

# LOW PROFILE OWNER'S MANUAL

Low Profile  
Series *by*



**Vrisimo**  
FLAIL MOWERS & SHREDDERS





# Delivery Report Form

Prior to acceptance of the equipment, thoroughly check and mark off the items outlined in the delivery checklist below with your sales representative. Make sure you fully understand the operation, adjustment and safety rules as outlined in the operator's manual. The sales representative is responsible for going over this form with the owner and operator of this attachment. This form also serves as your warranty registration. Fax to 209-882-9001.

## Customer Information

Last Name		Street Address	
City	State	Zip	

## Attachment Information

Model	Serial Number
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## Dealer Information

Company Name		Sales Rep. Name	
Company Street Address	City	State	Zip

- Buyer is shown all grease fittings and proper gear oil height.
- Oil in Gearbox checked for proper level and weight.
- All bolts checked for tightness.
- All hitch pins and retainer bolts in place.
- All knives and linkages in place.
- All shields in place.
- Belts checked for proper adjustment.
- PTO shaft checked for proper length.
- Procedures for attaching mower/shredder to tractor demonstrated to end user.
- Starting procedures explained to end user.
- Operation guidelines as outlined in owner's manual explained to end user.
- Adjustment of cutting height, belts and mower height explained to end user.
- Replacement of mower/shredder knives explained to owner.
- Lubrication points shown to end user.
- ALL safety precautions thoroughly read and understood.

**The signatures below indicate that both the sales representative and the end user have gone over the above checklist and all topics have been covered thoroughly.**

Buyer Signature \_\_\_\_\_

Date \_\_\_\_\_





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# Thank You

Dear Customer,

Thank you for purchasing a Vrisimo attachment. This manual has been prepared to acquaint you with the operation, adjustment and maintenance of your new attachment. It was carefully designed and manufactured under the highest industrial standards to give you years of dependable service. Read this manual carefully and fully understand the operation of the machine before attempting to operate it. Each section has been clearly identified so you can find the information you need. *Vrisimo Flail Mowers & Shredders* reserves the right to make changes in design and specifications, and/or to make additions to or improvements in its product without imposing any obligation upon itself to install them on its products previously manufactured. If at any time you require additional information, consult your authorized dealer or the customer service department.

## ATTENTION

The safety of the operator was one of the primary concerns of *Vrisimo Flail Mowers & Shredders* when designing this attachment. Shielding, simple adjustments and other safety features were built into this attachment whenever possible. You can make your home, orchard or farm a safer place by observing the precautions noted in this manual. Be sure you and the people working for you read and understand them. All machinery should be operated only by responsible persons who have been trained to operate them in a safe manner and have read and understand the operating precautions and instructions fully.

## Important to Purchaser

### Customer Ownership Registration

Prior to acceptance of the equipment, thoroughly check off the pre-delivery checklist with the sales representative. Be sure you fully understand the operation, adjustment and safety rules as outlined in this manual.



*Vrisimo Flail Mowers & Shredders* is solely owned by Valley Tool and Manufacturing.

Have industrial applications? Own a skid steer or mini excavator? for our full line of industrial applications.

Visit [www.Vrisimo.com](http://www.Vrisimo.com)



PO Box 220 | 2507 Tully Road | Hughson, CA 95326 USA  
800 426-5615  
[www.Valleytoolmfg.com](http://www.Valleytoolmfg.com)

### **Delivery Checklist**

- Buyer is shown all grease fittings and proper gear oil height.
- Oil in gearbox checked for proper level and weight.
- All bolts checked for tightness
- All hitch pins and retainer bolts in place.
- All knives and linkages in place.
- All shields in place.
- Belts checked for proper adjustment.
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- Procedures for attaching mower/shredder to tractor demonstrated to end user.
- Starting procedures explained to end user.
- Operation guidelines as outlined in owner's manual explained to end user.
- Adjustment of cutting height, belts and mower height explained to end user.
- Replacement of mower/shredder knives explained to owner.
- Lubrication points shown to end user.
- ALL safety precautions thoroughly read and understood.

## **Warranty**

Vrisimo Equipment guarantees the Vrisimo Flail Mower to be free from defect in material and workmanship for a period of one year dating from delivery to the original user. The obligation under this warranty, statutory or otherwise, is limited to the replacement and/or repair at your authorized Vrisimo dealer of choice part or parts as shall appear to us, upon inspection, to have been defective in material or workmanship and not altered in any way by the customer or other parties.

This warranty shall not apply to vendor warranted PTO items such as bearings, belts, PTO shafts and gearboxes or other parts not manufactured by Vrisimo Equipment. Such being subject to the warranty of their respective manufacturers.

No expressed, implied or statutory warranty other than herein set forth is made or authorized to be made by us. Vrisimo Equipment shall not be liable for consequential damages of any kind, including but not limited to: consequential labor costs or transportation charges in connection with the replacement or repair of defective parts, lost time or expense which may have accrued because of said defects.

Vrisimo reserves the right to make changes in its products at any time and without prior notice. When such changes are made, neither Vrisimo Equipment nor its dealers assume any obligation to make these changes in products previously manufactured.

# 1) Safety

*Failure to heed any of these warnings may result in personal injury or death.*

## I) Operational Safety

- **Before operating this machinery read the owner's manual thoroughly.**
- Do NOT operate this machine without proper training. It is the Owner's responsibility to ensure all Operators are properly trained in the appropriate language.
- Use OSHA approved eye, ear and head protection to protect the Operator from flying debris and noise.
- Avoid wearing loose clothing as it can inadvertently be drawn into moving parts.
- Never use drugs or alcohol before or during operation of this machine.
- Only operate this machine when it is in good working order on an appropriate power unit that is in good working order, and with all guards and safety devices in place and functioning.
- Be aware of the machine's weight and its effect on the stability of the power unit.
- Use flashing warning lights when operating on highways, except when prohibited by law.
- Always inspect area to be worked to ensure that the jobsite is free from obstacles and debris that could injure the operator or damage the machine. Operate at a safe speed (typically 0-5 mph) in consideration of the local terrain, moving slower when operating on or near slopes, ditches or drop-offs.
- Avoid running the machine along the ground in rocky areas as this could create dangerous discharge.
- Keep bystanders and children clear of the work area during operation as debris can be discharged in a dangerous manner. The minimum safe distance from discharge is 100 ft.
- Never allow children or other persons to ride on this mower.
- Be aware that this machine may be wider than the power unit, and caution should be used to avoid clipping or running over trees, signs or posts that may be in the way of the machine.
- Avoid operation that would allow hydraulic lines to be pinched or severed. In the event of a hydraulic leak, hydraulic fluid may have sufficient force to penetrate skin which requires immediate medical attention.
- Do not turn so sharp or lift the mower so high that the driveline produces a severe knocking as this will cause the accelerated wear of drive train components. The drum should not be rotating when the deck is lifted.
- Be aware of the risks of equipment and grass fires. To mitigate those risks:
  - Do not smoke or have an open flame in the work area.
  - Do not operate in areas that have been freshly burned or are still burning.
  - Do not allow clippings/debris to collect near hydraulic components or bearings.
  - Avoid areas with high fire risk: dry grass, brush or trees.
- Operation of this machine should be stopped immediately if the Operator's vision becomes obscured by the discharge of debris and dust. Also avoid operating this machine in unusually foggy or dusty conditions or at night.
- Keep away from the machine until all the energy has dissipated. This includes the complete stopping of the drum's rotation as well as the dissipation of pressure in the hydraulic lines.



- In the event that a failure does occur during operation or if the machine begins to produce excessive noise or vibration, shut the machine down immediately and repair before any continued use.
- Never leave the machine unattended unless it is in the storage or transport position.
- **In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern and prudence and requires suitable training of personnel involved in the operation, transport, maintenance and storage of equipment.**

## II) Maintenance Safety

- **Before performing maintenance on this machine read the owner's manual thoroughly.**
- Maintenance should only be performed by properly trained individuals. It is the Owner's responsibility to ensure all individuals involved in maintaining the machine are properly trained in the appropriate language.
- Be sure to inspect all safety devices before each use. If safety devices are worn in such a way that they can no longer properly perform their guarding function contact your nearest Vrisimo dealer for replacements.
- Maintain all safety decals and make sure they are visible to the operator. If decals are worn, contact your nearest Vrisimo dealer for replacements.
- Replace cracked or broken blades with new ones. Do not attempt to weld damaged blades. This can cause damage that could result in the blade being thrown from the shredder.
- Wear gloves and eye protection and exercise care when handling blades as they can be sharp. Also be alert to worn or damaged surfaces that could have sharp edges.
- Disengage PTO, shut off engine and allow all movement to stop before leaving the operator's position to adjust, lubricate, clean or unclog the machine. Do not try to uncouple hydraulic hoses unless the pressure has adequately dissipated.
- Before working on or underneath the machine, place blocks on both sides (front and back) of power unit's tires or treads and under each end of the attachment to prevent accidental lowering of the machine. Also, remove the ignition key from the power unit and allow all movement to stop before beginning work.

# 2) Basic Operation

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## I) Attaching to the Power Unit

The person that is attaching your Vrisimo product should be familiar with the attachment and removal of equipment from a 3-point hitch and be able to do so safely. Attachment should be performed on flat ground away from obstructions. During attachment, keep hands out of pinch points and away from the blades to avoid injury. The Power Unit's PTO should be disengaged and removed completely before trying to attach Power Unit to the mower, failure to do so could result in damaging the PTO.

