



## OPERATOR'S MANUAL AND PARTS LIST

### PROGRESSIVE 12' AND 15.5' TRI-DECK ROTARY FINISHING MOWERS

TD65-2: 12 FT. SERIAL NO. UP TO 1265-21375

TD65: 15.5 FT. SERIAL NO. UP TO 12651441



SERIAL # \_\_\_\_\_



# **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**

<b><u>Models:</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>
TD65-2	526512C, 526512D	3.66m Tri-Deck Finishing Mower
TD65	526515C, 526515D	4.72m Tri-Deck Finishing Mower
TD92	529222C	6.70m Tri-Deck Finishing Mower
PF-120	601205C, 601205D	3.05m Pro-Flex Contour Mower
PM-36	529236E	10.97m Pro-Max 36 Mowing System
TDR-22	526924E	6.70m Tri-Deck Roller Mower
TDR-15	528750C, 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 25<sup>th</sup> day of January 2010.



Luke Janmaat  
President  
Progressive Turf Equipment Inc.



# **TABLE OF CONTENTS**

# **PAGE**

## **INTRODUCTION**

TO THE OWNER .....	3
GENERAL INFORMATION .....	4
WARRANTY .....	5
SPECIFICATIONS .....	6
SAFETY RULES .....	7
GENERAL SAFETY PRECAUTIONS .....	8
OPERATING EQUIPMENT SAFELY .....	9
MAINTENANCE SAFETY .....	10
WELDING & GRINDING WORK PRECAUTIONS .....	11
SAFETY CHAINS .....	12
TRANSPORTING MOWER .....	12
TIRES .....	13
POWER TAKE OFF .....	13
SAFETY DECAL LOCATIONS .....	14
SAFETY DECALS .....	15
ASSEMBLY INSTRUCTIONS .....	18

## **OPERATION OF THE MOWER**

DAILY CHECK LIST .....	19
HITCHING MOWER TO TRACTOR .....	20
LEVELING THE MOWER & PTO .....	21
INSTALLING PTO SHAFTS .....	22
CHECKING PTO LENGTH DURING TURNS .....	23
CUTTING HEIGHT ADJUSTMENT .....	24
GREASE COMPATIBILITY.....	25
LUBRICATION .....	26
GEARBOX OIL LEVEL .....	27

## **MAINTENANCE**

MOWER BLADE SERVICING .....	28
BLADE REMOVAL & INSTALLATION .....	29
BLADE SHARPENING .....	29
SPINDLE INSPECTION .....	30
SPINDLE ASSEMBLY REMOVAL .....	30
SPINDLE ASSEMBLY INSTALLATION .....	30
ASSEMBLY OF SPINDLES .....	31
“V” BELT ADJUSTMENT .....	32
“V” BELT TENSION .....	32
HYDRAULICS .....	33
TROUBLE SHOOTING .....	34

## **REPLACEMENT PARTS BOOK**

## **TO THE OWNER:**

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

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

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

## **GENERAL INFORMATION:**

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

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

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

For quick reference, record the following information.

MODEL: \_\_\_\_\_

DATE PURCHASED: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

For additional information, assistance during assembly, or operation of this mower, contact the dealer from whom the machine was purchased.

## WARRANTY POLICY

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

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.

**Pro-Flex120, TD65-2, TD65, TD92, TDR-15, TDR-12, TDR-22,  
SDR-65, SDR-90, Pro-Max 36  
FOR ALL APPLICATIONS - 24 MONTHS**

*This warranty coverage supersedes all written warranties, effective June, 2007..*

This warranty will not cover any components which, in the opinion of the company, have been subjected to negligent use, alteration, and accident, or if parts supplied by others have been used in repairs of any product manufactured by Progressive Turf Equipment Inc.

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. Any parts to be returned to Progressive Turf Equipment Inc. for inspection will be issued an RGA number and must be returned within 14 days, transportation charges prepaid. 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.

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.

## MACHINE SPECIFICATIONS

DESCRIPTION	TD65-2 (12')	TD65 (15.5')	
Recommended HP	25-40	30-50	
Cutting Width	12 ft.	15 ½ ft.	
Transport Width	7 ½ ft.	8 ½ ft.	
Height	5 ½ ft.	7 ½ ft.	
Length	14 ft.	14 ft.	
Ground Clearance	9 ¼"	9 ¼"	
Spindles	7	9	
Blades	3 per Centre Deck 2 per Wing Deck	3 per Deck	
Weight	2380 lbs.	2720 lbs.	
Tongue Weight Transport	445 lbs.	580 lbs.	
Mowing	235 lbs.	330 lbs.	
Mowing Capacity MPH	2.9 acres/hr 4 5.8 acres /hr 6 8.7 acres/hr Assumes no stops or overlaps	3.75 acres/hr 7.5 acres/hr 11.3 acres/hr	
360 Degree Turn	24" uncut circle	0" uncut circle	
Ground Pressure	7 PSI	8 PSI	
Tire to Ground	310 square inches of contact	Castors	15 X 6. NHS – 4 ply pneumatic tires.
Number of Tires	10 on decks, 2 on main frame	Transport Tires	18 X 9.5 NHS – 6 ply turf saver tires.
Deck Drive	PTO shaft to right angle gear box driving 2-"B" section belts to 3 heavy-duty spindles.	Hydraulics	Requires 1 double acting outlet, all hoses supplied to tractor.
Belt Adjustment	Easily made by loosening four bolts at gearbox base and adjusting the slide plate forward or backward for retightening.	Deck Construction	3/16" steel plate formed and welded with supporting members at high stress areas to achieve maximum strength. Deck is 5" deep.
Cutting Height	Easy to use spacer bushings allow adjustment from 1" to 5" in 3/8" increments.	Hitch	4 position, with height settings from 10 ½" to 15". Safety chain with hook according to Dept. of Transport regulations.
Spindles	1 3/16" dia. (30 mm) spindle is carried in 2 re-greaseable ball bearings, which are housed, in a precision machined hub.	PTO Shafts	Telescoping agricultural PTO shafts, with proper safety shields. 1 3/8" – 6 spline quick-disconnect yokes on both ends with Ring Lock collars. INPUT PTO – Category # 4 DECK PTO – Category # 2
Blades	High lift, heat treated, alloy steel - 5/16" x 2 ½" x 23". <b>Optional:</b> Low lift blades	Speeds	Tractor PTO – 540 RPM Blades – 3040 RPM Blade Tip Speed – 18,287 FPM
Anti-Scalp Rollers	Standard on front of wing decks.	Paint Finish	Electrostatically painted with oven baked finish.
Main Gearbox	4 shaft gearbox with 1 3/8 - 6 spline shafts	SMV Sign	Located at back of mower for safety.

REAR DEFLECTOR AND MULCHING KITS AVAILABLE UPON REQUEST.

Design and specifications are subject to change without notice.

## **SAFETY RULES**

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

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

### **IMPORTANT!**

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

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

### **Proper care is your responsibility.**

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

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

## **SAFETY ALERT SYMBOL**

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



## **HAZARD SERIOUSNESS LEVEL**

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

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



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



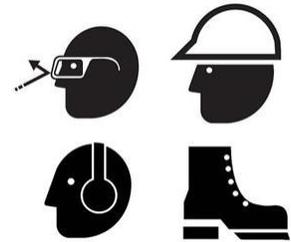
**CAUTION!** – Hazards or unsafe practices that COULD result in minor personal injury or product or property damage.



## GENERAL SAFETY PRECAUTIONS

### **WARNING!**

- 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

### **WARNING!**

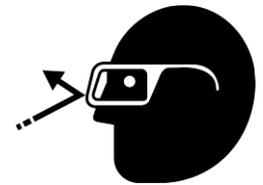
- Operator must have sufficient knowledge in the care and operation of the power unit (tractor) before connecting power unit to mower.
- Power unit must be equipped with ROPS and seat belt. Foldable ROPS must be secured in the upright position. Follow recommendations of power unit manufacturer. Seat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

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

## OPERATING EQUIPMENT SAFELY

### **WARNING!**

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



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

## MAINTENANCE SAFETY PRECAUTIONS

### **WARNING!**

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



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

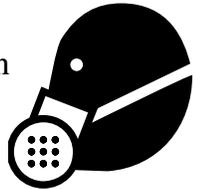
## **WELDING AND GRINDING WORK PRECAUTIONS**

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

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

### **WORKING ON PAINTED SURFACES**

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

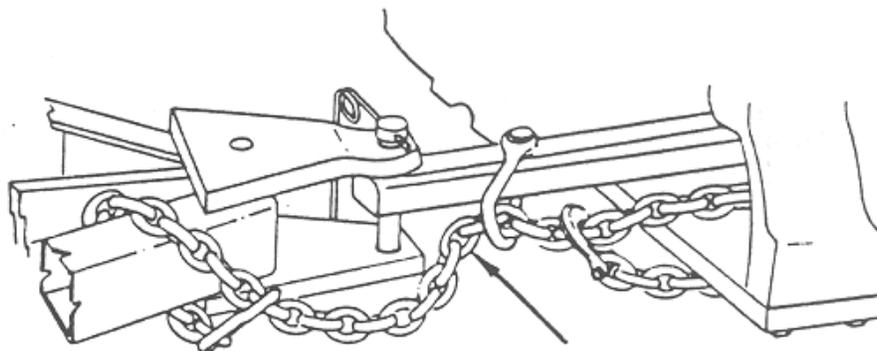


Methods and precautionary measures when removing paint:

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

## **SAFETY CHAIN**

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



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

## **TRANSPORTING MOWERS:**

### **⚠ CAUTION!**

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

Once mower is in the raised position, activate tractor hydraulic control valve slightly so that the cylinders will extend and allow the locks to be totally engaged. This way there will be no sudden surges on the hydraulic system when traveling over tough terrain.

### **⚠ WARNING!**

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

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

### **⚠ CAUTION!**

Always have safety chain attached to towing vehicle.

## **TIRES**

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

<b>TIRE TYPE</b>	<b>RECOMMENDED TIRE PRESSURE (PSI)</b>
MOWER DECK TIRES (CASTORS)	24 PSI
MAIN FRAME TIRES	32 PSI

### **CAUTION!**

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

## **POWER TAKE-OFF:**

### **CAUTION!**

Keep all safety shields in place.

### **CAUTION!**

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

### **WARNING!**

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

### **CAUTION!**

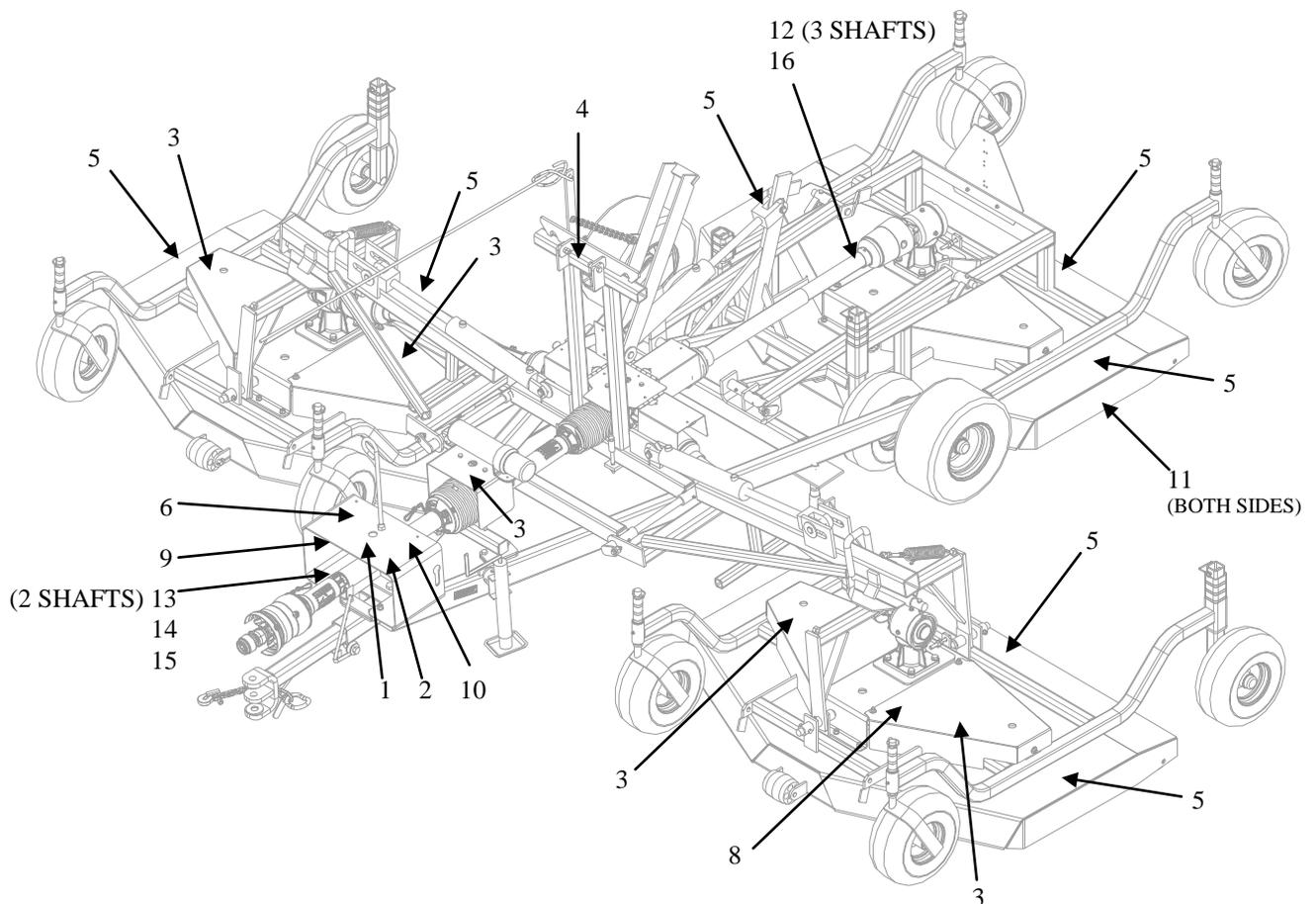
When ready to engage PTO shaft, be sure engine RPM is at idle speed. Engaging PTO at full throttle will cause high shock loads to driveline, with the potential for future failure.

### **WARNING!**

Do not exceed the recommended PTO speed of 540 RPM.

## SAFETY & MAINTENANCE DECAL LOCATIONS ON MACHINE

ITEM NO.	DESCRIPTION	QTY	ITEM NO.	DESCRIPTION	QTY
1	DANGER – READ MANUAL	1	10	NOTICE – HITCH SETUP	1
2	CAUTION - TURNING	1	11	MOWER MODEL	2
3	CAUTION – REPLACE SHIELDS	8	12	DANGER – OUTER TUBE	3
4	COMPANY NAME	1	13	CE WARNING DECAL	1
5	WARNING - BLADE HAZARD	7	14	SAFETY SIGN – INNER GUARD	2
6	WARNING – OEM PARTS	1	15	SAFETY SIGN – OUTER GUARD	2
7	CAUTION – DISENGAGE PTO	1	16	DANGER – OUTER SHIELD	3
8	GREASING SCHEDULE	1			
9	PTO GREASING	1		GREASE POINT	20

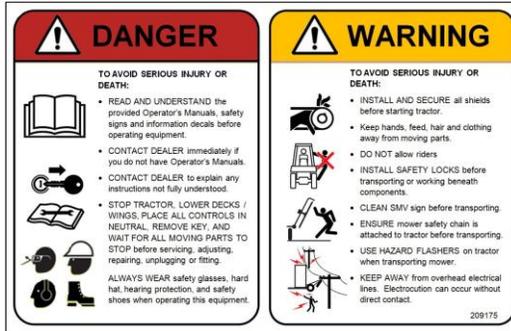


# TD65 DECAL LISTING

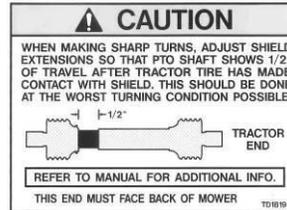
If decals become faded, damaged, or lost, replace immediately. Order decal according to corresponding Part # below. Complete decal kits are also available.

**TD 65 15' Decal Kit – 522303**

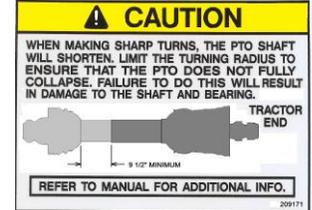
**TD 65 12' Decal Kit – 522302**



**ITEM 1  
(209175)**



**ITEM 2  
(521819)  
(A&C models only)**



**ITEM 2  
(209171)  
(B&D models only)**



**ITEM 3  
(209113)**



**ITEM 4  
(521817)**



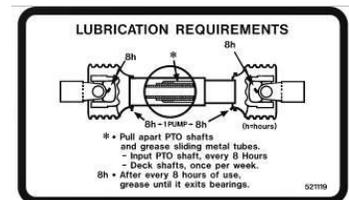
**ITEM 5  
(209173)**



**ITEM 6  
(209115)**



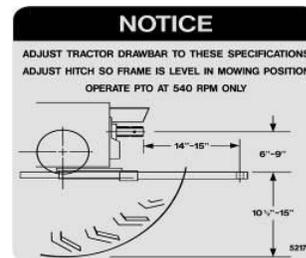
**ITEM 7  
(521820)**



**ITEM 8  
(521119)**



**ITEM 9  
(521199)**



**ITEM 10  
(521784)**

**PROGRESSIVE**  
65-2 TRI-DECK

**PROGRESSIVE**  
65" TRI-DECK

**ITEM 11 – TD 65-2**  
(521837)

**ITEM 11 – TD65**  
(521838)



**ITEM 12**  
(521451)



**ITEM 13**  
(210238)



**ITEM 14**  
(210239)



**ITEM 15**  
(210237)



**ITEM 16**  
(521455)



**GREASE POINT DECAL**  
(521014)

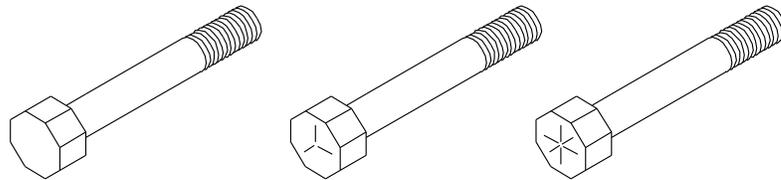
## MAINTENANCE SAFETY

- Never work on mower without safety locks in place, if decks are in raised position.
- Keep tractor and mower in good operating condition and all safety devices in place.
- Frequently check blade mounting bolts for tightness.
- Periodically check to ensure all bolts are tight and that all nuts, screws and cotter pins are properly installed to ensure that the mower is in a safe condition.

