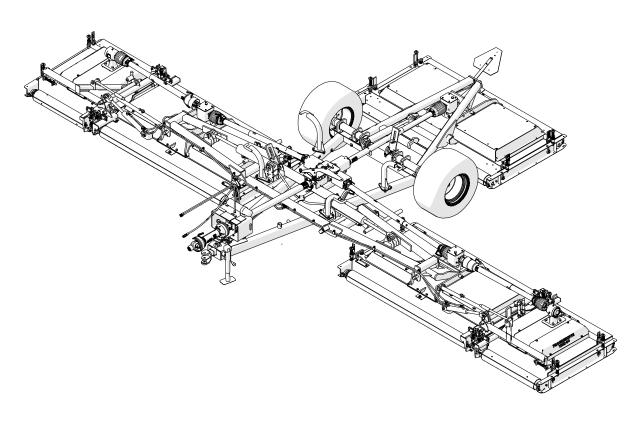


OPERATOR'S MANUAL AND PARTS LIST

PROGRESSIVE TDR-30 TRI-DECK ROLLER FINISHING MOWER

SERIAL NO: 13301002 - 13301008



PROGRESSIVE TURF EQUIPMENT INC. 137 WEST WILLIAM STREET SEAFORTH, ONTARIO CANADA NOK 1W0

PHONE:519-527-1080 SERIAL # _____ TOLL FREE: 800 668-8873 WEB: <u>www.progressiveturfequip.com</u>

ISSUE DATE: August 2014 120537

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TO THE OWNER

Before you operate this mower, study this manual carefully. It has been prepared to help you do a better and safer job of maintaining your mower.

Use only genuine Progressive Turf Equipment Inc. replacement parts. Substitute parts will void the warranty and may not meet the standards required for safe and satisfactory operation of this equipment.

Blades are especially important. The manufacturing process is a very exacting one and only a handful of blade producers are capable of this process. Always insist on purchasing and using OEM blades for your own protection and that of your employees.

HAZARD SERIOUSNESS LEVEL

The following signal words are found throughout the manual together with the safety alert symbol to indicate the seriousness level of identified hazards. Their selection is based on the consequence of human interaction with a hazard.

DANGER! –Hazards or unsafe practices which WILL result in severe personal injury or death.

WARNING! – Hazards or unsafe practices that COULD result in severe personal or death.

CAUTION! – Hazards or unsafe practices that COULD result in minor personal injury or product or property damage.

ADANGER!





GENERAL INFORMATION

The purpose of this manual is to assist the operator in maintaining and operating Progressive Turf Equipment mowers. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance.

Some information may be general in nature due to unknown and varying conditions. However, through experience and these instructions you should be able to develop operating procedures suitable to your particular situation.

Throughout this manual, references are made to right and left directions. These are determined by standing at the rear of the equipment and facing the direction of forward travel. Blade rotation is counter-clockwise as viewed from the top of the mower.

For quick reference, record the following information.

MODEL: TDR-30

DATE PURCHASED: ______

SERIAL NUMBER: _____

For additional information, assistance during assembly, or operation of this mower contact the dealer the machine was purchased from, or call Progressive Turf Equipment Inc.

PHONE: 519-527-1080 1-800-668-8873 FAX: 519-527-2275

TDR-30 MACHINE SPECIFICATIONS			
Cutting Width	30 feet		
Cutting Height	1/2" to 4"	Deck Flexibility	25" up, 15 degree down
Recommended HP	85 Min – 105Max	360 Degree Turn	0" Uncut Circle
Hydraulics	Requires 2 double acting outlets, with float, all hoses supplied to tractor	Numbers of wheels	2 on main frame
Transport Width	94"	Mowing Capacity	MPH 2 4 6 7.5 Acres per hour 7.4 14.6 22 27 Assumes no stops or overlap.
Height	13'	Paint Finish	Electrostatically painted with oven baked finish.
Length	17 ft.	SMV Sign	Located at back of mower for safety
Ground Clearance	11" Cutting	Weight	Total 7400 lbs.

DECK		FRAME		
Drive	PTO shaft to right angle gear box	"A" Frame	Hollow structural steel tubing with supports	
	driving "B" section belts to heavy-		at high stress areas to achieve maximum	
	duty spindles.		strength.	
Belt		Axles	Rated at 7000 lbs. with re-greasable hubs	
Adjustment	Positive screw type belt tensioners.	XX71 1 .	0.1, 14, 0221, 14, 2, 1	
		Wheels	8 bolt, 8" bolt circle 33 x 16LL	
Deck	3/16" steel plate formed and	Tires Hitch	4 positions, with height settings from 10-1/2"	
Construction	welded with supporting members	HILLII	to 15". Safety chain with hook according to	
Construction	at high stress areas to achieve		Dept. of Transport regulations.	
	maximum strength. Deck is 7"		Dept. of Transport regulations.	
	deep.			
Cutting Height	Easy and accessible screw	Tongue	Transport position – 1260 lbs.	
	mechanism. Infinite number of	Weight	Mowing position – 560 lbs.	
	adjustments from 1/2" to 4"			
Spindles	16 spindles, 35mm spindles are	Cylinders	Rear deck: (1) 3" x 12" single acting	
	each carried in 2 sealed ball		Wing deck: (2) 4" x 16" single acting	
	bearings, which are housed, in a		Wing Ext: (2) 2" x 10" double acting	
	precision machined hub.			
Blade Support	3/4" x 2 1/2" x 8" long bar welded	Main Gear	4 shaft gear box with 1-3/8"-6 spline shafts,	
	to spindle and machined. 1/2"	Box	delivering power to decks.	
	bolts hold blade rigid to provide			
Blades	clean level cut. High lift, heat treated, alloy steel	PTO Shafts	Deck Drive telescoping agricultural PTO	
Biades	blades 5/16" x 2-1/2" x 24".	1 10 Shalts	Drive shafts, with proper safety shields.	
	Optional low-lift and Pro EZ		1-3/8"-6 spline quick-disconnect yokes on	
	change blade system available.		both ends.	
Speeds	Tractor PTO – 540 RPM			
1	Blades – 2890 RPM	Screw Jack	7000 lbs. side wind jack for easy hookup.	
	Blade Tip Speed 18,300 FPM		, , ,	
Rollers	6" diameter with 1.88 wall		Input PTOrated at 85 HP at 540 RPM	
	thickness. Supported by (2) 1.25"		Deck PTOrated at 38 HP at 540 RPM	
	two bolt ductile bearings			

SAFETY RULES

All rotary mowers are potentially dangerous machines; this mower has been designed to minimize the safety risks to the operator, bystanders and property. This section of the Operator's Manual details a number of safety rules pertaining to the operation and maintenance of Progressive Turf Equipment mowers. In order to minimize risks and promote safety at all times, these rules must always be followed and obeyed.

Further safety rules and warning texts are given within the respective sections of this manual.

IMPORTANT!

When it comes to safety, nothing will ever replace a careful operator.

It is imperative that the operator reads and understands all the safety information in this manual before proceeding. Failure to follow the instructions or heed the warnings could result in injury or death.

Proper care is your responsibility.

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The hazard alerts in this publication and on the product, are therefore not all inclusive. If a tool, procedure, work method, or operating technique not specifically recommended by the manufacturer is used, it is your responsibility to ensure that it is safe for you and others. You should also ensure the machine will not be damaged or made unsafe by the operation, maintenance, or repair procedures you choose. Modifications or adaptations to the machine are not allowed.

Various jurisdictions have specific requirements for work zone safety. Know and adhere to your local requirements. Treat the instructions in this manual as minimum requirements for safe operation.

SAFETY ALERT SYMBOL

This symbol appears at various points in the manual together with a signal word and warning text. **It means** – **Be alert! Your safety is involved.** This symbol is used throughout the manual to call attention to areas in which carelessness or failure to follow specific procedures may result in personal injury or component damage / malfunction or both.



HAZARD SERIOUSNESS LEVEL

The following signal words are found throughout the manual together with the safety alert symbol to indicate the seriousness level of identified hazards. Their selection is based on the consequence of human interaction with a hazard.

DANGER! —Hazards or unsafe practices which WILL result in

DANGER! –Hazards or unsafe practices which WILL result in severe personal injury or death.

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WARNING!

CAUTION! – Hazards or unsafe practices that COULD result in minor personal injury or product or property damage.



GENERAL SAFETY PRECAUTIONS

AWARNING!

- The operator of this machine must have sufficient knowledge and instructions in the care and operation of this mower and the power unit being used before he / she uses the machine. Do not allow unauthorized persons or children to operate the machine. Do not allow riders on the machine.
- It is the obligation of the operator to make sure that all guards and shields are in place on the machine. Safety decals must be in place and be readable accidents may otherwise occur. Contact your dealer or the manufacturer for replacement manuals or decals.
- Never use a machine that does not have an operator's manual available. Learn and understand the safety signs and symbols on the machine and the operator instructions before you begin to use the machine.
- Wear personal protective equipment. Know and use the protective equipment that is to be worn when operating or servicing the machine. Hard hats, protective glasses and face shields, protective shoes, gloves, reflector type vests, and ear protection are types of equipment that may be required. Prolonged exposure to loud noise can cause hearing damage.



- Never operate a mower while under the influence of drugs or alcohol. These make reflexes slow and put you and others in grave danger. Always make sure you have full concentration while mowing.
- Adhere strictly to all regulations at the worksite pertaining to the operation of this
 equipment.
- Always disengage power takeoff (PTO) when transporting or traveling between work sites.
- Be prepared for emergencies. Have a first aid kit, fire extinguisher and emergency contact information available at the work site.

POWER UNIT SAFETY



- Operator must have sufficient knowledge in the care and operation of the power unit (tractor) before connecting power unit to mower.
- Power unit must be equipped with ROPS and seat belt. Foldable ROPS must be secured in the upright position. Follow recommendations of power unit manufacturer. Seat belt must be worn at all times.

Power unit must be equipped with a 1-3/8" 6 spline 540 RPM PTO connection. Never use PTO adapters to connect implements. Never connect mower driveline to 1000 RPM PTO.

OPERATING EQUIPMENT SAFELY

MWARNING!

- Never allow persons to stand between power unit and mower while backing power unit up to hitch the mower.
- Before hitching mower to power unit, place transmission in neutral, set park brake, and turn engine off. Remove the ignition key.
- Make sure locking collar on PTO shaft is properly locked. If the PTO shaft comes off during operation, personal injury or equipment damage could result.
- Always install safety chains properly when hitching mower to power unit.
- Tall grass can hide obstacles. Carefully walk the entire area to be mowed beforehand.
 Look for debris, rocks, tree limbs etc. that will damage or be thrown by the mower
 blades. Identify objects that cannot be removed. Set mower cutting
 height to avoid contact.
- Ensure that no bystanders are within 25 ft. of mower when wing transport locks are released.
- Keep all bystanders well away from the machine when it is operating. Always maintain a safe operating distance of 300 ft. from personnel, other equipment, or vehicles.
- Never operate the mower with deflectors or guards removed. Mower blades can cause small objects and debris to be thrown from under the mower deck at high speeds, up to 300 ft. away. Objects ejected by the mower blades can cause severe injury.
- Never tamper with safety devices or operate the mower with them removed. Check proper operation regularly.
- Always disengage PTO, turn power unit off and remove key before dismounting, for any reason.
- Never place hands or feet under mower deck when the mower is operating or power unit engine is running.
- Disengage the PTO when crossing gravel areas or roadways.
- Disengage the PTO and turn power unit off upon striking any object. Inspect mower and repair any damage before continuing.
- If the equipment should start to vibrate abnormally during operation, stop the mower, shut down power unit, and immediately check for the cause. Excess vibration is generally an indication of a problem. Replace bent or damaged parts; do not attempt to straighten a bent blade.
- Use extreme care when operating on uneven terrain.
- Reduce speed when operating on slopes during wet conditions, especially when making sharp turns.

- Do not use the mower in limited visibility (e.g. at dusk, in fog, heavy rain etc.). Mow only in daylight or good artificial light.
- Disengage PTO and ensure blades are completely stopped before raising wings.
- Ensure transport locks are securely engaged before transporting mower with wings in raised position.
- Clean reflectors, Slow Moving Vehicle sign and lights before transporting. Use power unit hazard lights.
- Before disconnecting from power unit, always lower equipment to the ground, place controls in neutral, set park brake, turn engine off, and wait for all moving parts to stop. Relieve hydraulic pressure per power unit manufacturer's instructions.
- Ensure mower tongue jack is securely fastened to mower frame with supplied pin before removing hitch draw pin.

MAINTENANCE SAFETY PRECAUTIONS

MARNING!

- Never make adjustments or repairs with the engine running. Always disengage PTO, turn engine off, lower wings to cutting position and relieve hydraulic pressure before performing any maintenance.
- Observe and perform proper lock-out procedures for power unit if attached to mower during service.
- Keep nuts and bolts tight and properly torqued, especially blade attachment bolts. Check that all cotter pins are properly installed. Keep equipment in good condition.
- Keep mower free of grass, leaves, or other debris build-up.
- Never work on raised mower decks without safety locks in place.
- Periodically check condition of safety devices, guards, and deflectors. Replace only with manufacturer's recommended parts.
- Inspect and replace damaged blades. Use only original OEM parts. Blades can fail from poor maintenance practices.
- Handle mower blades carefully. They are sharp and can cut unprotected skin. Use caution and wear gloves when handling them.
- Check to make sure hydraulic hoses are not worn or damaged, and are routed to avoid chafing.
- Immediately replace any hydraulic hose that shows signs of swelling, wear, leaks or damage so it does not burst.
- 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.
- Do not bend or strike hydraulic lines, tubes or hoses, or reinstall them in a bent or damaged condition.

- Inspect tires daily for wear or damage. Check tire pressures weekly with an accurate pressure gauge. Do not inflate tires beyond 35 psi.
- Mounting and dismounting tires from rims can be dangerous and should be performed by trained personnel using correct tools, equipment and procedures.

WELDING AND GRINDING WORK PRECAUTIONS

IMPORTANT! A fire extinguisher should be easily accessible during all welding work.

- Welding repairs are to be performed by a trained welder with proper service instructions. Know the material to be welded and select the correct welding procedure and materials (electrodes, rods, wire) that will provide a weld metal strength equivalent to the parent material.
- Move the machine to a clean, safe area before welding, grinding or using a cutting torch on it. This type of work should only be done in a clean area and not in places that contain combustible liquids, such as fuel tanks, hydraulic pipes or similar.
- Connect arc welder ground as close as possible to work area.
- Work with extra care when welding, grinding or torch cutting near flammable objects.

WORKING ON PAINTED SURFACES

Heated paint gives off poisonous gases. Therefore, paint must be removed from an area with a radius of at least 4 in (10 cm) before carrying out welding, grinding, or gas cutting. In addition to the health hazard, the weld will be of inferior quality and strength if the paint is not removed.



Methods and precautionary measures when removing paint:

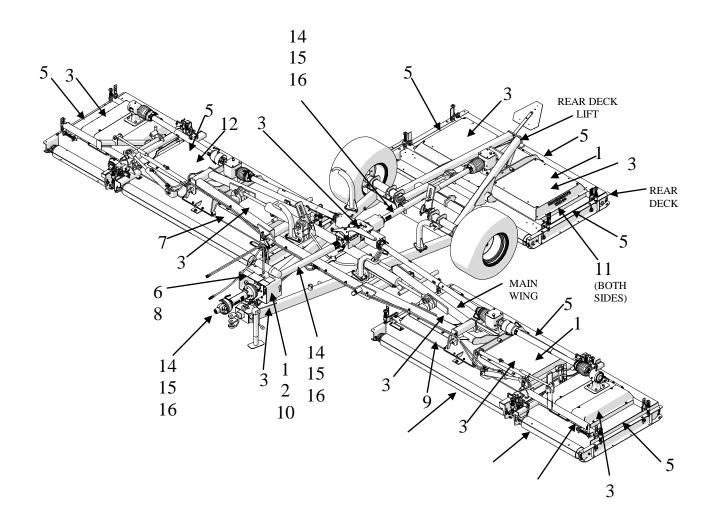
- Blasting use respiratory protective equipment and protective goggles.
- Paint remover or other chemicals use a portable air extractor, respiratory protective equipment, and protective gloves.
- Grinding use a portable air extractor, respiratory protective equipment, and protective gloves and goggles.

WORKING ON GALVANIZED / PLATED SURFACES

- Only qualified welders should attempt a weld repair on galvanized or plated components. Proper pre-welding surface preparation is required.
- Always ensure proper ventilation, wear proper respiratory protective equipment and avoid direct contact with smoke emitted from welding process.

