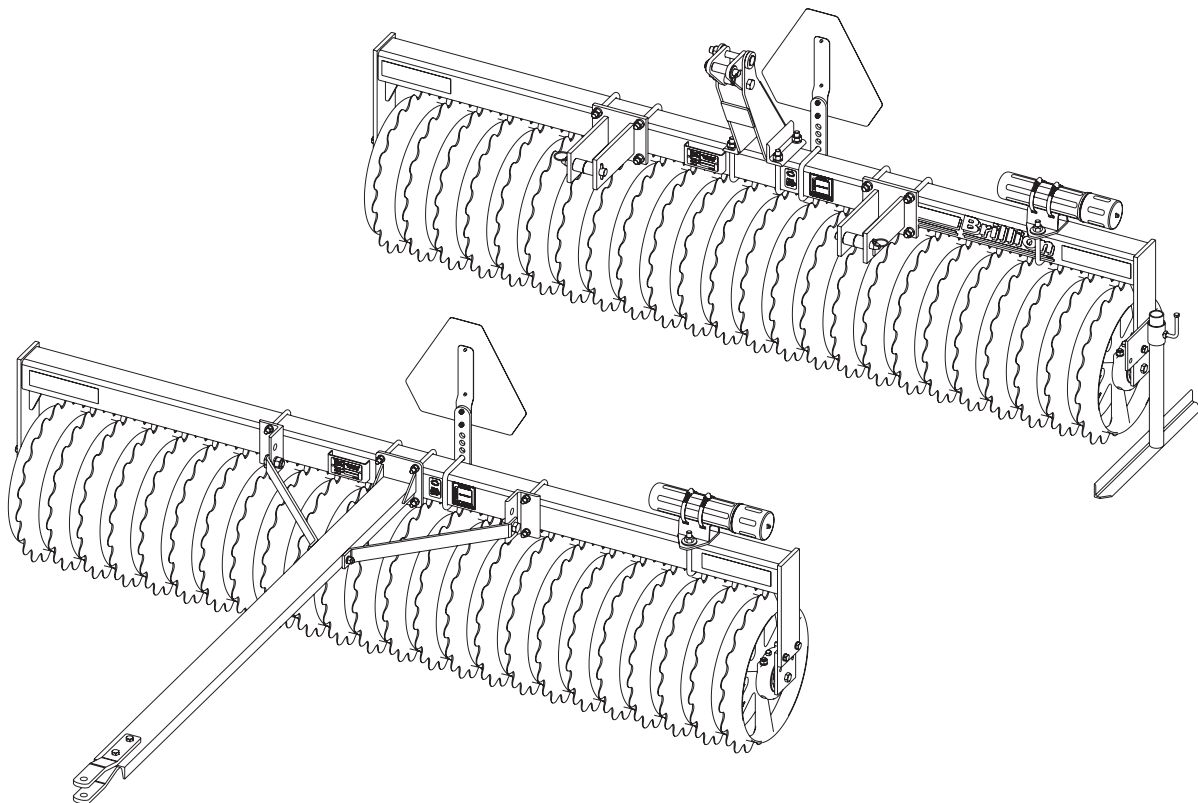




Pulverizer

Models PP5-8 and P5-8

Operator's and Parts Manual



LANDOLL COMPANY, LLC

1900 North Street

Marysville, Kansas 66508

(785) 562-5381

800-428-5655 ~ WWW.LANDOLL.COM

Instructions for Ordering Parts

**** Repair parts must be ordered through an Authorized Dealer ****

DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

Phone #: 800-423-4320 or 785-562-5381

Fax #: 888-527-3909

Order online: dealer.landoll.com

DATA PLATE

The Data Plate, which lists the model number and serial number, is located on the front of the frame.

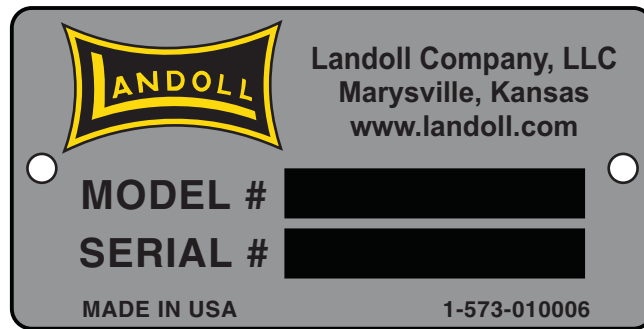
SERIAL NUMBER

The serial number is located on the Data Plate.

The following information will help decode the serial number.

PXC2100100 = xxmysssss

xx	= model series (i.e. "PX" for all Pulverizers)
m	= month of manufacture (ex. "C" means March. The letter I is not used.)
yy	= year manufactured (ex. "21" means 2021)
sssss	= sequential number used to track warranty and service information.



Data Plate

Manuals for Pulverizer PP5-8 and P5-8

Manual Number	Manual Type
9J893	Operator's and Parts Manual



DANGER

DO NOT operate or perform any maintenance tasks on this equipment until you have completed the following:

- 1. Receive proper training to operate this equipment safely.**
- 2. Read and understand the operator's manual.**
- 3. Be thoroughly trained on inspection and repair procedures.**

Failure to comply with this warning may result in serious injury or possibly death.

Table of Contents

1 Safety Information

Introduction	1-1
Description of Unit	1-1
Using this Manual	1-1
Owner Assistance	1-1
Warranty Registration	1-1
Safety	1-2
Understanding Safety Statements	1-2
Transporting Safety	1-2
Safety Instructions for Towing Vehicles	1-3
Attaching, Detaching and Storage	1-3
Maintenance Safety	1-3
Protective Equipment	1-3
Chemical Safety	1-3
Prepare for Emergencies	1-3

2 Assembly

Pull-Type Hitch	2-2
Scraper Kit (Notched Ductile Wheel 8J001) - Optional	2-4
Scraper Kit (Notched Gray Iron Wheel 8C988) - Optional	2-5

3 Operation

Tractor Preparation	3-2
Tractor Preparation for Attaching 3-PT Hitch Pulverizer	3-2
Attaching/Detaching 3-PT Hitch Pulverizer	3-4
Attaching/Detaching Pull-Type Pulverizer	3-4
General Operation	3-4
Scraper Adjustment	3-5
Transporting the Pulverizer	3-5

4 Maintenance

General Torque Specifications	4-1
Hydraulic Fitting Torque Specifications	4-2
Fasteners	4-2
Roller Adjustment	4-3
Storage	4-4

5 Specifications

6 Illustrated Parts List

Drawbar Assembly, PP5-PP7 6-1

Drawbar Assembly, PP8 6-2

3-PT Hitch Assembly, PP5-7 6-3

3-PT Hitch Assembly, PP8 6-4

Manual Canister 6-5

Slow Moving Vehicle (SMV) Sign 6-6

Frame to Roller Assembly 6-7

Mounting Plate 6-8

Roller Axle Assemblies, 20" Notched Ductile 6-9

Roller Axle Assemblies, 16" Notched Gray Iron 6-10

Roller Axle Assemblies, Crowfoot 6-11

Roller Axle Assemblies, 18" Smooth 6-12

4" Pipe Axle Assembly 6-13

Bearing Housing Assembly, 9C182 6-14

4-1/2" Pipe Axle Assembly 6-15

Bearing Housing Assembly, 7J035 6-16

Bearing Housing Assembly, 5D202 6-17

Axle Clamp Assembly, 4" Axle 6-18

Axle Clamp Assembly, 4-1/2" Axle 6-19

Scraper Kit for Notched Ductile Wheel 8J001 - Optional 6-20

Scraper Kit for Notched Gray Iron Wheel 8C988 - Optional 6-22

Drawbar - Optional for 3-PT Hitch Models 6-24

Decals 6-27

Decal Locations 6-28

7 Glossary

8 Index

Safety Information

Introduction

The implement described in this manual has been designed with care and built by skilled workers using quality materials and processes. Proper assembly, maintenance, and safe operation will allow this machine to provide you with satisfactory use for seasons to come.



DANGER

Read this entire manual before attempting to assemble, adjust or operate this implement. Failure to comply with this warning can result in personal injury or death, damage to the implement or its components and inferior operation.

Description of Unit

The Brillion PP and P Series Pulverizer are designed with versatility to operate under a wide variety of soil conditions and are highly maneuverable for use in smaller areas. A variety of Pulverizer wheel styles are offered to accommodate many types of field conditions. Units are available in 3-PT Hitch and Drawbar.

Using this Manual

This manual will familiarize you with safety, assembly, operation, adjustment, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.

- The information in this manual is current at time of printing. Some parts may have changed to assure top performance.
- Location reference: Right and Left designations in this manual are determined by facing the direction the implement will travel during field operation, unless otherwise stated.

Owner Assistance

If customer service or repairs are needed, contact your Brillion dealer. Implement parts should only be replaced with Brillion parts. Have the Serial Number and complete Model Number available when ordering parts from your Brillion dealer. If items covered in this manual are not understood, contact your local Brillion Dealer.

Warranty Registration

Brillion Farm Equipment, by Landoll, shall have no warranty obligation unless each product is registered within 10 days of retail purchase, using the Landoll Company, LLC Ag Products on-line registration process. Please refer to the Ag Products Policy and Procedures Manual, accessible at www.landoll.com for step by step instructions regarding product registration.

Enter your product information below for quick reference. Refer to the Data Plate as shown. **See Figure 1-1.**

MODEL NUMBER _____

SERIAL NUMBER _____

DATE OF PURCHASE _____

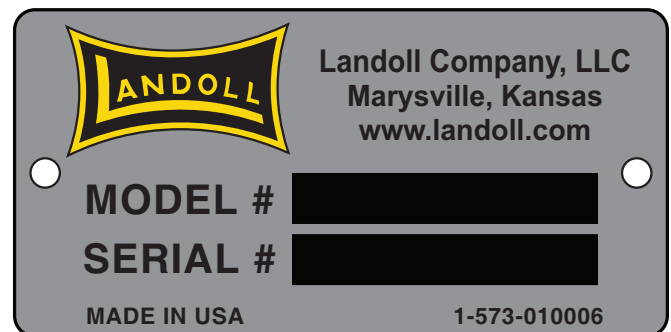


Figure 1-1: Data Plate

SAFETY INFORMATION

Safety

NOTE

Investigation has shown that nearly 1/3 of all farm accidents are caused by careless use of machinery. Insist that all people working with you or for you abide by all safety instructions.

Understanding Safety Statements

You will find various types of safety information on the following pages and on the machine signs (decals) attached to the vehicle. This section explains their meaning.

NOTICE

Special notice - read and thoroughly understand.

**CAUTION**

Proceed with caution. Failure to heed caution may cause injury to person or damage product.

**WARNING**

Proceed with caution. Failure to heed warning will cause injury to person or damage product.

**DANGER**

Proceed with extreme caution. Failure to heed notice will cause injury or death to person and/or damage product.

NOTE

You should read and understand the information contained in this manual and on this implement decals before you attempt to operate or maintain this equipment.

- Examine safety decals and be sure you have the correct safety decals for the implement. **See "Decals" on page 6-25.**
- Order replacement decals through your Brillion dealer.
- Keep these signs clean so they can be observed readily. It is important to keep these decals cleaned more frequently than the implement. Wash with soap and water or a cleaning solution as required.
- Replace decals that become damaged or lost. Also, be sure that any new implement components installed during repair include decals which are assigned to them by the manufacturer.

- When applying decals to the implement, be sure to clean the surface to remove any dirt or residue. Where possible, sign placement should protect the sign from abrasion, damage, or obstruction from mud, dirt, oil etc.

**DANGER**

- **Do not allow anyone to ride on the tractor or implement. Riders could be struck by foreign objects or thrown from the implement.**
- **Never allow children to operate equipment.**
- **Keep bystanders away from implement during operation.**

Transporting Safety

IMPORTANT

It is the responsibility of the owner/operator to comply with all state and local laws.

- When transporting the implement on a road or highway, use adequate warning symbols, reflectors, lights and slow moving vehicle sign as required. Slow moving tractors and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of the towing vehicle.
- Carry reflectors or flags to mark the tractor and implement in case of breakdown on the road.
- Do not transport at speeds over 20 MPH under good conditions. Never travel at a speed which does not allow adequate control of steering and stopping. Reduce speed if towed load is not equipped with brakes.
- Avoid sudden stops or turns because the weight of the implement may cause the operator to lose control of the tractor. Use a tractor heavier than the implement.
- Use caution when towing behind articulated steering tractors; fast or sharp turns may cause the implement to shift sideways.
- Keep clear of overhead power lines and other obstructions when transporting. Know the transport height and width of your implement. **See "Specifications" on page 5-1.**

Safety Instructions for Towing Vehicles

The maximum travel speed is the lesser of

- The limit of the road conditions;
- The maximum specified ground speed;
 - for towing operations as indicated in this manual or SIS;
 - of the towed vehicle as indicated in its operator's manual, SIS, or information sign;
- The maximum ground speed of the towed equipment combination shall be limited to the lowest specified ground speed of any of the towed machines. This speed is the ground speed limitation.

EXAMPLE: If the tractor is capable of 25 mph, the first implement has a SIS for 19 mph, and the last implement's operator's manual states its specified ground speed is 15 mph, the towed equipment combination ground speed limitation is 15 mph.

Attaching, Detaching and Storage

- Do not stand between the tractor and implement when attaching or detaching implement unless both are blocked from moving.
- Lower the machine to ground when not in use.
- Block Roller so it will not roll when unhitched from the tractor.
- **3-PT Hitch Models** - Use support stand so that machine will not roll when unhitched from tractor.

Maintenance Safety

- Block the implement so it will not roll when working on or under it to prevent injury.
- Do not make adjustments or lubricate the machine while it is in motion.
- Make sure all moving parts have stopped.
- Understand the procedure before doing the work. Use proper tools and equipment.

Protective Equipment

- Wear protective clothing & equipment appropriate for the job. Avoid loose fitting clothing.
- Because prolonged exposure to loud noise can cause hearing impairment or hearing loss, wear suitable hearing protection, such as earmuffs or earplugs.

Chemical Safety

Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil & property.

- Read chemical manufactures instructions and store or dispose of unused chemicals as specified. Handle chemicals with care & avoid inhaling smoke from any type of chemical fire.
- Store or dispose of unused chemicals as specified by the chemical manufacturer.

Prepare for Emergencies

- Keep a First Aid Kit and Fire Extinguisher handy.
- Keep emergency numbers for the doctor, ambulance, hospital and fire department near the phone.

Assembly

The PP Series Pulverizer is shipped completely assembled. The P Series Pulverizer will need the drawbar assembled to the frame. See Figure 2-1.

**CAUTION**

Do not work on or under this machine unless securely blocked and supported by a hoist or tractor or by other sufficient means.

**WARNING**

Do not attempt to lift heavy parts (such as the frame, rock shaft, and pull hitch) manually. Use a hoist or a fork lift to move these parts into position.

NOTE

Refer to the repair Parts Manual Chapter for identification of parts and for the approximate relationship of the parts in assembly. Your exact Pulverizer Model may vary slightly from the illustration.

To ensure the alignment of assemblies, leave the nuts loose until completion of final assembly. Use lock washers or flat washers as specified. Spread all cotter pins.

After completion of final assembly, tighten all nuts evenly to prevent misalignment, distortion or binding. Tighten all screws and nuts to the recommended torques.

IMPORTANT

- If pre-assembled parts or fasteners are temporarily removed, remember where they go. It is best to keep parts separated.
- Check that all working parts move freely, bolts are tight and cotter pins spread.
- Refer to the Torque Table for proper torque values. Note the different torque requirements for Bolts with Locknuts. See "General Torque Specifications" on page 4-1.

"Left" and "Right" refer to directions seen as if standing behind the machine and facing in the direction of forward travel.

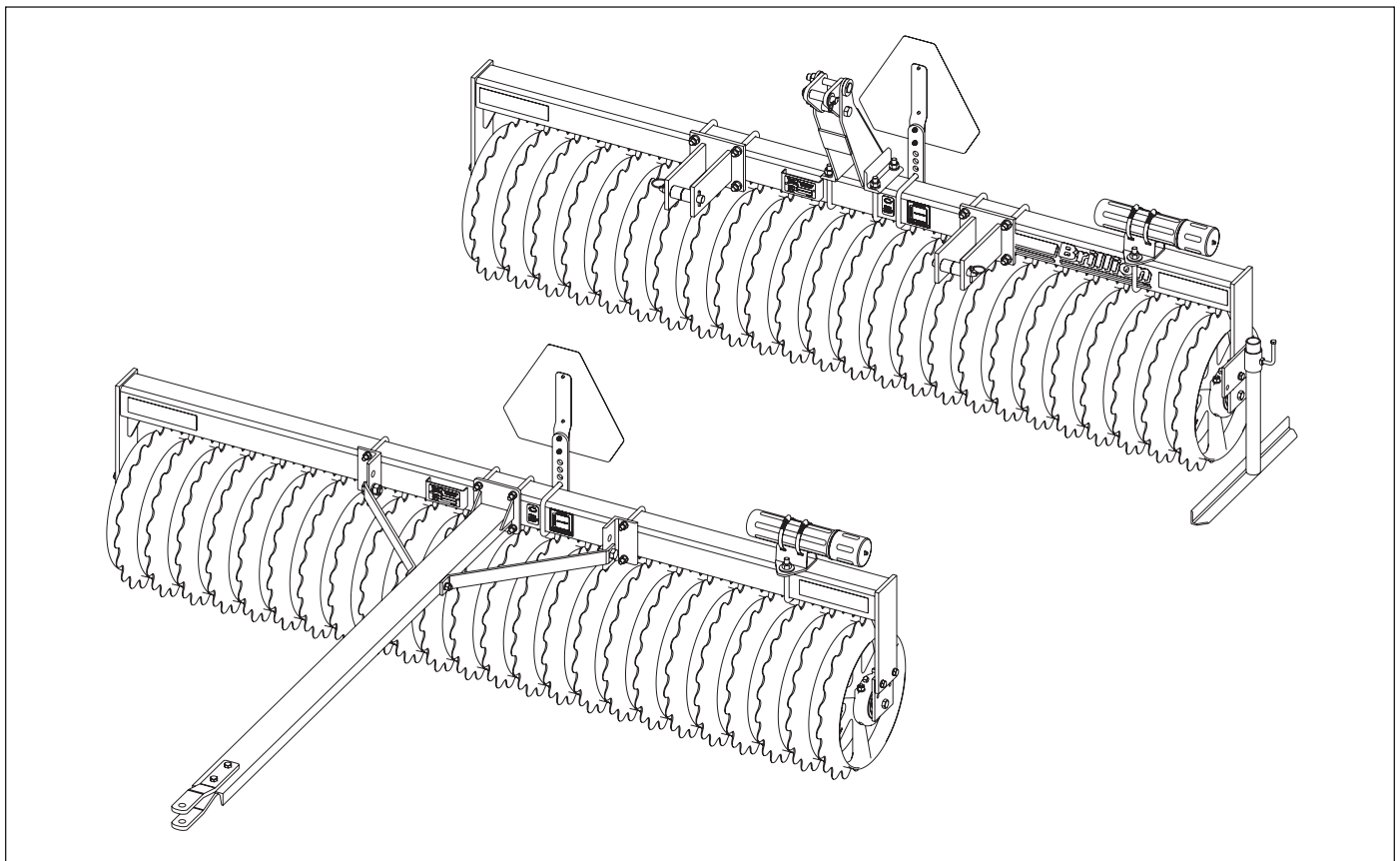


Figure 2-1: PP Series Pulverizer

Pull-Type Hitch

Optional Pull-Type Hitch Kit P/N 1K443 is available for 3-PT Hitch Models.

5-7 FT Models

1. Attach Drawbar to the center of the front Frame Tube with 1/2-13 U-Bolts, Lock Washers, and Nuts. **See Figure 2-2.**
2. Install Braces on each side of the Drawbar. Attach Braces to the Frame Outer Lugs with 3/4-10 x 1-3/4 Bolts, Lock Washers, and Nuts. Secure both Braces to the Drawbar with 1/2-13 x 5-1/2 Bolt, Lock Washer, and Nut.
3. Mount Hitches to the Drawbar with 1/2-13 x 2 Bolts, Lock Washers, and Nuts.

8 FT Models

1. Attach Drawbar to the center of the front Frame Tube with 1/2-13 U-Bolts, Lock Washers, and Nuts. **See Figure 2-3.**
2. Center and Position Angle Brackets 30-5/8" apart on the front Frame Tube. **See Figure 2-4.** Secure with 1/2-13 U-Bolts, Lock Washers, and Nuts.
3. Install Braces on each side of the Drawbar. Attach Braces to the Angle Brackets with 3/4-10 x 1-3/4 Bolts, Lock Washers, and Nuts. Secure both Braces to the Drawbar with 1/2-13 x 5-1/2 Bolt, Lock Washer, and Nut.
4. Mount Hitches to the Drawbar with 1/2-13 x 2 Bolts, Lock Washers, and Nuts.

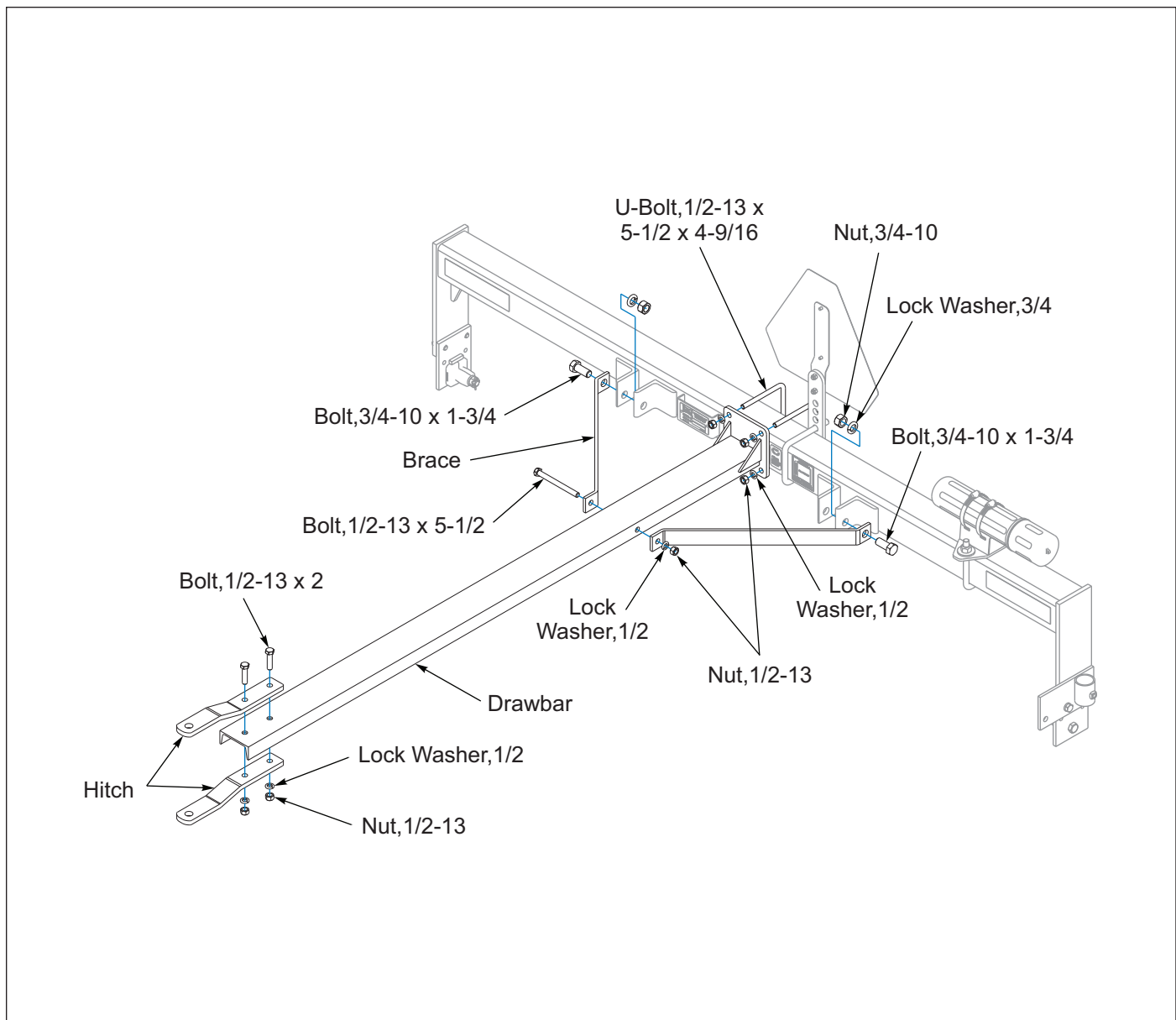


Figure 2-2: Hitch Kit, PP5-7

Scraper Kit (Notched Ductile Wheel 8J001) - Optional

NOTE

A Scraper can be used as a guide to achieve the 1/4" gap between the Scraper and the Notched Wheel.