## 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**  
(No Dashes)

**SAE Grade 5**  
(3 Dashes)

**SAE Grade 8**  
(6 Dashes)

<b>Bolt Diameter (in.) (SAE Grade 5 Bolts)</b>	<b>Recommended Torque in Foot Pounds (Newton-Meters)</b>
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)

## **ASSEMBLY INSTRUCTIONS; TD65 MOWERS**

- 1) Some assembly is necessary prior to pre-delivery inspection and delivery to the customer.
- 2) The TD65 requires rear deck to be lifted from the frame assembly. Secure the deck with lifting straps over the forks of a lift truck.
- 3) Lift the deck away and install the front castor wheels. Place the mower deck on its wheels.
- 4) Remove parts that are strapped to the mower, such as the rear deck shaft, input shaft, hose support, rear deck safety, hydraulic cylinder, hitch and hydraulic hoses.
- 5) Unwrap the hydraulic hoses and pull rope. Then connect the hydraulic hoses to a hydraulic source.
- 6) Secure the two rear lift arms before powering down the wings. They could fall and damage the hydraulic components.
- 7) Remove the line pressure in the hydraulic hoses.
- 8) The rear deck safety and hydraulic cylinder are then installed with the pins supplied. The safety goes on top of the cylinder and the pin holds both the safety and cylinder. Be sure the cylinder is mounted on the stub end. Connect the pull chain from the wing safety to the rear deck safety.
- 9) The long hose (31") connects to the shaft end of the cylinder and is connected to the bottom tee on the wing lock frame using the fittings supplied on the hoses. The 90 degree fitting installs on the cylinder. The small hose (24") is connected to the stub end of the cylinder and at the top tee on the wing lock frame. Be sure the 45 degree fitting is installed on the cylinder. Use thread sealant (Teflon tape) on all joints.
- 10) Run the cylinders up and down 3 or 4 times to be sure that all air is out of the system.
- 11) Roll the rear deck into place. Install lift arms with pins supplied on the deck.
- 12) Install deck shaft. Be sure that the end with the small bell marked with a tractor goes on the four-way gear-box.
- 13) Remove intermediate shaft stub cover and install the input shaft. Be sure that the small spacer bushing is in place and tighten the pinch bolt.
- 14) Install hose support shield. Make sure that the grease fitting on the hanger bearing is visible through the hole in the shield for greasing. Run the safety pull rope and hydraulic lines through the eye of the hose support rod.
- 15) Install the front hitch with the bolt provided.
- 16) Grease the front bearing, and the rear deck lift arms, and check over mower to find any other spots that missed greasing (All spindles and wheels are greased before shipping)

The mower is now ready for pre-delivery inspection.

## **OPERATING THE MOWER**

- A careful and knowledgeable operator is the best insurance against an accident.
- Allow no riders on any equipment.
- If tractor is equipped with R.O.P.S., use the seat belt for maximum protection.
- Make sure that everyone is clear of the tractor and mower before starting the engine or operating.

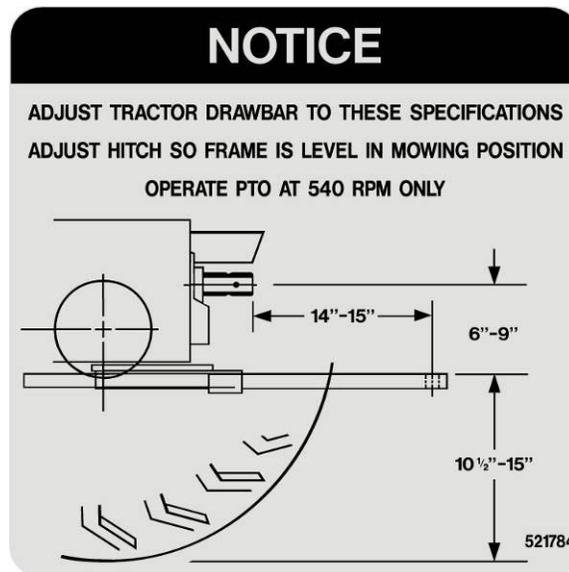
## **DAILY CHECK LIST**

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.
  2. Check that mower is properly and securely attached to tractor with a safety chain.
  3. Ensure all safety shielding is properly installed and check that all nuts and bolts are secure and pins are properly secured with cotter pins.
  4. Check condition of blades and security of attachment.
  5. Ensure mower is properly mounted, adjusted and in good operating condition.
  6. Clear area of stones, branches or other debris that might be thrown causing injury or damage.
  7. Never permit any person other than the operator to ride or board the tractor at any time.
  8. Check that all lubrication points with grease fittings have been lubricated as per schedule.
  9. Check all gearboxes for proper amount of gear oil. Mower must be on level surface when this is done.
- Be sure actuator pull rope is properly secured and will not become entangled in PTO shaft.

## HITCHING MOWER TO TRACTOR

### CAUTION!

Attach mower to drawbar only.



### A & C MODELS ONLY

- Drawbar should be adjusted so it is 14" to 15" from the center line of the draw pin hole to end of PTO shaft. This is critical for proper PTO shaft operation. (A & C MODELS ONLY)
- Adjust hitch or drawbar so mower frame (Item #1, Page 33) is at the most level position in relation with the ground. This will ensure proper flotation of the wing decks.

### CAUTION!

Safety chain must always be attached to towing vehicle.

### CAUTION!

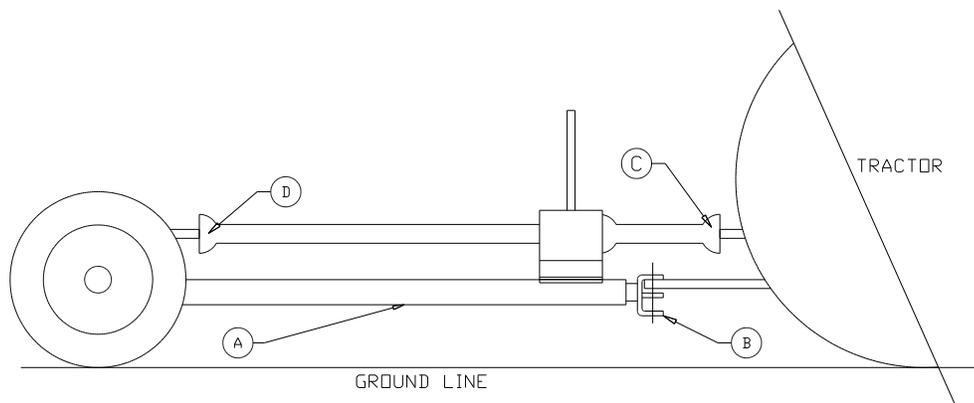
When towing mower on any roadways, lock brakes together. Use proper lighting and marking devices according to the local regulations.

**NOTE:** If the three-point hitch is attached to tractor, be sure it will not contact any part of the mower when making sharp turns. Mount the hose support bracket so the large access hole is directly over the grease fitting on the hanger bearing. The hose support rod may have to be bent back slightly to clear the three point hitch arms.

## LEVELLING THE MOWER & PTO

For proper mower operation and maximum PTO life, the mower hitch and PTO driveline must be setup correctly.

- a) When the mower is connected to the tractor, the mower hitch frame “A”, should be as close to level with the ground as possible.
- b) The connecting hitch “B” can be removed and turned over to give more height adjustments. Set in the best position for the mower frame to be as level as possible.
- c) To ensure proper life of the PTO shaft, the driveline from the mower gear box “D” to the PTO shaft “E” on the tractor should be in a straight line.



## CONNECTING THE PTO SHAFT

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

### **CAUTION!**

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.

## INSTALLING PTO SHAFTS

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

### **! CAUTION!**

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

#### **Input Drive Shaft**



- All PTO shafts have a short chain attached on both ends. Find a location to wrap or hook on short chain. Be sure that when decks are brought into transport position, the safety chain will not bind or pull PTO shield.
- The Intermediate shaft is installed with the large bell end onto the main gear box. Slide the 4 bolt flange bearing onto the intermediate shaft. Fasten the flange bearing to the back side of the mounting plate. Install the shield and level the PTO shaft. See section on “Hitching to the Tractor”.

## **CHECK PTO LENGTH DURING TURNS**

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

- a) With the tractor and mower aligned, and the input PTO straight, turn the shields on the input PTO to check that the holes line up for greasing the input shaft tubes. If not, you will have to lengthen or shorten the drawbar. (It should be 14" to 15" from the end of the PTO shaft to the center of the drawpin hole. A & C models)
- b) With the tractor in the lowest gear and traveling very slowly, make a sharp turn to the right as required for mowing.
- c) Watch the PTO shielding to make sure the PTO shaft does not totally collapse. There should be 1" to 2" of inside PTO shielding left at maximum turn. See picture below.



1" to 2" of inside shield showing

**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. The operator should avoid making sharp turns on uneven ground.

## **CUTTING HEIGHT ADJUSTMENT**

- Mower cutting height adjustment is made by removing lynch pin from the top of each castor stem (square or round) and moving the spacers either above or below support tube as required for your selected cutting height.

**NOTE:** Cutting height starts at 1", with no spacers under the bushing.  
Adjust the height using 3/8" and 1" spacers.

- Be sure all adjustments are set the same.

**Spacers (3/8" & 1")**

**Bushing**



## **GREASE COMPATIBILITY**

### **What Grease Is:**

- Grease is essentially 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.
- Many of the thickeners will work for similar situations, but when mixing greases with different thickeners, one must review compatibility. Grease incompatibility will actually decrease the lubrication ability of the grease, and cause premature part failure.
- There may be other additives in the grease that impart special properties. These properties may be “high temperature”, “extreme pressure”, etc.

### **What We Use:**

- Our bearing supplier uses Shell Alvania 2
- Progressive uses Texaco Multifak EP 2
- EP means extreme pressure
- Both greases have:
  - A mineral oil base
  - A lithium thickener
  - The mineral oil has a NLGI Grade 2
  - Both greases are compatible with each other

### **Note:**

- If a thickener other than lithium is used, the existing grease will be contaminated and the lubrication properties may be lost.
  - If a synthetic base oil is used rather than a mineral base oil, the grease will again be contaminated and the lubrication properties may be lost
  - Molybdenum Disulfide (Moly) is an additive used in slow moving, extreme load applications. The particles in the “Moly” will actually increase bearing wear in a mower spindle. Our grease does not contain Moly.
  - The blade spindle temperature should never go above 120°F if properly greased; we do not recommend high temperature grease.
- A grease with these features is considered to be a “General Purpose Grease”. Use on all grease point locations on your Progressive Mower.

### **Our Recommendation for Grease Compatibility:**

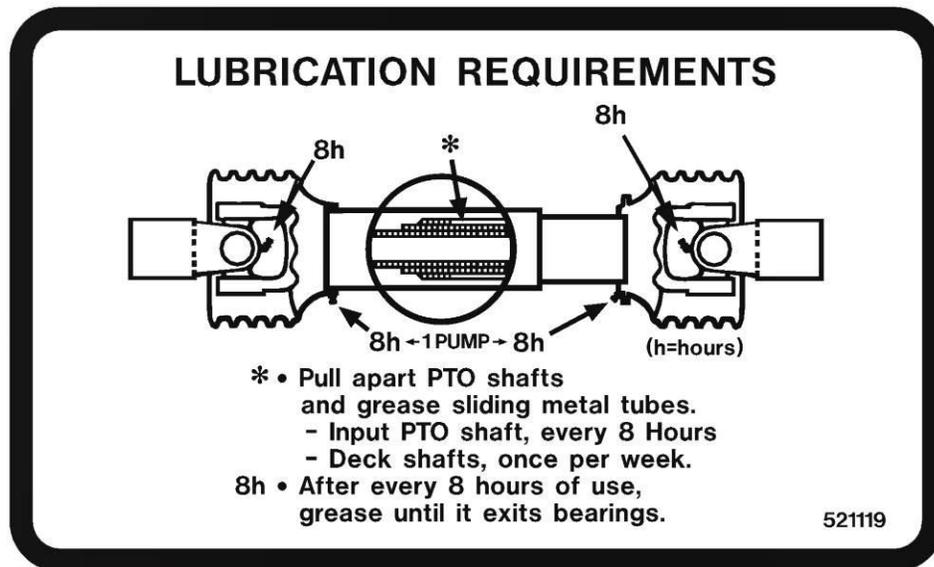
The grease you use for the blade spindle assemblies must have these properties:

- NLGI grade 2
- Lithium thickener (NOT LITHIUM COMPLEX OR LITHIUM 12-HYDROXY)
- 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
- Check the properties of the grease you wish to use with your supplier prior to use.

## 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.

<b>DECKS</b>	<b>P.T.O. SHAFTS</b>	<b>FRAME</b>
<ul style="list-style-type: none"> <li>• Spindles* (See Manual)</li> <li>• 3 Pivots per Wing</li> </ul> <b>Deck*</b> <ul style="list-style-type: none"> <li>• 2 Pivots on Rear Deck*</li> <li>• Castor Wheel &amp; Swivels*</li> </ul> *As Required	<ul style="list-style-type: none"> <li>• Main Input*(See Below)</li> <li>• Deck Drive, 4 Locations per Shaft*</li> <li>• Pull Apart Sliding Tubes once per week and lubricate</li> </ul> *As Required	<ul style="list-style-type: none"> <li>• 8 Pivot Locations*</li> <li>• 2 Wheels*</li> </ul> *As Required
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p><b>CHECK FOR PROPER OIL LEVEL IN GEARBOXES DAILY</b></p> <p><b>GREASING SCHEDULE &amp; LOCATION</b></p> </div>		



## BLADE SPINDLE GREASING:

The top bearing on all spindle assemblies has a shield only. This allows grease to exit and relieves any pressure build up inside spindle housing, when greasing. Greasing of blade spindles should continue until grease can be seen exiting between the top bearing and the bottom of hub on pulley. 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 operator, depending on working conditions in your particular area.

## **GEARBOX OIL LEVELS**

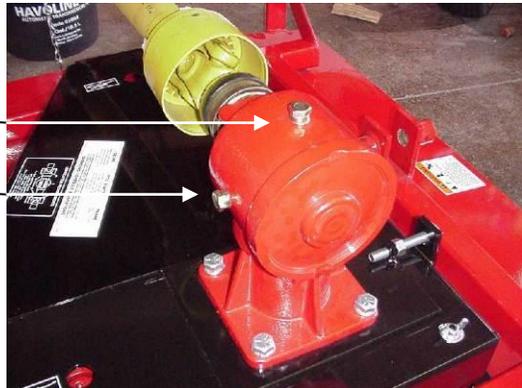
**IMPORTANT! DO NOT OVERFILL! MOWER MUST BE LEVEL WHEN CHECKING GEARBOX OIL LEVEL**

### **DECK GEARBOXES:**

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

**Filler Plug**

**Level Plug**



### **MAIN GEAR BOX:**

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



## MAINTENANCE

### **WARNING!**

Turn tractor engine off before performing any maintenance.

### **CAUTION!**

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

### **WARNING!**

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

## BLADE SERVICING

### **WARNING!**

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

### **CAUTION!**

Do not handle mower blades with bare hands. Careless or improper handling may result in serious injury.

Inspect blades before each use to determine that they are mounted tightly and are in good condition. Replace any blade that is bent, excessively nicked, worn or has any other damage. Small nicks can be ground out when sharpening.

### **WARNING!**

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

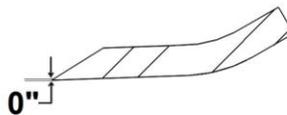
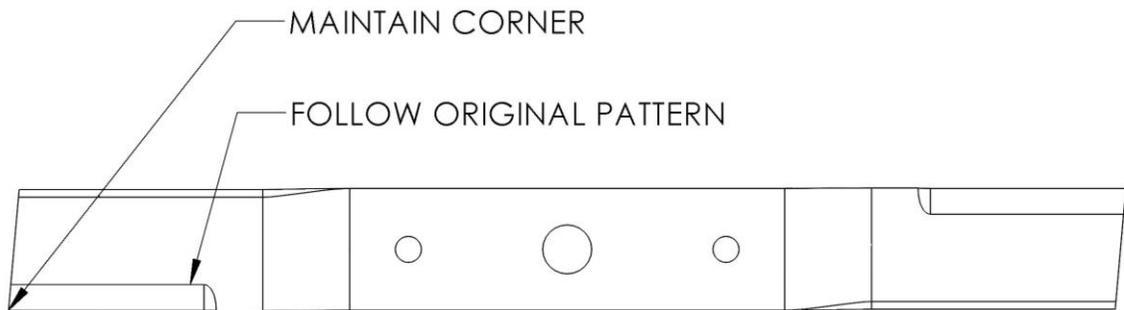
## **BLADE REMOVAL AND INSTALLATION**

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

## **BLADE SHARPENING**

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

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



## **BLADE SHARPENING**

## **SPINDLE INSPECTION**

- Spindles are equipped with two roller ball bearings. Adjustment is set by tightening the 1” left hand nut to 60 ft-lbs. torque for proper setting.
- Periodically inspect blade spindles by grasping blade, and moving from side to side. If any free play is noted, replace or repair.

## **SPINDLE ASSEMBLY REMOVAL**

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

## **SPINDLE ASSEMBLY INSTALLATION**

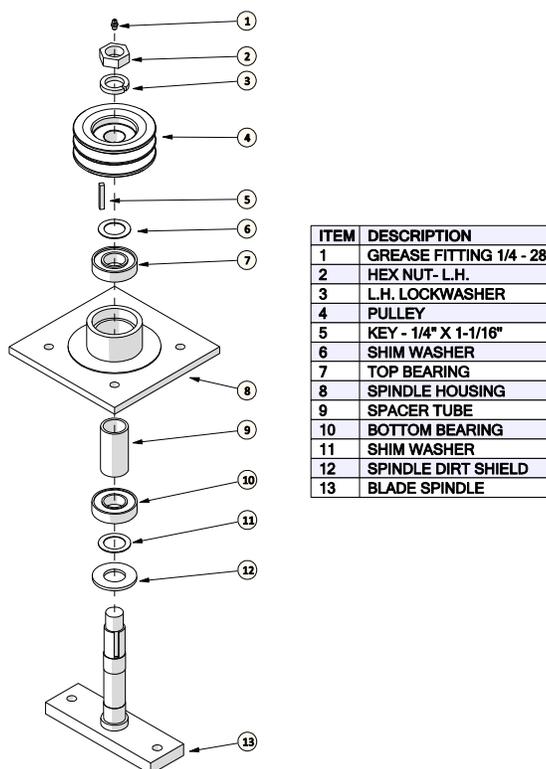
Reverse above procedure. Be sure spindle mounting area of deck is clean of any foreign material before attaching spindle assembly.

