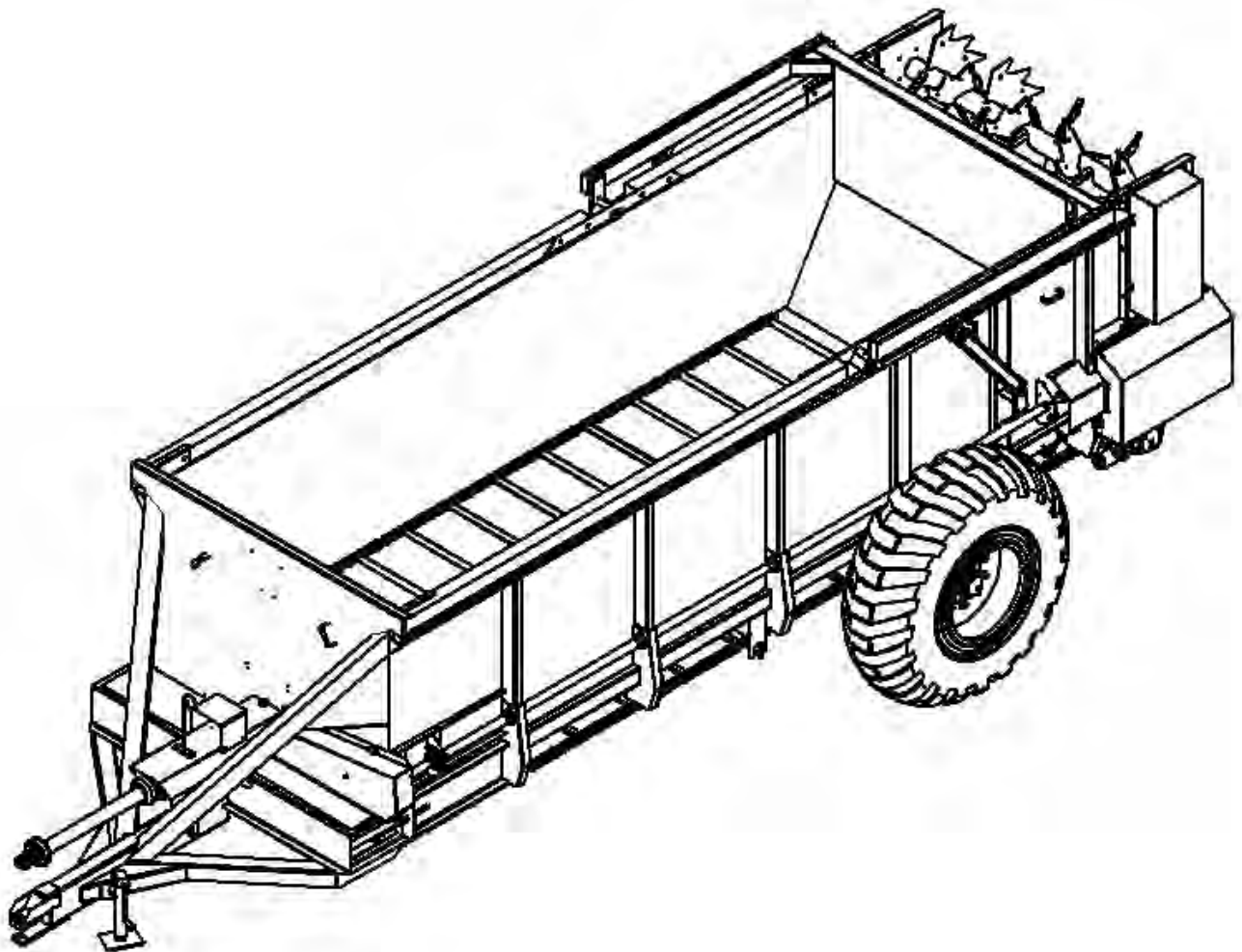




810 BUSHEL MANURE SPREADER 2009



**RODA MANUFACTURING
338 MAIN ST.
HULL, IA. 51239
712-439-2366
WWW.RODAMFG.COM**

INTRODUCTION

Thank you for purchasing a Roda Spreader. We appreciate your business. Here at Roda, we do our best to provide you with a rugged and durable unit, which is easy to maintain. If you have any suggestions for any of our products, please let us know.

Roda Manufacturing Inc.

USING THIS MANUAL

This manual should be considered a permanent part of your machine, and should remain with the machine when you sell it.

This manual has been designed to help you become familiar with your unit. Before you operate your unit, be sure you understand and follow all the operation, safety, and lubrication instructions on the following pages in this manual. These have been written for your safety and convenience, and to help keep your unit running trouble-free for many years.

ADDITIONAL OPERATORS MANUALS, SERVICE PARTS LISTINGS and safety decals may be obtained through your dealer, or Roda Manufacturing.

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SAFETY

UNDERSTAND SAFETY WORDS AND SYMBOLS



THIS SAFETY ALERT SYMBOL is used in this manual whenever personal safety is involved and means **ATTENTION! BECOME ALERT!** It stresses an attitude of “**HEADS UP**” for safety. Read and understand all pages in this manual that bear this safety symbol and...**TAKE TIME TO BE CAREFUL!**

The Signal Word or Message areas of all safety decals are color coded to indicate the level of hazard.

CAUTION: Is used to direct attention to unsafe practices, and uses the color yellow.

WARNING: Denotes a specific potential hazard, and uses the color yellow or orange.

DANGER: Denotes a most serious specific potential hazard, and uses the color red.

READ THE OPERATORS MANUAL

Any person who will be operating or maintaining this manure spreader should first read and understand this manual and all safety warnings on the unit.

This instruction manual should always be available to those responsible for the operation and maintenance of this manure spreader. It is the owner's responsibility to provide this safety information to his operators and employees.

Any person who does not understand the safety and operation instructions contained in this manual should not be considered qualified to operate this manure spreader.

FOLLOW SAFETY INSTRUCTIONS

Specialized procedures and instructions are required and must be adhered to when working on this equipment. Failure to follow the instructions contained in this manual could result in severe personal injury, death, and/or product or property damage. Personnel when operating or maintaining this equipment must use all applicable safety procedures such as OSHA requirements, regional and local safety codes and requirements, safe working practices, and good judgment.



SAFETY

OPERATING SAFETY PRECAUTIONS



WHEN THE SPREADER IS IN OPERATION, IT HAS MANY MOVING PARTS, WHICH COULD CAUSE SEVERE INJURY OR DEATH TO PERSONS COMING IN CONTACT WITH THESE PARTS. TO HELP AVOID SERIOUS ACCIDENTS, THE FOLLOWING GUIDELINES MUST BE FOLLOWED.

- **BE SURE ALL SAFETY SHIELDS** are in place before operating, including any truck and driveline shields. Exposed machinery, due to missing shielding, can cause severe injury or death. Repair or replace any damaged or missing shielding.
- **NEVER PUT ARMS OR FEET INSIDE UNIT**, or near discharge areas, nor climb on or in the spreader while it is running. NEVER allow anyone to position themselves over or near the top, or near the discharge area of the spreader while it is running. Rotating beaters, shafting, belts, pulleys, and sprockets can grab clothing or create pinch points, which can cause severe injury or death to the operator or bystanders. Always stop engine and remove ignition key so that the spreader cannot be accidentally turned on while inspection, servicing, repairing, or cleaning the spreader.
- **NEVER ATTEMPT TO RELEASE JAMMED MATERIALS OR CLEAN MATERIALS** from any area of the spreader of discharge without turning the spreader off first. Materials can hide moving parts and stopped parts can start unexpectedly, causing severe injury. Always stop engine and remove ignition key before attempting to remove jammed material or clean the spreader.
- **DO NOT ALLOW OPERATION OF THIS UNIT BY AN INEXPERIENCED OR UNQUALIFIED PERSON.** Keep all unqualified people away from spreader during operation. Operators of this unit must be alert and use good judgment at all times and must have fully read and understand this manual.
- **DO NOT WEAR LOOSE OR FLOPPY CLOTHING** while operating this unit. Loose clothing may become entangled in moving machinery.
- **BE SURE THE INSIDE OF SPREADER IS CLEAR** of any obstructions before loading.
- **SHOULD A PROBLEM OCCUR DURING THE OPERATION OF SPREADER, always turn off engine and remove ignition key before investigating problem.** If power source has not been turned off, the spreader may start unexpectedly, causing severe injury or death.



TRANSPORTING SAFETY PRECAUTIONS



WHEN TRANSPORTING A LOADED SPREADER, USE REDUCED SPEED AND BE SURE THE VEHICLE HAS ADEQUATE BRAKES TO STOP.

- **DO NOT ALLOW ANYONE TO RIDE ON OR INSIDE THE SPREADER.**
- **REDUCE SPEED WHEN TRAVELING** loaded and/or over rough, soft, or wet terrain. Exercise caution on side slopes and when turning corners.
- **AVOID OPERATING THE SPREADER CROSSING GULLIES OR DITCHES.**
- **WHEN WORKING ON SLOPES** or inclines, travel uphill or downhill. Keep the transmission in gear when going downhill.
- **AVOID DRIVING ON** loose fill, rocks, inclines, ditches, and holes.
- **ALWAYS PARK** the spreader on level ground and block the tires.
- **IF UNIT IS FOR HIGHWAY TRANSIT** the end user is responsible for federal, state and local vehicle safety regulation compliance (example: under ride requirements, lighting and weight limitations).

SAFETY DECALS

SAFETY DECALS ARE PLACED ON THIS UNIT FOR THE PROTECTION OF THE OPERATOR OR ANY PERSON NEAR THE UNIT.

- **BE SURE EVERYONE WHO OPERATES THE SPREADER UNDERSTANDS ALL THE INFORMATION, WARNING, CAUTION AND DANGER DECALS.**
- **KEEP THE DECALS CLEAN** so they are readable. This applies to all caution, warning, and danger decals.
- It is the **OWNER'S RESPONSIBILITY** to provide information for safe operation of this machine.
- **REPLACE ANY DAMAGED OR WORN DECAL.** Once any part of a decal becomes non-readable, it should be replaced. Replacement decals may be ordered through your dealer or Roda Manufacturing.
- **WHEN REPLACING DECALS,** be sure the surface area is clean and dry, peel the backing off the decal, and apply to the unit. Be sure to wipe with a clean cloth to rub out all air bubbles to assure a good seal. For best adhesion decals should be applied in temperatures of 50°(f) or warmer.



SAFETY

SAFETY DECALS

1.)



2.)



3.)



4.)



5.)



6.)



7.)



8.)



9.)



10.)



