



Pixall[®] **Even Feeder**

Parts & Operator's Manual

For machines with serial numbers 715870-XXXXXX and 715880-XXXXXX

LIMITED WARRANTY

Oxbo® International Corporation warrants its new machines to be free from defects in material and workmanship, under normal use and service, for a period of one (1) year from date of delivery to the original purchaser, or five hundred (500) hours of operation whichever occurs first.

Upon satisfactory claim, we will, within a reasonable time, at our option replace or repair defective parts free of charge. Charges for transportation, customs duties or taxes where applicable, installation, correcting defects or making additions will not be allowed, nor will we accept products returned for credit unless the return or correction is authorized by us in writing.

Warranty claims will not be honored, if, in the Company's opinion, such claim was caused by improper use, improper adjustment or failure to properly maintain the machine.

THE REMEDY FOR ANY BREACH OF WARRANTY AND THE ONLY REMEDY FOR THE COMPANY'S LIABILITY OF ANY KIND, INCLUDING LIABILITY FOR NEGLIGENCE, WITH RESPECT TO ANY MACHINE, SHALL IN NO EVENT INCLUDE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED.

THE OWNER ASSUMES FULL RESPONSIBILITY FOR ANY DAMAGES, INJURIES, ETC. WHICH MAY RESULT IF THE EQUIPMENT IS USED FOR ANYTHING OTHER THAN THE HARVESTING OPERATION IT IS SPECIFICALLY DESIGNED TO DO.

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oxbo

EVEN FEEDER

Parts & Operator's Manual

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All information in this manual is based upon the latest product information available at the time of publication and is subject to change without notice. Each manual is reviewed periodically and revised to include changes in later editions.

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Pixall® Even Feeder

The Pixall Even Feeder is used to convey beans onto the Pixall Vibratory Sorting Table (VST) or any other conveying system of similar height.

The Pixall Even Feeder produces a smooth even flow of product. This helps prevent plugging of equipment down line as well as speeds up hand sorting the crop.

This manual is intended to familiarize those involved with the installation, operation, maintenance and repair of the Even Feeder. Your Even Feeder will perform best if the maintenance and adjustments outlined in this manual are followed as specified. We recommend that the machine operator become familiar with this and all other operator's manuals which apply to the particular application of your Even Feeder.

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Safety

RECOGNIZE SAFETY INFORMATION

This is a safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



UNDERSTAND SIGNAL WORDS AND COLORS

Safety signs consist of a combination of pictorials, words and colors. Three signal words and three colors indicate the degree of hazard present in the area of the machine where the sign is displayed.

DANGER in white letters on a red background indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING in black letters on an orange background indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury such as when guards are removed.



CAUTION in black letters on a yellow background indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



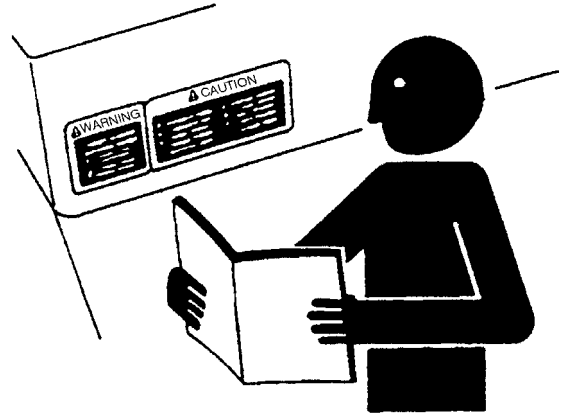
The pictorials on each sign show the likely consequence of human interaction with the hazard.

FOLLOW SAFETY INSTRUCTIONS

The warnings on these safety signs are for your personal safety and the safety of those working around you. **OBSERVE THESE WARNINGS!** If the signs become worn or illegible, replace them with new safety signs. Order them by part number from your local dealer.

REPLACE SAFETY SIGNS

Replace missing or damaged safety signs. See the machine operator's manual for correct safety sign placement.



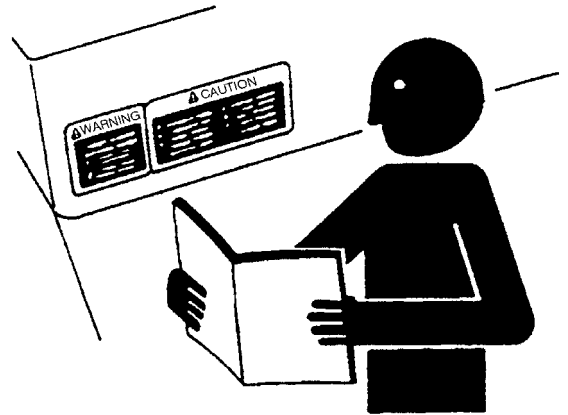
FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your dealer.

Learn how to operate the equipment and how to use controls properly. Do not let anyone operate without instruction.

Keep your equipment in proper working condition. Unauthorized modifications to the equipment may impair the function and/or safety and affect equipment life.

If you do not understand any part of this manual and need assistance, contact your dealer.



READ OPERATOR'S MANUAL

Read your operator's manual thoroughly to learn how to operate the machine and how to use controls properly. Do not allow anyone to operate this machine without instruction.

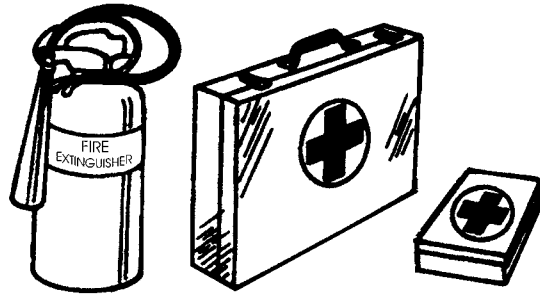


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust engine while it is running. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow engine to cool.

Securely support any engine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on engine.



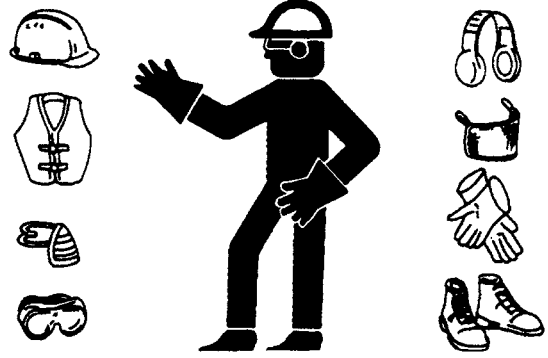
WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing.

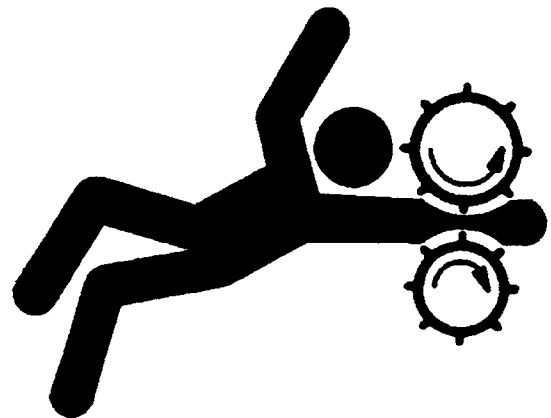
Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



SERVICE EQUIPMENT SAFELY

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



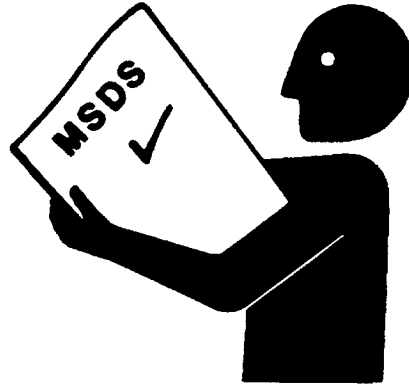
HANDLE CHEMICAL PRODUCTS SAFELY

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with this equipment include such items as lubricants, coolants, paints, and adhesives.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow procedures and use recommended equipment.

(See your Oxbo dealer for MSDS's on chemical products used with Oxbo equipment.)



DISPOSE OF WASTE PROPERLY

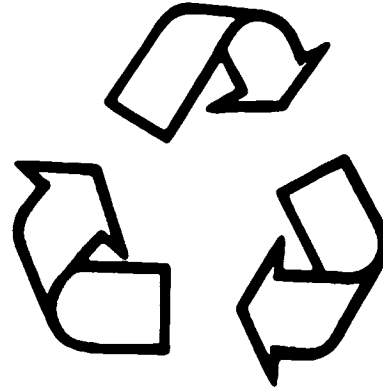
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with agricultural equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your dealer.



REMOVE PAINT BEFORE WELDING OR HEATING

Avoid potentially toxic fumes or dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 101 mm (4in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use chlorinated solvent in areas where welding will take place.

Repaint only after the weld area has cooled.

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

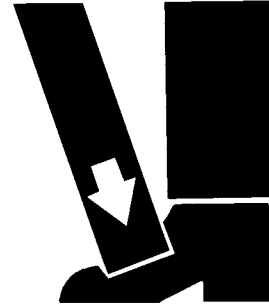
Dispose of paint and solvent properly.



USE PROPER LIFTING EQUIPMENT

Lifting heavy components incorrectly can cause severe injury or machine damage.

Follow recommended procedure for removal and installation of components in the manual.



USE PROPER TOOLS

Use tools appropriate to the work. Makeshift tools and procedures can create safety hazards.

Use power tools only to loosen threaded parts and fasteners.

For loosening and tightening hardware, use the correct size tools. **DO NOT** use U.S. measurement tools on metric fasteners or metric tools on U.S. measurement fasteners. Avoid bodily injury caused by slipping wrenches.

Use only service parts meeting Oxbo specifications.



PLEASE NOTE:

In order to take the photographs required for this manual some of the shields and guards were removed. Oxbo International Corporation does not recommend operating this equipment with any shields and guards removed. Make sure all shields and guards are securely fastened in place before operating this equipment.