## **SPINDLE REPAIR**

- Spindle repair requires special skills and tools. If your shop is not properly equipped or your mechanics are not properly trained in this type of repair, you may be time and money ahead to use a new spindle assembly.
- Remove pulley from spindle assembly. Place assembly in press and force spindle down through housing. Once pressed apart, replace bearings, as removal will have damaged bearings internally.

## ASSEMBLY OF SPINDLE

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



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

Bearing with seal and shield combination will be pressed into the blade side of the hub first with the seal side facing out. Next, set spindle on press bed, install dirt shield and shim first (as per diagram) set hub, bearing end down, onto spindle. You must use a tube (Note: both ends must be square) which will slide over spindle and press on inner race of bearing, until seated against shim.

Insert bearing spacer tube with hole end up. Set remaining bearing with shield side up, open side on first, onto spindle. Press on inner race (this bearing will be a loose fit in the hub so it will seat itself properly).

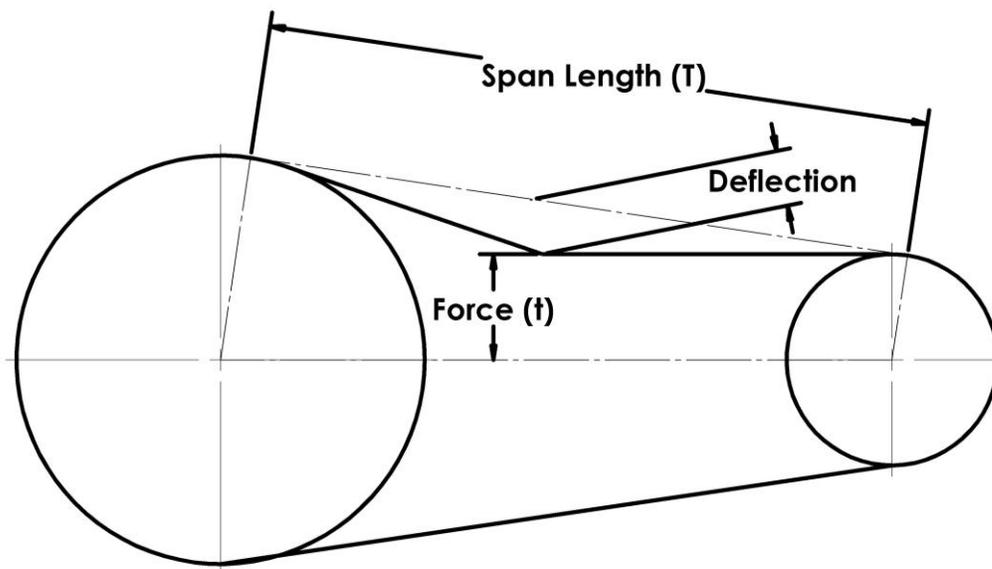
When all parts have been installed on spindle, torque left hand nut to 60 ft-lbs. and then tighten set screws in pulley. Once the assembly is complete, fill with quality grease until it can be seen exiting the top bearing. Rotate the housing six revolutions by hand so the bearings will have the grease worked into them, and at the same time check for free movement. The assembly is now ready for installation into the mower deck.

## **“V” BELT ADJUSTMENT**

- Begin by loosening 4 bolts at the base of the gearbox. Adjusting long threaded bolt slides the gearbox back, tightening belt. After proper tension is achieved, tighten 4 bolts at base of gearbox. You may have to place a ½” nut under the head of the long threaded bolt to increase your adjustment length.
- When changing belts, removal of grease fitting from the top of the center spindle will make installation easier. Be sure belts run in proper groove.

## **“V” BELT TENSION**

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



### **CHECKING BELT TENSION**

- At the mid-point of the span, apply a deflection force with a spring scale in the direction perpendicular to the span until the belt is deflected the 3/8”.
- The recommended force to deflect the belt is a minimum of 4.9 lbs. to a maximum of 7.3 lbs.
- The first 24 to 48 hours of operation is the belt “run in” period. To ensure satisfactory belt performance, belt tension should be checked during this time period.

## **HYDRAULICS:**

- The hydraulic system on your Progressive mower is a simple cylinder system used to raise and lower the cutting decks into position. Each cylinder contains a .035 diameter restrictor orifice, which is located on the rod end to slow the speed of travel.



Restrictor Orifice

- When reconnecting the quick disconnects to the tractor, be sure that both ends are clean. Dirt in the hydraulic system can block the orifice in the line throttle valve or even score the cylinder tubes.
- Hydraulic fluid escaping under pressure has enough force to penetrate the skin. 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.
- If crimp-on hose ends are ever changed, be sure they are compatible with the hose, to provide the proper crimping pressure.

**TROUBLE SHOOTING:**

<b>PROBLEM</b>	<b>CAUSE</b>	<b>REMEDY</b>
Belt slippage	Lack of tension oily drive conditions	Increase tension Clean up drive
Rapid belt wear	Belt slippage belt not in proper groove	Increase tension Place in proper groove
Belt squeal	Belt slippage	Increase tension
Over-heated bearings	Belt slippage excessive drive tension	Increase Tension Tension drive properly
Wing deck, corner support bent	Insufficient spring tension	Increase Tension by adjusting eye bolt
Wing locks hard to disengage	Cylinder not pulling wing up all the way	Adjust clevis on end of cylinder
Mower deck will not lower	Orifice in line throttle valve plugged	Remove line throttle valve, Remove obstruction from orifice and reassemble
Vibration on turning.	Draw bar length incorrect	Adjust drawbar length To specification
Input shaft does not collapse easily on turning.	Lack of grease at intermediate location of drive shaft	Remove driveshaft and pull apart. Grease splines. Grease every 8 hours.
Premature spindle bearing failure.	Lack of lubrication or grease is contaminated	See grease information and ensure grease being used is compatible. Grease per instructions



# TD65-2 & TD65 ROTARY FINISHING MOWER

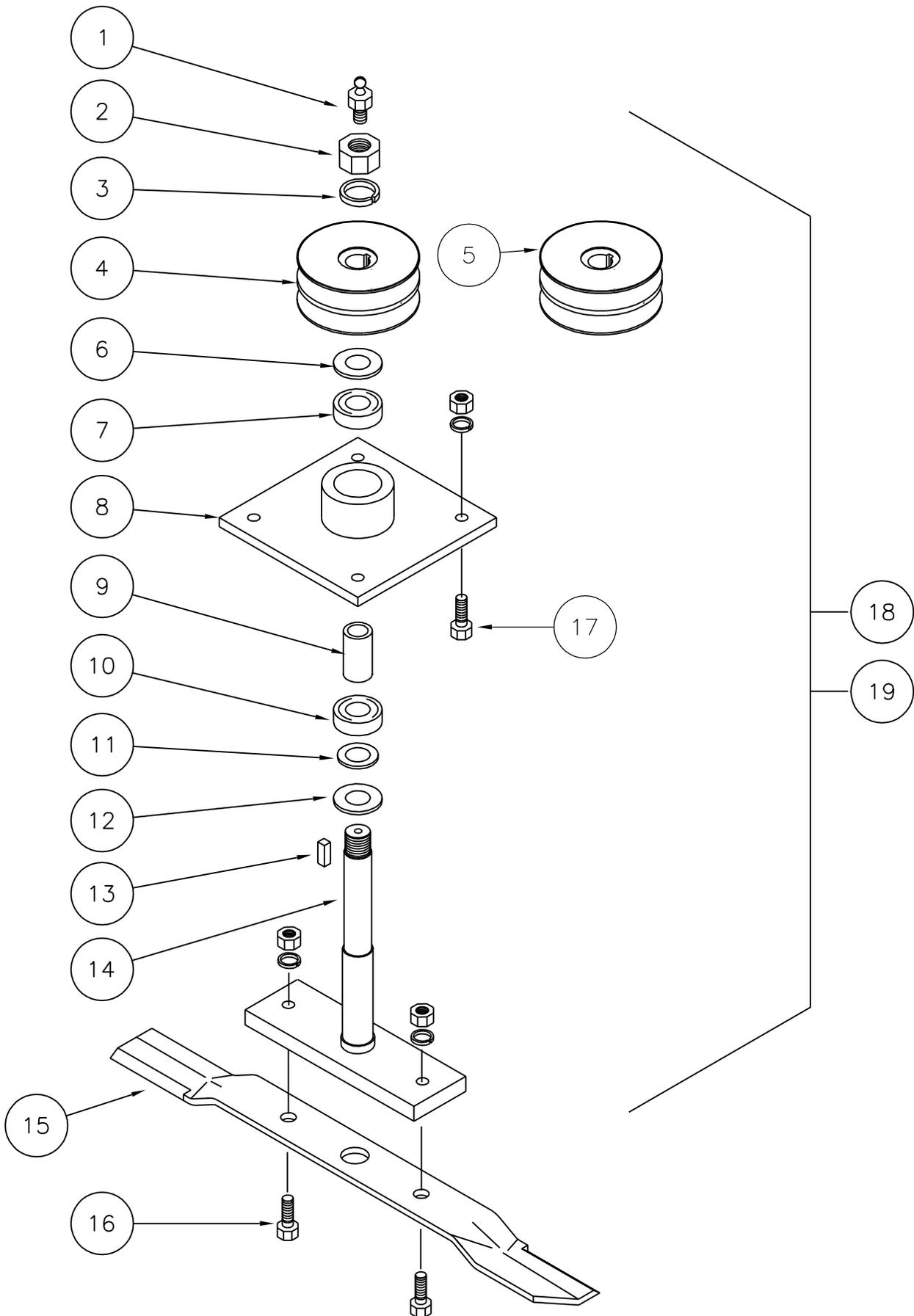
## PARTS MANUAL

### TABLE OF CONTENTS

ITEM	DESCRIPTION	PAGE
1	SPINDLE ASSEMBLY -----	2
2	MOWER WING DECKS TD65-2 -----	4
3	MOWER WING DECKS TD65 -----	6
4	REAR DECK ASSEMBLY -----	8
5	MAIN FRAME ASSEMBLY -----	10
6	WING DECK LIFT -----	12
7	HYDRAULIC COMPONENT ASSEMBLY -----	14
8	DRIVE COMPONENT ASSEMBLY -----	16
9	WHEEL ASSEMBLIES -----	18
10	DECK GEARBOX ASSEMBLY -----	20
11	4-WAY GEARBOX ASSEMBLY -----	22
12	DECK PTO ASSEMBLY -----	24
13	INTERMEDIATE PTO ASSEMBLY A & C MODELS-----	26
14	INPUT PTO ASSEMBLY A & C MODELS-----	28
15	INTERMEDIATE PTO ASSEMBLY B & D MODELS-----	30
16	INPUT PTO ASSEMBLY B MODEL-----	31
17	INPUT PTO ASSEMBLY D MODELS-----	33



# BLADE SPINDLE ASSEMBLY TD 65 & TD 65-2



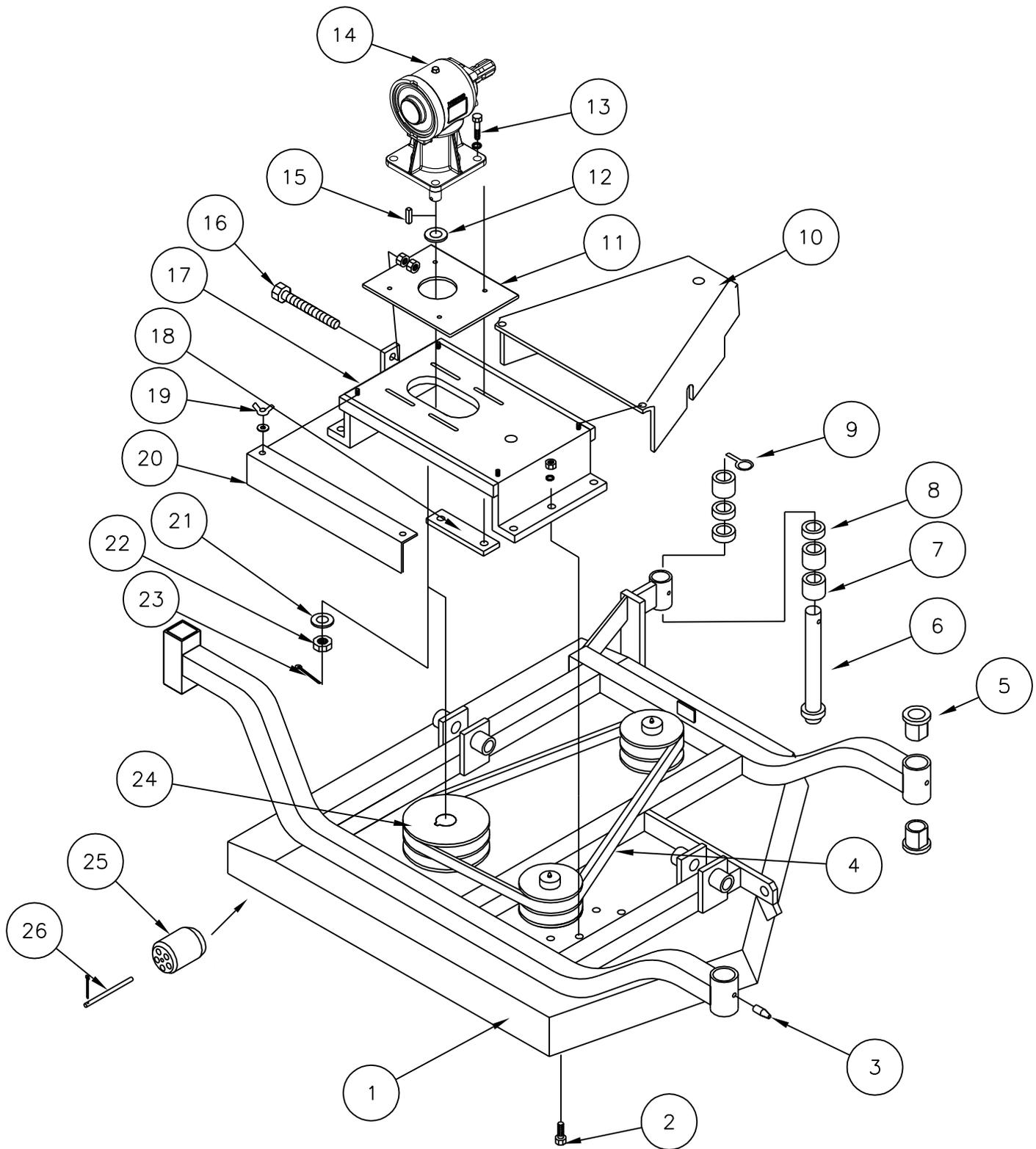
# BLADE SPINDLE - MODEL TD65

Rev. 2, JUNE 09

ITEM	PART #	DESCRIPTION	15.5' Serial No.	QTY.	12' Serial No.	QTY.
1	O.L.	1/4 - 28 GREASE FITTING		9		7
2	521003	LEFT HAND NUT		9		7
3	521002	LEFT HAND LOCK WASHER (3PC/KIT)		3 KITS		3 KITS
4	521773	2HB 4.4 X 1 1/8" PULLEY (RED) (A,B,C MODELS)	9365276 & Above	9	9365-2044 & Above	7
	521300	2HB 4.4 X 1 1/8" PULLEY (BLACK)	9165101 to 9365275	9	9265-2002 to 9365-2043	7
5	521790	5.95" OD X 1-1/8" HUB PULLEY (D MODELS)		9		7
6	521301	1" SHIM WASHER (9PC/KIT)		1 KIT		1 KIT
7	521302	TOP BEARING, STEEL SHIELD UP 6206ZC3		9		7
8	521700	SPINDLE HOUSING (RED)	9165176 & Above	9		7
	521303	SPINDLE HOUSING (BLACK) N/A	9165101 to 9165175	N/A		N/A
9	521304	BEARING SPACER TUBE		9		7
10	521701	BOTTOM BRG, STEEL SHIELD UP 6206LBZC3/2AS		9		7
11	521305	1" SHIM WASHER (9PC/KIT)		1 KIT		1 KIT
12	521306	DIRT SHIELD (3PC/KIT)		3 KITS		3 KITS
13	O.L.	1/4" SQ. X 1 11/16" KEY		9		7
14	521307	BLADE SPINDLE		9		7
15		MOWER BLADES KITS				
	522603	5/16" X 2 1/2" X 23" - O.E.M.		9/KIT		
	522604	5/16" X 2 1/2" X 23" - O.E.M.				7/KIT
	522606	5/16" X 2 1/2" X 23" - LOW LIFT		9/KIT		
	522607	5/16" X 2 1/2" X 23" - LOW LIFT				7/KIT
	522611	MULCHING BLADE		9/KIT		
	522612	MULCHING BLADE				7/KIT
522506	MULCH HOOP KIT 12' (TD65-2)				1	
522507	MULCH HOOP KIT 15' (TD-65)		1			
16	O.L.	1/2" X 1 3/4" BOLT, LOCKWASHER, NUT		24		20
17	O.L.	7/16" X 1 1/2" BOLT, LOCKWASHER, NUT		36		28
18		4.4" PULLEY				
	521776	COMPLETE SPINDLE ASSEMBLY(A,B,C MODELS)	9365276 & Above	9	9265-2044 & Above	7
	521340	SPINDLE ASSEMBLY LESS PULLEY(ALL MODELS)	9365276 & Above	9	9265-2044 & Above	7
	521702	COMPLETE SPINDLE ASSEMBLY	9365176 to 9365275	9	9265-2002 to 9365-2043	7
521309	COMPLETE SPINDLE ASSEMBLY N/A	9165101 to 9365175	N/A		N/A	
19	521792	5.9" PULLEY COMPLETE SPINDLE ASSEMBLY(D MODELS)		9		7

