



Art's-Way Manufacturing Co., Inc.

CattleMaxx Grinder/Mixer
Models 5105 And 5165

Illustrated Parts List
560510

Issued 07-2007



This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE AND CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Art's-Way Manufacturing Co., Inc. dealer or Art's-Way Manufacturing Co., Inc. for additional operator's manuals, illustrated parts catalogs, and service manuals.

TO THE OWNER

Congratulations on the purchase of your new Art's-Way CattleMaxx. You have selected a top quality machine that is designed and built with pride to ensure you have many years of efficient and reliable service.

Many people have worked on the design, production, and delivery of this CattleMaxx. The information in this manual is based on the knowledge, study, and experience through years of specializing in the manufacturing of farm machinery. This manual is designed to provide you with important information regarding safety, maintenance, and machine operation so you can and will get the best possible performance from your CattleMaxx.

Even if you are an experienced operator of this or similar equipment, we ask that you read this manual before operating this CattleMaxx. The way you operate, adjust, and maintain this unit will have much to do with its successful performance. Any further questions you may have about this product of Art's-Way equipment should be directed to your local Art's-Way dealer or to Art's-Way Manufacturing Co., Inc., Armstrong, Iowa, 50514, (712) 864-3131.

SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT NOTICE

Art's-Way Manufacturing Co., Inc. is continually making product improvements. In doing so, we reserve the right to make changes and/or add improvements to our products without obligation for the equipment previously sold.

Modifications to this CattleMaxx may affect the performance, function, and safety of its operation. Therefore, no modification are to be made without the written permission of Art's-Way Manufacturing Co., Inc. Any modification made without the written permission of Art's-Way Mfg. Co. shall void the warranty of this product.

In the interest of continued safe operation of this CattleMaxx, pay particular attention to the safety alert symbol(s) throughout this manual.

ART'S-WAY MANUFACTURING CO., INC. STATEMENT OF PRODUCT LIABILITY

Art's-Way Manufacturing Co., Inc. recognizes its responsibility to provide customers with a safe and efficient product. Art's-Way Manufacturing Co., attempts to design and manufacture its products in accordance with all accepted engineering practices effective at the date of design. This statement should not be interpreted to mean that our products will protect against the user's own carelessness or failure to follow common safety practices nor will Art's-Way Manufacturing Co., be liable for any such act. In addition, Art's-Way Manufacturing Co., assumes no liability for any altered product or any modified product by users or anyone other than an authorized dealer.

IMPORTANT WARRANTY INFORMATION

The warranty for this CattleMaxx appears on page 4 of this manual. In order to establish proper warranty registration, the Warranty Registration must be completed and returned to the factory. Failure to comply with this requirement may result in reduced warranty allowances.

LIMITATIONS OF THIS MANUAL

This manual contains operating instructions for your CattleMaxx only. Any mention of other machinery in this manual other than the CattleMaxx is for reference only. This manual does not replace nor is it to be used for any machinery that may be attached to or used in conjunction with the CattleMaxx.

PARTS & SERVICE

As the purchaser of your new CattleMaxx, it is very important to consider the following factors:

A. Original Quality

B. Availability of Service Parts

C. Availability of Adequate Service Facilities

Art's-Way Manufacturing Co., Inc. has an excellent dealership network ready to answer any questions you may have about your CattleMaxx. Parts for your machine may be ordered through our dealers. When placing a parts order, please have the **model** and **serial number** ready. This will allow the dealer to fill your order as quickly as possible.

For your convenience, we have provided this space for you to record your model number, serial number, and the date of purchase, as well as your dealer's name and address.

Owner's Name: _____

Owner's Address: _____

Purchase Date: _____

Dealership Name: _____

Dealership Address: _____

Dealership Phone No.: _____

CattleMaxx Serial Number Location

The placard containing the serial and model number is located on the front left-hand side of the CattleMaxx. Enter the serial and model number of your CattleMaxx within the space provided.



Figure 1 –Serial and Model Placard Location

	
SERIAL NO.	
MODEL NO.	
<i>Manufactured By</i> <i>Art's-Way Manufacturing Co., Inc.</i> <i>Armstrong, IA</i>	

Figure 2 – Serial Model Number Placard

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LIMITED WARRANTY

Art's-Way Manufacturing Co., Inc. warrants the products it sells to be free from defects in material and workmanship for a period of one (1) year after the date of delivery to the first (original) purchaser, subject to the following conditions:

- Art's-Way Manufacturing Co., Inc. obligation and liability under this warranty is to repair or replace (at the company's option) any parts that upon manufacture were defective in material or workmanship.
- All parts and repairs under this warranty shall be supplied at Art's-Way Manufacturing Co., Inc. or an authorized Art's-Way Manufacturing Co., Inc. dealer, at the option of Art's-Way Manufacturing Co., Inc.
- Art's-Way Manufacturing Co., Inc. warranty does not extend to parts and elements not manufactured by Art's-Way Manufacturing Co., Inc. and which carry the warranty of other manufacturers.
- Transportation or shipping to an authorized dealer for necessary repairs is at the expense of the purchaser.
- Art's-Way Manufacturing Co., Inc. makes no other warranty expressed or implied and makes no warranty of merchantability or fitness for any particular purpose beyond that expressly stated in this warranty. Art's-Way Manufacturing Co., Inc. liability is limited to the terms set forth in this warranty and does not include any liability for direct, indirect, incidental or consequential damages or expenses of delay and the company's liability is limited to repair or replacement of defective parts as set forth herein.
- Any improper use and/or maintenance, including operation after discovery of defective or worn parts, operation beyond the rated capacity, substitution of parts not approved by Art's-Way Manufacturing Co., Inc., or any alternation or repair by other than an authorized Art's-Way Manufacturing Co., Inc. dealer which affects the product materially and adversely, shall void the warranty.
- No dealer, employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Art's-Way Manufacturing Co., Inc.
- Some states do not allow limitations on how long an implied warranty lasts or exclusions of, or limitations on relief such as incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you the specific legal rights and you may have other rights that vary from state to state.

SAFETY FIRST

“A careful operator is the best insurance against an accident”

(National Safety Council)

Most accidents can be prevented if the operator:

- Fully understands how the machine functions
- Can anticipate situations which may produce problems
- Can make necessary corrections before problems develop



Figure 3 - Universal Safety Alert Symbol

**THIS SYMBOL MEANS
ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

The American Society of Agricultural Engineers has adopted the Universal Safety Alert Symbol as a way to identify areas of potential danger if the equipment is not operated correctly. (See Figure 4.) Please be alert whenever you see this symbol in the manuals or on your grinder/mixer.

Art's-Way Manufacturing Co., Inc. strives to make our equipment as safe as possible. The Art's-Way 5105 Grinder/Mixer conforms to applicable safety standards at the time of manufacturing. A safety conscious equipment operator makes an effective accident-prevention program complete.

Safety features and instructions for the harvester are detailed in the Safety Guidelines section of this Operator's Manual. It is the responsibility of the owner to ensure that all operators read and understand the manual before they are allowed to operate the grinder/mixer. (Occupational Safety and Health Administration (OSHA) regulations 1928.57.)

NOTICES OF DANGER, WARNING, AND CAUTION

Signal Words: Note the use of signal words **DANGER**, **WARNING**, and **CAUTION** on the grinder/mixer and in this manual. The appropriate signal word for each has been selected using the following guidelines:



DANGER: IMMEDIATE AND SPECIFIC HAZARD WHICH *WILL* RESULT IN SEVERE PERSONAL INJURY OR DEATH IF PROPER PRECAUTIONS ARE NOT TAKEN.



WARNING: SPECIFIC HAZARD OR UNSAFE PRACTICE *COULD* RESULT IN SEVERE PERSONAL INJURY OR DEATH IF PROPER PRECAUTIONS ARE NOT TAKEN.



CAUTION: A REMINDER OF GOOD SAFETY PRACTICES. PERSONAL INJURY *COULD* RESULT IF PROPER PROCEDURES ARE NOT FOLLOWED.



SAFETY GUIDELINES



Remember:

“The Best Operator is a Safe Operator”



CAUTION: READ AND UNDERSTAND THE OPERATOR'S MANUAL AND ALL THE SAFETY DECALS BEFORE OPERATING THE GRINDER MIXER. REVIEW ALL SAFETY INSTRUCTIONS WITH ALL OPERATORS ANNUALLY.

BEFORE OPERATING

- Do not wear loose fitting clothing as it may catch in moving parts.
- Make sure to install and/or secure all guards, doors and shields, including the tractor power take-off (PTO) master shield, before starting or operating the Grinder Mixer.
- Be sure that the correct implement driveline parts are used and that they are properly secured.
- Install the safety chain when attaching the Grinder Mixer to the tractor.
- Clear the area of bystanders, especially children, when making repairs, adjustments or performing maintenance on the Grinder Mixer.
- Do not allow riders.
- Put all tractor and machine controls in “neutral” and disengage the PTO before starting. Follow the starting instructions according to your tractor Manual.
- Operate the Grinder Mixer only while seated on the tractor seat.
- Make sure the unit is adequately supported with safety blocks or safety stands when changing tires or performing maintenance.



CAUTION: KEEP WELL CLEAR OF MOVING PARTS. BE SURE TO SHUT OFF THE TRACTOR AND SET THE PARKING BRAKE. REMOVE THE TRACTOR KEY WHILE MAKING ANY ADJUSTMENTS. WAIT FOR ALL MOVEMENT TO STOP BEFORE APPROACHING THE MACHINE.

DURING OPERATION

- Keep hands, feet, hair, and clothing away from moving parts.

- Keep all guards, doors and shields in place and in good working condition.
- Keep all bystanders, especially children, away from the grinder mixer while in operation.
- Do not allow riders while the grinder mixer is in operation.
- Do not attempt to unclog, clean, or adjust the grinder mixer while it is running.
- Stay away from overhead power lines. Electrocutation can occur even without direct contact.
- Keep all hydraulic lines, fittings, and couplers tight and free of leaks. (Refer to - Hydraulic Safety.)
- Use caution when ascending or descending on the grinder mixer. Wet shoes or boots are slippery.

MAINTENANCE SAFETY

- Follow all operating, maintenance and safety instructions found in this Manual.
- Before servicing, adjusting, repairing or unclogging the machine, always make sure the tractor engine is stopped, the parking brake is set, and all the moving parts have stopped.
- Use sufficient tools, jacks, and hoists that have the capacity for the job.
- Use support blocks or safety stands when changing tires or performing maintenance.
- Follow good shop practices of keeping the service area clean and dry and use adequate light for the job at hand.
- Before applying pressure to the hydraulic system, make sure all lines, fittings and couplers are tightly secured and in good condition.
- Make sure all guards, doors and shields are in place and properly secured when performing maintenance.

HYDRAULIC SAFETY

- Make sure components in the hydraulic system are kept clean and in good working condition.
- Relieve pressure from the hydraulic system before servicing or disconnecting from the tractor.
- Keep all hydraulic lines, fittings, and couplers tightly secured and free of leaks.
- Replace any worn, cut, abraded, flattened or crimped hoses.

- Do not make any temporary repairs to the hydraulic lines, fittings or hoses using tape, clamps, or cement. The hydraulic system operates under extremely high pressure and temporary repairs may fail suddenly and create a hazardous and or dangerous situation.
- Wear proper hand and eye protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop instead of hands to identify and isolate a leak. If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop if hydraulic fluid penetrates the surface of the skin.
- Before applying pressure to the system, make sure all components are tight and that the hydraulic lines, hoses, and couplings are not damaged.

TRANSPORTATION SAFETY

- Make sure the grinder mixer complies with all local regulations regarding the transportation of equipment on public roads and highways.
- Make sure the Slow Moving Vehicle (SMV) emblem and all lights and reflectors required by local highway and transportation authorities are properly in place, clean, and clearly visible to traffic.
- Do not allow riders on any machinery during transport.
- Make sure the grinder mixer is securely attached to the tractor and install a safety chain to the grinder mixer.
- Make sure the tractor brake pedals are latched together.
- Do not exceed 20 mph (32 km/h) when transporting the grinder mixer. Always reduce speed on rough roads and surfaces, or when going down inclines.
- Use caution when turning and always use the turn signals on the tractor to indicate your turning intentions to the other traffic.
- The weight of the trailed machine should NEVER exceed the weight of the towing vehicle.
- Check all clearances carefully whenever the machine is towed.
- Lower the elevator into the transport position before transporting the grinder/mixer on the highway.
- Stay away from overhead obstructions and power lines during transport. Electrocutation can occur even without direct contact.

STORAGE SAFETY

- Store the grinder mixer in an area away from human activity.
- Do not permit children to play on or around the stored machine at any time.
- Make sure that the grinder mixer is stored in an area with a firm and level base to prevent the machine from tipping or sinking into the ground.
- Block the wheels to prevent the machine from rolling.

TIRE SAFETY

- Have only a qualified tire dealer or tire repair service perform tire repairs.
- Do not attempt to install a tire on a wheel or rim unless you have the proper equipment and experience to do the job.
- Follow proper procedures when installing a tire on a wheel or rim to prevent an explosion that could result in serious injury.
- Do not substitute tires with a lesser road rating and/or capacity for the original equipment tires.



CAUTION: FAILURE TO FOLLOW PROPER PROCEDURES WHEN INSTALLING A TIRE ON A WHEEL OR RIM CAN PRODUCE AN EXPLOSION THAT MAY RESULT IN SERIOUS INJURY OR DEATH. DO NOT ATTEMPT TO INSTALL A TIRE UNLESS YOU HAVE THE PROPER EQUIPMENT AND EXPERIENCE TO PERFORM THE JOB. REPLACEMENT, REPAIR, AND/OR MAINTENANCE SHOULD BE DONE BY A QUALIFIED TIRE DEALER OR QUALIFIED REPAIR SERVICE.

ASSEMBLY SAFETY

- Use adequate manpower to perform assembly procedures safely.
- Assemble the grinder mixer in an area with sufficient space to maneuver the largest components and allow easy access to all sides of the machine.
- Use only forklifts, lift cranes, jacks and tools with sufficient capacity for the loads.
- Do not allow spectators, especially children, in the working area.

Remember:

“The Best Operator is a Safe Operator”

ILLUSTRATED PARTS LIST

- The figure item corresponds to the number shown in the illustration. Figure items having a dash “-” next to the number indicates that the figure item is not displayed on the corresponding illustration.
- Numbers listed in the part number column are the numbers under which the parts are manufactured and by which the parts are identified by the manufacturer.
- Requirement shown in the Units Per Assy column is per Harvester or assembly. Items that have no specified quantity are designated by the letters “AR” (as required). “RF” listed in the Units Per Assy column indicates that the item is listed as a reference and the requirement is listed in another figure of the IPC.

The relationship of component parts of an installation or assembly may be determined by the degree of indenture in the nomenclature column. The next higher assembly can be found by referring to the first indentation above and to the left. The following example shows the format of this indented system:

1	2	3	4
*	*	*	*
DETAIL PART OR ASSEMBLY			
*	DETAIL PART BREAKDOWN OR ASSEMBLY BREAKDOWN		
*	*	ADDITIONAL BREAKDOWN OF DETAIL PART OR ASSEMBLY	
*	*	*	ADDITIONAL BREAKDOWN OF DETAIL PART OR ASSEMBLY

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417250.....	77	528920.....	69	P20130.....	49
419070.....	49	528940.....	69	P20170.....	49
423280.....	63	529070.....	17, 19	P20220.....	50
423940.....	57	529080.....	17	P20270.....	49
423950.....	59	529100.....	17	P20286.....	53
423960.....	59	529110.....	19	P20320.....	50
423970.....	59	529130.....	27	P30799.....	57
423990.....	59	529140.....	27	P30800M.....	63
449190.....	15	529150.....	26	P30813.....	57
455060.....	65	529170.....	15	P30814.....	57

P30815	57
P30816	57
P30820	57
P30835	57
P30881	50
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P30953	59
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P82700	53
P99025	50, 59
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P99712	50, 59
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P99897	77

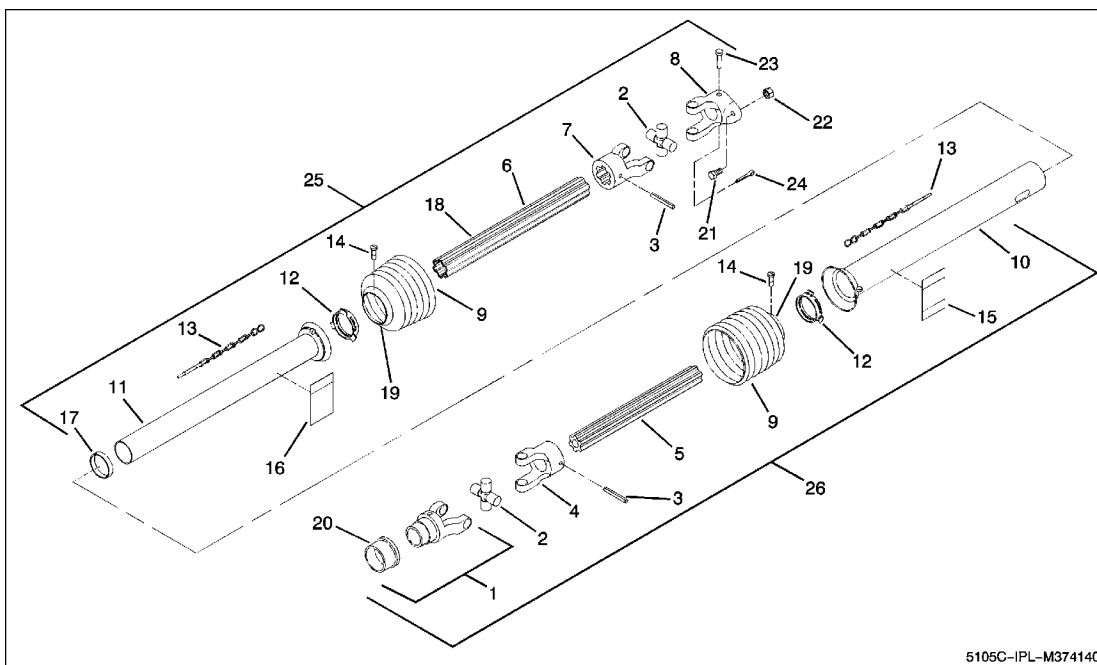
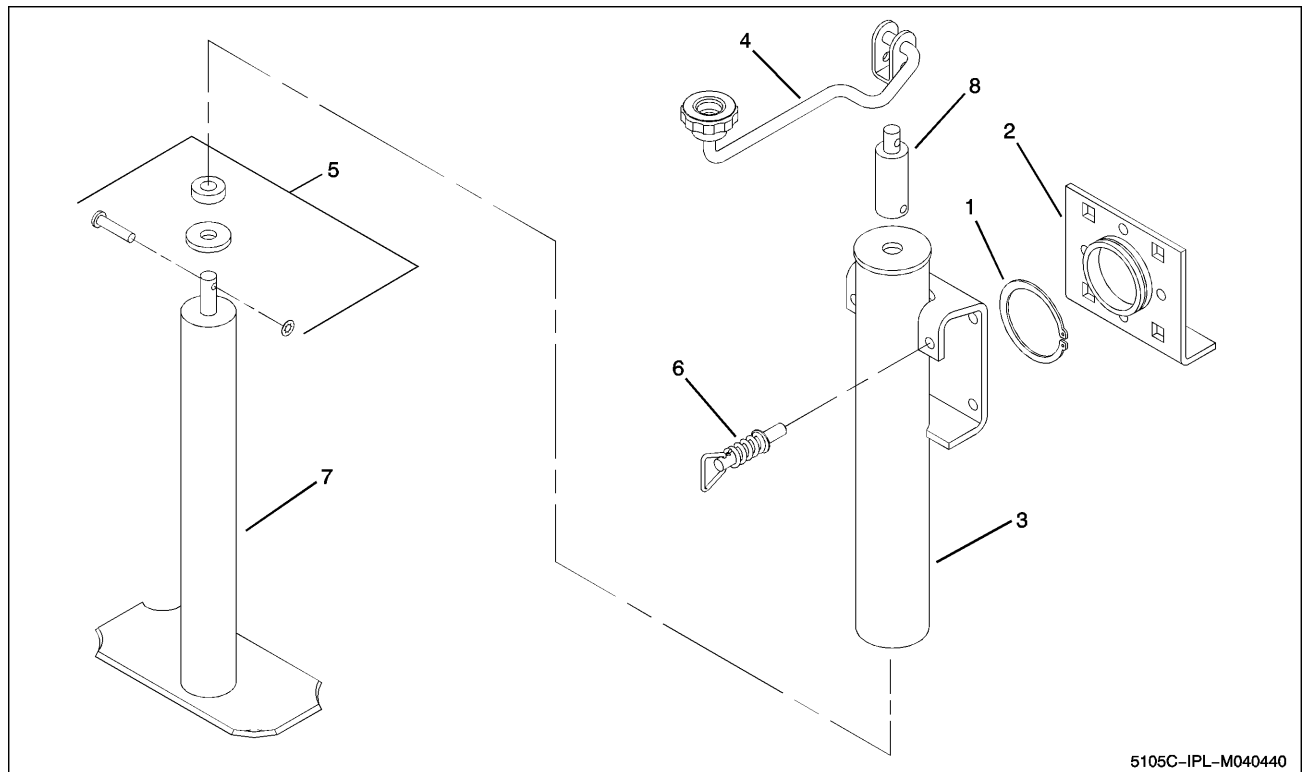
DRIVELINE ASSEMBLY (540 RPM)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (374140)	UNITS PER ASSY (380690)
		DRIVELINE ASSEMBLY (540 RPM)		
	374140 380690	USED ON 20 INCH ROLLERMILL USED ON 30 INCH ROLLERMILL	RF	RF
1	340130	YOKE, 1-3/8 INCH 6 SPLINE A S	1	1
2	182230	KIT, CROSS AND BEARING	2	2
3	196740	PIN, SPRING 10 X 90	2	2
4	196730	YOKE, INBOARD	1	1
5	355700	SHAFT, INNER PROFILE S4	1	1
6	355710	PROFILE AND SLEEVE W.A.	1	1
7	196770	YOKE, INBOARD	1	1
8	379800	SHEARBOLT, CLUTCH	1	N/A
8	379840	SHEARBOLT, CLUTCH	N/A	1
9	340140	SHIELD, CONE 7 RIB	2	2
10	379830	TUBE, OUTER SHIELD OVL	1	N/A
10	383190	TUBE, OUTER SHIELD OVL	N/A	1
11	355730	TUBE, INNER SHIELD RND	1	1
12	182900	RING, SC 25 BEARING	2	2
13	182890	CHAIN, SAFETY	2	2
14	345980	SCREW, SHIELD (IN FIG ITEM 9)	2	2
15	268860	DECAL, DANGER ROTATING DRIVE LINE	1	1
16	340180	DECAL	1	1
17	340190	BEARING, SUPPORT	2	2
18	196890	ZERK, 3/16 DRIVE GREASE (IN FIG ITEM 6)	1	1
19	349250	COLLAR, REINFORCED	2	2
20	340210	ASSEMBLY, COLLAR KIT (IN FIG ITEM 1)	1	1
21	299930	BOLT, HHCS 3/8-16 X 2-1/4	1	1
22	E552044	NUT, LOCK 3/8-16	1	1
23	036480	PIN, CLEVIS	1	1
24	020700	PIN, COTTER	1	1
25	379790	IMPLEMENT DRIVELINE, IMPLEMENT HALF	1	N/A
25	383180	IMPLEMENT DRIVELINE, IMPLEMENT HALF	N/A	1
26	379780	IMPLEMENT DRIVELINE, TRACTOR HALF	1	N/A
26	383170	IMPLEMENT DRIVELINE, TRACTOR HALF	N/A	1

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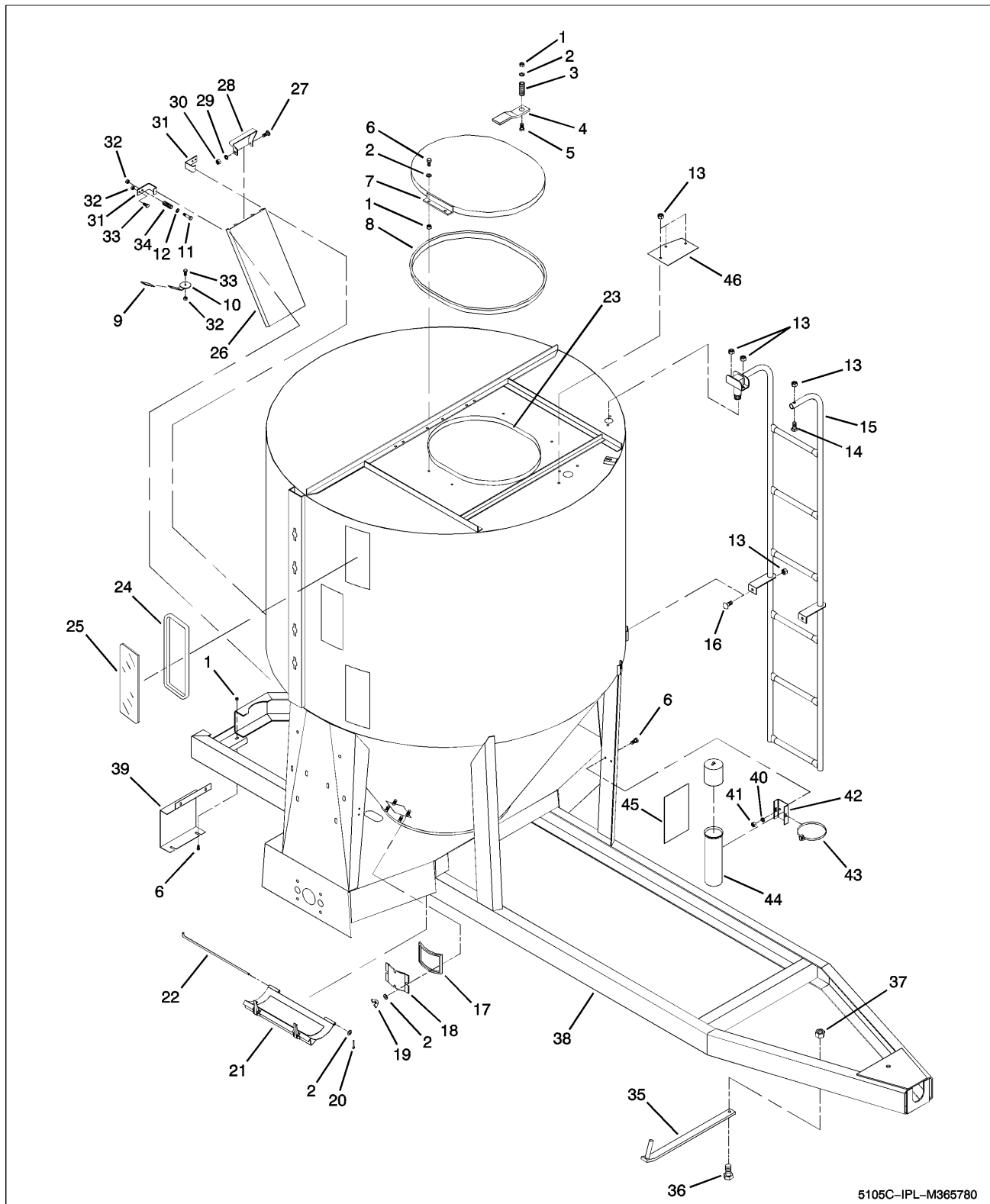
JACK ASSEMBLY

5105C-IPL-M040440

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
	040440	JACK ASSEMBLY		
1	040290	RING, RETAINING, 5100-250	1	1
2	040300	BRACKET, SWIVEL	1	1
3	040370	TUBE AND BRACKET ASSEMBLY	1	1
4	151630	KIT, CRANK HANDLE ASSEMBLY	1	1
5	151640	KIT, THRUST WASHER ASSEMBLY	1	1
6	151650	PLUNGER ASSEMBLY	1	1
7	151670	TUBE ASSEMBLY, 14 INCH INNER	1	1
8	389180	SHAFT EXTENSION	N/A	1