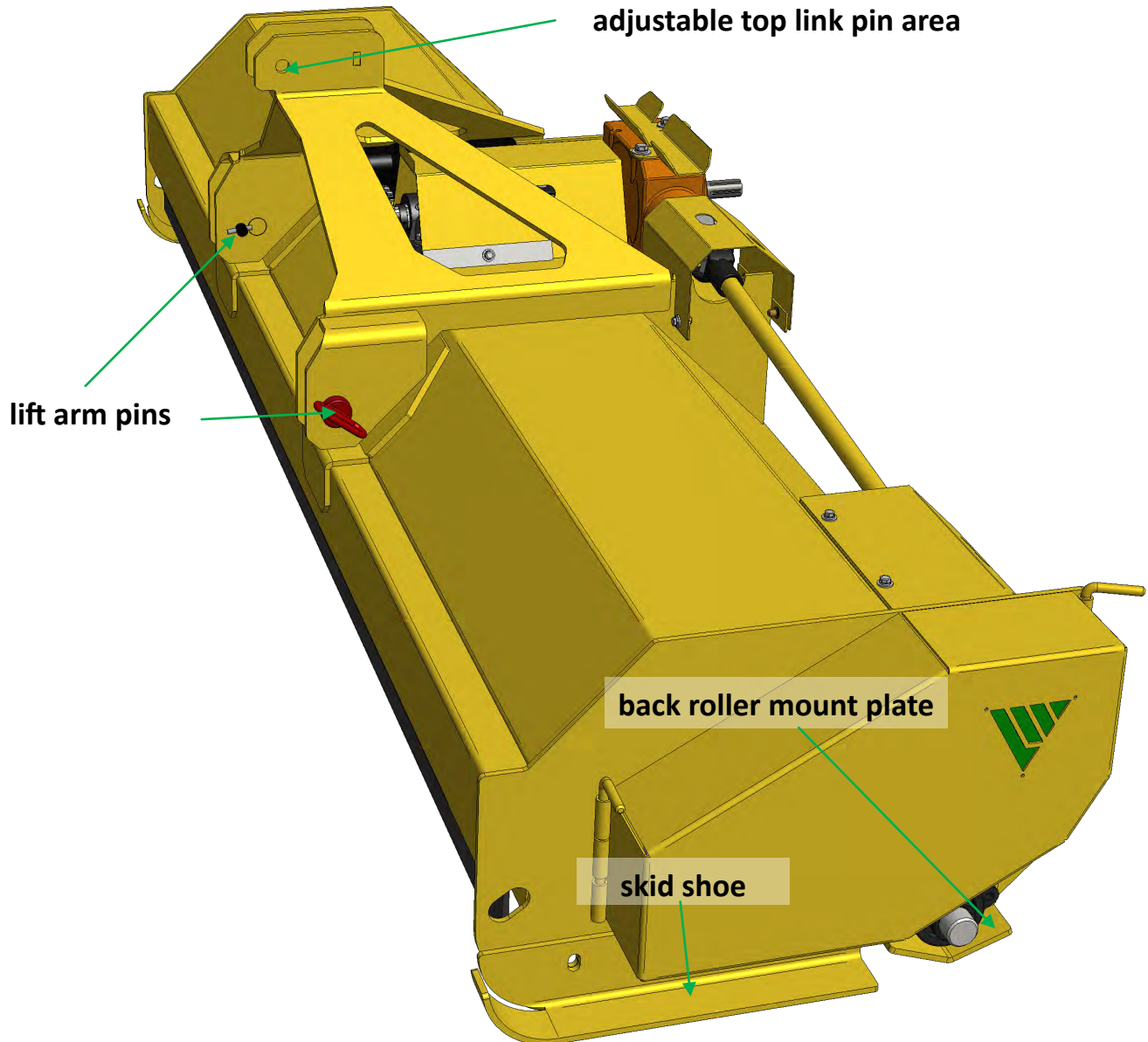
- 1) Back the tractor so the lift links arms are in-line with the mower's hitch pins.
- 2) Shut off engine and disengage PTO. Block tractor wheels before you place yourself between the tractor and the mower.
- 3) Attach the tractor's left and right lift links to the corresponding hitch pins of the mower. Secure both connections with lynch pins.
- 4) Adjust sway chains or bars so there is a minimum of side slack. Be sure the stabilizers are tight.
- 5) Attach the tractor's top link to the "A" frame of the mower. Adjust the link out to the approximate desired cutting height.
- 6) Attach the PTO to the tractor by pushing in on the quick disconnect pin. Remember, tube end goes to the mower and bar end goes to the tractor.
- 7) Do not raise the mower while the PTO is engaged, since this will cause the shaft to bind or even break, and may cause injury to the operator.

## II) Starting Procedure

- 1) Check that the attachment is in the down position and that the blades are not in contact with ground. Start engine and set throttle to idle. Never engage the PTO with the motor above idle speed.
- 2) With the motor at low RPM engage the PTO output.
- 3) Slowly bring the throttle up to 1700 RPM. If the Attachment produces excessive noise or vibration, disengage the PTO and shut down the Power Unit immediately. Determine the cause of the problem and correct it before continuing with its operation.
- 4) Attachment is ready for operation.

## III) Running Your Attachment

- 1) Determine ground speed based on terrain and material being cut. This will typically fall within the 0-5 mph range.
- 2) Adjust the hitch to the approximate desired cutting height.
- 3) Position skid shoes between 1/2-3" off the ground; skid shoes are not meant to run on the ground.
- 4) The mower and skid shoes should be level with the ground, the height of the mower can be adjusted with the back gauge roller which runs along the ground and works in conjunction with top link.
- 5) Make sure PTO is properly attached.
- 6) With the attachment and PTO line connected check the drive shaft through the entire lifting range checking for binding, bottoming, uncoupling or attachment contact.



#### Attaching to Power Unit

### IV) Shut Down Procedure

- 1) When work is completed, disengage the PTO drive and position it for storage or transport (See the "Storage and Transport" section for details on proper storage). Shut off Power Unit and set parking brake, wait for the attachment to stop rotating.
- 2) Visually inspect the PTO shaft, all the bearings and gearbox for excessive heat or leaks.

# 3) Adjustments & Maintenance

**Note:** Before performing maintenance, ensure all motion has stopped and that the Power Unit is powered down with ignition key removed. Before working on or underneath the mower, place blocks on both sides of the Power Unit's tires and underneath both ends of the mower to prevent accidental lowering of the machine.

## I) Cut Height Adjustments

- 1) The cutting height of the mower can be adjusted by shortening and lengthening the adjustable top link.
- 2) The entire weight of the mower should be on the back gauge roller. The skid shoes should be adjusted so there is 1/2"-3" clearance between them and the ground. The shoes are for added protection against tree roots, ridges or border and are not designed to slide on the ground. Adjust the back gauge roller by removing the bolts from both back roller mount plates and resetting it to the correct height.

## II) Wear Components

Wear components such as knives, belts and bearings may wear at different rates and so each should be inspected for wear independently.

### a) Belt Tension

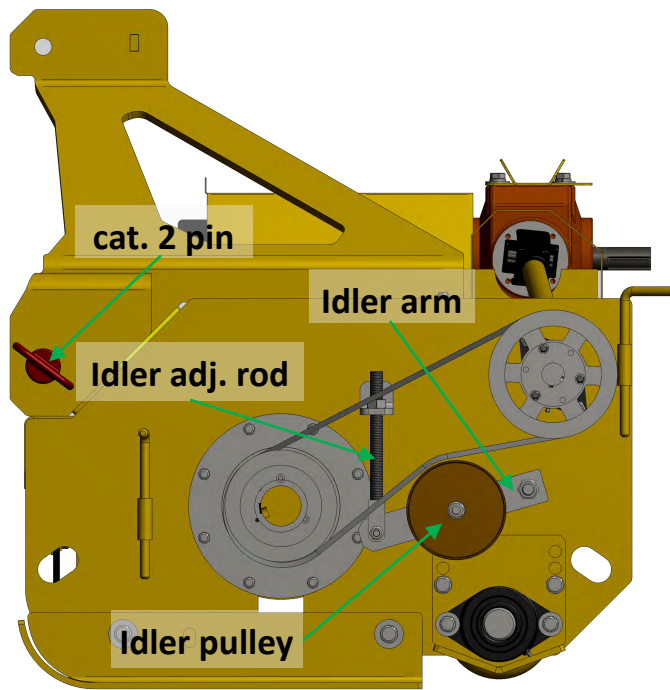
- 1) Belt adjustment is done by tightening the idler adjusting rod which pulls the idler pulley into the belts. On a new machine, after 1-2 hours of operation, tighten the drive belts so there is only 1/4" to 3/8" give with 8 pounds of force.

### b) Knives

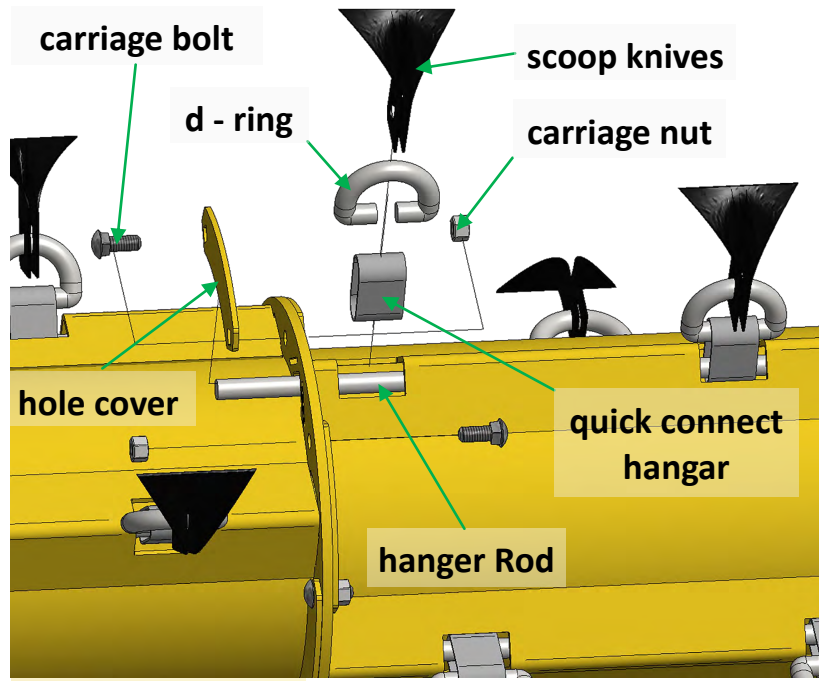
- 1) When individual knives, bolts or spacers become worn or damaged they must be replaced with hardware saved from your previous knife replacement. Replacing an individual station with new hardware could cause the cutter drum to run out of balance. When replacing hardware at all the stations, some old hardware should be saved to replace future broken hardware.
- 2) Replacing the complete knife assembly is done by removing the 3/8" carriage bolt's from the hole cover, removing the hole cover as well. Remove the hanger rod and remove old knife assembly as you remove hanging rod. When you re-insert hanging rod insert new knife assembly in it's station. Re-attach the hole cover and carriage bolt's, repeat this process until completed.
- 3) To replace the knife only, rotate the 7/16" D-Ring until slot is exposed. Disconnect from quick connect changer. Replace the knife and reconnect knife to D-Ring then proceed to connect D-Ring back to quick connect changer repeat this process until completed.