**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# TD 65-2 WING DECK



**WING DECK - MODEL TD65-2 - 12'**

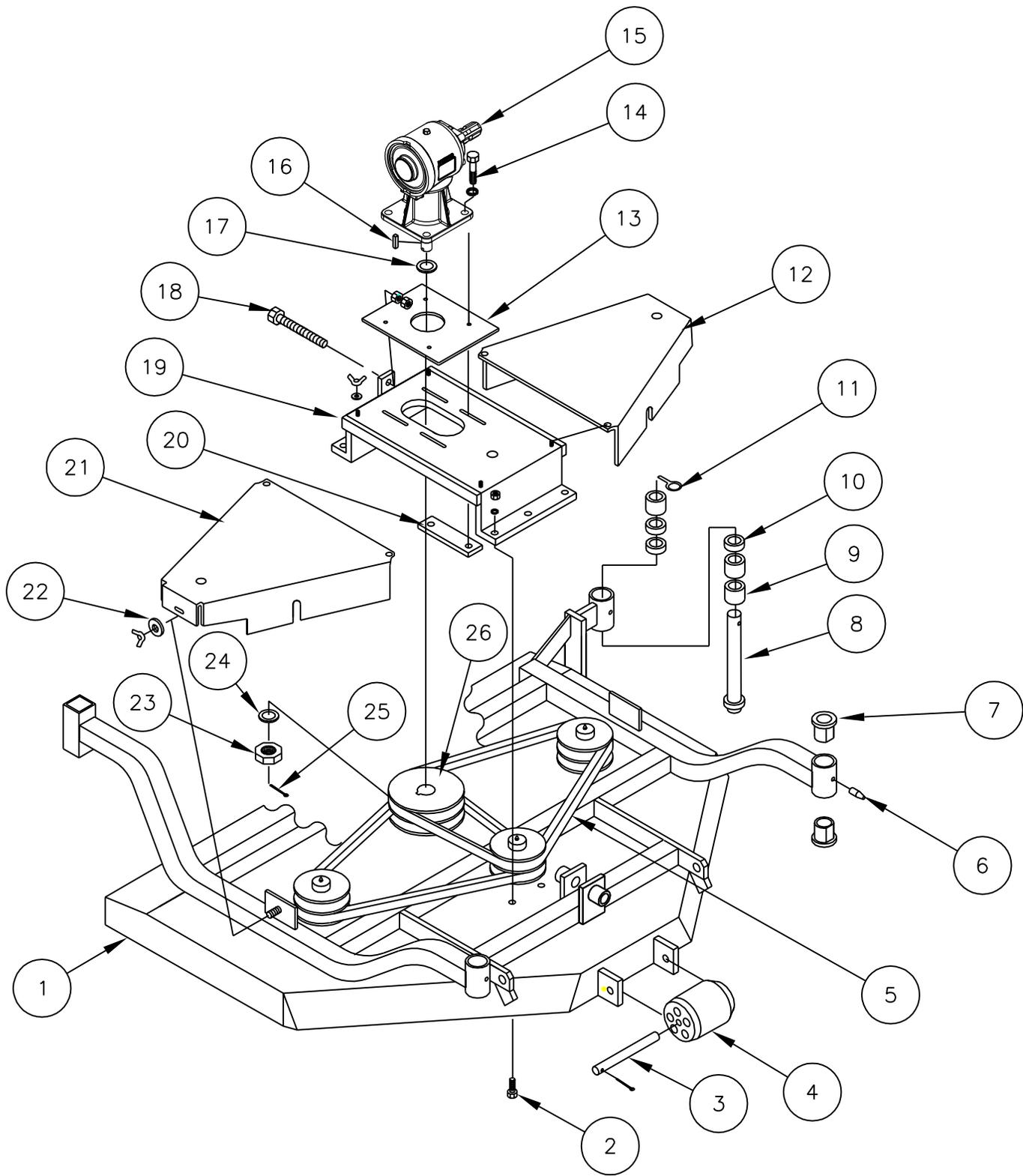
Rev. 2, JUNE 09

ITEM	PART #	DESCRIPTION	12' Serial No.	QTY
1	521707	44" RH MOWER DECK		1
	521706	44" LH MOWER DECK		1
2	O.L.	7/16" X 1" BOLT, LOCK, NUT		18
3	O.L.	1/4" - 28 GREASE FITTING		20
4	521315	B69 BELT (A,B,C MODELS)		4
	212040	B75 BELT (D MODELS ONLY)		4
5	521818	1" GRAPH OIL BUSHING (PRESS IN)		12
	521818.10	1" GRAPH OIL BUSHING 10 PACK		2
6	522312	1" X 9 3/8" CORNER PIN	9765-2342 AND ABOVE	2
	521312	1" X 9" CORNER PIN	9365-2002 TO 9765-2341	2
7	521021	1" X 1" RD SPACER (6 PC/ KIT)		3 KITS
8	521022	3/8" 1" RD SPACER (6 PC/KIT)		3 KITS
9	521038RD	5/16" LYNCH PIN (4PC/ KIT)		2 KITS
10	521704	LH BELT GUARD		2
	521705	RH BELT GUARD		2
11	521013	SLIDE PLATE		3
12	521004	1 1/4" SHIM WASHER (9 PC KIT)		1 KITS
13	O.L.	9/16" X 2" BOLT AND LOCK		12
14	521012	DECK GEARBOX LF141A		3
15	521390	KEY - 1/4" X 1/4" X 1 5/16" (KIT 3 PCS)		3 KITS
16	521020	1/2" X 3 1/2" TAP BOLT (3 PC/KIT)		1 KIT
17	521019	GEARBOX MOUNT		3
18	521018	STIFFENER NUT BRACKET		6
19	O.L.	3/8" WING NUT, FLAT WASHER		16
20	521703	BELT GUARD SMALL		2
21	521129	WASHER - 25 X 44 X 4 (3 PC/KIT)		1 KIT
22	521130	CASTELLATED NUT M24 X 2		3
23	O.L.	3/16" X 2 1/4" COTTERPIN		3
24	521774	MAIN DRIVE PULLEY 8.7" (A,B,C MODELS)	9465-2044 AND ABOVE	3
	212021	MAIN DRIVE PULLEY 11 1/4" (D MODELS)		3
	521035	MAIN DRIVE PULLEY (BLACK)	9365-2002 TO 9365-2043	3
25	209001	ANTI-SCALP ROLLER - 4 1/4"		6
26	521750	ANTI-SCALP PIN 5 7/8" + COTTERPIN		6

**O.L. - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# TD 65 WING DECK

---



**WING DECK - MODEL TD65 - 15.5'**

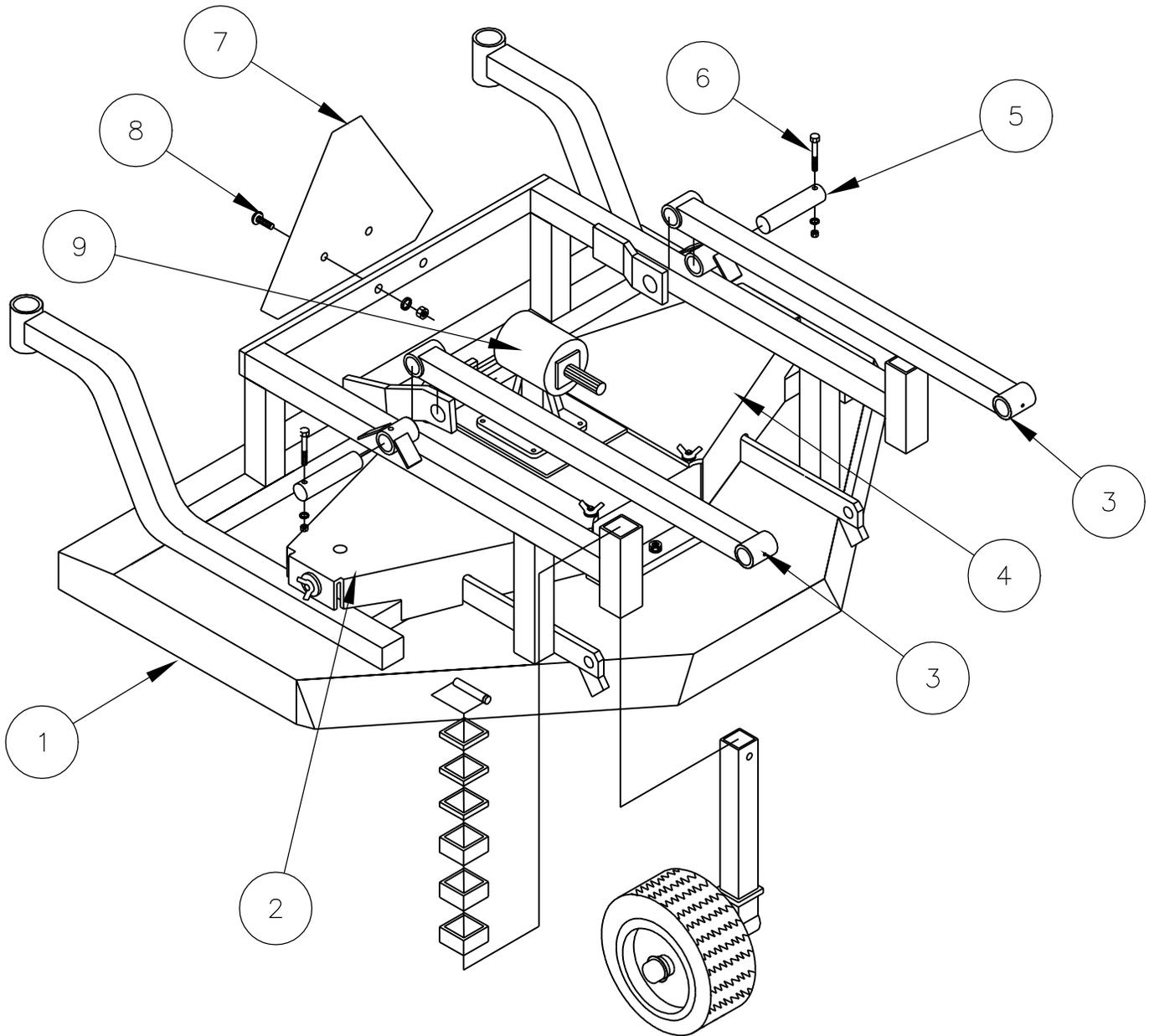
Rev. 2,AUG 07

ITEM	PART #	DESCRIPTION	15.5' Serial No.	QTY
1	521314	65" R. H. MOWER DECK		1
	521313	65" L. H. MOWER DECK		1
2	O.L.	7/16" X 1" BOLT, LOCK, NUT		18
3	521750	5/8" X 5 7/8" PIN & COTTERPIN		2
	521316	5/8" X 7 1/2" PIN & COTTERPIN	9165101 TO 9865587	2
4	209001	4" ANTI-SCALP ROLLER		2
	521026	4" x 6" ANTI-SCALP ROLLER	9165101 TO 9865587	2
5	521315	B69 BELT (A,B,C MODELS)		6
	212040	B75 BELT (D MODEL ONLY)		6
6	O.L.	1/4" - 28 GREASE FITTING		20
7	521818	CASTOR ARM, PIVOT BUSHING		12
	521818.10	1" GRAPH OIL BUSHING 10 PACK		2
8	522312	1" X 9 3/8" CORNER PIN		2
	521312	1" X 9" CORNER PIN		2
9	521021	1" X 1" RD SPACER (6 PC/ KIT)		3 KITS
10	521022	3/8" 1" RD SPACER (6 PC/KIT)		3 KITS
11	521038RD	5/16" LYNCH PIN (4PC/ KIT)		2 KITS
12	521704	LH BELT GUARD		3
13	521013	SLIDE PLATE		3
14	O.L.	9/16" X 2" BOLT AND LOCKWASHER		12
15	521012	DECK GEARBOX LF141A		3
16	521390	KEY - 1/4" X 1/4" X 1 5/16" (KIT 3 PCS)		1 KIT
17	521004	1 1/4" SHIM WASHER (9 PC KIT)		1 KIT
18	521020	1/2" X 3 1/2" TAP BOLT (3 PC/KIT)		1 KIT
19	521019	GEARBOX MOUNT		3
20	521018	STIFFENER NUT BRACKET		6
21	521705	RH BELT GUARD		3
22	O.L.	3/8" WING NUT, FLAT WASHER		18
23	521130	CASTALATED NUT M24 X 2		3
24	521129	WASHER - 25 X 44 X 4 (3 PC/KIT)		1 KIT
25	O.L.	3/8" X 2 1/4" COTTERPIN		3
26	521774	MAIN DRIVE PULLEY (A,B,C MODELS)	9465276 & ABOVE	3
	212021	MAIN DRIVE PULLEY (D MODEL ONLY)		3
	521035	MAIN DRIVE PULLEY	9165101 TO 9465275	3

**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# TD 65 REAR DECK

---



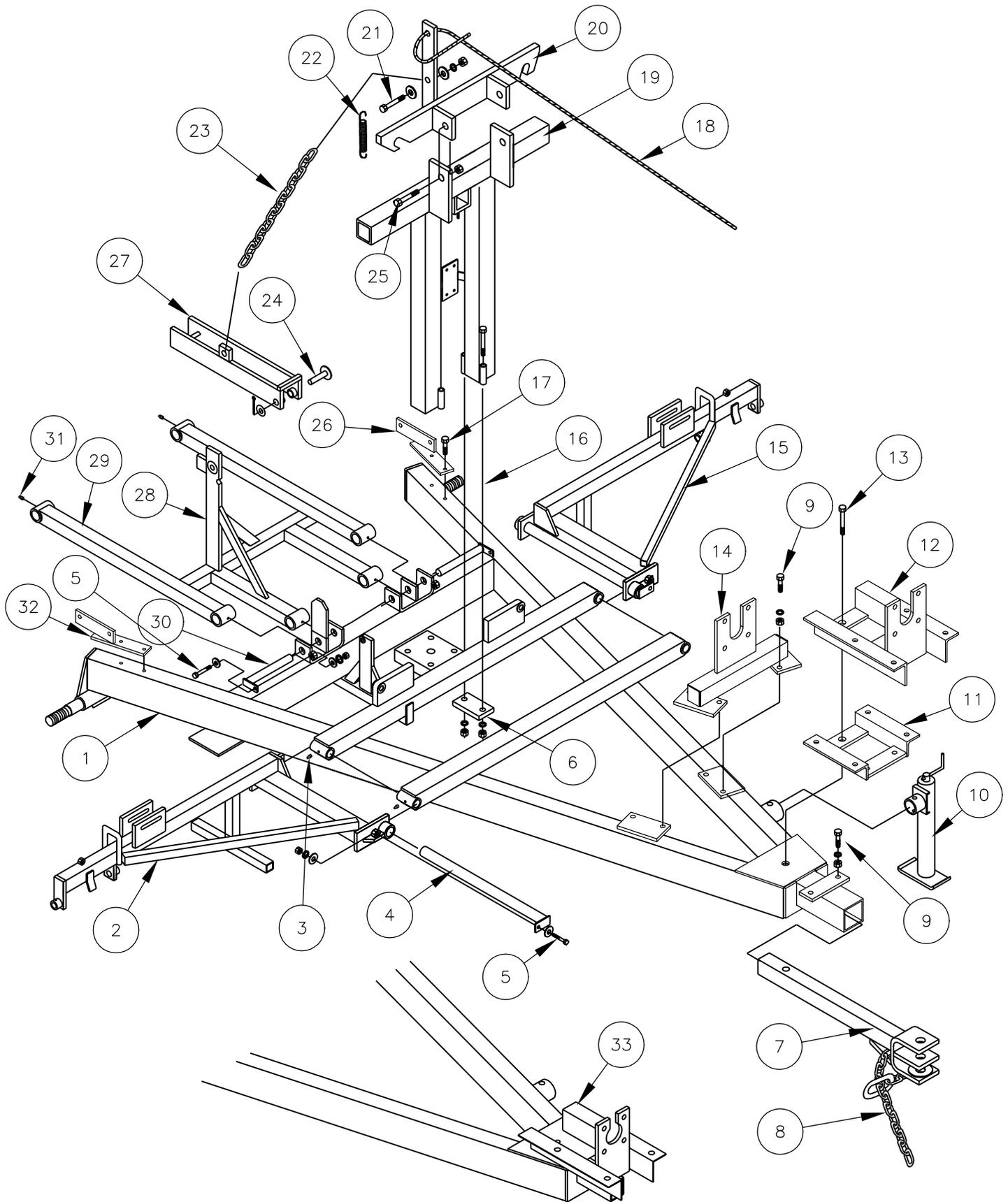
**REAR DECK - 15.5' & 12'**

Rev. 1, OCT 05

ITEM	PART #	DESCRIPTION	15.5' Serial No.	12' Serial No.	QTY
1	521354	REAR MOWER DECK			1
2	521705	R.H. BELT GUARD			3
3	521349	REAR DECK LIFT ARM			2
4	521704	L.H. BELT GUARD			3
5	521337	1" X 6 1/4 DECK LIFT PIN-SHORT	9765545 & ABOVE	9765-2342 & ABOVE	6
	521395	1" X 6 1/2 PIVOT PIN	9465276 TO 9765544	9465-2044 TO 9765-2341	6
	521351	1" X 6 1/2 PIVOT PIN	9165101 TO 9465275	9365-2010 TO 9365-2043	6
6	O.L.	3/8" X 2" BOLT, LOCK, NUT			6
7	521353	S.M.V. SIGN			1
8	O.L.	1/4" X 3/4" BOLT, LOCK, NUT			2
9	521012	DECK GEARBOX LF141A			3

