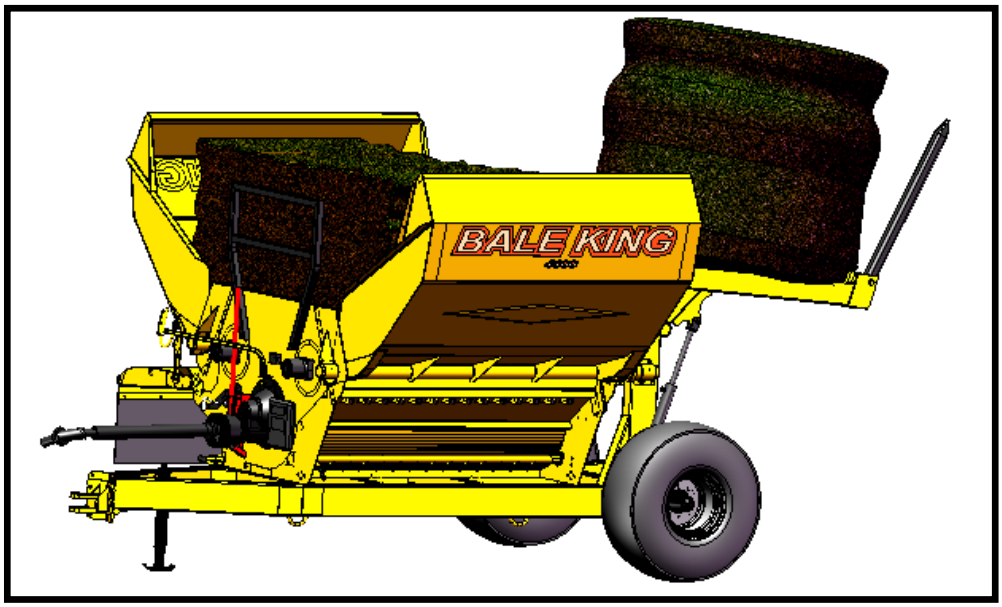
BRIDGEVIEW



BALE KING 4105

Bale Processor

Operator's & Parts Manual

Last Update: March 5, 2025

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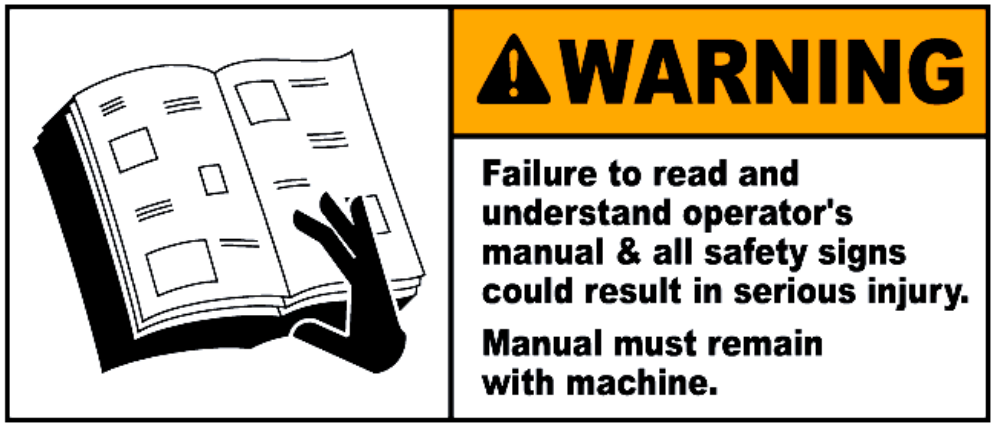
Your Authorized Dealer
Your Serial Number

The Serial Number is located near the front of the left hand wall of the tub.



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1 INTRODUCTION

Thank you for purchasing your new **Bale King** Bale processor. With the proper operation and service as outlined in this manual, the Bale King will provide you with years of trouble free operation.

This is a complete safety and operation manual for the Bale King 4105. The manual covers in detail how to safely and effectively use your new processor. The procedures outlined in this manual should be followed to ensure safe operation and longevity of your machine. Please read completely through this manual before beginning operation of your new machine.

2 *SAFETY & OPERATION*

2.1 SAFETY PRECAUTIONS

The following safety precautions MUST be followed to ensure safe operation of the Bale King Bale Processor.

1) **ALWAYS** turn off the tractor when leaving the operating platform.

2) **DO NOT** stand in front of the discharge chute while the machine is running.

3) **DO NOT** walk or move under the bale forks when they are in the upward position, unless the cylinder safety lock is in place.

4) **DO NOT** enter the machine while in operation.

5) **DO NOT** clean machine while in operation.

6) **DO NOT** stick any device into the machine to clear debris while the machine is in operation.

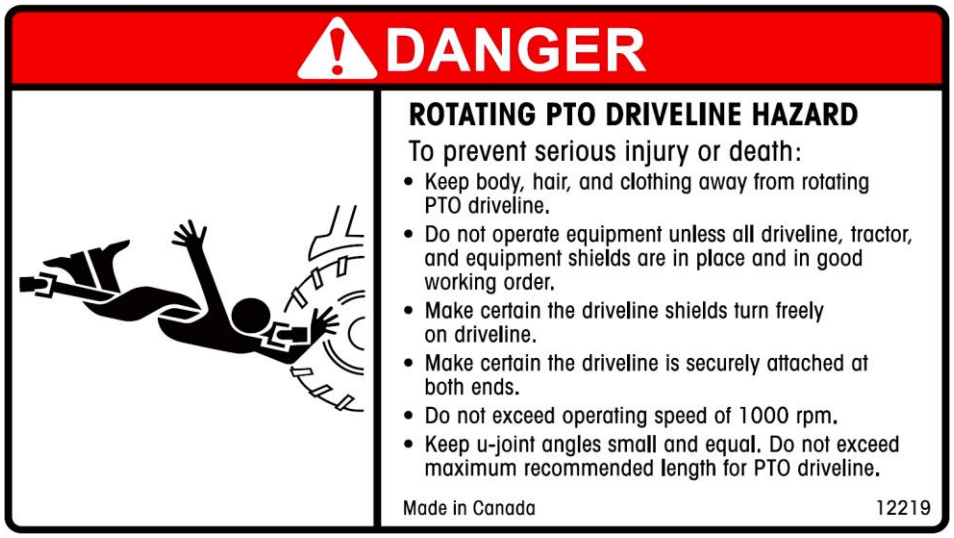
7) **ALWAYS** turn off the machine when cleaning the machine, removing twine, or hooking/unhooking the machine

8) **ALWAYS** use safety chain tow ring located directly behind the hitch on the underside of the frame when towing the machine on the highway.

9) **DO NOT operate if any part of the PTO safety shielding is** missing or is not secured.

Safety Decals

The operator must obey all safety labels and must maintain the proper shielding. A high percentage of drive-line injuries occur when safety shielding is missing or not functioning properly.



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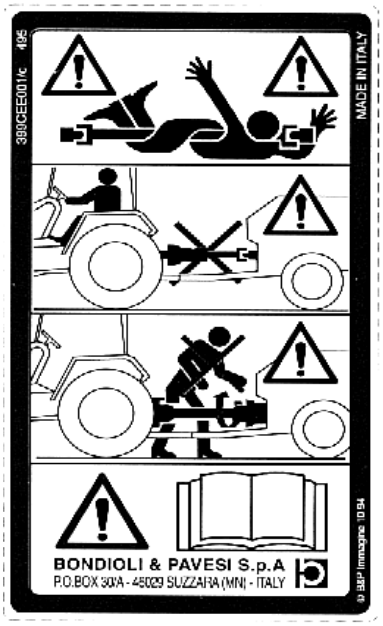


DANGER: ***Contact with a rotating drive-line can cause serious injury or death.***

There are several safety decals on the Bale King to provide warning about dangerous areas. They are located in the following locations:

Discharge

Do not stand on the discharge side of the machine while it is in operation.

Rear Fork Lift Area

Stand clear of lift area. Do not stand under the forks unless safety locks are installed.

2.2 POWER TAKE-OFF

2.2.1 PTO SAFETY

Do not operate the machine without all driveline, tractor, and implement shields in place. Drive-line shields must turn freely on the driveshaft.

Before operating the machine, be sure drive-lines are attached **securely** to the tractor and to the implement. Check the tractor yoke.

Keep operators and bystanders away from all moving parts.

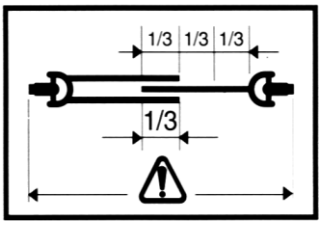
NOTE: Contact with a rotating drive-line can cause serious injury or death.

2.2.2 PTO USE AND MAINTENANCE

Safety

Shut off the tractor engine and remove the key before doing any maintenance on the machine.

NOTE: Use genuine Weasler parts when replacing any worn or damaged PTO components.

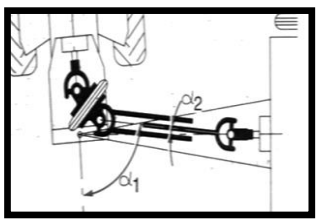


Length

Confirm the minimum and maximum working lengths of the drive-line. The telescoping tubes must overlap at least 1/3 of their length when in use. The PTO is designed to be used with a drawbar length of 16" from the end of the PTO shaft. Adjust your tractor accordingly.

Shielding

Be sure that the shielding is not damaged and rotates freely on the drive shaft.

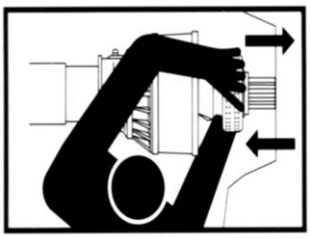


Working Angles

Constant Velocity joints can operate up to 80 degrees for short periods of time. Do not operate for long periods on sharp angles.

Attachment

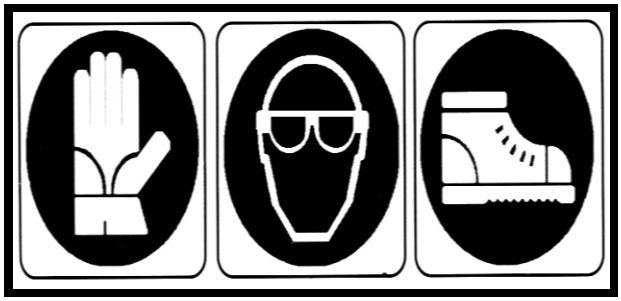
Be sure the drive-line is properly attached and all bolts and screws are tight on the implement input shaft and on the tractor PTO shaft.



Storage

When not in use, cover or protect the drive shaft from the weather. When removed from the machine store both halves together to prevent damage. Check all components for proper function and lubrication before use.

BEFORE ATTEMPTING ANY REPAIR PROCEDURES, ALWAYS USE APPROPRIATE EQUIPMENT SUCH AS SAFETY GLASSES, SAFETY SHOES, AND GLOVES.

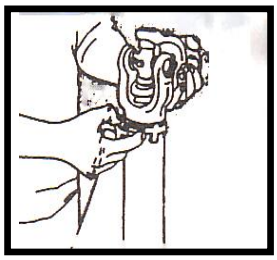


2.2.3 PTO ASSEMBLY AND DISASSEMBLY

Shield Removal

To remove the shield, pop out the red snap, then rotate the guard on the bearing to line up the three tabs with the openings and pull it off away from the knuckle joint.

Remove the nylon bearing from the shaft by spreading it open.

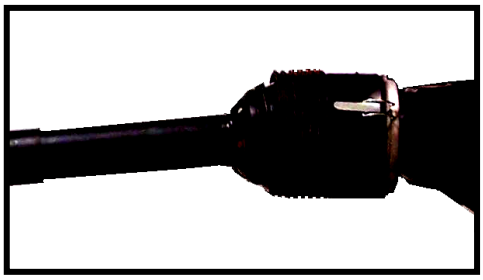


Shield Assembly

Be sure to lube the groove in the inner yokes where the shield bearing rides.

Re-install shields in the above directions in reverse order.

2.2.4 SHEAR-BOLT CLUTCH PTO SHAFT



All new Bale King Processors are equipped with a shear bolt clutch located at the machine end of the PTO shaft. The shear-bolt is **3/8" x 2" grade 5.** The **shear-bolt** must be used. Any other size will damage the shear assembly.

If your shear-bolt is shearing excessively you may be over-loading the machine. If this occurs raise the grate assembly to make the machine less aggressive. Also roll the bale more slowly. **Always ensure that your machine is running at 1000 PTO RPM.**

NOTE: Please consult your local dealer to help pinpoint any problems.

