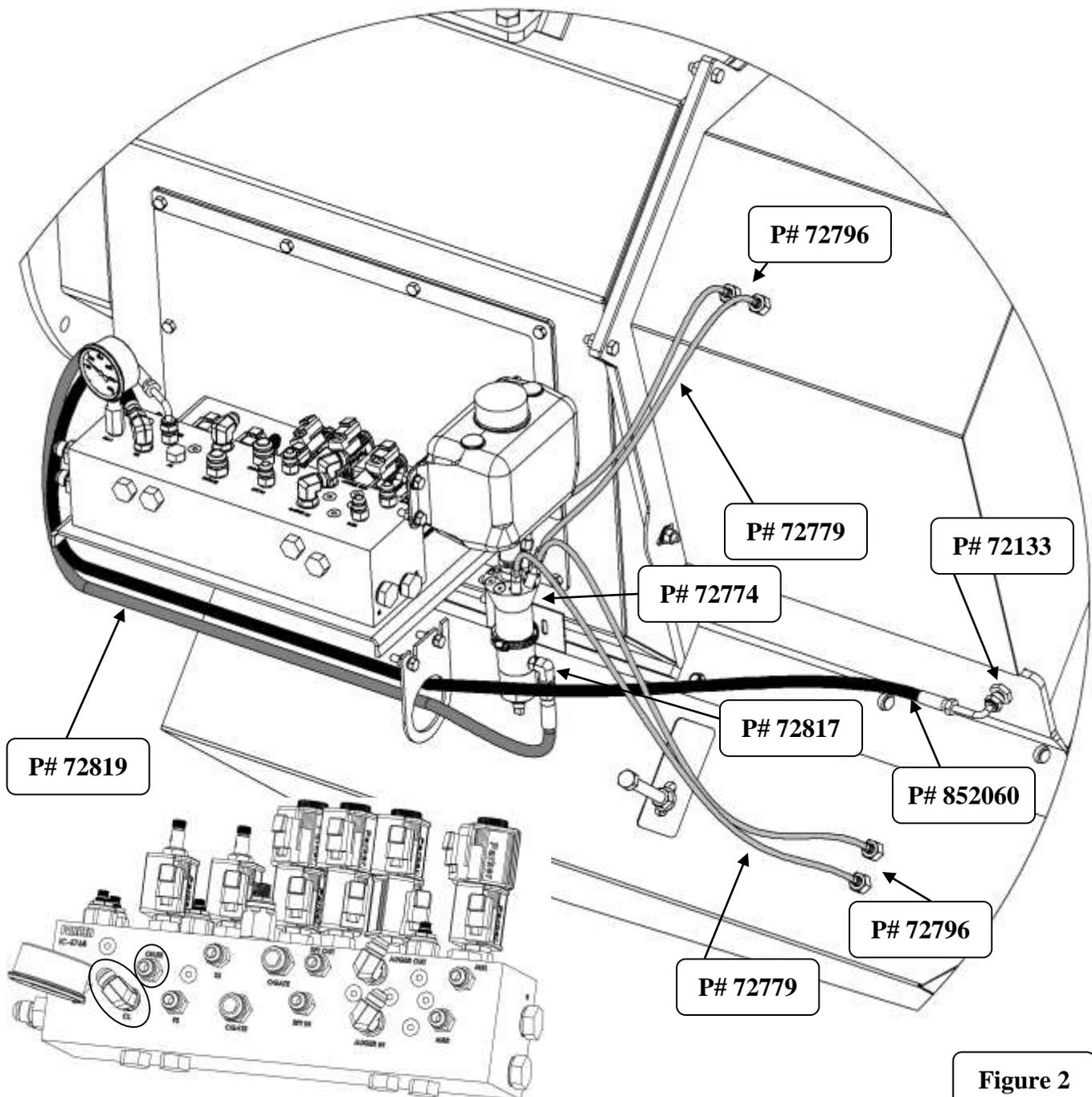


Figure 2

Assembly

Running Light Wiring Harness

Required Hardware

- (7) 5/16" X 1" Bolt P# 1185
- (7) 5/16" Washer P# 1597

Required Tools / Equipment

- Wrenches
- Wire Cutters

Route running light wiring harness P# 72854 and secure with bolts P# 1185, washers P# 1597 and clamps P# 15742. Leave loop at top to connect to running lights. Connect running light harness extension P# 72853 from rear of cart to running light wiring harness P# 72854. See Figure 1. Loosen bolts P# 1301 on rear corner brackets. Slide cart bracket P# 72792 onto bolts P# 1301 and tighten. Repeat for other side. See Figure 2.

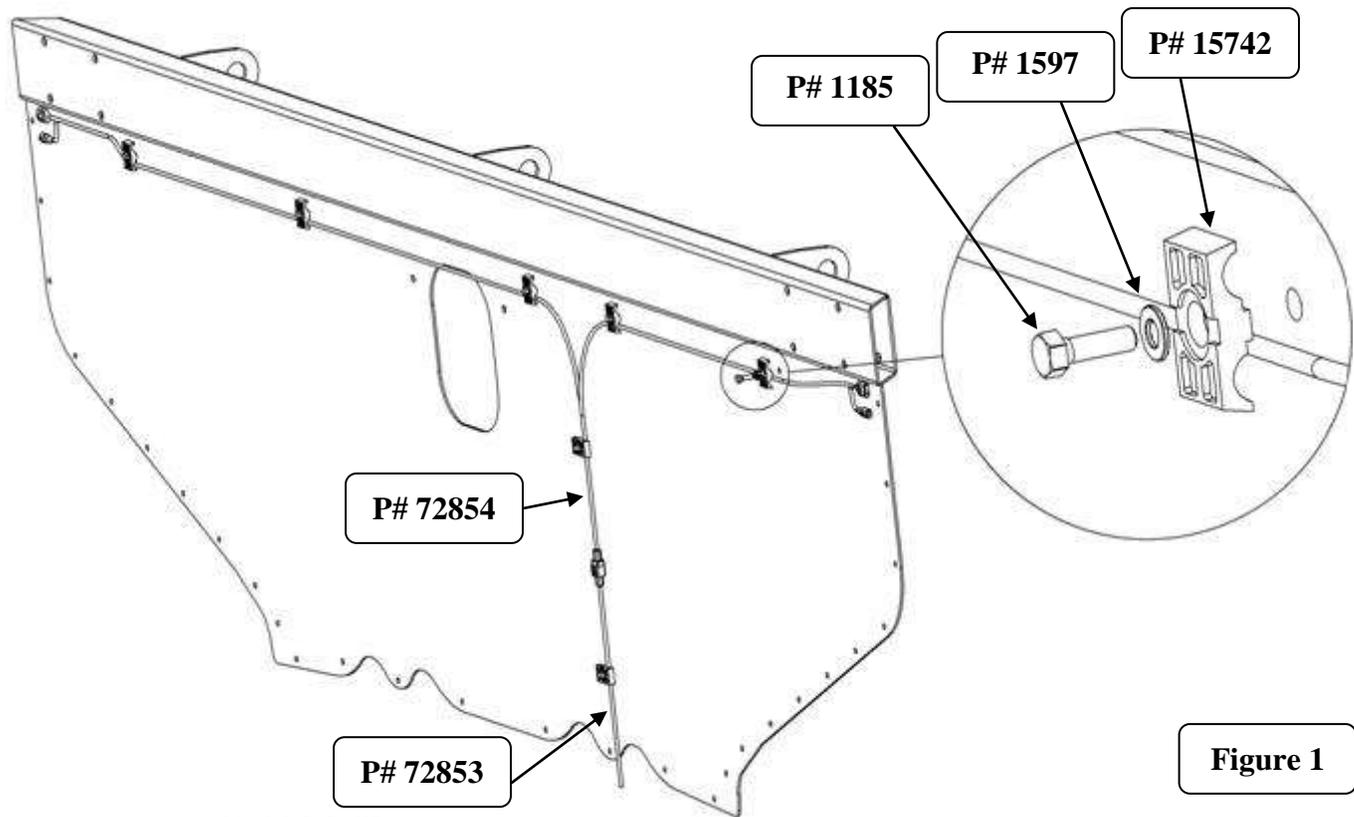


Figure 1

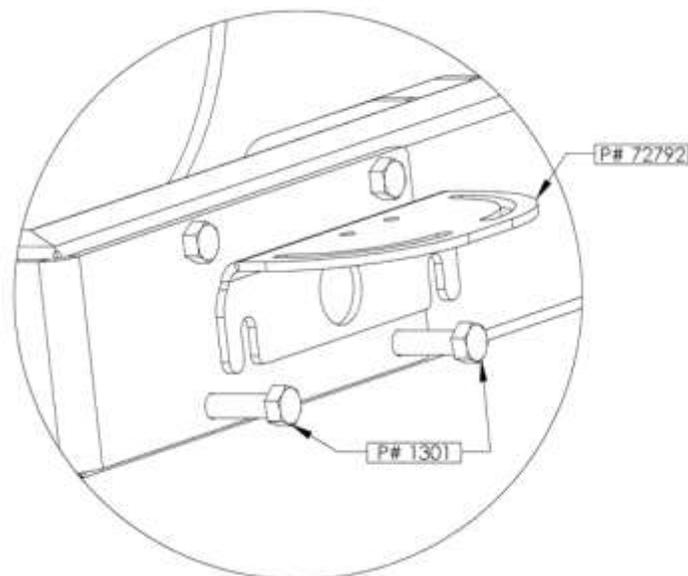


Figure 2

Assembly

Running Light Wiring Harness Continued

Required Hardware

- (2) 3/8" x 3 1/2" Bolt P# 1216
- (4) 3/8" Locknut P# 2496
- (4) 3/8" Washer P# 1598
- (4) 1/4" x 1" Bolt P# 1164
- (4) 1/4" Flange Nut P# 2080
- (4) 1/4" Washer P# 1596

Required Tools / Equipment

Wrenches

Attach right hand running light P# 40762 to light bracket P# 72786 using bolts P# 1164, washers P# 1596 and flange nuts P# 2080. Secure light bracket P# 72786 to swing arm P# 85769 using bolts P# 1216, locknuts P# 2496 and washers P# 1598. Secure swing arm to cart bracket P# 72792 using bolts P# 1216, locknuts P# 2496 and washers P# 1598. Attach wiring harness and tighten all hardware. Repeat for left hand running light P# 40763. See Figure 3.

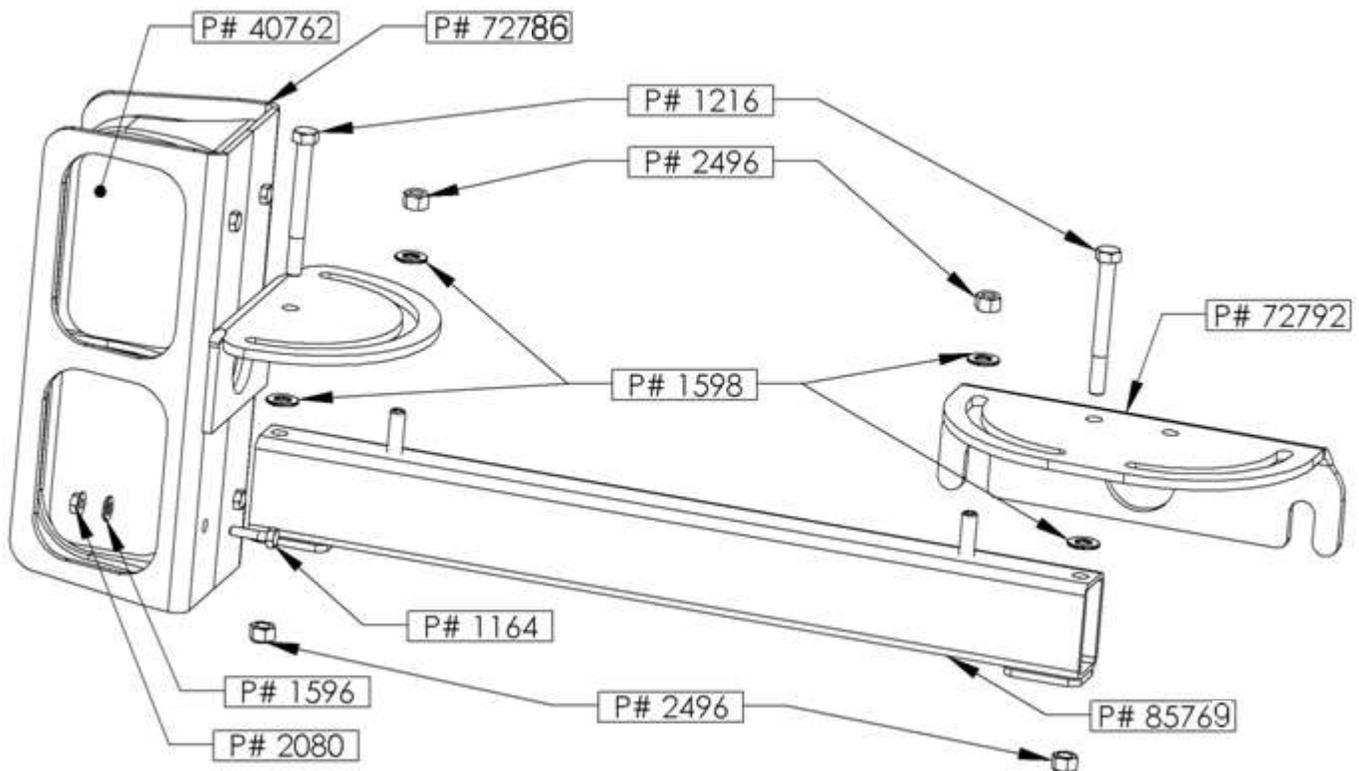


Figure 3

Assembly

Running Light Wiring Harness Continued

Required Hardware

N/A

Required Tools / Equipment

Wrenches

Connect wires from running lights to wire harness P# 72854. See Figure 4.

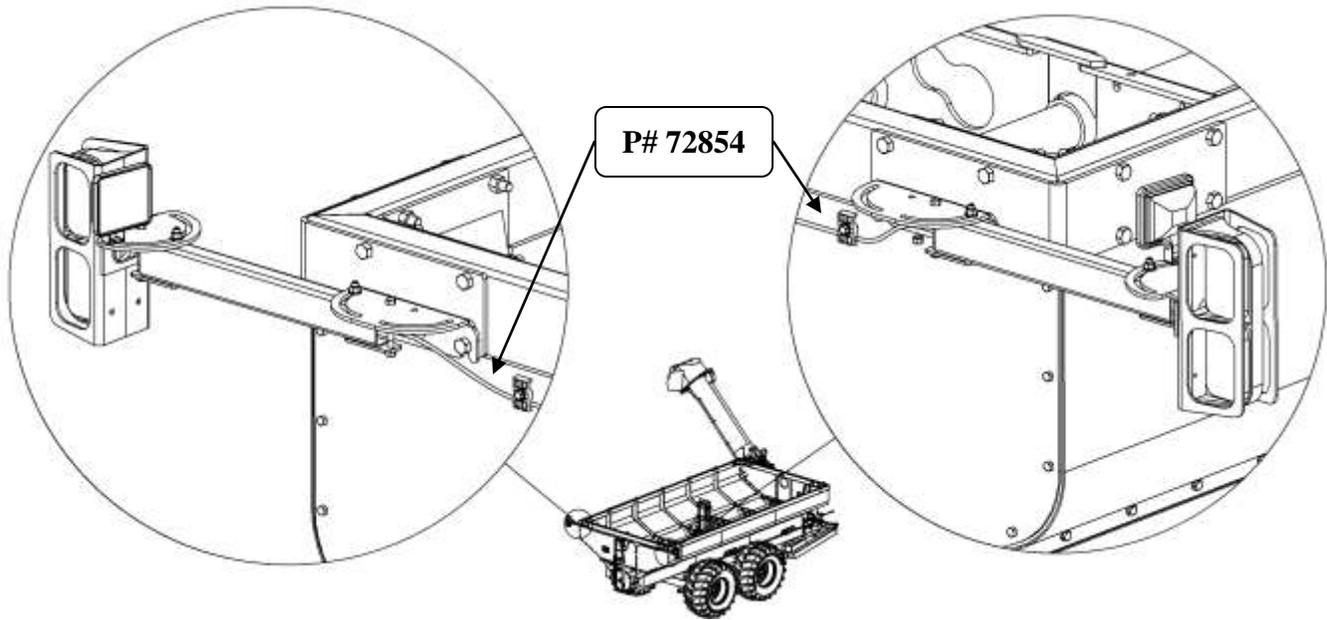


Figure 4

Assembly

Wiring Harness

Required Hardware

N/A

Required Tools / Equipment

Tie Wraps

Wire Cutters

Connect 7 pin wiring harness P# 72851 to Main wiring harness P#72852. See Figure 1. Connect harness P# 72853 to main wiring harness P# 72852. See Figure 2.



