

TECHNICAL MANUAL

Safety, Operation, Parts, Maintenance & Service

Model:

744283B MATAWAY



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



CALIFORNIA Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

A WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Californie Proposition 65 **Avertissement**

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

A AVERTISSEMENT

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

California Advertencia de la Proposicion 65

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.



ADVERTENCIA

El estado de California hace saber que los gases de escape de este producto contienen productos químicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

IMPORTANT MESSAGE

Thank you for purchasing this Jacobsen product. You have purchased a world class product, one of the best designed and built anywhere.

This machine comes with a Technical Manual containing safety, operation, parts, maintenance and service information. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand this manual. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Jacobsen product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manual thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See a Jacobsen dealer for any service or parts needed. Jacobsen service ensures that you continue to receive the best results possible from Jacobsen's products. You can trust Jacobsen replacement parts because they are manufactured with the same high precision and quality as the original parts.

Jacobsen designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Jacobsen, a Textron Company One Bob Cat Lane Johnson Creek, WI 53038-0469

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3-2003 **1**

NOTICE !!!

Unauthorized modifications may present **extreme** safety hazards to operators and bystanders and could also result in product damage.

Jacobsen, a Textron Company strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Jacobsen Engineering Department. Any Jacobsen product that is altered, modified or changed in any manner not specifically authorized after original manufacture—including the addition of "after-market" accessories or component parts not specifically approved by Jacobsen—will result in the Jacobsen Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Jacobsen will be considered the responsibility of the individual(s) or company designing and/or making such changes. Jacobsen will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



This symbol means:
ATTENTION!
BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Jacobsen machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

A DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

AWARNING

WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

ACAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage.

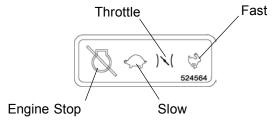
TEXTRON GOLF, TURF & SPECIALTY PRODUCTS MODEL NUMBER SERIAL NUMBER JOHNSON CREEK, WI MADE IN U.S.A

MODEL NUMBER: This number appears on sales literature, technical manuals and price lists.

SERIAL NUMBER: This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

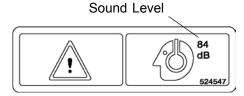
MATAWAY *****

Throttle Control



Sound Level

Operator should wear hearing protection if operating the machinery for extended periods of time (longer than 4 hours).

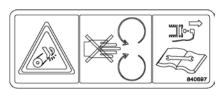


Safety Warnings



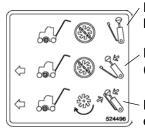
Hands or feet may be severely injured or severed if placed beneath the unit while running. Bystanders should keep a safe distance from the machine while it is running.

Keep hands away from moving parts.



Safety shieds should remain in place while running the machine. Hands may become entangled in belts. Disconnect the spark plug wire and read the manual before performing any service or maintenance on the unit.

Clutch Control



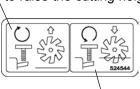
Both drive and reel clutches DISENGAGED (control is pulled back)

Drive clutch ONLY engaged (control is pushed forward)

Both drive and reel clutches engaged (lever is pulled back to knob, then control is pushed forward)

Cutting Height Adjustment

Turn the adjustment screw clockwise to raise the cutting height.



Turn the adjustment screw – counterclockwise to lower the cutting height.

Operating Instructions

To prevent injury, the operator must be familiar with the operation of this machinery and fully aware of safe operating procedures.



Read and understand the operator's manual

Lift Control



Push down on the handle to lower the reel

Pull the handle up to raise the reel

ACAUTION

Do not operate this equipment until you have read the CONTROLS and OPERATION sections of this manual thoroughly.

To prevent injury, use an adequate lifting device (i.e., hoist, or fork lift) to remove unit from pallet.

1. Remove and discard banding attaching Mataway to pallet.

AWARNING

Banding is under tension and may snap back when cut. Wear eye protection and stay clear when cutting the band.

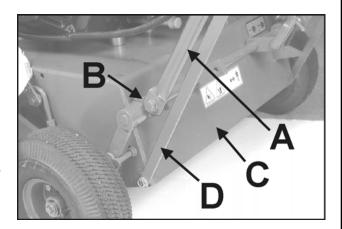
- 2. Lay-out all loose parts and hardware, and remove Mataway from pallet using appropriate lifting device.
- 3. Attach the handle **A** to the mounting tabs **B** on the frame **C** using (2) 1/2-13x1 screws and lockwashers.
- Mount the side braces D to the handle A using (2) 3/8-16x1 flangelock screws, and flangelock nuts. Secure braces to frame using (2) 3/8-16x1 flangelock screws.
- 5. Remove the guard covering the belts and transmission. Tilt unit forward and support the chassis with jack stands.

