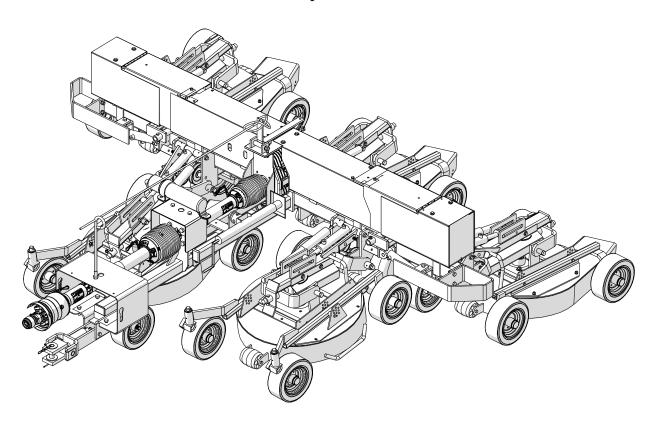


Operator's Manual and Parts List

Pro-Flex 120

Rotary Contour Mower Serial No. Up to 12271776



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

PHONE:519-527-1080	SERIAL #
TOLL FREE: 800 668-8873	WEB: www.progressiveturfequip.com

ISSUE DATE: March 2013 P.N.120534



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

DECLARATION OF CONFORMITY

According to Annex 11 A of the European Community Regulation for Machines

We, Progressive Turf Equipment Inc. 137 West William Street, Box 940, Seaforth Ontario, Canada declare under our sole responsibility that:

Progressive Rotary Finishing Mowers

Models:	Part Number	<u>Description</u>
TD65-2	526512D	3.66m Tri-Deck Finishing Mower
TD65	526515D	4.72m Tri-Deck Finishing Mower
TD92	529222E	6.70m Tri-Deck Finishing Mower
PF-120	601205D	3.05m Pro-Flex Contour Mower
PFR-120	601205RD	3.05m Pro-Flex Roller Contour Mower
PM-36	529236E	10.97m Pro-Max 36 Mowing System
TDR-22	526924E	6.70m Tri-Deck Roller Mower
TDR-15	528750D	4.72m Tri-Deck Roller Mower
TDR-12	528712D	3.65m Tri-Deck Roller Mower
SDR-65	531965C	165cm Three Point Hitch Roller Mower
SDR-90	531990C	228.6cm Three Point Hitch Roller Mower

are in conformity with Directive 98/37/EC of the European Parliament and of the Council of 22 June, 1998 on the approximation of the laws of the member states relating to Machinery.

The Technical Construction File is maintained at the corporate offices of Progressive Turf Equipment Inc. at the address listed above.

Dated at Seaforth, Ontario Canada the 28th day of February 2013.

Luke Janmaat

President

Progressive Turf Equipment Inc.

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INTRODUCTION

Thank you for purchasing a Pro-Flex 120 mower. This product is designed and manufactured to allow safe and productive mowing of contoured areas. A well-maintained machine will provide years of reliable service.

FOREWORD

This is the Operator's Manual for the Pro-Flex 120 mower. Keep it with the mower at all times. This manual is intended as a guide to the safe use and maintenance of the machine, so before you operate this machine, study this manual carefully.

Replace this manual immediately if it becomes lost.

This manual is not considered all-inclusive, so for further information on specific components, e.g. PTO shafts etc., refer to the respective documents included with the manual set for this machine.

The Pro-Flex 120 is a contour turf grass finishing mower with a 10 foot cutting width, and is designed to be pulled by a 30- 40 PTO horsepower utility tractor. This versatile mower has the ability to mow both contoured and flat terrain that requires a high quality finished after cut appearance. It can also blow leaves while backing up or be equipped with optional mulching blades and baffles to help return nutrients to the turf. High blade tip speed leaves a second-to-none after cut appearance. Shock absorbers on each mowing deck eliminate deck bounce as the Pro-Flex 120 follows changing ground contours.

Features:

- Five independent floating decks
- Cut height can be set on each deck between 3/4 inch and 3 inches
- 10' foot cutting swath with all decks down or 6 foot cutting swath with the outer decks raised
- Automatic rubber damped belt tensioners for consistent tension and long life
- Combination of swivelling and rigid caster wheels ensures true straight line tracking and easy turning without scuffing
- Automatic mechanical deck locks for transport

Applications:

- Golf course roughs
- Golf course fairways and bunkers
- Corporate and industrial campuses
- Park lands and recreational areas
- Sports venues
- Landscaped venues

OSHA Training Requirements (USA)

The following training requirements have been taken from Title 29, Code of Federal Regulations Part 1928.57 (a)(6). www.osha.gov

Operator Instructions: At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all covered equipment with which he is or will be involved, including at least the following safe operating practices.

In other jurisdictions

It is good practice, following the initial instruction and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all covered equipment with which he is or will be involved, including at least the following safe operating practices.

ITEMS INCLUDED WITH PRO-FLEX 120 MOWER

- Pro-Flex 120 Operator's Manual
- Service instructions for PTO drive shafts and safety clutches
- Mower parts book
- Blade balancer tool
- Drive belt tensioner tool

SERIAL NUMBER LOCATION

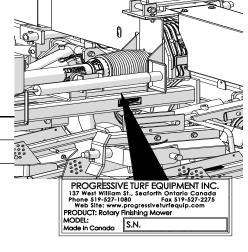
The serial number plate for the machine is located on the left-hand front frame.

For quick reference, record the following information:

Model:	Pro-Flex 120
Serial Number:	
Date purchased:	
Always state th	is information when contacting your
selling dealer a	nd when ordering spare parts.

REPLACEMENT 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.





UNAUTHORIZED MODIFICATION

Modifications to the original design of the Pro-Flex 120 mower, including the use of unauthorized accessories or non-genuine OEM parts, may affect the reliability of the machine or make it unstable or unsafe to operate and perform as originally designed and intended. Persons or organizations that make unapproved modifications (including operation without provided guards and shields) assume all liability arising from or related to the modification including any adverse affect on the machine.

- No modification can be made to the original design or assembly of the Pro-Flex 120 mower (including any and all attachments, safety or control devices) without

the prior written consent of the Progressive Turf Equipment Inc.'s Engineering Manager (see contact information below). Progressive Turf Equipment Inc. retains the right to reject all claims which arise from or are related to unauthorized modifications.

- Modifications are officially approved if at least one of the following conditions is met:
 - i. The attachment, accessory or part is distributed by Progressive Turf Equipment Inc. and is intended for a Pro-Flex 120 mower application and installed in an approved manner as described in Progressive Turf Equipment Inc.'s provided instructions; or
 - ii. The modification has been approved in writing by the Progressive Turf Equipment Inc.'s Engineering Manager.
- No other entity is authorized by Progressive Turf Equipment Inc. to provide such approval.

MISUSE OF EQUIPMENT

It is incumbent upon the owner and selling dealer along with their respective employees to warn and discourage users about the misuse of the equipment whenever knowledge of misuse becomes known, whether the act has, is or could occur. Such acts include, but not limited to: riding upon, use of non-OEM parts, operation on unstable or steeper slopes than specified, operating in explosive or fire-hazard areas, modifications that alter the original machine specifications or use other than originally intended, etc.

NOTIFICATION OF UNAUTHORIZED MODIFICATION OR MISUSE OF EQUIPMENT

If any person, employee, agent, dealer or distributor becomes aware of any Unauthorized Modification or Misuse of a Pro-Flex 120 mower, either past or intended, it is the responsibility of that person to ensure that Progressive Turf Equipment Inc.'s Engineering Manager is notified of the occurrence promptly. That person shall provide; the facts of the occurrence, location, machine serial number, name and contact information of the persons involved.

Send correspondence regarding Unauthorized Modification or Misuse to:

Progressive Turf Equipment Inc.

Box 940, 137 West William St.

Seaforth, Ontario, N0K 1W0

Canada

Attn: Engineering Manager

PRODUCT DESIGN

The Pro-Flex 120 mower has been designed and produced using generally acceptable manufacturing processes as is standard in the industry for the type of equipment that is similar to the machine. As such, the useful life of the machine is ten (10) years from the date of manufacture.

The official language of the manufacturer is English.

No responsibility is assumed for translations in other languages, which do not correspond to the original meaning.

WARRANTY POLICY

Progressive Turf Equipment Inc. warrants each new product to be free of defects in material and workmanship to the original purchaser. Warranty will be applicable, from the original date of purchase of the following new, unused current models:

Pro-Flex 120, Pro-Flex 120R, TD65-2, TD65, TD92, Pro-Max 36, TDR-15, TDR-12, TDR-22, SDR-65, SDR-90

For all applications:

Basic Mower: 24 months Gearboxes: 36 months

To validate warranty, the Delivery and Warranty Registration form must be completely filled out & mailed to Progressive Turf Equipment Inc.

This warranty will not cover any components which, in the opinion of the company, have been subjected to negligent use, alteration, and accident, damage due to lack of maintenance or use of wrong lubricants, or if parts supplied by others have been used in repairs of any product manufactured by Progressive Turf Equipment Inc. Items such as blades, belts, tires, wheels and batteries are considered consumable wear items and are excluded from Progressive Turf Equipment Inc.'s warranty coverage. Warranty coverage on these items is limited to what is provided by the OEM of the applicable part, if any.

Our obligation, in the event that any Progressive Turf Equipment Inc. product warranted, shall become defective or fail, will be limited to repairing or replacing free of charge, or provide labour and materials for the repair of, any defective part, subject to company approval. All defective parts must be retained for 60 days after applying for warranty consideration. This warranty will not provide for service calls to customer location or for transportation of equipment to dealer location if such servicing is required.

The sole liability of Progressive Turf Equipment Inc. under this warranty or any implied warranty, shall be limited as set forth herein. The customer agrees that Progressive Turf shall not in any event be obligated to reimburse, or pay the customer for any expense, loss or any direct, incidental or consequential damages to any person or property for any reason or caused by reason of Progressive Turf Equipment Inc., negligence, or otherwise in connection with the sale, delivery, installation, training or use of the equipment. The customer shall indemnify and hold Progressive Turf Equipment Inc. harmless against all such liability. PROGRESSIVE TURF EQUIPMENT INC. DISCLAIMS ANY EXPRESS (EXCEPT AS SET FORTH HEREIN) AND IMPLIED WARRANTIES WITH RESPECT TO THE GOODS INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND MAKES NO WARRANTY AS TO THE DESIGN, CAPABILITY, CAPACITY, OR SUITABILITY FOR USE OF THE GOODS.

Progressive Turf Equipment Inc. reserves the right to make improvements to the design or changes to the specifications at any time without prior notice or any obligation or duty to inform current owners or modify units previously sold.

This warranty is not subject to change or modification by anyone, including dealers, and no one is authorized to make any representation on behalf of Progressive Turf Equipment Inc.

KEEP FOR YOUR RECORDS:

Purchaser should fill in the blanks below for his reference when buying repair parts and/or for proper machine identification when applying for warranty.

Model	Serial Number
Date Purchased	Dealer

Read your Operator's Manual

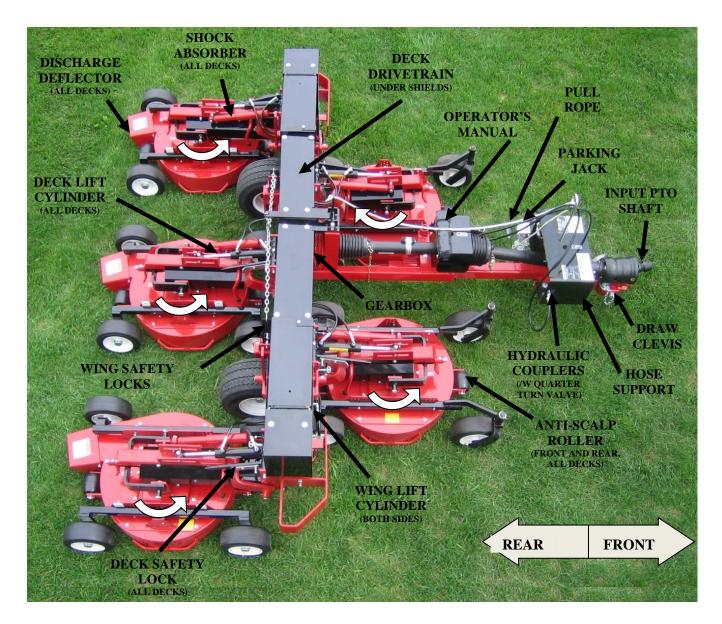
This warranty coverage supersedes all written warranties, effective November 1, 2012.

PRO-FLEX 120 SPECIFICATIONS

Tractor Size	30-40 hp
PTO Input Speed	540 rpm
Cutting Width	Wings Raised6 ft. Wings Lowered10 ft.
Turning Radius	16 in uncut circle.
Cutting Height	Minimum
Flexibility Mower Decks	Fore & Aft Rotation+/- 10° Left & Right Rotation+/- 10° Vertical Movement+/-8 in
Hitch	Rotation360°
Mower Decks Configuration Suspension Construction Spindles Blades Blade Mounting Tires Anti Scalp	5 deck staggered independent 4-way floatation with walking beam Welded Steel – 3/16 in. (7 ga) thickness Easy drop out 4 bolt style with integral blade stiffener 5 x 27" diameter (high lift std., mulching optional) Two bolt (No spindle damage from blade fasteners) 10 in dia. x 4 in wide, Puncture proof, non-scuffing (4) per deck, tapered roller bearing support Impact Resistant Rollers (front and rear of each deck)
Power Transmission Input Shaft Gearbox Deck Drive Belt Tensioning	1 3/8 dia – 6 Spline 80° Constant Velocity /w auto locking collar Cast Iron Housing /w Helical gears Aramid fiber reinforced V-Belts Self adjusting rubber dampened torsional tensioners
Transport Tires	(2) Heavy Duty 18.5 x 8.5 – 8, 4 ply, 5 bolt.
Productivity	2 mph
Transport Dimensions	Width
Weight	Machine

COMPONENT IDENTIFICATION

NOTE: DECK BLADE ROATION DIRECTIONS



NOTES

- 1. 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.
- 2. Blade rotation are expressed as "Left Hand" (LH) or "Right Hand" (RH). LH rotating blades rotate counter-clockwise as viewed from the top of the mower and are on all decks except the front left deck. The RH rotation blades on the front left deck rotates clockwise as viewed from the top of the mower.

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 and safety personnel read and understand all of 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 severe personal injury or death.

⚠ DANGER! **⚠** WARNING!

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

ACAUTION!

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

AWARNING!

- The operator must have sufficient knowledge in the care and operation of the power unit (tractor) before connecting power unit to mower. Read and understand power unit operator's manual before connecting 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.
- Hydraulic circuits to control mower functions must be set to 2000psi maximum working pressure.