NOTE Wiring harness components are not drawn to scale. Representative views are provided for illustration purposes.

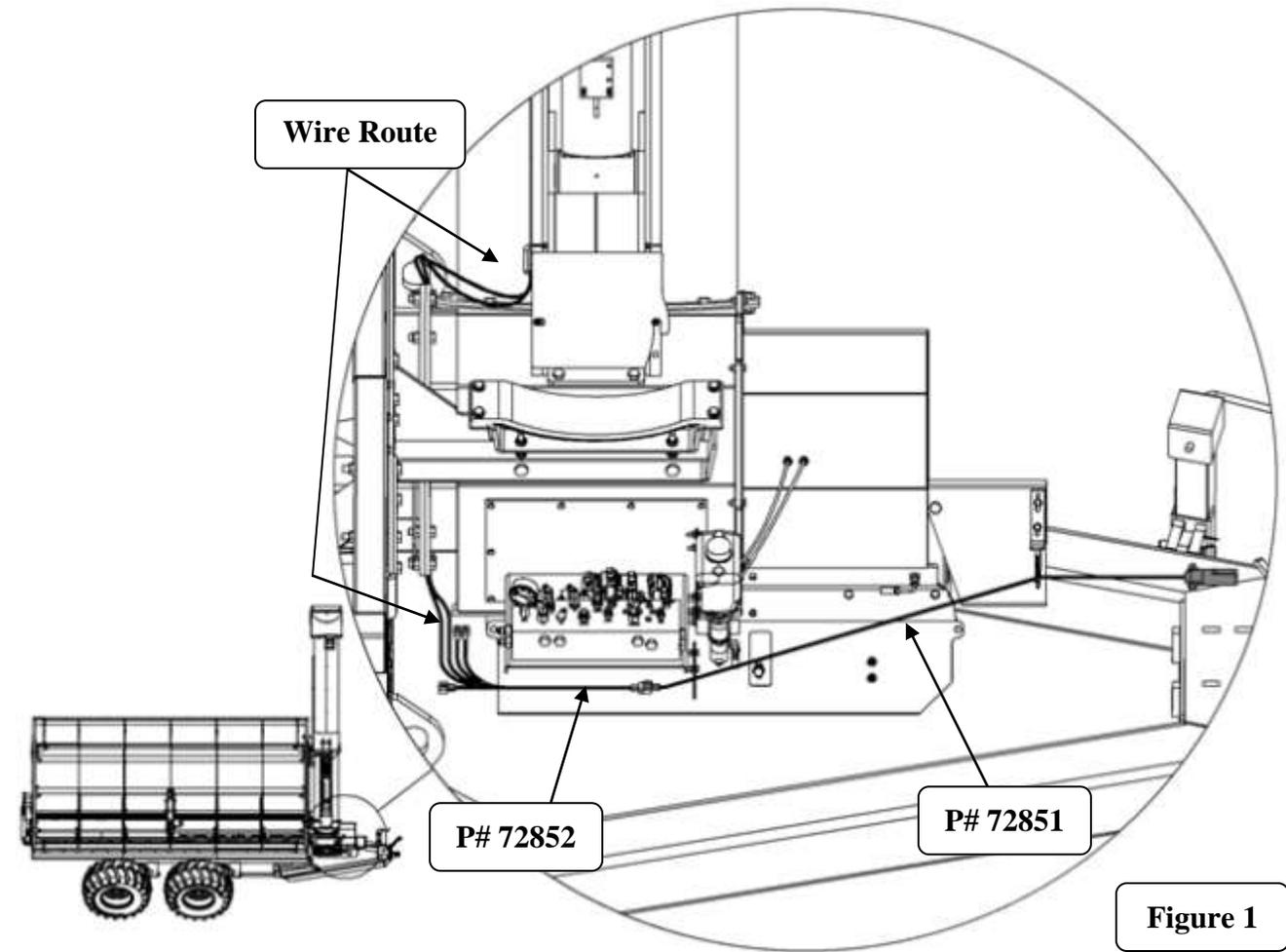


Figure 1

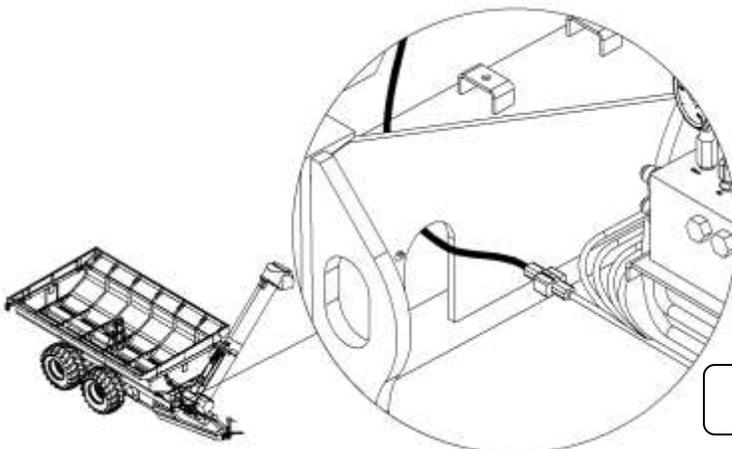


Figure 2

Assembly

Wiring Harness Continued

Required Hardware

N/A

Required Tools / Equipment

Tie Wraps

Wire Cutters

Route work light connections from wiring harness P#72852 under and around horizontal auger and up to work light locations. Connect work light installed on upper auger. Leave wire for light mounted on extensions until they are installed. See Figures 2 and 3.

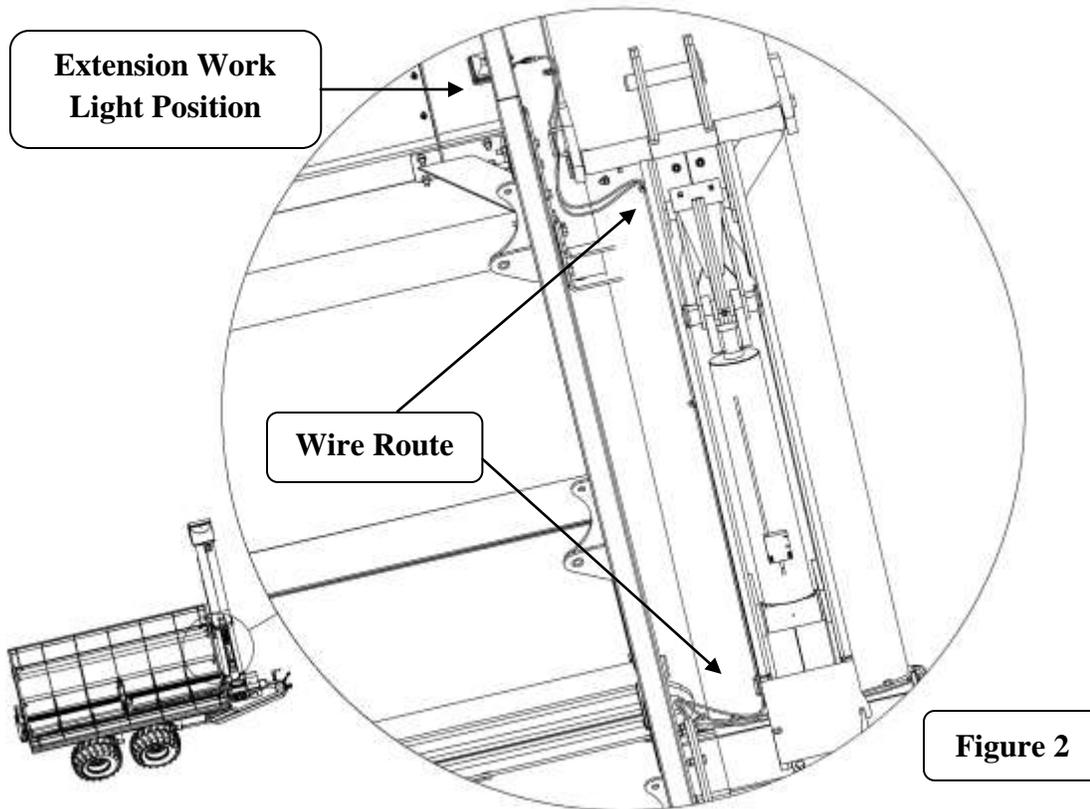


Figure 2

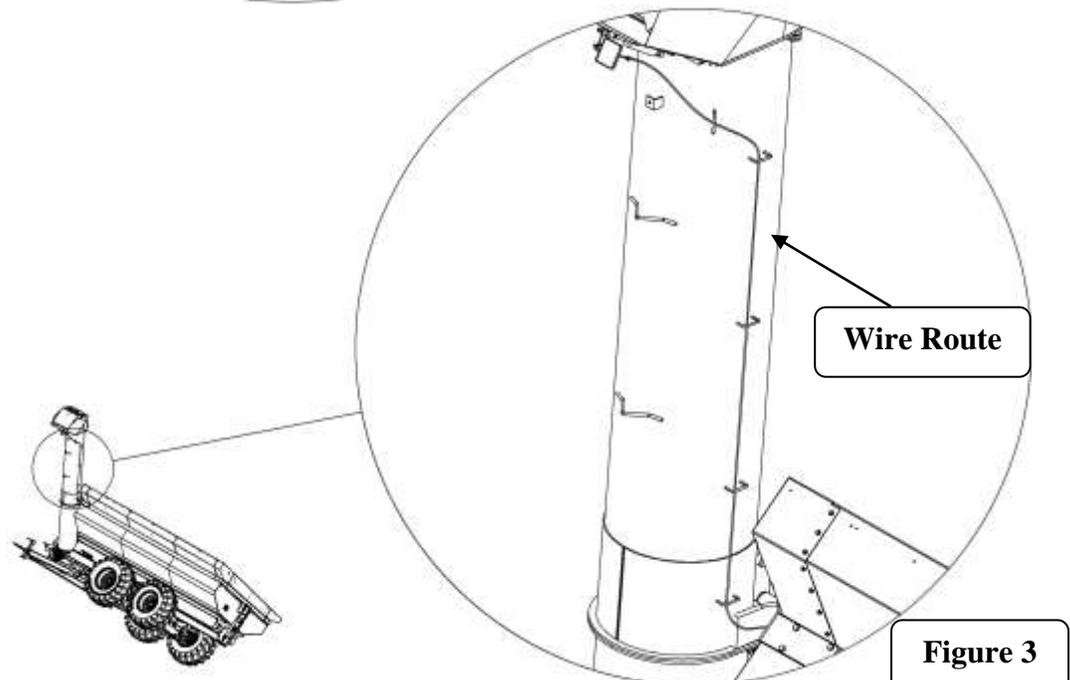


Figure 3

Assembly

Wiring Harness Continued

Required Hardware

N/A

Required Tools / Equipment

Tie Wraps

Wire Cutters

Route work light connections from wiring harness P#72852 under and around horizontal auger and up to work light locations. Connect work light installed on upper auger. Leave wire for light mounted on extensions until they are installed. See Figures 2 and 3. See Figure 6 for specific wire locations.

P# 845001

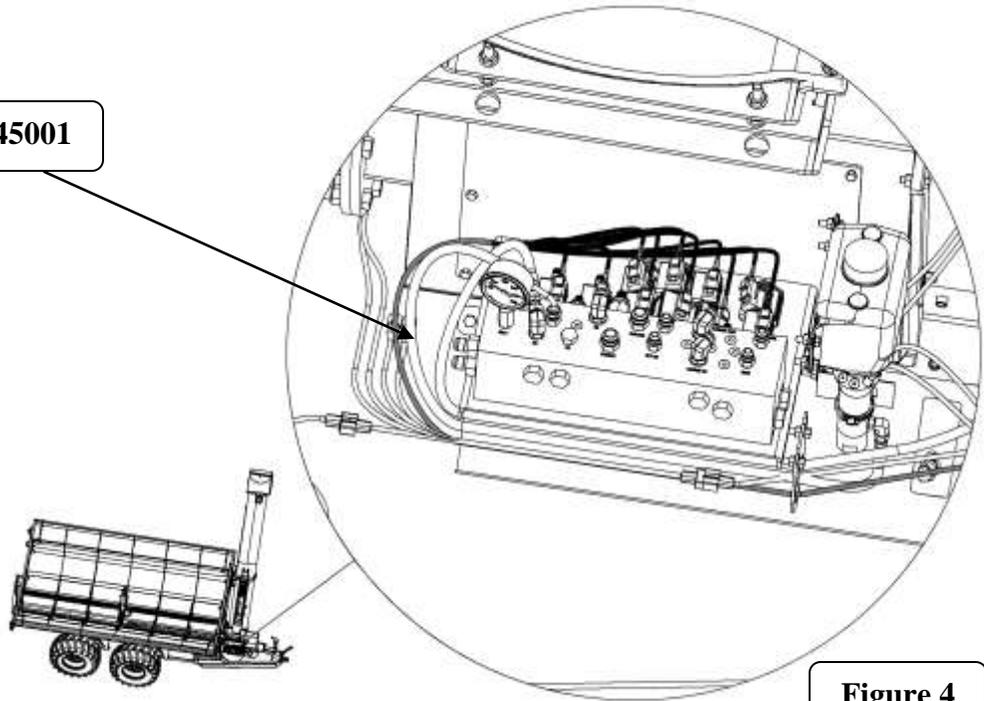


Figure 4

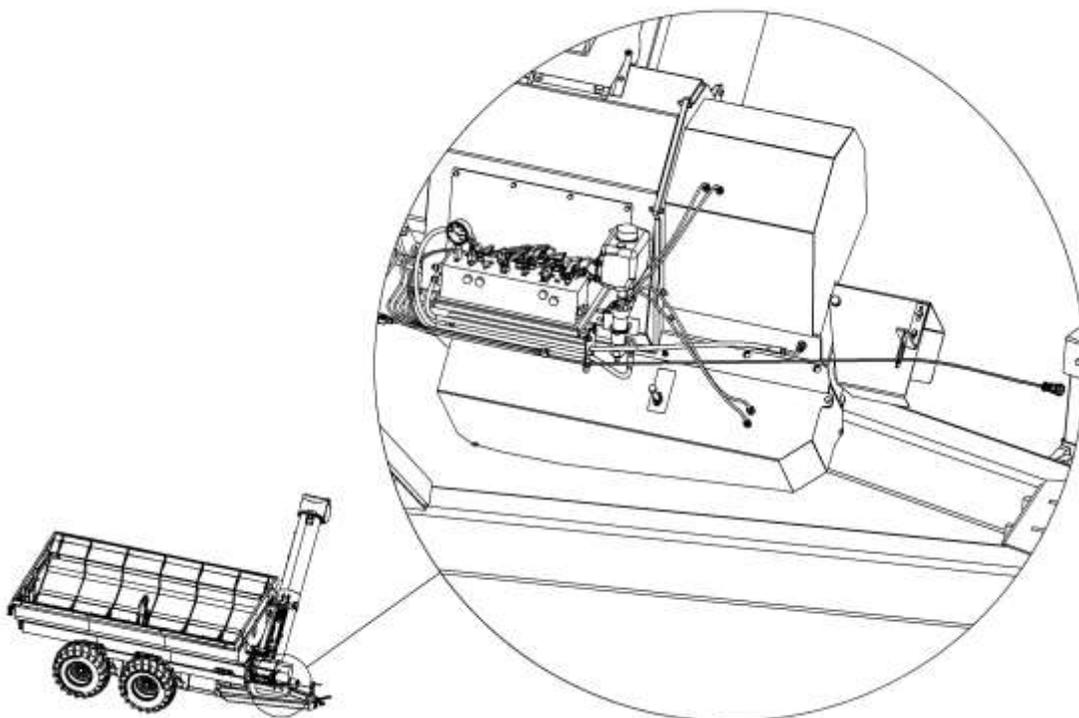


Figure 5

Assembly

Wiring Harness Continued

Required Hardware

N/A

Required Tools / Equipment

Tie Wraps

Wire Cutters

Match labels on individual wires to location in Figure 6.