- = Not Illustrated

TANK ASSEMBLY

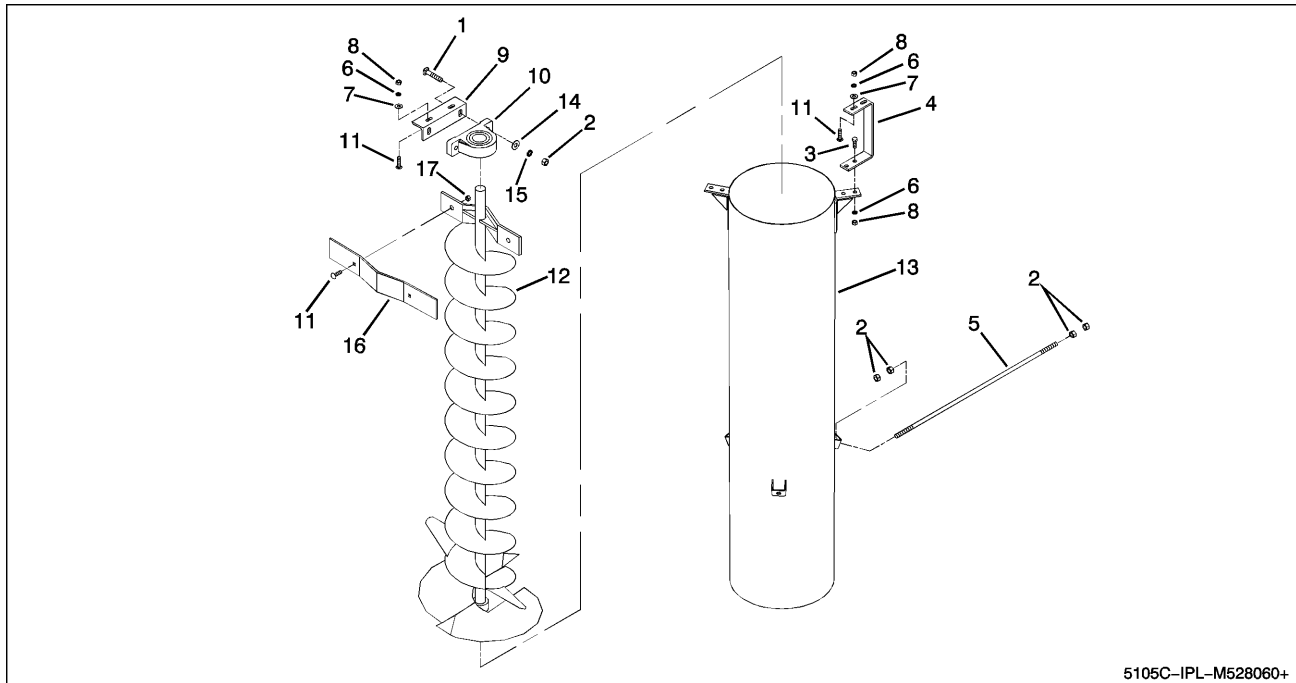


5105C-IPL-M365780

TANK ASSEMBLY

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
		TANK ASSEMBLY		
1	025670	NUT, 5/16 LOCK	4	4
2	022920	WASHER, 5/16 FLAT	13	13
3	013080	SPRING, COMPRESSION	2	2
4	022930	BRACKET, LID LOCKING	2	2
5	009800	BOLT, HHCS 5/16 X 2-1/2	2	2
6	012140	BOLT, HHCS 5/16 X 3/4	2	2
7	035661	LID AND HINGE WELDMENT	1	1
8	164020	SEAL, TANK LID	1	1
9	050150	GRIP, RED HANDLE	1	1
10	204690	ECCENTRIC WELD	1	1
11	E672368	BOLT, HHCS 1/4 X 2-1/4	2	2
12	023260	WASHER, 1/4 FLAT	2	2
13	020180	NUT, 3/8 LOCK	8	8
14	J03H1558	BOLT, CRG. 3/8 X 1-1/2	1	1
15	365670	LADDER WELD ASSEMBLY (5105)	1	N/A
15	529170	LADDER WELD ASSEMBLY (5165)	N/A	1
16	213900	BOLT, CRG. 3/8 X 1.0	1	1
17	185910	STRIP, SEALING	2	2
18	036090	DOOR, CLEAN OUT	2	2
19	009790	NUT, WING 5/16	8	8
20	021210	PIN, COTTER 3/32 X 1.0	1	1
21	363990	COVER WLDT., TROUGH	1	1
22	156970	PIN, HINGE	1	1
23	962040	RUBBER ADHESIVE 5.0 OZ	AR	AR
24	012020	RUBBER, WINDOW FRAME	3	3
25	012050	WINDOW, GLASS	3	3
26	204670	DOOR, UNLOADING SLIDE	1	1
27	012410	BOLT, CRG. 5/16 X 3/4	2	2
28	204680	HANDLE, DOOR	1	1
29	023620	WASHER, LOCK 5/16	2	2
30	023630	NUT, 5/16 HEX	2	2
31	216020	HOLDER, SLIDING DOOR	2	2
32	042370	NUT, 1/4 LOCK	5	5
33	012051	BOLT, HHCS 1/4 X 3/4	3	3
34	011130	SPRING, SLIDE HOLDER ASSY	2	2
35	379470	HOLDER, PTO	1	1
36	014770	BOLT, HHCS 1/2-13 X 1-1/2	1	1
37	037540	NUT, LOCK 1/2-13 GR5 ZN NYLON	1	1
38	560010	FRAME AND TANK WLDT., 105 BU PORTABLE	1	N/A
38	528310	FRAME AND TANK WLDT., 165 BU PORTABLE	N/A	1
39	365190	BRACKET, SHORT 105 BU	1	N/A
39	365180	BRACKET, LONG 165 BU	N/A	1
40	023620	WASHER, LOCK 5/16 INCH	2	2
41	023630	NUT, HEX 5/16 INCH -18	2	2
42	458080	BRACKET, TUBE MOUNT	1	1
43	455160	CLAMP, HOSE	1	1
44	449190	TUBE, MANUAL HOLDER	1	1
45A	560510	MANUAL, IPL CATTLEMAX 5105/5165 GM	1	1
45B	560520	MANUAL, OPERATORS CATTLEMAX 5105/5165 GM	1	1
46	380040	COVER, AIR	1	1
50				

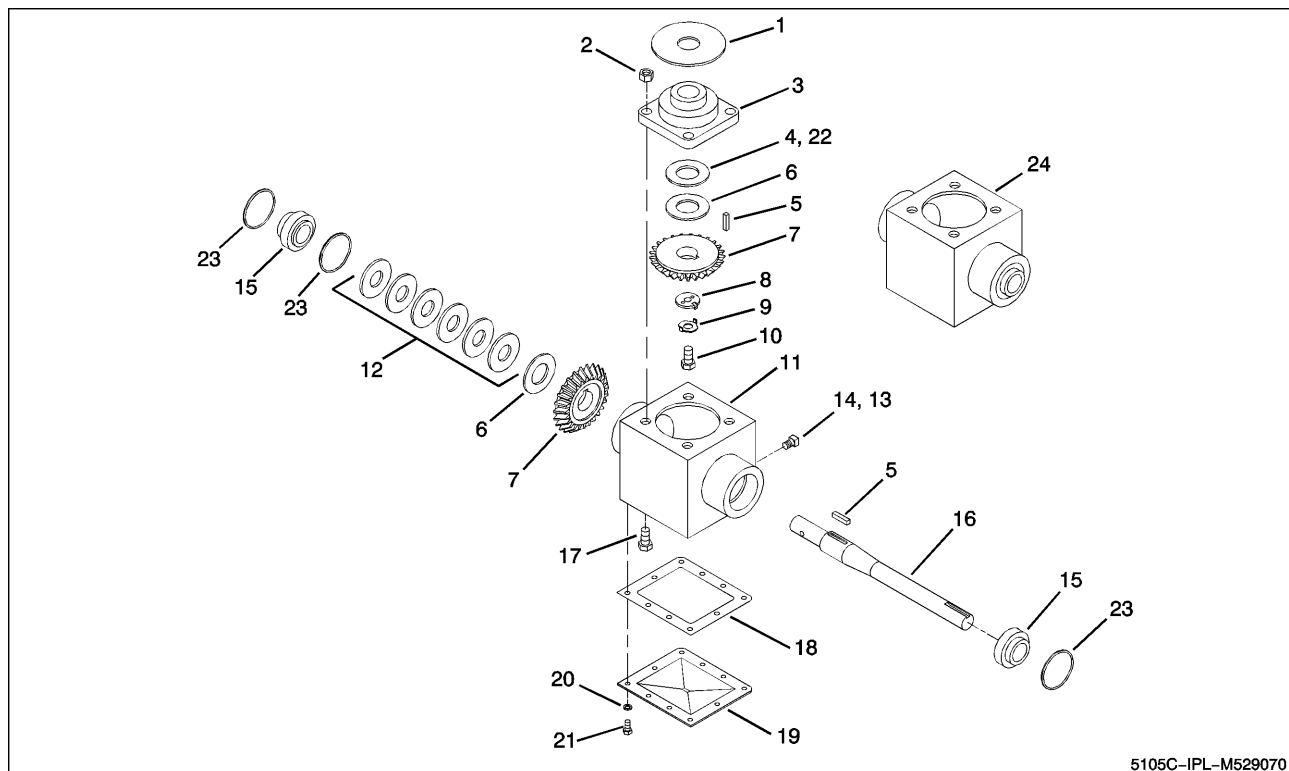
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MIXING AUGER ASSEMBLY

5105C-IPL-M528060+

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
		MIXING AUGER ASSEMBLY		
1	991200	BOLT, CRG. 1/2-13 X 2.0 GR5 ZN	2	2
2	005360	NUT, HEX 1/2-13 GR5 ZN	14	14
3	011370	BOLT, HHCS 3/8-16 X 1-1/2 GR5	4	4
4	018680	SUPPORT, MAIN AUGER TUBE	2	2
5	021020	ROD, MIX AUGER TUBE	3	3
6	021180	WASHER, LOCK 3/8 INCH	10	10
7	021190	WASHER, FLAT 0.438 X 1.0 X 0.083	6	6
8	027260	NUT, HEX 3/8-16 GR5 ZN	10	10
9	516090	HANGER, BEARING	1	1
10	013960	BEARING, PB 1-5/8 CI HSG. W/ LC	1	1
11	035180	BOLT, CRG. 3/8-16 X 1-1/4 GR5	8	8
12	363970	AUGER WLDT., MIXING 105 BU (5105)	1	N/A
12	516110	AUGER WLDT., MIXING 165 BU (5165)	N/A	1
13	363880	TUBE, MIXING AUGER 105 BU (5105)	1	N/A
13	516100	TUBE, MIXING AUGER 165 BU (5165)	N/A	1
14	005200	WASHER, FLAT 1/2 STD.	2	2
15	005370	WASHER, LOCK 1/2	2	2
16	126660	PADDLE, MIXING AUGER	1	1
17	020180	NUT, LOCK 3/8-16 HEX FLG.	2	2

- = Not Illustrated

GEARBOX ASSEMBLY, MIXER

5105C-IPL-M529070

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	529070	GEARBOX ASSEMBLY, MIXER	
1	010570	PLATE, BEARING PROTECTOR	1
2	037540	NUT, LOCK 1/2 GR5 ZN	4
3	020270	BEARING, FLANGE 1-5/8 INCH	1
4	020290	WASHER, FLAT 1.65 X 2.12 X 0.134	1
5	020220	KEY SQ. 5/16 X 1.25	2
6	020300	WASHER, FLAT 1.65 X 2.12 X 0.048	2
7	020280	GEAR, BEVEL 1-5/8	2
8	020310	WASHER, SPECIAL LOCK	1
9	010720	WASHER, BOLT LOCK	1
10	010730	BOLT, HHCS 1/2 X 1.25	1
11	020330	GEARBOX, MACHINED, A-33	1
12	529050	WASHER, 1.44 X 2.25 X 0.048	6
13	I120123	PIN, COTTER 1/8 X 1-1/4	1
14	020341	PLUG, PIPE 3/4	1
15	529090	BEARING, BALL, 1-7/16 CYL.	2
16	529100	SHAFT, GEARBOX 1.44 X 18.0	1
17	013790	BOLT, HHCS 1/2 X 2.25 G5 ZN	4
18	010740	GASKET, GEARBOX	1
19	010750	COVER, GEARBOX	1
20	023620	WASHER, LOCK 5/16 ZN	10
21	012140	BOLT, HHCS 5/16 X 0.75 G5 ZN	10
22	126940	WASHER, FLAT 1-21/32 X 2.0 X 9/64	1
23	020350	RING, RETAINING INTERNAL	3
24	529080	GEARBOX, W/ BEARINGS	1
25	961960	PERMATEX ULTRA BLUE 13 OZ.	AR
26	963130	90W GEAR OIL SAE	AR

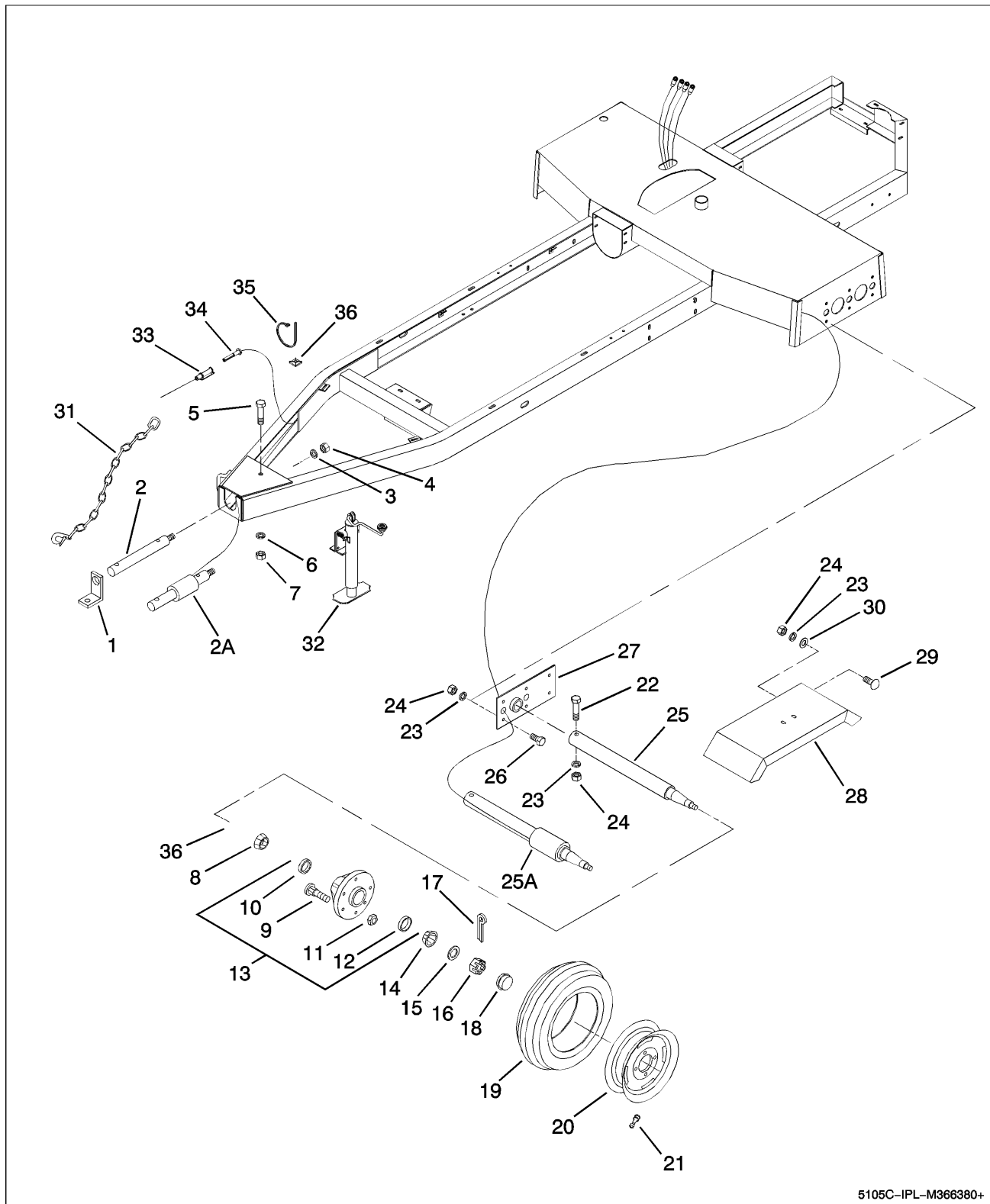
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This exploded view diagram illustrates the assembly of a mechanical system, likely a conveyor or material handling component. The parts are numbered 1 through 31. The assembly includes a motor (1) connected to a gear train (2, 3, 4, 13, 21, 22) which drives a long shaft (11). The shaft is supported by bearings (5, 6) and is connected to a large gear (12) which meshes with a smaller gear (19). The gear train is mounted on a frame (17) which is supported by a base (18). The shaft (11) is also connected to a pulley (20) which is part of a drive mechanism (23, 24, 25, 26, 27, 28, 29, 30, 31). The diagram shows the relative positions and assembly sequence of the components.

DRIVE AND GEARBOX ASSEMBLY, LOWER

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
		DRIVE AND GEARBOX ASSEMBLY, LOWER	
1	529070	GEARBOX ASSY., 5165 GM	1
2	461150	SPROCKET, 60B14 COUPLER	1
3	163770	CHAIN ASSY., 60-2 14P INC. CONN.	1
4	529110	SPROCKET, 60B14 1.44 ID.	1
5	021530	KEY, SQ. 3/8 X 2.0	4
6	I486454R1	SHIM, 0.030 INCH BLADE	8
7	214150	CHAIN, ROLLER 2040 X 33P	1
8	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	6
9	005370	WASHER, LOCK 1/2 INCH ZN	6
10	005360	NUT, HEX 1/2-13 GR5 ZN	6
11	461870	SHAFT, MIXER DRIVE	1
12	042370	NUT, HEX LOCK 1/4-20 GA CZ	4
13	010990	SCREW, AHSS 5/16-18 X 0.31 PL	8
14	461890	HUB WLDT., SHEAR 1.625 BORE	1
15	461880	PLATE, SPROCKET 40A28 1-5/8 ID	1
16	042960	BOLT, HHCS 1/4-20 X 1.0 GR5	2
17	469750	HUB WLDT., SHEAR 1.625 ID.	1
18	047000	BOLT, HHCS 1/4-20 X 1-1/2 GR5	2
19	469730	SPROCKET, PLATE 80A30	1
20	040290	RING, RETAINING	1
21	013960	BEARING, 1-5/8 PB, CI HSG W/ LC	2
22	991200	BOLT, CRG. 1/2-13 X 2.0 GR5	4
23	035540	BOLT, CRG. 3/8-16 X 2-3/4 GR5	1
24	463690	BRACKET, MILL TO MIXER IDLER	1
25	041440	TIGHTENER, CHAIN	1
26	021190	WASHER, FLAT 0.438 X 1.0 X 0.083	5
27	021180	WASHER, LOCK 3/8 INCH	1
28	027260	NUT, HEX 3/8-16 GR5	1
29	021860	SPROCKET, 40B24 1.12 BORE	1
30	020760	KEY, PAR, 5/16 SQ. X 1.125	1
31	V061805	BOLT, CRG. 1/2-13 X 1-1/4 GR5	2

- = Not Illustrated

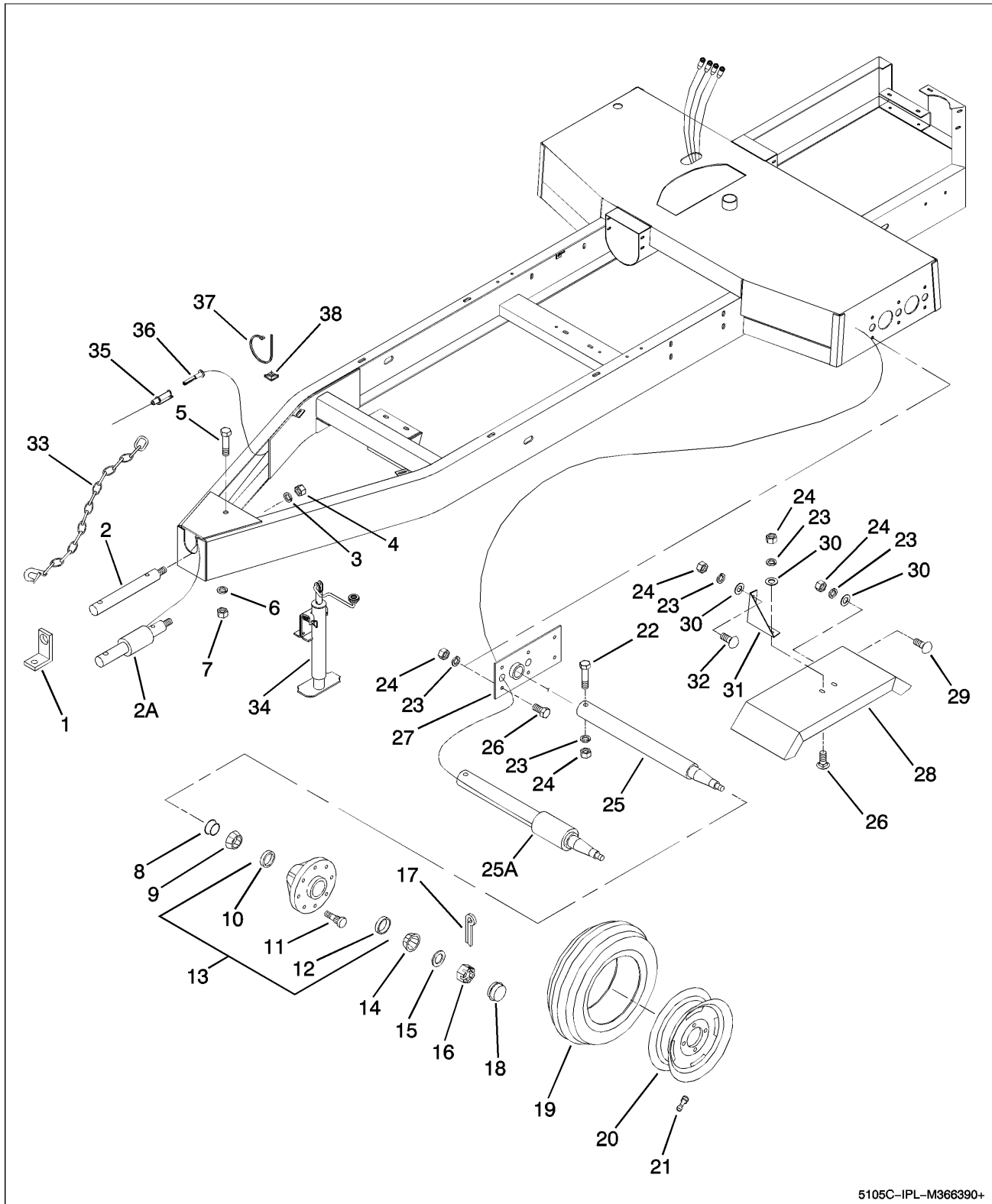
SPINDLE, HITCH, AND HUB ASSEMBLY (5105 ONLY)

5105C-IPL-M366380+

SPINDLE, HITCH, AND HUB ASSEMBLY (5105 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (366400)	UNITS PER ASSY (366380)
	366380 366400	SPINDLE, HITCH, AND HUB ASSEMBLY - STANDARD SPINDLE, HITCH, AND HUB ASSEMBLY - SCALE		
1	036740	CLEVIS, 1-7/8 HITCH	1	1
2	124780	BAR, HITCH W/O SCALE	N/A	1
2A	219870	HITCH, 1.88-2 1/8 INCH CAL 5 PIN	1	N/A
3	003350	WASHER, LOCK 1 INCH	1	1
4	147310	NUT, HEX 1 INCH	1	1
5	990960	BOLT, HHCS 3/4 X 4.50 G5 ZN	1	1
6	036800	WASHER, LOCK 3/4	1	1
7	036750	NUT, HEX 3/4	1	1
8	016520	CONE, BRG. 1.38	2	2
9	020470	BOLT, STUD 1/2-20 X 1.50	12	12
10	018850	CUP, BRG.	1	1
11	020730	NUT, LUG 1/2-20 UNF.	12	12
12	018860	CUP, BEARING	2	2
13	016530	HUB ASSEMBLY 6-BOLT	2	2
14	012630	CONE, BRG. 1.25	2	2
15	020720	WASHER, FLAT 0.81 X 1.75 X 0.179	2	2
16	020710	NUT, SLOTTED HEX 3/4	2	2
17	026630	PIN, COTTER 5/32 X 1.50	2	2
18	035420	CAP, HUB 2.50 INCH	2	2
19	148640	TIRE, TUBELESS 10 X 15 8 PLY	2	2
20	018716	WHEEL, 8 X 15 6-BOLT GOLD	2	2
21	164420	VALVE STEM, W/ CORE AND CAP	2	2
22	030420	BOLT, HHCS 1/2 X 4.50 G5 ZN	2	2
23	005370	WASHER, LOCK 1/2	14	14
24	005360	NUT, HEX 1/2	14	14
25	042270	SPINDLE, 2.12 X 31.31	N/A	2
25A	040581	SPINDLE, WEIGHTBAR	2	N/A
26	010730	BOLT, HHCS 1/2 X 1.25 G5 ZN	12	12
27	363910	BRACKET, MOUNTING 105 BU.	2	2
28	366250	FENDER, 105 BU.	2	2
29	005390	BOLT, CRG. 1/2 X 1.0 G5 ZN	4	4
30	005200	WASHER, FLAT 0.56 X 1.38 X 0.109	4	4
31	1765302	CHAIN, SAFETY 5 FT.	1	1
32	040440	JACK ASSEMBLY 151 DS COMPLETE	1	1
33	036780	CONNECTOR, POWER CORD	1	N/A
34	147060	CORD, 23 FT. DIGITAL POWER	1	N/A
35	149670	TIE, NYLON CABLE	14	N/A
36	379570	MOUNT, 4-WAY CABLE	4	N/A

- = Not Illustrated

SPINDLE, HITCH, AND HUB ASSEMBLY (5165 ONLY)

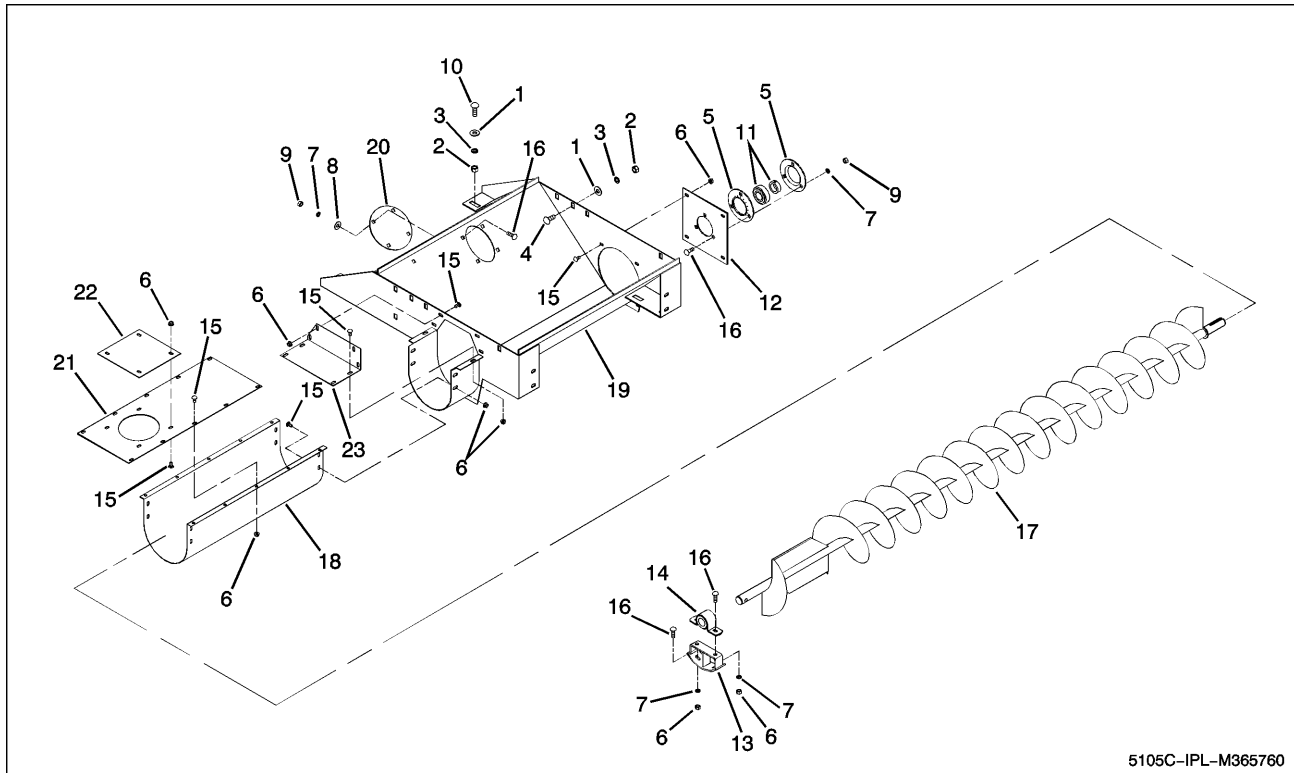
5105C-IPL-M366390+

SPINDLE, HITCH, AND HUB ASSEMBLY (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (366410)	UNITS PER ASSY (366390)
	366390 366410	SPINDLE, HITCH, AND HUB ASSEMBLY - STANDARD SPINDLE, HITCH, AND HUB ASSEMBLY - SCALE		
1	036740	CLEVIS, 1-7/8 HITCH	1	1
2	124780	BAR, HITCH W/O SCALE	N/A	1
2A	219870	BAR, HITCH W/ SCALE	1	N/A
3	003350	WASHER, LOCK 1 INCH	1	1
4	147310	NUT, HEX 1 INCH	1	1
5	990960	BOLT, HHCS 3/4 X 4.50 G5 ZN	1	1
6	036800	WASHER, LOCK 3/4	1	1
7	036750	NUT, HEX 3/4	1	1
8	121130	SEAL, 2.12 X 3.06 X 0.50	2	2
9	042310	CONE, BRG. 1.78 ID.	2	2
10	042320	CUP, BRG.	1	1
11	042440	BOLT, LUG 9/16 X 1.12 UNF.	16	16
12	018860	CUP, BEARING	2	2
13	042330	HUB ASSEMBLY	2	2
14	012630	CONE, BRG. 1.25	2	2
15	020720	WASHER, FLAT 0.81 X 1.75 X 0.179	2	2
16	020710	NUT, SLOTTED HEX 3/4	2	2
17	026630	PIN, COTTER 5/32 X 1.50	2	2
18	035420	CAP, HUB 2.50 INCH	2	2
19	050230	TIRE, 13.5 X 16.1	2	2
20	042261	WHEEL, 11 X 16.1	2	2
21	164420	VALVE STEM, W/ CORE AND CAP	2	2
22	030420	BOLT, HHCS 1/2 X 4.50 G5 ZN	2	2
23	005370	WASHER, LOCK 1/2	26	26
24	005360	NUT, HEX 1/2	26	26
25	042270	SPINDLE, 2.12 X 31.31	N/A	2
25A	040611	WEIGHTBAR, 2-1/8 DIA. X 31.31 5-PIN AXLE	2	N/A
26	010730	BOLT, HHCS 1/2 X 1.25 G5 ZN	16	16
27	363940	BRACKET, MOUNTING 150	2	2
28	159140	FENDER, 150 BU.	2	2
29	005390	BOLT, CRG. 1/2 X 1.0 G5 ZN	4	4
30	005200	WASHER, FLAT 0.56 X 1.38 X 0.109	12	12
31	159160	SUPPORT, FENDER	4	4
32	030470	BOLT, CRG. 1/2 X 1.25 G5 ZN	4	4
33	1765302	CHAIN, SAFETY 5 FT.	1	1
34	040440	JACK ASSEMBLY 151 DS COMPLETE	1	1
35	036780	CONNECTOR, POWER CORD	1	N/A
36	147060	CORD, 23 FT. DIGITAL POWER	1	N/A
37	149670	TIE, NYLON CABLE	14	N/A
38	379570	MOUNT, 4-WAY CABLE	4	N/A