SAFETY & MAINTENANCE DECAL LOCATIONS ON MACHINE

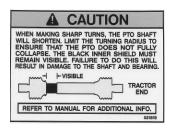
ITEM NO.	DESCRIPTION	QTY	ITEM NO.	DESCRIPTION	QTY
1	DANGER – READ MANUAL	1	10	NOTICE – HITCH SETUP	1
2	CAUTION - TURNING	1	11	MOWER MODEL	2
3	CAUTION – REPLACE SHIELDS	8	12	WING DECK BELT LAYOUT	2
4	COMPANY NAME	1	13	REAR DECK BELT LAYOUT	1
5	DANGER - BLADE HAZARD	7	14	SAFETY SIGN - OUTER GUARD	2
6	WARNING – OEM PARTS	1	15	CE WARNING DECAL	2
7	CAUTION –DISENGAGE PTO	1	16	SAFETY SIGN – INNER GUARD	2
8	GREASING SCHEDULE	1		GREASE POINT	25
9	PTO GREASING				



SAFETY DECAL IDENTIFICATION

❖ If decals become faded, damaged, or lost, replace immediately. Order Decal Kit, Part # 607080. Safety Decals shown below are located on machine as illustrated on sketch.





ITEM 2 (521819)

ITEM 1 (209175)



ITEM 3 (209113)



ITEM 4 (521817)



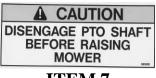
ITEM 5 (209173)



ITEM 6 (209115)



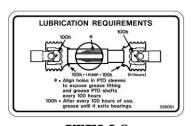
ITEM 9 (526003)



ITEM 7 (521820)

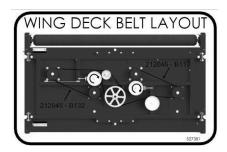


ITEM 10 (521784)

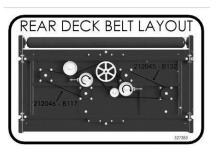


ITEM 8 (526001)

PROGRESSIVE TDR-30 ITEM 11 (209179)



ITEM 12 (527381)



ITEM 13 (527383)



ITEM 14 (210238)



ITEM 15 (210239)



ITEM 16 (521455)



GREASE POINT DECAL (521014)

ASSEMBLY INSTRUCTIONS

SET-UP



The mower is shipped in 3 main assemblies in order to facilitate shipping within enclosed vans. Approximately 3 hours are required to assemble the mower into a field ready condition. Assembly will be easier if components are aligned and loosely assembled before tightening hardware. Recommended torque values are found on page 40. Select a suitable working area. A tractor or portable hydraulic supply is necessary to complete assembly. All required hardware is supplied with the machine.

ACAUTION!

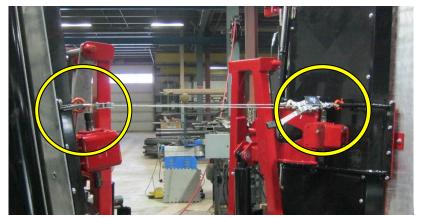
Assembly should be completed by a competent individual who has an understanding of safe machinery operation practices and tool operation. Always use personal protection devices such as eye and ear protection during assembly. Ensure the area is free of hazards and can accommodate the assembly of the mower. Always stay clear of the machine when lowering decks during the assembly process.

WING DECKS

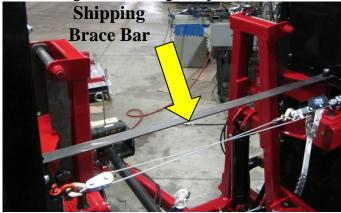


1. Before removing any bolt or pin, the deck spreader fixture (PTE # 526498) needs to be placed underneath the mower frame, centered between the wing decks on the floor. This must be installed before lowering the decks to prevent the decks from pivoting underneath the mower frame.

WING DECK INSTALLATION



2. With the TDR Spreader Fixture (526498) in place, attach a ratchet equipped strap between both wing decks using the points shown.



3. Tighten the device until enough tension is relieved from the shipping brace bar. Remove the wire securing the flat bar to the wing, and the flat bar itself.

Be sure to stay clear of the each wing deck as you loosen the **WARNING!** ratchet strap. The top of each deck will quickly swing outwards from the machine once tension is released from the strap.

4. Connect the mower to a hydraulic supply. Retract the hydraulic cylinders and release the deck locks. Lower all decks until they are fully resting on the ground. Remove each pin and shipping link on each side of the deck swivel.



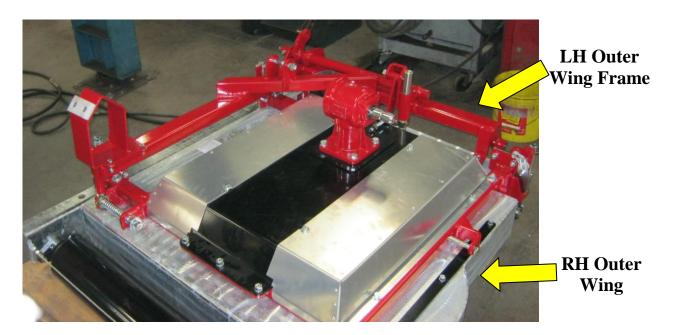
Never retract the wing cylinders into the lift and turn position when the decks are not attached to the wings. You will damage the wing and lock components, the force the cylinders supply is too great without the counterweight of the decks.

5. Remove the wooden shipping blocks from the four stand-off arms.

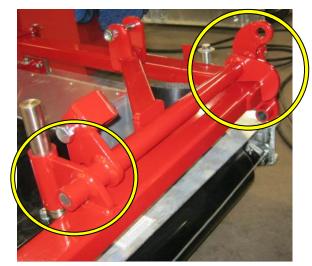
- 6. Lower the wing until the deck swivel mounting points align with the bushings on the wing deck. Re-install the painted 1-1/4" pins through the bushings and deck swivel. Secure the pins in place using the 3/8" bolts previously removed.
- 7. Install deck stop chains on wing decks
- 8. When it is safe to do so, fully raise the decks and secure each deck in the transport position with the corresponding deck locks. Ensure the deck locks function properly without binding and engage the matching lug on the wing arm properly.
- 9. Inspect the front and rear stand-off arms and ensure that they engage the deck lock mounts properly. If required, lower deck to ground, loosen (3) mounting bolts on frame, adjust location of stand-off pin accordingly and re-tighten bolts. Raise deck and re-check stand-off engagement.
- 10. Remove the TDR Spreader Fixture (526498).
- 11. When safe to do so, release the transport locks and carefully lower the decks to the ground.

OUTER WING DECK INSTALLATION

- 1. Remove all banding from each deck pallet.
- 2. Using a lifting device with a minimum 700 lb. capacity, lift each outer wing deck off of their shipping pallet and place beside each corresponding wing deck.



- 3. Each outer deck assembly has the opposite wing installed on it upon shipment. Each outer wing frame must be removed and installed on the correct deck before the outer wings can be properly installed.
- 4. Remove each cable tie holding the lift pivot and lift shaft in place, allowing them to rotate freely.



5. Remove the 5/8" x 8.5" bolt, springs, bushing and hardware from the deck frame in order to remove the wing.

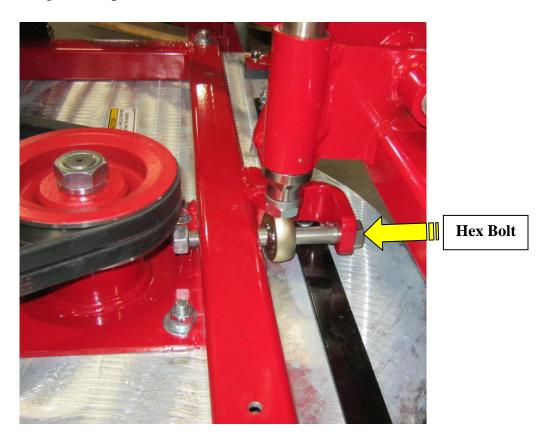


- 6. Using a lifting device with a minimum 100lb capacity, lift each wing off of the outer decks.
- 7. Before installing the LH wing onto the LH deck, remove the inner deck shield in order to access the lift shaft mounting point.



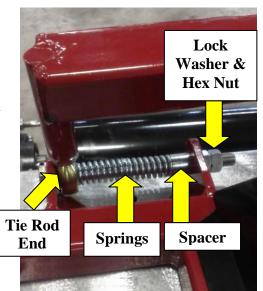


8. Place the LH wing onto the LH deck by aligning each tie rod with its corresponding mount point.



9. Remove the 5/8" x 6 hex bolt from the deck frame and install it through the lift shaft tie rod.

10. Align the corresponding tie rod end of the wing with the mounting brackets and reinstall the hardware as shown.



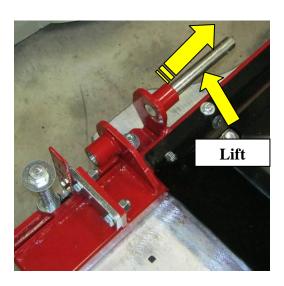
11. Attach the Wing Stop Chain to the upright tab on the wing deck next to the Height Indicator. Use existing hardware attached to secure the chain.

LH outer wing is now ready for installation. Repeat steps 7-11 to mount the RH wing onto the RH outer deck.

right ht ht ched to Wing Stop Chain

Height Indicator

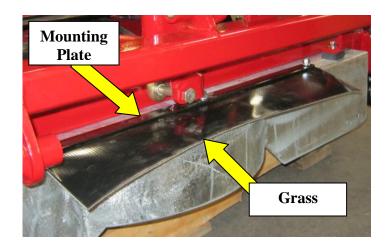
12.Remove the 3/8" hardware from each LH lift pin on the LH Main Wing Deck and slide the pin into each inside bushing as shown.



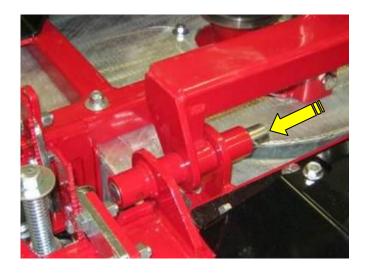
13. Move the Outer Wing Deck towards the main wing deck until they contact the front and rear plastic bumpers on the wing deck. Align the outer wing frame bushings above the main wing frame bushings.



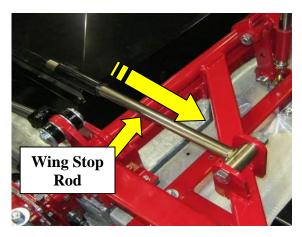
14. Remove the mat mounting plate and hardware from the top of the deck and place the black grass mat over each upright bolt. Place the mounting plate on top of the grass mat and reinstall the mounting hardware.



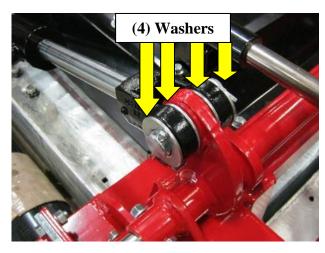
15.Lower the outer wing frame between each set of mounting bushings until the lift pins can slide completely through each bushing. Secure each pin using the previous 3/8" bolt, lock washer and nut.

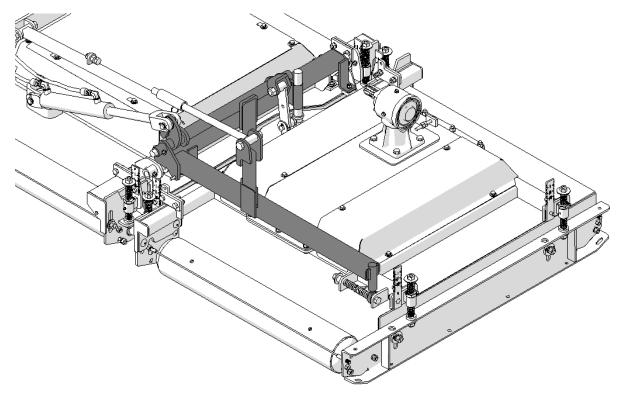


- 16.Cut all plastic ties securing the wing stop rod. Remove the 5/8" hex bolt and lock nut from the upright brackets on the Outer Wing and fasten the stop rod in place between the mounting brackets.
- 17. Repeat steps 12-16 to properly mount the RH Outer Wing Deck onto the RH Main Wing Deck.



18. Connect the outer wing lift circuit to a hydraulic power source (tractor or power pack) and extend the cylinders until they align with the mounting brackets on the lift pivot bar. Place a washer on each side of the mount and each side of the cylinder ends. Install the cotter pin through each end of the pin.



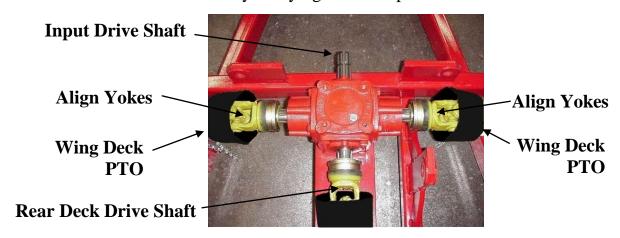


Outer Wing Deck Installed onto Main Wing Deck

INSTALLING DECK PTO SHAFTS

The three identical PTO shafts are used to drive the mower decks. Each PTO shaft will have one end designated a tractor end. This end should be hooked up to the main gear box.

The PTO shafts from the two wing decks must be timed when mounted to the gear box. See photo below. Mount the one side first with the yoke lying flat. The opposite side must be mounted with the yoke lying as flat as possible. I.e. Timed.

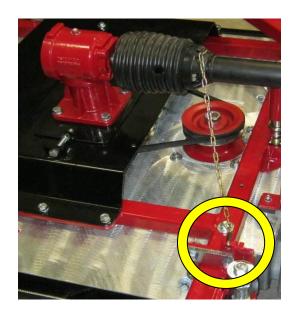


All PTO shafts have a short chain attached on both ends. Find a location to wrap or hook on short chain. Be sure that when decks are brought into transport position, the safety chain will not bind or pull PTO shield. Do not forget to install the PTO spacers to level the driveline. See section on "Hitching to the Tractor".

Outer Wing Deck Drive Shaft



1. Connect the PTO shaft end with the longer guard cone to the outer shaft of the main wing deck gearbox. Connect the opposite end to the outer wing deck gearbox.





2. Connect the outer PTO guard chains to the locations shown.

TIRES

Upon receiving your mower, check air pressure in the tires and adjust according to specifications.

Main Frame Tires – 32 PSI

HITCHING MOWER TO TRACTOR

ACAUTION!

Attach mower to drawbar only.



DRAWBAR SETUP

• Drawbar should be adjusted so it is 14" to 15" from the centerline of the draw pin hole to end of PTO shaft. This is critical for proper PTO shaft operation.



Adjust hitch or drawbar so mower frame is at the most level position in relation with the ground. This will ensure proper flotation of the wing decks.



• Safety chain must always be attached to towing vehicle.

When towing mower on any roadways, lock brakes together. Use proper lighting and marking devices according to the local regulations.

NOTE: If the three-point hitch is attached to tractor, be sure it will not contact any part of the mower when making sharp turns. The hose support rod may have to be bent back slightly to clear the three point hitch arms.

POWER TAKE-OFF

CAUTION! Keep all safety shields in place.

A CAUTION!

When operating the power take-off, be sure the tractor shield is always in place, covering the exposed power take-off shaft.

WARNING!

Before dismounting from the tractor, stop the power take-off, put tractor in neutral, set brakes in lock position and shut off engine.

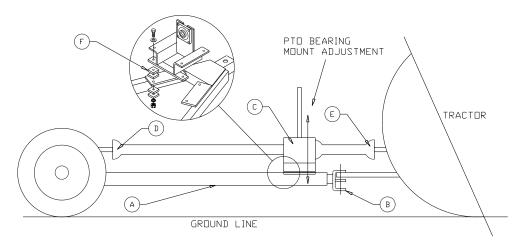
When ready to engage PTO shaft, be sure engine RPM is at idle **CAUTION!** speed. Engaging PTO at full throttle will cause high shock loads to drive line which will lessen component life and lead to component failure.

CAUTION! Do not exceed the recommended PTO speed of 540 RPM.