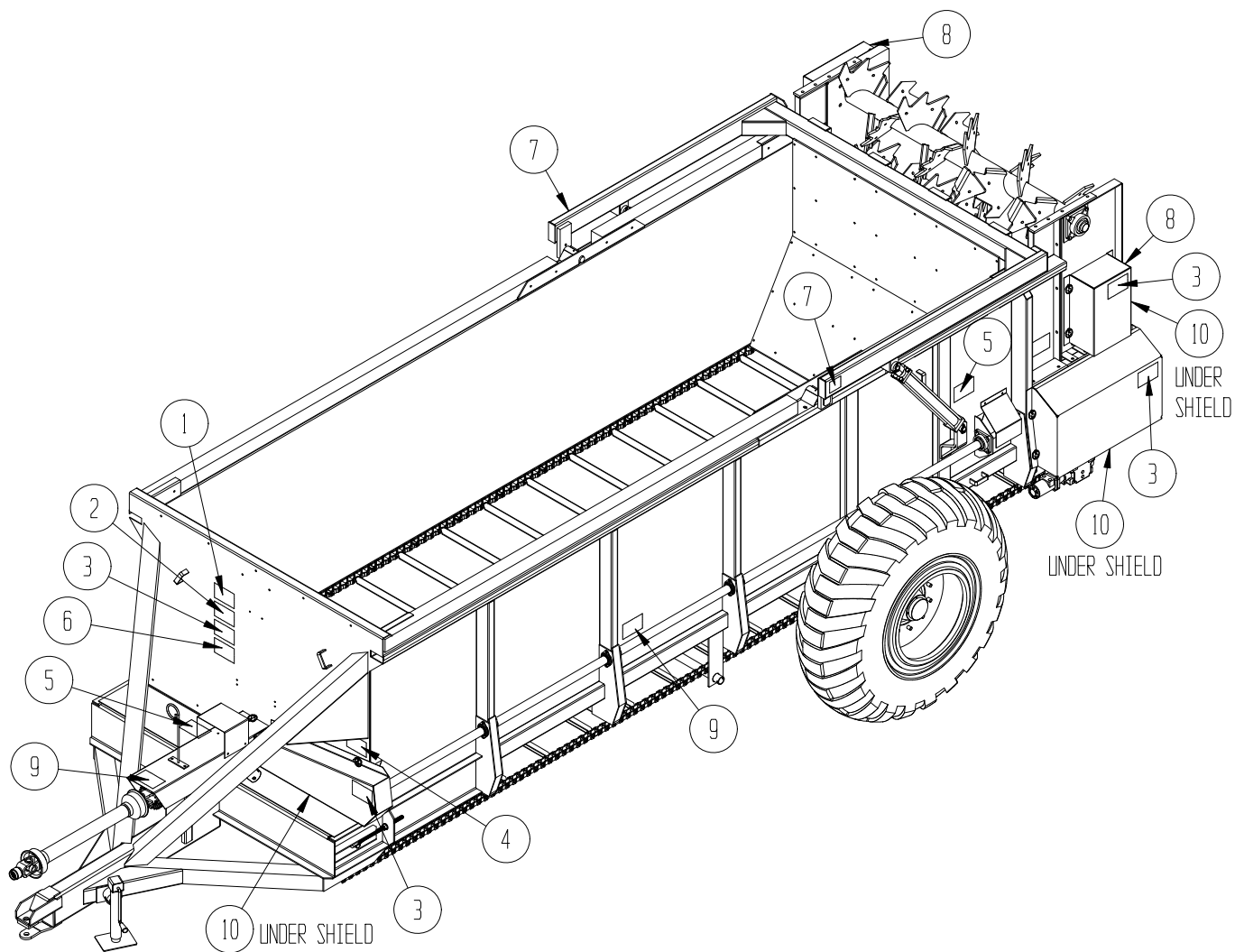
11.)





SAFETY

SAFETY DECAL LOCATION



MODEL AND SERIAL NUMBER INFORMATION is located in the upper center area of the front panel. This is the number to give service personnel for parts and service questions.



MANURE SPREADER SAFETY



THERE ARE INHERENT HAZARDS ASSOCIATED WITH THE OPERATION OF A MANURE SPREADER. FOR YOUR SAFETY:

- **ONLY PROPERLY INSTRUCTED PEOPLE SHOULD OPERATE THE SPREADER.** Do not allow children or inexperienced persons to operate spreader.
- **KEEP ALL GUARDS AND SHEILDS IN PLACE.** Moving parts can crush and dismember.
- **CLEAR THE AREA** before equipment start up.
- **KEEP HANDS, FEET, AND LOOSE CLOTHING AWAY FROM ANY MOVING PARTS.**
- **DO NOT GO NEAR THE SPREADER WHILE THE MACHINE IS OPERATING.**
- **MAKE SURE THE PTO IS SECURELY LOCKED** to both the tractor and spreader before operating this unit.
- **DO NOT OPERATE PTO AT SPEEDS HIGHER** than manufacturer's recommendations.
- **HIGHWAY TRAFFIC IS NOT TO EXCEED 10 MPH.** The tires supplied are for farm use only and are not designed for use above this speed.
- **USE ADEQUATE SAFETY CHAINS** when towing the spreader.
- **USE OF A SLOW MOVING VEHICLE SIGN IS REQUIRED** on all public roads. Obey all applicable highway safety laws and rules.
- **ALWAYS USE A TRACTOR LARGE ENOUGH TO PROVIDE SUFFICIENT BRAKING** assistance when towing a loaded spreader.
- **USE CAUTION WHEN TRAVELING** over uneven terrain and when approaching stops.
- **DO NOT LOAD THE SPREADER** unless it is hitched to the tractor.
- **DO NOT UNHITCH A LOADED SPREADER** from the tractor. Leaving it supported by only the jack.
- **PARK THE SPREADER ON LEVEL GROUND** and place blocks ahead of and behind the wheels before unhooking from tractor to avoid unexpected rolling when separated from vehicle
- **DO NOT ALLOW RIDERS ON THE SPREADER.**



FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH

THERE ARE ADDITIONAL HAZARDS ASSOCIATED WITH THE SERVICE AND MAINTENENCE OF YOUR SPREADER.

FOR YOUR SAFETY:

- **INSPECT** when first delivered and regularly thereafter; that all connections and bolts are tight and secure before operating.
- **RETIGHTEN ALL WHEEL BOLTS** after the first hour of towing. Check periodically thereafter.
- **MAINTAIN PROPER TIRE AIR PRESSURE** at all times.
- **ALWAYS WEAR EYE PROTECTION** when operating or servicing spreader.
- **BE SURE ALL MOVEMENT HAS STOPPED** and that the PTO is disconnected and the tractor is shut off before servicing the spreader or components.
- **ESCAPING HYDRAULIC FLUID UNDER PRESSURE** can penetrate skin and cause serious injury. Relieve all pressure from the hydraulic system before connecting of disconnecting the lines or making repairs. Check all hoses and fittings before start-up and periodically during operation.
- **NEVER MAKE ANY ALTERATIONS** or modifications to this equipment.



FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH

PRE-OPERATION

IMPORTANT: READ BEFORE OPERATING SPREADER.

IT IS THE RESPONSIBILITY OF THE OWNER TO MAKE SURE THE SPREADER IS SET UP PROPERLY. THE FOLLOWING RECOMMENDATIONS SHOULD BE HELPFUL.

- **CHECK FOR PROPER ASSEMBLY**, adjustment and lubrication. Check to be sure all bolts and setscrews are tight. Check to be sure that all chains and chain tighteners are properly adjusted. Review Operating Safety Precautions and Lubrication instructions for more information.
- **BE SURE ALL SHIELDS** are properly in place, including any drive-line shields
- **CHECK FOR AND REMOVE ANY FOREIGN OBJECTS** in the spreader box and discharge area.
- **BE SURE NO ONE IS NEAR THE SPREADER.**
- **TEST RUN THE SPREADER.**
- **WITH THE SPREADER EMPTY**, start the apron and beaters.
- **RUN FOR AT LEAST 5 MINUTES.**
- **CHECK THE SPREADER DRIVE COMPONENTS TO BE SURE THEY ARE NOT ABNORMALLY HOT.**

If any of these items are not running as indicated, immediately repair or contact your service representative. Always refer to Operating Safety Precautions before operating or servicing the spreader.



LUBRICATION

ALWAYS STOP THE MANURE SPREADER AND DISCONNECT POWER BEFORE SERVICING, REPAIRING, OR CLEANING. USE SAFE SHOP PROCEDURE AND EXERCISE CAUTION WHEN WORKING ON THIS MACHINE!

It is extremely important to properly lubricate your new RODA machine before it is used for the first time. If the mechanical drive components of your unit are not protected from shock and frictional abrasion, the wear rate of these components will be vastly accelerated and their life span will be drastically reduced. For proper care and maintenance, your machine should be serviced with engine oil, multipurpose grease, and fluids specified below.

It is extremely important that the lubrication guide be followed. For lubricating bearings, use good quality multipurpose grease. Pump the grease in slowly. Roller chains should be lubricated with engine oil, or a spray-on chain lubricant and then the spreader operated under a no-load condition. This will allow the roller chains to be thoroughly lubricated and thus minimize heat-up during operation.

