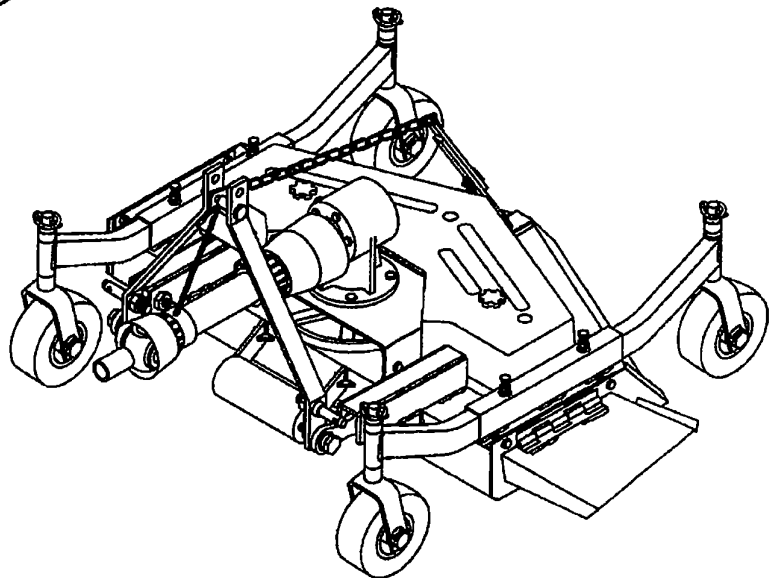
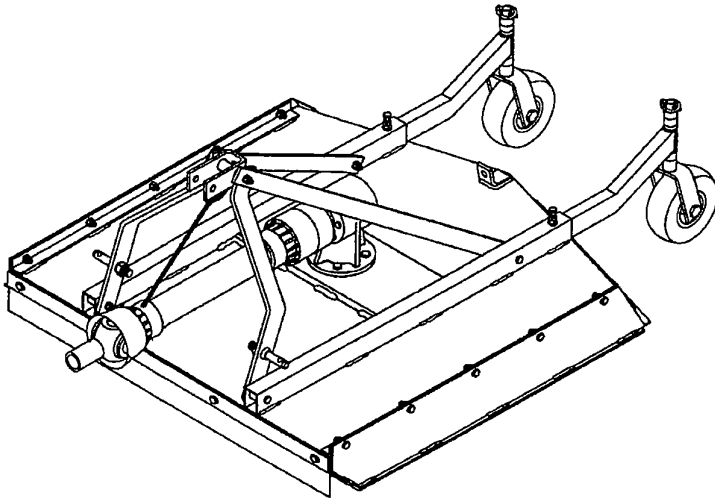




TAYLOR PITTSBURGH MFG., INC.  
P.O. BOX 1866  
ATHENS, TN 37371  
423-745-3110

# FIELD GENERAL Sub-Compact Mowers



## OWNERS MANUAL

Form 233-48-40-SC  
233-FM-48-SC / 233-RFM-48-SC

**TO THE DEALER:**

The Implement assembly and proper installation to the tractor is the responsibility of the TAYLOR PITTSBURGH dealer. Read manual instructions and safety rules. Make sure all items on the Pre-delivery and Delivery Check Lists are completed before releasing equipment to the owner.

**TO THE OWNER:**

Read this manual before operating your TAYLOR PITTSBURGH rear blade. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all the adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer or by calling 1-423-745-3110, in the USA and Canada only.

The rear blade you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the rear blade and tractor.

For service, your authorized TAYLOR PITTSBURGH dealer has trained mechanics, genuine TAYLOR PITTSBURGH service parts, and the necessary tools and equipment to handle all your needs.

Provide this information to your dealer to obtain correct repair parts.

**LIMITED WARRANTY**

TAYLOR PITTSBURGH MFG., INC., the manufacturer, warrants only to the Original Purchaser that this equipment, under normal use and service, will be free from defects in material and workmanship for one (1) year from date of purchase providing this equipment is purchased for individual and not for commercial use. Warranty for commercial usage is 90 days. This warranty does not apply to any equipment which has been damaged or which has been subjected to abuse, misuse, negligence, abnormal wear and tear, alterations, tampering, or failure to follow operating instructions. This warranty does not cover any product or parts not manufactured by Taylor Pittsburgh Manufacturing, Inc..

Under this warranty, the manufacturer will repair or replace any part which the manufacturer determines has failed during the period of the warranty due to defects in material or workmanship. After approval by the manufacturer, the equipment or defective part must be returned to Taylor Pittsburgh Mfg., Inc., Athens, Tennessee 37371.

**PURCHASER'S EXCLUSIVE REMEDY FOR BREACH OF WARRANTY, OTHER DEFECT, OR CONDUCT GIVING RISE TO LIABILITY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT SOLD, AND THE MANUFACTURER UNDER NO CIRCUMSTANCES SHALL BE LIABLE FOR ECONOMIC LOSS OR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE MANUFACTURER DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR PURPOSE.**

Taylor Pittsburgh Mfg., Inc. reserves the right to make improvements and changes in specifications without notice or obligation to modify previously sold units.

This manual describes the proper assembly procedures for your rear blade and furnishes operating and maintenance recommendations to help you obtain long and satisfactory service.



## TAYLOR PITTSBURGH MFG.

### FIVE YEAR LIMITED GEARBOX WARRANTY

Taylor Pittsburgh warrants to the original purchaser of any new Taylor Pittsburgh product equipped with a Gearbox, a Gearbox only limited Five (5) year warranty, for non-commercial, non-state, non-municipalities, and non-rental use and for 90 days for commercial non-rental use or a 30-day warranty is offered for rental use.

Under no circumstances will this Warranty apply in the event that the product, in good faith opinion of Taylor Pittsburgh, has been subjected to improper operation, improper maintenance, misuse, fire or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone not authorized prior to repair by Taylor Pittsburgh. This Warranty does not cover normal wear or tear, or normal maintenance items. This Warranty also does not cover repairs made with parts other than those obtainable through Taylor Pittsburgh.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

Taylor Pittsburgh's obligation under this Warranty is limited to, at Taylor Pittsburgh's option, the repair or replacement of the product if Taylor Pittsburgh in its sole discretion, deems it to be defective or in noncompliance with this Warranty. **The product must be returned to Taylor Pittsburgh with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. TAYLOR PITTSBURGH MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND TAYLOR PITTSBURGH SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

**Taylor Pittsburgh shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory.**

Without limiting the generality of the foregoing, Taylor Pittsburgh specifically disclaims any damages relating to lost profits, business revenues or goodwill, loss of crops, loss of delay in harvesting; any expense or loss incurred for labor, supplies, substitute machinery or rental; or any other type of damage to property or economic loss.

Any and ALL repairs must be pre-approved by Taylor Pittsburgh prior to any repairs being made and subject to all conditions, restrictions, and purchaser obligations as stated within this warranty.

P.O. Box 1866 • 7 Rocky Mount Road • Athens, TN 37371 • (423) 745-3110 • Fax (423) 744-9662

(continued on next page)



Five (5) Year Limited Gearbox Warranty is a variable warranty based on purchase date, within one year from original purchase date, to the original owner. Warranty would include parts and labor based on all restrictions and limits as stated above. Taylor Pittsburgh reserves the right to limit labor in hours and hourly charges. All repairs must be pre-approved prior to work being done. Years 2 through 5 are parts only warranty. **NO LABOR WILL BE PAID.** Taylor Pittsburgh reserves the right to ask and inspect all parts prior to a warranty decision being made. Incidental expenses such as lubricants and transportation to and from the dealer are not covered by warranty.

It is the original purchaser's burden and obligation to maintain proof of purchase, a copy of which must accompany any and all warranty claims.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, Taylor Pittsburgh, its authorized dealers, distributors, and service centers, is authorized to alter, modify or enlarge this Warranty.

This Warranty is effective on any Taylor Pittsburgh product purchased January 1, 2008 and after and is subject to change without notice.

Answers to any questions regarding warranty service may be obtained by contacting:

Taylor Pittsburgh  
7 Rocky Mount  
Athens, TN 37308

800-456-7929(tel)  
423-744-9662(fax)

Taylor Pittsburgh Manufacturing, Inc., Athens, TN, is a manufacturer of quality agricultural and rural lifestyle equipment, and is a division of King Kutter Inc. Taylor Pittsburgh Manufacturing, Inc. offers a full line of three-point mounted and pull type implements including rotary cutters, rotary tillers, estate groomers, landscape equipment, and specialty equipment. For more information please contact Taylor Pittsburgh Manufacturing, Inc. at (423) 745-3110.

P.O. Box 1866 • 7 Rocky Mount Road • Athens, TN 37371 • (423) 745-3110 • Fax (423) 744-9662

(continued from previous page)

## **TABLE OF CONTENTS**

Warranty.....	1-3
Safety.....	5-6
Rotary Mower Assembly.....	7-9
Finish Mower Assembly.....	10-11
Before Operation.....	12
Safety Training.....	13
Preparation.....	14
Starting & Stopping Safety.....	14
Operational Safety.....	15-17
Transport Safety.....	17
Attaching to Tractor.....	18-19
Sizing PTO Shaft .....	20
Operating Instructions.....	21-23
Maintenance.....	24-27
Maintenance Safety.....	28
Storage Safety.....	28
Safety Decal Locations .....	29-30
Safety Decals.....	31-37

## **PARTS BREAKDOWN**

Rotary Mower Components.....	38-39
Finish Mower Components.....	40-42
Gearbox Components.....	43-44
PTO Shaft Components.....	45

## SAFETY

**READ AND FOLLOW THE INSTRUCTIONS IN THIS MANUAL AND ESPECIALLY IN THE SAFETY SECTION. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.**

**TAKE NOTE ! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS.**

### **SIGNAL WORDS:**

The signal words **DANGER**, **WARNING**, and **CAUTION** are used with the safety messages in this manual and with each safety signs. They are defined as follows:

**DANGER:** Indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components that, for functional purposes, cannot be guarded.

**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practice.

If you have any questions not answered in this manual or require additional copies, or the manual is damaged, please contact your local dealer or Taylor Pittsburgh Mfg. P.O. Box 1866 Athens, TN 37371 or call (423) 745-3110.



**THIS SYMBOL MEANS  
ATTENTION!  
BECOME ALERT!  
YOUR SAFETY IS INVOLVED**

## EQUIPMENT SAFETY GUIDELINES



- Safety of the operator and bystanders is one of the main concerns in designing and developing a mower. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions and insist those working with you, or for you, follow them.
- In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.
- Replace any safety that is not readable or is missing. Location of such safety signs is indicated in this manual.
- Never use alcoholic beverages or drugs that can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- **Under no circumstances should children under the age of 18 be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.** Review the safety instructions with all users annually.
- This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be responsible, properly trained and physically able person familiar with farm machinery and trained in this equipment's operations. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.
- Use a tractor equipped with a Roll Over Protective System and seat belts. (ROPS)
- Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question-**DON'T TRY IT!**
- Do not modify the equipment in any way. Unauthorized modification can result in serious injury or death and may impair the function and life of the equipment.
- In addition to the design and the confirmation of this implement, including safety signs and safety equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer also to safety messages and operation instruction in each of the appropriate sections of the tractor and mower manuals. Pay close attention to the safety signs affixed to the tractor and the mower.

## ROTARY MOWER ASSEMBLY INSTRUCTIONS

### STEP 1

With rotary mower lying flat on the ground, remove the wire holding lift pins and PTO shaft from mower. Remove bolts from the free end of the lift arm braces. Remove bolts attaching lift arms and lift braces to the mower. Remove bolt holding swivel link assembly from lift arm brace.