LEVELLING THE MOWER & PTO

For proper mower operation and maximum PTO life, the mower hitch and PTO driveline must be setup correctly. See illustration on next page

- a) When the mower is connected to the tractor, the mower hitch frame "A" should be as close to level with the ground as possible.
- b) The connecting hitch "B" can be removed and turned over to give more height adjustments. Set in the best position for the mower frame to be as level as possible.
- c) To ensure proper life of the PTO shaft, the driveline from the mower gear box "D" to the PTO shaft "E" on the tractor should be in a straight line.
- d) Spacers "F" are provided under the hose support "C", to allow adjustment up or down. Each spacer is 1/2" high. Sixteen are provided, for a 2" total adjustment, four on each corner.



CONNECTING THE INPUT PTO SHAFT

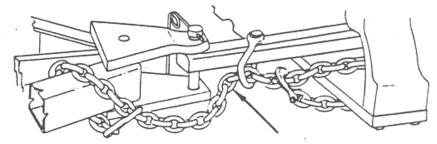
- a) Ensure that the tractor engine is shut off and the parking brake is locked.
- b) Holding the PTO against the end of the tractor PTO shaft, rotate the tractor PTO by hand until the shaft slides on slightly.
- c) Slide the locking collar on the PTO backwards, releasing the locking mechanism hold and slide the PTO on.
- d) Release the locking ring and pull the PTO shaft backwards until the locking mechanism snaps into place.
- e) Push the shaft forward and backwards to ensure that this is securely locked in place.

AWARNING!

If the PTO shaft comes off during operation, it may cause personal injury and damage to the PTO shaft and tractor PTO. When checking, make sure the locking collar is locked, and that the shaft is not just jammed against the end of the tractor PTO shaft.

TRANSPORT SAFETY CHAIN

It is recommended that the safety chain provided with this mower be attached to the towing vehicle at all times.

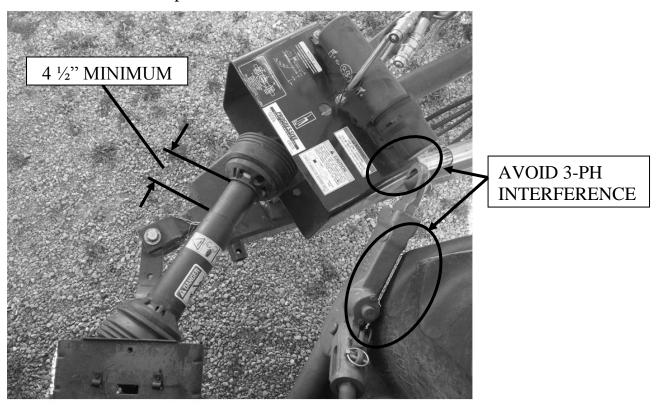


Install a safety chain as shown. After attaching the safety chain, make a test run to the left and right for a short distance to check for proper adjustment. Readjust to eliminate a loose or tight chain.

CHECK PTO LENGTH & HITCH INTERFERENCE DURING TURNS

During the mowing operation the tractor should be able to make turns without damage to the driveline. To ensure proper setup check the following conditions:

- a) With the tractor and mower aligned, and the input PTO is straight, turn the shields on the input PTO to check that the holes line up for greasing the input shaft tubes. If not, you will have to lengthen or shorten the drawbar. It should be 14 to 15" from the end of the PTO shaft to the center of the draw pin hole.
- b) With the tractor in the lowest gear and traveling very slowly, make a sharp turn to the right as required for mowing.
- c) Watch the input PTO shaft shielding to make sure the PTO shaft does not totally collapse. There should be at least 4 1/2" between outer shield and rear shield cone at maximum turn. See picture below.



d) Ensure that the 3-Point hitch (3-PH) arms will not contact the input PTO shaft, Hose Support Shield or Tractor tires during turning. See above picture.



This is not the worst condition. Making turns while the tractor is **CAUTION!** angling up a hill will cause the PTO shaft to collapse even more. The operator should avoid making sharp turns on uneven ground.

HYDRAULIC CONNECTION TO TRACTOR

Hydraulic fluid escaping under pressure can penetrate the **WARNING!** skin causing serious injury. If skin penetration occurs, seek medical attention immediately.

- a) Ensure the tractor controls are in the park position, the engine is turned off, the parking brake is engaged and hydraulic pressure to the tractor remote connectors has been relieved per the tractor operator's manual instructions.
- b) When connecting the hydraulic couplers to the tractor, be sure that both ends are clean. Dirt in the hydraulic system can block the orifice in the cylinder and cause premature wear of hydraulic components on the mower and tractor.
- c) Ensure the hoses are free to move, between the tractor and mower. During operation of the mower going up and down the hills, the distance between the tractor and mower will change.



Tractor control valves must be equipped with float function. **CAUTION!** Failure to use float function during mowing may damage the mower.

OPERATING THE MOWER

A careful and knowledgeable operator is the best insurance against an accident. Allow no riders on any equipment.

Always read and understand the power unit operator's manual before operating. If tractor is equipped with R.O.P.S., use the seat belt for maximum protection.

DAILY MOWING CHECK LIST

- 1. Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough soled work shoes. Never operate tractor or implements in bare feet, sandals or sneakers.
- 2. Check that the mower is properly and securely attached to tractor with a safety chain.
- 3. Ensure all safety shielding is properly installed, all nuts and bolts are secure and all pins are properly cotter pinned.
- 4. Check the condition of each blade.
- 5. Check that all decks are properly adjusted to the same cutting height and all mower components are in safe, undamaged operating condition.
- 6. Clear area of stones, branches or other debris that might be thrown causing injury or damage.
- 7. Never permit any person other than the operator to ride or board the tractor at any time.
- 8. Check that all lubrication points with grease fittings have been lubricated as per schedule.
- 9. Check all gearboxes for proper amount of gear oil. Mower must be on level surface when this is done.
- 10.Be sure lock release pull rope is properly secured and will not become entangled in PTO shaft.
- 11. Make sure that everyone is clear of the tractor and mower before starting the engine or operating.

LOWERING THE DECKS

Before lowering the decks, make sure that there are no obstacles or people in the area that the decks could come in contact with while lowering to the ground. First, fully retract the 3 main cylinders, which will disengage the locks. Pull on the lock release pull rope to release the wings and rear lift from their locking position, and hold until the decks are on the ground. Lower the main wing decks and rear deck until they are completely sitting on the ground. Once the 3 main decks are on the ground, lower the outside wing decks until they are completely on the ground.

Place both hydraulic levers (main decks and outside wing decks) into their float positions before mowing.



Tractor control valves must be equipped with float function. Both **CAUTION!** hydraulic circuits must be in "FLOAT" position during mowing or damage to the mower may result.

RAISING THE DECKS

Before raising the decks, ensure that the PTO on the tractor is disengaged and wait until the PTO comes to a complete stop. To raise the decks, first raise the outer wing decks. When fully raised, pull on the lock release pull rope so the wings do not latch into the ProLift-N-Turn position before rising all the way. Proceed with lifting the main decks into transport position by pulling the appropriate hydraulic lever. Once all hydraulic cylinders have fully collapsed, ensure that all three wing locks are in their locking position before removing the hydraulic hoses from the tractor, or transporting the mower. Make sure that none of the hydraulic levers are in the float position.

MOWING

Once the tractor and mower are situated in the field to be mowed, follow the "Lowering the Decks" section. Once lowered, move both hydraulic ports into float position.

Engage the PTO just above idle and bring the mower up to full PTO speed, Engage to appropriate gear in the tractor and proceed to mow.

It is advisable to mow double headlands on each end of the field to allow for a sweeping turn at the end of a row as opposed to a tight turn. Sweeping turns will limit the scuffing of turf as the mower negotiates a turn.



Ensure tractor engine is at idle when engaging PTO. Some **CAUTION!** tractor PTO arrangements engage very abruptly; engaging PTO at higher engine speeds can cause premature component failure.

PRO LIFT-N-TURNTM OPERATION



Pro Lift-N-TurnTM system in use.

The industry exclusive Pro Lift-N-TurnTM system found on the TDR-30 mower offers a real productivity advantage and is a feature not offered on competitive mowers.

With the Pro Lift-N-TurnTM system, Operators have the ability to raise the decks slightly off the ground with the PTO still engaged. This makes turns at the end of the pass easier and less stressful on both the turf and the equipment. With the TDR-30, the Pro Lift-N-Turn must be activated in sequence.

- 1. Take the outside wing deck hydraulic circuit out of float position.
- 2. Lift the main decks until the wings stop at the lift and turn position.
- 3. Complete your turn.
- 4. Lower the main decks by putting the hydraulic lever for the main decks in float.
- 5. Lower the wing extension decks by putting the lever in float.
- 6. Continue mowing.

WARNING! If you turn at high speed in the Lift-N-Turn position and there are irregularities in the field, the wing decks can sway causing the decks to come close to the ground, and possibly hit and catch. Use caution when performing the Lift-N-Turn maneuver.

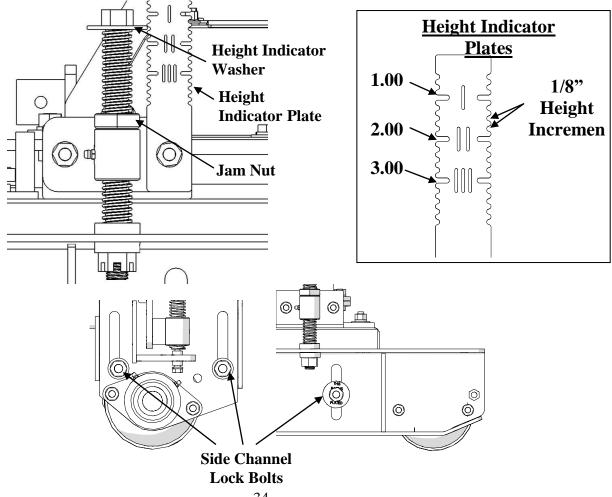
CAUTION! If the Pro Lift-N-TurnTM system is actuated with the PTO running, and any of the latch plates are not in the correct position, the Pro Lift-N-TurnTM system cannot prevent that deck from rising too far. *Damage to the PTO drive will result*. It is the responsibility of the Operator to ensure the Pro Lift-N-TurnTM system is functioning properly before use.

CUTTING HEIGHT ADJUSTMENT

There are four height adjusters per mowing deck. Each adjuster (located in each corner of the deck) must be adjusted to the same height to ensure a smooth even cut. A wrench for this purpose is provided. Mower cutting height adjustment is made by turning a 5/8" nut on top of an acme threaded rod which makes up the height adjuster. A washer under the nut indicates the height against the decal. There are an infinite number of adjustments available from 1/2" to 4". Moving the adjuster up and down moves a side channel that mounts the front and rear rollers. The height indicator plates at the back of the deck are set 1/4" lower, so that the back actually cuts 1/4" higher, this will provide a better cut, prolong the life of the blades, and reduce horsepower requirement.

To make a height adjustment, follow these steps:

- 1) Loosen the 2 locking bolts on the side channel
- 2) Loosen the ACME jam nut
- 3) Turn the 5/8" nut on top of the ACME threaded rod to desired height displayed on the height indicator plate.
- 4) Tighten ACME jam nut
- 5) Tighten the sided channel locking bolts



TRANSPORTING MOWERS

Always adhere to local department of transportation laws when transporting equipment on local roadways.



When traveling on public roadways, use flashing amber lights and S.M.V. emblem on rear of mower to provide greater visibility to other traffic.

AWARNING!

When mower is in the raised position, ensure transport locks are engaged before entering roadway.

AWARNING!

Always have safety chain attached to towing vehicle.

AWARNING!

When towing this mower the following information concerning road speed should be strictly adhered to.

WEIGHT OF TOWING VEHICLE	MAXIMUM ALLOWABLE ROAD SPEED
4500 LBS OR MORE	UP TO 20 MPH (32 KM/H)
2300 LBS - 4500 LBS	UP TO 10 MPH (16 KM/H)
2300 LBS OR LESS	DO NOT TOW

TIRES

Upon receiving your mower, check air pressure in the tires and adjust according to specifications.

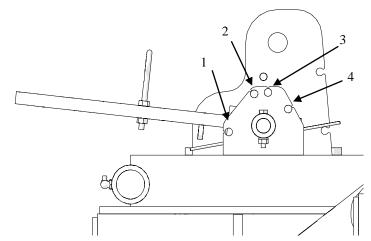
Main Frame Tires – 32 PSI

Never inflate tires beyond 35 pounds per square inch to seat beads. Inflation beyond 35 PSI pressure before seating the bead may break the bead or even the rim with an explosive force. If beads have not seated by the time the pressure has reached 35 PSI, deflate the assembly, move tire to another position on the rim and re-lubricate. Inflate tire and inspect both sides of the tires to be sure beads are seated properly. If not, deflate tire, unseat beads and repeat the above mounting procedure. After properly seating beads adjust to pressure recommended.

LOCK PIN POSITIONS

The wing and rear locks (black plates) can be held in place by using the supplied pin. The holes in the lock mounting plates function as follows.

- 1. Position to prevent lock from moving into Pro Lift-N-Turn position.
- 2. Use in blade Change position.
- 3. Use when mower is in transport position.
- 4. Pin storage location.



MAINTENANCE

A

WARNING! Turn tractor engine off before performing any maintenance.

ACAUTION!

Always use personal protection devices such as eye and ear protectors when performing maintenance functions.

AWARNING!

When completing a maintenance or service function, make sure all safety shields are installed before placing mower in service.

GREASING

A properly maintained lubrication schedule will provide a smooth running machine for many years. All pivot locations have grease fittings. The following information shows and describes where all lubrication points are located. Use a quality EP2 bearing grease (WITH NO MOLYBDENUM COMPOUNDS) or equivalent.

,		, 1	
DECKS • Spindles* (See Below) • 3 Pivots per Wing Deck*	P.T.O. SHAFTS • See TDR-30 P.T.O. shafts below	FRAME • 8 Pivot Locations* • 2 Wheels*	
• 7 Pivots on Rear Deck* *As Required		*As Required	
CHECK FOR PROPER OIL LEVEL IN GEAR BOXES DAILY GREASING SCHEDULE & LOCATION			

P.T.O. SHAFTS

Your TDR-30 mower is equipped with <u>reduced maintenance drive shafts</u>. This means that greasing of the shafts must be done only every 100 hours of use, or 8 to 10 days of use. This applies to the main input, intermediate and deck shafts supplied with this mower. These shafts are also equipped with the EASY LOCK GUARD SYSTEM.

BLADE SPINDLE GREASING

This TDR-30 mower is equipped with fully sealed roller bearings that require no regular maintenance. A predetermined amount of grease has been placed in both the top and bottom bearings in order to provide adequate lubrication throughout the life of the bearing.

PRO LIFT-N-TURNTM SYSTEM MAINTENANCE

As with any mechanical system, the Pro Lift-N-TurnTM system needs to be used and maintained properly. With only a few moving parts, this is a simple task.

- In a safe level location, fully lower the decks to the ground, shut the tractor engine off, and set the parking brake.
- With the lock rope released, all three latch plates should lay flat against the wing frames.
- Check each of the three latch plates and make sure they do not bind when the lock release rope is pulled or released.
- Ensure that the latch plate, cables and springs are in good condition.
- Check to see if the center lock swivel is free to rotate without binding and returns to a neutral position so that the cables have slack when the latch plates are lying flat against the wing frame.
- If any binding or damage is found, repair the issue before using the Pro Lift-N-TurnTM system.

It is advisable to instruct all Operators to check the operation of the Pro Lift-N-TurnTM system prior to the start of each shift. Operators should be advised that upon arriving at the work site and lowering the decks, the Operator should ensure that each latch plate is in the fully lowered (flat) position before starting to mow.



Each latch plate should lay flat against the wing frame when released. Ensure the center lock swivel is free to rotate.



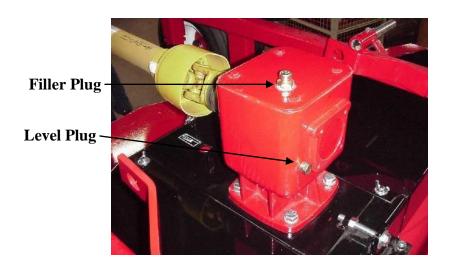
A deck latch plate correctly positioned during Pro Lift-N-TurnTM operation.

GEAR BOX OIL LEVELS

IMPORTANT! DO NOT OVERFILL! MOWER MUST BE LEVEL WHEN CHECKING GEAR BOX OIL LEVEL

DECK GEAR BOXES

Gear boxes all have an oil level plug located on the side of the gear box. Oil should reach the bottom of this hole. If oil level is low, add oil through top plug hole of casing until oil just starts to flow out of side oil level hole. Replace and tighten plugs. Use 80W90-gear oil or equivalent.