Safety Sign Locations - Domestic

CAUTION		CUIDADO
Read Operator's Manual before operating this machine or any attachments mounted on it. If you do not have the Operator's Manual please contact:		Lea el MANUAL DEL OPERADOR antes de operar la máquina oñ acer cualquier trabajo en ella. Si usted no tiene su Manual de Operador, por favor contacte a:
7275 Batavia-Byron Road Byron, NY U.S.A.	OXBO International Corporation 270 Great Bay Lyndon Road Lyndon, WA U.S.A.	100 Bean Street Clear Lake, WI U.S.A. 90122

1 90122

	WARNING
	Rotating belts and pulleys Can cause severe personal injury or death Stay clear of belts and pulleys when engine is running Shut off engine before servicing belts or pulleys
	3000-0189

2 3000-0189

	DANGER
	Shield open or missing Will cause severe personal injury or death Do not work in this area when engine is running Replace all shields before operating harvester
	3000-0222

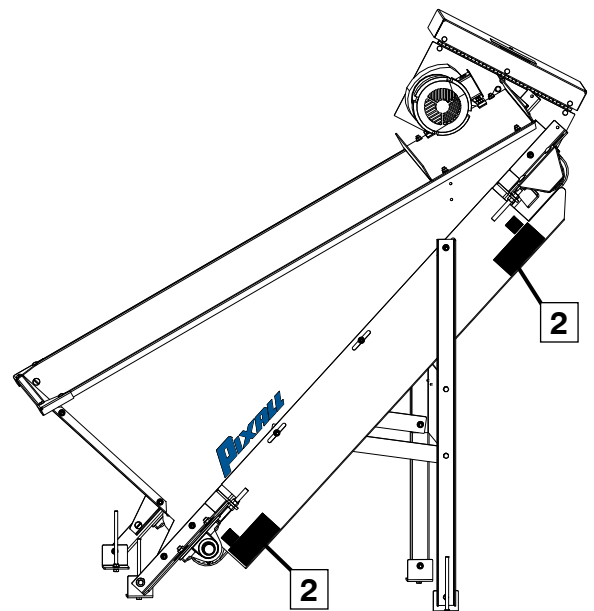
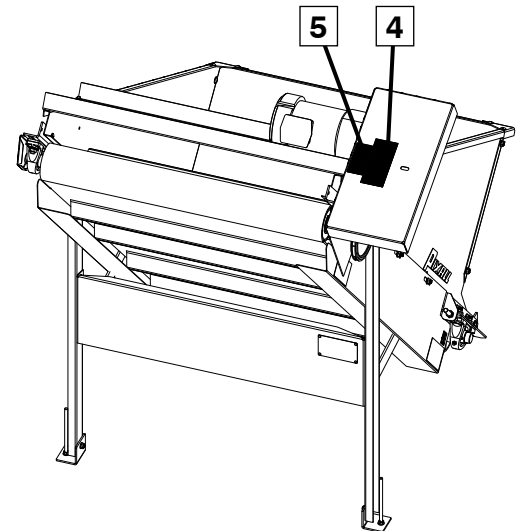
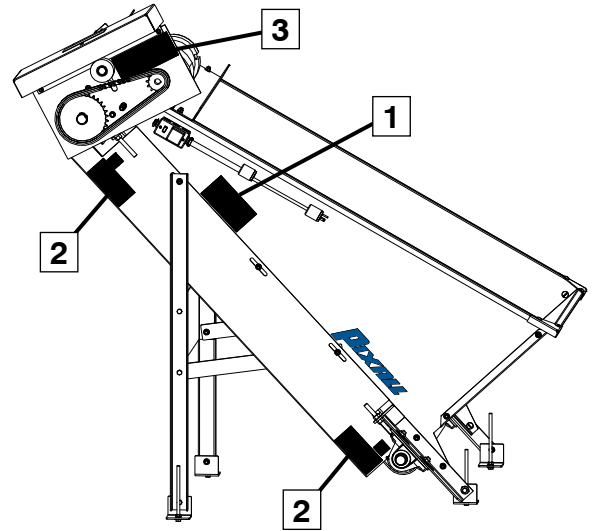
3 3000-0222

	WARNING
	Rotating chains and sprockets Can cause severe personal injury or death Do not service sprockets or chains when engine is running Shut off engine before servicing sprockets or chains
	3000-0188

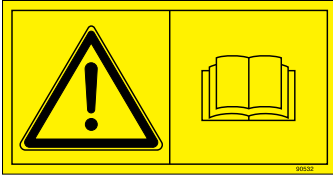
4 3000-0188

CAUTION
SHIELDS ARE FOR YOUR PROTECTION. KEEP THEM IN PLACE.
#3000-0160

5 3000-0160

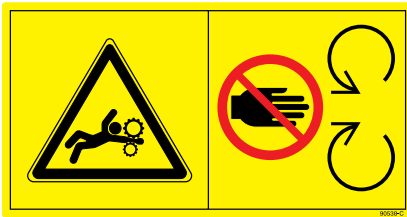


Safety Sign Locations - Europe



Carefully read operator's manual before handling the machine. Observe instructions and safety rules when operating.

1 90532



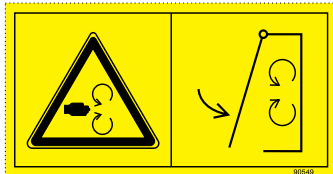
Stay clear of rotating machine parts.

2 90538



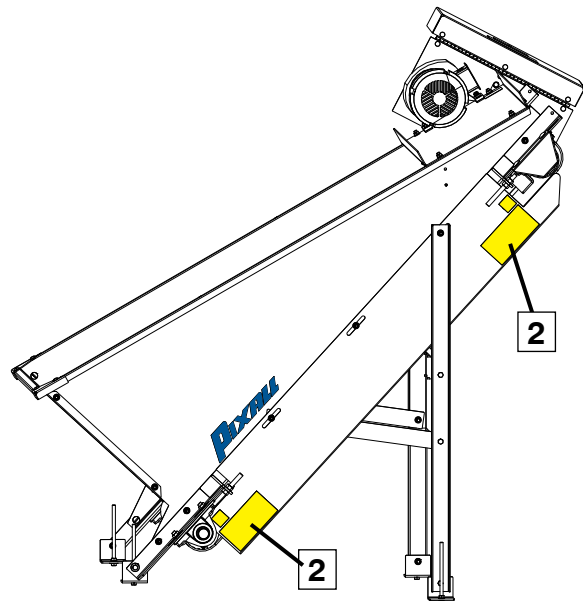
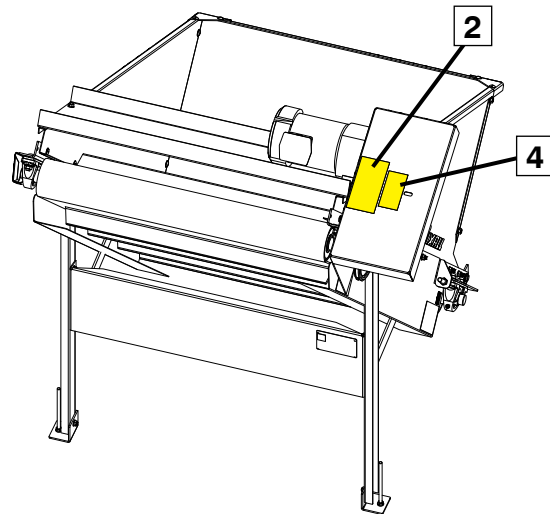
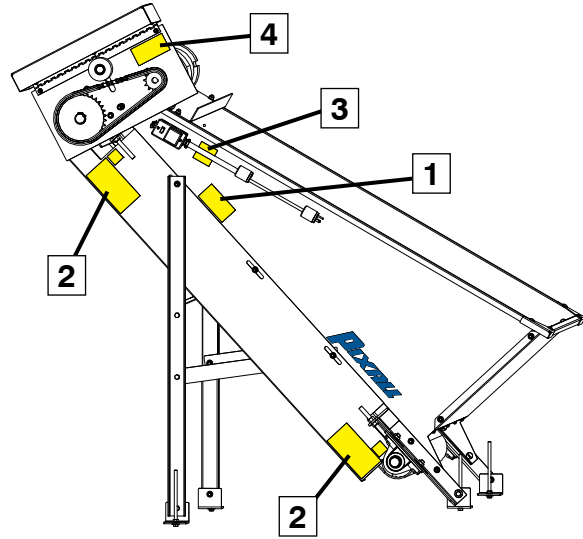
Electrical voltage

3 92767



Close shields and guards prior to operating machine.

4 90549



Setup

The Even Feeder conveyor is powered by an electric motor and is protected by a 15 amp fuse (A).

ELECTRICAL CONNECTION

1. Remove tie wrap (B) from electrical cord.
2. Connect plug (C) to a 110 volt electrical outlet.

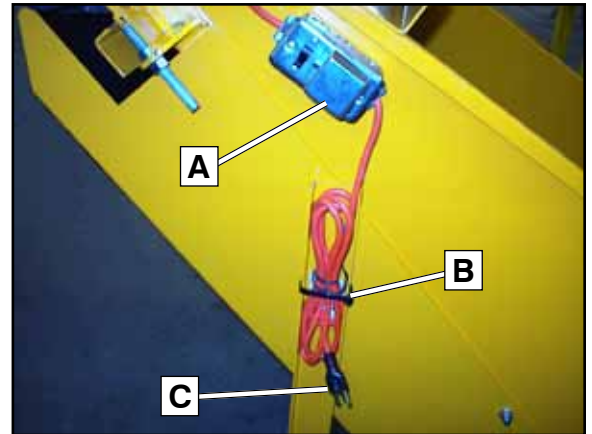


WARNING: DO NOT HANDLE POWER CORD WHEN YOU ARE WET OR STANDING IN WATER. FAILURE TO COMPLY COULD CAUSE SERIOUS INJURY OR DEATH FROM ELECTROCUTION.



CAUTION: BEFORE PLUGGING POWER CABLE INTO AN ELECTRICAL OUTLET, MAKE SURE POWER SWITCH IS TURNED OFF. FAILURE TO COMPLY MAY CAUSE SERIOUS INJURY.

IMPORTANT: AVOID RUNNING POWER CORD IN AREAS WERE IT COULD CONTACT MOVING PARTS OR PEOPLE. DAMAGE TO THE CORD COULD CAUSE DAMAGE TO THE ELECTRICAL SYSTEM OR A FIRE.