2.2.5 PTO HOOKUP

Your Bale King Processor has a PTO shaft which is splined on both ends. The machine end uses a 1-3/4"-20 spline with wedge lock bolt. Install on the machine and tighten the wedge bolt. The bolt should be torqued to **160 ft/lbs.** and re-torqued after 8 hrs of use.

The tractor end comes standard with a 1-3/8"-21 spline quick detach constant velocity joint. An optional 1-3/4"-20 spline yoke is available through your Bale King dealer.

DO NOT operate the machine using a spline adaptor. Use of adaptors will void warranty due to damage caused to the tractor PTO, PTO driveshaft, or implement.

DO NOT operate at 540 rpm, or use any kind of adaptor to connect to a 540 rpm spline.

Always ensure that the PTO shaft is attached securely to the tractor. When the processor is not hooked to the tractor, store the shaft on the PTO holder.

DO NOT transport the processor without securing the PTO shaft. It may bounce off the holder and be damaged.

Always ensure that the drawbar is adjusted to **16"** from the end of the tractor PTO shaft to the center of the hole in the drawbar.

2.2.6 ROTOR OPERATION

To engage the rotor for processing of a bale, be sure the PTO shaft is properly connected to the tractor. Engage the PTO at idle. After the PTO is fully engaged, increase PTO speed until it has reached 1000 RPM**.**

The processor must not run at any speed less than **1000 PTO RPM** as it may result in the flails springing back against the rotor after they come in contact with the bale. This "backslap" may cause flails to fatigue and excessive vibration which may cause the bearings to fail. Bales may be dumped into the tub while the rotor is stopped or while it is running.

2.2.7 PTO HOLDER

A PTO shaft holder is standard with your new Bale King, for safe storage of the shaft when processor is not in use.
When unhooking the PTO shaft from the tractor, lift the free end of the PTO shaft up and place it in the holder provided. This will keep the shaft away from the hitch when hooking the tractor to the machine and keep it clear from snow and ice.

2.2.8 HORSEPOWER RATING

The Bale King Processor is designed to use a minimum of **80 HP**. The drive shaft is shear-bolt protected. The machine must be operated at **1000 PTO RPM.**

NOTE: Spread yokes and twisted drive shafts are signs of overload, not a manufacturer's defect and therefore not covered by warranty.

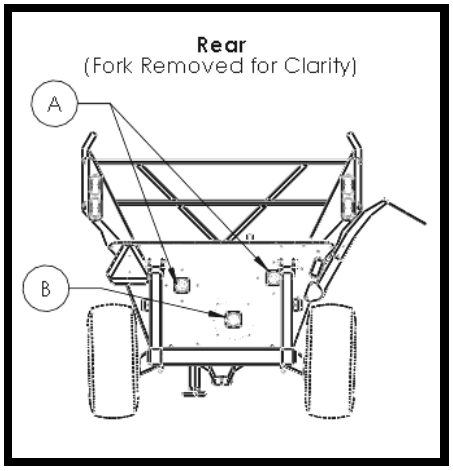
2.3 MACHINE & PTO LUBRICATION

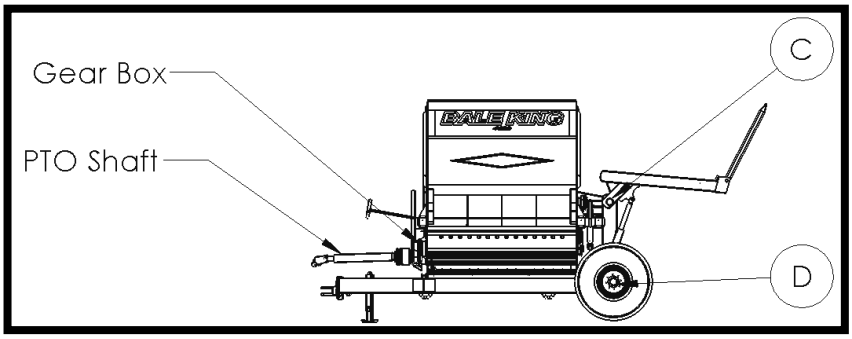
Lubricating the Bale King Bale processor should be done on a regular basis.

	Location	Timeline
A	Agitator Bearings (x 2)	250 Bales (or 8 hours)
B	Rotor Bearing	
C	Bale Fork Pivot (x 2)	
D	Wheel Hubs (x 2)	Seasonally (or 300 hours)
E	Wing Pivot (x6)	250 Bales (or 8 hours)

Wheel bearings should be inspected periodically for adjustment and lubricated annually. Inspect more often for extensive traveling.

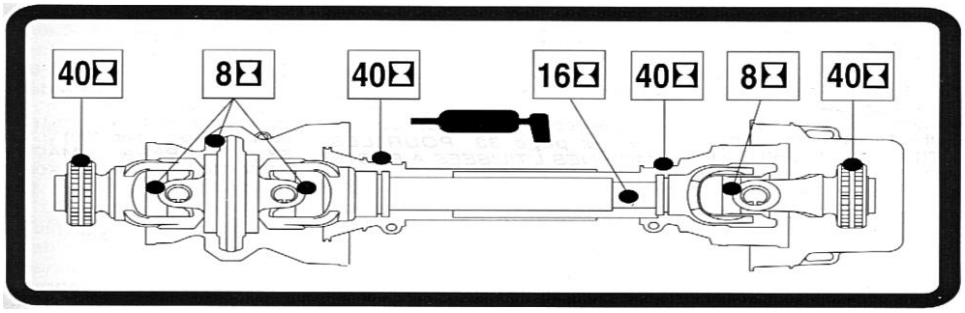
To tighten the wheel bearings, lift up each wheel (one at a time) until the wheel spins freely. Remove dust cap and the cotter pin which retains the castle nut. Tighten the nut until the wheel will rotate approximately two turns when given a firm spin. Align castle nut to closest hole and insert the cotter pin. Re-install the dust cap and pack full of grease.





PTO/DRIVELINE

Frequent lubrication is required. Grease the driveline parts as required on the chart.



After Storage for long periods of time, lubricate and check the function of every driveline component before operating.

Check to see that all locations are lubricated as per chart. Failure to grease all the joints will **void** warranty.

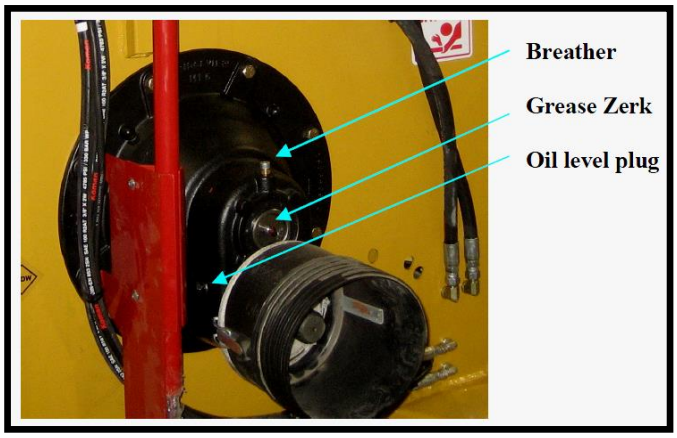
2.4 GEARBOX

There is one grease zerk on the front of the gear box. Apply 3-5 pumps of good quality grease every 8 hours (or 250 bales).

The gear box requires GL5 80W90 gear oil. The oil should be filled to the level plug and checked on a regular basis.

Oil change interval:

- 25 hours after first use
- 50 hours after first use
- Every 300 hours or yearly (Which ever comes first)



2.5 CYLINDER MAINTENANCE

The hydraulic cylinders are easily removed for repair or maintenance simply by:

1. Lowering the fork to the down position and unhooking the hydraulic lines.

NOTE: Make sure there is no pressure on the lines and mark the lines as to their placement so there will be no confusion when it comes time to re-install the cylinders.

2. Removing the cotter pins closest to the frame of the machine forks and sliding out the cylinder pins.

3. To re-install, reverse the removal procedure.

2.6 DEFLECTORS

SIDE DEFLECTOR

Your new Bale King is equipped with a hydraulic deflector and an electric diverter valve. This allows you to use only two remotes on your tractor. The rear fork, side deflector, and wing are operated by the same hydraulic lever. The middle position on the switch operates the rear forks. The deflector or wing operates when you move the switch to that position. The deflector position is standard on all models. The wing/feed will allow the wings to fold open and closed.

The control box requires 12 volt power. The **Black** wire is power and **White** wire is ground.

Note: Always attach the control box to keyed power to avoid draining the tractor battery when tractor is not being used.

BOTTOM DEFLECTOR

Located at the bottom of the discharge opening is a deflector which can be adjusted up or down to suit your feeding and bedding needs. It adjusts with a handle and a spring loaded pin on the front of the Bale King.

Bedding - To bed an open area or corral, raise the side deflector to the upper position to allow straw to blow out evenly. The bottom deflector can be adjusted part way up or down to aid in distribution.

Windrowing- To window feed along the ground simply lower the side deflector to the desired height and adjust the bottom deflector to the lower position.

Bunk Feeding - Adjust the side deflector to clear the bunk and raise the bottom deflector up to throw the material up against the deflector. Drive along the bunk and process.

2.7 LOADING BALES

When loading bales into your Bale King Bale processor, the following procedure should be followed:

1. Position the tractor and the Bale King so that it is lined up to back straight into the row of bales.

2. When close to the bale, lower the forks totally (you will feel a slight vibration as the

forks bottom out against the frame.)

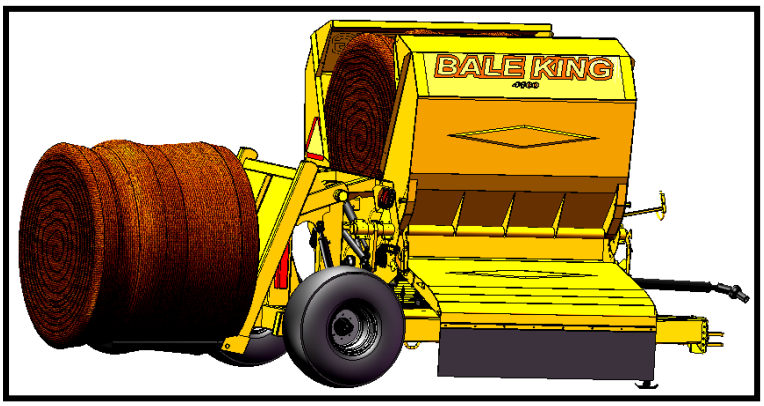
3. Back completely under the first bale.

4. Spread the wings enough to allow the round bale in.

5. Allow the tractor to push forward while lifting the bale because the bale fork moves away from the machine while loading. If you are loading from the same row you can dump the bale into the machine and back straight back for the second bale. If you are going to a different stack for the second bale only raise the first bale enough to clear the ground. Move to the next row and align the machine to the bale before dumping the bale into the tub. This gives you good visibility to line up to the second bale.

6. Once you have the first bale in the tub and the second bale on the forks, raise the bale fork about ¼ of the way up. You now can transport to your feeding area to begin processing.

Note: Carry the bale as low as possible so that there is less stress on the cylinder shafts. Carrying the bale high may bend hydraulic cylinder shafts.



2.8 BALE TINE INSTALLATION

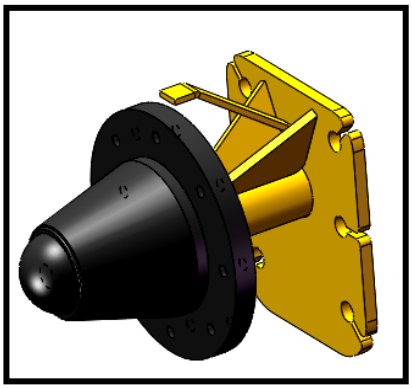
To install the 3 x 3 bale tine, remove the cotter key on the hinge pin at the bottom of the main forks.

Slide the tine into the slot at the bottom of the forks, align holes and insert the hinge pin.

Install the cotter key in the pin and spread the cotter key to insure the hinge pin does not accidentally fall out.

There is an optional tine kit for small bales available from your Bale King Dealer.

2.9 WHEEL HUB & TWINE GUARD



Wheel bearings should be inspected periodically for adjustment and lubricated annually.

To tighten the wheel bearings, lift up each wheel (one at a time) until the wheel spins freely. Remove dust cap and the cotter pin which retains the nut. Tighten the nut until the wheel will rotate approximately two turns when given a firm spin.