- = Not Illustrated

MILL TO MIXER AUGER ASSEMBLY

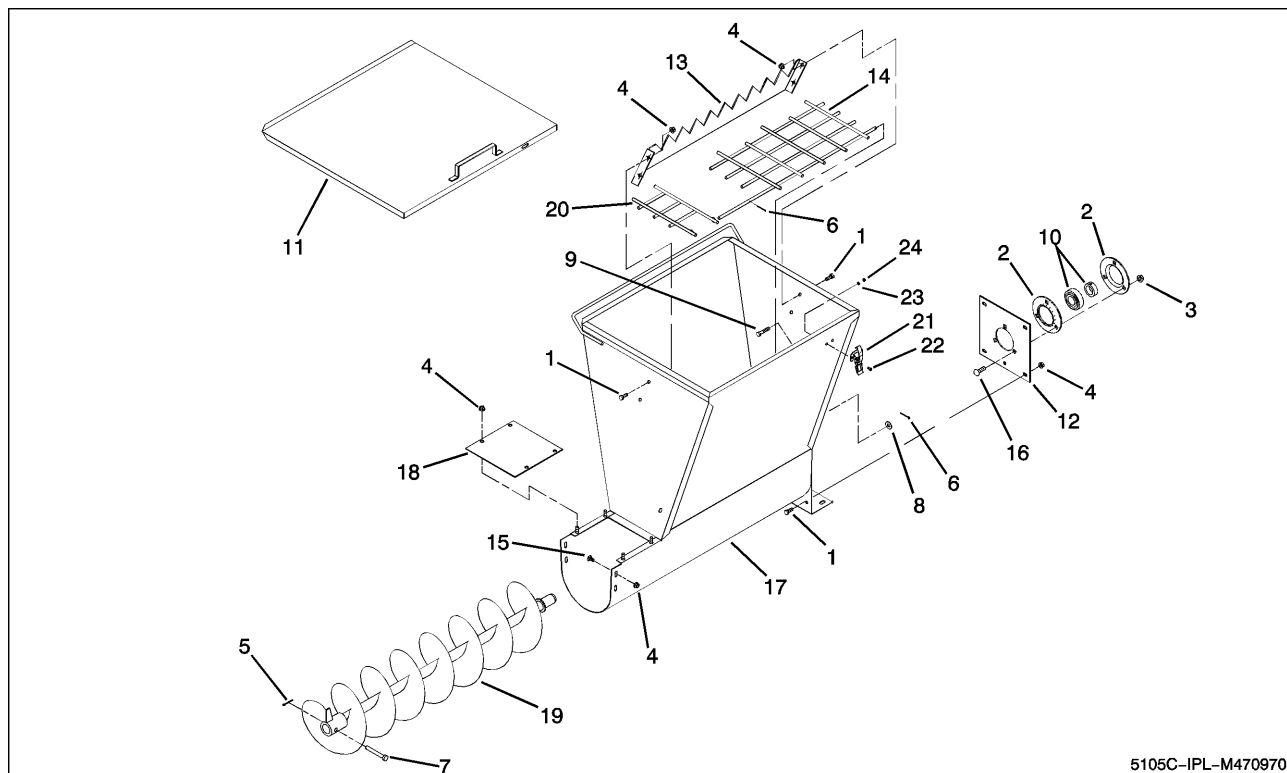


5105C-IPL-M365760

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	365760	MILL TO MIXER AUGER ASSEMBLY	RF
1	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	14
2	005360	NUT, HEX 1/2-13 GR5 ZN	14
3	005370	WASHER, LOCK 1/2 INCH ZN	14
4	005390	BOLT, CRG. 1/2-13 X 1.0 SSN GR5 ZN	10
5	019150	FLANGE, 1.12 BRG 3-BOLT ROUND	2
6	020190	NUT, HEX FLG. LK 5/16-18	28
7	021180	WASHER, LOCK 3/8 INCH	11
8	021190	WASHER, FLAT 0.438 X 1.0 X 0.083 ZN	4
9	027260	NUT, HEX 3/8-16 GR5 ZN	11
10	030470	BOLT, CRG. 1/2-13 X 1.25 SSN GR5 ZN	4
11	108850	BEARING, 1.12 SOD SPRING LOCK	1
12	128040	PLATE, HOLE COVER	1
13	165020	BRACKET WLDT., BEARING HOLDER	1
14	165030	BEARING, 1.12 SPLIT WOOD PB	1
15	169340	BOLT, CRG. 5/16-18 X 0.50 SSN GR2 ZN	28
16	170530	BOLT, CRG. 3/8-16 X 1.0 SSN GR5 ZN	11
17	363750	AUGER WLDT., MILL TO MIXER	1
18	364250	TROUGH, LOWER PAN TO TANK	1
19	365330	PAN WLDT., LOWER	1
20	365390	COVER, LOWER PAN	1
21	365880	CAP, TROUGH	1
22	365900	PLATE, CAP	1
23	365950	CAP, ANGLE	1
24	961990	CAULKING, TUBE MAGIC SEAL CLEAR	AR

- = Not Illustrated

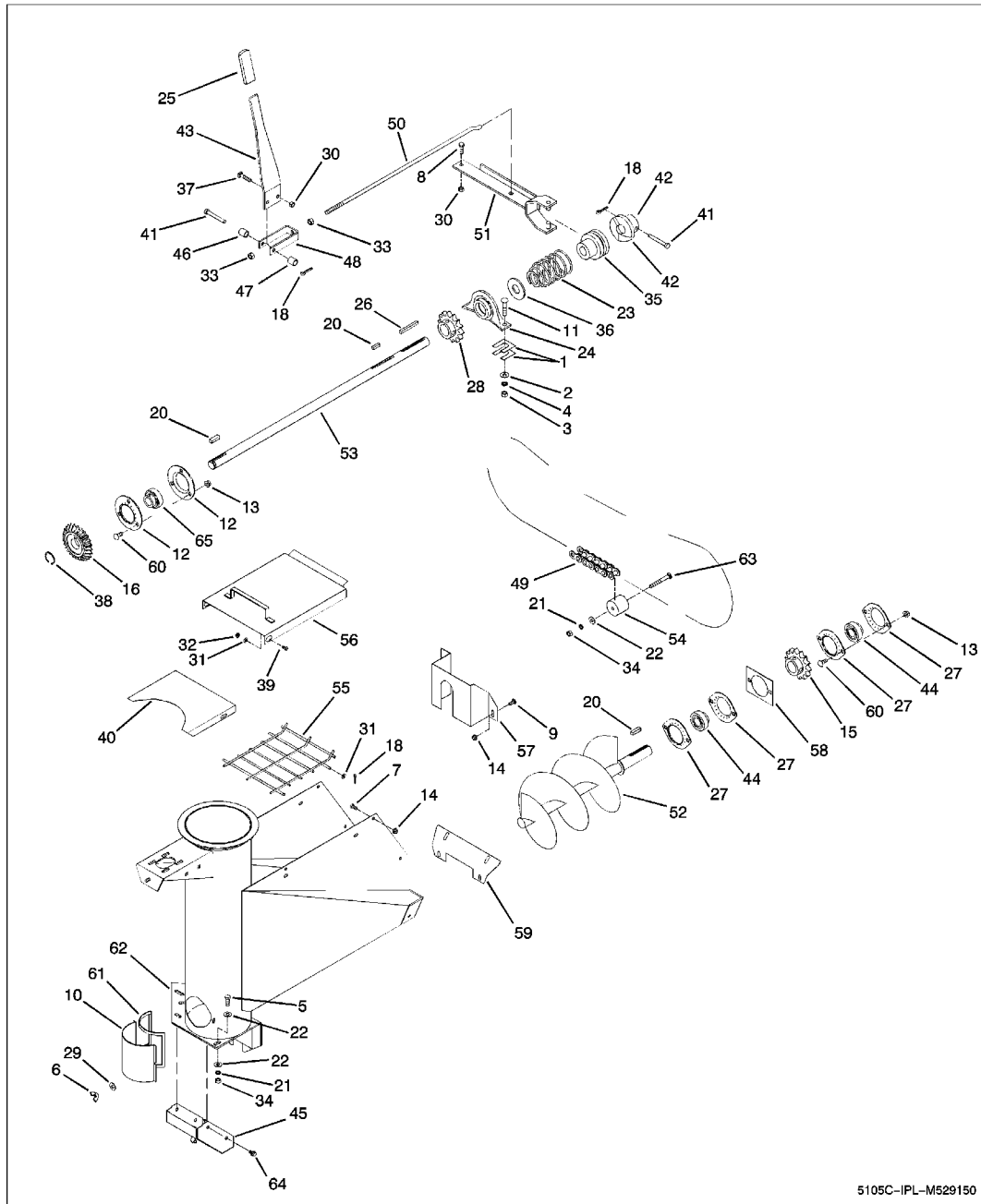
SUPPLEMENT HOPPER



5105C-IPL-M470970

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	470970	SUPPLEMENT HOPPER	
1	006880	BOLT, HHCS 5/16-18 X 0.62 GR5 ZN	6
2	019150	FLANGETTE, BRG. 1.12 3-BOLT RD	2
3	020180	NUT, LOCK 3/8-16 HEX FLG. GR5	3
4	020190	NUT, LOCK 5/16-18 HEX FLG. G5	16
5	020700	PIN, COTTER 5/32 X 1.0 CHISEL	1
6	021210	PIN, COTTER 3/32 X 1.0 ZN	2
7	021430	PIN, CLEVIS 3/8 X 2.25 GR5 ZN	1
8	022920	WASHER, FLAT 0.375 X 0.875 X 0.083 ZN	1
9	025760	BOLT, HHCS 5/16-18 X 1.5 GR5 ZN	2
10	108850	BEARING, 1.12 SOD SPRING LOCK	1
11	126540	LID WLDT., SUPPLEMENT HOPPER	1
12	128040	PLATE, HOLE COVER	1
13	470950	CUTTER, SACK	1
14	560700	GRATE, SUPPLEMENT HOPPER	1
15	169340	BOLT, CRG. 5/16-18 X 0.50 SSN GR2	4
16	170530	BOLT, CRG. 3/8-16 X 1.0 SSN GR5	3
17	470960	HOPPER WLDT., SUPPLEMENT	1
18	365140	COVER, SUPPLEMENT HOPPER	1
19	365150	AUGER WLDT., CONCENTRAT TANK	1
20	560710	GRATE, ANGLED HOPPER	1
21	I669184R1	CLAMP, SHIELD LATCH	1
22	I159920	SCREW, PHMS 10-24 X 1/2	2
23	120600	WASHER, LOCK #10	2
24	120590	NUT, HEX 10-24	2

- = Not Illustrated

HOPPER AND DRIVE ASSEMBLY, DISCHARGE

5105C-IPL-M529150

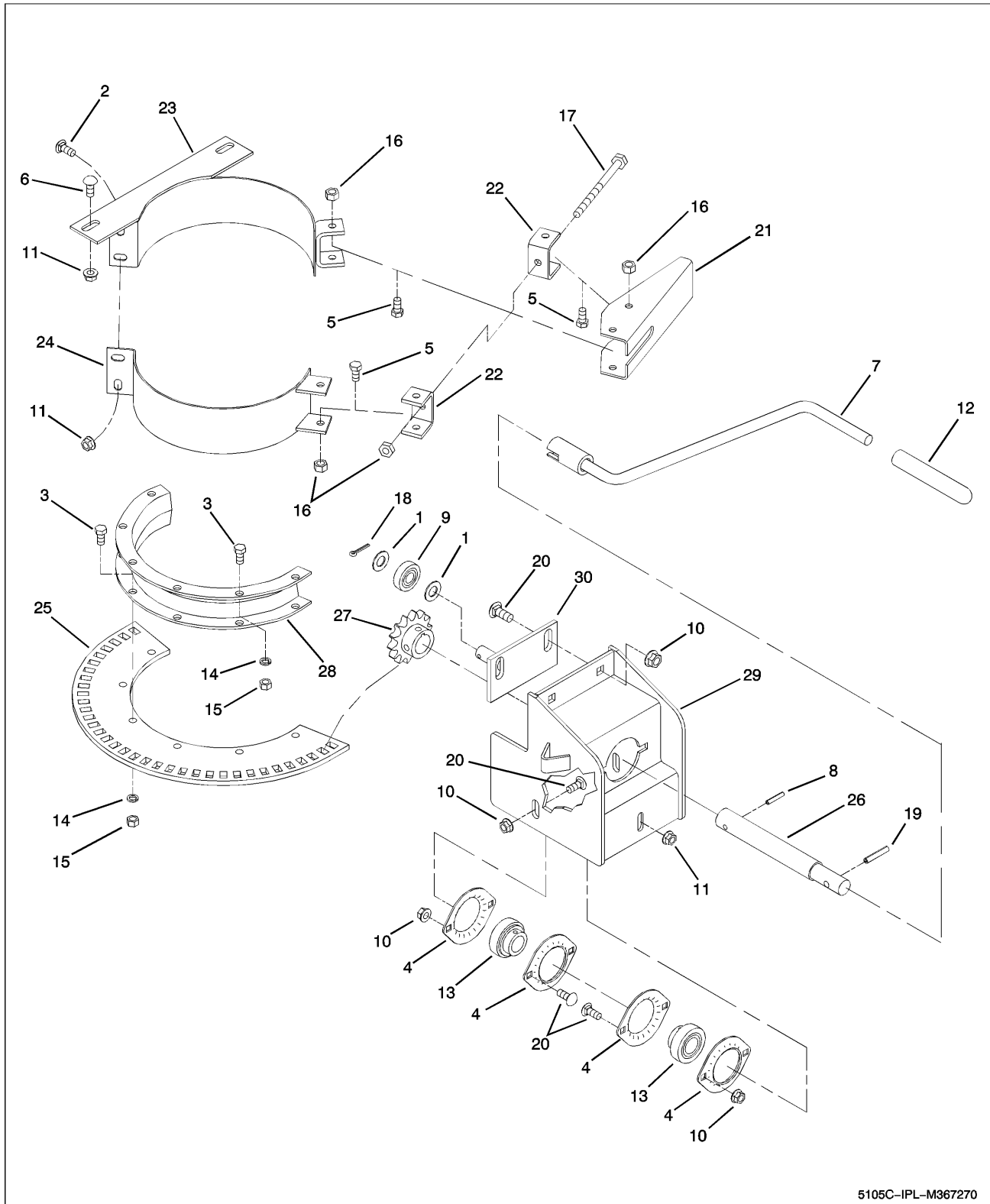
FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	529150	HOPPER AND DRIVE ASSEMBLY, DISCHARGE	
1	I486454R1	SHIM, 0.030 BLADE	4
2	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	2
3	005360	NUT, HEX 1/2-13 GR5 ZN	2
4	005370	WASHER, LOCK 1/2 INCH ZN	2
5	006690	BOLT, HHCS 3/8-16 X 1.25 GR5 ZN	3
6	009790	NUT, WING 5/16-18	2
7	012140	BOLT, HHCS 5/16-18 X 0.75 GR5 ZN	4
8	012260	BOLT, HHCS 3/8-16 X 1.0 GR5 ZN	1

- = NOT ILLUSTRATED

HOPPER AND DRIVE ASSEMBLY, DISCHARGE

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	529150	HOPPER AND DRIVE ASSEMBLY, DISCHARGE (CONT)	
9	012410	BOLT, CRG. 5/16-18 X 0.75 GR5 ZN	4
10	012520	DOOR, CLEANOUT	1
11	991200	BOLT, CRG. 1/2-13 X 2 GR5 ZN	2
12	019150	FLANGE, 1.12 BRG. 3-BOLT RND	2
13	020180	NUT, LOCK 3/8-16 FLNG. HX GR5	7
14	020190	NUT, 5/16-18 HX FLNG. LK. GR5 ZN	4
15	020240	SPROCKET, 40B28, 1.12 BORE	1
16	461790	GEAR, BEVEL 14T 1.25 BORE	1
17	020650	WASHER, FLAT 1.14 X 1.62 X 0.134 PLN.	4
18	020700	PIN, COTTER 5/32 X 1.0 CHSL. PNT.	6
19	020750	WASHER 1.14 X 1.62 X 0.105 PLN.	4
20	020760	KEY, PAR 5/16 SQ. X 1.12	3
21	021180	WASHER, LOCK 3/8 INCH	4
22	021190	WASHER, FLAT 0.438 X 1.0 X 0.083	7
23	528710	SPRING, CLUTCH HOLDING	1
24	529120	BEARING., 1.25 PB, STL. HSG. W/ LC	1
25	021560	GRIP, CLUTCH HANDLE	1
26	021570	KEY, PAR, 5/16 SQ. X 3.62	1
27	021610	FLANGETTE., 1.12 BRG. 2-BOLT	4
28	529140	SPROCKET, 40B24, 1.25 BORE	1
29	022920	WASHER, FLAT 0.38 X 0.88 X 0.083	2
30	023060	NUT, LOCK 3/8-16 DSTHD	2
31	023260	WASHER, FLAT 0.312 X 0.75 X 16 GA. ZN	6
32	023270	NUT, LOCK 1/4 INCH HEX FLNG.	2
33	023770	NUT, HEX 7/16-14 GR2 ZN	2
34	027260	NUT, HEX 3/8-16 GR5 ZN	4
35	528690	CLUTCH, A-66 CASTING 1-1/4	1
36	I49581203	WASHER, 1.28 X 2.00 X 0.105 PLN.	2
37	035180	BOLT, CRG. 3/8-16 X 1.25 GR5	1
38	025710	RING, 1.25 SNAP	1
39	035230	SCREW, 1/4-20 X 0.75 TR HD, GR2 ZN	2
40	040820	FEED DEFLECTOR	1
41	041540	PIN, CLEVIS 3/8 X 2.38 ZN	2
42	528700	CLUTCH, A-67 CASTING 1-1/4	1
43	105210	HANDLE, CLUTCH	1
44	108850	BEARING, 1.12 SOD SPRING LOCK	2
45	529460	SHIELD, LOWER GEARS	1
46	144730	SPACER, 1/2 INCH LONG	1
47	144740	SPACER, 7/8 INCH LONG	1
48	151450	FORK, DISCHARGE CLUTCH	1
49	157860	CHAIN ASSY., RC40 X 61P	1
50	158200	ROD, CLUTCH, 500	1
51	158210	ARM WLDT., CLUTCH	1
52	158230	AUGER WLDT., PUSH	1
53	529130	SHAFT, BACK AUGER DRIVE 1-1/4	1
54	041440	TIGHTENER, CHAIN	1
55	560570	GRATE, DISCHARGE	1
56	158280	COVER WLDT., BACK HOPPER	1
57	162140	SHIELD, PUSH AUGER	1
58	167090	SPACER, BEARING	1
59	167100	GASKET, FILLER	1
60	170530	BOLT, CRG. 3/8-16 X 1.0 GR5 ZN	7
61	185900	STRIP, SEAL, DISCHARGE CO	1
62	529440	DISCHARGE WLDT., FIRST SECT.	1
63	117550	BOLT, CRG. 3/8-16 x 2.25 GR2 ZN	1
64	JN71292	BOLT, HXHD 5/16-18 X 1/2 FLG. GR5	4
65	461780	BEARING, 1.25 SOD SPRING LOCK	1

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MECHANICAL SWIVAL, DISK DRIVE - 5105

5105C-IPL-M367270

MECHANICAL SWIVAL, DISK DRIVE - 5105

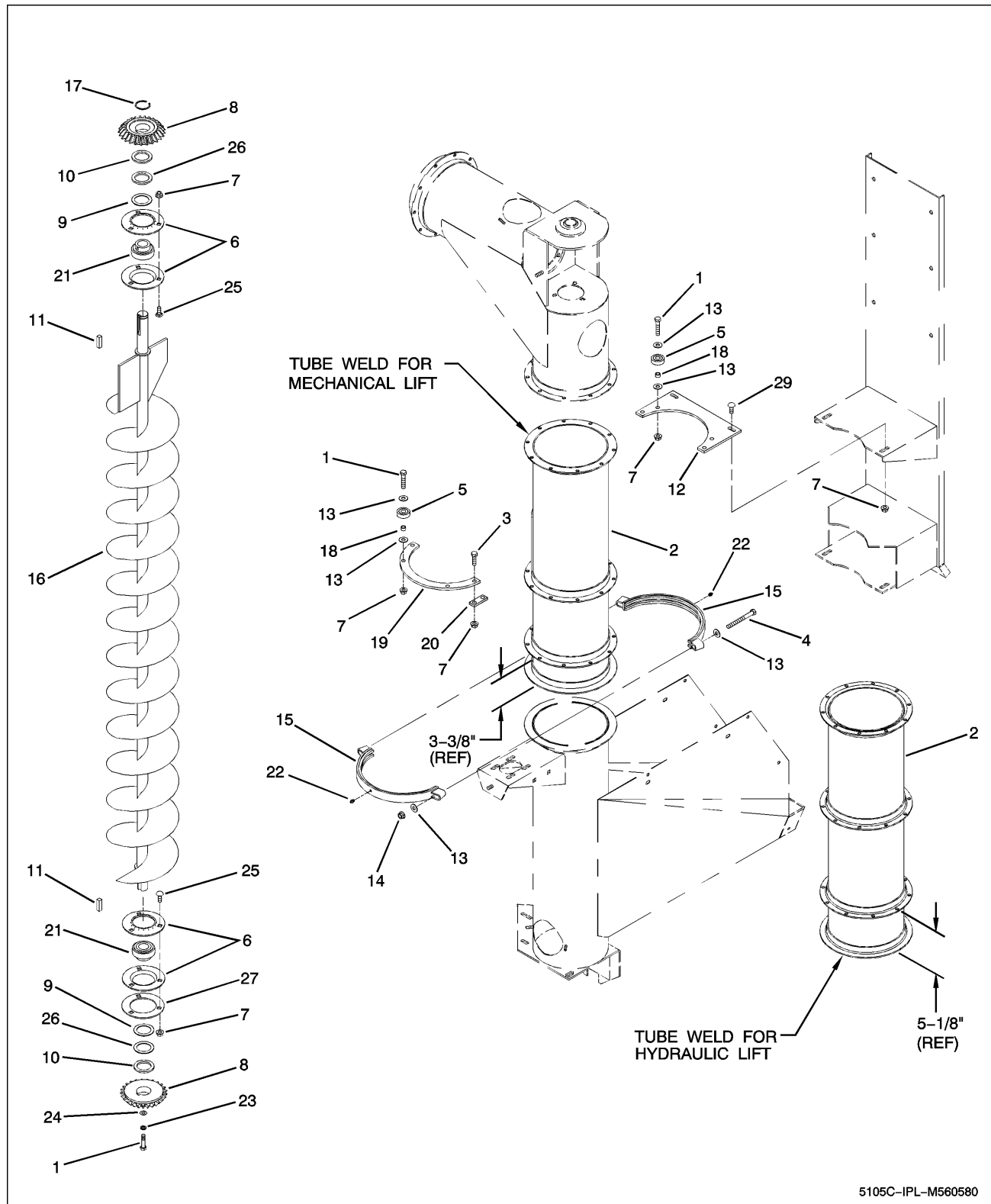
FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	367270	MECHANICAL SWIVAL, DISK DRIVE - 5105	
1	I120396	WASHER, FLAT 0.531 X 1.06 X 0.074 ZN	2
2	I14994R1	BOLT, CRG. 5/16-18 X 1.0 NK GR2	2
3	005900	BOLT, HHCS 5/16-18 X 1.0 GR5 ZN	12
4	008580	FLANGETTE, BEARING 2-BOLT 0.75	4
5	012140	BOLT, HHCS 5/16-18 X 0.75 GR5 ZN	6
6	012410	BOLT, CRG. 5/16-18 X 0.75 GR5 ZN	2
7	012500	CRANK ASSEMBLY, BACK AUGER	1
8	012560	PIN, EXPANSION 3/16 X 1.0	1
9	013750	BEARING, 1/2 INCH BALL, SPECIAL	1
10	020180	NUT, HEX FLNG. LOCK 3/8-16	8
11	020190	NUT, HEX FLNG. LOCK 5/16-18	5
12	020640	GRIP, PLASTIC	1
13	021680	BEARING, 3/4 INCH ADAPTER, SOD	2
14	023620	WASHER, LOCK, 5/16 INCH ZN	12
15	023630	NUT, HEX 5/16-18 GR5 ZN	12
16	025670	NUT, LOCK 5/16-18 HEX DSTHD	7
17	028200	BOLT, HHCS 5/16-18 X 4.5 GR5 ZN	1
18	034360	PIN, COTTER 1/8 X 1.0	1
19	169220	PIN, SPRING 1/4 X 1.38 SLOTTED	1
20	170530	BOLT, CRG. 3/8-16 X 1.0 GR5 ZN	8
21	206490	HANDLE, BRAKE	1
22	206500	YOKE, BRAKE	2
23	206510	BAND WLDT., HANDLE HALF	1
24	206520	BAND WLDT., PLAIN HALF	1
25	217670	DISK, HALF SWIVEL DRIVE	1
26	217740	SHAFT, SWIVEL DRIVE	1
27	217750	SPROCKET, 50B8, 3/4 INCH BORE	1
28	367320	RING HALF WLDT., DISK DRIVE	1
29	367360	BRACKET WLDT., MECH. SWING	1
30	367400	ROD, IDLER WLDT.	1

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SWIVEL ASSEMBLY, HYDRAULIC

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	560620	SWIVEL ASSEMBLY, HYDRAULIC	
1	I120394	WASHER, FLAT 3/8 SAE.	8
2	I120396	WASHER, FLAT 1/2 SAE.	12
3	005360	NUT, HEX 1/2-13	8
4	005900	BOLT, HHCS 5/16-18 X 1.0	10
5	006180	KEY, WOODRUFF 1/4 X 1.0	1
6	009790	NUT, WING 5/16-18	1
7	012260	BOLT, HHCS 3/8-16 X 1	4
8	990870	BOLT, HHCS 3/8-16 X 3-1/2	4
9	020190	NUT, HEX FLG. LOCK 5/16-18	10
10	021180	WASHER, LOCK 3/8	4
11	021190	WASHER, FLAT 3/8 STD.	5
12	023060	NUT, LOCK 3/8-16 DISTHRD	8
13	023620	WASHER, LOCK 5/16	1
14	023950	BOLT, HHCS 1/2-12 X 2.0	4
15	458500	SPROCKET ASSY., 60B10	1
16	366540	CHAIN, RC60 60P	1
17	037790	BOLT, HHCS 3/8-16 X 2	4
18	111090	MOTOR, HYD 20 CU IN DISP.	1
19	458490	SPROCKET, HALF 60A54	2
20	258540	SPRING, COMP. 0.40 X 0.75 X 0.78	4
21	349470	PLATE, CLAMP	2
22	528640	SPACER, 0.675 OD X 0.493 ID X 2.59	4
23	387220	PLATE, SPROCKET BOLT HALF	2
24	528610	BAND ASSY, WIDE HALF SLIP	2
25	364040	SHIELD ASSY, SWIVEL MOTOR	1
26	010990	SCREW, SET 5/16-18 X 5/16	2

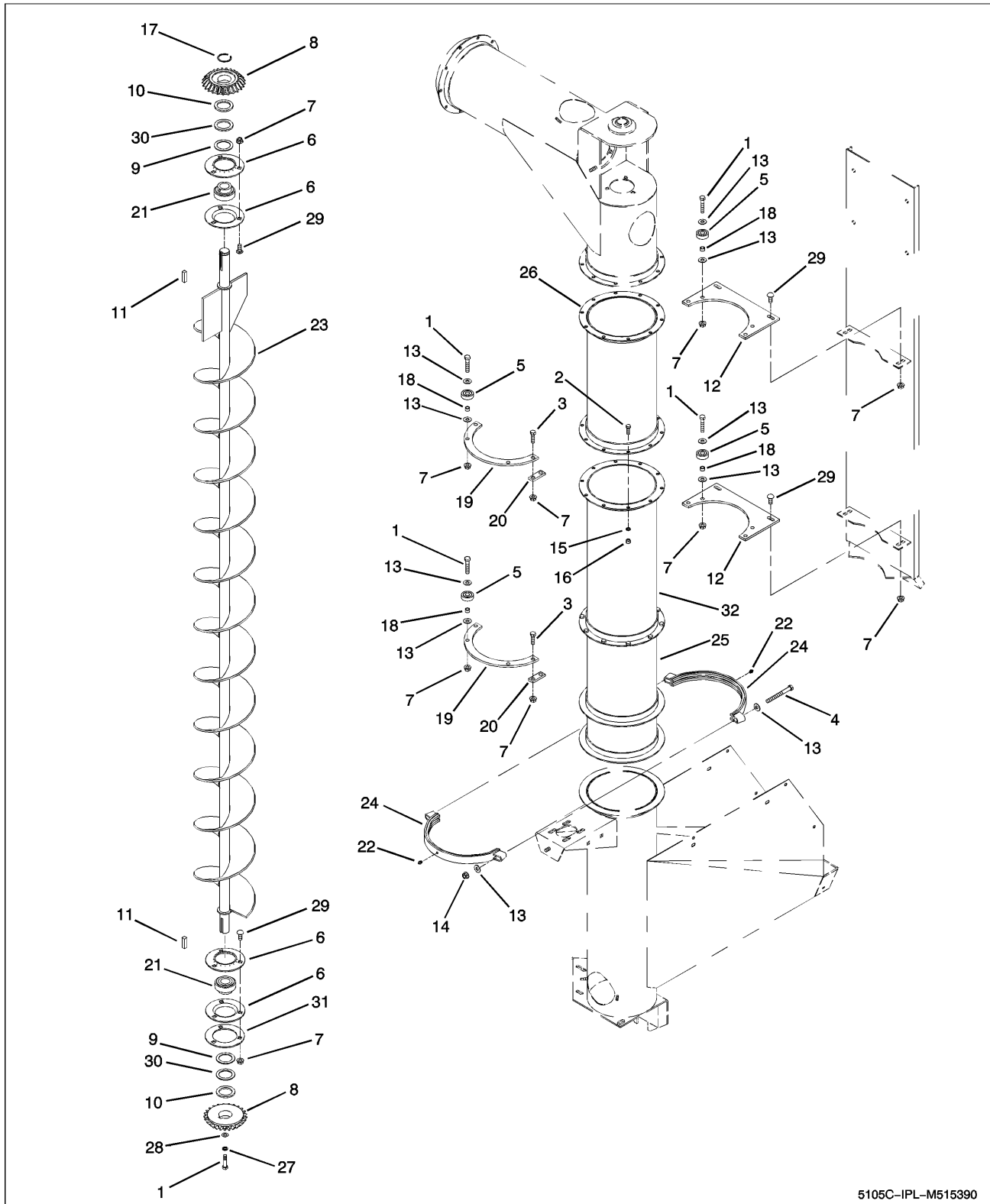
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29 INCH MECHANICAL VERTICAL OR HYDRAULIC DISCHARGE ASSEMBLY (5105 ONLY)