1. Place the Pulverizer Roller on level ground.
2. Attach Scraper Brackets to the Scraper Tube with 1/2-13 x 3-1/2 Bolts, Flat Washers, Lock Washers, and Nuts. **See Figures 2-5 and 2-6.**
3. Center Scraper Tube on the Notched Ductile Wheel Roller and attach Scraper Brackets to the Frame Tube with 1/2-13 x 5-1/2 U-Bolts, Lock Washers, and Nuts.
4. Center the Scrapers between the Notched Wheels. Position the Scrapers so that there is a 1/4" gap between the Scraper and the Notched Wheel. **See Figure 2-5.** Secure with 3/8-16 x 2-7/16 U-Bolts, Flat Washers, Lock Washers, and Nuts.

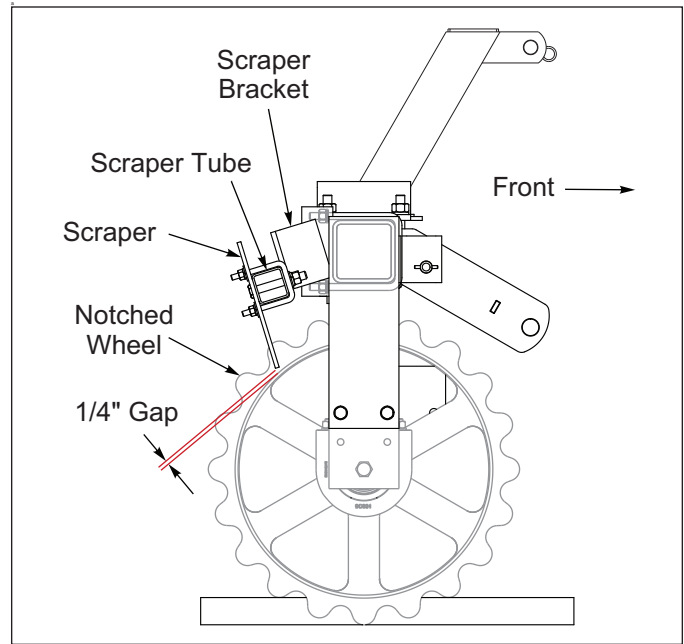


Figure 2-5: Scraper Kit Detail

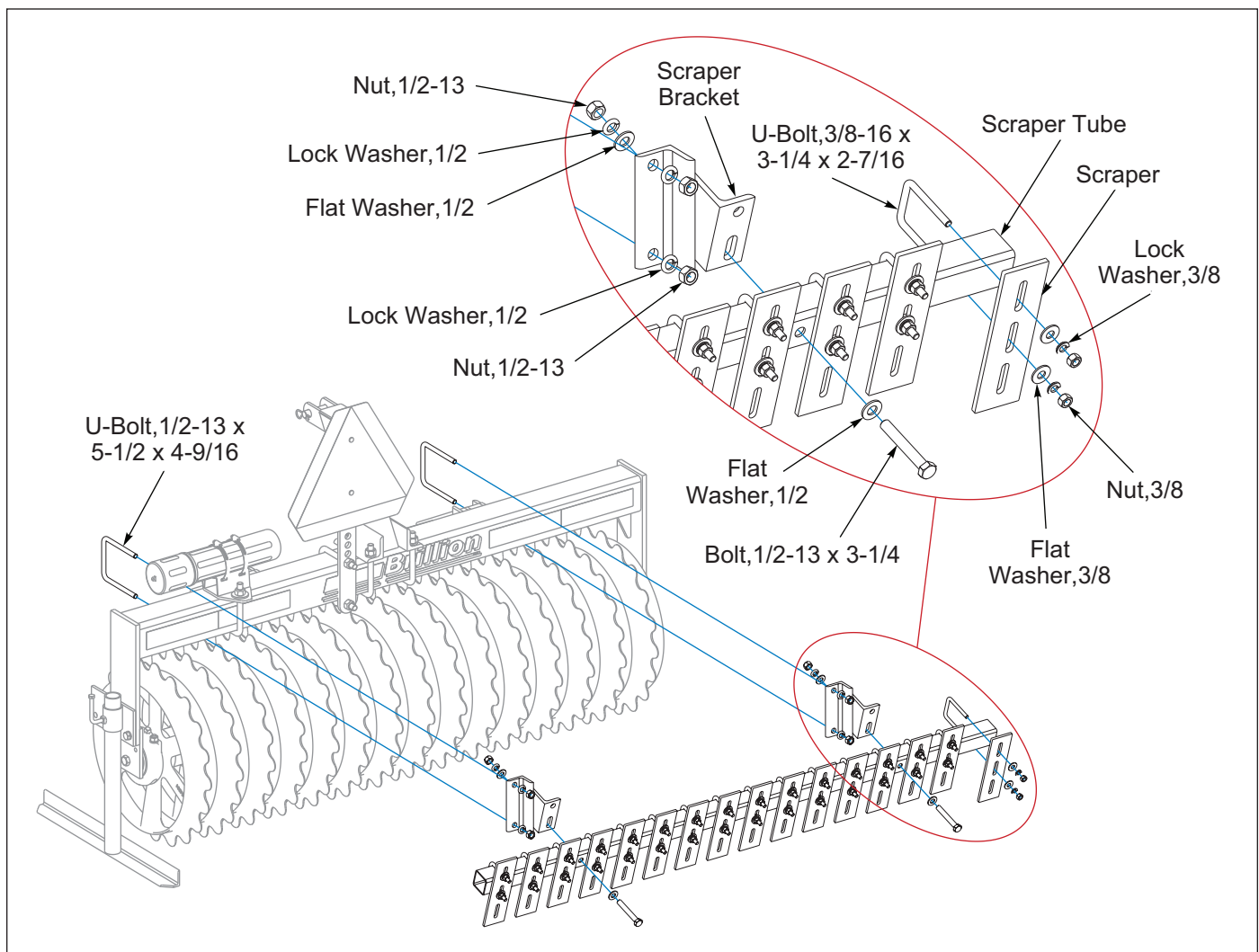


Figure 2-6: Scraper Kit Installation

Scraper Kit (Notched Gray Iron Wheel 8C988) - Optional

1. Place the Pulverizer Roller on level ground.
2. Attach short Angles to the Scraper Angle with 1/2-13 x 1-1/2 Bolts, Flat Washers, Lock Washers, and Nuts. **See Figures 2-7 and 2-8.**
3. Attach Scraper Brackets to the short Angles with 1/2-13 x 1-1/2 Bolts, Flat Washers, Lock Washers, and Nuts.
4. Center Scraper Angle on Notched Gray Iron Wheel Roller and attach Scraper Brackets to the Frame Tube with 1/2-13 x 5-1/2 U-Bolts, Lock Washers, and Nuts.
5. Center the Scrapers between the Notched Wheels. Position the Scrapers so that there is a 1/4" gap between the Scraper and the Notched Wheel. **See Figure 2-7.** Secure with 3/8-16 x 1-1/2 Carriage Bolts, Flat Washers, Lock Washers, and Nuts.

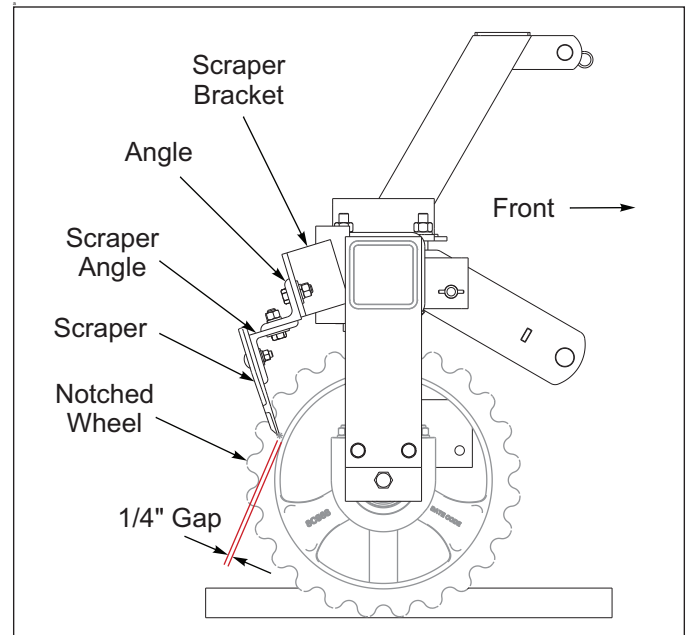


Figure 2-7: Scraper Kit Detail

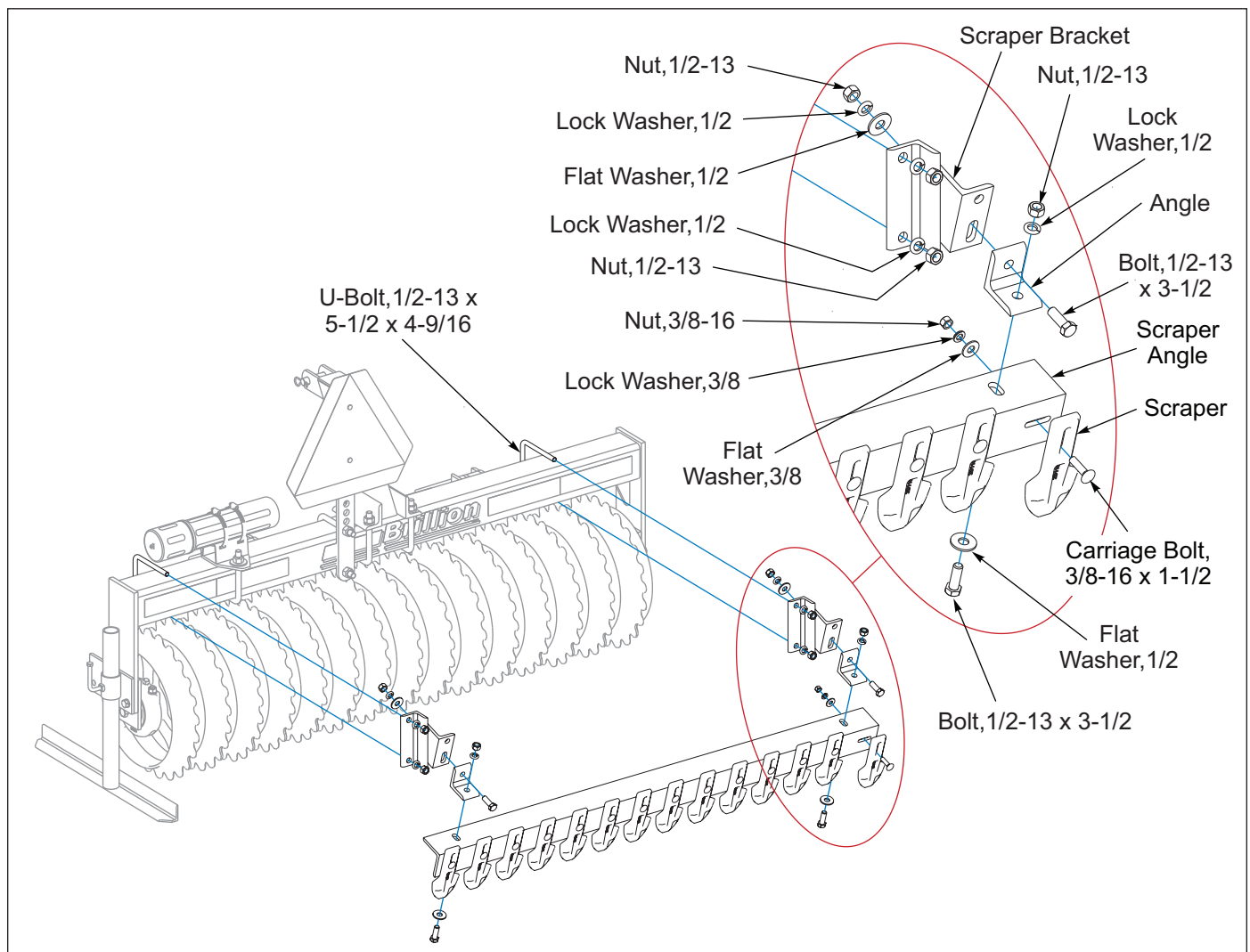


Figure 2-8: Scraper Kit Installation

Operation

**DANGER**

Never allow anyone to ride on the Pulverizer at any time. Allowing a person to ride on the machine can inflict serious personal injury or death to that person.

**DANGER**

Keep all bystanders away from the machine when folding/unfolding or transporting.

**DANGER**

Always lock the tractor drawbar in the center position when transporting the unit. Failure to do so can result in serious injury or death and cause damage to the machine.

**WARNING**

Always be sure that the tractor hitch capacity is rated to carry the weight of the Pulverizer. Refer to "Specifications" and Tractor Operator's Manual

**CAUTION**

When transporting farm implements on public roads, it is the responsibility of the operator to abide by state and local laws concerning wide loads, speed, safety emblems and safety lighting equipment. Drive at safe speeds, particularly when rounding corners, crossing rough ground or driving on hillsides, to prevent tipping the tractor.

OPERATION

Tractor Preparation

The Pulverizer is available as a Pull Type or 3-PT mounted version.

- A Pull Type Pulverizer is equipped to be pulled by a tractor with a drawbar, no clevis.
- A 3-PT mounted Pulverizer hitch category is based on the Model.

PP5-7 Models: Category 1 Free Link

PP8 Models: Category 1,2 Free Link and Category 1,2 Quick Coupler

Tractor Preparation for Attaching 3-PT Hitch Pulverizer

1. 3-PT Hitch Pulverizer is designed to be pulled by a Tractor equipped with a 3-PT Hitch Category based on Model. **See Figures 3-1 and 3-2.** Be sure Tractor's Hitch Capacity is not exceeded by the Laden Mass of the Pulverizer. **Refer to Tractor Operator's Manual.**
2. Be sure Tractor is properly ballasted. A minimum 25% of Tractor and Equipment Laden Mass must be on Tractor Front Wheels in transport position to maintain stability. **See "Specifications" on page 5-1 and refer to Tractor Operator's Manual.**
3. Check the Tractor tire inflation levels to ensure that they are properly inflated for the additional Laden Pulverizer Mass. **Refer to the Tractor Operator's Manual.** Be sure not to over ballast and exceed Tractor Tire Capacity.
4. Set Tractor 3-PT Lower Links to allow lateral (torsional) float. **Refer to Tractor Operator's Manual.** If left rigid, your Brillion Pulverizer may not follow ground contours.
5. Set Lift Rod length long enough to ensure the Pulverizer can float downward in the case of a furrow or waterway. Lower Links should be the same height, leveling your Brillion Pulverizer side to side. Fine adjustments may need to be made after hookup is completed. **Refer to the Tractor Operator's Manual.**
6. Attach Pulverizer to the Tractor's 3-PT Free Link or Quick Coupler using the appropriate size pins and bushings. Be sure to use the correct hardware and that it is in good working order. **Refer to the Tractor Operator's Manual** for Quick Hitch Operation.
7. Raise the Pulverizer. Adjust or lock tractor sway stabilizers if equipped, centering the Pulverizer with the Tractor. **Refer to the Tractor Operator's Manual.**
8. Lower the Pulverizer, if necessary level the Pulverizer side to side (laterally) by adjusting Lift Rod length. **Refer to the Tractor Operator's Manual.**

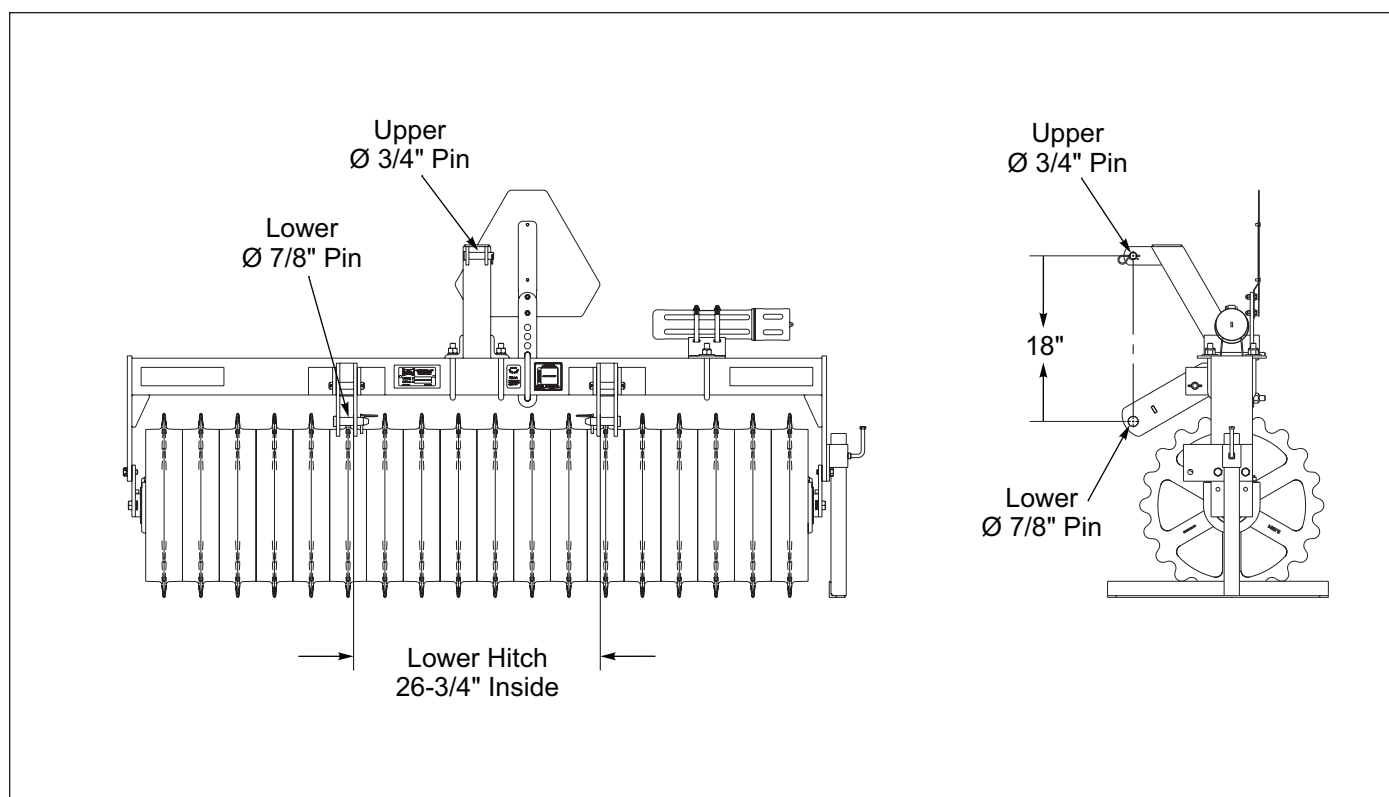


Figure 3-1: Category 3-PT Hitch, PP5-7

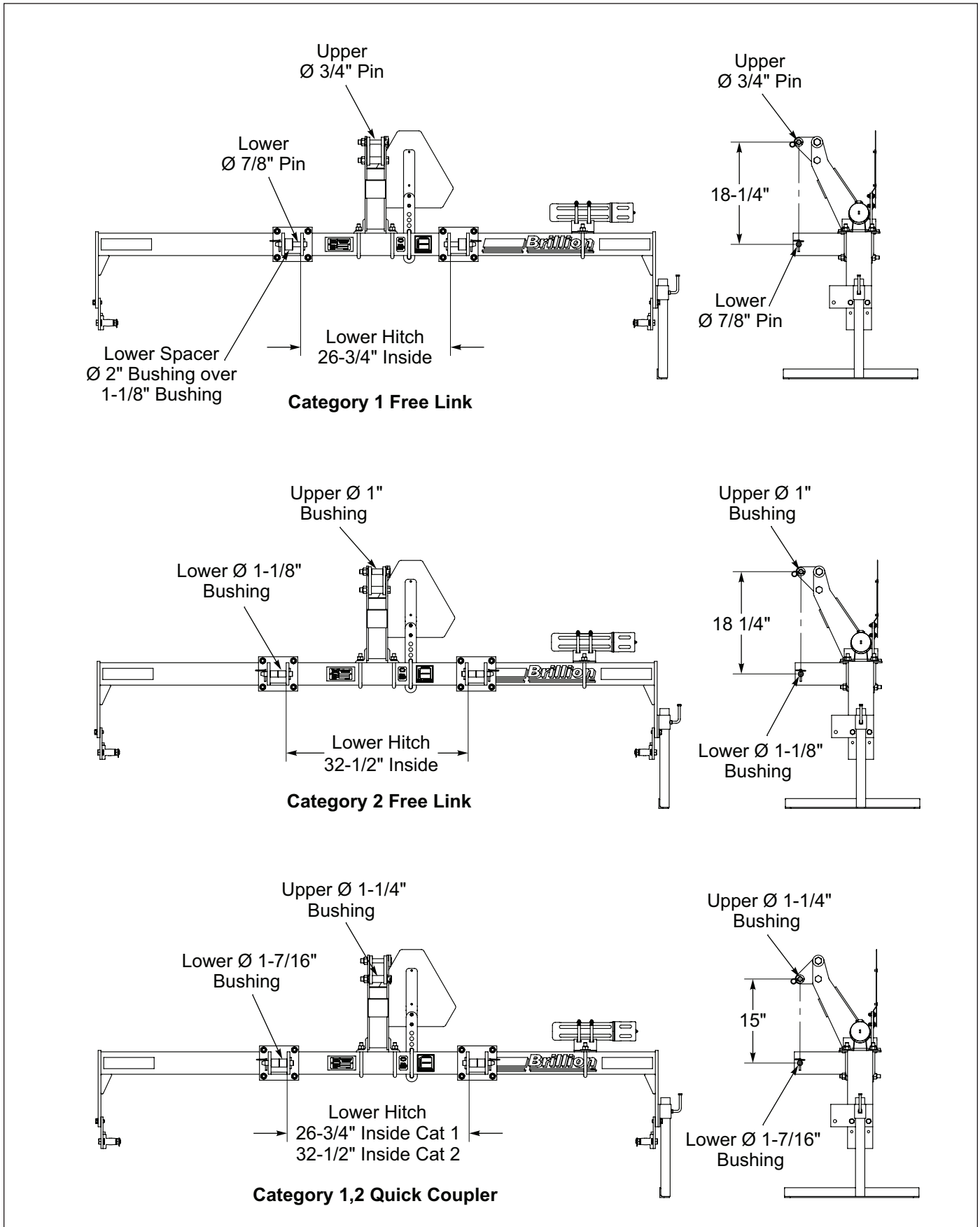


Figure 3-2: Category 3-PT Hitch, PP8

OPERATION

Attaching/Detaching 3-PT Hitch Pulverizer

Prior to operating the Pulverizer, inspect it thoroughly for good operating condition. Replace worn or missing parts. New machines, check the bolt tightness after a few hours of operation. Periodic checks should be made thereafter.

8 FT Models

- Lower Hitch Brackets can be adjusted to match the tractor category lower links. **See Figure 3-2.**
- Upper Hitch Float Link can be reassembled to the Upper Mast to achieve the upper and lower hitch pin distance for the tractor Free Link or Quick Coupler Hitch Category being used. **See Figure 3-3.** Quick Coupler requires a 15" upper to lower hitch pin distance where as the Free Link requires an 18-1/4" upper to lower hitch pin distance.

