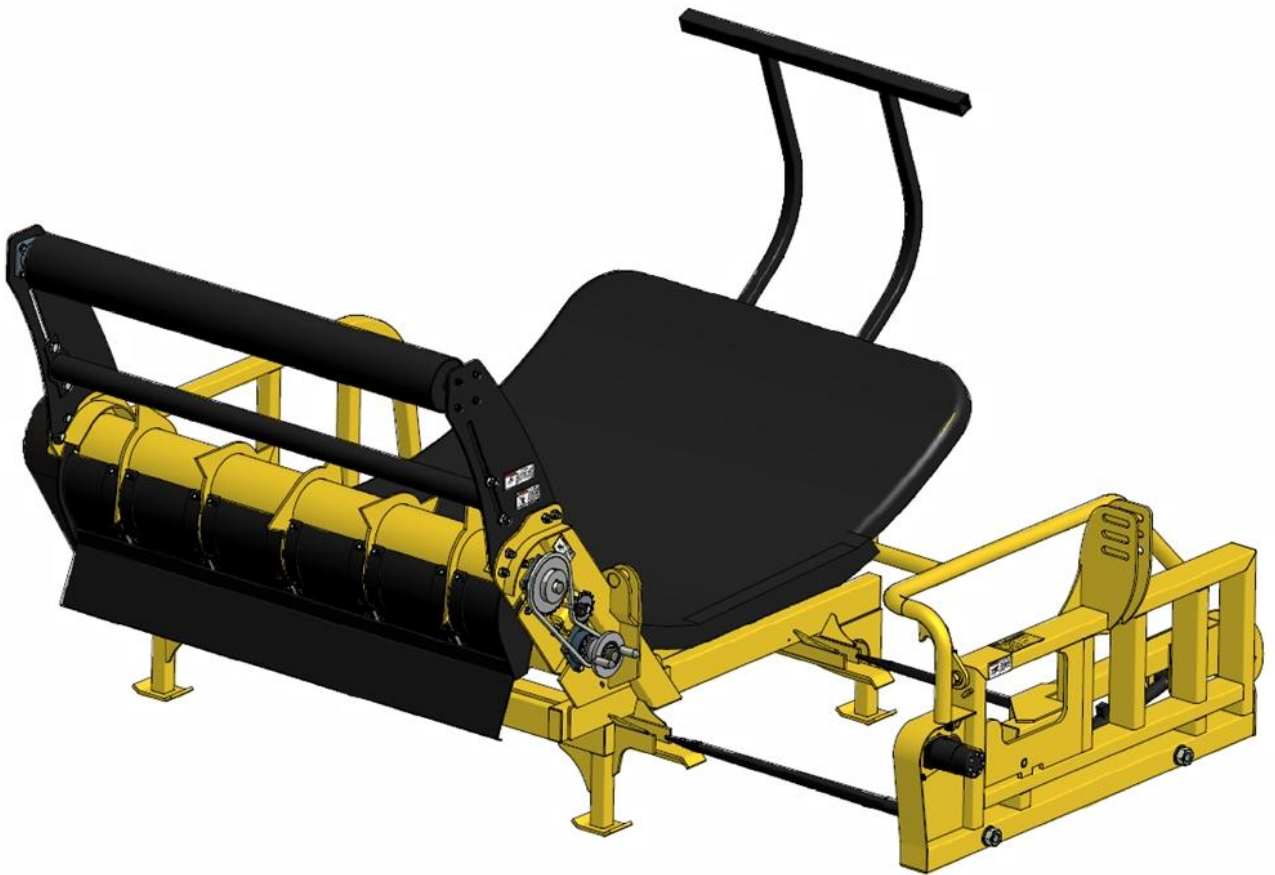


# **Tube-Line Bale Feeder**

## **BF 50003PH**



**TUBE•LINE™**  
**MANUFACTURING LTD.**



## **TO THE OWNER**

This manual contains information concerning the adjustment, assembly and maintenance of your Tube-Line Chainless Bale Feeder. You have purchased a dependable machine, but only by proper care and operation can you expect to receive the performance and long life built into the Bale Feeder. Please have all operators read this manual carefully and keep it available for ready reference.

Your authorized dealer will instruct you in the general operation of your Bale Feeder. Your dealer's staff of factory-trained service technicians will be glad to answer any question that may arise regarding the operation of your Bale Feeder.



### **WARNING**



**This safety alert symbol indicates important safety messages in this manual. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.**



### **WARNING**



**Pictures in this manual may show protective shielding open or removed to better illustrate a particular feature or adjustment.**

**Be certain, however, to close or replace all shielding before operating the machine**

## **Improvements**

Tube-Line Manufacturing Inc. is continually striving to improve its products. We reserve the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

## **Contents**

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# **Precautionary Statements**

## **Personal Safety**

---

Throughout this manual and on machine decals you will find precautionary statements (“DANGER”, “WARNING”, and “CAUTION”) followed by specific instructions. These precautions are intended for the personal safety of you and those working with you. Please take time to read them.



### **CAUTION**



This word “DANGER” indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury.



### **WARNING**



This word “WARNING” indicates a Potentially Hazardous situation that, if not avoided, could result in death or serious injury.



### **DANGER**



This word “CAUTION” indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. Failure to follow the danger warning and caution instructions may result in serious bodily injury or death.

## **MACHINE SAFETY**

The precautionary statement (“important”) is followed by specific instructions. This statement is intended for machine safety.

**IMPORTANT:** The word “*IMPORTANT*” is used to inform the reader of something he needs to know to prevent minor machine damage if a certain procedure is not followed.

## **Safety**

### **Precautionary Statements**

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents read the following precautions before operating this equipment. Equipment should be operated only by those who are responsible and instructed to do so.

Carefully review the procedures given in this manual with all operators. It is important that all operators be familiar with and follow safety precautions.

1. When transporting the machine on public roads, make sure the machine is in compliance with all local road regulation.
2. Before operating the unit be sure that it is assembled correctly and in good operating condition.
3. If machine maintenance work, repairs or adjustments must be done in the field, they should be done at a spot where the ground is firm and level. Turn off the tractor and apply the parking brake. Use the proper tools and wear suitable protection (safety goggles, work gloves, etc.).
4. If any maintenance work, repairs or adjustments are done which require disassembly, always make sure that everything is reassembled or retightened as it has been prior to making repairs or adjustments.
5. Follow the schedule provided for maintenance. By following these suggestions, it will be possible to keep the machine operating safely and efficiently, to the benefit of the user.
6. General checking of bolts, security pins and split pins must be carried out initially after the first 8 hours of use. Subsequently, check every 50 hours and whenever the machine is laid up for extended periods.
7. Before applying pressure to the system, be sure all connections are tight and that hoses and connections are not damaged.
8. Fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Always protect the skin and eyes from escaping fluid under pressure. If injured by escaping fluid, obtain medical assistance at once. Serious infection or reaction can develop if medical treatment is not administered immediately.
9. Do not weld on wheels. Welding on wheels may cause high stress and a wheel failure.
10. Do not weld on wheels with a mounted tire. Welding on wheels with a mounted tire may cause the tire to burst, causing serious injury or death.
11. Before leaving the cab, engage the parking brake, shut down engine, and wait for all moving parts to stop.
12. Always keep bystanders away from machine during operation, Rotating elements may cause serious bodily injury.

## **General Safety**

YOU are responsible for the safe operation and maintenance of your Tube-line Chainless Bale Feeder. You must ensure that you and anyone else who is going to operate, maintain or work around the Bale Feeder be familiar with the operating and maintenance procedures and related safety information contained in this manual.

Remember, YOU are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

Review the operating instructions for this header at least once a year per OSHA regulations 1928.57. Know the meaning and location of each decal before operating the BF5000.

Watch for this symbol in this manual and on the Bale Feeder:



1. Keep a first aid kit in the cab for emergencies and know how to use it.
2. Do not allow any one to ride on the Bale Feeder while it is in motion.
3. Clear the area of bystanders, especially small children before starting the Bale Feeder.
4. Do not allow anyone to operate the Bale Feeder who has not been instructed in how to use the machine.
5. All operators should familiarize themselves with the safety section in the operator's manual.
6. Some pictures or illustrations may not show protective shields in place. Make certain that all protective shields are in place before operating the machines.

## **Operating and Maintenance safety**

1. DANGER, DO NOT stand around or near the Discharge or bed area. Objects thrown from the beaters may cause death or serious injury
2. Hydraulic leaks can penetrate the skin causing serious injuries. Small leaks can be invisible and are the most dangerous. Use some object, like cardboard, to find the leak. Do not use your hand.

## **Hydraulic Safety**

Ensure that all the pressure is released from the hydraulic lines before repairing.  
Replace or repair damaged hoses immediately.



### **WARNING**



When checking for oil leaks use a piece of cardboard; DO NOT use your hand:

Escaping fluid under pressure can penetrate the skin causing serious injury.  
Avoid the hazard by relieving pressure before disconnecting hydraulic of other lines.  
Tighten all line connections before applying pressure.  
Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Failure to comply could result in death or serious injury.

DO NOT weld on or near rotating parts. Welding close to rotating parts will cause warping and will challenge the structural integrity.

DO NOT weld on or near rotating parts. Welding close to rotating parts may cause warping thus creating high stress loads for moving or rotating parts.

DO NOT weld on wheels. Welding on wheels may cause high stress and wheel failure.

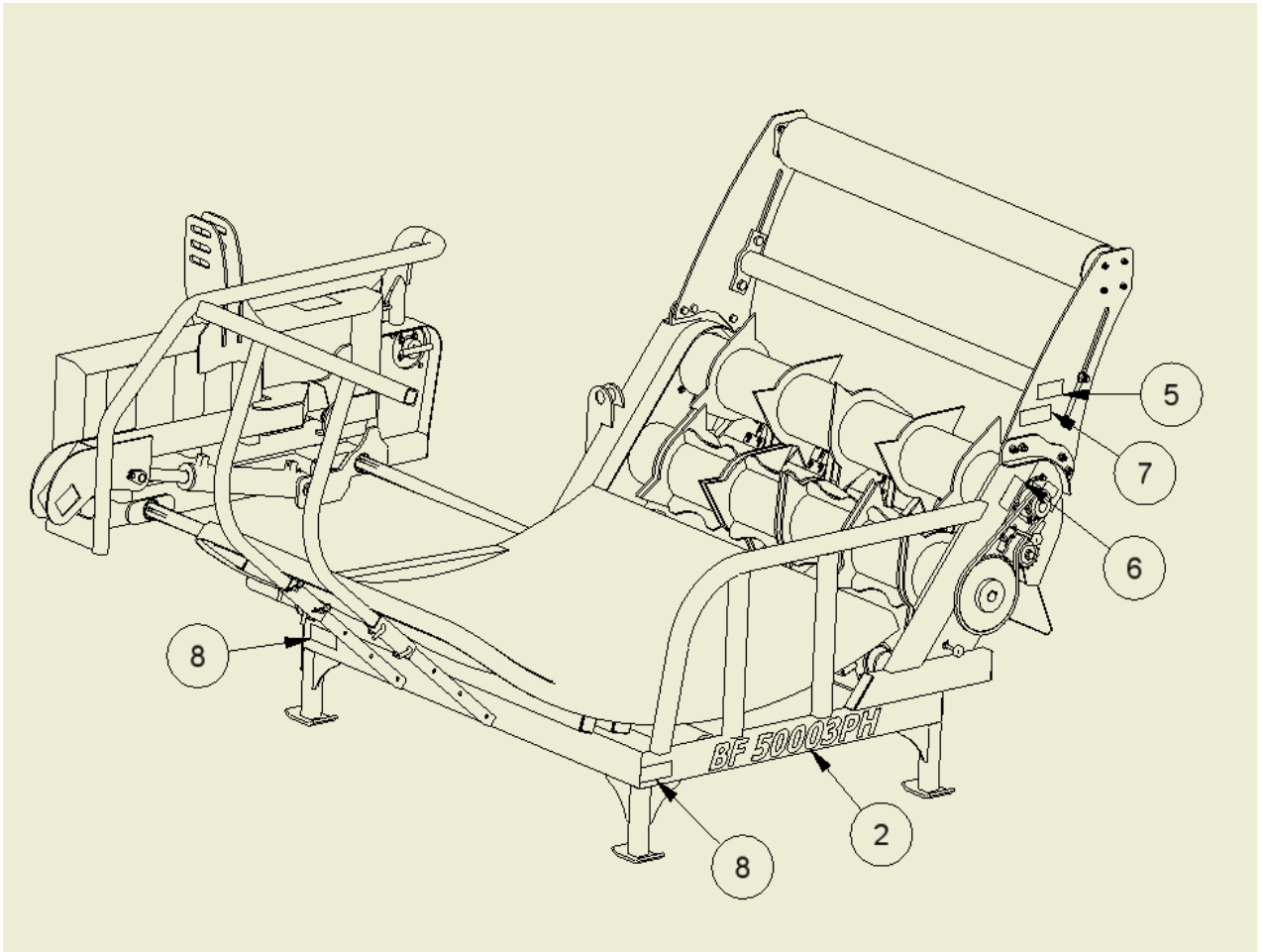
DO NOT weld on wheels with a mounted tire, Welding on wheels with a mounted tire may cause tire to burst, causing serious injury or death.