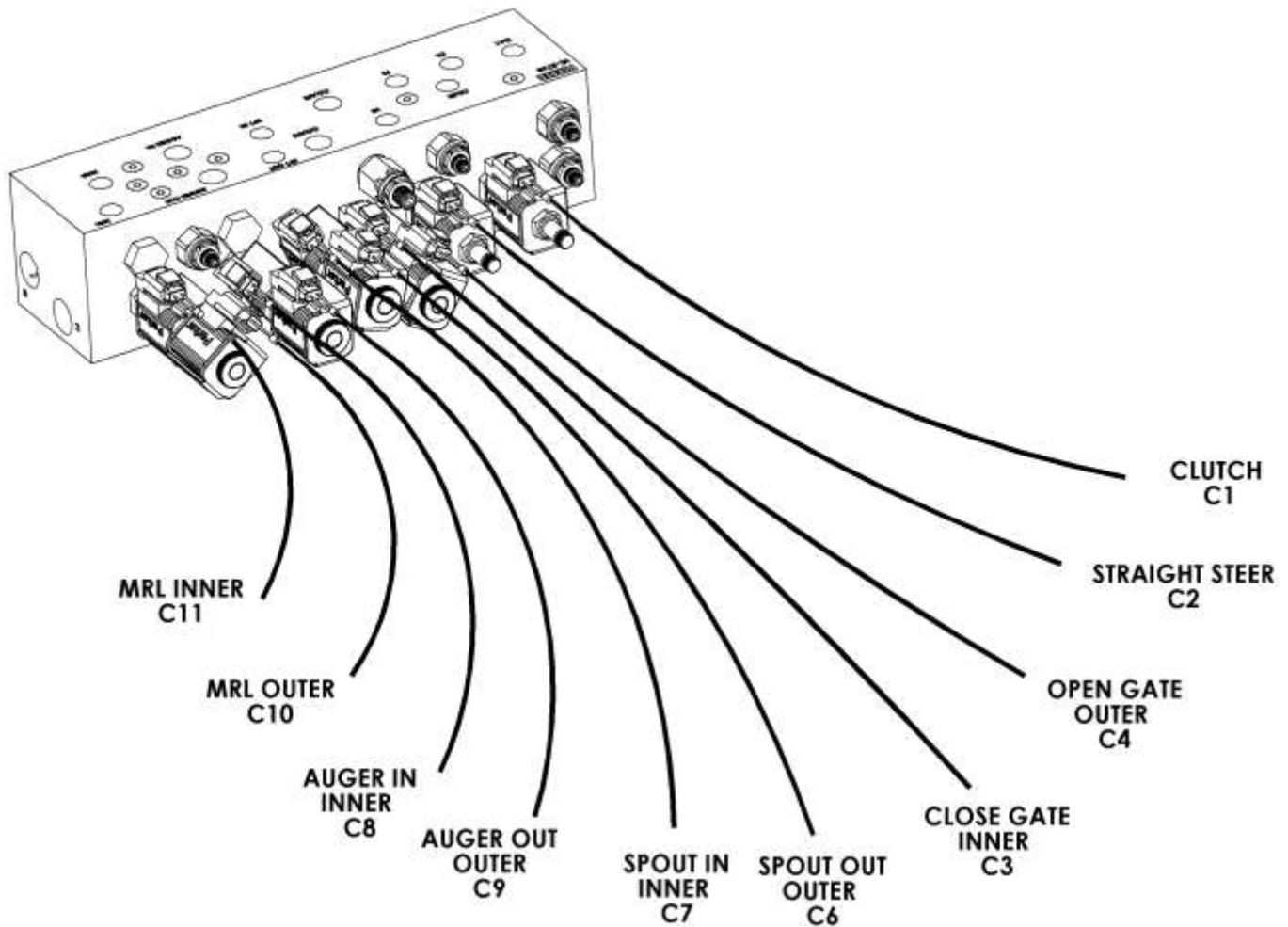


Figure 6

Assembly

Hydraulics

Required Hardware

N/A

Required Tools / Equipment

Tie Wraps
Wrenches

Wire Cutters

Connect grain door hydraulic lines P# 855168 to hydraulic manifold. See Figure 1. Refer to grain cart hydraulic schematic in Figure 2 for further detail.

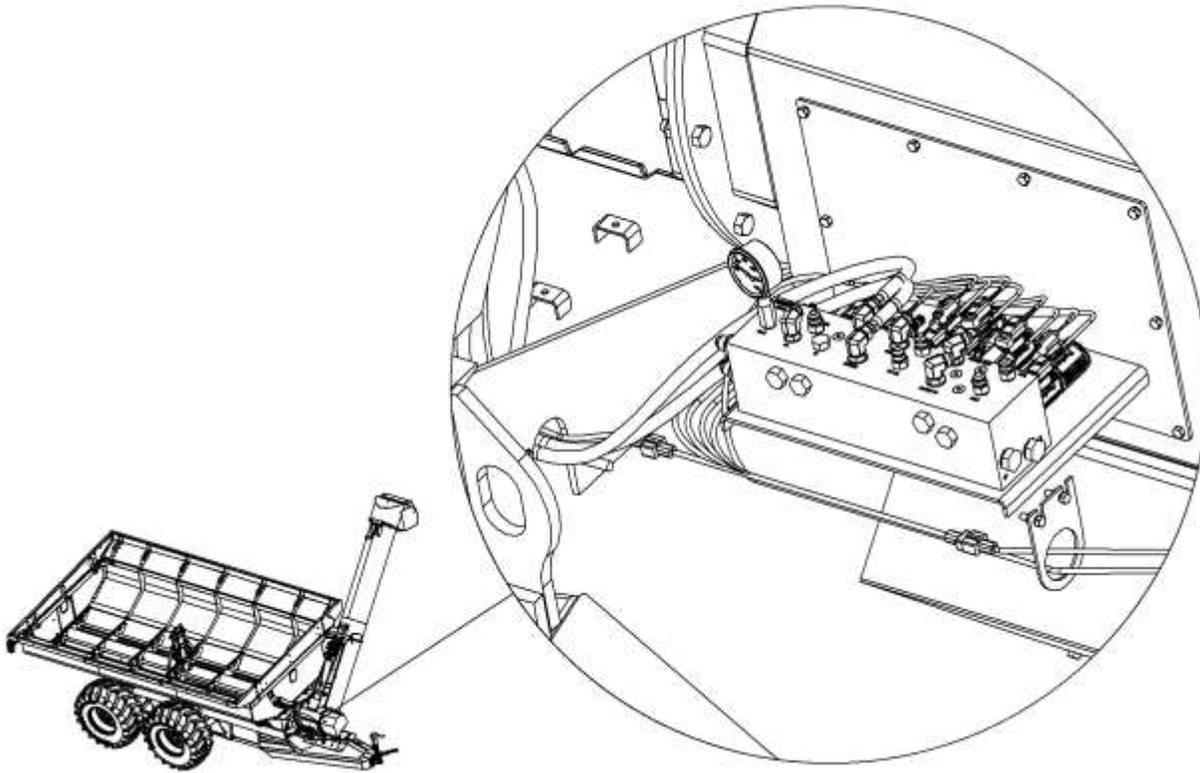


Figure 1

Assembly

Hydraulics Continued

844000 Grain Cart Hydraulics

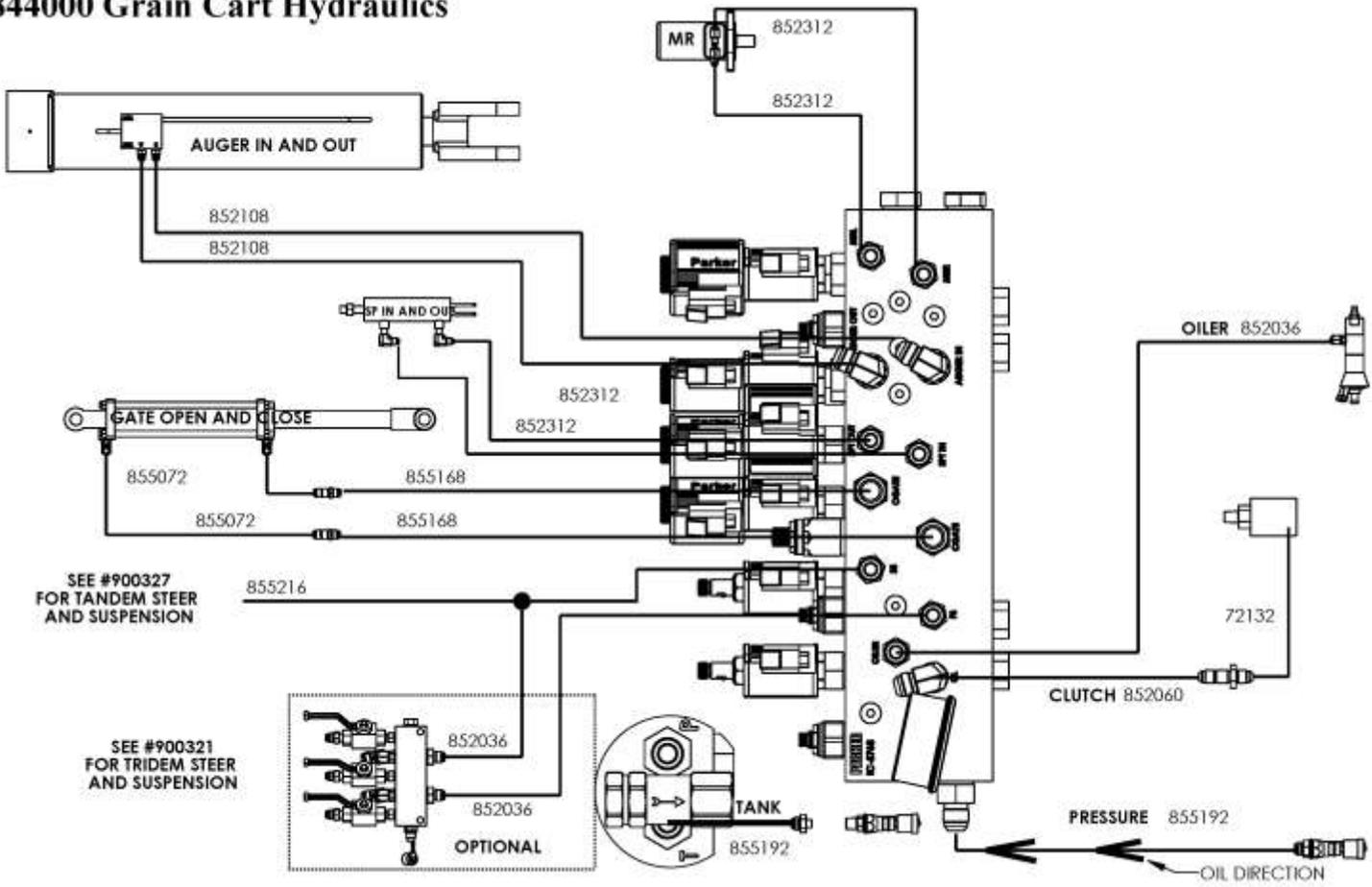


Figure 2

Assembly

Auger Grease Bank

Required Hardware

(2) 1/4" X 3/4" Bolt P# 1162

Required Tools / Equipment

Wrenches

Wire Cutter

Remove bolts P# 1162 and remove cover P# 41704. Install grease tab P# 72335 using bolts P# 1162 and locknuts P# 2564. See Figure 119. Replace cover P# 41704 and replace bolts P# 1162. Install decal P# 72354. See figure 120. All grease lines are connected to the grease tabs using a grease zerk P# 2291 and fitting P# 12333. See Figure 119. We show some individual hose installations from this common routing point to where they attach to the grease point. See Figure 121.

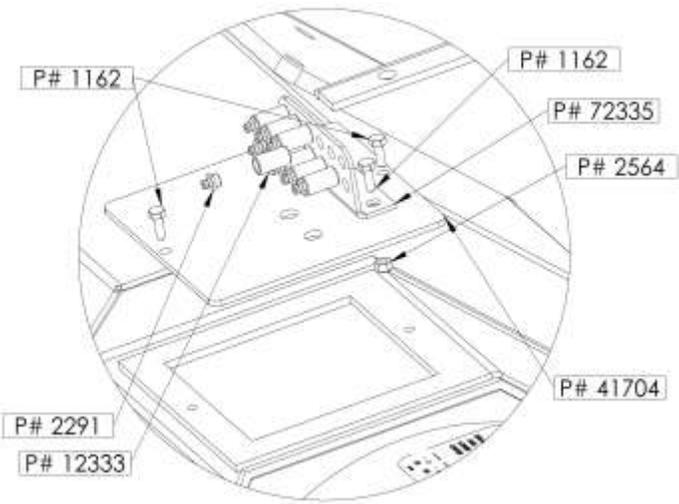


Figure 119

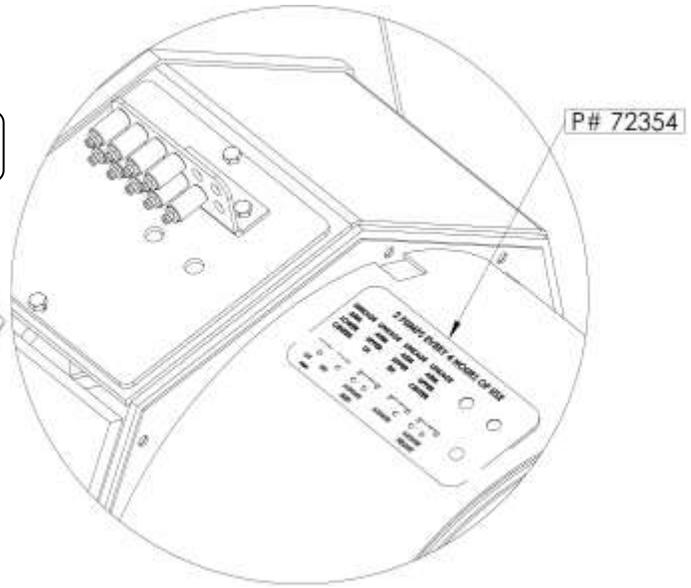


Figure 120

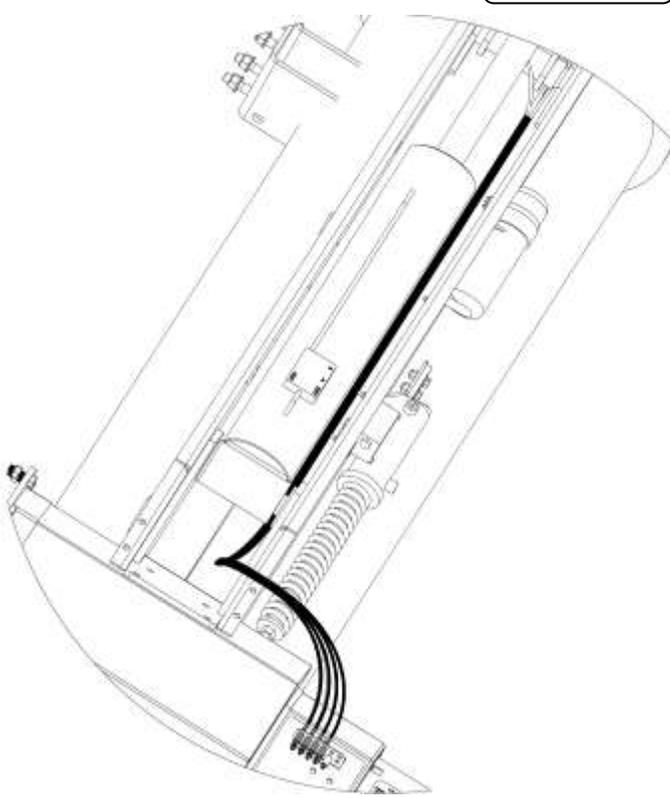


Figure 121

Assembly

1325 Bushel Extensions

Required Hardware

- (6) 3/4" X 2 1/4" Bolt P# 1312
- (12) 3/4" Flat Washer P# 1603
- (6) 3/4" Lock Nut P# 2593

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position Front End Panel P# 85738 and secure by installing bushings P# 85765 and securing with bolts P# 1312, washers P#1603 and lock nuts P# 2593. see Figure 1. Repeat with same hardware to Rear End Panel P# 85739.