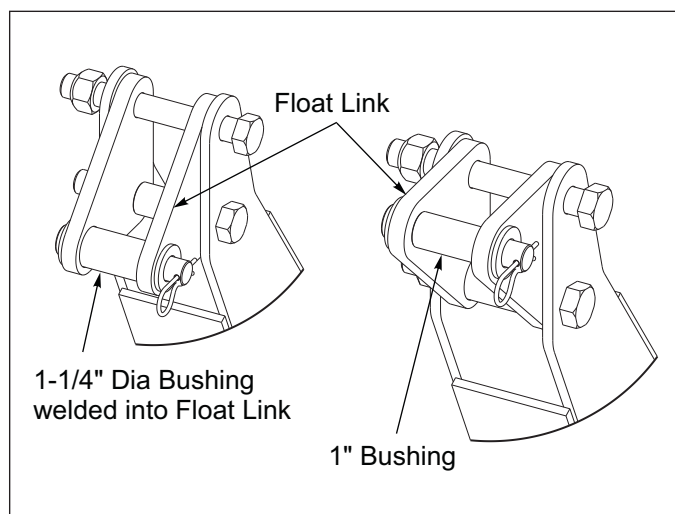


Figure 3-3: Float Link Rotated

Attaching the Pulverizer:

1. Attach the Pulverizer to the Tractor with the appropriate size pins and bushings based on the 3-PT Hitch Category being used. **See Figures 3-1 and 3-2.**
2. Raise the Pulverizer.
3. Loosen the Stand Bent Screw. Raise Stand and tighten the Bent Screw.

Detaching the Pulverizer:

1. Lower the Pulverizer on a level surface.
2. Loosen the Stand Bent Screw and lower Stand to the level surface. Tighten the Bent Screw.
3. Block the Pulverizer Roller Assembly.
4. Disconnect the Tractor from the Pulverizer.

Attaching/Detaching Pull-Type Pulverizer



DANGER

Do not allow any bystanders to stand between the tractor and the machine while backing up to the machine.

Attaching Pulverizer

1. Align the Tractor Drawbar with the Pulverizer drawbar.
2. Attach the Pulverizer to the tractor with the proper size Hitch Pin and Safety Clip.
3. Transport the Pulverizer to the area to be worked.

Detaching Pulverizer

1. Position the Pulverizer on a level surface.
2. Block the Pulverizer Roller Assembly
3. Disconnect the tractor from the Pulverizer.

General Operation

1. The minimum horsepower requirement is based on the Pulverizer width. This will vary widely due to speed, moisture, and types of soils. Local dealers can help in making recommendations for your area.
5 FT and 6 FT Machines: 35 horsepower
7 FT and 8 FT Machines: 45 horsepower
2. 3-PT Hitch capacity is based on the Pulverizer weight. **See "Specifications" on page 5-1.** Tractor must be sized accordingly. **Refer to Tractor Operator's Manual.**
3. Operating speed is typically 3-6 mph. Reduce speed in rocky conditions to prevent Roller Wheel breakage.
4. 3-PT Hitch Pulverizer Stand should always be securely raised when operating. When not in use, lower Pulverizer Stand to a level surface. Block the Pulverizer Roller Assembly before unhitching from tractor.

Scraper Adjustment

To adjust scrapers; lower machine on level surface. Adjust scrapers to obtain 1/4" gap between scraper and wheel.

NOTE

Scrapers are optional on Ductile Notched (PPD) and Heavy Notched (PPM) Roller Models.

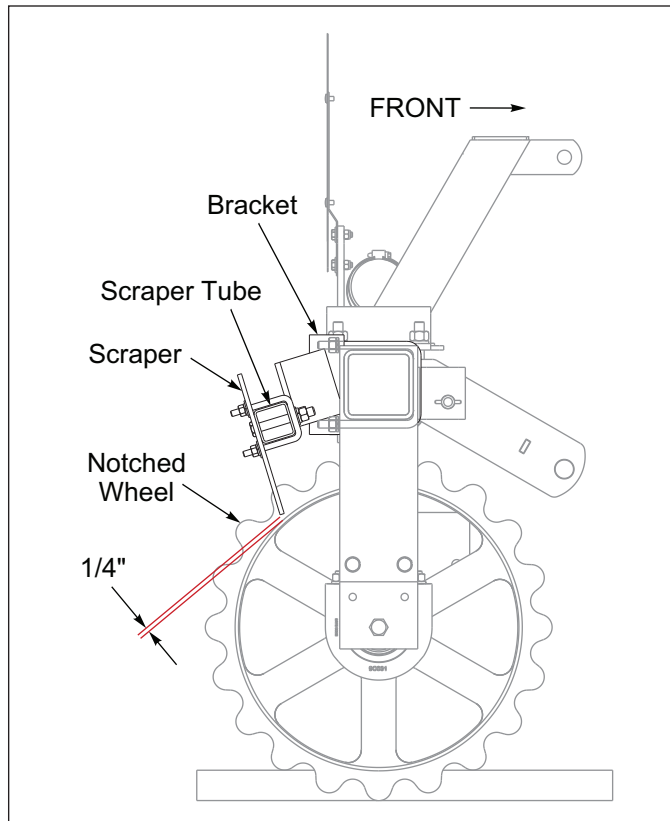


Figure 3-4: Scraper Adjustment

Transporting the Pulverizer

1. Check and follow all federal, state, and local requirements before transporting the Pulverizer.
2. The Pulverizer should be transported only by tractor required for field operation. The implement weight should not exceed more than 1.5 times the tractor weight. Maximum transport speed for the Pulverizer is 20 mph.



CAUTION

Excessive speed may result in loss of control of the tractor and implement, reduced braking ability, or failure of the implement tire or structure. Do not exceed the implement maximum specified ground speed regardless of the capability of the maximum tractor speed.

3. When towing equipment in combination, the maximum equipment ground speed shall be limited to the lowest specified ground speed of any of the towed implements.

Maximum transport speed shall be the lesser of travel speed specified in the operator's manual, speed identification symbol, information sign of towed equipment, or limit of road conditions.

4. Slow down when driving on rough roads. Reduce speed when turning, or on curves and slopes to avoid tipping. Equipment altered other than the place of manufacture may reduce the maximum transport speed. Additional weight, added tanks, or other attachments may reduce the machine load carrying capabilities.
5. Know the transport heights and widths of the implement before transporting. Use caution when transporting near bridges and power lines.



WARNING

Electrocution can occur without direct contact.

6. Check to see that the tractor hitch capacity is rated to carry the weight of the Pulverizer. **Refer to Tractor Operator's Manual.**
7. Use pins that properly fit the Lift Arms or Quick Hitch and Implement Hitch.
8. If applicable, raise the machine to full transport height.
9. Verify that SMV sign, reflectors and Safety Decals are clearly visible and the Tractor Warning Lamps are functioning properly.
10. Transport during daylight hours whenever possible. Always use flashing warning lights, except where such use is prohibited by law. Make sure lights, reflectors and SMV emblem are clearly visible and operating. Remove any obstructions such as dirt, mud, stalks or residue that restricts view before transporting. **See Figure 3-5.**

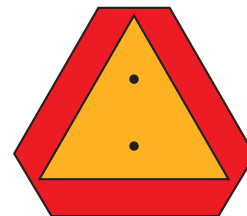


Figure 3-5: SMV Sign

Maintenance

General Torque Specifications

(rev. 4/97)

This chart provides tightening torques for general purpose applications when special torques are not specified on process or drawing. Assembly torques apply to plated nuts and capscrews assembled without supplemental lubrication (as received condition). They do not apply if special graphite moly-disulfide or other extreme pressure lubricants are used. When fasteners are dry (solvent cleaned) add 33% to as received condition torque. Bolt head identification marks indicate grade and may vary from manufacturer to manufacturer. Thick nuts must be used on grade 8 capscrews. Use value in [] if using prevailing torque nuts

TORQUE SPECIFIED IN FOOT POUNDS

UNC SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8	UNF SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8
1/4-20	4 [5]	6 [7]	9 [11]	1/4-28	5 [6]	7 [9]	10 [12]
5/16-18	8 [10]	13 [13]	18 [22]	5/16-24	9 [11]	14 [17]	20 [25]
3/8-16	15 [19]	23 [29]	35 [42]	3/8-24	17 [21]	25 [31]	35 [44]
7/16-14	24 [30]	35 [43]	55 [62]	7/16-20	27 [34]	40 [50]	60 [75]
1/2-13	35 [43]	55 [62]	80 [100]	1/2-20	40 [50]	65 [81]	90 [112]
9/16-12	55 [62]	80 [100]	110 [137]	9/16-18	60 [75]	90 [112]	130 [162]
5/8-11	75 [94]	110 [137]	170 [212]	5/8-18	85 [106]	130 [162]	180 [225]
3/4-10	130 [162]	200 [250]	280 [350]	3/4-16	150 [188]	220 [275]	320 [400]
7/8-9	125 [156]	320 [400]	460 [575]	7/8-14	140 [175]	360 [450]	500 [625]
1-8	190 [237]	408 [506]	680 [850]	1-14	210 [263]	540 [675]	760 [950]
1-1/8-7	270 [337]	600 [750]	960 [1200]	1-1/8-12	300 [375]	660 [825]	1080 [1350]
1-1/4-7	380 [475]	840 [1050]	1426 [1782]	1-1/4-12	420 [525]	920 [1150]	1500 [1875]
1-3/8-6	490 [612]	1010 [1375]	1780 [2225]	1-3/8-12	560 [700]	1260 [1575]	2010 [2512]
1-1/2-6	650 [812]	1460 [1825]	2360 [2950]	1-1/2-12	730 [912]	1640 [2050]	2660 [3325]

METRIC:

Coarse thread metric class 10.9 fasteners and class 10.0 nuts and through hardened flat washers, phosphate coated, Rockwell "C" 38-45. Use value in [] if using prevailing torque nuts

Nominal thread diameter (mm)	Newton Meters (Standard Torque)	Foot Pounds (Standard Torque)	Nominal Thread Diameter (mm)	Newton Meters (Standard Torque)	Foot Pounds (Standard Torque)
6	10 [14]	7 [10]	20	385 [450]	290 [335]
7	16 [22]	12 [16]	24	670 [775]	500 [625]
8	23 [32]	17 [24]	27	980 [1105]	730 [825]
10	46 [60]	34 [47]	30	1330 [1470]	990 [1090]
12	80 [125]	60 [75]	33	1790 [1950]	1340 [1450]
14	125 [155]	90 [115]	36	2325 [2515]	1730 [1870]
16	200 [240]	150 [180]	39	3010 [3210]	2240 [2380]
18	275 [330]	205 [245]			

Hydraulic Fitting Torque Specifications

37 degree JIC, ORS, & ORB (REV. 10/97) - This chart provides tightening torques for general purpose applications when special torques are not specified on process or drawing. Assembly torques apply to plated nuts and capscrews assembled without supplemental lubrication (as received condition). They do not apply if special graphite moly-disulfide or other extreme pressure lubricants are used. When fasteners are dry (solvent cleaned) add 33% to as received condition torque. Bolt head identification marks indicate grade and may vary from manufacturer to manufacturer. Thick nuts must be used on grade 8 capscrews. Use value in [] if using prevailing torque nuts.

TORQUE SPECIFIED IN FOOT POUNDS

PARKER® BRAND FITTINGS

Dash Size	37 Deg. JIC	O-ring (ORS)	O-ring boss
-4	11-13	15-17	13-15
-5	14-16	-----	21-23
-6	20-22	34-36	25-29
-8	43-47	58-62	40-44
-10	55-65	100-110	58-62
-12	80-90	134-146	75-85
-16	115-125	202-218	109-121
-20	160-180	248-272	213-237
-24	185-215	303-327	238-262
-32	250-290	-----	310-340

GATES® BRAND FITTINGS

Dash Size	37 Deg. JIC	O-ring (ORS)	O-ring boss
-4	10-11	10-12	14-16
-5	13-15	-----	-----
-6	17-19	18-20	24-26
-8	34-38	32-40	37-44
-10	50-56	46-56	50-60
-12	70-78	65-80	75-83
-14	-----	65-80	-----
-16	94-104	92-105	111-125
-20	124-138	125-140	133-152
-24	156-173	150-180	156-184
-32	219-243	-----	-----

AEROQUIP® BRAND FITTINGS

Dash Size	37 Deg. JIC	O-ring (ORS)	O-ring boss
-4	11-12	10-12	14-16
-5	15-16	-----	16-20
-6	18-20	18-20	24-26
-8	38-42	32-35	50-60
-10	57-62	46-50	75-80
-12	79-87	65-70	125-135
-14	-----	-----	160-180
-16	108-113	92-100	200-220
-20	127-133	125-140	210-280
-24	158-167	150-165	270-360

Valve Torque Values		
Part Number	Description	Torque (Ft-Lbs)
175159	Relief	24-26
171000	Shutoff	19-21

Fasteners

Before operating your Brillion machine, check all hardware for tightness. Use the Tightening Torque Table as a guide. **See Page 4-1.**

After a few hours of use, check entire machine and tighten any loose nuts or bolts. Daily or periodic checks should be made thereafter.

When replacing bolts, be sure to use fasteners of equal grade.

Roller Adjustment

IMPORTANT

The Roller Axle has Internal Bearings. When installing the Roller Axle onto the Mounting Plate Assemblies, it is important to keep the Roller Axle aligned as straight as possible to the Straight Axle Mount. If the Roller Axle is significantly out of line when sliding it onto the Straight Axle Mount, the inner race of the Internal Bearing may crack and cause premature Bearing failure.

After an initial run of 5-10 hours, check the Roller Assembly to ensure that the Wheels are tight to one another and that the Clamps are tight. If not, slide the Roller Wheels tight together and adjust the Roller Clamps per **Roller Assembly Clamp Tightening Procedure**. Tighten the Clamp U-Bolt evenly to 57 Ft-Lbs and the Set Screws if applicable, to 37 Ft-Lbs. Thereafter, check the Roller Assembly every 50-100 hours.

Roller Assembly Clamp Tightening Procedure

IMPORTANT

The tightening procedure and torque requirement is critical in keeping the Roller Assembly Clamps tight and has a significant effect on the Internal Bearing life of the Roller Axle.

1. Check Roller Axle Pipe and Clamp for burrs on mating surfaces.
2. Remove end play between Roller Wheels. Loosen the Clamps. Slide the Wheels snug against each other, centering the entire assembly on the Roller Axle. If the Roller Assembly has only one Clamp, slide the Wheels toward the fixed end of the Roller Axle.
3. Position the Clamps snugly against the end Wheels.
4. Tighten the Clamp U-Bolt evenly to 57 Ft-Lbs. **See Figure 4-1. U-Bolt *MUST BE* tightened before the Set Screws are tightened.**
5. Tighten the Clamp Set Screws to 37 Ft-Lbs, if applicable. *Clamp for 4-1/2" diameter Roller Axle does not have Set Screws.*
6. Check that the Internal Bearings turn freely. You should be able to turn the Internal Bearing with your fingers. If rotation is jerky, loosen the Set Screws and U-Bolt until Internal Bearing turns smoothly. It may be necessary to loosen and reposition the Clamp.

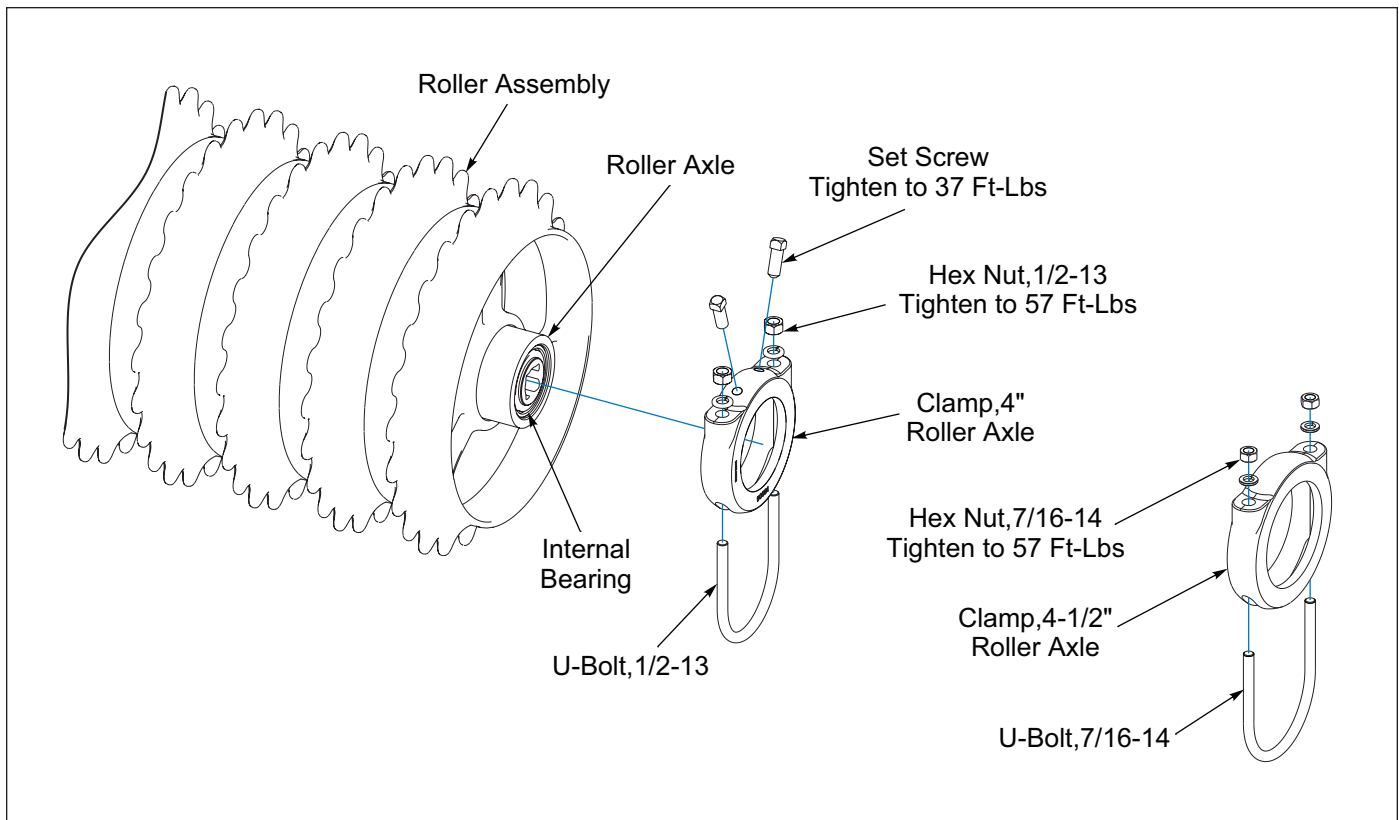


Figure 4-1: Maintenance Roller Bearing Clamp End

Storage

1. The service life of the Pulverizer will be extended by proper off-season storage practices. Prior to storing the unit, complete the following procedures:
 - Completely clean the unit.
 - Inspect the machine for worn or defective parts. Replace as needed.
 - Repaint all areas where the original paint is worn off.
2. Store the unit in a shed or under a tarpaulin to protect it from the weather.
3. Lower the 3-PT Hitch Pulverizer on a level surface and lower the Stand. Secure Stand with Bent Screw.
4. Position the Pull-Type Pulverizer on a level surface.
5. Block the Pulverizer Roller Assembly before unhitching from tractor.

Specifications

Product Attributes	PP5	PP6
Approximate Weight		
(PPM) 16" Notched Gray Iron Wheels	709 lbs. (322 kg)	827 lbs. (375 kg)
(PPD) 20" Notched Ductile Iron Wheels	650 lbs. (295 kg)	756 lbs. (343 kg)
(PPC) 16" Crowfoot Gray Iron Wheels	678 lbs. (305 kg)	789 lbs. (358 kg)
Working Width	5 ft. 0 in. (1.5 m)	6 ft. 0 in. (1.8 m)
Transport Width	5 ft. 8 in. (1.7 m)	6 ft. 8 in. (2.0 m)
Transport Height	Dependent Upon Tractor	Dependent Upon Tractor
Overall Length	2 ft. 0 in. (600 mm)	2 ft. 0 in. (600 mm)
Number of Pulverizer Wheels		
(PPM) 16" Notched Gray Iron Wheels	15	18
(PPD) 20" Notched Ductile Iron Wheels	15	18
(PPC) 16" Crowfoot Gray Iron Wheels	10	12
Axle Size	4 in. (100 mm)	4 in. (100 mm)
Three-Point Hitch	Cat. 1 Free Link	Cat. 1 Free Link
Pull-Type Hitch	Optional	Optional
Scraper Kits	Optional for PPM & PPD Series	Optional for PPM & PPD Series
SMV Emblem	Standard	Standard
Powder Coat Paint, Red	Standard	Standard
Horsepower Requirements	35 HP (26.88 kW) and up	35 HP (26.88 kW) and up
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Product Attributes	PP7	PP8
Approximate Weight		
(PPM) 16" Notched Gray Iron Wheels	944 lbs. (428 kg)	1,093 lbs. (496 kg)
(PPD) 20" Notched Ductile Iron Wheels	861 lbs. (391 kg)	998 lbs. (453 kg)
(PPC) 16" Crowfoot Gray Iron Wheels	901 lbs. (409 kg)	1,044 lbs. (474 kg)
Working Width	7 ft. 0 in. (2.1 m)	8 ft. 0 in. (2.4 m)
Transport Width	7 ft. 8 in. (2.3 m)	8 ft. 8 in. (2.6 m)
Transport Height	Dependent Upon Tractor	Dependent Upon Tractor
Overall Length	2 ft. 0 in. (600 mm)	2 ft. 0 in. (600 mm)
Number of Pulverizer Wheels		
(PPM) 16" Notched Gray Iron Wheels	21	24
(PPD) 20" Notched Ductile Iron Wheels	21	24
(PPC) 16" Crowfoot Gray Iron Wheels	14	16
Axle Size	4 in. (100 mm)	4 in. (100 mm)
Three-Point Hitch	Cat. 1 Free Link	Cat. 1, 2 Free Link, Cat. 1, 2 Quick Coupler
Pull-Type Hitch	Optional	Optional
Scraper Kits	Optional for PPM & PPD Series	Optional for PPM & PPD Series
SMV Emblem	Standard	Standard
Powder Coat Paint, Red	Standard	Standard
Horsepower Requirements	45 HP (33.6 kW)	45 HP (33.6 kW)
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Specifications subject to change with or without notice.

Figure 5-1: PP Series Models

SPECIFICATIONS

Product Attributes	P5	P6
Approximate Weight		
(PM) 16" Notched Gray Iron Wheels	715 lbs. (324 kg)	832 lbs. (377 kg)
(PD) 20" Notched Ductile Iron Wheels	651 lbs. (295 kg)	755 lbs. (342 kg)
(PC) 16" Crowfoot Gray Iron Wheels	684 lbs. (310 kg)	795 lbs. (361 kg)
Working Width	5 ft. 0 in. (1.5 m)	6 ft. 0 in. (1.8 m)
Transport Width	5 ft. 8 in. (1.7 m)	6 ft. 8 in. (2.0 m)
Transport Height	2 ft. 6 in. (0.8 m)	2 ft. 6 in. (0.8 m)
Overall Length	7 ft. 9 in. (2.4 m)	7 ft. 9 in. (2.4 m)
Number of Pulverizer Wheels		
(PM) 16" Notched Gray Iron Wheels	15	18
(PD) 20" Notched Ductile Iron Wheels	15	18
(PC) 16" Crowfoot Gray Iron Wheels	10	12
Axle Size	4 in. (100 mm)	4 in. (100 mm)
Hitch	Pull-Type/No Transport	Pull-Type/No Transport
Scraper Kits	Optional for PM & PD Series	Optional for PM & PD Series
LED Safety Warning Lights & SMV Emblem	SMV Emblem Only	SMV Emblem Only
Powder Coat Paint, Red	Standard	Standard
Horsepower Requirements	35 HP (26.88 kW) and up	35 HP (26.88 kW) and up
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Product Attributes	P7	P8
Approximate Weight		
(PM) 16" Notched Gray Iron Wheels	949 lbs. (430 kg)	1,068 lbs. (484 kg)
(PD) 20" Notched Ductile Iron Wheels	859 lbs. (390 kg)	965 lbs. (438 kg)
(PC) 16" Crowfoot Gray Iron Wheels	906 lbs. (411 kg)	1,019 lbs. (462 kg)
Working Width	7 ft. 0 in. (2.1 m)	8 ft. 0 in. (2.4 m)
Transport Width	7 ft. 8 in. (2.3 m)	8 ft. 8 in. (2.6 m)
Transport Height	2 ft. 6 in. (0.8 m)	2 ft. 6 in. (0.8 m)
Overall Length	7 ft. 9 in. (2.4 m)	7 ft. 9 in. (2.4 m)
Number of Pulverizer Wheels		
(PM) 16" Notched Gray Iron Wheels	21	24
(PD) 20" Notched Ductile Iron Wheels	21	24
(PC) 16" Crowfoot Gray Iron Wheels	14	16
Axle Size	4 in. (100 mm)	4 in. (100 mm)
Hitch	Pull-Type/No Transport	Pull-Type/No Transport
Scraper Kits	Optional for PM & PD Series	Optional for PM & PD Series
LED Safety Warning Lights & SMV Emblem	SMV Emblem Only	SMV Emblem Only
Powder Coat Paint, Red	Standard	Standard
Horsepower Requirements	45 HP (33.6 kW) and up	45 HP (33.6 kW) and up
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Specifications subject to change with or without notice.