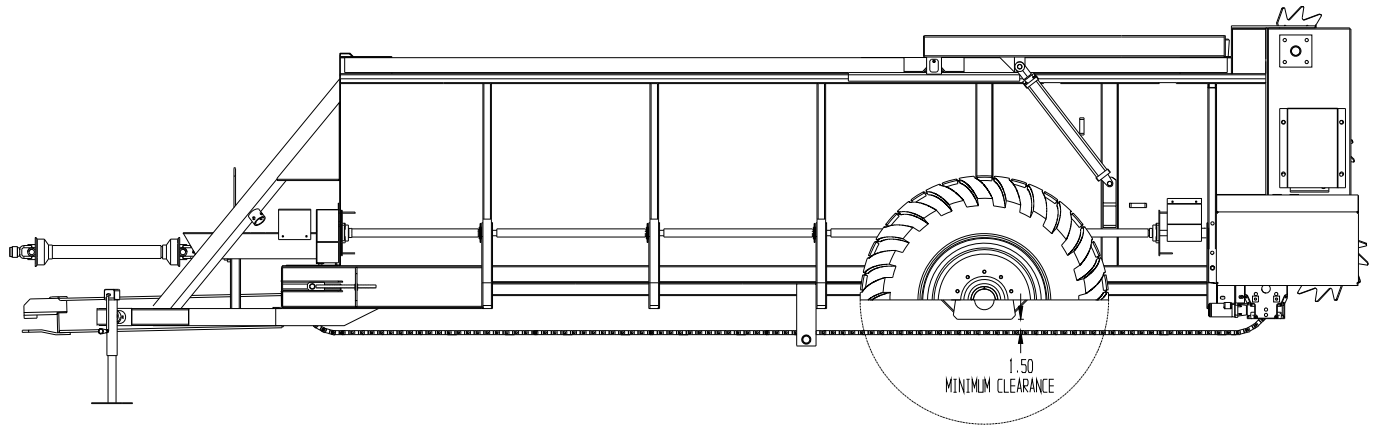
DESCRIPTION	INTERVAL	LUBRICANT
ROLLER CHAINS	15-20 HOURS	OIL
APRON BEARINGS	15-20 HOURS	GREASE
APRON GEAR CASE	ANNUALLY	EP90 GEAR LUBE
APRON CHAIN	WHEN PARKED	30WT OIL
RIGHT ANGLE GEAR CASE	ANNUALLY	EP90 GEAR LUBE
GEARBOX KNUCKLE	15-20	GREASE
AXLE HUBS	BI-ANNUALLY	GREASE
PTO SHAFT	15-20	GREASE
SLIP CLUTCH	BI-ANNUALLY	GREASE
CAST FLANGE BEARINGS	15-20 HOURS	GREASE
PILLOW BLOCK BEARING	15-20 HOURS	GREASE
SLOP GATE PIVOT POINT	15-20 HOURS	GREASE

ALWAYS REPLACE ALL SHIELDS AFTER MAINTENANCE AND LUBRICATION IS COMPLETE

INSPECTION & ADJUSTMENTS

ALWAYS STOP SPREADER, SHUT OFF VEHICLE ENGINE AND REMOVE IGNITION KEY BEFORE SERVICING, REPAIRING, OR CLEANING, USE SAFE SHOP PROCEDURES AND EXERCISE CAUTION WHEN WORKING ON THIS SPREADER!

- **SHIELDING** to be sure all shielding is in place and functioning properly. Replace all damaged or missing shielding immediately-Contact your nearest dealer or the Roda parts/service dept. for more information. Check bolts and Set Screws after a few hours of use and each month thereafter, and tighten if necessary.
- **AFTER A FEW HOURS OF INITIAL OPERATION**, check all bolts and set screws to be sure they are tight and secure.
- **ROLLER CHAIN TIGHTENERS** to apply sufficient tension to keep roller chains running smoothly. The chain will form grooves in the tightener blocks. These grooves help to keep the chains in proper alignment, and the blocks should not be turned unless the roller portion of the chain has worn into the block
- **ROLLER CHAINS FOR WEAR**, proper alignment and tension, and adjust or replace if necessary. Roller chain connector links which pall over tightener blocks must have the legs of the cotter pins facing the trailing end.
- **SAFETY DECALS FOR READABILITY**. If any safety decals are removed, obstructed, or otherwise not understandable, they should be replaced immediately. Keep all decals clean!
- **IMPORTANT: IF YOU WELD ON THIS UNIT:** Do Not allow the currents to flow through the bearings. Ground directly to the item being welded.
- **PERIODICALLY CHECK** all set screws and bolts and retighten if necessary.
- **APRON CHAINS** for wear, proper alignment and tension, according to the adjustment guidelines as shown.
- **BE SURE TO KEEP PROPER TENSION ON APRON CHAINS**. The (4) apron tightener bolts are located at the front of the unit at each end of the apron shaft. They should be adjusted evenly for their respective assembly as shown below:



If apron is loose, remove one link from each side of that apron chain assembly and readjust to tension as shown. **CAUTION:** Over tightening can cause premature failure of the drive components.

SPREADER OPERATION

ALWAYS REFER TO THE OPERATING SAFETY PRECAUTIONS AND SAFETY DECAL SECTIONS OF THIS MANUAL BEFORE OPERATING THIS SPREADER

LOADING

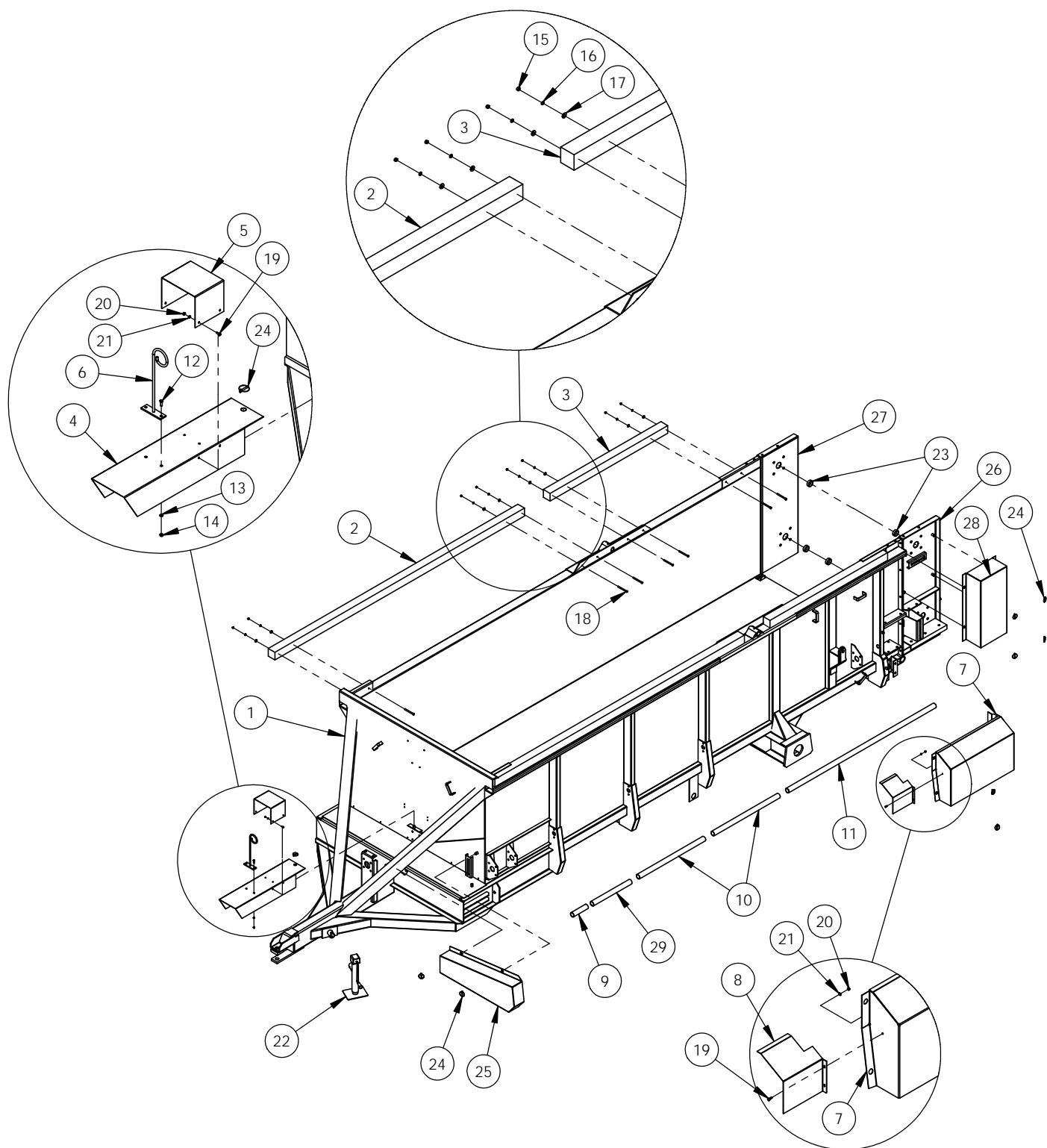
- **BEFORE LOADING THE SPREADER**, be sure there are no obstructions in the beaters or discharge opening. Inspect the spreader to see that it is in good mechanical condition and that all shields are in place and functional.
- **NEVER CHECK THE SPREADER WHILE IT IS OPERATING**
- **IN FREEZING WEATHER**, make sure the apron is not frozen with manure. If this appears likely, turn off vehicle engine, remove ignition keys, loosen the frozen area and operate before loading.
- **AVOID LOADING ROCKS AND OTHER SOLID OBJECTS INTO THE SPREADER**
- **NEVER COVER BEATERS** when loading, beaters should spin freely before engaging.

OPERATION

- **BEFORE OPERATING, BE SURE NO ONE IS NEAR THE SPREADER AND THAT THE DISCHARGE AREA IS CLEAR OF ALL OBJECTS OR PERSONS THAT COULD BE HARMED IF MATERIAL WAS DISCHARGED!**
- **WITH THE VEHICLE STOPPED** and the engine throttled down, engage the apron and beater levers.
- **START VEHICLE IN MOTION.**
- **THE SPREAD RATE IS CONTROLLED BY THE VEHICLE GROUND SPEED.** The type of material being spread affects the rate at which material is discharged from the spreader. Semi-liquid materials will discharge faster than the more solid type materials.
- **WHEN THE SPREADER IS EMPTY DURING FREEZING TEMPERATURES,** be sure that the spreader is cleaned out to prevent the apron from freezing down.
- **IF THE BEATER QUILTS TURNING,** stop the vehicle, turn off the motor, remove the ignition key, and check driveline of the spreader, starting in the front with the PTO and working towards the rear of the spreader.
- **NEVER LOAD THE SPREADER SO THE LOAD IS ON THE BEATERS.**

*If a problem should occur while unloading the spreader, or if you want to clean off the spreader after it is empty, NEVER leave the VEHICLE without first turning off the engine and removing ignition key.

