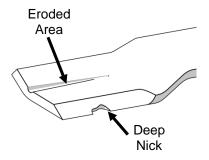
FIXED BLADE REMOVAL AND INSTALLATION

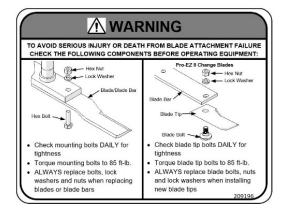
A 1" diameter pilot centers the blade of the Pro-EZII blade holder on the spindle with two 1/2" grade 5 fasteners. When changing blades, be sure that pilot is properly seated in the blade and the blade lies flat on the spindle bar.

Always replace bolts, lock washers and nuts when replacing blades. Tighten bolts to proper torque as listed on Page 37.

Replace any blade that is bent, nicked deeper than ¼", excessively worn or has any other damage. Small nicks can be ground out during sharpening. Always balance blades before use.

In abrasive soil conditions, monitor condition of the blade wing. If erosion of the steel is evident at the base of the wing, replace blade.





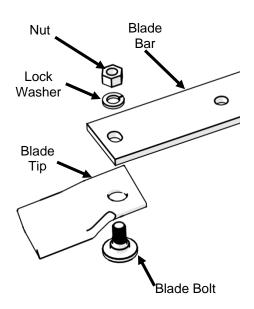
PRO-EZII BLADE REMOVAL AND INSTALLATION

Pro-EZII Blade Bar

A 1" diameter pilot centers the blade bar on the spindle with two 1/2" grade 5 fasteners. When changing blades, be sure that pilot is properly seated in the blade bar and the blade bar lies flat on the spindle.

Always replace bolts, lock washers and nuts when replacing blade bars. Tighten bolts to proper torque as listed on Page 37.

Replace any blade bar that is bent, worn or has any other damage.



Pro-EZII Replaceable Blade Tips

The Pro-EZII change blade tips are serviceable with a single wrench. An anti-rotation slot engaging the blade bolt to the blade bar allows for installation and removal of the nut from one side without having to hold the bolt.

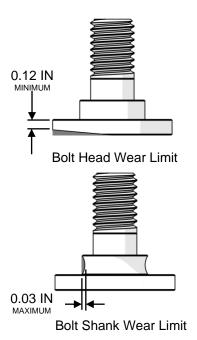
When removing blade tips, inspect the tips and blade bolts for wear and damage.

Replace any tip that is bent, nicked deeper than ¼", excessively worn or has any other damage. Small nicks can be ground out during sharpening. Always balance Pro-EZII blades as an assembled unit. Replace both tips at the same time on one holder.

Replace any blade bolts that have the head or blade shank worn beyond the limits shown in the accompanying illustrations.

Always install new blade bolts, lock washers and nuts when installing new blade tips. Tighten bolts to 85 ft-lbs**Error! Bookmark not defined.**. DO NOT OPERATE WITH ONLY ONE BLADE TIP INSTALLED.

Grass build-up between the tip and blade bar may prevent the tip from pivoting properly at start-up or during mowing. Ensure all tips are free to rotate prior to operation.



BLADE SHARPENING



Use gloves when handling mower blades. Blades can be very sharp.

IMPORTANT! When sharpening blades, be sure material removed is equal on both sides of the blade. Unbalanced blades will cause excessive vibration leading to cracks in machine components.

- Clean all material from the blade prior to sharpening and balancing.
- Grind or file blades following original pattern as shown.
- Sharpen to a razor edge. Do not sharpen back side of blade.

Use the supplied cone balancer to verify blade balance. When the blade is correctly balanced, the blade will remain horizontal on the cone balancer as show in Figure 16.

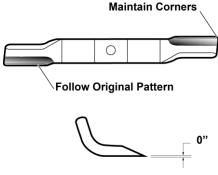


Figure 15 – Grind Pattern



WARNING!

Failure to properly balance blades after sharpening can cause vibration leading to premature component damage.



Figure 16



WARNING!

Wear appropriate eye and face protection when sharpening blades.



SPINDLE SERVICE

Blade spindles are factory equipped with sealed, maintenance free bearings. These spindles are identified by the absence of a grease fitting in the center of the drive pulley.

Periodically inspect blade spindles by removing the belts and spinning the blade spindle by hand to make sure it rotates smoothly, and there are no tight spots.

SPINDLE ASSEMBLY REMOVAL

- 1. Remove blade from spindle.
- 2. Remove belt shield. Loosen 4 bolts that hold gearbox slide plate to deck
- 3. Loosen 1/2" x 3 1/2" tap bolt and slide gearbox toward front until belt is easy to remove, as shown in Figure 14
- 4. Remove belt.
- 5. Remove 4 bolts attaching spindle assembly to mower deck and remove as a unit, since pulley will come out through the hole in the deck.

SPINDLE ASSEMBLY INSTALLATION

Reverse above procedure. Be sure spindle mounting area of deck is clean of any foreign material before attaching spindle assembly.

SPINDLE ASSEMBLY REPAIR

Note: A video showing this rebuild procedure is available on our website: http://www.progressiveturfequip.com/service



Spindle repair requires special skills and tools, a shop press is required. If your shop is not properly equipped or your mechanics are not properly trained in this type of repair, complete spindle assemblies are available as service parts.

 Remove LH thread nut (1), lock washer (2), pulley (3), key (11) & shim (4,5) from spindle assembly. The spindle nut is left-hand thread, the pulley has 2 setscrews.

ACAUTION!

Make sure that the press ram and bed 100% square to each other. If bearings are not square in housing, bearings will wear out prematurely.

- 2) Place assembly in shop press with support under spindle housing flange and press spindle (12) down through housing.
- 3) Remove bottom bearing from spindle and top bearing from housing
- 4) IMPORTANT! Removing bearings from spindle / housing causes permanent damage to the bearings. New bearings <u>must</u> be used in re-assembling the spindle.
- 5) Replace bearing spacer tube (8) with new spacer tube if the ends are worn.
- 6) IMPORTANT! Failure to replace a worn or damaged spacer will lead to premature bearing wear.

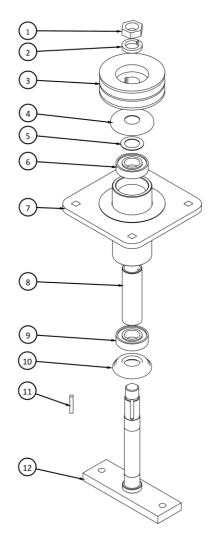
REASSEMBLY

- 7) Place housing (7) in press (upside down). **Pressing on the outer race**; install bottom bearing (9) into housing.
- 8) Place spindle (12) in press. Install bottom cap (10) on spindle.
- 9) Turn housing right side up, **Pressing on the inner race** of bottom bearing, press housing / bearing on to spindle. A steel tube will be required to slide over the spindle and press on inner race.
- 10) Install bearing spacer (8) with hole end up.
- 11) Set top bearing (6) on to spindle. **Pressing on inner race**, press top bearing on to spindle.
- 12) IMPORTANT! Due to design tolerances, the top bearing may appear to be loose in the housing. This is normal and is <u>not</u> detrimental to the operation of the spindle.
- 13) Install shim washer (5), cap (4), key (11), pulley (3) on to spindle.
- 14) Install LH lock washer (2) and LH nut (1) and torque to 60 ft-lb.
- 15) Tighten pulley set screws.

Rotate the housing six revolutions by hand and check for smooth, free movement.

The assembly is now ready for installation into the mower deck. Note: Orientation of genuine OEM maintenance free bearings are not important. Do not use greaseable bearings in this assembly.





HYDRAULICS

Hydraulic Oil – Conventional Anti-Wear Tractor-Hydraulic Fluid Biodegradable Oils – Consult Factory for compatibility analysis.



Hydraulic fluid escaping under pressure can penetrate the skin. Seek medical attention at once if injured by escaping fluid.

During your daily inspection, repair all leaks before they create a major problem. Do not use your hand to check for hydraulic oil leaks. Use a piece of cardboard instead. Hydraulic fluid escaping under pressure can penetrate the skin causing serious injury. If skin penetration occurs, seek medical attention immediately. Relieve all pressure before disconnecting hoses.

When servicing any hydraulic component of the mower ensure that all decks and wings are in their lowered position and all hydraulic pressure is relieved. Pressure can be maintained in the hydraulic circuits long after the power source and pump have been shut down.

Relieve all pressure before disconnecting hoses or tubes.

Tighten all connections before applying pressure.

When connecting the hydraulic couplers to the tractor, be sure that both coupler ends are clean. Dirt in the hydraulic system can block the orifice in the cylinder ports or cause premature wear & failure of hydraulic components on the mower or tractor.

All hydraulic cylinders have a .032" diameter orifice installed in the port for the rod end of each hydraulic cylinder. This orifice is present to throttle the cylinder speed to a safe level. When repairing the hydraulic system ensure that this orifice elbow is present and free of debris that could block the orifice.