### STEP 2

Using the 5/8" x 31-1/2" bolt and the lift arm spacer, attach a lift arm to the front hole of the right side deck tube as seen in Figure A. Tighten only finger tight at this time. **Note: the lift arm should be on the gearbox side or the deck tube and the lift arm spacer should be inside the deck tube.** Allow the lift arm to rotate until it rests against the gearbox plate.

### STEP 3

Using the 5/8" x 3-1/2" bolt, attach the right lift arm brace to the rear hole of the right side deck tube. Tighten only finger tight at this time. **Note: the lift arm brace should also be on the gearbox side of the deck tube.** Allow the lift arm brace to rotate until it rests against the previously installed lift arm.

### STEP 4

Repeat steps 2 and 3 for the left side.

### STEP 5

Insert the swivel spacer into the large hole into the large hole in the swivel link.

### STEP 6

Lift the right lift arm brace and hold while rotating the right lift arm forward. Align the holes in the free ends of the linkages. **Note: the lift arm brace should be on the outside of the lift arm.** Insert the 5/8" x 6-1/2" bolt. Slide the swivel link assembly onto the free end of the bolt. The bolt should travel thru the swivel link spacer. Rotate the left lift arm up and inset the bolt through the hole in it. Lift the left arm brace and slide it onto the bolt. Place a lock washer on the bolt and screw on nut. Tighten only finger tight. See Figure B.

### STEP 7

Insert the lift pins in each lift arm and tighten.



# ROTARY MOWER ASSEMBLY INSTRUCTIONS

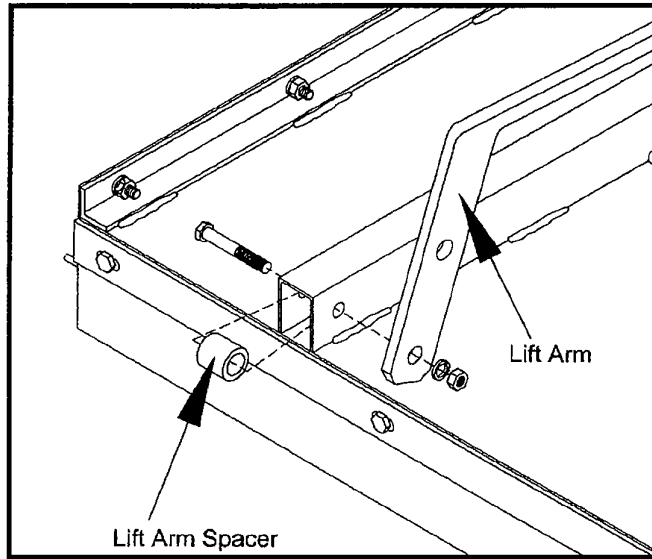


Figure A

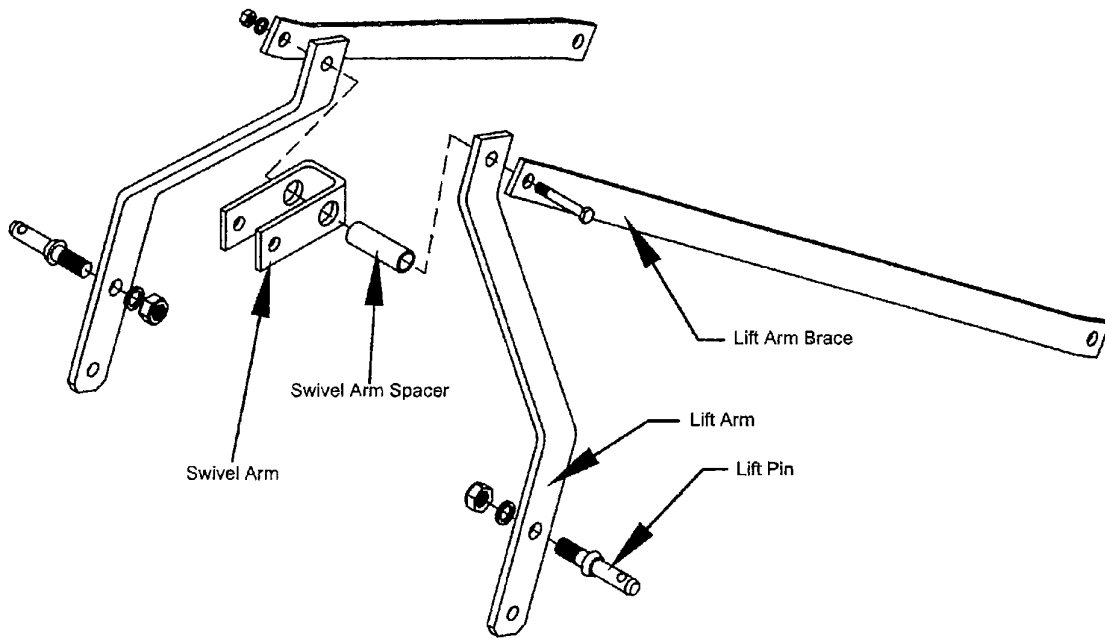


Figure B

## ROTARY MOWER ASSEMBLY INSTRUCTIONS

*(continued from previous page)*

### STEP 8

At this time, tighten the (4) 5/8" x 3-1/2" bolts attaching the lift arms and the lift braces to the mower. Also tighten the 5/8" x 6-1/2" bolt that joins them with the swivel link assembly.

### STEP 9

Lift the rear of the mower high enough for the tail wheels to be out of contact with the ground. Use blocks to ensure that the mower doesn't fall. Loosen tail wheel arm adjusting bolts and jam nuts. The tail wheel arms will slide in or out of the deck tubes. See Figure C. Adjust tail wheel arms in such a manner that at the closest position the tail wheel is at least 1" from any portion of the rear deck. See Figure D.

### STEP 10

Tighten tail wheel arm adjustment bolts and jam nuts.

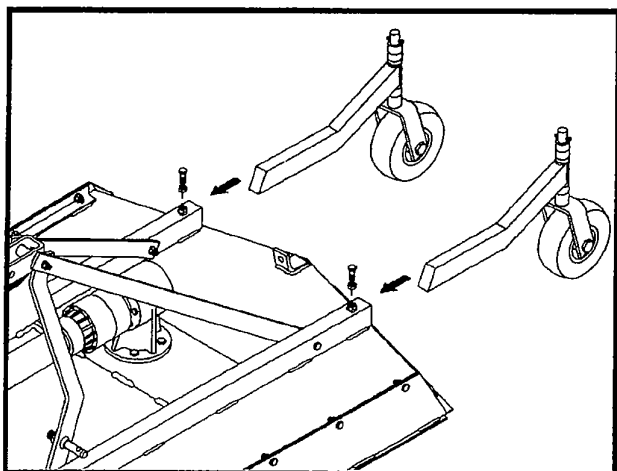


Figure C

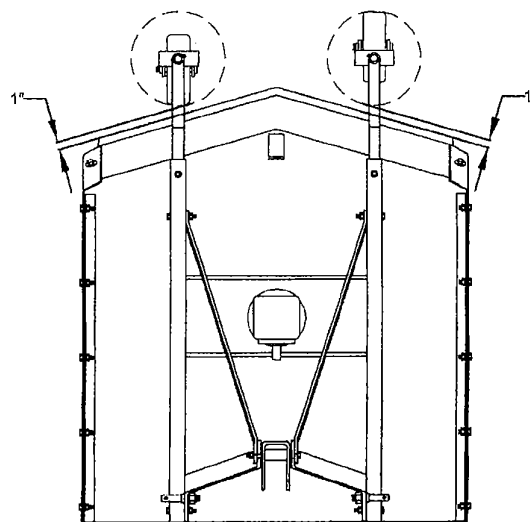


Figure D

## FINISHING MOWER ASSEMBLY INSTRUCTIONS

### STEP 1

With finishing mower still in crate, lay flat on a level surface. Remove the top & side sections of the crate, leaving the finishing mower resting on the bottom section. Set aside PTO shaft and tail wheel arm assemblies.

### STEP 2

Insert tail wheel arm assemblies as shown in Figure A. **Note: insert rear tail wheel arm assemblies first and adjust.** According to Figure C. Front tail wheel arm assemblies should slide into tail wheel arm holder until bottoming out. Tighten bolt and then tighten jam nut.

### STEP 3

Remove swivel links and lift pins that are wired on the lift arm "A" frame. Set aside for step 5.

### STEP 4

Remove the 4 bolts from the lift arm "A" frame. **Note: there are 2 different bolt lengths.**

### STEP 5

Attach the swivel links in the center of each lift plate channel using the longer of the 2 bolts, on each side as shown in Figure B.

### STEP 6

Attach the other end of each swivel link to the outside lower hole on the lift arm "A" frame using the shorter bolts as shown in Figure B.

### STEP 7

Attach the Category I lift pins as shown in Figure B.

### STEP 8

Tighten all nuts and bolts.