29 INCH MECHANICAL VERTICAL OR HYDRAULIC DISCHARGE ASSEMBLY (5105 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	560580	29" MECHANICAL VERTICAL OR HYDRAULIC DISCHARGE ASSEMBLY	RF
1	011370	BOLT, HHCS 3/8-16 X 1.5 GR5 ZN	5
2A	366890	TUBE WLDT., 29 INCH VERTICAL MECHANICAL LIFT	1
2B	560160	TUBE WLDT., 29 INCH VERTICAL HYDRAULIC LIFT	1
3	012260	BOLT, HHCS 3/8-16 X 1.0 GR5 ZN	4
4	990820	BOLT, HHCS 3/8-16 X 3.0 GR5 ZN	2
5	013750	BEARING, BALL 1/2 INCH SPECIAL	4
6	019150	FLANGETTE, BRG. 1.12 3-BOLT RND	4
7	020180	NUT, LOCK 3/8-16 HEX FLG. GR5	16
8	461790	GEAR, BEVEL 14T 1.25 INCH BORE	2
9	020910	WASHER, FLAT 1.25 X 1.75 X 0.062 ZN	2
10	020880	WASHER, FLAT 1.25 X 1.75 X 0.141 ZN	2
11	020760	KEY, SQ. 5/16 X 1.12 LG.	2
12	367180	BRACKET, SWIVEL RING	2
13	021190	WASHER, FLAT 0.438 X 1.0 X 0.083 ZN	12
14	023060	NUT, LOCK 3/8-16 FIN. HEX GRA	2
15	188340	CLAMP WLDT., HEAVY SWIVEL	2
16	554540	AUGER WLDT., VERT. DISCH. 29 INCH	1
17	025710	RING, 1.25 SNAP	1
18	038380	SPACER, 3/8 X 1/2 X 5/16 LONG	4
19	046060	RING, SWIVEL	1
20	046130	BRACKET, SWIVEL RING ATTACH	2
21	461780	BEARING, 1.25 SOD	2
22	115590	ZERK, 1/4-28 TAPER DR. THREAD	2
23	021180	WASHER, LOCK 3/8	1
24	012270	WASHER, FLAT 13/32 X 1.75 X 9/64	1
25	170530	BOLT, CRG. 3/8-16 X 1 SSN	8
26	020920	WASHER, FLAT 1-1/4 X 3/64	2
27	529710	RING, FLANGETTE REINFORCING	1

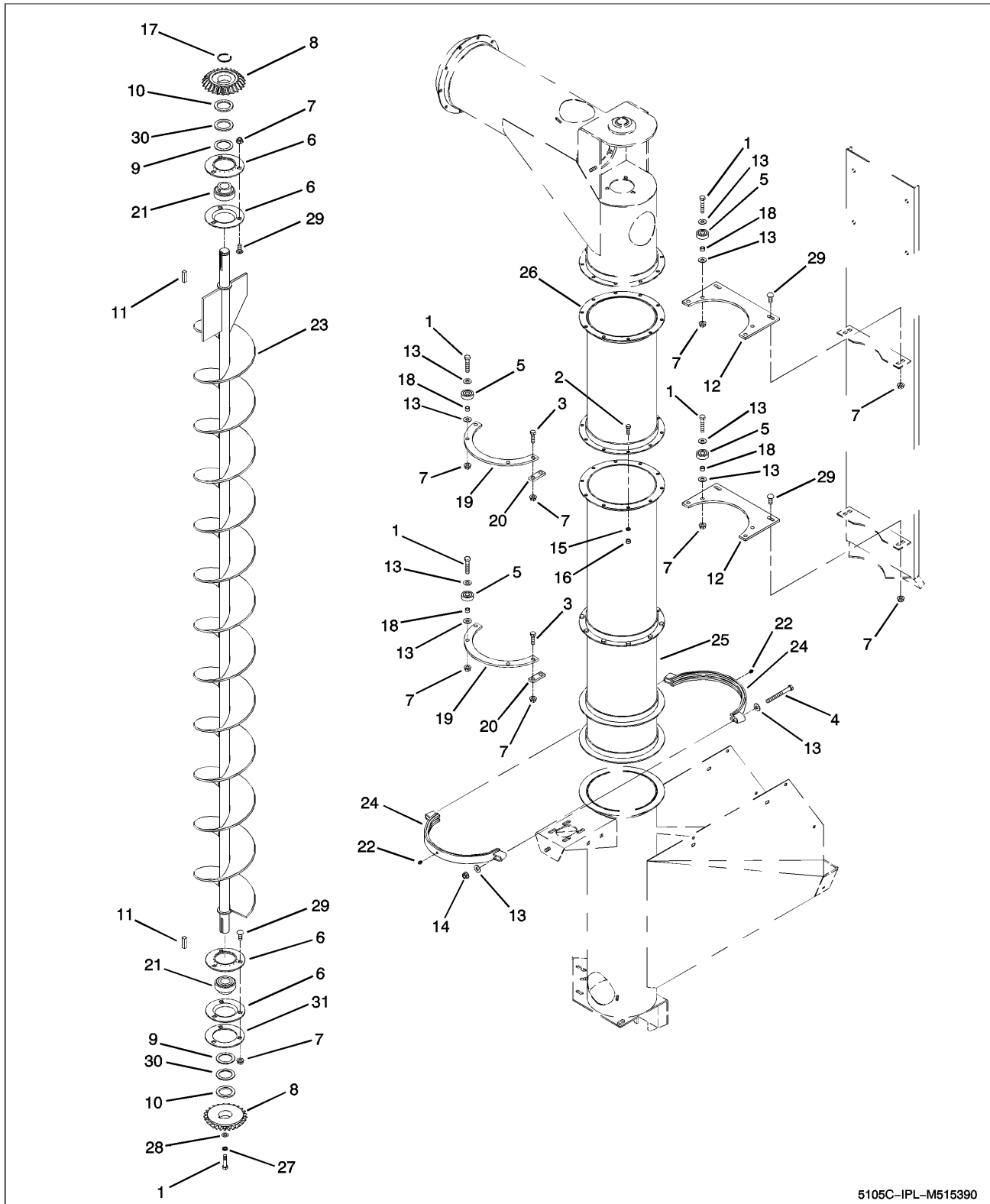
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52 INCH VERTICAL DISCHARGE ASSEMBLY – OLD DESIGN (5165 ONLY)

52 INCH VERTICAL DISCHARGE ASSEMBLY – OLD DESIGN (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	515390	52 INCH VERTICAL DISCHARGE ASSEMBLY – OLD DESIGN (5165 ONLY)	
1	011370	BOLT, HHCS 3/8-16 X 1.5 GR5 ZN	9
2	012140	BOLT, HHCS 5/16-18 X 0.75 GR5 ZN	20
3	012260	BOLT, HHCS 3/8-16 X 1.0 GR5 ZN	8
4	990820	BOLT, HHCS 3/8-16 X 3.0 GR5 ZN	2
5	013750	BEARING, BALL 1/2 INCH SPECIAL	8
6	019150	FLANGETTE, BRG. 1.12 3-BOLT RND.	4
7	020180	NUT, LOCK 3/8-16 HEX FLG. GR5	26
8	461790	GEAR, BEVEL 14T 1.25 INCH BORE	2
9	020910	WASHER, FLAT 1.25 X 1.75 X 0.062 ZN	2
10	020880	WASHER, FLAT 1.25 X 1.75 X 0.141 ZN	2
11	020760	KEY, SQ. 5/16 X 1.12 LG.	2
12	367180	BRACKET, SWIVEL RING	2
13	021190	WASHER, FLAT 0.438 X 1.0 X 0.083 ZN	20
14	023060	NUT, LOCK 3/8-16 FIN. HEX GRA	2
15	023620	WASHER, LOCK 5/16 INCH ZN	20
16	023630	NUT, HEX 5/16-18 GR5	20
17	025710	RING, 1.25 SNAP	1
18	038380	SPACER, 3/8 X 1/2 X 5/16 LONG	8
19	046060	RING, SWIVEL	2
20	046130	BRACKET, SWIVEL RING ATTACH.	4
21	461780	BEARING, 1.25 SOD	2
22	115590	ZERK, 1/4-28 TAPER DR. THREAD	2
23	528280	AUGER WLDT., VERT. DISCHARGE	1
24	188340	CLAMP WLDT., HEAVY SWIVEL	2
25	528100	TUBE WLDT., 18 INCH LOWER VERTICAL	1
26	366910	TUBE WLDT., 16 INCH VERTICAL	1
27	021180	WASHER, LOCK 3/8	1
28	012270	WASHER, FLAT 13/32 X 1.75 X 9/64	1
29	170530	BOLT, CRG. 3/8-16 X 1.0 SSN	10
30	020920	WASHER, FLAT 1-1/4 X 3/64	2
31	529710	RING, FLANGETTE REINFORCING	1
32	215790	TUBE WLDT., 18 INCH UPPER VERTICAL	1

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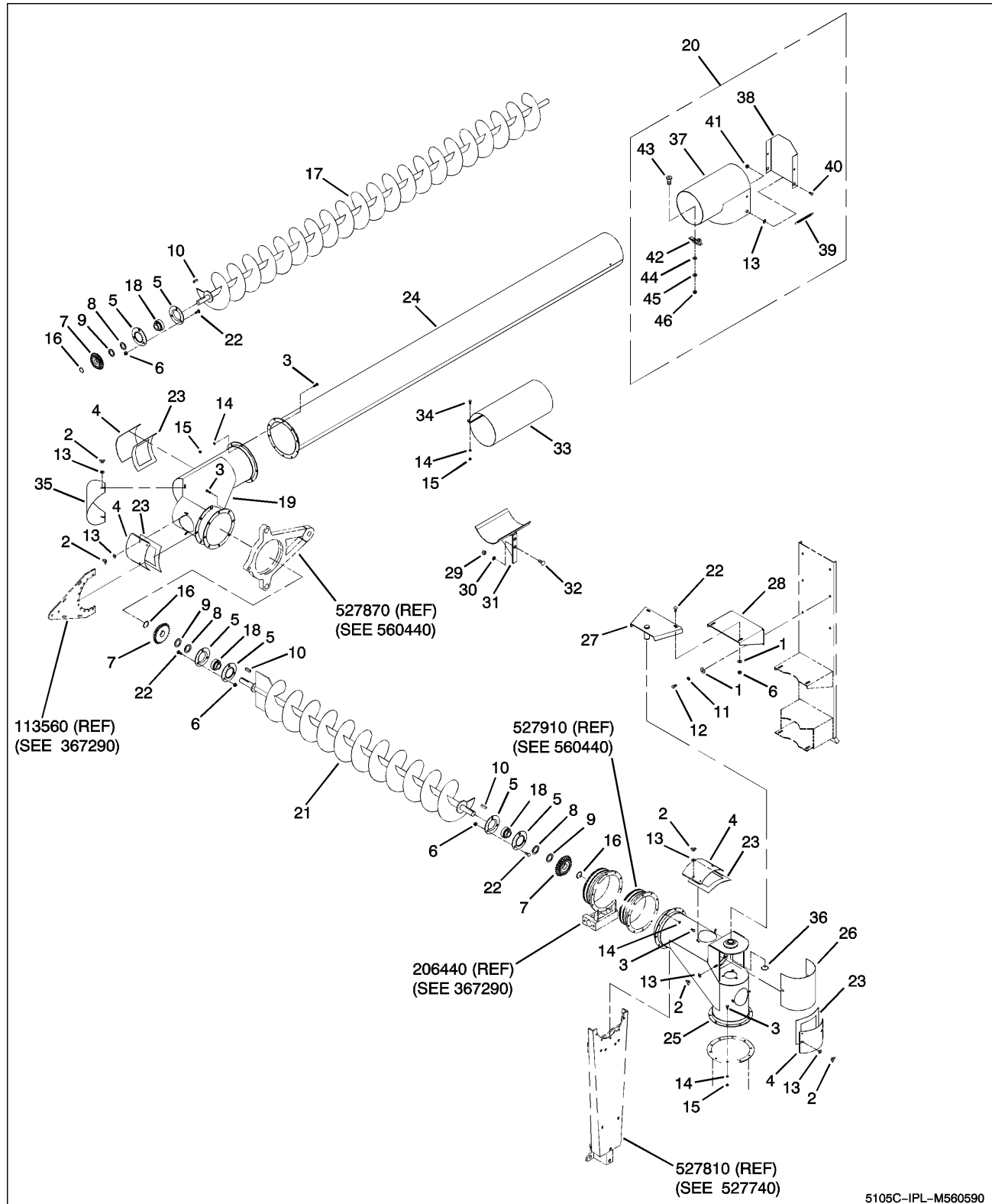
52 INCH VERTICAL DISCHARGE ASSEMBLY – NEW DESIGN (5165 ONLY)

5105C-IPL-M515390

52 INCH VERTICAL DISCHARGE ASSEMBLY – NEW DESIGN (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	515390	52 INCH VERTICAL DISCHARGE ASSEMBLY – NEW DESIGN (5165 ONLY)	
1	011370	BOLT, HHCS 3/8-16 X 1.5 GR5 ZN	9
2	012140	BOLT, HHCS 5/16-18 X 0.75 GR5 ZN	20
3	012260	BOLT, HHCS 3/8-16 X 1.0 GR5 ZN	8
4	990820	BOLT, HHCS 3/8-16 X 3.0 GR5 ZN	2
5	013750	BEARING, BALL 1/2 INCH SPECIAL	8
6	019150	FLANGETTE, BRG. 1.12 3-BOLT RND.	4
7	020180	NUT, LOCK 3/8-16 HEX FLG. GR5	26
8	461790	GEAR, BEVEL 14T 1.25 INCH BORE	2
9	020910	WASHER, FLAT 1.25 X 1.75 X 0.062 ZN	2
10	020880	WASHER, FLAT 1.25 X 1.75 X 0.141 ZN	2
11	020760	KEY, SQ. 5/16 X 1.12 LG.	2
12	367180	BRACKET, SWIVEL RING	2
13	021190	WASHER, FLAT 0.438 X 1.0 X 0.083 ZN	20
14	023060	NUT, LOCK 3/8-16 FIN. HEX GRA	2
15	023620	WASHER, LOCK 5/16 INCH ZN	20
16	023630	NUT, HEX 5/16-18 GR5	20
17	025710	RING, 1.25 SNAP	1
18	038380	SPACER, 3/8 X 1/2 X 5/16 LONG	8
19	046060	RING, SWIVEL	2
20	046130	BRACKET, SWIVEL RING ATTACH.	4
21	461780	BEARING, 1.25 SOD	2
22	115590	ZERK, 1/4-28 TAPER DR. THREAD	2
23	528280	AUGER WLDT., VERT. DISCHARGE	1
24	188340	CLAMP WLDT., HEAVY SWIVEL	2
25	560680	TUBE WLDT., 52 INCH	1
26	366910	TUBE WLDT., 16 INCH VERTICAL	1
27	021180	WASHER, LOCK 3/8	1
28	012270	WASHER, FLAT 13/32 X 1.75 X 9/64	1
29	170530	BOLT, CRG. 3/8-16 X 1.0 SSN	10
30	020920	WASHER, FLAT 1-1/4 X 3/64	2
31	529710	RING, FLANGETTE REINFORCING	1

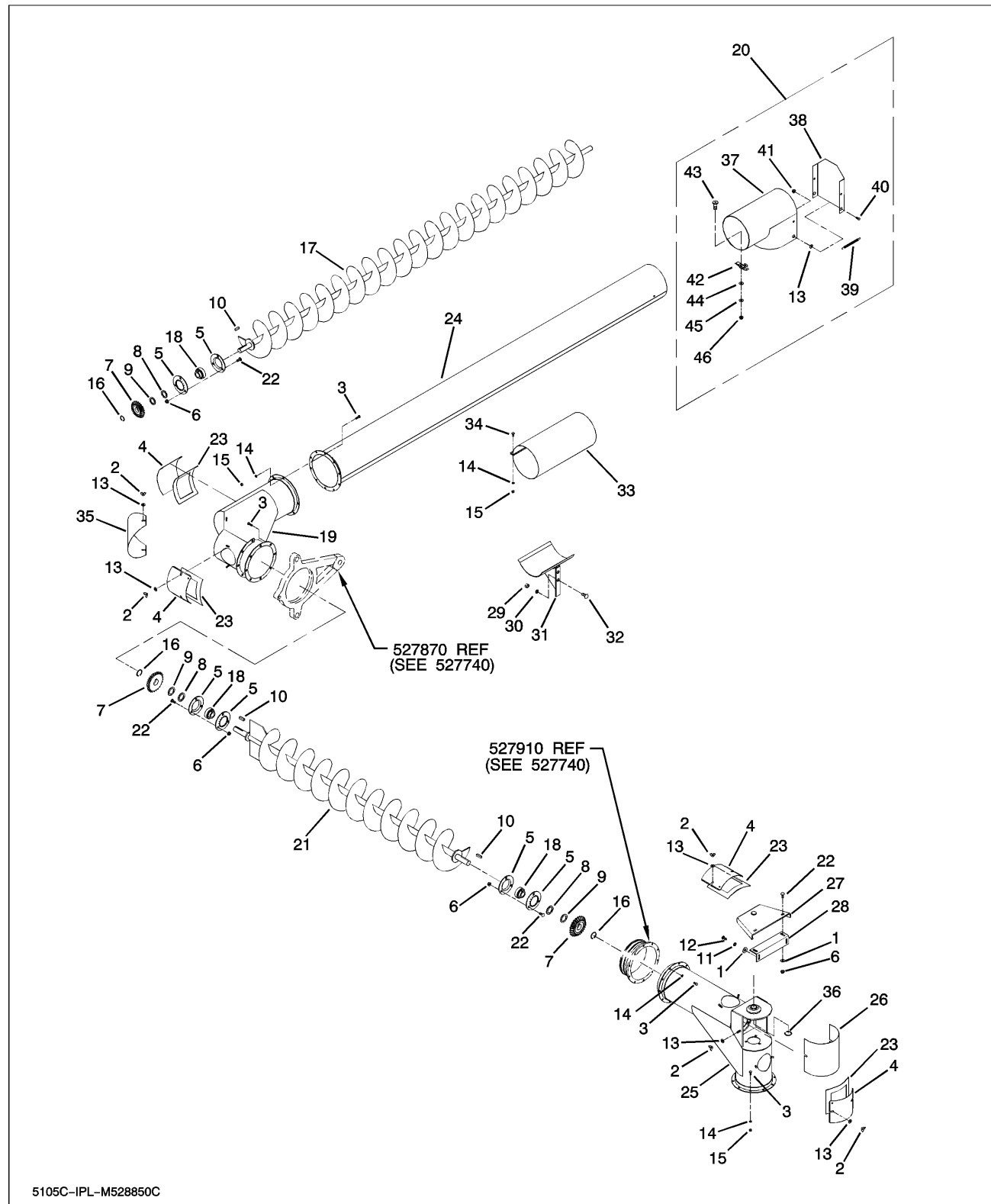
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INNER ELBOW ASSEMBLY, DISCHARGE (5105)

INNER ELBOW ASSEMBLY, DISCHARGE (5105)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	560590	INNER ELBOW ASSEMBLY, DISCHARGE (5105)	RF
1	I120374	WASHER, FLAT 0.406 X 0.812 X 0.051	4
2	009790	NUT, WING 5/16-18	12
3	012140	BOLT, HHCS 5/16-18 X 0.75 GR5 ZN	20
4	012520	DOOR, CLEANOUT	4
5	019150	FLANGE, 1-1/8 BRG. 3-BOLT RND.	6
6	020180	NUT, HEX FLG. LK. 3/8-16	11
7	461790	GEAR, BEVEL, 14T, 1-1/4 BORE	3
8	020910	WASHER, FLAT 1.25 X 1.75 X 0.134	6
9	020880	WASHER, FLAT 1.25 X 1.75 X 0.06	3
10	020760	KEY, PAR, 5/16 SQ. X 1.12	3
11	021180	WASHER, LOCK 3/8 INCH	2
12	022420	BOLT, HHCS 3/8-16 X 0.75 GR5 ZN	2
13	022920	WASHER, FLAT 0.38 X 0.88 X 0.083	12
14	023620	WASHER, LOCK, 5/16 ZN	23
15	023630	NUT, HEX 5/16-18 GR5 ZN	23
16	025710	RING, 1.25 SNAP	3
17	528670	AUGER WLDT., TILTED RH FLIGHT 7 INCH X 118.5	1
18	461780	BEARING, 1.25 SOD SPRING LOCK	3
19	132871	ELBOW ASSEMBLY, LIGHT	1
20	152100	HOOD ASSY, DISCHARGE AUGER	1
21	554470	AUGER WLDT., TILTED RH FLIGHT 7 INCH X 34.88 INCH	1
22	170530	BOLT, CRG. 3/8-16 X 1.0 GR5 ZN	11
23	185900	STRIP, SEAL, DISCHARGE CO	4
24	205990	TUBE WLDT., 8 X 103 X 16 GA	1
25	366820	ELBOW WLDT., 105 INNER	1
26	366830	COVER, GEAR	1
27	366860	ANCHOR WLDT., BEARING	1
28	379240	BRACKET, 105 BOLT ON EXT.	1
29	005360	NUT, HEX 1/2-13 GR5 ZN	1
30	005370	WASHER, LOCK 1/2 INCH	1
31	043480	HOLDER WLDT., UNLOADING	1
32	005390	BOLT, CRG. 1/2-13 X 1.0 SSN GR5 ZN	1
33	461230	WRAP, DISCHARGE	1
34	030030	BOLT, HHCS 5/16-18 X 1-1/4	3
35	040870	SHIELD, BEVEL GEAR	1
36	035200	RING, 1.12 SNAP	1
37	152110	HOOD, WLDT.	1
38	152170	DOOR, DISCHARGE HOOD	1
39	100750	SPRING	1
40	006880	BOLT, HHCS 5/16 X 5/8	2
41	025670	NUT, HEX 5/16-18 LOCK	2
42	I669184R1	CLAMP	2
43	I159920	SCREW, PHMS #10-24 X 1/2	4
44	W1447500056	WASHER, #10 FLAT	4
45	120600	WASHER, #10 LOCK	4
46	120590	NUT, #10-24 HEX	4

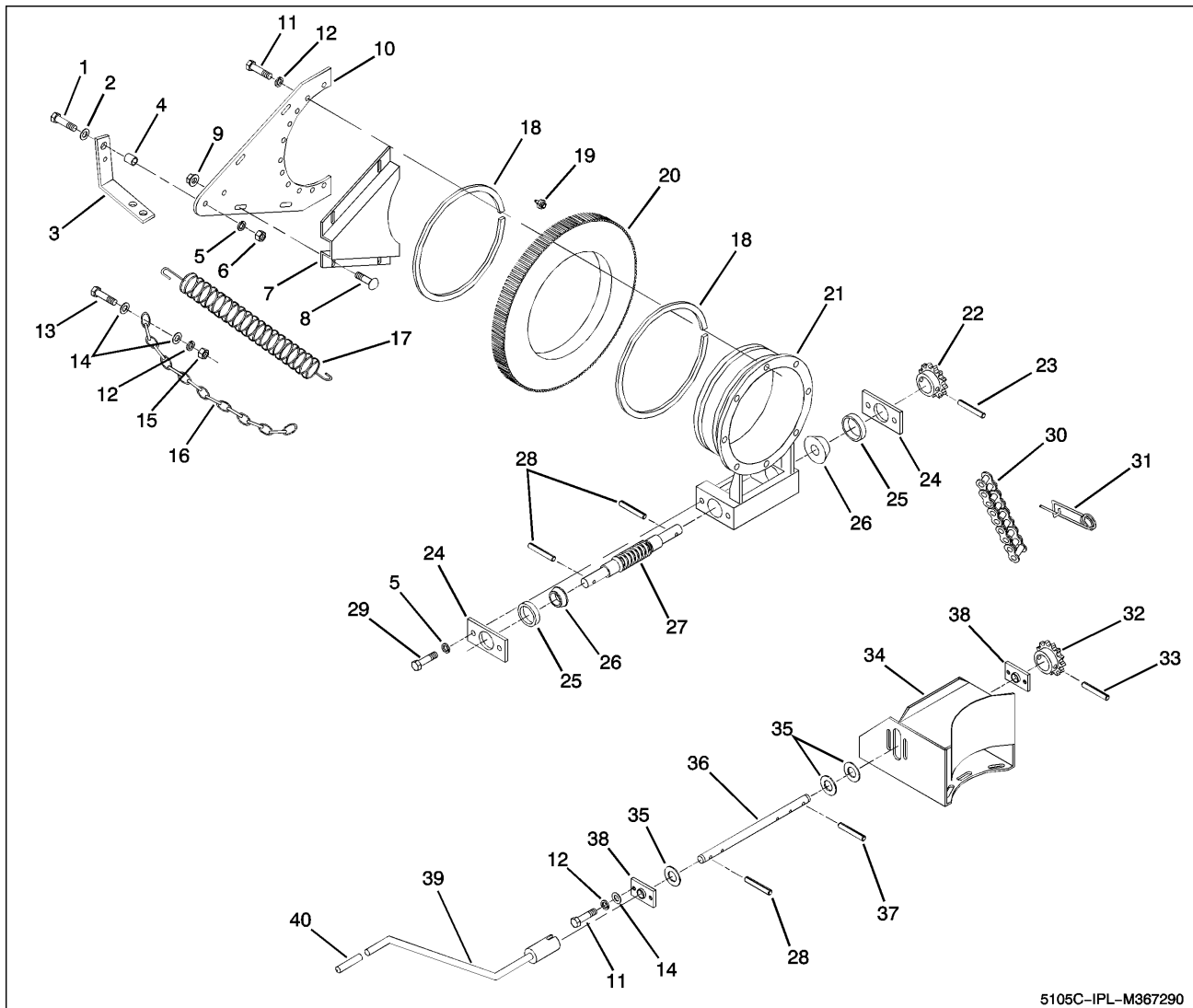
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INNER ELBOW ASSEMBLY, DISCHARGE (5165)

INNER ELBOW ASSEMBLY, DISCHARGE (5165)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	528850	INNER ELBOW ASSEMBLY, DISCHARGE (5165)	RF
1	I120374	WASHER, FLAT 0.406 X 0.812 X 0.051	4
2	009790	NUT, WING 5/16-18	12
3	012140	BOLT, HHCS 5/16-18 X 0.75 GR5 ZN	20
4	012520	DOOR, CLEANOUT	4
5	019150	FLANGE, 1-1/8 BRG. 3-BOLT RND.	6
6	020180	NUT, HEX FLG. LK. 3/8-16	11
7	461790	GEAR, BEVEL, 14T, 1-1/4 BORE	3
8	020910	WASHER, FLAT 1.250 X 1.75 X 0.134	3
9	020880	WASHER, FLAT 1.250 X 1.75 X 0.06	3
10	020760	KEY, PAR, 5/16 SQ. X 1.12	3
11	021180	WASHER, LOCK 3/8 INCH	2
12	022420	BOLT, HHCS 3/8-16 X 0.75 GR5 ZN	2
13	022920	WASHER, FLAT 0.38 X 0.88 X 0.083	12
14	023620	WASHER, LOCK, 5/16 ZN	23
15	023630	NUT, HEX 5/16-18 GR5 ZN	23
16	025710	RING, 1.25 SNAP	3
17	528670	AUGER WLDT., TILTED RH FLIGHT 7 INCH X 118.5	1
18	461780	BEARING, 1.25 SOD SPRING LOCK	1
19	132871	ELBOW ASSEMBLY, LIGHT	1
20	152100	HOOD ASSY, DISCHARGE AUGER	1
21	528650	AUGER WLDT., TILTED RH FLIGHT 7 INCH X 40.88	1
22	170530	BOLT, CRG. 3/8-16 X 1.0 GR5 ZN	11
23	185900	STRIP, SEAL, DISCHARGE CO	4
24	205990	TUBE WLDT., 8 X 103 X 16 GA	1
25	366810	ELBOW WLDT., 150 INNER	1
26	366830	COVER, GEAR	1
27	366860	ANCHOR WLDT., BEARING	1
28	379250	BRACKET, 150 BOLT ON EXT.	1
29	005360	NUT, HEX 1/2-13 GR5 ZN	1
30	005370	WASHER, LOCK 1/2 INCH	1
31	043480	HOLDER WLDT., UNLOADING	1
32	005390	BOLT, CRG. 1/2-13 X 1.0 SSN GR5 ZN	1
33	461230	WRAP, DISCHARGE	1
34	030030	BOLT, HHCS 5/16-18 X 1-1/4	3
35	040870	SHIELD, BEVEL GEAR	1
36	035200	RING, 1.12 SNAP	1
37	152110	HOOD WLDT.	1
38	152170	DOOR, DISCHARGE HOOD	1
39	100750	SPRING	1
40	006880	BOLT, HHCS 5/16 X 5/8	2
41	025670	NUT, HEX 5/16-18 LOCK	2
42	I669184R1	CLAMP	2
43	I159920	SCREW, PHMS #10-24 X 1/2	4
44	W144750056	WASHER, #10 FLAT	4
45	120600	WASHER, #10 LOCK	4
46	120590	NUT, #10-24 HEX	4

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MECHANICAL RING AND WORM GEAR ASSEMBLY (5105)

MECHANICAL RING AND WORM GEAR ASSEMBLY (5105)