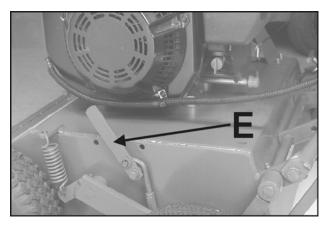
AWARNING

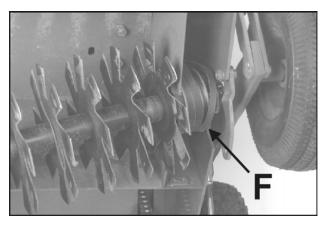
To prevent fuel spillage and/or the risk of fire or personal injury from inhalation of fumes, be sure fuel tank is empty before tilting the unit forward.

Use adequate jack stands when supporting the unit. Failure to do so may result in personal injury.

- 6. Move the reel clamp levers **E** (left and right side) toward rear of unit to release the reel clamps.
- 7. Position the reel to allow installation of the three reel drive belts **F** onto the reel pulley.







MATAWAY :

- Place the pillow block (on the drive pulley end) into the recessed part of the frame and position the pillow block (opposite end of drive pulley) so the frame slips into the groove in the pillow block.
- Place reel retaining hooks from the clamp lever into reel clamps and push the levers forward until they lock "over center" to secure the reel into position (the reel clamp will fit into the groove on the pillow block on left side of unit.

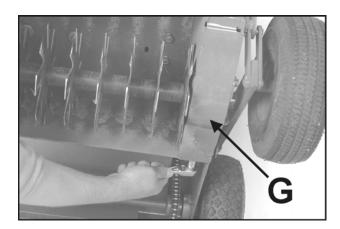
Note that the left side reel clamp is on the inside of the frame).

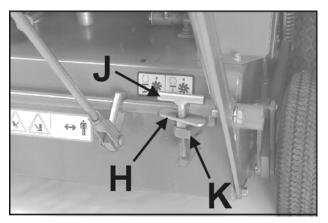
If the clamp is too tight or too loose, the hook can be adjusted so that the proper tension can be achieved when the lever is locked over center. After the reel is positioned properly, check for free rotation.

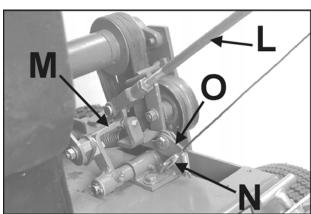
ACAUTION

Be certain the reel clamp lever locks over center. Failure to do so may allow the reel to work free causing damage to the equipment and/or personal injury to the operator and/or bystanders.

- 10. Install the belt shield **G** under the frame. Secure it with (1) 5/16-18x3/4 screw and lockwasher.
- 11. Remove jack stands and set unit on ground.
- Assemble the locking nut handle H and and depth adjustment screw J. Install them into the lift bracket K. For final depth adjustment of the reel, refer to the Operation section of this manual.
- 13. Attach the clutch control rod **L** to the drive belt idler assembly **M** using a clevis pin, washer and cotter pin.
- 14. Hook the clevis of the clutch cable **N** to the reel belt idler trigger **O**.







15. Attach the other end of the cable A to the cam B on the back of the handle. Pass the threaded portion through the hole in the cam and secure it with two jam nuts C.

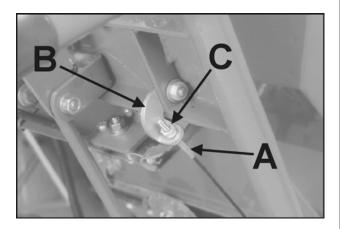
Use the jam nuts to adjust tension on the cable. The cable must be loose enough to allow the trigger to latch the reel belt idler when it is disengaged and tight enough to fully retract the trigger when the control lever is pulled back.

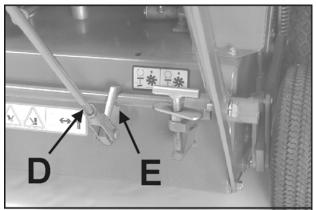
16. Using a clevis pin, connect the clevis on the lift rod **D** to the lift arm **E** as shown.