SUPPORTING MACHINE FOR SERVICE

You may be required to lift the mower off of the ground for servicing the transport tires / wheels / bearings. Use a bottle or service jack to raise the wheel from the ground and place a wooden block or other suitable support under the rectangular tube.

Jack up the frame in the location shown in Figure 17



Do not support the machine on cinder blocks, hollow tiles or other members that may fail under continuous load.

Never perform service on a machine that is supported solely by a jack. Always ensure proper blocking is placed to support load during service.

Transport tires must be changed with the wing decks on the ground.

TRANSPORT TIRES

Inspect tires daily for wear or damage. Check tire pressures weekly with an accurate pressure gauge. Do not inflate tires beyond 20 psi. NOTE THAT THE TIRES ARE NOT HIGHWAY RATED



Mounting and dismounting tires from rims can be dangerous and should be performed by trained personnel using correct tools, equipment, and procedures.

LONG-TERM STORAGE

If the mower is not to be used for an extended period of time (4 months or longer) it is recommended that the following maintenance steps are followed:

- 1) Thoroughly wash mower, removing all grass clipping residue from deck undersides & mower framework.
- 2) Add grease to all grease points.
- 3) Check gearbox oil for proper level.
- Relieve tension on all V-belts by loosening the bolt on the deck gear box.
- 5) Inspect all drive belts & pulleys.
- 6) Inspect all blade spindle bearings for excessive play.
- 7) Inspect all blades for serviceable condition.

When returning the mower to service after long-term storage:

- 8) Check tightness of all blade fasteners.
- 9) Add grease to all grease points.
- 10) Tension all V-belts.
- 11) Ensure all pivot points move freely.
- 12) Change gearbox oil.

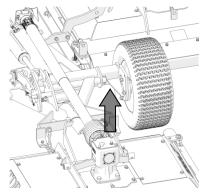


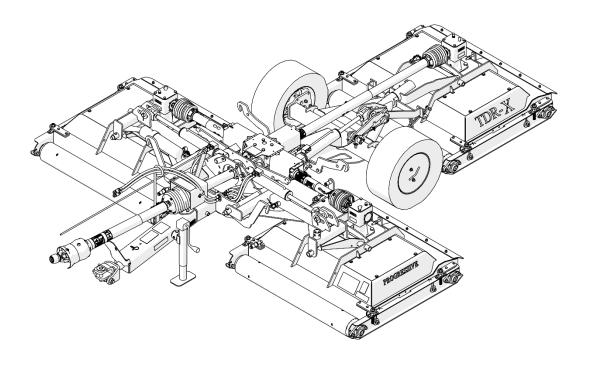
Figure 17



TROUBLE SHOOTING

PROBLEM	CAUSE	REMEDY
Belt slippage	Lack of tension	Inspect & check tension adjustment as required
	Oily drive conditions	Clean drive
	Over Loading	Increase cutting height or reduce ground speed
Rapid belt wear	Belt slippage	See Above
	Belt not aligned properly	Check pulley alignment and proper spacers
Belt squeal	Belt slippage	See Above
Over-heated bearings	Belt slippage	See Above
	Insufficient Cooling	Remove deck shields and clean out all grass.
Mower Deck will not lower.	Orifice in cylinder plugged	Remove orifice and remove obstruction and reassemble
Vibration on turning	Drawbar length incorrect.	Adjust drawbar to specification
Damage to intermediate bearing or tractor PTO shaft	Input shaft does not collapse easily under power	Remove input shaft, pull apart and deburr / grease splines Grease at proper interval.
Premature spindle bearing failure	Water ingestion from washing	Rebuild spindle with OEM repair kit DO NOT wash down mower when spindle housings are warm
	Improper rebuild procedure	See specific instructions in manual
	Improper bearings	Use only OEM bearings

Parts List TDR-X





Si No Lee Ingles, Pida Ayuda a Alguien Que Se Lo Lea Para Que le Traduzca Las Medidas de Seguridad Effective serial numbers: TDR-X: 20111003 and up.

P.N. 120596

Revision Date: September 2024

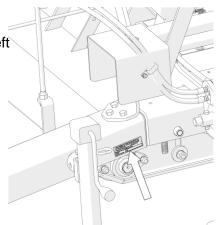
Serial Number Location

The serial number plate for the machine is located on the left side of the main frame tube at the front of the machine.

For quick reference, record the following information:

Model:	
Sorial Number:	
Serial Number: _	
Date purchased:	

Always state this information when contacting your selling dealer and when ordering spare parts.



PROGRESSIVE TURF EQUIPMENT INC.
137 West William St., Seaforth Ontario Canada
Phone 519-527-1080
Web Site: www.progressivefurfequip.com
PRODUCT: Rotary Finishing Mower
MODEL:

Made In Canada

S.N.

Parts Information

Use only Genuine Original Equipment Manufacturers (O.E.M.) replacement parts. The use of "will fit" parts may reduce machine performance, void machine warranties and present a safety hazard. Use Genuine OEM parts.

Progressive Turf Equipment Inc.

137 West William Street Seaforth, Ontario Canada N0K 1W0

Phone: 800-668-8873 Fax: 519-527-2275

www.progressiveturfequip.com

Maintenance

Maintenance should always be performed by a qualified service technician familiar with servicing similar equipment, using good safety and workmanship practices.

Always observe proper lock-out procedures when performing any maintenance work. Other than maintaining the blade spindles or blades, always lower all decks before performing maintenance. Block and or support machine using equipment designed for the task. When maintaining blades or spindles, always ensure locks are seated correctly in place. When performing hydraulic maintenance, ensure that pressure has been released.

It is imperative that the operator or qualified service technician reads and understands all the safety information in the Operator's Manual before proceeding. Failure to follow the instructions or heed the warnings could result in injury or death. **Proper care is your responsibility**.



PARTS ORDERING GUIDE

The following instructions are offered to help eliminate needless delay and error in processing purchase orders for the equipment in this manual.

- The Parts Section is prepared in logical sequence and grouping of parts that belong to the basic machine featured in this manual. Part Numbers and Descriptions are given to help locate the parts and quantities required.
- 2. Quantities shown in the parts section are not the total quantity used on the entire machine, they are just the quantities used in the assembly shown on that page.
- The Purchase Order must indicate the Name and Address of the person or organization ordering the parts, who should be charged, and if possible, the serial number of the machine for which the parts are being ordered.
- 4. The purchase order must clearly list the quantity of each part, the complete and correct part number, and the basic name of the part.
- 5. The manufacturer reserves the right to substitute parts where applicable.
- 6. Some parts may be unlisted items which are special production items not normally stocked and are subject to special handling. Request a quotation for such parts before sending purchase order.
- 7. The manufacturer reserves the right to change prices without notice.

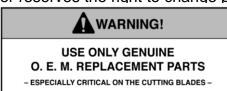
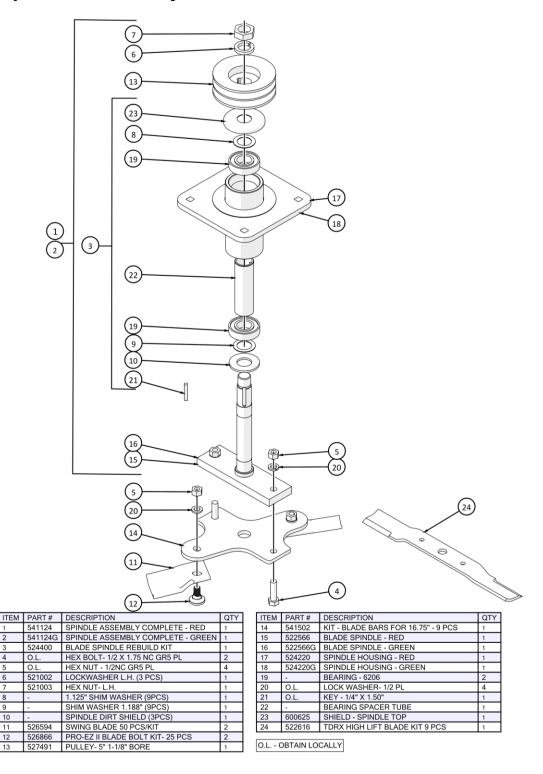