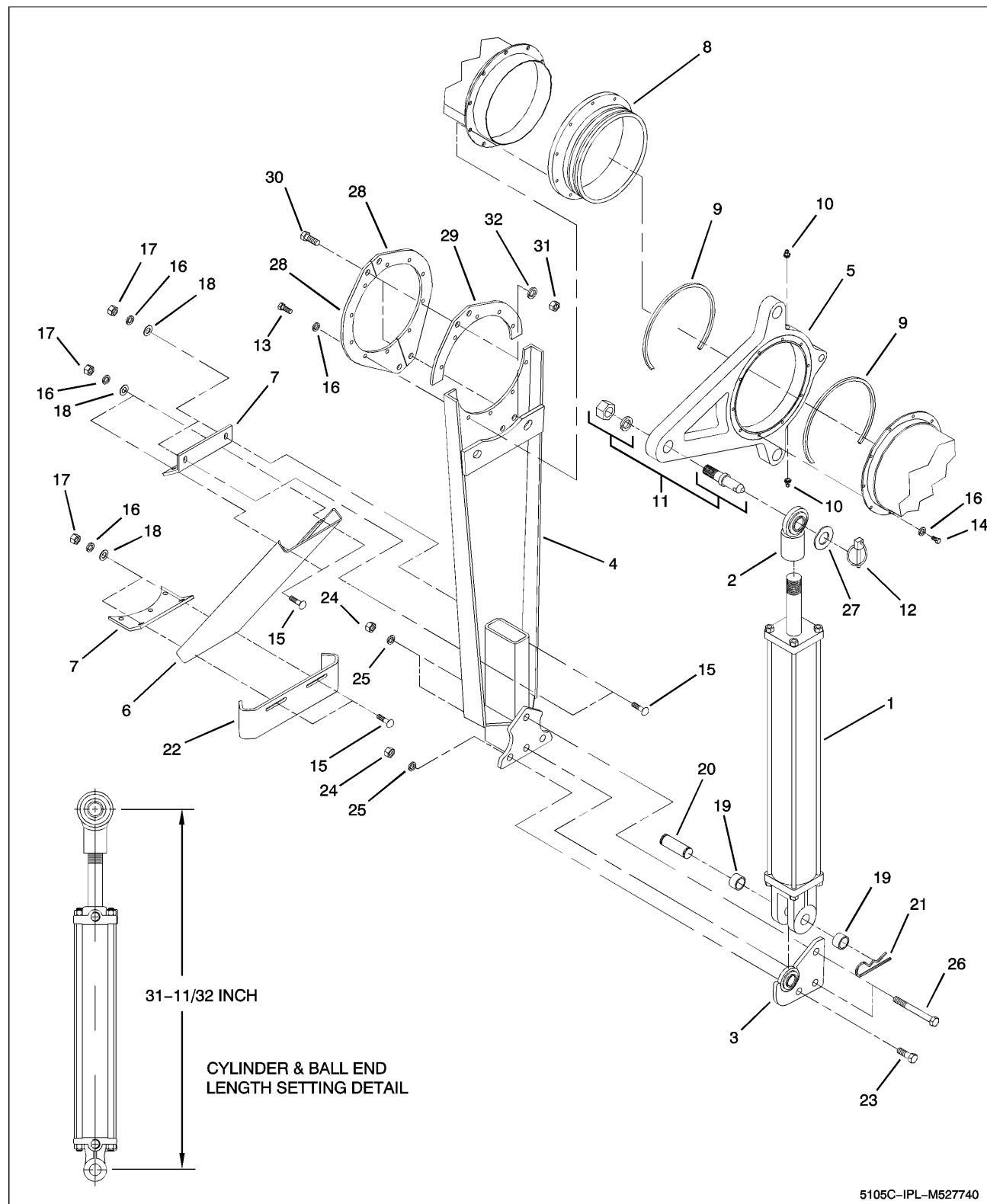
FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	367290	MECHANICAL RING AND WORM GEAR ASSEMBLY (5105)	RF
1	012260	BOLT, HHCS 3/8-16 X 1.0	1
2	021190	WASHER, FLAT 3/8 INCH	1
3	213310	BRACKET, LIFT ASSIST SPRING	1
4	033460	SPACER, 0.375 INCH X 0.281 INCH	1
5	021180	WASHER, LOCK 3/8 INCH	5
6	027260	NUT, HEX 3/8-16 INCH	1
7	214140	CHANNEL, LEVER BRACE	1
8	254060	BOLT, CRG. 5/16-18 X 1.0 INCH	4
9	020190	NUT, HEX FLANGE LOCK 5/16-18 X 1.0 INCH	4
10	113560	LEVER, LIFT	1
11	012140	BOLT, HHCS 5/16-18 X 3/4 INCH	9
12	023620	WASHER, LOCK 5/16 INCH	11
13	005900	BOLT, HHCS 5/16-18 X 1.0 INCH	2
14	022920	WASHER, FLAT 5/16 INCH	7
15	023630	NUT, HEX 5/16-18 INCH	2
16	213430	CHAIN, 2/0 SAFETY	1
17	145590	SPRING EXTENSION	1
18	104360	RING, RETAINING	2
19	115590	ZERK, 1/4-28	2
20	126230	GEAR, RING W/ 10 HOLES	1
21	206440	RING AND WORM HOLDER	1
22	206390	SPROCKET, 40B18 3/4 INCH BORE	1
23	013600	PIN, EXPANSION 1/4 X 2.0 INCH	1
24	204670	PLATE, HOLDER	2
25	252720	CUP, BEARING	2
26	1758902	CONE, BEARING 3/4 INCH BORE	2
27	206430	WORM AND SHAFT	1
28	012550	PIN, EXPANSION 1/4 X 1-1/4 INCH	3
29	001370	BOLT, HHCS 3/8-16 X 1-1/2 INCH	4
30	213530	CHAIN, ROLLER #40 X 144 PITCHES	1
31	140820	PIN, SAFETY 1/8 X 4-3/8 INCH	1
32	113520	SPROCKET, 40B9 5/8 INCH BORE	1
33	991100	PIN, EXPANSION 3/16 X 1-1/4 INCH	1
34	371760	BRACKET WLDT., LIFT ASSIST - PM20	1
35	035190	WASHER, FLAT 21/32 INCH	3
36	213340	SHAFT, LIFT ASSIST CRANK	1
37	012560	PIN, EXPANSION 3/16 X 1.0 INCH	1
38	114060	PLATE ASSY, ADJUSTMENT	2
39	012500	CRANK WLDT.	1
40	020640	GRIP, PLASTIC	1

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HYDRAULIC DISCHARGE LIFT ASSEMBLY (5105)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	560530	HYDRAULIC DISCHARGE LIFT ASSEMBLY (5105)	RF
1	527750	CYL., HYD., 3 X 16 CLEVIS, 1-1/4	1
	355350	SEAL KIT, CROSS (1-1/4 DIA. ROD) (IC4629)	
	531440	SEAL KIT, PRINCE (1-3/8 DIA. ROD) (PMCK-BF-0520)	
2	527760	END WLDT., BALL 1.015 ID	1
3	527780	MOUNT WLDT., LOWER CYL	1
4	527810	ARM WLDT., VERT. CYL. MNT.	1
5	527870	LEVER, CYL. LIFT	1
6	560170	CHANNEL, BRACE HYD. LIFT	1
7	560180	BRACKET, BRACE SWING STOP	2
8	527910	HOLDER, HYD. LIFT DISCHARGE	1
9	104360	RING, RETAINING	2
10	115590	FITTING, 1/4-28 STR.	2
11	I472790R2	STUD, NUT, AND LOCK WASHER	1
12	V240437	PIN, LYNCH	1
13	025760	BOLT, HHCS 5/16-18 X 1-1/2	10
14	012140	BOLT, HHCS 5/16-18 X 3/4	13
15	1111267	BOLT, CRG. 5/16-18 X 1-1/4	8
16	023620	WASHER, LOCK 5/16	31
17	023630	NUT, HEX 5/16-18	11
18	022920	WASHER, FLAT 5/16 STD.	11
19	I1337411C1	BUSHING, 1.25 OD X 1.00 ID X 0.75	2
20	I43951648	PIN, CLEVIS 1.0 X 3.0 ZN	1
21	035830	PIN, BRIDGE 3/16 INCH INTERNAL	1
22	371930	STOP, SWING	1
23	990620	BOLT, HHCS 5/8-11 X 2.0	1
24	I124589	NUT, HEX 5/8-11	3
25	020440	WASHER, LOCK 5/8	3
26	201660	BOLT, HHCS 5/8-11 X 6	2
27	I49611119	WASHER, FLAT 1-1/8 X 2-1/4 X 0.134	1
28	534730	PLATE, SUPPORT CYL. ARM	2
29	534740	PLATE, SPACER CYL. ARM	1
30	010730	BOLT, HHCS 1/2-13 X 1-1/4	4
31	005360	NUT, HEX 1/2-13	4
32	005370	WASHER, LOCK 1/2	4
33	212610	HOLDER, WLDT., RING HOSE	3
34	042960	BOLT, HHCS 1/4-20 X 1.0	1
35	027660	NUT, HEX 1/4-20	1
36	029440	WASHER, LOCK 1/4	1
37	023260	WASHER, FLAT 1/4 STD.	1

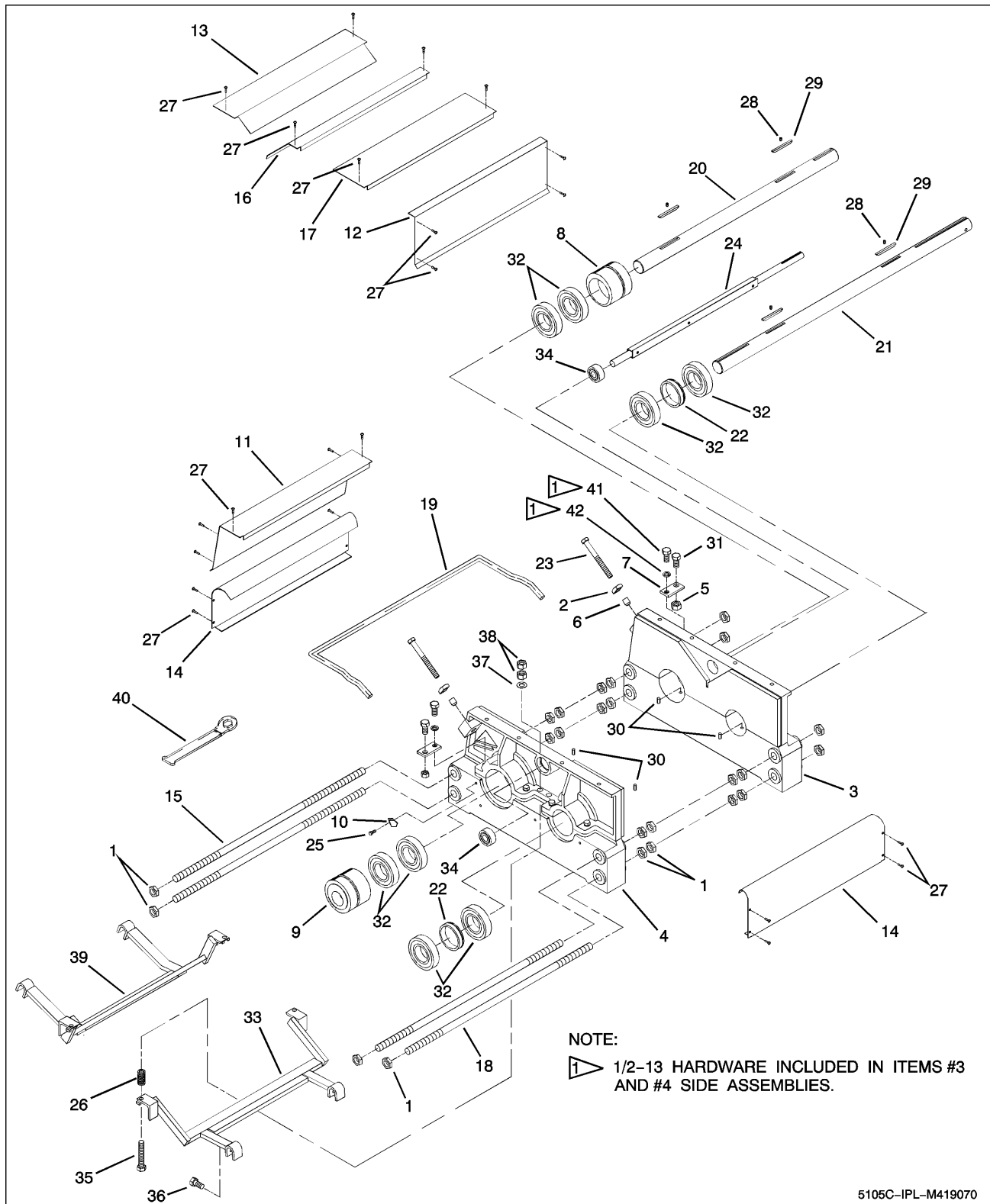
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HYDRAULIC DISCHARGE LIFT ASSEMBLY (5165)

HYDRAULIC DISCHARGE LIFT ASSEMBLY (5165)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	527740	HYDRAULIC DISCHARGE LIFT ASSEMBLY (5165)	RF
1	527750	CYL., HYD., 3 X 16 CLEVIS, 1-1/4	1
	355350	SEAL KIT, CROSS (1-1/4 DIA. ROD) (IC4629)	
	531440	SEAL KIT, PRINCE (1-3/8 DIA. ROD) (PMCK-BF-0520)	
2	527760	END WLDT., BALL 1.015 ID	1
3	527780	MOUNT WLDT., LOWER CYL	1
4	527810	ARM WLDT., VERT. CYL. MNT.	1
5	527870	LEVER, CYL. LIFT	1
6	527880	CHANNEL, BRACE 7.0 X 26.5	1
7	527890	BRACKET, BRACE BOTTOM	2
8	527910	HOLDER, HYD. LIFT DISCHARGE	1
9	104360	RING, RETAINING	2
10	115590	FITTING, 1/4-28 STR.	2
11	I472790R2	STUD, NUT, AND LOCK WASHER	1
12	V240437	PIN, LYNCH	1
13	025760	BOLT, HHCS 5/16-18 X 1-1/2	10
14	012140	BOLT, HHCS 5/16-18 X 3/4	13
15	1111267	BOLT, CRG. 5/16-18 X 1-1/4	6
16	023620	WASHER, LOCK 5/16	31
17	023630	NUT, HEX 5/16-18	6
18	022920	WASHER, FLAT 5/16 STD.	6
19	I1337411C1	BUSHING, 1.25 OD X 1.00 ID X 0.75	2
20	I43951648	PIN, CLEVIS 1.0 X 3.0 ZN	1
21	035830	PIN, BRIDGE 3/16 INCH INTERNAL	1
22	371930	STOP, SWING	1
23	990620	BOLT, HHCS 5/8-11 X 2.0	1
24	I124589	NUT, HEX 5/8-11	3
25	020440	WASHER, LOCK 5/8	3
26	201660	BOLT, HHCS 5/8-11 X 6	2
27	I49611119	WASHER, FLAT 1-1/8 X 2-1/4 X 0.134	1
28	534730	PLATE, SUPPORT CYL. ARM	2
29	534740	PLATE, SPACER CYL. ARM	1
30	010730	BOLT, HHCS 1/2-13 X 1-1/4	4
31	005360	NUT, HEX 1/2-13	4
32	005370	WASHER, LOCK 1/2	4

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ROLLERMILL, BASIC 20 INCH


5105C-IPL-M419070

ROLLERMILL, BASIC 20 INCH

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	419070	ROLLERMILL, BASIC 20 INCH	
1	073310	NUT, HEX JAM 7/8-9 GR5 ZN	24
2	E552090	NUT, SQ. 5/8-11	2
3	P10010	FRAME ASSY, LH SIDE R/MILL	1
4	P10011	FRAME ASSY, RH SIDE R/MILL	1
5	114380	NUT, HEX JAM 1/2-13 GR5 ZN	2
6	P10182	PLUG, CLAMP SCREW	2
7	P10191	STOP, HANDLE	2
8	374600	HOUSING, LH ECCENTRIC BRG.	1
9	374610	HOUSING, RH ECCENTRIC BRG.	1
10	P10580	POINTER	1
11	P20124	PANEL, ECCENTRIC END	1
12	P20126	PANEL, DRIVE ROLL END COVER	1
13	P20127	PLATE, INSPECTION COVER	1
14	P20128	PANEL, BASE COVER	2
15	395230	ROD, SPACER 7/8 X 29.50	2
16	P20130	PLATE, FEED CONTROL BOX	1
17	P20134	PANEL, TOP COVER	1
18	P96213	ROD, SPACER 7/8 X 28.75	2
19	P20170	HANDLE, ECCENTRIC ADJUSTING	1
20	415030	SHAFT, ECCENTRIC ROLL	1
21	415020	SHAFT, DRIVE ROLL	1
22	P20215	SPACER, ROLL BEARING	2
23	201660	BOLT, HHCS 5/8-11 X 6.0 GR5 ZN	2
24	P20270	AGITATOR ASSY, 20 INCH ROLLER M.	1
25	029450	BOLT, HHCS 1/4-20 X 0.50 GR5 ZN	1
26	P96936	SPRING, COMPRESSION	4
27	P98341	SCREW, SLOT MACH. #10 X 0.50	24
28	P98300	SCREW, AHSS 3/8 X 1.0	4
29	P98408	KEY, FEATHER 0.25 X 0.25 X 3.0	4
30	P98417	PIN, GROOVE 0.25 X 0.50	4
31	031080	BOLT, HHCS 1/2-13 X 1.0 GR5 ZN	2
32	P99000	BEARING, ROLL SHAFT	8
33	P73631	SCRAPER WLDT., 20 INCH DRIVE ROLL	1
34	P99040	BEARING, AGITATOR 0.75 BORE SL12	2
35	P99467	BOLT, HHCS 3/8 X 3.0 FULL THD.	4
36	1070046	SCREW, HH TAP. 5/16-18 X 3/4 SHEET METAL	4
37	022920	WASHER, 5/16 FLAT	4
38	027260	NUT, HEX 3/8-16	8
39	P73612	SCRAPER WLDT., 20 INCH ECC. ROLL	1
40	416850	WRENCH, 20 INCH ROLLERMILL	1
41	014770	BOLT, HHCS 1/2-13 X 1-1/2 GR5 ZN ** NOTE **	8
42	005370	WASHER, LOCK 1/2 ZN ** NOTE **	8
	NOTE:	FIG ITEM #41 AND #42 ARE INCLUDED IN FIG ITEM #3 AND #4	

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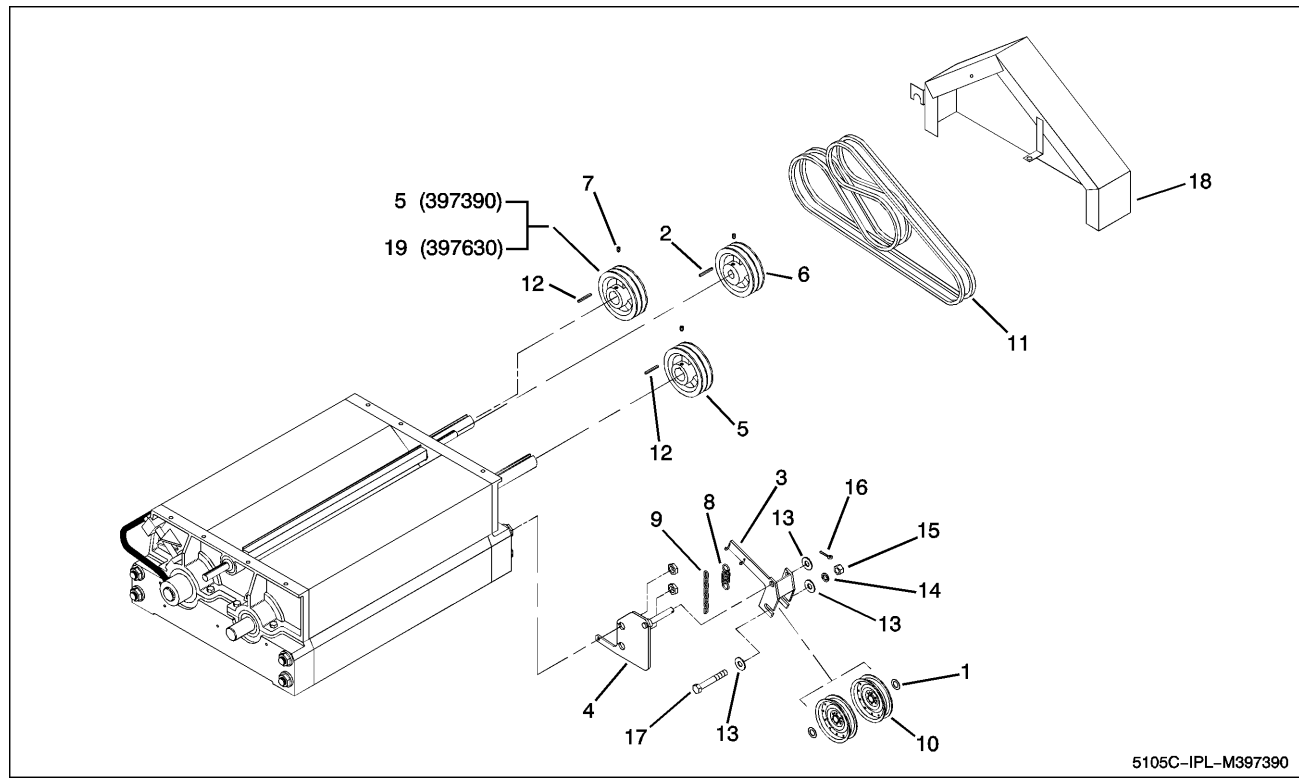
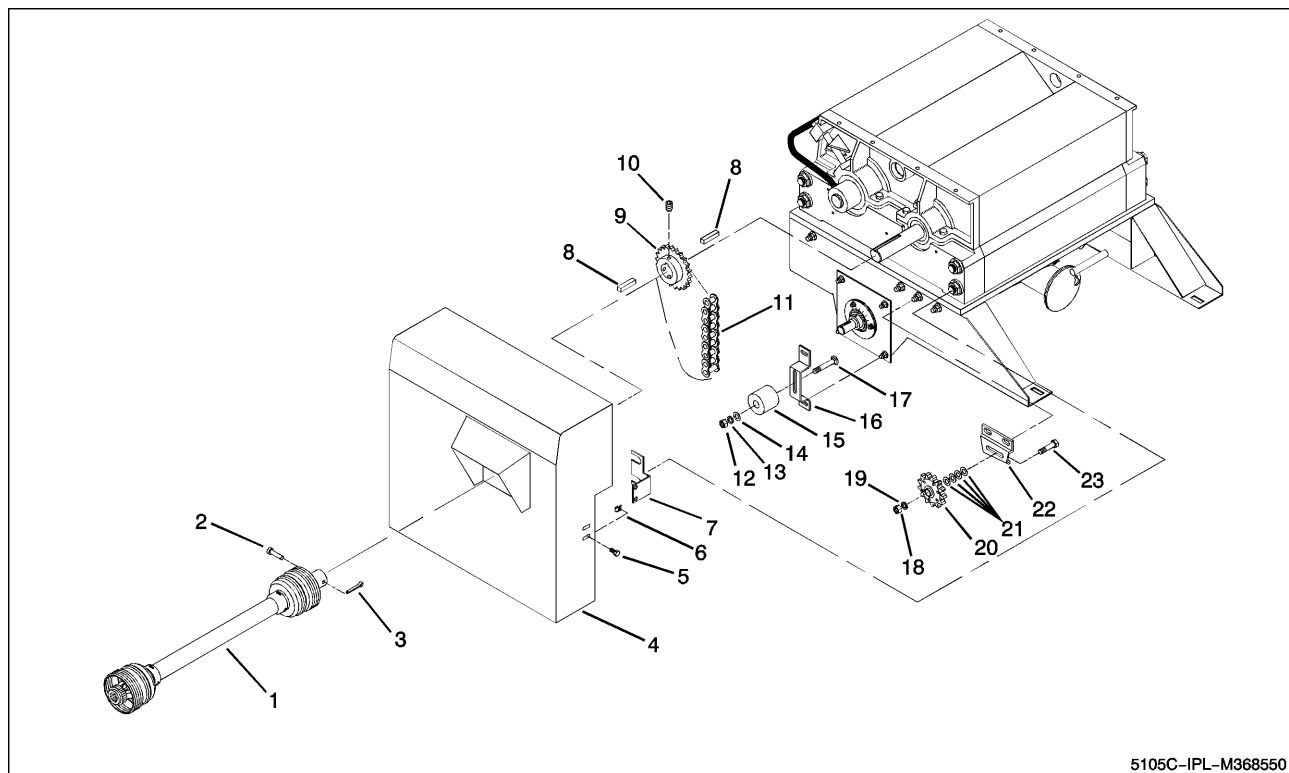
ROLLERMILL BELT DRIVE - 20 INCH

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (397390)	UNITS PER ASSY (397630)
		ROLLERMILL BELT DRIVE - 20 INCH		
	397390 397630	1:1 STANDARD DRIVE 1:1.12 DIFFERENTIAL DRIVE	RF	RF
1	E126120	BUSHING, MACH 0.75 X 1.25 X 18 GA	3	3
2	P10027	KEY SQ. 0.19 X 2.0	1	1
3	P10481	BRACKET WLDT., TIGHTENER	1	1
4	P10486	PIVOT WLDT., TIGHTENER	1	1
5	P20220	PULLEY, ROLL DRIVE	2	1
6	P20320	PULLEY, AGITATOR	1	1
7	P98298	SCREW, AHSS 3/8-16 X 0.50	5	5
8	P98375	SPRING, EXTENSION	1	1
9	P98522	CHAIN, #1 X 8.0 LINKS STRGHT. CL.	1	1
10	P99025	PULLEY, IDLER 0.634B 4.37 OD	2	2
11	P99712	BELT, ROLL DRIVE BB-81	2	2
12	014630	KEY SQ. 0.25 X 2.0	2	2
13	020430	WASHER, FLAT 0.688 X 1.75 X 0.134 ZN	7	7
14	020440	WASHER, LOCK 5/8 INCH ZN	1	1
15	020450	NUT, HEX 5/8-11 GR2 ZN	1	1
16	035850	PIN, COTTER 5/21 X 1.25 ZN	1	1
17	990670	BOLT, HHCS 5/8-11 X 3.75 GR5 ZN	1	1
18	P10730	BELT GUARD, ROLLER MILL	1	1
19	P30881	PULLEY, ROLL SPD. DIFF.	N/A	1

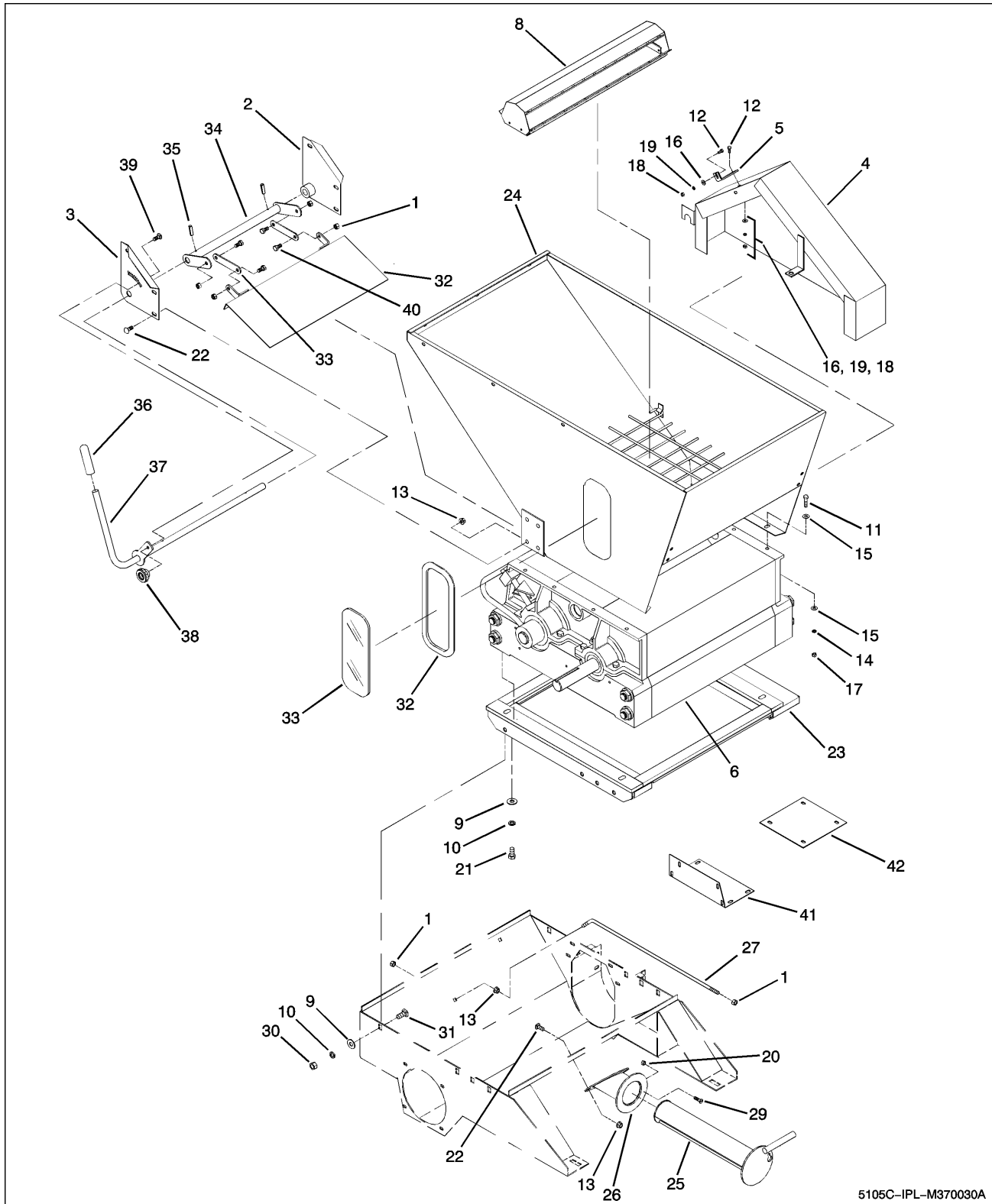
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20 INCH ROLLERMILL DRIVE ASSEMBLY (540 RPM)