Align castle nut to closest hole and insert the cotter pin. Re-install the dust cap and lube if required. The twine guard will help keep twines away from the bearing seal. Remove twine any time you notice it on the axle.

2.10 TIRE INFLATION & RATING

The proper tire inflation for the Model 4105 with 16.5L-16.1 6 ply tires is 24 psi.

Proper tire inflation will help alleviate a puncture problem when pulling and operating the machine on rough terrain.

Maximum speed for agricultural tires is 25 mph or 40 km/h

NOTE: Check and tighten wheel bolts regularly to ensure that bolts are tight!

Warranty does not cover damaged rims and hubs due to loose wheel bolts.

2.11 TWINE REMOVAL

Before attempting the removal of twine from the main rotor, make sure the machine is stopped and the tractor shut off and placed in park. Twines can then be removed with the use of twine knife that is included with the processor, a utility knife or other knife. An electric device is available from some suppliers which melts through the twine and allows it to be pulled off. It is **Not Allowed** to burn the twine from the rotor as this has several adverse effects:

- It may take the temper out of the steel, rendering it weaker.
- Loose straw and hay remaining in the machine may ignite causing a fire in the processor.
- Excessive build-up of melted plastic.
- Dry out bushings causing them to wear prematurely.

NOTE: Bridgeview Manufacturing Inc. VOIDS warranty if twine burning occurs.

2.13 HOOP GRATE ADJUSTEMNT

There are 7 adjustment settings for the hoop grate on the Bale King bale processor. These settings determine the rate of feed of the bale you are processing and the how fine the cut will be.

Position #1: Highest grate setting for finest cut and slowest rate of feed. Used for tough processing feeds such as silage bales and some types of hay.

Position #2 - #6: Normal operating range. Machine gets more aggressive as grate is lowered.

Position #7: Lowest grate position, most aggressive fastest rate of feed.

The Bale King should be adjusted according to various bale conditions to achieve a rate of feed of approximately 1.5 to 2 minutes. Light brittle material such as wheat straw may allow faster processing while tough stringy material such as slough hay, green feed, or flax will require slower processing. Hoop grate adjustment should be checked periodically. An additional set of settings can be achieved by moving the linkage connected to the charging panel to other hole. It will allow more aggressive settings for easy to process products

NOTE: Processing a bale more rapidly than this may cause unnecessary machine deterioration.

NOTE: Upper grate position should approximately - ¼" flail protrusion. Lower grate should allow 1 ¼" flail protrusion. Contact your Bale King dealer if this can't be achieved.

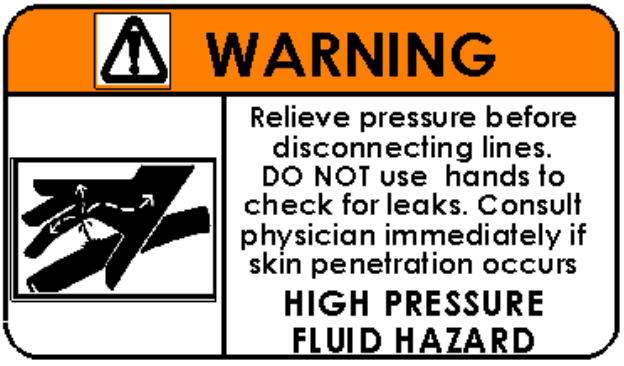
The grate assembly can be removed from the machine by removing the linkage bolts and the 3/8 bolts on the opposite side. The grate will lift out the top.

2.14 IMPLEMENT TONGUE

The new adjustable hitch on the Bale King features a welded upper and lower tongue. This allows the use with tractors equipped with the hammer strap or single drawbar. This allows the machine to move over rough terrain independently without bending or breaking the hitch pin. Adjust the hitch to level the machine. A level machine helps keep the bale in the center of the processing area.

2.15 HYDRAULIC HOOKUP

WARNING: ***Pressurized hydraulic fluid can cause serious injury.***



- When working with hydraulic equipment, eye and hand protection should be worn.
- Do not test for leaks with bare hands.
- Relieve any pressure before removing a hose or fitting.
- Never work under components raised by hydraulic equipment unless supported externally.

There are 2 sets of hydraulics required to operate the 4105 Bale King. The pairs of hoses are marked with different coloured sleeves for ease of hook-up.

Colour codes for hydraulics:

Blue Sleeve Hoses operate the bale fork/auger/deflector

Red Sleeve Hoses operate the agitators which rotate the bale

2.16 OPTIONAL FINE CHOP KIT

The 3, 4, 5 and 6 thousand series Bale King processors have an optional fine chop knife kit available to go into the lower tub area.

This option is available if you require a shorter cut on the material which you are processing such as slough hay and silage bales.

It is recommended that the knives be lowered when bedding straw as it will affect your spread pattern. Adjust the machine as needed.

2.17 TWINE GAURDS

The main rotor and the beaters are equipped with removable twine guards. The guards are mounted to the front and rear wall of the machine. The twine guards are bolted and need to be removed if you need to remove or tighten the bolts on the bearings or the hydraulic motors.

2.18 ROTATION OF BALES

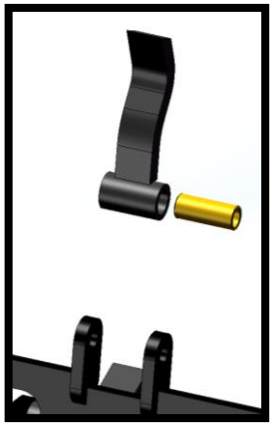
The Bale King is equipped with a flow divider/combiner and two hydraulic motors for turning the bale.

Once the main rotor is turning at full speed the bale can be turned in either direction to begin processing. The faster the bale is turned in either direction, the faster it will be processed. It may be necessary to change direction of the bale when loose debris builds on either side of the bale chamber. This will remove the loose debris preventing spillage from the machine. This is especially true when processing soft core bales. By reversing direction regularly, soft core bales will process more evenly.

When the first bale has been processed, it is common practice to leave the rotor turning at full speed when loading the second bale into the bale chamber from the rear forks.

If the tractor has a flow control, adjust the oil flow so that the beaters run at a low rate. Adjust the flow as needed to find the best speed to process a bale. Turning bales too fast can result in rotor overloading resulting in flail "backslap" which in turn causes flail and bushing damage.

2.19 FLAIL AND BUSHING REPLACEMENT



Flail replacement is accomplished by removing the 4-3/4"x 3/4" bolt holding the flail to the rotor. The flail is then lifted away from the rotor. The bushing can now be removed by using slight pressure to push it out of the flail. Inspect the bolt, bushing, and the flail for wear. If excessive, replace with new parts.

Bridgeview Manufacturing Inc. recommends when changing flails to change **IN PAIRS** (opposite each other). Processing bales with broken flails causes the rotor to be out of balance and excessive vibration may cause machine deterioration.

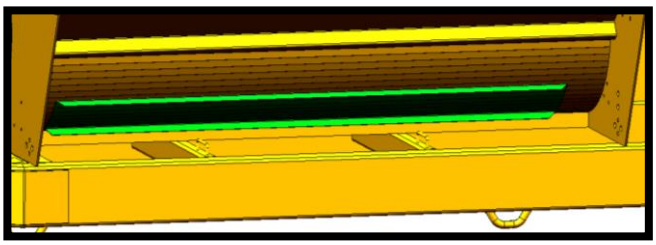
WARNING: Do not walk or stand in front of the discharge chute while processing. Never direct discharge chute at cattle while processing.

3. FEATURES AND SPECIFICATIONS

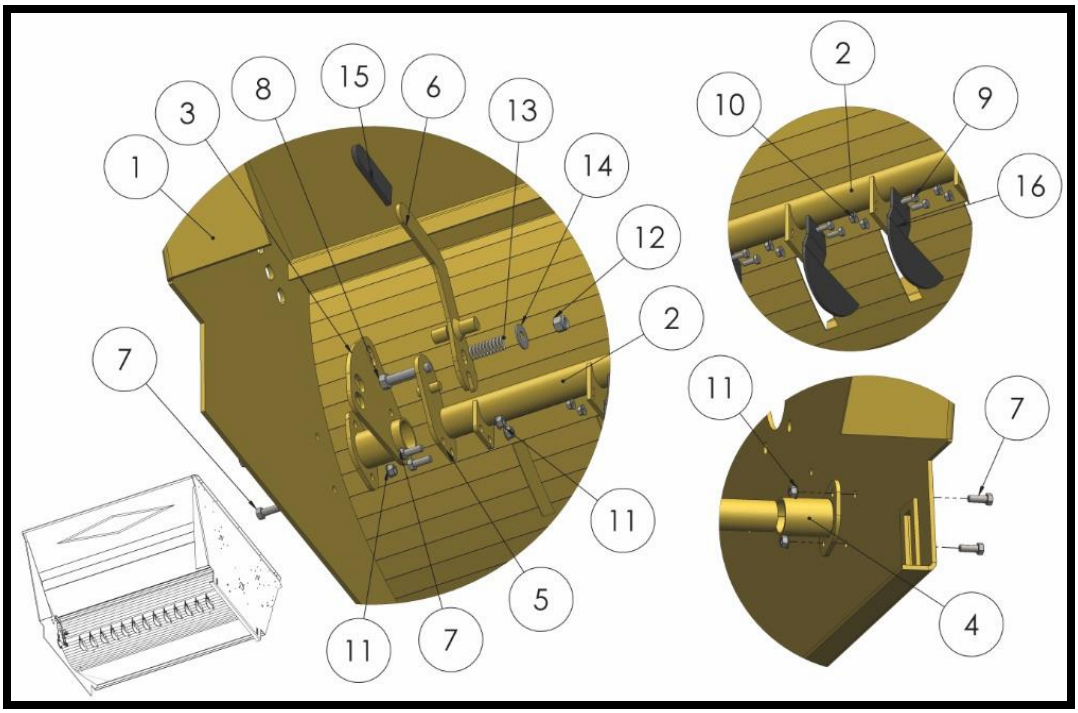
PROBLEM	POSSIBLE CAUSE	REMEDY
Excessive main shear bolt breakage	Engaging PTO at high engine speed or too quickly	Idle tractor to engage PTO then bring up to full operating speed /feather PTO lever into position.
	Excessive twine wrapped on rotor causing flail movement to be restricted	Cut twine off rotor
	Broken flails causing rotor to be out of balance	Replace broken flails(in pairs opposite each other)
	Overloading rotor	• Set hoops to less aggressive position • Slow rotation of Bale • Change Direction of bale rotation
	Incorrect Shear bolt used	Use correct Shear bolt
Excessive vibration while processing bales	Excessive twine wrapped around rotor restricting full flail movement	Remove twine from rotor
	Broken or missing flails	Replace broken or missing flails(in pairs opposite each other)
	Hoops set in a position too aggressive for the type of material being processed causing an overload	Adjust hoops to a less aggressive position
	Rotating bale too fast causing rotor overload	Slow rotation of bale
	Operating machine at less than 1000 PTO speed	Operate machine at rated 1000 PTO speed
	Rotor bearing failure	Replace failed parts
Beaters stopping	Excessive loose material in tub causing beater to jam	Reverse direction of bale rotation Turn bale more slowly
A single beater stopping	Mechanical flow valve not functioning correctly	Contact your dealer for repairs

FINE CHOP OPTION (INSTALLATION)

This manual will explain how to install a fine chop kit to an existing machine.