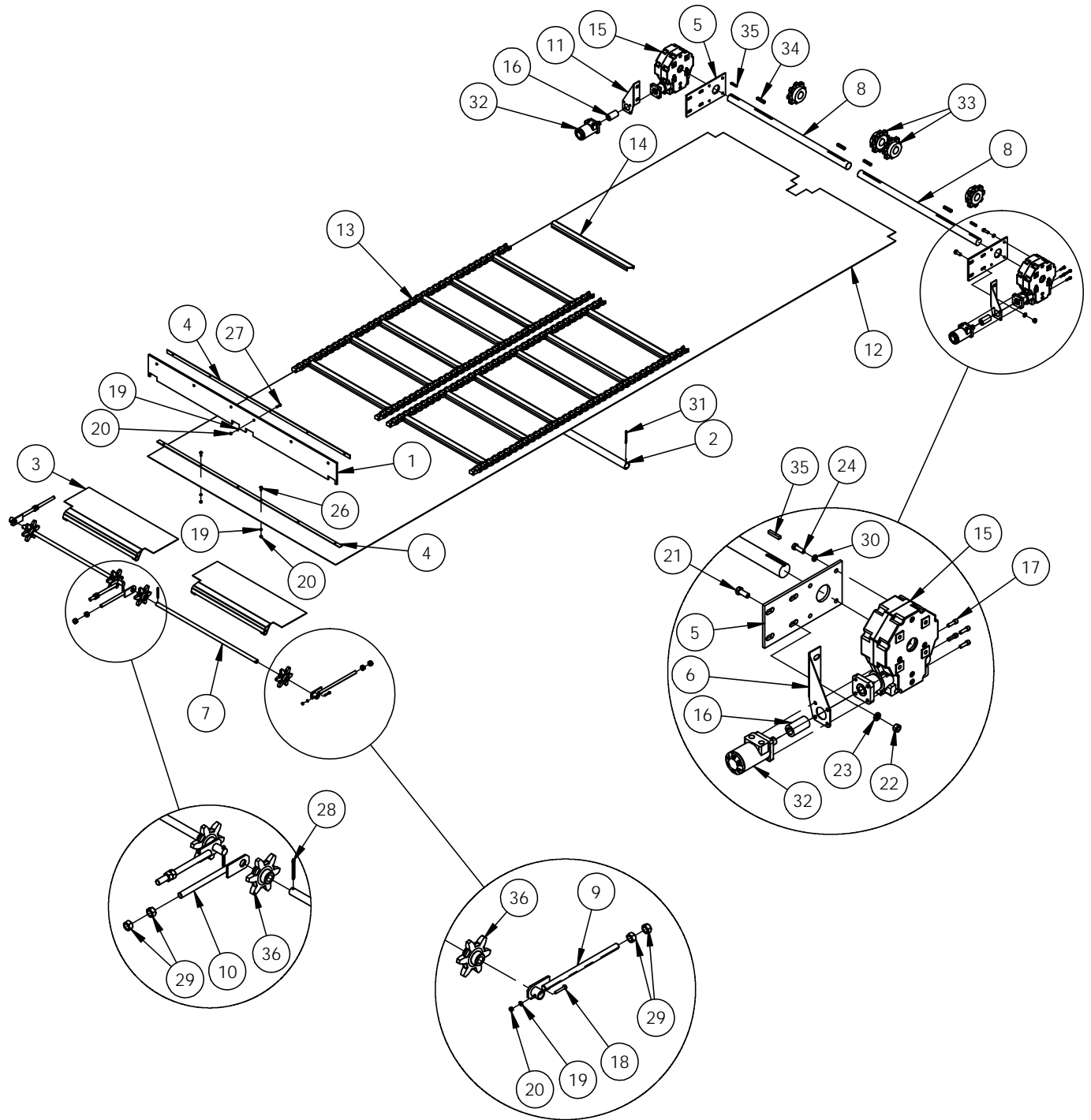
FRAME AND SHIELDS BREAKDOWN



FRAME AND SHIELDS PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	F&S/QTY.
1	810001	810 MAIN FRAME	1
2	810021	FRONT SIDE BOARD	2
3	810022	BACK SIDE BOARD	2
4	810038	810 PTO SHAFT SHIELD	1
5	610006	FLOW CONTROL VALVE COVER	1
6	610081	HYDRAULIC HOSE HOLDER	1
7	810011	810 GEARBOX CHAIN SHIELD	1
8	610011-A	SHIELD EXTENSION	1
9	810007	FRONT SIDE SHAFT SHIELD	1
10	810008	MIDDLE SIDE SHAFT SHIELD	2
11	810009	REAR SIDE SHAFT SHIELD	1
12	HX-31-1	5/16" HEX HEAD BOLT, 1"	2
13	LW-31	5/16" LOCK WASHER	2
14	HN-31	5/16" HEX HEAD NUT	2
15	HN-38	3/8" HEX HEAD NUT	16
16	LW-38	3/8" LOCKWASHER	16
17	FW-38	3/8" FLAT WASHER	16
18	HX-38-4.5	3/8" x 4.5" HEX HEAD BOLT	16
19	HX-25-0.75	1/4" HEX HEAD BOLT, .75"	4
20	HN-25	1/4" HEX HEAD NUT	4
21	LW-25	1/4" LOCK WASHER	4
22	198250	BULLDOG SIDEWINDER JACK	1
23	410091	TWINE SHIELD	4
24	LP-25-1.75	1/4" LYNCH PIN	11
25	610004	PTO CHAIN SHIELD	1
26	810044	LEFT BEATER PANEL	1
27	8100047	RIGHT BEATER PANEL	1
28	810045	TOP BEATER BEARING SHIELD	1
29	810049	MIDDLE SIDE SHAFT SHIELD	1

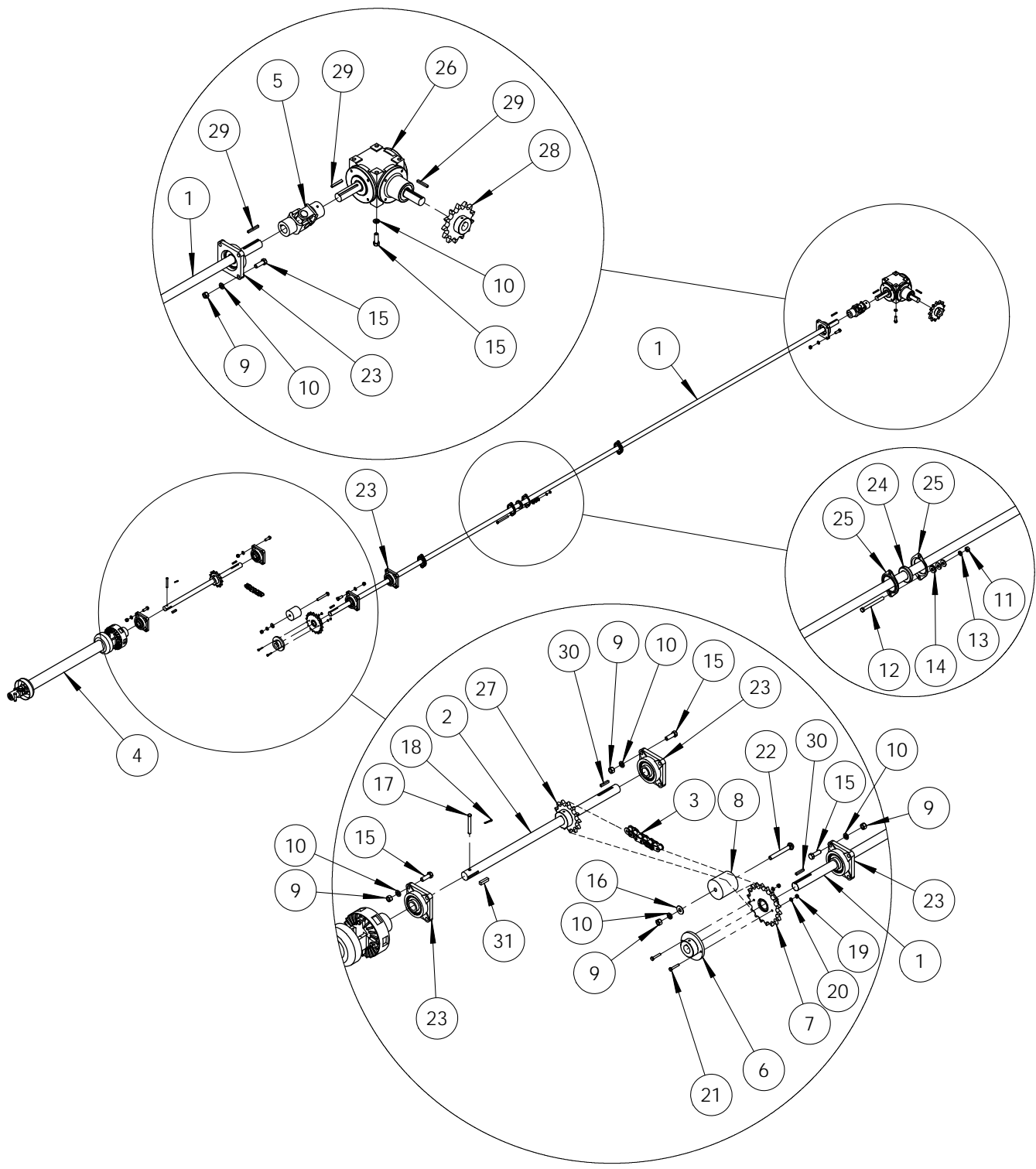
APRON DRIVE BREAKDOWN



APRON DRIVE PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	APRON BREAKDOWN/QTY.
1	610027	FRONT RUBBER SEAL	1
2	610028	APRON PIPE	1
3	610073	SHAFT COVER	2
4	610074	STRAP FOR FRONT RUBBER SEAL	2
5	610078	WORM GEAR MOUNT	2
6	610079	HYDRAULIC MOTOR BRACE	1
7	810014	Ø 1" WEB TIGHTENER SHAFT, 38"	2
8	810017	Ø 2" WEB DRIVE SHAFT, 45.06"	2
9	810023	OUTER APRON TIGHTENER	2
10	810024	INNER APRON TIGHTENER	2
11	810027	HYDRAULIC MOTOR BRACE	1
12	810030	FLOOR PLASTIC	1
13	810031	APRON CHAIN	2
14	810031-02	APRON FLIGHT	1
15	W25SDA008030	GEAR BOX, WORM DRIVE 25:1	2
16	W00101-02	COUPLER, 1"	2
17	Z85-11-0620	BOLT, SOCKET HEAD CAP, 3/8" X 1-1/4"	8
18	Z82-03-0528	BOLT, HEX, 5/16" X 1-3/4" Z5	2
19	Z82-66-0505	WASHER, LOCK SPLIT, 5/16 Z5	14
20	Z82-40-0505	NUT, HEX, 5/16"-18 Z5	14
21	Z82-03-1024	BOLT, HEX, 5/8" X 1-1/2" Z5	8
22	Z82-40-1010	NUT, HEX, 5/8" Z5	8
23	Z82-66-1010	WASHER, LOCK SPLIT, 5/8 Z5	8
24	Z82-03-0824	BOLT, HEX, 1/2" X 1-1/2" Z5	8
26	Z82-19-0516	BOLT, TRUSS HEAD, 5/16" X 1"	6
27	Z82-03-0520	BOLT, HEX, 5/16" X 1-1/4" Z5	6
28	Z82-71-0436	PIN, COTTER, 1/4" X 2-1/2"	2
29	Z82-40-1212	NUT, HEX, 3/4" Z5	8
30	Z82-66-0808	WASHER, LOCK SPLIT, 1/2" Z5	8
31	Z82-71-0440	PIN, COTTER, 1/4" X 3" Z5	2
32	C47-00-3124	MOTOR, HYD EATON H-SERIES 14.1 CU IN 4 BOLT 1" KEYED	2
33	M08-56-3077	8 TOOTH, 2" BORE, DRIVE SPRKT	4
34	FAB K5050-2.75	KEY, .50 X .50 X 2.75	4
35	FAB K3838-2	KEY, .38 X .38 X 2.0	2
36	FAB XL-R42	SPROCKET, 6T IDLER	4