# FINISH MOWER DIAGRAM

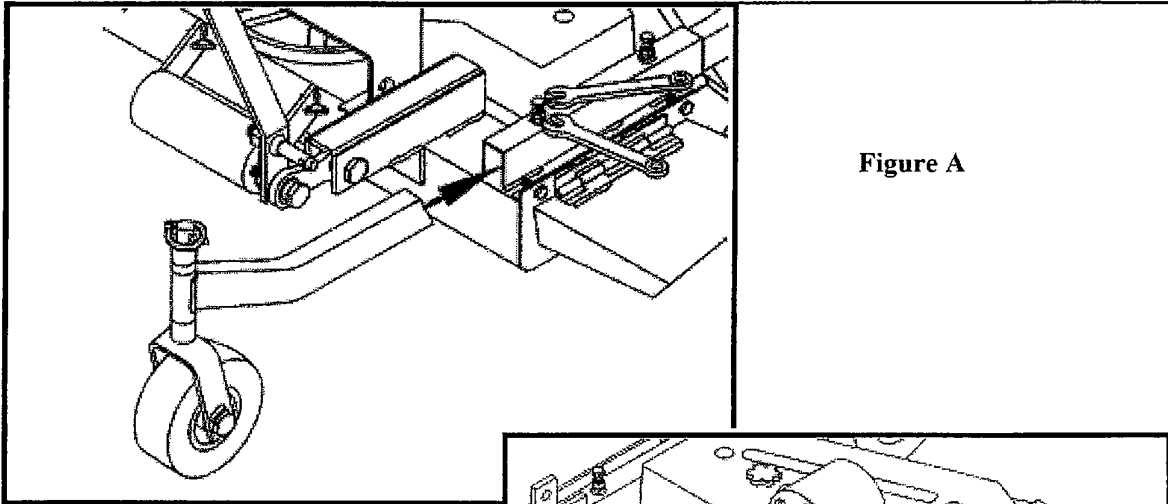


Figure A

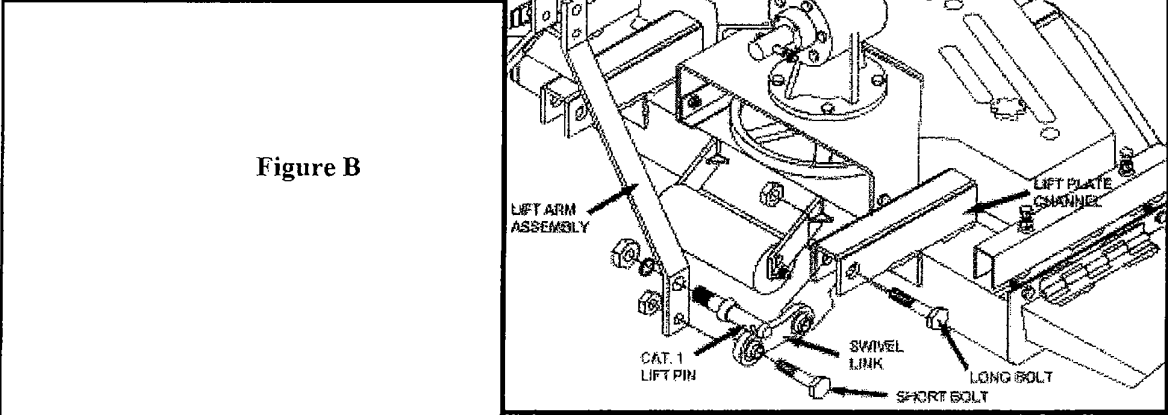


Figure B

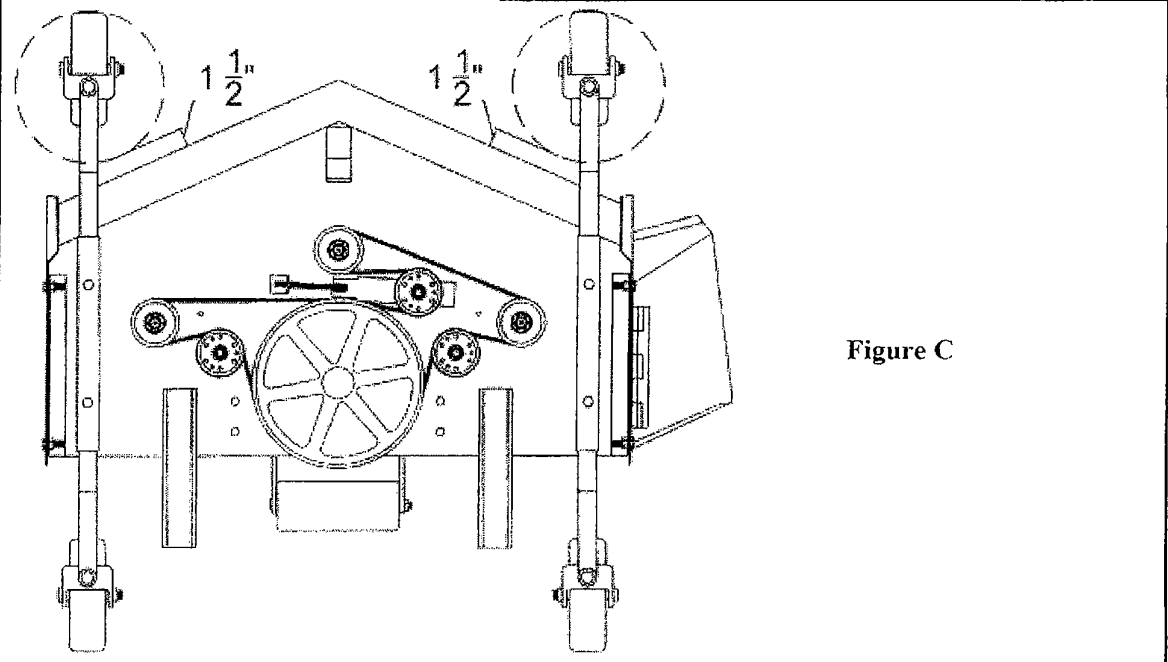


Figure C

## BEFORE OPERATION

(IMPORTANT - Instructions prior to start up)

Gearbox shipped without oil and without being greased.

- Fill Gearbox using Multi-Purpose gear oil (i.e. S.A.E. 80w/90 or S.A.E. 85w/140 Multi-Purpose gear oil.)
- For all grease fittings use (Type/grade II tube grease)

### STEP 1

Place mower so that deck is secure and level.

### STEP 2

Remove 1/2" Pipe Plug (Located at top of gearbox) and 1/8" Pipe Plug (Located at lower 1/3 of gearbox.)

### STEP 3

Fill gearbox using multi-purpose gear oil through to 1/2" fill hole until gear oil is level with lower 1/8" hole.

### STEP 4

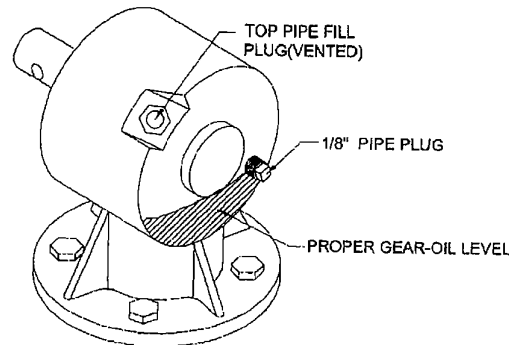
Replace both 1/2" pipe plug (located at top of gearbox) and also 1/8" pipe plug (located at lower 1/3 of gearbox) and clean away any excess oil.

### STEP 5

Grease wheel axles, wheel forks, and PTO shaft universal joints. Figure E.

### STEP 6

Check all bolts and nuts to insure they are tight.



**DO NOT** - overfill gearbox. This could cause damage to oil seals and can cause permanent damage to gearbox. This issue will not be covered under warranty.

## SAFETY TRAINING

- Safety is a primary concern in the design and manufacture of our product. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of this equipment.
- It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator. It is the operator's responsibility to read and understand all safety and operating instructions in the manual and to follow them. Accidents can be avoided.
- Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. If this machine is used by any person other than you, or is loaned or rented, it is the mower owner's responsibility to make certain that the operator, prior to operating:
  - 1 - Reads and understands the operator's manuals.
  - 2 - Is instructed in safe and proper use.
- Know your controls and how to stop tractor, engine, and the mower quickly in an emergency.
- Train all new personnel and review instructions frequently with existing workers. Be certain only a trained and physically able person will operate the machinery. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. If the elderly are assisting with farm work, their physical limitations need to be accommodated.

## PREPARATION

- Never operate the tractor and mower until you have read and completely understand this manual, the Tractor Operator's Manual and each of the safety messages found on the safety signs on the tractor and mower.
- Personal protection equipment including hard hat, operation, adjustment, maintenance, repairing, removal, or moving the implement. Do not allow long hair, loose fitting clothing, or jewelry to be around the equipment.
- **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!** Tractors with or without mowers attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the operator's position exceeds 80 db. Noise over 80 db on a long term basis can cause severe hearing loss. Noise over 90 db adjacent to the operator over a long-term basis may cause permanent hearing loss. **NOTE:** Hearing loss from loud noise (from tractors, chain saws, radios, and other such resources close to the ear) is cumulative over a lifetime without hope of natural recovery.
- Operate the mower only with a tractor equipped with an approved Roll-Over-Protective-System (ROPS). Always wear your seat belt. Serious injury or even death could result from falling off the tractor--particularly during a turnover when the operator could be pinned under the (ROPS) or the tractor.
- Clear area to be cut, of stones, branches, or other debris that might be thrown, causing injury or damage.
- Operate only in daylight or good artificial light.
- Ensure mower is properly mounted, adjusted and in good operating condition.
- Ensure that all safety shielding and safety signs are properly installed and in good condition.



### STARTING AND STOPPING SAFETY



- Check the tractor master shield over the PTO stub shaft. Make sure it is in good condition and fastened securely to the tractor. Purchase a new shield if old shield is damaged or missing. ( You may have to use a tractor salvage yard for replacement parts on older tractors).
- All tractors that are not equipped with a "live" power takeoff (PTO) need to be equipped with an over-running PTO clutch. These are available through most farm equipment stores. **NOTE:** The addition of an over-running PTO clutch may change the length of the PTO driveline required. Pay extra attention to the instructions on PTO driveline installation. Be sure that the driveline system guarding is adequate.
- Mower operating power is supplied from the tractor PTO. Refer to your tractor manual for PTO engagement and dis-engagement instructions. Know how to stop tractor and mower quickly in case of emergency.
- When engaging PTO, the engine RPM should always be at idle speed. Once engaged and ready to start cutting, raise PTO speed to 540-RPM and maintain throughout cutting operation.

## OPERATIONAL SAFETY

- The use of this equipment is subject to certain hazards that cannot be protected against by the mechanical means or product design. All operators of this equipment must read and understand this entire manual, paying particular attention to safety and operating instructions, prior to using. If there is something in this manual you do not understand, ask your supervisor, or your dealer, to explain it to you.
- Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders at least several hundred feet from operating mower. Only properly trained people should operate this machine.
- When machine is operated in populated areas where thrown objects could injure persons or property, **operation must be stopped when anyone comes within several hundred feet.**
- The majority of the accidents involve entanglement on the driveline, injury of bystanders by objects thrown by the rotating blades, and operators being knocked off the tractor by low hanging limbs and then being run over by the mower. Accidents are most likely to occur with machines that are loaned or rented to someone who has not read the owner's manual and is not familiar with a mower.
- The mower is designed for use only on tractors with **540-RPM** power take off.
- Install and secure all guards and shields before starting or operating. The discharge chute (if unit is a finishing mower), bands, flaps, driveline guards and tractor, shields should be used and maintained in good working condition. They should be inspected carefully, at least daily, for missing or broken cable, chain links, shields or guards. (Worn items must be replaced at once to reduce possibility of injury).
- Disengage power take off (PTO) and place transmission in neutral before attempting to start engine.
- Many varied objects, such as wire, cable, rope, or chains, can become entangled in the operating parts of the mower. These items could then swing outside the housing at greater velocities than the blades. Such a situation is extremely hazardous. Inspect the cutting area for such objects before mowing. Remove any like objects from the site.





## OPERATIONAL SAFETY *continued...*



- Never allow the cutting blade to contact such items. Cut material higher at first, allowing mower to clear hidden objects. Never assume an area is clear. **Always Check!**
- Always stop the tractor, disengage PTO, set brake, shut off the tractor engine, remove the ignition key, lower implement to the ground and allow cutter blades to come to a complete stop before dismounting tractor. Never leave equipment unattended with the tractor running.
- Never place hands or feet under mower with tractor engine running or before you are sure all motion has stopped. Stay clear of all moving parts.
- Do not reach or place any part of your body under equipment until it is blocked securely.
- Do not allow riders on the mower or tractor at anytime. There is no safe place for riders.
- Do not operate unless all personnel, livestock, and pets are several hundred feet away to prevent injury thrown objects.
- Never operate tractor and mower under trees with low hanging limbs. Operators can be knocked off the tractor and then run over by the rotating blades.
- The rotating parts of this machine have been designed and tested for rugged use. However, they could fail upon impact with heavy, solid objects such as steel guardrails and concrete abutment. Such impact could cause the broken objects to be thrown outward at very high velocities. To reduce the possibility of property damage, serious injury, or even death, never allow the cutting blades to contact such obstacles.
- Stop mower and tractor immediately upon striking an obstruction. Turn engine off, remove key, inspect and repair any damage before resuming operation.
- Stay alert for uneven terrain, holes, rocks, and roots and other hidden hazards. Keep away from drop-offs and hazards that could cause roll over. Use extreme care and maintain minimum ground speed when transporting or operating on hillsides, over rough ground and when operating close to ditches or fences. Be careful and slow down when turning sharp corners and changing direction on slopes. Do not start or stop suddenly on slopes. Avoid operation on steep slopes. In extremely uneven terrain, rear wheel weights, front tractor weight, and/or tire ballast should be used to improve stability.