Figure 5-2: P Series Models

Illustrated Parts List

Drawbar Assembly, P5-P7

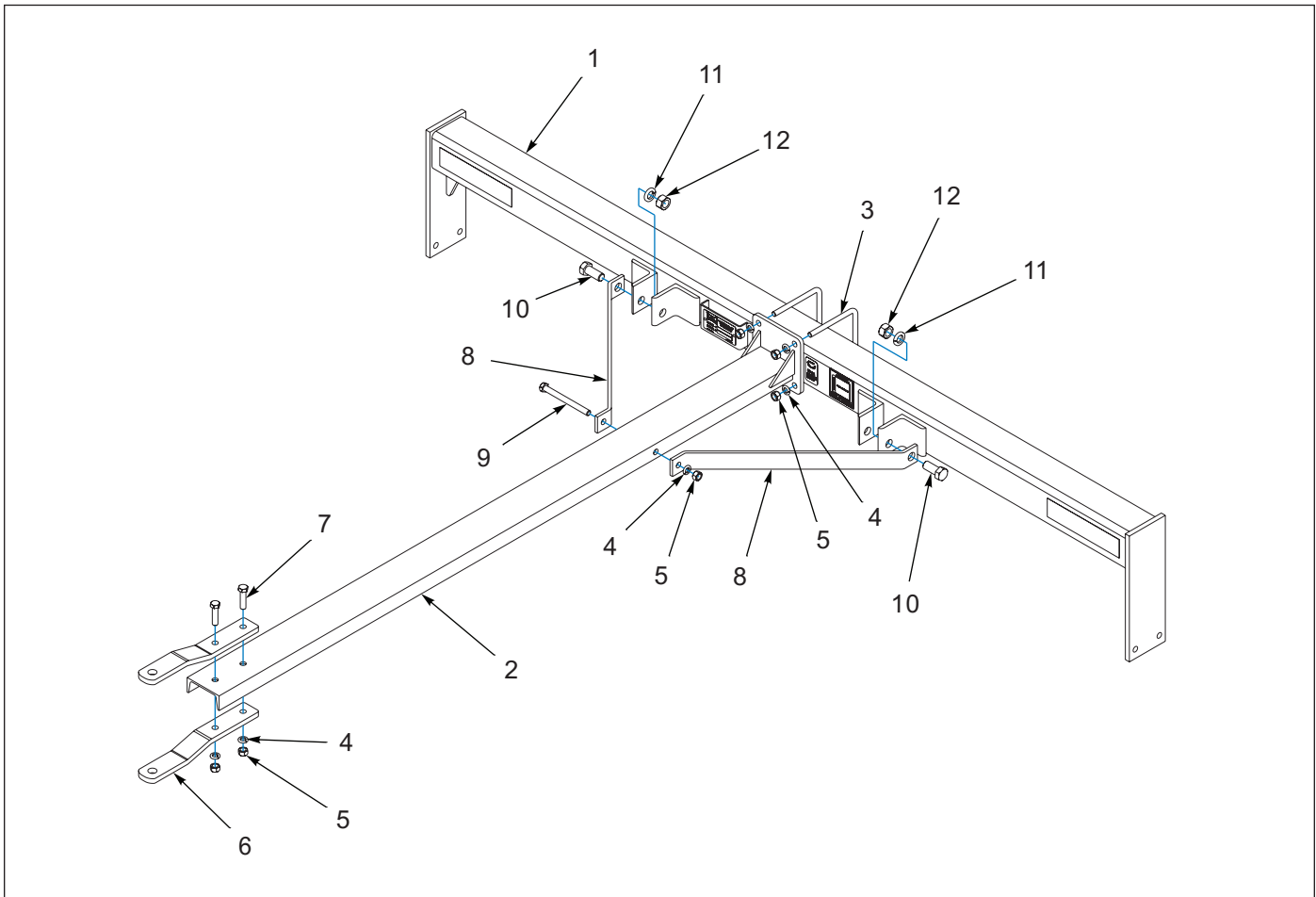


Figure 6-1: Drawbar Assembly, P5-P7

Drawbar Assembly, P5-P7

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6K403	FRAME WLDMT, 5' PULVERIZER	1
1	9J841	6' FRAME WLDMT	1
1	9J842	FRAME WLDMT - 7'	1
2	1K441	DRAWBAR	1
3	3J562	U-BOLT 1/2-13 X 5-1/2 X 4-9/16	2
4	1-861-010034-13	WASHER, LOCK 1/2 ZP	7
5	1-512-010007-09	NUT HEX 1/2-13 ZP	7
6	1C517	HITCH	2
7	1-654-010055-05	SCREW HEX CAP 1/2-13UNCX2 GR5	2
8	1K439	BRACE	2
9	1-654-010055-16	SCREW HEX CAP 1/2-13X5-1/2	1
10	1-654-010061-04	SCREW CAP 3/4-10UNCX1-3/4 GR5	2
11	1-861-010034-17	WASHER,LKG, HLCL SPR, 3/4	2
12	1-512-010007-12	NUT HEX 3/4-10 ZP	2

Drawbar Assembly, P8

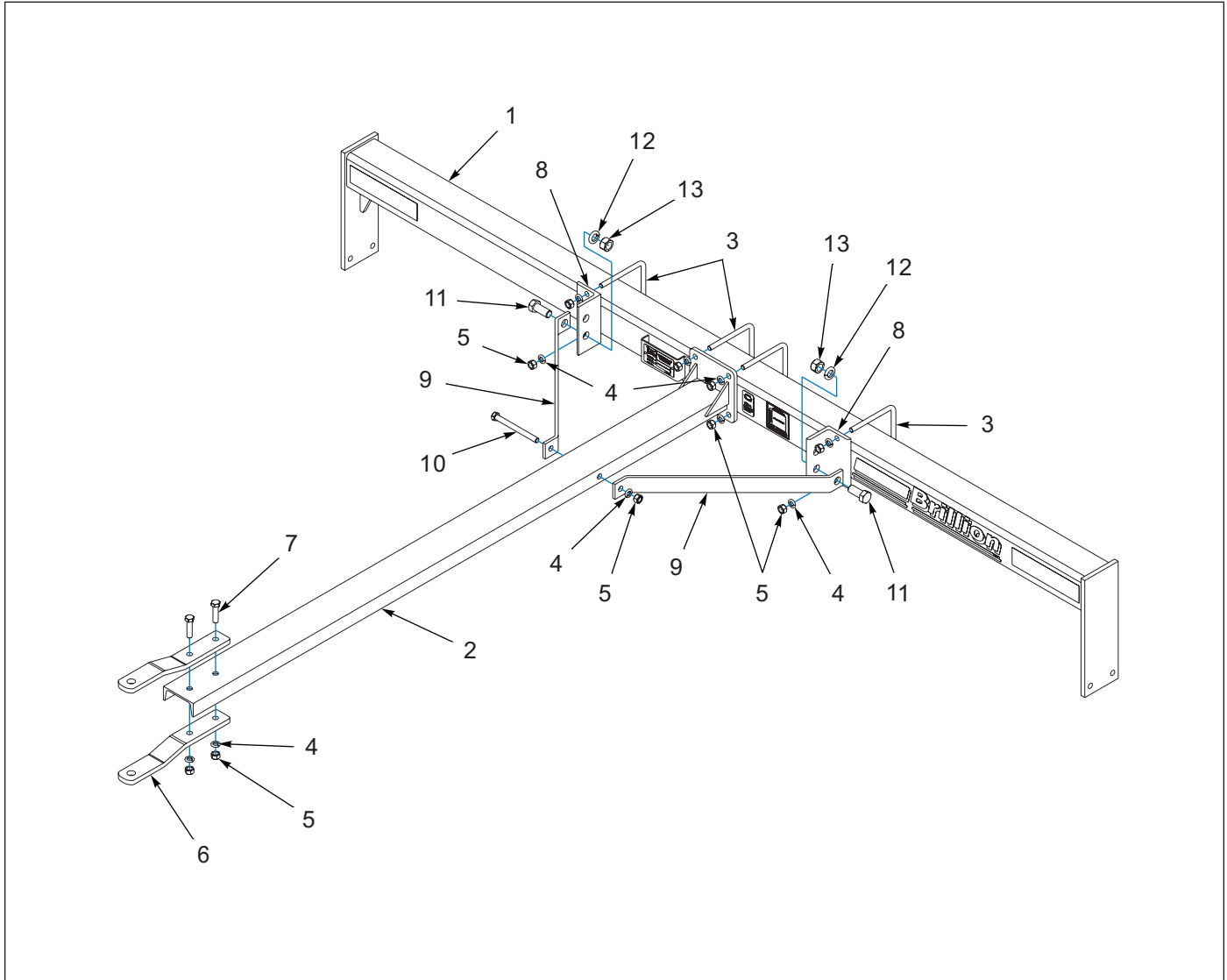


Figure 6-2: Drawbar Assembly, P8

Drawbar Assembly, P8

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6K982	8' FRAME WLDMT	1
2	1K441	DRAWBAR	1
3	3J562	U-BOLT 1/2-13 X 5-1/2 X 4-9/16	2
4	1-861-010034-13	WASHER, LOCK 1/2 ZP	7
5	1-512-010007-09	NUT HEX 1/2-13 ZP	7
6	1C517	HITCH	2
7	1-654-010055-05	SCREW HEX CAP 1/2-13UNCX2 GR5	2
8	8K989	ANGLE BRACKET	2
9	1K439	BRACE	2
10	1-654-010055-16	SCREW HEX CAP 1/2-13X5-1/2	1
11	1-654-010061-04	SCREW CAP 3/4-10UNCX1-3/4 GR5	2
12	1-861-010034-17	WASHER,LKG, HLCL SPR, 3/4	2
13	1-512-010007-12	NUT HEX 3/4-10 ZP	2

ILLUSTRATED PARTS LIST

3-PT Hitch Assembly, PP5-PP7

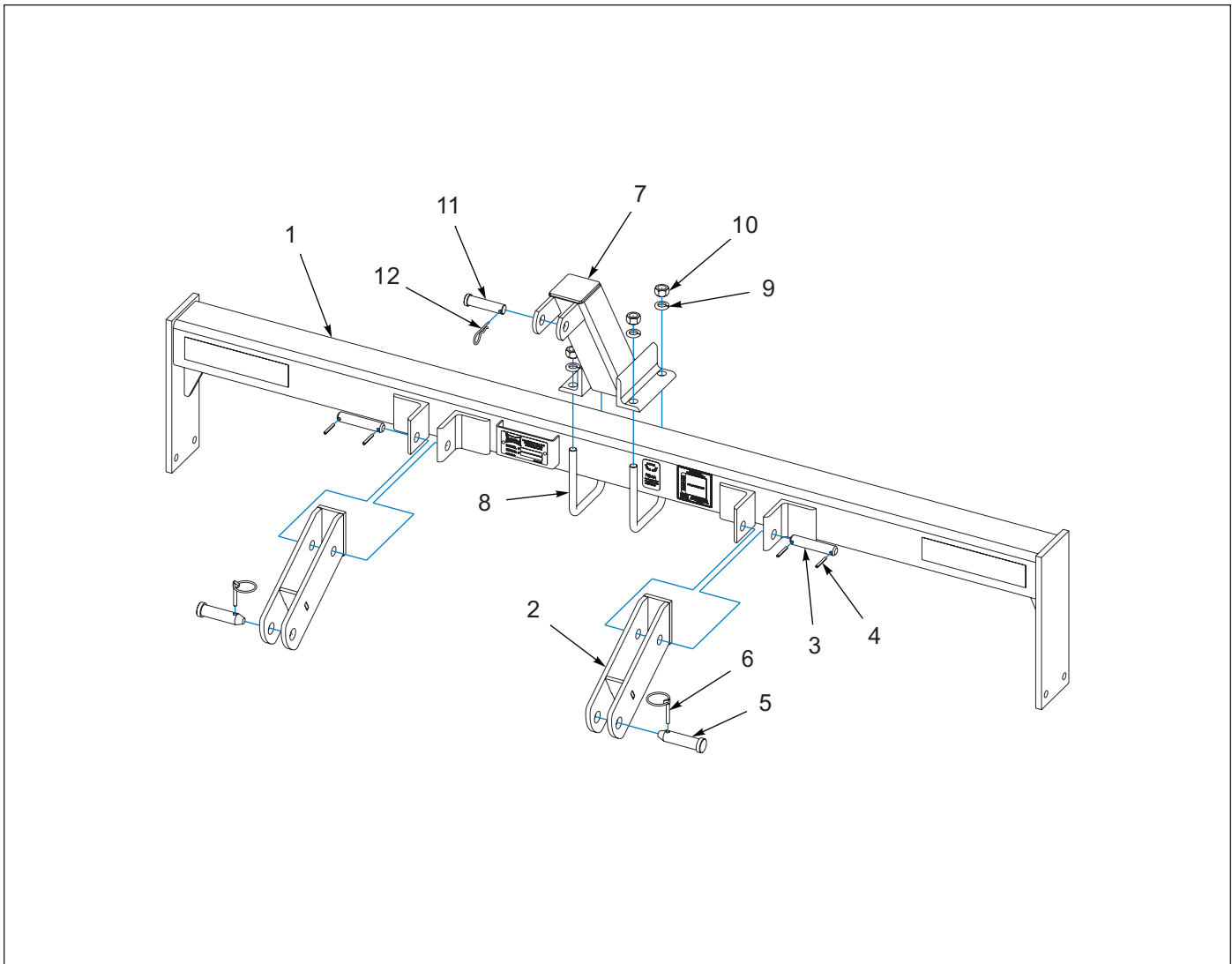


Figure 6-3: 3-PT Hitch Assembly, PP5-PP7

3-PT Hitch Assembly, PP5-PP7

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6K403	FRAME WLDMT, 5' PULVERIZER	1
1	9J841	6' FRAME WLDMT	1
1	9J842	FRAME WLDMT - 7'	1
2	9J847	HITCH WLDMT	2
3	9J848	PIN	2
4	1-647-010004177	PIN,SPRING,SLTD 3/16X1-1/2	4
5	9J849	CLEVIS PIN (7/8 X 3-1/2")	2
6	1-557-010327	PIN LYNCH 1/4X1-1/4	2
7	9J846	MAST WLDMT	1
8	9D989	U-BOLT 5/8-11X5-5/8X4-11/16	4
9	1-861-010034-15	WASHER,LKG,HLCL SPR,5/8	4
10	1-512-010007-11	NUT, HEX 5/8-11 GR2 ZP	4
11	7D642	CLEVIS PIN	1
12	6J448	HAIRPIN COTTER 1/8	1

3-PT Hitch Assembly, PP8

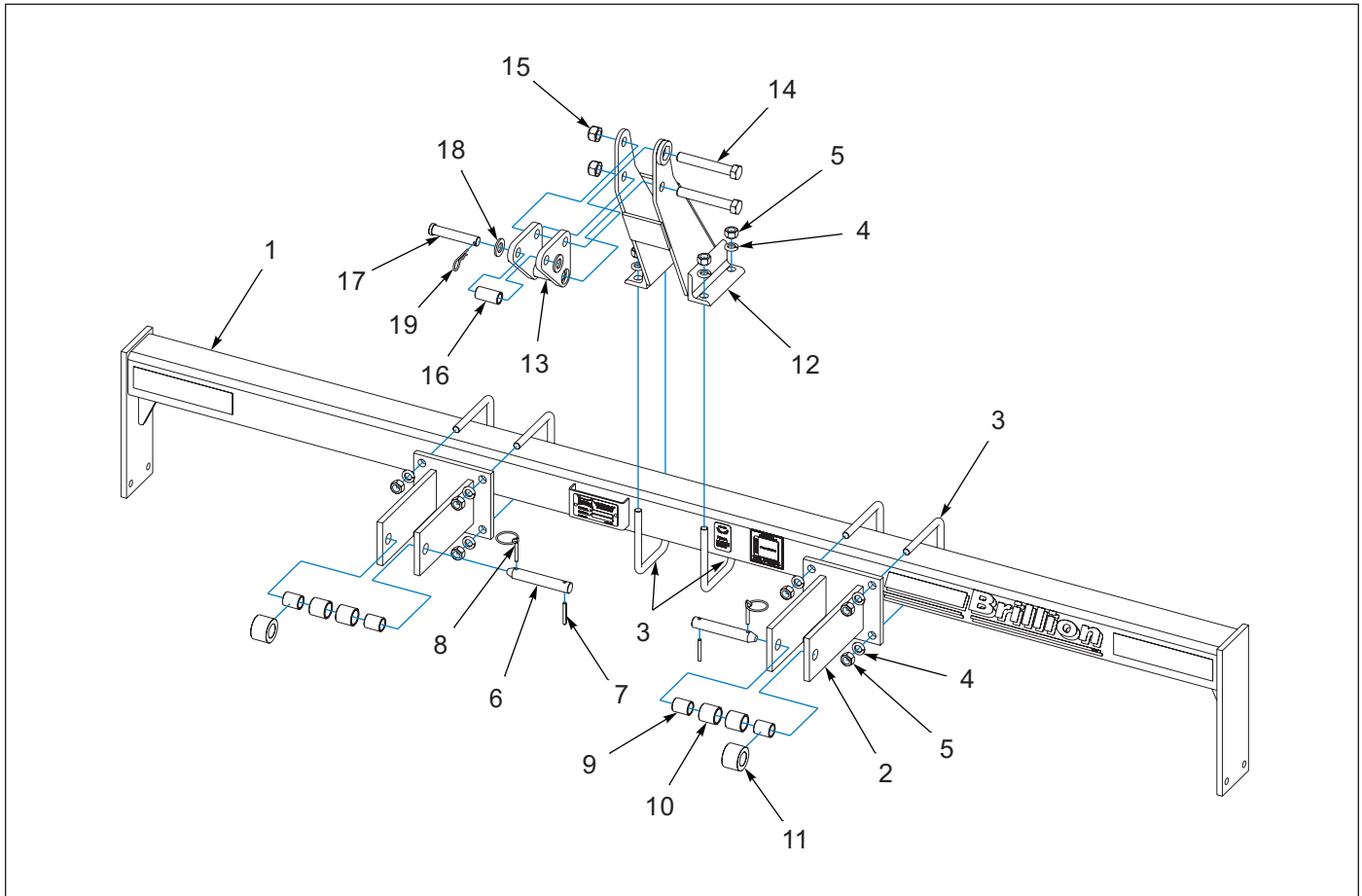


Figure 6-4: 3-PT Hitch Assembly, PP8

3-PT Hitch Assembly, PP8

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6K982	8' FRAME WLDMT	1
2	6K983	HITCH BRACKET	2
3	9D989	U-BOLT 5/8-11X5-5/8X4-11/16	6
4	1-861-010034-15	WASHER,LKG,HLCL SPR,5/8	12
5	1-512-010007-11	NUT, HEX 5/8-11 GR2 ZP	12
6	7K268	PIN (7/8 X 5-5/8)	2
7	1-647-010004221	PIN,SPRING 1/4X2 SLOTTED	2
8	1-557-010327	PIN LYNCH 1/4X1-1/4	2
9	7K227	SLEEVE - 1 1/8 OD X 1 13/32 LG	4
10	7K226	SLEEVE-1 7/16 OD X 1 13/32 LG	4
11	6K984	SLEEVE	2
12	6K977	MAST WLDMT	1
13	7K107	FLOAT LINK	1
14	1-654-010061-15	SCREW,HX CP 3/4-10UNCX5 GR5	2
15	1-512-010005-15	NUT,HEX,SLFLKG GRB 3/4-10	2
16	7K229	SLEEVE - 1 OD X 2 LG	1
17	5C077	CLEVIS PIN (3/4 X 4)	1
18	1-861-010032-20	WASHER, FLAT,3/4 N ZP/CD	2
19	6J448	HAIRPIN COTTER 1/8	1

SMV and Manual Canister

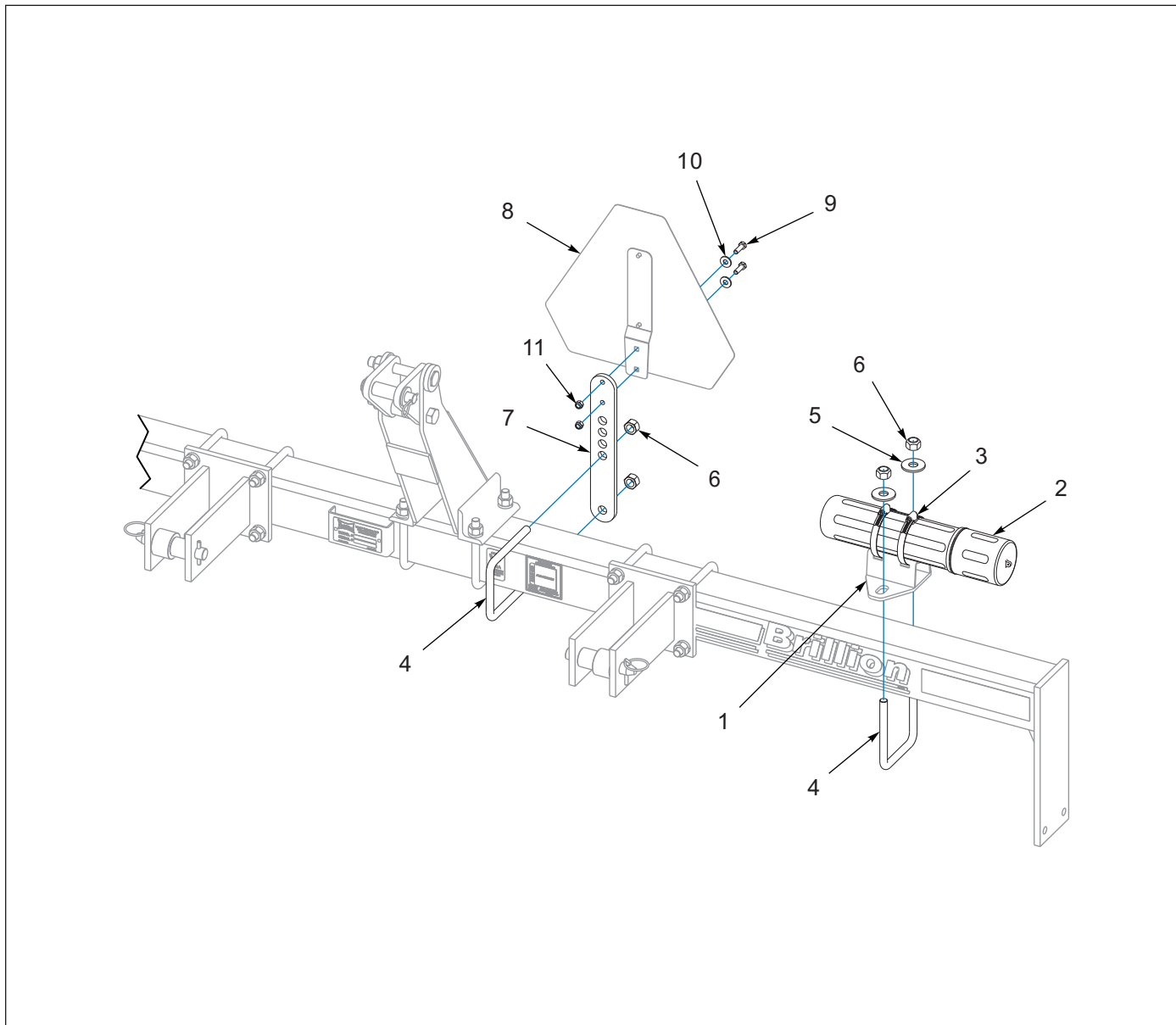


Figure 6-5: SMV and Manual Canister

SMV and Manual Canister

ITEM	PART NUMBER	DESCRIPTION	QTY
1	8K645	CANISTER BRACKET WELDMENT	1
2	1-116-010019	BOX, MANUAL STORAGE	1
3	105-0093	HOSE CLAMP 4-1/2 IDEAL #5264	2
4	9D989	U-BOLT 5/8-11X5-5/8X4-11/16	3
5	1-861-010032-19	WASHER, FLAT 5/8 W ZP/CD	2
6	1-512-010005-13	NUT,HEX SLFLKG GRB 5/8-11	4
7	164678	MOUNT, SMV	1
8	2P151	SMV W/BRACKET	1
9	1-654-010049-05	SCREW HX CP 5/16-18UNCX1 GR5	2
10	1-861-010032-09	WASHER, FLAT 5/16 W ZP/CD	2
11	104032	NUT,HX SLF-LKG W/MYL 5/16-18	2