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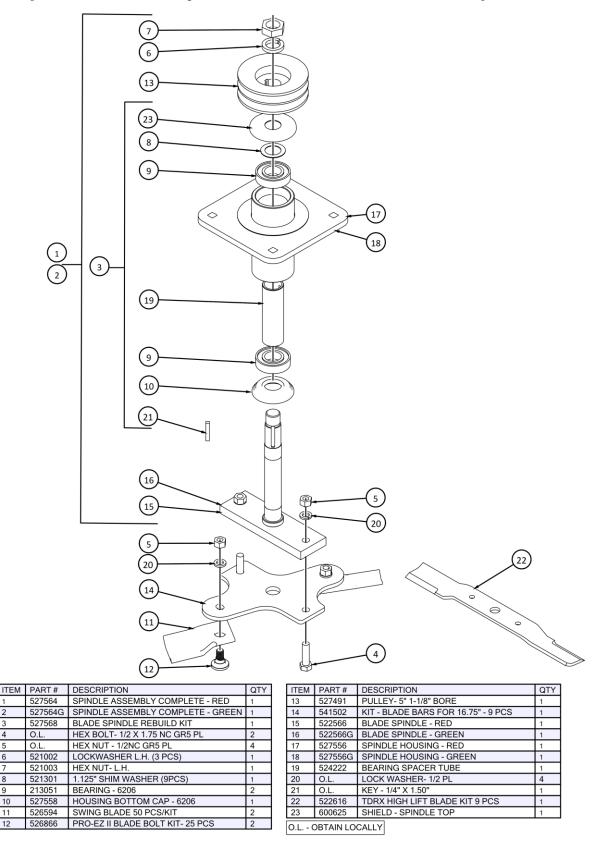
SE	RIAL N	NUMBER LOCATION	
1	DEC	CK ASSEMBLY	2
	1.1	BLADE SPINDLE ASSEMBLY – SERIAL # 20111003 - 20111059	2
	1.2	BLADE SPINDLE ASSEMBLY – SERIAL # 20111060 – AND UP	3
	1.3	DECK ASSEMBLY	4
	1.4	DECK SIDE CHANNEL ASSEMBLY	5
	1.5	GEARBOX ASSEMBLY	6
2	FRA	AME ASSEMBLY	7
	2.1	Main Frame	7
	2.2	HITCH ASSEMBLY	8
	2.3	RIGHT WING ASSEMBLY	9
	2.4	LEFT WING ASSEMBLY	10
	2.5	REAR LIFT ASSEMBLY	11
	2.6	LOCK RELEASE ASSEMBLY	12
	2.7	Wheel Assembly	13
3	HYE	DRAULICS	14
4	DRI	IVELINE	15
	4.1	Driveline Layout	15
	4.2	INPUT PTO SHAFT	16
	4.3	Intermediate PTO Shaft	17
	4.4	WING DECK PTO SHAFT- SERIAL # 20111002 – 21111093	18
	4.5	WING DECK PTO SHAFT- SERIAL #21111094 AND ABOVE	19
	4.6	REAR DECK PTO SHAFT- SERIAL #20111002 – 21111093	20
	4.7	REAR DECK PTO SHAFT- SERIAL #21111094 AND ABOVE	21
	4.8	4-Way Gearbox – Option #1 - 521497B	22
	4.9	4-Way Gearbox – Option #2 - 215150	23
	4.10	DECK GEARBOX	24
5	DEC	CALS	25
	5.1	SAFETY	25
6	NO	TES	27

1 DECK ASSEMBLY

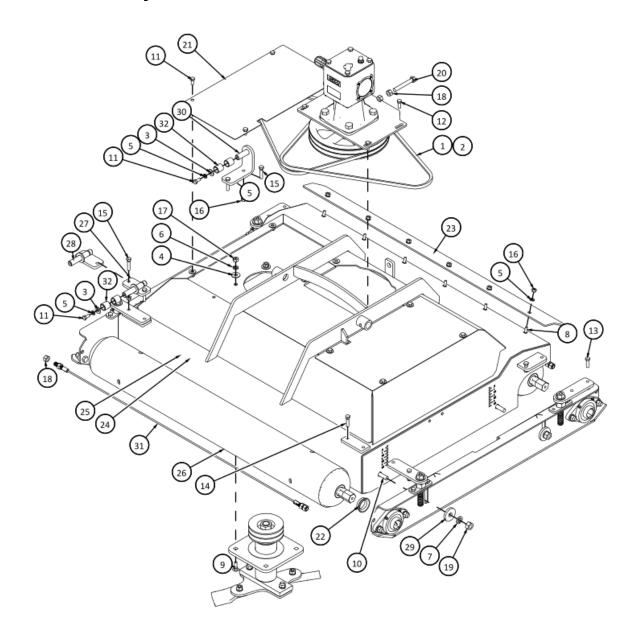
1.1 Blade Spindle Assembly - Serial # 20111003 - 20111059



1.2 Blade Spindle Assembly - Serial # 20111060 - and up



1.3 Deck Assembly

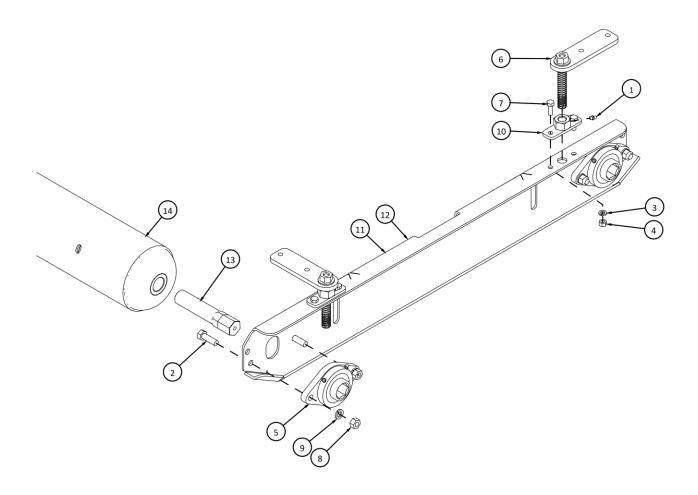


ITEM	Part#	Description	Qty	SN
1	212056	BELT - B61	2	UP TO 24111434
2	604963	BELT - B59	1	24111435 AND UP
3	0.L.	FLAT WASHER- 3/8 PL	14	
4	O.L.	FLAT WASHER- 7/16 PL	12	
5	O.L.	LOCK WASHER- 3/8 PL	16	
6	O.L.	LOCK WASHER- 7/16 PL	12	
7	O.L.	LOCK WASHER- 5/8 PL	4	
8	O.L.	CARR. BOLT- 3/8 X 1 NC GR5 PL	6	
9	0.L.	CARR. BOLT- 7/16 X 1.25 NC GR5 PL	12	
10	0.L.	CARR. BOLT- 5/8 X 2 NC GR5 PL	4	
11	O.L.	HEX BOLT - 3\8 x .75 NC GR5 PL	10	
12	O.L.	HEX BOLT- 3/8 X 1 NC GR5 PL	4	
13	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	2	
14	O.L.	HEX BOLT- 3/8 X 1.5 NC GR5 PL	2	
15	O.L.	HEX BOLT- 3/8 X 1.75 NC GR5 PL	4	
16	O.L.	HEX NUT - 3/8NC GR5 PL	14	
17	0.L.	HEX NUT - 7/16NC GR5 PL	12	

ITEM	Part #	Description	Qty	SN
18	O.L.	HEX NUT - 1/2NC GR5 PL	10	
19	O.L.	HEX NUT - 5/8NC GR5 PL	4	
20	O.L.	HEX BOLT- 1/2 X 3.5 NC GR5	1	
21	541043	DECK SHIELD - SIDE	2	
22	541510	KIT - ROLLER THRUST BUSHING 4PCS	1	
23	541335	GRASS DEFLECTOR - DECK	1	
24	541006	MOWER DECK - RED	1	
25	541006G	MOWER DECK GREEN	1	
26	541018	DECK ROLLER - TDR10	2	
27	541142	STANDOFF MOUNT - FRONT LEFT	1	
28	541146	STANDOFF MOUNT - FRONT RIGHT	1	
29	526148	TDR CLAMP WASHER KIT (4PCS)	1	
30	541120	REAR STANDOFF	1	
31	541156	ROLLER WIPER CABLE - TDR-X	2	
32	213102	BUSHING KIT - 8 PCS - GREY 3/4" ID	4	

O.L. - OBTAIN LOCALLY

1.4 Deck Side Channel Assembly

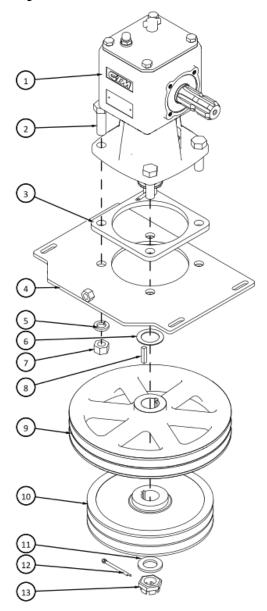


ITEM	PART #	DESCRIPTION	QTY
1	O.L.	GREASE FITTING 1/4 - 28	2
2	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	4
3	O.L.	LOCK WASHER- 3/8 PL	4
4	O.L.	HEX NUT - 3/8NC GR5 PL	4
5	213025	FLANGE BEARING - 2 BOLT HEX GREASABLE	2
6	541144	HEIGHT ADJ. ROD	2
7	O.L.	HEX BOLT- 3/8 X 1 NC GR5 PL	4
8	O.L.	HEX NUT - 1/2NC GR5 PL	4