## III) Cleaning Your Mower

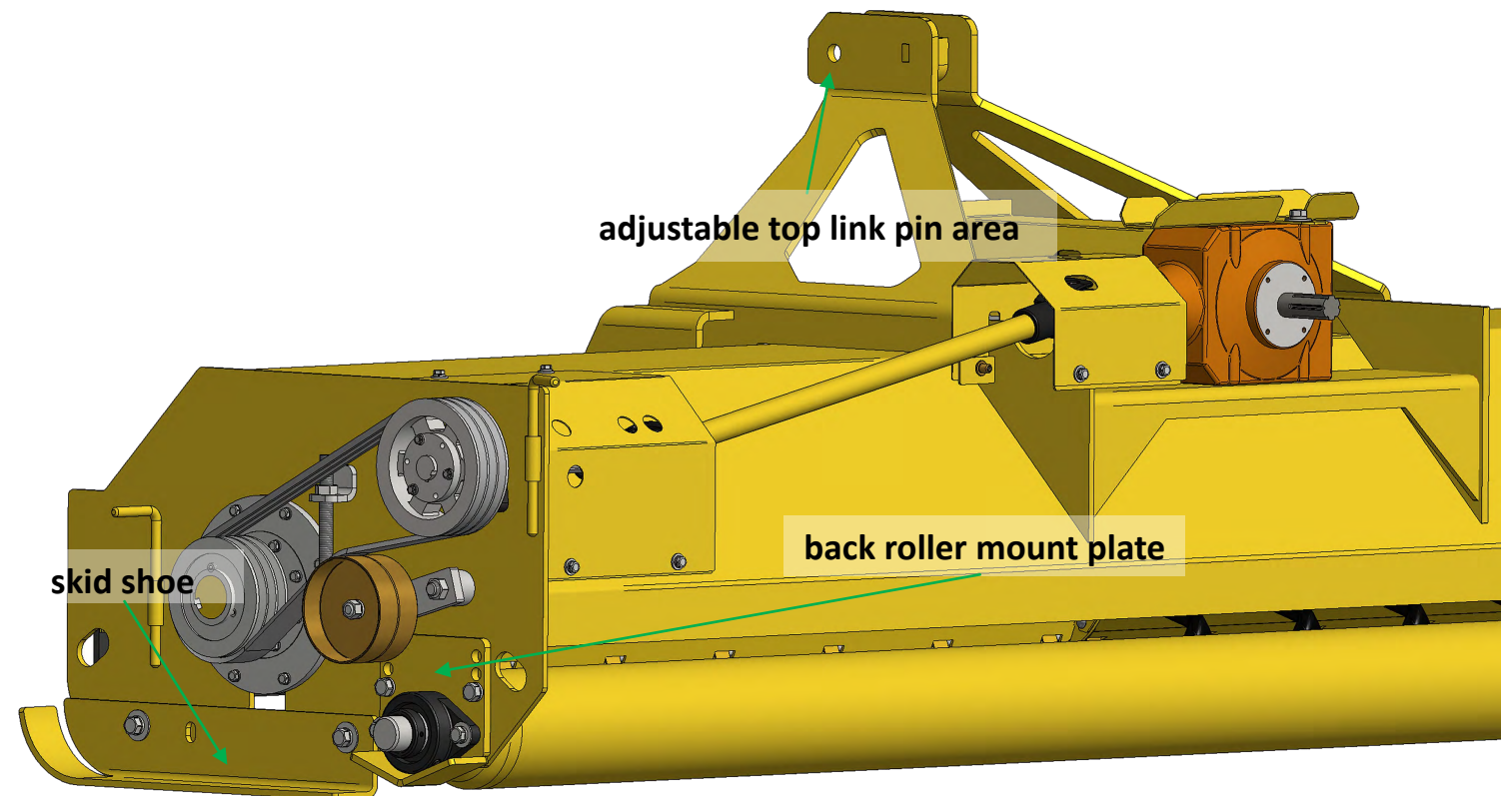
- 1) Check for excessive grease in bearing areas on the pulley side of the mower. Make sure that grease is not allowed to get into the belt areas.
- 2) Clean any clippings from the gearbox areas, pulley areas and anywhere else that is prone to excessive heat where fire can start.
- 3) Clean the inside of the mower with a pressure washer make sure the inside of the mower is kept free from mud and compact grass. Keep in mind that mud built up on the cutter drum can cause imbalance.
- 4) Preserve damaged decals or replace them if they are unreadable. Decal kits can be obtained from your local Vrisimo dealer.



Belt Tension



Cut Drum/ Knives



Cut Height Adjustments

# 3) Adjustments & Maintenance

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## IV) Lubrication

There are two Grease zirks to lubricate per Bearing Housing. There is an Outer and Inner zirk on the Drive side of the mower.

### a) Cutter Drum

Valley Tool and Manufacturing has recently upgraded to the new CD-3001 cutter drum bearing on its LP Orchard Mower line. The CD-3001 offers a significant improvement in overall life compared to the previous bearing if it is properly maintained. Below are guidelines to ensure the proper maintenance of this bearing so you can achieve its full design life.

#### 1) Installation

After installing, but before beginning to mow, you **must** allow the bearing to go through a “run-in” period. This is accomplished simply by letting the mower **spin at idle** for 30 minutes, allowing the bearing to push excess grease out of the races. After 30 minutes of running at idle, the mower is ready for full operation.

#### 2) Maintenance

Valley Tool recommends greasing with **Mobilith SHC 100** grease, but any lithium based NLGI Grade 2 grease that is ISO 100 VG and of high quality will work. It is important that grease designed for tractor pins and bushings **NOT** be used in this bearing as tractor grease tends to have tacking agents added in addition to being of higher viscosity.

The CD-3001 comes delivered with enough grease for over 300 hours of operation, and after that only requires 6 pumps of grease. This interval holds through regular operation, needing 6 pumps from a standard grease gun every 300 hours of operation. Use of a pneumatic grease guns is not recommended as it is difficult to control the amount of grease being applied. While it is not necessary to “run-in” the bearing with each grease interval, if an excessive amount of grease has been applied the risk of failure can be mitigated by allowing the bearing another “run-in” period.

### b) Back Roller

The back roller uses a two bolt flange style bearing. There is one on either side of the back roller. Grease regularly with every use as the back roller is exposed to the most mud and grime.

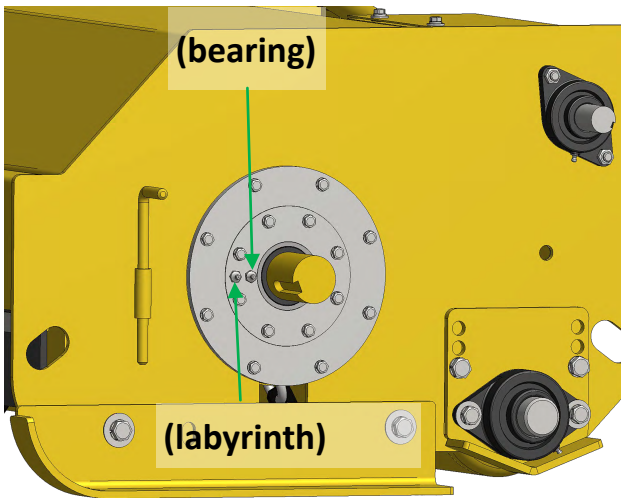
#### 1) Installation

The back roller bearing mounts directly to the back roller mount plate. The plate then mounts to the drive side and idle side end plates of the mower. To install a new bearing you must lift the mower off the ground and support the back roller from underneath. Unbolt the two flange bearing from the back roller mount plate replace the bearing re-insert bolts and repeat this process on the opposite side.

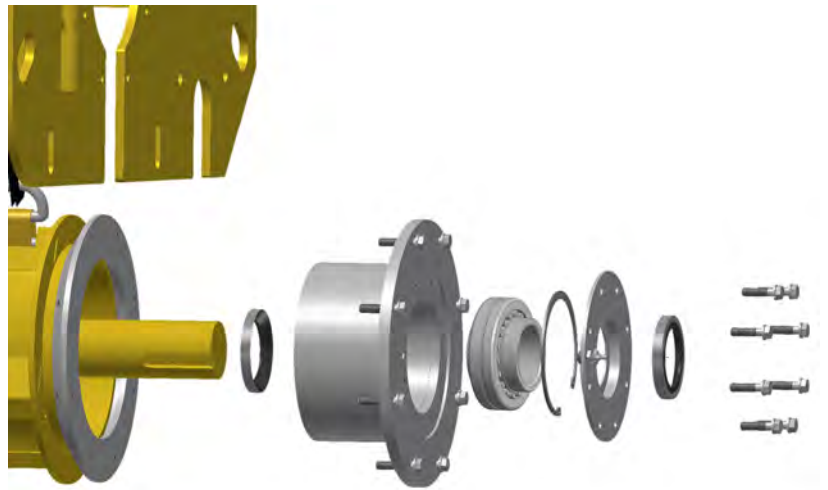
#### 2) Maintenance

The 2 flange back roller bearing uses Mobilith 460 grease and should be greased after each time used. Depending on conditions back roller bearings may require more or less grease. Wet conditions means more greasing as the moisture thins the grease, dry conditions requires less greasing.

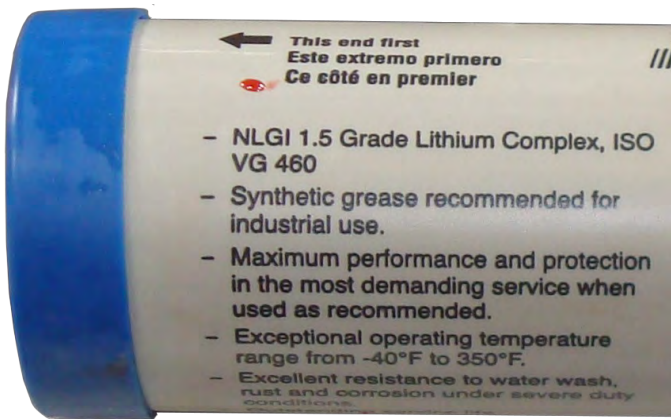




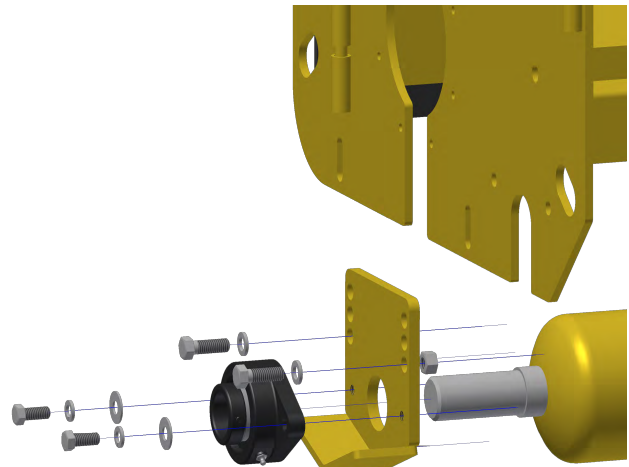
Drive Side



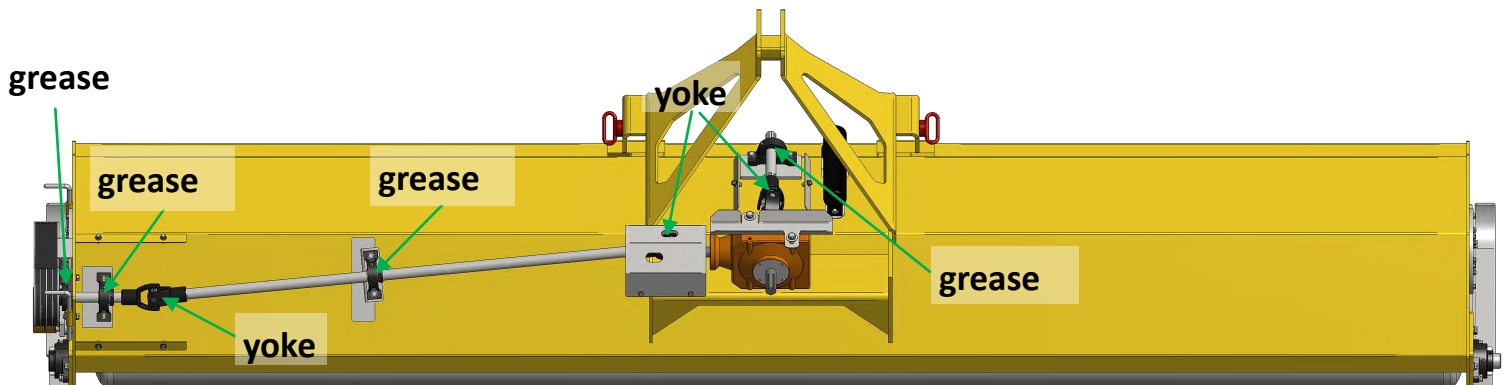
Drive Side exploded



Grease Call Out Example



Back Roller Assembly



Grease locations - Top shaft

# 3) Adjustments & Maintenance

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## c) Top Shaft

- All top shaft bearings and yokes need to be greased weekly with Mobilith 460.