## OPERATIONAL SAFETY *continued...*



- Pass mower diagonally through sharp dips and avoid sharp drops to prevent "hanging up" tractor and rotary mower. Practice will improve your skills in maneuvering on rough terrain. Always cut down slopes; never cross the face.
- When using a unit, a minimum 20% of tractor and equipment weight must be on tractor front wheels. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a front end loader, front wheel weights, ballast in the tires or front tractor weights. When attaining a minimum 20% of tractor and equipment weight on the front wheels, you must not exceed the ROPS weight certification. Weigh the tractor and equipment. **Do not guess estimate!**

## TRANSPORT SAFETY

- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all lighting and marking requirements.
- At all times, when driving the tractor and equipment on the road or highway under 20mph (32kph) use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem. Do not exceed 20mph (32kph). Reduce speed on rough roads and surfaces.
- Plan your route to avoid heavy traffic.
- Always install transport locks, pins or brackets before transporting.
- Do not drink and drive.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
- Turn curves or go up or down hills only a low speed and at a gradual steering angle. Make certain at least 20% of the tractor's weight is on the front wheels to maintain safe steering. Slow down on rough or uneven surfaces.
- Use extreme care and maintain minimum ground and when operating close to ditches or fences. Be careful when turning sharp corners.
- Never allow riders on either tractor or mower.

## ATTACHING TO TRACTOR



Never stand between tractor and mower while backing up tractor to the hitch

### STEP 1

Attach to tractor's category I three point hitch as described in the Tractor's Operator's Manual.

### STEP 2

Determine if the PTO shaft needs to be shortened.

### NOTE:

Due to the many variations in the tractor hitch points and distances between equipment gearbox input shaft and tractor PTO output shafts, some combinations may require PTO shafts to be shortened as described by the following steps.

### STEP 3

Raise and lower mower in order to locate the shortest distance between equipment gearbox input shaft and tractor PTO output shaft. With the mower in the shortest distance position shut down the tractor and **SECURELY BLOCK MOWER IN POSITION.**

### STEP 4

Pull apart PTO shaft and attach outer section to tractor PTO output shaft.

**NOTE:** Be sure to pull PTO section to ensure yoke has locked into place.

### STEP 5

Place and hold inner PTO shaft section next to outer section and check if PTO shaft is too long. Each section should end approximately 3 inches short of reaching u-joint shield on the opposite section. If the shaft is too long measure 3 inches back from each u-joint shield and mark the other shaft section. Be sure to do this for both PTO shaft halves. **NOTE:** Do not cut PTO shaft sections at this time.



## ATTACHING TO TRACTOR *continued...*



### STEP 6

Raise mower and remove blocking. Raise and lower mower in order to locate the longest distance between equipment input shaft and the tractor PTO output shaft. With the mower in the longest distance position shut down the tractor and **SECURELY BLOCK THE MOWER IN POSITION.**

### STEP 7

As in step 5 hold PTO shaft sections together and check for a minimum of 6 inches of overlap. If PTO shaft has been marked for cutting the overlap is the distance measured between the two marks. If the PTO shaft has less than a 6 inch overlap, **DO NOT USE.** Contact your authorized Taylor Pittsburgh Dealer.

**NOTE:** If the PTO shaft is too long go to **SIZING PTO SHAFT.**

### STEP 8

Apply any multi-purpose grease to the outside of the male (inner) PTO shaft section. Assemble PTO shaft and install on finishing mower and tractor.

**NOTE:** If you shear the bolt that attaches the PTO shaft to the gearbox **replace with a grade 2 bolt ONLY.** Replacement with another grade of bolt will void your warranty and may cause terminal damage to the PTO shaft, gearbox, or tractor. (Taylor Pittsburgh shear pin part #303367)

## WARNING

Failure to install retaining clip on gearbox input shaft would allow driveline to swing freely if bolt is sheared causing possible injury or death.

### STEP 9

Pull on tractor side of PTO shaft yoke to be sure it has locked in place. Make certain PTO shaft shielding is in place and in good working condition.

### STEP 10

The PTO shaft is a non-rotating design and must be secured prior to equipment use. Using the chain on each end yoke shield attach to a fixed object on the tractor and equipment ends that will not allow the PTO shaft shield to rotate during operation.

## SIZING PTO SHAFT

### STEP 1

Cutting the PTO shaft to length.  
**NOTE:** Be sure to cut equal lengths of each PTO shaft section. Clamp end of PTO shaft in a vice and cut off shield where marked. (Figure 1-A & 1-B)

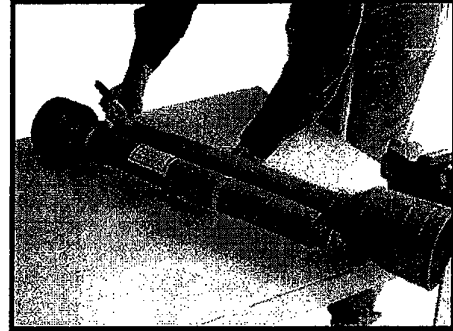


Figure 1-A

### STEP 2

Using cut section of the shield as a guide cut shaft off the same amount. (Figure 2)

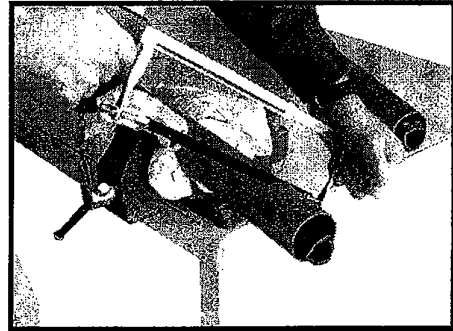


Figure 1-B

### STEP 3

Repeat steps 1 and 2 for other PTO shaft section.

### STEP 4

Use a file to deburr PTO shafts. Clean up all chips, burrs and filings from both ends of the PTO shaft.

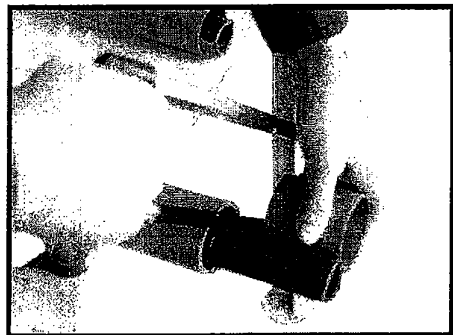


Figure 2

## **OPERATING INSTRUCTIONS**

### **CUTTING HEIGHT ADJUSTMENT**

To prevent blades from striking the ground your mower should be set to the highest position that will give desired grass height. By setting your mower up this way you reduce blade wear and stress on the mower. Mowing at regular intervals will yield far better results than periodic mowing. (i.e. weekly vs. by-weekly mowing).

#### **STEP 1**

Raise mower off the ground with the tractor **SECURELY BLOCK IN POSITION.**

#### **STEP 2**

Remove pin from top of wheel fork assembly. Lower wheel fork assembly from tail wheel arm.

#### **STEP 3**

Arrange spacers until desired cutting height is achieved. Cutting heights range from approximately 2.0–6.0 inches in height.

#### **STEP 4**

Reinstall wheel fork assembly into tail wheel arm and install keeper pin.

#### **STEP 5**

Repeat adjustment process on remaining wheel fork assembly.

**NOTE:** make sure all are adjusted to the same height for an even cut.

#### **STEP 6**

Check to ensure that tail wheel does not come within the specified clearance for the rear deck. See Figure D in the Rotary Mower Assembly Section which is 1" for rear deck. **(or)** Figure C in the Finish Mower Assembly Section which is 1-1/2" for rear deck.

## **ROTARY MOWER OPERATION**

### **STEP 1**

Before each use perform the maintenance described in the maintenance section of this manual.

### **STEP 2**

Read, understand, and follow the information on safety training, preparation, starting and stopping safety, operational safety, transport safety warning sections of this manual.

### **STEP 3**

With tractor running, lower mower to the ground so that the deck surface of the mower is parallel to the ground.

### **STEP 4**

With the tractor at idle RPM, engage PTO and slowly advance throttle to 540 PTO RPM. **NOTE:** Mower is designed to run at 540 PTO RPM only.

### **STEP 5**

Select a low gear for the tractor and begin to mow. Tractor ground speed is to be **CONTROLLED BY GEAR SELECTION ONLY** and not engine speed. Tractor ground speed should allow mower to maintain 540 PTO RPM and thus maximum blade tip speed.

**NOTE:** Do not allow the tractor engine or mower to bog down or stall. This causes undue wear and tear on both the mower and tractor. If this continues to happen reduce ground speed and raise cutting height of mower.

### **STEP 6**

After each use clean all debris from the top and bottom of the mower. Replace any missing or illegible safety decals. Inspect for any damage or worn parts and replace before next use. Store mower in a dry environment.

**See following page for Finish Mower Operation**

## FINISHING MOWER OPERATION

### STEP 1

Before each use perform the maintenance described in the maintenance section of this manual.

### STEP 2

Read, understand, and follow the information on safety training, preparation, starting and stopping safety, operational safety, transport safety warning sections of this manual.

### STEP 3

With tractor running, lower finishing mower to ground so that the swivel links are parallel to the ground. This allows the free-floating hitch system to follow the contour of the ground, thus mowing evenly on uneven terrain.

### STEP 4

With the tractor at idle RPM, engage PTO and slowly advance throttle to 540 PTO RPM. **NOTE:** Finishing mower designed to run at 540 PTO RPM only.

### STEP 5

Select a low gear for the tractor and begin to mow. Tractor ground speed is to be controlled by gear selection only and not engine speed. Tractor ground speed should allow finishing mower to maintain a PTO RPM of 540 and thus maximum blade tip speed. **NOTE:** Do not allow the tractor engine or finishing mower to bog down or stall. This causes undue wear and tear on both the mower and tractor. If this continues to happen reduce ground speed and raise cutting height of finishing mower. Never attempt to clean out a plugged discharge chute until the tractor has been shut down and the mower blades have completely stopped.

### STEP 6

After each use clean all debris from the top and bottom of the finishing mower. Replace any missing or illegible safety decals. Inspect for any damaged or worn parts and replace before next use. Store finishing mower in a dry environment.

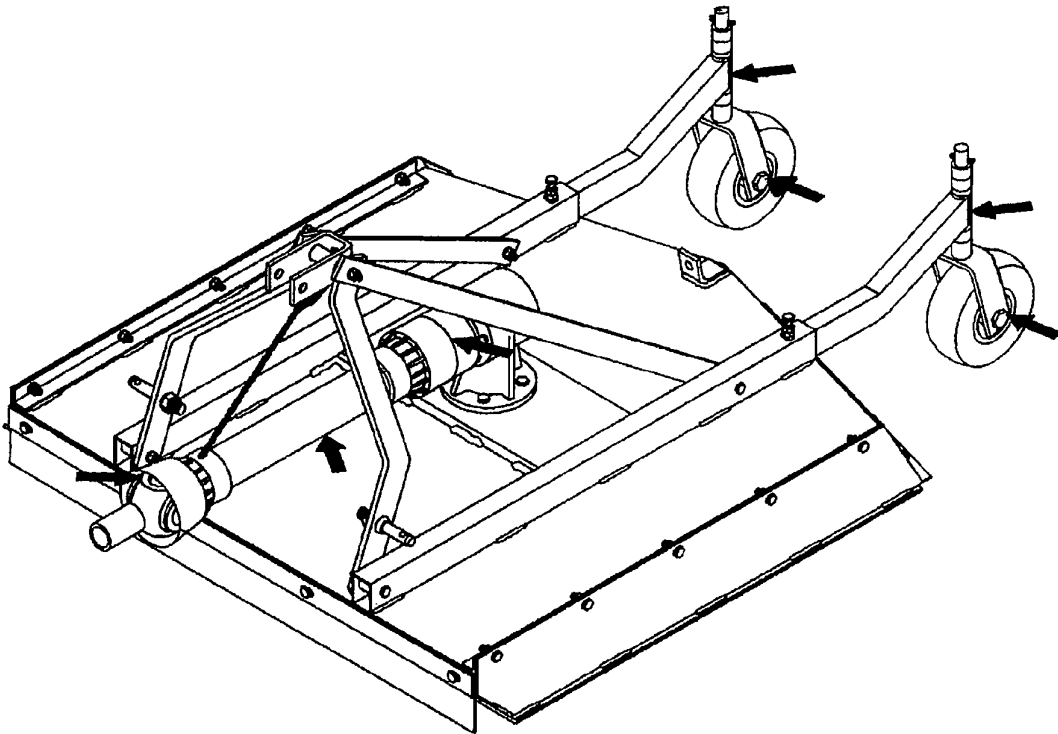


## ROTARY MOWER MAINTENANCE

- 1). Periodically check and maintain proper gear oil level.
- 2). Every 8 hours, grease wheel forks (4), wheel axles (4), PTO shaft universal joints (2), and PTO telescoping surface.