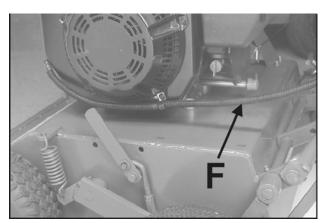
NOTE: Adjusting the clevis on the rod may be required to insure that the lever locks over center with enough force to hold the unit firmly in the up position.

Once the clevis is positioned properly, secure the clevis pin with a cotter pin. Tighten the locking nut on the rod against the clevis.

17. Secure the convoluted tubing **F** that contains the throttle cable and switch wire to the side of the engine as shown.



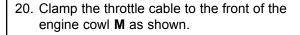


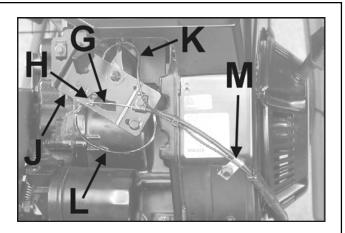


MATAWAY

- 18. Connect the throttle cable wire **G** to the throttle lever **H** and clamp the cable to the throttle plate **J** on the front of the engine.
- Connect the switch wire K to the electrode behind the throttle plate J (opposite end of the electrode to which the engine wire L is connected).

NOTE: Make sure that the throttle cable is clamped on the throttle plate so that when the throttle lever is pulled all the way back, the engine stops. Adjust the position of the cable in the clamp if required.





MATAWAY

THROTTLE (A)

Move throttle lever forward to increase engine speed. Move the lever all the way back to stop the engine.

LIFT LEVER (B)

Raises and lowers the frame mounted reel. Pull the lever back and down to lower the reel. Pull the lever up and forward until it locks over center to raise the reel.

OPERATOR PRESENCE LEVER (C)

Must be held against the handle bar whenever the clutch control is engaged or the engine will stall (the engine can be started without holding the operator presence lever, if the clutch control is disengaged).

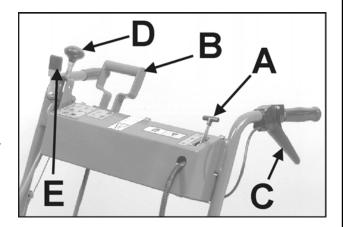
CLUTCH CONTROL (D)

Engages the clutch for both the drive transmission and reel rotation.

REEL CONTROL LEVER (E)

Must be pulled back against the clutch control handle for the reel clutch to be engaged.

Pull the Reel Control Lever back against the clutch control and push the clutch control forward to engage both the drive clutch and the reel clutch. Push the clutch control forward without pulling back the reel control lever to engage the drive clutch ONLY. Pull the clutch control all the way back until it locks over center to disengage both clutches.



AWARNING

Gasoline is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks when refueling. BE SURE to install fuel cap after refueling.

Remove fuel cap slowly. Fuel tank may be under pressure and could cause personal injury from spraying.

NEVER start or run the engine inside where exhaust fumes can collect. Carbon monoxide present in the exhaust is an odorless and deadly gas.

DO NOT operate equipment without shields in place. DO NOT make adjustments or perform any maintenance while the engine is running.

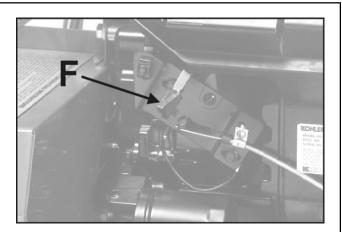
Immediately replace any warning decal which becomes illegible.

STARTING THE ENGINE

Before starting engine, check engine oil level. Fill if necessary following the engine manufacturer's recommendation for the type and amount of oil required.

Fill fuel tank with appropriate fuel recommended by the engines manufacturer.

- 1. Make sure the lift lever is in the raised position.
- 2. Make sure the clutch control is disengaged (engine will not start if the clutch control is engaged).
- Move the throttle lever midway between fast and slow.
- 4. Use the choke as required to start a cold engine. Choke control **F** is located on the front of the engine.
- Stand at side of unit placing left foot on top of housing and slowly pull the recoil starter until just past compression. Return starter handle, pull firmly with a smooth, steady motion to start.



DEPTH ADJUSTMENT

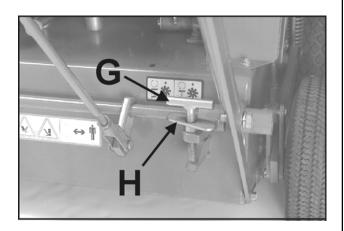
The factory reel depth setting gives a maximum of 1" (25 mm) turf penetration on level terrain, and a reel to ground clearance of 1 1/2" (38 mm) when reel lift lever is in the transport (raised) position.