## d) PTO

When PTO seems dry grease it. You can not over grease the PTO. In fact you can damage the PTO and the tractor if you run it dry as it will bind up and not telescope in and out properly.

- The PTO shaft can be grease with any standard grease as long as it is thick heavy grease. As the purpose of this is to keep the PTO from binding up. The same grease can be used on the labyrinth of the Cutter Drum housing, the purpose of using thick grease in this area is to act as a dust seal in the labyrinth.

## e) Gearbox

- Check gearbox oil level periodically and refill as required with quality 90 wt. gear oil. Be sure gearbox is in level position and remove side plug to fill

## V) Transport, Removal and Storage

Disengage PTO and shut off engine allowing all movement to stop before leaving the operators position to adjust, lubricate, clean or unclog the machine. Before working on or underneath the mower, place blocks on both sides (front and rear) of Power Unit tires and under each end of the mower to prevent accidental lowering of the machine. Also remove the ignition key from the Power Unit and allow all movement to stop before beginning work.

### a) Transport on Power Unit

- PTO must be disengaged, unit lifted off the ground.

### b) Transport on Trailer

- Use chain down locations even if unit is still attached to tractor, secure PTO shaft back into the PTO rack.

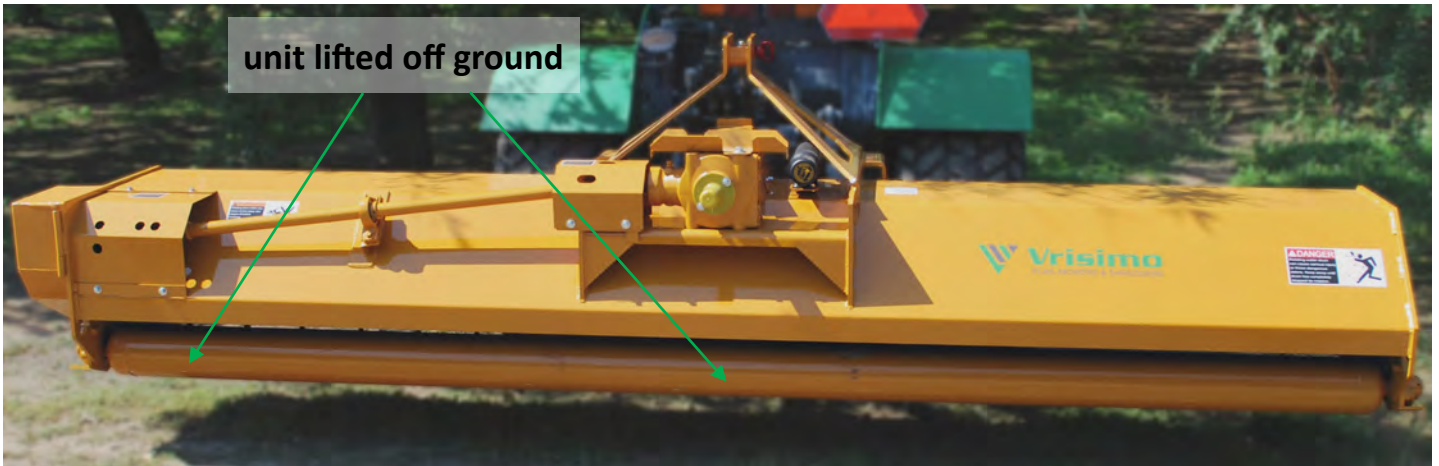
### c) Removal

- Place attachment on ground with entire weight resting on mower.
- Remove the adjustable top link from the tractor and mower.
- Disconnect the drive shaft from the tractor and mower.
- Remove the safety pins from the lower three point arm pin location and disconnect the arms

### d) Storage

- 1) Place mower in clean, level, dry place. should be stored in a way it doesn't slide.
- 2) Put the drive shaft away in a clean, dry place.
- 3) Clean the mower thoroughly (See the "Cleaning your Mower" section for details).
- 4) Relax belt tension (See the "Adjustments & Maintenance" section for details).
- 5) Lubricate the mower as recommended (See the "Lubrication" section for details).
- 6) Check oil level in gearbox and fill as required ( See the "Lubrication" section for details).
- 7) Check for worn parts and replace so you will be ready to mow when necessary. (see the "Adjustments & Maintenance" section).
- 8) Store in a clean, dry place.

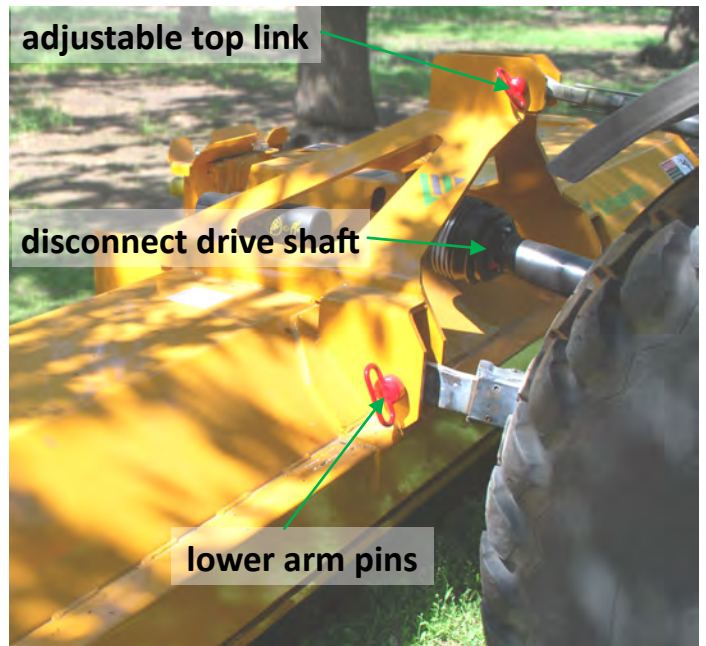




Transport on power unit



When transporting on trailer



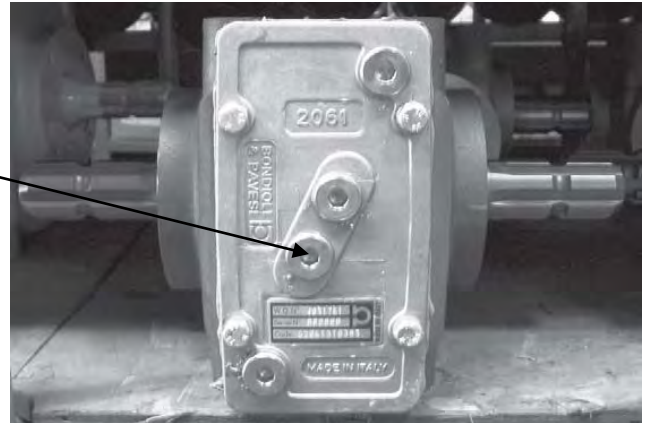
Removal

# 4) Frequently Asked Questions

Q. When I am replacing gear oil, how much should I add?

R. When replacing gear oil, fill from the Upper- fitting and when oil level reaches middle- fitting, the box is full.

Lower-Middle Fitting



Q. Are there any advantages to reversing cutter drum rotation?

R. Whether or not reversing cutter drum is advantageous depends on the application. In most, normal rotation is a reverse rotation. This means that the cutter drum rotates in a fashion that would throw grass or clippings towards the tractor. The only advantage to reversing rotation would be if you are mowing in industrial applications such as along freeways, in places with large amounts of debris (i.e. plastic, metal, rocks), or using a front mount application. There are typically no advantages as far as the grade of cut you will get, but rather safety advantages as stated above.

Q. How do I reverse cutter drum rotation?

R. To reverse cutter drum rotation, simply un-mount the gearbox from its current position, remove the safety cover from the other shaft of the gearbox and rotate the gearbox so that the previously covered shaft is the one that will be driven by the PTO. Install the safety covers and it is ready to go. Note: Scoop knives must be rotated to accommodate for a reversed cutter drum rotation.

Q. How do I replace my knives?

R. Replacing the knives may vary depending on your model of mower/shredder. See the Adjustments/Maintenance section for detailed information.

Q. When connecting my PTO shaft, can I put it on either way or should a specific side go to the mower/shredder and the other to the Power Unit?

R. The PTO shafts for these mowers are side specific. The tube half of the PTO shaft goes to the mower and the bar half of the PTO shaft goes to the Power Unit.