**NOTE: Use only a grade Type II tube grease.**

- 3). Before each use check to make sure all safety features are installed and working properly.
- 4). Keep blades sharp and balanced at all times. When replacing blades, replace both blades and blade bolts at the same time.
- 5). Periodically check all nuts, bolts, and all safety guards to insure they are tight and secure.



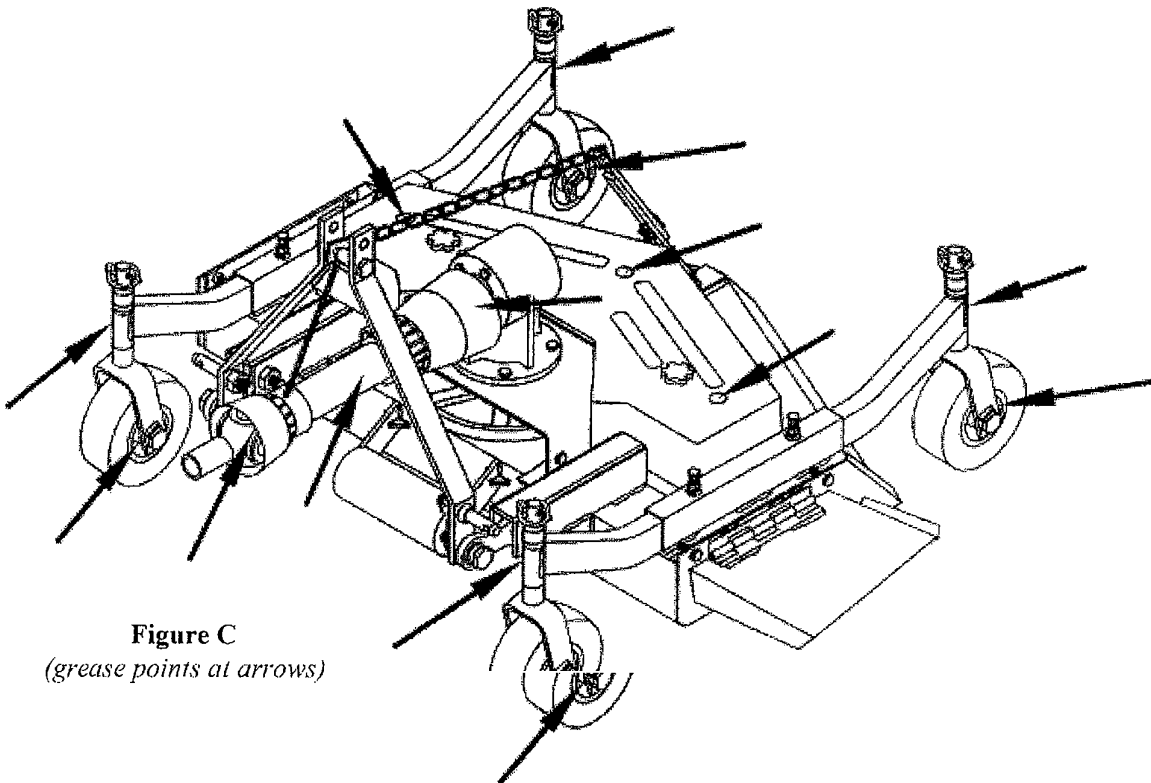
**Figure E**  
*(grease points at arrows)*

## FINISHING MOWER MAINTENANCE

- 1). Periodically check and maintain proper gear oil level.
- 2). Every 8 hours, grease spindles (3), roller axle (1), wheel forks (4), wheel axles (4), PTO shaft universal joints (2), and PTO telescoping surface.

**NOTE: Use only a grade Type II tube grease.**

- 3). Keep tires inflated to rated PSI (listed on tire) at all times.
- 4). Before each use check to make sure all safety features are installed and working properly.
- 5). Keep blades sharp and balanced at all times. When replacing blades, replace all 3 blades and blade bolts at the same time.
- 6). Periodically check all nuts, bolts, and belt to insure they are tight and secure.



**Figure C**  
*(grease points at arrows)*

## FINISHING MOWER MAINTENANCE *continued...*

### **TO REPLACE BELT:**

- STEP 1** Remove PTO shaft.
- STEP 2** Remove top cover.
- STEP 3** Loosen nut on adjustment pulley to allow for movement. (see Figure "D")
- STEP 4** Loosen nut on right side of "L" bracket. (see Figure "D")
- STEP 5** Loosen belt by moving adjustment pulley in opposite direction you would to tighten belt.
- STEP 6** Remove belt from all pulleys and idlers, leaving it on the main pulley. (See Figure E)
- STEP 7** Loosen nuts (4) retaining the gearbox to the gearbox plate.  
**Note:** the top of the nuts should be flush with the end of the bolts.
- STEP 8** Remove bolts (4) holding the gearbox plate to the finishing mower deck.
- STEP 9** Remove the gearbox and gearbox plate assembly from the finishing mower. **Note:** the belt should be removed with the assembly.
- STEP 10** Turn gearbox and plate assembly over and allow to rest on the gear box. This will allow a space to develop between the main pulley and the gearbox plate flange. The belt can be removed through this space.
- STEP 11** Install new belt.
- STEP 12** Re-assemble by reversing steps 1 through 10.

### **TO ADJUST BELT:**

- STEP 1** Remove top cover.
- STEP 2** Loosen nut on adjustment pulley to allow for movement. (see Figure D )
- STEP 3** Tighten nut on right side of "L" bracket until belt is sufficiently tight. (See Figure D)
- STEP 4** Re-tighten nut on adjustment pulley.
- STEP 5** Install top cover.