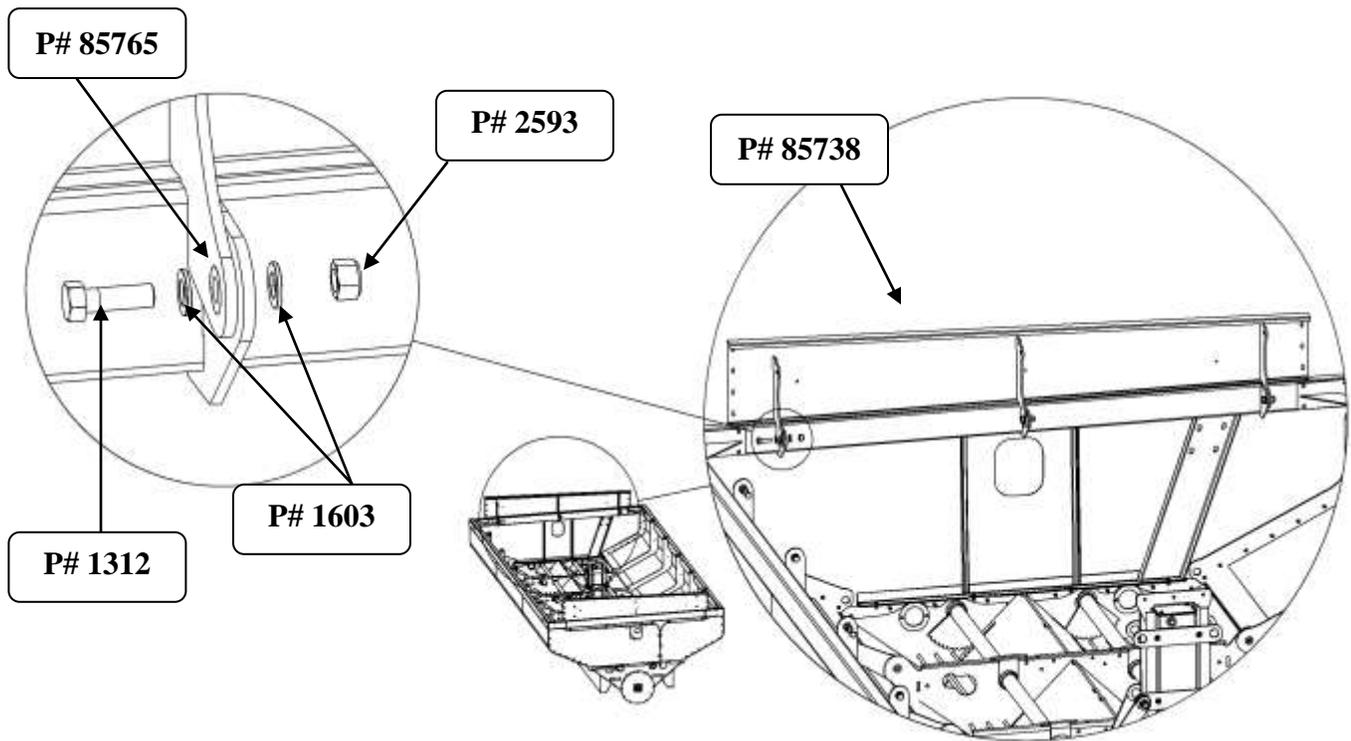


Figure 1

Assembly

1325 Bushel Extensions continued

Required Hardware

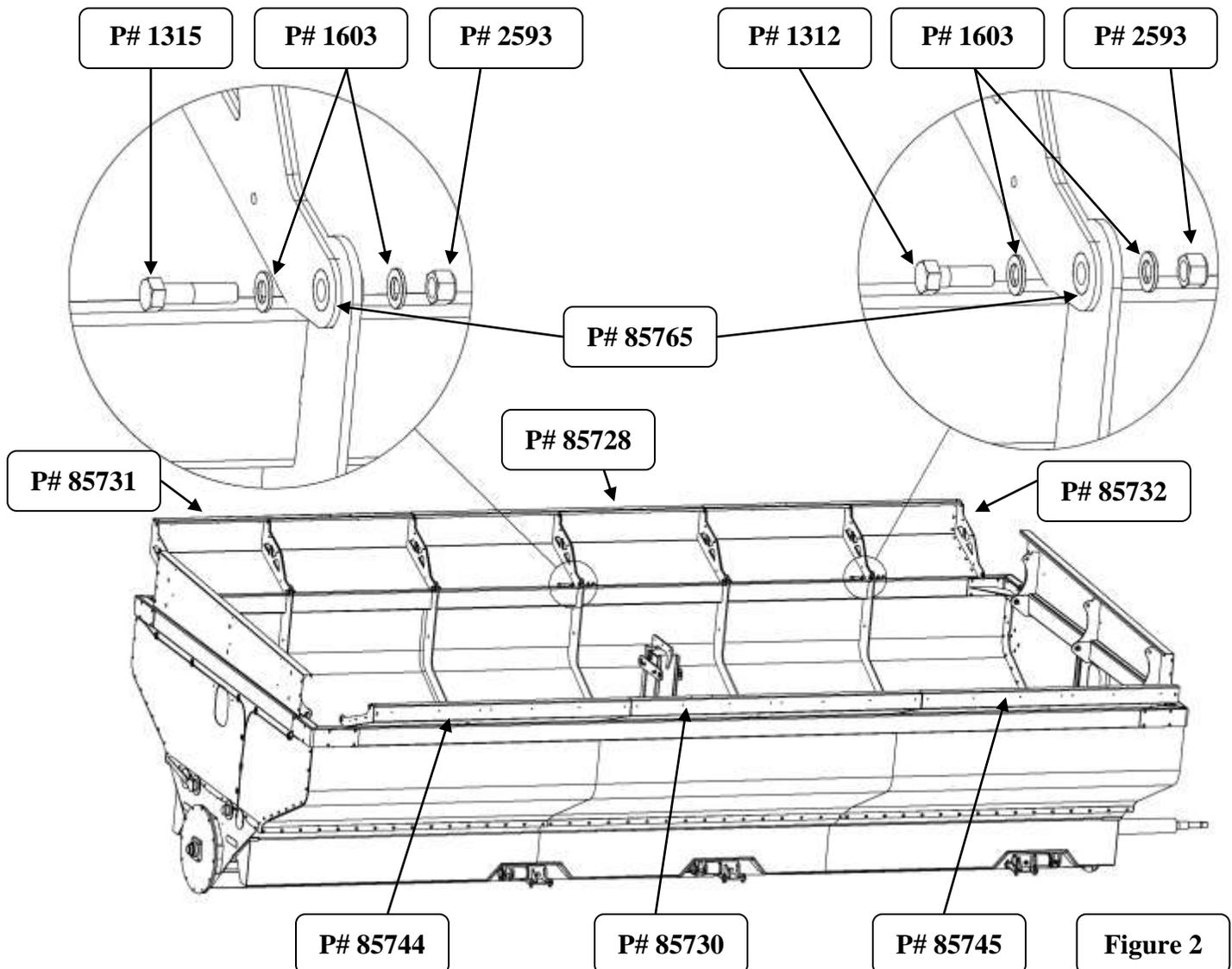
- (8) 3/4" X 2 1/4" Bolt P# 1312
- (2) 3/4" X 3" Bolt P# 1315
- (20) 3/4" Flat Washer P# 1603
- (10) 3/4" Lock Nut P# 2593

Required Tools / Equipment

Wrenches
Crane

Lifting Tackle

Position Lower Side Panels P# (Listed in illustration.) and secure by installing bushings P# 85765 and securing with bolts P# 1312, washers P#1603 and lock nuts P# 2593. see Figure 2.



Assembly

1325 Bushel Extensions continued

Required Hardware

- (8) 3/8" X 1" Bolt P# 1206
- (8) 3/8" Whiz Nut P# 2082
- (8) 3/8" Flat Washer P# 1598

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Connect Lower Side Panels with bolts P# 1209 washers P# 1598 and whiz nuts P# 2082. See Figures 3 and 4.

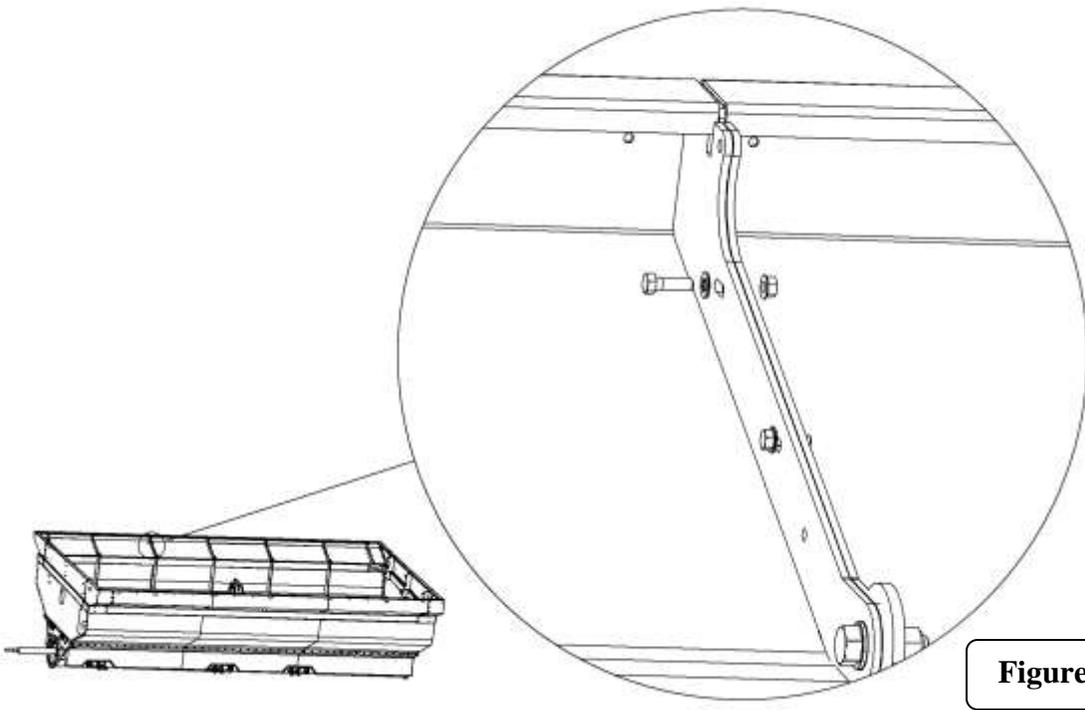


Figure 3

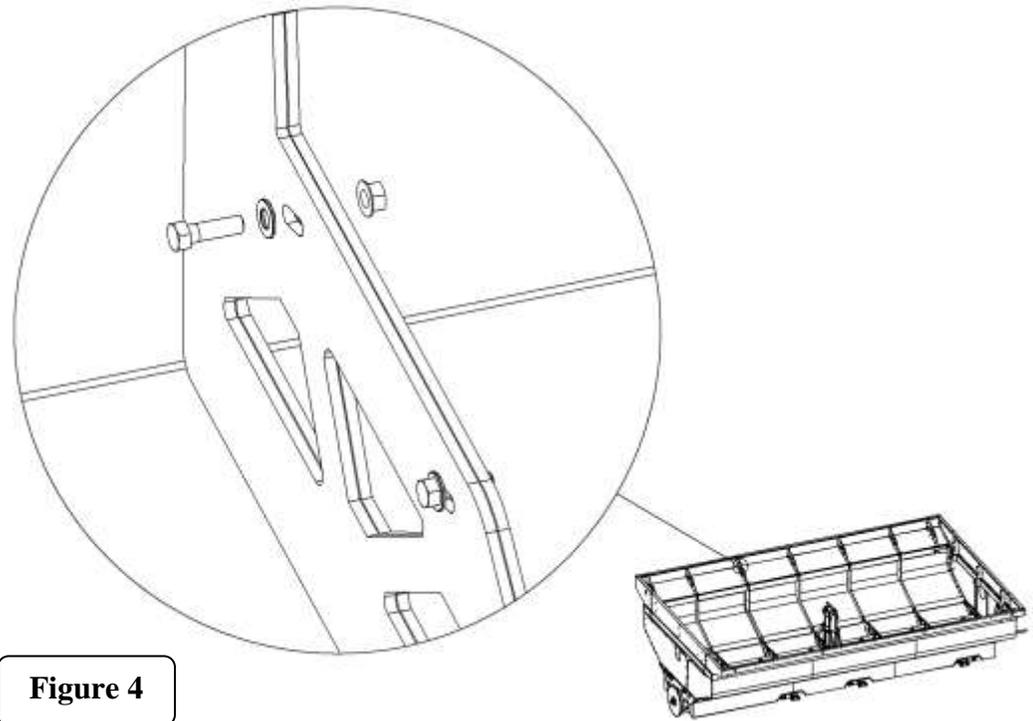


Figure 4

Assembly

1325 Bushel Extensions continued

Required Hardware

- (22) 3/8" X 1" Bolt P# 1206
- (22) 3/8" Whiz Nut P# 2082
- (22) 3/8" Flat Washer P# 1598

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position High Side front and rear corner weldments P#85740 and 85741 and secure with bolts P# 1206, washers P#1598 and whiz nuts P# 2082. See Figure 5. Position Low Side front and rear corner weldments P#85736 and 85737 and secure with bolts P# 1206, washers P#1598 and whiz nuts P# 2082. See Figure 6.