Frame to Roller Assembly

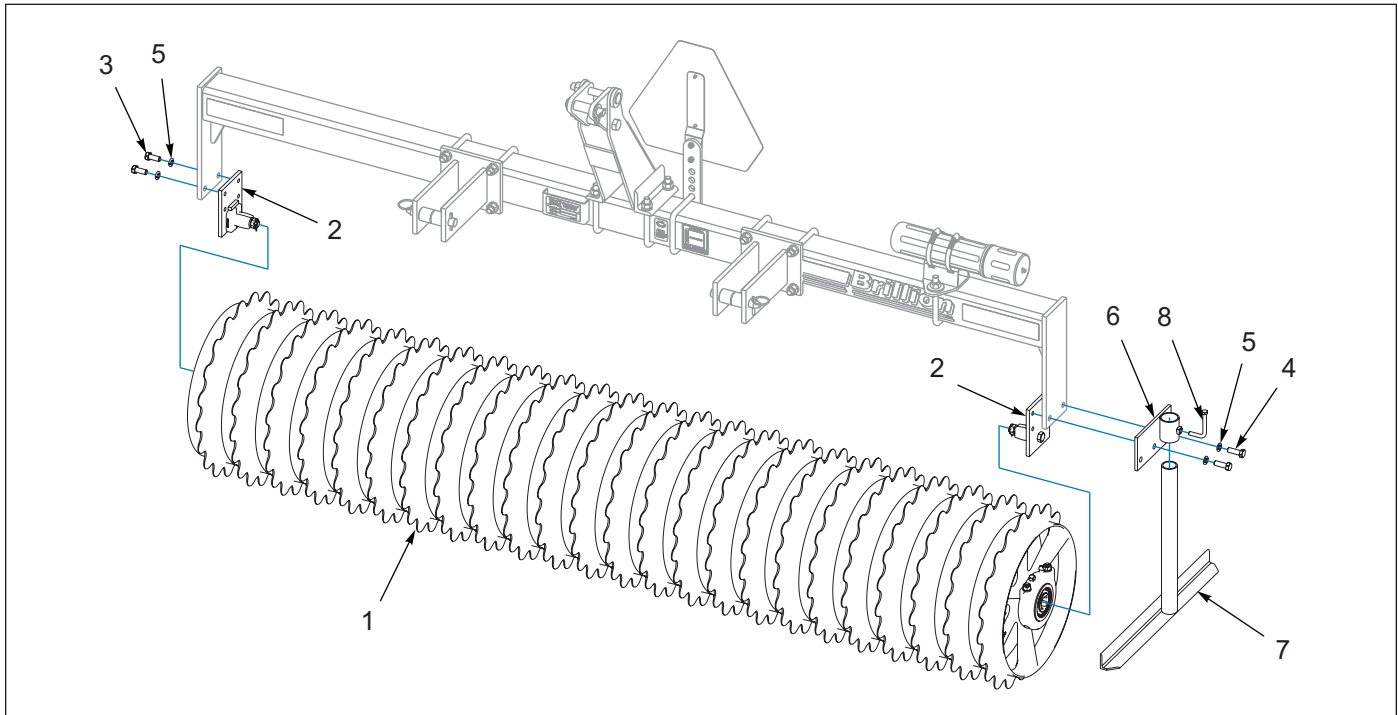


Figure 6-6: Frame to Roller Assembly

Frame to Roller Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY
1	6K417	WHEEL & AXLE ASSY - PPD5 (NOTCH DUCTILE) (SEE PAGE 6-8)	1
1	1K012	WHEEL & AXLE ASSY 6' (NOTCH DUCTILE) (SEE PAGE 6-8)	1
1	1K013	WHEEL & AXLE ASSY 7' (NOTCH DUCTILE) (SEE PAGE 6-8)	1
1	6K415	WHEEL & AXLE ASSY - PPM5 (NOTCH GRAY) (SEE PAGE 6-9)	1
1	9J839	WHEEL & AXLE ASSEM - 6' (NOTCH GRAY) (SEE PAGE 6-9)	1
1	4J608	WHEEL AND AXLE ASSY - FR (NOTCH GRAY) (SEE PAGE 6-9)	1
1	6K427	WHEEL & AXLE ASSY - PPC5 (CROWFOOT) (SEE PAGE 6-10)	1
1	1K018	WHEEL & AXLE ASSY 6' (CROWFOOT) (SEE PAGE 6-10)	1
1	4J645	WHEEL AND AXLE ASSY - FR (CROWFOOT) (SEE PAGE 6-10)	1
1	6K429	WHEEL & AXLE ASSY - PPG5 (SMOOTH) (SEE PAGE 6-11)	1
1	1K315	WHEEL & AXLE ASSY 6' (SMOOTH) (SEE PAGE 6-11)	1
1	1K316	WHEEL & AXLE ASSY 7' (SMOOTH) (SEE PAGE 6-11)	1
1	1K014	WHEEL & AXLE ASSY 8' (NOTCH DUCTILE) (SEE PAGE 6-8)	1
1	9J840	WHEEL & AXLE ASSEM - 8' (NOTCH GRAY) (SEE PAGE 6-9)	1
1	1K019	WHEEL & AXLE ASSY 8' (CROWFOOT) (SEE PAGE 6-10)	1
1	4K639	WHEEL & AXLE ASSY-DUCT CROWFT (CROWFOOT DUCTILE) (SEE PAGE 6-10)	1
1	1K317	WHEEL & AXLE ASSY 8' (SMOOTH) (SEE PAGE 6-11)	1
2	9J844	MOUNTING PLATE ASSY (SEE PAGE 6-7)	2
3	1-654-010055-02	SCREW 1/2-13UNCX1-1/4 CP GR5	4
4	1-654-010055-03	SCREW,HEX CAP,1/2-13UNCX1-1/2 (USED WITH ITEM 6)	2
5	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	4
6	9J845	BRACKET WLDMT	1
7	9J850	STAND WLDMT (3-PT MODELS ONLY)	1
8	9J851	SCREW (3-PT MODELS ONLY)	1

Mounting Plate

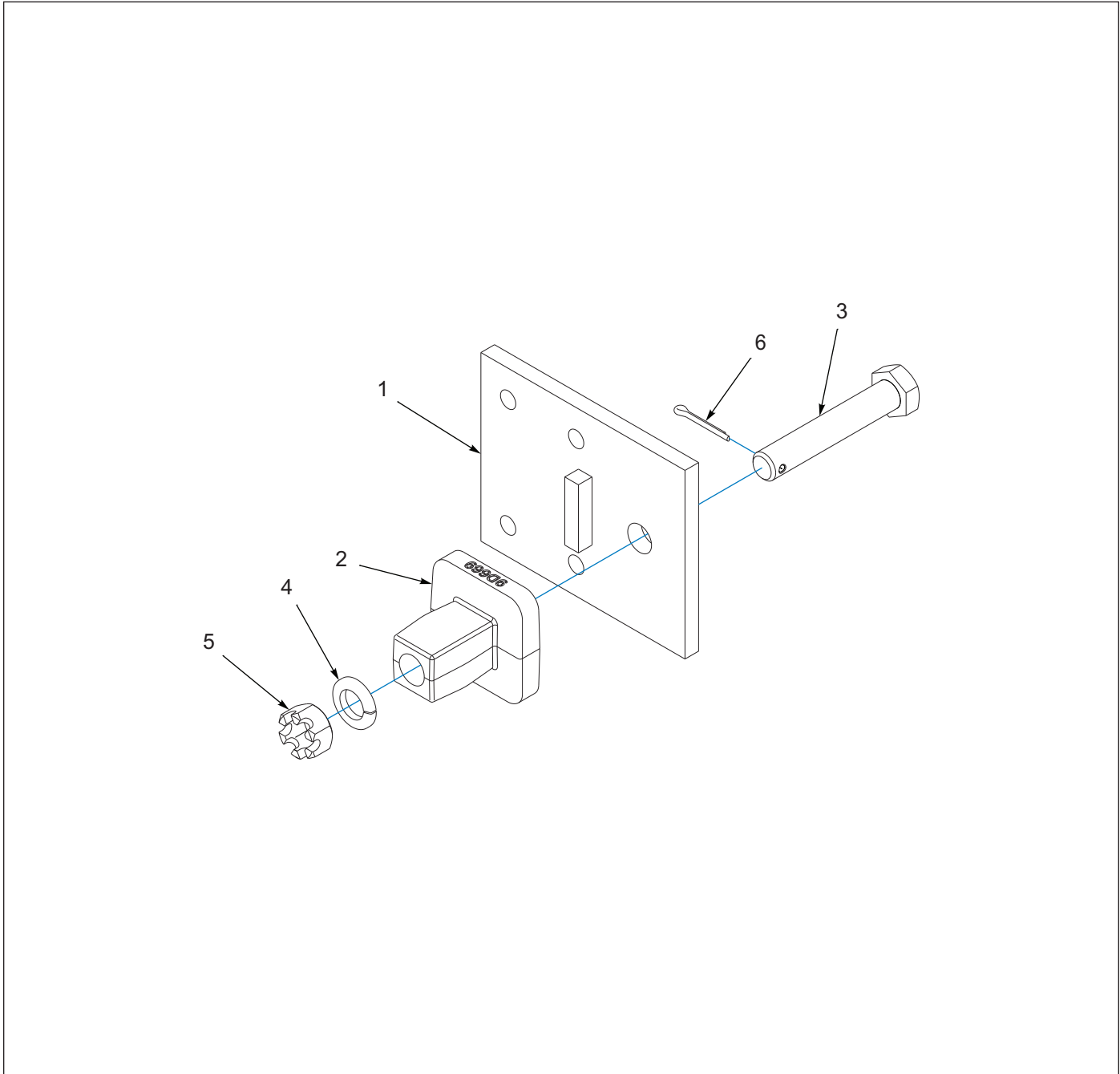


Figure 6-7: Mounting Plate

Mounting Plate

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J844	MOUNTING PLATE ASSY	1
1	9J870	MOUNTING PLATE WLDMT	1
2	9D669	STRAIGHT AXLE MOUNT	1
3	9D864	DRILLED BOLT	1
4	1-861-010034-15	WASHER,LKG,HLCL SPR,5/8	1
5	4D529	SLOTTED NUT 5/8-11 ZP	1
6	101386	PIN, COTTER, 1/8X1	1

Roller Axle Assemblies, 20" Notched Ductile

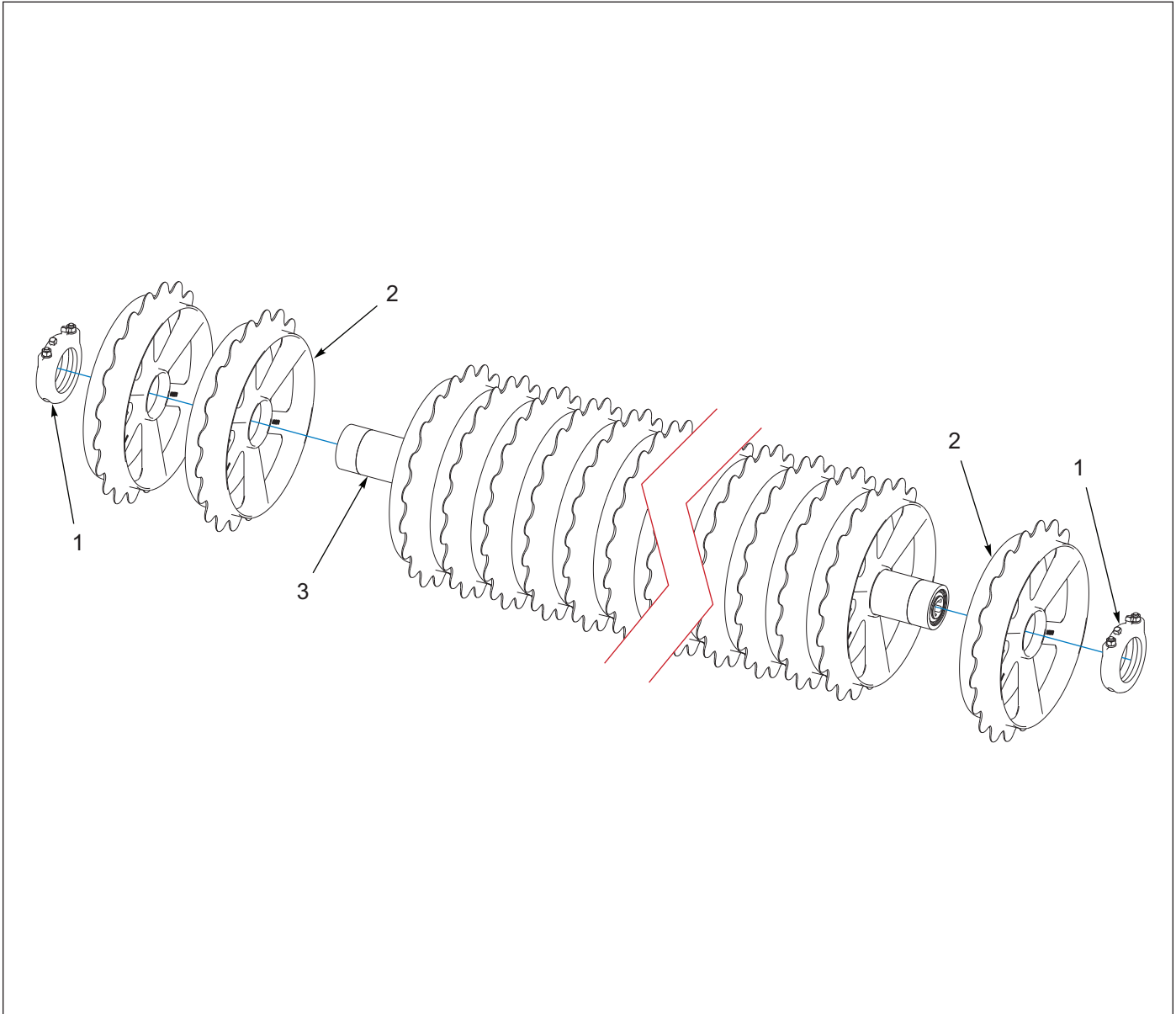


Figure 6-8: Roller Axle Assemblies, 20" Notched Ductile

Roller Axle Assemblies, 20" Notched Ductile

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS	5'	6'	7'	8'
	6K417	WHEEL & AXLE ASSY - PPD5	1	--	--	--
	1K012	WHEEL & AXLE ASSY 6'	--	1	--	--
	1K013	WHEEL & AXLE ASSY 7'	--	--	1	--
	1K014	WHEEL & AXLE ASSY 8'	--	--	--	1
1	5J375	AXLE CLAMP ASSY (SEE PAGE 6-17)	2	2	2	2
2	8J001	20" DUCTILE NOTCHED 7004107	15	18	21	24
3	6K413	PIPE AXLE ASSEMBLY (61-1/8") (SEE PAGE 6-12)	1	--	--	--
3	9J875	PIPE AXLE ASSY - 73 1/8" (SEE PAGE 6-12)	--	1	--	--
3	4J610	PIPE AXLE ASSY - FR - 85 1/8" (SEE PAGE 6-12)	--	--	1	--
3	9J874	PIPE AXLE ASSY - 97 1/8" (SEE PAGE 6-12)	--	--	--	1

Roller Axle Assemblies, 16" Notched Gray Iron

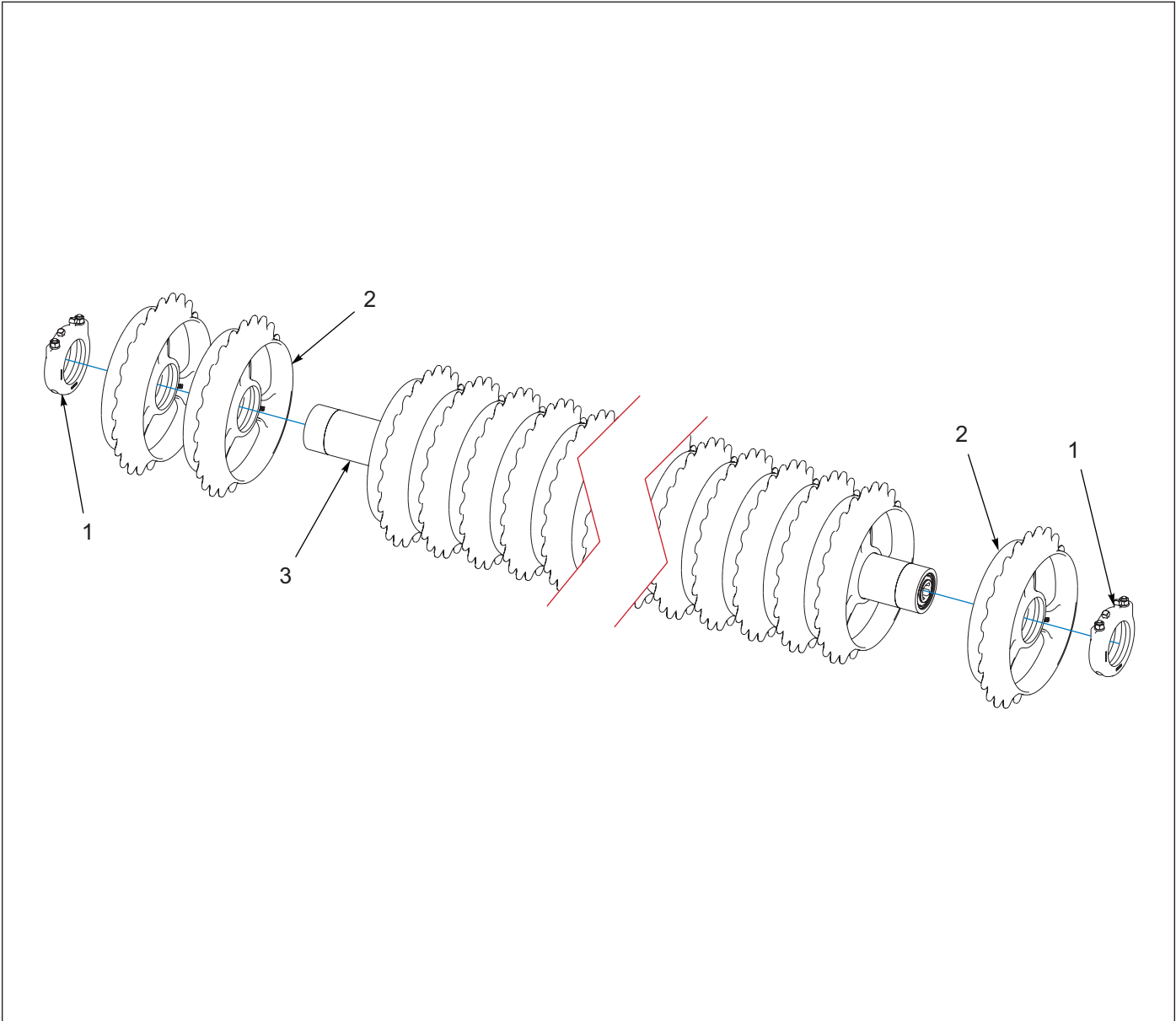


Figure 6-9: Roller Axle Assemblies, 16" Notched Gray Iron

Roller Axle Assemblies, 16" Notched Gray Iron

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS	5'	6'	7'	8'
	6K415	WHEEL & AXLE ASSY - PPM5	1	--	--	--
	9J839	WHEEL & AXLE ASSEM - 6'	--	1	--	--
	4J608	WHEEL AND AXLE ASSY - FR	--	--	1	--
	9J840	WHEEL & AXLE ASSEM - 8'	--	--	--	1
1	5J375	AXLE CLAMP ASSY (SEE PAGE 6-17)	2	2	2	2
2	8C988	CASTING, 16" NOTCHED WHEEL	15	18	21	24
3	6K413	PIPE AXLE ASSEMBLY (61-1/8") (SEE PAGE 6-12)	1	--	--	--
3	9J875	PIPE AXLE ASSY - 73 1/8" (SEE PAGE 6-12)	--	1	--	--
3	4J610	PIPE AXLE ASSY - FR - 85 1/8" (SEE PAGE 6-12)	--	--	1	--
3	9J874	PIPE AXLE ASSY - 97 1/8" (SEE PAGE 6-12)	--	--	--	1

Roller Axle Assemblies, Crowfoot

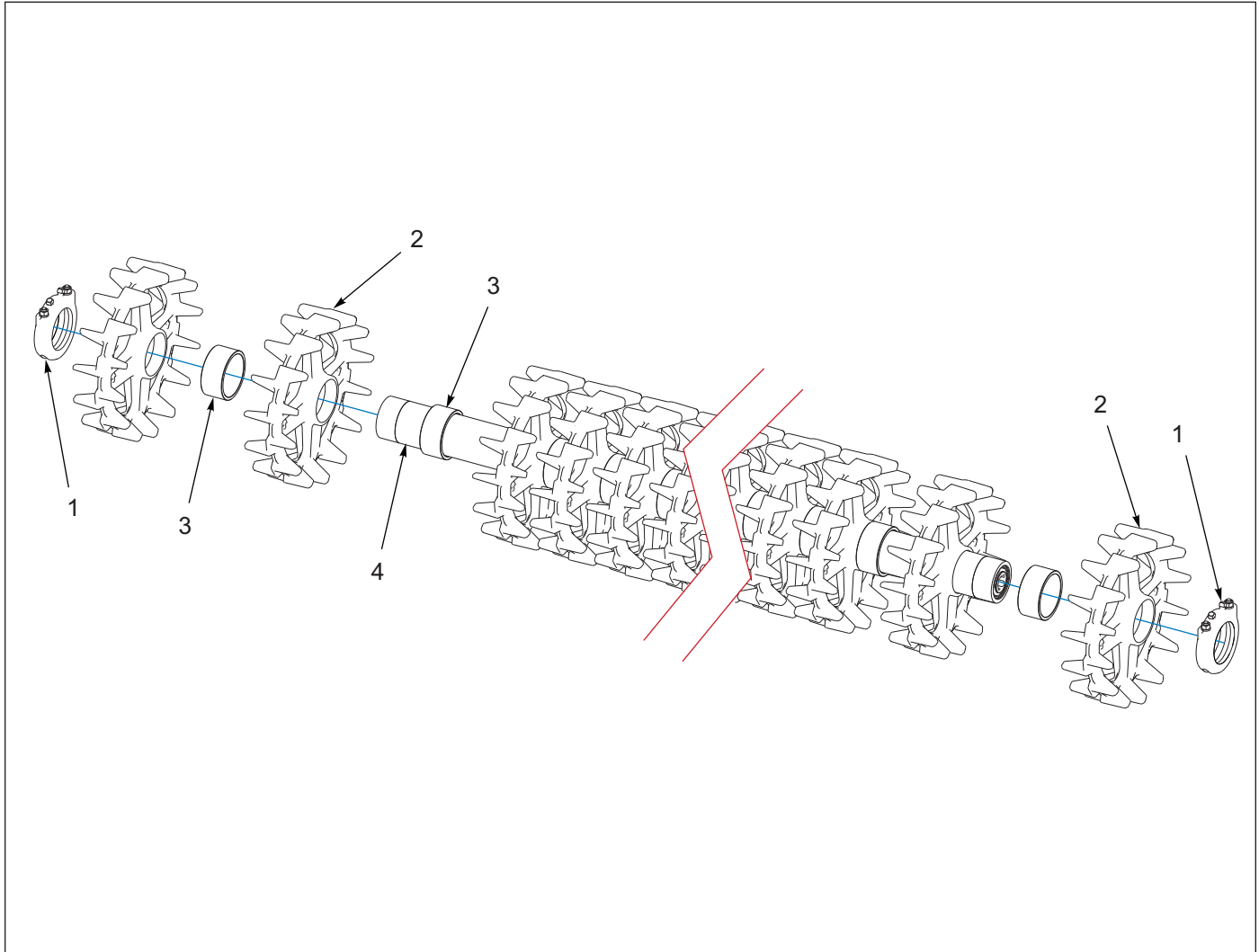


Figure 6-10: Roller Axle Assemblies, Crowfoot

Roller Axle Assemblies, Crowfoot

ITEM	PART NUMBER	DESCRIPTION	QTY				
			5'	6'	7'	8'	8'
		MODELS	5'	6'	7'	8'	8'
	6K427	WHEEL & AXLE ASSY - PPC5	1	--	--	--	--
	1K018	WHEEL & AXLE ASSY 6'	--	1	--	--	--
	4J645	WHEEL AND AXLE ASSY - FR	--	--	1	--	--
	1K019	WHEEL & AXLE ASSY 8'	--	--	--	1	--
	4K639	WHEEL & AXLE ASSY-DUCT CROWFT	--	--	--	--	1
1	5J375	AXLE CLAMP ASSY (SEE PAGE 6-17)	2	2	2	2	2
2	1D927	CASTING, 16" CROWFOOT WHEEL	10	12	14	16	--
2	9J811	CASTING, 20" DUCTILE CROWFOOT	--	--	--	--	16
3	2D213	SPACER	9	11	13	15	--
3	9J820	TUBE,RND 4/125X4.5X3.688	--	--	--	--	15
4	6K413	PIPE AXLE ASSEMBLY (61-1/8") (SEE PAGE 6-12)	1	--	--	--	--
4	9J875	PIPE AXLE ASSEMBLY - 73 1/8"(SEE PAGE 6-12)	--	1	--	--	--
4	4J610	PIPE AXLE ASSY - FR - 85 1/8" (SEE PAGE 6-12)	--	--	1	--	--
4	9J874	PIPE AXLE ASSY - 97 1/8" (SEE PAGE 6-12)	--	--	--	1	1