5105C-IPL-M368550

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	368550	20 INCH ROLLERMILL DRIVE ASSEMBLY (540 RPM)	RF
1	374140	PTO ASSEMBLY, 1-3/8 X 1-3/8	1
2	036480	PIN, CLEVIS 5/16 X 3.0	1
3	034360	PIN, COTTER 1/8 X 1.0	1
4	379330	SHIELD WLDT.	1
5	042960	BOLT, HHCS 1/4-20 X 1.0	4
6	I404766R1	NUT, TINNEMAN J 1/4-20	4
7	379380	BRACKET, SHIELD MOUNTING	2
8	014630	KEY SQ. 1/4 X 2.0	2
9	P99637	SPROCKET, 60B22 40MM	1
10	010990	SET SCREW, (INCLUDED IN ITEM #9)	N/A
11	040720	CHAIN, RC60 76 PITCHES	1
12	027260	NUT, HEX 3/8-16	1
13	021180	WASHER, LOCK 3/8	1
14	021190	WASHER, FLAT 3/8	1
15	041440	TIGHTENER, CHAIN	1
16	365890	BRACKET, M-T-M IDLER	1
17	117550	BOLT, CRG. 3/8-16 X 2-1/4	1
18	005360	NUT, HEX 1/2-13	1
19	005370	WASHER, LOCK 1/2	1
20	021840	SPROCKET, IDLER 60A15	1
21	005200	WASHER, FLAT 1/2	4
22	362570	BRACKET, IDLER	1
23	J03H1593	BOLT, CRG. 1/2-13 X 2-1/2	1

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20 INCH ROLLERMILL WITH OFFSET HOPPER

20 INCH ROLLERMILL WITH OFFSET HOPPER

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	370030	20 INCH ROLLERMILL WITH OFFSET HOPPER	RF
1	E552044	NUT, LOCK 3/8-16 HEX TOP GA, ZN	2
2	P10148	SCREW WLDT., SET	2
3	P10284	TUBE WLDT., HANDLE	1
4	P10730	GUARD WLDT., BELT	1
5	P10735	BRACKET, BELT GUARD	1
6	P20000	MILL, BASIC 20 INCH ROLLER	1
7	P20286	GATE WLDT., GRAIN	1
8	P82700	MAGNET ASSEMBLY, 20 INCH	1
9	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	12
10	005370	WASHER, LOCK 1/2 INCH ZN	12
11	006690	BOLT, HHCS 3/8-16 X 1.25 GR5 ZN	4
12	012051	BOLT, HHCS 1/4-20 X 0.75 GR5 ZN	2
13	020180	NUT, LOCK 3/8-16 FLG. HEX GR5	5
14	021180	WASHER, LOCK 3/8 INCH	4
15	021190	WASHER, FLAT 0.438 X 1.0 X 0.083	4
16	023260	WASHER, FLAT 0.31 X 0.75 X 16 GA. ZN	2
17	027260	NUT, HEX 3/8-16 GR5 ZN	4
18	027660	NUT, HEX 1/4-20 GR5 ZN	2
19	029440	WASHER, LOCK 1/4 INCH	2
20	023630	NUT, HEX 5/16-18 GR5 ZN	1
21	031080	BOLT, HHCS 1/2-13 X 1.0 GR5 ZN	4
22	032840	BOLT, CRG. 3/8-16 X 0.75 GR5 ZN	4
23	365560	PLATE WLDT., ADAPTER	1
24	371420	HOPPER WLDT., OFFSET 20 INCH	1
25	376630	TROUGH WLDT., SAMPLE	1
26	376830	TUBE WLDT., LOWER PAN	1
27	376870	ROD	1
29	144510	SCREW, RHS 5/16-18 X 0.75	1
30	005360	NUT, HEX 1/2-13 GR5 ZN	8
31	005390	BOLT, CRG. 1/2-13 X 1.0 GR5 ZN	8
32	393670	GATE WLDT., 20 INCH ROLLERMILL	1
33	386240	LINK, LOWER	2
34	386260	TUBE WLDT., LINK	1
35	012560	PIN, EXPANSION 3/16 X 1.0 ZN	2
36	150940	GRIP, ROUND HANDLE	1
37	393680	LEVER WLDT., 20 INCH LIFT	1
38	386130	KNOB, FLUTED 5/16-18	1
39	035520	BOLT, CRG. 5/16-18 X 1-1/4 SSN	1
40	022420	BOLT, HHCS 3/8-16 X 3/4	4
41	365950	CAP, ANGLE	1
42	365900	PLATE, CAP	1

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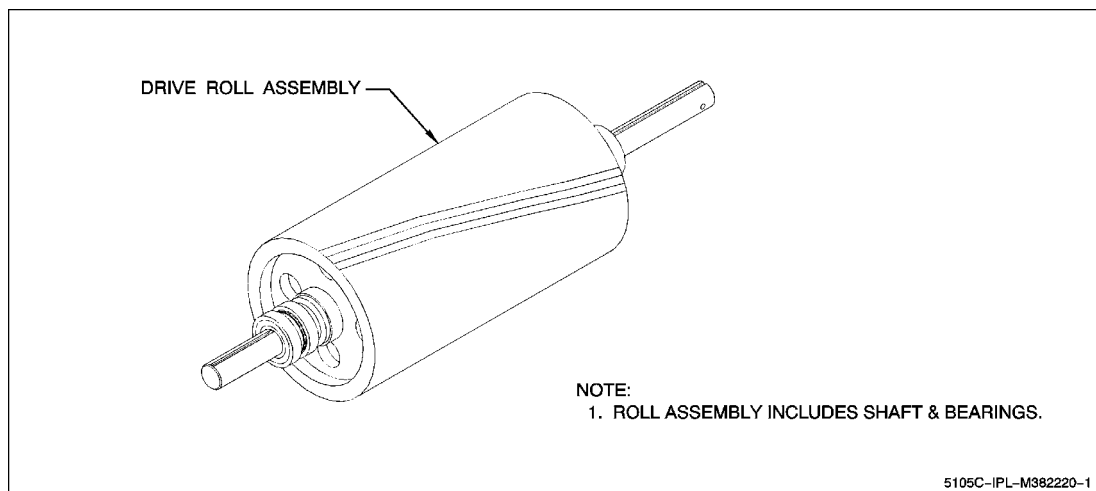
DRIVE ROLL ASSEMBLY

FIG ITEM	NEW PART NUMBER	REGROOVED PART NUMBER	NOMENCLATURE
	382220	382221	ROLL ASSEMBLY, 5-GROOVE FLAT
	396900	396901	ROLL ASSEMBLY, 5-GROOVE SHARP
	382230	382231	ROLL ASSEMBLY, 7-GROOVE FLAT
	396920	396921	ROLL ASSEMBLY, 7-GROOVE SHARP
	382240	382241	ROLL ASSEMBLY, 10-GROOVE FLAT
	388450	388451	ROLL ASSEMBLY, 10-GROOVE SHARP
	388470	388471	ROLL ASSEMBLY, 12-GROOVE SHARP

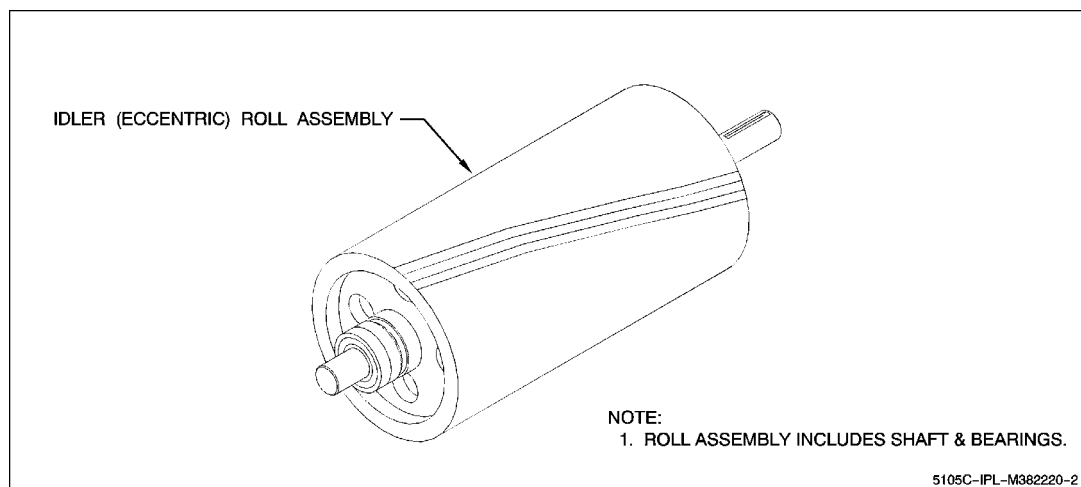
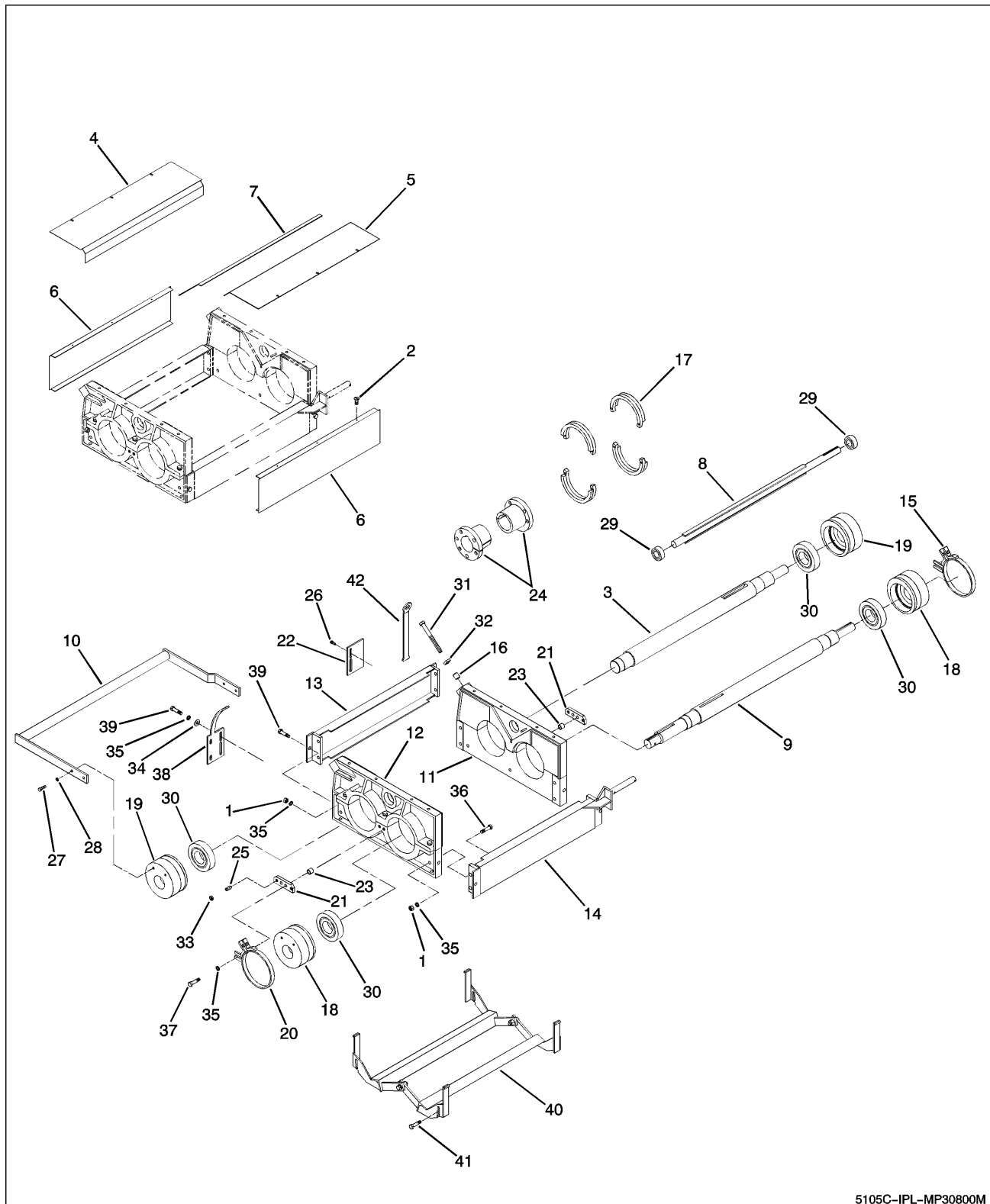
IDLER (ECCENTRIC) ROLL ASSEMBLY

FIG ITEM	NEW PART NUMBER	REGROOVED PART NUMBER	NOMENCLATURE
	382220		DRIVE ROLL ASSEMBLY
	382250	382251	ROLL ASSEMBLY, 5-GROOVE FLAT
	396910	396911	ROLL ASSEMBLY, 5-GROOVE SHARP
	382260	382261	ROLL ASSEMBLY, 7-GROOVE FLAT
	396930	396931	ROLL ASSEMBLY, 7-GROOVE SHARP
	382270	382271	ROLL ASSEMBLY, 10-GROOVE FLAT
	388480	388481	ROLL ASSEMBLY, 10-GROOVE SHARP
	388500	388501	ROLL ASSEMBLY, 12-GROOVE SHARP

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30 INCH ROLLERMILL, BASIC (5165 ONLY)

5105C-IPL-MP30800M

30 INCH ROLLERMILL, BASIC (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	MP30800M	30 INCH ROLLERMILL, BASIC (5165 ONLY)	
1	005360	NUT, HEX 1/2-13	12
2	P98341	SCREW, SPHMS #10-24 X 1/2	22
3	403250	SHAFT, ROLL ECCENTRIC 30 INCH	1
4	P30813	COVER, TOP FRONT CASTING	1
5	P30814	COVER, REAR TOP	1
6	P30815	COVER, FRONT AND REAR CASTING	2
7	P30816	PLATE, FEED CONTROL	1
8	P30820	SHAFT WLDT., AGITATOR	1
9	423940	SHAFT, 30 INCH PTO DRIVE	1
10	P30835	HANDLE WLDT., ECC ADJUSTING	1
11	P36810	SIDE ASSY., LH	1
12	P36811	SIDE ASSY., RH	1
13	400080	CHANNEL WLDT., RH	1
14	400100	CHANNEL WLDT., LH	1
15	386470	BRAKE WLDT., ADJUSTABLE RH	1
16	P36182	PLUG, CLAMP SCREW BRASS	2
17	P36196	WEIGHT WLDT., ROLL	4
18	P36824	HOUSING, DRIVE SIDE ECC.	2
19	P36825	HOUSING, ECCENTRIC	2
20	P36835	BRAKE WLDT., ADJUSTABLE LH	1
21	P36838	PLATE, ROLL ADJUSTER	2
22	P36852	STOP, CORN ROLL	1
23	P74358	BUSHING, SUPPORT SWIVEL	4
24	P97946	BUSHING, R2 X 3.0 SPLIT TAPER	4
25	P98307	SCREW, DOG POINT SS 1/2-13 X 1.0	4
26	P98346	SCREW, HH SELF TAP 5/16 X 5/8	2
27	012260	BOLT, HHCS 3/8-16 X 1.0	4
28	021180	WASHER, LOCK 3/8 INCH	4
29	P99036	BEARING, 1.25 AGITATOR RB20	2
30	P99050	BEARING, SHAFT 6313-2RS	4
31	P99420	BOLT, HHCS 7/8-9 X 6.50 GR5 ZN	2
32	P99530	NUT, SQ. 7/8-9 HEAVY	2
33	114380	NUT, JAM 1/2-13 GR5 ZN	4
34	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	4
35	005370	WASHER, LOCK 1/2 INCH ZN	18
36	1770500	BOLT, HHCS 1/2-13 X 1.75	8
37	013790	BOLT, 1/2-13 X 2.25 GR5 ZN	4
38	388150	STOP, ECCENTRIC ROLL GAUGE	1
39	014770	BOLT, HHCS 1/2-13 X 1.50 GR5 ZN	8
40	P30940	SCRAPER, 30 INCH ROLL	1
41	991200	BOLT, HHCS 1/2-13 X 2.0 GR5 ZN	4
42	416860	WRENCH, ROLLERMILL	4

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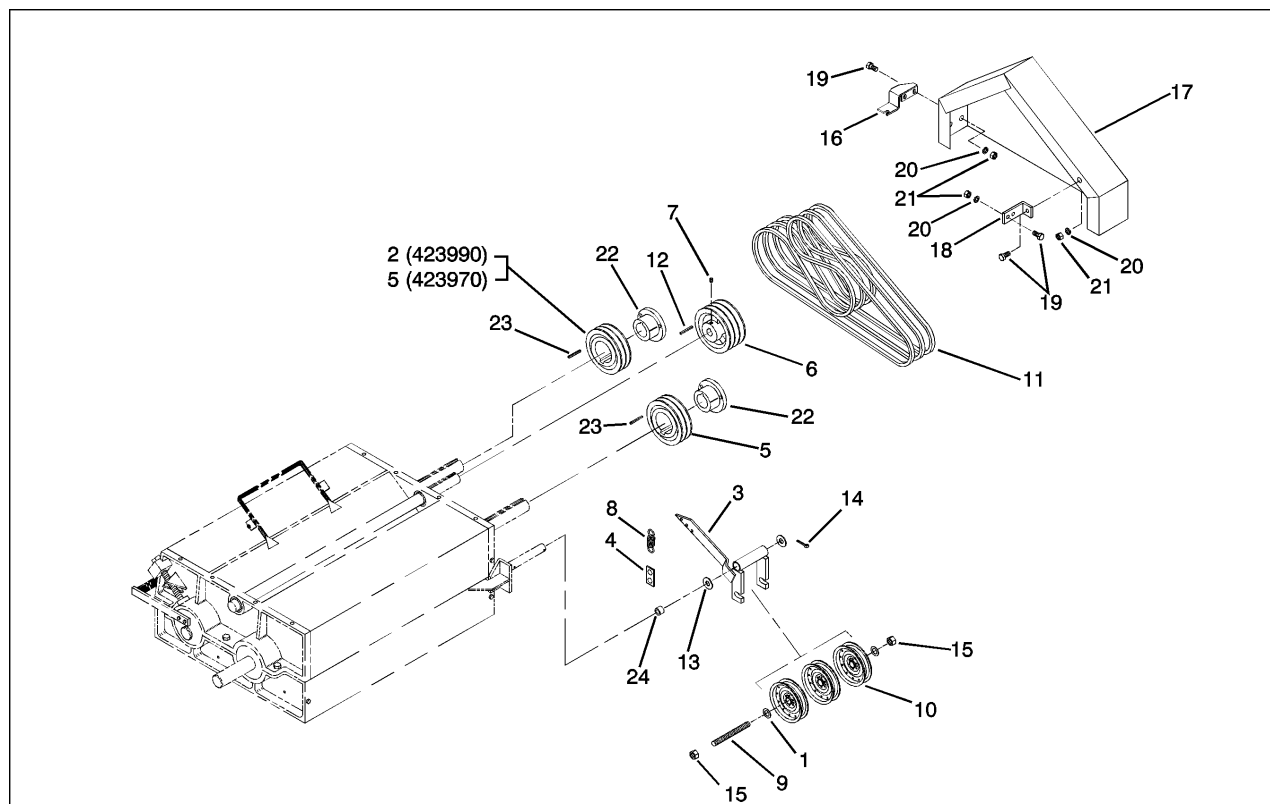
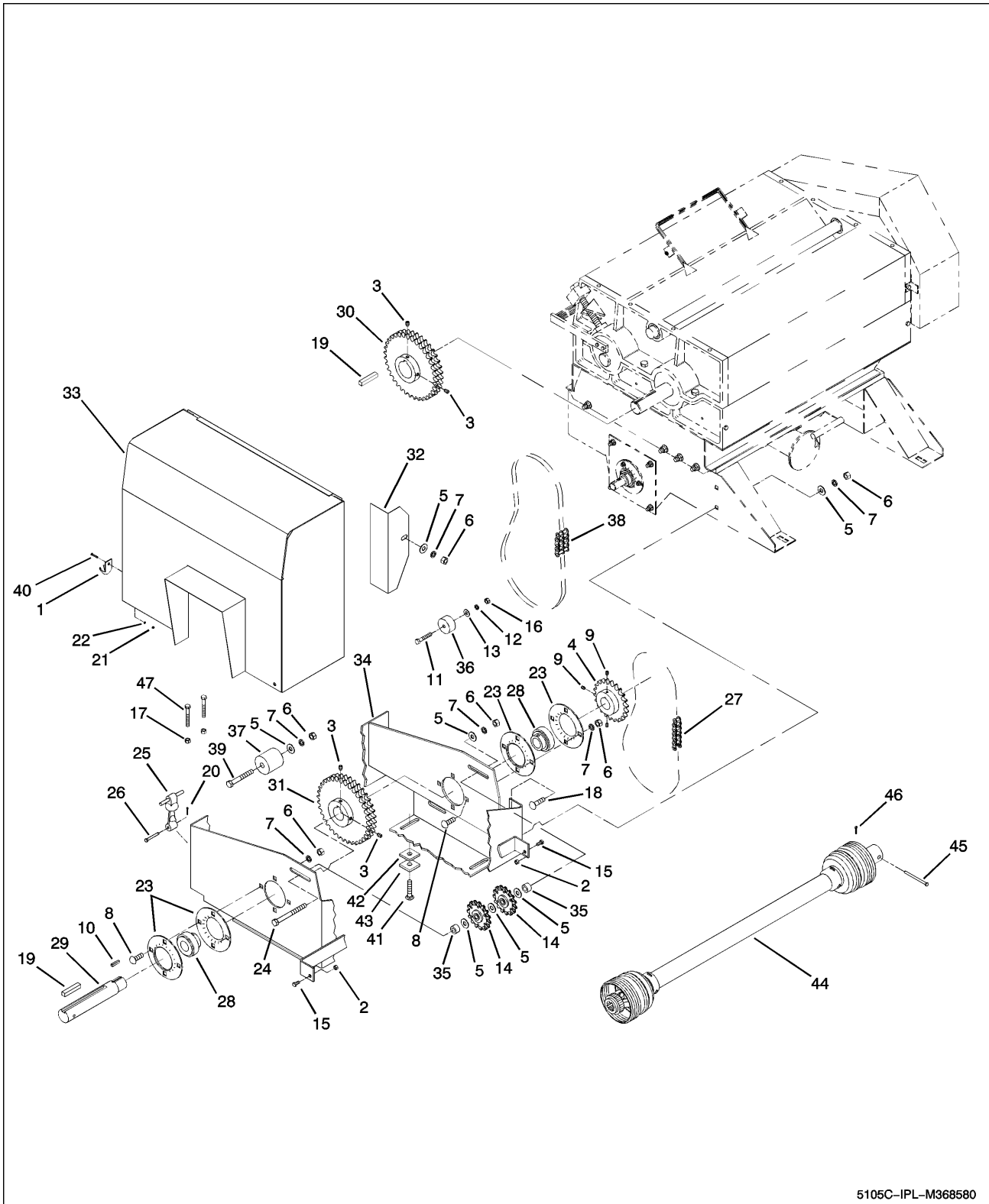
30 INCH ROLLERMILL BELT DRIVE (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (423970)	UNITS PER ASSY (423990)
	423990	30 INCH ROLLERMILL BELT DRIVE (5165 ONLY)		
	423970	1:1 STANDARD DRIVE	RF	
	423990	1:1.12 DIFFERENTIAL DRIVE		RF
1	E126120	BUSHING, MACH 0.75 X 1.25 X 18 GA.	4	4
2	423950	PULLEY, ROLL SPD. DIFF.	N/A	1
3	P30953	TIGHTENER BRACKET	1	1
4	P30957	SPRING, BRACKET	1	1
5	423960	PULLEY, ROLL DRIVE	2	1
6	P30882	PULLY, AGITATOR	1	1
7	P98298	SCREW, AHSS 3/8-16 X 0.50	1	1
8	P98379	SPRING (V198-6)	1	1
9	P36153	SHAFT, FULL THD.	1	1
10	P99025	PULLEY, IDLER 0.634B 4.37 OD.	3	3
11	P99712	BELT, ROLL DRIVE BB-81	3	3
12	014630	KEY SQ. 0.25X 2.0	1	3
13	020430	WASHER, FLAT 0.688 X 1.75 X 0.134 ZN	9	12
14	124340	PIN, COTTER 3/16 X 1-1/2	1	1
15	020450	NUT, HEX 5/8-11 GR2 ZN	2	2
16	388080	MOUNT WLDT., SHIELD	1	1
17	P36731	GUARD WLDT., BELT	1	1
18	P36735	BRACKET, REAR	1	1
19	012140	BOLT, HHCS 5/16-18 X 0.75	5	5
20	023620	WASHER, LOCK 5/16 ZN	5	5
21	023630	NUT, HEX 5/16-18	5	5
22	E126080	BUSHING, SPLIT TAPER Q1 2.0 X 1/4 X 1/2	2	2
23	401320	KEY SQ. 1/2 X 2-1/2	2	2
24	395260	SPACER, IDLER	1	N/A

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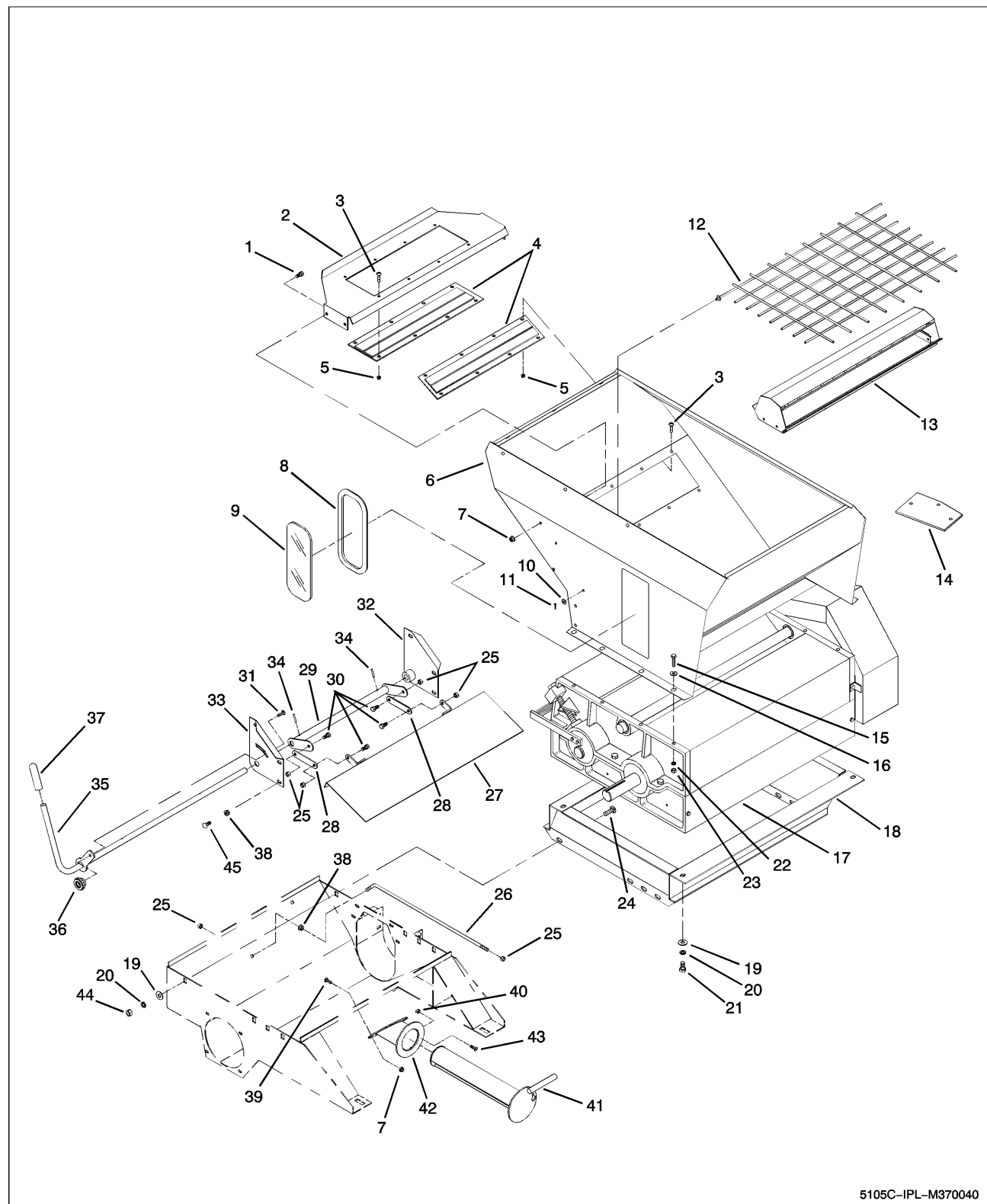
540 RPM 30 INCH ROLLERMILL DRIVE ASSEMBLY (5165 ONLY)

5105C-IPL-M368580

540 RPM 30 INCH ROLLERMILL DRIVE ASSEMBLY (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	368580	540 RPM 30 INCH ROLLERMILL DRIVE ASSEMBLY	RF
1	E104310	BRACKET, HOOK	1
2	E552044	NUT, LOCK 3/8-16 HEX TOP GA	4
3	I125843	SCREW, SET 3/8-16 X 0.38 GR8 ZN	4
4	P99637	SPROCKET, 60B22 40MM, 0.25 KEY WAY	1
5	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	20
6	005360	NUT, HEX 1/2-13 GR5 ZN	16
7	005370	WASHER, LOCK 1/2 INCH ZN	16
8	005390	BOLT, CRG. 1/2-13 X 1.0 GR5 ZN	8
9	010990	SCREW, SET 5/16-18 X 0.31 AHSS	3
10	011530	KEY SQ. 1/4 X 1-1/4	1
11	018150	BOLT, HHCS 3/8-16 X 1.75 GR5 ZN	1
12	021180	WASHER, LOCK 3/8 INCH	1
13	021190	WASHER, FLAT 0.438 X 1.0 X 0.083	1
14	021840	SPROCKET, IDLER 60A15 W/ BRG.	2
15	022420	BOLT, HHCS 3/8-16 X 0.75 GR5 ZN	2
16	027260	NUT, HEX 3/8-16 GR5 ZN	1
17	E552044	NUT, HEX TP LK 3/8-16 GA ZN	2
18	030470	BOLT, CRG. 1/2-13 X 1.25 SSN GR5	2
19	042040	KEY, PAR 1/2 INCH SQ. X 2.75 HTTR	2
20	116820	PIN, COTTER 1/16 X 3/4	1
21	120590	NUT, HEX #10-24 GR2 ZN	2
22	120600	WASHER, LOCK #10	2
23	121950	FLANGETTE., 1.62 AND 1.75 BRG., 4 BLT, RND	4
24	160350	BOLT, HHCS 1/2-13 X 5.0 GR5 ZN	1
25	205650	HOOK, RUBBER	1
26	215800	PIN, CLEVIS 1/4 X 1-5/8 ZN	1
27	270080	CHAIN, RC60-57 PITCHES	1
28	288130	BEARING, 1-3/4 X 85MM SOD, W/ COLLAR	2
29	386400	SHAFT	1
30	386420	SPROCKET, D 60B36 - 1.75	1
31	386440	SPROCKET, D 60B36 - 2.25	1
32	387070	SHIELD, FILLER	1
33	387140	SHIELD, MAIN	1
34	387170	MOUNT WLDT., MAIN DRIVE	1
35	387180	SPACER	2
36	387190	BLOCK, WOOD IDLER - SHORT	1
37	387200	BLOCK, WOOD IDLER - LONG	1
38	387210	CHAIN, RC60-2 64 PITCH	1
39	990840	BOLT, HHCS 1/2-13 X 3.0 GR5 ZN	1
40	991120	SCREW, #10-24 X 0.75 RHDHD, GR2 ZN	2
41	991200	BOLT, CRG. 1/2-13 X 2.0 GR5 ZN	2
42	035780	WASHER, FLAT 0.25 X 1.75 SQ. PLN.	2
43	035790	WASHER, FLAT 0.38 X 1.75 SQ. PLN.	2
44	380690	PTO ASSY, 1-3/8 6B X 1.75 SBC	1
45	036480	PIN, CELIVS 5/16 X 3.0 ZN	1
46	020700	PIN, COTTER 5/32 X 1.0 CHSL PNT	1
47	029930	BOLT, HHCS 3/8-16 X 2.25 GR5 ZN	2