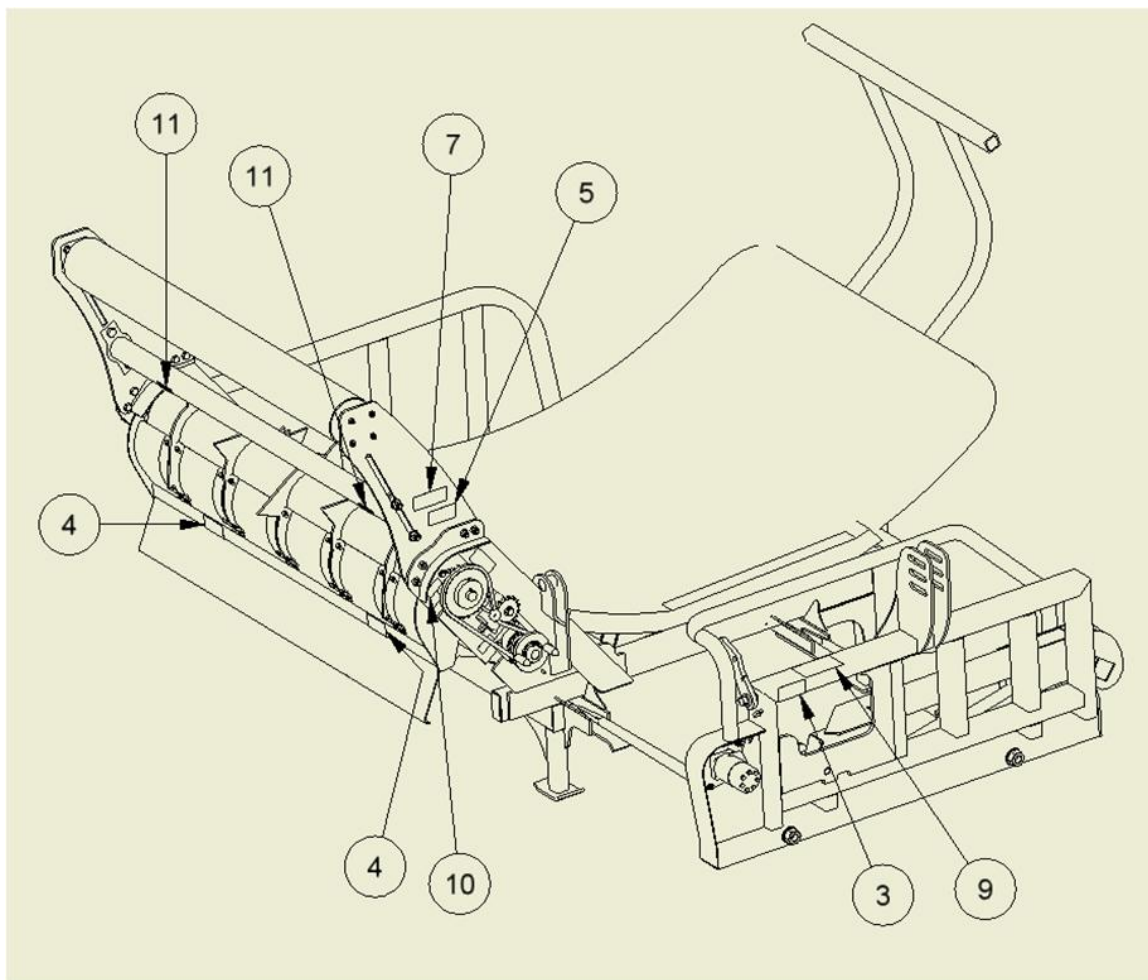




## Decals

The following safety decals have been placed on your machine in the areas indicated. They are intended for personal safety and or those working with you. Please take this manual and walk around your machine to note the content and location of these warning sign. Review these warning signs and the operating instruction detailed in this manual with your machine operators. Keep the decals legible, if they are not, obtain replacements from your authorized dealer. The decal replacement numbers are listed with each decal.





Item	Qty	Part #	Description
2	1	BF-5000-098	3PH Decal
3	1	PP-00788	High Pressure Fluid Decal
4	2	PP-00789	Shear Point Decal
5	2	PP-00790	Thrown Object Decal
6	2	PP-00791	Entanglement (Warning) Decal
7	2	PP-00792	Entanglement (Danger) Decal
8	2	PP-00793	Crush Point Decal
9	1	PP-00794	Read Manual Decal
10	4	PP-00795	Grease Decal
11	2	PP-00811	Detach From Bumper Decal

## Decals

# **BF 50003PH**

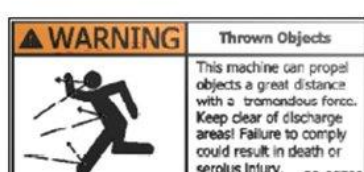
Decal 2- BF-5000-098



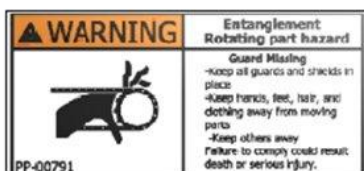
Decal 3- PP-00788



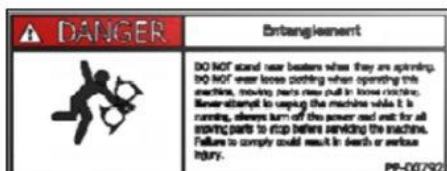
Decal 4- PP-00789



Decal 5- PP-00790



Decal 6- PP-00791



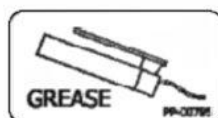
Decal 7- PP-00792



Decal 8- PP-00793



Decal 9- PP-00794



Decal 10- PP-00795



Decal 11- PP-00811



## Section 1

### Assembly Information

**NOTE:** Assembly drawings are intended for use of replacement parts only, and not as assembly guide.

**NOTE:** Assembly drawings are placed in sequential order, as one would assemble, if desired part on drawing is shown already assembled you have gone to far, and must look at a previous drawing.

## Section 2

### General Information

#### **3PH Bale Feeder**

The 3PH Bale Feeder unit consists of the main components listed below. The Bale Feeder is powered by hydraulic pressure from a tractor. The hydraulic pressure from a tractor powers the hydraulic motor as well as the bed.

#### **Principle Components**

1. Frame
2. Beaters
3. Bed
4. Beater Motor
5. Lift Cylinder
6. 3PH Spear Frame

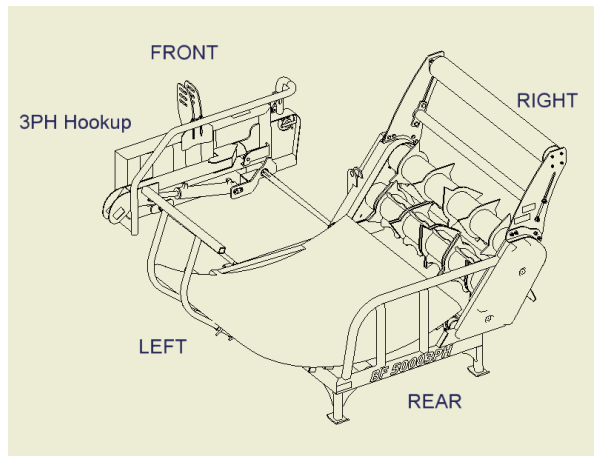
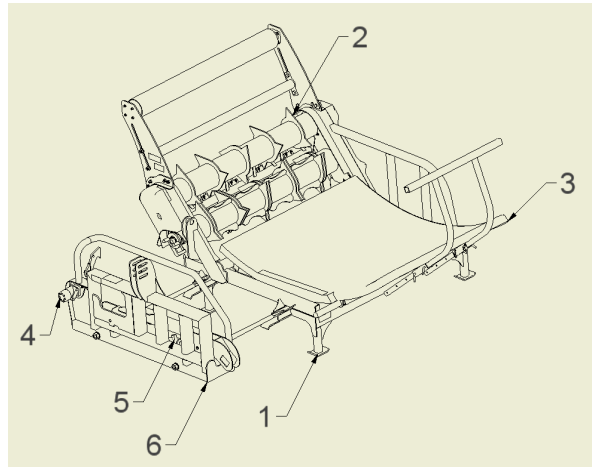
#### **3PH Bale Feeder Terminology**

Front- as seen in picture

Rear- as seen in picture

Left and Right- as seen in picture

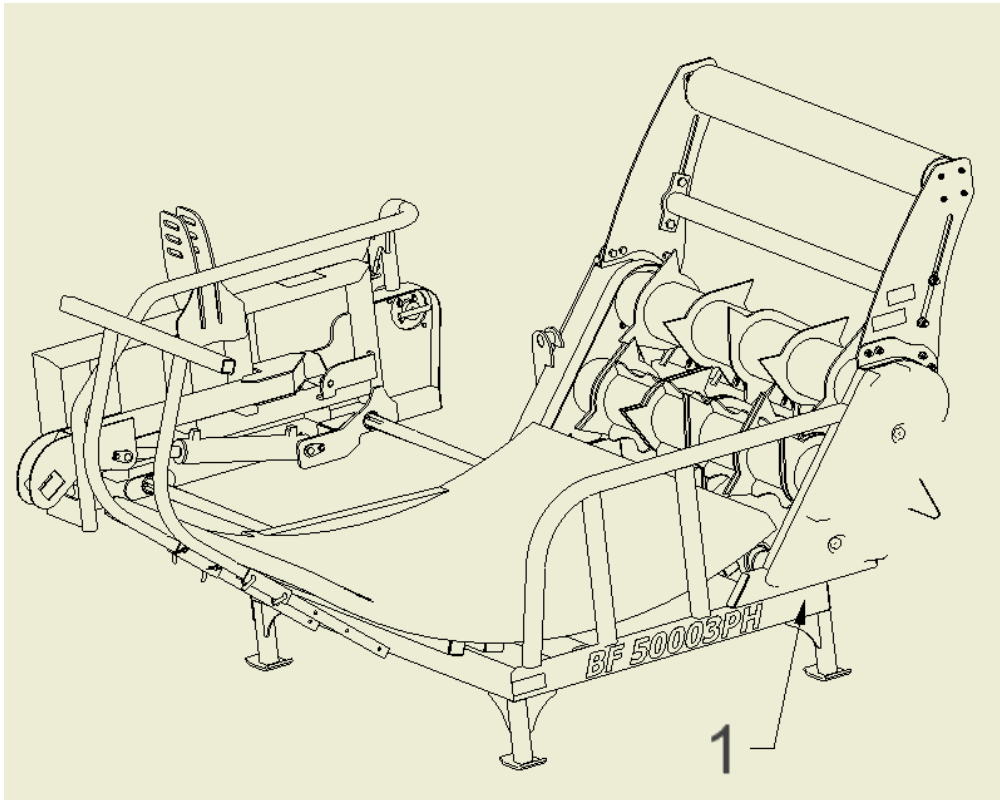
3PH hook up



## Self Loading Bale Feeder Terminology

### **Product Identification**

The P.S.N stamped on the metal tag(1), is located on the front of the bale feeder.



#### **Serial# XX BFSL XXX**

**XX** = year manufactured

**BFSL** = product identification

**XXX** = sequential numbering

#### **Model # BF5000SL**

**BF5000** = BF5000

**SL** = Self Loading unit

#### **Capacity**

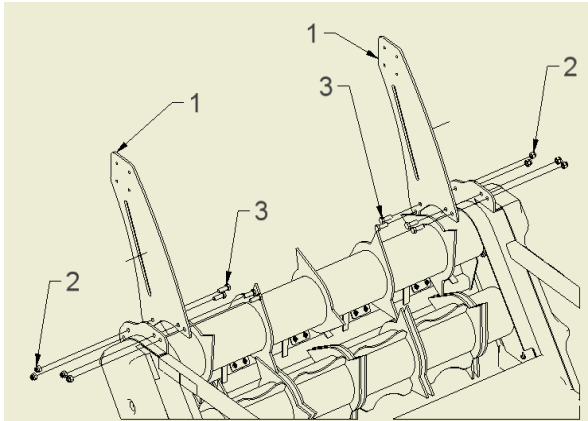
2 Bales = this unit can only  
contain 2 bales.