OPERATING EQUIPMENT SAFELY

MARNING!

- 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.
- 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 10 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 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, place all controls in neutral, turn power unit off, set parking brake, 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 wing and deck safety locks are securely engaged before transporting mower with wings in raised position.
- Mower is not intended for transport on public roadways.

- 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

AWARNING!

- Never make adjustments or repairs with the engine running. Always disengage PTO, engage parking brake, 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.

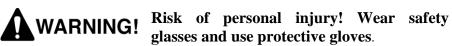
Methods and precautionary measures when removing paint:

- 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.

HYDRAULIC SYSTEM SERVICE PRECAUTIONS



Relieve all trapped pressure before performing any service to the hydraulic system. 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.



It is important that each person who comes in contact with the machine be alert to any faults.

Follow these basic precautions:

- Never adjust a pressure relief valve or other pressure-limiting device to a higher pressure than specified.
- Check to make sure hydraulic hoses are not worn or damaged, and are routed to avoid chafing.
- When connecting mower to tractor ensure hydraulic hoses have sufficient slack for negotiating turns and uneven terrain.
- 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 high-pressure lines, tubes or hoses, or reinstall them in a bent or damaged condition.

HYDRAULIC OIL HANDLING PRECAUTIONS

- Oils can irritate and damage the eyes, throat, and sensitive skin. Avoid contact.
- Petroleum based oils are hazardous to the environment. Take special care not to spill or discharge these fluids. Use approved containers and methods to handle and dispose of them.
- Use an authorized disposal and recycling company.

SAFETY DECALS



If decals become faded, damaged, or lost, replace immediately. Order Decal Kit, Part # 600550.







- ALL DRIVELINE GUARDS, TRACTOR AND EQUIPMENT SHIELDS IN PLACE
- DRIVELINES SECURELY ATTACHED AT BOTH ENDS
- DRIVELINE GUARDS THAT TURN FREELY ON DRIVELINE



- DO NOT OPERATE with deflectors removed
- . DO NOT POINT DISCHARGE toward bystanders animals, buildings or vehicles
- · INSPECT area for potential mower thrown object hazards
- REMOVE AND / OR AVOID objects such as wire, cable.
- metal objects and all other foreign material / solid objects

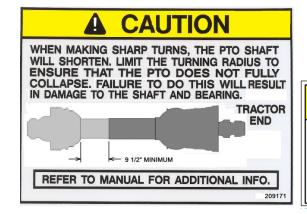
 DO NOT PLACE HANDS OR FEET under cutting deck
- when operating or when tractor engine is running

WARNING

REPLACEMENT PARTS

- ESPECIALLY CRITICAL ON THE CUTTING BLADES -

USE ONLY GENUINE O.E.M.



CAUTION

REPLACE ALL SHIELDS BEFORE **OPERATING THE MOWER**

⚠ CAUTION

DISENGAGE PTO SHAFT BEFORE RAISING WINGS

ASSEMBLY INSTRUCTIONS

REAR MOWER DECK

The center rear mower deck, lift arm and drive belt are placed on a temporary rack for transportation to the dealer. The RH wing deck can be used as an assembly reference.

- 1. Remove the deck and the lift arm assembly from the rack. A chain hoist or lift truck and straps will be necessary (deck assembly weight approx. 250lb).
- 2. Remove both of the center shields of the main drivetrain by extracting (8) 3/8" bolts in order to install deck drive belt on to the gearbox.
- 3. Remove (2) 5/8" bolts and bushings that are installed in the lift arm yoke mounts.
- 4. Roll the deck assembly into position at the center-rear of the mower and remove the rear deck shields by extracting (2) 3/8" X 3 3/4" bolts.
- 5. The rear deck belt is then installed by starting at the drive pulley (rear of gearbox), down behind the frame and twisting it 1/4 turn to ride on the idlers (both fixed and moveable) and then onto the deck spindle pulley
- 6. Position the lift arm so that the 5/8" bolt and bushings can be attached to the frame. Some alignment of the deck will be necessary to thread both bolts into the frame
- 7. The hydraulic hose ends should now be attached to a hydraulic source. Stroke the center cylinder out completely. Remove the cylinder pin by loosening the 3/8" bolt that holds it in place. The rod end bushing is placed between the slotted plates on the lift arm. Push the pin through one slot, through the bushing and through the other slot. Tighten the bolt being sure the bolt end rests in the indent in the pin at its center. This will lock the pin in place.
- 8. The shock absorber is then installed in the threaded hole located on the side of the lift arm near where the end of the shock rests. Use the fasteners shipped on the loose end of the shock.
- 9. Re-install the shields on the main drive train and the center deck.
- 10. There are two rectangular plastic plugs taped to the frame of the mower. They serve to fill the tube ends on the frame where the temporary transport frame was installed.

INPUT SHAFT – shipped strapped to center rear mower deck (on transport rack)

- 1. Remove ½" UNC retaining bolt/nut from input shaft.
- 2. Remove notification tag from intermediate shaft hanger bearing, ensure gold coloured spacer ring is present against bearing inner race.
- 3. Disconnect input shaft shield at clamp yoke end and slide shield exposing the clamp yoke (see input shaft service instructions in mower manual storage tube).
- 4. Install input shaft clamp yoke on intermediate shaft, ensuring gold coloured spacer ring is in place between the input shaft yoke and hanger bearing race.
- 5. Reinstall ½" UNF retaining bolt in input shaft yoke, torque to 85 ft-lb.
- 6. Reinstall input shaft shield per input shaft service instructions.
- 7. Fasten input shaft guard retaining chain to mower main frame.

TRANSPORT TIRES

1. Check air pressure in the tires and adjust according to specifications **Transport Tires – 32 PSI**

The mower is now ready for pre-delivery inspection and lubrication prior to first use.

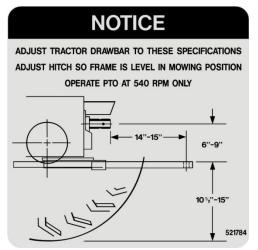
MOWER SETUP FOR OPERATION

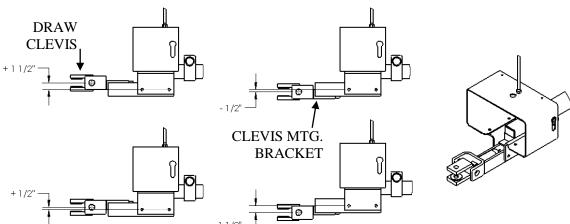
HITCH ADJUSTMENT

Before hitching the mower to the tractor, ensure tractor drawbar is set properly. Having the proper hitching dimensions for the tractor drawbar and the PTO, will ensure long and trouble free hours of operation. Incorrect setup may lead to contact between the mower and PTO shaft, causing damage to the shaft.

The following decal is mounted to the machine and shows these important hitch dimensions.

- 1) The drawbar length must be adjusted so it is 14" to 15" from the end of the PTO shaft to the center of the draw pin.
- 2) The top of the drawbar must be adjusted so it is 6" to 9" from the center of the PTO shaft to the top of the drawbar.





- 3) The main frame of the mower should be level when hitched to the tractor. The Pro-Flex 120 features an adjustable height hitch; the above figure shows the pivoting Draw Clevis and bolt-on Clevis Mounting Bracket that can be turned to give a total of 3" in height adjustment.
- 4) The position of the hose support and hose guide rod may need to be adjusted to provide clearance to the PTO shaft.
- 5) To assist in connecting the Pro Flex 120 to the tractor, the provided hitch pin can be temporarily placed in the hitch swivel to hold it level while aligning the hitch. Do not operate mower with the hitch pin in the hitch swivel.



HITCHING THE MOWER TO THE TRACTOR

- 1) With the draw pin placed in the hitch clevis, back the tractor to the hitch clevis.
- 2) When the draw pin holes are aligned, place the tractor controls in the park position, shut the engine off and engage the parking brake.
- 3) Remove draw pin from the hitch clevis and place in the draw pin hole connecting the mower to the tractor.
- 4) Raise parking jack fully and place in storage position.

STOWING THE JACK

The jack cannot be stowed in the parked position while mowing. A second storage position is provided along the frame of the mower to avoid damage to the jack while mowing.



CONNECTING THE TRACTOR PTO

- 1) Ensure that the tractor engine is shut off, the parking brake is engaged and the mower is securely hitched to the tractor.
- 2) Slide the mower input shaft locking collar backwards, opening the locking mechanism. Locking collar should remain in an open position
- 3) When it is safe to do so, hold the PTO against the end of the tractor PTO shaft, rotate the tractor PTO by hand until the shaft slides on slightly.
- 4) Slide the yoke onto the tractor's PTO.
- 5) The locking collar should automatically engage when the yoke is properly engaged with the tractor PTO.
- 6) Attempt to move the shaft forward and backwards to ensure that it is securely locked in place.
- 7) Attach the PTO cover safety chain to the tractor. Ensure cover is properly retained by the chain on the mower end.



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.

CONNECTING THE HYDRAULICS

- 1) 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.
- connecting 2) When 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.
- 3) 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.





Hydraulic fluid escaping under pressure has enough force to WARNING! penetrate the skin. See a doctor at once if injured by escaping fluid.

CONNECTING THE PULL ROPE

The Pro-Flex 120 mower is equipped with a nylon pull rope that is connected to the wing deck release mechanism, used for locking the two outside mower decks into transport position. Connect it to the tractor in a position that is easily accessible to the operator and will release easily if the mower should ever become disconnected.

MOWER SAFETY LOCKS

Safety locks are provided on the wings as well as each individual mower deck to prevent each from lowering in the event of a failure in the hydraulic system.

WING SAFETY LOCK

(2) spring activated wing safety locks are located behind the deck drivetrain, one for each wing. The lock is engaged automatically when the wings are raised.

In order to lower the wings:

- 1) first fully raise the wings (they may have settled against the lock during transport or storage).
- 2) From the operator station in the tractor, pull and hole the pull rope to disengage the locks.
- 3) Lower the wings to the working position using the tractor hydraulic control.
- 4) Release the pull rope when the wings are lowered.

DECK SAFETY LOCK

Each deck is provided with individual safety locks. These locks have (2) modes of operation:

1) TRANSPORT / SERVICE POSITION

- a. Ensure the tractor controls are in the park position, the engine is turned off, the parking brake is engaged.
- b. On each deck, pull the silver coloured mowing position tab and rotate upward until the round pin is above the top of the lock bar.
- c. When all (5) deck locks have the tab in this position, fully raise mower decks.
- d. Locking mechanism will engage automatically preventing decks from lowering.
- 2) MOWING POSITION
- a. Fully raise decks using tractor hydraulics (deck cylinders fully retracted)
- b. Ensure the tractor controls are in the park position, the engine is turned off, the parking brake is engaged
- c. On each deck, lift the lock bar, pull the silver coloured mowing position tab and rotate downward until the round pin is engaged in the corresponding hole in the lock bar.
- d. The mower is now ready for mowing operations.

WARNING! Ensure mowing position tabs are in the Transport / Service position and locks are properly engaged before attempting to transport or service mower.

CHECK PTO LENGTH DURING TURNS AND ON HILLS

The Pro-Flex 120 mower is designed for mowing of uneven, contoured landscape. When negotiating turns, the PTO shaft will collapse in length. During mowing of steep contoured conditions, when the tractor starts up a hill the PTO shaft will collapse and when cresting the hill, it will extend. It is important to make sure that the PTO shaft does not fully collapse, fully extend or contact the hose shield or hose support rod during turns or when travelling over hills.

To ensure proper setup check the following conditions:



- 1) With the tractor in the lowest gear and travelling very slowly, make a sharp turn to the right.
- 2) Watch the PTO shielding to make sure the PTO shaft does not totally collapse. There should be a minimum of 9 ½" of the inner black PTO shielding exposed at maximum turn.
- 3) Ensure PTO shielding does not come in contact with hose support or hose support rod.



NOTE: This is not the worst condition. Making turns while the tractor is angling up a hill will cause the PTO shaft to collapse even more. Likewise, traveling straight up or



down a hill will either extend of collapse the PTO shaft. The operator should avoid making sharp turns on uneven terrain.

If the PTO over extends, it will come apart and can cause injury to the operator or extensive damage to the mower or tractor.



If the input PTO shaft completely collapses it will force the shaft back against the hanger bearing. This will cause damage and premature failure of the bearing.

CHECK TIRE CONTACT DURING TURNS

The Pro-Flex 120 mower features a hose support which also serves the function to limit the steering angle of the mower without damage to components. In proper operation, the tractor tire should contact the hose support first if the operator attempts to turn too sharp without damage to the drive-line.

To check tire contact:

- 1) With the tractor in the lowest gear and travelling very slowly, make a sharp turn.
- 2) As you turn, watch closely to make sure the tractor tires contact the hose support. (not other parts of the mower)
- 3) If the tires do not contact the hose support, adjust tractor tire width (if possible), so they contact the hose support. Contact us for a modified guard.



NOTE: Using this setup, with the proper adjustment, the tire will contact the hose support and will not allow the tractor to turn any further. It will either, prevent the contacted tire from turning, spin the opposite tire, or push the front of the tractor around. This guard will not work with lug style tires.

DISCONNECTING THE MOWER

The mower can be stored with the wings/decks in the raised or lowered position. If the wings or decks are in the raised position, ensure the wing and deck locks are securely engaged before disconnecting the mower from the tractor.

- 1) Place mower on a level surface for storage.
- 2) Ensure that the tractor engine is shut off and the parking brake is engaged.
- 3) Inspect wing / deck safety locks to ensure they are properly engaged (if in the raised position).
- 4) Ensuring the quarter turn valve is in the open position; relieve pressure in the hydraulic hoses per tractor manufacturer's instructions (normally cycling the tractor control valve in both directions is sufficient).
- 5) Chock mower transport tires to ensure mower does not roll unexpectedly when hitch pin is removed.
- 6) Disconnect pull rope from rear of tractor and hook on hose support rod.
- 7) Disconnect hydraulic couplers from tractor & stow in supplied locations in the sides of the tire guard.
- 8) Disconnect input shaft guard chain from tractor. Slide the mower input shaft locking collar backwards, opening the locking mechanism. Locking collar should remain in an open position.
- 9) Remove input shaft from tractor (collapsing sliding shaft) and stow on supplied support bracket.
- 10) Remove the tongue jack from the storage location and place in the parking position. Raise the jack sufficiently to remove all mower weight from the tractor drawbar. Ensure mower tongue jack is securely fastened to mower frame with supplied pin before removing hitch draw pin
- 11) Remove supplied draw pin from hitch and stow in the hitch swivel.



ADJUSTING THE MOWER FOR CUTTING

SETTING THE CUTTING HEIGHT

Each of the five independent mower decks has its own cutting height adjustment. Cutting height is set by adjusting the height of the mower deck wheel arms. Each deck has one fixed wheel arm and one pivoting wheel arm; ensuring that all four tires remain in contact with the turf while navigating contoured areas for a more uniform cut.