**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# TD 65 MAIN FRAME COMPONENTS



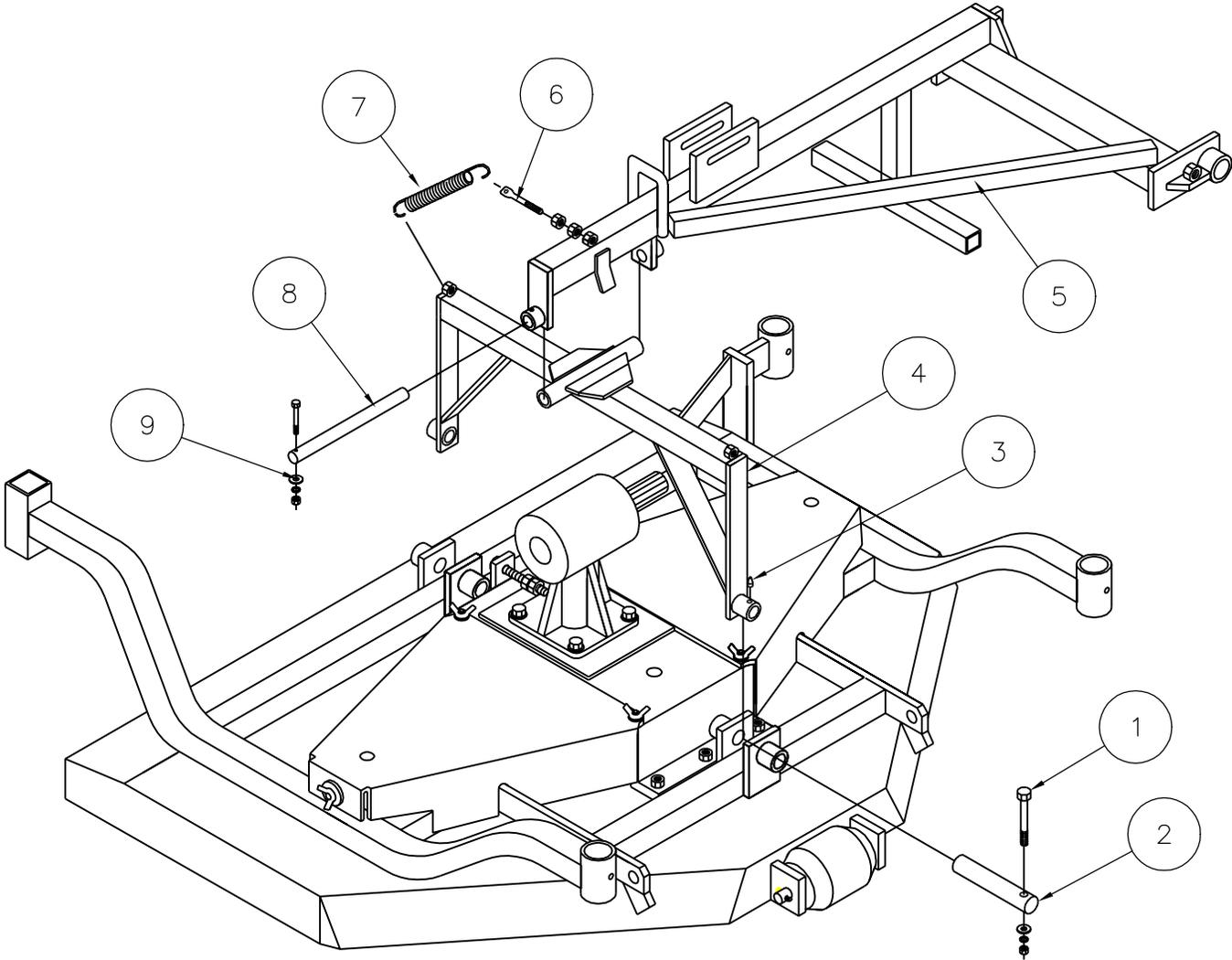
# MAIN FRAME - 15.5' & 12'

Rev. 2, JUNE 09

ITEM	PART #	DESCRIPTION	15.5' Serial No.	12' Serial No.	QTY
1	521870	MAIN FRAME	9651371 & ABOVE	0965-21295 & ABOVE	1
2	521358	RH WING			1
3	O.L.	1/4" - 28 90° GREASE FITTING			4
4	521356	1" X 21" WING PIN			2
5	O.L.	3/8" X 1 1/2" W/ LOCK, NUT, 2 FLAT			4
6	521325	WING LOCK FRAME MT BRKT			2
7	521322	4 POSITION HITCH			1
8	521048	SAFETY CHAIN			1
9	O.L.	3/8" X 1 1/4" W/ LOCK, NUT, FLAT			6
10	521324	IMPLEMENT JACK			1
11	528192	FRONT SHIELD MT C.V (B&D MODELS)			1
12	528196	FRONT SHIELD MT. NON C.V.(A&C MODELS)			1
13	O.L.	3/4" X 5" BOLT, NUT & LOCK			1
14	528190	INTERMEDIATE MOUNT (B&D MODELS)			1
15	521355	LH WING			1
16	O.L.	1/2" X 6" BOLT, LOCK, NUT			4
17	O.L.	3/8" X 1 1/4 BOLT WITH LOCKWASHER			4
18	521331	PULL ROPE 10'			1
19	521329	WING LOCK FRAME			1
20	521330	WING SAFETY LOCK			1
21	O.L.	3/8" X 1 1/4" W/FLATS, NUT, LOCK			2
22	521064	SAFETY SPRING			1
23	521332	PULL CHAIN 23 1/4"			1
24	521081	1" X 5 5/16" PIN - REAR CYLINDER			1
25	O.L.	1/2" X 1 3/4" BOLT, NUT			2
26	528198	FENDER BRACKET L.H.			1
27	521841	REAR DECK SAFETY	9765545 & ABOVE	9765-2342 & ABOVE	1
	521763	REAR DECK SAFETY	9465276 TO 9765544	9465-2044 TO 9765-2341	1
	521348	REAR DECK SAFETY	9165101 TO 9465275	9365-2010 TO 9365-2043	1
28	522301	REAR DECK PICK UP FRAME	9565588 & ABOVE	9865-2423 & ABOVE	1
	521708	REAR DECK PICK UP FRAME	9165101 TO 9865587	9365-2010 TO 9865-2422	1
29	521349	REAR DECK LIFT ARM			2
30	521094	LIFT ARM PIVOT PIN -1" X 9 3/4"			2
31	O.L.	GREASE FITTING - STRAIGHT			20
32	528200	FENDER BRACKET R.H.			1
33	521321	MAIN FRAME	9165101 TO 9651371	9365-2010 TO 0965-21295	1

**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

WING DECK LIFT ASSEMBLY



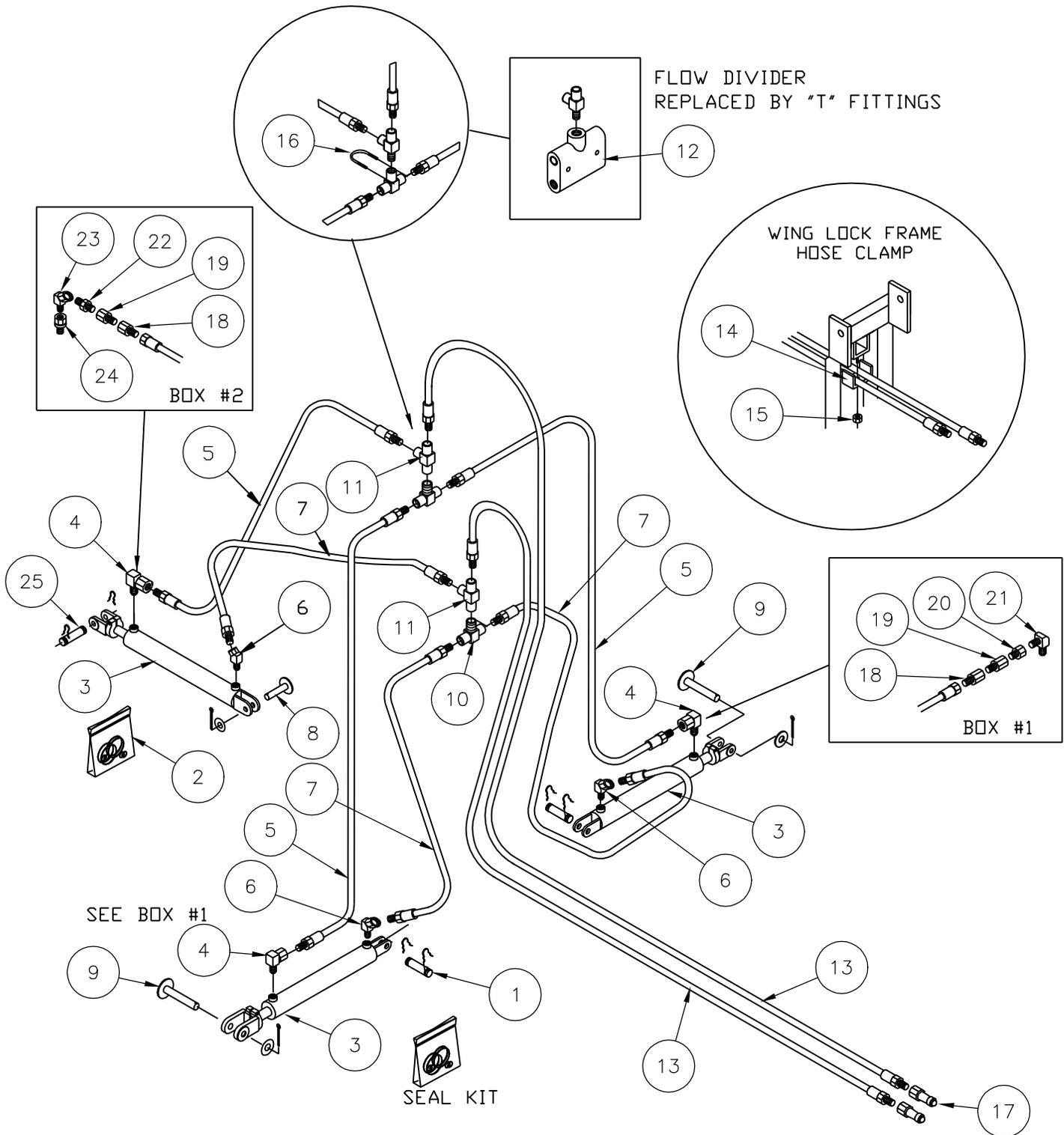
# WING LIFT - 15.5' & 12'

Rev. 1, OCT 05

ITEM	PART #	DESCRIPTION	15.5' Serial No.	12' Serial No.	QTY
1	O.L.	3/8" X 2" BOLT, LOCK, NUT			6
2	521337	1" X 6 1/4 DECK LIFT PIN - SHORT	9765545 & ABOVE	9765-2342 & ABOVE	6
	521395	1" X 6 1/2 PIVOT PIN	9465276 TO 9765544	9465-2044 TO 9765-2341	6
	521351	1" X 6 1/2 PIVOT PIN	9165101 TO 9465275	9365-2010 TO 9365-2043	6
3	O.L.	1/4" - 28 GREASE FITTING			20
4	521710	DECK SWIVEL TD65-2 (12' MOWER)			2
	521357	DECK SWIVEL TD65 (15.5' MOWER)			2
5	521358	R.H. WING			1
	521355	L.H. WING			1
6	521102	1/2" X 3 1/2" SPADE BOLT, 1/2" NUTS			2
7	521431	2" X 10" SPRING			2
8	521338	1 1/4" X 16 3/4" SWIVEL PIN	9465295 & ABOVE	9465-2044 & ABOVE	2
	521097	1 1/4" X 17" SWIVEL PIN	9165101 TO 9465294	9365-2010 TO 9365-2043	2
9	O.L.	3/8" X 2 1/4" BOLT, NUT, LOCK			2

**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# HYDRAULIC COMPONENT ASSEMBLY



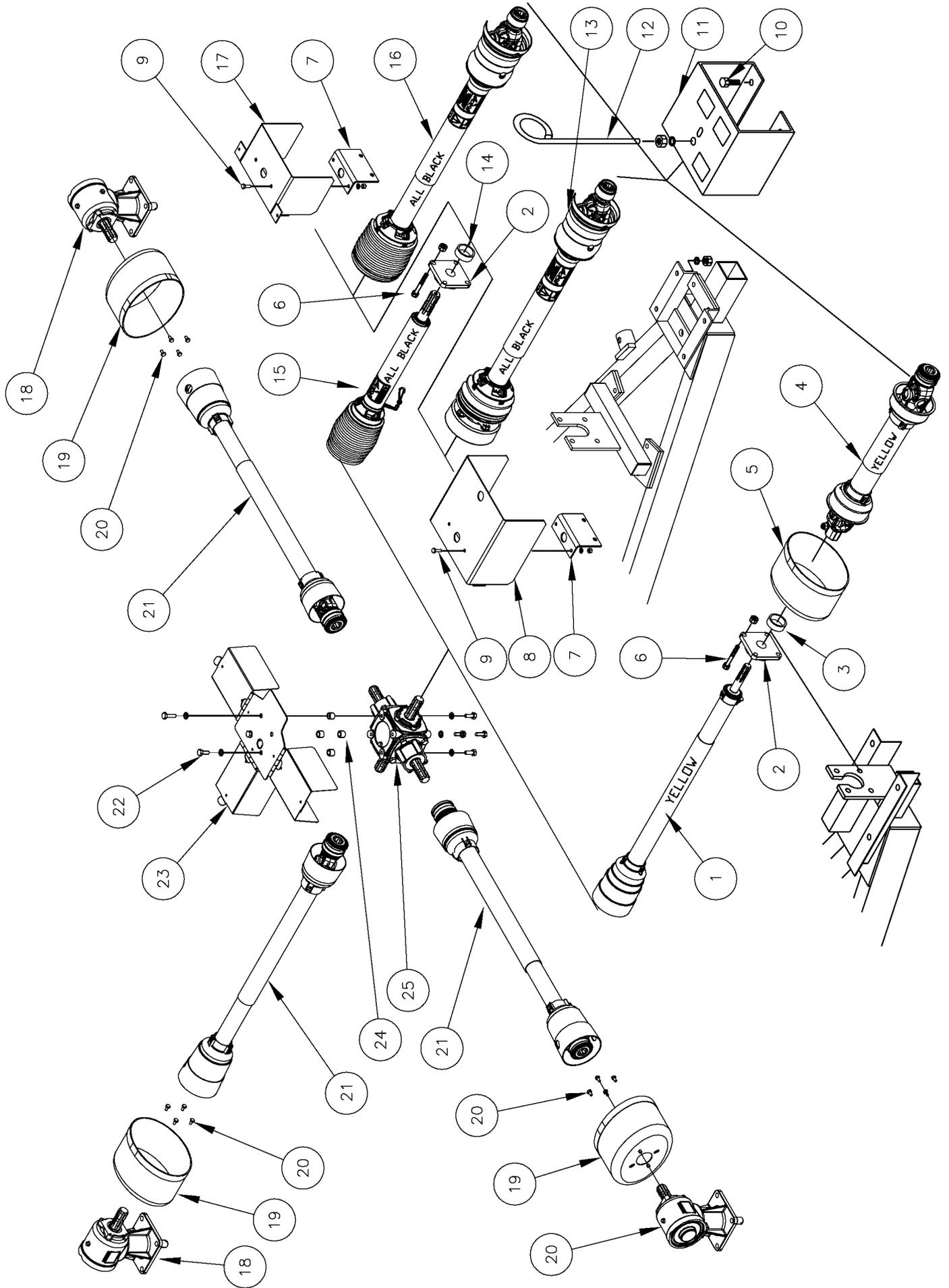
# HYDRAULIC ASSEMBLY - 15.5' & 12'

Rev. 1, OCT 05

ITEM	PART #	DESCRIPTION	15.5' Serial No.	12' Serial No.	QTY
1	521345	1" X 2.938" PIN AND CLIPS			2
2	521814	SEAL KIT FOR 2 1/2" CYLINDER	9865588 & ABOVE	9865-2423 & ABOVE	-
	521477	SEAL KIT FOR 2 1/2" CYLINDER	9165101 TO 9865587	9365-2010 TO 9865-2422	-
3	522300	2 1/2" HYDRAULIC CYLINDER	9865588 & ABOVE	9865-2423 & ABOVE	3
	521333	2 1/2" HYDRAULIC CYLINDER	9165101 TO 9865587	9365-2010 TO 9865-2422	3
4	521336	90° 3/8" RESTRICTOR ( 0.035)	9465276 & ABOVE	9465-2044 & ABOVE	3
	222015	RESTRICTOR KIT (W/ 31" HOSE - EXTRA)	9165101 TO 9465275	9365-2010 TO 9365-2043	2
5	521769	31" HYDRAULIC LINE	9465276 & ABOVE	9465-2044 & ABOVE	3
	521339	26" HYDRAULIC LINE	9165101 TO 9465275	9365-2010 TO 9365-2043	3
6	521063	45 DEGREE SWIVEL STREET ELBOW	9465276 & ABOVE	9465-2044 & ABOVE	3
	521347	45 DEGREE SWIVEL STREET ELBOW	9165101 TO 9465275	9365-2010 TO 9365-2043	3
7	521335	24" HYDRAULIC LINE			3
8	521081	1" X 5 1/4" PIN- REAR CYLINDER			1
9	521103	1" X 4 3/4" PIN - WING CYLINDER			2
10	521416	MALE BRANCH TEE	9465276 & ABOVE	9465-2044 & ABOVE	2
11	521770	3/8" TEE	9465276 & ABOVE	9465-2044 & ABOVE	2
12	521073	FLOW DIVIDER	REPLACED W/ KIT 222016		1
	222016	FLOW DIVIDER KIT	9165101 TO 9465275	9365-2010 TO 9365-2043	1
13	521334	110" HYDRAULIC LINE			2
14	521051	HYDRAULIC HOSE CLAMP			1
15	O.L.	3/8" LOCKNUT			1
16	521071	"U" BOLT, NUTS, AND LOCKS			2
17	222006	HOSE END - 1/2" (2PCS/KIT)			1 KIT
18	521342	1/2" NPT TO JIC ADAPTER	REPLACED WITH 222015		2
19	521077	LINE THROTTLE VALVE	REPLACED WITH 222015		2
20	521343	REDUCING BUSHING	REPLACED WITH 222015		1
21	521344	90 DEG. ELBOW, MALE TO MALE	REPLACED WITH 222015		1
22	521391	3/8" TO 1/2" MALE NIPPLE	REPLACED WITH 222015		1
23	521392	45 DEG STREET ELBOW	REPLACED WITH 222015		1
24	521341	3/8" STRAIGHT SWIVEL ADAPTER	REPLACED WITH 222015		1
25	521350	1" x 3.563" PIN			1
	521067	1" X 6 1/2" PIN (REAR)	9165101 TO 9365175	---	1