ITEM	PART #	DESCRIPTION	QTY
9	O.L.	LOCK WASHER- 1/2 PL	4
10	541012	HEIGHT ADJ MOUNT	2
11	541016	DECK SIDE CHANNEL - RED	1
12	541016G	DECK SIDE CHANNEL - GREEN	1
13	541055	ROLLER SHAFT - HEX	1
14	541018	DECK ROLLER WITH SHAFTS	1
	9 10 11 12 13	9 O.L. 10 541012 11 541016 12 541016G 13 541055	10 541012 HEIGHT ADJ MOUNT 11 541016 DECK SIDE CHANNEL - RED 12 541016G DECK SIDE CHANNEL - GREEN 13 541055 ROLLER SHAFT - HEX

O.L. - OBTAIN LOCALLY

1.5 Gearbox Assembly

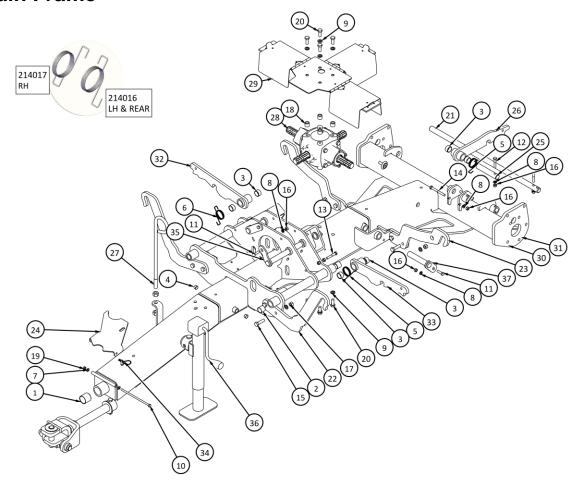


ITEM	Part#	Description	Qty	SN
1	215110	GEAR BOX DECK	1	
2	O.L.	HEX BOLT- 5/8 X 2 NC GR5 PL	4	
3	528657	GEAR BOX SPACER PLATE	1	USED UP TO SN 24111434
4	541084	GEAR BOX MOUNT	1	
5	O.L.	LOCK WASHER- 5/8 PL	4	
6	521004	SHIM WASHER - 1.25 (9 PCS)	1	
7	O.L.	HEX NUT - 5/8NC GR5 PL	4	
8	O.L.	KEY - 1/4" X 1.25"	1	
9	212021	PULLEY - 11-1/4"	1	USED UP TO SN 24111434
10	521774	MAIN DRIVE PULLEY	1	SN 24111435 AND UP
11	521129	WASHER - 25 X 44 X 4	1	
12	O.L.	3/16 X 1-1/2" COTTER PIN	1	
13	521130	CASTLE NUT - M24	1	

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2 Frame Assembly

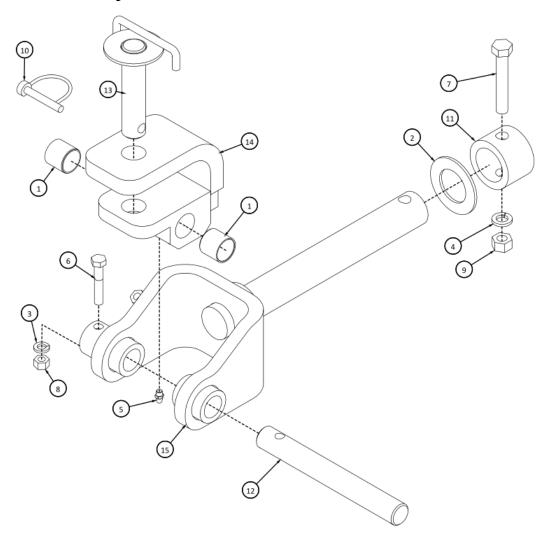
2.1 Main Frame



ITEM	PART#	DESCRIPTION	QTY
1	213110	BUSHING KIT -2 PCS - BEIGE- 1.5"ID X 1.5"	2
2	213108	BUSHING KIT - 4 PCS - BEIGE- 1"ID X 1"	4
3	213112	BUSHING KIT -6 PCS-GREY- 26MMID X 16MM	6
4	213114	BUSHING KIT -2 PCS-YELLOW- 16MMID X 10MM	2
5	214016	SPRING - DECK ARM LOCK - LH	2
6	214017	SPRING - DECK ARM LOCK - RH	1
7	O.L.	FLAT WASHER- 5/16 PL	2
8	O.L.	LOCK WASHER- 3/8 PL	8
9	O.L.	LOCK WASHER- 1/2 PL	16
10	O.L.	HEX BOLT- 5/16 X 7.5 NC GR5 PL	1
11	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	3
12	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	3
13	O.L.	HEX BOLT- 3/8 X 2.25 NC GR5 PL	2
14	O.L.	HEX BOLT- 3/8 X 3 NC GR5 PL	2
15	O.L.	HEX BOLT- 1/2 X 1.75 NC GR5 PL	8
16	O.L.	HEX NUT - 3/8NC GR5 PL	12
17	O.L.	HEX NUT - 1/2NC GR5 PL	8
18	521197	GEAR BOX COVER SPACER	4
19	O.L.	HEX LOCK NUT - 5/16 NC GRA CTR	1

ITEM	PART#	DESCRIPTION	QTY
20	O.L.	HEX BOLT - M12 X 30GR 8.8	8
21	541405	PIN - REAR LIFT	1
22	541263	STANDOFF - FRONT	2
23	541265	STANDOFF REAR	2
24	541327	PTO SUPPORT PLATE	1
25	541339	PIN - REAR LOCK	1
26	541214	REAR LOCK WITH BUSHINGS	1
27	522413	HOSE GUIDE - C/W HARDWARE	1
28	521497B	GEAR BOX - 4 SHAFT - BLACK	1
29	522463	4-WAY GEARBOX COVER	1
30	541036	MAIN FRAME - TDRX - RED	1
31	541036G	MAIN FRAME - TDRX - GREEN	1
32	541218	WING LOCK R.H. WITH BUSHINGS	1
33	541216	WING LOCK L.H. WITH BUSHINGS	1
34	O.L.	HAIR PIN - 1/8 x 2 9/16	1
35	541056	PIN - CYLINDER	2
36	219005	IMPLEMENT JACK	1
37	607398	PIN - CYLINDER	1
0.1	ODTAINL	OCALLY	

2.2 Hitch Assembly

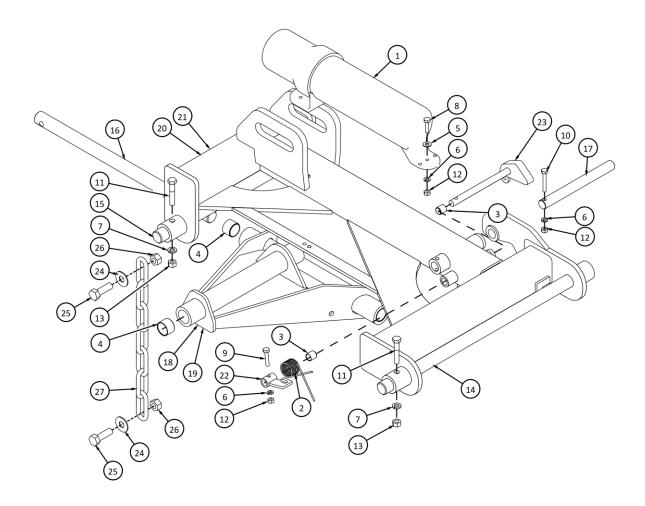


ITEM	PART#	DESCRIPTION	QTY
1	213100	BUSHING KIT - 2 PCS -1"	2
2	213081	THRUST WASHER - 1.5"	1
3	O.L.	LOCK WASHER- 3/8 PL	1
4	O.L.	LOCK WASHER- 1/2 PL	1
5	O.L.	GREASE FITTING 1/4 - 28	1
6	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	1
7	O.L.	HEX BOLT- 1/2 X 3 NC GR5 PL	1
8	O.L.	HEX NUT - 3/8NC GR5 PL	1

ITEM	PART#	DESCRIPTION	QTY
9	O.L.	HEX NUT - 1/2NC GR5 PL	1
10	302902	LYNCH PIN - 5/16"	1
11	541241	HITCH COLLAR	1
12	541251	HITCH PIVOT PIN	1
13	541082	HITCH PIN	1
14	541172	MAIN HITCH	1
15	541050	HITCH RECEIVER	1