NOTE: For optimal cutting results, the mower should be set to remove not more than 1/3 of the total grass height. This will result in the best cutting performance while minimizing stress to the grass.

The deck wheel arms are bolted solid to the deck frame in order to provide rigid, positive cutting height control.

Follow these steps to adjust the cutting height anywhere from 3/4" to 3":

- 1) Place the mower deck safety latch into the locking position on each deck.
- 2) Raise the mower decks into the Pro Lift-N-TurnTM raised position.
- 3) Turn the engine off on the tractor, place all controls in neutral position and set the parking brake.



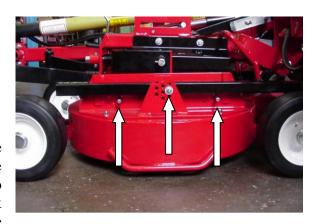
4) Using the cutting height decal, determine the hole you wish to set the axles in according to the desired cutting height.



5) On the fixed wheel arm side, remove the two mounting bolts and reposition the axle in the desired holes. Be sure to retighten properly.



- 6) On the pivoting wheel arm side remove the two axle stop pins and the center pivot bolt. Reposition the axle to the proper hole for the desired cutting height. Retighten the center pivoting bolt properly.
- 7) Replace the two axle stop pins to the same hole in the pattern as the axle mounting bolts. This pin is used to limit the travel of the mower deck and prevent scalping. The pins are not required for cutting heights of 2 3/4" and 3". Store pins in one of the holes for the center pivoting bolt.



SETTING THE DISCHARGE DEFLECTORS

Each mower deck has its own discharge deflector. This is a two position deflector that can be adjusted by moving the spring clip on the deflector. When set in the lower position it deflects the cuttings downwards into the grass, and when set in the upper position, the discharge fans out more discharging the cuttings straight out.



NOTE: In wet or heavy conditions, the deflector can be set in the upper most position to help avoid clumping.

WING FRAME ALIGNMENT

When the wings are in the lowered position, the wing frame should be level with the mower frame (this is pre-set at the factory). A stop bolt is located on the main frame and can be adjusted so that the wing stops in a level position when lowered.





IMPORTANT! - Operating with the wings misaligned with the main frame can cause excess stress on the wing drive belts, leading to accelerated wear.

OPERATING THE MOWER

DAILY 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. Ensure other required PPE is in good condition.
- 2. Ensure all safety shielding is properly installed and check that all nuts and bolts are secure and pins are properly cotter pinned.
- 3. Check condition of blades and security of attachment.
- 4. Ensure mower is properly connected to the tractor, adjusted and in good operating condition.
- 5. 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.
- 6. Never permit any person other than the operator to ride or board the tractor at any time.
- 7. Check that all lubrication points with grease fittings have been lubricated as per schedule.
- 8. Check the gearbox for possible oil leaks.
- 9. Be sure wing release pull rope and hydraulic hoses are properly secured and will not become entangled in PTO shaft.

RAISING AND LOWERING THE DECKS

The mower decks are raised into transport and service position by the hydraulic cylinders. When raised, the wings will lock into position and must be unlatched with the pull rope to lower into working position.

When lowering the wings, drive forward slowly as the wing deck wheels contact the ground. This will allow the tires to slide into position without scuffing the turf.

Each individual deck also has a lock for holding the decks in the service position. Ensure that these are locked out for operating the mower. See below.

Mowing Position – Locks Disengaged



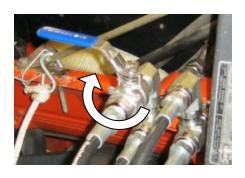
Service Position – Locks Engaged



ENGAGING THE MOWER

When engaging the mower, it is important to follow this procedure:

- 1) Lower the wings and decks into the working position.
- 2) Ensure all deck cylinders are FULLY EXTENDED. Close the quarter turn valve. This will ensure the wings are locked down during mowing.





- 3) Set the tractor engine speed at 1000 rpm maximum.
- 4) Ensure that everyone is clear of the mower.
- 5) Engage the tractor PTO lever.
- 6) Select the proper ground speed gear and slowly engage the clutch.
- 7) Once the mower has come up to speed, slowly increase the tractor throttle to desired rpm.

MOWING

The Pro-Flex 120 mower is a very versatile cutting machine that allows the operator to maintain turf on undulating terrain in a productive manner. Drive safely, cut safely. Be sure to idle the tractor back before engaging the PTO, and shut the tractor off before leaving the tractor.

NOTE: Under normal cutting conditions, it may be desirable to operate the tractor at less than 540 rpm PTO speed, reducing fuel consumption and the noise level. Select a suitable ground speed gear to maintain proper cutting.

Pro Lift-N-TurnTM SYSTEM

Your Pro-Flex 120 is equipped with the Pro Lift-N-TurnTM system. This feature allows the operator to lift all five cutting decks just off the turf without shutting down the PTO. When mowing near cart paths or other roadways, the operator can save time by moving from section to section without raising the wings to the full transport position by utilizing the Pro Lift-N-TurnTM system. Pro Lift-N-TurnTM can also be used to start the mower in tall grass. Engaging the blades with the decks raised will reduce start-up loading on the mower drivetrain.

To actuate the Pro Lift-N-TurnTM system, ensure that the quarter turn valve located at the tractor hydraulic connection is closed. The operator lifts the mower decks during operation using the tractor hydraulic valve until the deck cylinders are fully retracted. Once the mower is again in position to mow, the operator can lower the decks and continue mowing. It is possible to perform this without disengaging the PTO.



The mower blades remain at cutting speed while using the **Pro Lift-N-Turn** TM system. Do not proceed into areas that may have loose debris that may be thrown by the mower blades.

NOTE: The Pro Lift-N-TurnTM system is designed to be engaged for short durations only. If travelling over long distances with the decks in the raised position, disengage PTO before proceeding.

MOWING WHILE REVERSING TRACTOR

The unique design of the hitch and deck mounting allows the mower to operate equally well in the reverse direction. This is excellent for cutting in confined areas and cleaning up leaves in the fall.

MOWING WITH WINGS RAISED



When mowing around greens, sand traps or in other confined areas, it is possible to operate the mower with the wing decks WARNING! raised. This will reduce the cutting width from 10 feet to 6 feet. Be sure to follow these steps for cutting with the decks raised.

- 1) Stop the tractor.
- 2) Disengage the PTO and let the mower come to a complete stop.
- 3) Open the quarter turn valve and raise the wings and wing decks (ensure wing locks properly engage).
- 4) Close the guarter turn valve and lower the (3) center mower decks.
- 5) Idle the tractor back and engage the PTO.
- 6) Release the clutch and bring the tractor up to speed.

To go back to full cutting width, use the same procedure. While lowering the wing decks move forward as wings are lowered. To allow the wings to come fully down, be sure the cylinders are fully extended. Close the quarter turn valve when done.

OPERATING ON HILLY TERRAIN

When operating on hilly terrain, proceed with caution and drive carefully. If the tractor has four wheel drive, make sure it is engaged. On two wheel drive tractors equipped with a differential lock, apply while driving straight on the hills, disengage to allow for normal turning.

Use care while turning on hillsides in wet conditions. The weight of the mower behind the tractor may push the tractor unexpectedly. Drive slowly around sand traps, river banks, etc.

TRANSPORTING THE MOWER



The Pro-Flex 120 mower is NOT designed for use on public roadways. Use an appropriate transportation method such as a trailer or float to move mower from site to site if required.

When transporting the Pro-Flex 120 from site to site, ensure the wings and decks are in the raised position and wing and deck safety locks are engaged.



Use an appropriate sized vehicle to tow the Pro-Flex 120 mower. Do not tow with vehicles that are less than 1035lb, vehicle handling and braking characteristics will be diminished.

MAINTENANCE



Ensure the tractor controls are in the park position, the engine is turned off, the parking brake is engaged and hydraulic pressure has been relieved before performing service or maintenance.



Always use personal protection devices such as protective glasses and face shields, protective shoes, gloves, hard hats, and ear protection when performing service or maintenance functions.



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

_		Maintenance Intervals				
	Service	Initial Run - 50h	Daily	As Req'd	100h / Monthly	600h / Yearly
	Spindle Bearings (5 locn's)	X	X	-	-	-
	Intermediate Hanger Bearing	-	X	-	-	-
	Deck Pivots	-	-	X	-	-
e	Deck Wheels	-	-	X	-	-
Grease	Transport Wheels	-	-	X	-	-
Gr	Hitch Swivel	-	-	X	-	-
	Wing Pivots	-	-	X	-	_
	Input PTO Shaft (7 locn's)	-	-	-	X	-
	Int. PTO Shaft (2 locn's)	-	-	-	X	-
	Inspect Gearbox	-	X	-	-	_
Oil	Check Gearbox Oil	-	-	-	X	_
	Change Gearbox Oil	X	-		-	X

LUBRICATION

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 or equivalent (WITH NO MOLYBDENUM COMPOUNDS).

GREASE COMPATIBILITY

What Grease Is:

- -Grease is a distilled petroleum product in the form of mineral oil (or a synthetic) which has a thickening agent such as lithium, calcium, barium, sodium, or aluminum.
- -When mixing greases with different thickeners, one must review compatibility. Grease incompatibility will decrease the lubrication ability of the grease, and can cause premature part failure.

What We Use:

- Progressive uses Shell Alvania EP2
- This grease has: A mineral oil base
 - A lithium-12 hydroxy thickener ("lithium")
 - Extreme Pressure additives (EP)
 - An NLGI Grade 2

Notes: -If a thickener other than lithium is used, the existing grease will be contaminated and the lubrication properties may be lost leading to component damage.

- -If synthetic base oil is used rather than mineral base oil, the grease will be contaminated; the lubrication properties may be lost leading to component damage.
- -Molybdenum Disulfide (Moly) is an additive used in slow moving, extreme load applications. The particles in the "Moly" will actually <u>increase</u> bearing wear in a mower spindle. Generally speaking Moly based greases will be grey in colour.
- -We do not recommend the use of "High Temperature" greases, blade spindle temperature should never reach temperatures above the level at which general purpose greases can operate.

Our Recommendation for Grease Compatibility:

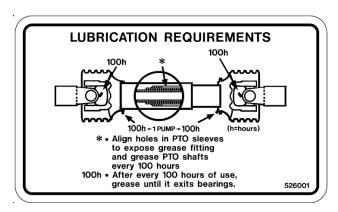
The grease you use for the blade spindle assemblies must have these properties:

- NLGI grade 2
- Lithium thickener (NOT LITHIUM COMPLEX)
- Kinematic Viscosity at 40°C is no greater than 190 cSt
- Dropping Point Less than 400° F
- General Purpose Grease, Not Heavy Duty
- No MOLY (molybdenum disulphide) additives in the grease
- No synthetic grease
- No High Temperature Grease

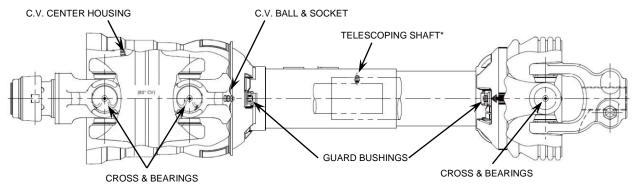
Grease with these features is considered to be a "General Purpose Grease". Use on all grease point locations on your Progressive Mower. Check the properties of the grease you wish to use with your supplier prior to use.

DRIVELINE GREASING

All PTO shafts on the Pro-Flex 120 mower feature 100h greasing interval. The following decal located on the hose support shield as a reminder.

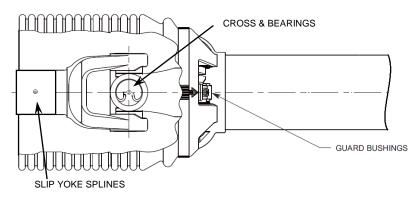


INPUT SHAFT – 100h / Monthly (7 Locations)

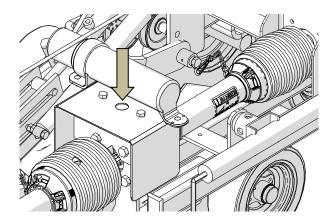


* Inner & outer guards must be rotated to align holes for accessing telescoping shaft grease fitting.

INTERMEDIATE SHAFT – 100h / Monthly (2 Locations)



INTERMEDIATE BEARING – 8h / Daily (1 Location)



BLADE SPINDLE GREASING: 4-8h / Daily (5 Locations, 1 / deck)

Add grease to blade spindles until grease can be seen exiting between the top bearing and the dirt shield. Some working conditions will require this operation to take place every 4 to 5 running hours because of hot working areas. Cooler working areas will only require greasing every 8 to 10 hours. A proper greasing schedule can only be determined by the operator, depending on the working conditions in your particular area.



DECK WHEELS & PIVOTS: As Required

The deck wheels have greaseable tapered roller bearings, and all pivot points on the deck floatation have grease fittings. They should be greased frequently as required.

TRANSPORT HUBS & OTHER LOCATIONS: As Required

All pivot locations have grease fittings. These include the wing hinge pivots, the transport wheel hubs, the rotating hitch and the hitch clevis. Lubricate these areas per the recommended schedule

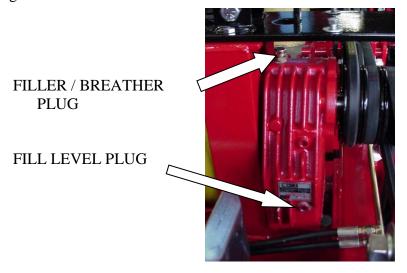
GEARBOX OIL:

Recommended Oil: SAE 90 EP or SAE 80W90 EP

Factory Fill: Shell Spirax HD SAE 80W90

Checking Level – 100h / Monthly

A level indicator plug is located on the side of the gearbox (the lower plug). Proper oil level is set when oil starts to flow from this hole. If the level is low, add oil through top breather plug until correct level is attained. Replace and tighten plugs.



IMPORTANT!

- MOWER MUST BE LEVEL WHEN CHECKING GEARBOX OIL LEVEL
- <u>DO NOT OVERFILL!</u> Gearbox may over-heat causing premature component damage.

Changing Oil - 600h / Yearly

The gearbox oil should be changed after the first 50 hours of operation and every 600 hours or yearly afterwards.

Oil change quantity – 0.52 Qt (0.5 Litres)

"V" BELT DRIVE

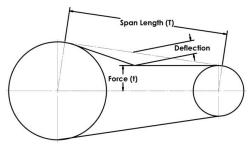
"V" BELT TENSION - 100h / Monthly

Proper belt tension is a fundamental factor in 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. To assess the condition of the automatic tensioner, the following procedure is recommended.

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".