#### **Weight**

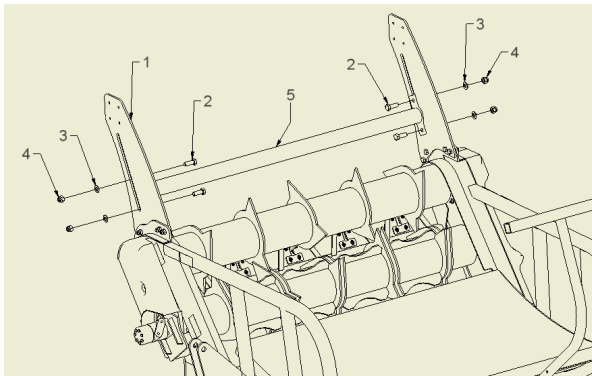
**2700** = weight in pounds

## **Initial Setup**

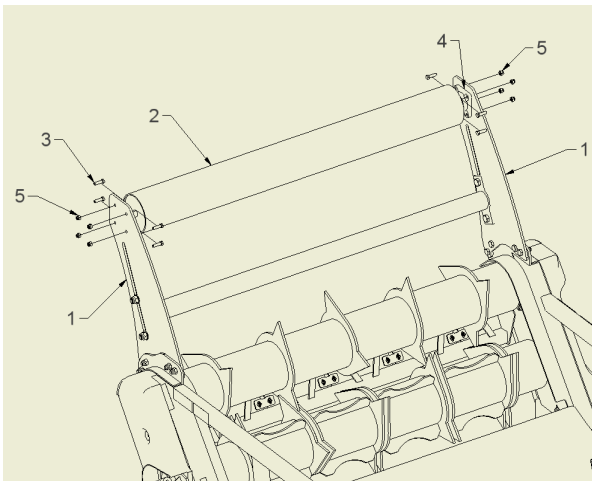
When you first receive the Tube-line Bale Feeder you will need to install the bumper bale rollers



1. Secure bumper plate (1), using six 5/8-11 bolts(3), with 5/8-10 nuts(2) to the Tube-line Bale Feeder.



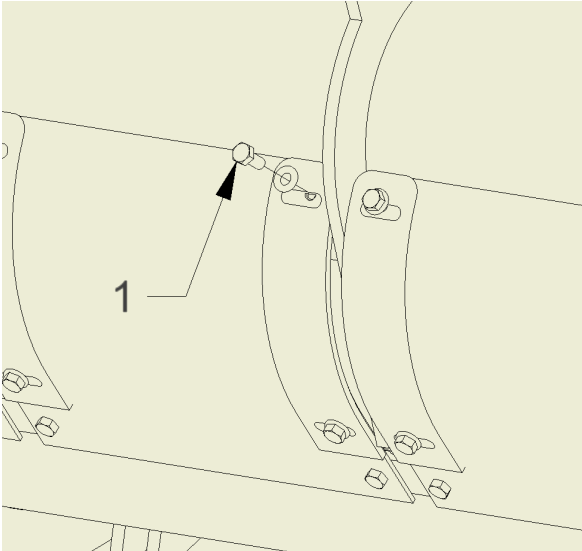
2. Secure second roller(5), with  $\frac{3}{4}$ -10 bolts(2),  $\frac{3}{4}$  flat washer(3) and  $\frac{3}{4}$ -10 hex nut(3) to bumper plate(1).



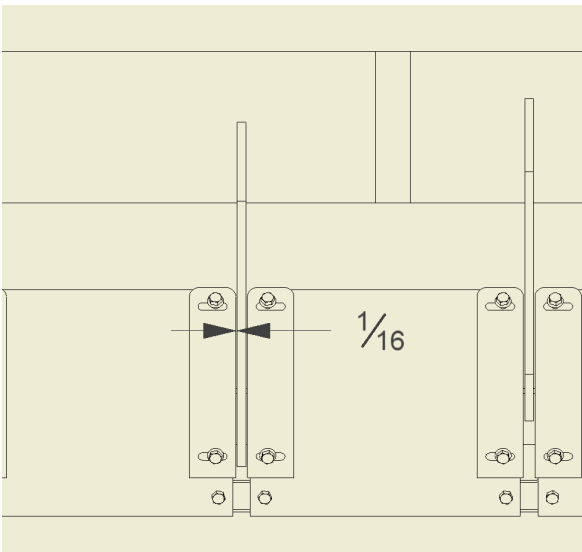
3. Secure bearing(4), and bumper roller(2), with 7/16-14 bolts(3), 7/16-14 hex nuts(5) to bumper plate (1).



## Adjusting the BF5000 Beater Guide



1. Loosen 5/16-18 bolt (1), and 5/16-18 nuts.



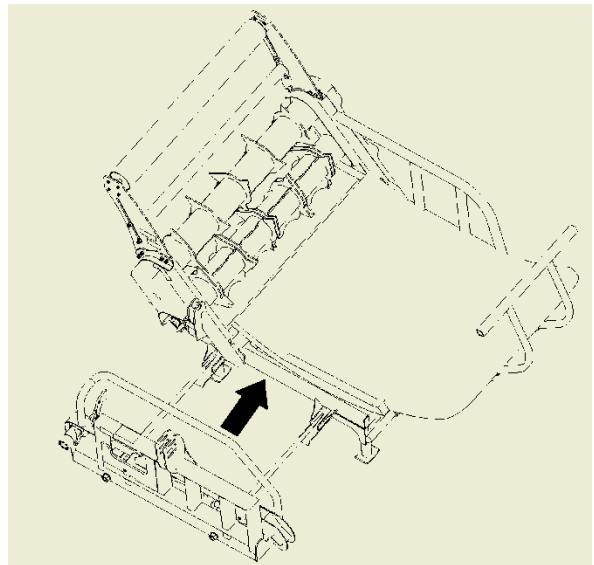
2. Adjust slot opening guide to  $\frac{1}{16}$ " from beater and retighten fasteners.

## Agway Bale Feeder Hook Up

**NOTE:** The Agway Chainless Bale Feeder 3PH Spear frame is manufactured to fit different tractor types, because of the variety of different attachments available on the market today, the hookup between the Agway Bale Feeder spear frame and the tractor will not be explained in this manual, please reference your tractors owners manual for hookup detail.

**NOTE:** Setup instructions assume operator already has the Tube-line Bale Feeder attached to his tractor.

1. Connect hydraulic lines
2. Align spear frame with spear frame guides on the Tube-line Bale Feeder and insert all the way in.
3. Apply hydraulic pressure.



## **Before Transporting**

1. Do a complete walk-around visual check to be sure there are no loose parts or components.
2. Do a visual check of all hoses to make sure they are securely tied so they will not pinch or drag during transporting.

## **Transport Safety**

1. Transport the Agway Bale Feeder with the SMV(Slow Moving Vehicle) sign, displayed at the rear of the Agway Bale Feeder and use your hazard lights if the law permits. Check local road laws before transporting.
2. When transporting the Agway Bale Feeder on the road be aware of the width length of the Agway Bale Feeder, especially when carrying a square bale.
3. Do not transport the machine at night, at dawn, or at dusk.
4. Do not exceed 32kph (20mph) during transport.

## **Transporting Checks**

Check the hitch pins and safety chain periodically to make sure they are secure.

## **Section 3 Operation**



### **WARNING**



**Keep bystanders away from the machine. Failure to comply could result in death or serious injury.**

**NOTE:** Setup instructions assume the operator already has read and has the Tube-line Bale Feeder attached to the tractor.

1. Apply hydraulic pressure.
2. Raise and lower bed.
3. Raise and lower bale loading assembly.



### **WARNING**



**Do not run with defective hoses or fittings. Make sure that there is no pressure in the hydraulic lines before checking or repairing. High-pressured hydraulics can cause death or serious injury.**

7. Restart the Tube-line Bale Feeder.



### **WARNING**

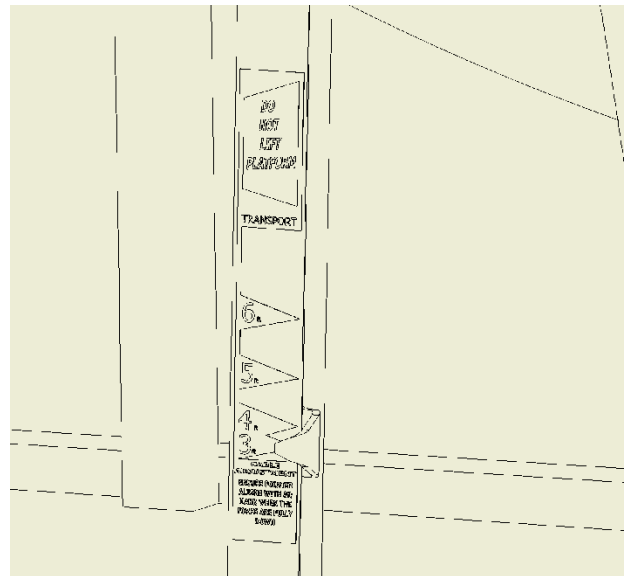
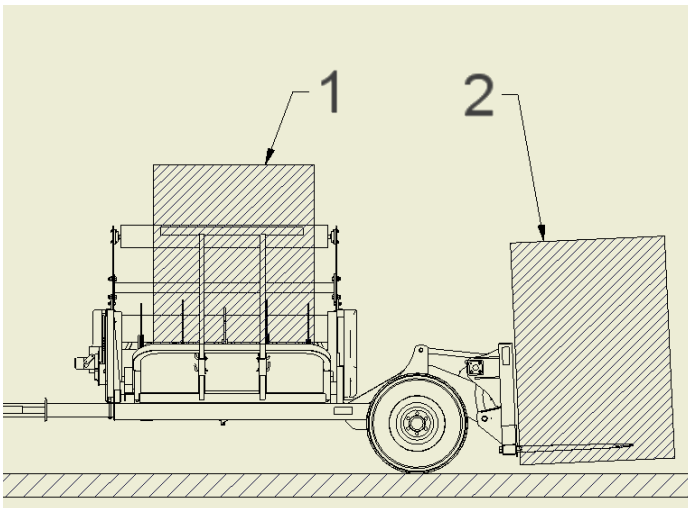
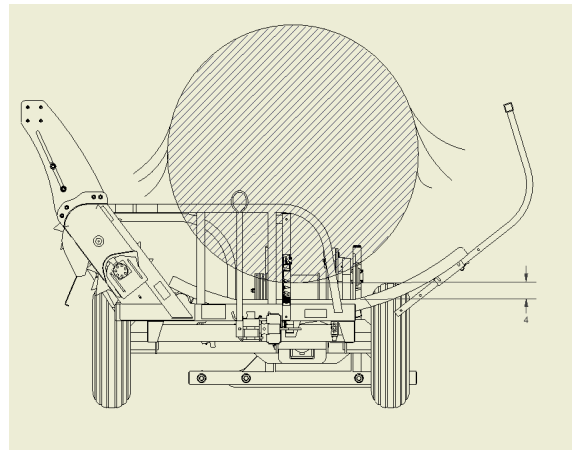
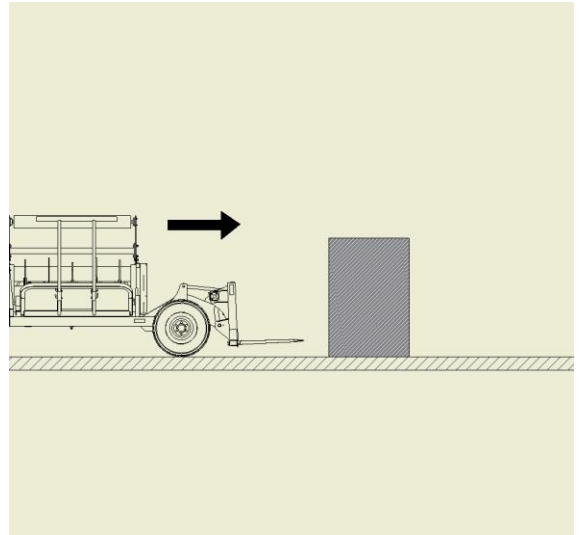


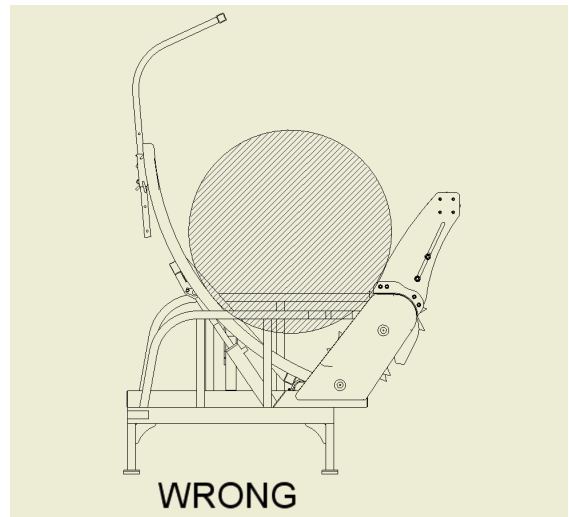
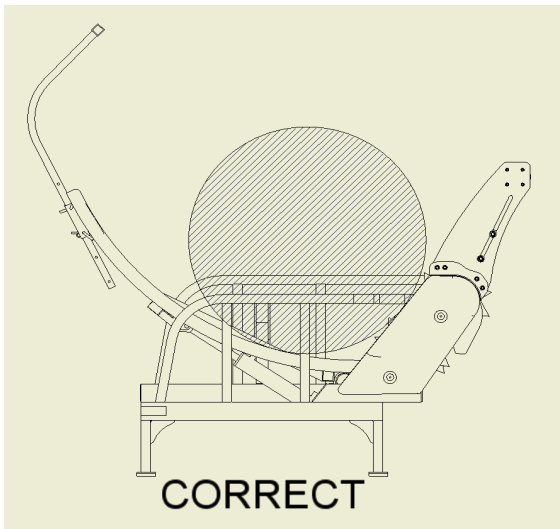
**Engage the parking brake on the tractor, shut the engine down, and wait for all moving parts to stop before leaving the cab. Failure to comply could result in death or serious injury**

4. Check for loose or missing nuts and bolts. Tighten any that are loose and replace any missing fasteners.
5. Make sure that all protective shields are in place and properly secured.
6. Check all hydraulic hoses and fittings to be sure they are tight and that no hose damage has occurred during mounting. Repair or replace any damaged parts before starting the machine.