**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# DRIVELINE ASSEMBLY



**TD65 & 65-2 - DRIVE SYSTEM**

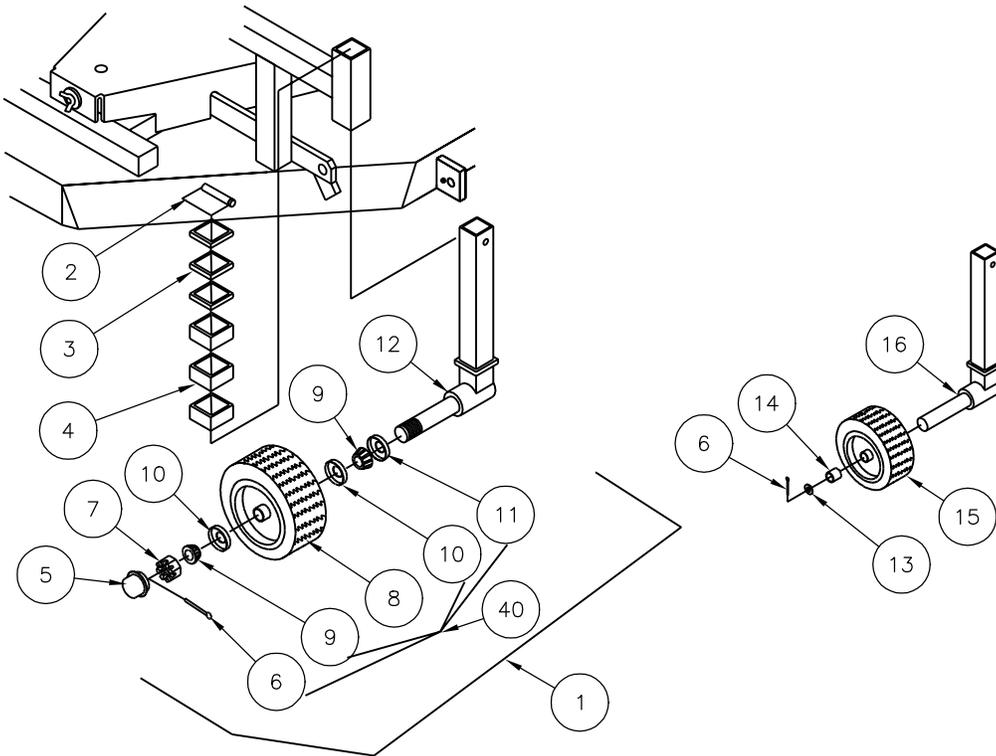
Rev. 2, JUNE 09

ITEM	PART #	DESCRIPTION	15.5' Serial No.	12' Serial No.	QTY
1	521725	INTERMEDIATE PTO SHAFT A & C MODELS	9465276 & ABOVE	9465-2044 & ABOVE	1
	521379	INTERMEDIATE PTO SHAFT REPL W/ 521725	9165101 TO 9465275	9365-2010 TO 9365-2043	1
2	521323	1" 3/8" HOUSED FLANGE BEARING			1
3	521789	PTO SHAFT SPACER - 9/16" A & C MODELS			1
4	521738	INPUT PTO SHAFT A & C MODELS	9465276 & ABOVE	9465-2044 & ABOVE	1
	521386	INPUT PTO SHAFT REPL. W/ 521738	9165101 TO 9465275	9365-2010 TO 9365-2043	1
5	210062	COUNTER CONE INPUT C MODEL			1
6	O.L.	1/2" X 1 3/4" BOLT, LOCK, NUT			4
7	528439	INTERMEDIATE SHIELD BRACKET			1
8	528194	INTERMEDIATE SHIELD FOR CLUTCH D MODELS			1
9		3/8" X 1" HEX BOLT, LOCKWASHER, NUT			2
10	O.L.	1/2" X 1 1/4" BOLT, LOCK, NUT			4
11	522408	HYDRAULIC HOSE SUPPORT AND SHIELD			1
	521711	HYDRAULIC HOSE SUPPORT AND SHIELD	9465276 TO 9865587	9465-2044 TO 9865-2422	1
	521815	SHIELD EXTENSIONS WITH BOLTS	9765545 TO 9865587	9765-2342 TO 9865-2422	2
	521711	HYDRAULIC HOSE SUPPORT	9365176 TO 9465275	9365-2010 TO 9365-2043	1
12	522413	HOSE GUIDE C/W HARDWARE			1
13	210250	INPUT PTO CV & CLUTCH			1
14	526013	PTO SHAFT SPACER - 0.400" B & D MODELS			1
15	210210	INTERMEDIATE PTO-w/OVERRUNNING B & D MODELS			1
16	210230	INPUT PTO C.V. B MODELS			1
17	600430	C.V. INTERMEDIATE SHIELD B MODELS			1
18	521012	DECK GEARBOX LF141A			3
19	210061	COUNTER CONE DECK C & D MODELS ONLY			3
20	O.L.	M8 X 1.25 X 14MM C & D MODELS ONLY			12
21	521718	DECK PTO SHAFT	9465276 & ABOVE	9465-2044 & ABOVE	3
	521389	DECK PTO SHAFT	9165101 TO 9465275	9365-2010 TO 9365-2043	3
22	521764	M12 X 30 8.8 METRIC BOLT, LOCK (8 PC/ KIT)			1 KIT
23	522463	4-WAY GEARBOX COVER	06651228 & ABOVE	0665-21167 & ABOVE	1
	521195	GEARBOX COVER	9165101 TO 06651227	9365-2010 TO 0665-21166	1
24	521197	GEARBOX COVER SPACER			4
25	521497	4-WAY GEARBOX	9765545 & ABOVE	9765-2342 & ABOVE	1
	521082	4-WAY GEARBOX	9165101 TO 9765544	9365-2010 TO 9765-2341	1

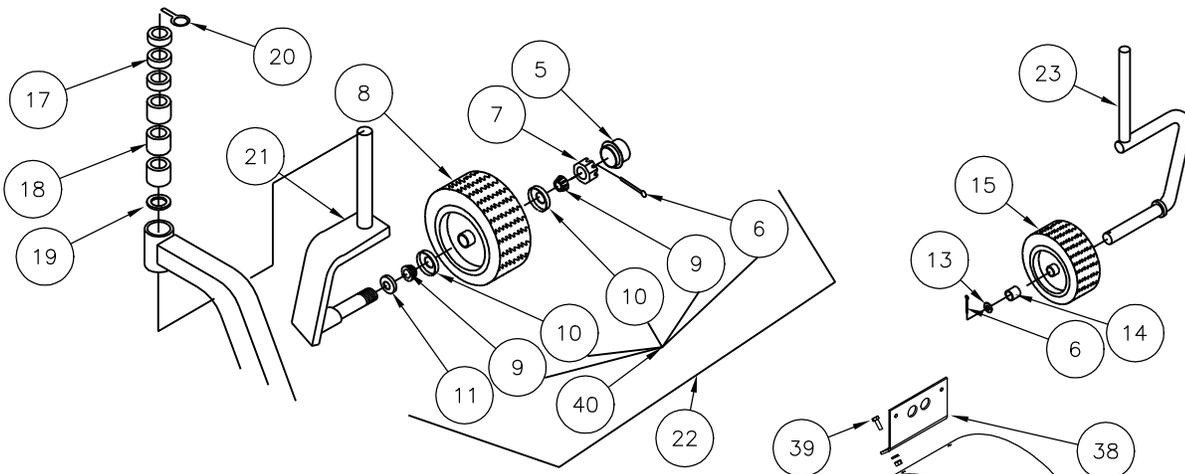
**OL - Obtain Locally AR - As Required QTY - Total Number Required for Complete Machine**

# WHEEL ASSEMBLIES

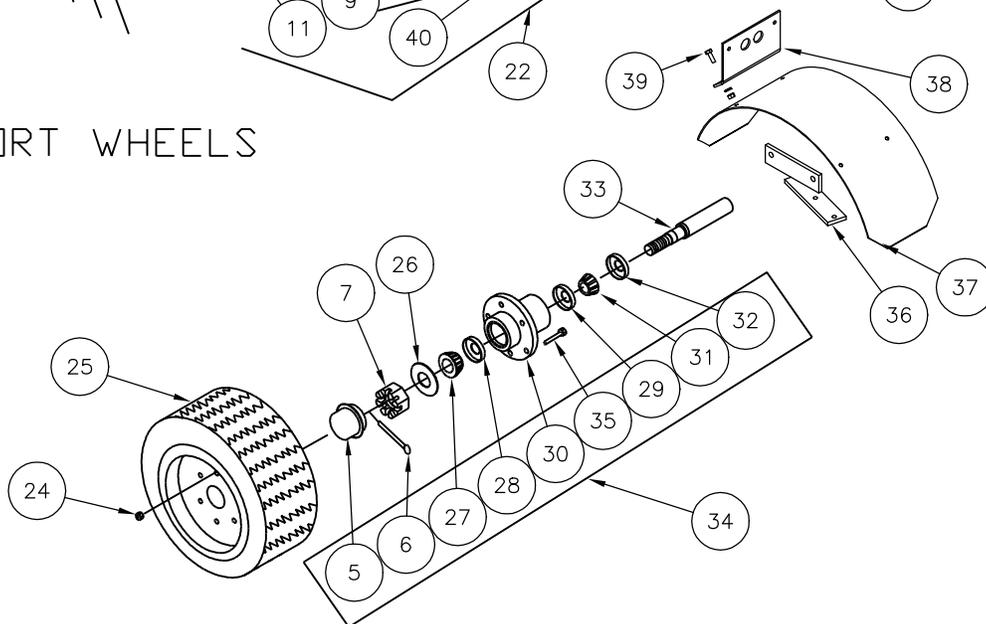
## SQUARE GAUGE WHEELS



## ROUND CASTOR WHEELS



## TRANSPORT WHEELS

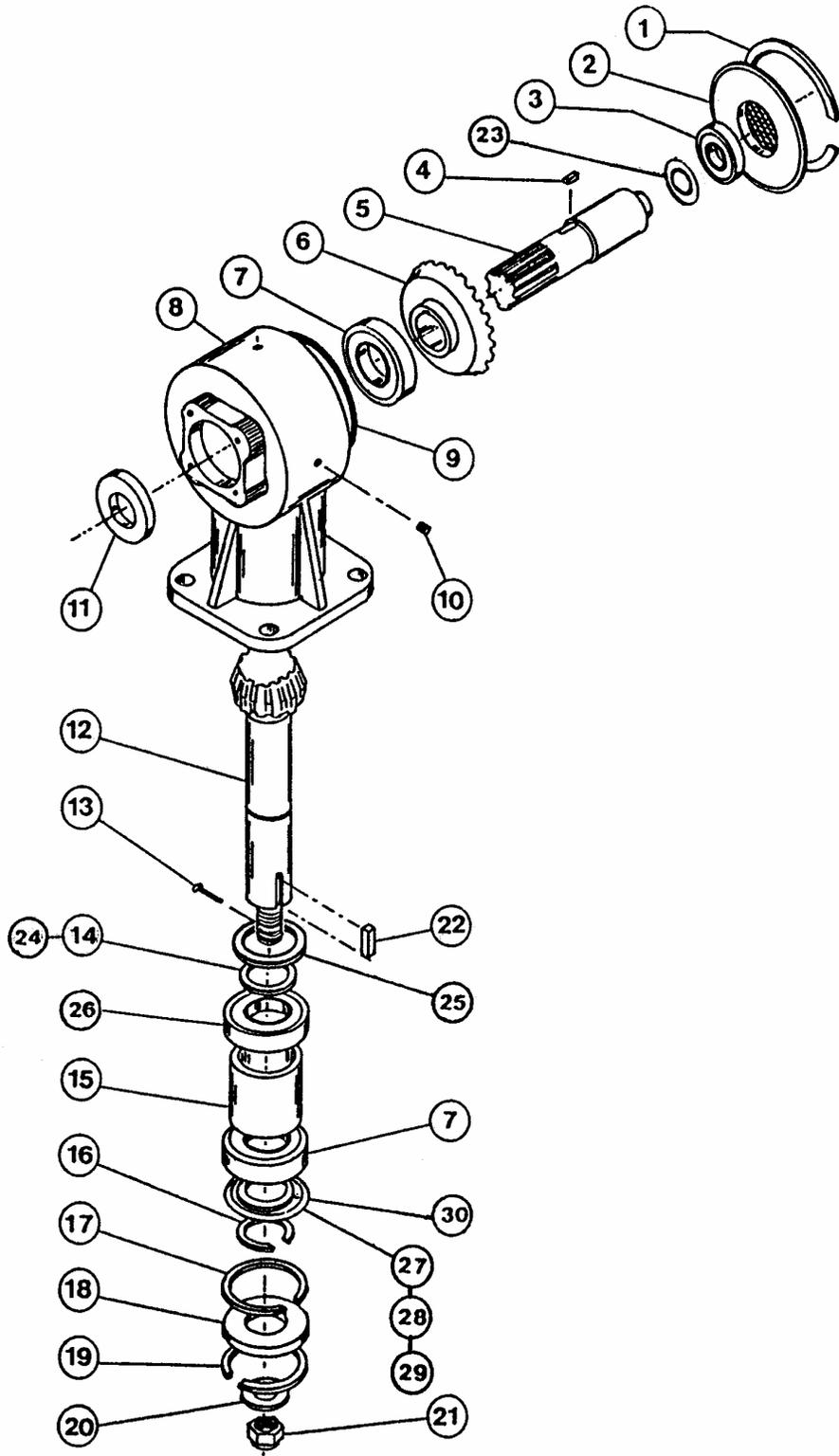


**TD65 & 65-2 - WHEEL ASSEMBLY**

Rev. 2, JUNE 09

ITEM	PART #	DESCRIPTION	15.5' Serial No.	12' Serial No.	QTY
1	522320	SQUARE CASTOR COMP. +PARTS	9765545 & ABOVE	9765-2342 & ABOVE	4
2	521038	CLIP PIN - 2" SQUARE (5 PCS/KIT)	9765545 & ABOVE	9765-2342 & ABOVE	1 KIT
3	521040	SPACER -SQ 3/8 X 2 1/2 (6 PCS/KIT)	9765545 & ABOVE	9765-2342 & ABOVE	2 KITS
4	521039	SPACER - SQ 1" X 2 1/2 (6 PCS/KIT)	9765545 & ABOVE	9765-2342 & ABOVE	2 KITS
5	521748	HUB CAP	9165101 & ABOVE	9265-2002 & ABOVE	10
6	521752	COTTERPIN (6 PCS/KIT)	9165101 & ABOVE	9265-2002 & ABOVE	2 KITS
7	521747	HEX NUT - CASTELLATED (2 PCS/KIT)	9165101 & ABOVE	9265-2002 & ABOVE	6 KITS
8	522317	TIRE/WHEEL.15/6X6 PRO-TURF	9765545 & ABOVE	9765-2342 & ABOVE	10
	522315	RIM - 15X6.00 - TAPERED R BRG	9765545 & ABOVE	9765-2342 & ABOVE	10
	522316	TIRE - 15X6.00 KENDA/ PRO-TURF	9765545 & ABOVE	9765-2342 & ABOVE	10
	521848	TIRE - 15 X 6.00 KENDA	9465276 to 9765544	9465-2044 TO 9765-2341	
	521827	TIRE - 15 X 6.00 DURO	9465276 to 9765544	9465-2044 TO 9765-2341	
9	521494	BEARING - TAPER ROLLER	9765545 & ABOVE	9765-2342 & ABOVE	20
10	521744	BEARING RACE - OUTER	9765545 & ABOVE	9765-2342 & ABOVE	20
11	521493	GREASE SEAL	9765545 & ABOVE	9765-2342 & ABOVE	10
12	522314	SQUARE CASTOR (TAP. R. BRG) C/W ITEM 7	9765545 & ABOVE	9765-2342 & ABOVE	4
13	521320	SPACER WASHER - 1" (10 PCS/KIT)	9165101 - 9765544	9265-2002 TO 9765-2341	2 KITS
14	521787	WHEEL BUSHINGS - GREY 1.375 OD	9465276 to 9765544	9265-2044 TO 9765-2341	10
	521319	WHEEL BUSHING KIT	9165101 to 9465275	9265-2044 TO 9765-2341	20
	501319	BEARING	9165101 to 9465275	9265-2002 TO 9365-2043	20
15	521786	WHEEL ASSY 15 X 6.00 - KENDA	9465276 to 9765544	9465-2044 TO 9765-2341	10
	521788	WHEEL ASSY 15 X 6.00 - DURO	9465276 to 9765544	9465-2044 TO 9765-2341	10
	521772	RIM - FOR TD 1786 & TD 1788	9165101 to 9765544	9265-2044 TO 9765-2341	
	521318	TIRE AND RIM REPL. BY 521786	9165101 to 9465275	9265-2002 TO 9365-2043	10
16	521352	CASTOR - SQUARE	9165101 - 9765544	9265-2002 TO 9765-2341	4
17	521022	SPACER - RD 3/8" X 1" (6 PCS/KIT)	9765545 & ABOVE	9765-2342 & ABOVE	3 KITS
18	521021	SPACER - RD 1" X 1" (6 PCS/KIT)	9765545 & ABOVE	9765-2342 & ABOVE	3 KITS
19	521320	SPACER WASHER KIT (10PCS/KIT)			1 KIT
20	521038RD	LYNCH PIN - 5/16" (4 PCS/KIT)	9765545 & ABOVE	9765-2342 & ABOVE	2 KITS
21	522313	SWIVEL CASTOR (TAP. R BRG) C/W ITEM 7	9765545 & ABOVE	9765-2342 & ABOVE	6
22	522319	SWIVEL CASTOR RD COMPLETE	9765545 & ABOVE	9765-2342 & ABOVE	6
23	521317	CASTOR - 1" RD SWIVEL	9165101 to 9765544	9265-2002 TO 9765-2341	6
	521833	CASTOR - 1"RD SWIVEL O/S (BLACK)	Early Machines		6
24	521327	WHEEL NUT (5 PCS/KIT)	9165101 & ABOVE	9265-2002 & ABOVE	2 KITS
25	522305	TIRE & RIM -ASSY CARLISLE TIRE	9165101 & ABOVE	9265-2002 & ABOVE	2
	522306	TIRE - 18X9.5 TURF FOR 522305	9165101 & ABOVE	9265-2002 & ABOVE	2
	521398	RIM - FOR 521028 & 521326	9165101 & ABOVE	9265-2002 & ABOVE	2
26	521746	WASHER (2 PCS/KIT)	9165101 & ABOVE	9265-2002 & ABOVE	1 KIT
27	521745	BEARING - TAPER ROLLER	9165101 & ABOVE	9265-2002 & ABOVE	2
28	521744	BEARING RACE - OUTER	9165101 & ABOVE	9265-2002 & ABOVE	2
29	521743	BEARING RACE - INNER	9165101 & ABOVE	9265-2002 & ABOVE	2
30	521754	HUB #3500 - TRANSPORT	9165101 & ABOVE	9265-2002 & ABOVE	2
31	521742	BEARING - TAPER ROLLER	9165101 & ABOVE	9265-2002 & ABOVE	2
32	521741	GREASE SEAL	9165101 & ABOVE	9265-2002 & ABOVE	2
33	521807	SPINDLE - TD 65 WELD-ON FRAME COMES WITH ITEMS 26 (1), 7 (1)	9165101 & ABOVE	9265-2002 & ABOVE	2
34	521328	HUB ASSY 3500 LB. - 5 BOLT	9165101 & ABOVE	9265-2002 & ABOVE	2
35	521755	PRESS IN WHEEL STUD (5PCS/KIT)			-
36	528200	FENDER BRACKET R.H.			1
	528198	FENDER BRACKET L.H.			1
37	524246	FENDER - TRANSPORT TIRE			2
38	528447	LIGHT BRACKET			2
39	O.L.	3/8" x 1" BOLT, LOCK & NUT			4
40	522420	BEARING KIT (ITEMS 9 (2), 10 (2), 11(1), 6 (1) )			8