Settings & Adjustments

DRIVE CHAIN TENSION

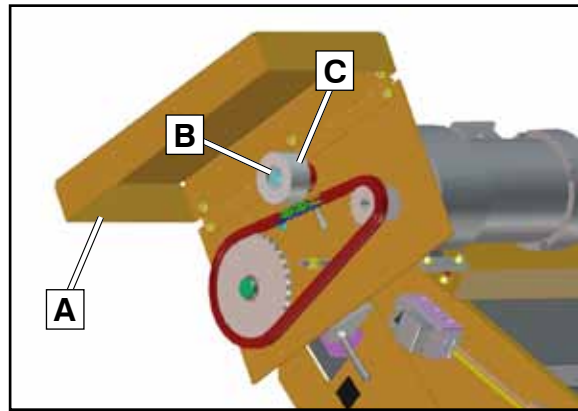
The drive chain drive utilizes an automatic chain tensioner (A). No adjustment is necessary. However, if the unit is replaced, an initial adjustment will be necessary.



WARNING: NEVER MAKE ANY ADJUSTMENTS WHILE MACHINE IS RUNNING. ALWAYS TURN OFF MACHINE AND UNPLUG ELECTRICAL CORD PRIOR TO MAKING ADJUSTMENTS. FAILURE TO COMPLY COULD CAUSE SERIOUS INJURY OR DEATH.

Adjust the automatic tensioner as follows:

1. Open shield (A).
2. Loosen adjustment bolt (B).
3. Slide adjuster (C) down until slack is removed from chain.
4. Tighten adjusting bolt.
5. Close the shield.



ROLLER CHAIN MAINTENANCE

Roller chain drives require proper and timely maintenance to deliver satisfactory performance and service life.

MAINTENANCE

A roller chain drive should be inspected after the *first* 50 hours of operation. Following this, an inspection should be conducted every 100 hours of operation.

Chains must be maintained as follows:

Drive Interferences:

Inspect for any evidence of interferences between drive components and other parts of the equipment. If any is found, correct it immediately.

Damaged Chain and Sprockets:

Inspect chains for cracked, broken, deformed, or corroded parts and for tight joints or turned pins. If any are found, locate and correct the cause of the damage and replace the entire chain.

Inspect sprockets for chipped, broken, or deformed teeth. If they are found, locate and correct the cause of the damage and replace the sprocket.

Replace worn chains and sprockets. A chain is considered worn when it reaches 3% elongation.

Make sure sprockets are properly aligned.

Chain Tension:

Make sure chain is properly tensioned. For a check of chain tension, turn one sprocket to tighten the lower strand of the chain, then measure the sag of the upper strand. The sag, measured at the midpoint of the upper strand, should be approximately two to three percent of the length of the tangent to the sprockets.

Safety Shields:

Make sure shields and guards are in good condition and properly installed.

CONVEYOR SPEED

The Even Feeder has only one speed setting. To increase product flow, simply elevate the hopper of the Even Feeder until desired product flow is achieved.

Elevating the hopper lessens the angle of climb, therefore, more product will remain on each cleat.



WARNING: KEEP AWAY FROM MOVING PARTS WHEN ELEVATING THE HOPPER. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY OR DEATH.

CONVEYOR BELT TENSION

The belt should be tight enough to keep from slipping on the drive pulley, but not so tight as to cause the belt to stretch. If the belt is too loose, it will cause premature belt failure. If the belt is too tight, it will put undue stress to the belt, belt lacing, rollers, and bearings resulting in premature failure of these components.

NOTE: Do not overtighten. A standard wrench is capable of applying enough force to easily overtighten the adjusting nuts resulting in a belt that is too tight. Tighten a little at a time, then run conveyor and observe tightness.

NOTE: Belt tightness may be affected by climate conditions and may need to be readjusted as climate conditions change throughout the day (starts or stops raining, gets warmer or colder, etc.)



WARNING: NEVER MAKE ANY ADJUSTMENTS WHILE MACHINE IS RUNNING. ALWAYS TURN OFF MACHINE AND UNPLUG ELECTRICAL CORD PRIOR TO MAKING ADJUSTMENTS. FAILURE TO COMPLY COULD CAUSE SERIOUS INJURY OR DEATH.



WARNING: NEVER ATTEMPT TO UNPLUG OR ADJUST ANY CONVEYOR WHILE THE ENGINE IS RUNNING. FAILURE TO COMPLY COULD CAUSE SERIOUS INJURY OR DEATH.

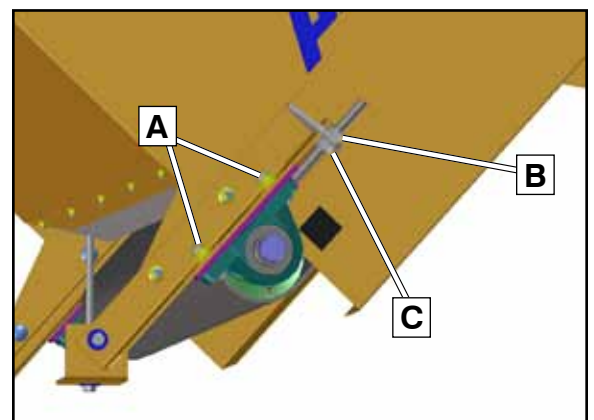
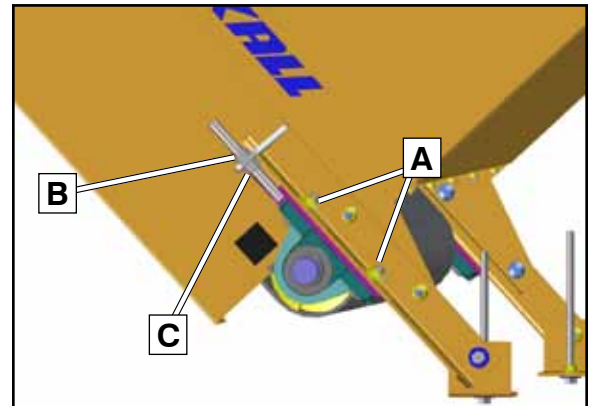
ADJUSTMENT - TENSION

Adjust the conveyor belt as follows:

1. Turn off Even Feeder and unplug power cord.
2. Loosen bearing mount nuts (A)
3. Loosen jam nuts (B).
4. Turn adjusting nuts (C) clockwise to tighten.
NOTE: Turn nut only a small amount. **Do not overtighten**
5. Retighten bearing mount nuts.
6. Retighten jam nuts.
7. Repeat for the opposite side of the roller.

NOTE: Be sure to adjust both sides equally and do not overtighten the jam nuts.

8. Run conveyor and observe belt. If belt requires further adjustment, turn Even Feeder off and repeat steps 1 thru 6.



Lubrication & Maintenance

PRACTICE SAFE MAINTENANCE

Understand service procedure before doing work. Keep area clean and dry. Never lubricate, service, or adjust machine while it is running. Keep hands, feet, and clothing from power-driven parts.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.



WARNING: ALWAYS TURN POWER SWITCH TO OFF POSITION AND UN-PLUG POWER CORD WHEN PERFORMING SERVICE OR MAINTENANCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY OR DEATH.



MAINTENANCE & LUBRICATION SCHEDULE

Recommended Maintenance Intervals - Hours

Component	Action	10	50	100	250	500	1000	2000	Notes
		(each shift)	(weekly)	(2 weeks)	(monthly)	(3 months)	(6 months)	(yearly)	
Conveyor belt tension	Check	X						X	See <i>Settings & Adjustments</i> Section
Drive chain	Lubricate	X						X	Chain saw grade oil
Drive roller bearings	Grease	X						X	#2 lithium grease
Idler roller bearings	Grease	X						X	#2 lithium grease
Loose hardware	Tighten	X						X	

GREASE POINTS



WARNING: ALWAYS TURN POWER SWITCH TO OFF POSITION AND UN-PLUG POWER CORD WHEN PERFORMING SERVICE OR MAINTENANCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

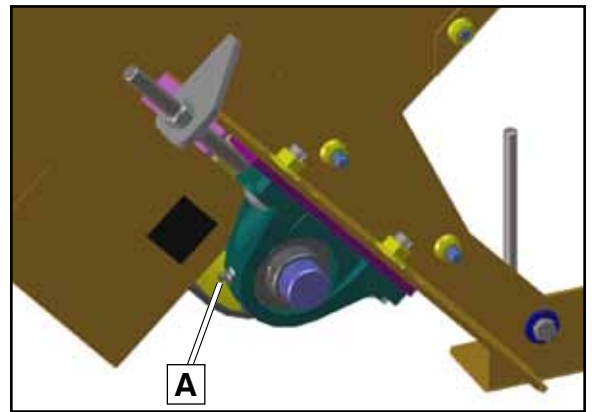
Refer to the *Maintenance & Lubrication Schedule* for lubrication intervals.

Any good quality Multipurpose Hi Temperature/Extreme Pressure grease rated NGLI #2 is acceptable.

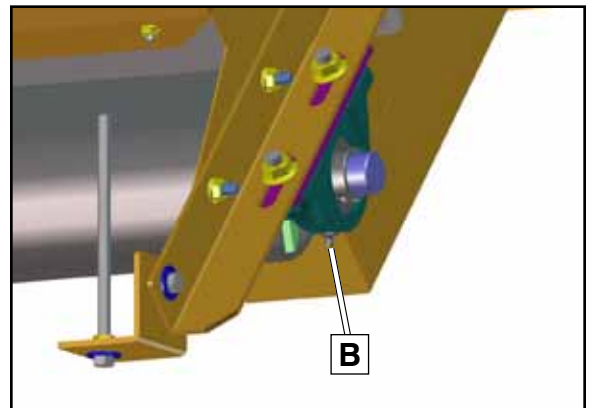
IMPORTANT: IF A GREASE FITTING IS MISSING, REPLACE IMMEDIATELY. CLEAN FITTINGS THOROUGHLY BEFORE USING GREASE GUN.

There are four points on the machine that must be lubricated at least as often as indicated at each of the following locations:

One fitting (A) on the idler roller R.H. bearing.