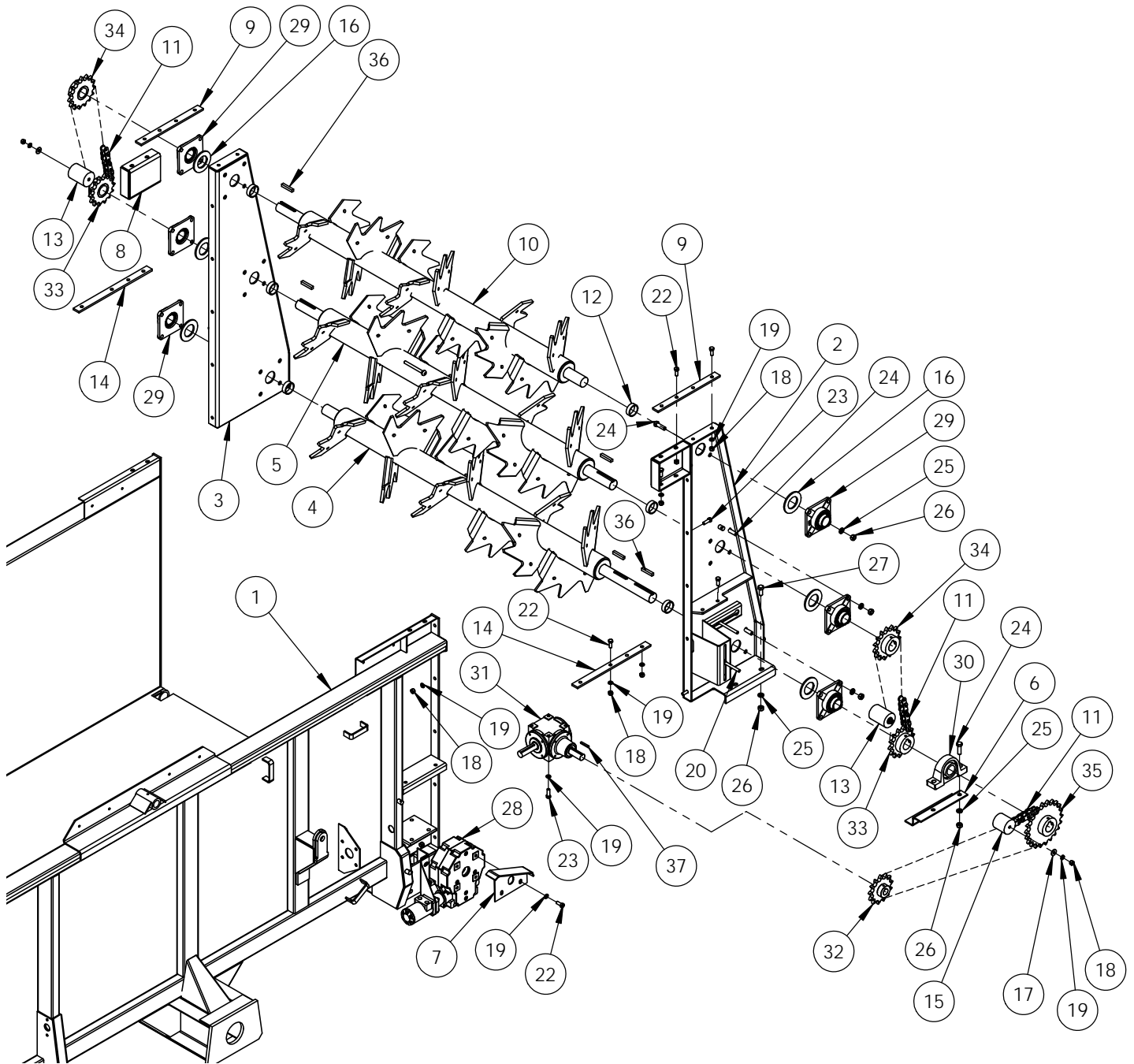
FRONT & SIDE DRIVELINES BREAKDOWN



FRONT & SIDE DRIVELINES PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	FRONT & SIDE DRIVELINES/QTY.
1	810015-A	SIDE SHAFT	1
2	810039	810 PTO SHAFT	1
3	610013	#80 PTO DRIVE CHAIN	1
4	610029	48" PTO W/CLUTCH PACK	1
5	610034	COUPLER, UNIVERSAL JOINT 1-1/4" ROUND TO 1-1/4" ROUND	1
6	610099	SHEAR PLATE ASSY	1
7	610100	SHEAR SPROCKET	1
8	610101	3.00"DIA x 3.00" PLASTIC TIGHTENER	1
9	Z82-40-0808	NUT, HEX, 1/2" Z5	21
10	Z82-66-0808	WASHER, LOCK SPLIT, 1/2" Z5	25
11	Z82-40-0606	NUT, HEX, 3/8" Z5	6
12	Z82-03-0648	BOLT, HEX, 3/8" X 4" Z5	6
13	Z82-66-0606	WASHER, LOCK SPLIT, 3/8" Z5	6
14	Z82-60-0606	WASHER, FLAT, 3/8" Z5	30
15	Z82-03-0824	BOLT, HEX, 1/2" X 1-1/2" Z5	24
16	Z82-60-0808	WASHER, FLAT, 1/2" Z5	1
17	Z82-70-0640	PIN, CLEVIS, 3/8" X 3"	1
18	Z82-71-0212	PIN, COTTER, 1/8" X 3/4" Z5	1
19	Z82-40-0404	NUT, HEX, 1/4" Z5	2
20	Z82-66-0404	WASHER, LOCK SPLIT, 1/4" Z5	2
21	Z82-03-0424	BOLT, HEX, 1/4" X 1-1/2" Z5	2
22	Z82-01-0848	BOLT, CARRIAGE, 1/2" X 4" Z5	1
23	K08-03-1012	BEARING, FLANGE 4 BOLT 1-1/4" W/LOCKING COLLAR	5
24	K08-05-1024	BEARING, INSERT 1-1/4" NON-RELUBABLE W/LOCK COLLAR	3
25	K08-04-1033	BEARING, FLANGETTE 2 HOLE 62 MM	6
26	O74-01-5040	GEARBOX, HUB CITY MODEL 66, 1:1 RATIO	1
27	FAB 8013X-1.25	SPROCKET, 80-13 1.25 BORE	1
28	FAB 10013X-1.25	SPROCKET, 100-13 1.25 BORE	1
29	FAB K2525-2	KEY, .25 X .25 X 2.0	3
30	FAB K2525-1.5	KEY, .25 X .25 X 1.5	2
31	FAB K3838-1.5	KEY, .38 X .38 X 1.5	1