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2.3 Right Wing Assembly



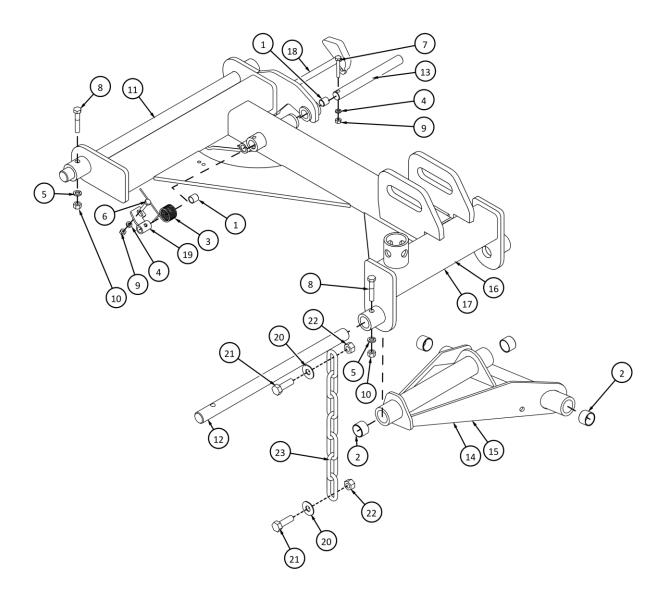
ITEM	Part #	Description	Qty
1	120519	MANUAL HOLDER TUBE	1
2	214020	SPRING - LOCK RELEASE RH	1
3	213104	BUSHING KIT - 6 PCS - YELLOW 13MM ID	2
4	213106	BUSHING KIT - 4 PCS - RED- 1"ID X 3/4"	4
5	O.L.	FLAT WASHER- 1/4 PL	2
6	O.L.	LOCK WASHER - 1/4 PL	4
7	O.L.	LOCK WASHER- 3/8 PL	2
8	O.L.	HEX BOLT - 1/4 x 1 NC GR5 PL	2
9	O.L.	HEX BOLT - 1/4 x 1.25 NC GR5 PL	1
10	O.L.	HEX BOLT - 1/4 x 1.75 NC GR5 PL	1
11	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	2
12	O.L.	HEX NUT - 1/4NC GR5 PL	4
13	O.L.	HEX NUT - 3/8NC GR5 PL	2
14	541249	PIN - WING	1

ITEM	Part #	Description	Qty
15	541253	PIN - SWIVEL	1
16	541255	PIN - DECK LIFT	1
17	541423	PIN - WING LOCK	1
18	541022	DECK SWIVEL - WING - RED	1
19	541022G	DECK SWIVEL - WING - GREEN	1
20	541028	WING- RH - RED	1
21	541028G	WING- RH- GREEN	1
22	541076	LOCK RELEASE RETURN	1
23	541114	LOCK RELEASE RH WING	1
24	O.L.	FLAT WASHER- 7/16 PL HARDENED	2
25	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	2
26	O.L.	HEX LOCK NUT - 1/2NC GR5 PL	2
27	541228	DECK STOP CHAIN	1

O.L. - OBTAIN LOCALLY

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2.4 Left Wing Assembly



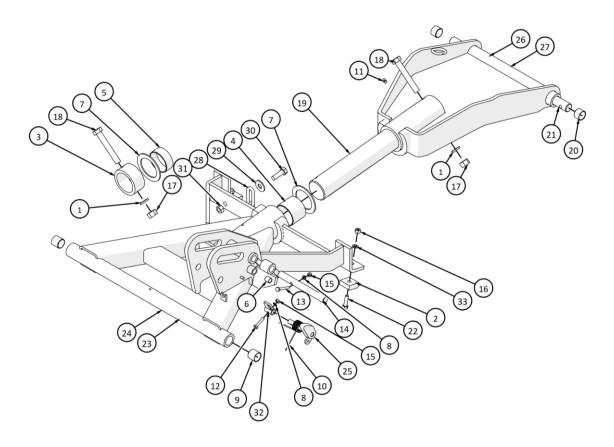
ITEM	PART#	DESCRIPTION	QTY
1	213104	BUSHING KIT - 6 PCS - YELLOW 13MM ID	2
2	213106	BUSHING KIT - 4 PCS - RED- 1"ID X 3/4"	4
3	214019	SPRING - LOCK RELEASE LH	1
4	O.L.	LOCK WASHER - 1/4 PL	2
5	O.L.	LOCK WASHER- 3/8 PL	2
6	O.L.	HEX BOLT - 1/4 x 1.25 NC GR5 PL	1
7	O.L.	HEX BOLT - 1/4 x 1.75 NC GR5 PL	1
8	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	2
9	O.L.	HEX NUT - 1/4NC GR5 PL	2
10	O.L.	HEX NUT - 3/8NC GR5 PL	2
11	541249	PIN - WING	1
12	541253	PIN - SWIVEL	1

ITEM	PART#	DESCRIPTION	QTY
13	541423	PIN - WING LOCK	1
14	541022	DECK SWIVEL - WING - RED	1
15	541022G	DECK SWIVEL - WING - GREEN	1
16	541026	WING - LH - RED	1
17	541026G	WING - LH - GREEN	1
18	541068	LOCK RELEASE LH WING	1
19	541076	LOCK RELEASE RETURN	1
20	O.L.	FLAT WASHER- 7/16 PL HARDENED	2
21	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	2
22	O.L.	HEX LOCK NUT - 1/2NC GR5 PL	2
23	541228	DECK STOP CHAIN	1

O.L. - OBTAIN LOCALLY

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2.5 Rear Lift Assembly

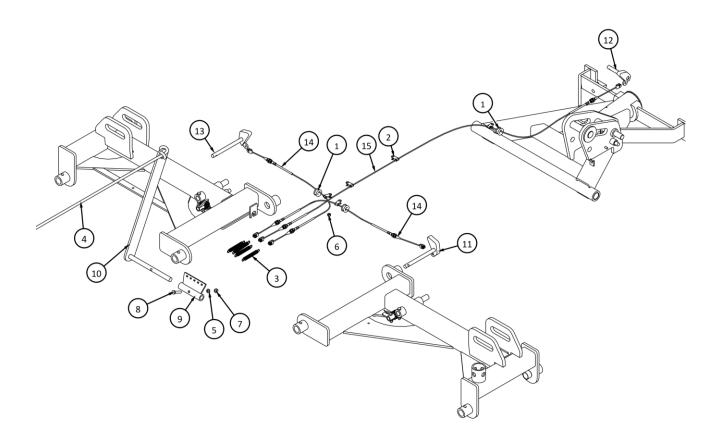


ITEM	PART#	Description	QTY
1	O.L.	LOCK WASHER- 5/8 PL	2
2	541504	BUMPER KIT (2 PCS)	1
3	541245	REAR LIFT COLLAR	1
4	213077	BUSHING - 2.5" ID X 2"	1
5	213078	BUSHING - 2.5" ID X 1"	1
6	213104	BUSHING KIT - 6 PCS - YELLOW 13MM ID	2
7	213120	WASHER KIT -2 PCS-GREY- 2.5"ID	2
8	O.L.	LOCK WASHER- 1/4 PL	2
9	213100	BUSHING KIT - 2 PCS - GREY 1"	2
10	214020	SPRING - LOCK RELEASE RH	1
11	O.L.	GREASE FITTING 1/4 - 28	1
12	O.L.	HEX BOLT - 1/4 x 1.25 NC GR5 PL	1
13	O.L.	HEX BOLT - 1/4 x 1.75 NC GR5 PL	1
14	541429	PIN - REAR LOCK	1
15	O.L.	HEX NUT - 1/4NC GR5 PL	2
16	O.L.	HEX NUT - 3/8NC GR5 PL	2
17	O.L.	HEX NUT - 5/8NC GR5 PL	2

ITEM	PART#	Description	QTY
18	O.L.	HEX BOLT- 5/8 X 4 NC GR8 PL	2
19	541259	PIN - REAR SWIVEL	1
20	213106	BUSHING KIT - 4 PCS - RED- 1"ID X 3/4"	2
21	541255	PIN - DECK LIFT	1
22	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	2
23	541148	REAR LIFT - RED	1
24	541148G	REAR LIFT - GREEN	1
25	541154	LOCK RELEASE REAR	1
26	541024	REAR DECK SWIVEL - RED	1
27	541024G	REAR DECK SWIVEL - GREEN	1
28	526972	DECK STOP CHAIN	2
29	O.L.	FLAT WASHER - 1/2 USS PL	2
30	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	2
31	O.L.	HEX NUT - 1/2 NC GR5 PL	2
32	541076	LOCK RELEASE RETURN	1
33	O.L.	LOCK WASHER- 3/8 PL	2