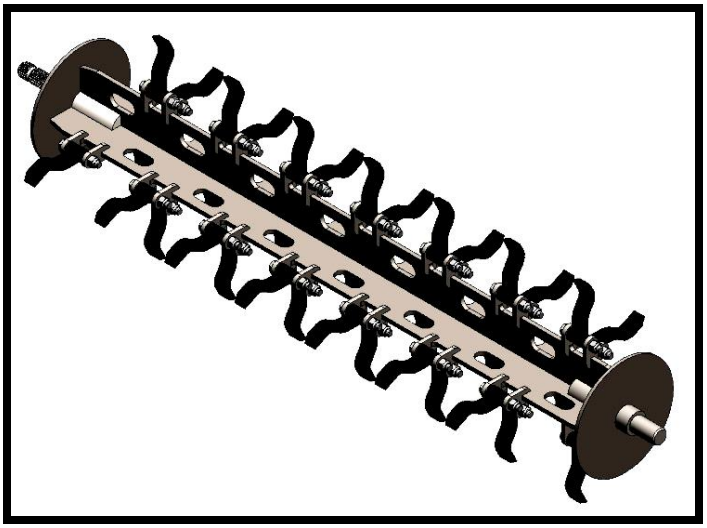


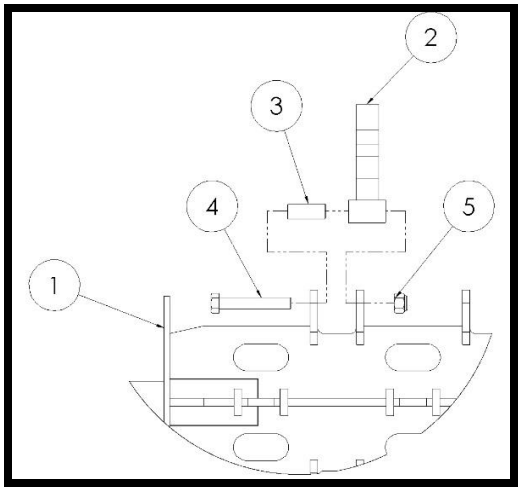
- Remove cover plate (BELOW) and the four fin bolts holding it in place
- loosely slide the front (3) and rear (4) pivots over the ends of the pipe (2)
- lift the assembly into the bottom left side of the tub and install the pivots to the tub walls with 3/8" hardware (7,11) as shown
- Install the handle (6) on the handle mount (5) with a spring (13) and 1/2" hardware (8,12,14). Make sure the lock nut is fully catching the threads
- Install the rubber handle cap (15) onto the handle
- Install the handle mount to the pipe using 3/8" hardware (7,11). Make sure that the bar can pivot freely
- Install the fine chop blades (16) to the pipe handle using 1/4" hardware (9,10)



4. PART DIAGRAMS AND PART NUMBERS

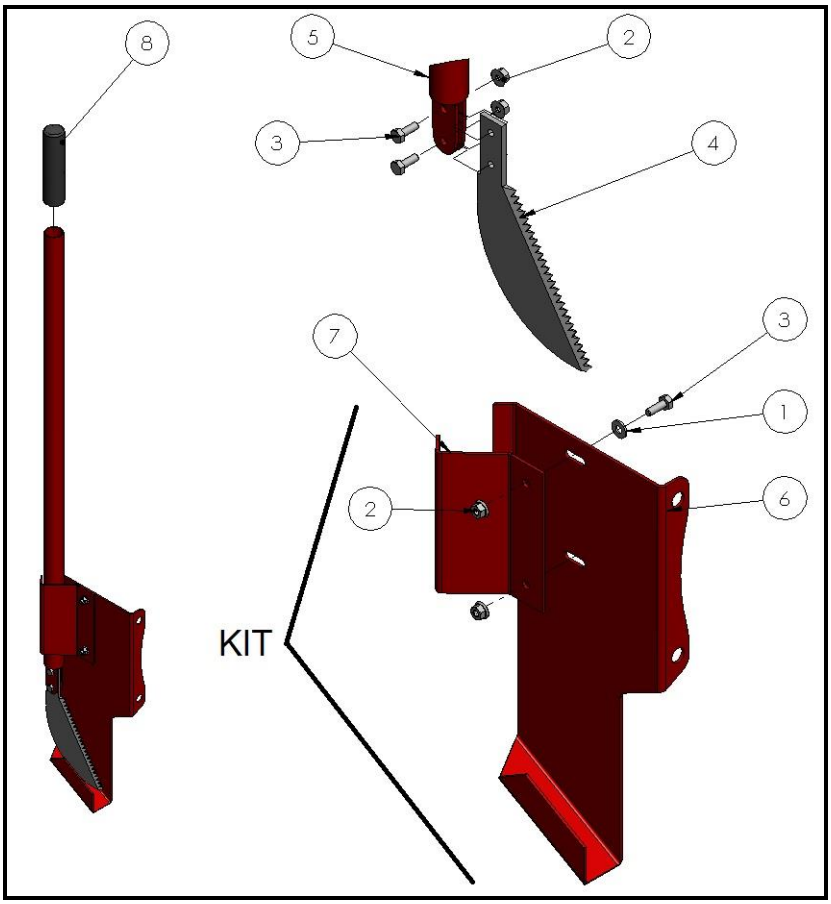
4.1 ROTOR





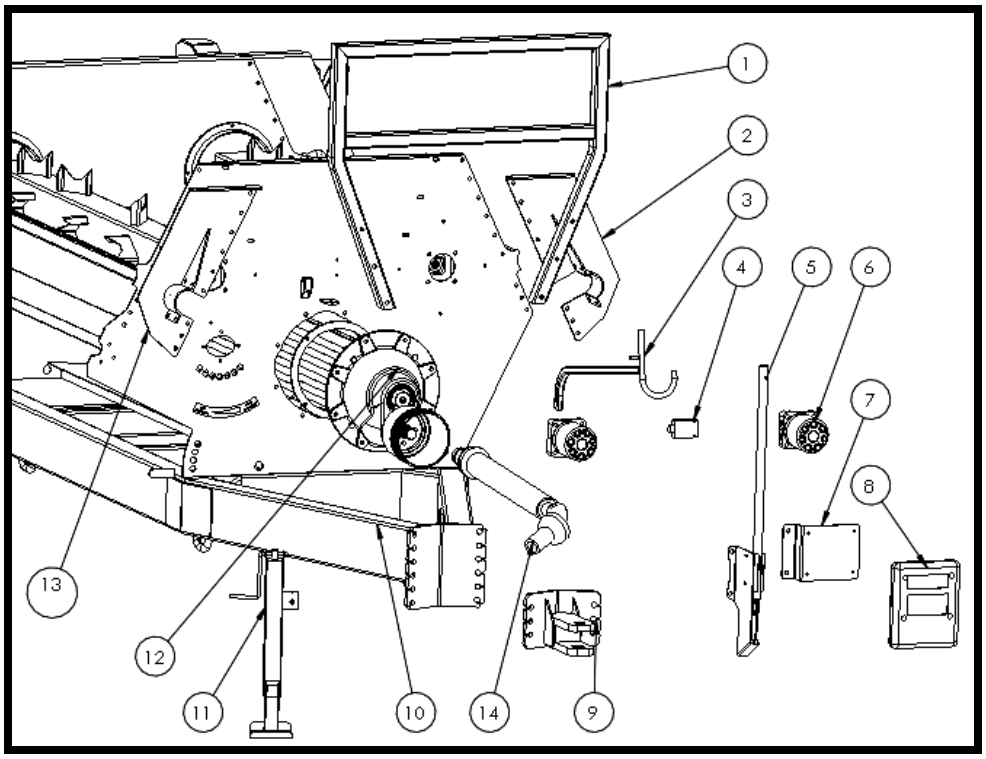
ITEM NO.	DESCRIPTION	ID NO	QTY.
1	10" 30 Flail X Rotor	22695	1
2	Flail	22412	30
3	Flail Bushing	10005	30
4	3/4" x 4.75" Bolt	10443	30
5	3/4" Stover Lock Nut	11823	30

4.2 TWINE CUTTER



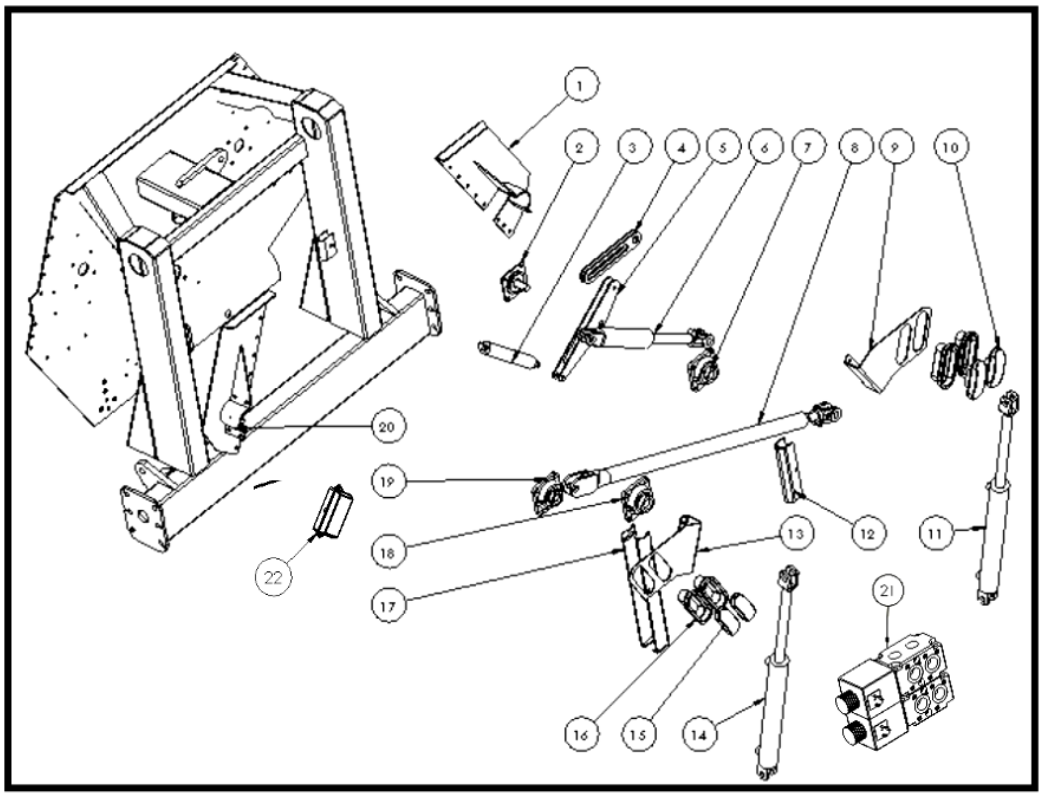
ITEM NO.	DESCRIPTION	ID NO	QTY.
KIT	Holder Kit	21549	1
1	1/4" Flat Washer	11666	2
2	1/4" Serrated Flange Nut	11812	4
3	1/4" x 3/4" Truss-head Bolt	21221	4
4	Twine Cutter Blade	17438	1
5	Twine Cutter Handle	20862	1
6	Twine Cutter Holder Outside	17691	1
7	Twine Cutter Holder Inside	17690	1
8	Rubber Handle	17587	1

4.3 FRONT END COMPONENTS



ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Front Rack	23665	1
2	Wing Pivot A	23666	1
3	PTO Holder	22694	1
4	Flow Divider \ Combiner Valve (FDCV)	11742	1
5	Twine Cutter	20862	1
6	Hydraulic motor Seal Kit	10045 22820	2
7	Manual Bracket	23647	1
8	Operator's Manual Box	22409	1
9	Hitch	23650	1
10	Main Frame	---	1
11	Jack	11798	1
12	Gearbox	10420	1
13	Wing Pivot B	23667	1
14	PTO Shaft	20546	1

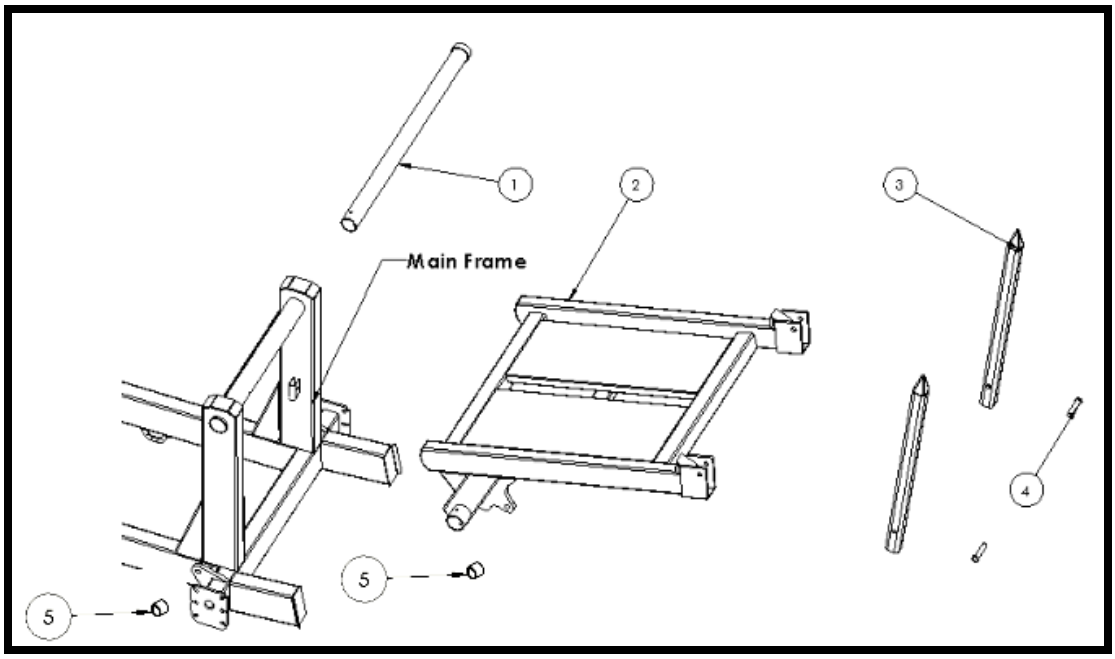
4.4 REAR END COMPONENTS



ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Wing Pivot A	23666	1
2	Rocker Arm Pivot Pin Assembly	16415	1
3	Hydraulic Cylinder(1.5 x 8 x 1 Rod End) Seal Kit Replacement Shaft	17442 17613 17614	1
4	Slotted Bracket	13372	2
-	Bushing	10239	2
-	Fender Washer	10238	2
5	Rocker Arm Assembly	16416	1
6	8" Cylinder Seal Kit	17443 17609	1
7, 19	Agitator Bearing	10038	1
8	Tie Rod Assembly	23668	1
9	Light Bracket (RH)	23669	1
10	Red Light	21721	2