MAIN GEAR BOX

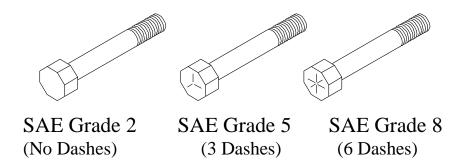
The main gear box has a combination filler plug and dip stick. Remove the plug, dry off the dip stick and replace to check oil level. It must touch the oil in the gear box. Add oil as required. Use 80W90 gear oil or equivalent. Replace and tighten the plug.



FASTENERS INSTALLATION TORQUE

The chart lists the correct tightening torque for fasteners on Progressive Turf Equipment mowers. When bolts are to be tightened or replaced, refer to this chart to determine the proper torque except when specific torque values are assigned in the manual. Only SAE grade 5 fasteners are to be used in the assembly of this machine, or as otherwise specified in this manual.

Bolt Head Markings



Bolt Diameter (in.) (SAE Grade 5 Bolts)	Recommended Torque in Foot Pounds (Newton-Meters)
5/16	21 (28)
3/8	38 (52)
7/16	55 (75)
1/2	85 (115)
9/16	125 (170)
5/8	175 (240)
3/4	300 (410)
7/8	450 (610)
1	680 (925)
1" LH Spindle Nut	60 (82)

BLADE SERVICING



Be sure safety locks are in place when working on decks in the raised position. The tractor hydraulic system could fail, causing decks to fall and crush anything under them.

- ❖ Do not handle mower blades with bare hands. Careless or improper handling may result in serious injury.
- ❖ Inspect blades before each use to determine that they are mounted tightly and are in good condition. Replace any blade that is bent, excessively nicked, worn or has any other damage. Small nicks can be ground out when sharpening.

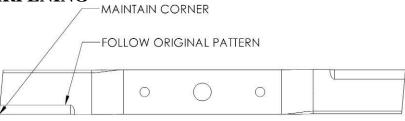


Only original equipment blades should be used when replacing worn out mower blades. They are made of special steel alloys and subjected to rigid heat-treat and inspection requirements. Substitute blades may not meet these rigid specifications and MAY BE DANGEROUS.

BLADE REMOVAL AND INSTALLATION

Two, 1/2 x 1 3/4" grade 5 bolts with locks washers and nuts hold blade to blade spindle support bar. When changing blades, be sure that these fasteners are in good condition so they will not come loose during operation.

BLADE SHARPENING





IMPORTANT - When sharpening blades be sure to balance them. Unbalanced blades will cause excessive vibration, which can damage blade spindle bearings. Vibration may also cause structural cracks in spindle housing.

Follow original sharpening pattern as shown. Sharpen blade to a razor edge. Protect hands when sharpening. Do not sharpen backside of blade.

SPINDLE SERVICE

Spindles are equipped with two roller ball bearings. Adjustment is set by tightening the 1" left hand nut to 60 ft-lbs. torque for proper setting.

Periodically inspect blade spindles by grasping blade, and moving from side to side. If any free play is noted, replace or repair.

SPINDLE ASSEMBLY REMOVAL

Remove blade from spindle.

Remove belt shield. Loosen 4 bolts that hold gear box to mount. Loosen 1/2 x 3 1/2" tap bolts and slide gear box toward front until belt is easy to remove.

Remove belt.

Remove 4 bolts attaching spindle assembly to mower frame 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.

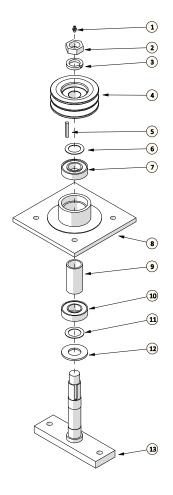
SPINDLE REPAIR

Spindle repair requires special skills and tools. If your shop is not properly equipped or your mechanics are not properly trained in this type of repair, you may be time and money ahead to use a new spindle assembly.

Remove pulley from spindle assembly. Place assembly in press and force spindle down through housing. Once pressed apart, replace bearings, as removal will have damaged bearings internally.

SPINDLE REASSEMBLY

Only use a press that has the ram and bed 100% square to each other. If bearings are not square in housing, bearings will wear out prematurely. Press on outer race when inserting into hub and press on inner race when installing on spindle.



ITEM	DESCRIPTION
1	GREASE FITTING 1/4 - 28
2	HEX NUT- L.H.
3	L.H. LOCKWASHER
4	PULLEY
5	KEY - 1/4" X 1-1/16"
6	SHIM WASHER
7	TOP BEARING
8	SPINDLE HOUSING
9	SPACER TUBE
10	BOTTOM BEARING
11	SHIM WASHER
12	SPINDLE DIRT SHIELD
13	BLADE SPINDLE

If bearings are being changed, be sure to check bearing spacer for wear. If wear is noticed, insert new spacer. This is critical because if spacer is short by only .010", the top bearing will start to bind and will result in premature failure.

Bearing will be pressed into the blade side of the hub first, orientation does not matter. Next, set spindle on press bed, install dirt shield and shim first (as per diagram) set hub, bearing end down, onto spindle. You must use a tube (Note: both ends must be square) which will slide over spindle and press on inner race of bearing, until seated against shim.

Insert bearing spacer tube with hole end up. Set remaining bearing on to spindle, orientation does not matter. Press on inner race (this bearing will be a loose fit in the hub so it will seat itself properly).

When all parts have been installed on spindle, torque left hand nut to 60 ft-lbs. and then tighten set screws in pulley. The assembly is now ready for installation into the mower deck.

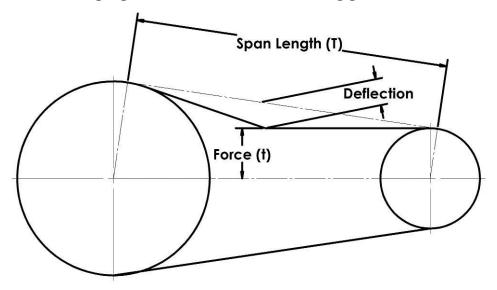
"V" BELT ADJUSTMENT

Each mower deck is equipped with 2 spindle drive belts, each with a dedicated draw-type screw tensioner. To adjust belt tension, first remove cover from the side of the deck to be tensioned. Loosen jam nut on tensioner screw and loosen bolt fastening the idler pulley (do not remove). Adjust belt tension the belt using the threaded bolt (see below for specs). Tighten the nut on the pulley and the locknut on the adjuster bolt.

Ensure belts are properly aligned in the correct groove when replacement is required.

"V" BELT TENSION

Proper belt tensioning is a fundamental factor in the successful V-belt operation. Lack of tension will cause slippage, and too much tension will cause excessive belt stretch as well as damage to the drive components, such as bearings and shafts. Therefore, to assure proper belt tension, the following procedure is recommended.



CHECKING BELT TENSION

At the mid-point of the span, apply a deflection force with a spring scale in the direction perpendicular to the span until the belt is deflected the 3/8". The recommended force to deflect the belt is a minimum of 4.9 lbs. to a maximum of 7.3 lbs.

The first 24 to 48 hours of operation is the belt "run in" period. To ensure satisfactory belt performance, belt tension should be checked during this time period.

HYDRAULICS

The hydraulic system on your Progressive mower is a simple cylinder system used to raise and lower the cutting decks into position. Each cylinder contains a small diameter restrictor orifice, which is located on the rod end to slow the speed of travel.



Restrictor Orifice

When reconnecting the quick disconnects to the tractor, be sure that both ends are clean. Dirt in the hydraulic system can block the orifice in the line throttle valve or even score the cylinder tubes.

Hydraulic fluid escaping under pressure has enough force to penetrate the skin. See a doctor at once if injured by escaping fluid. During your daily inspection repair all leaks before they create a major problem. Relieve all pressure before working on, or disconnecting the line in the hydraulic system.

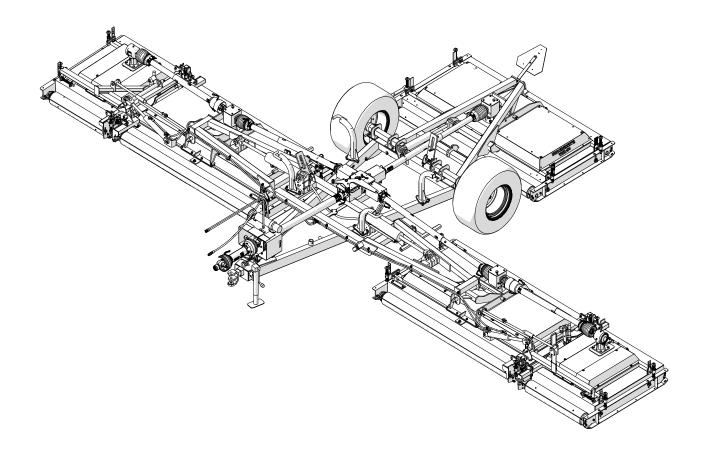
If crimp-on hose ends are ever changed, be sure they are compatible with the hose, to provide the proper crimping pressure.

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Belt Slippage	Lack of Tension	Increase Tension
	Oily Drive Conditions	Clean up Drive
Rapid Belt Wear	Belt Slippage	Increase Tension
	Belt not in Proper	Place in Proper Groove
	Groove	
D 1. G 1	D 1. 011	T
Belt Squeal	Belt Slippage	Increase Tension
O bt1 Di	D-14 C1:	In annual Transiture
Over-heated Bearings	Belt Slippage Excessive Drive	Increase Tension Tangian Drive Property
	Tension	Tension Drive Properly
	1 Chiston	
Wing Deck, Corner	Insufficient	Increase Tension by
Support Bent	Spring Tension	Adjusting Eye Bolt
Wing Locks Hard	Cylinder not Pulling	Adjust Clevis on end of
to Disengage	Wing up all the Way	Cylinder
Mower Deck will	Orifice in Line Throttle	Remove Line Throttle
not Lower	Valve Plugged	Valve, Remove
		Obstruction from
		Orifice and Reassemble

NOTES

Parts Manual TDR-30



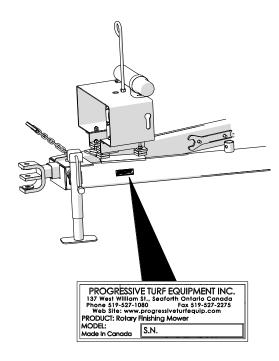
TDR 30

Effective serial number: 13301004 and up.

19/10/2014



Si No Lee Ingles, Pida Ayuda a Alguien Que Se Lo Lea Para Que le Traduzca Las Medidas de Seguridad



Serial Number Location

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

For quick reference, record the following information:

Model:	
Serial Number:	
Date purchased:	

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

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.
- 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.
- 3. The purchase order must clearly list the quantity of each part, the complete and correct part number, and the basic name of the part.
- 4. The manufacturer reserves the right to substitute parts where applicable.
- 5. 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.
- 6. The manufacturer reserves the right to change prices without notice.

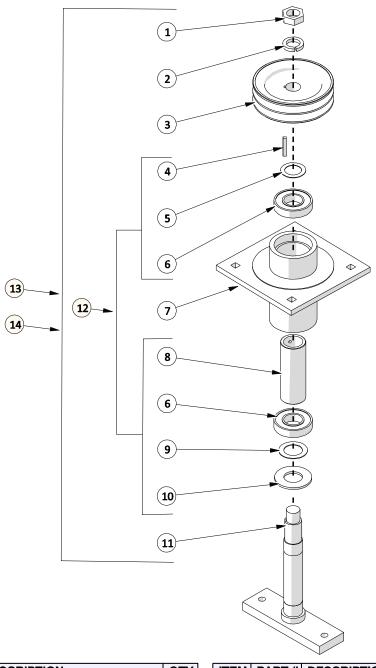


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1 DECK ASSEMBLY

1.1 Blade Spindle Assembly

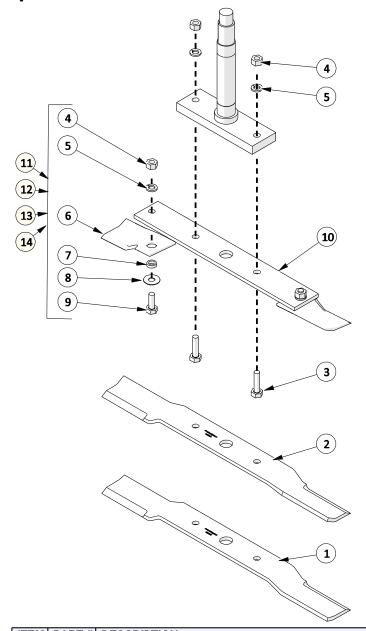


ITEM	PART#	DESCRIPTION	QTY
1	521003	HEX NUT- L.H.	1
2	521002	LOCK WASHER L.H., (3PCS)	1
3	521775	PULLEY - 5.9"	1
4	-	SPINDLE KEY	1
5	•	SHIM WASHER	1
6	-	BEARING	2
7	526092	SPINDLE HOUSING	1
8	-	BEARING SPACER TUBE	1

ITEM	PART#	DESCRIPTION	QTY
9	-	SHIM WASHER	1
10	-	DIRT SHIELD	1
11	526098	BLADE SPINDLE	1
12	526980	SPINDLE REBUILD KIT	1
13	526748	BLADE SPINDLE - COMPLETE	1
14	526750	BLADE SPINDLE - LESS PULLEY	1

O.L. - OBTAIN LOCALLY

1.2 Blade Options

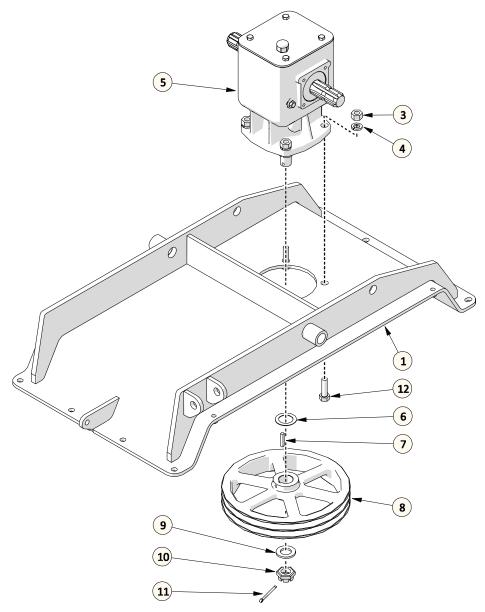


ITEM	PART #	DESCRIPTION	QTY
1	607594	LOW LIFT BLADE KIT (8 PCS)	1
2	522610	HIGH LIFT BLADE KIT (8 PCS)	1
3	O.L.	HEX BOLT- 1/2 X 1.75 NC GR5 PL	2
4	O.L.	HEX NUT - 1/2NC GR5 PL	4
5	O.L.	LOCK WASHER- 1/2 PL	4
6	-	SWING BLADE	2
7	526590	SPACER - SWING BLADE - 25 PCS/KIT	2
8	526588	FLAT WASHER PL HARDENED 7/16-25 PCS/KIT	2
9	O.L.	HEX BOLT- 1/2 X 1.25 NC GR8 PL	2
10	526632	BLADE BAR KIT (16 PCS)	1
11	526592	HIGH LIFT SWING BLADE -1 SET (ITEMS 4-10)	1
12	526596	HIGH LIFT SWING BLADE KIT - 50 BLADE TIPS & H/W (ITEMS 4-9	1
13	526630	LOW LIFT SINGLE BLADE KIT - 1 SET (ITEMS 4-10)	1
14	526636	LOW LIFT SWING BLADE KIT - 50 BLADE TIPS & H/W (ITEMS 4-9)	1

O.L. - OBTAIN LOCALLY

FOR COMPLETE SWING BLADE KIT, ORDER ITEMS # 11 & 13

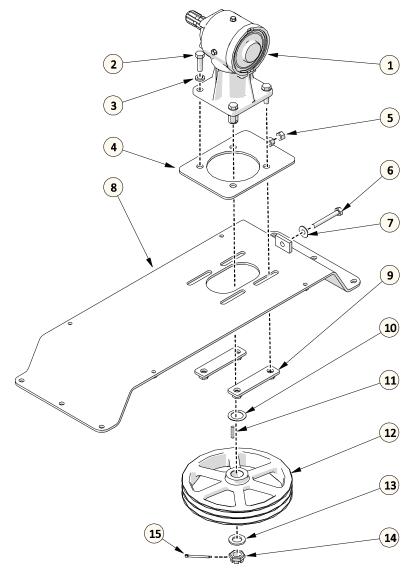
1.3 Wing Deck Gearbox Assembly



ITEM	PART#	DESCRIPTION	QTY
1	607190	GEARBOX MOUNT - LH WING (SHOWN)	1
2	607214	GEARBOX MOUNT - RH WING	1
3	O.L.	HEX NUT - 9/16NC GR5 PL	4
4	O.L.	LOCKWASHER - 9/16" PL	4
5	607290	GEARBOX - DECK	1
6	521004	SHIM WASHER - 1.25 (9 PCS)	1
7	521390	KEY - 1/4 X 1-5/16 (3 PC KIT)	1
8	212021	MAIN DRIVE PULLEY	1
9	521129	WASHER KIT (3 PCS)	1
10	521130	CASTLE NUT M24	1
11	O.L.	COTTER PIN - 3/16" X 1-1/2	1
12	O.L.	HEX BOLT- 9/16 X 1.75 NC GR5 PL	4