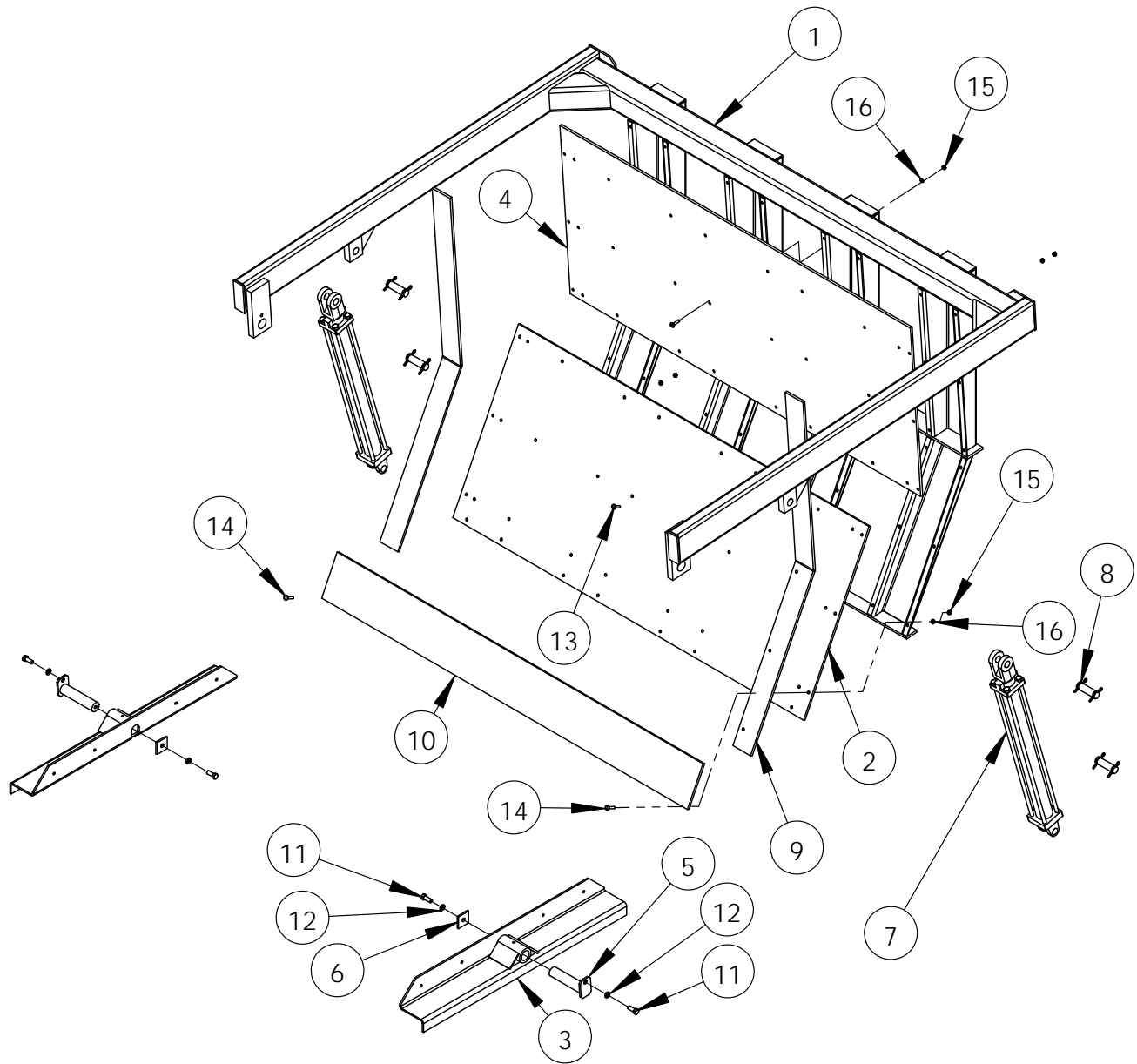
BEATER PANEL BREAKDOWN



BEATER PANEL PARTS LIST

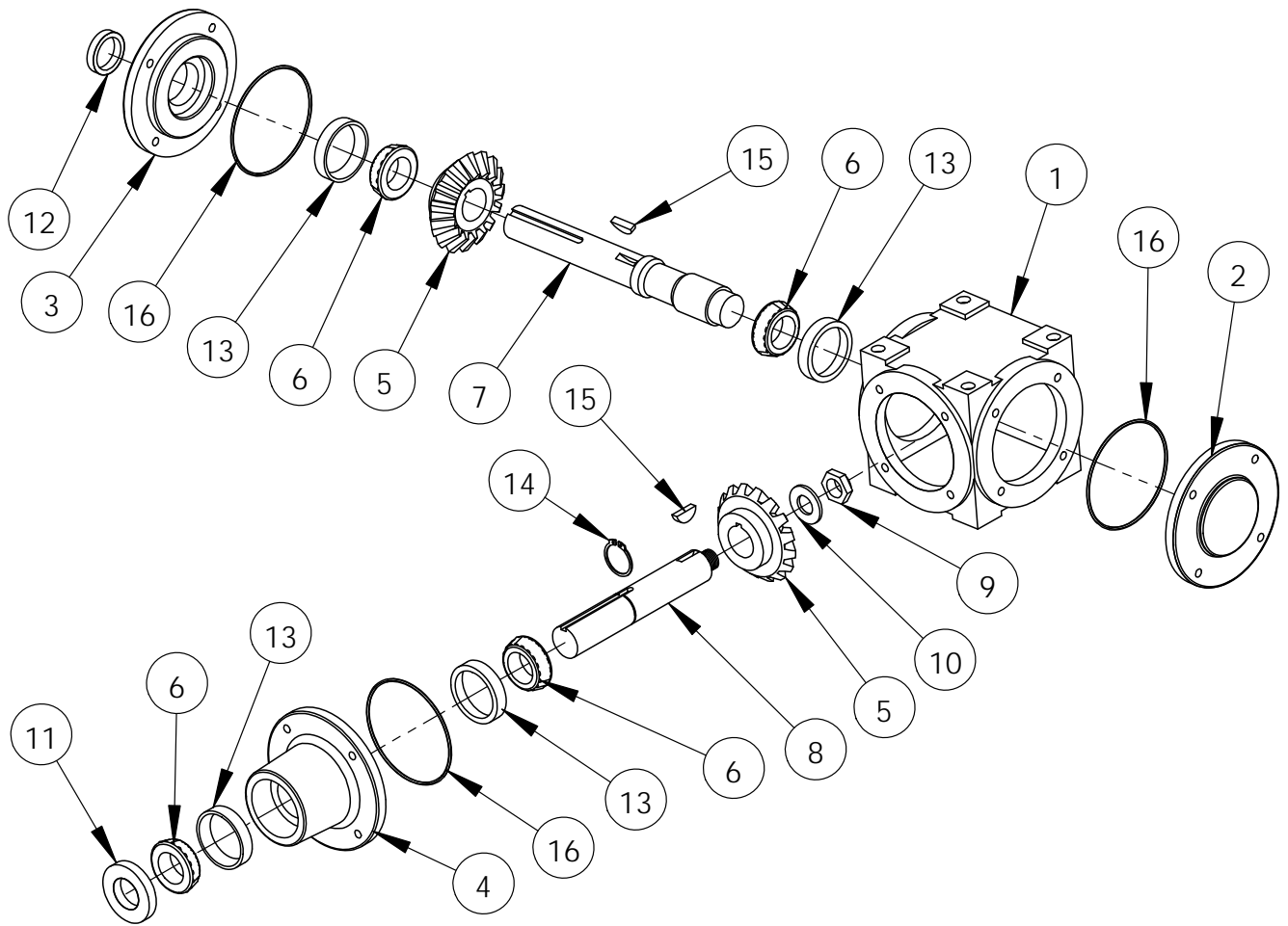
ITEM NO.	PART NUMBER	DESCRIPTION	Beater Panel/QTY.
1	810001	810 MAIN FRAME	1
2	810002	LEFT BEATER PANEL	1
3	810003	RIGHT BEATER PANEL	1
4	810018	810 BOTTOM BEATER	1
5	810019	810 MIDDLE BEATER	1
6	810026	2" PILLOW BLOCK BEARING MOUNT	1
7	810029	GEARBOX CHAIN GUARD	1
8	810052	CORNER PANEL	2
9	810053	TOP BEATER PANEL BRACE BAR	2
10	810055	810 TOP BEATER	1
11	810068	#100 BEATER CHAIN	3
12	410091	TWINE SHIELD	6
13	610052	3.00" DIA x 4.00" PLASTIC TIGHTENER	2
14	610083	BEATER PANEL BRACE BAR	2
15	610101	3.00"DIA x 3.00" PLASTIC TIGHTENER	1
16	610109	BEARING SAVER, 2"	6
17	Z82-60-0808	WASHER, FLAT, 1/2" Z5	3
18	Z82-40-0808	NUT, HEX, 1/2" Z5	33
19	Z82-66-0808	WASHER, LOCK SPLIT, 1/2" Z5	39
20	Z82-01-0848	BOLT, CARRIAGE, 1/2" X 4" Z5	1
21	Z82-01-0856	BOLT, CARRIAGE, 1/2" x 5" Z5	2
22	Z82-03-0820	BOLT, HEX, 1/2" X 1-1/4" Z5	22
23	Z82-03-0824	BOLT, HEX, 1/2" X 1-1/2" Z5	14
24	Z82-03-1032	BOLT, HEX, 5/8" X 2" Z5	26
25	Z82-66-1010	WASHER, LOCK SPLIT, 5/8 Z5	28
26	Z82-40-1010	NUT, HEX, 5/8" Z5	28
27	Z82-03-1024	BOLT, HEX, 5/8" X 1-1/2" Z5	2
28	W25SDA008030	GEAR BOX, WORM DRIVE 25:1	2
29	K08-03-1037	BEARING, FLANGE 4 BOLT 2" W/LOCKING COLLAR	6
30	K08-55-1029	BEARING, PILLOW BLOCK 2" W/LOCKING COLLAR	1
31	O74-01-5040	GEARBOX, HUB CITY MODEL 66, 1:1 RATIO	1
32	FAB 10013X-1.25	SPROCKET, 100-13 1.25 BORE	1
33	FAB 10014Y-2.00	SPROCKET, 100-14 2.00 BORE	2
34	FAB 10015Y-2.00	SPROCKET, 100-15 2.00 BORE	2
35	FAB 10022Y-2.00	SPROCKET, 100-22 2.00 BORE	1
36	FAB K5050-2.75	KEY, .50 X .50 X 2.75	5
37	FAB K2525-2	KEY, .25 X .25 X 2.0	1

SLOP GATE BREAKDOWN



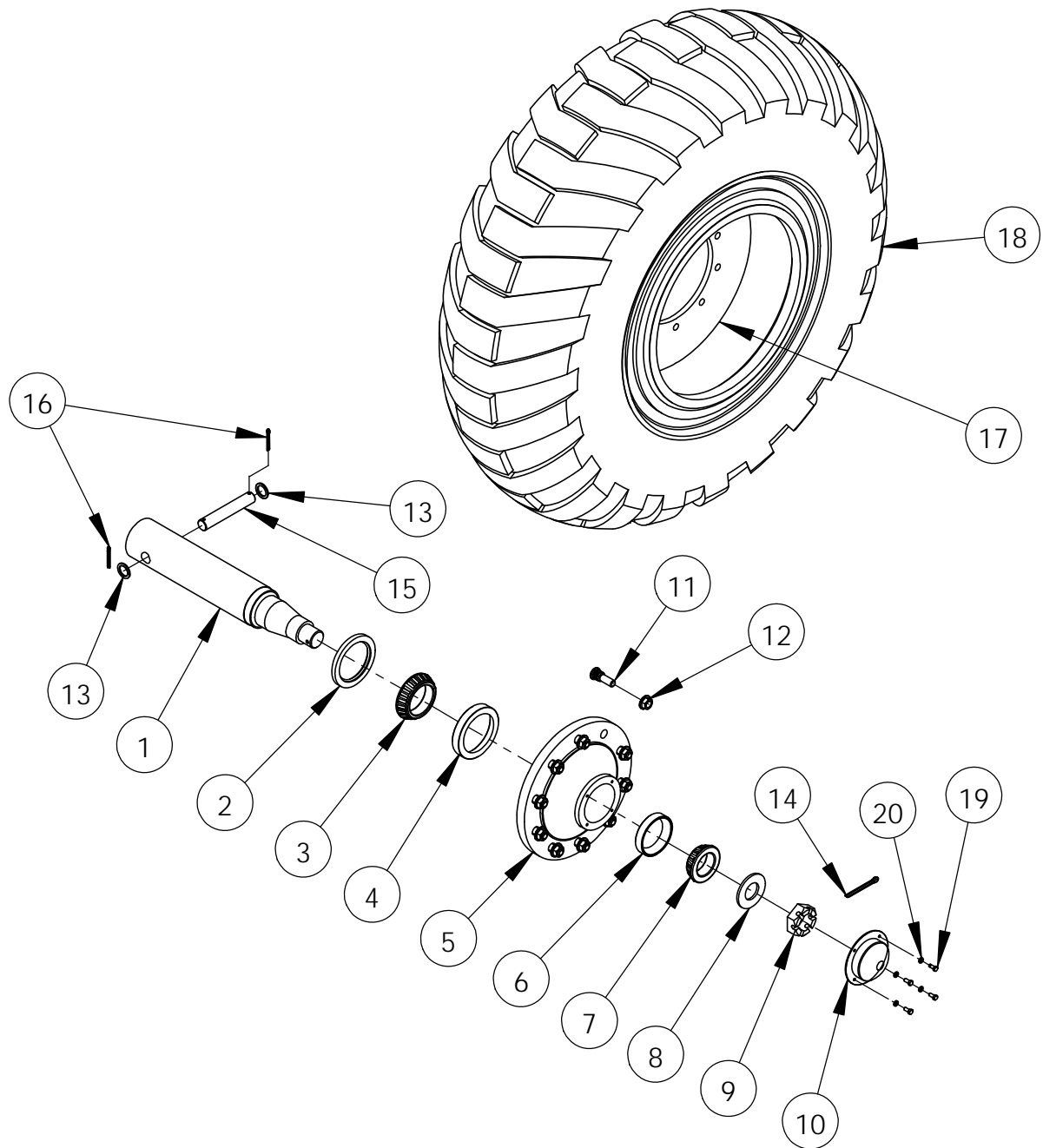
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	810004	SLOP GATE	1
2	810032	LOWER SLOP GATE PLASTIC	1
3	810012	SLOP GATE PIVOT BRACKET	2
4	810041	UPPER SLOP GATE PLASTIC	1
5	810013	SLOP GATE PIN	2
6	810036	SLOP GATE PIVOT WASHER	2
7	B200240ABAAA07A	HYD CYLINDER, 2" BORE 24" STROKE	2
8	610023	CYLINDER PIN KIT	2
9	810050	SIDE RUBBER FOR SLOP GATE	2
10	610087	BOTTOM RUBBER FOR SLOP GATE	1
11	HX-50-1.25	1/2" x 1.25" HEX HEAD BOLT	4
12	LW-50	1/2" LOCK WASHER	4
13	CH-31-1.25	5/16" CARRIAGE BOLT, 1.25"	30
14	CH-31-1.5	5/16" CARRIAGE BOLT, 1.5"	18
15	HN-31	5/16" HEX HEAD NUT	48
16	LW-31	5/16" LOCK WASHER	48