Roller Axle Assemblies, 18" Smooth

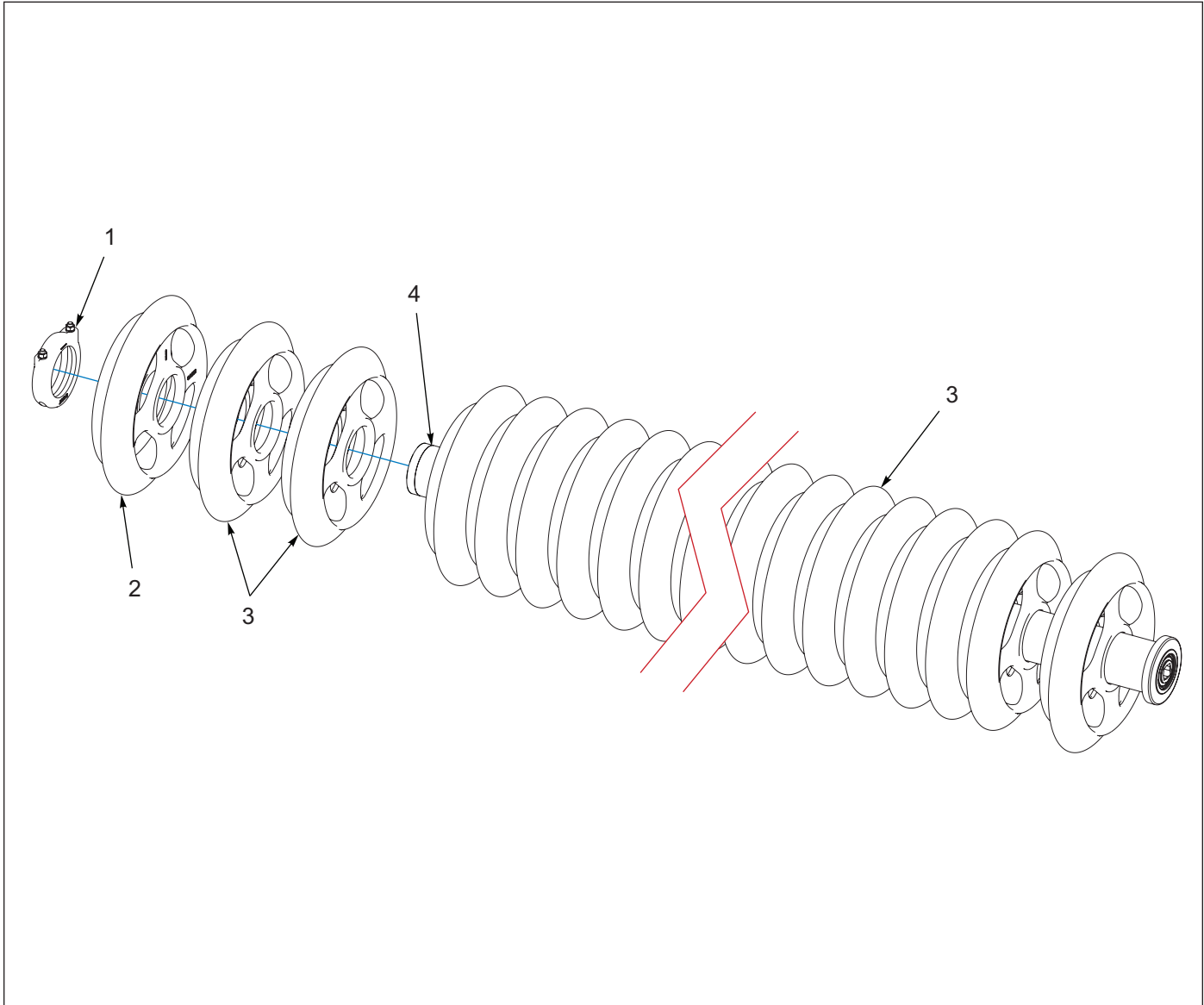


Figure 6-11: Roller Axle Assemblies, 18" Smooth

Roller Axle Assemblies, 18" Smooth

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS				
	6K429	WHEEL & AXLE ASSY - PPG5	1	--	--	--
	1K315	WHEEL & AXLE ASSY - 6'	--	1	--	--
	1K316	WHEEL & AXLE ASSY - 7'	--	--	1	--
	1K317	WHEEL & AXLE ASSY - 8'	--	--	--	1
1	5J376	AXLE CLAMP ASSY (SEE PAGE 6-18)	1	1	1	1
2	0A086	CASTING 18" END WHEEL	1	1	1	1
3	0A046	CASTING 18" WHEEL	14	17	20	23
4	6K431	PIPE AXLE ASSEMBLY (61-1/8") (SEE PAGE 6-14)	1	--	--	--
4	1K324	PIPE AXLE ASSY - 72 1/8" (SEE PAGE 6-14)	--	1	--	--
4	1K325	PIPE AXLE ASSY - 85 1/8" (SEE PAGE 6-14)	--	--	1	--
4	1K326	PIPE AXLE ASSY - 97 1/8" (SEE PAGE 6-14)	--	--	--	1

4" Pipe Axle Assembly

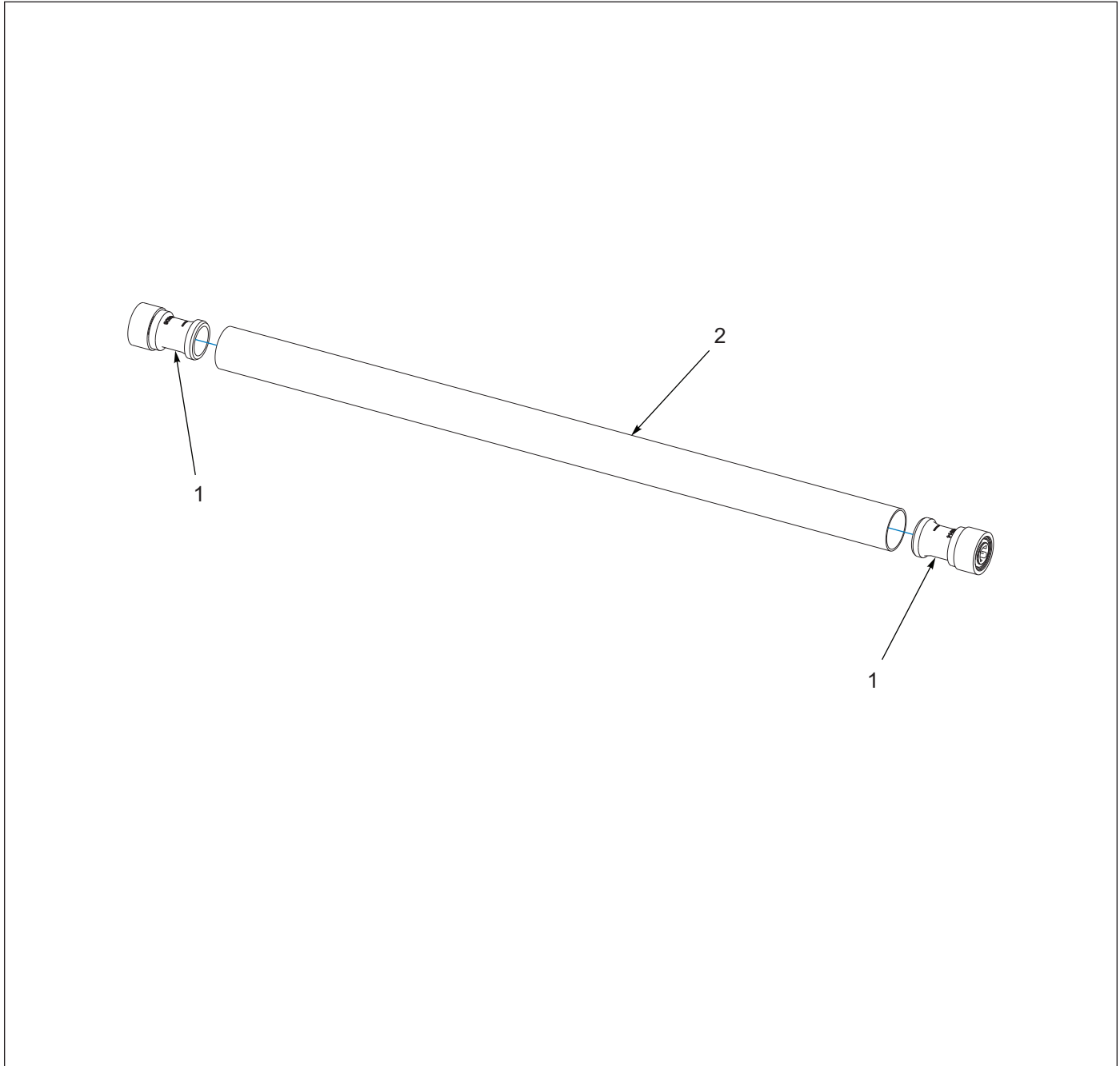


Figure 6-12: 4" Pipe Axle Assembly

4" Pipe Axle Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS				
	6K413	PIPE AXLE ASSEMBLY (61-1/8") (5FT)	1	--	--	--
	9J875	PIPE AXLE ASSEMBLY - 73 1/8" (6FT)	--	1	--	--
	4J610	PIPE AXLE ASSY - FR - 85 1/8" (7FT)	--	--	1	--
	9J874	PIPE AXLE ASSY - 97 1/8" (8FT)	--	--	--	1
1	9C182	OUTER BEARING HOUSING ASSY (SEE PAGE 6-13)	2	2	2	2
2	-----	AXLE PIPE (NOT SOLD SEPARATELY)	1	1	1	1

Bearing Housing Assembly, 9C182

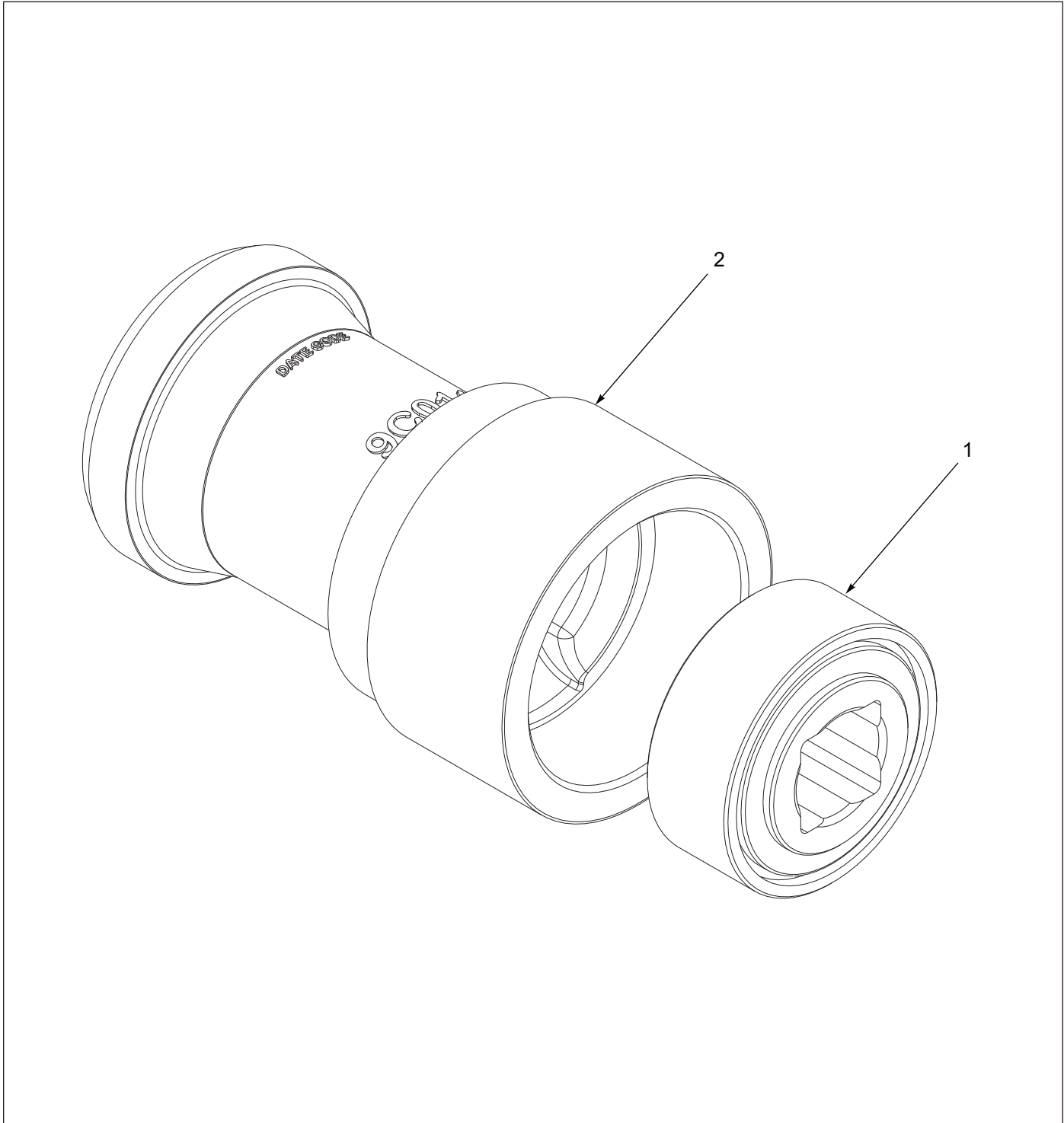


Figure 6-13: Bearing Housing Assembly, 9C182

Bearing Housing Assembly, 9C182

ITEM	PART NUMBER	DESCRIPTION	QTY
	9C182	OUTER BEARING HOUSING ASSY	1
1	9C016	BEARING	1
2	9C014	OUTER BEARING HOUSING	1

4-1/2" Pipe Axle Assembly

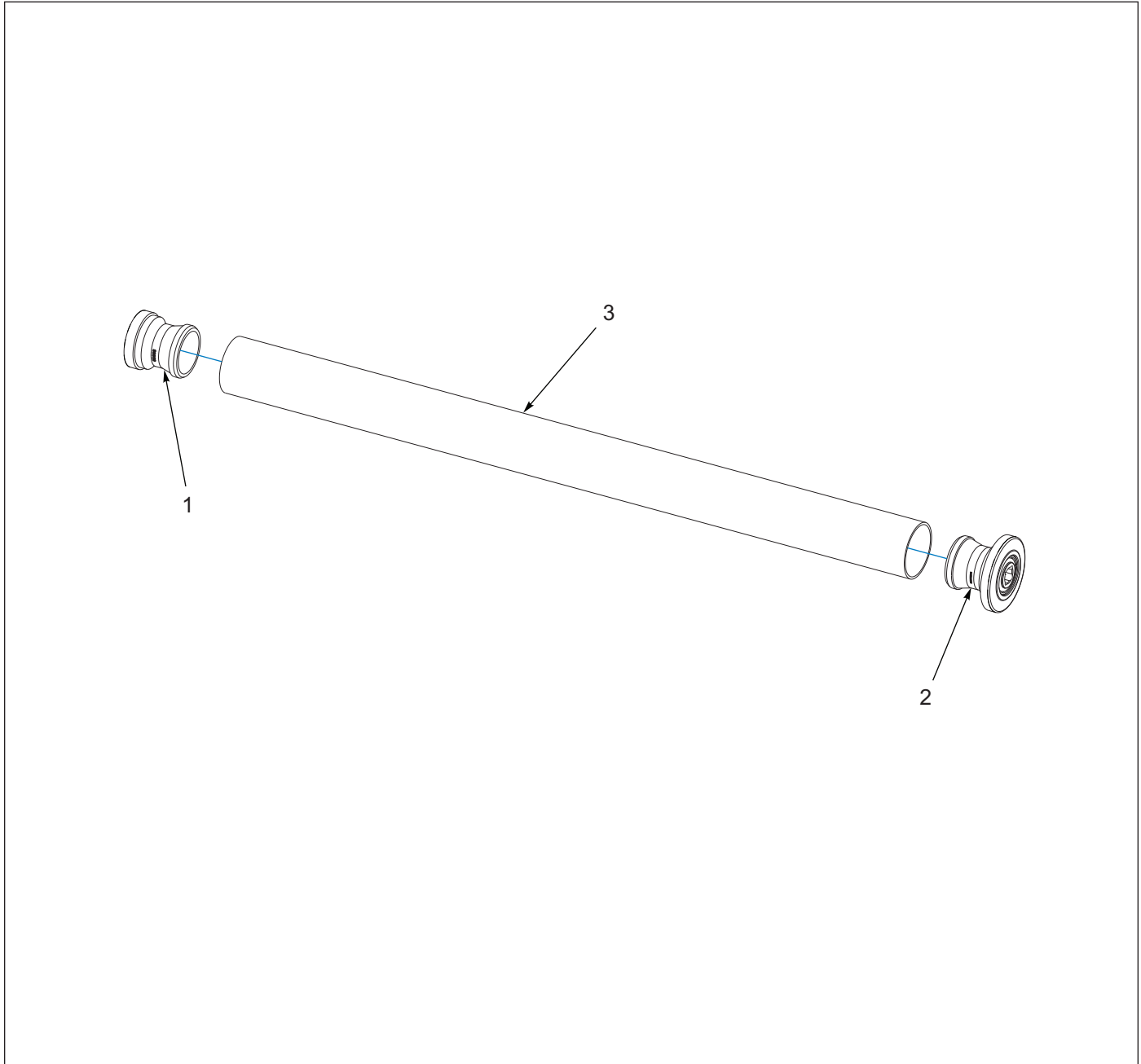


Figure 6-14: 4-1/2" Pipe Axle Assembly

4-1/2" Pipe Axle Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS	5'	6'	7'	8'
	6K431	PIPE AXLE ASSEMBLY (61-1/8") (5FT)	1	--	--	--
	1K324	PIPE AXLE ASSY - 72 1/8" (6FT)	--	1	--	--
	1K325	PIPE AXLE ASSY - 85 1/8" (7FT)	--	--	1	--
	1K326	PIPE AXLE ASSY - 97 1/8" (8FT)	--	--	--	1
1	7J035	BEARING HOUSING ASSY (SEE PAGE 6-15)	1	1	1	1
2	5D202	INNER BRG. HOUSING ASSEMBLY (SEE PAGE 6-16)	1	1	1	1
3	-----	AXLE PIPE (NOT SOLD SEPARATELY)	1	1	1	1