O.L. - OBTAIN LOCALLY

2.6 Lock Release Assembly

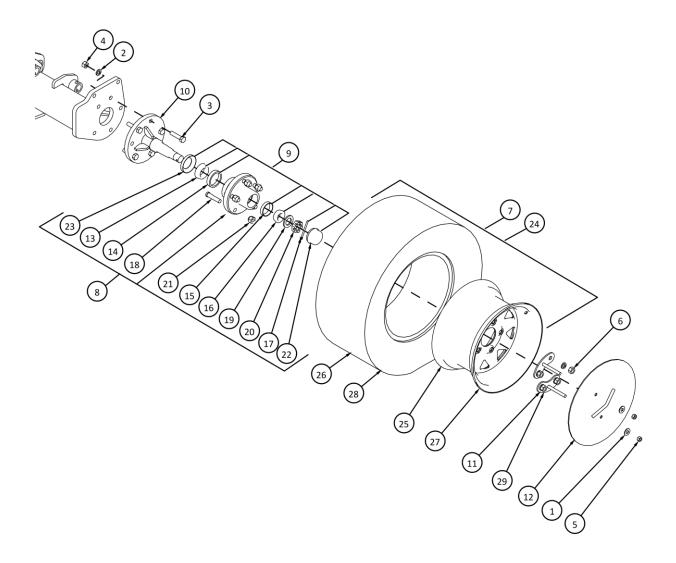


ITEM	PART #	DESCRIPTION	QTY
1	213116	GROMMET KIT -3 PCS- 9/16" X 3/8"	3
2	213118	CABLE CLAMP KIT -5 PCS- 3/16" DIA	5
3	214022	KIT- LOCK CABLE SPRINGS, 4 PCS	4
4	521331	PULL ROPE - 10'	1
5	O.L.	LOCK WASHER- 5/16 PL	1
6	O.L.	HEX LOCK NUT - 1/4NC GR5 PL	1
7	O.L.	HEX NUT - 5/16NC GR5 PL	1
8	O.L.	HEX BOLT- 5/16 X 1.5 NC GR5 PL	1

ITEM	PART #	DESCRIPTION	QTY
9		LOCK RELEASE PIVOT	1
10	541066	LOCK RELEASE HANDLE	1
11	541068	LOCK RELEASE LH WING	1
12	541154	LOCK RELEASE REAR	1
13	541114	LOCK RELEASE RH WING	1
14	541130	LOCK RELEASE CABLE - WING - 35.0'	2
15	541132	LOCK RELEASE CABLE - REAR- 70"	1

O.L. - OBTAIN LOCALLY

2.7 Wheel Assembly



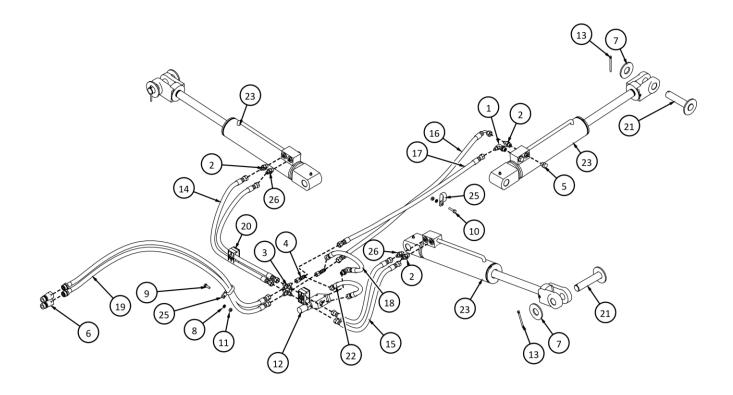
ITEM	Part #	Description	Qty	SN
1	O.L.	FLAT WASHER- 3/8 PL	2	
2	O.L.	LOCK WASHER- 1/2 PL	9	
3	O.L.	HEX BOLT- 1/2 X 2 NC GR5 PL	5	
4	O.L.	HEX NUT - 1/2NC GR5 PL	5	
5	O.L.	HEX LOCK NUT - 3/8 NC GR5 PL	2	
6	O.L.	HEX NUT - 1/2NF GR8 PL	4	
7	230087	WHEEL ASSY: TDR-X	1	UP TO 21111157
8	521328	HUB ASSEMBLY W/ALL PARTS	1	
9	230028	WHEEL REBUILD KIT	1	
10	541040	REPLACEABLE AXLE	1	
11	541078	WHEEL DISC MOUNT, FOR 230087	2	UP TO 21111157
12	541080	HUB CAP - TDRX	1	
13		BEARING - CONE	1	
14	-	BEARING CUP - INNER	1	
15	-	BEARING CUP - OUTER	1	

ITEM	Part #	Description	Qty	SN
16	-	BEARING - CONE	1	
17	O.L.	3/16 X 1-1/2" COTTER PIN	1	
18	521755	PRESS IN WHEEL STUD (5 PCS)	1	
19	521746	WASHER (2 PCS)	1	
20	521747	HEX NUT - CASTELATED (2 PCS)	1	
21	521327	WHEEL NUT KIT (5 PCS)	1	
22	521748	DUST CAP	1	
23	521741	GREASE SEAL	1	
24	230090	WHEEL ASSY: TDR-X	1	21111158 AND UP
25	230092	WHEEL ONLY FOR 230090	1	21111158 AND UP
26	230091	TIRE ONLY FOR 230090	1	21111158 AND UP
27	230089	WHEEL ONLY FOR 230087	1	UP TO 21111157
28	230088	TIRE ONLY FOR 230087	1	UP TO 21111157
29	541180	WHEEL DISC MOUNT, FOR 230090	2	21111158 AND UP

O.L. - OBTAIN LOCALLY

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3 Hydraulics



ITEM	PART#	DESCRIPTION	QTY
1	221142	ELBOW -6 ORBM X -4 JICM 90DEG	1
2	221151	ADAPTER - JIC#4M -ORB#6M-REST-0.032	3
3	221152	CROSS- #6JIC MALE	2
4	221153	TEE- #6JIC M-F-M	2
5	221154	PLUG - #6 ORB MALE	6
6	222006	HOSE END KIT - (2 PCS)	2
7	O.L.	FLAT WASHER- 1 PL	3
8	O.L.	LOCK WASHER - 1/4 PL	2
9	O.L.	HEX BOLT - 1/4 x .75 NC GR5 PL	1
10	O.L.	HEX BOLT - 1/4 x 1 NC GR5 PL	1
11	O.L.	HEX NUT - 1/4NC GR5 PL	2
12	528822	RELIEF VALVE	1
13	O.L.	3/16 X 1-1/2" COTTER PIN	3
14	221155	HYD HOSE - RIGHT WING CYL	2

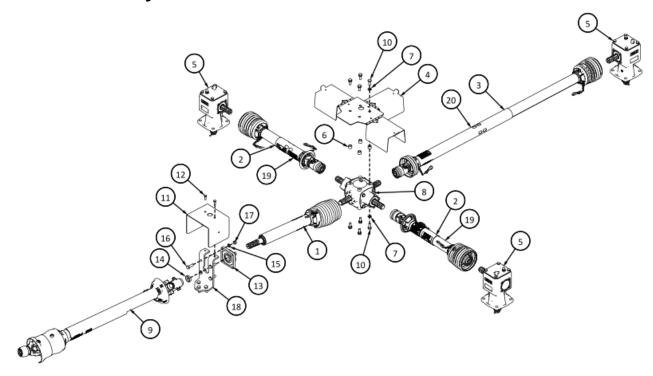
ITEM	PART#	DESCRIPTION	QTY
15	221156	HYD. HOSE - LEFT WING CYL	2
16	221157	HYD HOSE - REAR CYL 90DEG	1
17	221158	HYD HOSE - REAR CYL	1
18	221159	HYD HOSE 90 deg- RELIEF VALVE	1
19	221160	HYDRAULIC HOSE 1/4" - 115"	2
20	229019	DOUBLE HOSE CLAMP	2
21	541116	ROD END CYL PIN - TDR-X	3
22	221161	HYD HOSE - RELIEF VALVE	1
23	522072	HYDRAULIC CYL2.5" X 10"	3
24	522073	SEAL KIT FOR 522072	1
25	229008	5/8 DOUBLE TUBE CLAMP	2
26	221150	ADAPTER - JIC#4M -ORB#6M	2