# Parts Catalog

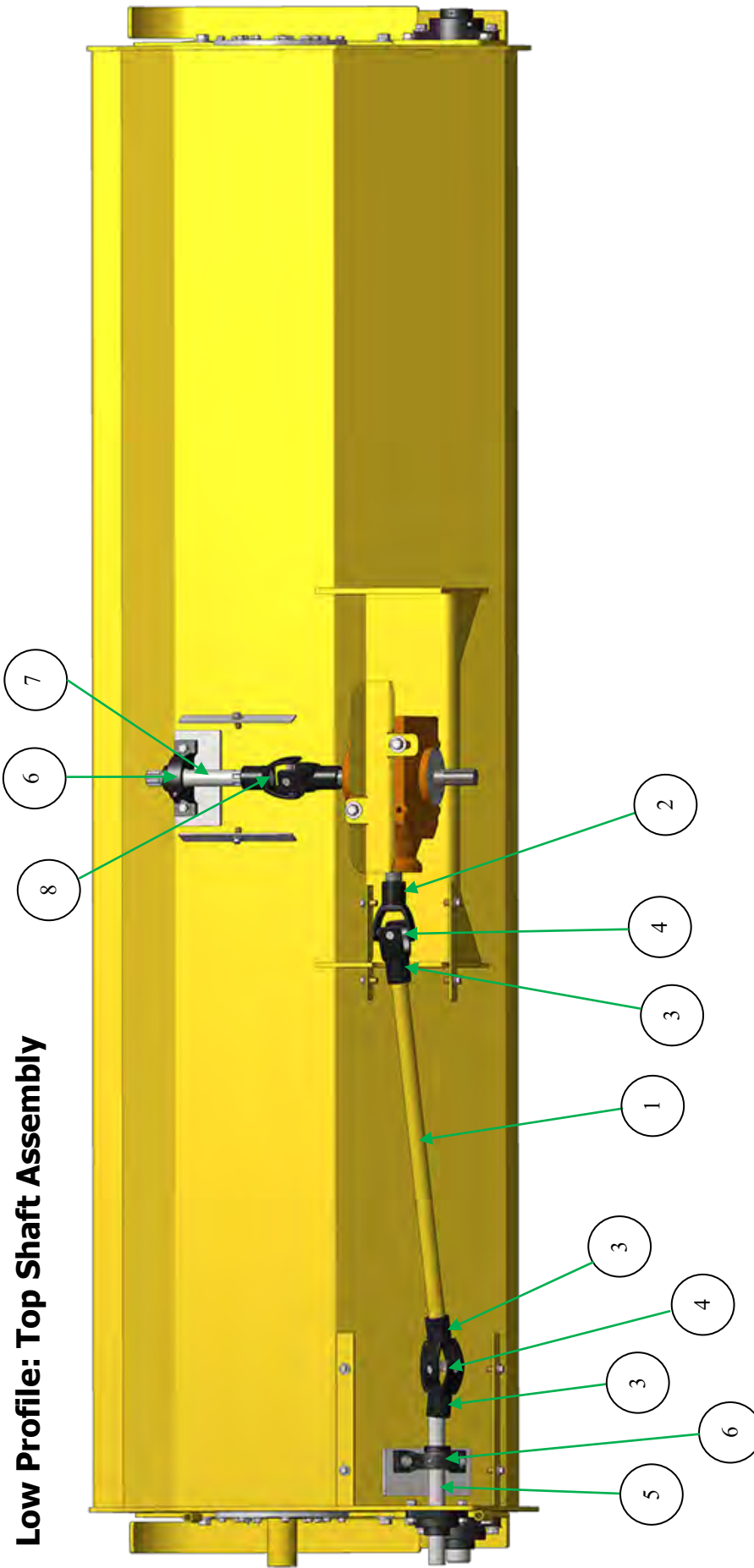


**Low Profile  
Series** *by*



**Parts Catalog  
7'-15'**

## Low Profile: Top Shaft Assembly

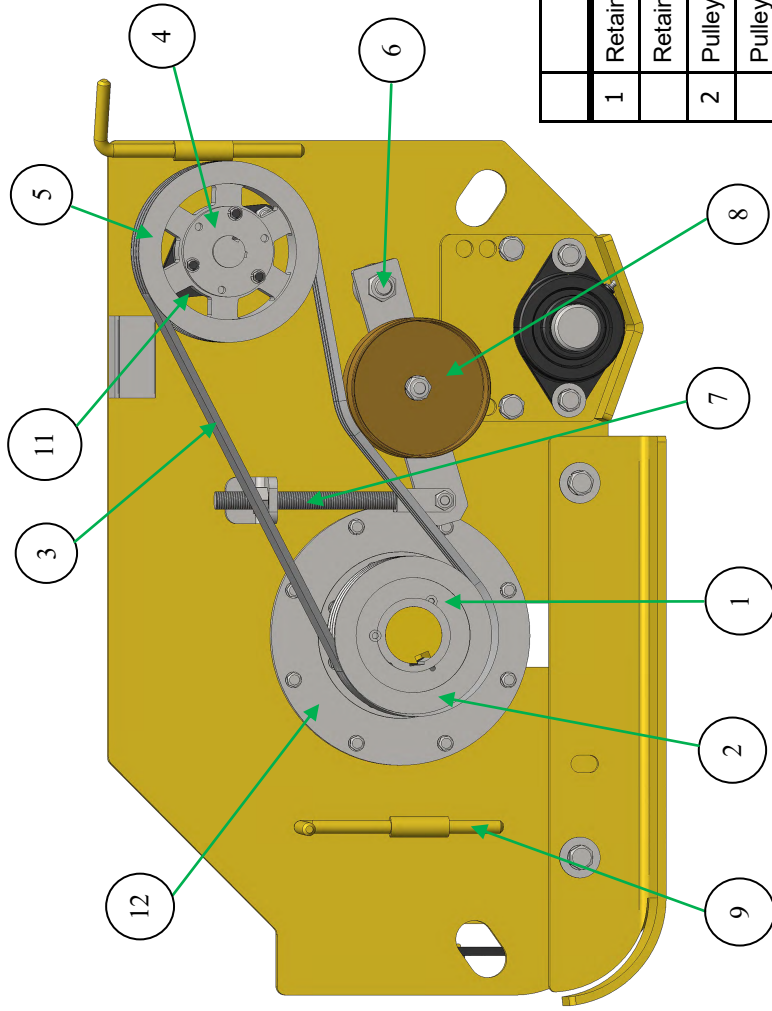


	Description	Model	Qty.	P/N
2	Yoke 1 3/8" Six Spline	All	1	DS-2223
3	Yoke 1 3/8" Round Bore, Keyed	All	3	DS-2225
4	Universal Cross Assembly	All	2	DS-2230
5	Top Shaft Extension	All	1	TS-1401
6	Pillow Block Bearing 1 3/8"	LP2084-2134	2	TS-1300
7	Center Shaft	All	1	DS-2227
8	U joint - 1.375 Spline x 1.375 Key	All	1	TS-1085
9	Pillow Block Bearing( Not Shown)	LP2144-2180	3	TS-1300

	Description	Model	Qty.	P/N
1	Top Shaft 1 3/8" x 33.5" center Mount	LP2120	1	TS-1413
	Top Shaft 1 3/8" x 16" Center Mount	LP2084	1	TS-1410
	Top Shaft 1 3/8" x 22" Center Mount	LP2096	1	TS-1411
	Top Shaft 1 3/8" x 27.5" Center Mount	LP2108	1	TS-1412
	Top Shaft 1 3/8" x 39.5" Center Mount	LP2132	1	TS-1414
	Top Shaft 1 3/8" x 45.5" Center Mount	LP2144	1	TS-1415
	Top Shaft 1 3/8" x 51.5" Center Mount	LP2156	1	TS-1416
	Top Shaft 1 3/8" x 57.5" Center Mount	LP2168	1	TS-1417
	Top Shaft 1 3/8" x 63.5" Center Mount	LP2180	1	TS-1418

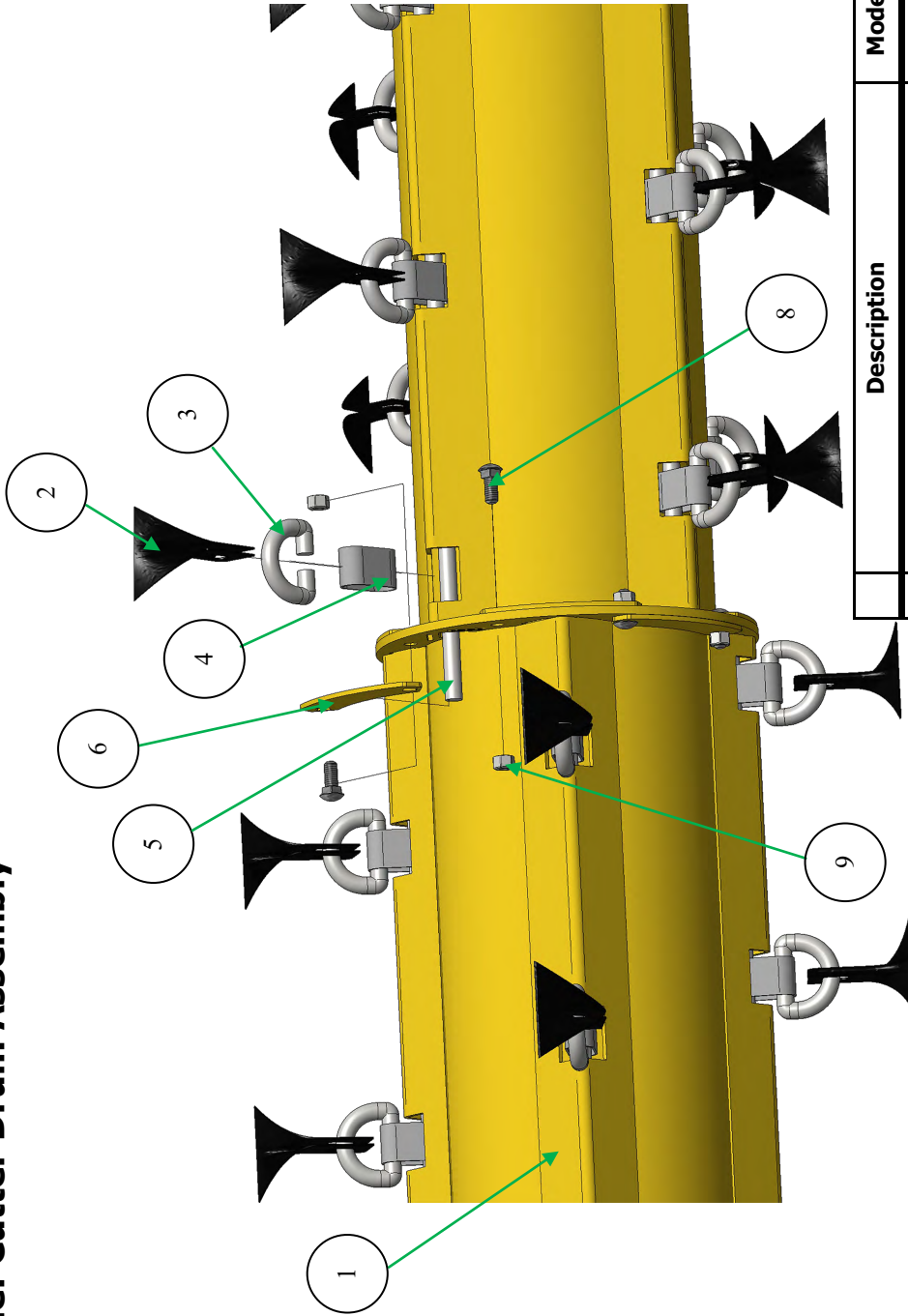


## Low Profile: Pulley Assembly



	Description	Model	Qty	P/N
1	Retaining Bushing - Lower 2- 7/16" 3G	LP2084-2132	1	TL-1631
	Retaining Bushing - Lower 2- 7/16" 4G (Not Shown)	LP2144-2180	1	TL-1550
2	Pulley 6.8in OD 3B - Lower	LP2084-2132	1	P-1440A
	Pulley 7.8 in OD 4B - Lower (Not Shown)	LP2144-2180	1	P-1461
3	Belt 3 Band	LP2084-2132	1	B-1746A
	Belt 4 Band (Not Shown)	LP2144-2180	1	B-1745A
4	Retainer Bushing - Top 1 - 3/8	All	1	TL-1540
5	Pulley - 7.4in 3B - Top	LP2084-2132	1	P-1460
	Pulley - 7.8in 4B - Top (Not Shown)	LP2144-2180	1	P-1461
6	Idler Arm	All	1	IP-1654
7	Belt Adjuster	All	1	P-1653A
8	Pulley - 6in Idle		1	IP-1641
9	Belt Guard - Hinge Pin	All	2	DP-1007
11	Top Shaft Bearing	All	1	TS-1306
12	Bearing Housing - Drive Side	All	1	CD-3002