O.L. - OBTAIN LOCALLY

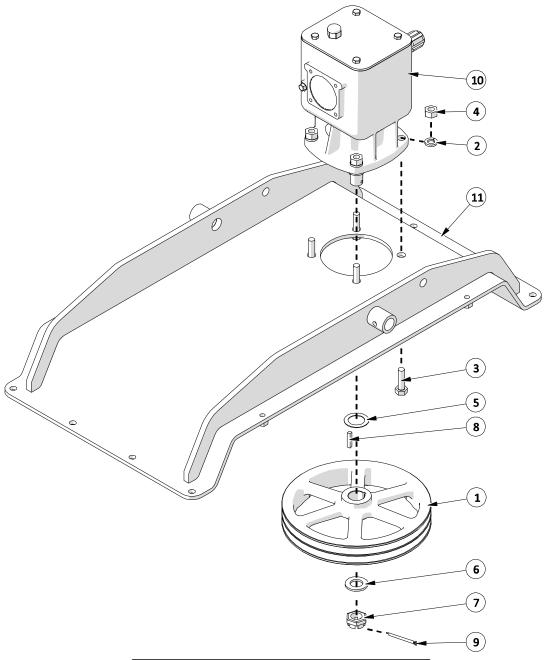
1.4 Outer Wing Deck Gearbox Assembly



ITEM	PART#	DESCRIPTION	QTY
1	521012	GEARBOX - DECK	1
2	O.L.	HEX BOLT- 9/16 X 1.75 NC GR5 PL	4
3	O.L.	LOCKWASHER - 9/16" PL	4
4	521013	SLIDE PLATE	1
5	O.L.	HEX NUT - 1/2NC GR5 PL	1
6	521020	TAP BOLT KIT (3 PCS)	1
7	O.L.	FLAT WASHER -1/2" PL	1
8	607186	GEARBOX MOUNT	1
9	521018	STIFFENER NUT BRACKET	2
10	521004	SHIM WASHER KIT (9 PCS)	1
11	521390	KEY - 1/4 X 1 5/16 (3 PC KIT)	1
12	212021	MAIN DR PULLEY 11.25 X 1-1/4	1
13	521129	WASHER KIT (3 PCS)	1
14	521130	CASTLE NUT M24	1
15	O.L.	COTTER PIN - 3/16" X 1.50	1

O.L. - OBTAIN LOCALLY

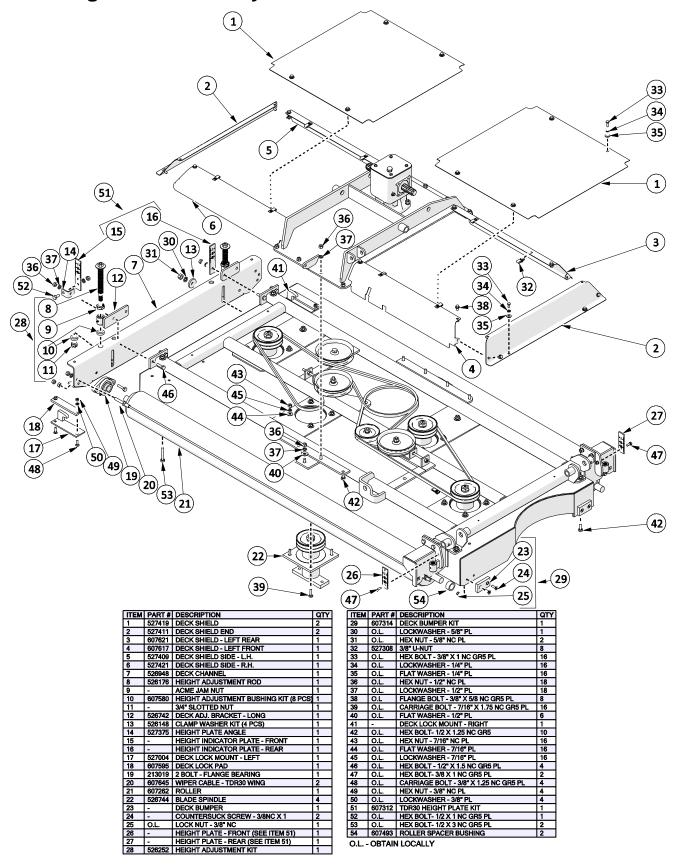
1.5 Rear Deck Gearbox Assembly



ITEM	PART#	DESCRIPTION	QTY
1	212021	PULLEY - 11-1/4"	1
2	O.L	LOCK WASHER- 5/8 PL	4
3	O.L.	HEX BOLT- 5/8 X 1.75 NC GR5 PL	4
4	O.L.	HEX NUT - 5/8NC GR5 PL	4
5	521004	SHIM WASHER (9 PCS)	1
6	521129	WASHER KIT (3PCS)	1
7	521130	CASTLE NUT - M24	1
8	521390	DECK GEARBOX KEY (3 PCS)	1
9	O.L.	3/16 X 1-1/2" COTTER PIN	1
10	521432	DECK GEARBOX	1
11	526714	GEAR BOX MOUNT - REAR DECK	1

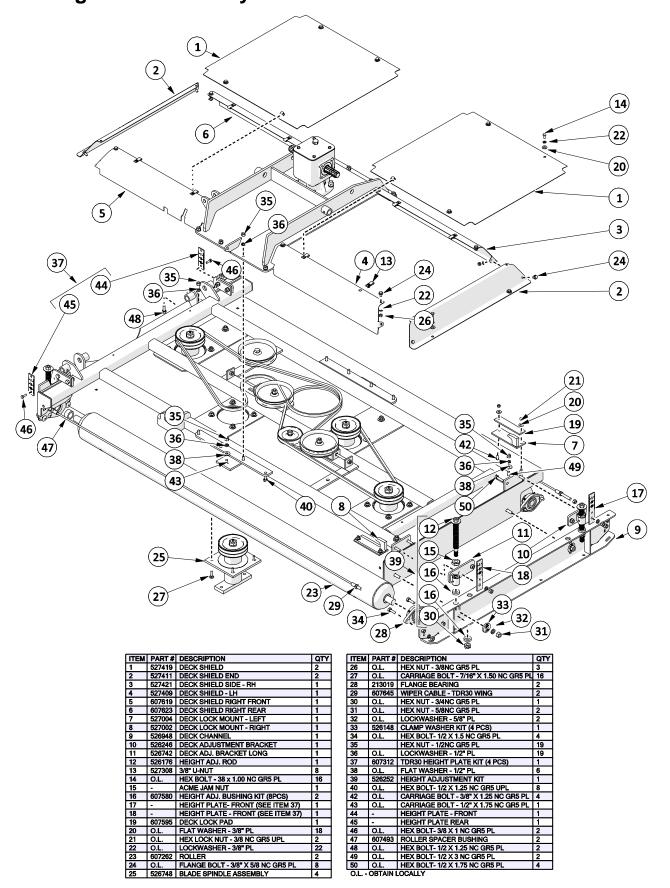
O.L. - OBTAIN LOCALLY

1.6 Wing Deck Assembly - L.H.



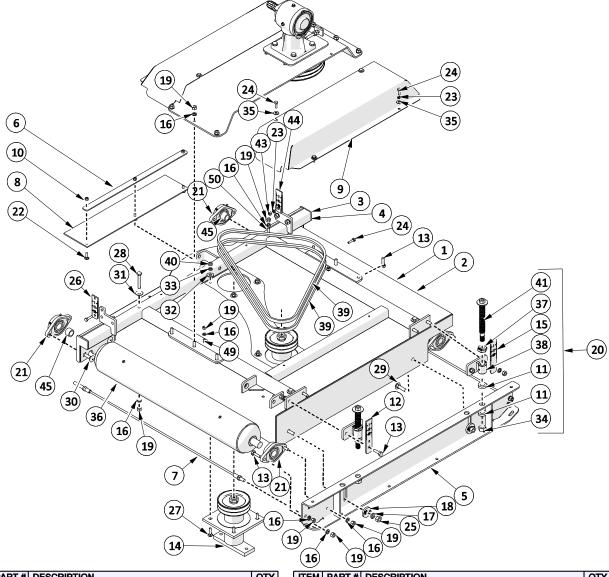
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1.7 Wing Deck Assembly - R.H.



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1.8 Outer Wing Deck Assembly

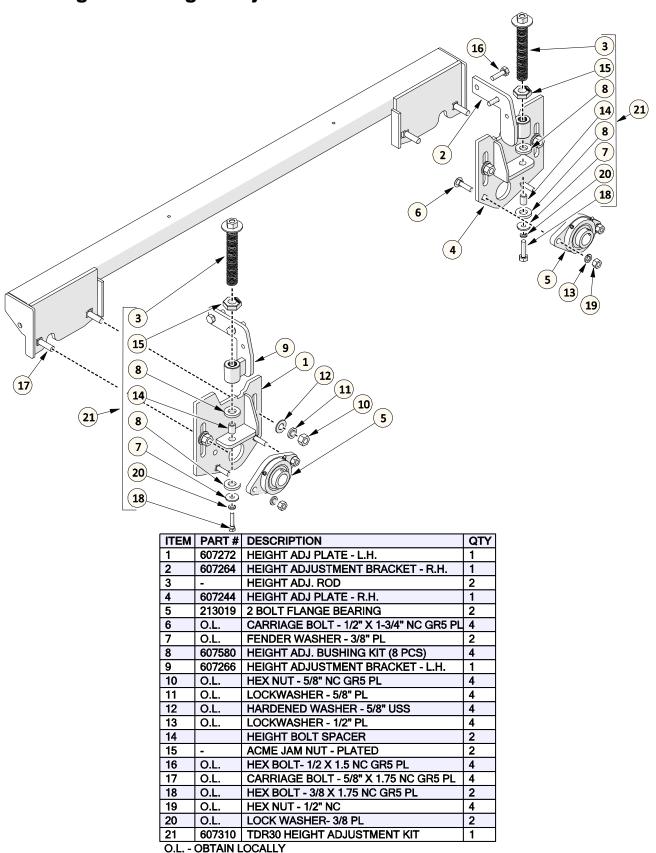


ITEM	PART#	DESCRIPTION	QTY
1	607120	LH OUTER WING DECK	1
2	607200	RH OUTER WING DECK (NOT SHOWN)	1
3	607268	DECK FRAME - LH OUTER WING	1
4	607274	DECK FRAME - RH OUTER WING (NOT SHOWN)	1
5	526948	DECK CHANNEL - GALVANIZED	1
6	607607	BELT STRAP	1
7	607647	WIPER CABLE - TDR30 OUTER WING DECK	2
8	607599	GRASS MAT	1
9	607308	DECK SHIELD - OUTER DECK	2
10	O.L.	LOCK NUT - 3/8NC GR5 PL	3
11	607580	HEIGHT ADJ. BUSHING KIT (8 PCS)	5
12	-	HEIGHT INDICATOR PLATE - FRONT (SEE ITEM #48)	1
13	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	11
14	526748	BLADE SPINDLE ASSEMBLY	2
15	-	HEIGHT INDICATOR PLATE- REAR (SEE ITEM #48)	1
16	O.L.	LOCKWASHER - 1/2" PL	24
17	O.L.	LOCKWASHER - 5/8" PL	4
18	526148	CLAMP WASHER KIT (4 PCS)	2
19	O.L.	HEX NUT - 1/2" NC GR5 PL	24
20	526252	TDR HEIGHT ADJUSTMENT KIT	1
21	213019	FLANGE BEARING	4
22	O.L.	CARR. BOLT- 3/8 X 1.00 NC GR5 PL	3
23	O.L.	LOCKWASHER - 3/8" PL	6
24	O.L.	HEX BOLT - 3/8 X 1 NC GR5 PL	10
25	O.L.	HEX NUT - 5/8" NC GR5 PL	2

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ITEM	PART #	DESCRIPTION	QTY		
26	-	HEIGHT DECAL PLATE- FRONT (SEE ITEM 47)	1		
27	Ċ.	CARRIAGE BOLT - 7/16 X 1.25" NC GR5 PL	7		
28	O.L.	HEX BOLT- 1/2 X 3 NC GR5 PL	3		
29	O.L.	CARRIAGE BOLT - 5/8" X 2"	2		
30	O.L.	CARRIAGE BOLT - 5/8" X 1.75" NC GR5 PL	4		
31	O.L.	FLAT WASHER - 1/2" PL	3		
32	O.L.	FLAT WASHER - 7/16" PL	8		
33	O.L.	LOCKWASHER - 7/16" PL	8		
34	O.L.	CASTLE NUT - 3/4" NC	2		
35	O.L.	FLAT WASHER - 3/8" PL	8		
36	607256	DECK ROLLER	2		
37	526144	ACME JAM NUT	2		
38	526246	DECK ADJUSTMENT BRACKET	2		
39	212037	BELT - B72	2		
40	O.L.	HEX NUT - 7/16" NC GR5 PL	2		
41	-	HEIGHT ADJ. ROD	2		
43	O.L.	HEX NUT - 3/8" NC PL	2		
44	-	HEIGHT INDICATOR PLATE- REAR (SEE ITEM #47)	1		
45	607493	ROLLER SPACER BUSHING	2		
46	607310	TDR30 HEIGHT ADJUSTMENT KIT	1		
47	607312	TDR30 HEIGHT PLATE KIT (4 PCS)	1		
48	527606	TDR HEIGHT PLATE KIT (4 PCS)	1		
49	O.L.	CARRIAGE BOLT - 1/2" X 1.25" NC GR5 PL	2		
50	O.L.	CARR. BOLT- 1/2 X 3 NC GR5 PL	1		
O.L (O.L OBTAIN LOCALLY				

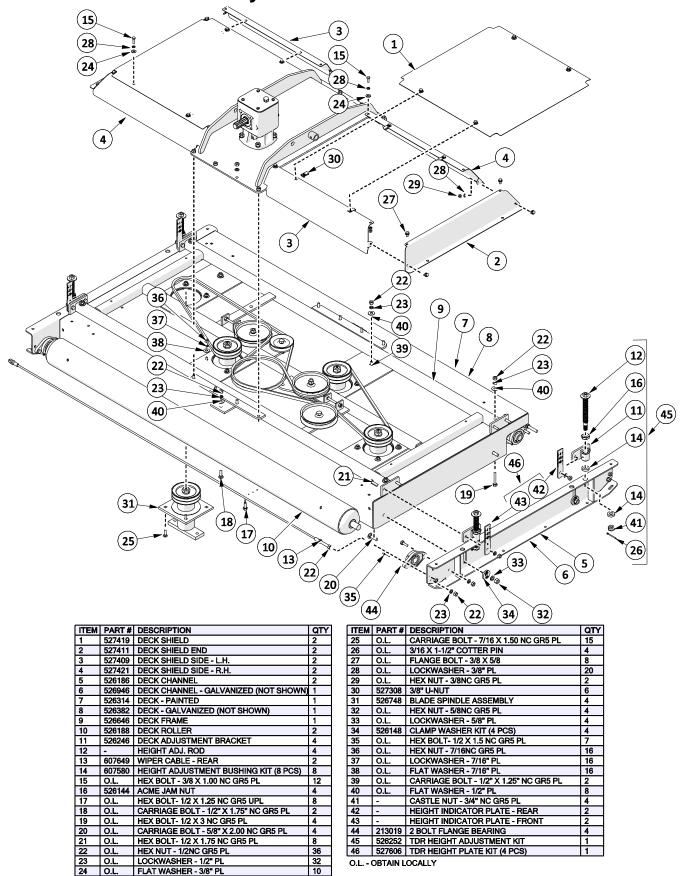
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1.9 Wing Deck Height Adjustment