## Loading Bales (Wrapped Bales)

1. With rear fork assembly down reverse the unit and pierce bale.
2. Apply hydraulic pressure and lift the bale until it is approximately 4" above plastic bed.
3. Remove plastic wrap and net wrap.
4. Lower bale onto Tube-line Bale Feeder bed and release fork rack and lower into loading position.
5. Once again pierce the bale and lift the bale a few inches off the ground.





## Section 4 Lubrication

### Introduction

This section gives full details of the procedures necessary to maintain the Tube-line Bale Feeder at peak efficiency. Complete all checks and services in this section at the hour interval shown.

*Important:* Failure to complete the required maintenance at the intervals shown can cause unnecessary downtime.

The recommended lubrication intervals are for average conditions. Perform lubrication more often when operating under adverse conditions.



### **WARNING**



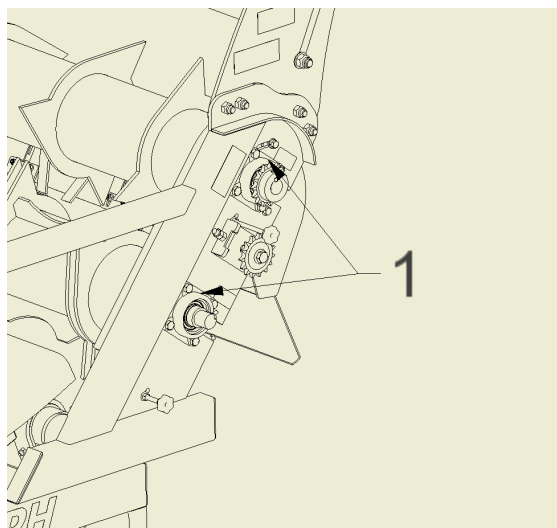
**Before lubricating the Tube-line Bale Feeder, always observe the following precautions:**

•**Turn off tractor, set parking brake, remove key and wait for all moving parts to stop before leaving cab.**

**Failure to comply could result in death or serious injury.**

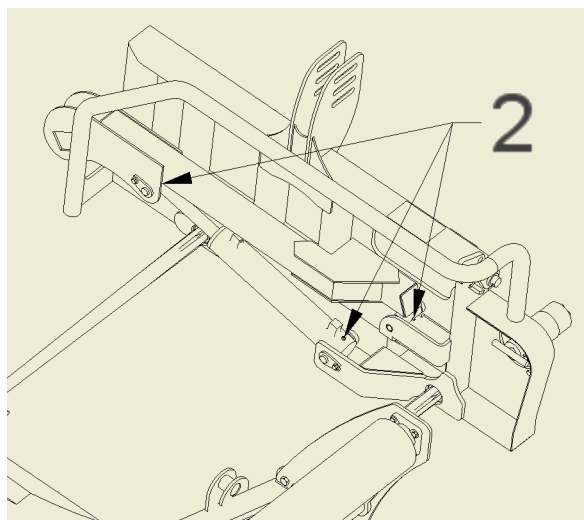
### Beater Bearing (1)

Apply 3 strokes of grease every 50 hours at point (1) (4 locations)



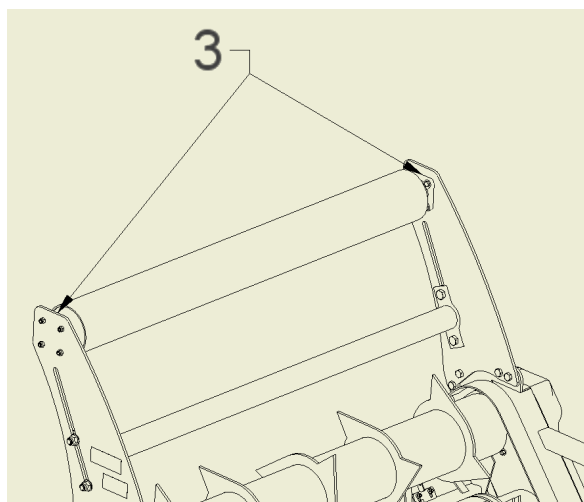
### Cylinder Pivot (2)

Apply 3 strokes of grease every 50 hours at point (2) (3 locations).



### Bumper Bearing (3)

Apply 3 strokes of grease every 50 hours at point (3) (2 locations)



## **Section 5**

### **Maintenance**

Complete all checks and services in this section at the hour interval shown.

**IMPORTANT:** Failure to complete the required maintenance at intervals shown can cause unnecessary downtime.

The recommended intervals are for average conditions. Perform maintenance more often when operating the Tube-line BF5000 under adverse conditions.



#### **WARNING**



**Before performing any adjustments or maintenance on the Tube-line BF5000, observe these safety precautions:**

- **Turn off tractor, set parking brake, remove key and wait for all moving parts to stop before leaving cab.**

**Failure to comply could result in death or serious injury.**

Careful inspection and service of the BF5000 prior to operation each day will prevent needless breakdowns and delays in the field. Make the following checks and adjustments.

#### **End of Season Service**

Prior to storing the Tube-line BF5000 during the off season, follow these steps to ensure easier preparation for the next season and longer Tube-line BF5000 life

Pack all grease point with grease (see the “Lubrication” section for grease points location).

Remove all crop material from the BF5000.

#### **Daily Maintenance**

Be alert for loose hardware and tighten or replace as required.

Lubricate the Tube-line BF5000 according to the instructions in the “Lubrication” section of this manual.

Under adverse conditions, shorten the lubrication intervals.

#### **Preseason Service**

Prior to beginning the harvest after offseason storage, take the following steps be certain the Tube-line BF5000 is in good condition.

Check slot opening guide, make sure it is tight and that the beater blade clears as described in the “General Information” section.

Lubricate the Tube-line BF5000 according to the “Lubrication” section of this manual.

Tighten or replace any damaged or missing fasteners.



## **Section 6**

### **Trouble Shooting**

#### **Round bales**

**Problem:** The rotors turn, but the bale refuses to turn.

**Suggested remedy:** The platform is not raised high enough. The bale must be pushed against both beaters.(see pg 3-2)

**Problem:** Crop material jams between top beater and wiper.

**Suggested remedy:** The wiper guides may need adjusting. (see pg 2-3)

**Problem:** Several biscuits coming out at once.

**Suggested remedy:** The bed is too high. Lower the bed. The crop material was baled when wet, reverse beaters 2 turns then forward again.

#### **General**

**Problem:** The bale is dropping too hard onto platform.

**Suggested Remedy:** Spear bale lower when loading

**Problem:** Spear frame does not trip before the bale rests on the platform.

**Suggested Remedy:** Spear bale higher when loading

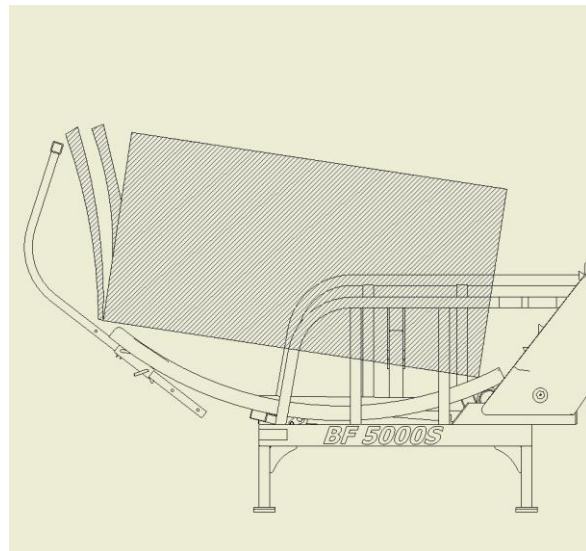
## Section 7

### Optional Equipment

#### **Bale Extension**

The bale extension, available as an option is used primarily to contain square bales placed on the bed of the Tube-line BF5000.

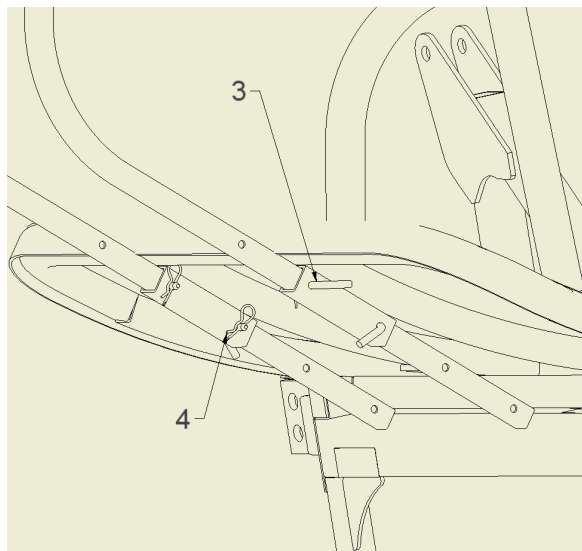
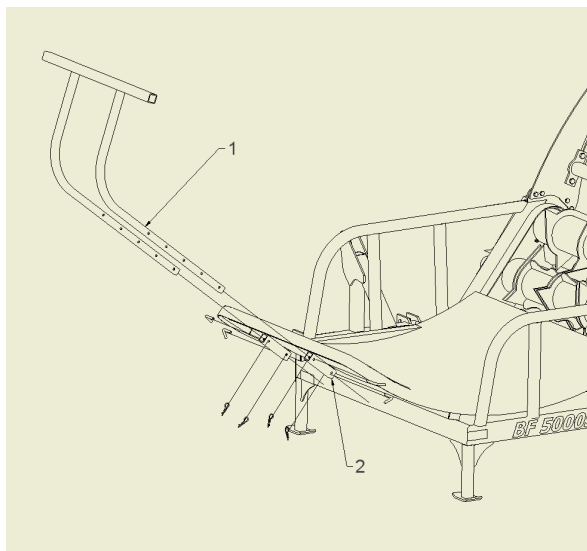
The bale extension is designed to contain the biscuits of crop material placed on the bed of the Tube-line BF5000, allowing the bale to be feed and no crop material to spill off the non feeding side.