## Low Profile: Cutter Drum Assembly



	Description	Model	P/N	Qty.
1	Assembly-Cutter Drum	LP2120	CD-2677	1
2	Standard scoop Knife	All	CD-2110	54
3	7/16" D-Ring	All	CD-2135	54
4	Quick Connect Changer	All	CD-2125	54
5	Hanger Rod	LP2120	HR-2670	8
6	Hole Cover	All	HC-2676	8
7	Wire Guard	All	WG-2659	2
8	3/8-16 UNC 3/4" Carriage Bolt	All	WG-2659	8
9	3/8-16 UNC Nut	All		8

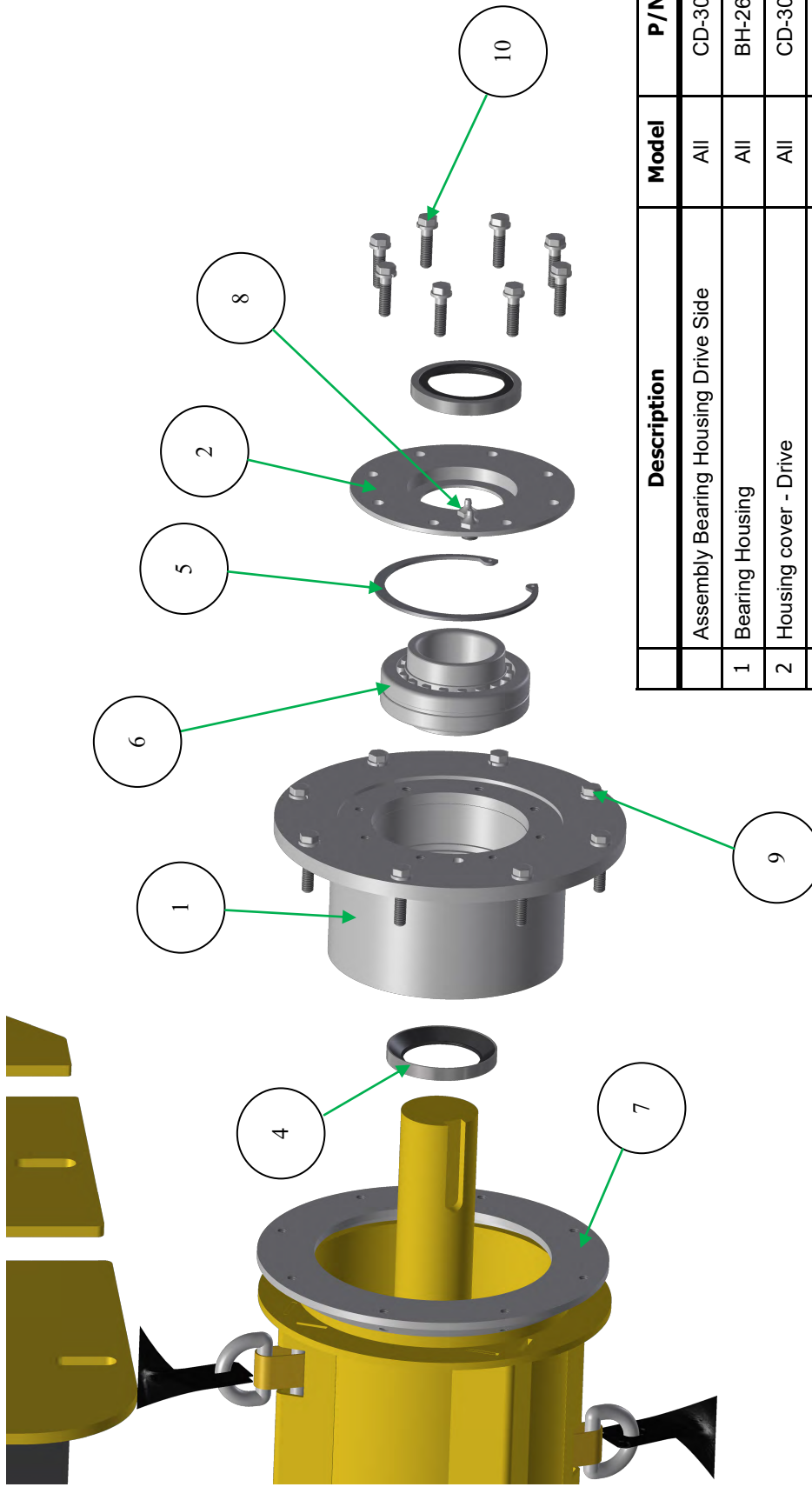
## Low Profile: Cutter Drum Assembly Continued

Description	Model	P/N	Qty.
LP2084			
Assembly-Cutter Drum	LP2084	CD-2467	1
Standard scoop Knife	All	CD-2110	38
7/16" D-Ring	All	CD-2135	38
Quick Connect Changer	All	CD-2125	38
Hanger Rod	LP2084	HR-2741	8
LP2096			
Assembly-Cutter Drum	LP2096	CD-2734	1
Standard scoop Knife	All	CD-2110	46
7/16" D-Ring	All	CD-2135	46
Quick Connect Changer	All	CD-2125	46
Hanger Rod	LP2096	HR-2736	8
LP2108			
Assembly-Cutter Drum	LP2108	CD-2735	1
Standard scoop Knife	All	CD-2110	54
7/16" D-Ring	All	CD-2135	54
Quick Connect Changer	All	CD-2125	54
Hanger Rod	LP2108	HR-2737	8

Description	Model	P/N	Qty.
LP2120			
Assembly-Cutter Drum	LP2120	CD-2677	1
Standard scoop Knife	All	CD-2110	54
7/16" D-Ring	All	CD-2135	54
Quick Connect Changer	All	CD-2125	54
Hanger Rod	LP2120	HR-2670	8
LP2132			
Assembly-Cutter Drum	LP2132	CD-2685	1
Standard scoop Knife	All	CD-2110	62
7/16" D-Ring	All	CD-2135	62
Quick Connect Changer	All	CD-2125	62
Hanger Rod	LP2132	HR-2684	8
LP2144			
Assembly-Cutter Drum	LP2144	CD-2710	1
Standard scoop Knife	All	CD-2110	70
7/16" D-Ring	All	CD-2135	70
Quick Connect Changer	All	CD-2125	70
Hanger Rod	LP2144	HR-2709	8

Description	Model	P/N	Qty.
LP2156			
Assembly-Cutter Drum	LP2156	CD-2717	1
Standard scoop Knife	All	CD-2110	78
7/16" D-Ring	All	CD-2135	78
Quick Connect Changer	All	CD-2125	78
Hanger Rod	LP2156	HR-2716	8
LP2168			
Assembly-Cutter Drum	LP2168	CD-2724	1
Standard scoop Knife	All	CD-2110	86
7/16" D-Ring	All	CD-2135	86
Quick Connect Changer	All	CD-2125	86
Hanger Rod	LP2168	HR-2721	8
LP2180			
Assembly-Cutter Drum	LP2180	CD-2732	1
Standard scoop Knife	All	CD-2110	94
7/16" D-Ring	All	CD-2135	94
Quick Connect Changer	All	CD-2125	94
Hanger Rod	LP2180	HR-2514	8

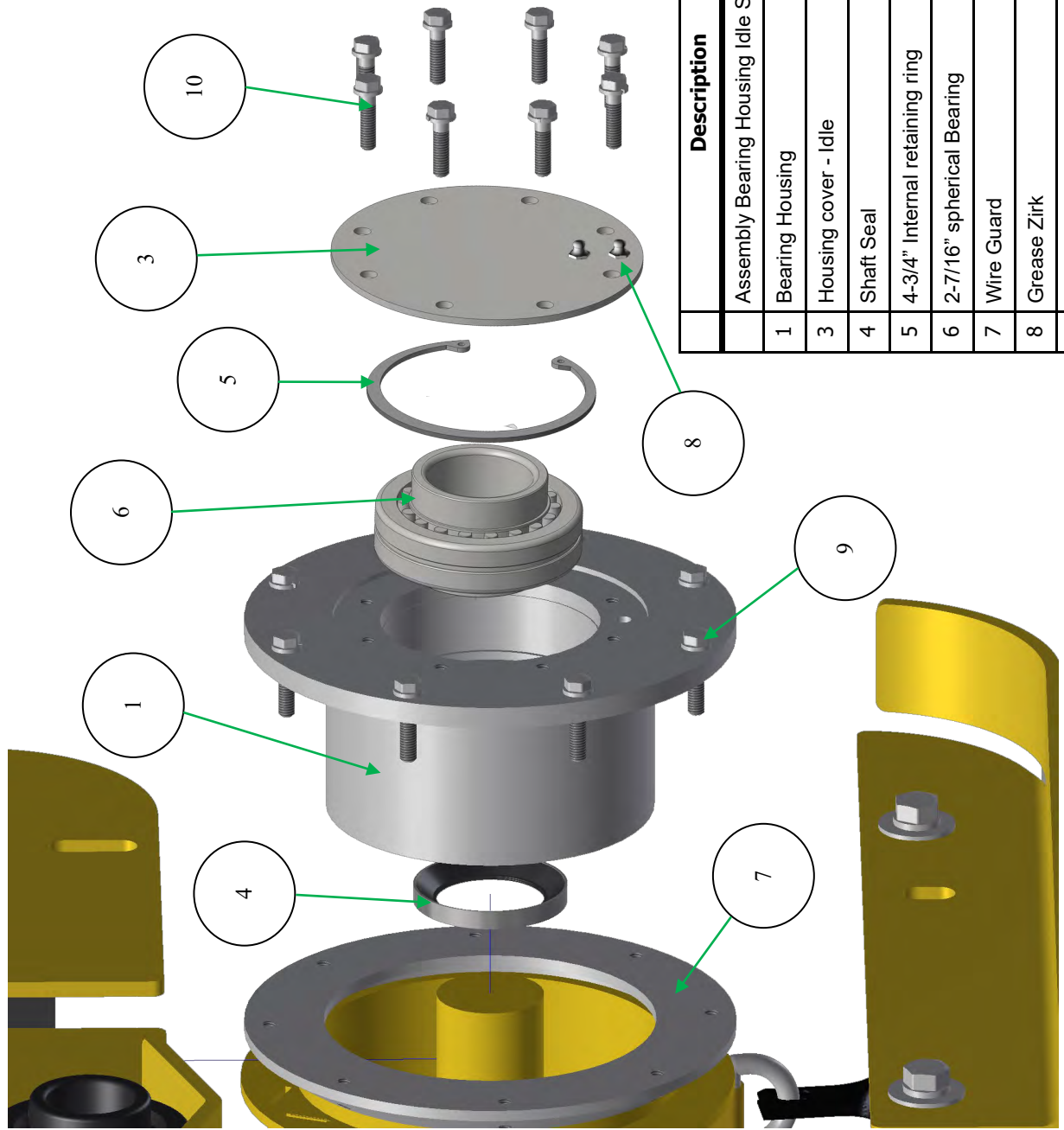
# Low Profile: Bearing Housing - Drive



	Description	Model	P/N	Qty.
	Assembly Bearing Housing Drive Side	All	CD-3002	1
1	Bearing Housing	All	BH-2655	1
2	Housing cover - Drive	All	CD-3004	1
4	Shaft Seal	All	CD-3006	2
5	4-3/4" Internal retaining ring	All	SR-1200	1
6	2-7/16" Spherical Bearing	All	CD-3100	1
7	Wire Guard	All	CD-3005	2
8	Grease Zirk	All	HY-2440	4
9	3/8"-16 UNC 1-1/2" Bolt - 3/8" Lock Washer	All		8
10	3/8"-16 UNC 1-3/4" Bolt - 3/8" Lock Washer	All		8