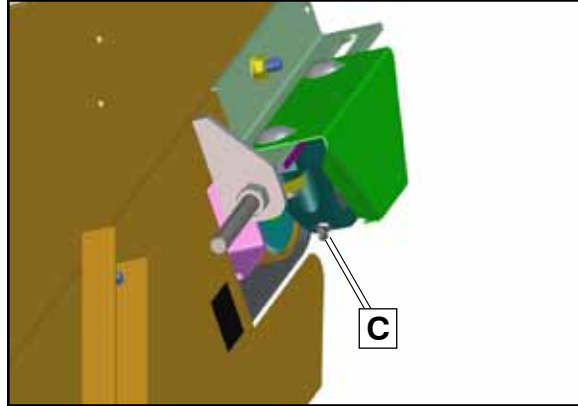
One fitting (B) on the idler roller L.H. bearing.



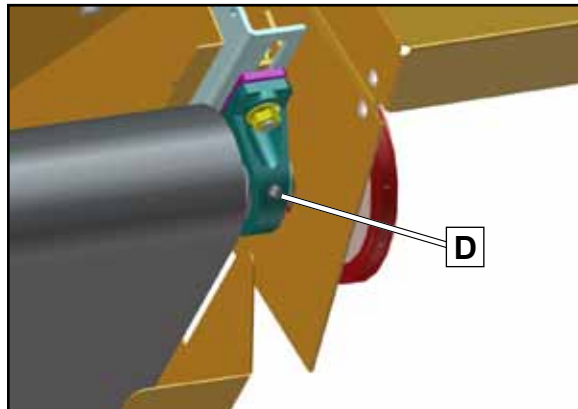
Lubrication & Maintenance

Grease Points cont'd.

One fitting (C) on the drive roller R.H. bearing.



One fitting (D) on the drive roller L.H. bearing.



Electrical System

ELECTRICAL BOX

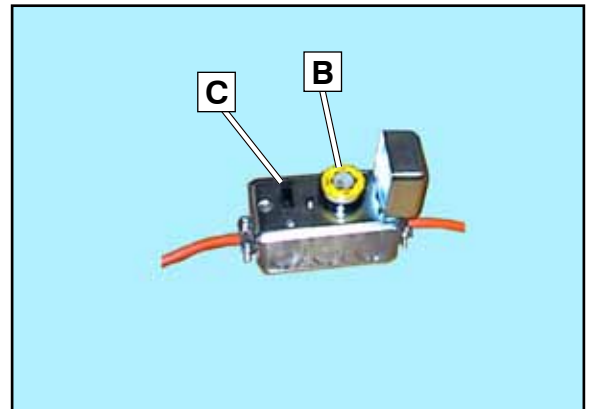
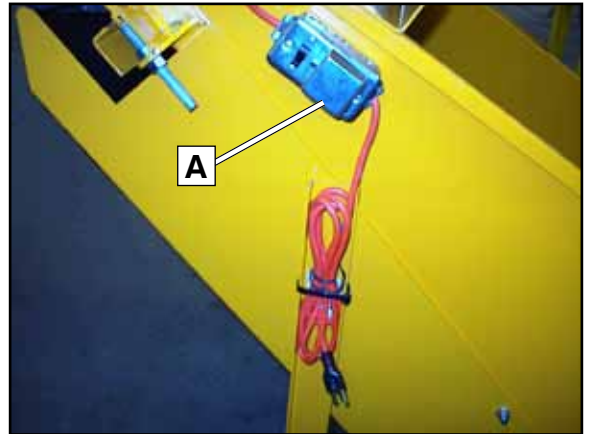
The electrical box (A) contains a 15 amp fuse (B) and an on/off switch (C).

The fuse protects the circuit from overload, and when blown, must be replaced.

IMPORTANT: KEEP FUSE BOX DOOR CLOSED AND COVER PLATE ATTACHED. DO NOT SPRAY ANY WATER DIRECTLY AT THE BOX. DO NOT ALLOW ANY WATER TO GET INSIDE THE BOX.



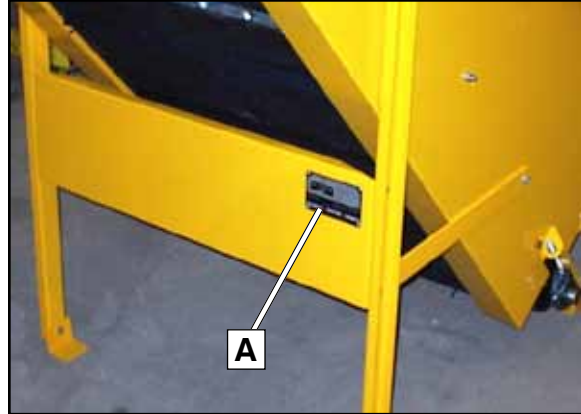
WARNING: ALWAYS TURN POWER SWITCH TO OFF POSITION AND UN-PLUG POWER CORD WHEN PERFORMING SERVICE OR MAINTENANCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY OR DEATH.



Serial Number

When ordering parts, always furnish the model number and serial number of the machine as stamped on the data plate located on the right rear of the frame (A).

Record your model and serial number in the space provided on the first page of the *Repair Parts Section*.
















Charts & Specifications

COMMON CONVERSION FACTORS

Length:	Inches to millimeters: x 25.4 Miles to kilometers: x 1.609
Speed:	Miles per hour to kilometers per hour: x 1.6093
Weight:	Pounds to kilograms: x .4536
Area:	Acres to hectare or square hectometer: x .4047
Pressure:	Psi to bar: x .06895 Psi to kPa: x 6.8948
Torque:	Foot-pounds to Newton meters: x 1.3558
Flow:	Gallons/minute to liters/minute: x 3.7848
Displacement:	Cubic inches to cubic centimeters: x 16.387
Power:	Horsepower to kilowatts: x .74571
Liquid:	Gallons to liters: x 3.785

UNIFIED INCH BOLT AND CAP SCREW TORQUE VALUES

SAE Grade and Head Markings	NO MARK 	1 or 2 ^b 	5 	5.1 	5.2 	8 	8.2 	
SAE Grade and Nut Markings	NO MARK 	2 	5 		5 		8 	8 

Size	Grade 1				Grade 2 ^b				Grade 5, 5.1, or 5.2				Grade 8 or 8.2			
	Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a	
	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft
1/4	3.7	2.8	4.7	3.5	6	4.5	7.5	5.5	9.5	7	12	9	13.5	10	17	12.5
5/16	7.7	5.5	10	7	12	9	15	11	20	15	25	18	28	21	35	26
3/8	14	10	17	13	22	16	27	20	35	26	44	33	50	36	63	46
7/16	22	16	28	20	35	26	44	32	55	41	70	52	80	58	100	75
1/2	33	25	42	31	53	39	67	50	85	63	110	80	120	90	150	115
9/16	48	36	60	45	75	56	95	70	125	90	155	115	175	130	225	160
5/8	67	50	85	62	105	78	135	100	170	125	215	160	215	160	300	225
3/4	120	87	150	110	190	140	240	175	300	225	375	280	425	310	550	400
7/8	190	140	240	175	190	140	240	175	490	360	625	450	700	500	875	650
1	290	210	360	270	290	210	360	270	725	540	925	675	1050	750	1300	975
1-1/8	470	300	510	375	470	300	510	375	900	675	1150	850	1450	1075	1850	1350
1-1/4	570	425	725	530	570	425	725	530	1300	950	1650	1200	2050	1500	2600	1950
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2150	1550	2700	2000	3400	2550
1-1/2	1000	725	1250	925	990	725	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

DO NOT use these torque values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

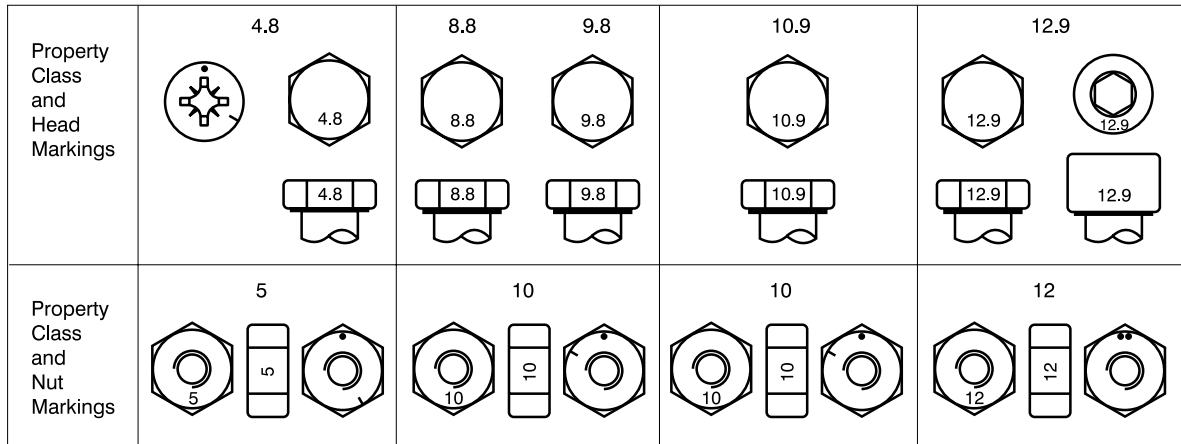
Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

^a "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

^b Grade 2 applies for hex cap screws (not hex bolts) up to 152 mm (6 in.) long. Grade 1 applies for hex cap screws over 152 mm (6 in.) long, and for all other types of bolts and screws of any length.

METRIC BOLT AND CAP SCREW TORQUE VALUES



Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a		Lubricated ^a		Dry ^a	
	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft	Nm	lb-ft
M6	4.8	3.5	6	4.5	9	6.5	11	8.5	13	9.5	17	12	15	11.5	19	14.5
M8	12	8.5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	225	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1300	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	2200	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

DO NOT use these torque values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class.

Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

^a "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

Fitting Assembly Torque and F.F.W.R. (For O-ring Face Seal Fittings)						
SAE Dash Size	Tube Side Thread Size	Tube Side Assembly Torque (+10% -0%)			Flats from Wrench Resistance (F.F.W.R.)	
		in-lb.	ft-lb.	Nm	Tube Nuts	Swivel & Hose Ends
-4	9/16-18	220	18	25	1/4 to 1/2	1/2 to 3/4
-6	11/16-16	360	30	40	1/4 to 1/2	1/2 to 3/4
-8	13/16-16	480	40	55	1/4 to 1/2	1/2 to 3/4
-10	1-14	---	60	80	1/4 to 1/2	1/2 to 3/4
-12	1 13/16-12	---	85	115	1/4 to 1/2	1/3 to 1/2
-14	15/16-12	---	95	130	1/4 to 1/2	1/3 to 1/2
-16	1 7/16-12	---	110	150	1/4 to 1/2	1/3 to 1/2
-20	1 11/16-12	---	140	190	1/4 to 1/2	1/3 to 1/2
-24	2-12	---	180	245	1/4 to 1/2	1/3 to 1/2
-32	2 1/2-12	---	360	490	---	---

F.F.W.R. Assembly Method:

If torque wrenches are not available, an alternate method of assembly is the Flats From Wrench Resistance (F.F.W.R.) Method.

Wrench tighten the nut onto the fitting body until wrench resistance is reached. Tighten further to the appropriate F.F.W.R. value from the *Fitting Assembly Torque and F.F.W.R.* chart shown above.

NOTE: The torque method of assembly is the preferred method of assembly. It reduces the risk of human error during assembly that is more prevalent in the Flats From Wrench Resistance (F.F.R.W.) method. To ensure the most accurate assembly of the fitting, it is strongly recommended that the torque method be utilized.

Repair Parts Section

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A NOTE ON USING THESE PARTS LISTS

Right or left hand parts are determined by standing in the back of the machine and facing in the direction of travel. The abbreviation "A.R." in the "USED" column means "AS REQUIRED" - the item is used to service a major assembled component or it is used in numbers which may vary between individual machines usually to obtain a particular adjustment or dimension at assembly. When in the course of routine repair disassembly, if a number of shims, flatwashers, etc. are removed, always reassemble with the same quantity.

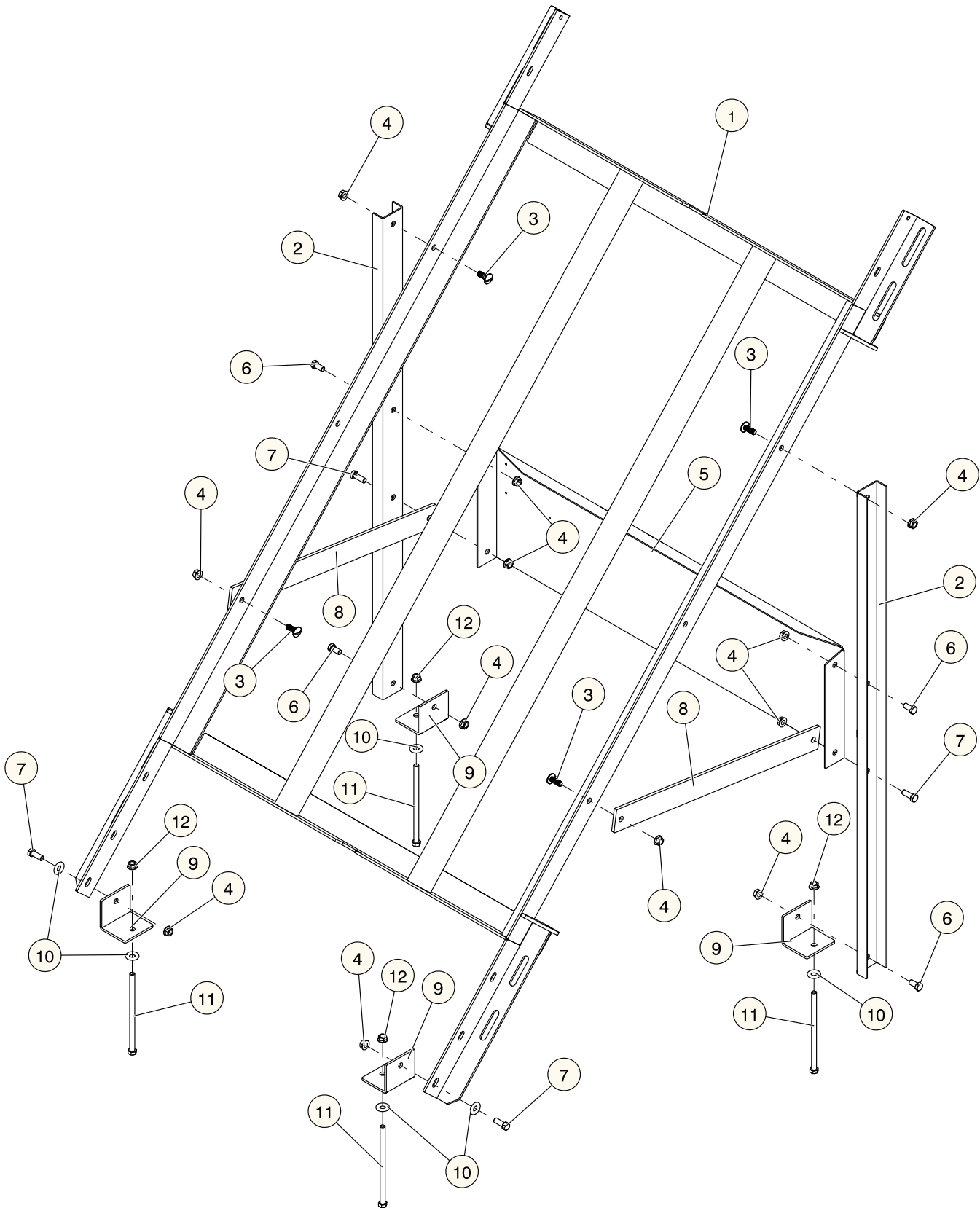
ORDERING REPAIR PARTS

The Pixall Even Feeder is designed and built with top quality agricultural grade components. We recommend that repair/replacement parts be obtained from one of the Oxbo International Corporation locations shown on inside front cover. Parts ordered within the United States will be shipped via United Parcel Service (UPS) if less than 150 lbs. and by common carrier if heavier. Faster service can be provided on request. Arrangements for Canadian, Mexican and overseas shipment will be made with the customer at the time of order.

NOTE: Please include serial number when ordering parts. Record your serial number in the space provided.

SERIAL NUMBER

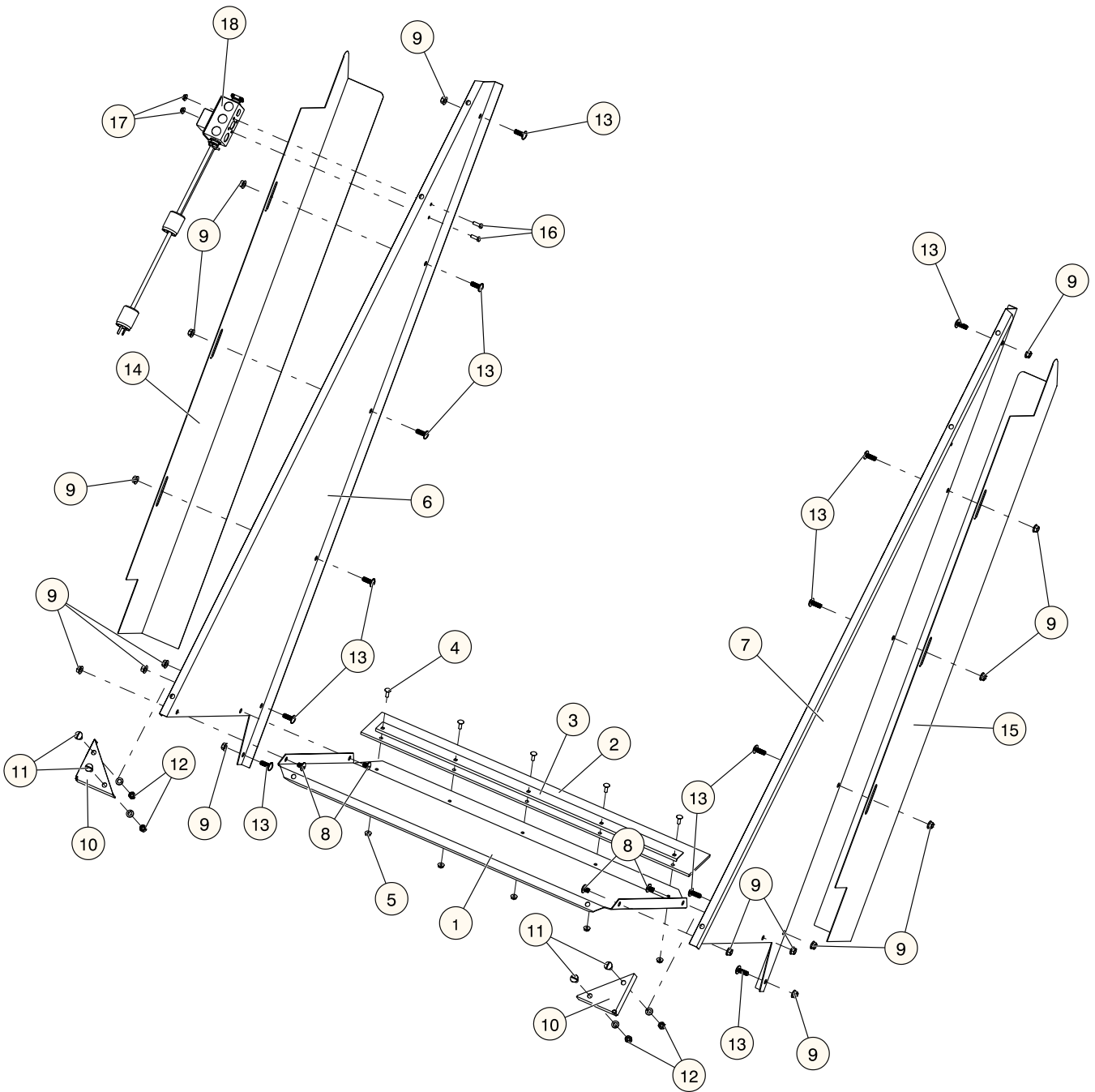
FRAME & RELATED PARTS



FRAME & RELATED PARTS

KEY	P/N	DESCRIPTION	QTY
1	3111-0001	WELDMENT FRAME EVEN FEED ER	1
2	3111-0012	LEG PLATE 12 GA HR	2
3	0002-0123	BOLT TRS HD .375-16 X 1.00 GR5 ZINC SLTD	4
4	93523	NUT,3/8-16,WHIZLOC,GR5 PLTD,SERRATED FLANGE	12
5	3111-0013	LEG PLATE 12 GA HR	1
6	93052	HHCS,3/8-16X3/4,GR5 PLTD	4
7	93053	HHCS,3/8-16X1,GR5 PLTD	4
8	3111-0011	BRACE PLATE .25 HR	2
9	3111-0021	FOOT PLATE 7 GA HR	4
10	93603	WASHER,3/8,FLAT PLTD,ANS TYPE A,WIDE	6
11	94422	HHCS,3/8-16X7 GR5 ZN	4
12	0002-0470	NUT,3/8-16,SIDELOCK FLANGED,GRADE C,PLTD	4