HUB CITY GEARBOX BREAKDOWN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	610076-21	CASTING BODY	1
2	610076-22	END CAP W/O HOLE	1
3	610076-23	END CAP W/ HOLE	1
4	610076-24	END CAP W/ BOSS AND HOLE	1
5	610076-25	BEVEL GEAR	2
6	610076-26	THRUST BEARING	4
7	610076-27	LONG DRIVE SHAFT	1
8	610076-28	SHORT DRIVE SHAFT	1
9	610076-29	3/4-16 UNF LOCKING JAM NUT	1
10	610076-30	.76" ID x 1.50" OD WASHER	1
11	610076-31	LARGE SEAL	1
12	610076-32	SMALL SEAL	1
13	610076-33	BEARING RACE	4
14	610076-34	1.25" SNAP RING	1
15	610076-35	#808 .25" x 1" WOODRUFF KEY	2
16	610076-36	O-RING SEAL	3

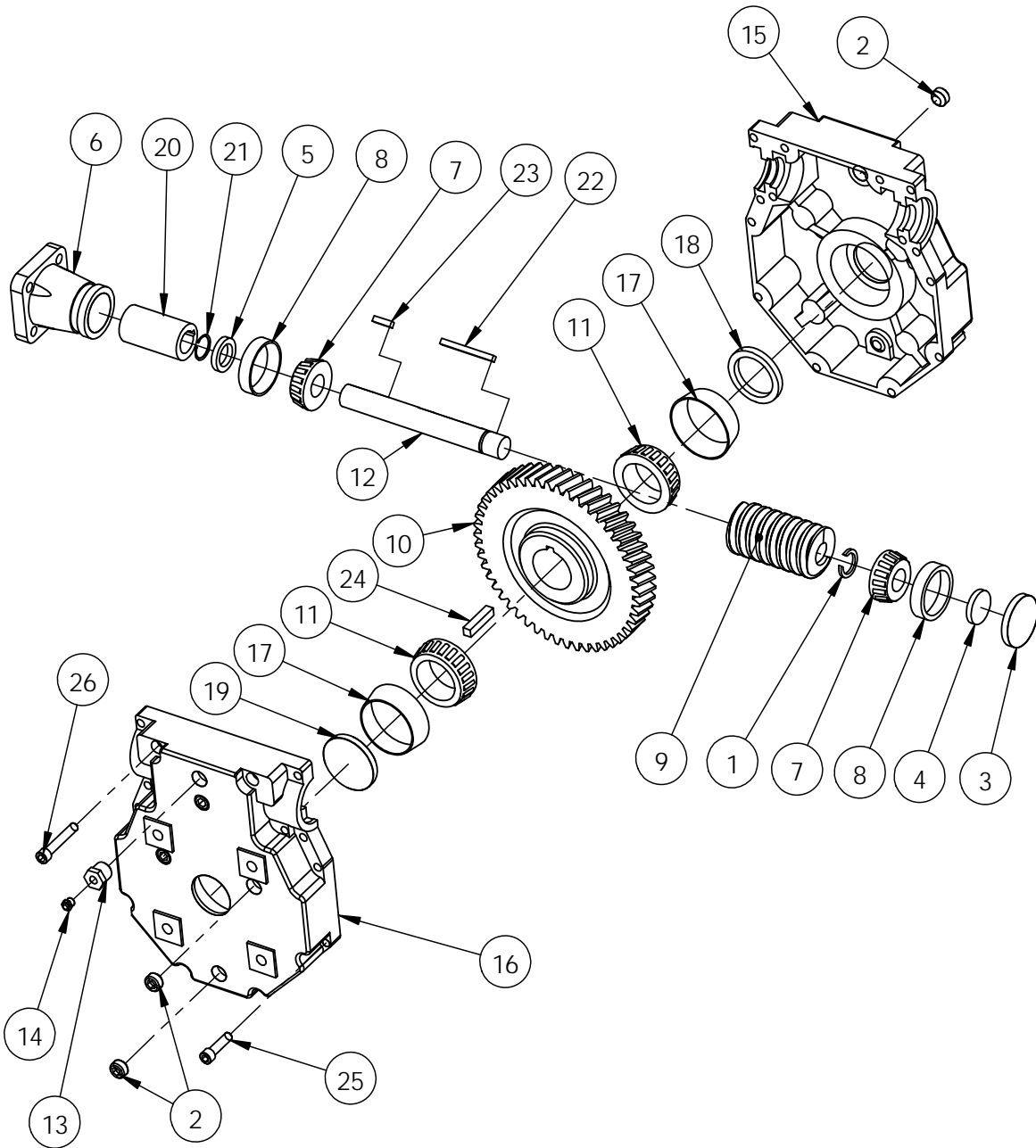
WHEEL AND HUB BREAKDOWN



WHEEL AND HUB PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	LS8241U-16	SPINDLE FOR 881 HUB	1
2	SL-43605	GREASE SEAL #43605 SA	1
3	KOYO-218248	INSIDE BEARING #HM218248	1
4	KOYO-218210	OUTSIDE BEARING RACE #HM212011	1
5	MH-881	873 HUB MACHINED CASTING	1
6	KOYO-212011	OUTSIDE BEARING RACE #HM212011	1
7	KOYO-212049	OUTSIDE BEARING #HM212049	1
8	FW-2.00	FLAT WASHER, 2.00" ID x 4.00" OD	1
9	CN-2.00	2.00" CASTLE NUT	1
10	P502041	4-BOLT DUST CAP	1
11	WB-75	3/4" WHEEL STUD	10
12	WN-75	3/4" LUG NUT	10
13	MW-NR-1.25-10	1.25" ID MACHINE WASHER, 10GA	2
14	CP-38-3.75	3/8" x 3.75" COTTER PIN	1
15	810025	AXLE PIN	1
16	CP-25-2	.25"x 2" COTTER PIN	2
17	20.5X25-R	20.5 x 25 RIM	1
18	20.5X25-T	20.5 x 25 TIRE	1
19	HX-31-.75	5/16" HEX HEAD BOLT, .75"	4
20	LW-31	5/16" LOCK WASHER	4