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30 INCH ROLLERMILL ASSEMBLY WITH OFFSET HOPPER (5165 ONLY)

30 INCH ROLLERMILL ASSEMBLY WITH OFFSET HOPPER (5165 ONLY)

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	370040	30 INCH ROLLERMILL ASSEMBLY WITH OFFSET HOPPER	RF
1	012140	BOLT, HHCS 5/16-18 X 3/4	4
2	423280	PANEL, 30 INCH UPPER MTG.	1
3	035230	BOLT, TRUSS HD 1/4-20 X 3/4	16
4	009740	MAGNET	2
5	023270	NUT, HEX FLG. LOCK 1/4-20	16
6	375080	HOPPER WLDT., 30 INCH OFFSET	1
7	020190	NUT, HEX FLG. LOCK 5/16-18	4
8	012020	RUBBER, WINDOW FRAME	1
9	012050	GLASS, WINDOW	1
10	023260	WASHER, FLAT 1/4 STD.	1
11	023090	PIN, COTTER 3/32 X 3/4	1
12	375130	GRATE WLDT., TRASH	1
13	375220	MAGNET ASSY, 30 INCH OFFSET	1
14	380040	COVER, AIR	1
15	006690	BOLT, HHCS 3/8-16 X 1-1/4	8
16	021190	WASHER, FLAT 3/8 STD.	8
17	P30800M	30 INCH ROLLER MIL	1
18	371170	BASE WLDT.	1
19	005200	WASHER, FLAT 1/2 STD.	12
20	005370	WASHER, LOCK 1/2	12
21	031080	BOLT, HHCS 1/2-13 X 1	4
22	021180	WASHER, LOCK 3/8	10
23	027260	NUT, HEX 3/8-16	10
24	030470	BOLT, CRG. 1/2-13 X 1-1/4	8
25	E552044	NUT, HEX TOP LOCK 3/8-16	5
26	376870	ROD, 3/8 X 23.8	1
27	386220	GRATE WLDT., 30 INCH	1
28	386240	LINK, LOWER	2
29	386260	TUBE WLDT., LINK	1
30	022420	BOLT, HHCS 3/8-16 X 3/4	4
31	035520	BOLT, CRG. 5/16-18 X 1-1/4	1
32	386170	HANGER WLDT., REAR	1
33	386160	HANGER WLDT., FRONT	1
34	012560	PIN, EXPANSION 3/16 X 1.0	2
35	386180	LEVER WLDT., LIFT	1
36	386130	KNOB, FLUTED 5/16-18	1
37	150940	GRIP, ROUND HANDLE	1
38	020180	NUT, HEX FLG. LOCK 3/8-16	7
39	012410	BOLT, CRG. 5/16-18 X 3/4	1
40	023630	NUT, HEX 5/16-18	4
41	376630	TROUGH, SAMPLE	1
42	376830	TUBE, WLDT.	1
43	144510	SCREW, RHMS 5/16-18 X 3/4	1
44	005360	NUT, HEX 1/2-13	8
45	032840	BOLT, CRG. 3/8-16 X 3/4	6

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NEW OR REGROOVED 30 INCH ROLLS (5165 ONLY)

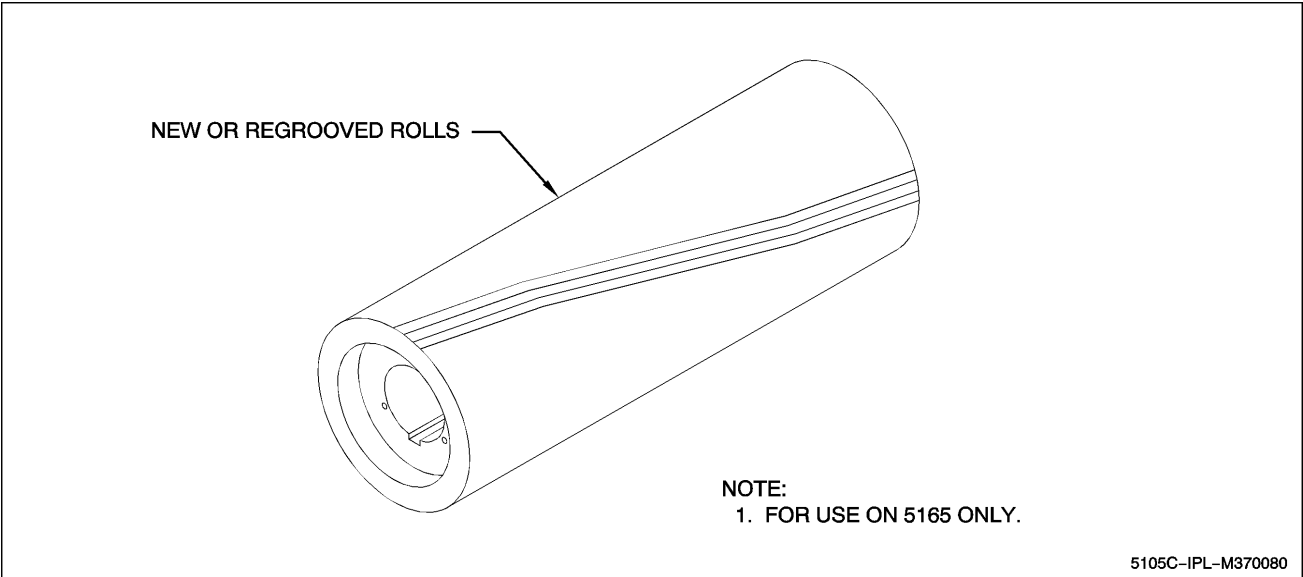


FIG ITEM	NEW PART NUMBER	REGROOVED PART NUMBER	NOMENCLATURE
	370080	370081	ROLL ASSEMBLY, 5-GROOVE FLAT
	396800	396801	ROLL ASSEMBLY, 5-GROOVE SHARP
	370090	370091	ROLL ASSEMBLY, 7-GROOVE FLAT
	396840	396841	ROLL ASSEMBLY, 7-GROOVE SHARP
	370100	370101	ROLL ASSEMBLY, 10-GROOVE FLAT
	390400	390401	ROLL ASSEMBLY, 10-GROOVE SHARP
	389080	386081	ROLL ASSEMBLY, 12-GROOVE SHARP

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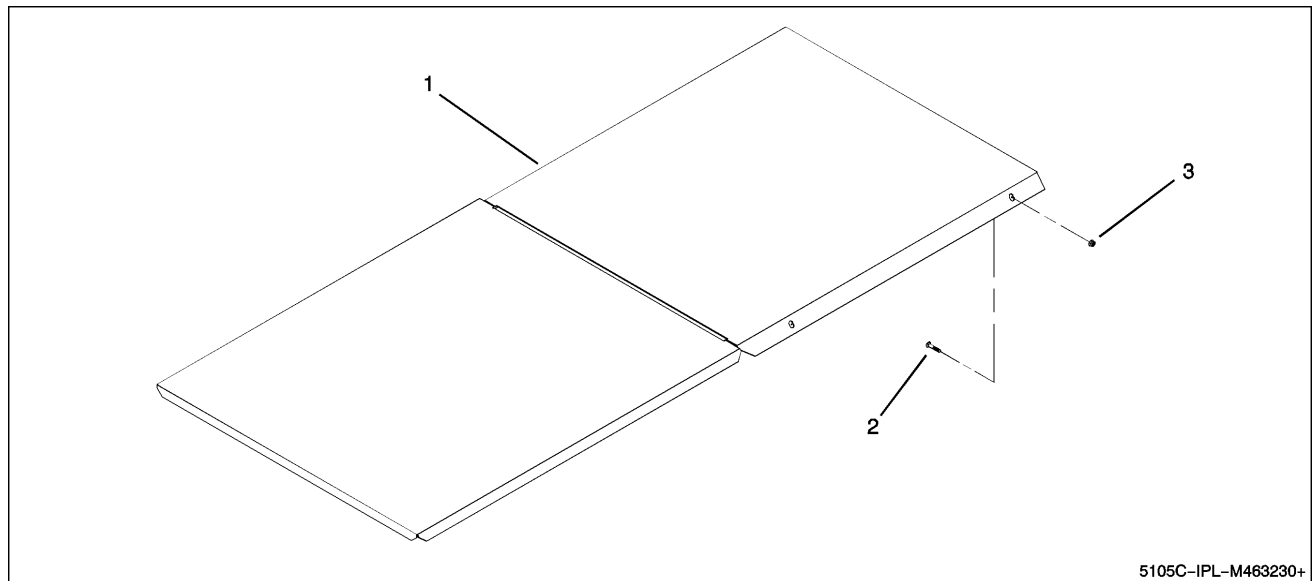
COVER ASSEMBLY FOR OFFSET HOPPER WITHOUT AUGER FEEDER

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (463230)	UNITS PER ASSY (455110)
	463230	COVER ASSEMBLY FOR OFFSET HOPPER WITHOUT AUGER FEEDER	RF	RF
1A	463220	COVER WLDT., W/O AUGER FEEDER	1	N/A
1B	455060	COVER WLDT., W/O AUGER FEEDER	N/A	1
2	035290	BOLT, CRG. 5/16-18 X 0.62 GR2	4	4
3	020190	NUT, LOCK 5/16-18 HEX FLG.	4	4

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AUGER FEEDER ASSEMBLY, ROLLERMILL

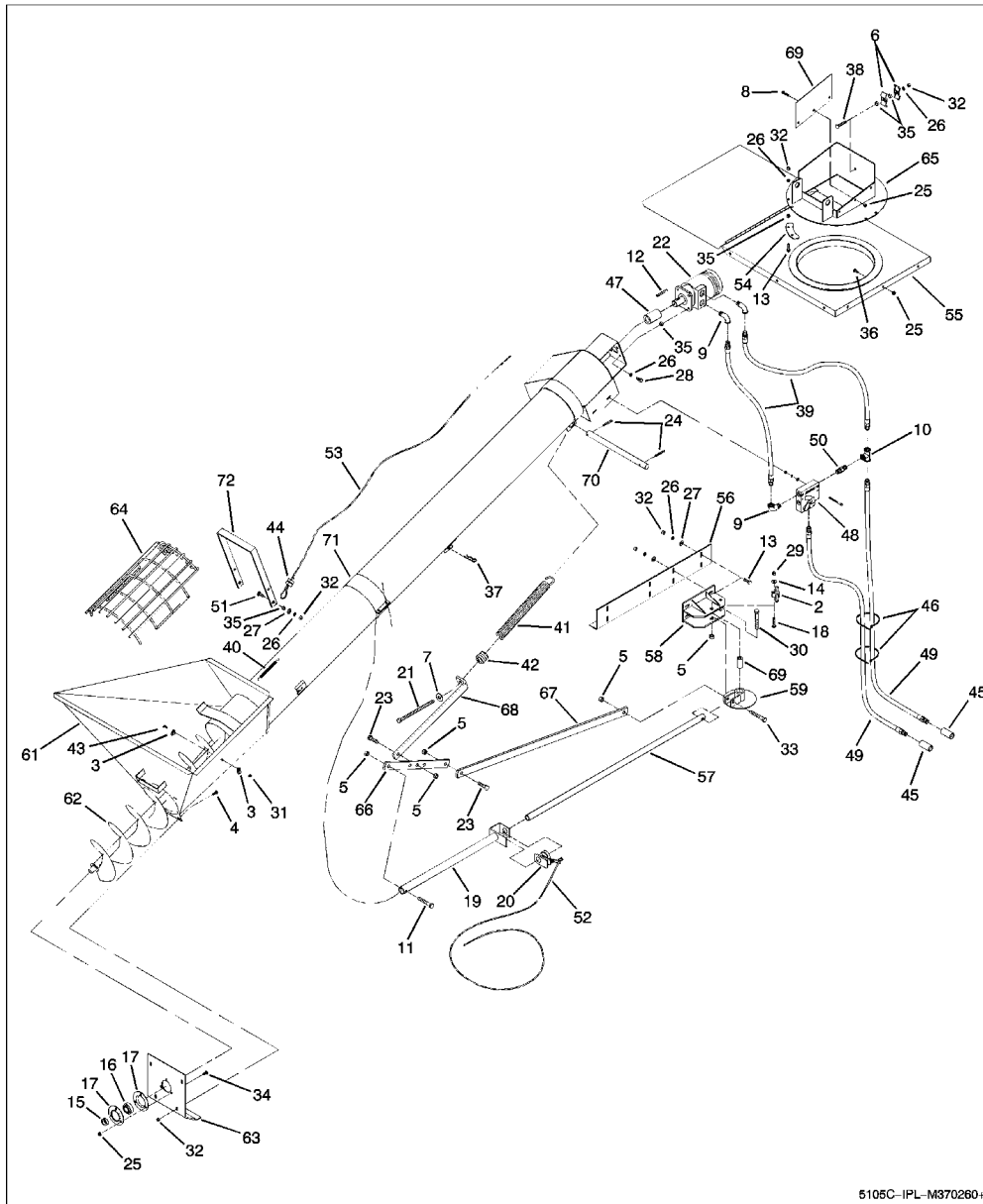
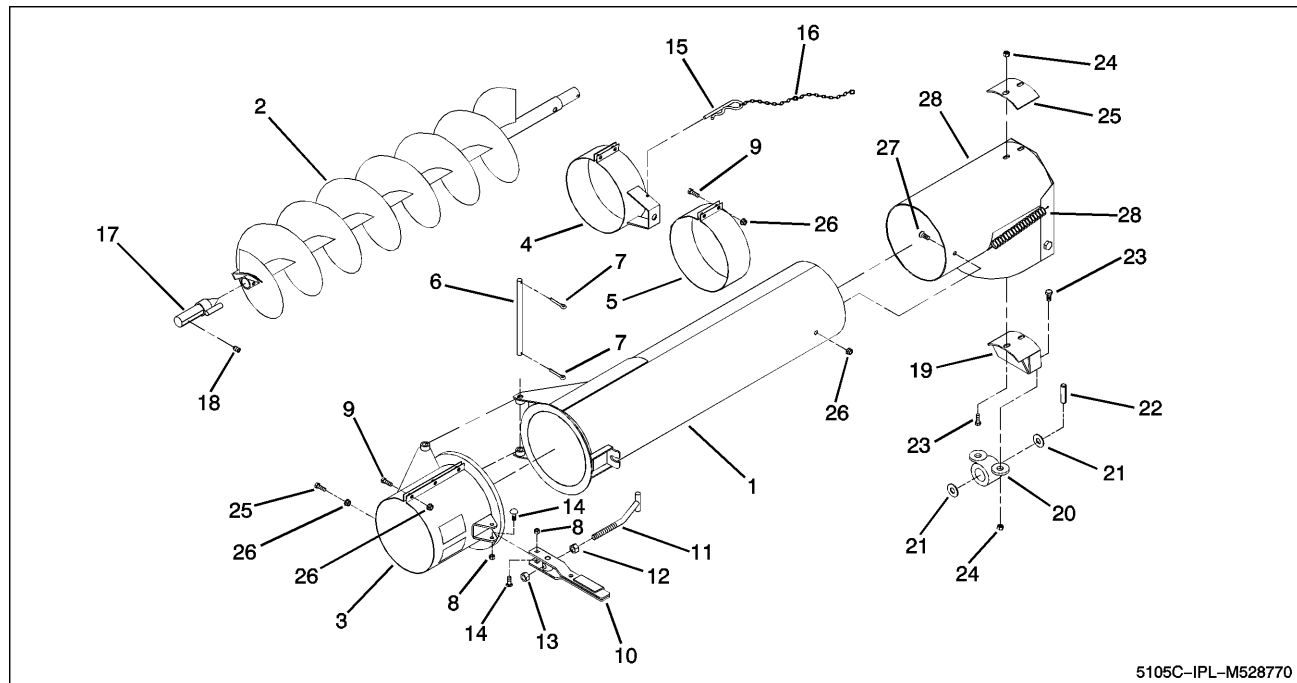


FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (370260) 20 INCH	UNITS PER ASSY (383890) 30 INCH
		AUGER FEEDER ASSEMBLY, ROLLERMILL	RF	RF
1	025670	NUT, LOCK 5/16-18	2	2
2	160560	HANDLE ASSY, BRAKE	1	1
3	E180006	CLIP, WIRE	3	3
4	I14994R1	BOLT, CRG. 5/16-18 X 0.75 SQNK. GR2	4	4
5	I9413967	NUT, HEX LK. 1/2-13 GR5 CP	6	6
6	JN185041	CLAMP, HOSE – SHORT	2	2
7	005200	WASHER, FLAT 0.562 X 1.38 X 0.109 ZN	1	1
8	005900	BOLT, HHCS 5/16-18 X 1.0 GR5 ZN	3	3
9	006240	ELBOW, 1/2 X 90 DEGREE STREET	3	3
10	006320	TEE, 1/2 INCH PIPE ZN	1	1
11	007080	BOLT, HHCS 1/2-13 X 2.5 GR5 ZN	1	1

AUGER FEEDER ASSEMBLY, ROLLERMILL

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (370260) 20 INCH	UNITS PER ASSY (383890) 30 INCH
		AUGER FEEDER ASSEMBLY, ROLLERMILL (CONT.)		
12	011530	KEY, SQ. 1/4 X 1.25	1	1
13	012260	BOLT, HHCS 3/8-16 X 1.0 GR5 ZN	15	15
14	012270	WASHER, 0.406 X 1.75 X 0.14 PLN	1	1
15	012300	COLLAR, 1.0 ECC. LOCK	1	1
16	012310	BEARING, 1.0 ADAPTER, SOD	1	1
17	012330	FLANGETTE, 7/8 X 1.0 BRG., 3-BOLT RND	2	2
18	012420	BOLT, CRG. 3/8-16 X 1.5 GR2 ZN	1	1
19	014130	SUPPORT, PIPE JACK TOP	1	1
20	014140	CLAMP, DRAG FEED ONL	1	1
21	384270	BOLT, HHCS 1/2-13 X 7.0 FULTHD.	1	1
22	014280	MOTOR HYD., 12 CU. IN. DISPL.	1	1
23	014770	BOLT, HHCS 1/2-13 X 1.5 GR5 ZN	2	2
24	018920	PIN, ROLL 1/4 X 1.75 ZN	2	2
25	020190	NUT, LOCK 5/16-18 HEX FLG.	16	16
26	021180	WASHER, LOCK 3/8 INCH	20	20
27	021190	WASHER, FLAT 0.438 X 1.0 X 0.083	12	12
28	022420	BOLT, HHCS 3/8-16 X 0.75 GR5 ZN	4	4
29	023060	NUT, LOCK 3/8-16 DISTHRD.	9	9
30	990840	BOLT, HHCS 1/2-13 X 3.0 GR5 ZN	1	1
31	023270	NUT, HEX FLG. LK., 1/4 INCH	2	2
32	027260	NUT, HEX 3/8-16 GR5 ZN	11	11
33	031580	BOLT, HHCS 1/2-13 X 2.75 GR5 ZN	1	1
34	032970	BOLT, CRG. 5/16-18 X 1.0 GR2 ZN	3	3
35	033460	SPACER, 0.375 ID X 0.281 LG	12	12
36	035290	BOLT, CRG. 5/16-18 X 0.62 GR2 ZN	9	9
37	035830	PIN, HAIR COTTER 3/16 X 3.0	1	1
38	041450	BOLT, CRG 3/8-16 X 2.0 GR5 ZN	1	1
39	046640	HOSE, SINGLE BRAID 1/2 INCH HYD.	2	2
40	100750	SPRING, EXT. 0.438 OD X 5.75 LG	1	1
41	113470	SPRING, 2 INCH DIA. X 14 INCH LG.	1	1
42	113490	NUT, SPRING RETAINING	1	1
43	E096029	BOLT, CRG. 1/4-20 X 3/4 ZN	2	2
44	129260	CABLE CLIP, 1/8 CABLE	2	2
45	133460	ADAPTER, CPLR FM. 1/2-14 NPTF	2	2
46	149670	TIE, NYLON CABLE	6	6
47	160140	COLLAR, SHAFT, ROLL FEED	1	1
48	161510	VALVE ASSY, HYD. FLOW CONTROL	1	1
49	164560	HOSE ASSY, 1/2 X 120 INCH HYDRAULIC	2	2
50	166250	FIT, HYD. NIPPLE 1/2 NPT HEX	1	1
51	170530	BOLT, CRG. 3/8-16 X 1.0 GR5 ZN	10	10
52	211490	ROPE, POLYPROPYLENE 102 INCH LG	1	1
53	214020	ROPE, WIRE ASSY, 124 INCH, MECH. AF.	1	1
54	349470	PLATE, CLAMP	3	3
55A	365680	COVER WLDT., HOPPER 20 INCH	1	N/A
55B	377850	COVER WLDT., HOPPER 30 INCH	N/A	1
56	371050	ANGLE, MOUNT	1	1
57	371060	PIPE, LOWER	1	1
58	371070	SUPPORT WLDT.	1	1
59	371110	PIVOT WLDT.	1	1
60	371130	BUSHING, 1.0 OD. X 0.561 ID X 1.9	1	1
61	371220	HOUSING WLDT., AUGER FEEDER	1	1
62	371260	AUGER WLDT., GRAIN	1	1
63	371320	PANEL, HOPPER BEARING	1	1
64	372240	GUARD WLDT.	1	1
65	372910	CAP WLDT., HOPPER	1	1
66	372970	STRAP, SPRING ADJUSTMENT	1	1
67	372980	STRAP, LOWER	1	1
68	372990	STRAP, SPRING EXTENSION	1	1
69	373000	FLAP, RUBBER GRAIN	1	1
70	373010	ROD, AUGER PIVOT	1	1
71	374100	BAND WLDT., CLAMP	1	1
72	380270	BAR, DECLUTCHER	1	1

FOLDING DISCHARGE AUGER EXTENSION 3 AND 6 FEET

5105C-IPL-M528770

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (528770) 3 FT	UNITS PER ASSY (528780) 6 FT
		FOLDING DISCHARGE AUGER EXTENSION 3 AND 6 FEET		
1A	152150	3 FOOT EXTENSION TUBE	1	N/A
1B	152160	6 FOOT EXTENSION TUBE	N/A	1
2A	528880	AUGER WLDT., TILTED 3 FT EXTENSION	1	N/A
2B	528900	AUGER WLDT., TILTED 6 FT EXTENSION	N/A	1
3	134250	PIVOT WLDT., CLAMP-ON	1	1
	144650	DECAL-AUGER ENGAGEMENT	2	2
4	134240	CLAMP BAND W/ STRAP	1	1
5	134290	CLAMP BAND W/ PIN	1	1
6	144640	PIVOT PIN	1	1
7	034360	COTTER PIN, 1/8 DIA. X 1.0	2	2
8	025670	NUT, HEX LOCK, 5/16 NC.	2	2
9	030030	BOLT, HEX HD, 5/16 NC X 1-1/4	7	7
10	127830	LOCKING HANDLE AND PIVOT ASSY	1	1
11	144270	T-BAR HANDLE	1	1
12	005360	NUT, HEX 1/2 NC	1	1
13	127890	NUT, HEX LOCK, 1/2 NC	1	1
14	012410	BOLT, CARRIAGE, 5/16 NC X 3/4	2	2
15	035830	HAIRPIN, COTTER, 3/16 DIA. X 3.0	1	1
16	143700	CHAIN, 8 INCH LONG	1	1
17	171160	PIVOT DRIVE WLDT.	1	1
18	008780	SET SCREW, SQ. HD 7/16 NC X 3/4	1	1
19	134320	HANGER WLDT., BEARING	1	1
20	134310	BEARING, PILLOW BLOCK, WOOD 1-1/8	1	1
21	020650	WASHER, FLAT 1-1/8 ID	4	4
22	013600	PIN, ROLL 1/4 DIA. X 2.0	1	1
23	022420	BOLT, HEX HD., 3/8 NC X 3/4	4	4
24	020180	NUT, FLANGE LOCK, 3/8 NC	4	4
25	152200	PLATE, BEARING MOUNT	1	1
26	020190	NUT, FLANGE LOCK, 5/16 NC	11	11
27	028230	MACHINE SCREW, TRUSS HD., 5/16 NC X 3/4	4	4
28	152100	HOOD ASSY, DISCHARGE AUGER	1	1
	528770	3 FT. FOLDING DISCHARGE AUGER (NOT INCLUDED)		
	528780	6 FT. FOLDING DISCHARGE AUGER (NOT INCLUDED)		

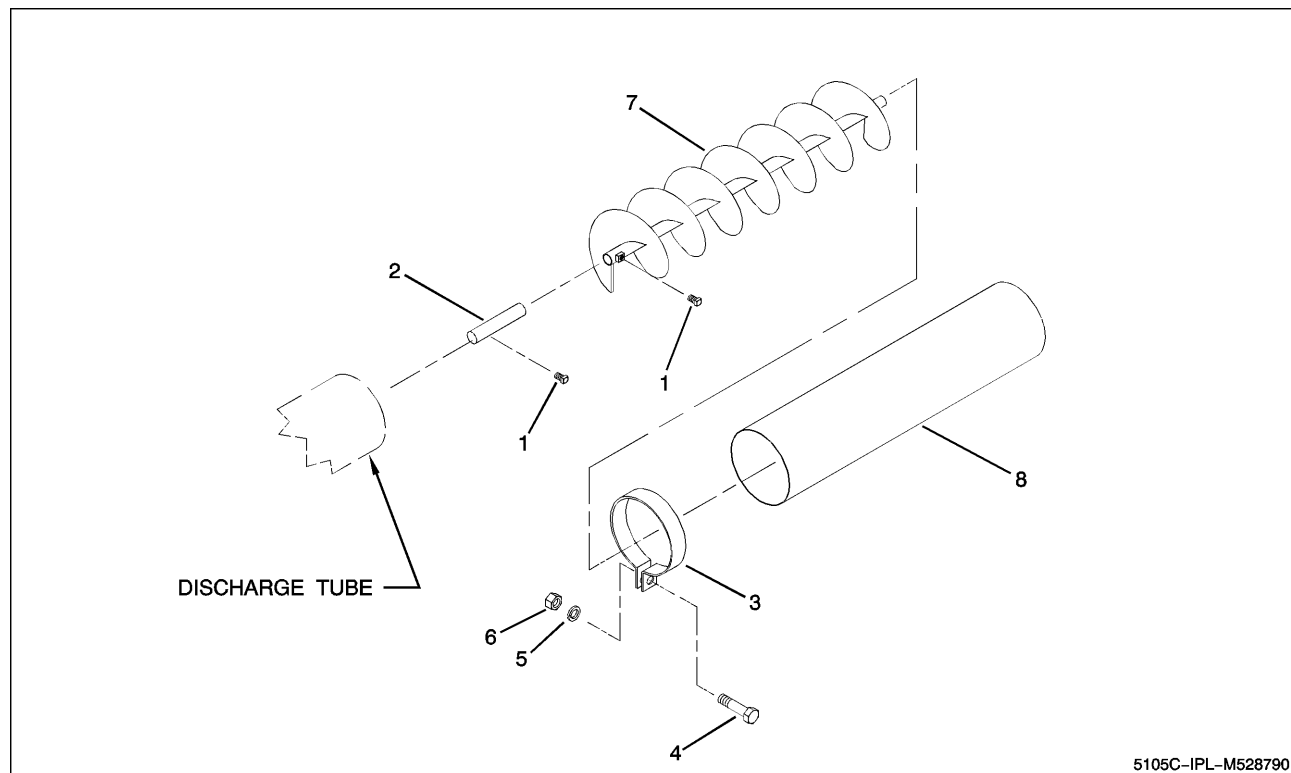
BOLT-ON DISCHARGE AUGER EXTENSION 3 AND 6 FEET

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (528790) 3 FT	UNITS PER ASSY (528800) 6 FT
	528790 528800	BOLT-ON DISCHARGE AUGER EXTENSION 3 AND 6 FEET KIT, 3 FT. BOLT-ON EXTENSION, TILTED FLIGHTING KIT, 6 FT. BOLT-ON EXTENSION, TILTED FLIGHTING	RF	RF
1	008780	SET SCREW, 7/16 X 3/4 SQ. HD		
2	041130	SHAFT, 1.1 X 8.0	1	1
3	041140	BAND, CLAMPING	1	1
4	006690	BOLT, 3/8 X 1-1/4 HHCS		
5	021180	WASHER, 3/8 LOCK		
6	027260	NUT, 3/8 HEX		
7A	528920	AUGER, 3 FT EXTENSION	1	N/A
7B	528940	AUGER, 6 FT EXTENSION	N/A	1
8A	041040	TUBE, 3 FT EXTENSION	1	N/A
8B	041070	TUBE, 6 FT EXTENSION	N/A	1