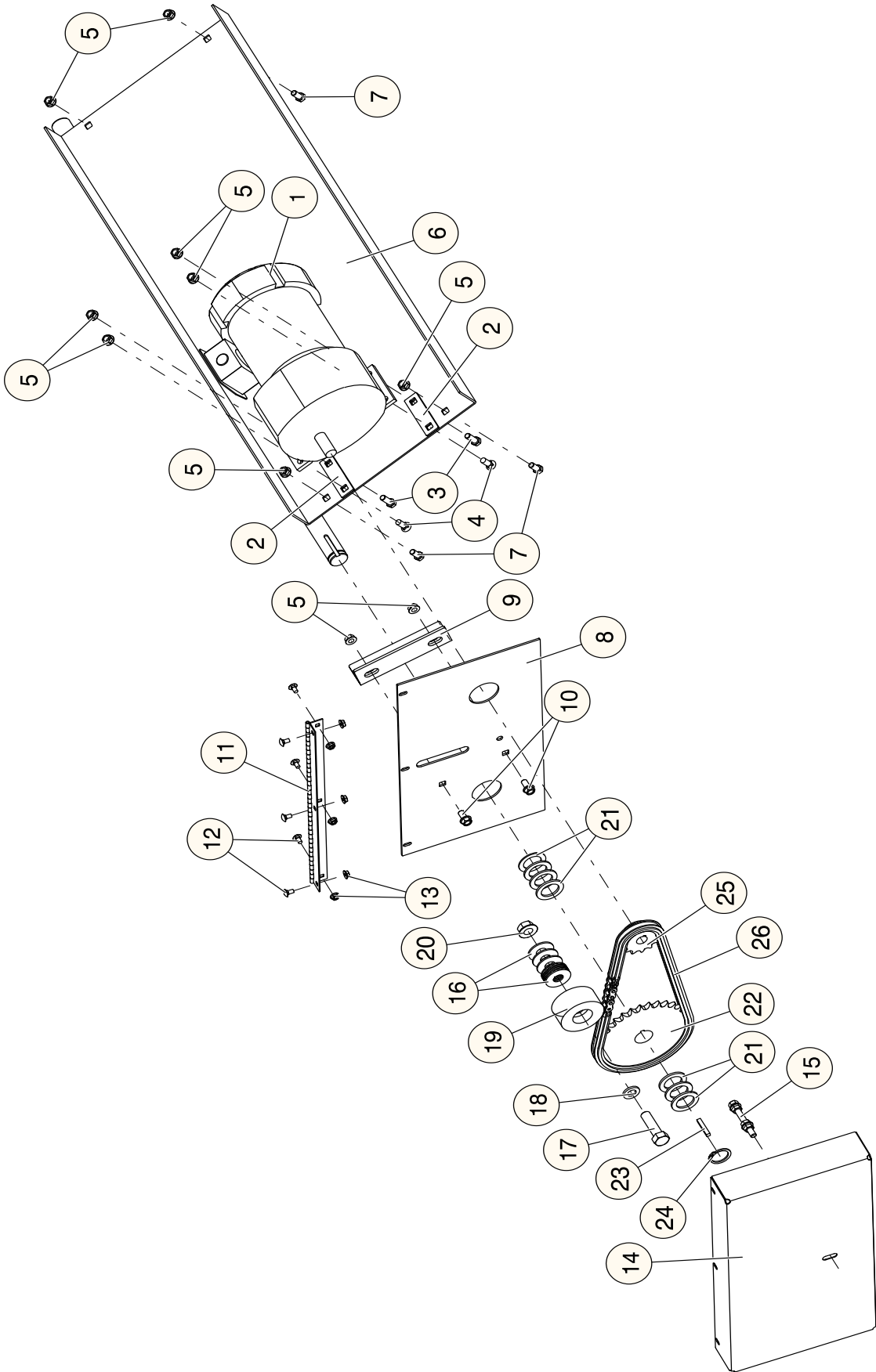
HOPPER & RELATED PARTS



HOPPER & RELATED PARTS

KEY	P/N	DESCRIPTION	QTY
1	3111-0026	HOPPER END PLATE 14 GA HR	1
2	6004-0327	SEALER BELT BELLY PAN ON B.J. BEAN HEAD	1
3	6004-0112	PLATE 16 GA CR BACK-UP S TRIP 33.50 LG	1
4	0002-0405	BOLT CRG .250-20 X .750 GR5 ZINC	5
5	93520	NUT,1/4-20,WHIZLOC,GR5	5
6	3111-0025	HOPPER SIDE LH P LATE 14 GA HR	1
7	3111-0024	HOPPER SIDE RH P LATE 14 GA HR	1
8	0002-0124	BOLT TRS HD .375-16 X .5 00 ZINC	4
9	93523	NUT,3/8-16,WHIZLOC,GR5 PLTD,SERRATED FLANGE	16
10	3111-0009	PLATE 12 GA HR 5.000 X 5 .000 CORNER PIEC	2
11	0002-0617	BOLT SLT RND HD .375-16 X .750 ZINC	4
12	93453	NUT,3/8-16,HEX,GR5 UNC,RH,PLTD	4
-	93578	WASHER,3/8,SPLIT LOCK PLTD	4
13	0002-0123	BOLT TRS HD .375-16 X 1. 00 GR5 ZINC SLTD	12
14	3111-0029	SIDE SAFETY SHIELD L.H. PLATE 16 GA CRS	1
15	3111-0030	SIDE SAFETY SHIELD R.H. PLATE 16 GA CRS	1
16	93002	HHCS,1/4-20X3/4,GR5 PLTD	2
17	93520	NUT,1/4-20,WHIZLOC,GR5	2
18	-----	ASSY,FUSE BOX,15 AMP (SEE FUSE/SWITCH & RELATED PARTS ILLUSTRATION FOR PARTS BREAKDOWN)	1