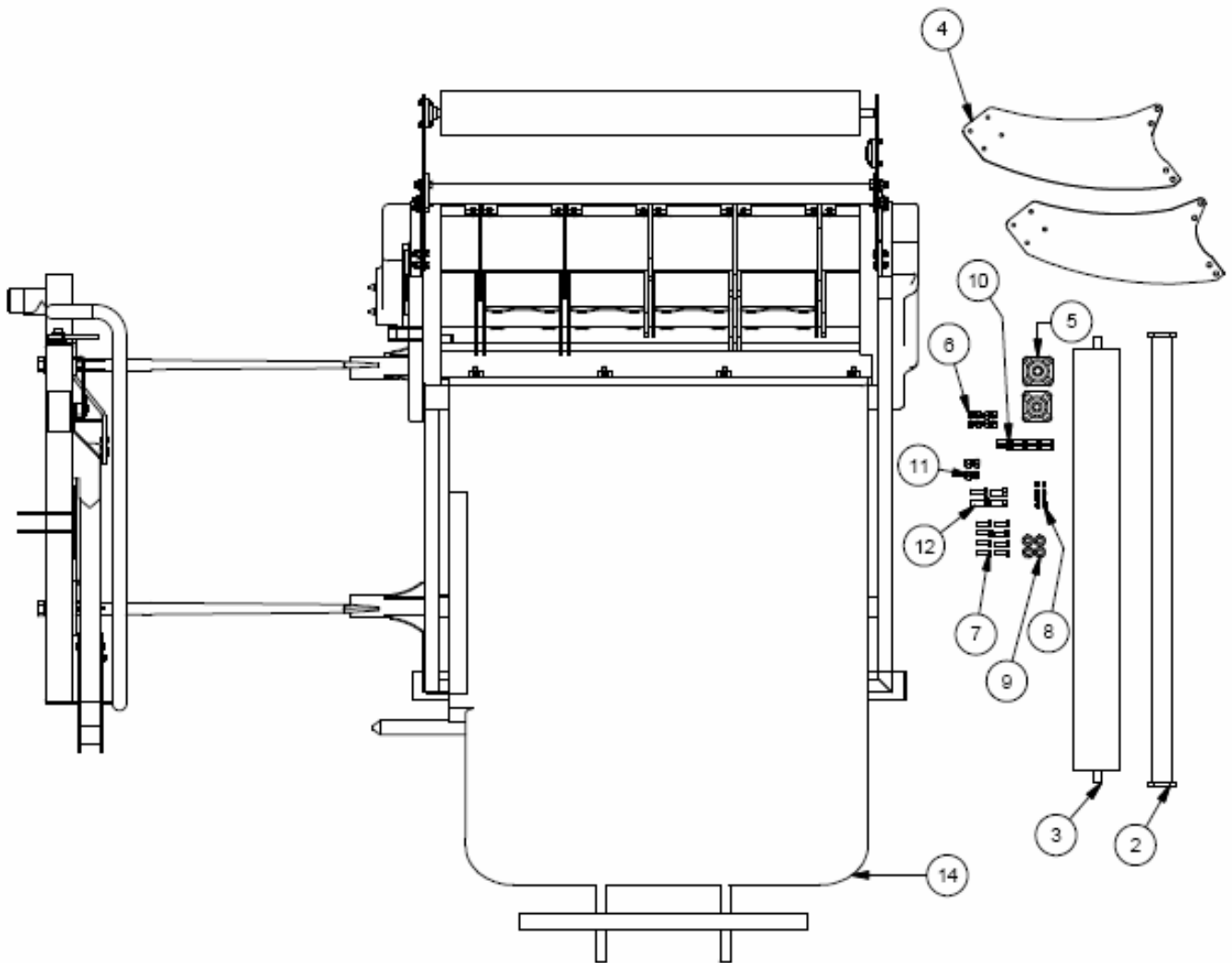
#### **Square Bale Extension**

Slide bale extension assembly(1) into bed extension receiver(2).

Secure bale extension with bale extension pin(3), and hitch pin clip(4).

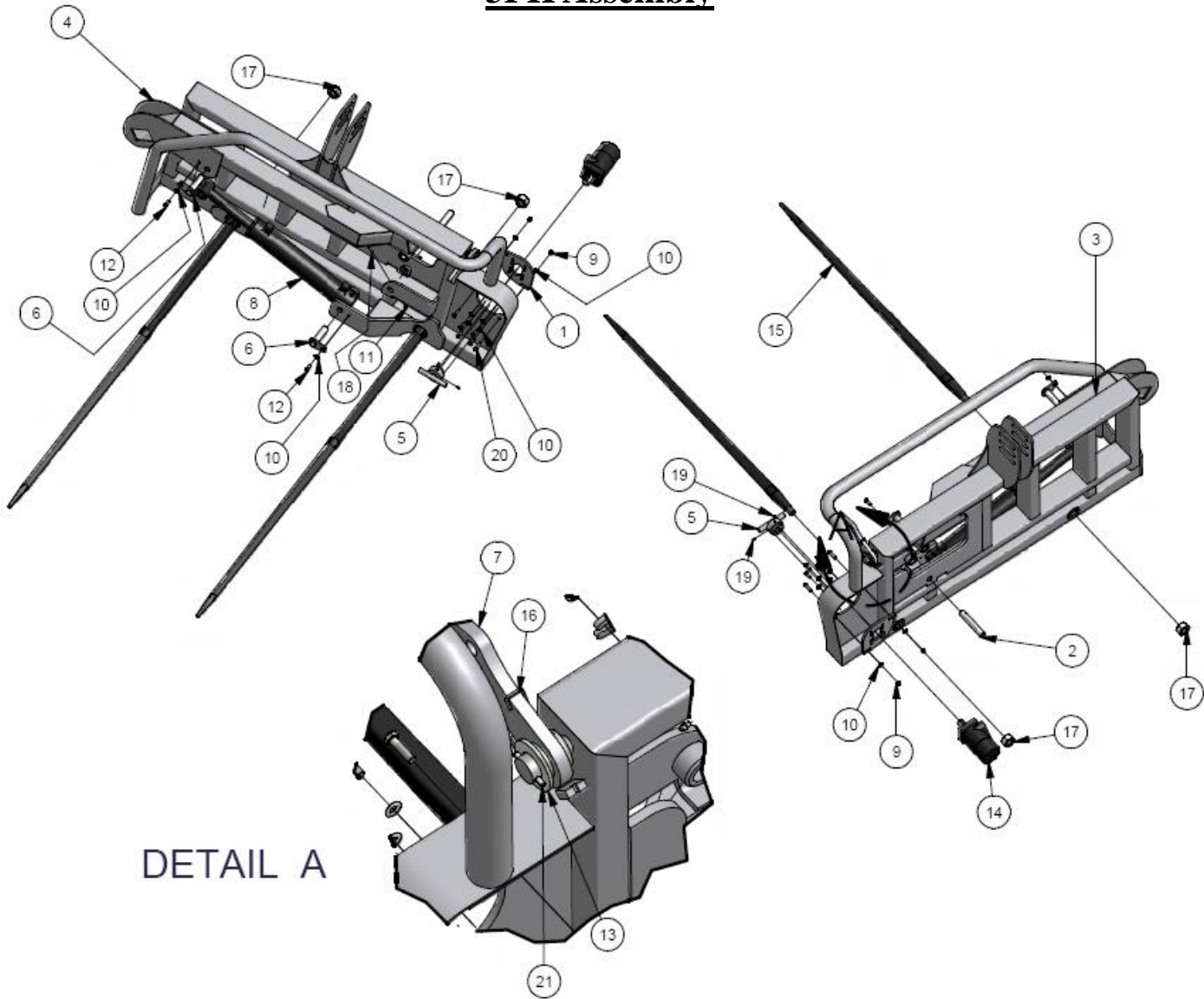


## Items you will find with your Tube-line Self Loading Bale Feeder



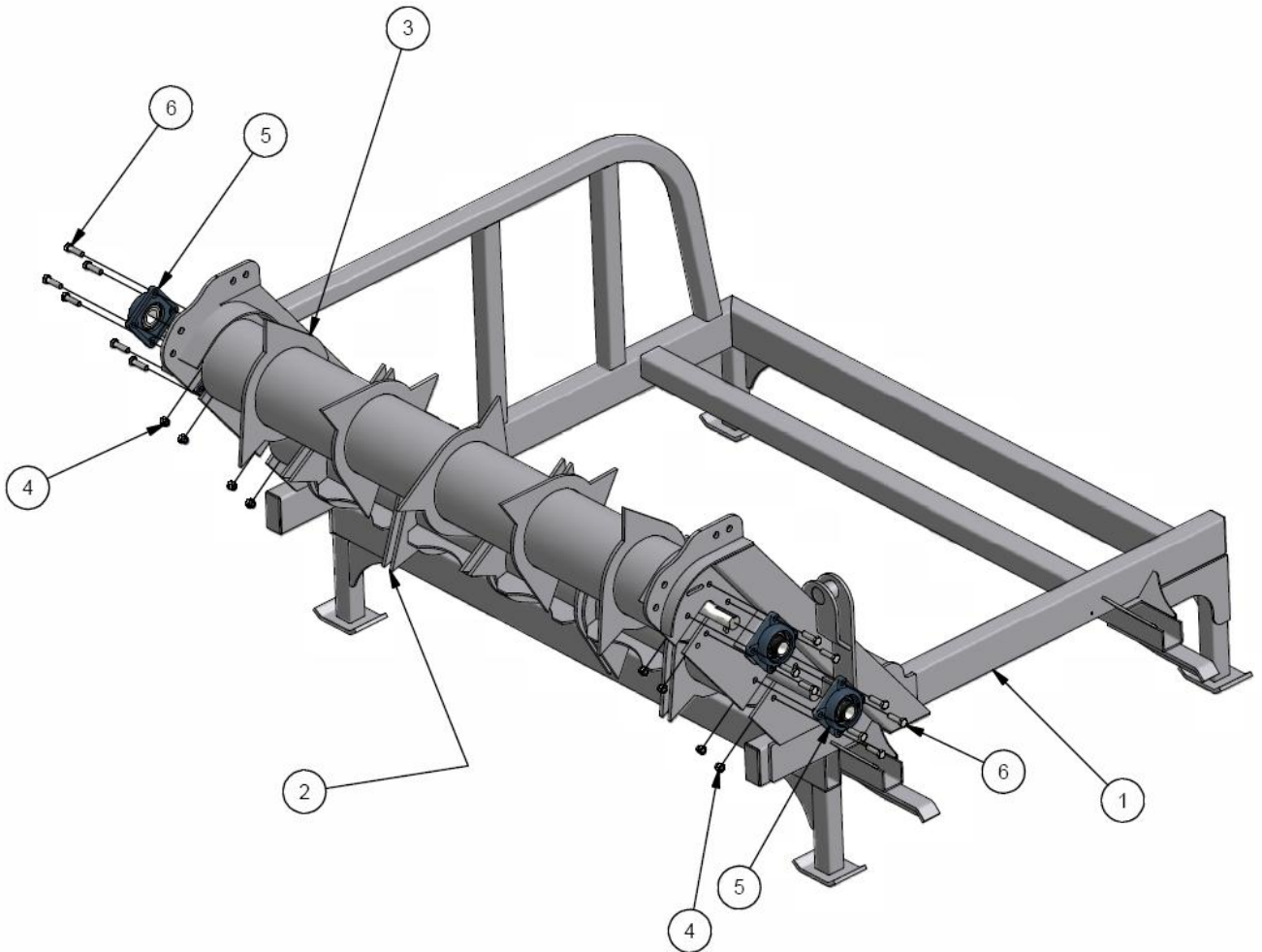
Item	Qty	Part #	Description
2	1	BF-5000-a19	Second Roller
3	1	BF-5000-a20	Bumper Roller
4	2	BF-5000-260	Bumper Plate
5	2	PP-00655	F206, 1.125 (ID) Bearing
6	8	PP-00170	5/8-11, UNC Lock Nut
7	8	PP-00323	Gr.3, 5/8-11 x 1.75 Hex Cap Screw
8	8	PP-00332	7/16-14 UNC Lock Nut
9	4	PP-00192	USS Zinc Plated 3/4 Flat Washer
10	8	PP-00636	Gr.3, 7/16-14 UNC x 1.5 Hex Cap Screw
11	4	PP-00003	3/4-10 UNC Lock Nut
12	4	PP-00047	Gr.3, 3/4-10 UNC x 2 Head Cap Screw
13	1	BF-5000-3PH-00	Complete Assembly