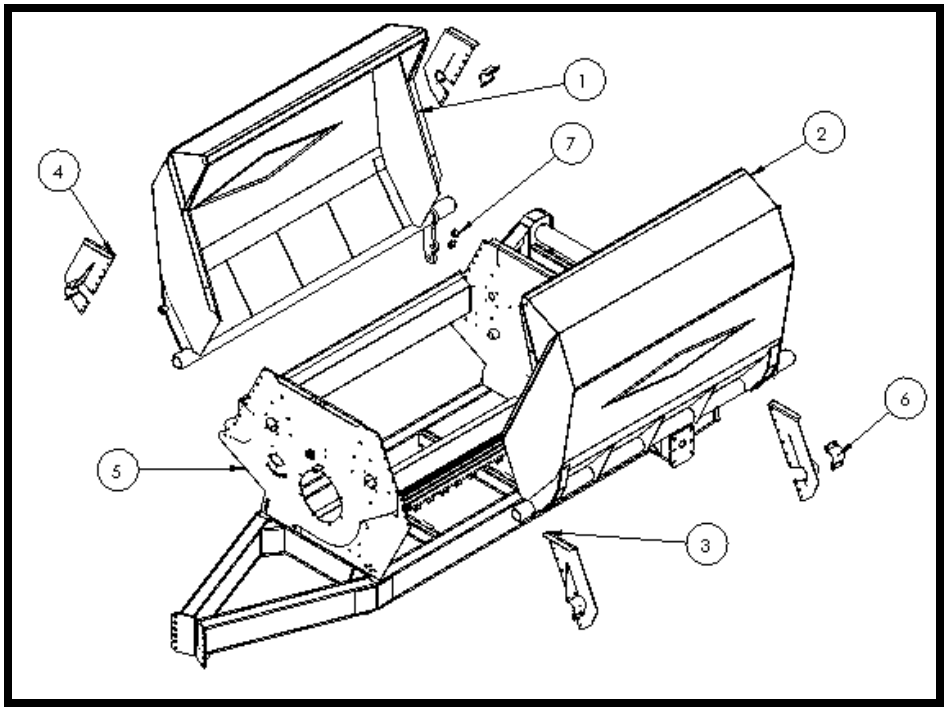
11, 14	Hydraulic Cylinder Seal Kit	17444 17609	2
12	Safety Stop (Wing Cylinder)	23671	1
13	Light Bracket (LH)	23670	1
15	Amber Light	21722	2
16	LED Light Grommet	21723	4
17	20" Cylinder Lock	23684	1
18	Rotor Bearing	10221	1
20	Wing Pivot B	23667	1
21	Electric Diverter Valve	11743	2
22	Junction Box	13668	1

4.5 REAR FORK



ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Pipe Pivot Assembly	10579	1
2	Back Fork	23685	1
3	Fork Tine	11144	2
4	Fork Tine Pin	10031	2
5	1" Spring Bushing Insert	23708	4

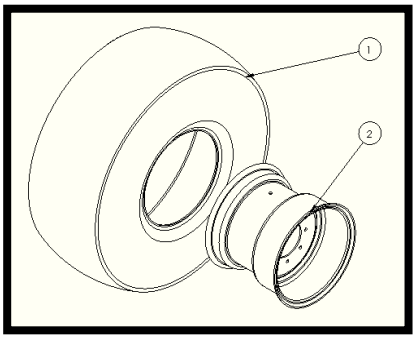
4.6 WINGS



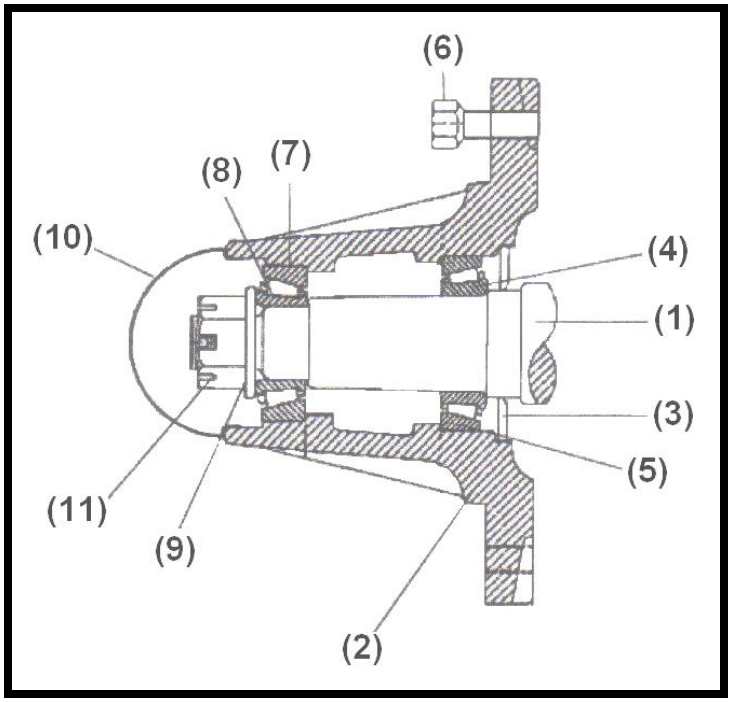
ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Left Wing	24106	1
2	Right Wing	24105	1
3	Wing Pivot A	23666	2
4	Wing Pivot B	23667	2
5	Main Frame	---	---
6	Clamp Wing Pivot w/Zerk	24107	2
7	1" Spring Bushing Insert	23708	3

4.7 TIRE & RIM ASSEMBLY

ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Tire (16.5LX16.1)	10355	1
2	Rim	10354	2

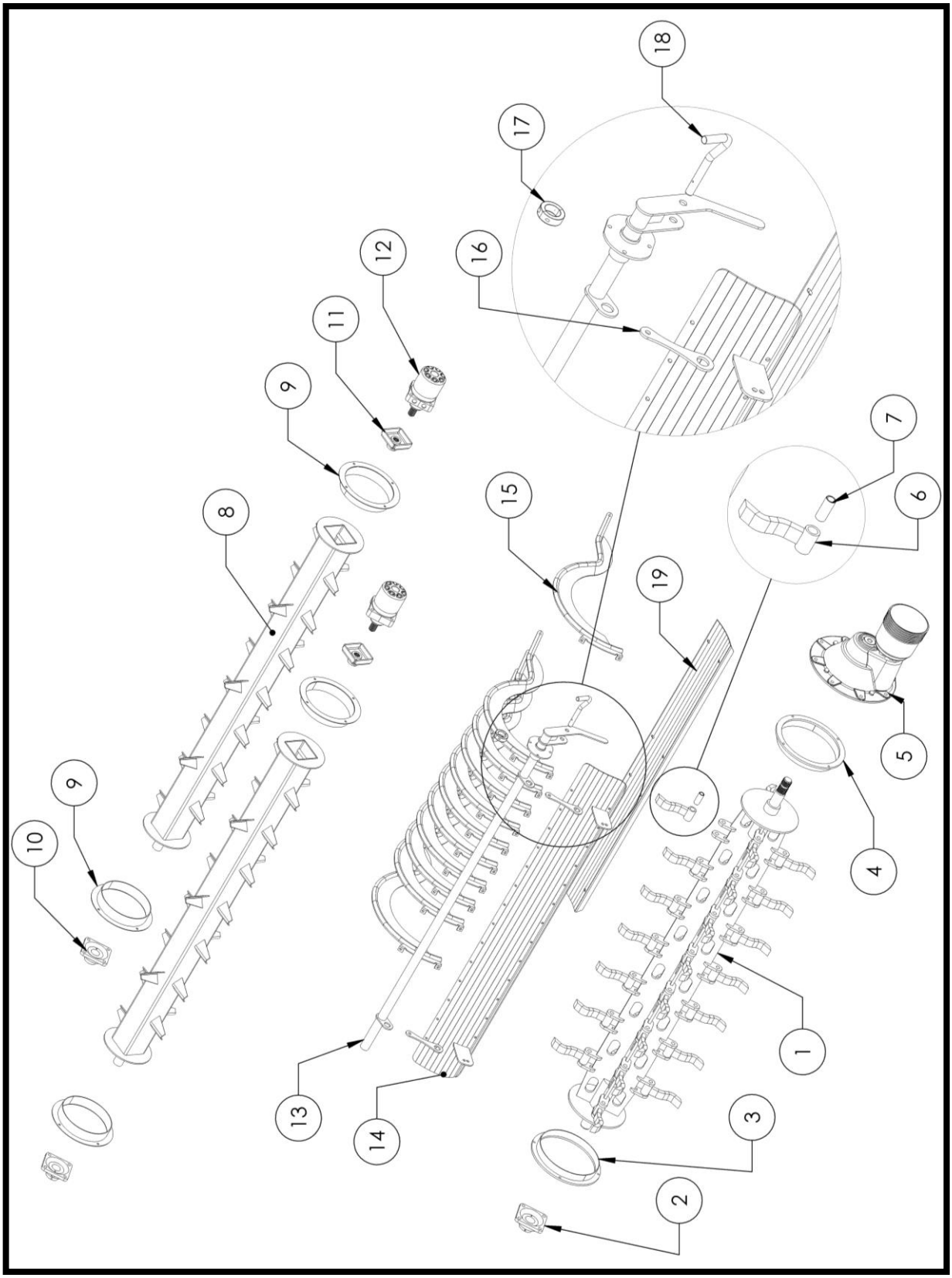


4.8 WHEEL & HUB ASSEMBLY



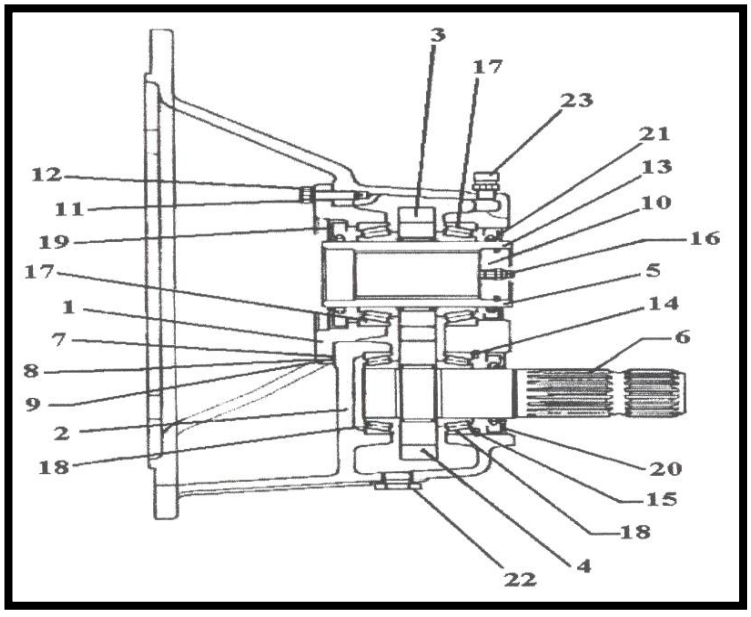
ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Spindle 2.25” x 15.5”	22706	2
2	Hub 6500 Series	10343	2
3	Dirt Seal	10344	2
4	Inner Bearing Cone	10345	2
5	Inner Bearing Cup	10346	2
6	9/16” x 1 3/4” NF Wheel Stud	10347	16
7	Outer Bearing Cone	10348	2
8	Outer Bearing Cup	10349	2
9	1 1/16” x 2” Flat Washer	10071	2
10	3/16” x 1 1/2” Cotter Pin	10072	2
11	Dust Cap	10350	2
12	Castle Nut	10153	2