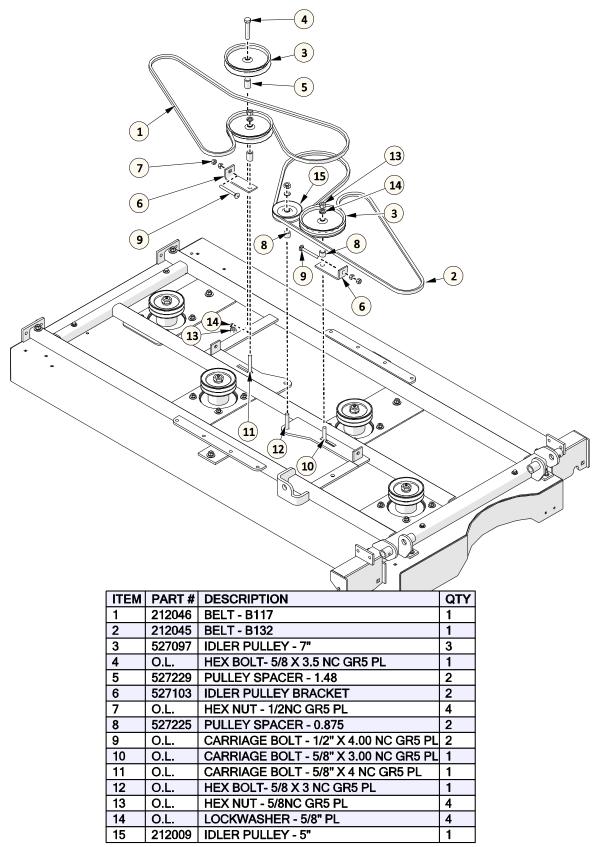
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1.10 Rear Deck Assembly



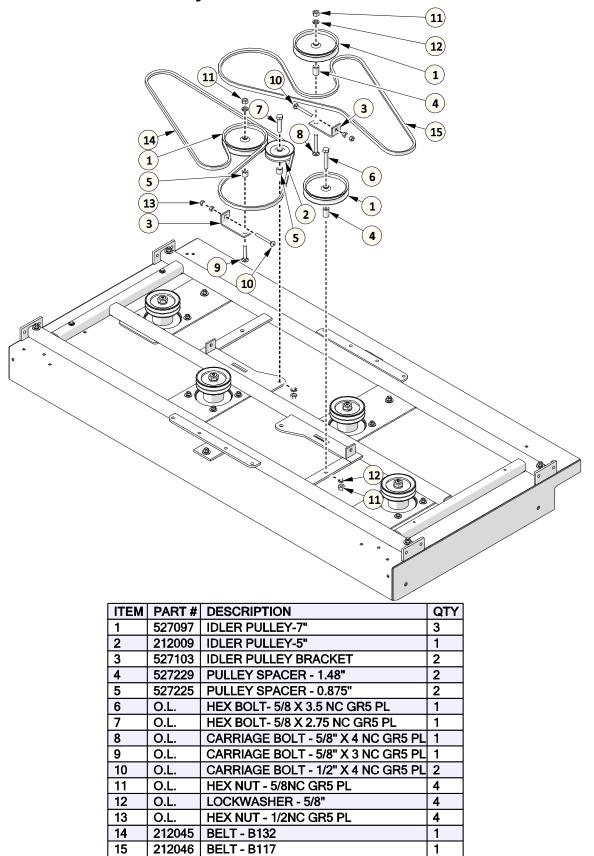
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1.11 Belt Drive Assembly - Wing



O.L. - OBTAIN LOCALLY

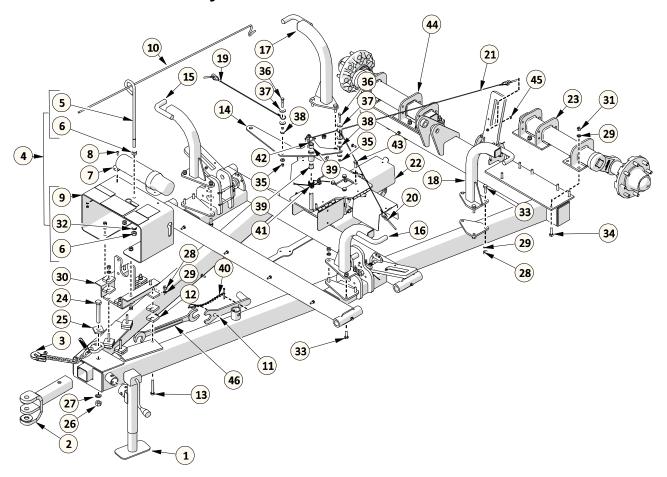
1.12 Belt Drive Assembly - Rear



O.L. - OBTAIN LOCALLY

2 FRAME ASSEMBLY

2.1 Frame Assembly

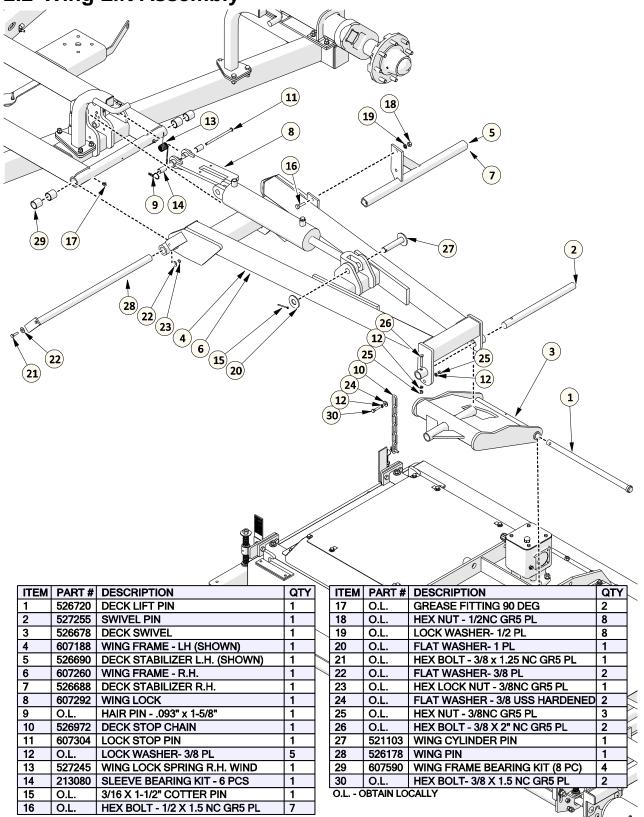


ITEM	PART#	DESCRIPTION	QTY
1	219006	IMPLEMENT JACK	1
2	521047	4 POSITION HITCH	1
3	521048	SAFETY CHAIN	1
4	522408	HOSE SUPPORT - COMPLETE	1
5	522413	HOSE GUIDE - W/ HARDWARE	1
6	O.L.	HEX NUT - 5/8NC GR5 PL	2
7	120519	MANUAL HOLDER TUBE	1
8	O.L.	CARRIAGE BOLT - 1/4 X 3/4" NC GR5 PL	2
9	-	HOSE SUPPORT	1
10	526474	PULL ROPE	1
11	526094	TDR HEIGHT ADJUST WRENCH	1
12	522406	PTO BRACKET SPACER KIT (4 PCS)	16
13	O.L.	HEX BOLT- 1/2 X 3.5 NC GR5 PL	4
14	526684	LOCK RELEASE SWIVEL	1
15	607224	DECK STANDOFF - FRONT RIGHT	1
16	607220	DECK STANDOFF - FRONT LEFT	1
17	607222	DECK STANDOFF REAR RIGHT	1
18	607280	DECK STANDOFF REAR LEFT	1
19	526956	LOCK RELEASE CABLE - LEFT	1
20	526954	LOCK RELEASE CABLE - RIGHT	1
21	526952	LOCK RELEASE CABLE - REAR	1
22	526618	4-WAY GEARBOX SHIELD	1
23	526992	3500LB L.H. AXLE	1
24	O.L.	HEX BOLT- 3/4 X 5 NC GR5 PL	1

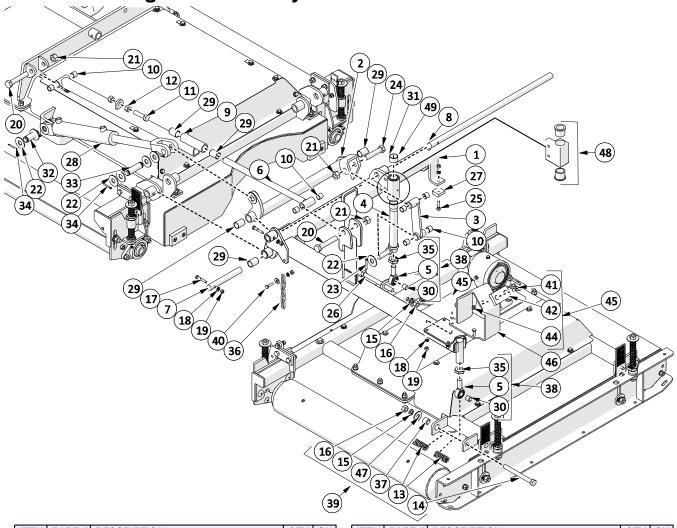
ITEM	PART#	DESCRIPTION	QTY
25	521857	SAFETY CHAIN FLAT WASHER	1
26	O.L.	HEX NUT - 3/4NC GR5 PL	1
27	O.L.	LOCKWASHER - 3/4" PL	1
28	O.L.	HEX NUT - 1/2NC GR5 PL	16
29	O.L.	LOCKWASHER - 1/2"	32
30	522402	PTO MOUNTING BRKT	1
31	O.L.	HEX NUT - 1/2NF GR8 PL	14
32	O.L.	LOCKWASHER - 5/8" PL	1
33	O.L.	HEX BOLT- 1/2 X 1.5 NC GR5 PL	11
34	O.L.	HEX BOLT- 1/2 X 1.75 NF GR8 PL	13
35	O.L.	HEX NUT - 3/8 NC GR5 PL	6
36	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	2
37	O.L.	FENDER WASHER - 3/8" PL	7
38	O.L.	FLAT WASHER - 3/8" PL	6
39	527350	FLANGE BEARING KIT (2 PCS)	2
40	302910	LYNCH PIN - 3/16" RD W/ CHAIN	1
41	527247	WING LOCK SPRING - RH	1
42	O.L.	COTTER PIN - 3/16" X 2.00	1
43	521764	HEX BOLT -M12X30 & L.W (8 PCS)	4
44	526994	3500LB. R.H. AXLE	1
45	O.L.	HEX NUT - 5/16NC GR5 PL	6
46	605833	1 1/2" 15/60 DEG OPEN END WRENCH	1

O.L. - OBTAIN LOCALLY

2.2 Wing Lift Assembly



2.3 Outer Wing Lift Assembly - LH



ITEM	PART#	DESCRIPTION	QTY	SN
1	607346	OUTER WING - L.H.	1	
2	607250	LIFT PIVOT - L.H.	1	
3	607234	DECK LIFT LINK - L.H.	1	
4	607176	DECK LIFT SHAFT	1	
5	-	TIE ROD END	2	
6	607184	WING STOP ROD	1	
7	607603	WING PIVOT PIN	2	
8	607527	WING PIN	1	
9	607182	WING DECK STOP	1	
10	607350	SLEEVE BEARING KIT (4 PCS)	8	
11	O.L.	HEX BOLT- 5/8 X 2.5 NC GR5 PL	1	
12	O.L.	HEX NUT - 5/8NC GR5 PL	2	
13	-	SPRING	2	
14	-	HEX BOLT-5/8 X 8.5 NC 18-8 SS	1	
15	-	LOCK WASHER- 5/8 PL	2	
16	-	HEX NUT - 5/8NC GR5 PL	2	
17	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	2	
18		LOCK WASHER- 3/8 PL	9	
19		HEX NUT - 3/8NC GR5 PL	9	
20	O.L.	HEX BOLT- 3/4 X 4 NC GR5 PL	2	
21	J.	CTR. LOCK NUT - 3/4NC GR5 PL	3	
22		FLAT WASHER- 3/4 PL	11	
23	O.L.	3/16 X 1-1/2" COTTER PIN	1	
24	O.L.	HEX BOLT- 3/4 X 3.5 NC GR5 PL	1	
25	O.L.	HEX BOLT- 3/8 X 1.5 NC GR5 PL	1	

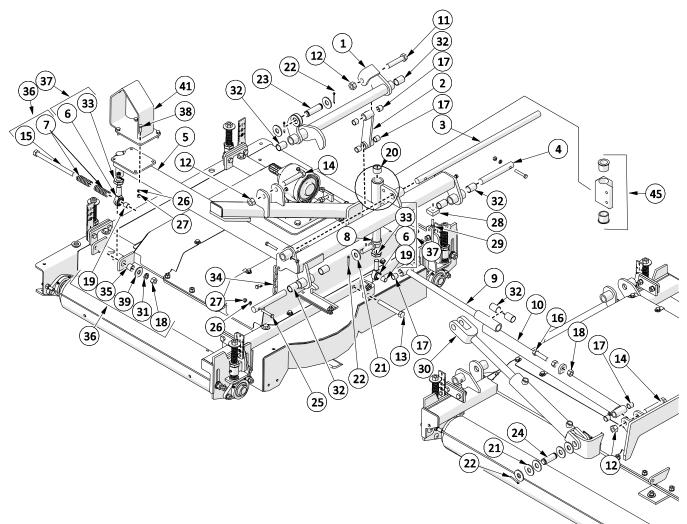
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ITEM	PART#	DESCRIPTION	QTY	SN
26	-	HEX BOLT - 5/8 X 6 NC 18-8 SS	1	
27	600512	BUMPER KIT (4 PCS)	1	
28	607355	HYDRAULIC CYL - OUTER WING	1	
29	529240	SLEEVE BEARING KIT - 1" (12 PCS)	8	
30	607560	SLEEVE BEARING KIT - 5/8" (4 PCS)	2	
31	521831	PRESS IN BUSHING	2	1
32	521345	PIN - 1" X 2.938"	1	
33	521350	PIN - 1" X 3.563"	1	
34	302200	COTTER PIN - 3/16" x 1-1/2"	4	
35	305619	JAM NUT - 3/4"-16 PL	2	
36	607270	WING DECK STOP CHAIN	1	
37	-	SPRING TENSION BUSHING	1	
38	607318	TIE ROD KIT (3 PCS)	2	
39	607316	WING FLOAT KIT (6 PCS)	1	
40	305061	HEX BOLT - 3/8 x 1.25 NC GR5 PL	2	
41	-	COUNTERSUNK SCREW - 3/8 X 1.00 NC	2	
42	-	DECK BUMPER	1	
43	607314	BUMPER KIT (10 PCS)	1	
44	-	NYLON LOCK NUT - 3/8NC PL	2	
45	O.L.	HEX BOLT- 3/8 X 1 NC GR5 PL	4	
46	607609	WING BUMPER PLATE	1	
47	O.L.	FLAT WASHER- 5/8 PL	1	
48	607671	REPAIR BUSHING - DECK SLIDE	1	1
49	607360	SLEEVE BUSHING KIT	1	2
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O.L. - OBTAIN LOCALLY

SERIAL NUMBER RANGE 1 - SN#14301009 & UP 2 - SN#12301001 TO 14301008

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2.4 Outer Wing Lift Assembly - RH



ITEM	PART#	DESCRIPTION	QTY	SN
1	607252	WING LIFT PIVOT- RH	1	
2	607234	DECK LIFT LINK	1	
3	607527	WING PIN	1	
4	607603	WING PIVOT PIN	2	
5	607348	OUTSIDE WING - RH	1	
6	•	TIE ROD END	2	
7	•	SPRING	2	
8	607176	DECK LIFT SHAFT	1	
9	607184	WING STOP ROD	1	
10	607182	WING DECK STOP	1	
11	O.L.	HEX BOLT- 3/4 X 3.5 NC GR5 PL	1	
12	O.L.	CTR. LOCK NUT - 3/4NC GR5 PL	3	
13	305250	HEX BOLT- 5/8 X 6 NC 18-8 SS	1	
14	O.L.	HEX BOLT- 3/4 X 4 NC GR5 PL	2	
15		HEX BOLT- 5/8 X 8.5 18-8 SS	1	
16	O.L.	HEX BOLT- 5/8 X 2.5 NC GR5 PL	1	
17	607350	SLEEVE BEARING KIT - 3/4" (4 PCS)	8	
18	O.L.	HEX NUT - 5/8NC GR5 PL	3	
19	607560	SLEEVE BEARING KIT - 5/8"(4 PCS)	2	
20	521831	PRESS IN BUSHING	2	1
21	O.L.	FLAT WASHER - 3/4" PL	8	
22	521752	COTTER PIN KIT (6 PCS)	5	