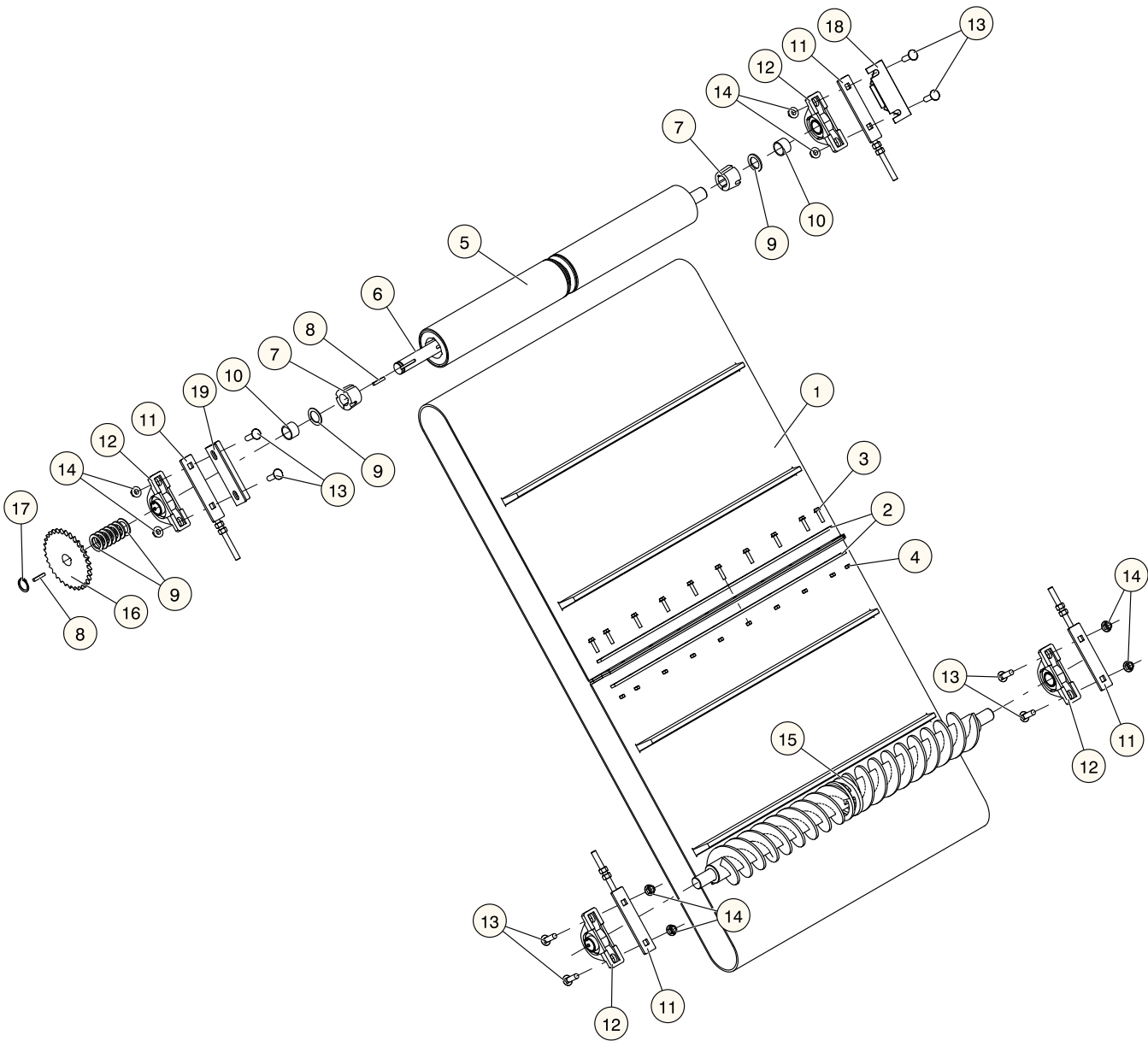
MOTOR & RELATED PARTS



MOTOR & RELATED PARTS

KEY	P/N	DESCRIPTION	QTY
1	3111-0018	MOTOR EVEN FEEDER	1
2	3111-0020	SPACER FLAT PLATE 11 GA HR	2
3	93053	HHCS,3/8-16X1,GR5 PLTD	2
4	93302	BOLT,PLOW,3/8-16X1 GR5,#3 HEAD,PLTD	2
5	93523	NUT,3/8-16,WHIZLOC,GR5 PLTD,SERRATED FLANGE	10
6	3111-0010	MOTOR MTG PLATE 11 GA H R	1
7	93052	HHCS,3/8-16X3/4,GR5 PLTD	4
8	3111-0015	PLATE 11 GA HR 10.0 X 19 .25 SHIELD BACK	1
9	3111-0014	SHIELD MTG PLATE 7 GA H R	1
10	94166	HHWZ,3/8-16X3/4 GR5 ZN	2
11	3111-0023	HINGE 2.000 X 18.000 EVE N FEEDER COVER	1
12	0002-0613	BOLT CRG .250-20 X .500 ZN GR5	6
13	93520	NUT,1/4-20,WHIZLOC,GR5	6
14	3111-0016	SHIELD COVER PLATE 16 GA CR	1
15	0002-0655	BOLT HX HD .375-16 X 3.0 00 GR2 ZN FULLTH	1
-	93523	NUT,3/8-16,WHIZLOC,GR5 PLTD,SERRATED FLANGE	3
16	93607	WASHER,5/8,FLAT PLTD,ANS TYPE A,WIDE	A.R.
17	93107	HHCS,5/8-11X2-1/2,GR5 PLTD	1
18	0002-0453	WASHER MACH .625 X 1.125 X 10GA ZINC	1
19	1027-0010	TIGHTNER UHMW	1
20	94231	NUT,5/8-11,WHIZLOC,GR5 PLTD,SERRATED FLANGE	1
21	0002-0438	WASHER MACH 1.250 X 1.87 5 X 10GA ZINC	A.R.
21	93619	BUSH,MACH,1-1/4X14GA PLTD,NARROW RIM 2.25 OD	A.R.
22	1019-0158	SPRKT RC50B 32T 1.250 BO RE .250KW	1
23	1006-0177	KEY .250 X .250 X 1.250 BYRON # 50575	1
24	1016-0013	RING RTNG EXT 1.250 X .0 93 (HEAVY DUTY)	1
25	1019-0453	SPRKT RC50B 13T .750 BOR E .187KW	1
-	51487	KEY,1/4SQX1	1
26	1021-0146	ROLLER CHAIN RC50 X 58 P ITCH	1
-	50233	LINK,CONN,RC50-1R SPRING CLIP 1021-0043	A.R.
-	50234	LINK,OFFSET,RC50-1R COTTER PIN TYPE	A.R.

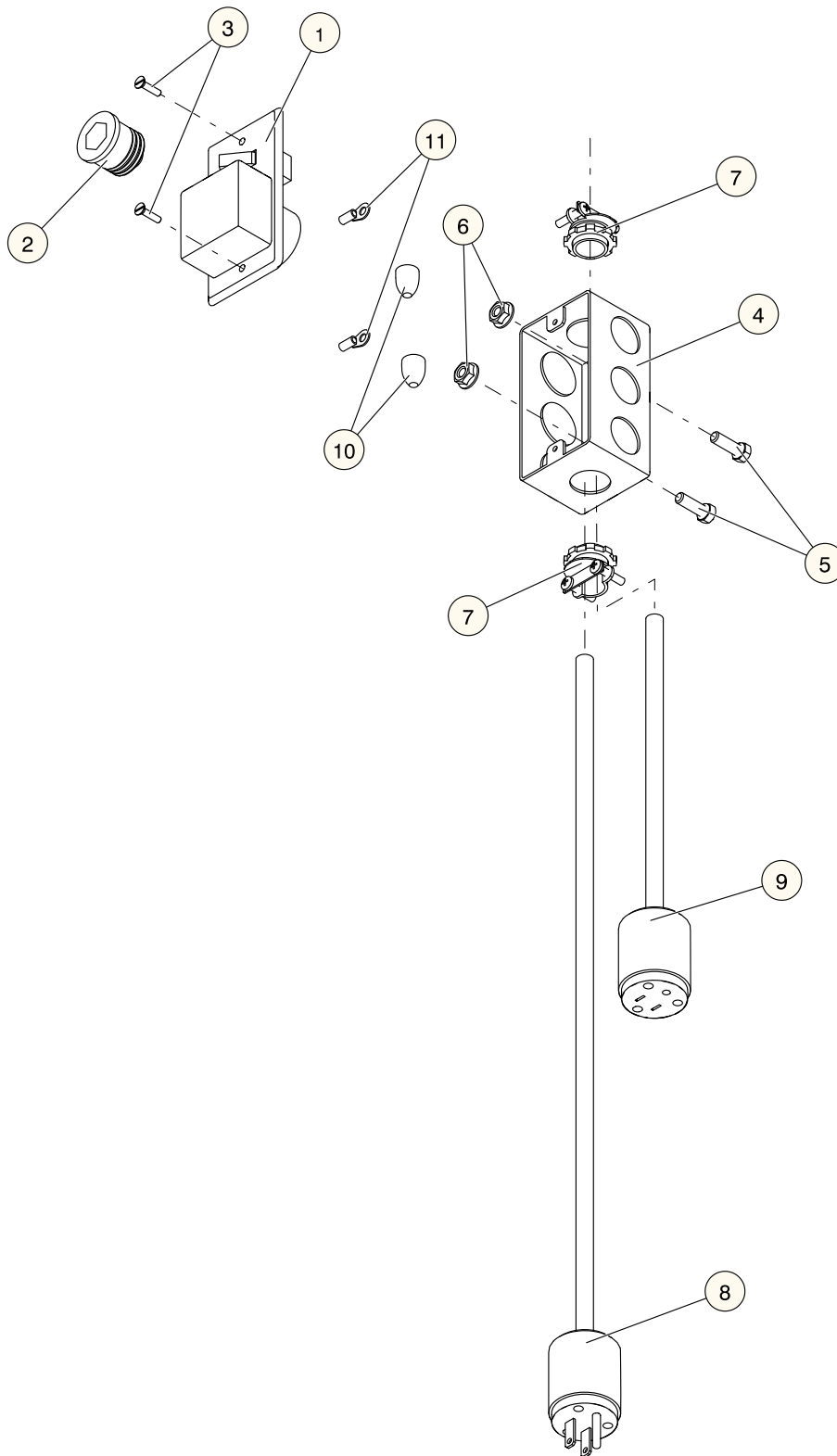
CONVEYOR & RELATED PARTS



CONVEYOR & RELATED PARTS

KEY	P/N	DESCRIPTION	QTY
1	1021-0370	BELT BOLTED ASSY,INTAKE (INCLUDES ITEMS 2 THRU 4)	1
2	1021-0401	BELT BACKUP STRIP,BJ	2
3	94543	HHWZ,5/16-18X1-1/4 SERRATED FLANGE,PLTD	10
4	93541	NUT,5/16-18,OVAL TOPLOCK 1 WAY,GR C,PLTD,CONELock	10
5	6003-0221	WELDMENT DRIVE ROLLER 4. 250 DIA	1
6	6003-0226	DRIVE SHAFT 1.25 CRS 101 8 SHAFT	1
7	50321	BUSH,TLB,1615X1-1/4	2
8	1006-0177	KEY .250 X .250 X 1.250 BYRON # 50575	1
9	0002-0438	WASHER MACH 1.250 X 1.87 5 X 10GA ZINC	A.R.
9	93619	BUSH,MACH,1-1/4X14GA PLTD,NARROW RIM 2.25 OD	A.R.
10	6003-0229	TUBE EW 1.50 X 12 GA WAL L 1.00 SPACER	2
11	6003-0217	WELDMENT TIGHTNER & SPAC ER	4
-	93455	NUT,1/2-13,HEX,GR5 UNC,RH,PLTD	8
12	1015-0143	BRG,1-1/4 PB 2-BOLT BOTTOM TAP	4
13	0002-0130	BOLT,CARR,1/2-13X1-3/4 GR5,PLTD	8
14	93525	NUT,1/2-13,WHIZLOC,GR5 PLTD,SERRATED FLANGE	8
15	6004-0422	WELDMENT AUGER ROLLER	1
16	1019-0158	SPRKT RC50B 32T 1.250 BO RE .250KW	1
17	1016-0013	RING RTNG EXT 1.250 X .0 93 (HEAVY DUTY)	1
18	6003-0546	ELEVATOR BEARING SHIELD PLATE 16 GA CR	1
19	3111-0014	SHIELD MTG PLATE 7 GA H R	1

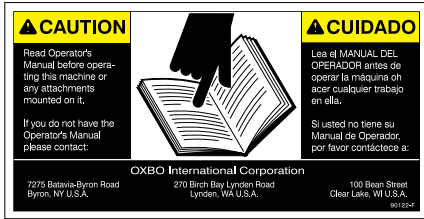
FUSE/SWITCH & RELATED PARTS



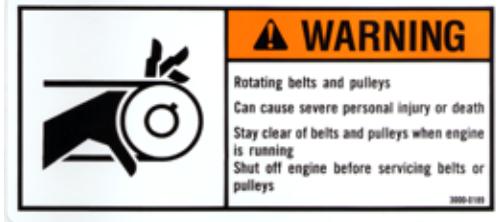
FUSE/SWITCH & RELATED PARTS

KEY	P/N	DESCRIPTION	QTY
1	3110-0057	FUSE BOX COVER W/SWITCH FOR TYPE-S FUSE	1
2	3110-0062	FUSE 15 AMP BUSS TYPE-S	1
3	0002-0399	BOLT SLT RND HD 6-32 X . 500 ZINC	2
4	3110-0054	HANDY BOX 4.000 X 2.125 X 1.875 METAL	1
5	93002	HHCS,1/4-20X3/4,GR5 PLTD	2
6	93520	NUT,1/4-20,WHIZLOC,GR5	2
7	3110-0056	ROMEX CONNECTOR	2
8	3110-0060	8' ELEC. CORD 110 VOLT W /MALE PLUG	1
9	3110-0061	2' ELEC. CORD 110 VOLT W /FEMALE PLUG	1
10	1040-0395	WIRE NUT KNURLED 22-14GA ORANGE	2
11	1040-0159	TERMINAL EYELET #10 16-1 4GA NON-INSUL.	2