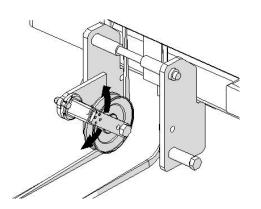
The recommended force to deflect the belt is a minimum of 5 lbs. to a maximum of 7 lbs.

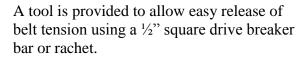
The first 24 to 48 hours of operation is the belt "run in" period. To ensure satisfactory belt performance, belt tension should be checked during this time period.

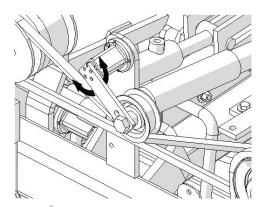


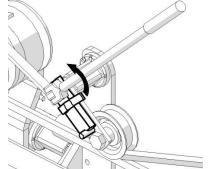
"V" BELT ADJUSTMENT

All deck drive belts utilize an automatic rubber torsional tensioning device. These tensioners are pre-set upon installation and require no further adjustment or maintenance.





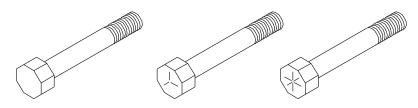




PROPER TORQUE FOR FASTENERS

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



SAE Grade 2	SAE Grade 5	SAE Grade 8
(No Dashes)	(3 Dashes)	(6 Dashes)

Bolt Diameter (in.)	Recommended Torque in Foot Pounds
(SAE Grade 5 Bolts)	(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)

NOTE: The gearbox mounting bolts are metric. Size M10 x 25, 8.8 (10 mm diameter x 25mm long, grade 5)

BLADE SERVICING



Always observe proper lock-out procedures when performing any maintenance work including changing or servicing the blades. Always remove and retain the ignition switch key, ensure parking brake is engaged, and block and or support machine using equipment designed for the task.



Be sure deck and wing safety locks are engaged when working on decks in the raised position.



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

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.



Use only original equipment blades 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 specifications and MAY BE DANGEROUS.

BLADE REMOVAL AND INSTALLATION

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

Replace any blade that is bent, excessively nicked, worn or has any other damage. Small nicks can be ground out when sharpening.



- When replacing mower blades, be aware of blade rotation as blades rotate in opposite directions. Ensure the cutting edge is facing in the correct direction
- The Pro-Flex 120 is equipped with 4 left hand (LH) rotation blades and 1 right hand (RH) rotation blade*:
 - 4 LH ROTATION BLADES painted BLACK.
 - 1 RH ROTATION BLADES painted RED

*RH & LH rotation is determined by the top blade tip travel direction when viewed from above . RH = Clock-wise, LH = Counter Clock-wise

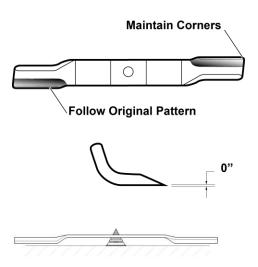
BLADE SHARPENING

WARNING!

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.



SPINDLE SERVICE

Each spindle is equipped with two ball bearings. No adjustment of clearance is required. Running clearance is pre-set during assembly by tightening the 1" NF left hand nut on top of the pulley.

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

SPINDLE ASSEMBLY REMOVAL

- 1) Relieve tension from belt, and remove belt from the spindle pulley.
- 2) Raise the mower decks into the service position and ensure the deck safety locks are secure
- 3) Remove blade from spindle.
- 4) From under the deck, loosen the four nuts that hold the spindle assembly to the deck.
- 5) Remove the complete spindle assembly and pulley 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



Spindle repair requires special skills and tools, a shop CAUTION! 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

1. Remove pulley from spindle assembly. The spindle nut is left-hand thread.

CAUTION!

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

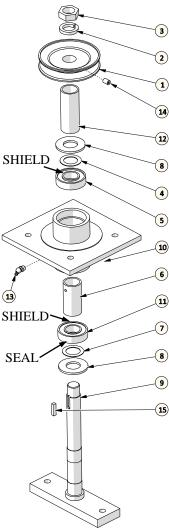
- 2. Place assembly in shop press with support under spindle housing flange and press spindle down through housing.
- 3. Remove bottom bearing from spindle and top bearing from housing

IMPORTANT! Removing bearings from spindle / housing will cause permanent damage to the bearings. Always replace with new bearings.

4. Inspect bearing spacer for wear. If any wear is present, replace spacer with new.

IMPORTANT! Failure to replace a worn or damaged spacer will lead to premature top bearing wear.

- 5. Place housing in press (upside down). **Pressing on outer** race; install bottom bearing (11) into housing with seal facing out. (The bottom bearing has a seal and shield.)
- 6. Place spindle in press. Place dirt shield (8) and shim (7) on spindle.
- 7. **Pressing on 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.
- 8. Install bearing spacer (6) with hole end up.
- 9. Set top bearing on to spindle with shield facing outward. Pressing on inner race, press top bearing on to spindle (will be a loose fit in housing).
- 10. Install shim washer (4), dirt shield (8), pulley spacer (12), key (15), pulley (1) and set screw (14) on to spindle.
- 11. Install LH lock washer (2) and LH nut (3) and torque to 60 ft-lb.
- 12. Once the assembly is complete, fill with quality grease until it can be seen exiting the top bearing (around the dirt shield). Rotate the housing six revolutions by hand so the bearings will have the grease worked into them, and at the same time check for free movement.
- 13. The assembly is now ready for installation into the mower deck.



HYDRAULICS



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. Relieve all pressure before working on, or disconnecting the line in the hydraulic system.

The hydraulic system on the Pro-Flex 120 mower is a simple cylinder system used to raise and lower the cutting decks into position. Each cylinder contains a .040 diameter restrictor orifice, located on the butt end, to reduce the speed of travel.



Restrictor Orifice

When reconnecting to the tractor, be sure that both connector ends are clean. Dirt in the hydraulic system can block the orifice in the line throttle valve or cause premature wear & failure of hydraulic components on the mower or tractor.

The quarter turn valve located on the hose end to the tractor is used to shut off the hydraulic system to the wing cylinders. This will ensure that no oil returns from the mower into the tractor during operation. It should be in the closed position while operating or servicing the mower.

VALVE CLOSED



VALVE OPEN



TROUBLE SHOOTING

DD 0D7 D7 6		
PROBLEM	CAUSE	REMEDY
Belt slippage	Lack of tension	Inspect & replace belt or
		tensioner device 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
	Raising wings with PTO	Disengage PTO and wait for
	engaged	blades to stop before raising
	engage a	wings
Belt squeal	Belt slippage	See Above
Over-heated bearings	Belt slippage	See Above
Over neated bearings	Insufficient Lubrication	Add grease per manual
	Insufficient Cooling	Clean top of deck area
	mourretent coomig	surrounding spindle
Uncut strips at wings	Wing raising during turns	Close quarter turn valve
Left front deck not	Wrong blade	This is a right-hand turning
cutting	Wiong blade	blade, install RH blade
cutting		(RH blade, painted red)
Wing safety locks will	Lock chains too short	Adjust chain length
not engage		
	Lock springs too loose	Tighten lock springs
Mower Deck will not	Orifice in cylinder plugged	Remove orifice and remove
lower.		obstruction and reassemble
	Deck latch in locked	Unlatch deck locks.
	position.	
Vibration on turning	Drawbar length incorrect.	Adjust drawbar to specification
Damaged intermediate	Input shaft does not	Remove input shaft, pull apart
bearing or tractor PTO	collapse easily under power	and deburr / grease splines
shaft		Grease at proper interval.
Premature spindle	Lack of lubrication or	See information in manual for
bearing failure	grease contaminated	grease specification and
-		compatibility.
	Improper rebuild procedure	See specific instructions in
	FF	manual
	Improper bearings	Use only OEM bearings
	Improper bearings	Osc only Other bearings

PRO - FLEX 120 CONTOUR MOWER

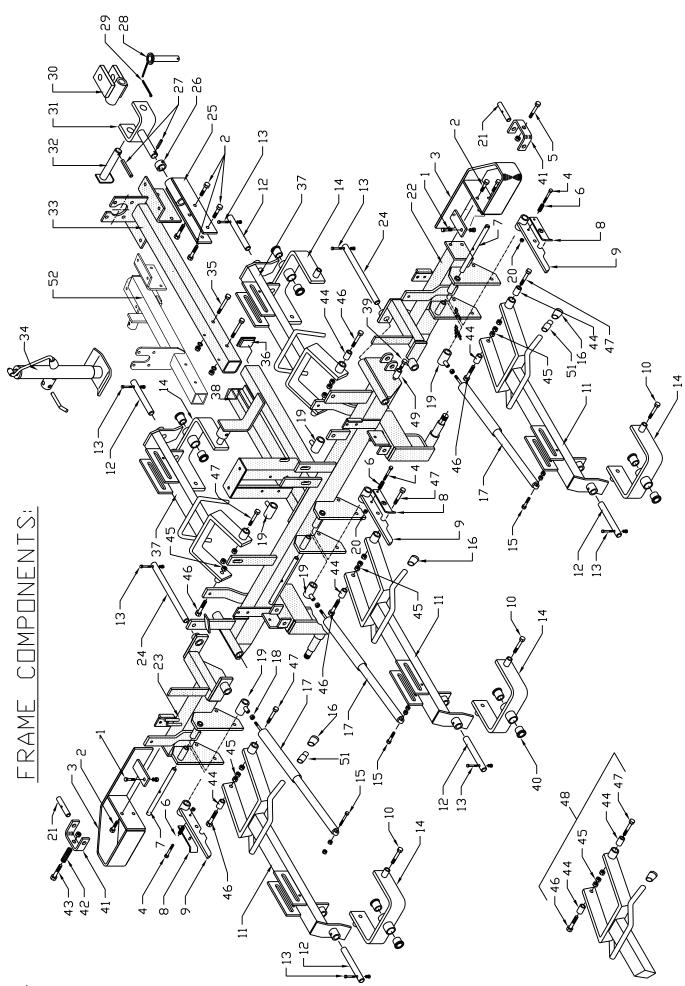
PARTS MANUAL

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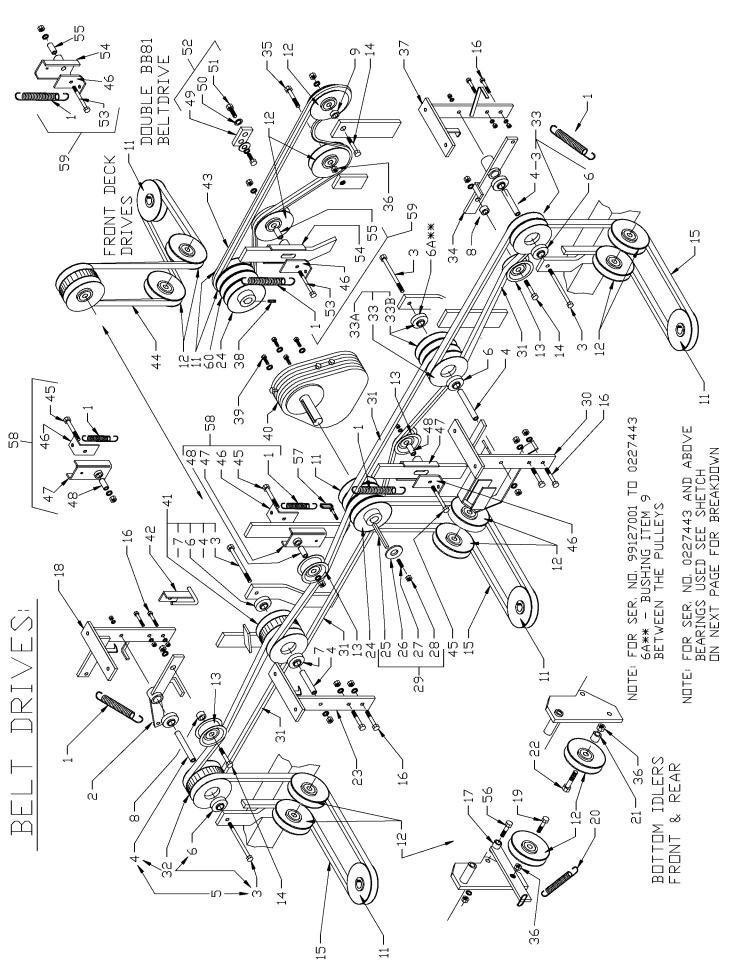


Revision Level: 6
Issue Date: Mar-10



No.	ITEM	DESCRIPTION	SERIAL NUMBER	QTY
O.L.	1	HEX BOLT - 1/2" X 1 1/2" NC, GRADE 5		10
600147	3	WING DEFLECTOR		2
O.L.	4	HEX BOLT - 5/16" X 2 1/4" NC, GRADE 5		5
O.L.	5	HEX BOLT - 5/8" X 1 3/4" - NC, GRADE 5		1
214008	6	SPRING - DECK LATCH KIT (5 PCS)		5
600222	7	DECK ARM PIN		5
600155	8	DECK SAFETY LATCH		5
600195	9	DECK LOCK		5
O.L.	10	HEX BOLT - 5/8" X 3 1/4" NC, GRADE 5		10
600048	11	DECK LIFT ARM - REAR		1
600220	12	DECK SWIVEL PIN		5
O.L.	13	HEX BOLT - 3/8" X 2" NC, GRADE 5		7
606160	14	DECK SWIVEL YOKE		5
O.L.	15	HEX BOLT - 1/2" X 3" NC, GRADE 5		5
209005	16	RUBBER BUMPER KIT (10 PCS)		10
219000	17	SHOCK ABSORBER		5
O.L.	18	HEX NUT - 3/8" - 24 NF, GRADE 5		5
600299	19		0227349 & ABOVE	5
			UP TO 0227348	5
O.L.	20	HEX LOCK NUT - 5/16" NC, GRADE 5		5
600219	21	CYLINDER YOKE PIN		2
600108	22	WING FRAME - RIGHT		1
600107	23	WING FRAME - LEFT		1
600221	24	WING HINGE PIN		2
600030	25	HITCH CLEVIS PIVOT		1
600022	26	HITCH PIVOT BUSHING		1
302603	27	ROLL PIN - 3/8" X 1.75" KIT (2 PCS)		2
600259	28	HITCH PIN		1
O.L.	29	COTTER PIN - 3/16" x 1 1/2"		2
600025	30	HITCH CLEVIS		1
600033	31	HITCH PIVOT		1
600036	32	CLEVIS PIN		1
600021	33	MAIN HITCH FRAME-A & C MODELS ONLY		1
219001	34	JACK COMPLETE		1
O.L.	35	HEX BOLT - 1/2" X 4 1/2" NC, GRADE 5		2
600506	36	TUBE CAP - 2" X 3" KIT (2 PCS)		2
600047	37	DECK LIFT ARM - FRONT - INCLUDES ITEM 44 (2)		2
600106	38	MAIN FRAME		1
O.L.	39	HEX BOLT - 5/8" X 2 1/2" NC, GRADE 5		2
521818	40	REPLACEMENT BUSHING (RED)		18
600154	41	WING FLOATION YOKE		2
214003	42	SPRING177 - WING FLOAT		1
O.L.	43	HEX BOLT - 5/8" X 4 1/2" - NC, GRADE 5		1
SEE ITEM 48	44	WEAR BUSHING		2/KIT
O.L.	45	HEX CENTER LOCK NUT - 5/8"		3/KIT
O.L.	46	HEX BOLT - 5/8" X 3.50" NC, GRADE 8		1/KIT
O.L.	47	HEX BOLT - 5/8" X 3 1/2" NC, GRADE 8		1/KIT
600508	48	LIFT ARM BOLT KIT - ITEM 44 (2), 45 (3), 46 (1), 47 (1)		5 KITS
600315	49	WING LEVELLING BUSHING KIT (2 PCS & BOLTS)		1
600048	50	PIVOT ARM REAR - OUTSIDE		2
600270	51	DECK STUB KIT- C & D MODELS ONLY		2
600340	52	MAIN HITCH FRAME-B & D MODELS ONLY		1
		HANTITIES CHOWN ARE FOR COMPLETE MACHINE	O.L. ODTAIN LO	

NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE O.L. - OBTAIN LOCALLY

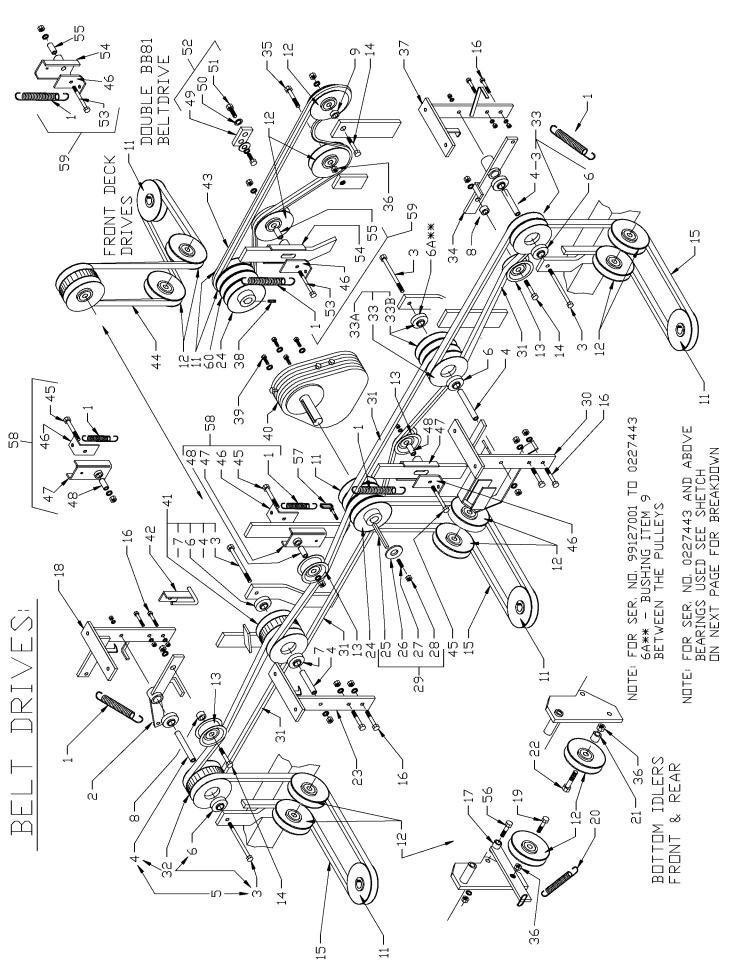


BELT DRIVES REVISION: 5 Nov-05

ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	214000	SPRING - WING IDLER		5
2	600248	IDLER ARM - LH		1
3		HEX BOLT - 3/8" X 6" - NC,GRADE 5, NUT & LOCK		4/KIT
4	600503	PULLEY SLEEVE BUSHING		4/KIT
5	KIT	PULLEY SLEEVE KIT - ITEMS 3, 4 (4 PCS)		4 KITS
6	213013	BEARING - UCS202-010	0227444 AND ABOVE	9
	KIT (600504)	BUSHING (11/32") SILVER (WITH WELDED PULLEY)	9927001 to 0227443	6
6A	213013	BEARING - UCS202-010	0227444 AND ABOVE	9
	KIT (600504)	BUSHING (13/32") YELLOW (WITH WELDED PULLEY)	9927001 to 0227443	2
7	213013	BEARING - UCS202-010	0227444 AND ABOVE	9
	KIT (600504)	BUSHING (19/64") RED (WITH WELDED PULLEY)	9927001 to 0227443	1
8	600142	BUSHING (17/32") BLACK (ALSO IN KIT 600504)		2
9	600141	BUSHING (13/32") YELLOW (ALSO IN KIT 600504)		1
10	600504	BUSHING KIT (QTY FOR COMPLETE MACHINE)	9927001 to 0227443	1
11	212002	DRIVE PULLEY - 5" OD - B GROOVE - ZINC	0427754 and ABOVE	7
12	212009	IDLER PULLEY - 5" OD - B GROOVE		13
13	212000	BELT IDLER PULLEY - 2 3/4" OD		4
14	O. L.	HEX BOLT - 5/8" X 2 1/2" - NC, GRADE 5		3
15	212015	BELT - REAR DECK - KEVLAR 5LK890		3
16	O. L.	HEX BOLT - 3/8" X 1 1/4" NC, GRADE 5		8
17	600203	LOWER IDLER ARM		5
18	600237	PULLEY BRACKET - WING LH		1
19	O. L.	HEX BOLT - 5/8" X 1 3/4" - NC, GRADE 5		5
20	214007	SPRING - DECK IDLER (.092 DIA)		5
21	600507	BUSHING - FIXED IDLER KIT (5 PCS)		5
22	O. L.	HEX BOLT - 5/8" X 2 3/4" - NC, GRADE 5		5
23	600235	PULLEY BRACKET - CENTER LH		1
24	212008	DRIVE PULLEY - 5" - SPECIAL (BLACK/YELLOW)		1
25		KEY - 1/4" SQ. X 4" LG		1/KIT
26		FLAT WASHER406" X 1.25" X .120"		1/KIT
27	600516	SET SCREW -3/8" NC X 1 3/4" CUP POINT		1/KIT
28	KIT	HEX (CENTER) LOCK NUT - 3/8" NC		4/KIT
29		HARDWARE KIT - ITEMS 25, 26, 27, 28 (4 PCS)		1 KIT
30	600236	PULLEY BRACKET - CENTER RH	0027185 & ABOVE	1
	600126	PULLEY BRACKET - CENTER RH	9927001 TO 0027184	1
31	212011	BELT - MAIN DRIVE - KEVLAR 5LK620		4
32 TO 34		PULLEYS - SEE NEXT PAGE		
35	O. L.	HEX BOLT 5/8 X 2.0 NC G5 PL		1
36	O. L.	HEX NUT - 5/8" NC, GR 5		18
37	600238	PULLEY BRACKET - WING RH		1
38	O. L.	SET SCREW - 3/8" NC X 1/2" CUP POINT		4
39	211017	HEX BOLT - M10 X 25 & LOCK KIT (4 PCS)		1 KIT
40	211000	GEARBOX		1
41		PULLEY - SEE NEXT PAGE		
42	600256	BELT GUIDE	9927001 TO 9927029	1
43	212003	BELT MAIN DRIVE - BB81		1
44	212013	BELT - FRONT DECK - KEVLAR 79"		2
45	O. L.	HEX BOLT 3/8 X 2.5 NC G5 PL		2

NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE

O.L. - OBTAIN LOCALLY

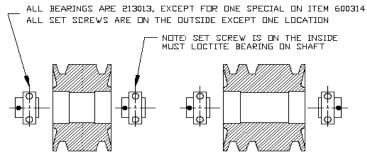


BELT DRIVES REVISION: 5 Nov-05

ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
46	600274	SPRING IDLER PLATE		3
47	600291	IDLER CHANNEL BRACKET343"		2
48	600295	BUSHING - IDLER SPRING - 1.82"		2
49		IDLER TENSION BLOCK		1/KIT
50	600515	WASHER - SHIM - 5/8 ID X 1" OD		1/KIT
51	KIT	HEX BOLT - 5/8" X 1 1/4" - NC, GRADE 5		2/KIT
52		IDLER TENSIONER KIT - ITEMS 49, 50, 51 (4 PCS)	9927001 TO 0027184	1/KIT
53	O. L.	HEX BOLT 3/8 X 3.75 NC G5 PL		1
54	600292	IDLER CHANNEL BRACKET - 1.38"		1
55	600294	BUSHING - SPRING IDLER - 2.884"		1
56	0. L.	HEX BOLT 5/8 X 3 1/4 NC G2 PL		5
57	600263	SPRING ANCHOR	9927001 TO 0027184	1
58	600510	SPRING IDLER KIT - 62" BELT, ITEM 1, 45 - 48		1
59	600511	SPRING IDLER KIT - BB81, ITEM 1,46, 53 - 55	0027185 & ABOVE	1
60	212018	MACHINED PULLEY- 5" OD-GEARBOX	0427754 & ABOVE	1
32	600310	DBLE PULLEY ASS'Y - LH WING - W/ ITEM 3,4,6	0227444 & ABOVE	1
	600246	DOUBLE PULLEY - LEFT WING - WELDED	9927001 to 0227443	1
33	600313	DBLE PULLEY - RH SIDE C\W BRG'S BUSHING BOLT USED ON RH WING & CENTER RH - REAR PULLEY	0227444 & ABOVE	1
	600244	DOUBLE PULLEY - RIGHT SIDE - WELDED	9927001 to 0227443	1
		ON RH WING - REPLACE W/ 600525 KIT - PULLEY, BRG'S, BUSHING & IDLER ARM		
33A	600312	DBLE PULLEY ASS'Y - CENTER RH (600313 & 314)	0227444 & ABOVE	1
	600244	DOUBLE PULLEY - CENTER RH - WELDED	9927001 to 0227443	2
33B	600314	DBLE PULLEY ASS'Y - CENTER RH - FRT W/BRG'S	0227444 & ABOVE	1
34	600305	IDLER ARM - RH	0227444 & ABOVE	1
	600249	IDLER ARM - RH	9927001 to 0227443	1
41	600311	TRIPLE PULLEY ASS'Y - CENTER LH - W/ ITEM 3,4,6,7	0227444 & ABOVE	1
	600245	TRIPLE PULLEY - CENTER LH - WELDED	9927001 to 0227443	

NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE

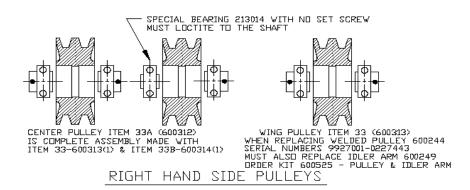
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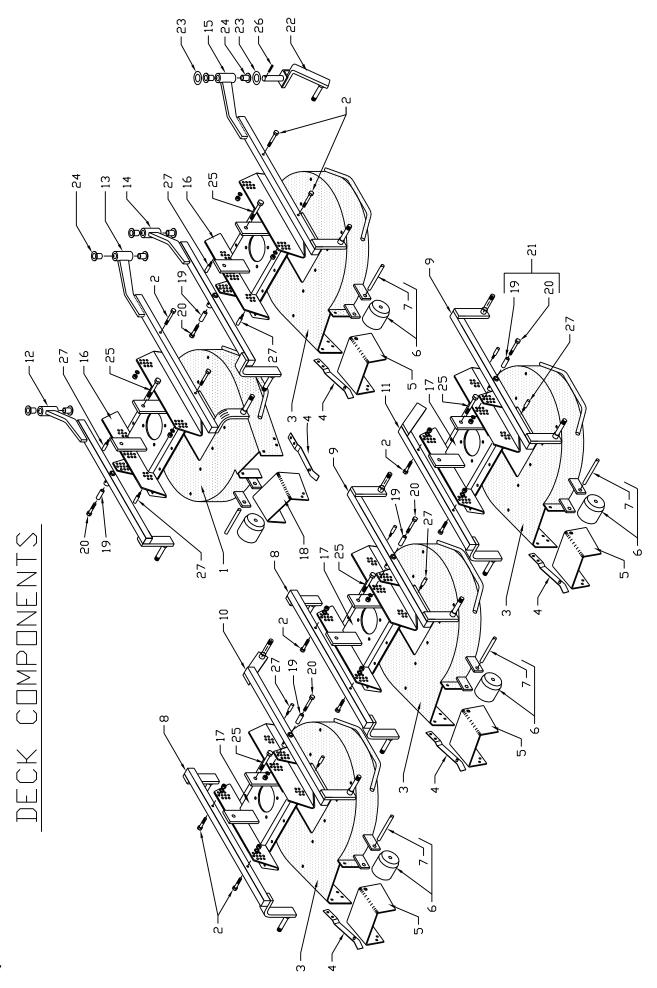


WING PULLEY ITEM 32 (600310)

INSIDE PULLEY ITEM 41 (600311)