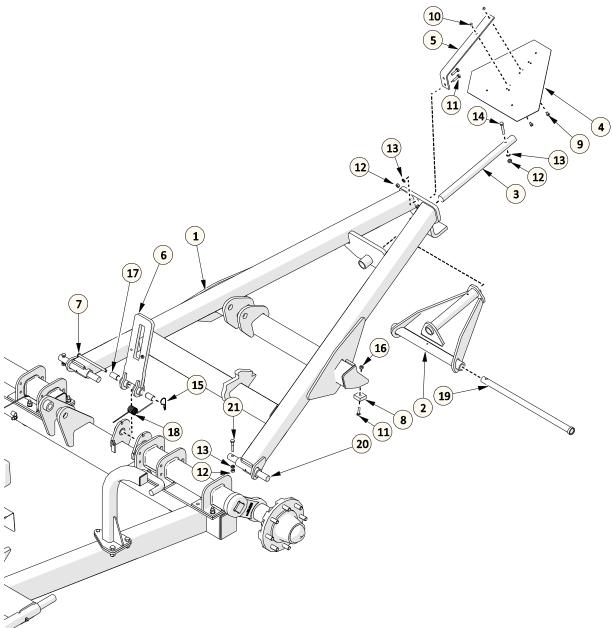
ITEM	PART#	DESCRIPTION	QTY	SN
23	521350	PIN - 3.563"	1	
24	521345	PIN - 2.938"	1	
25	O.L.	HEX BOLT- 3/8 X 2.25 NC GR5 PL	3	
26	O.L.	LOCK WASHER - 3/8" PL	8	
27	O.L.	HEX NUT - 3/8NC GR5 PL	8	
28	600512	BUMPER KIT (4 PCS)	1	
29	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	1	
30	607355	HYDRAULIC CYL - OUTER WING	1	
31	O.L.	LOCK WASHER- 5/8 PL	1	
32	529240	SLEEVE BEARING 1" - 12PCS	8	
33	305619	JAM NUT - 3/4"-16 PL	2	
34	607270	WING DECK STOP CHAIN	1	
35	607571	SPRING TENSION BUSHING	1	
36	607316	WING FLOAT KIT (7 PCS)	1	
37	607318	TIE ROD KIT (3 PCS)	2	
38	305060	HEX BOLT- 3/8 X 1 NC GR5 PL	4	
39	301106	FLAT WASHER- 5/8 PL	1	
41	607609	WING BUMPER PLATE	1	
44	607314	BUMPER KIT (10 PCS)	1	
45	607671	REPAIR BUSHING - DECK SLIDE	1	1
46	607360	SLEEVE BUSHING KIT	1	2

O.L. - OBTAIN LOCALLY

SERIAL NUMBER RANGE 1 - SN#14301009 & UP 2 - SN#12301001 TO 14301008

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2.5 Rear Lift Assembly

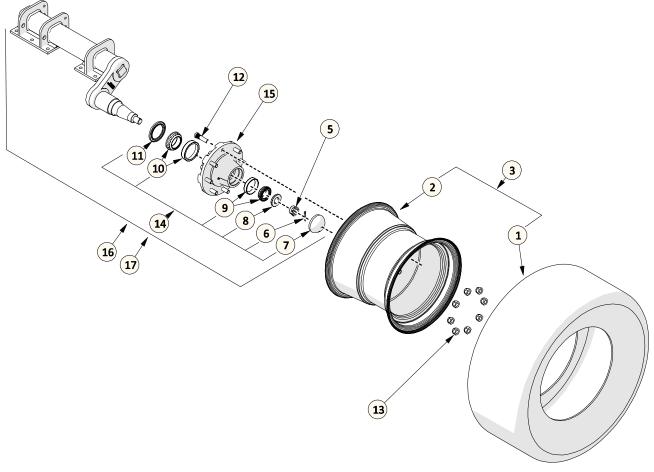


ITEM	PART#	DESCRIPTION	QTY
1	526716	REAR DECK LIFT ARM	1
2	526704	REAR DECK SWIVEL	1
3	527255	SWIVEL PIN	1
4	521353	SMV SIGN	1
5	527223	SMV BRACKET	1
6	607292	LOCK - WING/REAR	1
7	607304	LOCK STOP PIN	1
8	600512	BUMPER KIT (4 PCS)	2
9	O.L.	HEX BOLT - 1/4 x .75 NC GR5 PL	2
10	O.L.	HEX LOCK NUT - 1/4NC GR5 PL	2
11	O.L.	HEX BOLT - 3/8 x 1.25 NC GR5 PL	4

ITEM	PART#	DESCRIPTION	QTY
12	O.L.	HEX NUT - 3/8NC GR5 PL	5
13	O.L.	LOCKWASHER - 3/8" PL	5
14	O.L.	HEX BOLT- 3/8 X 2.25 NC GR5 PL	1
15		HAIR PIN093" x 1-5/8" ZINC	1
16	O.L.	HEX LOCK NUT - 3/8 NC GR5 UPL	2
17	213080	SLEEVE BEARING KIT (6 PCS)	2
18	527245	WING LOCK SPRING R.H. WIND	1
19	527219	SWIVEL PIN	1
20	527243	REAR LIFT PIN	2
21	O.L.	HEX BOLT- 3/8 X 2 NC GR5 PL	2

O.L. - OBTAIN LOCALLY

2.6 Wheel Assemblies

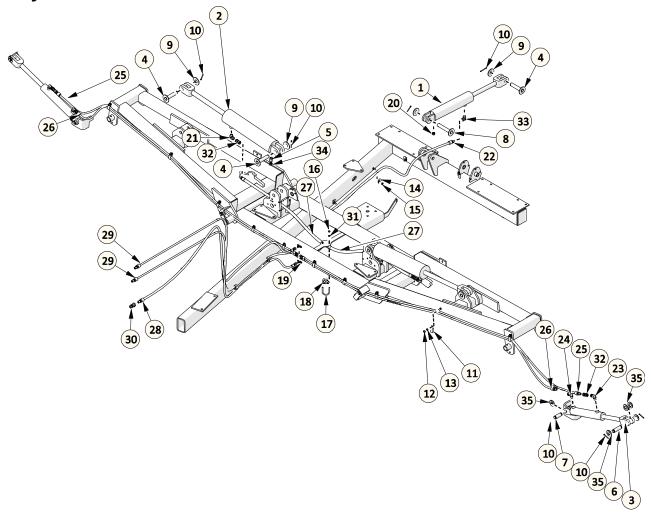


ITEM	PART#	DESCRIPTION	QTY
1	230059	TRANSPORT TIRE	1
2	230058	RIM	1
3	230057	TRANSPORT TIRE & RIM ASSEMBLY	1
5	526914	CASTLE NUT	1
6	O.L.	COTTER PIN - 5/32" X 2.00	1
7	526918	DUST CAP	1
8	-	BEARING WASHER	1
9	-	OUTER BEARING	1
10	-	INNER BEARING	1
11	-	GREASE SEAL	1
12	526916	WHEEL STUD KIT (8 PCS)	1
13	526964	WHEEL NUT KIT (8 PCS)	1
14	526996	HUB REBUILD KIT - ITEMS 6-11	1
15	526998	HUB ASSEMBLY - W/BEARINGS	1
16	526994	COMPLETE AXLE ASSEMBLY - RH (SHOWN)	1
17	526992	COMPLETE AXLE ASSEMBLY - LH (NOT SHOWN)	1

O.L. - OBTAIN LOCALLY

3 HYDRAULICS

3.1 Hydraulics



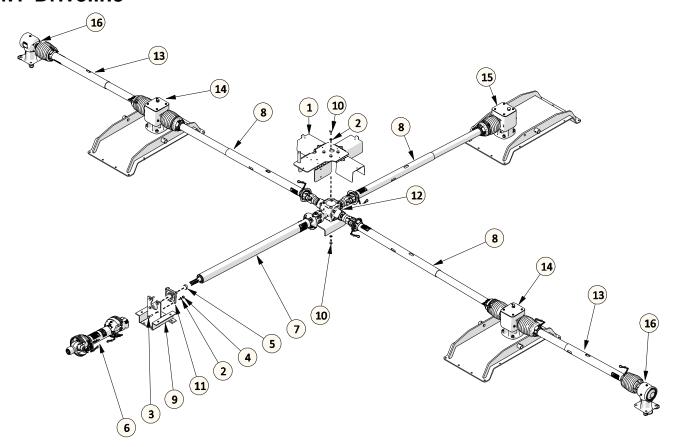
ITEM	PART#	DESCRIPTION	QTY
1	522010	HYDRAULIC CYL3" X 12"	1
2	607284	HYDRAULIC CYL4" X 16"	2
3	607355	HYDRAULIC CYL. 2" X 10"	2
4	521103	WING CYLINDER PIN	5
5	221054	ADAPTER ORB-NPTF	2
6	521350	PIN - 1" X 3.563"	2
7	521345	PIN - 1" X 2.938"	2
8	526162	CYLINDER PIN	1
9	O.L.	FLAT WASHER - 1" PL	6
10	521752	COTTER PIN (6 PCS)	10
11	229002	1/2 HOSE CLAMP KIT (7 PCS)	10
12	O.L.	HEX NUT - 3/8NC GR5 PL	10
13	O.L.	LOCKWASHER - 3/8" PL	10
14	229011	5/8 SINGLE TUBE CLAMP	5
15	O.L.	HEX LOCK NUT - 3/8 NC GR5 UPL	5
16	O.L.	HEX NUT - 5/16NC GR5 PL	2
17	304202	U BOLT -2.06X 1.75 X 5/16 DIA.	1
18	521070	HYDRAULIC CROSS	1

ITEM	PART#	DESCRIPTION	QTY
19	221037	TEE-JICM	2
20	221087	BREATHER VENT - 3/8" NPT	1
21	222020	ADAPTOR-6805-8-6- RESTRICTOR	2
22	526970	HYDRAULIC HOSE -94"	1
23	222012	ADAPTOR-6805-8-6- RESTRICTOR	2
24	221074	CYLINDER BASE END FITTING	2
25	607541	HYDRAULIC HOSE - 125"	2
26	607543	HYDRAULIC HOSE - 117"	2
27	526974	HYDRAULIC HOSE - 45"	2
28	521334	HYDRAULIC HOSE - 122"	1
29	607545	HYDRAULIC HOSE - 130"	2
30	222001	MALE QUICK DISCONNECT	1
31	O.L.	LOCKWASHER - 5/16"	2
32	222022	PIPE SWIVEL UNION - 3/8	4
33	521364	90 DEGREE RESTRICTOR FITTING	1
34	221055	BREATHER VENT - 1/2" NPT	2
35	301132	FLAT WASHER- 1 PL NARROW SAE	12

O.L. - OBTAIN LOCALLY

4 DRIVELINE

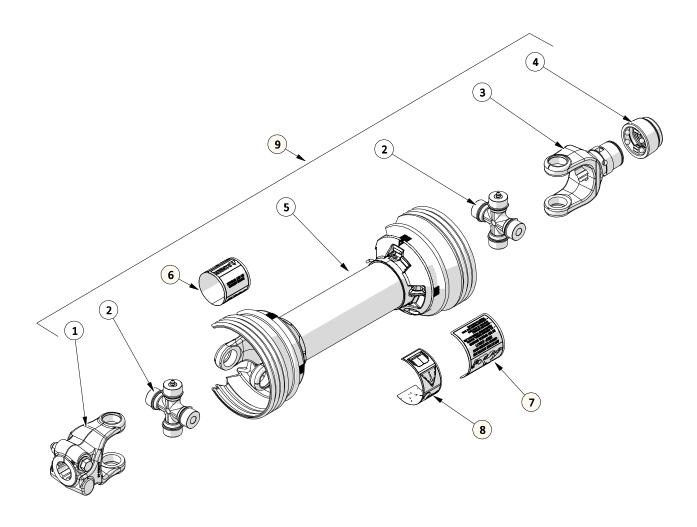
4.1 Driveline



1 526618 4 WAY GEARBOX SHIELD 1 2 O.L. LOCK WASHER- 1/2 PL 12 3 O.L. HEX BOLT- 1/2 X 1.75 NC GR5 PL 4 4 O.L. HEX NUT - 1/2NC GR5 PL 4 5 521789 PTO SPACER 1 6 210150 INPUT PTO SHAFT 1 7 210170 INTERMEDIATE PTO SHAFT 1 8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1 16 521012 GEAR BOX - DECK 2	ITEM	PART #	DESCRIPTION	QTY
3 O.L. HEX BOLT- 1/2 X 1.75 NC GR5 PL 4 4 O.L. HEX NUT - 1/2NC GR5 PL 4 5 521789 PTO SPACER 1 6 210150 INPUT PTO SHAFT 1 7 210170 INTERMEDIATE PTO SHAFT 1 8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	1	526618	4 WAY GEARBOX SHIELD	1
4 O.L. HEX NUT - 1/2NC GR5 PL 4 5 521789 PTO SPACER 1 6 210150 INPUT PTO SHAFT 1 7 210170 INTERMEDIATE PTO SHAFT 1 8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	2	O.L.	LOCK WASHER- 1/2 PL	12
5 521789 PTO SPACER 1 6 210150 INPUT PTO SHAFT 1 7 210170 INTERMEDIATE PTO SHAFT 1 8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	3	Ċ.	HEX BOLT- 1/2 X 1.75 NC GR5 PL	4
6 210150 INPUT PTO SHAFT 1 7 210170 INTERMEDIATE PTO SHAFT 1 8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	4	O.L.	HEX NUT - 1/2NC GR5 PL	4
7 210170 INTERMEDIATE PTO SHAFT 1 8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	5	521789	PTO SPACER	1
8 210190 DECK PTO SHAFT 3 9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	6	210150	INPUT PTO SHAFT	1
9 522402 PTO MOUNTING BRACKET 1 10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	7	210170	INTERMEDIATE PTO SHAFT	1
10 521764 HEX BOLT - M12 X 30GR 8.8 (8PCS) 8 11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	8	210190	DECK PTO SHAFT	3
11 521323 4 BOLT FLANGE BEARING - 1-3/8" 1 12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	9	522402	PTO MOUNTING BRACKET	1
12 521497 GEAR BOX - 4 SHAFT 1 13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	10	521764	HEX BOLT - M12 X 30GR 8.8 (8PCS)	8
13 210180 DECK PTO SHAFT 2 14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	11	521323	4 BOLT FLANGE BEARING - 1-3/8"	1
14 607290 DECK GEARBOX 2 15 521432 DECK GEARBOX - REAR 1	12	521497	GEAR BOX - 4 SHAFT	1
15 521432 DECK GEARBOX - REAR 1	13	210180	DECK PTO SHAFT	2
	14	607290	DECK GEARBOX	2
16 521012 GEAR BOX - DECK 2	15	521432	DECK GEARBOX - REAR	1
	16	521012	GEAR BOX - DECK	2

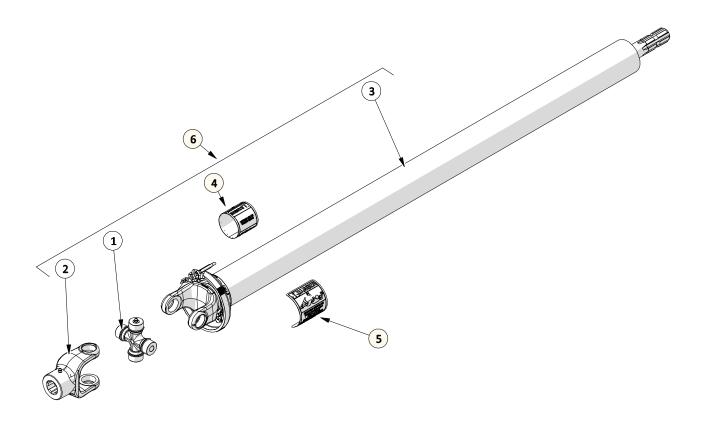
O.L. - OBTAIN LOCALLY

4.2 Input PTO Shaft



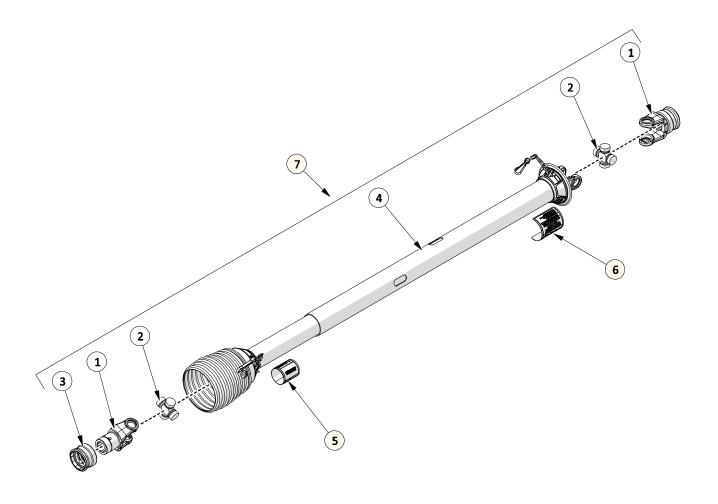
ITEM	PART#	DESCRIPTION	QTY
1	210174	CLAMP YOKE	1
2	210171	CROSS AND BEARING KIT	2
3	210175	SAFETY SLIDE LOCK YOKE ASM.	1
4	210179	SSL/AUTO-LOK REPAIR KIT	1
5	210178	COMPLETE GUARD SET	1
6	210239	SAFETY SIGN - INNER GUARD	1
7	210237	SAFETY SIGN - OUTER GUARD	1
8	210238	CE WARNING DECAL	1
9	210150	INPUT PTO SHAFT - COMPLETE	1