TD65 & 65-2 – DECK GEARBOX ASSEMBLY



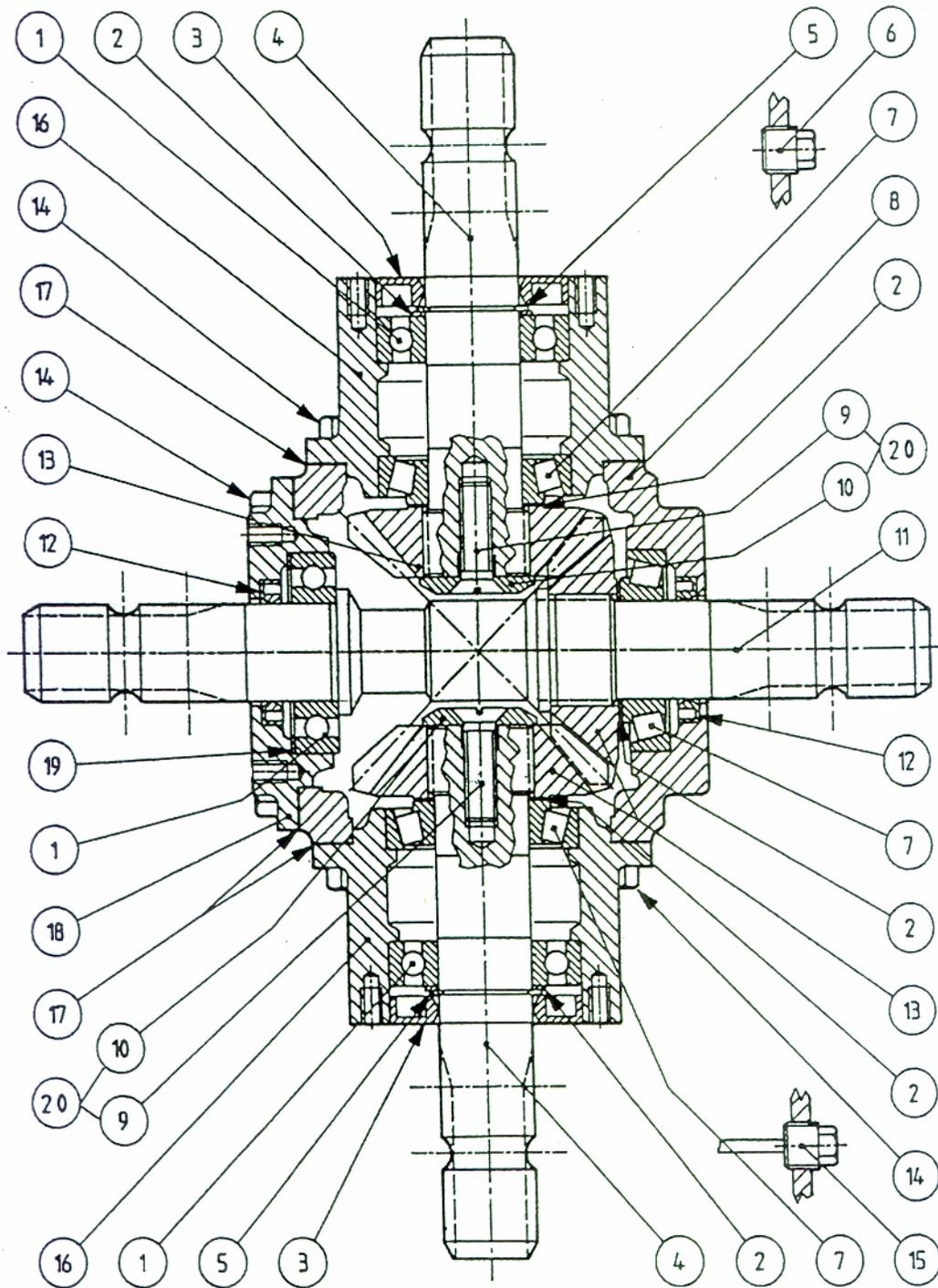
**TD65 & 65-2 - DECK GEARBOX ASSEMBLY**

Rev. 1, OCT 05

ITEM	PART #	DESCRIPTION	SERIAL NUMBER	QTY
1	521110	SNAP RING		1
2	521111	COVER PLATE		1
3	521112	BEARING - 6205		1
4	521113	KEY - 10 X 8 X 30		1
5	521114	SHAFT - 1 3/8" X 6 SPLINE		1
6	521115	GEAR		1
7	521116	BEARING - 6207		2
8	521117	CASING		1
9	521118	O - RING		1
10	521482	3/8" PIPE PLUG		2
11	521120	OIL SEAL - 35 X 52 X 7		1
12	521121	PINION SHAFT		1
13	521122	COTTERPIN - B5 X 50		1
14	521123	SHIM - 259.7504 AR (3PC/KIT)		2
15	521124	SPACER TUBE		1
16	521125	SNAP RING - 35 UNI 7435 (3PC/KIT)		1
17	521126	SNAP RING - 72 UNI 7437 (3PC/KIT)		1
18	521127	DOUBLE LIP SEAL - 35 X 72 X 10/8		1
19	521128	SNAP RING - SB72		1
20	521129	WASHER 25 X 44 X 4 (3PC/KIT)		1
21	521130	CASTALATED NUT M24 X 2		1
22	521390	KEY - 1/4" X 1/4" X 1 5/16"		1
23	521359	SHIM		1
24	521360	SHIM 259.7503 AR		1
25	521361	SPACER RING TAPERED		1
26	521362	BEARING TAPERED (30207A)		1
27	521491	SHIM - 248.7505 (KIT) AR		1
28	521491	SHIM - 248.7504 (KIT) AR		1
29	521491	SHIM - 248.7503 (KIT) AR		1
30	521366	SHIM - 259.7505 AR		1
	<b>521012</b>	<b>COMPLETE DECK GEARBOX</b>		<b>1</b>

**OL - Obtain Locally AR - As Required QTY - Total Number Required for One Gearbox**

# 4 – WAY GEARBOX ASSEMBLY



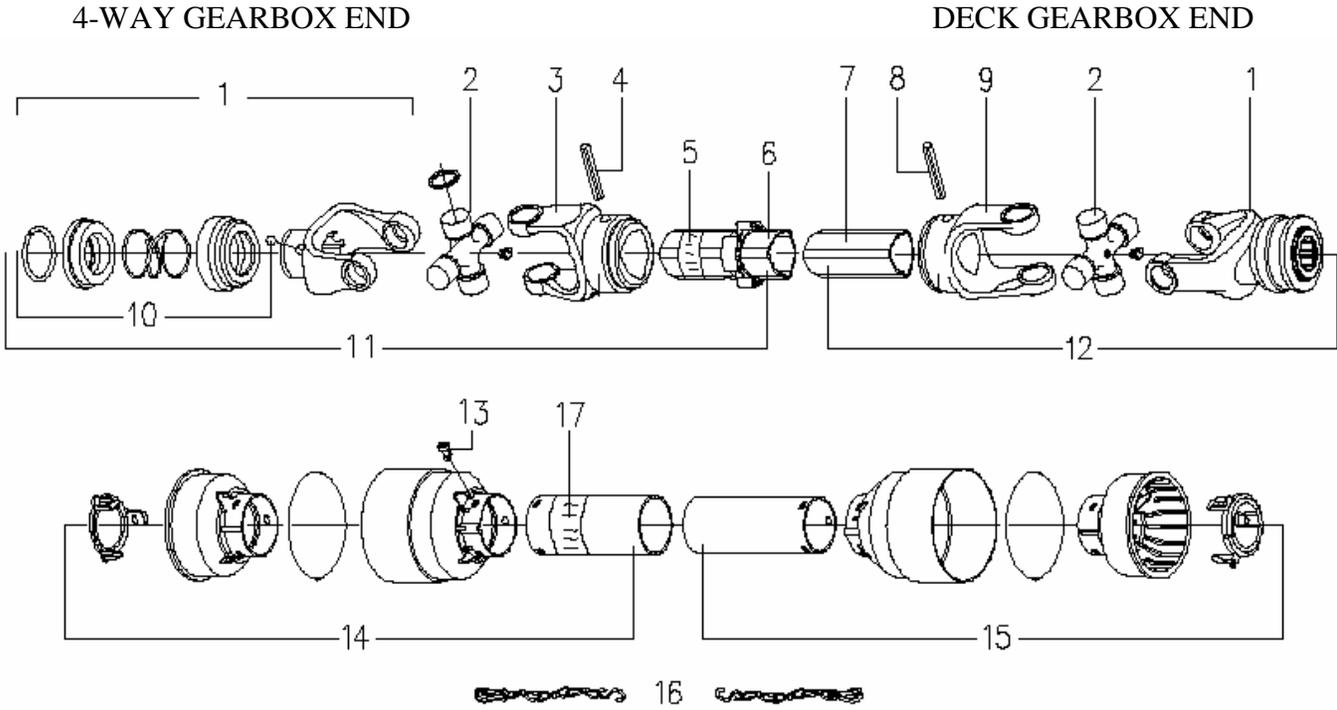
## 4-WAY GEARBOX ASSEMBLY

Rev. 1, OCT 05

ITEM	PART NO.	DESCRIPTION	SERIAL NUMBER	QTY
1	521116	BEARING 6207		3
2	521794	SHIM KIT - 48.0		6
3	521127	OIL SEAL - 35 X 72 X 10/7		2
4	521481	STUB SHAFT - 1 3/8" SPLINE		2
5	521137	SNAP RING - 35 UNI 7435		4
6	521482	3/8" PIPE PLUG		2
7	521362	BEARING - 30207		3
8	521483	HOUSING		1
9	ITEM 20	BOLT - M12 X 40 - 10.9		2
10	ITEM 20	WASHER BLANK		2
11	521486	THRU SHAFT 1 3/8" X 1 3/8"		1
12	521120	OIL SEAL - 35 X 52 X 7		2
13	521487	GEAR Z18 M5		3
14	521488	BOLT - M12 X 25 - 8.8 KIT (6 PCS)		12
15	521489	OIL LEVEL DIPSTICK		1
16	521796	EXTENSION HOUSING		2
17	-	GASKET (REPLACE W/SILICONE)		3
18	521797	COVER		1
19	521491	WASHER - SHIM (60 X 72) (3 PCS)		1
20	522426	BOLT KIT - ITEMS 9 (2) & 10 (2)		1
*****	<b>521497</b>	<b>COMPLETE GEARBOX</b>		<b>1</b>

OL - Obtain Locally AR - As Required QTY - Total Number Required for One Gearbox

# DECK PTO ASSEMBLY



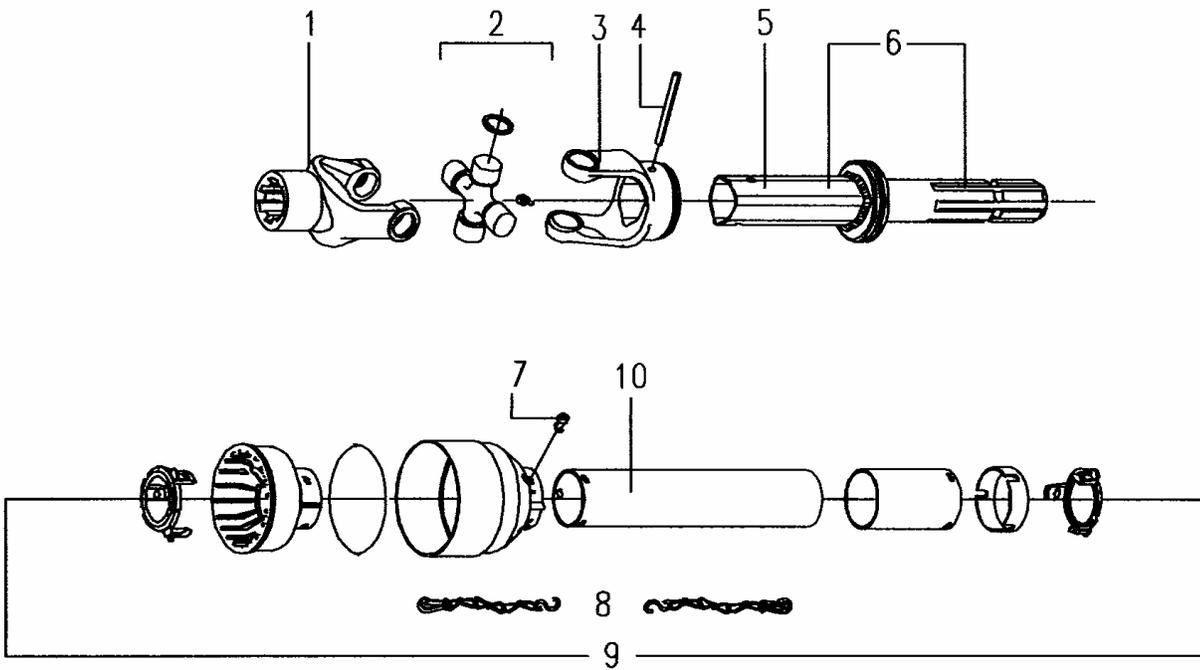
**DECK PTO ASSEMBLY**

Rev. 1, OCT 05

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
1	521778	QD. YOKE 1 3/8" - 6 SPLINE (CO2)	2
2	521779	CROSS & BEARING KIT	2
3	521780	OUTER TUBE YOKE	1
4	521781	ROLL PIN FOR OUTER TUBE	1
5	521451	"DANGER" LABEL FOR OUTER TUBE	1
6	521712	OUTER TUBE	1
7	521713	INNER TUBE	1
8	521782	ROLL PIN FOR INNER TUBE	1
9	521783	INNER TUBE YOKE	1
10	210017	COLLAR KIT (STEEL)	1
	521727	COLLAR KIT (PLASTIC)	
11	521714	1/2 FEMALE SHAFT WITH SHIELDING	1
12	521715	1/2 MALE SHAFT WITH SHIELDING	1
13	521463	PLASTIC SHIELD BOLT (6PC/KIT)	6
14	521716	1/2 FEMALE SHIELD WITH LABEL	1
15	521717	1/2 MALE SHIELD	1
16	521467	SAFETY CHAIN	2
17	521455	"DANGER" LABEL FOR OUTER SHIELD	1
****	521718	COMPLETE PTO SHAFT	3/ MACH

**QTY.- REPRESENTS TOTAL NUMBER REQUIRED  
FOR ONE DECK PTO ASSEMBLY ONLY.**

INTERMEDIATE PTO SHAFT A & C MODELS ONLY



**INTERMEDIATE PTO SHAFT**

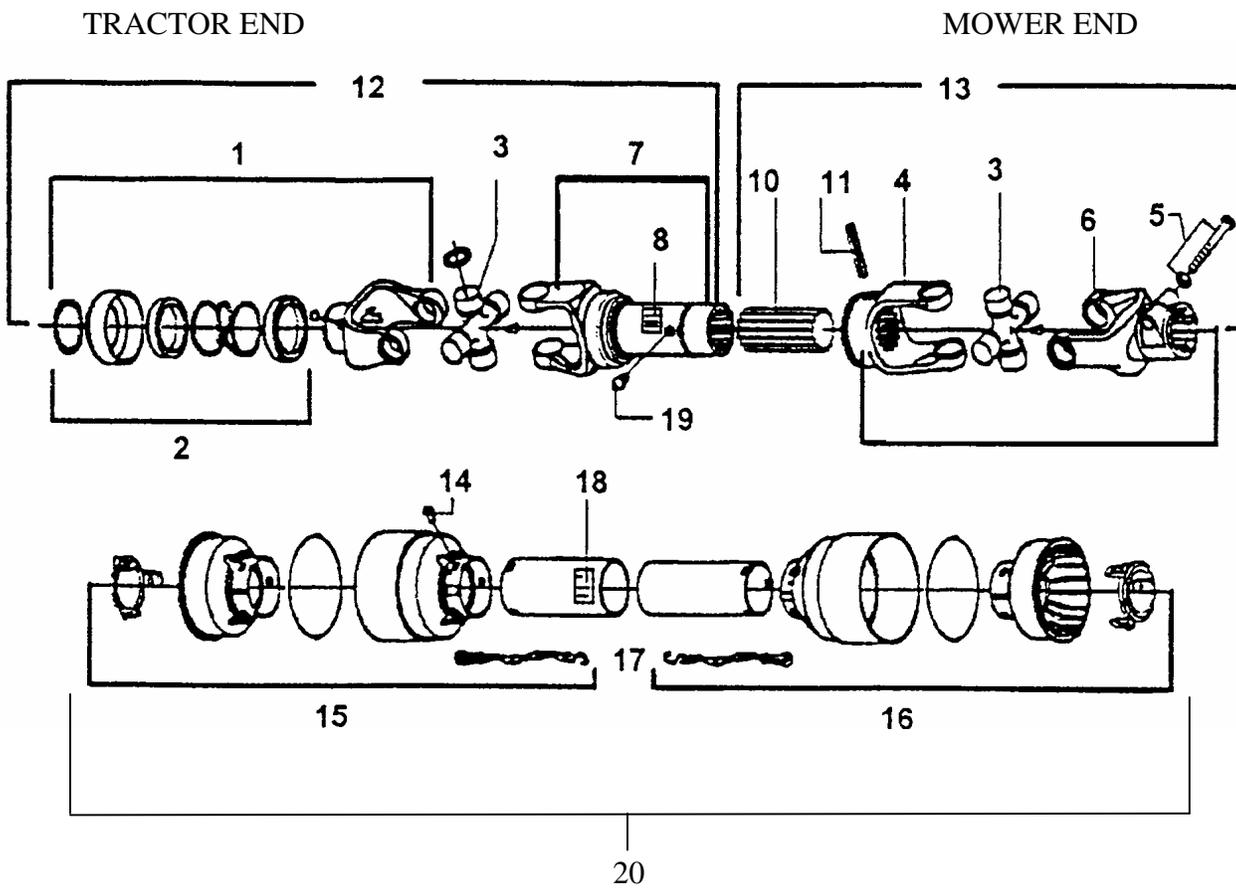
Rev. B, AUG 2013

See Service  
Bulletin  
521725  
PTO Shaft;  
Page 33

ITEM	PART #	DESCRIPTION	QTY.
1	521719	SPLINED YOKE	1
2	521720	CROSS & BEARING KIT	1
3	521721	YOKE FOR OUTER TUBE	1
4	521722	ROLL PIN FOR OUTER TUBE	1
5	521451	"DANGER" LABEL FOR TUBE	1
6	521723	OUTER TUBE WITH SPLINED SHAFT	1
7	521463	PLASTIC SHIELD BOLT (6PC/KIT)	6
8	521467	SAFETY CHAIN	2
9	521724	COMPLETE SHIELD TYPE "P" WITH LABEL	1
10	521455	"DANGER" LABEL FOR OUTER SHIELD	1
****	521725	COMPLETE PTO ASSEMBLY	1