LEFT HAND SIDE PULLEYS

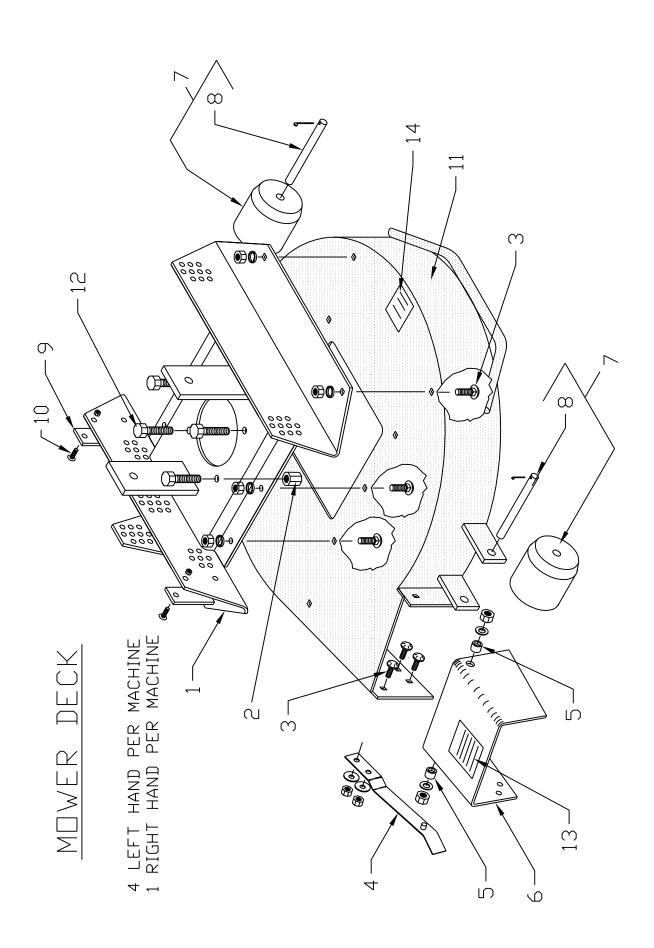




ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	600169	MOWER DECK - 28" RH		1
2	O. L.	HEX BOLT - 3/8" X 2 1/4" - NC, GRADE 5		10
3	600168	MOWER DECK - 28" LH		4
4	606162	REAR DEFLECTOR LATCH		5
5	600120	REAR DEFLECTOR - LH		4
6	521749	ANTI SCALP ROLLER - 5 7/8" PIN & COTTER PIN		10
7	521750	ANTI SCALP PIN & COTTER PIN		10
8	600189	DECK WHEEL ARM - REAR E		2
9	600190	DECK WHEEL ARM - REAR F		2
10	600191	DECK WHEEL ARM - REAR G		1
11	600192	DECK WHEEL ARM - REAR H		1
12	600185	DECK WHEEL ARM - FRONT A		1
13	600186	DECK WHEEL ARM - FRONT B		1
14	600187	DECK WHEEL ARM - FRONT C		1
15	600188	DECK WHEEL ARM - FRONT D		1
16	600150	DECK "H" FRAME - FRONT		2
17	600151	DECK "H" FRAME - REAR		3
18	600121	REAR DEFLECTOR - RH		1
19	600509	DECK WHEEL SWIVEL BUSHING		5/KIT
20	KIT	HEX BOLT - 3/8" X 4" - NC, GRADE 5		5/KIT
21		DECK PIVOT BUSHING KIT - (5 PCS)		1 KIT
22	600177	DECK CASTOR FRAME		4
23	521320	SHIM WASHER - 1" KIT (10 PCS)		1 KIT
24	521818	PIVOT BUSHING (RED)		8
25	O. L.	HEX BOLT - 5/8" X 3 1/4" NC, GRADE 5		10
26	302604	ROLL PIN - 1/4" X 1.375" KIT (4 PCS)		1 KIT
27	600514	DECK PIVOT STOP PIN KIT (10 PCS)		1 KIT

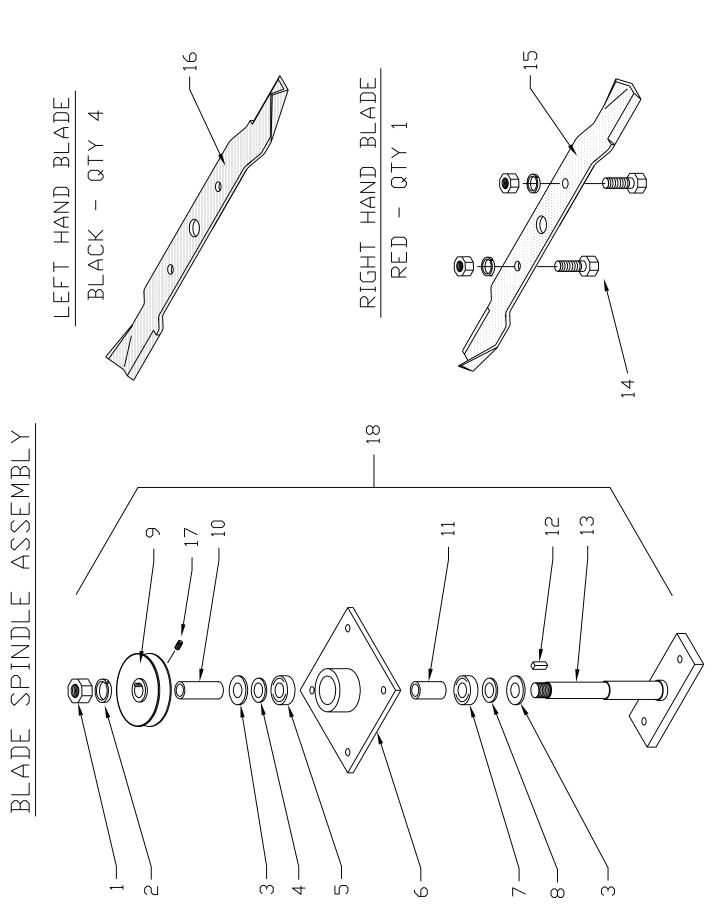
NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE

O.L. - OBTAIN LOCALLY



ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	600150	DECK "H" FRAME - FRONT		2
	600151	DECK "H" FRAME - REAR		3
2	600513	SPINDLE PLATE SPACER KIT (4PCS)		5 KITS
3	O. L.	CARRIAGE BOLT - 3/8" X 1" NC		70
4	606162	REAR DEFLECTOR LATCH		5
5	600519	DEFLECTOR BUSHING KIT (4 PCS)		3 KITS
6	600120	REAR DEFLECTOR - LEFT HAND		4
	600121	REAR DEFLECTOR - RIGHT HAND		1
7	521749	ANTI SCALP ROLLER - 4" PIN & COTTER PIN		10
8	521750	ANTI SCALP PIN & COTTER PIN		10
9	600521	WEAR PLATE KIT (10 PCS)	0227344 AND ABOVE	5 KITS
10	KIT	FLAT HEAD CAP SCREW 1/4 UNC X 3/4"		20
11	600168	MOWER DECK - 28" LEFT HAND		4
	600169	MOWER DECK - 28" RIGHT HAND		1
12	305805	HEX TAP BOLT-7/16 X 2 1/2" NC, KIT (4 PCS)		5 KITS
13	521043	DECAL - "WARNING"		2
14	209104	CUTTING HEIGHT DECAL KIT (4PCS)		1 KIT
	KIT	DECAL - "CUTTING HEIGHT - LH"		2
		DECAL - "CUTTING HEIGHT - RH"		2

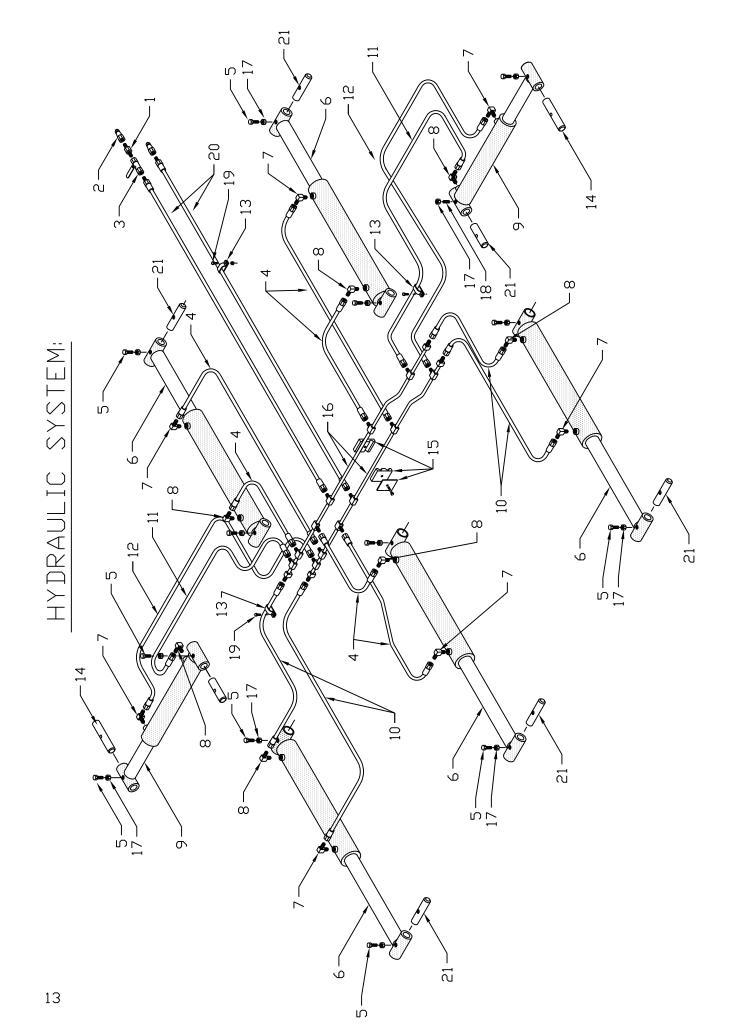
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ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	521003	HEX NUT - LEFT HAND		5
2	521002	LOCK WASHER - LEFT HAND KIT (3 PCS)		2 KITS
3	521306	DIRT SHIELD KIT (3 PCS)		4 KITS
4	521301	SHIM WASHER 1 1/8"KIT (9 PCS)		1 KIT
5	521302	TOP BEARING - 6206Z (STEEL SHIELD UP)		5
6	600146	SPINDLE HOUSING		5
7	521701	BOTTOM BEARING - 6206LBZ (STEEL SHIELD UP)		5
8	521305	SHIM WASHER 1 3/16" KIT (9 PCS)		1 KIT
9	212002	DECK DRIVE PULLEY		7
10	600148	SPINDLE SPACER - TOP		5
11	521304	BEARING SPACER		5
12	O. L.	KEY - 1/4" X 1/4" X 1 1/16"		5
13	600149	BLADE SPINDLE		5
14	O. L.	HEX BOLT 1/2" X 1 3/4" NC, GRADE 5		10
15	522374	MOWER BLADE - RIGHT HAND (RED)		1
16	522372	MOWER BLADE - LEFT HAND (BLACK)		4
	600517	PRO-FLEX 27" BLADE SET - STD. BLADES		1 KIT
	600265	MULCHING BLADE - 27" - LEFT HAND		4
	600266	MULCHING BLADE - 27" - RIGHT HAND		1
	600518	PRO-FLEX 27" BLADE SET - MULCHING BLADES		1 KIT
17	O.L.	SET SCREW 3/8" x 0.5" NC, COMES WITH PULLEY		18
18	600152	COMPLETE SPINDLE ASSEMBLY		5
	600162	COMP. SPINDLE ASSEMBLY - LESS PULLEY		5

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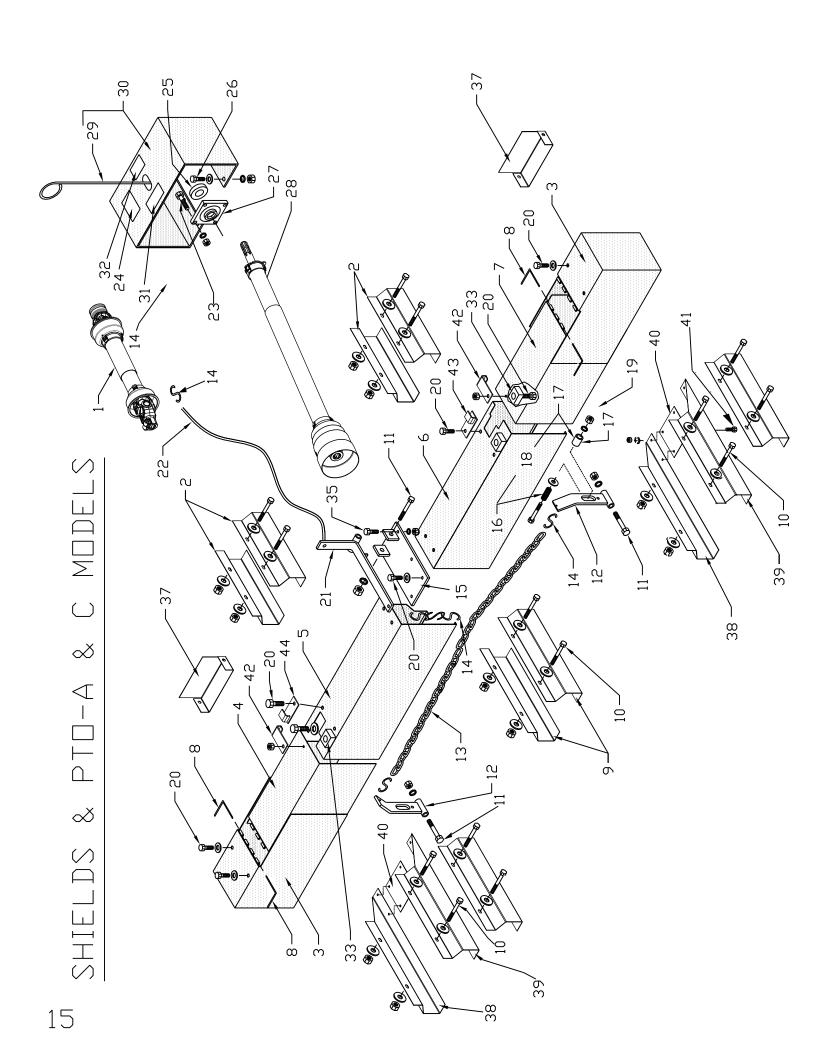
HYDRAULIC COMPONENTS

Nov-05

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REVISION:

ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	222004	HEX NIPPLE - 1/2" NPT		1
2	222006	HOSE END - 1/2" NPT PIONEER KIT (2 PCS)		1 KIT
3	222005	BALL VALVE - 1/2" NPT (F)		1
4	221002	HYDRAULIC HOSE - 1/4" - 19" LG		9
2	0. L.	HEX BOLT - 3/8" X 3/4" NF, GRADE 5		13
9	220001	HYDRAULIC CYLINDER 1 1/2" X 6" - DECK		5
7	222002	ELBOW 90 DEG 1/4" O RING X JIC		7
8	222003	ELBOW 90 DEG RESTRICTOR .040"		7
6	220002	HYDRAULIC CYLINDER 1 1/2" X 6" - WING		2
10	221005	HYDRAULIC HOSE - 1/4" - 42 3/4" LG		4
11	221004	HYDRAULIC HOSE - 1/4" - 39" LG		2
12	221003	HYDRAULIC HOSE - 1/4" - 32 1/2" LG		2
13	229002	HOSE CLAMP - 1/2" DIA KIT (7PCS)		1 KIT
14	600219	CYLINDER YOKE PIN		2
15	229003	TUBE CLAMP COMPLETE		2
16	229000	HYDRAULIC TUBE MANIFOLD		2
17	O. L.	HEX NUT - 3/8" - 24 NF, GRADE 5		14
18	0. L.	SET SCREW -3/8" NF X 5/8" CUP POINT		1
19	0. L.	HEX BOLT - 3/8" X 3/4" - NC, GRADE 5		2
	O. L.	HEX BOLT -5/16" X 1"-NC, GRADE 5, LOCK AND NUT		5
20	221006	HYDRAULIC HOSE - 1/4" - 115" LG		2
21	600223	CYLINDER PIN - DECK		7
NOTE: QUANTITIE		S SHOWN ARE FOR COMPLETE MACHINE	O.L OBTAIN LOCALLY	;ALLY