# FINISHING MOWER BELT ADJUSTMENT

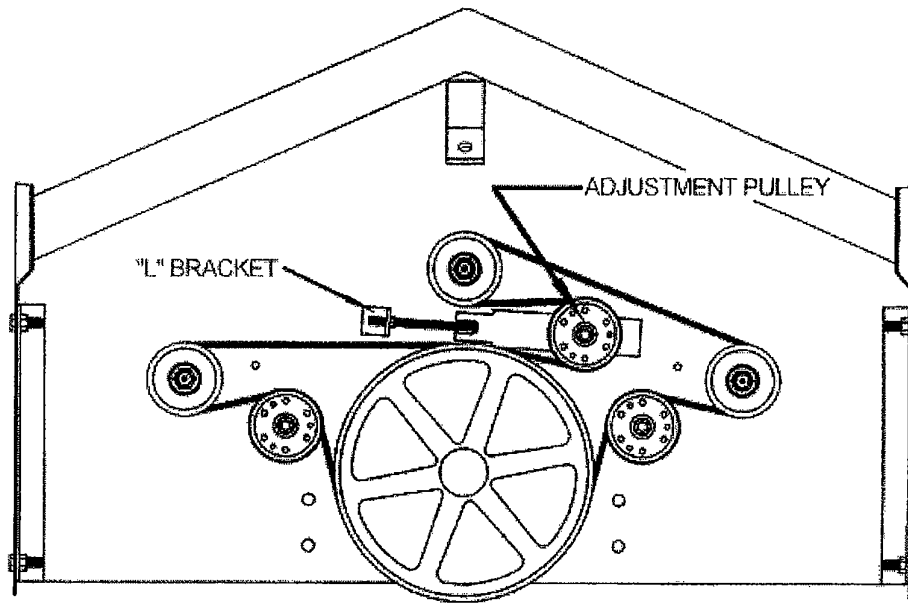


Figure D

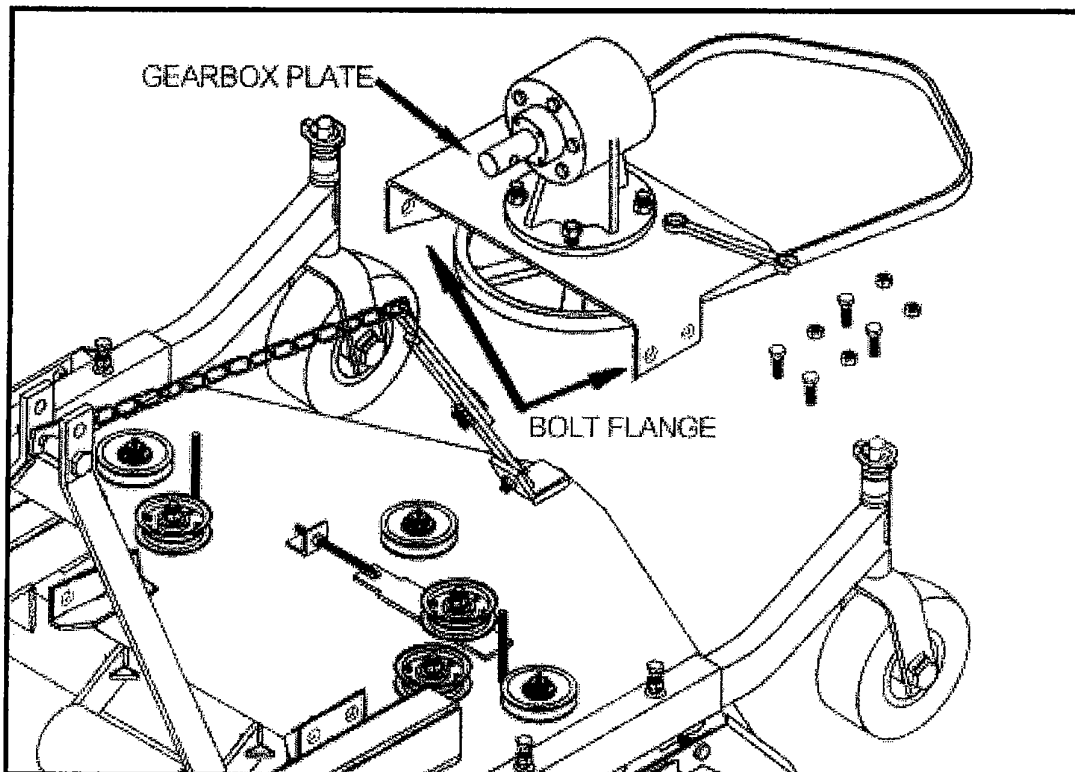


Figure E



## **MAINTENANCE SAFETY**



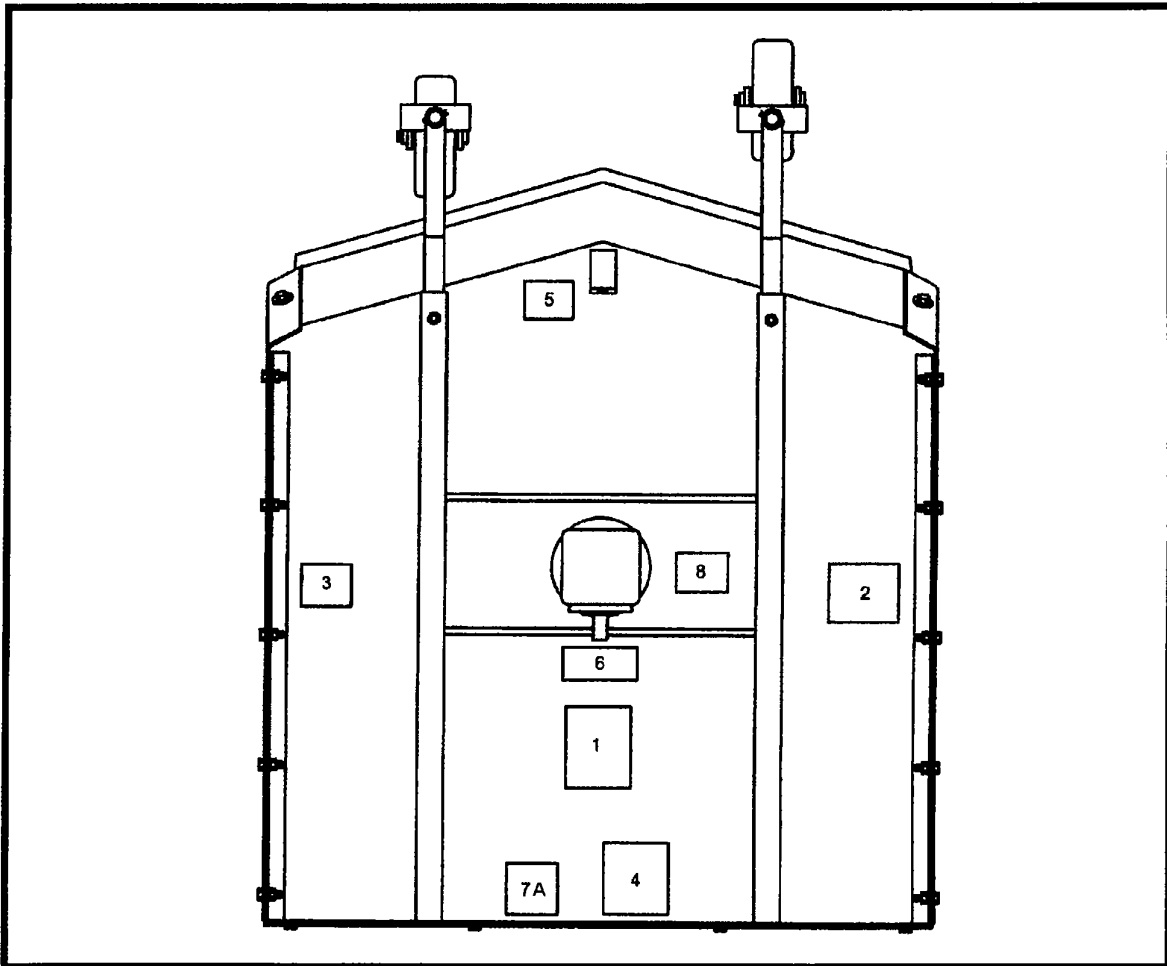
- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
  - Follow good shop practices.
  - Keep service area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for the job.
- Make sure there is plenty ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- Before working on this machine, disengage the PTO, shut off the engine, set the brakes, and remove the ignition keys.
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- Never work under equipment unless it is blocked securely.
- Always use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance.
- Frequently check mower blades. They should be sharp, free of nicks and cracks and securely fastened.
- Periodically tighten all bolts, nuts, and screws and check that all cotter pins are properly installed to ensure unit is in safe condition.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.
- After servicing, be sure all tools, parts and service equipment are removed from mower.
- Do not allow debris, grease or oil build up on any deck or platform.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications.
- The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
- A fire extinguisher and a first aid kit should be kept readily accessible while performing maintenance on this equipment.

## **STORAGE SAFETY**

- Following operation, or when unhooking the mower, stop the tractor, set the brakes, disengage the PTO, shut off engine and remove the ignition keys.
- Store the unit in an area away from human activity.
- Do not park equipment where it can be exposed to direct contact with livestock for long periods of time. Damage and livestock injury could result.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.

## ROTARY MOWER SAFETY SIGN LOCATIONS

The types of safety signs and locations on the equipment are shown in the illustration below. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your **SAFETY AWARENESS**

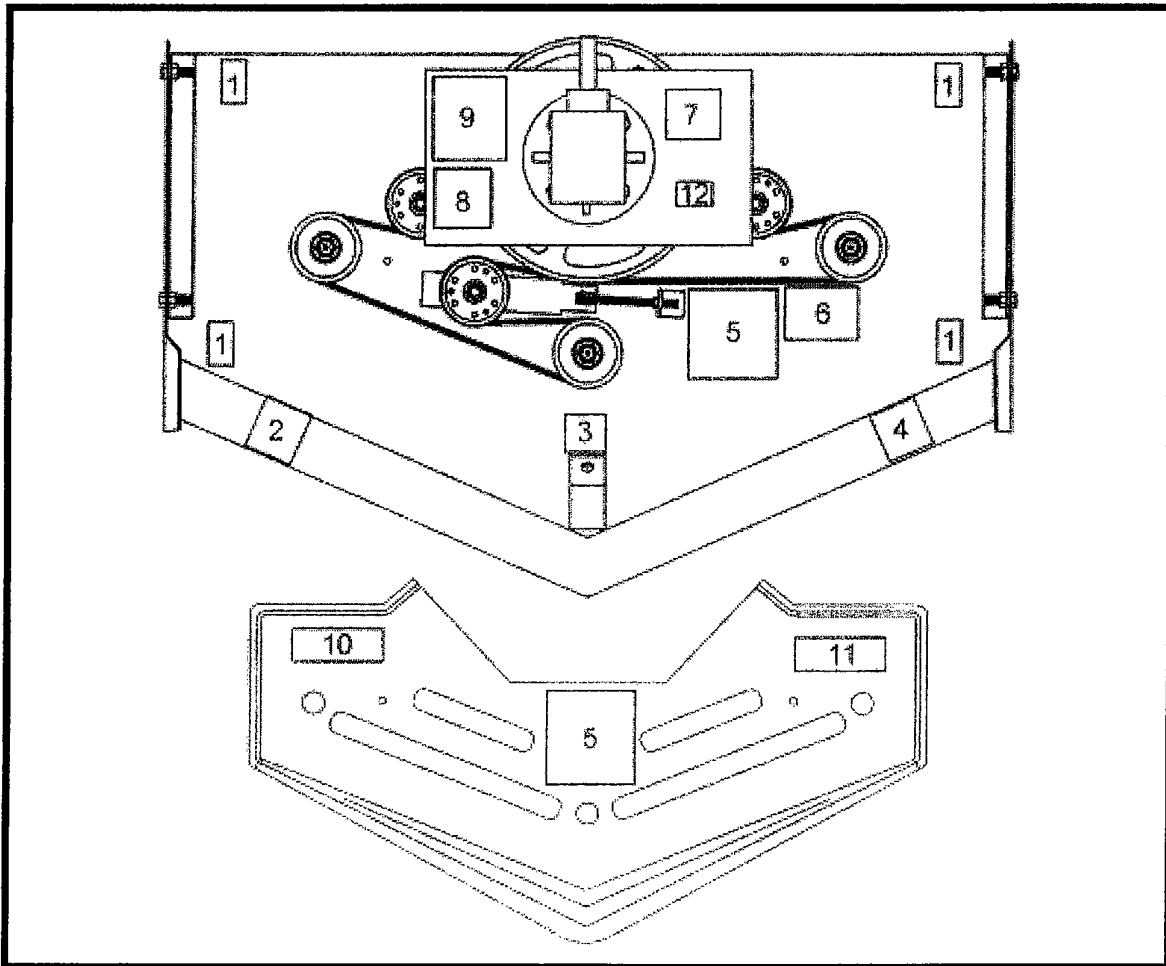


**REMEMBER:** IF safety signs have been damaged, removed, become illegible or parts have been replaced without signs, new safety signs must be applied. New safety signs are available from your authorized dealer, distributor or factory.

## FINISHING MOWER SAFETY SIGN LOCATIONS



The types of safety signs and locations on the equipment are shown in the illustration below. Good safety requires that you familiarize yourself with the various safety signs, the type of warning and the area, or particular function related to that area, that requires your **SAFETY AWARENESS**



**REMEMBER:** IF safety signs have been damaged, removed, become illegible or parts have been replaced without signs, new safety signs must be applied. New safety signs are available from your authorized dealer, distributor or factory.

## SAFETY DECALS

# **WARNING**

### **To prevent serious injury or death:**

*Si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad.*

- Read and understand Operator's Manual before using. Review annually.
- Do not permit riders on the tractor or mower, including children.
- Do not allow children to operate mower.
- Operate only with guards installed and in good working condition.
- Keep away from moving parts.
- Operate only with tractor equipped with ROPS and seatbelts.
- Before mowing, clear debris from mowing area.
- Do not operate in the raised position.
- Stop engine, lower mower, set brake and wait for all moving parts to stop before dismounting.
- Support mower securely before working beneath unit.
- Transport with clean reflectors, SMV and working lights as required by federal, state, and local laws.
- Keep yourself, others, and clothing away from the rotating PTO.
- Keep others away from area to be mowed to avoid injury from flying objects.
- Do not stand between tractor and mower.
- Be careful on uneven terrain. Decrease speed when turning.
- Do not exceed a safe transport speed.



## SAFETY DECALS



2



3

## SAFETY DECALS

**⚠ DANGER**




**ROTATING DRIVELINE HAZARD  
KEEP AWAY**

To prevent serious injury or death from rotating driveline:

- Keep all guards in place when operating.
- Operate only at 540 RPM
- Keep hands, feet, clothing and hair away from moving parts.
- Do not operate without driveline securely attached at both ends.
- Do not operate without driveline shields that turn freely on driveline.

4

**⚠ WARNING**

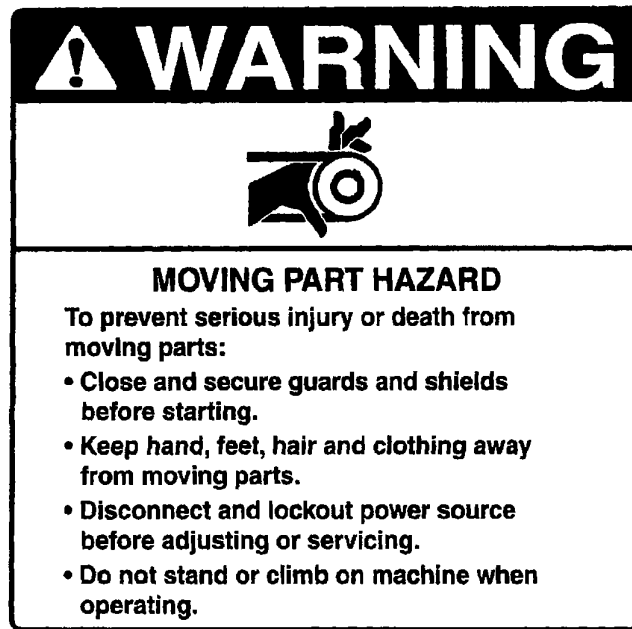


**TO PREVENT SERIOUS INJURY OR DEATH**

- Keep hands and body out of hitch area when attaching mower to tractor.
- Keep body clear of crush point between tractor and mower.