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HYDRAULIC PLUMBING - LIFT AND SWING WITH HYDRAULIC AUGER FEEDER

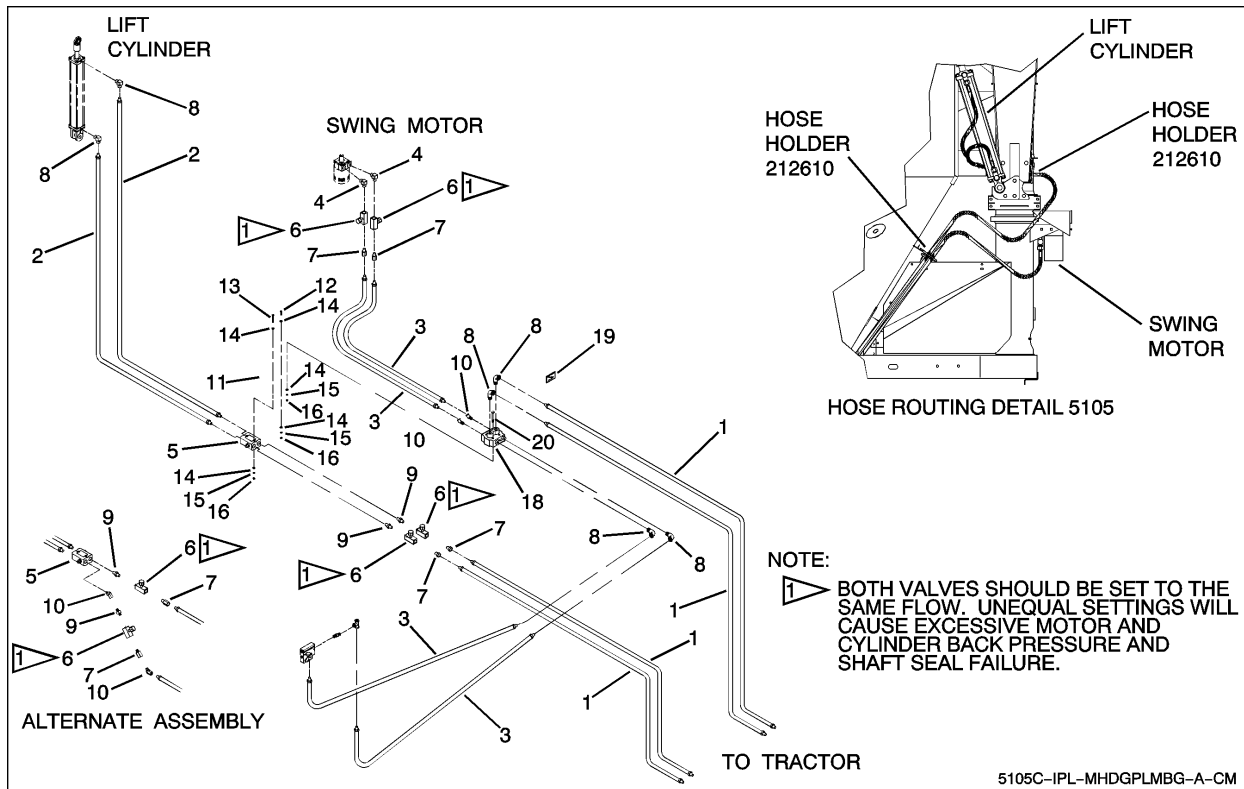


FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
		HYDRAULIC PLUMBING - LIFT AND SWING WITH HYDRAULIC AUGER FEEDER		
1	014250	HOSE, HYDRAULIC 100R2 1/2 INCH X 144 INCH SAE	4	4
2	385790	HOSE, HYDRAULIC 100R2 1/2 INCH X 180 INCH SAE	2	2
3	164560	HOSE, HYDRAULIC 100R2 1/2 INCH X 120 INCH SAE	4	4
4	274460	ELBOW, MALE 1/2 X 3/8 X 90 DEGREE NPTF	2	2
5	163280	VALVE, DUAL RELIEF 800 PSI	1	1
6	212490	VALVE, FLOW CONTROL **NOTE**	4	4
7	502570	BUSHING, REDUCER 1/2 X 3/8	4	4
8	166230	ELBOW, STREET 1/2 X 90 DEGREE NPTF	6	6
9	212480	ADAPTER, 1/2 NPT-3/8 NPT	2	2
10	270620	ADAPTER, 1/2-14 45 DEGREE STEEL STREET ELBOW	4	4
11A	528390	BRACKET, HYD. VALVES	1	N/A
11B	555380	PLATE, VALVE	N/A	1
12	005900	BOLT, HHCS 5/16-18 X 1.0	2	N/A
13	009800	BOLT, HHCS 5/16-18 X 2-1/2	2	2
14	022920	WASHER, FLAT 5/16 STD.	12	8
15	023620	WASHER, LOCK 5/16	6	4
16	023630	NUT, HEX 5/16-18	6	4
17	149670	TIE, 3/16 X 11 CABLE	A/R	A/R
18	163290	VALVE, DOUBLE SELECTOR	1	1
	248060	VALVE KIT, HANDLE		
	277270	VALVE KIT, SEAL		
19	159460	DECAL, VALVE DIRECTION	1	1
20	160230	BOLT, HHCS 5/16-18 X 3.0	2	2
	NOTE:	BOTH VALVES SHOULD BE SET TO THE SAME FLOW. UNEQUAL SETTINGS WILL CAUSE EXCESSIVE MOTOR AND CYLINDER BACK PRESSURE AND SHAFT SEAL FAILURE.		

- = Not Illustrated

HYDRAULIC PLUMBING - LIFT AND SWING WITHOUT HYDRAULIC AUGER FEEDER

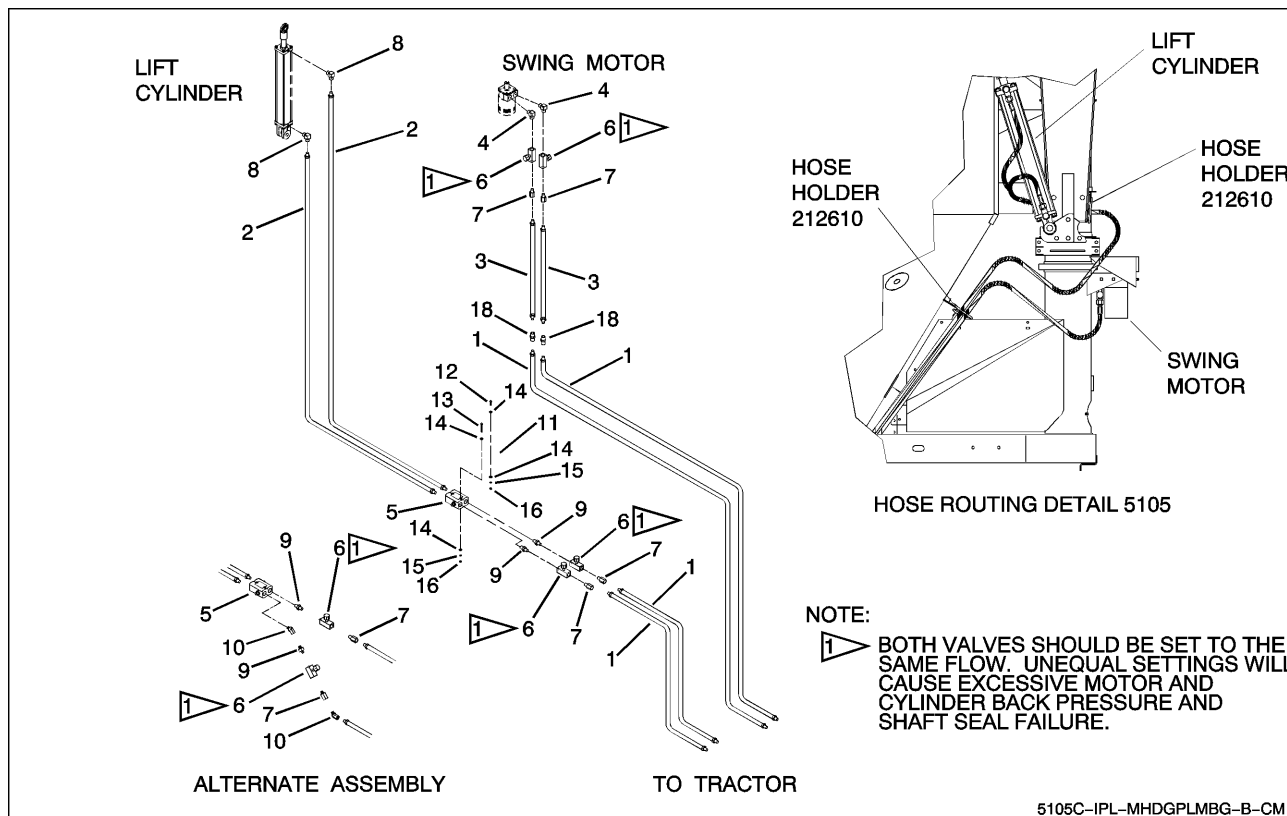


FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
		HYDRAULIC PLUMBING - LIFT AND SWING WITHOUT HYDRAULIC AUGER FEEDER		
1	014250	HOSE, HYDRAULIC 100R2 1/2 INCH X 144 INCH SAE	4	4
2	385790	HOSE, HYDRAULIC 100R2 1/2 INCH X 180 INCH SAE	2	2
3	164560	HOSE, HYDRAULIC 100R2 1/2 INCH X 120 INCH SAE	2	2
4	274460	ELBOW, MALE 1/2 X 3/8 X 90 DEGREE NPTF	3	3
5	163280	VALVE, DUAL RELIEF 800 PSI	1	1
6	212490	VALVE, FLOW CONTROL **NOTE**	4	4
7	502570	BUSHING, REDUCER 1/2 X 3/8	4	4
8	166230	ELBOW, STREET 1/2 X 90 DEGREE NPTF	2	2
9	212480	ADAPTER, 1/2 NPT-3/8 NPT	2	2
10	270620	ADAPTER, 1/2-14 45 DEGREE STEEL STREET ELBOW	2	2
11A	528390	BRACKET, HYD. VALVES	1	N/A
11B	555380	PLATE, VALVE	N/A	1
12	005900	BOLT, HHCS 5/16-18 X 1.0	2	N/A
13	009800	BOLT, HHCS 5/16-18 X 2-1/2	2	2
14	022920	WASHER, FLAT 5/16 STD.	8	4
15	023620	WASHER, LOCK 5/16	4	2
16	023630	NUT, HEX 5/16-18	4	2
17	149670	TIE, 3/16 X 11 CABLE	10	10
18	133460	ADAPTER, COUPLER FM 1/2-14 NPTF	2	2
	NOTE:	BOTH VALVES SHOULD BE SET TO THE SAME FLOW. UNEQUAL SETTINGS WILL CAUSE EXCESSIVE MOTOR AND CYLINDER BACK PRESSURE AND SHAFT SEAL FAILURE.		

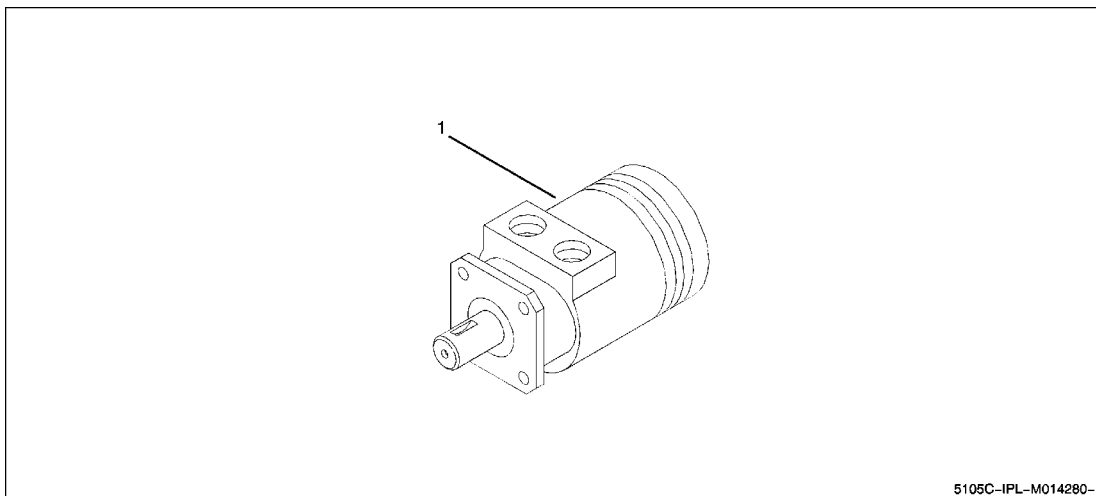
HYDRAULIC MOTOR KITS

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
		HYDRAULIC MOTOR KITS	RF
1A	014280	MOTOR, HYDRAULIC (LIFT AND AUGER FEEDER)	
1B	111090	MOTOR, HYDRAULIC (SWING)	
	243040	SEAL KIT, ROSS TRW (014280 AND 111090) - SERIES MG #SK000090	

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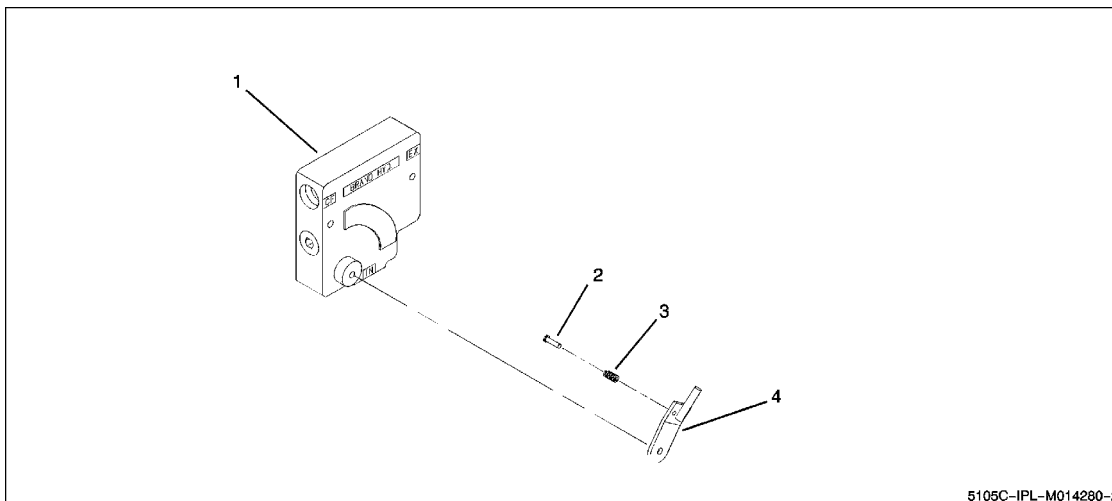
VALVE ASSEMBLY, HYDRAULIC FLOW CONTROL

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
		VALVE ASSEMBLY, HYDRAULIC FLOW CONTROL	RF
1	006301	VALVE, FLOW CONTROL W/O HANDLE	1
2	012172	PIN, CLEVIS 3/8 X 1.0	2
3	042390	SPRING, 0.415 X 0.5 X 1.045 ZN	2
4	161500	LEVER WLDT., HYD., CONTROL	1

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ELECTRONIC SCALE ASSEMBLY

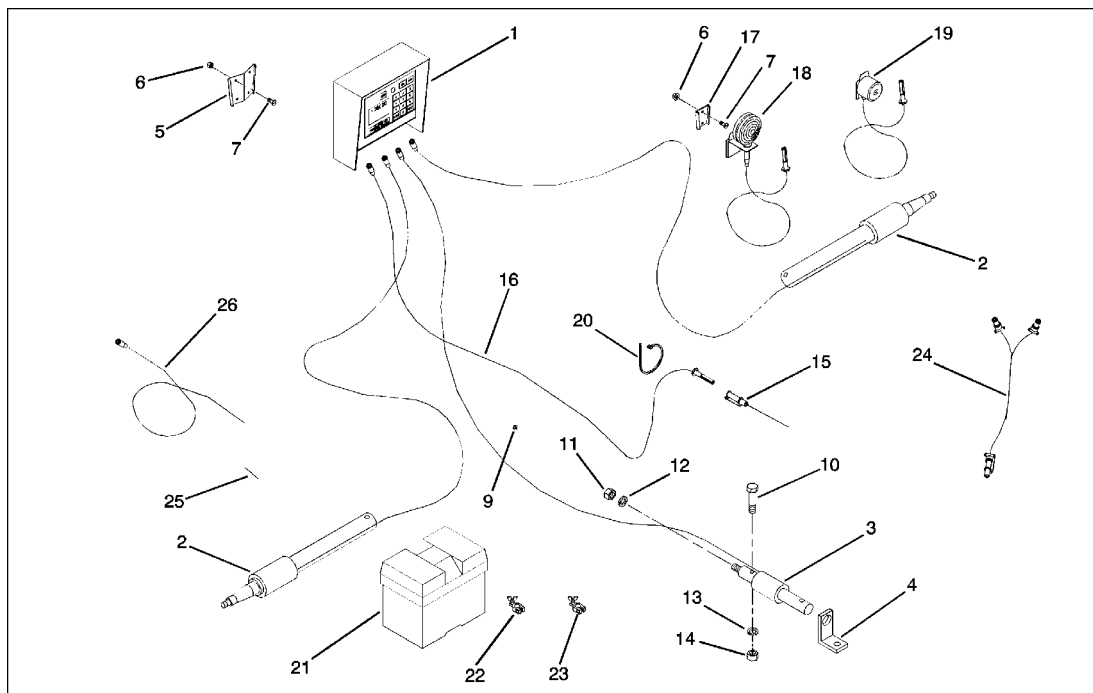
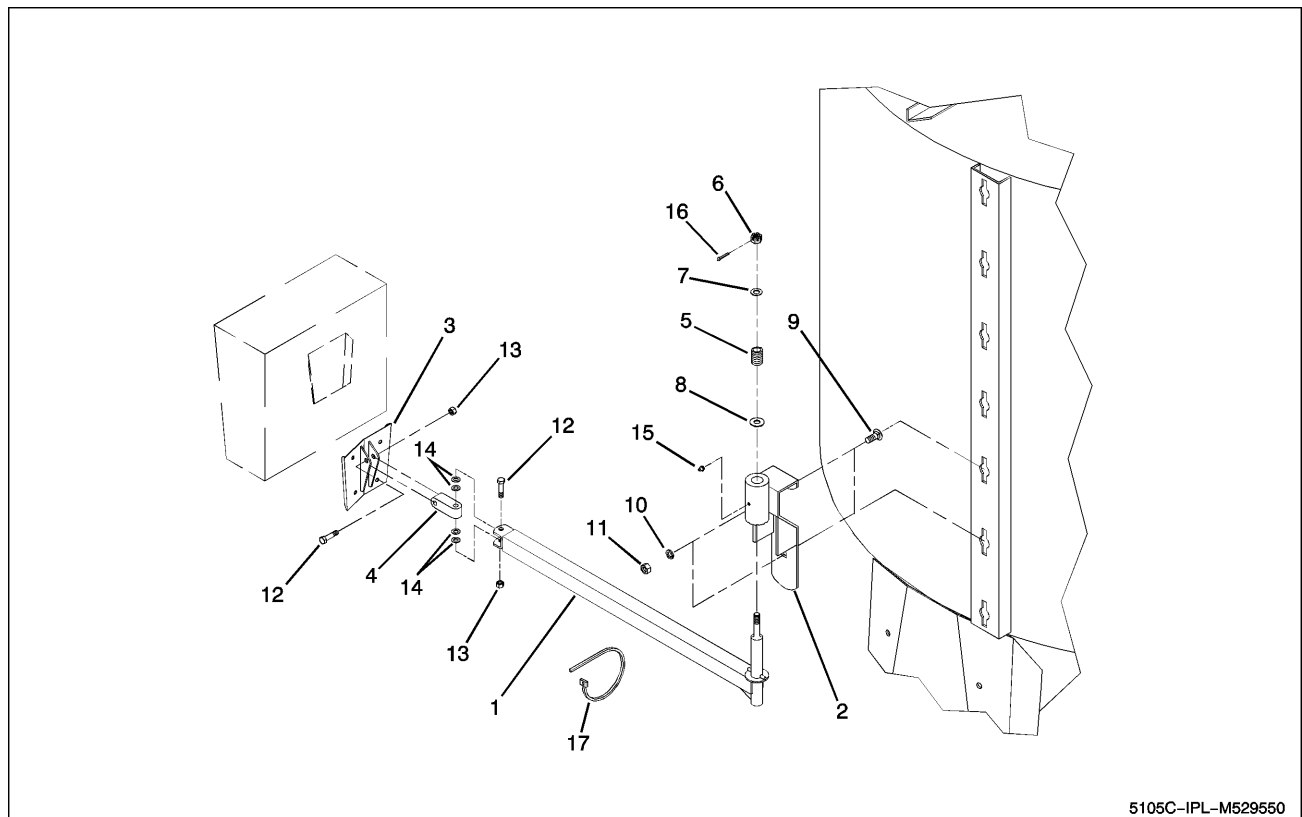


FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
	SCALE-CM	ELECTRONIC SCALE ASSEMBLY	RF	RF
1A	556670	INDICATOR, MODEL 640 - 3 CONNECTOR/5 PIN PLUG	1	1
1B	556680	INDICATOR, MODEL 640XL - 3 CONNECTOR/5 PIN PLUG	1	1
1C	5173101	INDICATOR, MODEL 1040 - 3 CONNECTOR/5 PIN PLUG	1	1
1D	556690	INDICATOR, MODEL 640M - 3 CONNECTOR/5 PIN PLUG	1	1
2A	040581	SPINDLE, WEIGH BAR 5-PIN	2	N/A
2B	040611	SPINDLE, WEIGH BAR 5-PIN	N/A	2
3	219870	HITCH, WEIGH BAR 5-PIN	1	1
4	036740	CLEVIS, HITCH 1-7/8 INCH	1	1
5	036670	BRACKET, INDICATOR	1	1
6	023270	NUT, LOCK 1/4-20 HEX FLANGE		
7	021240	SCREW, TRUSS HEAD 1/4-20 X 1/2		
8	219880	PLUG, 5-PIN PLUG (FOR 4 CONNECTOR INDICATORS)	1	1
9	036890	CLIP, SPRING	3	3
10	990960	BOLT, HHCS 3/4-10 X 4-1/2		
11	147310	NUT, HEX 1-8 GRADE 2		
12	003350	WASHER, LOCK 1 INCH SPLIT		
13	036800	WASHER, LOCK 3/4 INCH SPLIT		
14	036750	NUT, HEX 3/4-10 GRADE 2		
15	036780	CONNECTOR, POWER CORD (FEMALE)		
16	147060	CORD, 23 FT. DIGITAL POWER		
17	039261	BRACKET		
18	111900	LIGHT, WARNING DIGITAL		
19	111880	HORN, DIGITAL WARNING		
20	149670	TIE, NYLON CABLE 3/16 X 11.0		
21	039690	BOX, BATTERY		
22	135440	CLAMP, POSITIVE BATTERY		
23	135450	CLAMP, NEGATIVE BATTERY		
24	199090	ADAPTER, DUAL		
25	1727206	SPLICE KIT, WEIGH BAR CORD		
26	253210	PIGTAIL, 5-PIN WITH B-CONNECTOR W/ 1 FT. CORD		
27	253211	PIGTAIL, 5-PIN WITH B-CONNECTOR W/ 10 FT. CORD		
28	253212	PIGTAIL, 5-PIN WITH B-CONNECTOR W/ 20 FT. CORD		

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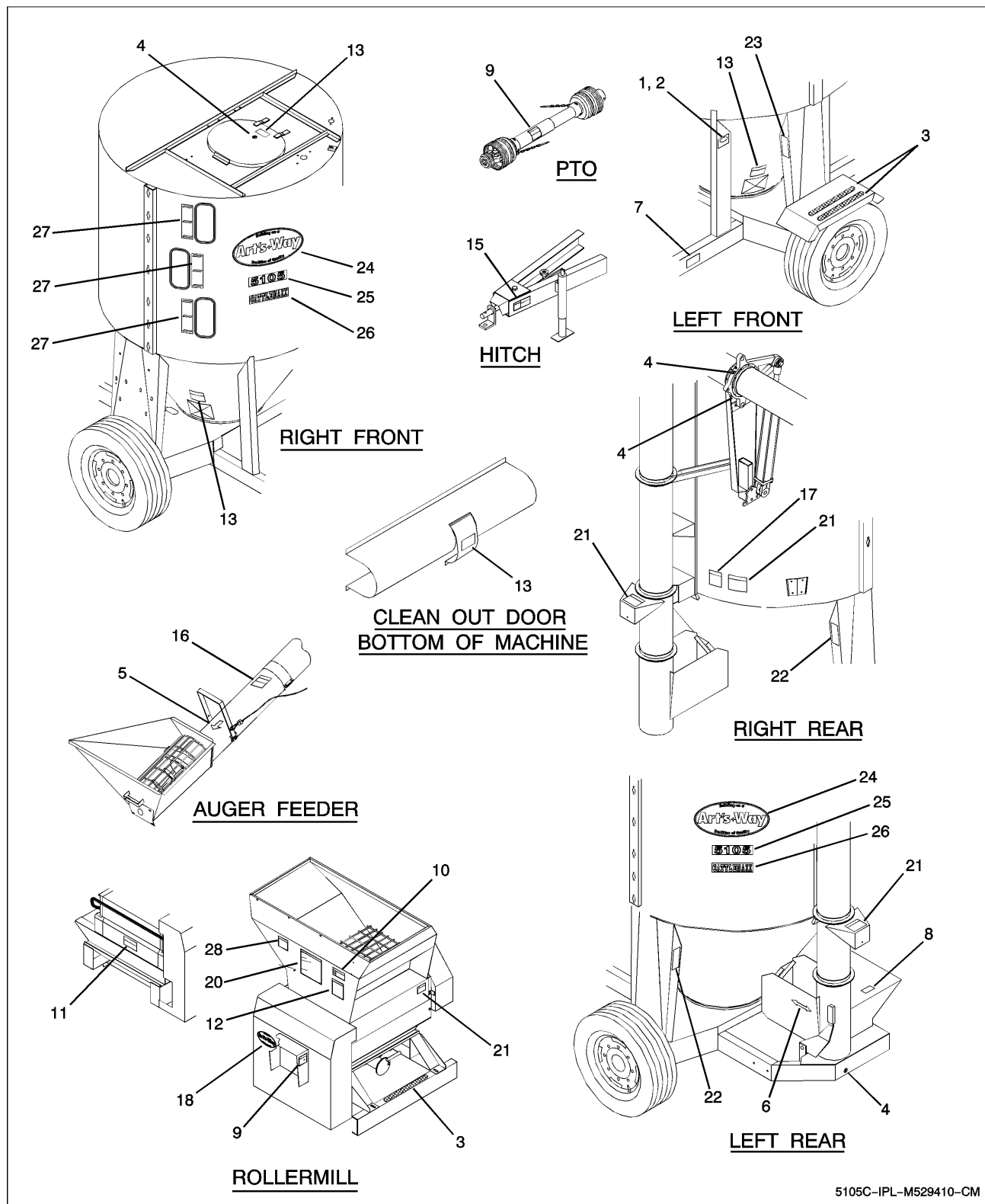
SCALE ARM ASSEMBLY



5105C-IPL-M529550

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	529550	SCALE ARM ASSEMBLY	RF
1	529560	ARM WLDT., SCALE PIVOT	1
2	529600	BRACKET, WLDT., SCALE PIVOT MNT	1
3	529630	BRACKET, WLDT., SCALE MTG.	1
4	400800	BLOCK, PIVOT	1
5	342890	SPRING, COMPRESSION 1.0 X 1.75	1
6	215160	NUT, HEX SLOTTED 1/2-20	1
7	I120396	WASHER, FLAT 1/2 SAE	1
8	005200	WASHER, FLAT 1/2 STD. ZN	1
9	E096046	BOLT, CRG. 1/2-13 X 1-1/2	2
10	005370	WASHER, LOCK 1/2	2
11	005360	NUT, HEX 1/2-13	2
12	037790	BOLT, HHCS 3/8-16 X 2 GR5	2
13	023060	NUT, LOCK 3/8 HEX 2-WAY	2
14	I120394	WASHER, FLAT 3/8 SAE	4
15	115590	ZERK, 1/4-28 TAPER DRIVE	1
16	020700	PIN, COTTER 5/32 X 1.0	1
17	149670	TIE, NYLON CABLE 3/16 X 11.0	6

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PAINT AND DECALS

PAINT AND DECALS

FIG ITEM	PART NUMBER	NOMENCLATURE	UNITS PER ASSY (5105)	UNITS PER ASSY (5165)
		PAINT AND DECALS		
1	355500	TAG, SERIAL NO. FINISHED	1	1
2	204510	NAIL, 1/4 INCH GRIP	4	4
3	117720	TAPE, ANTI-SKID	3	3
4	146670	DECAL, GREASE SYMBOL	4	4
5	158520	DECAL, AUGER FEEDER STOP	1	1
6	158530	DECAL, START-STOP AUGER	1	1
7	159460	DECAL, VALVE DIRECTION	1	1
8	212350	DECAL, SUPPLEMENT INSTRUCTIONS	1	1
9	268860	DECAL, DANGER ROTATING DRIVE LINE	1	1
10	P99897	DECAL, WARNING ROLLS, BELTS	1	1
11	P99846	DECAL, ADJUSTING FEED FLOW	1	1
12	368040	DECAL, CAUTION SAFETY INSTRUCTIONS	1	1
13	377280	DECAL, CAUTION DO NOT OPEN	4	4
14	383320	DECAL, ATTENTION FOREIGN MATERIAL	1	1
15	383970	DECAL, CAUTION HITCH INSTRUCTIONS	1	1
16	383990	DECAL, DANGER AUGER FEEDER	1	1
17	384000	DECAL, DANGER ELECTROCUTION HAZARD	1	1
18	519500	DECAL, ART'S-WAY LOGO	1	1
19	384030	DECAL, DANGER 565 RPM PTO	1	1
20	417250	DECAL, ROLLERMILL OPERATION	1	1
21	467450	DECAL, MOVING PART HAZARD	3	3
22	476450	REFLECTOR, RED	2	2
23	476460	REFLECTOR, AMBER	1	1
24	519480	DECAL, ART'S-WAY LOGO 11.5 X 20	2	2
25A	560210	DECAL, 5105 GRINDER MIXER	2	N/A
-25B	529380	DECAL, 5165 GRINDER MIXER	N/A	2
26	529390	DECAL, CATTLEMAXX	2	2
27	529400	DECAL, TANK WINDOW DASH	3	3
28	383320	DECAL, ATTENTION FOREIGN MATERIAL	1	1

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