O.L. - OBTAIN LOCALLY

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4 Driveline

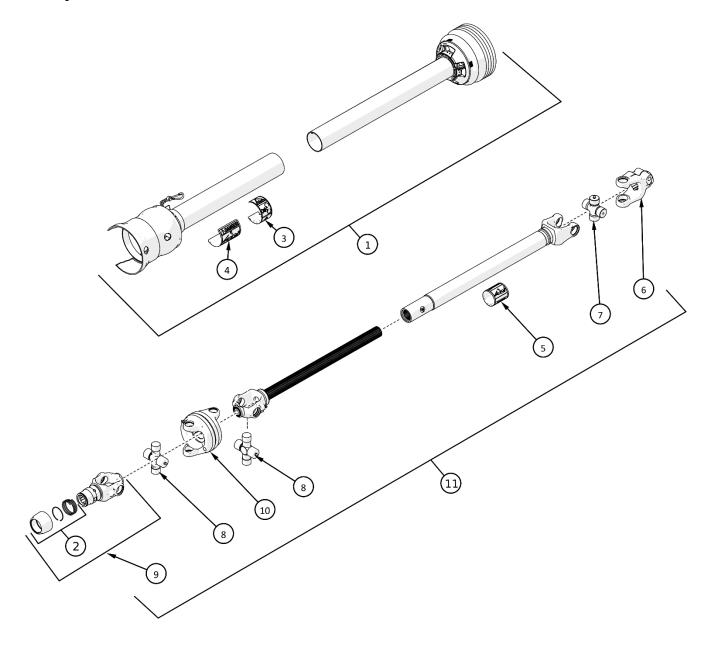
4.1 Driveline Layout



ITEM	PART#	DESCRIPTION	QTY	SerialNumber
1	210210	INTERMEDIATE PTO-w/OVERRUNNING	1	
2	210306	WING PTO SHAFT - TDR-X, 6 SERIES	2	UP TO 21111093
3	210316	REAR PTO SHAFT - TDR-X, 6 SERIES	1	UP TO 21111093
4	522463	4-WAY G-BOX SHIELD	1	
5	215110	GEAR BOX RG-30	3	
6	521197	GEAR BOX COVER SPACER	4	
7	O.L.	LOCK WASHER- 1/2 PL	4	
8	521497B	GEAR BOX - 4 SHAFT - BLACK	1	
9	210320	INPUT PTO	1	
10	521764	HEX BOLT-M12X30 & L.W (16 PCS)	8	
11	541239	INTERMEDIATE SHIELD	1	
12	O.L.	HEX BOLT- 3/8 X 1 NC GR5 PL	2	
13	521323	4 BOLT FLANGE BEARING - 1-3/8"	1	
14	526013	INPUT PTO SPACER 0.400"	1	
15	O.L.	LOCK WASHER- 1/2 PL	3	
16	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	4	
17	O.L.	HEX NUT - 1/2NC GR5 PL	3	
18	541042	PTO MOUNT PLATE	1	
19	210330	WING PTO SHAFT - TDR-X	2	21111094 AND UP
20	210340	REAR PTO SHAFT - TDR-X	1	21111094 AND UP

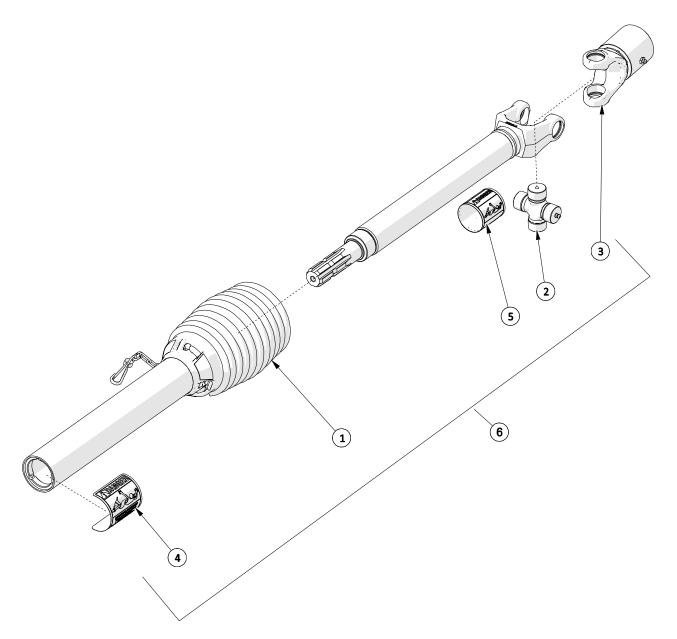
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4.2 Input PTO Shaft



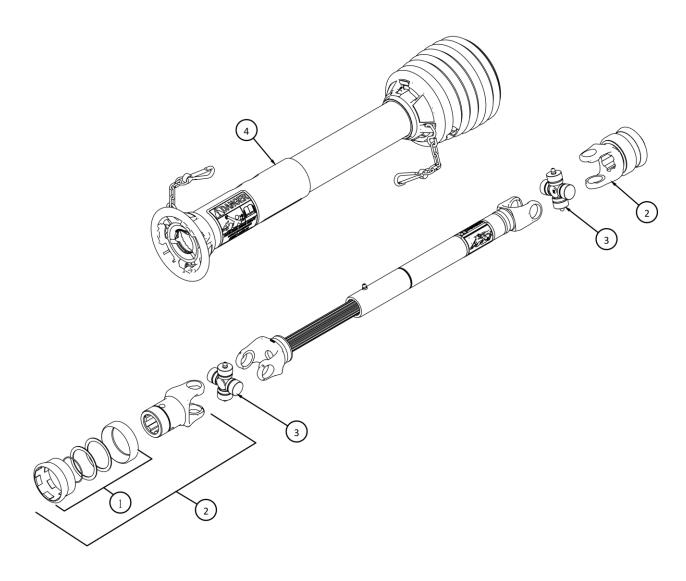
ITEM	PART #	DESCRIPTION	QTY
1	210321	COMPLETE GUARD SET	1
2	210179	SLIDE LOCK REPAIR KIT(44E)	1
3	210238	CE WARNING DECAL	1
4	210237	SAFETY SIGN - OUTER GUARD	1
5	210239	SAFETY SIGN - INNER GUARD	1
6	210235	35 SERIES CLAMP YOKE	1
7	210234	35E2BL CROSS KIT	1
8	210284	CAT 4 80 EBL CROSS & BRG KIT	2
9	210283	AUTO LOK YOKE ASSEMBLY	1
10	210281	CENTER HOUSING	1
11	210320	COMPLETE INPUT PTO WITH GUARDS	1

4.3 Intermediate PTO Shaft



ITEM	PART#	Description	QTY
1	210211	PTO GUARD	1
2	210234	35E2BL CROSS & BEARING KIT	1
3	210212	OVERRUNNING CLUTCH ASSEMBLY	1
4	210237	SAFETY SIGN - OUTER GUARD	1
5	210239	SAFETY SIGN - INNER GUARD	1
6	210210	COMPLETE PTO SHAFT ASSEMBLY	1

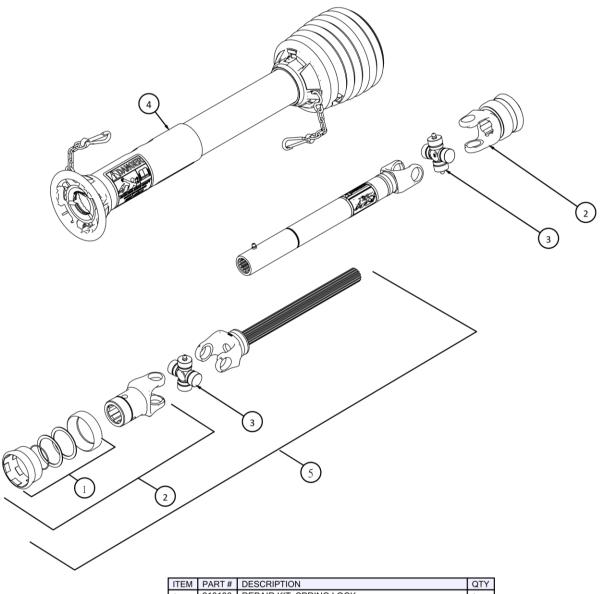
4.4 Wing Deck PTO Shaft- Serial # 20111002 - 21111093



ITEM	PART#	DESCRIPTION	QTY	Notes
1	210196	REPAIR KIT, SPRING LOCK	1	
2	210302	YOKE, 6 SERIES, SPRING LOCK	2	
3	210303	CROSS AND BEARINGS - 6E2BL	2	
4	210301	COMPLETE GUARD SET FOR 210300	1	
5	210306	WING PTO SHAFT COMPLETE, 6 SERIES	1	OBSOLETE, REPLACED WITH 210330

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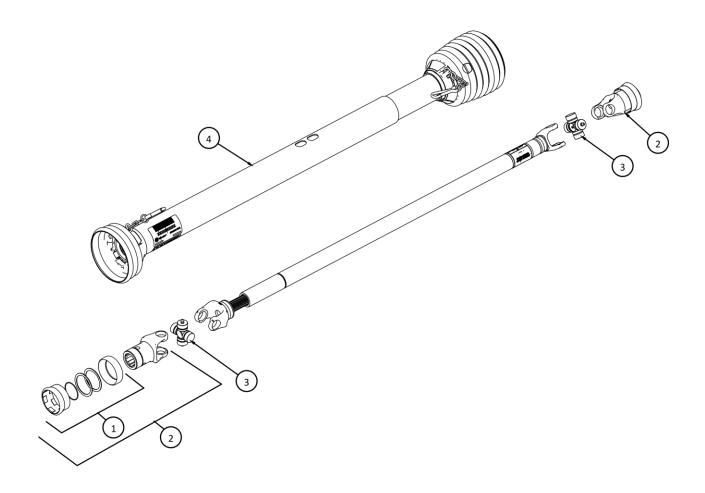
4.5 Wing Deck PTO Shaft- Serial #21111094 and above