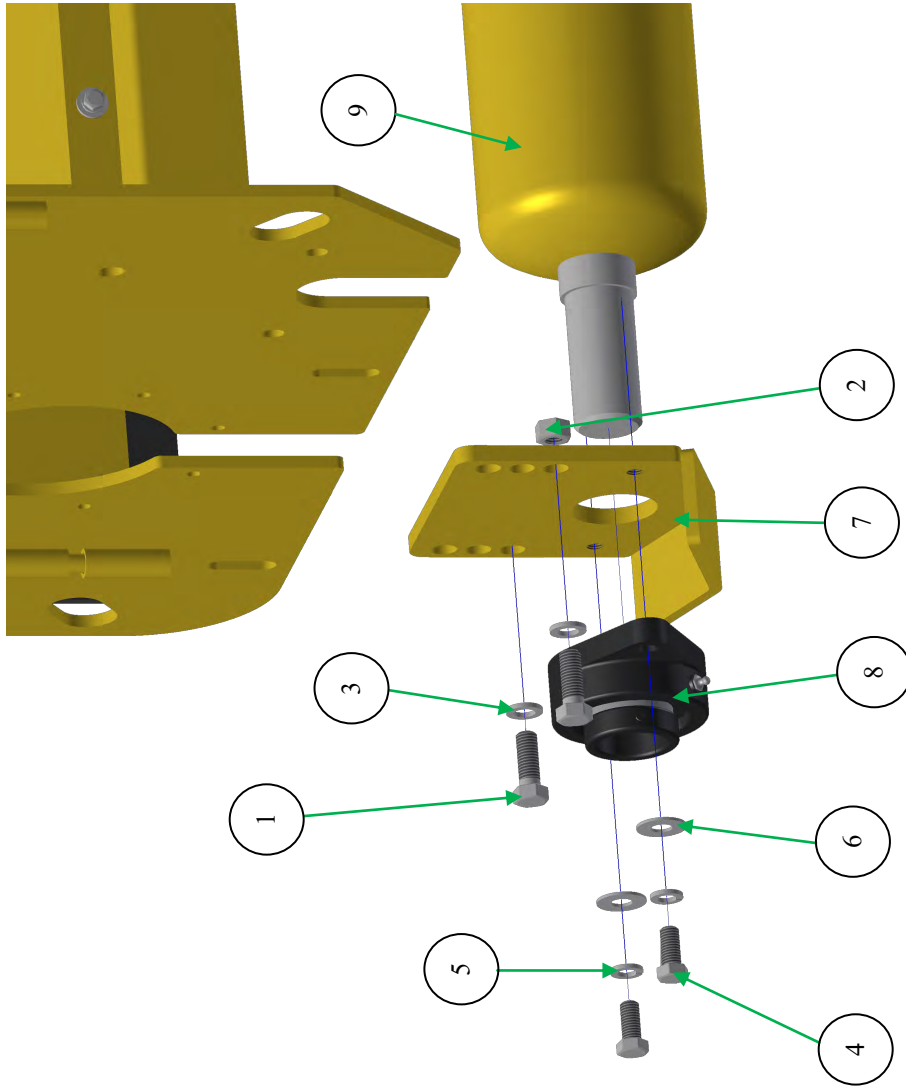


# Low Profile: Bearing Housing - Idle



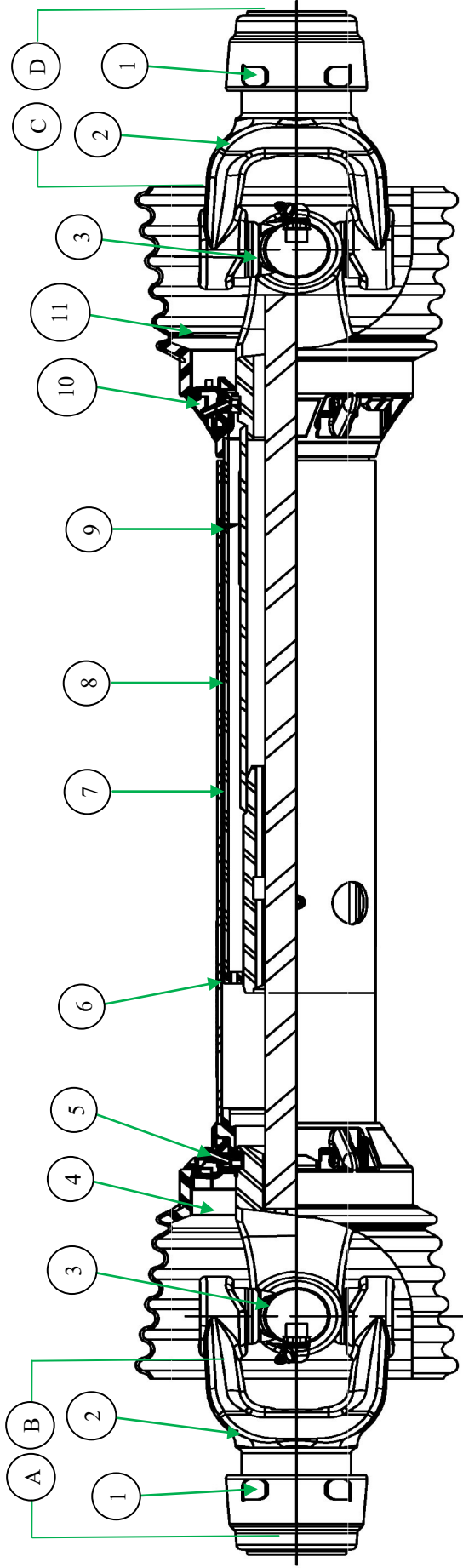
	Description	Model	P/N	Qty.
	Assembly Bearing Housing Idle Side	All	CD-3001	
1	Bearing Housing	All	BH-2655	1
3	Housing cover - Idle	All	CD-3003	1
4	Shaft Seal	All	CD-3006	2
5	4-3/4" Internal retaining ring	All	SR-1200	1
6	2-7/16" spherical Bearing	All	CD-3100	2
7	Wire Guard	All	CD-3005	2
8	Grease Zirk	All	HY-2440	4
9	3/8"-16 UNC 1-1/2" Bolt - 3/8" Lock Washer	All		8
10	3/8"-16 UNC 1-3/4" Bolt - 3/8" Lock Washer	All		8

## Low Profile: Back Roller Assembly



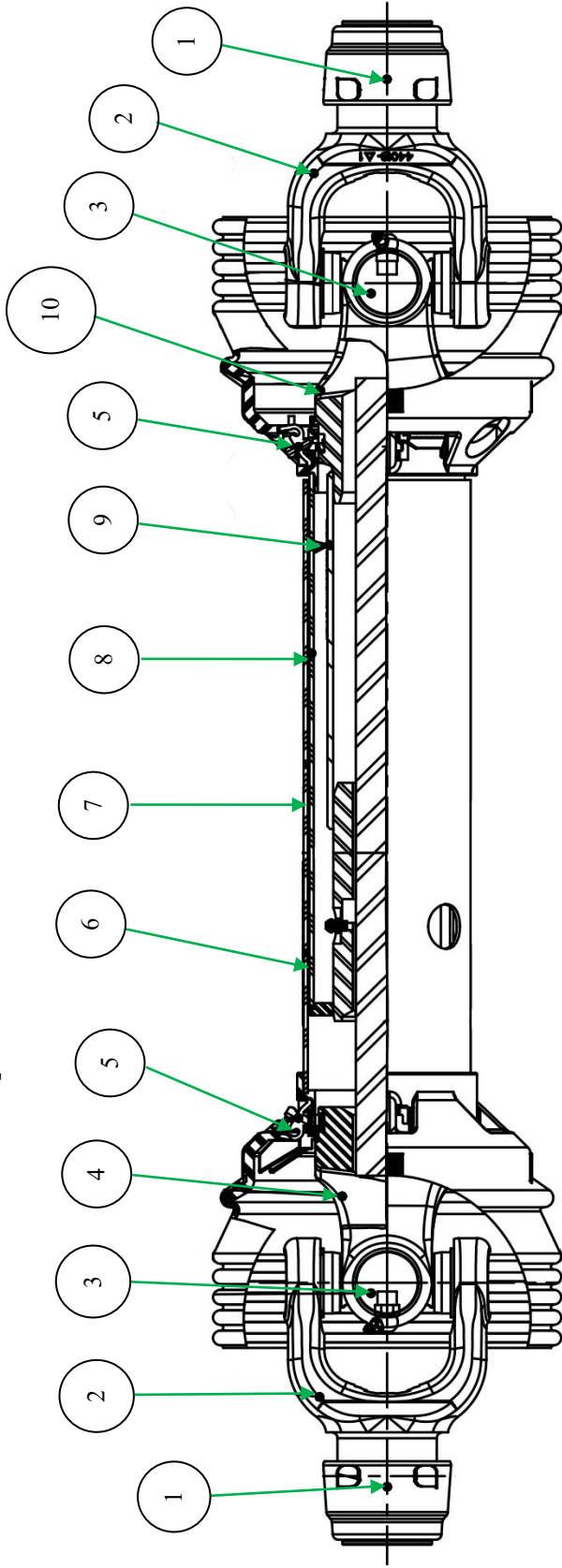
	Description	Model	Qty	P/N
1	5/8-11 UNC 1 - 3/4 Bolt	All	4	N/A
2	5/8-11 UNC Nut	All	4	N/A
3	5/8 Lock Washer	All	4	N/A
4	9/16—12 UNC 1 - 1/4 Bolt	All	4	N/A
5	9/16 Lock Washer	All	4	N/A
6	9/16 Washer	All	4	N/A
7	Back Roller Mount	All	2	BR-MP-LP2
8	Back Roller Bearing	All	2	BR-2403
9	Back Roller	LP2120	1	BR-2350
	LP2084 - Back Roller	LP2084	1	BR-2325
	LP2096 - Back Roller	LP2096	1	BR-2335
	LP2108 - Back Roller	LP2108	1	BR-2340
	LP2132 - Back Roller	LP2132	1	BR-2360
	LP2144 - Back Roller	LP2144	1	BR-2370
	LP2156 - Back Roller	LP2156	1	BR-2380A
	LP2168 - Back Roller	LP2168	1	BR-2375
	LP2180 - Back Roller	LP2180	1	BR-2390A