NOTE: Initial depth adjustment should be made with the unit on a level surface. If level surface is concrete, the reel blades must not touch the surface when lifting lever is in the lowered position.

Never cross hard surfaces or objects (sidewalks, driveways, stepping stones etc.) with reel blades down and/or engaged.

Fine depth adjustment is made by turning the adjusting screw **G** clockwise (down) to raise reel from the turf, and turning the adjusting screw counterclockwise (up) to lower reel into the turf. Tighten locking nut **H** after each reel adjustment.

Low tire pressure may cause uneven reel penetration. Correct tire pressure should be maintained to eliminate this possibility (refer to the Tire Pressure section of this manual, for recommended tire pressure).



DETHATCHING

- 1. Adjust reel to desired cutting depth.
- Whenever possible, a few test runs should be made on turf similar to where the unit will be used. This will allow preliminary adjustments to be made before entering greens (etc.) and help eliminate the possibility of turf damage due to misadjustments.
- 3. Start the engine. Compress and hold the operator presence lever.
- Pull back on the reel control lever and push the clutch control forward to engage both the reel and drive clutches. Adjust the throttle to the operator's desired walking speed.
- 5. Lower the reel **after** the unit is in motion.

NOTE: To prevent damage to the turf, the unit should be in motion and the clutch control engaged **before** lowering reel onto the turf.

Never cross hard surfaces or objects (sidewalks, driveways, stepping stones, etc.) while the reel is down and/or engaged.



Clutch Control

Reel Control Lever

6. After each pass across the turf, raise the reel, disengage the clutch control and position the unit manually for the next pass (this will help prevent damage to the turf). Make all passes across the turf at uniform speed.

ACAUTION

Before operating, check area to be worked and remove any object(s) which may present a safety hazard and/or damage the equipment.

To prevent injury due to rotating blades, never place hands or feet beneath the equipment at any time.

To prevent injury from thrown blades, never operate equipment with reel blades that are cracked, badly bent, missing, or in any abnormal condition.

To keep the Mataway in good operating condition, proper maintenance and immediate repair of any damaged part is necessary. Perform the following services, and follow procedures for proper storage.

▲ WARNING

When replacement parts are required, use genuine JACOBSEN parts or parts with equivalent characteristics, including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders.

Any warning decal that becomes illegible should be replaced immediately.

Wear protective eye equipment when using hammer, chisels, punches and drills.

Carbon monoxide present in the exhaust is an odorless and deadly gas. Provide enough ventilation. Never start or run the engine inside where exhaust fumes can collect.

Stop engine and let cool before servicing or making adjustments around the engine area.

Use adequate lifting device to raise unit. Use appropriate jack stands to support unit.

PREVENTIVE MAINTENANCE

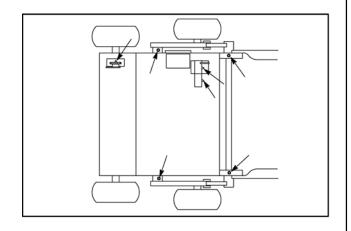
After each days use:

- 1. Wash unit with water after engine has cooled.
- 2. Check blades for damage (cracks, broken blades, etc.) replace if necessary. Make sure blades are free of debris and apply a light coat of 5. Keep all belts free from dirt and oil. oil to the blades to help prevent rust (any motor oil will work effectively).
- 3. Check engine oil level and air cleaner for dirt and/or obstructions. Service according to engine manual recommendations.
- 4. Check transmission case for proper oil level. The case holds 1/2 pint (.4L) when full. Use EP90w Oil.

LUBRICATION

The Mataway has 7 lubrication fittings.

- 1. Wipe off each fitting before and after lubrication.
- 2. Use a good quality Lithium based lubricant.
- 3. Lubricate equipment after every 8 hours of use and before long storage periods.



TIRE PRESSURE

Keep the tires to the recommended pressure. Improper inflation will shorten the life of the tires and cause unsatisfactory operation.

Tires......4.10 / 3.50 - 4, 2-ply Tire Pressure......24 to 26 PSI (165 to 179 kPa)

ACAUTION

Due to low air volume of tires, over-inflation can be reached in a matter of seconds. To prevent explosion, check air pressure with air gauge before filling the tire. Fill to recommended air pressure, and Do Not exceed the recommended pressure.