7A

## SAFETY DECALS



SAFETY DECALS

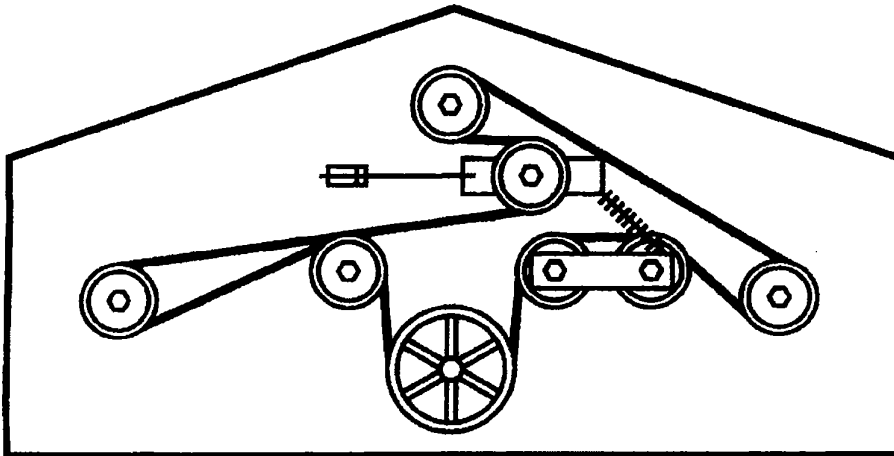
**! WARNING**



**TO PREVENT SERIOUS INJURY OR DEATH**

- Keep hands and body out of hitch area when attaching mower to tractor.
- Keep body clear of crush point between tractor and mower.

6



7

**FOR LAWN  
GRASS ONLY**

8

**SAFETY DECALS**

**SHIPPED WITHOUT OIL IN GEAR BOX  
AND WITHOUT GREASE IN GREASE FITTINGS.  
"CONSULT OWNERS MANUAL FOR  
LUBRICATING AND OPERATING INSTRUCTIONS."**

9

**CHECK**  
Air Pressure  
in Tires  
**MAINTAIN**  
Rated PSI  
At all Times

10

SAFETY DECALS

**Operators Manuals are  
available from  
your dealer, or**

**King Kutter, INC.  
P.O. Box 1200  
Winfield, AL 35594  
(205) 487-3202  
www.kingkutter.com**

11

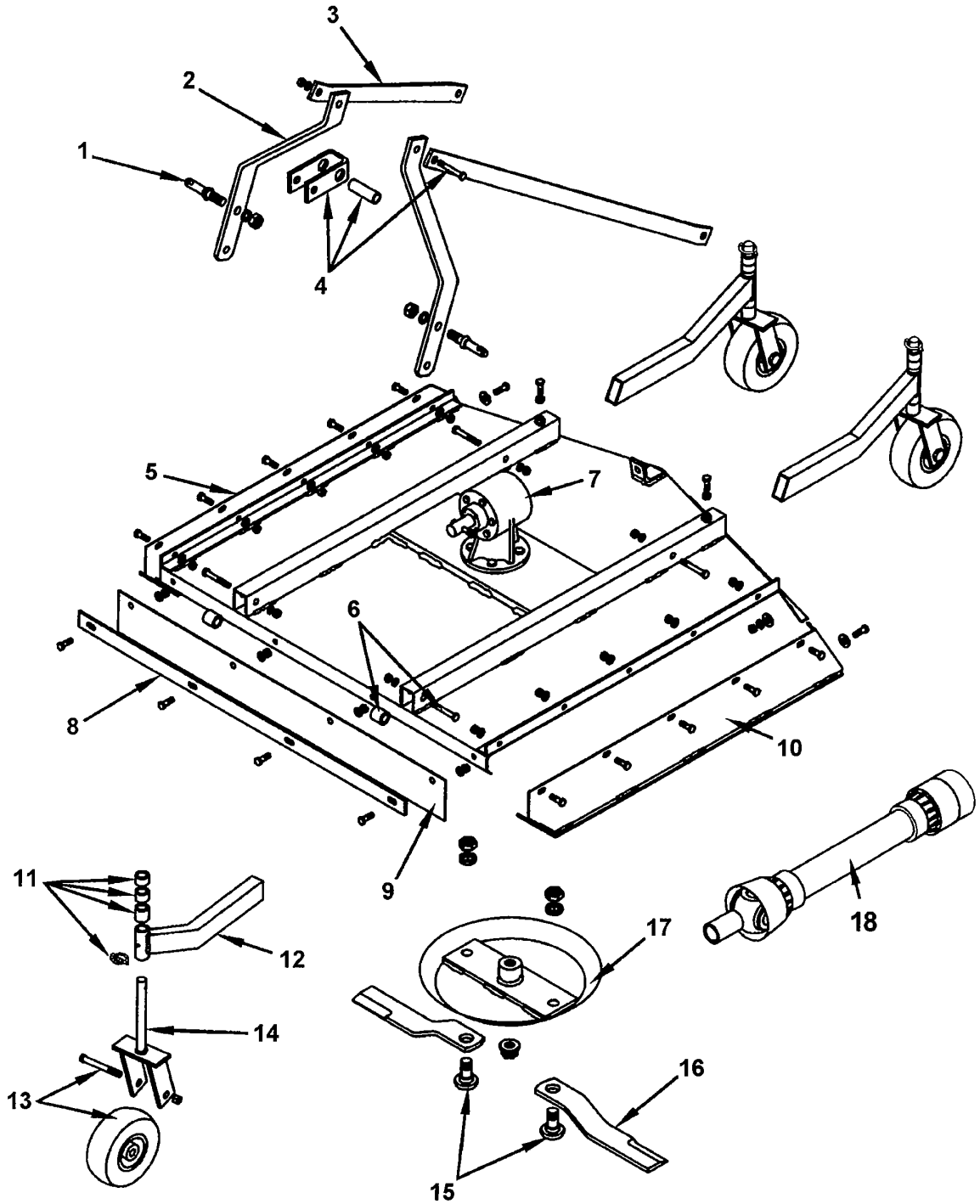
**715<sup>300</sup> =afbil}**

**MODEL NO.  
DESCRIPTION  
SN# XXXXXXXXXXX**

12

37

# ROTARY CUTTER COMPONENTS

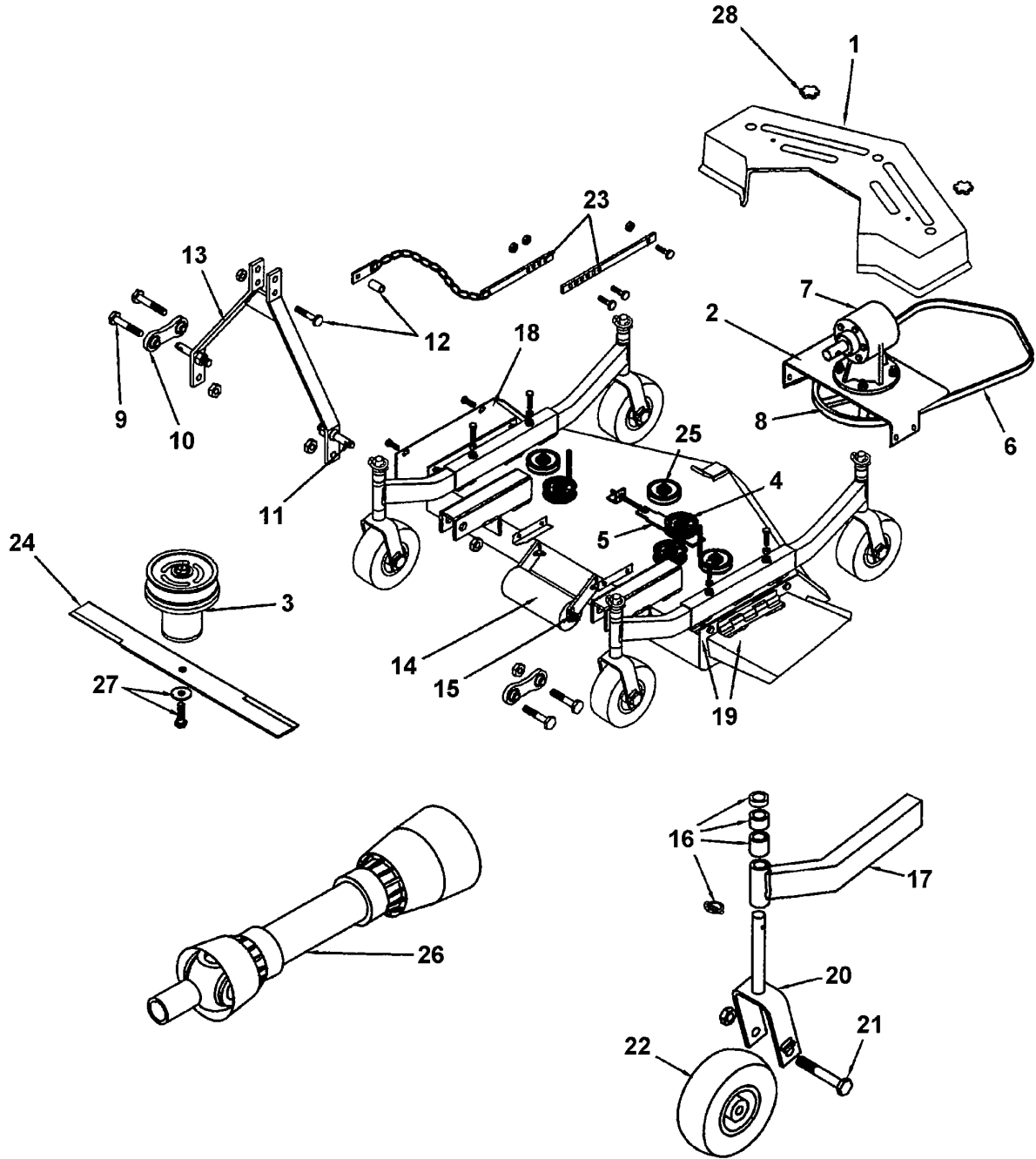


## ROTARY CUTTER COMPONENTS

<b>Item</b>	<b>Part #</b>	<b>Description</b>
1	203266	LINK PIN CAT.I W/NUT & LOCKWASHER
2	311100	LIFT ARM
3	311099	LIFT ARM BRACE
4	501027	SWIVEL LINK KIT (inc. bolts)
5	501003	RIDE SIDE PANEL KIT (inc. bolts)
6	501005	LIFT ARM ATTACHMENT (inc. bolts)
7	184000	GEARBOX
8	501006	BELT GUARD KIT (inc. belt and strip)
9	311101	BELT GUARD
10	501004	LEFT SIDE PANEL KIT (inc. bolts)
11	501007	TAILWHEEL ARM SPACER KIT
12	403700	TAILWHEEL ARM
13	502030	WHEEL KIT (inc. axle bolt)
14	403026	TAILWHEEL ARM FORK
15	501001	BLADE BOLT SET (Pkg. of 2)
16	501118	MOWER BLADE SET (Pkg. of 2)
17	403031	STUMP JUMPER
18	147029	29" PTO SHAFT