**QTY.- REPRESENTS TOTAL NUMBER REQUIRED  
FOR ONE INTERMEDIATE PTO ASSEMBLY ONLY.**

# INPUT PTO SHAFT A & C MODELS ONLY



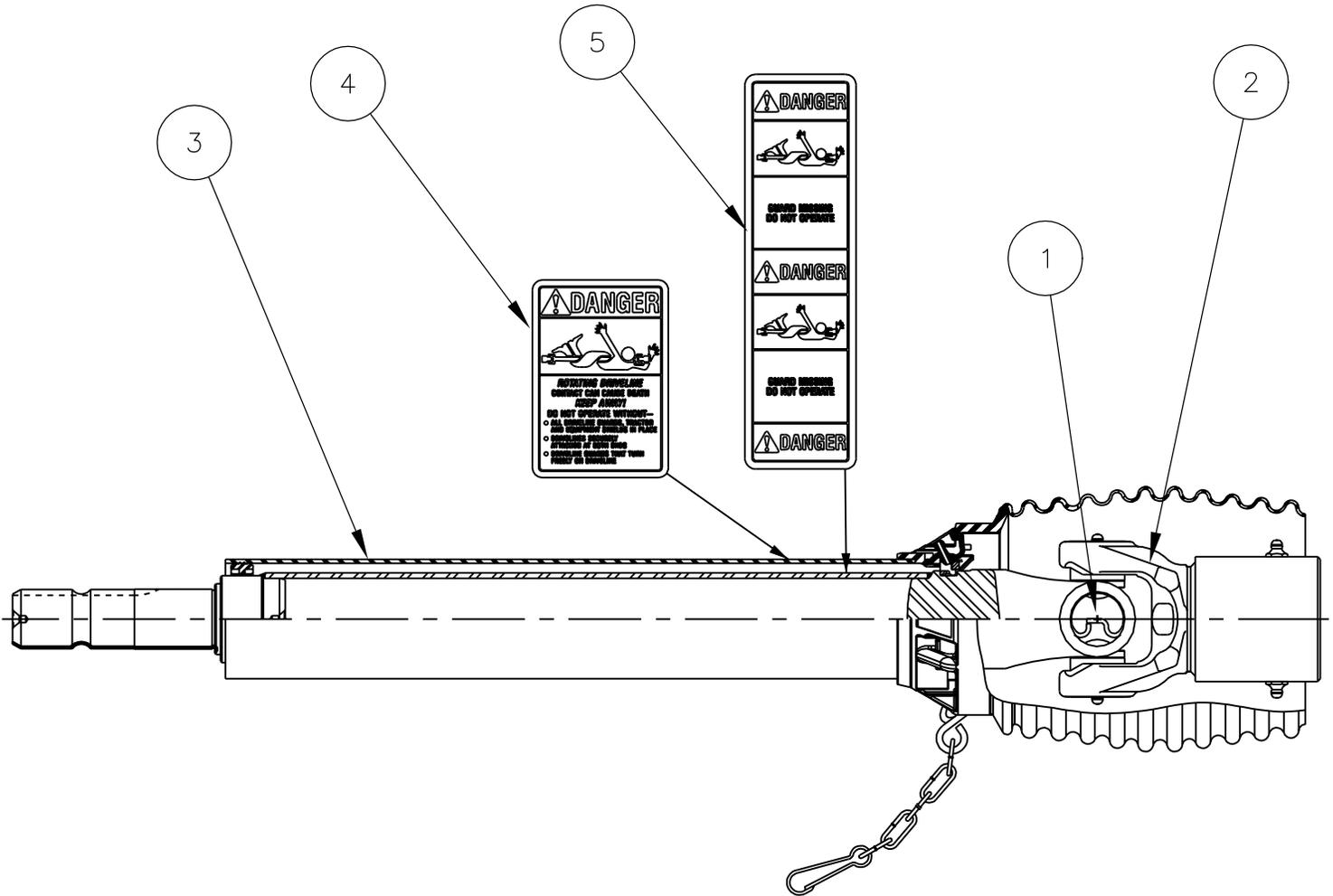
**INPUT PTO SHAFT**

Rev. 1, OCT 05

<b>ITEM</b>	<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
1	521726	QD YOKE 1 3/8" - 6 SPLINE (CO2)	1
2	210017	COLLAR KIT - STEEL	1
	521727	COLLAR KIT - PLASTIC	
3	521720	CROSS & BEARING KIT	2
4	521728	INNER TUBE YOKE	1
5	521729	BOLT M12 X 1.25 X 65 NUT	1
6	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)	6
15	521736	1/2 FEMALE SHIELD WITH LABEL	1
16	521737	1/2 MALE SHIELD	1
17	521467	SAFETY CHAIN	2
18	521455	"DANGER" LABEL FOR OUTER SHIELD	1
19	521821	GREASE FITTING	2
20	521768	COMPLETE SHIELD KIT	1
****	<b>521738</b>	<b>COMPLETE PTO SHAFT</b>	<b>1</b>

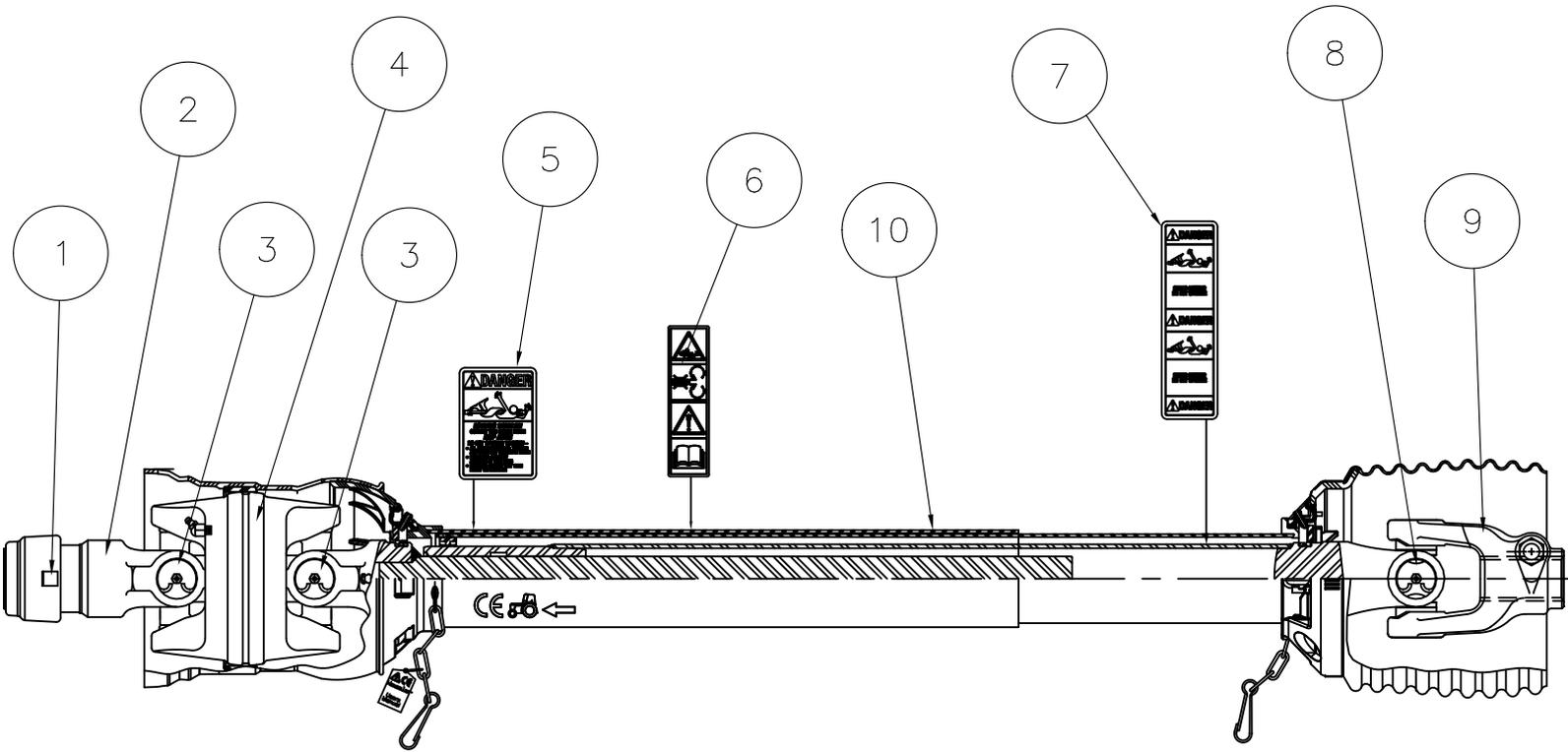
**QTY.- REPRESENTS TOTAL NUMBER REQUIRED  
FOR ONE INPUT PTO ASSEMBLY ONLY.**

# 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 MODEL ONLY

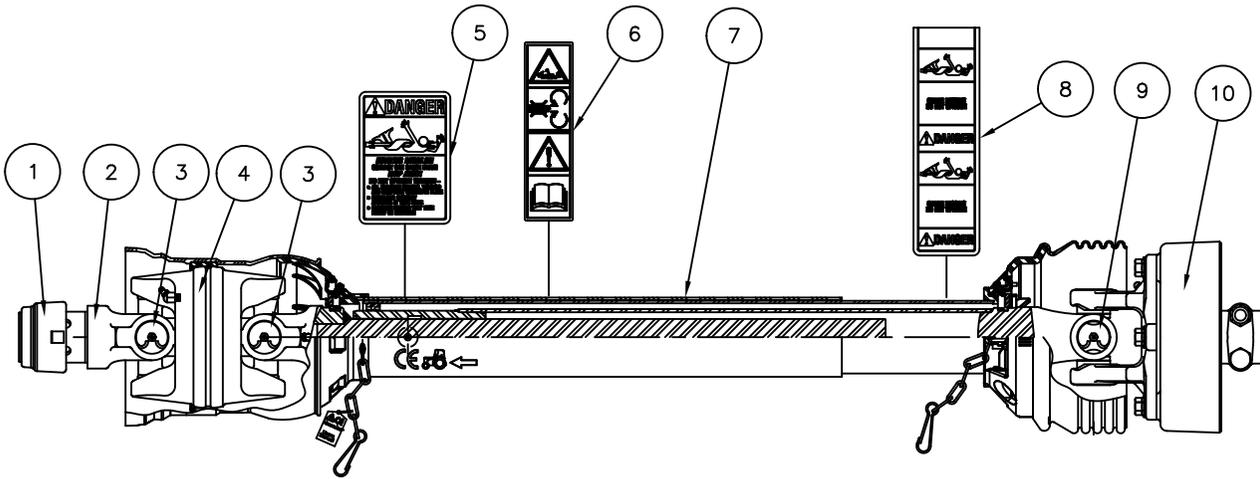


	PART NUMBER	DESCRIPTION	QTY.
1	210179	SSL/AUTO-LOK REPAIR KIT	1
2	210231	SAFETY SLIDE LOCK YOKE ASM.	1
3	210232	CAT 4 80° E2BL CROSS & BEARING KIT	2
4	210233	CENTER HOUSING	1
5	210237	GUARD SAFETY SIGN	1
6	210238	CE WARNING DECAL	1
7	210239	SHAFT SAFETY SIGN	1
8	210234	35E2BL CROSS & BEARING KIT	1
9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

TD65: UP TO SERIAL #12651432B

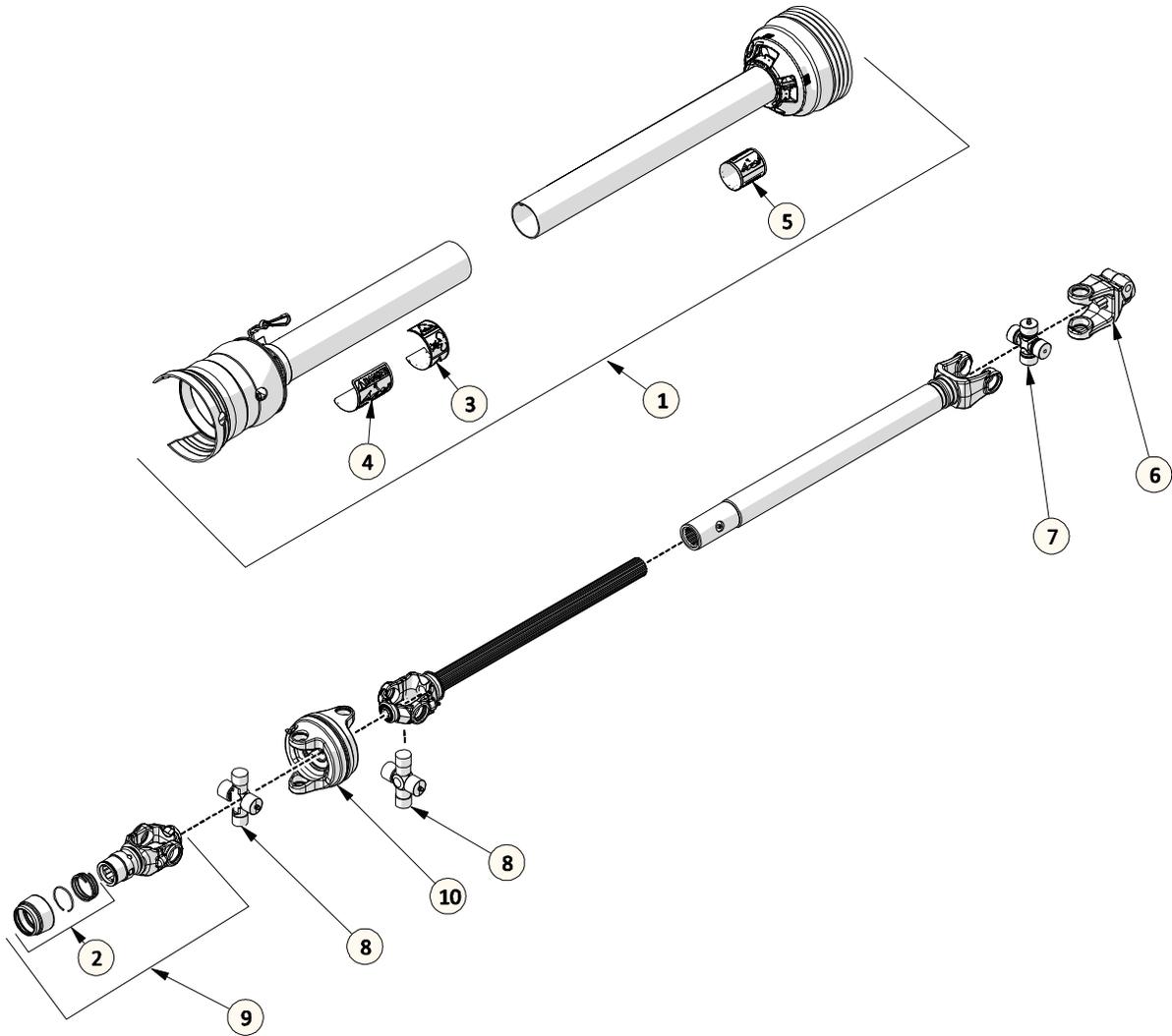
TD65-2: UP TO SERIAL #1265-21360B

# INPUT PTO SHAFT D MODEL ONLY



ITEM	PART NUMBER	DESCRIPTION	QTY.
1	210179	AUTO-LOK REPAIR KIT	1
2	210231	AUTO-LOK YOKE ASSEMBLY	1
3	210232	CROSS & BEARING KIT	2
4	210233	CENTER HOUSING	1
5	210237	GUARD SAFETY SIGN	1
6	210238	C.E. WARNING DECAL	1
7	210255	COMPLETE GUARD SET	1
8	210239	SHAFT SAFETY SIGN	1
9	210234	CROSS & BEARING KIT	1
10	210257	AUTOMATIC CLUTCH ASM.	1
-	210250	COMPLETE PTO SHAFT	
		QUANTITY IS FOR ONE COMPLETE PTO SHAFT	

**INPUT PTO SHAFT – B MODELS**  
**TD 65: SERIAL #12651437B AND UP**  
**TD65-2: SERIAL #1265-21361B AND 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	INPUT PTO CAT 4-80 DEG CV (COMPLETE)	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.

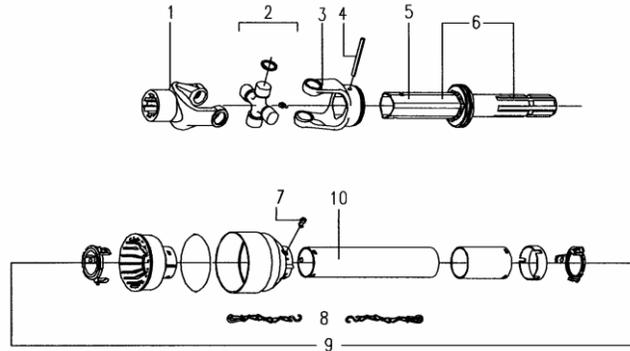
**Diagram 1A**



**Diagram 2B**



**INTERMEDIATE PTOSHAFT A & C MODELS ONLY**



**INTERMEDIATE PTO SHAFT**

	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
****	521725		COMPLETED	1

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