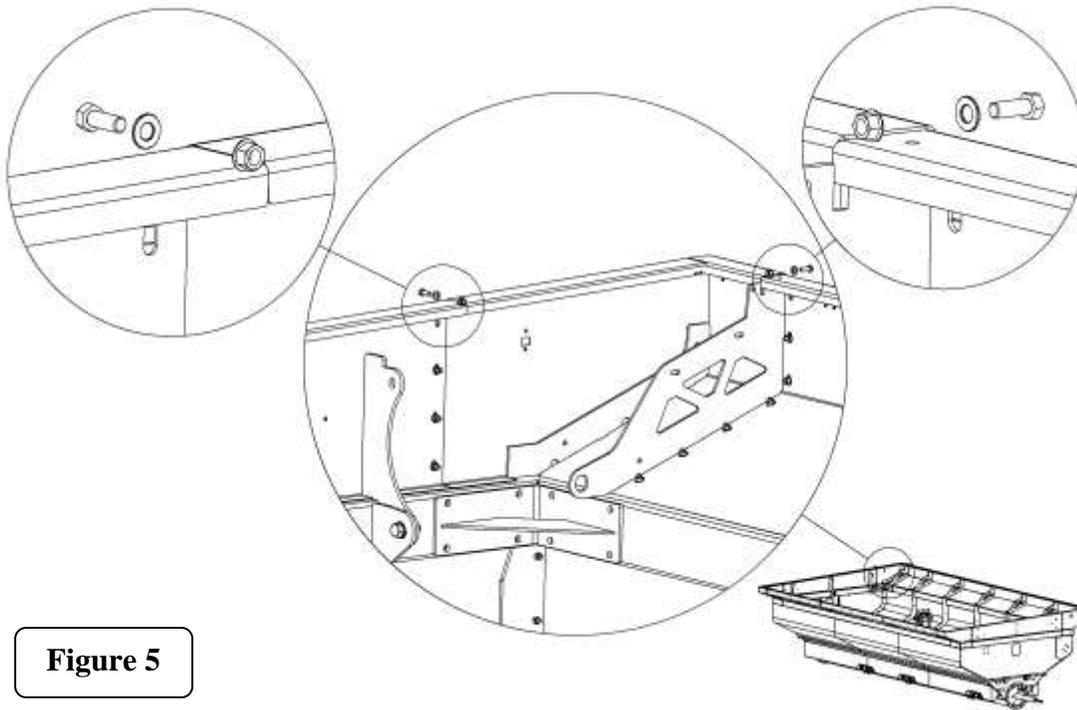


Figure 5

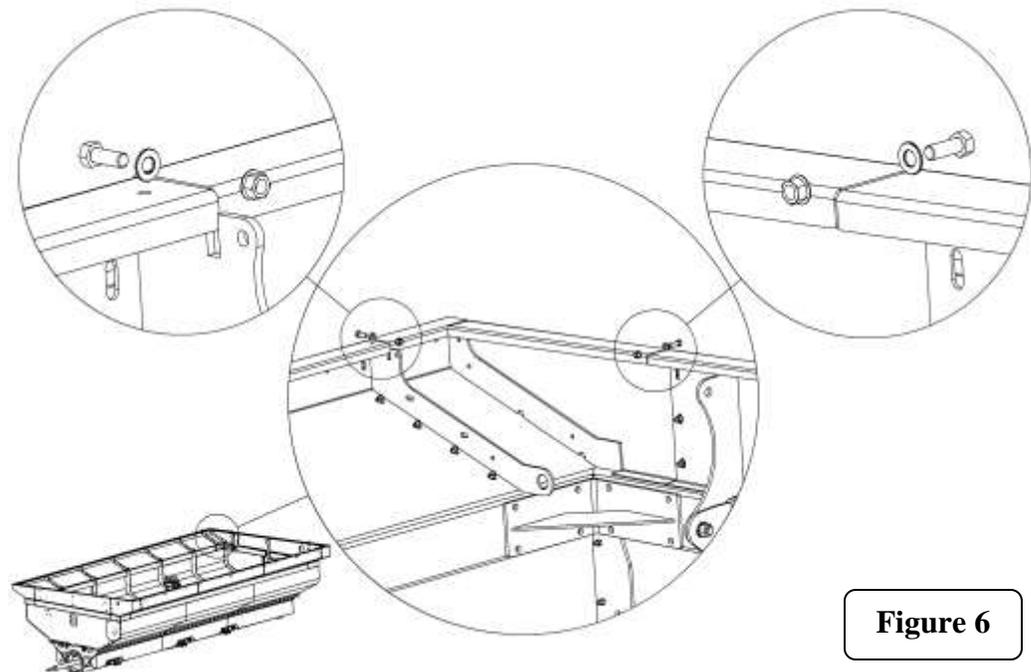


Figure 6

Assembly



1550 Bushel Extensions

Required Hardware

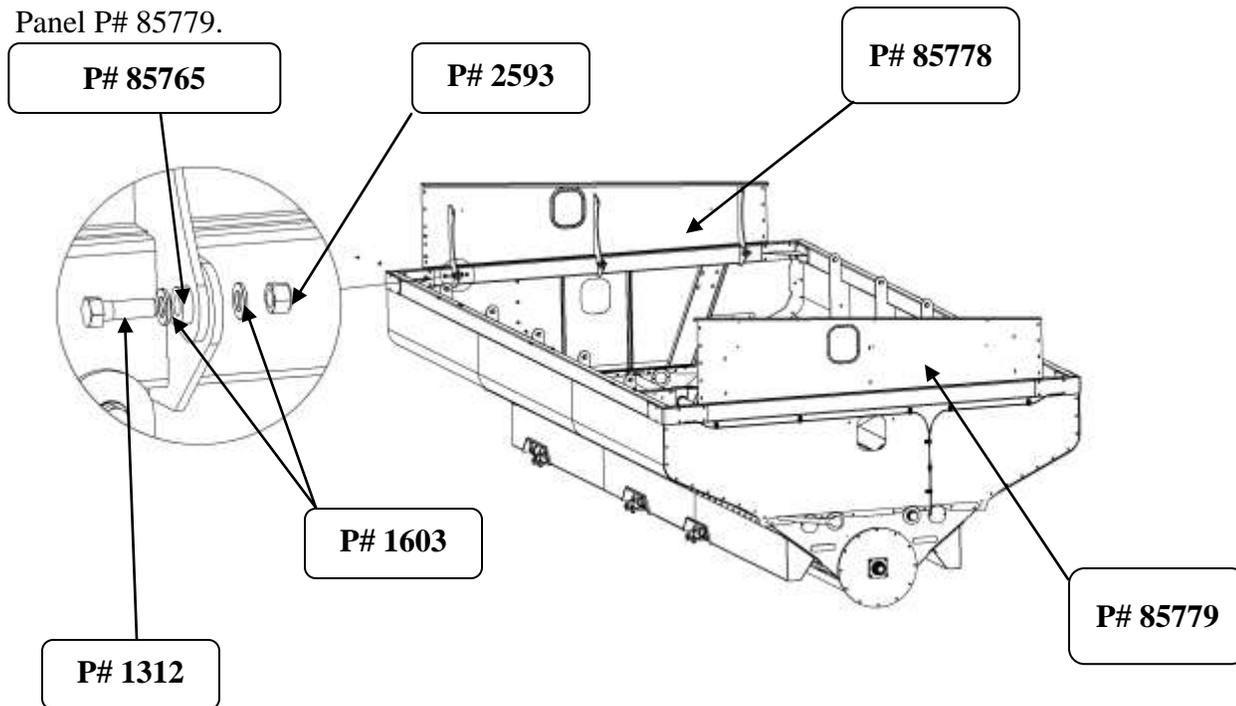
- (6) 3/4" X 2 1/4" Bolt P# 1312
- (12) 3/4" Flat Washer P# 1603
- (6) 3/4" Lock Nut P# 2593
- (6) Bushing P# 85765

Required Tools / Equipment

Wrenches
Crane

Lifting Tackle

Position Front End Panel P# 85778 and secure by installing bushings P# 85765 and securing with bolts P# 1312, washers P#1603 and lock nuts P# 2593. see Figure 1. Repeat with same hardware to Rear End Panel P# 85779.



Assembly



1550 Bushel Extensions continued

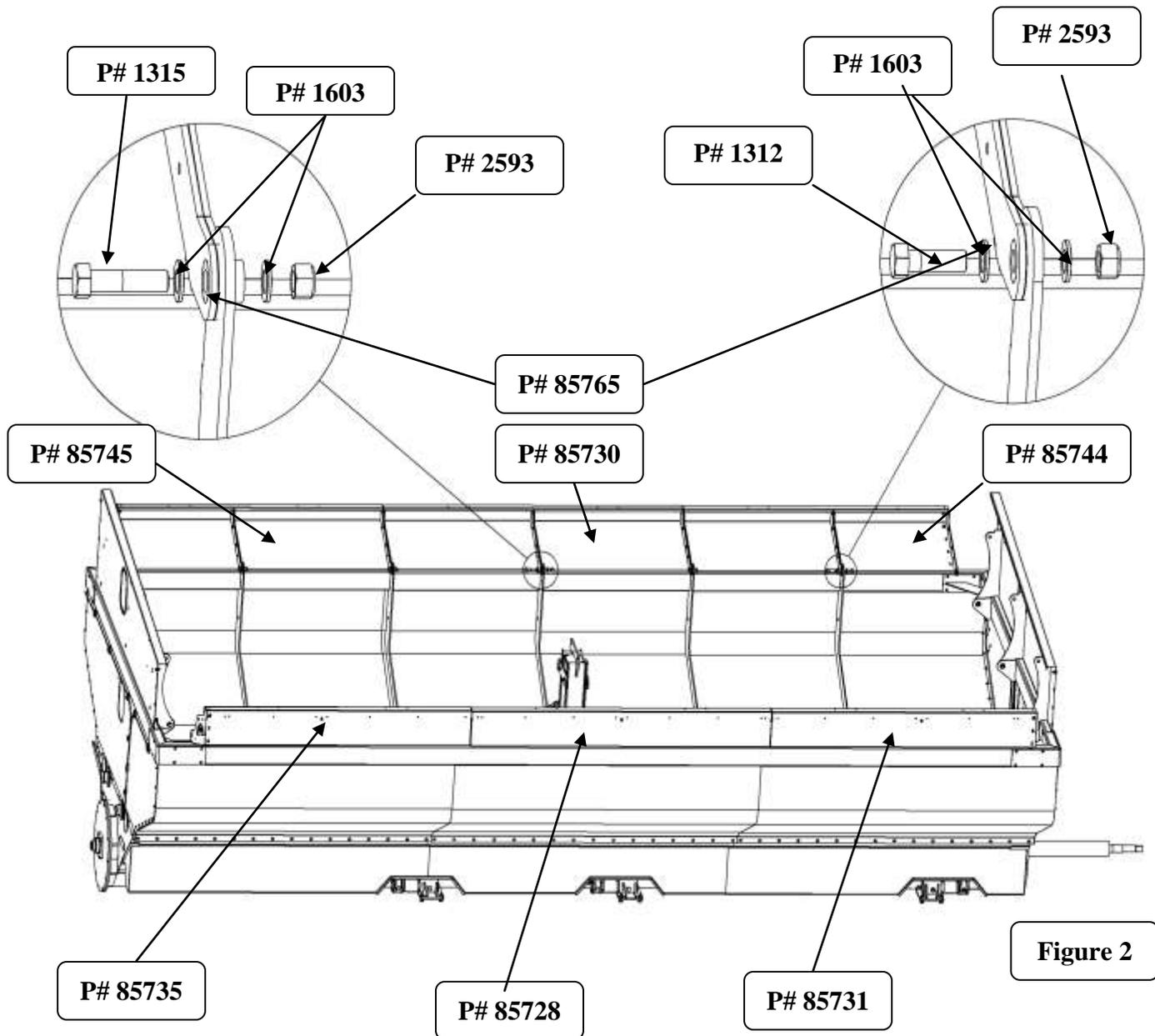
Required Hardware

- (8) 3/4" X 2 1/4" Bolt P# 1312
- (2) 3/4" X 3" Bolt P# 1315
- (20) 3/4" Flat Washer P# 1603
- (10) 3/4" Lock Nut P# 2593

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position Lower Side Panels P# (Listed in illustration.) and secure by installing bushings P# 85765 and securing with bolts P# 1312, washers P#1603 and lock nuts P# 2593. see Figure 2.



Assembly



1550 Bushel Extensions continued

Required Hardware

- (30) 3/8" X 1 3/4" Bolt P# 1209
- (30) 3/8" Whiz Nut P# 2082
- (30) 3/8" Flat Washer P# 1598
- (2) Spacers P# 85793

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Connect Extension panels LH P# 85771, P# 85785 and P# 85772 with bolts P# 1209 washers P# 1598 and whiz nuts P# 2082. See Figures 3 and 4. Utilizing spacer P#85793 See Figure 5