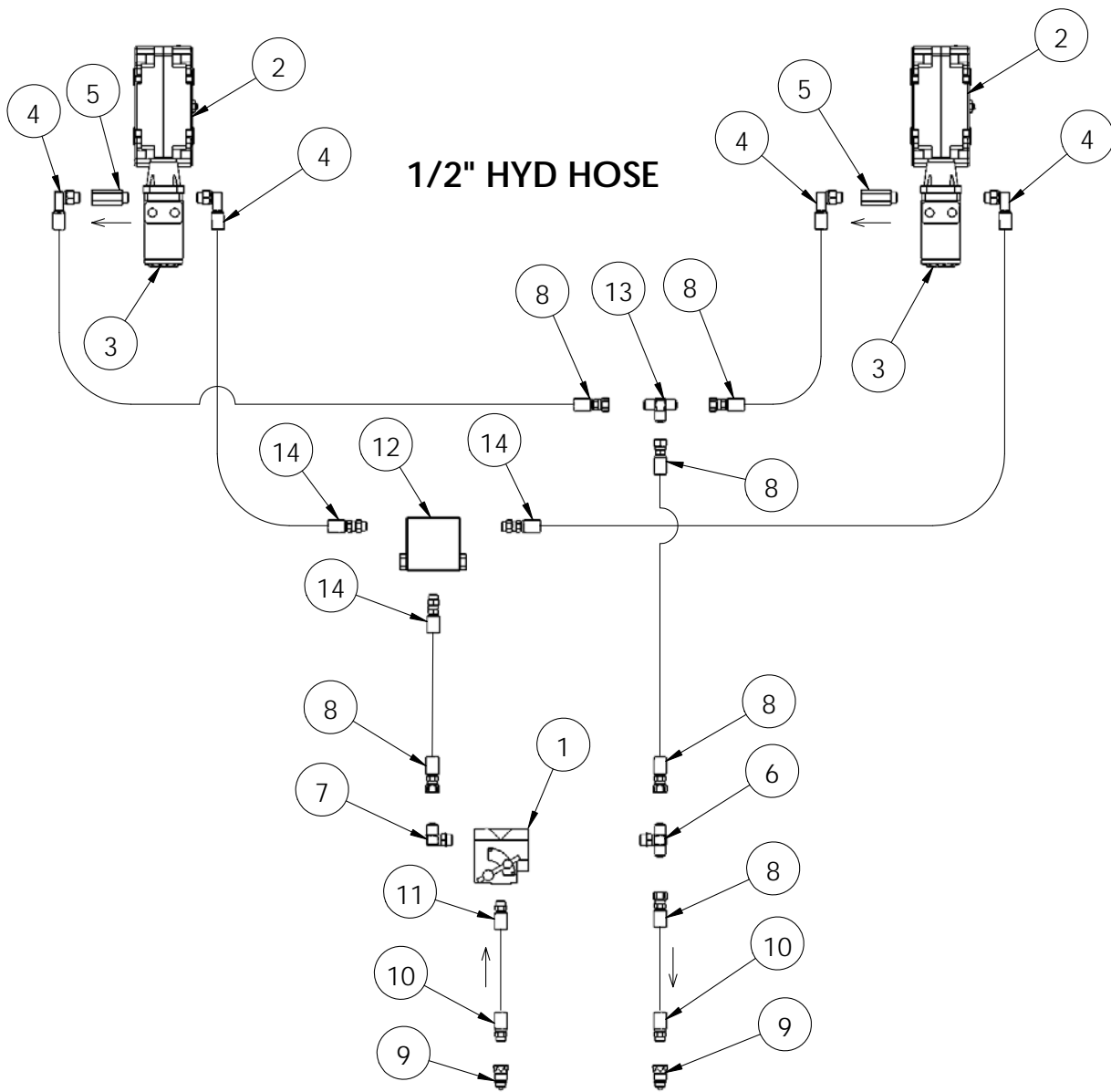
WORM GEAR BREAKDOWN



WORM GEAR BREAKDOWN PARTS LIST

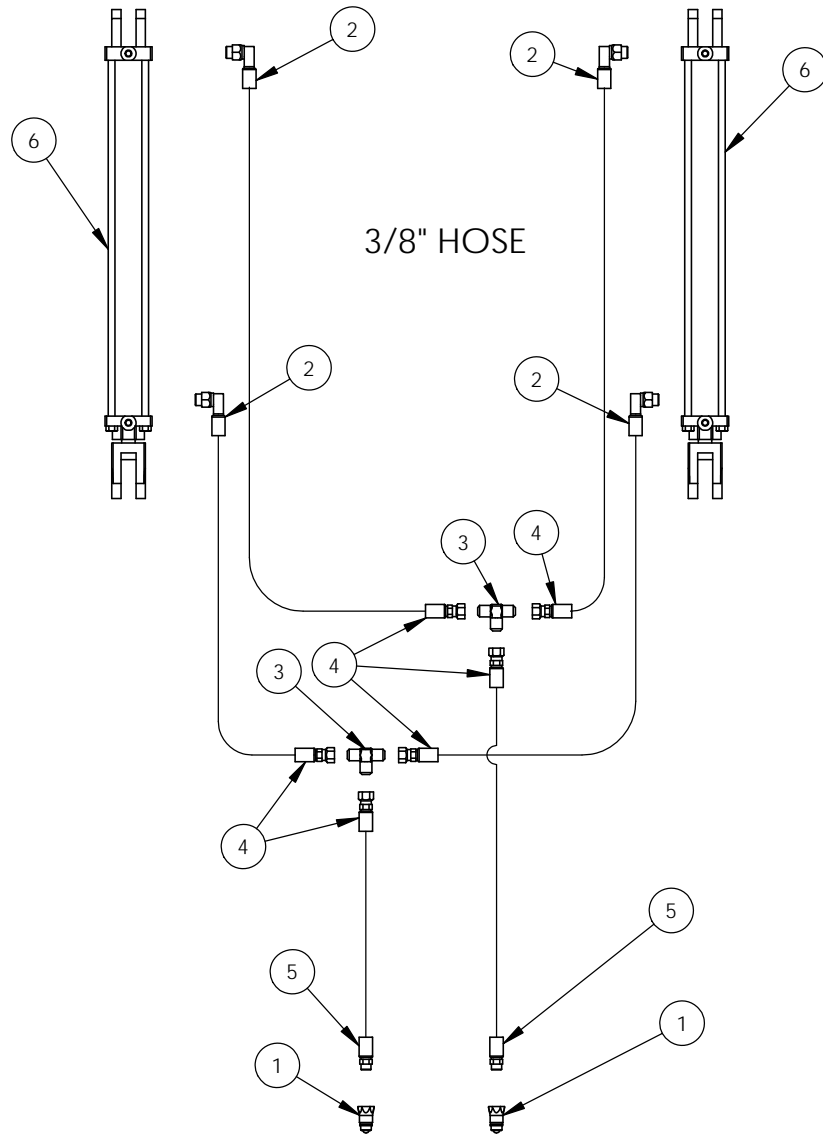
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203293	RETAINING RING, EXT 1.00 SHFT	1
2	400300	PLUG, 1/2-14 NPT SCHD W/3M	9
3	W26231	END CAP, CP-2.312-.313 D.#0049	1
4	200301	END CAP, CP-1.50-.25 D.#0653	1
5	209843	SEAL, 1.00-1.49-.25 (R) TC	1
6	WH3254-01	ADAPTER, HYD 4-BOLT 3/8-THRU	1
7	W15101	BEARING, CONE 1.00 VN-15101	2
8	W15245	BEARING, CUP 2.4409 VN-15245	2
9	W26R02-01	GEAR, WORM ROLLED 2-L RH 25:1	1
10	W26R25-0	GEAR, WORM 25:1 RH 2.00 3/8 KW	1
11	804949	BEARING, CONE TMKN# LM104949	2
12	W00100-03	SHAFT, WORM W00100	1
13	4003VB	BUSHING, 1/2-14 NPT TO 1/8 NPT	1
14	2003PR	PLUG, VENT 5PSI V/N 005677	1
15	W00001-0	CASTING, MACH W260 TAP STAND	1
16	W00002-0	CASTING, MACH W260 THRU STAND	1
17	804911	BEARING, CUP TMKN# LM104911	2
18	819762	SEAL, 2.00-2.623-.312 (R) TC	1
19	W26262	END CAP, CP-2.312-.313 D.#0049	1
20	W00101-02	COUPLER	1
21	W50001	RETAINING RING, INT 1.00 BORE	1
22	W00200	KEY, 1/4 x 1/4, 2.731	1
23	200200	KEY, 1/4 x 1/4, .930	1
24	W00201	KEY, 3/8 x 3/8, 1.80	1
25	SC-38-1.5	3/8" SOCKET HEAD CAP SCREW, 1.5"	10
26	SC-38-2.25	3/8" SOCKET HEAD CAP SCREW, 2.25"	4

APRON HYDRAULICS BREAKDOWN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FC-51	VALVE, FLOW CONTROL	1
2	W25SDA008030	WORM GEAR DRIVE	2
3	101-1014	HYD MOTOR, EATON	2
4	08U-R70	1/2" HOSE END, 7/8-14, M-"O" RING, ELB, SWVL	4
5	FC-10	CHECK VALVE, 7/8-14, "O" RING	2
6	6803-10-10-10	TEE, 7/8-14, 2 M-FLARE x M-"O" RING	1
7	6801-10-10	90 ELBOW, 7/8-14, M-FLARE x M-"O" RING	1
8	08U-610	1/2" HOSE END, 7/8-14, F-FLARE, STR, SWVL	6
9	8010-15	PIONEER TIP, 3/4-16, M	2
10	08U-P08	1/2" HOSE END, 3/4-16, M-"O" RING, STR, RGD	2
11	08U-P10	1/2" HOSE END, 7/8-14, M-"O" RING, STR, RGD	1
12	B100AB-1-2	PROPORTIONAL DIVIDER	1
13	2603-10-10-10	TEE, 9/16-18, 2 M-FLARE	1
14	08U-J08	1/2" HOSE END, 1/2-14, M-NPT, STR, SWVL	3

SLOP GATE HYDRAULICS BREAKDOWN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	8010-15	PIONEER TIP, 3/4-16, M	2
2	06U-R68	3/8" HOSE END, 3/4-16, M-"O" RING, ELB, SWVL	4
3	2603-6-6-6	TEE, 9/16-18, 2 M-FLARE	2
4	06U-606	3/8" HOSE END, 9/16-18, F-FLARE, STR, SWVL	6
5	06U-P08	3/8" HOSE END, 3/4-16, M-"O" RING, STR, RGD	2
6	B200240ABAAA07A	HYD CYLINDER, 2" BORE 24" STROKE	2

RODA LIMITED WARRANTY

Roda Manufacturing Incorporation warrants, in accordance with the provisions below, to the original purchaser for the period of (12) months from the date of delivery of a Roda machine that the machine is free from defects in material or workmanship. Roda's obligation under this warranty is to repair or replace, at Roda's election, without charge and at the place of business of a dealer authorized to handle Roda machinery, any part or parts of the machine which, in the judgment of Roda, prove to be defective.

THIS WARRANTY AND RODA'S OBLIGATION HEREUNDER IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, and all other obligations or liabilities of Roda for incidental and consequential damages resulting from the design, manufacture, sale or use of the machine. No person is authorized to make any warranty or assume for Roda any liability not strictly in accordance with this warranty.

This warranty shall not apply to any machine or machine part which, in the judgment of Roda, has been altered or tampered with in any way or has been subjected to misuse, abuse, neglect or accident, or has had the serial numbers altered, effaced or removed. This warranty does not apply to batteries, tire and tubes, or other component parts not manufactured by Roda, except to the extent of their individual manufacturer's guarantees. Any and all such parts must be returned to the original manufacturer for warranty adjustment.

Roda Manufacturing Incorporation reserves the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligations to make changes or additions to the equipment sold previously.

WARRANTY REGISTRATION SHEET

MODEL NUMBER _____

SERIAL NUMBER _____

DATE OF SALE _____

CUSTOMER _____

DEALER _____

ADDRESS _____

ADDRESS _____

CITY _____

CITY _____

STATE _____ ZIP _____

STATE _____ ZIP _____

This is to acknowledge that I am the new owner of the following RODA Machine, that I agree to read the Operators manual and become familiar with the safe operation of this unit.

_____ R25 _____ R50 _____ R50 PT0 _____ R80 _____ R210 _____ R410 _____ R610 _____ R810 _____ RF812
_____ RF912 _____ R716 _____ R720 _____ R716F _____ R720F

Roda Manufacturing Incorporation warrants, in accordance with the provisions below, to the original purchaser for the period of (12) months from the date of delivery of a Roda machine that the machine is free from defects in material or workmanship. Roda's obligation under this warranty is to repair or replace, at Roda's election, without charge and at the place of business of a dealer authorized to handle Roda machinery, any part or parts of the machine which, in the judgment of Roda, prove to be defective.

THIS WARRANTY AND RODAS OBLIGATION HEREUNDER IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, and all other obligations or liabilities of Roda for incidental and consequential damages resulting from the design, manufacture, sale or use of the machine. No person is authorized to make any warranty or assume for Roda any liability not strictly in accordance with this warranty.

This warranty shall not apply to any machine or machine part which, in the judgment of Roda, has been altered or tampered with in any way or has been subjected to misuse, abuse, neglect or accident, or has had the serial numbers altered, effaced or removed. This warranty does not apply to batteries, tire and tubes, or other component parts not manufactured by Roda, except to the extent of their individual manufacturer's guarantees. Any and all such parts must be returned to the original manufacturer for warranty adjustment.

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SIGNED _____

DATE _____

This Registration form Must be returned to enact this warranty.