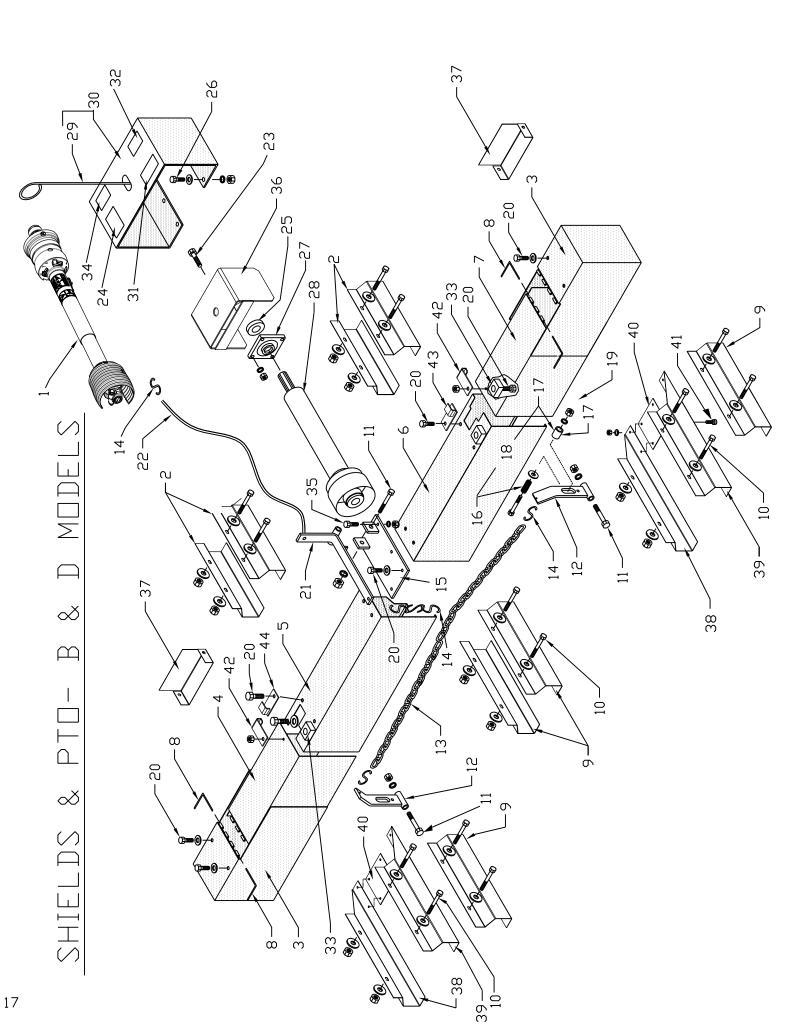
SHIELD & PTO-A & C MODELS

ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	521738	INPUT PTO COMPLETE		1
2	600467	DECK SHIELD - FRONT		4
3	600230	WING SHIELD		2
4	600132	INTERMEDIATE SHIELD - LH		1
5	600214	CENTER SHIELD - LH		1
6	600215	CENTER SHIELD - RH		1
7	600133	INTERMEDIATE SHIELD - RH		1
8	600502	SHIELD HINGE PIN KIT (2 PCS)		2 KITS
9	600463	DECK SHIELD - REAR -A&B MODELS ONLY		2
10	O. L.	HEX BOLT - 3/8" X 3 3/4" - NC, GRADE 5		10
11	O. L.	HEX BOLT - 5/8" X 4 1/2" - NC, GRADE 5		3
12	600173	WING LOCK BRACKET		2
13	115003	WING RELEASE CHAIN - 39"		1
14	O. L.	"S" HOOK - 2.5"		6
15	600201	SHIELD MOUNTING BRACKET		1
16	214009	SPRING - WING LATCH		2
17	KIT	WING LATCH BUSHING		2
18		WING LATCH KIT - ITEMS 16, 17 (4 PCS)		1
19	O. L.	HEX BOLT - 3/8" X 4" - NC, GRADE 5		2
20	O. L.	HEX BOLT - 3/8" X 3/4" - NC, GRADE 5		16
21	600200	WING LOCK RELEASE BRACKET		1
22	119002	PULL ROPE - 9.5'		1
23	O.L.	HEX BOLT - 1/2" X 1 3/4" NC, GRADE 5		4
24	521784	DECAL - "NOTICE" HITCH DETAILS		1
25	521789	PTO SPACER - 9/16"		1
26	O. L.	HEX BOLT - 1/2" X 1 1/4" NC, GRADE 5		4
27	521323	FLANGE BEARING		1
28	521725	INTERMEDIATE PTO COMPLETE		1
29	522413	HOSE GUIDE C/W NUTS		2
30	522408	SHIELD & HOSE GUIDE COMPLETE (REPLACED 522508)		1
31	521119	DECAL - PTO GREASING		1
32	521819	DECAL - "ATTENTION"		1
33	600512	SHIELD BUMPER KIT - ITEM 20, 33 (4 PCS)		1 KIT
34	521820	DECAL - CAUTION		1
35	O.L.	HEX BOLT - 3/8" x 1 1/4"NC, GRADE 5		2
36	524256	INTERMEDIATE SHIELD		1
37	600483	CE WING SHIELD- C MODELS ONLY		2
38	600471	CE DECK SHIELD - LEFT- C MODELS ONLY		2
39	600475	CE DECK SHIELD - RIGHT- C MODELS ONLY		2
40	600479	CE DECK SHIELD PLATE- C MODELS ONLY		2
41	O.L.	HEX BOLT - 1/4" x 3/4" NC, GRADE 5		4
42	600368	SHIELD LOCK TOP- C MODELS ONLY		2
43	600372	SHIELD LOCK BOTTOM R.H C MODELS ONLY		1
44	600370	SHIELD LOCK BOTTOM L.H C MODELS ONLY		1

REVISION:3

Mar-10

NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE
O.L. - OBTAIN LOCALLY



SHIELD & PTO-B & D MODELS

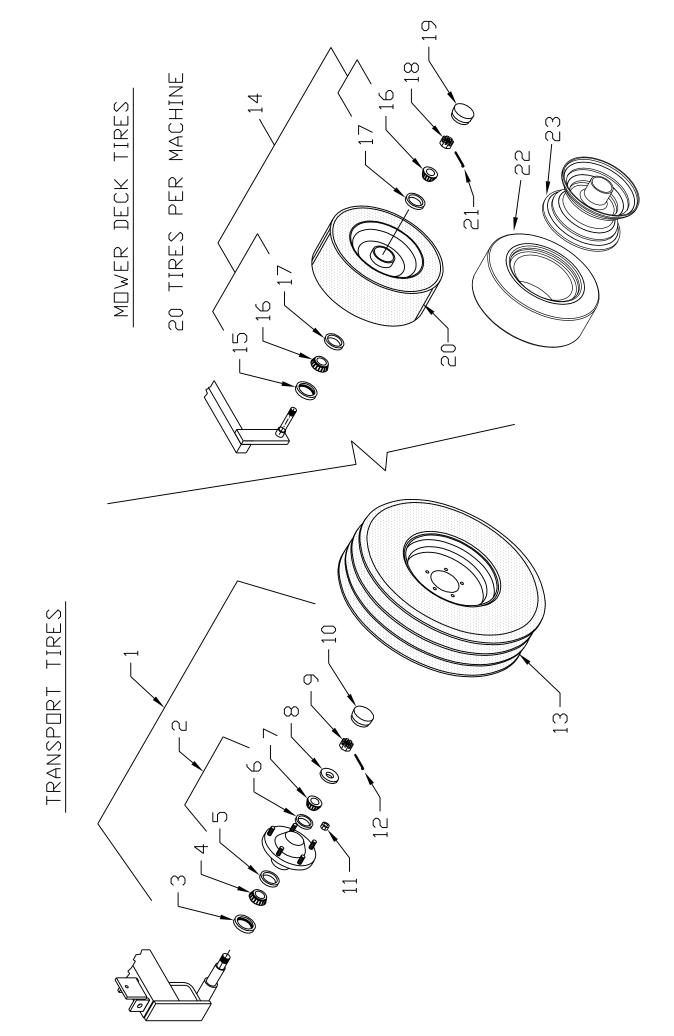
ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	210230	INPUT PTO COMPLETE	UP TO 12271703	1
	210280	INPUT PTO COMPLETE	12271704 & UP	1
2	600467	DECK SHIELD - FRONT		4
3	600230	WING SHIELD		2
4	600132	INTERMEDIATE SHIELD - LH		1
5	600214	CENTER SHIELD - LH		1
6	600215	CENTER SHIELD - RH		1
7	600133	INTERMEDIATE SHIELD - RH		1
8	600502	SHIELD HINGE PIN KIT (2 PCS)		2 KITS
9	600463	DECK SHIELD - REAR		2
10	O. L.	HEX BOLT - 3/8" X 3 3/4" - NC, GRADE 5		10
11	O. L.	HEX BOLT - 5/8" X 4 1/2" - NC, GRADE 5		3
12	600173	WING LOCK BRACKET		2
13	115003	WING RELEASE CHAIN - 39"		1
14	O. L.	"S" HOOK - 2.5"		6
15	600201	SHIELD MOUNTING BRACKET		1
16	214009	SPRING - WING LATCH		2
17	KIT	WING LATCH BUSHING		2
18		WING LATCH KIT - ITEMS 16, 17 (4 PCS)		1
19	O. L.	HEX BOLT - 3/8" X 4" - NC, GRADE 5		2
20	O. L.	HEX BOLT - 3/8" X 3/4" - NC, GRADE 5		16
21	600200	WING LOCK RELEASE BRACKET		1
22	119002	PULL ROPE - 9.5'		1
23	305121	HEX BOLT - 1/2" X 1 3/4" NC, GRADE 5		4
24	521784	DECAL - "NOTICE" HITCH DETAILS		1
25	521789	PTO SPACER - 9/16"		1
26	O. L.	HEX BOLT - 1/2" X 1 1/4" NC, GRADE 5		4
27	521323	FLANGE BEARING		1
28	210210	INTERMEDIATE PTO COMPLETE		1
29	522413	HOSE GUIDE C/W NUTS		2
30	522408	SHIELD & HOSE GUIDE COMPLETE		1
31	521119	DECAL - PTO GREASING		1
32	521819	DECAL - "ATTENTION"		1
33	600512	SHIELD BUMPER KIT - ITEM 20, 33 (4 PCS)		1 KIT
34	521820	DECAL - CAUTION		1
35	O.L.	HEX BOLT - 3/8" x 1 1/4"NC, GRADE 5		2
36	524256	INTERMEDIATE SHIELD		1
37	600483	CE WING SHIELD-D MODELS		2
38	600471	CE DECK SHIELD - LEFT-D MODELS		2
39	600475	CE DECK SHIELD - RIGHT-D MODELS		2
40	600479	CE DECK SHIELD PLATE-D MODELS		2
41	O.L.	HEX BOLT - 1/4" x 3/4" NC, GRADE 5		4
42	600368	SHIELD LOCK TOP-D MODELS		2
43	600372	SHIELD LOCK BOTTOM R.HD MODELS		1
44	600370	SHIELD LOCK BOTTOM L.HD MODELS		1

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Oct-14

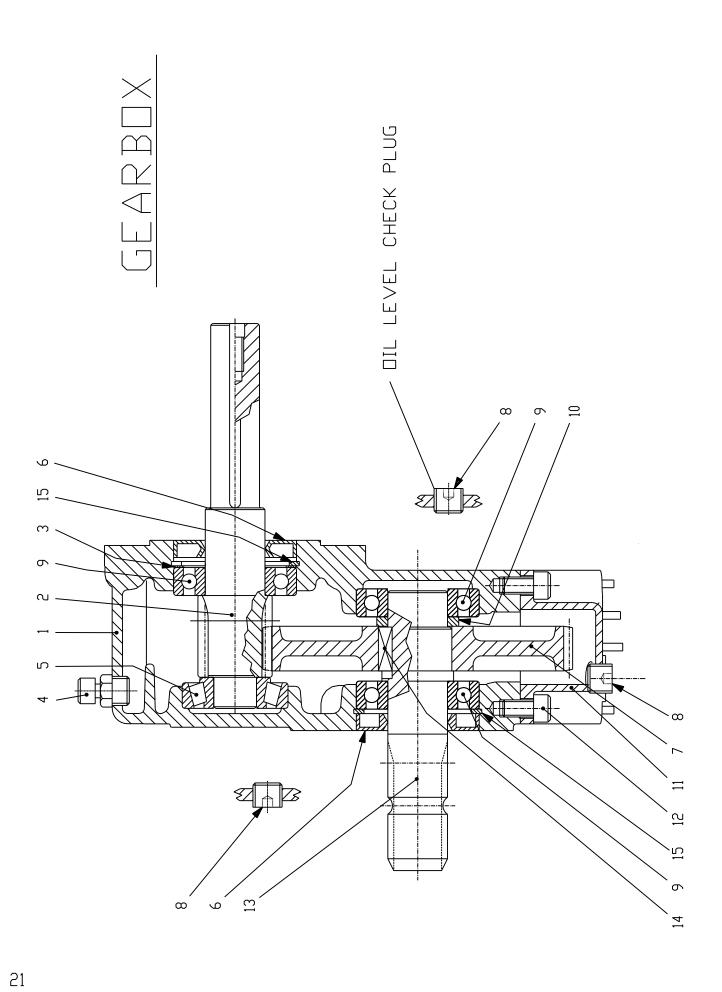
NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE

O.L. - OBTAIN LOCALLY



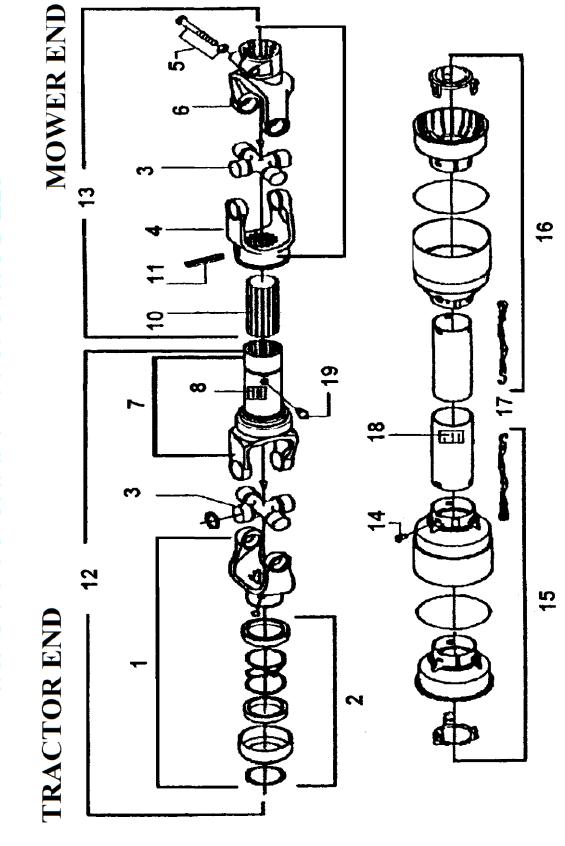
2 **REVISION:** WHEEL ASSEMBLIES

WHEEL	WHEEL ASSEMBLIES	MBLIES REVISION:	2	Jan-09
ITEM	No.	DESCRIPTION	SERIAL NUMBER	αTY
1	521328	HUB ASSEMBLY - 3500 # - COMPLETE WITH PARTS		2
2	521754	HUB - 3500 # - C/W CUPS ONLY		2
3	521741	BEARING SEAL		2
4	521742	BEARING CONE - INNER		2
2	521743	BEARING CUP - INNER		2
9	521744	BEARING CUP - OUTER		2
7	521745	BEARING CONE - OUTER		2
8	521746	WASHER (2 PCS)		1 KIT
6	521747	SLOTTED NUT - 1" (2PCS)		1 KIT
10	521748	DUST CAP		2
11	521327	WHEEL NUT KIT (5 PCS)		2 KITS
	521755	"PRESS - IN" WHEEL STUD (5 PCS)		2 KITS
12	0. L.	COTTER PIN - 3/16" X 1 1/2"		2
13	230010	TIRE & WHEEL ASSEMBLY - 18.5/850-8		2
	230011	TIRE - 18.5/18.5/850-8 CARLISLE		2
	521398	RIM - 8 X 7 X 545 WHT CONV TRL WHL		2
14		WHEEL BEARING KIT ITEMS 15, 16, 17 (5 PCS)		20 KITS
15	230018	SEAL - 3/4"		1/KIT
16	KIT	BEARING - CONE 3/4"		2/KIT
17		BEARING CUP		2/KIT
18	600500	HEX NUT SLOTTED KIT - 3/4 X 16 UNF (4 PCS)		5 KITS
19	230019	DUST CAP (4 PCS)		5 KITS
20	230017	DECK TIRE ASSEMBLY C/W ITEM 15(1pc), 16(2pc), 17(2pcs)		20 KITS
21	O.L.	5/32" x 1 1/2" COTTER PIN		2
22	230014	GAUGE TIRE ONLY		20
23	230015	GAUGE WHEEL SPLIT RIM		20
NOTE: QU	QUANTITIES	IIES SHOWN ARE FOR COMPLETE MACHINE	O.L OBTAIN LOCALLY	CALLY



GEARBOX	XO	REVISION:	4	Nov-05
ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	211001	CASING		1
2	211002	OUTPUT PINION SHAFT		1
3	521491	WASHER - SHIM (60 X 72) (3 PCS)		1
4	211004	BREATHER PLUG		1
2	211005	BEARING - TAPERED ROLLER		1
9	521127	OIL SEAL		2
7	211007	CROWN GEAR		1
8	521482	OIL LEVEL / DRAIN PLUG		3
6	521116	BEARING - BALL		3
10	211010	SPACER		1
11	211011	COVER		1
12	211012	BOLT M10 X 20 8.8 KIT (6 PCS)		9
13	211013	INPUT SHAFT		1
14	211014	PARALLEL KEY		1
15	521126	SNAP RING KIT (3 PCS)		2
NOTE: QL	NOTE: QUANTITIES SHO	40WN ARE FOR COMPLETE MACHINE	O.L OBTAIN LOCALLY	CALLY

INPUT PTO SHAFT - A & C MODELS



INPUT PTO SHAFT-A & C MODELS

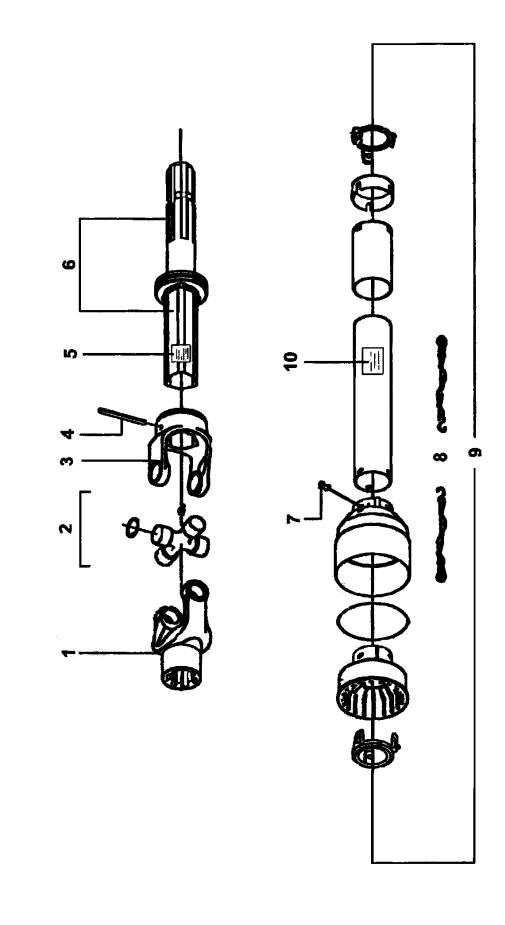
Nov-05

REVISION: 3

ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
1	521726	QD YOKE 13/8" - 6 SPLINE (CO2)		1
2	210017	COLLAR KIT CO2 - STEEL		1
3	521720	CROSS & BEARING KIT		3
4	521728	INNER TUBE YOKE		Т
2	521729	BOLT M12 X 1.25 X 65 NUT		1
9	521730	INTERFERING BOLT CLAMP YOKE		1
7	521731	OUTER TUBE & YOKE WITH LABEL		1
8	521451	"DANGER" DECAL		1
10	521732	SPLINED SHAFT		1
11	521733	ROLL PIN FOR INNER TUBE		1
12	521734	1/2 FEMALE SHAFT WITH SHIELDING		1
13	521735	1/2 MALE SHAFT WITH SHIELDING		1
14	521463	PLASTIC SHIELD BOLT (6PC/KIT)		2 KITS
15	521736	1/2 FEMALE SHIELD WITH LABEL		1
16	521737	1/2 MALE SHIELD		1
17	521467	SAFETY CHAIN		4
18	521455	"DANGER" LABEL FOR OUTER SHIELD		2
19	521821	GREASE FITTING		2
	521738	*COMPLETE PTO SHAFT		1

NOTE: QUANTITIES SHOWN ARE FOR COMPLETE MACHINE O.L. - OBTAIN LOCALLY

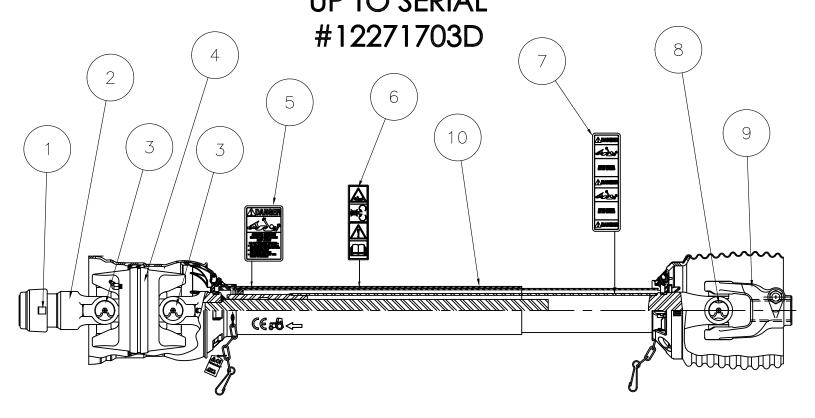
INTERMEDIATE PTO SHAFT- A & C MODELS



INTERMEDIATE PTO SHAFT REVISION: 3 Nov-05

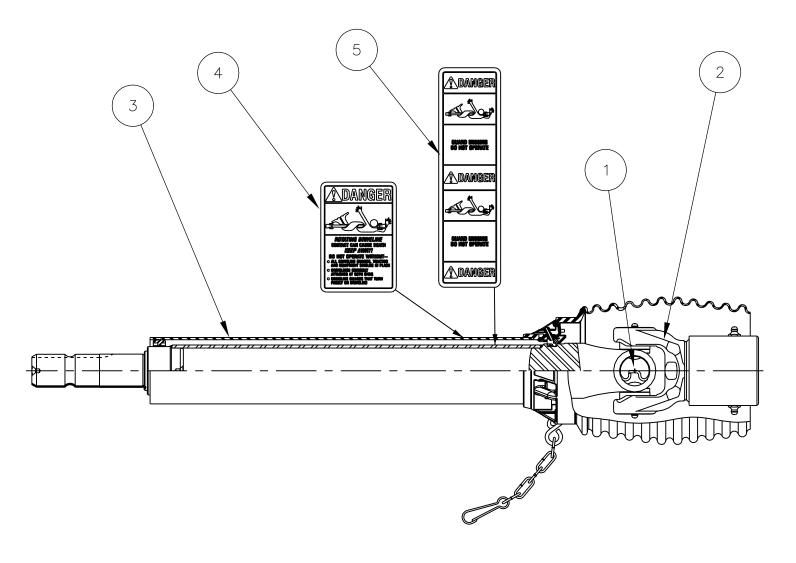
		ITEM	No.	DESCRIPTION	SERIAL NUMBER	QTY
		1	521719	SPLINED YOKE		1
		2	521720	CROSS & BEARING KIT		3
See Service	\longrightarrow	3	521721	YOKE FOR OUTER TUBE		1
Bulletin		4	521722	ROLL PIN FOR OUTER TUBE		1
521725		5	521451	"DANGER" LABEL FOR TUBE		1
PTO Shaft;	\longrightarrow	6	521723	OUTER TUBE WITH SPLINED SHAFT		1
Page 30		7	521463	PLASTIC SHIELD BOLT KIT (6 PCS)		2 KITS
		8	521467	SAFETY CHAIN		4
	\longrightarrow	9	521724	COMPLETE SHIELD TYPE "P" WITH LABEL		1
		10	521455	"DANGER" LABEL FOR OUTER SHIELD		2
			521725	*COMPLETE PTO ASSEMBLY		1

INPUT PTO SHAFT B&D MODELS ONLY UP TO SERIAL



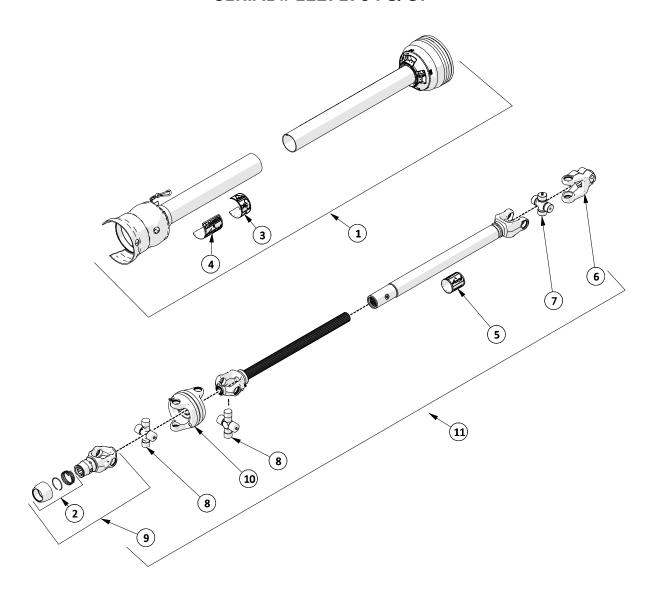
	PART NUMBER	DESCRIPTION	QTY.
1	210179	SSL/AUTO-LOK REPAIR KIT	1
2	210231	SAFETY SLIDE LOCK YOKE ASM.	1
3	210232	CAT 4 80° E2BL CROSS & BEARING KIT	2
4	210233	CENTER HOUSING	1
5	210237	GUARD SAFETY SIGN	1
6	210238	CE WARNING DECAL	1
7	210239	SHAFT SAFETY SIGN	1
8	210234	35E2BL CROSS & BEARING KIT	1
9	210235	YOKE	1
10	210236	COMPLETE GUARD SET	1
	210230	COMPLETE INPUT SHAFT	1
		QUANTITY IS FOR ONE COMPLETE SHAFT	

INTERMEDIATE SHAFT B & D MODELS ONLY



ITEM	PART NUMBER	DESCRIPTION	QTY
1	210234	35E2BL CROSS & BEARING KIT	1
2	210212	OVERRUNNING CLUTCH ASM	1
3	210211	GUARD	1
4	210237	GUARD SAFETY SIGN	1
5	210239	SHAFT SAFETY SIGN	1
	210210	COMPLETE PTO SHAFT	1
		QUANTITY IS FOR ONE COMPLETE PTO SHAFT	

INPUT PTO SHAFT B & D MODELS ONLY SERIAL # 12271704 & UP



ITEM	PART#	DESCRIPTION	QTY
1	210286	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	210280	COMPLETE INPUT PTO SHAFT W/GUARDS	1

Service Bulletin: 521725 PTO Shaft

Part #521725, Intermediate Z50 shaft used on Pro-flex 120/TD65/TD65-2

For a period between 2003 and 2006, this PTO shaft was changed to one with a new shield. The shielding seen in "Diagram 1A" was used before this, and was changed to shielding seen in "Diagram 2B" for this period of time. See diagrams below on page.

If your Progressive Mower has an intermediate shaft with shielding as seen in "Diagram 2B", the parts breakdown listing for the inner yoke found in your machine parts book is incorrect. Part #521721 (Yoke - Outer Tube) must be changed to Part #521721.50 (Yoke - Inner Tube). The size of hole for mounting yoke on the shaft is different in each application.

INTERMEDIATE PTOSHAFT A & C MODELS ONLY

INTERMEDIATE PTO SHAFT

		0 .0		
	1A	2B		
ITEM	PN	PN	DESCRIPTION	QTY.
1	521719	521719	SPLINED YOKE	1
2	521720	521720	CROSS & BEARING KIT	1
3	521721	521721.50	YOKE FOR OUTER TUBE	1
4	521722	521722	ROLL PIN FOR OUTER TUBE	1
5	521451	521451	"DANGER" LABEL FOR TUBE	1
6	521723	522050	OUTER TUBE WITH SPLINED SHAFT	1
7	521463	521463	PLASTIC SHIELD BOLT (6PC/KIT)	6
8	521467	521467	SAFETY CHAIN	2
9	521724	522060	COMPLETE SHIELD TYPE "P" WITH LABEL	1
10	521455	521455	"DANGER" LABEL FOR OUTER SHIELD	1
****	52	21725	COMPLETED	1

HIGHLIGHTED PARTS ARE REQUIRED FOR SHAFT 2B SERVICE PARTS QTY.- REPRESENTS TOTAL NUMBER REQUIRED FOR ONE INTERMEDIATE PTO ASSEMBLY ONLY