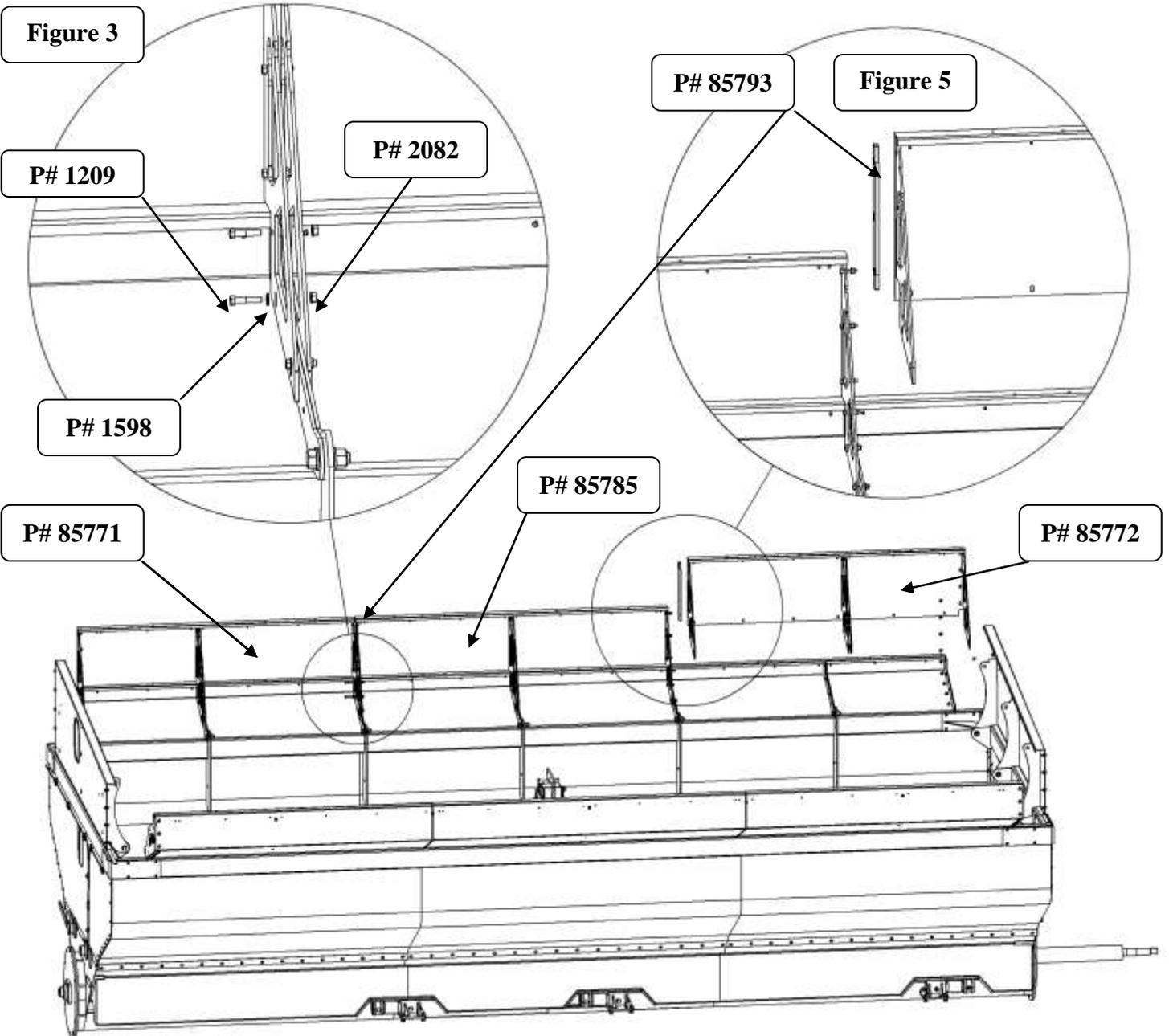


Figure 4

Assembly



1550 Bushel Extensions continued

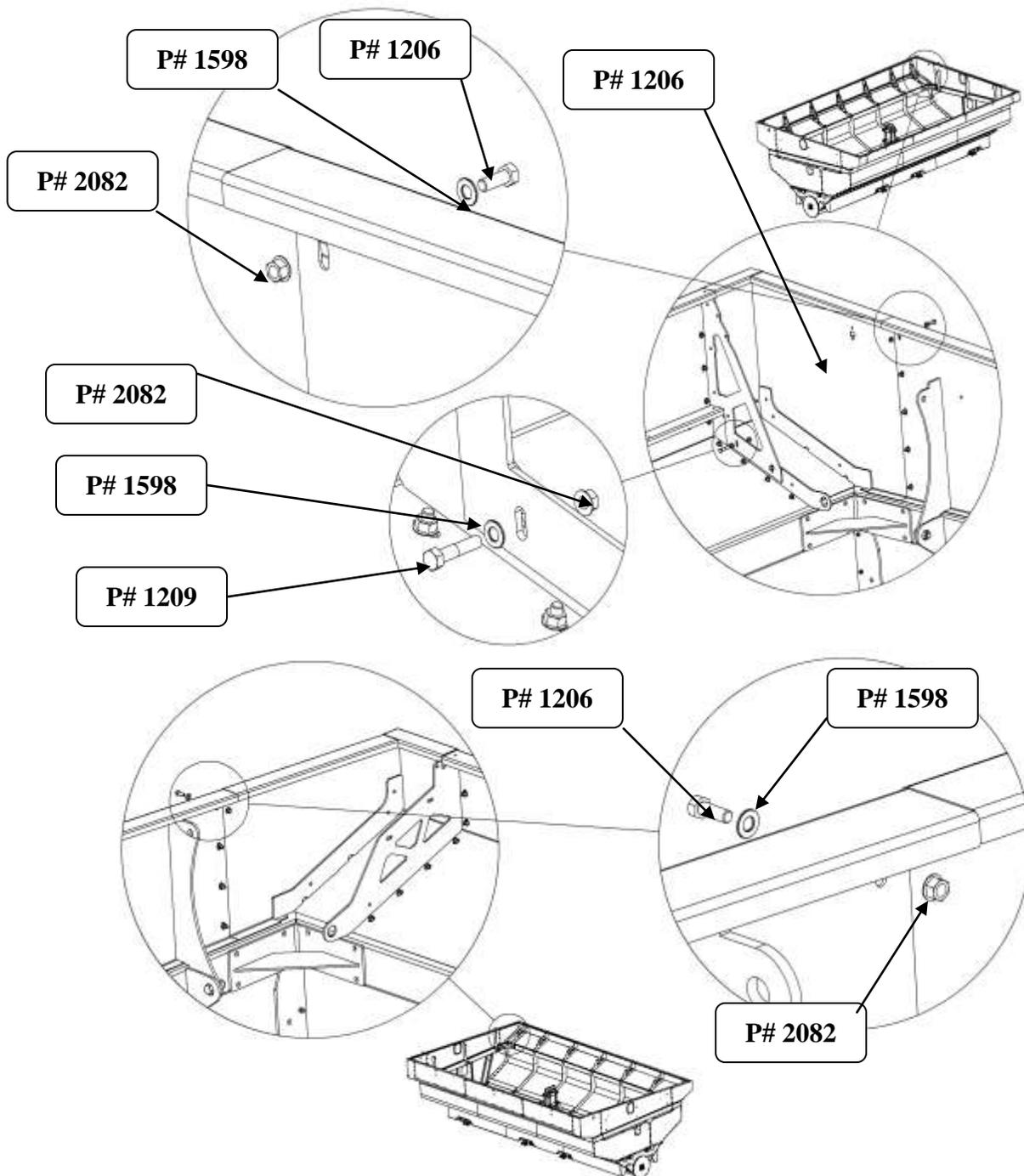
Required Hardware

- (40) 3/8" X 1" Bolt P# 1206
- (40) 3/8" Whiz Nut P# 2082
- (40) 3/8" Flat Washer P# 1598

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position High Side front and rear corner weldments P#85790 and 85791 and secure with bolts P# 1206, washers P#1598 and whiz nuts P# 2082. See Figure 5. Position Low Side front and rear corner weldments P#85776 and 85777 and secure with bolts P# 1206, washers P#1598 and whiz nuts P# 2082. See Figure 6.



Assembly



2000 Bushel Extensions

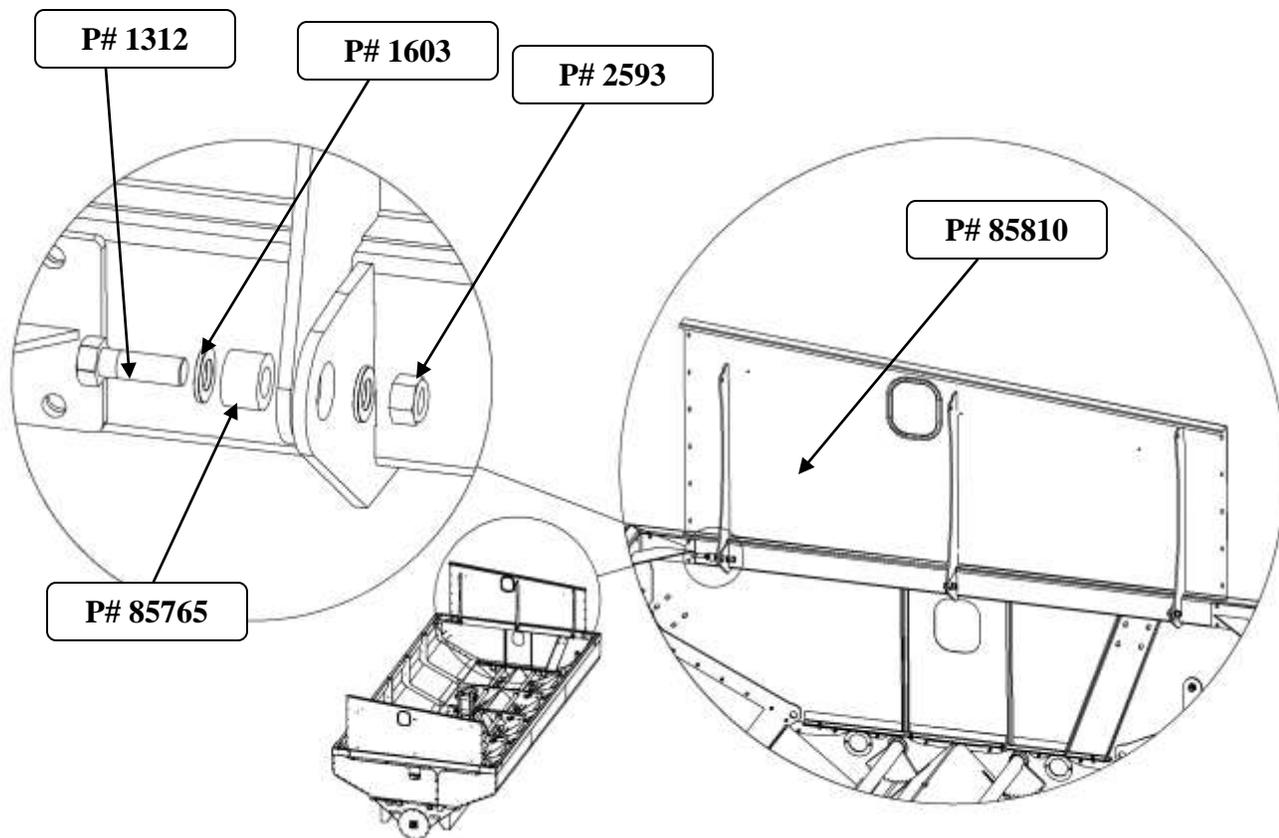
Required Hardware

- (6) 3/4" X 2 1/4" Bolt P# 1312
- (12) 3/4" Flat Washer P# 1603
- (6) 3/4" Lock Nut P# 2593
- (6) Bushings P# 85765

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position Front End Panel P# 85810 and secure by installing bushings P# 85765 and securing with bolts P# 1312, washers P#1603 and lock nuts P# 2593. see Figure 1. Repeat with same hardware to Rear End Panel P# 85809.



Assembly



2000 Bushel Extensions continued

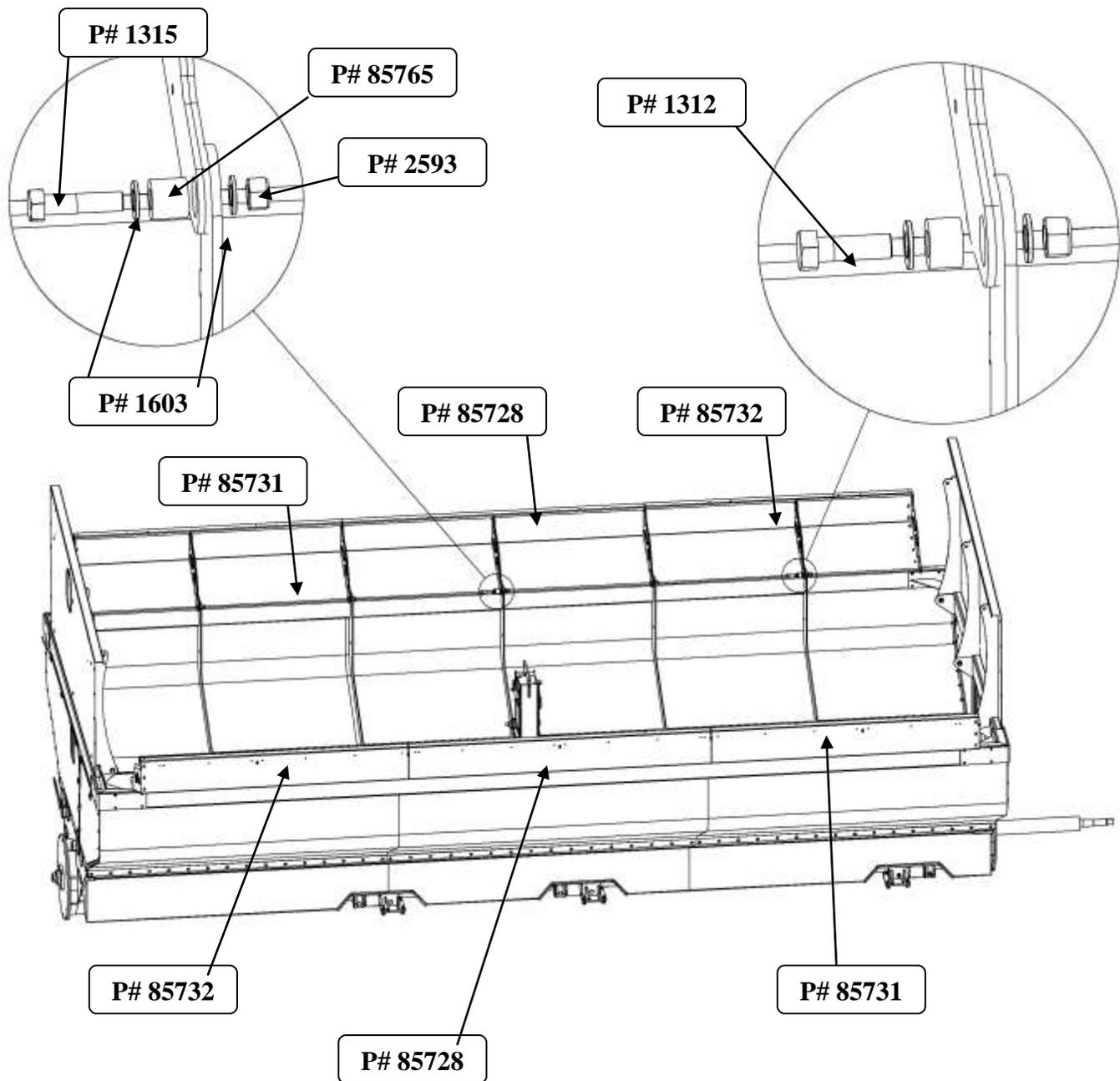
Required Hardware

- (8) 3/4" X 2 1/4" Bolt P# 1312
- (2) 3/4" X 3" Bolt P# 1315
- (20) 3/4" Flat Washer P# 1603
- (10) 3/4" Lock Nut P# 2593
- (10) Bushings P# 85765

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position Lower Side Panels P# (Listed in illustration.) and secure by installing bushings P# 85765 and securing with bolts P# 1312, washers P#1603 and lock nuts P# 2593. see Figure 2.