4.9 INNER TUB PARTS



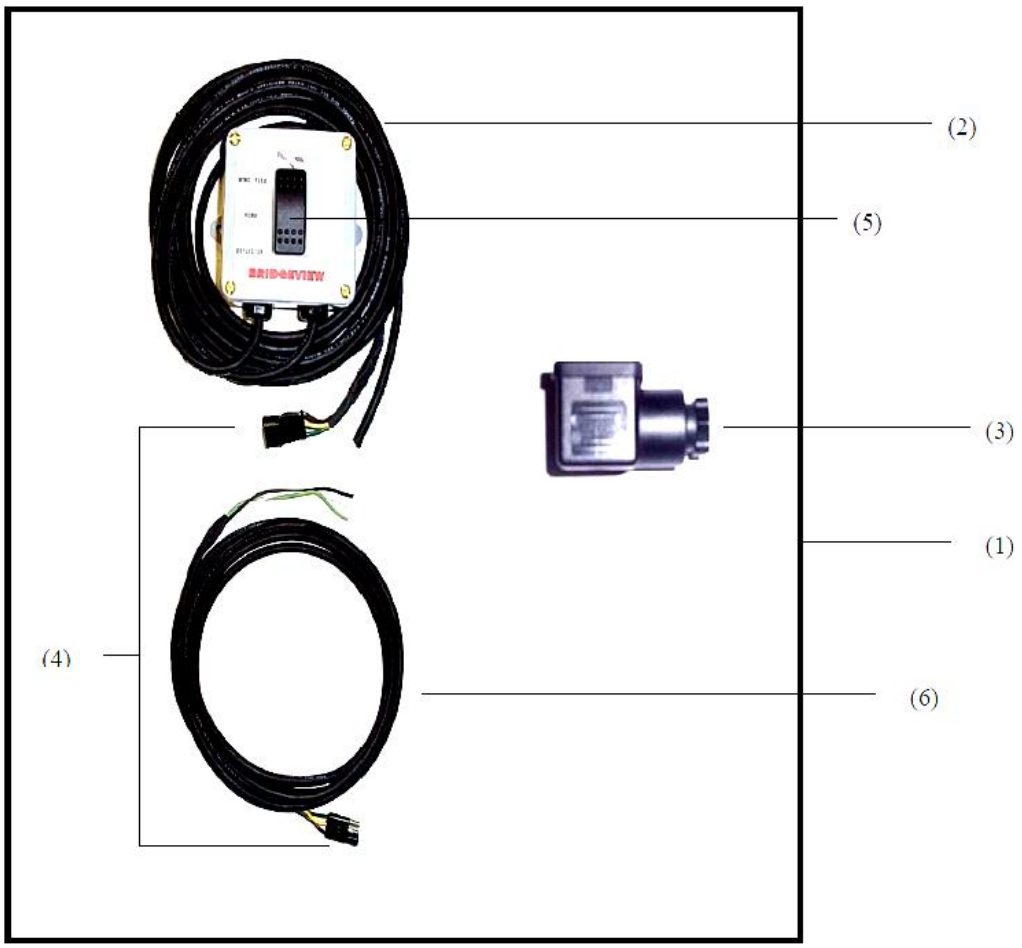
ITEM NO.	DESCRIPTION	ID NO	QTY.
1	Rotor	22695	1
2	1 15/16” Rotor Bearings	10221	2
3, 4	Front & Rear Rotor Twine Guard	22692	2
5	Gearbox	10420	1
6	Flail (replace in pairs)	22412	30
7	Flail Bushing	10005	30
8	Agitator (4000 Style)	23686	2
9	Agitator Twine Guard	22692	4
10	1 3/4” Agitator Bearings	10038	2
11	Agitator Coupler	10021	2
12	Hydraulic Agitator Motors	10045	2
13	Hoop Bar / Handle	22701	1
14	Charging Panel	22699	1
15	Hoop	22700	14
16	Hoop Adjustment Shackle	22693	2
17	Split Coupler	12792	1
18	S-Handle	11784	1
19	Fine Chop Cover	22716	1

4.10 GEARBOX ASSEMBLY



ITEM NO.	ID NO	DESCRIPTION	QTY
	10420	Right Hand Gearbox	1
1	10480	Flange Output Shaft	1
2	---	Casting	1
3	---	Output Gear	1
4	---	Input Gear	1
5	---	1 3/4” Internal Output Shaft	1
6	---	1 3/4” Input Shaft	1
7	10486	Output Shaft Flange Shim	1
8	10487	Output Shaft Flange Shim	1
9	10488	Output Shaft Flange Shim	1
10	10489	Output Shaft Cover	1
11	10490	Bolt M8 x 25 x 1.25 cl. 8.8	6
12	10491	Washer 8.2 x 14.8 x 1.6	6
13	10492	Snap Ring	1
14	10493	Snap Ring 1.75 x 2.5	1
15	10494	Shims	1
16	10495	Grease Fitting M8 x 1.25	1
17	10496	Taper Roller Bearing	2
18	10497	Taper Roller Bearing	2
19	10498	Oil Seal 60 x 100 x 10	1
20	10499	Oil Seal 45 x 75 x 10	1
21	10500	Oil Seal 60 x 85 x 10	1
22	10501	Drain Plug	1
23	10502	Breather Plug	1

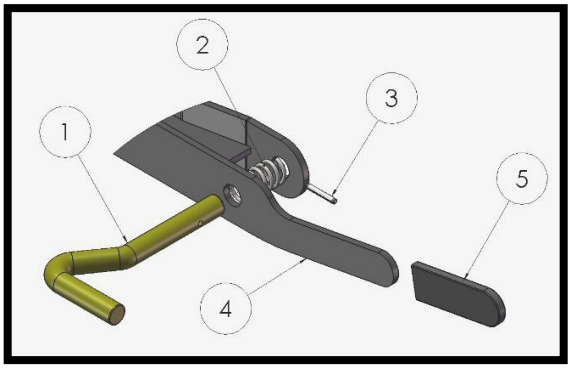
4.11 DIVERTER VALVE WIRING



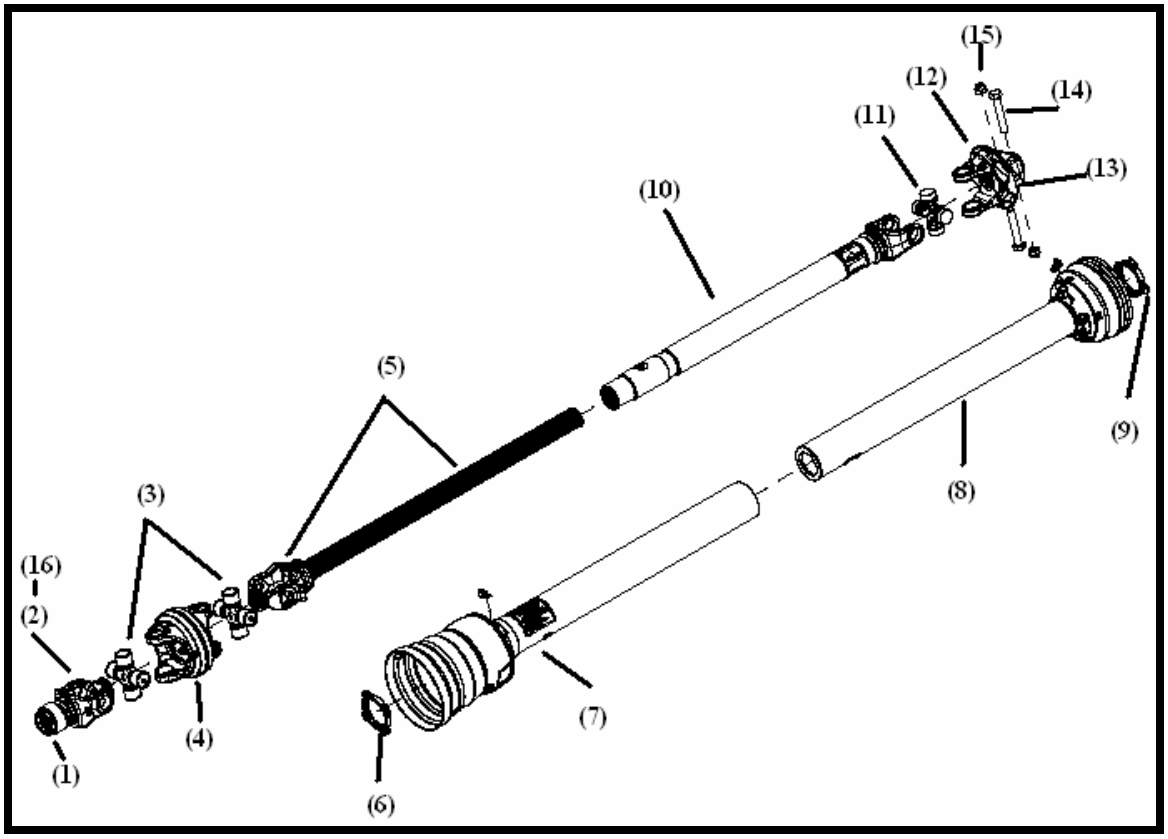
ITEM NO.	ID NO	DESCRIPTION	QTY
1	11801	Complete control box with harness for 4000 series	1
2	11793	Control box complete with cab to hitch harness all 3000 & 4000 series	1
3	13657	Square plug for diverter valve	1
4	13562	3 pin trailer plug	1
5	13561	3 way switch	1
6	11802	Harness (hitch to valve) 4000 series	1

4.12 HANDLE COMPONENTS

ITEM NO.	DESCRIPTION	ID NO	QTY.
1	S Handle	22187	1
2	Hoop Handle Spring	19471	1
3	3/16" x 1-1/4" Roll Pin	10302	1
4	Hoop Adjustment Handle	22023	1
5	Rubber Handle	10297	1



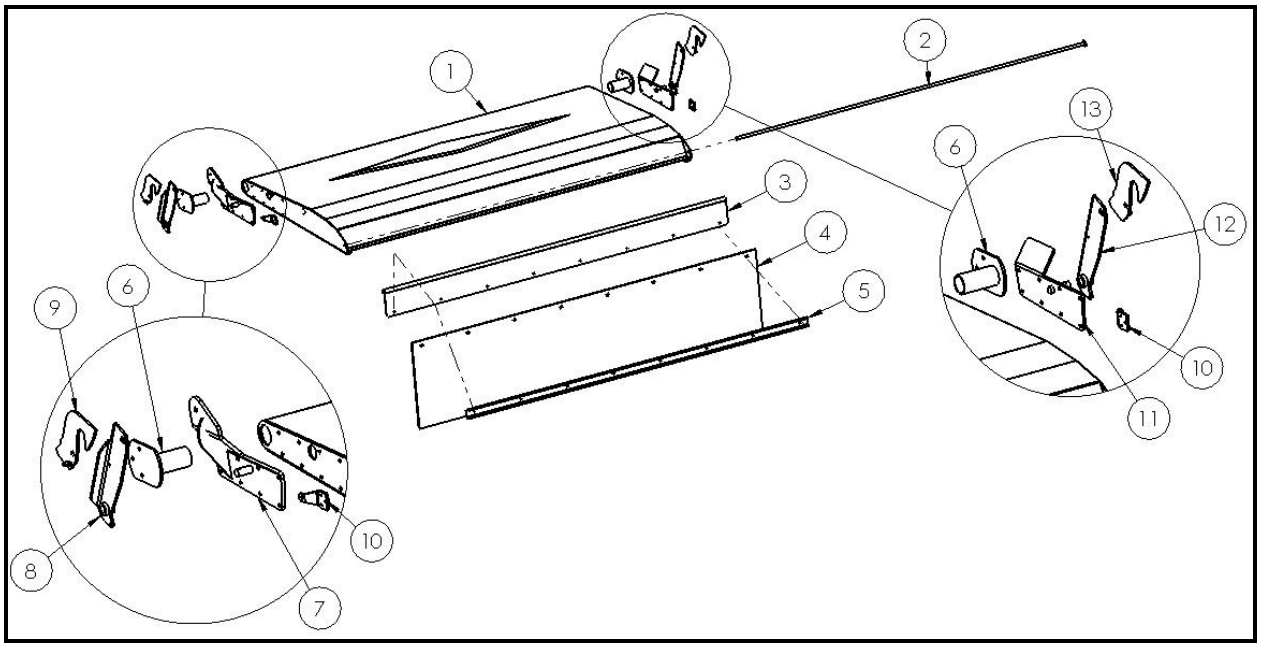
4.13 PTO SHAFT ASSEMBLY



ITEM NO.	ID NO	DESCRIPTION	QTY
	20546	Complete PTO Assembly, Weasler Cat. 6	1
1	17567	Safety Slide Lock Repair Kit	1
2	20549	WWCV Auto-Lok Yoke ASM 1-3/8"-21 Spline	1
3	20550	CV Cross and Bearing Kit	2
4	20551	CV Center Housing	1
5	20552	Yoke and Shaft Assy. Tractor Side	1
6	20553	Guard Repair Kit Tractor Side	1
7	17583	Outer Guard Assy. Tractor Side (Incl. item #6)	1
8	17585	Inner Guard Assy. Impl. Side (Incl. item #9)	1
9	17572	Guard Repair Kit Implement Side	1
10	17584	Yoke and Tube Assy. Implement Side	1
11	17573	Cross and Bearing Kit	1
12	17581	Shear Assembly	1
13	11817	Shear Bolt, 3/8" x 2" NC Gr.5	1
	17586	3/8" NC Lock Nut	1
14	---	5/8" x 3-1/2" NF Gr.8 Bolt	2
15	---	5/8" NF Lock Nut	2
16	20556	WWCV Auto-Lok Assy. 1-3/4"-20 Spline	1

NOTE: CV U-joint cross has equal length arms(4.19"). Bearing cup diameter 1.38".