## 3PH Assembly



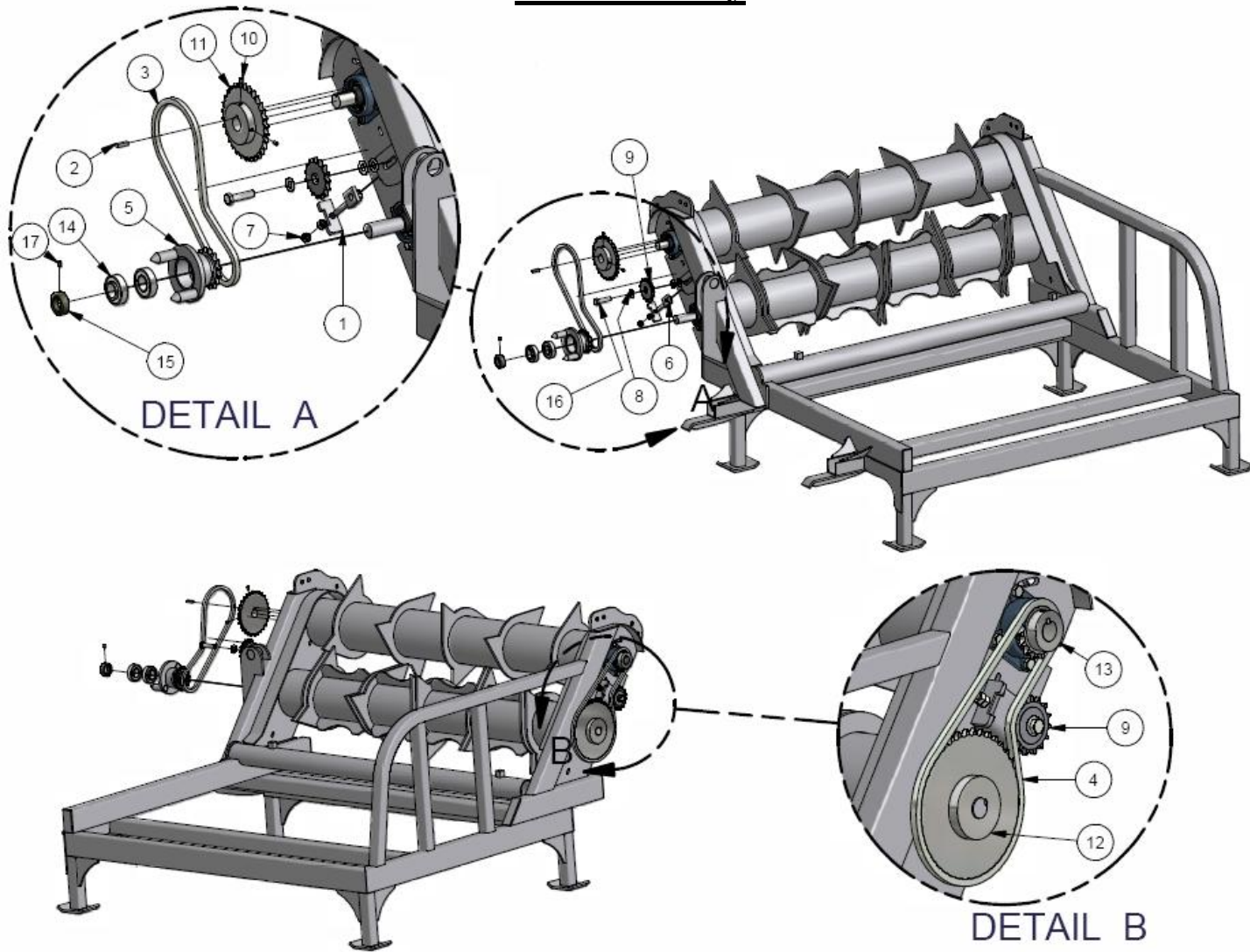
Item	Qty	Part #	Description	Item	Qty	Part #	Description
1	1	BF-5000-099	Slot Plate	12	6	PP-00153	Gr.5 3/8-16 x 1 Hex Head Cap Screw
2	1	BF-5000-102	Arm Pivot Pin	13	1	PP-00188	1 1/4 Plain Washer
3	1	BF-5000-3PH-02	Spear Assembly	14	1	PP-00202	Hydraulic Motor
4	1	BF-5000-3PH-04	Arm Assembly	15	2	PP-00519	49" Fork Spear
5	1	BF-5000-3PH-09	Drive Rod Assembly	16	1	PP-00524	Torsion Spring
6	2	BF-5000-a04	Cyl. Pin Assembly	17	2	PP-00559	Gr.3 M30 x 3.5 Finished Hex Nut
7	1	BF-5000-a05	Hook Assembly	18	1	PP-00640	Gr.3 5/16-18 UNC x 2.25 Hex Head Cap Screw
8	1	CY-30014-01-00	3" Bore x 14" Stroke Cylinder	19	2	PP-00641	1/4-20 UNC x .5 Set Screw
9	2	PP-00007	3/8=16 UNC Lock Nut	20	2	PP-00642	Gr.3 3/8-16 UNC x 1.375 Hex Head Cap Screw
10	8	PP-00008	3/8 Flat Washer	21	1	PP-00544	Roll Pin 1/4 x 2
11	1	PP-00080	5/16-18 Lock Nut				

## 3PH Assembly



Item	Qty	Part #	Description
1	1	BF-5000-3PH-01	Frame Assembly
2	1	BF-5000-3PH-08	Bottom Beater Assembly
3	1	BF-5000-a01	Top Drum Assembly
4	16	PP-00014	1/2-13 UNC Lock Nut
5	4	PP-00309	Bearing
6	16	PP-00503	Gr.3 1/2-13UNC x 1.75 Hex Cap Screw

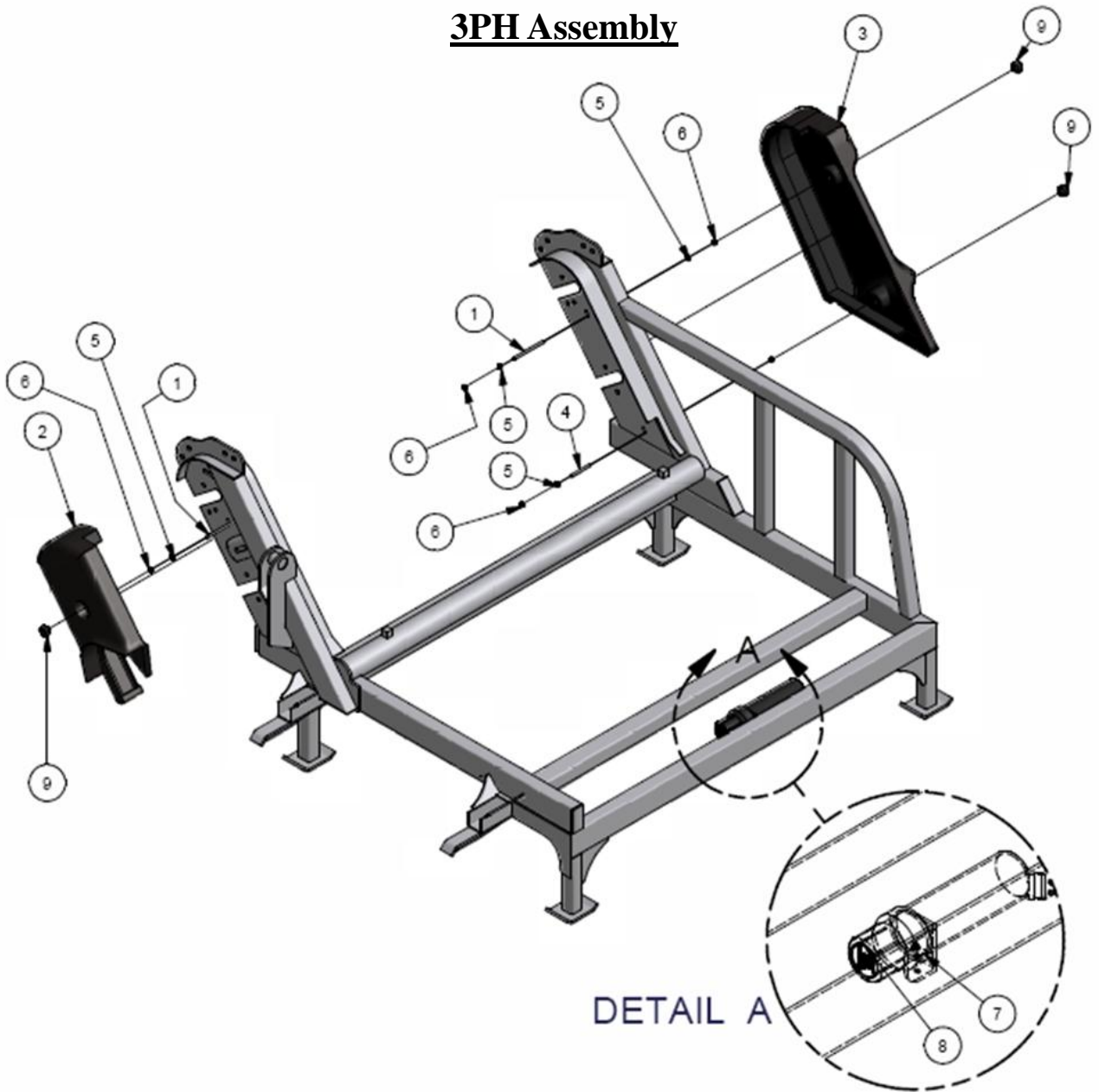
## 3PH Assembly



Item	Qty	Part #	Description	Item	Qty	Part #	Description
1	2	BF-5000-246	Chain Tightener Bracket	10	6	PP-00504	5/16-18 UNC x .5 Socket Head Cap Screw
2	3	BF-5000-253	Key	11	1	PP-00521	60-30 Drive Sprocket
3	1	BF-5000-254	Chain 60 Series-28.5 Links	12	1	PP-00522	60-20 Drive Sprocket
4	1	BF-5000-255	Chain 60 Series-32 Links	13	1	PP-00523	60-20 Drive Sprocket
5	1	BF-5000-3PH-05	Drive Sprocket	14	2	PP-00550	Bearing
6	2	BF-5000-a17	Slide Assembly	15	1	PP-00551	Locking Collar
7	4	PP-00013	1/2-13 UNC Finished Hex Nut	16	2	PP-00589	Gr.3 5/8-11 UNC x 2 5/8 Hex Head Cap Screw
8	6	PP-00036	5/8 Flat Washer	17	1	PP-00646	5/16-24 x .5 Socket Head Set Screw
9	2	PP-00060	60-15 Idler Sprocket				

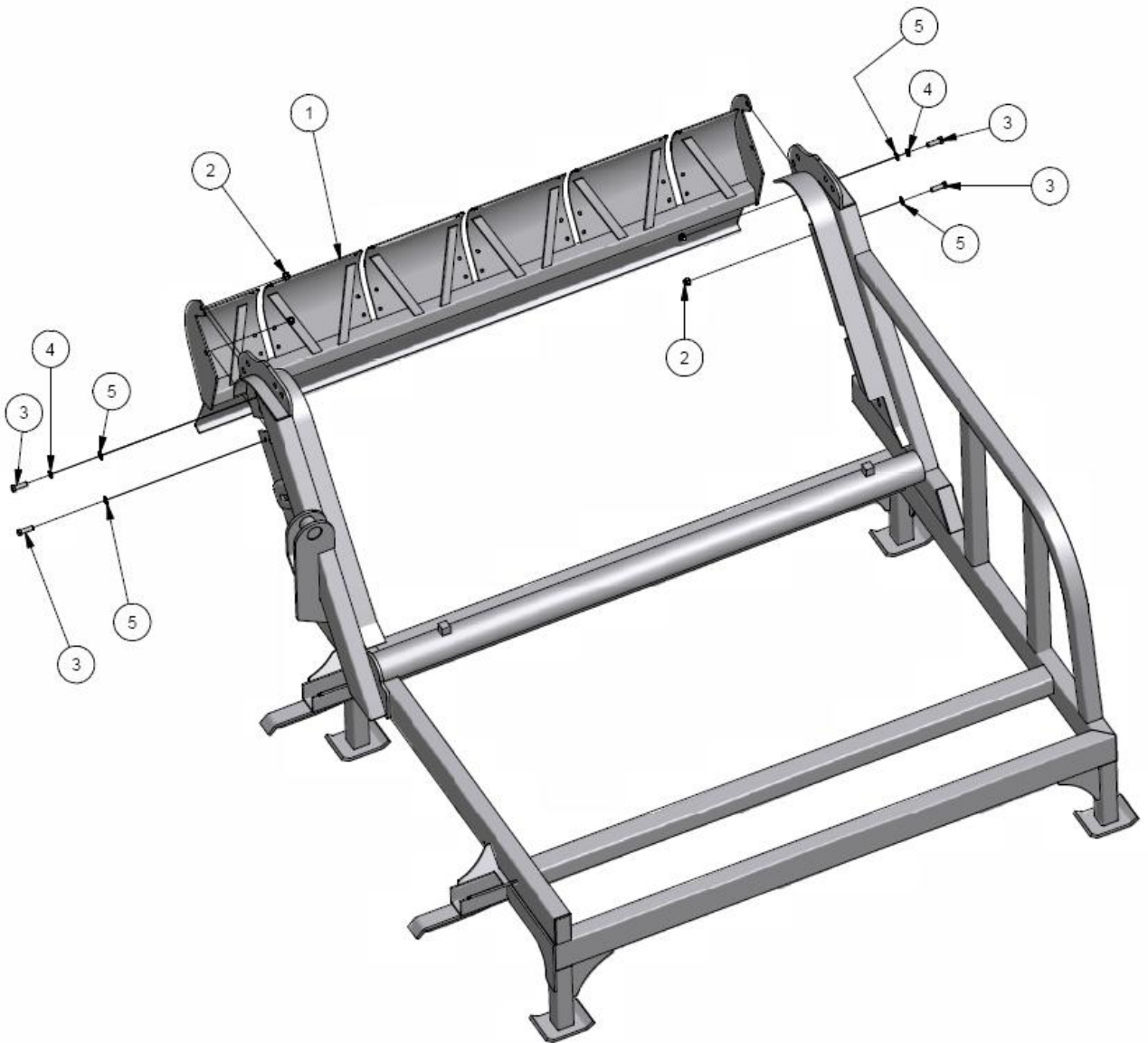


## 3PH Assembly



Item	Qty	Part #	Description
1	2	BF-5000-106	Tightener Rod
2	1	BF-5000-108	Bale Feeder Small Guard
3	1	BF-5000-109	Bale Feeder Large Guard
4	1	BF-5000-250	Bottom Tightener Rod
5	6	PP-00008	3/8 Flat Washer
6	6	PP-00026	3/8-16 Finished Hex Nut
7	2	PP-00352	Gr.3 1/4-20 UNC x 1 Hex Cap Screw
8	1	PP-00535	Manual Holder
9	3	PP-00590	Lobed Hand Wheel