Assembly



2000 Bushel Extensions continued

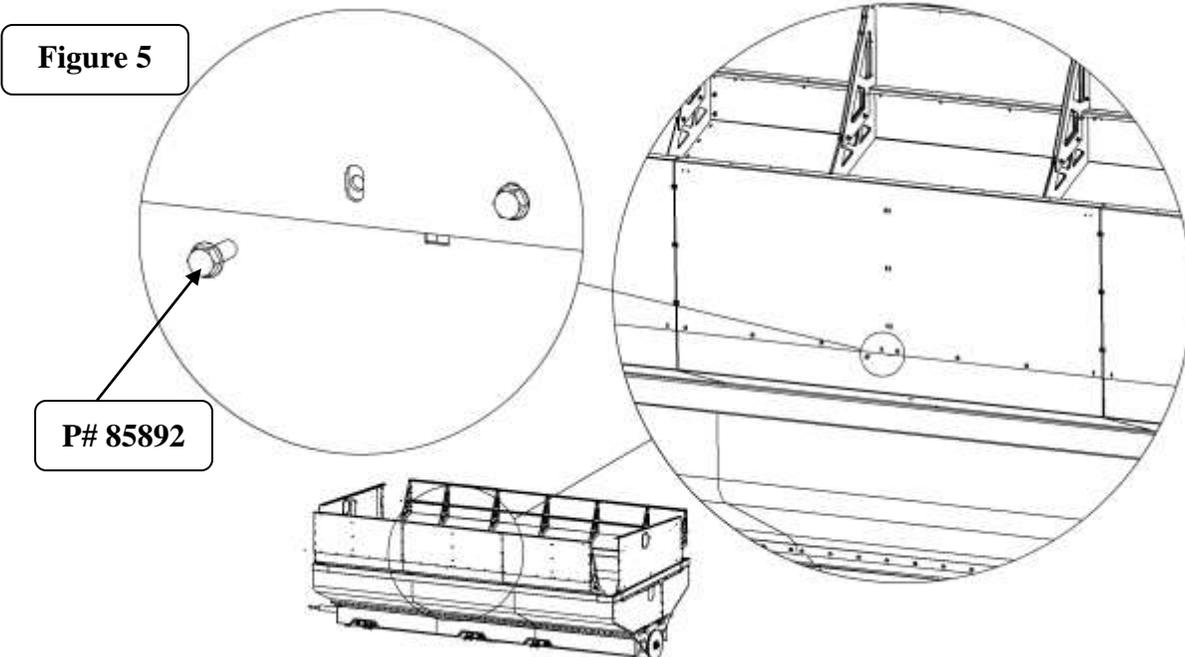
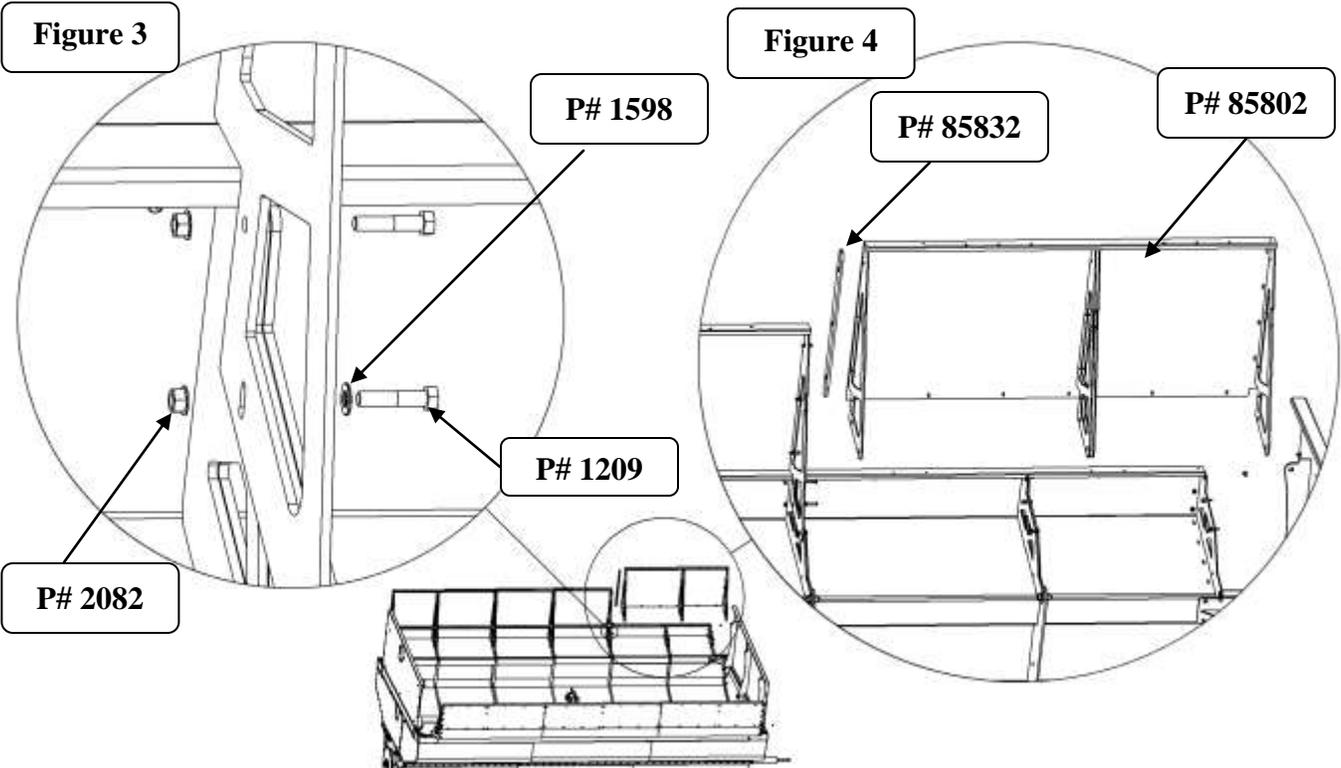
Required Hardware

- (8) 3/8" X 1" Bolt P# 1206
- (8) 3/8" Whiz Nut P# 2082
- (8) 3/8" Flat Washer P# 1598

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Connect Lower Side Panels with bolts P# 1209 washers P# 1598 and whiz nuts P# 2082. See Figures 3 and 4.



Assembly



2000 Bushel Extensions continued

Required Hardware

- (22) 3/8" X 1" Bolt P# 1206
- (22) 3/8" Whiz Nut P# 2082
- (22) 3/8" Flat Washer P# 1598

Required Tools / Equipment

- Wrenches
- Crane
- Lifting Tackle

Position High Side front and rear corner weldments P#85821 and 85816 and secure with bolts P# 1206, washers P#1598 and whiz nuts P# 2082. See Figure 5. Position Low Side front and rear corner weldments P#85823 and 85815 and secure with bolts P# 1206, washers P#1598 and whiz nuts P# 2082. See Figure 6.

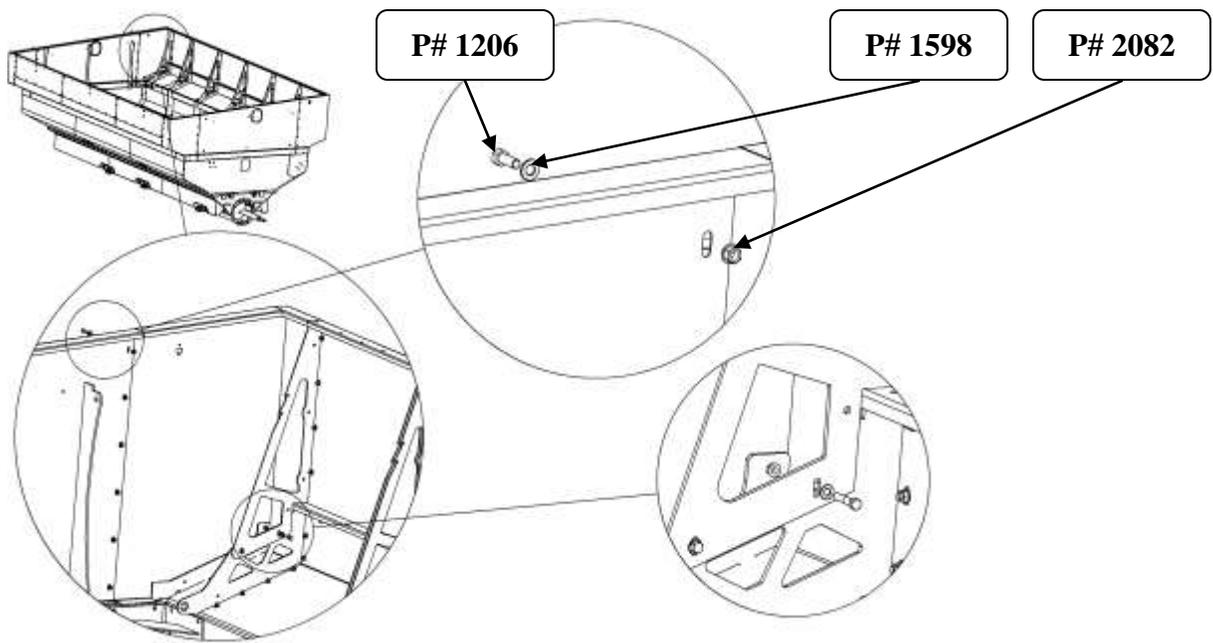
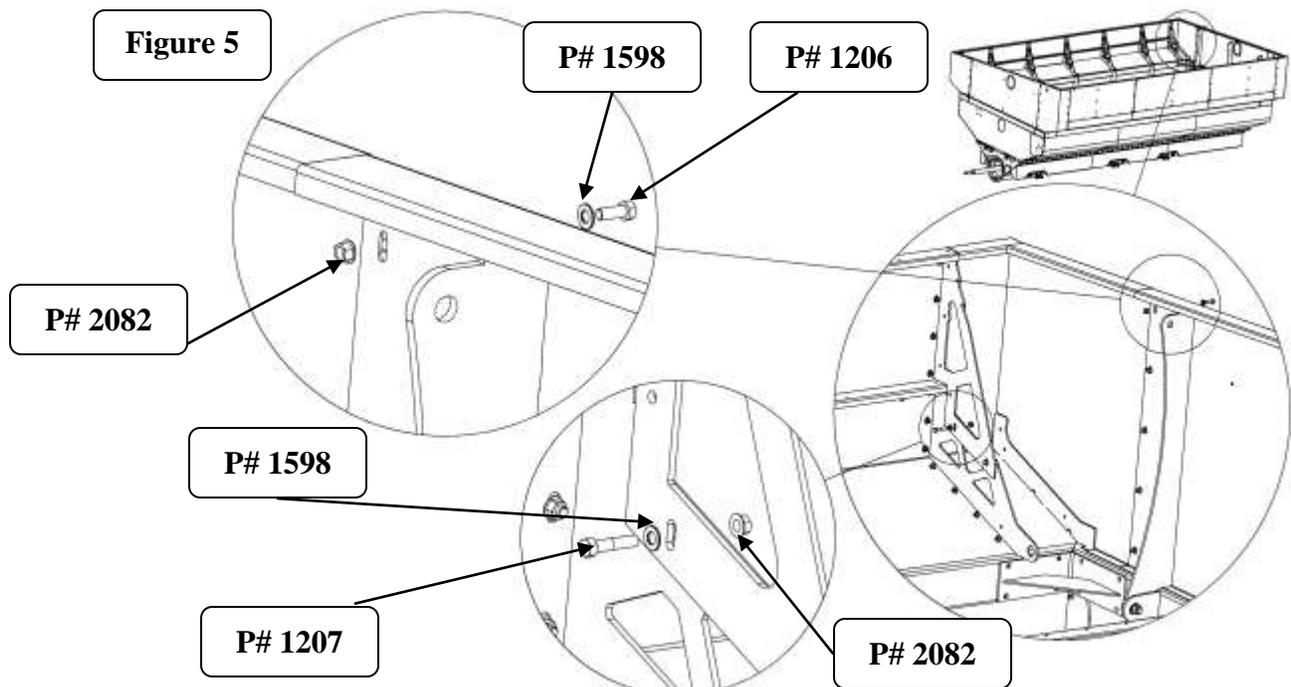


Figure 5



Lubrication

Pre-Startup

The following procedure refers only to initial setup of the Field Floater IV Grain Cart. Refer to Lubrication and Maintenance section of the Field Floater IV Grain Cart manual for normal maintenance operations.

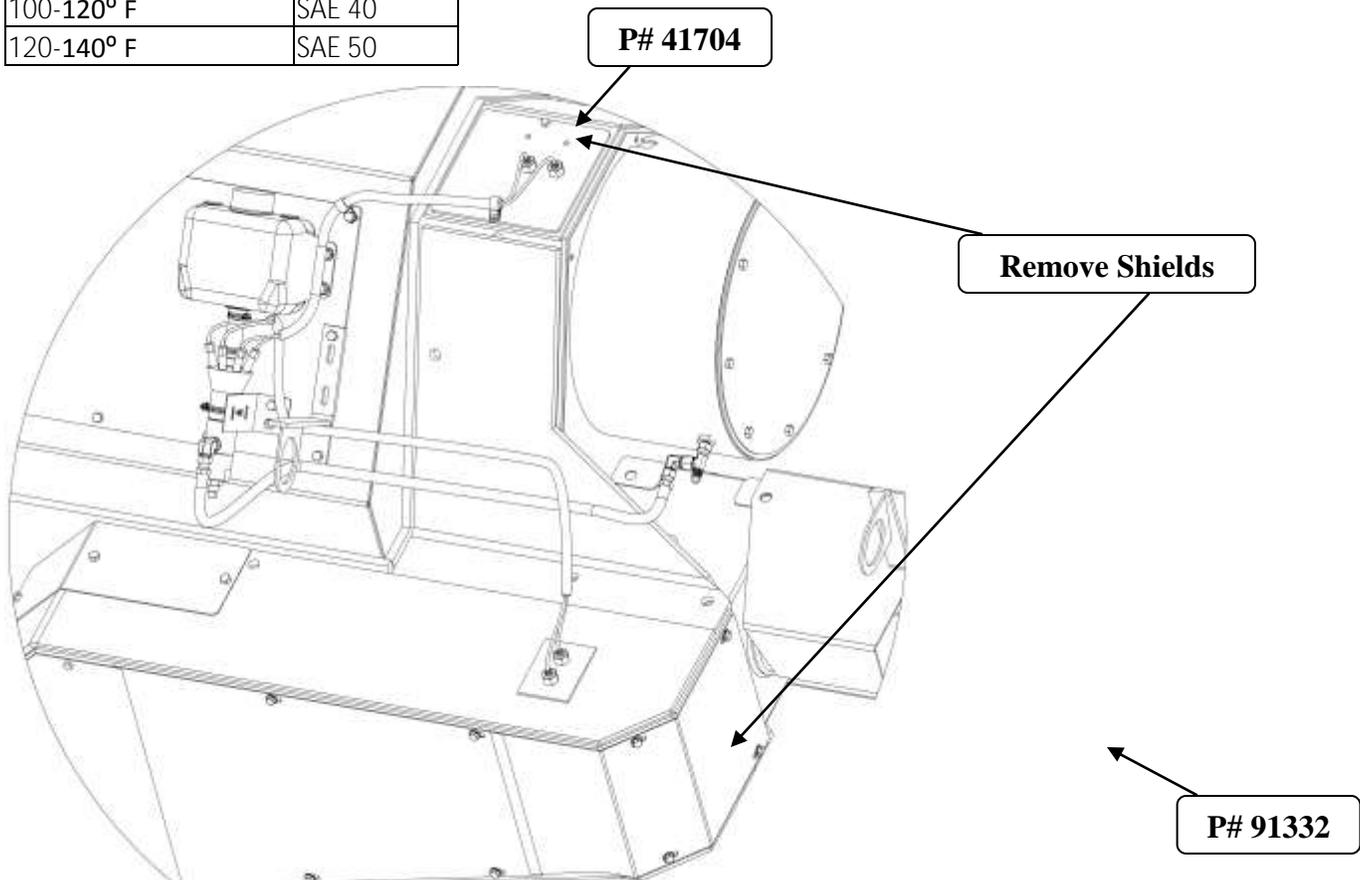
	CAUTION	The following components must be lubricated to avoid damage to the grain cart.
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Automatic Chain Oiler

Fill oiler reservoir with chain oil. See Oiler Viscosity Chart below. Remove shields P# 91332 and P# 41704. If grain cart is equipped with the joystick controller, press trigger for auger clutch and check for oil flow at the brushes. If grain cart is not equipped with the joystick controller, engage tractor control for auger clutch and check for oil flow at the brushes. Wait two to three seconds and repeat until oil flow is present.