DECALS & SIGNS - DOMESTIC



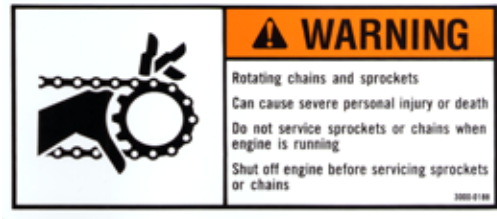
1 90122



2 3000-0189



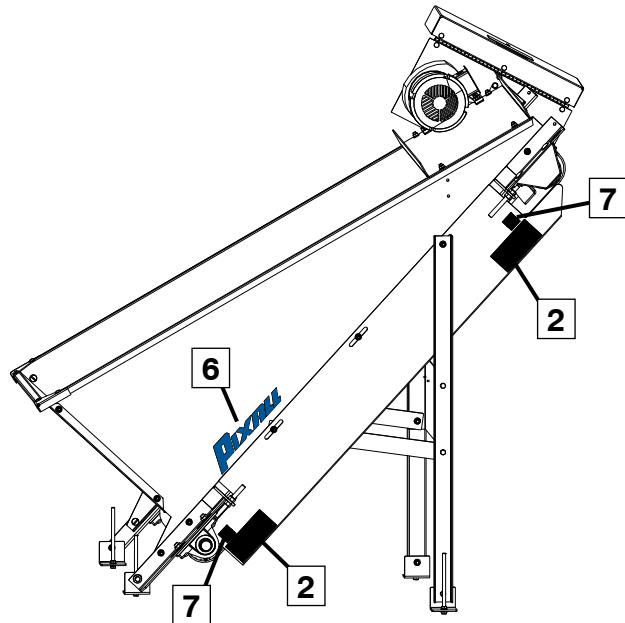
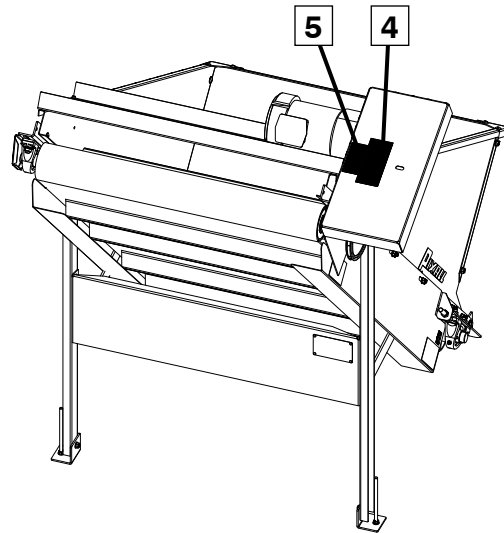
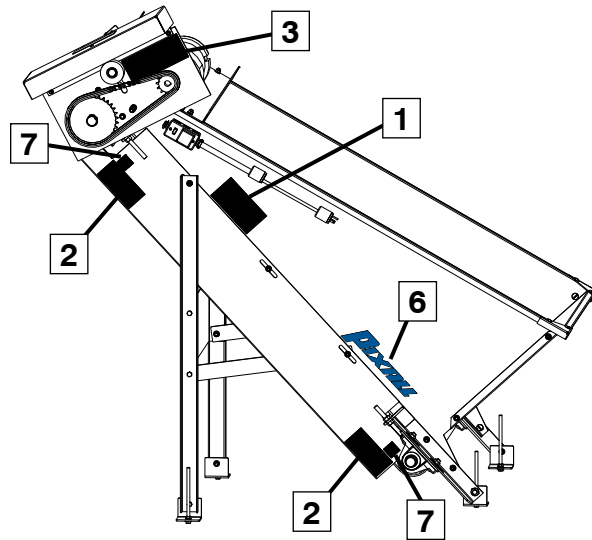
3 3000-0222



4 3000-0188



5 3000-0160



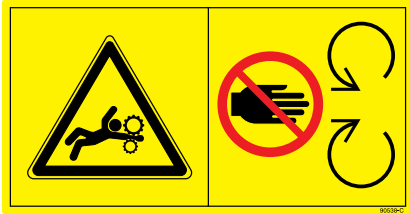
DECALS & SIGNS - DOMESTIC

KEY	P/N	DESCRIPTION	QTY
1	90122	DECAL,CAUTION READ OPERATORS MANUAL	1
2	3000-0189	DECAL WARNING ROTATING BELTS & PULLEYS	4
3	3000-0222	DECAL DANGER SHIELD OP EN OR MISSING	1
4	3000-0188	DECAL WARNING ROTATING CHAINS & SPRKTS	1
5	3000-0160	DECAL BE CAREFUL SHIEL DS 2.000 X 4.000	1
6	92418	DECAL,PIXALL LOGO 3" BLUE	2
7	90225	DECAL,"GREASE" ARROW W/ GREASE GUN	4

DECALS & SIGNS - EUROPE



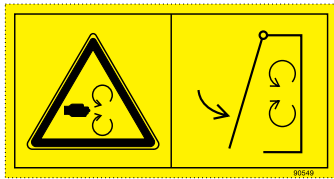
1 90532



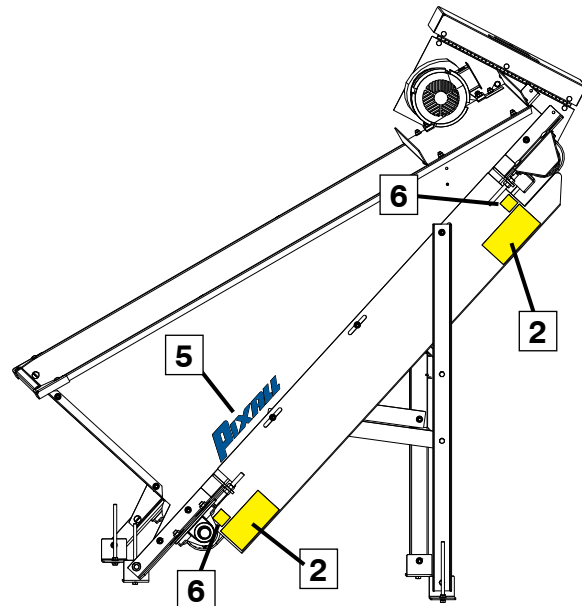
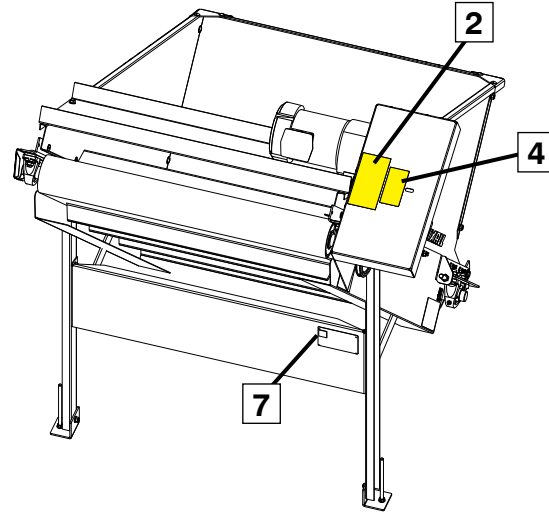
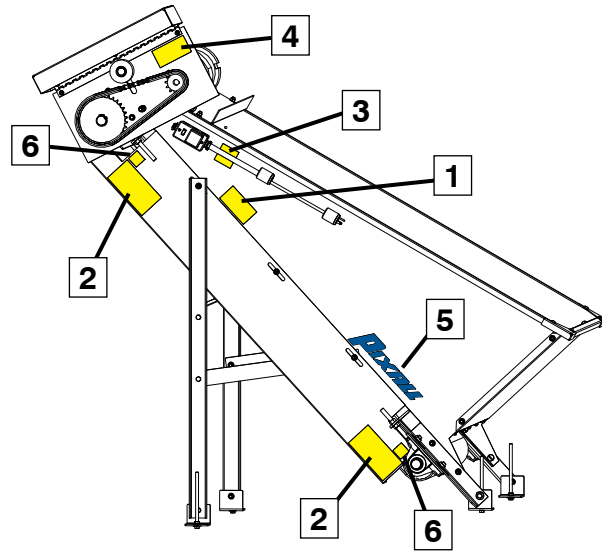
2 90538



3 92767



4 90549



DECALS & SIGNS - EUROPE

KEY	P/N	DESCRIPTION	QTY
1	90532	DECAL,CE BSB 451-294 READ OPS MANUAL	1
2	90538	DECAL,CE BSB-17 ROTATING PARTS 88 X 168 MM	5
3	92767	DECAL,ELECTRICAL BOX HAZARD	2
4	90549	DECAL,CE BSB-55 CLOSE SHIELDS	2
5	92418	DECAL,PIXALL LOGO 3" BLUE	2
6	90225	DECAL,"GREASE" ARROW W/ GREASE GUN	4
7	90552	DECAL,CE LOGO 1" SQUARE	1

NUMERICAL PARTS INDEX

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1006-017733	3110-005635	3111-002127	5023431
1015-014333	3110-005735	3111-002331	5032133
1016-001333	3110-006035	3111-002429	5148731
1019-015831, 33	3110-006135	3111-002529	9012237
1019-045331	3110-006235	3111-002629	9022537, 39
1021-014631	3111-000127	3111-002929	9053239
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1021-040133	3111-001031	6003-021733	9054939
1027-001031	3111-001127	6003-022133	9055239
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1040-039535	3111-001327	6003-022933	9276739
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3000-022237	3111-001831	6004-042233		
3110-005435	3111-002031	5023331		