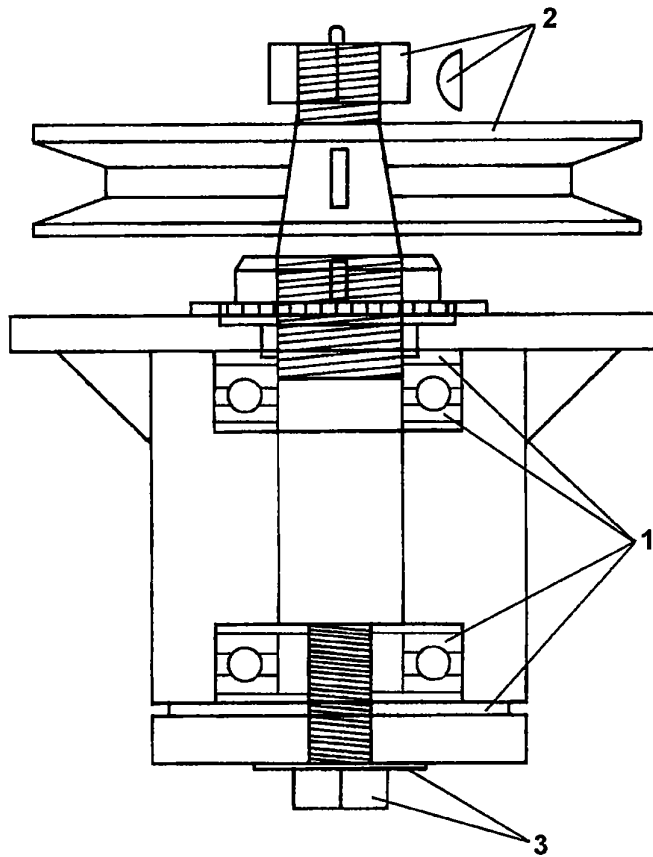
# FINISH MOWER COMPONENTS



## FINISH MOWER COMPONENTS

Item	Part #	Description
1	124684	TOP COVER
2	403029	GEAR BOX PLATE
3	502303	SPINDLE UNIT - SINGLE
4	164090	IDLER PULLEY - SINGLE
5	403682	BELT ADJUSTMENT ASSY.
6	167108	V- BELT B108
7	184000	GEARBOX
8	165114	MAIN PULLEY - SINGLE
9	502011	BOLT 3/4" X 4" w/nut
10	502010	SWIVEL LINK SET
11	203266	LINK PIN CAT.1 w/nut
12	502012	LIFT ARM SPACER w/bolt & nut
13	403662	LIFT ARM ASSY.
14	502110	CENTER ROLLER w/axle
15	403670	ROLLER AXLE
16	502120	HEIGHT ADJUSTER SET
17	403700	TAILWHEEL ARM
18	403665	R.H. SIDE PANEL
19	403681	L.H. SIDE PANEL w/chute
20	403023	WHEEL FORK
21	502125	AXLE BOLT 3/4" X 5" w/nut
22	502015	TIRE & RIM w/axle & nut
23	502690	CHAIN ASSY.
24	502316	BLADE SET w/bolts
25	502313	SPINDLE PULLEY - SINGLE
26	147022	22" PTO SHAFT
27	502310	L.H. BLADE BOLT SET w/washer
28	502287	PLASTIC KNOB

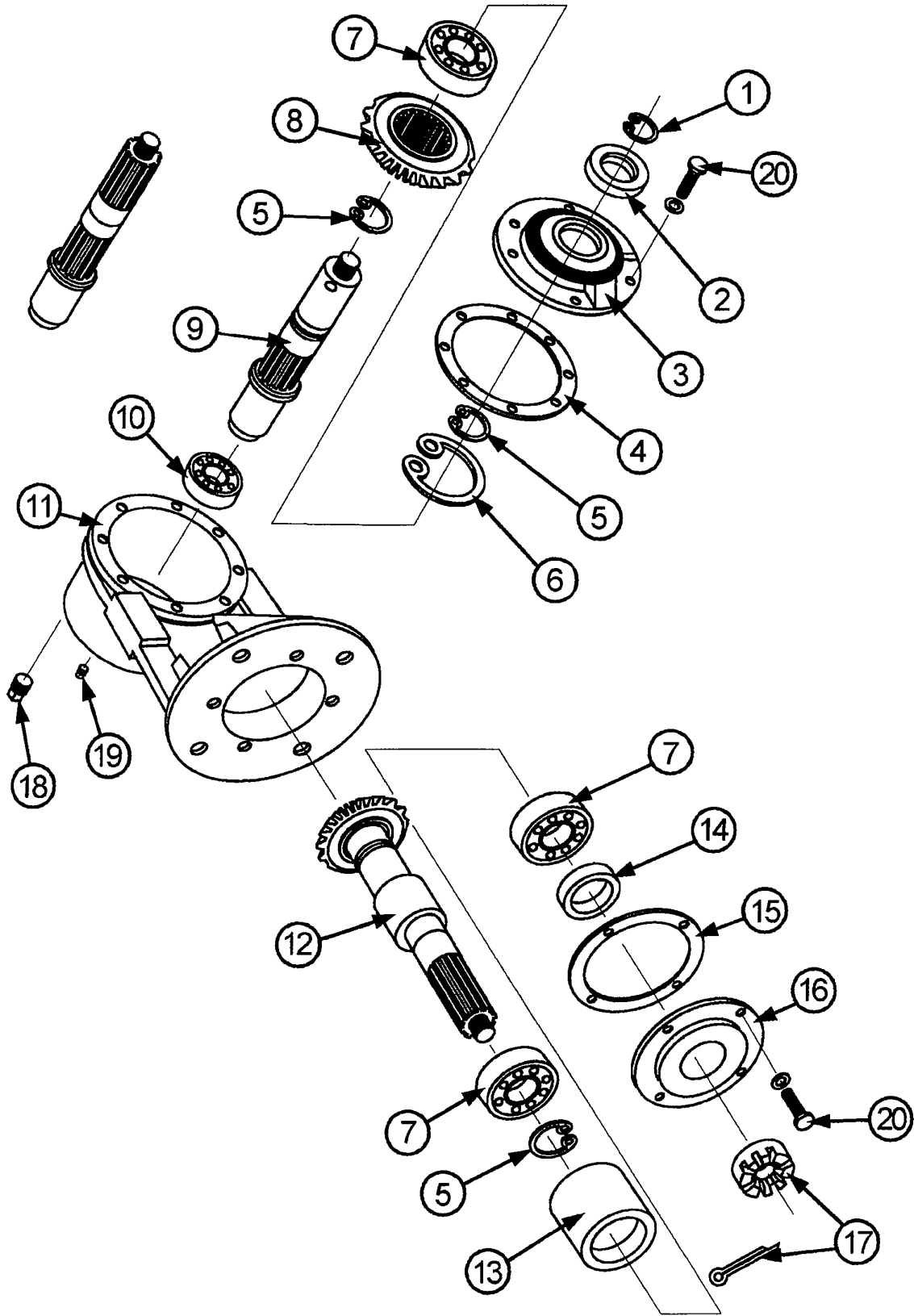
# BLADE SPINDLE UNIT



Item	Description	Part #
1	Ball Bearings(6205)(2/pk), Snaprings(4/pk)	555009
	Seals(2/pk) (TCM 25X52X7TC)*	
2	Spindle Pulley /w Nut & Key	502313
3	Blade Bolt Set (3) /w Washer	502310
<b>Complete Spindle Assy</b>		<b>502303</b>

\*Old Style Seal (TCM 32X52X7SC)

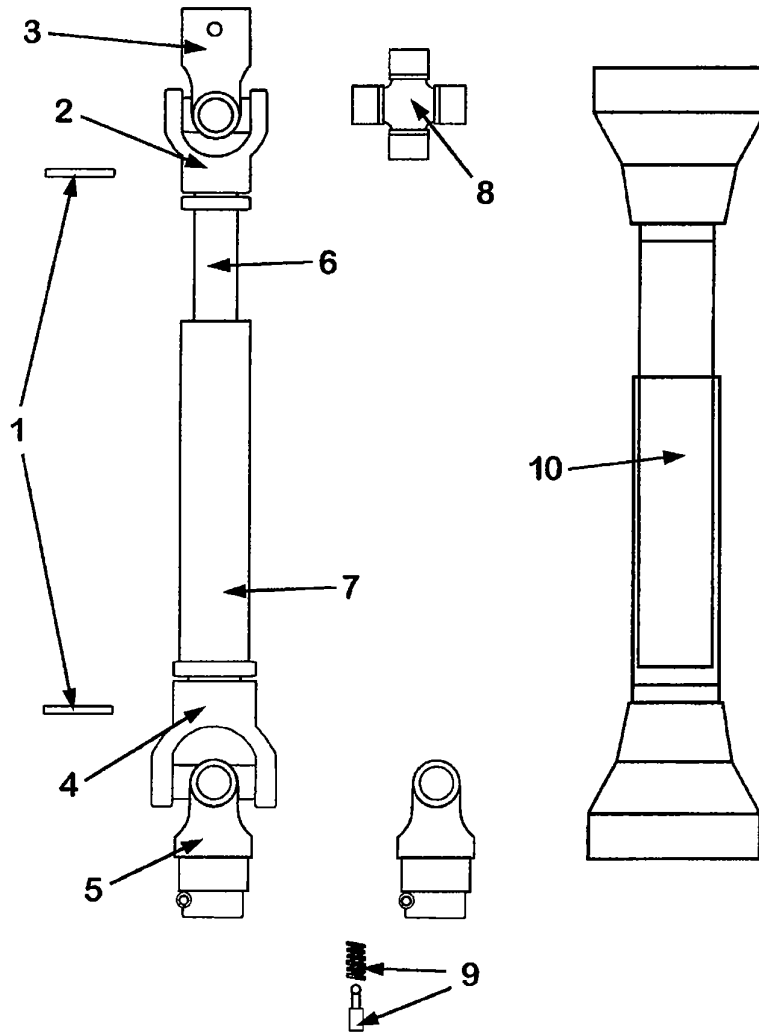
# 40 HP GEARBOX COMPONENTS



## 40 HP GEARBOX COMPONENTS

Item	Part #	Description
1	106138	SNAP RING
2	156010	INPUT SEAL (NAK 35 X 54 X10)
3	129015	FRONT CAP
4	124130	FRONT CAP GASKET
5	131031	SNAP RING
6	131030	SNAP RING
7	155005	BEARING (Hoover 2008)
8	185007	INPUT GEAR
9	186010	INPUT SHAFT
10	155010	BEARING (NSK 6207)
11	129010	HOUSING
12	185005	OUTPUT SHAFT
13	131045	SPACER
14	156005	OUTPUT SEAL (NAK 40 X 54 X 7)
15	124131	BOTTOM CAP GASKET
16	129005	BOTTOM CAP
17	501110	CASTLE NUT 1" w/washer and cotter pin
18	131035	PIPE PLUG 1/2"
19	131040	PIPE PLUG 1/8"
20	-----	HHCS 3/8" X 1" nut and lockwasher ( <b>Obtain Locally</b> )

## SHEAR PIN PTO SHAFT



Item	Description	147029	147022
1	Roll Pin Kit	500131	500131
2	Male Tube End Yoke	151045	151045
3	Implement End Yoke	151040	151040
4	Female Tube End Yoke	151050	151050
5	Tractor End Yoke	151035	151035
6	Inner Tube 14 Series	151090	151090
7	Outer Tube 14 Series	151091	151091
8	Cross Kit #4	170015	170015
9	Quick Disconnect Pin	170110	170110
10	Safety Shield BYPY	124310	124310
10	Safety Shield EUROCARDAN	124311	124311