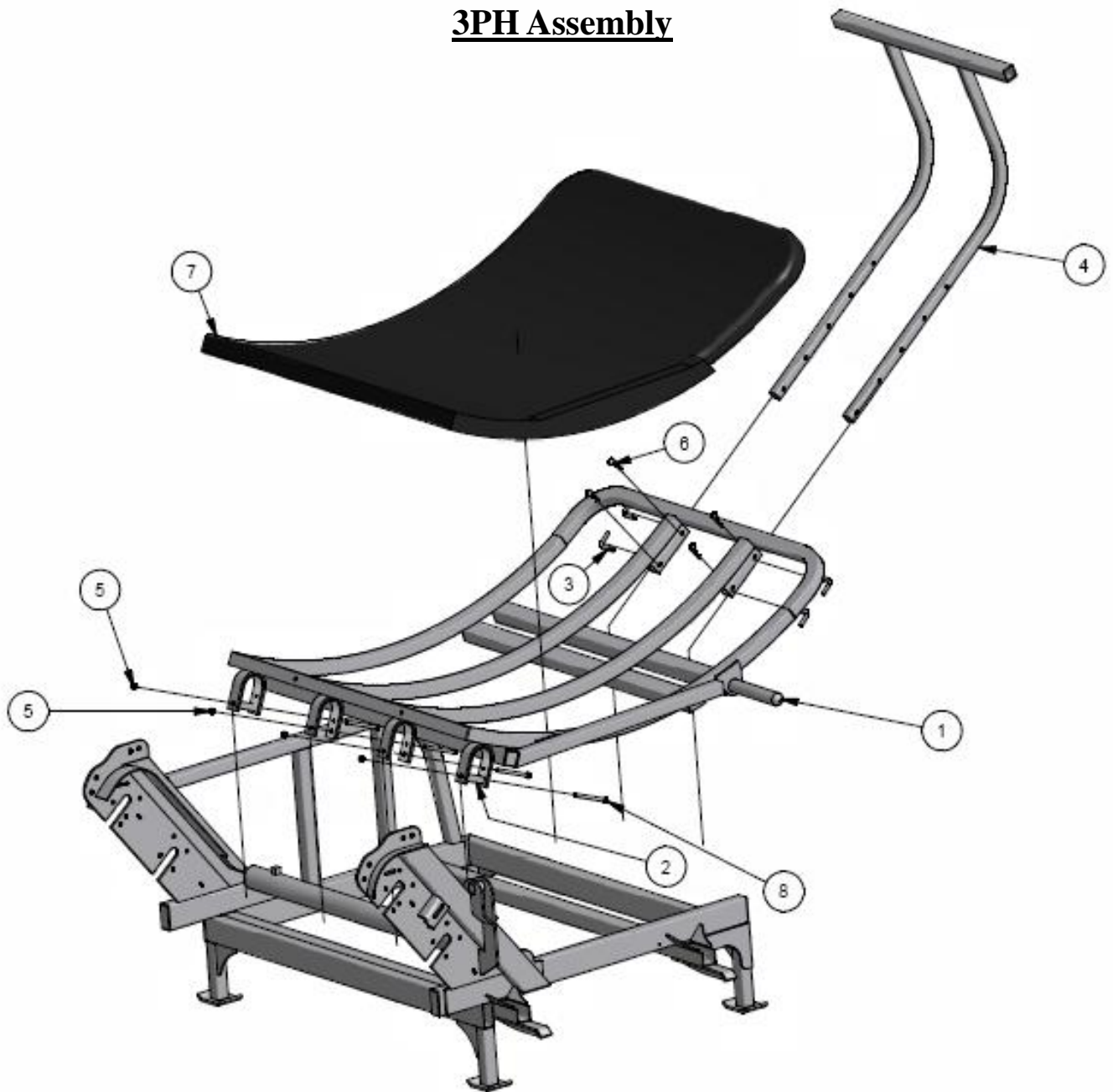
## 3PH Assembly



Item	Qty	Part #	Description
1	1	BF-5000-a03	Large Wiper Assembly
2	4	PP-00332	7/16-14 UNC lock Nut
3	4	PP-00636	Gr.3 7/16-14 UNC x 1.5 Hex Cap Screw
4	2	PP-00637	7/16 Lock Washer
5	4	PP-00638	716 Washer

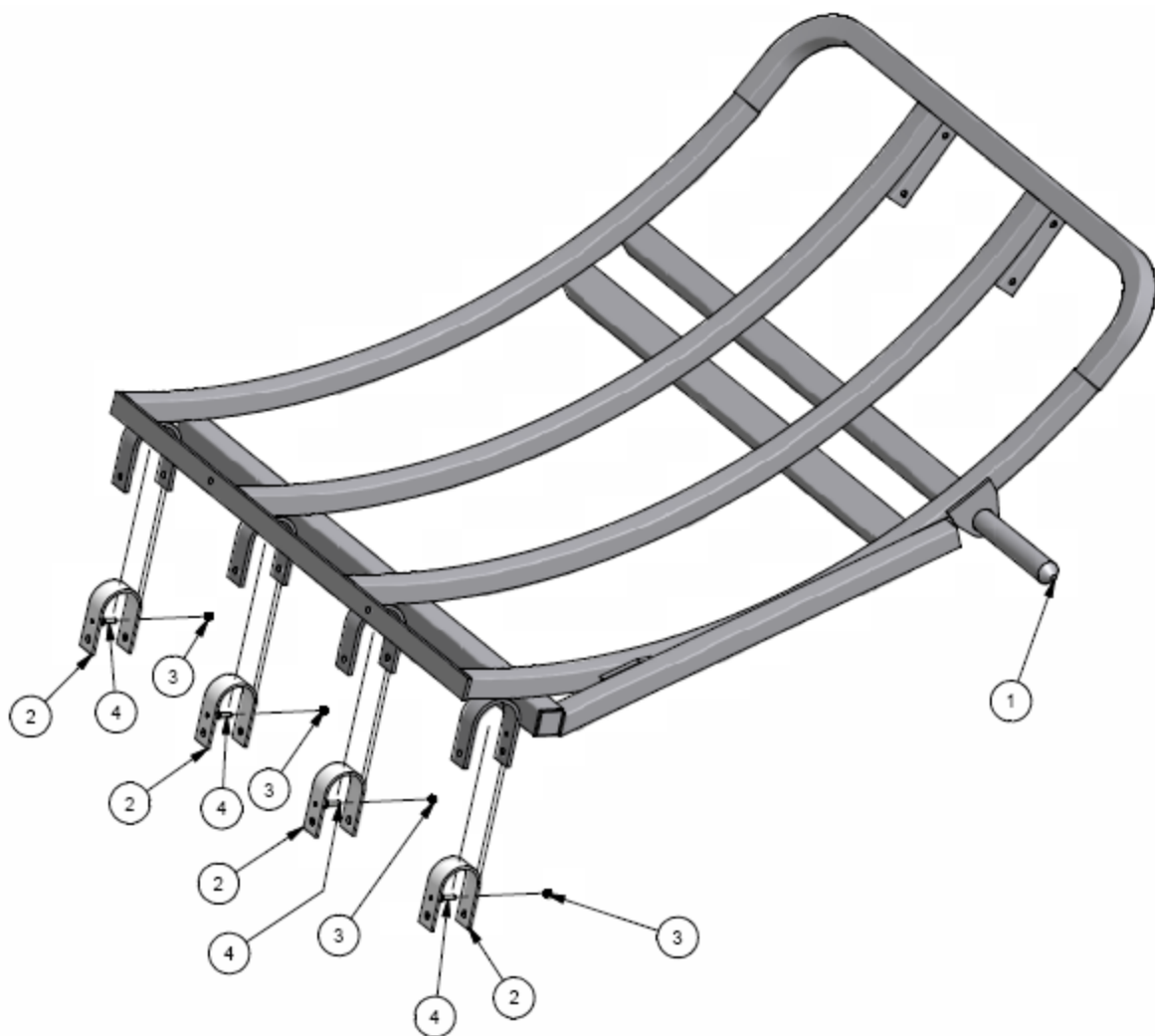


## 3PH Assembly



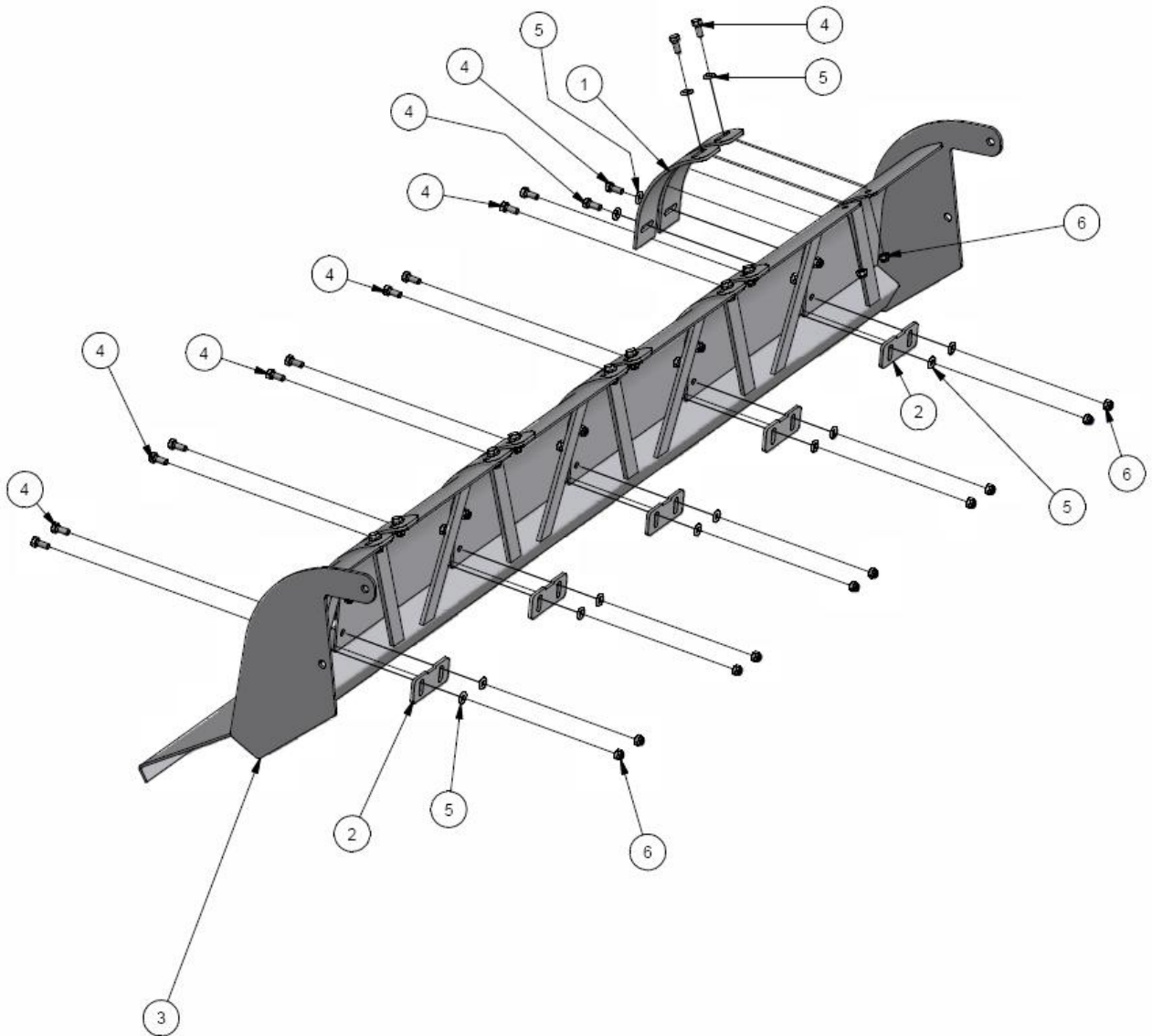
Item	Qty	Part #	Description
1	1	BF-5000-3PH-03	Bed Assembly
2	2	BF-5000-229	Bed Spacer
3	4	BF-5000-238	Bale Extension Pin
4	1	BF-5000-a10	Bale Extension Assembly
5	4	PP-00014	1/2-13 UNC Lock Nut
6	4	PP-00405	Hitch Pin Clip (.15 dia)
7	1	PP-00516	Plastic Bed
8	4	PP-00560	Gr.3 1/2-13 UNC x 6 Hex Head Cap Screw