Bearing Housing Assembly, 7J035

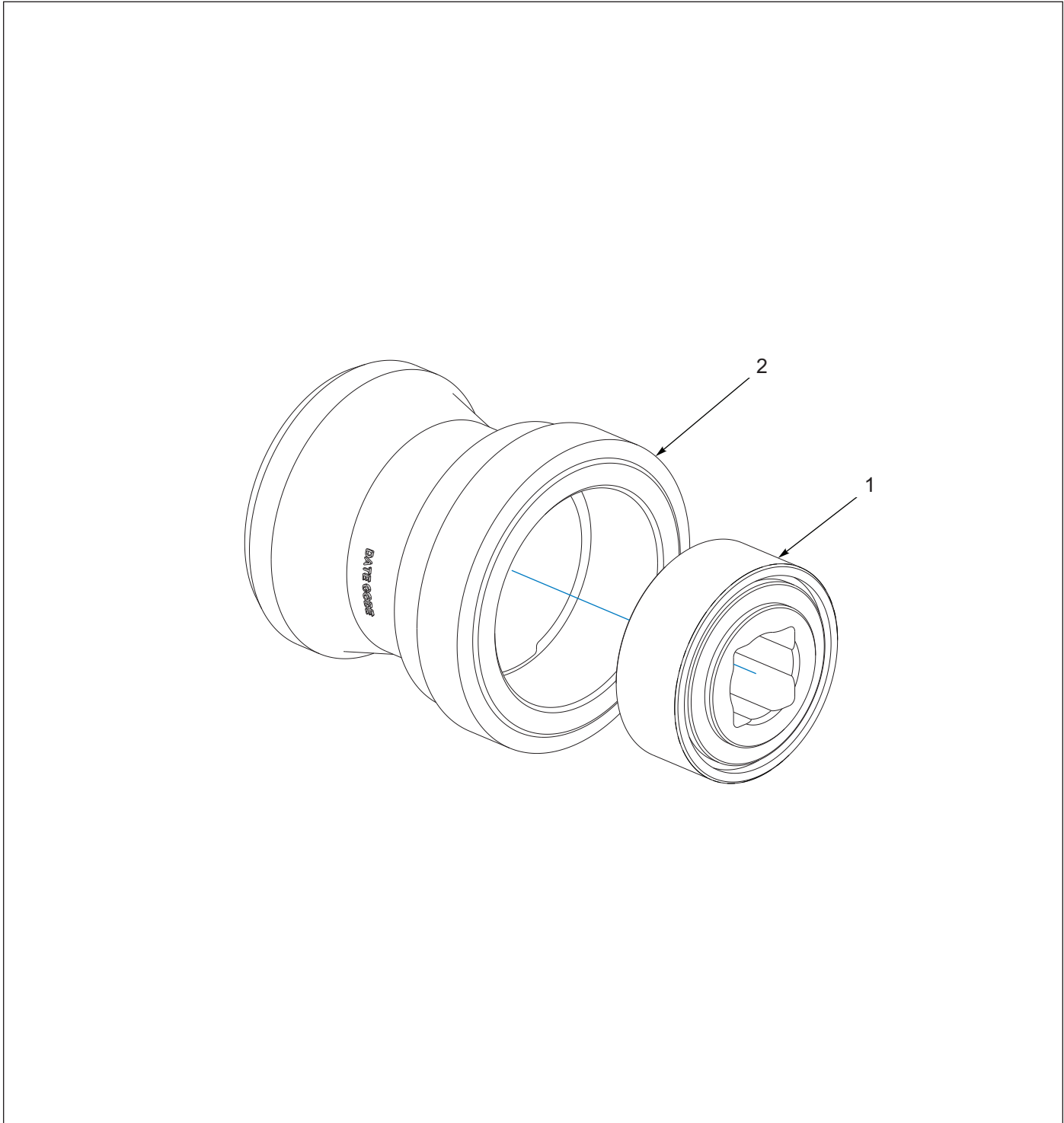


Figure 6-15: Bearing Housing Assembly, 7J035

Bearing Housing Assembly, 7J035

ITEM	PART NUMBER	DESCRIPTION	QTY
	7J035	BEARING HOUSING ASSY	1
1	9C016	BEARING	1
2	2K843	BEARING HOUSING	1

Bearing Housing Assembly, 5D202

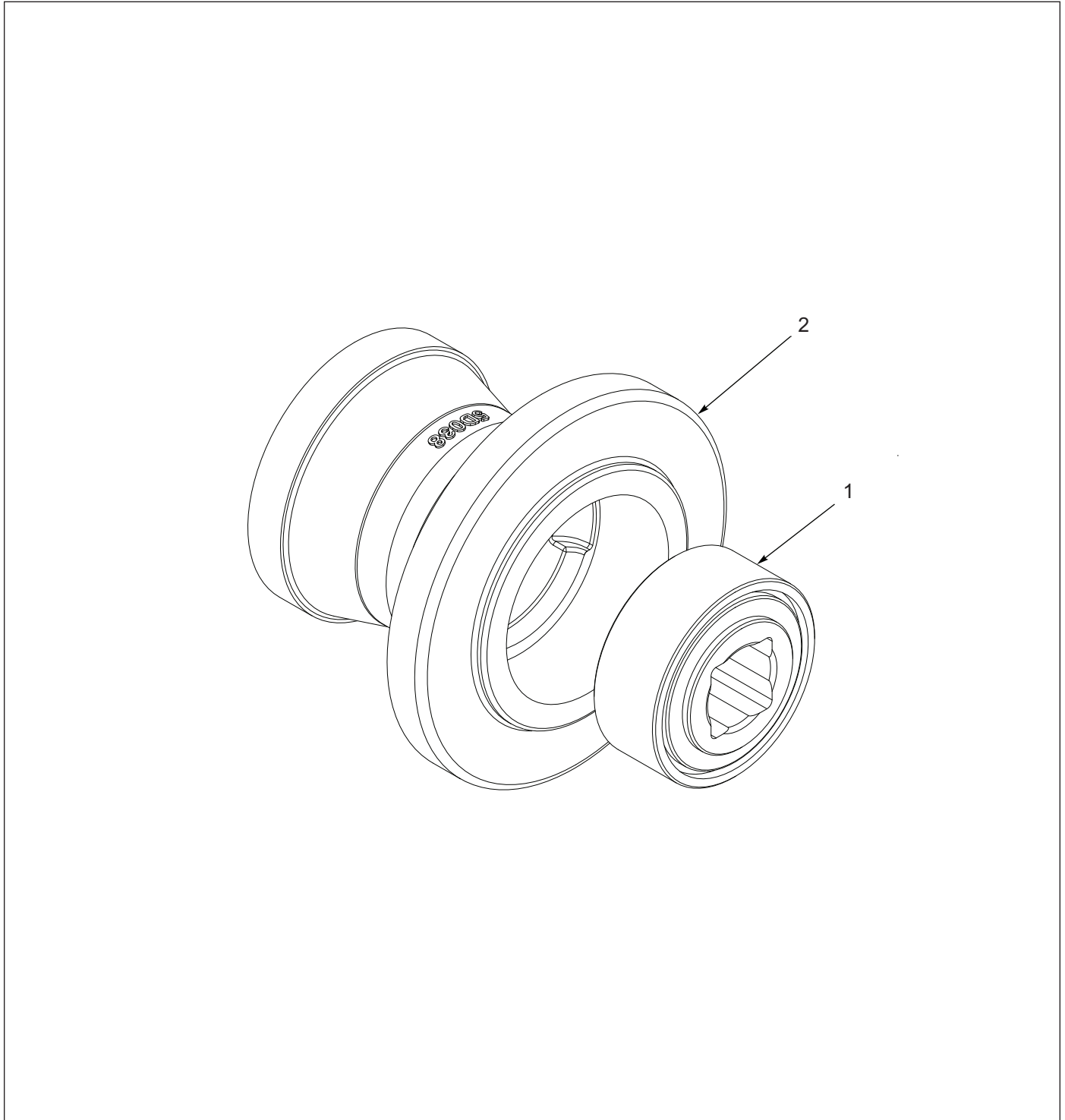


Figure 6-16: Bearing Housing Assembly, 5D202

Bearing Housing Assembly, 5D202

ITEM	PART NUMBER	DESCRIPTION	QTY
	5D202	INNER BRG. HOUSING ASSY	1
1	9C016	BEARING	1
2	5D038	INNER BRG. HOUSING (7003752)	1

Axle Clamp Assembly, 4" Axle

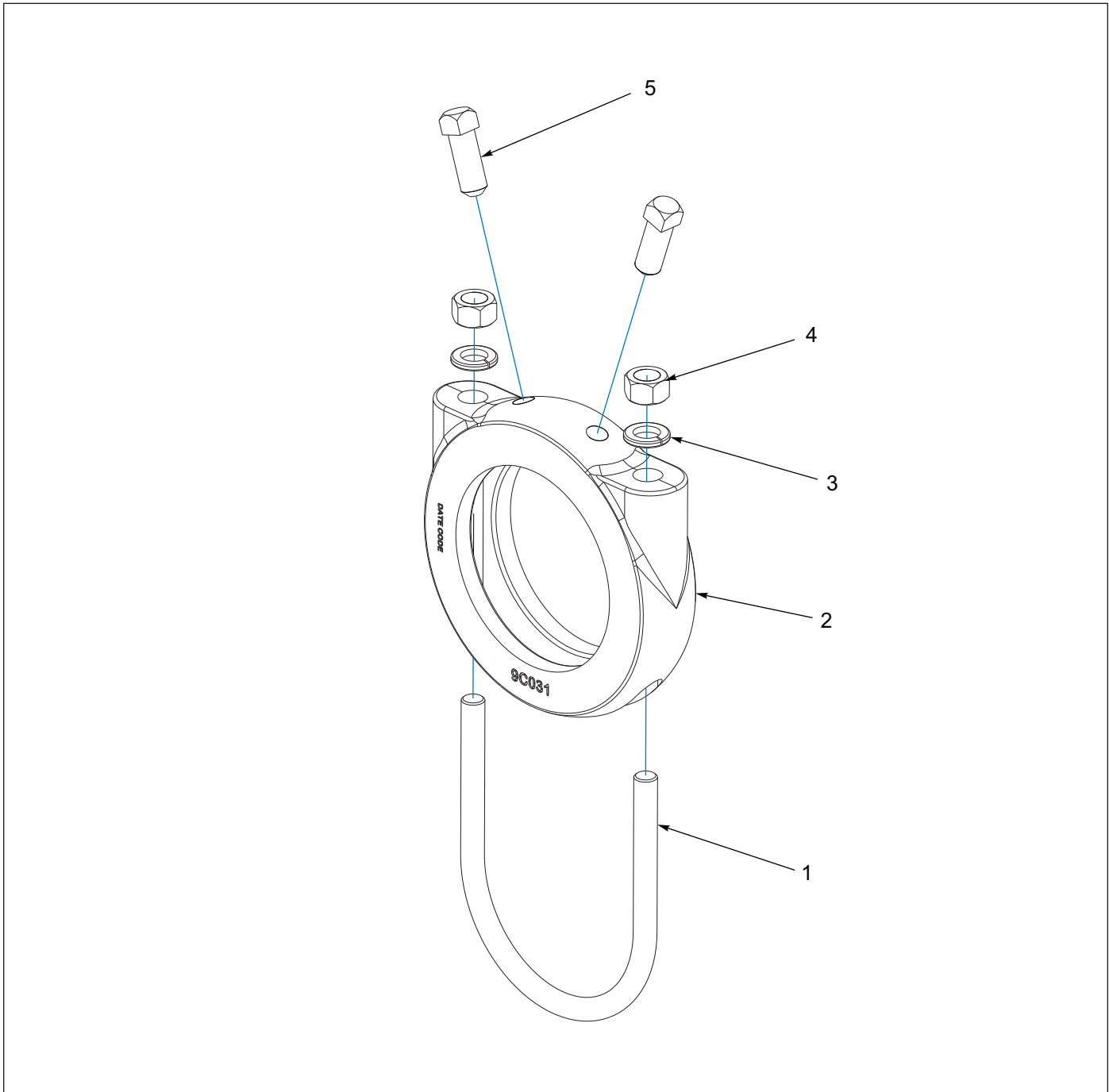


Figure 6-17: Axle Clamp Assembly, 4" Axle

Axle Clamp Assembly, 4" Axle

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J375	AXLE CLAMP ASSEM	1
1	9D673	U-BOLT, 1/2-13 X 3-1/4 X 4-9/16	1
2	9C031	AXLE CLAMP	1
3	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	2
4	1-512-010007-09	NUT, HEX 1/2-13, ZP	2
5	1-654-010080-2	SCREW SET 1/2 X 1-1/4 SQHD CP PT	2

Axle Clamp Assembly, 4-1/2" Axle

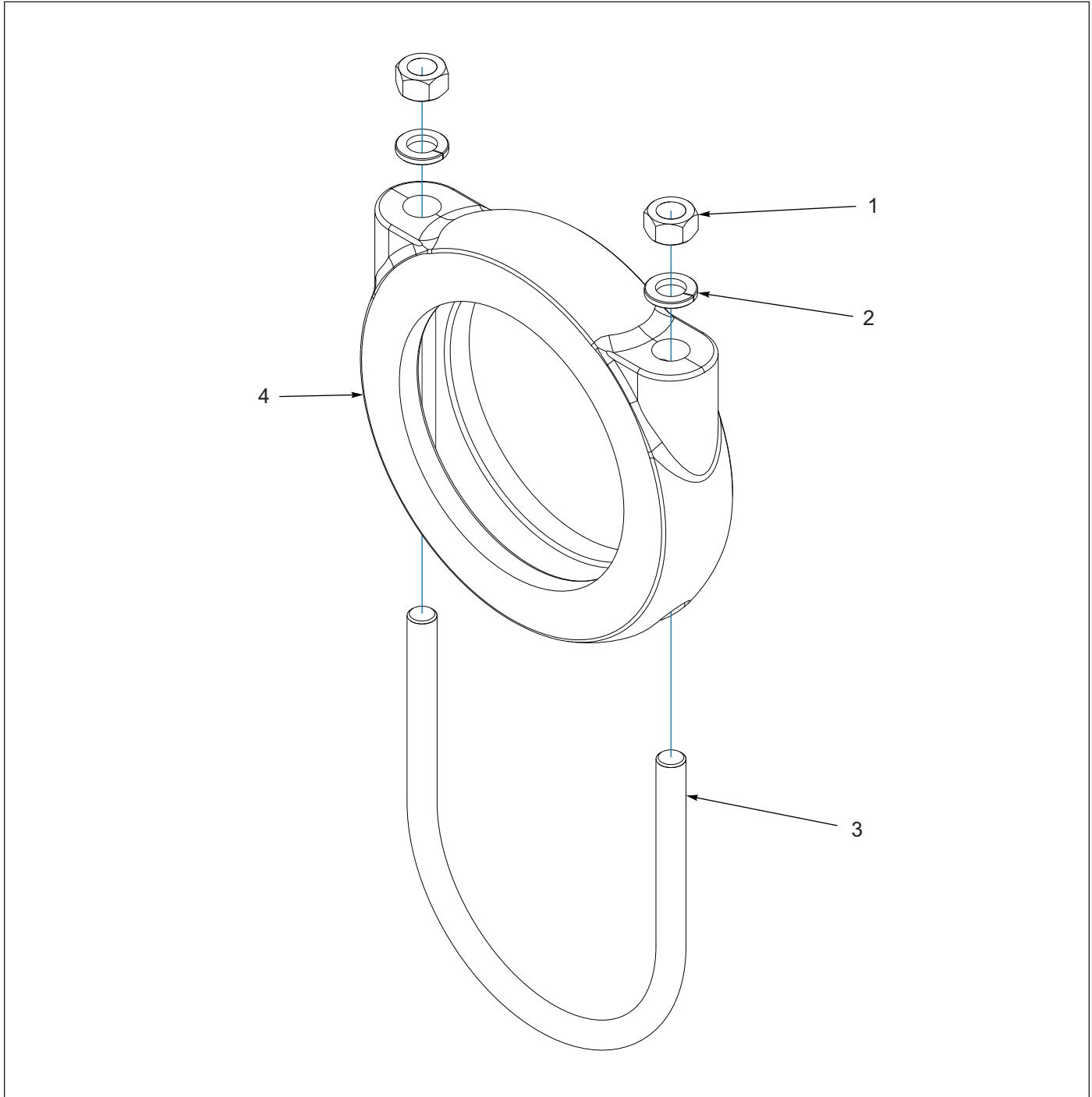


Figure 6-18: Axle Clamp Assembly, 4-1/2" Axle

Axle Clamp Assembly, 4-1/2" Axle

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J376	AXLE CLAMP ASSY	1
1	512-010007-08	NUT HEX 7/16-14 GR2 ZP	2
2	1-861-010034-12	WASHER LOCKING HLC SPG 7/16	2
3	1C290	U-BLT,RND7/16-14 X R2-5/16	1
4	0A087	AXLE CLAMP,4-5/8" ID	1

Scraper Kit for Notched Ductile Wheel 8J001 - Optional

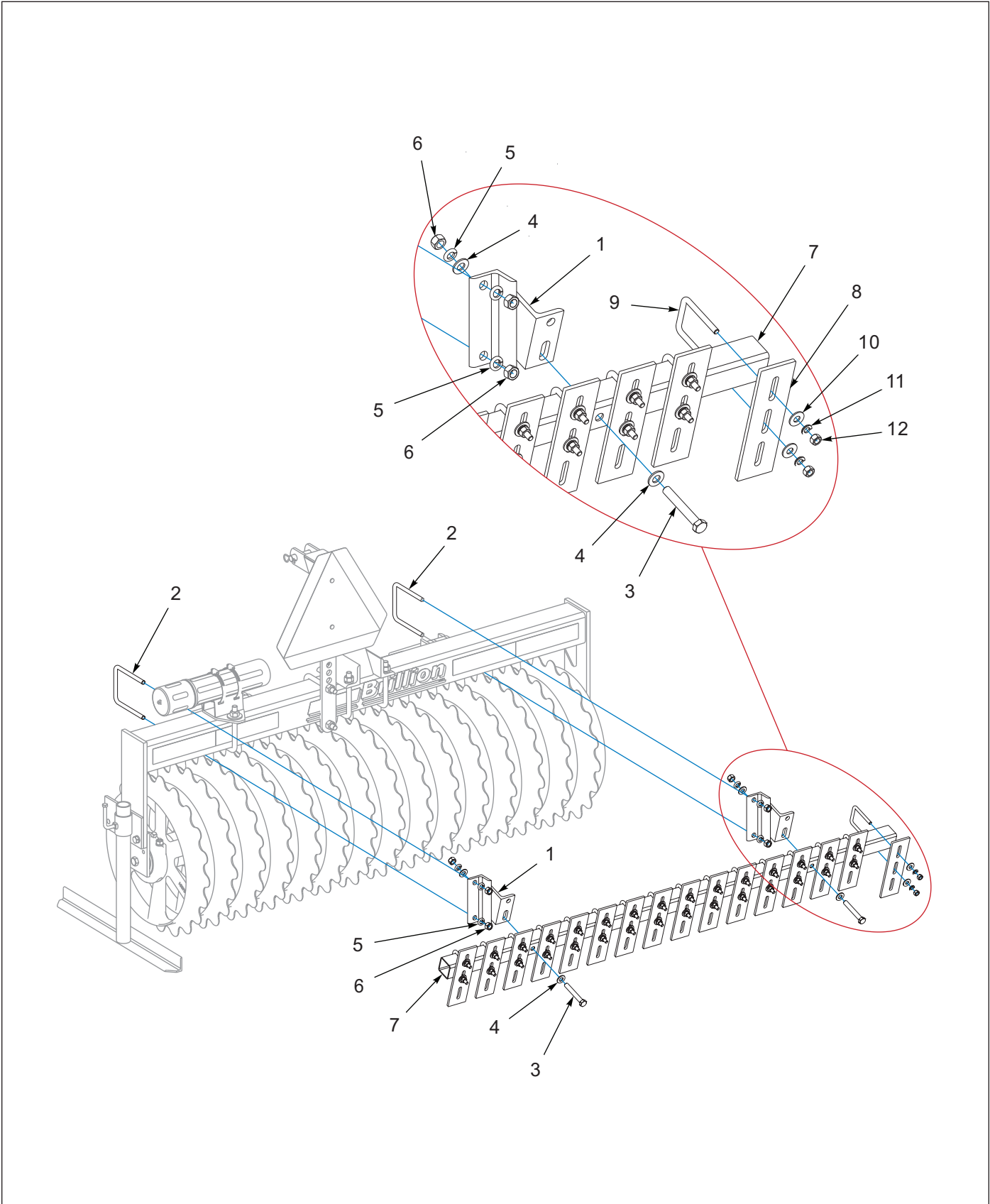


Figure 6-19: Scraper Kit for Notched Ductile Wheel 8J001 - Optional

Scraper Kit for Notched Ductile Wheel 8J001 - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS				
	6K434	SCRAPER KIT - PPD5 (SHOWN)	1	--	--	--
	1K436	SCRAPER KIT FOR PPD6	--	1	--	--
	1K437	SCRAPER KIT FOR PPD7	--	--	1	--
	1K438	SCRAPER KIT FOR PPD8	--	--	--	1
1	1K411	BRACKET	2	2	2	2
2	3J562	U-BOLT 1/2-13 X 5-1/2 X 4-9/16	2	2	2	2
3	1-654-010055-11	SCREW, HX CP 1/2-13UNCX3-1/2	2	2	2	2
4	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD	4	4	4	4
5	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	6	6	6	6
6	1-512-010007-09	NUT, HEX 1/2-13 GR2 ZP	6	6	6	6
7	6K437	SCRAPER TUBE (2 X 64)	1	--	--	--
7	1K413	SCRAPER TUBE (2 X 76)	--	1	--	--
7	1K414	SCRAPER TUBE (2 X 88)	--	--	1	--
7	1K415	SCRAPER TUBE (2 X 100)	--	--	--	1
8	8J014	SCRAPER, 2-1/2" WIDE	16	19	22	25
9	8J015	U-BOLT 3/8-16 X 3-1/4 X 2-7/16	16	19	22	25
10	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	32	38	44	50
11	1-861-010034-11	WASHER, LKG HLCL SPR, 3/8	32	38	44	50
12	1-512-010007-07	NUT, HEX 3/8-16 GR2 ZP	32	38	44	50

Scraper Kit for Notched Gray Iron Wheel 8C988 - Optional

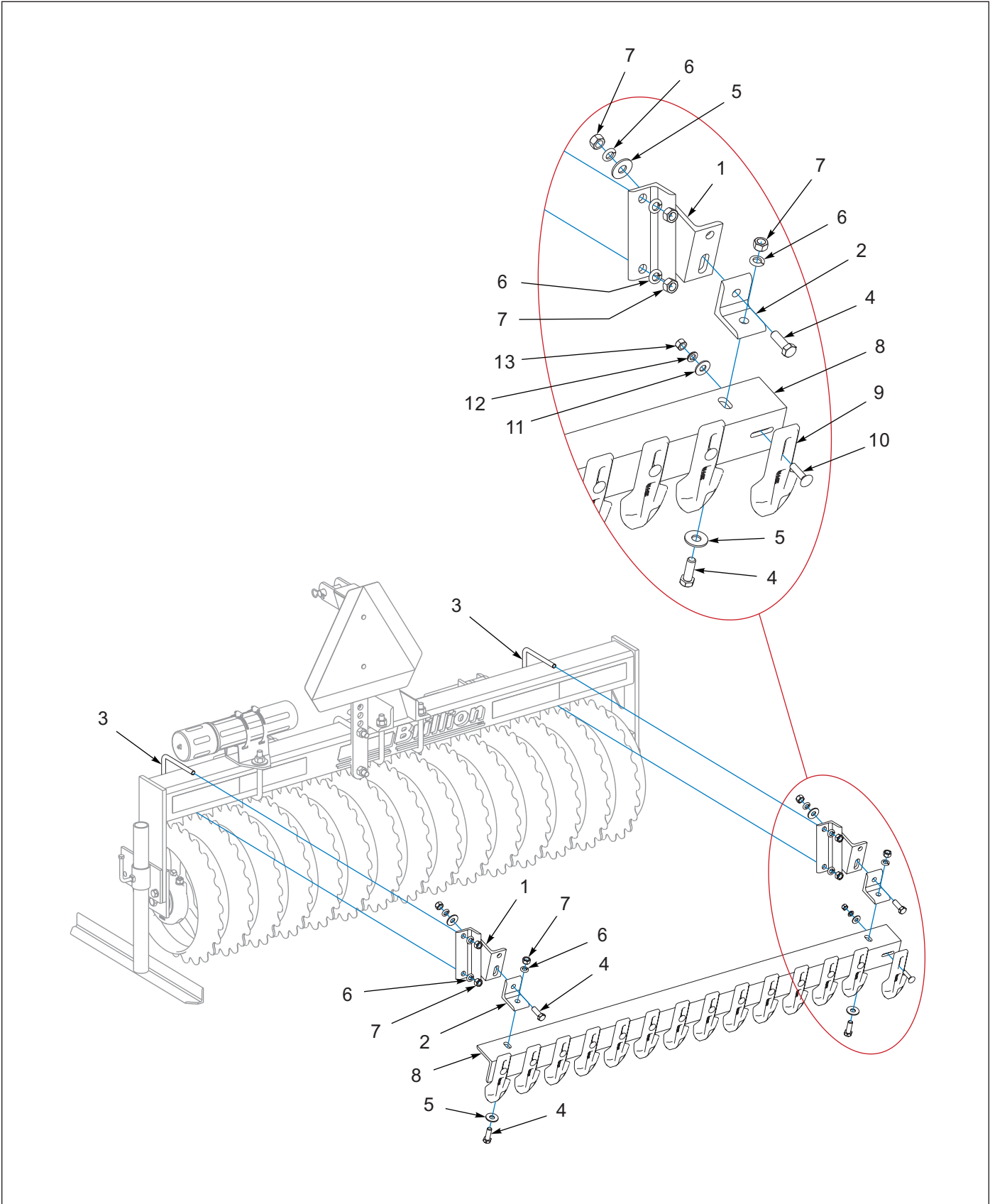


Figure 6-20: Scraper Kit for Notched Gray Iron Wheel 8C988 - Optional

Scraper Kit for Notched Gray Iron Wheel 8C988 - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY			
			5'	6'	7'	8'
		MODELS				
	6K432	SCRAPER KIT - PPM5 (SHOWN)	1	--	--	--
	1K430	SCRAPER KIT FOR PPM6	--	1	--	--
	1K431	SCRAPER KIT FOR PPM7	--	--	1	--
	1K432	SCRAPER KIT FOR PPM8	--	--	--	1
1	1K411	BRACKET	2	2	2	2
2	9J047	ANGLE	2	2	2	2
3	3J562	U-BOLT 1/2-13 X 5-1/2 X 4-9/16	2	2	2	2
4	1-654-010055-03	SCREW,HEX CAP 1/2-13UNCX1-1/2	4	4	4	4
5	1-861-010032-15	WASHER, FLAT 1/2 W ZP/CD	4	4	4	4
6	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	8	8	8	8
7	1-512-010007-09	NUT, HEX 1/2-13 GR2 ZP	8	8	8	8
8	4J001	SCRAPER ANGLE (55" LONG)	1	--	--	--
8	4J002	SCRAPER ANGLE (67" LONG)	--	1	--	--
8	4J003	SCRAPER ANGLE (79" LONG)	--	--	1	--
8	4J005	SCRAPER ANGLE (91" LONG)	--	--	--	1
9	2D110	SCRAPER	14	17	20	23
10	3J595	CARRIAGE BOLT (3/8-16 X 1-1/2)	14	17	20	23
11	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	14	17	20	23
12	1-861-010034-11	WASHER, LKG HLCL SPR, 3/8	14	17	20	23
13	1-512-010007-07	NUT, HEX 3/8-16 GR2 ZP	14	17	20	23