4.14 DEFLECTOR



ITEM NO.	ID NO	Description	QTY
1	23687	Deflector	1
2	23688	Deflector Rubber Tube	1
3	23689	Deflector Rubber Flip Panel	1
4	10477	Rubber Deflector	1
5	22423	Rubber Support Channel	1
6	22690	Deflector Pivot	2
7	24493	Hook Mount Plate Rear	1
8	24509	Hook Lower Rear	1
9	24520	Hook Upper Rear	1
8-9	11788	Spring, 5/8 x 3” Tension	1
8-10	11787	Spring, 1 x 8-1/2” Tension	1
10	13112	Spring Mount Plate	2
11	24508	Hook Mount Plate Front	1
12	24499	Hook Lower Front	1
13	24507	Hook Upper Front	1

4.15 DECALS

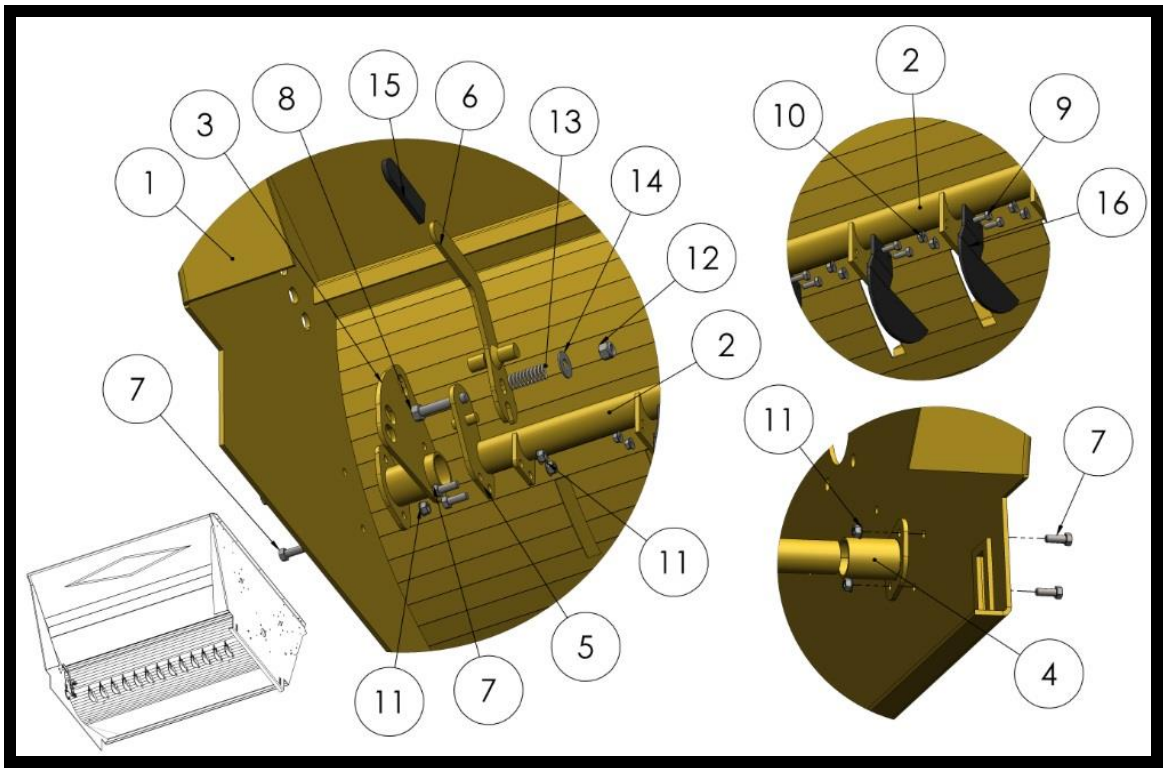
The following decals are present on the Bale King 4105.

7

8

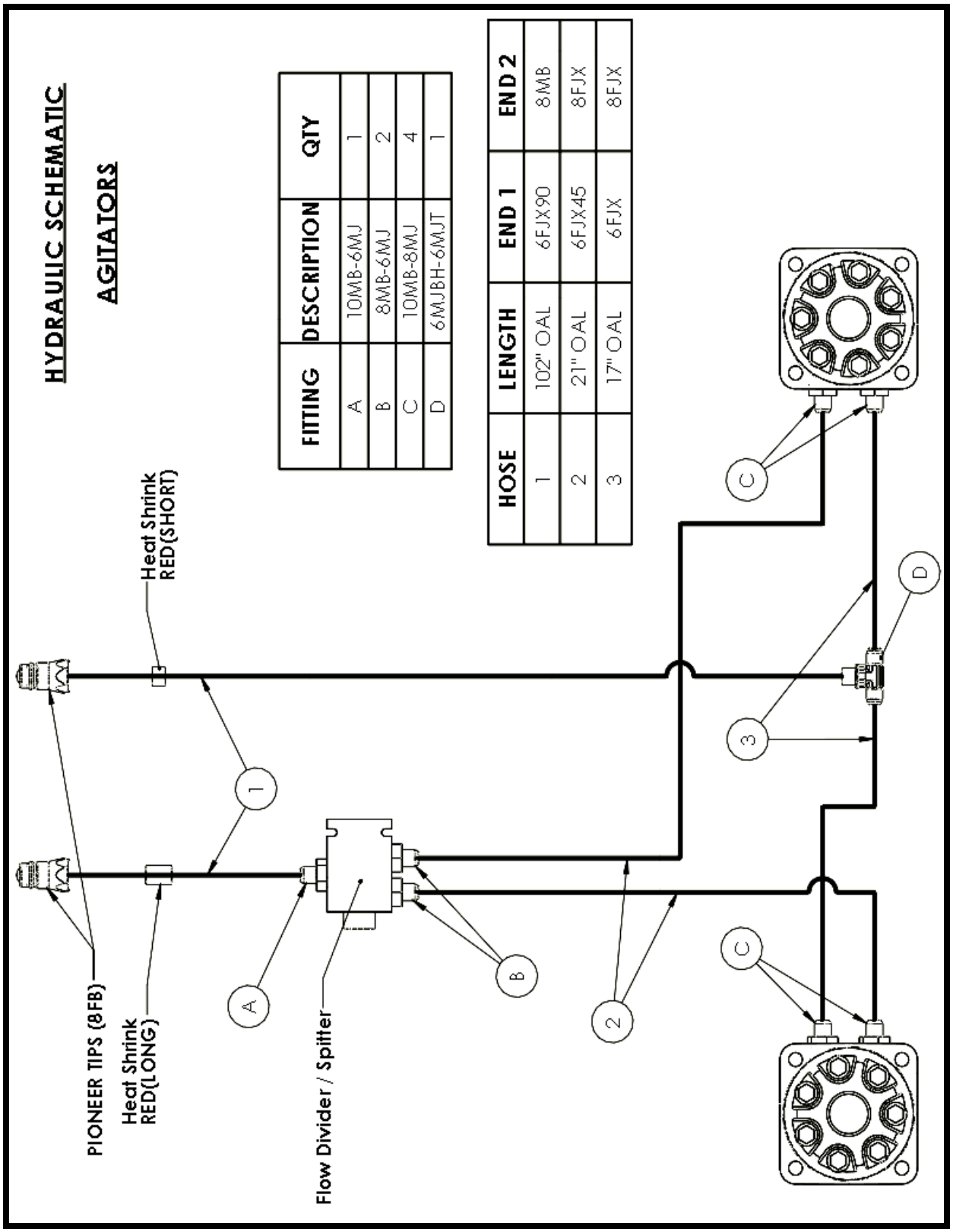
ITEM NO.	DESCRIPTION	ID NO	QTY
1	PTO Danger	12219	2
2	Stand Clear of Lift	12229	2
3	Side Discharge	12230	4
4	PIMA / AMC	12239	1
5	Red Reflective	13324	3
6	Amber Reflective	13325	3
7	Bale King 4105	---	2
8	Hoop Adjustment	22165	1

4.16 FINE CHOP (OPTIONAL)



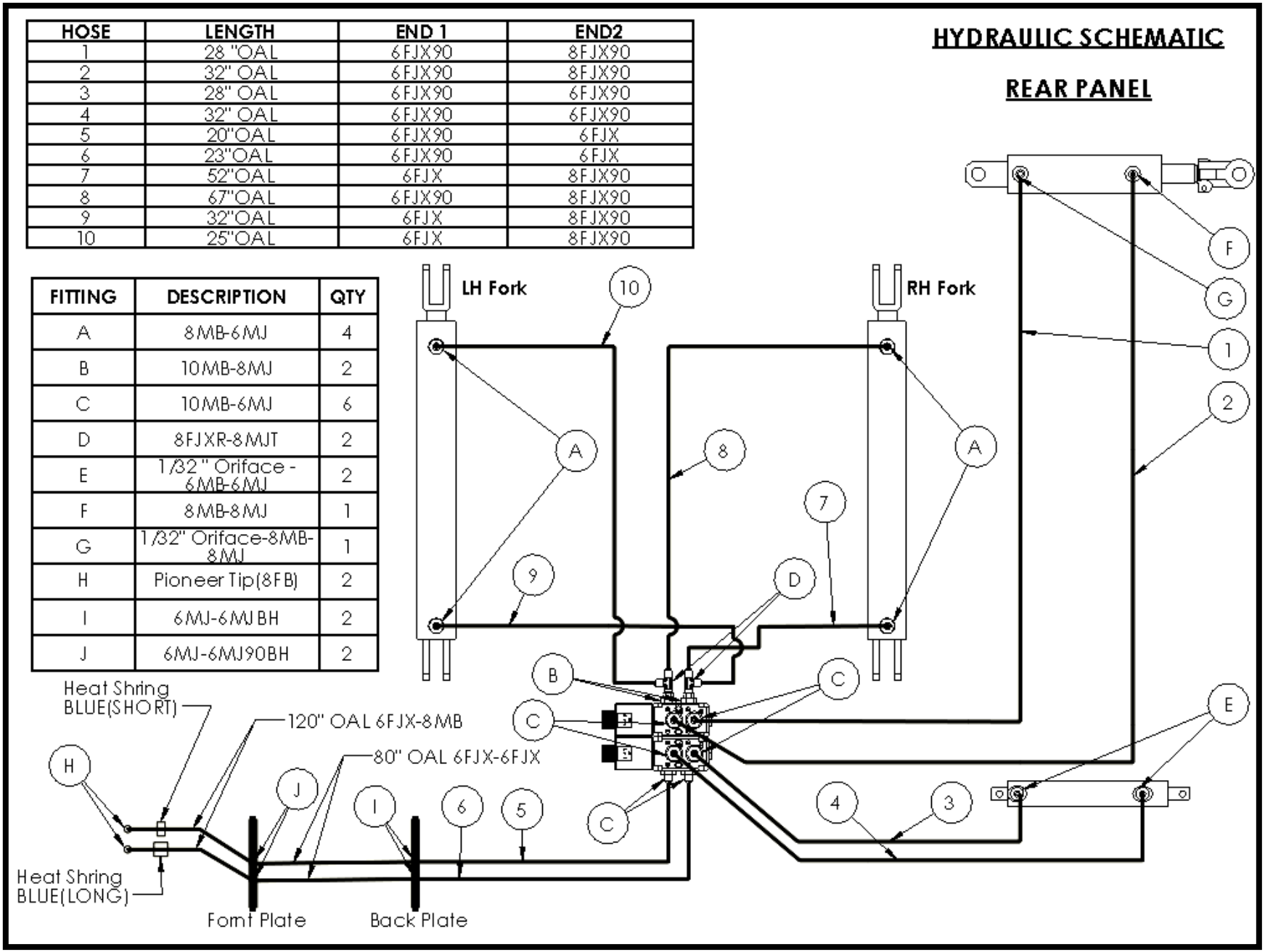
ITEM NO.	ID NO	DESCRIPTION	QTY.
1	---	Frame and Tub	1
2	23657	Fine Chop Bar	1
3	23658	Fine Chop Mount (Front)	1
4	23659	Fine Chop Mount (Rear)	1
5	23661	Fine Chop Handle Mount	1
6	23660	Fine Chop Handle	1
7	13806	3/8" x 1" Bolt	8
8	10804	1/2" x 2-1/2" Bolt	1
9	11809	1/4" x 3/4" Bolt	26
10	11812	1/4" Serrated Flange Nut	26
11	10271	3/8" Serrated Flange Nut	8
12	10241	1/2" Nylon Lock Nut	1
13	21713	Fine Chop Handle Spring	1
14	11668	1/2" Flat Washer	1
15	10297	Rubber Handle	1
16	10404	Fine Chop Blade	13