ITEM	PART#	DESCRIPTION	QTY
1	210196	REPAIR KIT, SPRING LOCK	1
2	210334	YOKE, 12 SERIES, SPRING LOCK	2
3	210335	CROSS AND BEARINGS - 12E2BL	2
4	210331	COMPLETE GUARD SET FOR 210330	1
5	210332	JOINT AND SHAFT HALF GUARDED, 4 WAY GB SIDE	1
6	210330	WING PTO SHAFT COMPLETE, 12 SERIES	1

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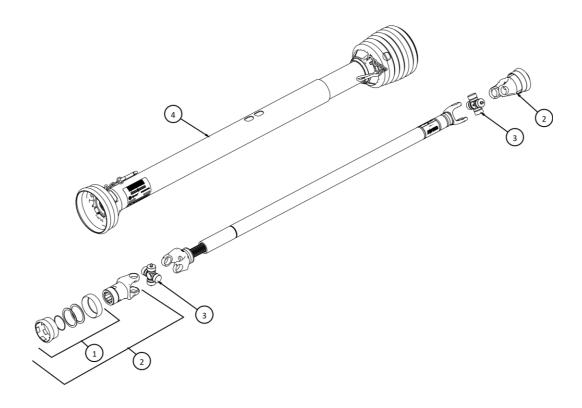
4.6 Rear Deck PTO Shaft- Serial #20111002 - 21111093



ITEM	PART#	DESCRIPTION	QTY	Notes
1	210196	REPAIR KIT, SPRING LOCK	1	
2	210302	YOKE, 6 SERIES, SPRING LOCK	2	
3	210303	CROSS AND BEARINGS - 6E2BL	2	
4	210311	COMPLETE GUARD SET FOR 210310	1	
5	210316	REAR PTO SHAFT COMPLETE, 6 SERIES	1	OBSOLETE, REPLACED WITH 210340

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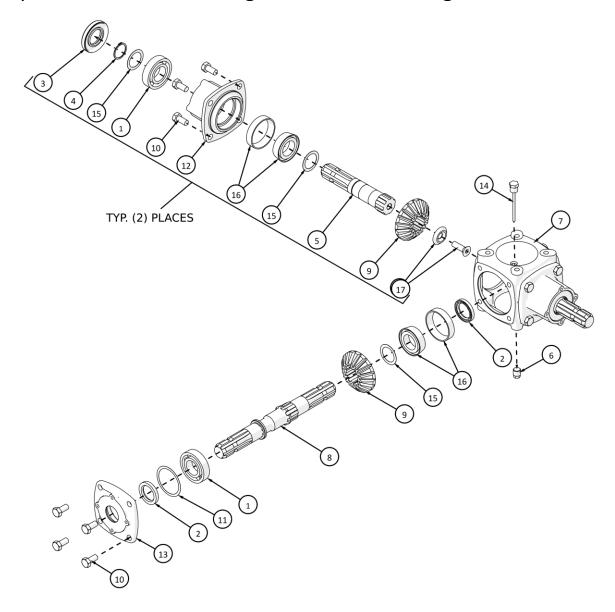
4.7 Rear Deck PTO Shaft- Serial #21111094 and above



ITEM	PART#	DESCRIPTION	QTY
1	210196	REPAIR KIT, SPRING LOCK	1
2	210334	YOKE, 12 SERIES, SPRING LOCK	2
3	210335	CROSS AND BEARINGS - 12E2BL	2
4	210341	COMPLETE GUARD SET FOR 210340	1
5	210340	REAR PTO SHAFT COMPLETE, 12 SERIES	1

4.8 4-Way Gearbox - Option #1 - 521497B

Internal parts are not interchangeable with 215150 gearbox



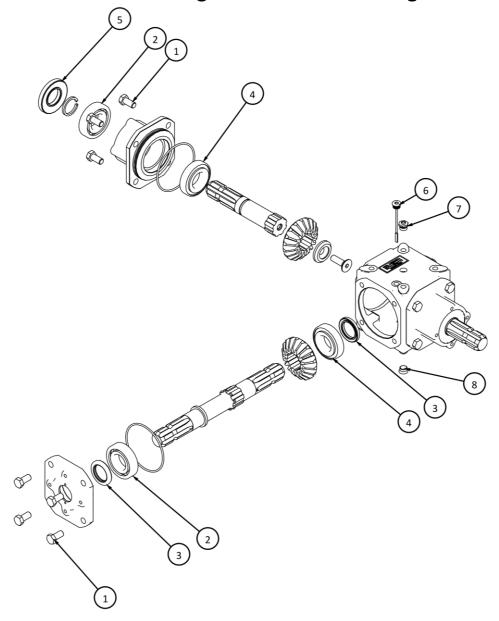
ITEM	PART #	DESCRIPTION	QTY
1	521116	BEARING - 6207	3
2	521120	OIL SEAL - 35 X 52 X 10	2
3	521127	OIL SEAL - 35 X 72 X 10	2
4	521137	SNAP RING	2
5	521481	STUB SHAFT	2
6	521482	HEX PIPE PLUG	1
7	521483	HOUSING	1
8	521486	THRU SHAFT	1
9	521487	GEAR	3
10	521488	BOLT - M12 X 25 - 8.8 (6 PCS)	12

ITEM	PART #	DESCRIPTION	QTY
11	521491	SHIM KIT	1
12	521796	EXTENSION HOUSING	2
13	521797	COVER	1
14	521489	OIL LEVEL DIPSTICK	1
15	521794	SHIM KIT	5
16	521362	BEARING - TAPERED	3
17	522426	BOLT AND WASHER KIT (4 PCS)	2
18	521497B	COMPLETE GEARBOX BLACK	1

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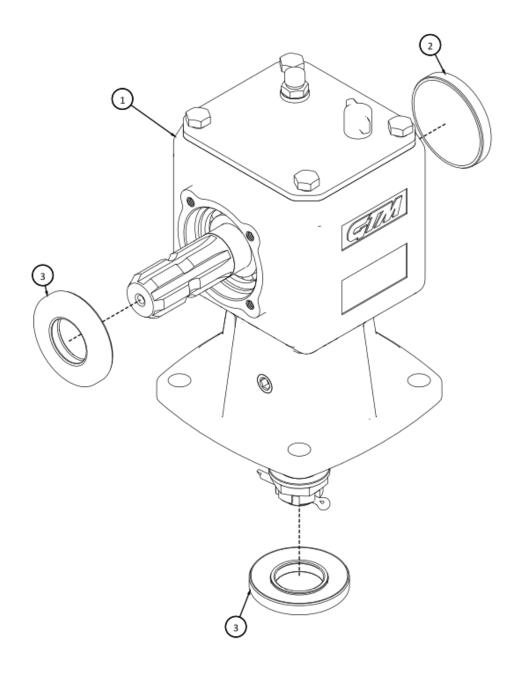
4.9 4-Way Gearbox - Option #2 - 215150

Internal parts are not interchangeable with 521497B gearbox



ITEM	PART#	DESCRIPTION	QTY
1	521488	BOLT - M12 X 25 8.8 (6PCS)	12
2	521116	BEARING	3
3	215151	OIL SEAL	2
4	521362	BEARING - CUP & CONE	3
5	521127	OIL SEAL	2
6	215152	DIPSTICK	1
7	215153	BREATHER	1
8	215154	PLUG 9/16 UNF	1
9	215150	GEAR BOX 4 WAY	1

4.10 Deck Gearbox



ITEM	PART#	DESCRIPTION	QTY
1	215110	GEAR BOX - DECK	1
2	521443	END CAP 72 X 10	1
3	521127	OIL SEAL 35 X 72 X 10	2

5 DECALS

5.1 Safety

If decals become faded, damaged, or lost, replace immediately. Order decal according to corresponding part number below. Complete decal kits are also available.

541503 - KIT - SAFETY DECALS FOR TDR-X



TO AVOID SERIOUS INJURY OR DEATH FROM BLADE ATTACHMENT FAILURE CHECK THE POLLOWING COMPONENTS SEFORE OPERATING EQUIPMENT:

- Check mounting boils DAILY for tightness
- Torque mounting boils to 85 ft-lb.
- ALWAYS replace boils, lock washers and nuts when replacing blades or blade bars

- ALWAYS replace blade boils, nuts and lock washers when installing new blade tips

- 209196

209196 DECAL - BLADE HARDWARE

209175 DECAL – GENERAL SAFETY



209113 DECAL – REPLACE SHIELDS



209115 DECAL – OEM PARTS



209174 DECAL - CAUTION



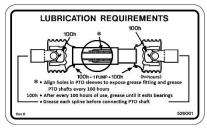
521817 DECAL – PROGRESSIVE TURF (B Models)



DECAL - ROTATING BLADE DANGER



521784 DECAL – HITCH SETUP



526001 DECAL – PTO GREASE



521817DE DECAL – PROGRESSIVE TURF (D Models)



209203 TDR-X



210237 SAFETY SIGN – OUTER GUARD



210238 DECAL – CE WARNING



GREASE POINT DECAL (521014)



GREASE X PER YEAR (209204)