Drawbar - Optional for 3-PT Hitch Models

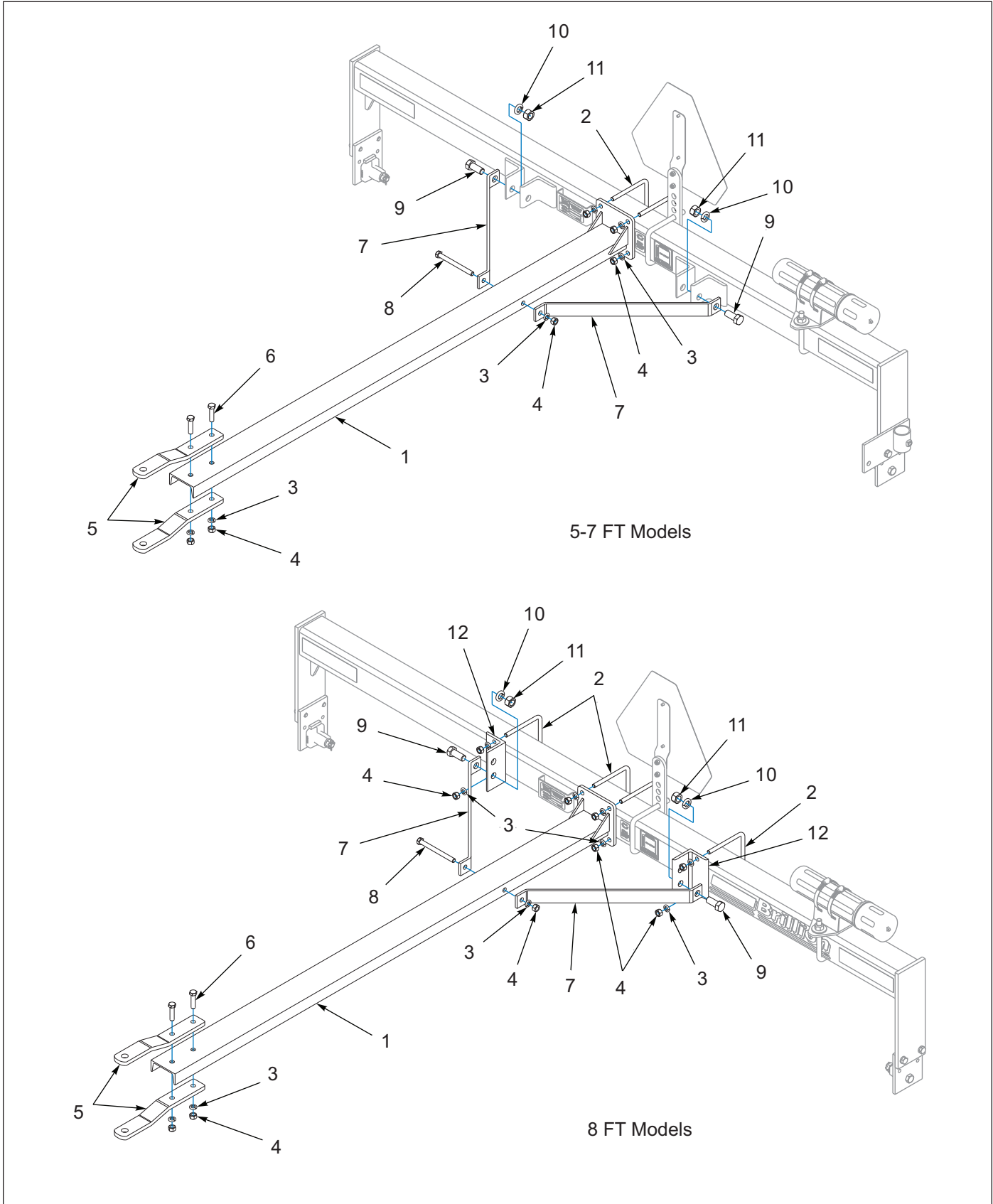


Figure 6-21: Drawbar - Optional for 3-PT Hitch Models

Drawbar - Optional for 3-PT Hitch Models

ITEM	PART NUMBER	DESCRIPTION	QTY	
			5' - 6' - 7'	8'
		MODELS		
	1K443	DRAWBAR KIT	1	1
1	1K441	DRAWBAR	1	1
2	3J562	U-BOLT 1/2-13 X 5-1/2 X 4-9/16	2	4
3	1-861-010034-13	WASHER, LOCK 1/2 ZP	7	11
4	1-512-010007-09	NUT HEX 1/2-13 ZP	7	11
5	1C517	HITCH	2	2
6	1-654-010055-05	SCREW HEX CAP 1/2-13UNCX2 GR5	2	2
7	1K439	BRACE	2	2
8	1-654-010055-16	SCREW HEX CAP 1/2-13X5-1/2	1	1
9	1-654-010061-04	SCREW CAP 3/4-10UNCX1-3/4 GR5	2	2
10	1-861-010034-17	WASHER,LKG, HLCL SPR, 3/4	2	2
11	1-512-010007-12	NUT HEX 3/4-10 ZP	2	2
12	8K989	ANGLE BRACKET	--	2

Decals

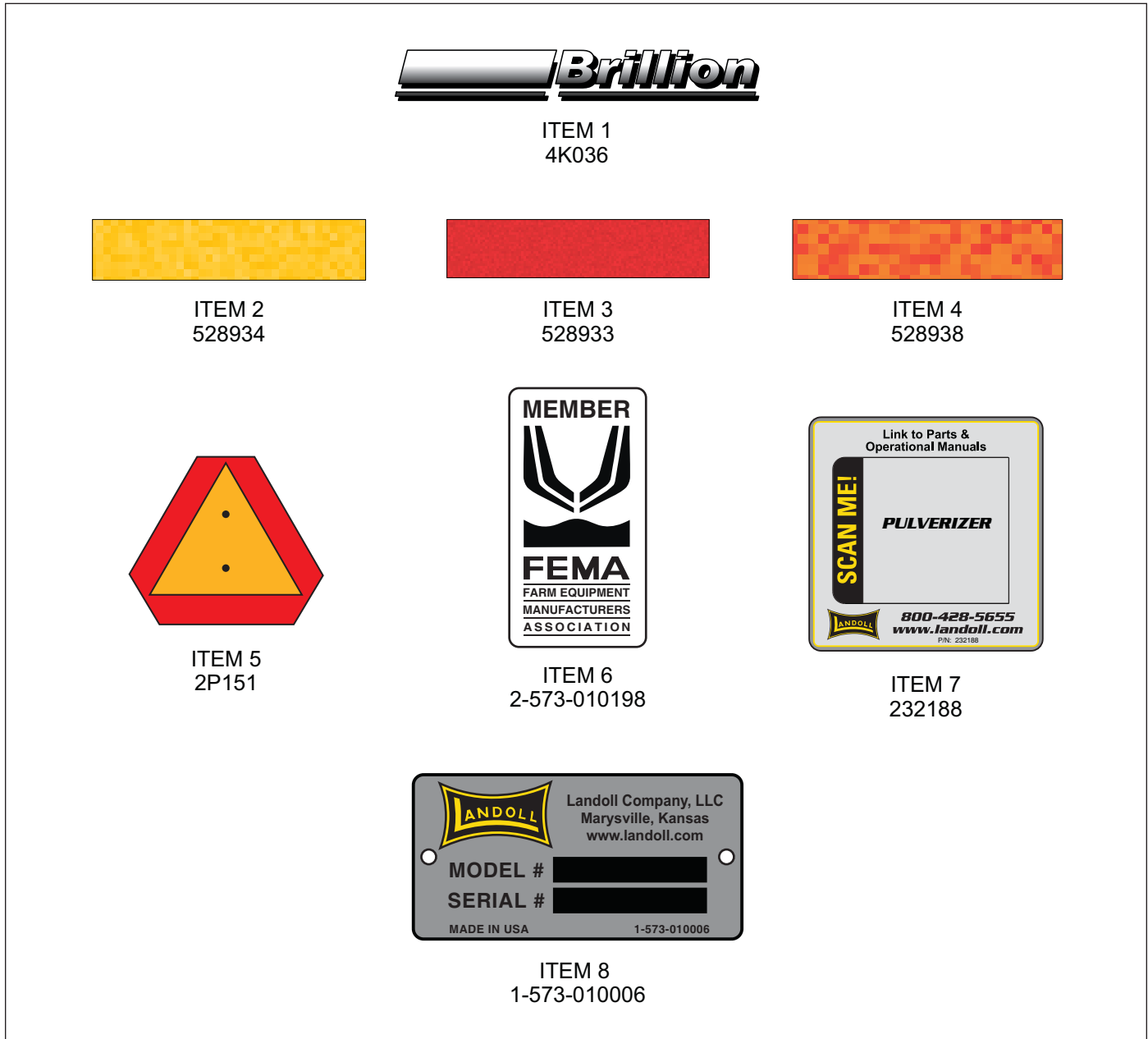


Figure 6-22: Decals

Decals

ITEM	PART NUMBER	DESCRIPTION	QTY
1	4K036	DECAL-BRILLION (2 3/4 X 20)	1
2	528934	REFLECTOR - YELLOW	2
3	528933	REFLECTOR - RED	2
4	528938	STRIPE, ORANGE	2
5	2P151	SMV W/BRACKET	1
6	2-573-010198	DECAL, MEMBER FEMA	1
7	232188	DECAL, QR CODE PULVERIZER	1
8	1-5730010006	PLACARD, NAME	1
9	107-0814	RIVET 1/8X1/8 A LUM POP (HARDWARE FOR ITEM 8)	2

Decal Locations

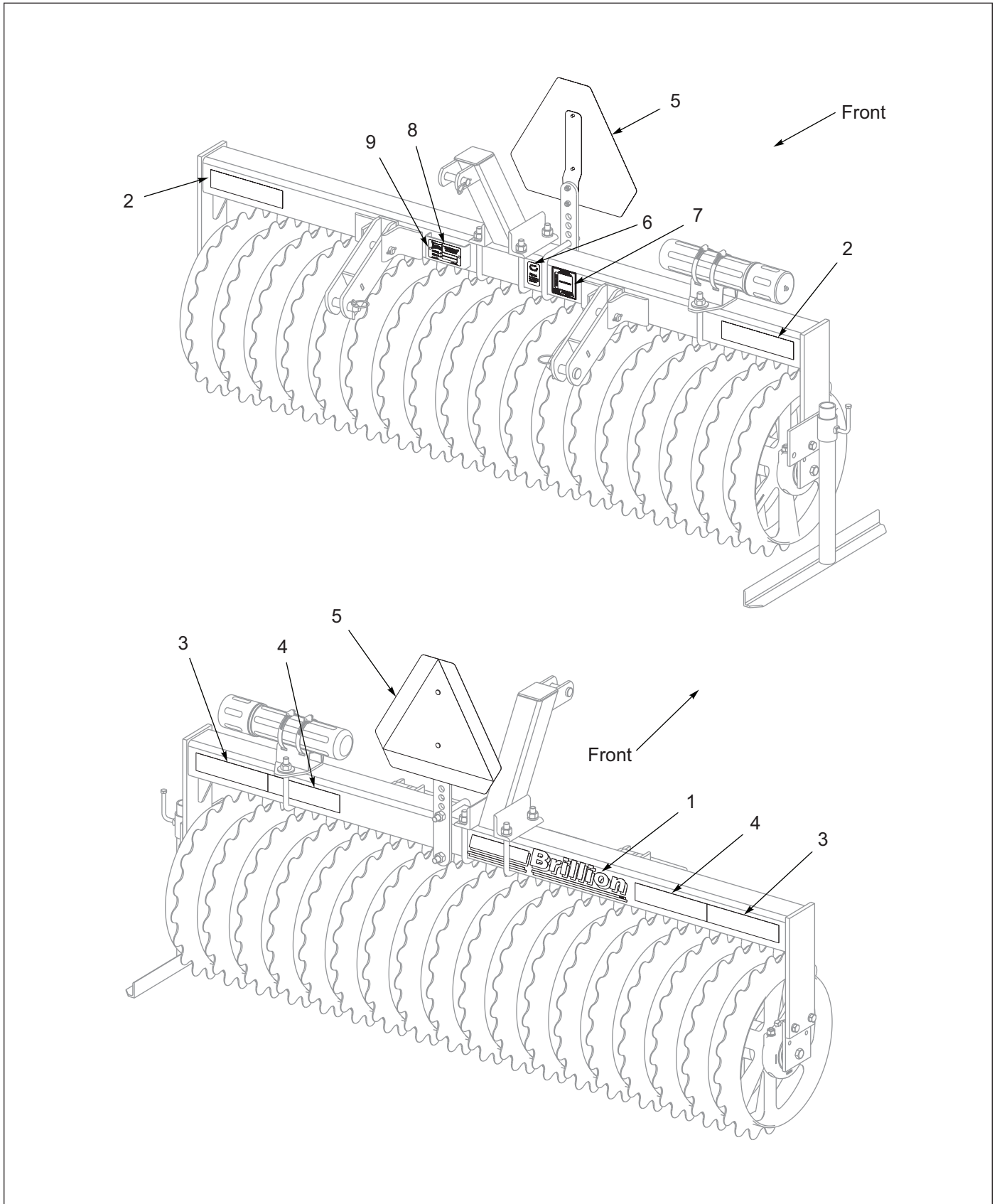


Figure 6-23: Decals, 5FT - 7FT

ILLUSTRATED PARTS LIST

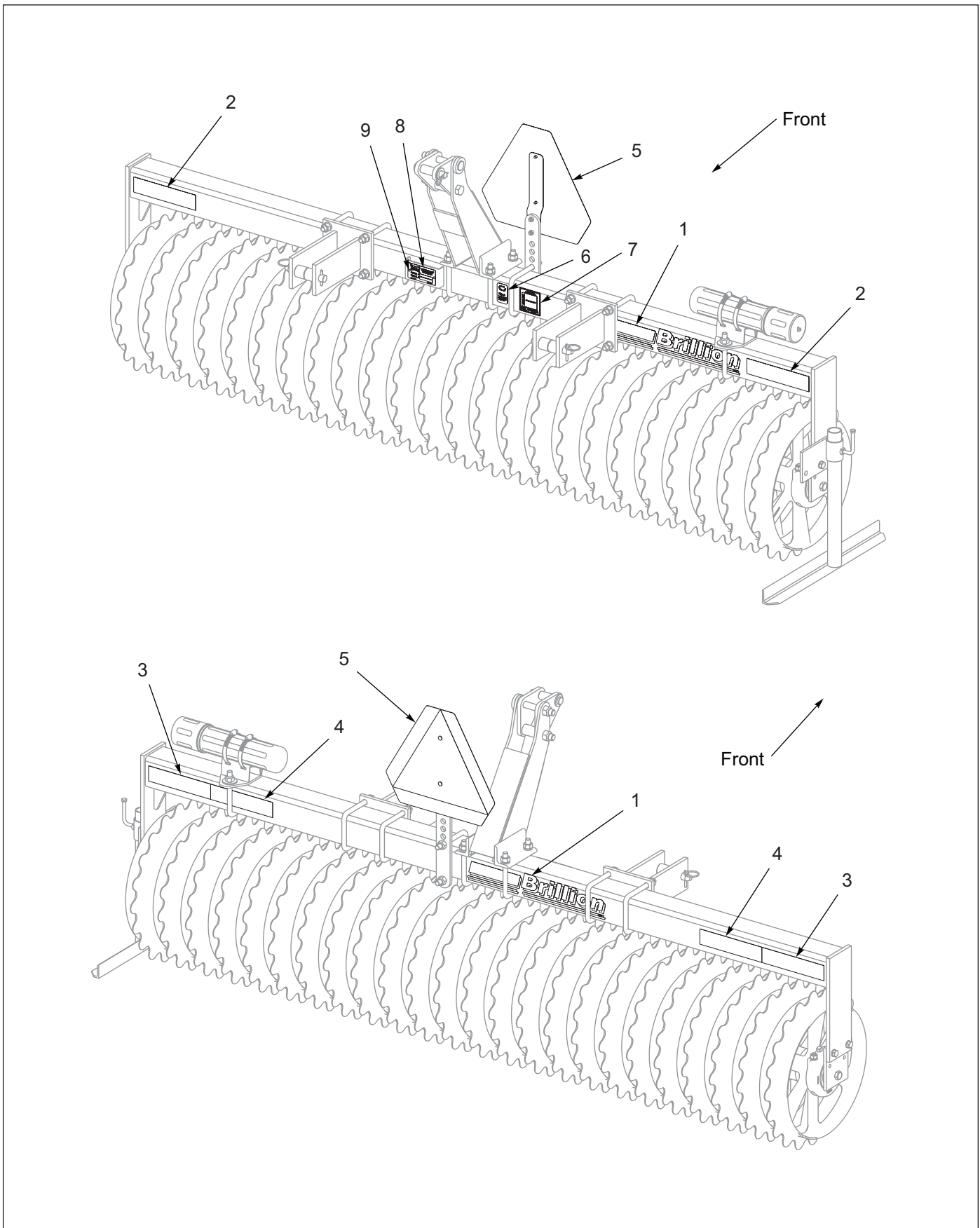


Figure 6-24: Decals, 8FT

For clarity this glossary of industry standard abbreviations and their definitions are provided. For additional information, see instruction on the inside front cover or the last page of this manual.

A

ASM Assembly

B

BATT Battery
BHSC Button Head Socket Cap
BLK Black

C

CB Carriage Bolt
CONN Connector
CRG Carriage
CTSK Countersunk
CTWT Counterweight
CVR Cover
CYD Cylinder

D

DBL Double
DIA Diameter

E

ENCLSD Enclosed

F

FHCS Flanged Head Cap Screw
FHHCS Flanged Hex Head Cap Screw
FL OR FLG Flange
FLT Flat

G

GA Gauge

H

HHCS Hex Head Cap Screw
HCS High Carbon Steel
HD Head
HLCL Helical
HCSKT Hex Socket
HSFC Hex Socket Flat Countersunk
HYD Hydraulic

I

ID Inside Diameter

L

LH Lefthand
LKG OR LOCK Locking
LWR Lower

M

MANF Manifold
MNT Mount

N

NRW Narrow
----- Not Serviced Separately

O

OD Outside Diameter
OHG Overhead Guard
ORFS OR ORS O-Ring Seal
ORP OR ORB O-Ring Boss

P

P-STEER Power Steering
PTFE Polytetrafluoroethylene (Teflon)

GLOSSARY

R

RH Righthand
RND Round

S

SER Series
SHCS Socket Head Cap Screw
SHLD Shield
SKT Socket
SLFLKG Selflocking
SOC Socket
SPDT Single Pole Double Throw
SPR Spring
SQ Square
SRTD Serrated
SSCR Setscrew
SST Stainless Steel
STD Standard

U

UPR Upper

W

WHL Wheel
WLD OR WLDMT Weldment

Numerics

0A046	6-12	1C517	6-1, 6-2, 6-25
0A086	6-12	1D927	6-11
0A087	6-19	1K012	6-7, 6-9
101386	6-8	1K013	6-7, 6-9
107-0814	6-27	1K014	6-7, 6-9
1-512-010005-13	6-5	1K018	6-7, 6-11
1-512-010005-15	6-4	1K019	6-7, 6-11
1-512-010007-07	6-21, 6-23	1K315	6-7, 6-12
1-512-010007-09 ...	6-1, 6-2, 6-18, 6-21, 6-23, 6-25	1K316	6-7, 6-12
1-512-010007-11	6-3, 6-4	1K317	6-7, 6-12
1-512-010007-12	6-1, 6-2, 6-25	1K324	6-12, 6-15
1-557-010327	6-3, 6-4	1K325	6-12, 6-15
1-5730010006	6-27	1K326	6-12, 6-15
1-647-010004177	6-3	1K411	6-21, 6-23
1-647-010004221	6-4	1K413	6-21
1-654-010055-02	6-7	1K414	6-21
1-654-010055-03	6-7, 6-23	1K415	6-21
1-654-010055-05	6-1, 6-2, 6-25	1K430	6-23
1-654-010055-11	6-21	1K431	6-23
1-654-010055-16	6-1, 6-2, 6-25	1K432	6-23
1-654-010061-04	6-1, 6-2, 6-25	1K436	6-21
1-654-010061-15	6-4	1K437	6-21
1-654-010080-2	6-18	1K438	6-21
1-861-010032-09	6-6	1K439	6-1, 6-2, 6-25
1-861-010032-11	6-21, 6-23	1K441	6-1, 6-2, 6-25
1-861-010032-14	6-21	232188	6-27
1-861-010032-15	6-23	2-573-010198	6-27
1-861-010032-19	6-5	2D110	6-23
1-861-010032-20	6-4	2D213	6-11
1-861-010034-11	6-21, 6-23	2K843	6-16
1-861-010034-12	6-19	2P151	6-27
1-861-010034-13	6-1, 6-2, 6-7, 6-18, 6-21, 6-23, 6-25	3J562	6-1, 6-2, 6-21, 6-23, 6-25
1-861-010034-15	6-3, 6-4, 6-8	3J595	6-23
1-861-010034-17	6-1, 6-2, 6-25	4D529	6-8
1C290	6-19	4J001	6-23
		4J002	6-23
		4J003	6-23

INDEX

4J005	6-23	8J015	6-21
4J608	6-7, 6-10	8K645	6-5
4J610	6-9, 6-10, 6-11, 6-13	8K989	6-2, 6-25
4J645	6-7, 6-11	9C014	6-14
4K036	6-27	9C016	6-14, 6-16, 6-17
4K639	6-7, 6-11	9C031	6-18
512-010007-08	6-19	9C182	6-13, 6-14
528933	6-27	9D669	6-8
528934	6-27	9D673	6-18
528938	6-27	9D864	6-8
5C077	6-4	9D989	6-3, 6-4
5D038	6-17	9J047	6-23
5D202	6-15, 6-17	9J811	6-11
5J375	6-9, 6-10, 6-11, 6-18	9J820	6-11
5J376	6-12, 6-19	9J839	6-7, 6-10
6J448	6-3, 6-4	9J840	6-7, 6-10
6K403	6-1, 6-3	9J841	6-1, 6-3
6K413	6-9, 6-10, 6-11, 6-13	9J842	6-1, 6-3
6K415	6-7, 6-10	9J844	6-7, 6-8
6K417	6-7, 6-9	9J845	6-7
6K427	6-7, 6-11	9J846	6-3
6K429	6-7, 6-12	9J847	6-3
6K431	6-12, 6-15	9J848	6-3
6K432	6-23	9J849	6-3
6K434	6-21	9J850	6-7
6K437	6-21	9J851	6-7
6K977	6-4	9J870	6-8
6K982	6-4	9J874	6-9, 6-10, 6-11, 6-13
6K983	6-4	9J875	6-9, 6-10, 6-11, 6-13
6K984	6-4		
7D642	6-3		
7J035	6-15, 6-16		
7K107	6-4		
7K226	6-4		
7K227	6-4		
7K229	6-4		
7K268	6-4		
8C988	6-10		
8J001	6-9		
8J014	6-21		

Instructions for Ordering Parts

**** Repair parts must be ordered through an Authorized Dealer ****

DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

Phone #: 800-423-4320 or 785-562-5381

Fax #: 888-527-3909

Order online: dealer.landoll.com

DATA PLATE

The Data Plate, which lists the model number and serial number, is located on the front of the frame.

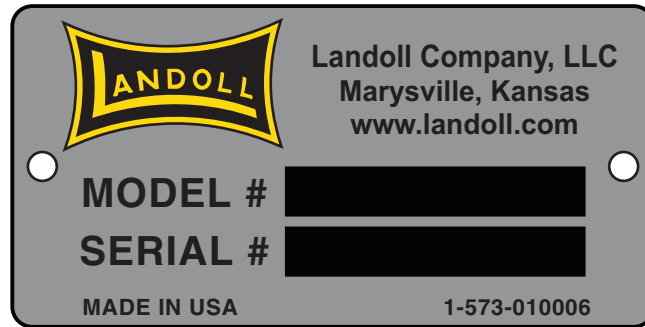
SERIAL NUMBER

The serial number is located on the Data Plate.

The following information will help decode the serial number.

PXC2100100 = xxmyysssss

xx	= model series (i.e. "PX" for all Pulverizers)
m	= month of manufacture (ex. "C" means March. The letter I is not used.)
yy	= year manufactured (ex. "21" means 2021)
sssss	= sequential number used to track warranty and service information.



Data Plate

Manuals for Pulverizer PP5-8 and P5-8

Manual Number	Manual Type
9J893	Operator's and Parts Manual

Document Control Revision Log:

Date	Form #	Improvement(s): Description and Comments
10/25/2005	1199rev10-25-05	Initial Release
07/2023	9J893-2307	Revised Template, Revision Format "Year/Month" Add Scraper Kits ECN 49151, 49671 - Decals, Part Numbers Updated ISO logos to ISO 9001:2015 (Revised 04/2024)
05/2024	9J893-2405	Updated Drawings



intertek

Equipment from Landoll Company, LLC is built to exacting standards ensured by ISO 9001:2015 registration at all Landoll manufacturing facilities.

Pulverizer Models PP5-8 and P5-8 Operator's and Parts Manual

Re-Order Part Number 9J893

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