Oiler Viscosity Chart

Temperature Range	Oil Viscosity
20-40° F	SAE 20
40-100° F	SAE 30
100-120° F	SAE 40
120-140° F	SAE 50



Lubrication

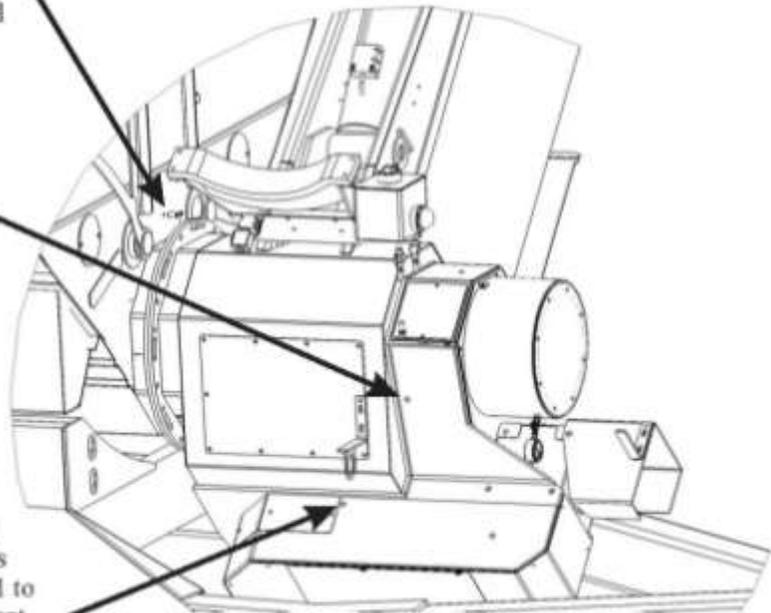
Pre-Startup Continued

The bearing located at the rear end of the horizontal auger should get 1 to 2 careful pumps of grease every 2 days of constant use.



The middle bearing for the horizontal auger has a grease line and fitting that permits greasing externally. This location should get a liberal greasing after every 4 hours of constant use in normal conditions. In dusty or dry conditions, more frequent greasing is recommended.

The bearing at the front end of the horizontal auger has a grease line and fitting that permits greasing externally. This location should get 1 to 2 careful pumps of grease every day of constant use.



The bearing at the bottom end of the vertical auger has a grease line and fitting that permits greasing externally. This location should get 1 to 2 careful pumps of grease every day of constant use.

CAUTION

Excessive pressure while applying grease can be harmful to the bearing seals.

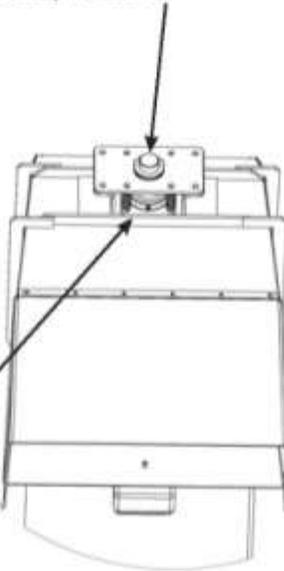
Lubrication

Pre-Startup Continued

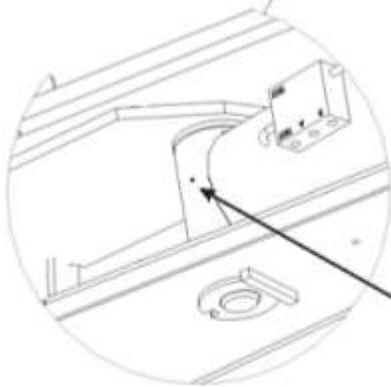


Five (5) grease fittings are located on the auger folding hinge. These should be greased every day. Pump grease until old grease is visible.

Apply never seize to shaft that goes through pillow block bearing once every 40 hours.



The bearing located at the end of the vertical auger should get 1 to 2 careful pumps of grease every day of constant use.



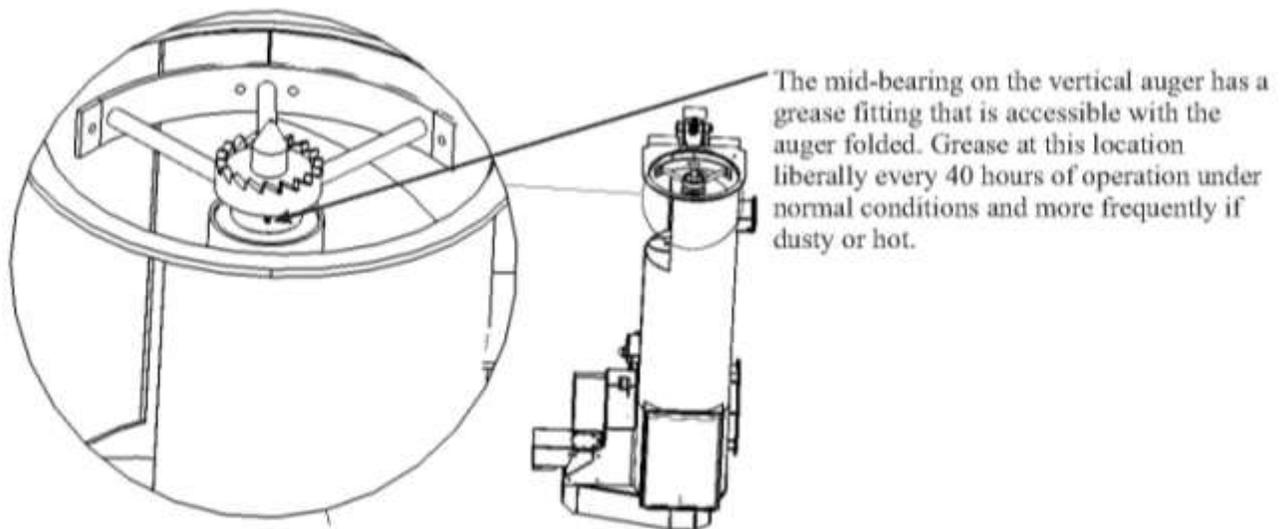
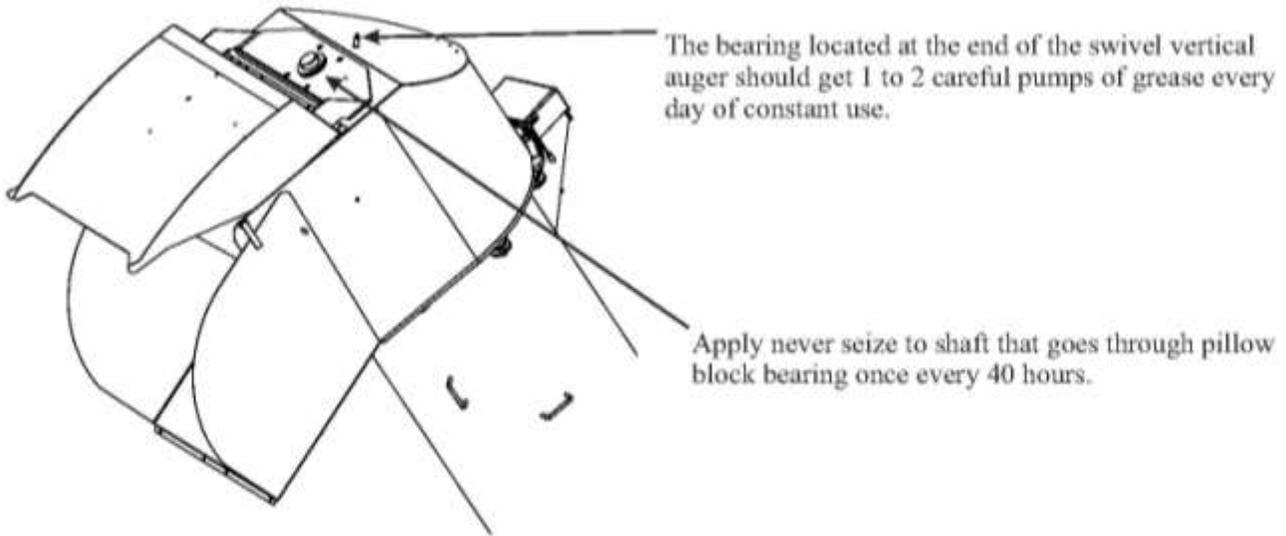
Apply grease to fitting located on the bottom end of auger folding cylinder. This should be greased every day. Pump grease until old grease is visible.

CAUTION

Excessive pressure while applying grease can be harmful to the bearing seals.

Lubrication

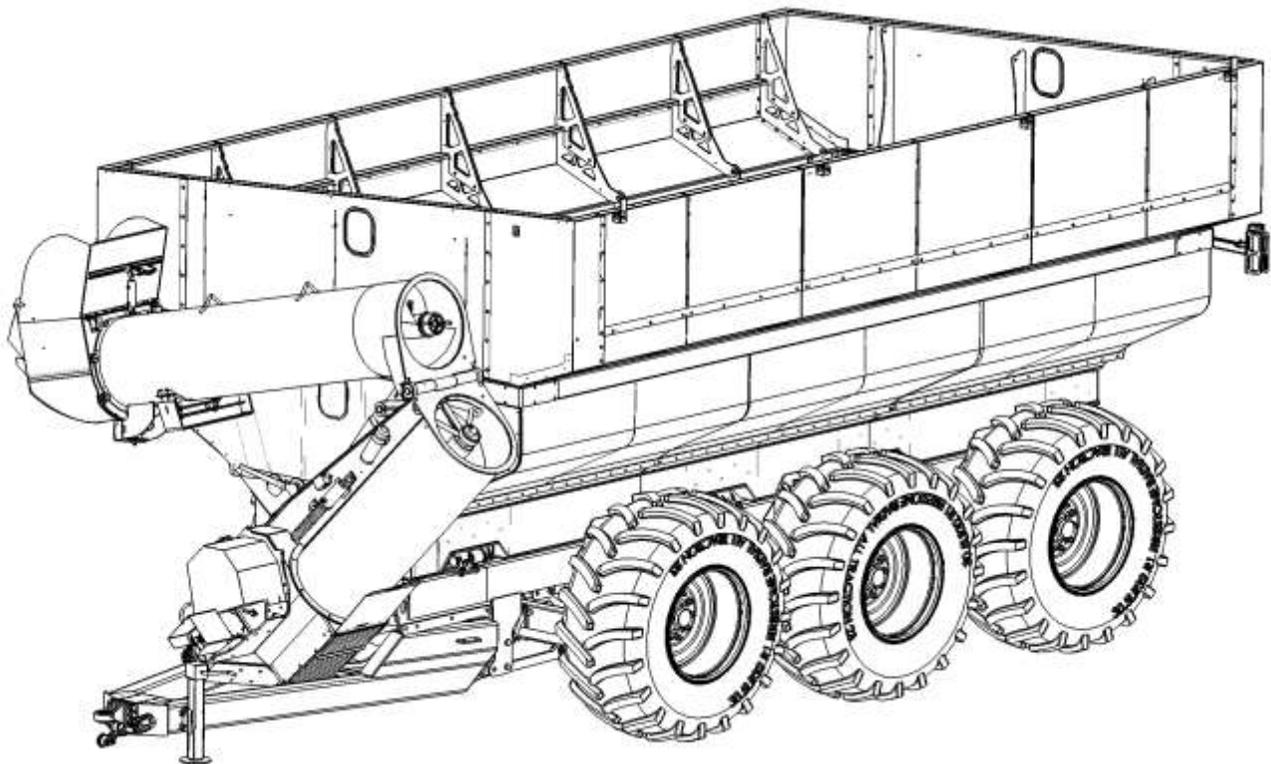
Pre-Startup Continued



CAUTION

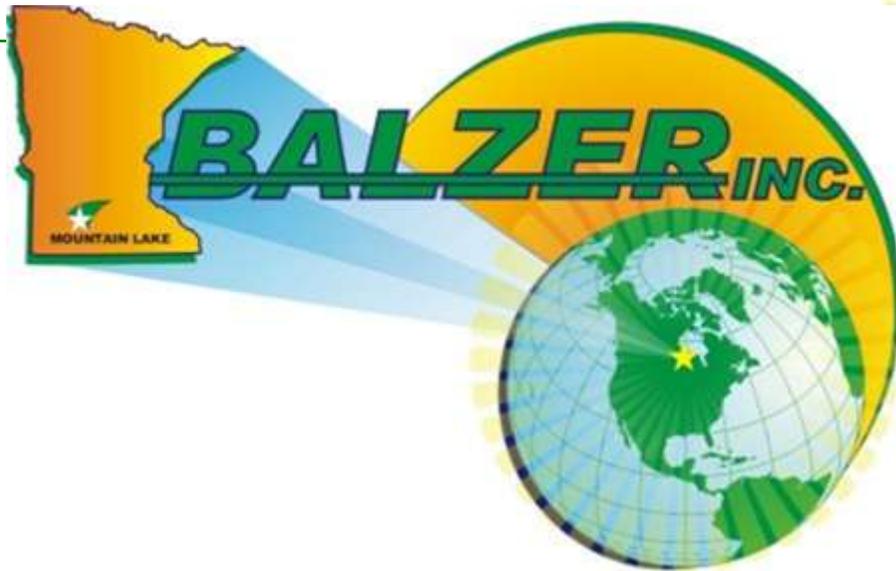
Excessive pressure while applying grease can be harmful to the bearing seals.

The following initial setup operational tests are to be performed by qualified maintenance personnel prior to delivery to customer. Refer to Field Floater IV Grain Cart manual for further instructions on safety, tractor requirements and in field operations.



- 1) Attach tractor draw bar to grain cart hitch with properly sized hitch pin that has a retainer device. Attach safety chain to tractor. Crank trailer jack to slowly place pressure on draw bar. Move jack to storage location and secure. Connect PTO to tractor. Attach all hydraulic hoses. (Refer to Operation Sections of grain cart manual for more detail.)
- 2) Connect grain cart 7-pin light harness to tractor 7-pin connection. Verify left and right turn indicators, hazard lights and stop lights with tractor controls.
- 3) Connect Avery Weigh-Tronix controller to grain cart. Connect **RED** wire on Avery-Tronix controller to **+12VDC** on tractor. Connect **BLACK** wire on Avery Weigh-Tronix controller to **Ground** on Tractor. Zero Avery Weigh-Tronix controller and add weight to cart to verify operation.
- 4) Connect Joystick controller to grain cart. Connect **RED** wire on joystick controller to **+12VDC** on tractor. Connect **BLACK** wire on joystick controller to Ground on tractor.

- 5) Make sure to have oil in chain oiler reservoir and gearboxes This will ensure proper oiling of chain and gears.
- 6) Extend upper auger by pushing button. Make sure to have clutch dis-engaged at this point.
- 7) Rotate swivel head forward and backwards by moving joystick left and right. At this point use a second person to do a visual inspection of the gear and chain. Check for proper alignment. Always check this when the auger is fully extended.
- 8) Verify spout opening and closing operation by moving joystick to IN and OUT position. Make sure the hydraulic lines have enough slack for movement in all positions.
- 9) Use thumb rocker switch to open grain doors. Visually check to see if doors open fully. Use thumb rocker switch to close grain doors. Visually check to see if doors close fully. To adjust opening and closing adjust screw on joystick for fine adjustment. For large adjustments adjust set-screw on hydraulic block.
- 10) Engage PTO and pull trigger on joystick to engage clutch to operate unload auger. **GREEN** indicator light will illuminate. Visually verify auger rotation. Use trigger to dis-engage clutch. **GREEN** light will be extinguished. Decrease PTO speed and dis-engage PTO. Lower auger into saddle. Close valves on drip oiler.
- 11) Attach hydraulic hoses for Load Leveling System. Pressurize the Load Leveling System until the hydraulic cylinders are at half stroke. Remove hydraulic hoses and store.
- 12) Check steering function by maneuvering cart with tractor hydraulic lever for steering function in the float position. Maneuver cart in a zig zag motion and watch to see if wheels are steering to follow tractor movement. Continue by making a ninety degree turn and at the end of the turn return tractor hydraulic lever to engaged position. Wheels should snap back to straight position.
- 13) If grain cart is equipped with brakes, engage hydraulic lever for braking function and watch pressure gauge to see if pressure increases. Functionality can also be judged by applying brakes while cart is in motion to see in the grain cart slows down the tractor.
- 14) After testing is complete check all bolt to ensure proper tightness. Also check to see is all gear are aligned correctly at this time. Once this is done assemble all safety shields .



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