## 3PH Assembly



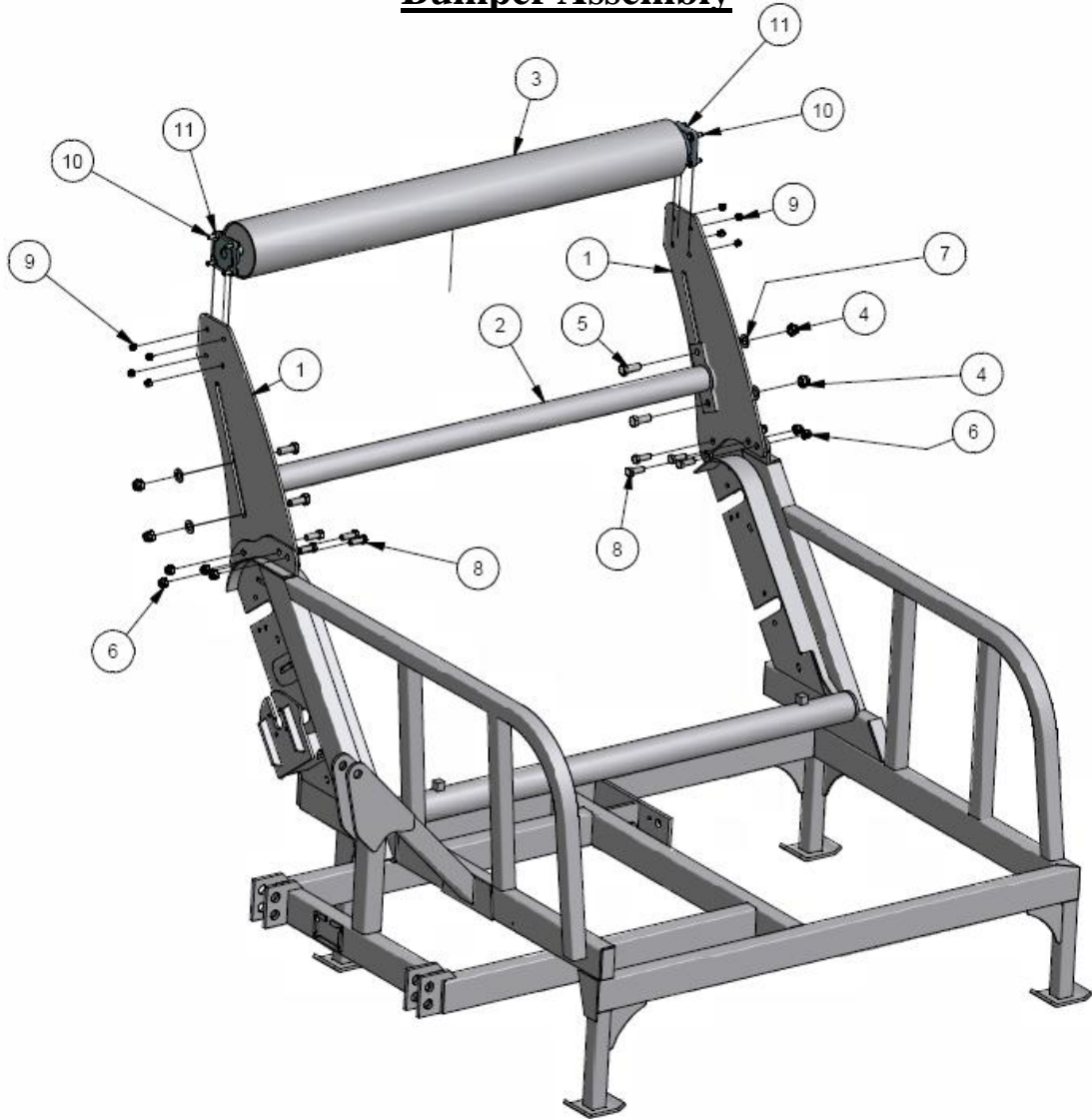
Item	Qty	Part #	Description
1	1	BF-5000-3PH-03	Bed Assembly
2	4	BF-5000-079	UHMW Wear Strip
3	4	PP-00007	3/16-16 UNC Lock Nut
4	4	PP-00055	Gr.3 3/8-16 UNC x 1.25 Hex Head Cap Screw

## Wiper Assembly



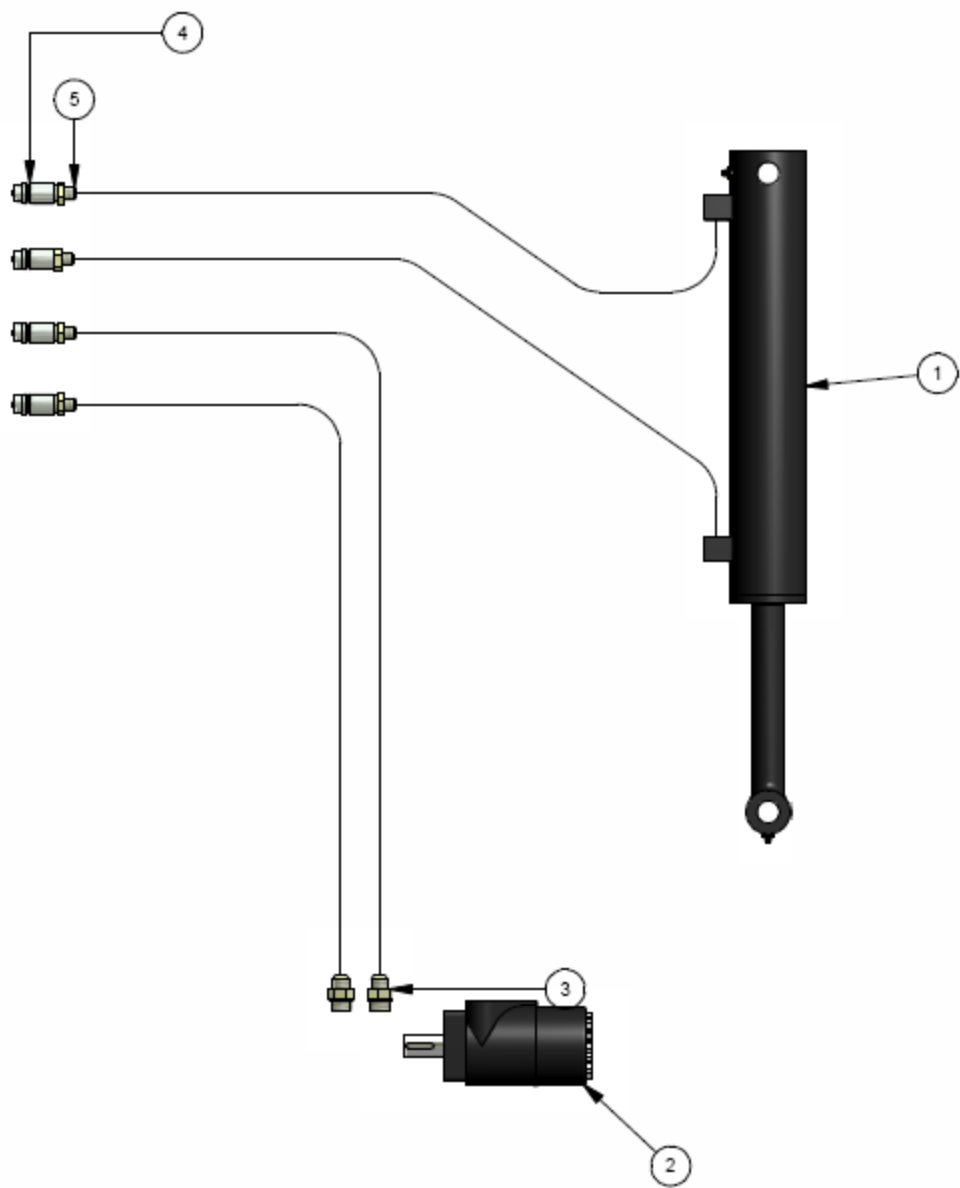
Item	Qty	Part #	Description
1	10	BF-5000-100	Slot Opening Guide
2	5	BF-5000-101	Inside Bracket Guide
3	1	BF-5000-a03	Large Wiper Assembly
4	30	PP-00005	Gr.3 5/16-18 UNC x .75 Hex Head Cap Screw
5	30	PP-00006	5/16 Flat Washer
6	30	PP-00080	5/16-18 Lock Nut

## Bumper Assembly



Item	Qty	Part #	Description
1	2	BF-5000-260	Bumper Plate
2	1	BF-5000-a19	Second Roller
3	1	BF-5000-a20	Bumper Roller
4	4	PP-00063	3/4-10 UNC Lock Nut
5	4	PP-00047	Gr.3 3/4-10 UNC x 2 Hex Head Cap Screw
6	8	PP-00170	5/8-11 UNC Lock Nut
7	4	PP-00192	USS Zinc Plated 3/4 Flat Washer
8	8	PP-00323	Gr.3 5/8-11 UNC x 1.75 Hex Cap Screw
9	8	PP-00332	7/16-14 UNC Lock Nut
10	8	PP-00636	Gr.3 7/16-14 UNC x 1.5 Hex Cap Screw
11	2	PP-00655	Bearing

# Hydraulic Setup

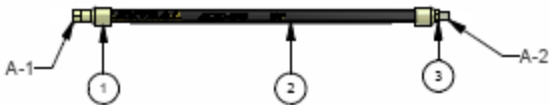


Item	Qty	Part #	Description
1	1	CY-30014-01-00	3 Bore x 14 Stroke Cylinder
2	1	PP-00202	Hydraulic Motor
3	2	PP-00410	Adapter #8 M-JIC/#10 M-ORB
4	4	PP-00661	Pioneer Male Coupler #8 F-NPT
5	4	PP-00662	Adapter #6 M-JIC/ #8 M-NPT

# Hydraulic Setup

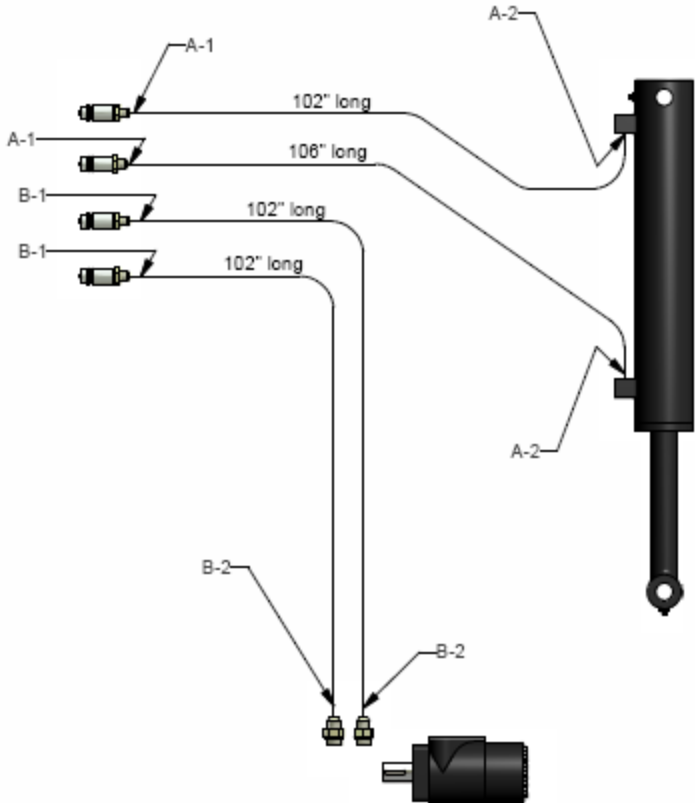
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PP-00094	Coupling,#6 F-JIC 3/8" bore
2	1	PP-00098	3/8" Two wire braid hose
3	1	PP-00101	Coupling,#4 M-NPT 3/8" bore

**A**



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PP-00094	Coupling,#6 F-JIC 3/8" bore
2	1	PP-00098	3/8" Two wire braid hose
3	1	PP-00416	Coupling,#8 F-JIC 3/8" bore

**B**





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