4.3 Intermediate PTO Shaft



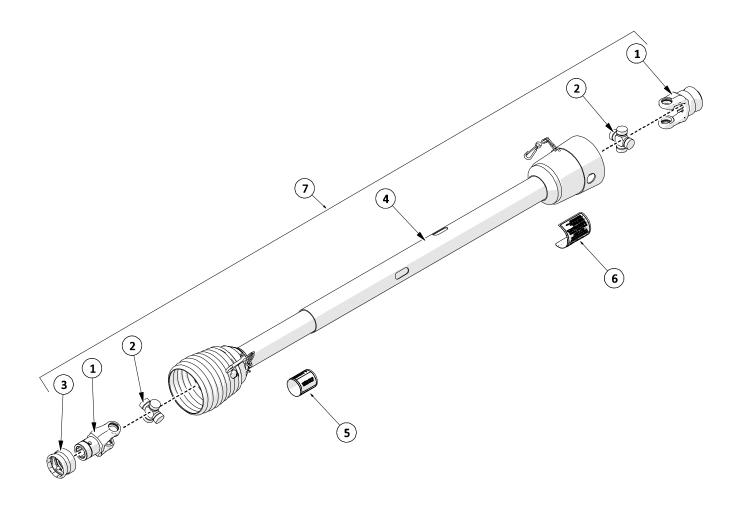
ITEM	PART#	DESCRIPTION	QTY
1	210171	CROSS AND BEARING KIT	1
2	210172	SLIDE YOKE	1
3	210173	GUARD SET	1
4	210239	SAFETY SIGN - INNER GUARD	1
5	210237	SAFETY SIGN - OUTER GUARD	1
6	210170	INTERMEDIATE SHAFT - COMPLETE	1

4.4 Wing Deck PTO Shaft



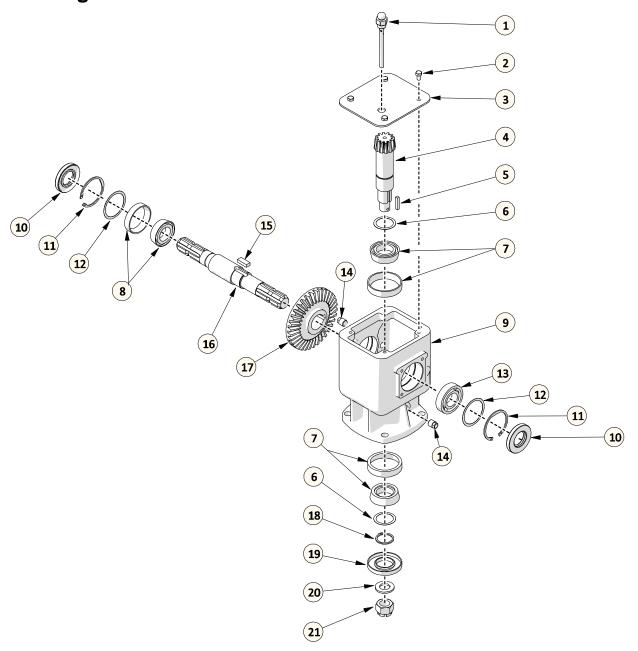
ITEM	PART#	DESCRIPTION	QTY
1	210192	SPRING-LOK YOKE ASSM.	2
2	210191	CROSS AND BEARING KIT	2
3	210196	SPRING-LOK REPAIR KIT	2
4	210195	COMPLETE GUARD SET	1
5	210239	SAFETY SIGN - INNER GUARD	1
6	210237	SAFETY SIGN - OUTER GUARD	1
7	210190	DECK SHAFT - COMPLETE W/GUARDS	1

4.5 Outer Wing Deck PTO Shaft



ITEM	PART#	DESCRIPTION	QTY
1	210192	SPRING-LOK YOKE ASSM.	2
2	210191	CROSS AND BEARING KIT	2
3	210196	SPRING-LOK REPAIR KIT	2
4	210182	COMPLETE GUARD SET	1
5	210239	SAFETY SIGN - INNER GUARD	1
6	210237	SAFETY SIGN - OUTER GUARD	1
7	210190	DECK SHAFT - COMPLETE	1

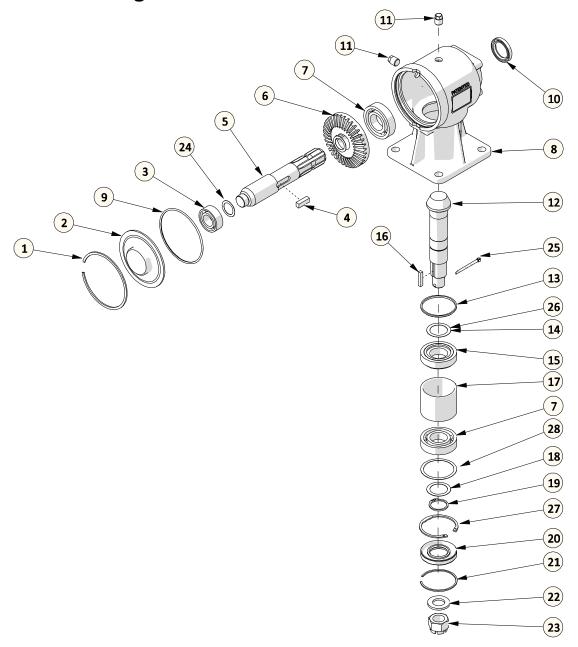
4.6 Wing Deck Gearbox



ITEM	PART#	DESCRIPTION	QTY
1	521433	OIL LEVEL DIPSTICK	1
2	521399	BOLT - M8 X 14 - 8.8	4
3	521420	COVER PLATE	1
4	521435	PINION SHAFT	1
5	521390	DECK GEARBOX KEY	1
6	521436	SHIM KIT -51.5	2
7	521442	BEARING - 30208	2
8	521362	BEARING - TAPERED ROLLER	1
9	521428	CASING	1
10	521127	OIL SEAL	2
11	521126	SNAP RING 3 PC KIT	2

ITEM	PART#	DESCRIPTION	QTY			
12	521491	SHIM KIT	2			
13	521116	BEARING	1			
14	521482	HEX PIPE PLUG	2			
15	521444	KEY - 12 X 8 X 30	1			
16	521441.05	INPUT/ OUTPUT SHAFT	1			
17	521434	GEAR	1			
18	521439	SNAP RING - 3 PC KIT	1			
19	521440	OIL SEAL - 40 X 80 X 10	1			
20	521129	WASHER - 25 X 44 X 4 (3PC/KIT)	1			
21	521130	CASTLE NUT - M24 X 2	1			
$\overline{\Delta}$	O L OPTAIN LOCALLY					

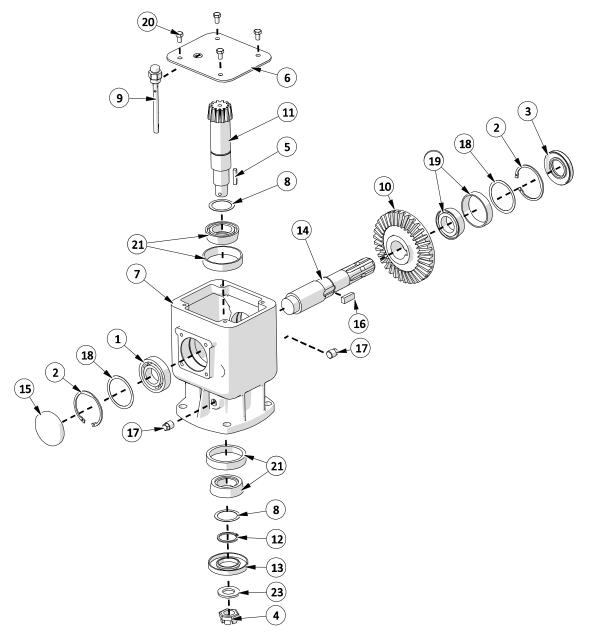
4.7 Outer Wing Deck Gearbox



ITEM	PART#	DESCRIPTION	QTY
1	521110	SNAP RING (3 PCS)	_
2	521111	COVER PLATE	1
3	521112	BEARING - 6205	1
4	521113	KEY - 10 X 8 X 30 MM (3 PCS)	1
5	521114	INPUT SHAFT	_
6	521115	GEAR	1
7	521116	BEARING - 6207	2
8	521117	CASING	1
9	521118	O-RING	1
10	521120	OIL SEAL	1
11	521482	HEX PIPE PLUG	2
12	521121	PINION SHAFT	1
13	521361	TAPERED SPACER RING	1
14	521123	SHIM KIT (3 PCS)	1
15	521362	BEARING - TAPERED ROLLER	1

ITEM	PART#	DESCRIPTION	QTY
16	521390	KEY - 1/4 X 1-5/16 (3 PCS) KIT	1
17	521124	SPACER TUBE	1
18	521366	SHIM KIT (3 PCS)	1
19	521125	SNAP RING (3 PCS)	1
20	521127	OIL SEAL	1
21	521128	SNAP RING	1
22	521129	WASHER (3PC/KIT)	1
23	521130	CASTLE NUT - M24	1
24	521359	SHIM KIT - (2PCS)	1
25	521122	COTTER PIN KIT (3 PCS)	1
26	521360	SHIM KIT - (3PCS)	1
27	521126	SNAP RING KIT (3 PCS)	1
28	521491	SHIM KIT (3 PCS)	1
29	521012	GEARBOX - COMPLETE	1

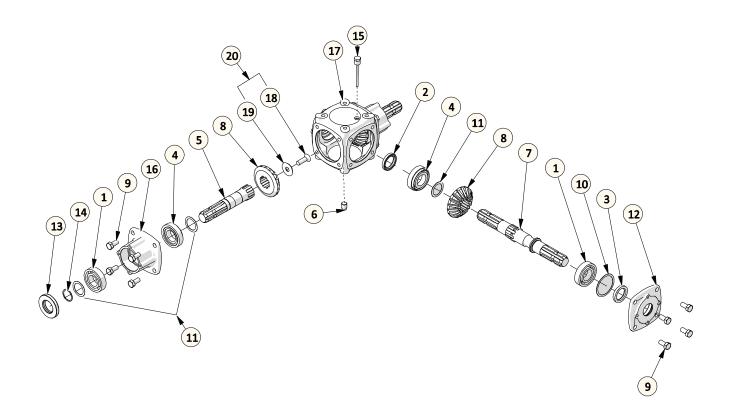
4.8 Rear Deck Gearbox



ITEM	PART#	DESCRIPTION	QTY
1	521116	BEARING	1
2	521126	SNAP RING - 3 PC KIT	2
3	521127	OIL SEAL	1
4	521130	CASTLE NUT - M24	1
5	521390	DECK GEARBOX KEY (3 PCS)	1
6	521420	COVER PLATE	1
7	521428	CASING	1
8	521436	SHIM KIT (2 PCS)	2
9	521433	OIL LEVEL DIPSTICK	1
10	521434	GEAR	1
11	521435	PINION SHAFT	1
12	521439	SNAP RING - 3 PC KIT	1

ITEM	PART#	DESCRIPTION	QTY
13	521440	OIL SEAL	1
14	521441	INPUT SHAFT	1
15	521443	CAP	1
16	521444	KEY - 12 X 8 X 30	1
17	521482	HEX PIPE PLUG	2
18	521491	SHIM KIT	2
19	521362	BEARING - TAPERED ROLLER	1
20	521399	BOLT - M8 X 14 - 8.8	4
21	521442	BEARING - 30208	2
23	521129	WASHER KIT (3 PCS)	1
24	521432	GEAR BOX - DECK - COMPLETE	1

4.9 4 Way Gearbox



ITEM	PART#	DESCRIPTION	QTY
1	521116	BEARING - 6207	3
2	521120	OIL SEAL	1
3	521120	OIL SEAL	1
4	521362	BEARING - TAPER ROLLER - 7207E	3
5	521481	STUB EXTENSION SHAFT	2
6	521482	HEX PIPE PLUG	1
7	521486	THRU SHAFT	1
8	521487	GEAR (Z18 M5)	3
9	521488	BOLT - M12 X 25 - 8.8 KIT (6 PCS)	2
10	521491	SHIM KIT (3 PCS)	1
11	521794	SHIM KIT - 3 PCS	1
12	521797	COVER	1
13	521127	OIL SEAL	2
14	521137	SNAP RING	1
15	521489	DIPSTICK	1
16	521796	EXTENSION HOUSING	2
17	521483	HOUSING	1
18	-	HEX COUNTERSUNK BOLT - M12 X 40	2
19	-	WASHER	2
20	522426	GEARBOX SHAFT BOLT KIT	1

5 DECALS

5.1 **Safety**

If decals become faded, damaged, or lost, replace immediately. Order Decal Kit, Part # 522002. Safety Decals shown below are located on machine as illustrated on sketch.

TDR-30 DECAL KIT - 607080



WHEN MAKING SHARP TURNS, THE PTO SHAFT WILL SHORTEN. LIMIT THE TURNING RADIUS TO ENSURE THAT THE PTO DOES NOT FULLY COLLAPSE. THE BLACK INNER SHIELD MUST REMAIN VISIBLE. FAILURE TO DO THIS WILL RESULT IN DAMAGE TO THE SHAFT AND BEARING.

TRACTOR END

REFER TO MANUAL FOR ADDITIONAL INFO.

521619

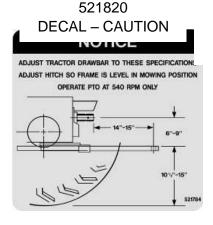
521819 DECAL – CAUTION

209175 DECAL – GENERAL SAFETY



209113 DECAL – REPLACE SHIELDS





PROGRESSIVE

TURF EQUIPMENT INC.

137 WEST WILLIAM ST.,
SEAFORTH, ONTARIO
GARADA, NOT THO

521817 DECAL – PROGRESSIVE TURF



209115 DECAL – OEM PARTS 521784 DECAL – NOTICE 209173 DECAL – ROTATING BLADE DANGER

ROTATING BLADE HAZARD

TO AVOID SERIOUS INJURY OR DEATH to operator and

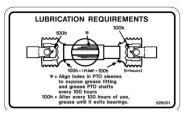
before mowing

REMOVE AND / OR AVOID objects such as wire, cable metal objects and all other foreign material / solid object
DO NOT PLACE HANDS OR FEET under cutting deck when operating or when tractor engine is running

DO NOT OPERATE with deflectors removed
 DO NOT POINT DISCHARGE toward bystanders, animals, buildings or vehicles
 INSPECT area for potential mower thrown object hazards before powering.



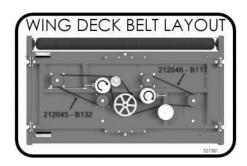
526001 DECAL – GREASING SCHEDULE



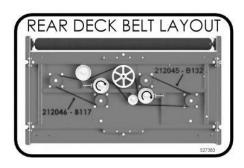
521119 8HR DECAL – PTO GREASE

PROGRESSIVE TDR-30

209179 DECAL – TDR 30



527381 WING DECK BELT LAYOUT



527383 REAR DECK BELT LAYOUT



210239 DECAL – INNER GUARD



521455 DECAL – OUTER SHIELD



210238 DECAL – CE WARNING



521014 DECAL – GREASE GUN

5.2 General Info