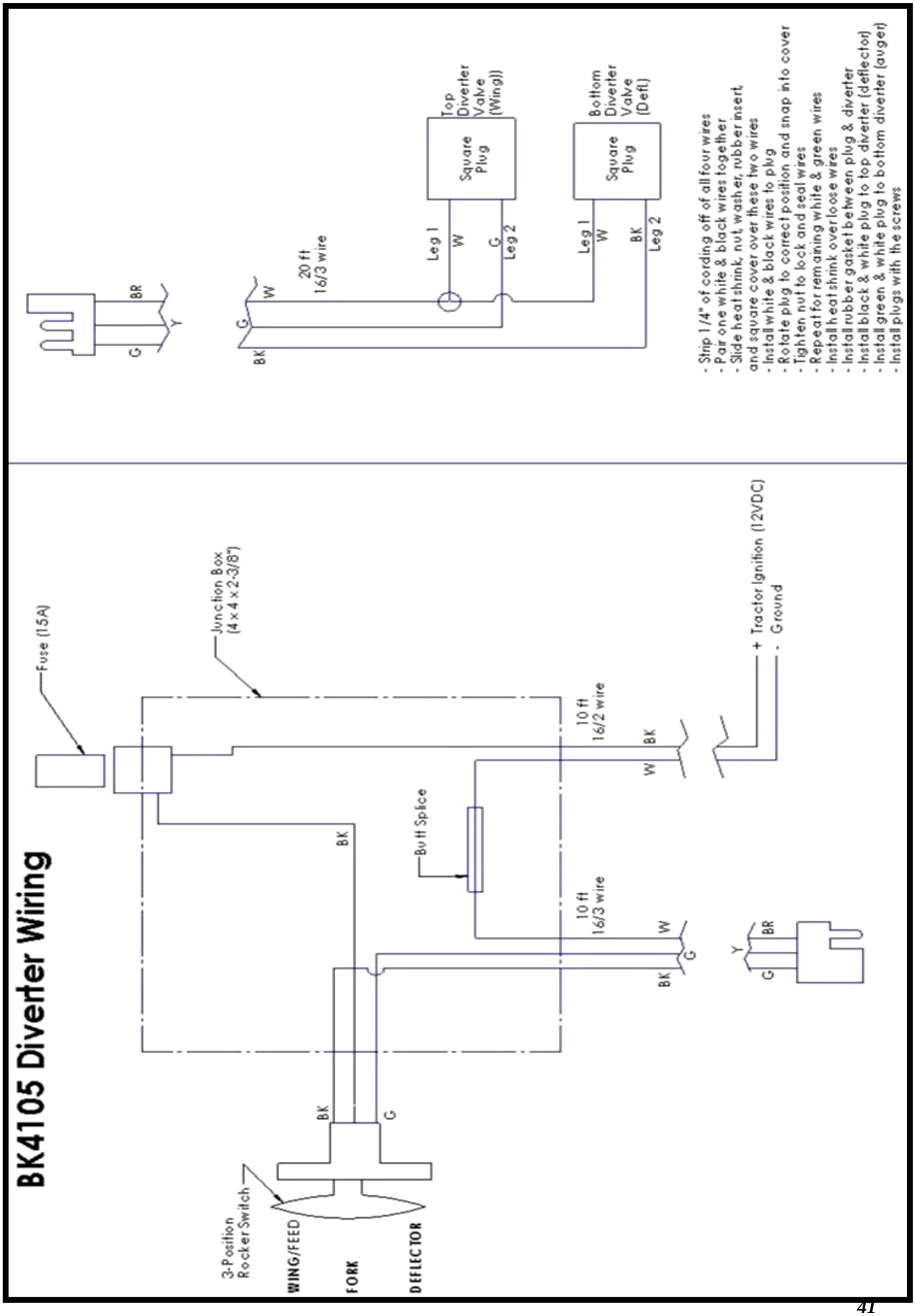
5. HYDRAULIC SCHEMATIC

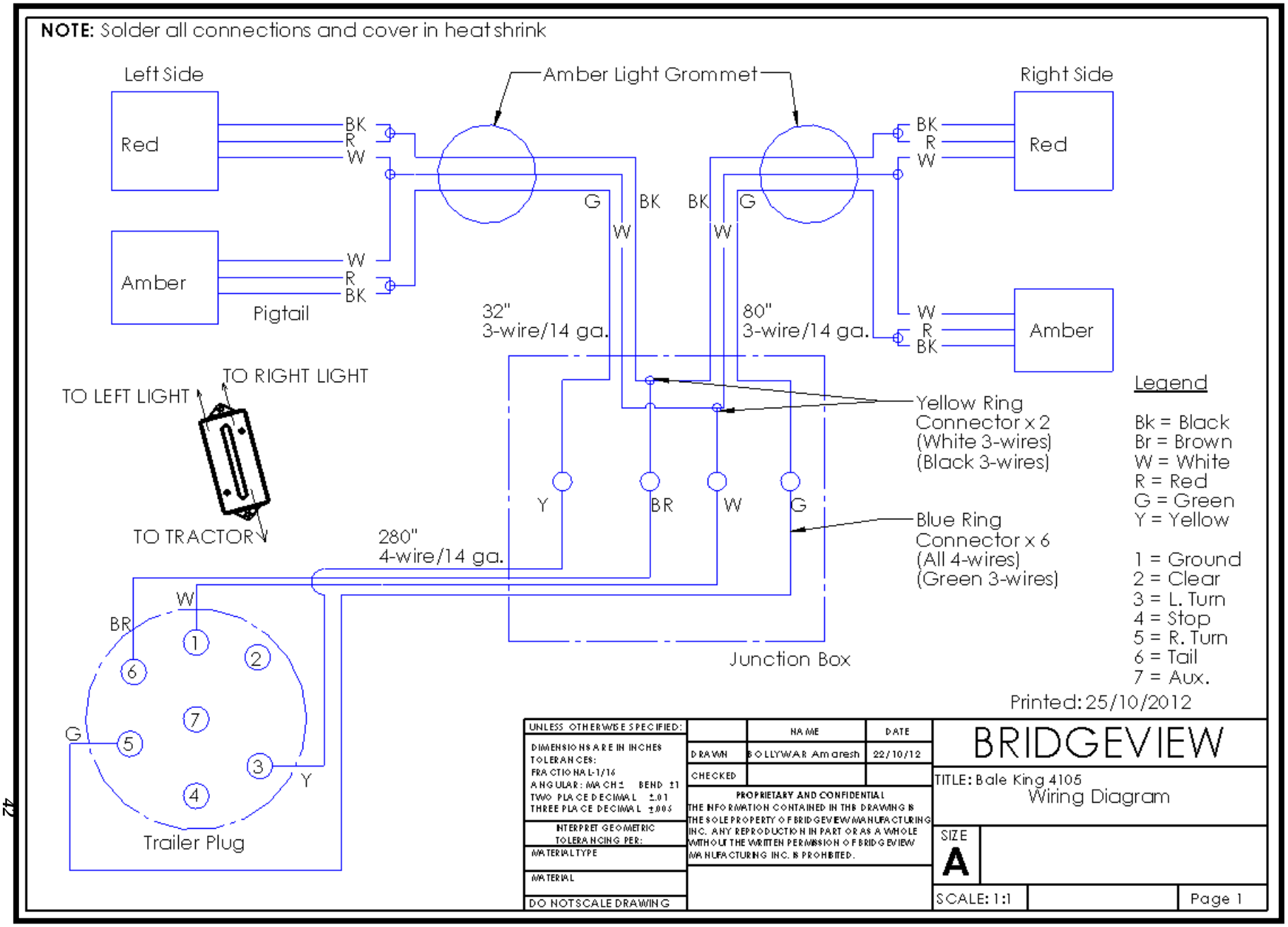


HOSE	LENGTH	END 1	END2
1	28 "OAL	6FJX90	8FJX90
2	32" OAL	6FJX90	8FJX90
3	28" OAL	6FJX90	6FJX90
4	32" OAL	6FJX90	6FJX90
5	20"OAL	6FJX90	6FJX
6	23"OAL	6FJX90	6FJX
7	52"OAL	6FJX	8FJX90
8	67"OAL	6FJX90	8FJX90
9	32"OAL	6FJX	8FJX90
10	25"OAL	6FJX	8FJX90

FITTING	DESCRIPTION	QTY
A	8MB-6MJ	4
B	10MB-8MJ	2
C	10MB-6MJ	6
D	8FJXR-8MJT	2
E	1/32 " Oriface - 6MB-6MJ	2
F	8MB-8MJ	1
G	1/32" Oriface-8MB-8MJ	1
H	Pioneer Tip(8FB)	2
I	6MJ-6MJ BH	2
J	6MJ-6MJ90BH	2




BK4105 Diverter Wiring
Fuse (15A)
Junction Box (4 x 4 x 2-3/8")
10 ft 16/2 wire
10 ft 16/3 wire
Butt Splice
+ Tractor Ignition (12VDC)
- Ground
3-Position Rocker Switch
WING/FEED
FORK
DEFLECTOR
BR
Y
G
BK
W
20 ft 16/3 wire
Top Diverter Valve (Wing!)
Bottom Diverter Valve (Defl)
Square Plug
Leg 1
Leg 2
- Strip 1/4" of cording off of all four wires
- Pair one white & black wires together
- Slide heat shrink, nut, washer, rubber insert, and square cover over these two wires
- Install white & black wires to plug
- Rotate plug to correct position and snap into cover
- Tighten nut to lock and seal wires
- Repeat for remaining white & green wires
- Install heat shrink over loose wires
- Install rubber gasket between plug & diverter
- Install black & white plug to top diverter (deflector)
- Install green & white plug to bottom diverter (auger)
- Install plugs with the screws


NOTE: Solder all connections and cover in heat shrink
Left Side
Red
Amber
Pigtail
BK
R
W
W
R
BK
Amber Light Grommet
G
BK
W
BK
G
W
Right Side
Red
BK
R
W
W
R
BK
Amber
32"
3-wire/14 ga.
80"
3-wire/14 ga.
TO LEFT LIGHT
TO RIGHT LIGHT
TO TRACTOR
280"
4-wire/14 ga.
Y
BR
W
G
Yellow Ring
Connector x 2
(White 3-wires)
(Black 3-wires)
Blue Ring
Connector x 6
(All 4-wires)
(Green 3-wires)
Junction Box
Legend
Bk = Black
Br = Brown
W = White
R = Red
G = Green
Y = Yellow
1 = Ground
2 = Clear
3 = L. Turn
4 = Stop
5 = R. Turn
6 = Tail
7 = Aux.
Printed: 25/10/2012
BR
W
G
Y
Trailer Plug
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL 1/16
ANGULAR: MACH ± BEND ±1
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.005
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL TYPE
MATERIAL
DO NOT SCALE DRAWING
NAME
DATE
DRAWN
BOLLYWAR Amaresh
22/10/12
CHECKED
PROPRIETARY AND CONFIDENTIAL
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BRIDGEVIEW
TITLE: Bale King 4105
Wiring Diagram
SIZE
A
SCALE: 1:1
Page 1

NOTES

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