# Low Profile: PTO Shaft Assembly 7' - 11'



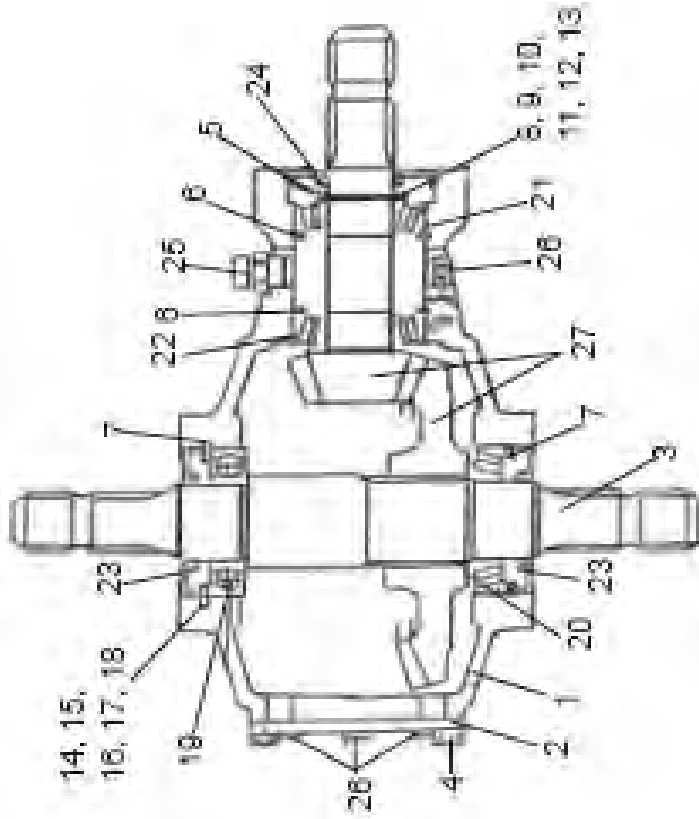
	Description	Qty
	<b>7'-11' PTO DS-2200</b>	<b>1</b>
A	Joint & Shaft half Assembly, With Guard	1
B	Joint & Shaft half Assembly	1
C	Joint & Tube half Assembly, With Guard	1
D	Joint & Tube half Assembly.	1
1	SSL/ Auto- lock Repair Kit Drive line	1
2	Safety Slide Lock Yoke Assembly	2
3	35E Cross & Bearing Kit	2
4	Yoke & Shaft	1
5	Guard Repair Kit	1
6	Safety Sign	1
7	Outer Guard	1
8	Inner Guard	1
9	Safety Sign	1
10	Guard Repair Kit	1
11	Yoke, Tube and slip sleeve	1

## Low Profile: PTO Shaft Assembly 12' - 15'



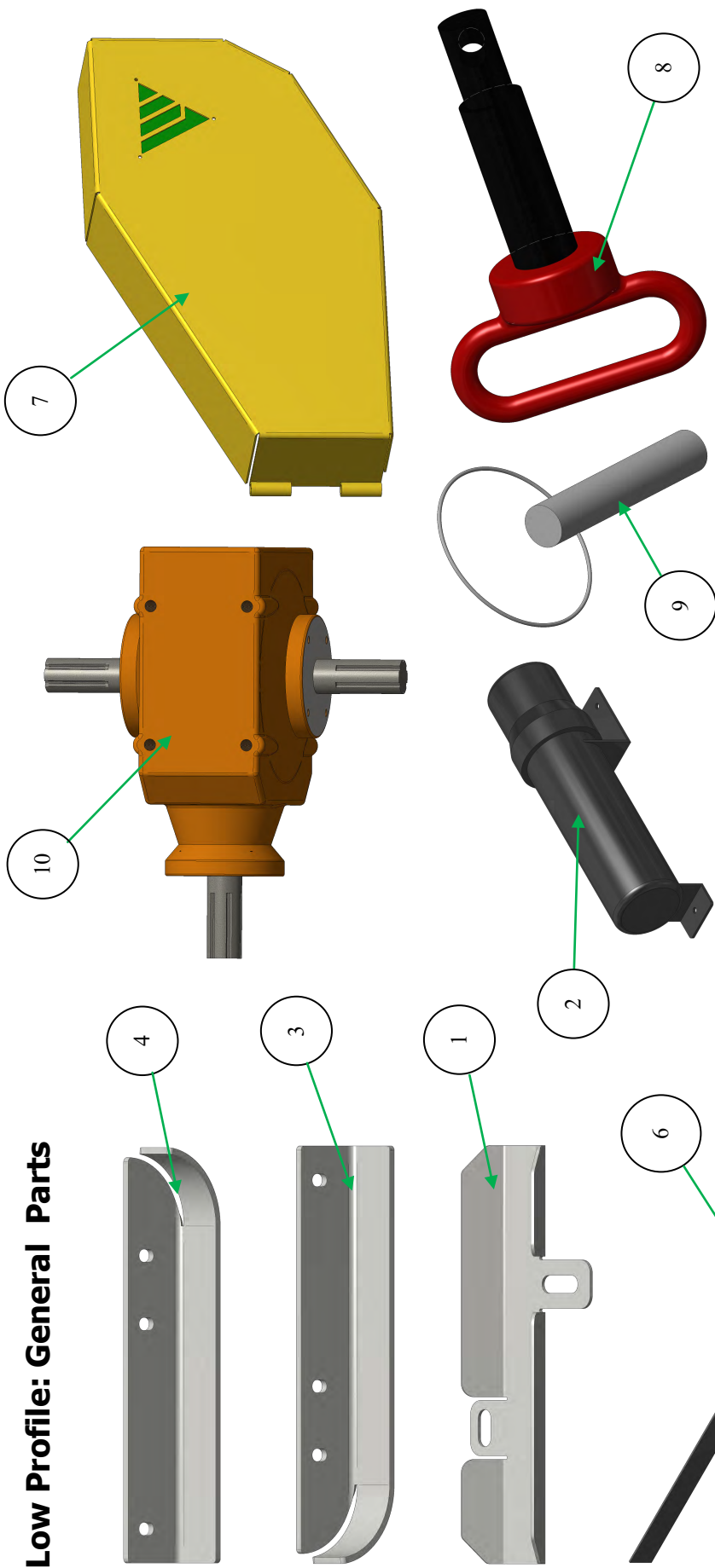
	Description	Qty
	<b>12'-15' PTO DS-2600</b>	<b>1</b>
A	Joint & Shaft half Assembly. With Guard	1
B	Joint & Shaft half Assembly	1
C	Joint & Tube half Assembly. With Guard	1
D	Joint & Tube half Assembly.	1
1	SSL/ Auto-lock Repair Kit Drive line	1
2	Safety Slide Lock Yoke Assembly	2
3	35E Cross & Bearing Kit	2
4	Yoke & Shaft	1
5	Guard Repair Kit	1
6	Safety Sign	1
7	Outer Guard	1
8	Inner Guard	1
9	Safety Sign	1
10	Guard Repair Kit	1

## Gearbox Assembly



	Description	Model	P/N	Qty.
1	Main Housing	All	BP-2701	1
2	Rear Cover	All	BP-2702	1
3	Input Shaft	All	BP-2703	1
4	Cap Screw	All	BP-2705	8
5	Snap Ring	All	BP-2706	1
6	Snap Ring	All	BP-2707	2
7	Snap Ring	All	BP-2708	2
8	Shim Output Shaft 0.5 mm	All	BP-2709	A/R
9	Shim Output Shaft 0.8 mm	All	BP-2710	A/R
10	Shim Output Shaft 1.0 mm	All	BP-2711	A/R
11	Shim Output Shaft 0.3 mm	All	BP-2712	A/R
12	Shim Output Shaft 0.4 mm	All	BP-2713	A/R
13	Shim Output Shaft 0.2 mm	All	BP-2714	A/R
14	Shim Input Shaft 0.6 mm	All	BP-2715	A/R
15	Shim Input Shaft 0.8 mm	All	BP-2716	A/R
16	Shim Input Shaft 1.0 mm	All	BP-2717	A/R
17	Shim Input Shaft 0.3 mm	All	BP-2718	A/R
18	Shim Input Shaft 0.4 mm	All	BP-2719	A/R
19	Ball Bearing	All	BP-2720	1
20	Tapered Bearing Assembly	All	BP-2721	1
21	Tapered Bearing Assembly	All	BP-2722	1
22	Tapered Bearing Assembly	All	BP-2723	1
23	Oil Seal, Input Shaft	All	BP-2724	2
24	Oil Seal, Output Shaft	All	BP-2725	1
25	Breather	All	BP-2730	1
26	Oil Plug	All	BP-2726	4
27	Ring and Pinion Gear Set	All	BP-2727	1
28	Safety Cover, Input Shaft	All	BP-2728	1
29	Safety Cover, Rear Shaft	All	BP-2729	1
	Complete Gear Box Assembly		BP-2700	1

## Low Profile: General Parts



	Description	Model	P/N	Qty.
1	PTO shaft holder	All	GP-2503	1
2	Document Holder	All	DH-100	1
3	Skid Shoe left	All	2997-VR-4L	1
4	Skid Shoe right	All	2997-VR-4R	1
5	Backing Strip	LP2120	RB-1700	1
6	Rubber Guard	LP2120	RB-1701	1
7	Pulley Cover	All	BC-2015	1
8	Category 2 pin	All	TP-2810	2
9	7/16" Lynch Pin	All	P-791	2
10	Gearbox	All	BP-2700	1



## Low Profile: Decal Set



DC-119



DC-118



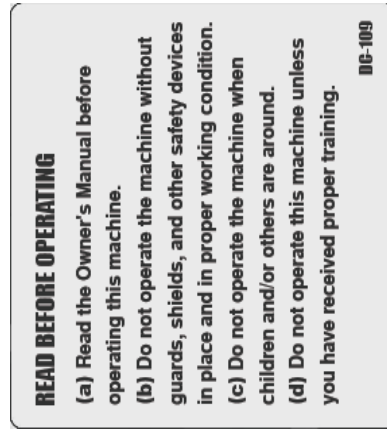
DC-103



DC-105



DC-107



DC-109



DC-104



DC-101



DC-113

Description	Model	P/N	Qty.
Danger	Low Profile	DC-101	3
Caution	Low Profile	DC-103	1
Caution	Low Profile	DC-104	1
Caution Extra	Low Profile	DC-105	1
General Warning	Low Profile	DC-109	1
Vrisimo Logo Decal	Low Profile	DC-119	1
Serial # Plate	Low Profile	DC-118	1
Vrisimo Icon Decal	Low Profile	DC-113	1



# LOW PROFILE OWNER'S MANUAL