NEW BLADE INSTALLATION

Remove the reel in the reverse order of installation as stated in the Set-Up instructions in this manual.

Blades are removed from the reel by removing the pillow block and the reel nut on the end of the reel, opposite the drive pulley.

Notice how the blades are spaced before removing them to assure proper installation of the new blades.

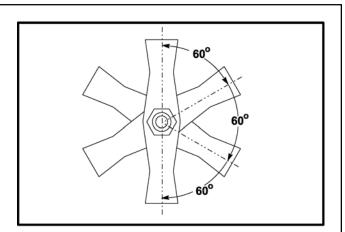
NOTE: When reassembling the reel, it is important to start and end with a spacer. DO NOT assemble with a blade next to the shaft nut.

When installing new blades (Part No. 516901 and Part No. 516900, straight blades) note the hexagon shape of the shaft. Install the first blade onto the shaft, then rotate the next blade so it is one lobe forward (60° off center) from each previous blade.

Keep installing the blades in this order until all blades are installed.

Mount the reel shaft, with new blades in the reverse order it was removed.

After 4 hours of use, check reel nut for proper torque. The torque value for the reel nut is 348 ft.-lbs. + 35 ft.- lbs. (420 to 510 N·m).

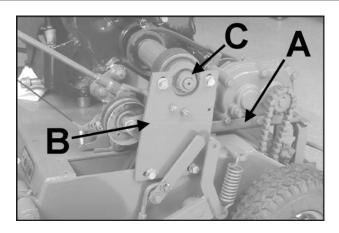


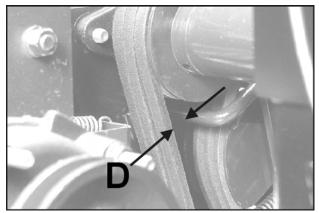
ADJUSTMENT FOR REEL AND DRIVE BELTS

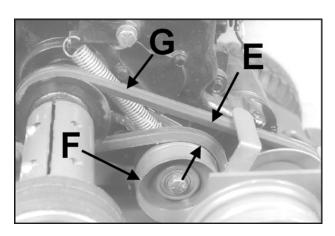
Over time, the belts will naturally need adjusting due to the use of the equipment. Inspect belts daily to ensure proper operation of the unit.

Before adjusting belts, make sure to:

- 1. Loosen the transmission mounting plate **A** and chain idler sprocket hardware.
- 2. Clean the underside of chassis to allow movement of the engine and loosen the engine mounting hardware.
- 3. Loosen the hardware securing the mounting plate **B** (supporting the reel drive pulley) and the pillow block.
- 4. Loosen the set screw in the locking collar C on the drive shaft. Insert a punch in the small hole in the collar and use a hammer to tap the collar clockwise (opposite direction of engine rotation) until it's loose (approx. 1/4 turn).
- 5. Make sure the springs are in place on the drive belt idler arm and the reel belt idler arm.
- 6. Slide transmission and mounting plate toward the rear of unit as far as possible. Tighten transmission mounting hardware.
- 7. Position engine so it is square with the chassis and tighten either the two front or the two rear mounting screws.
- Engage the reel drive clutch. Measure the distance between the reel drive belts and the forward edge of the idler assembly belt stop. Measurement **D** should be 3/4" (19 mm). If necessary, reposition engine to obtain proper dimension.
- Engage the drive clutch. Measure the distance from the top edge of the idler pulley F, to the top edge of the drive belt G. The measurement E should be 1-3/4" to 2" (44 to 51 mm).
- 10. If measurement is less than 1-3/4" (44 mm) slide transmission forward until proper dimension is obtained.

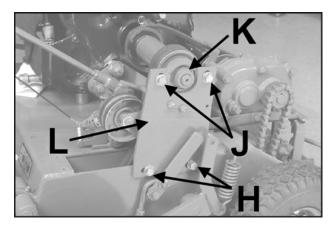


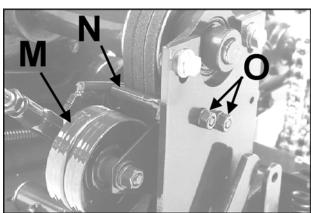




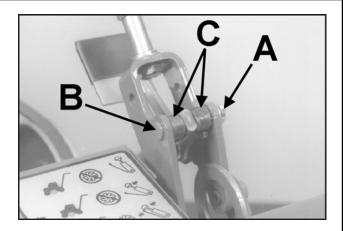
MATAWAY:

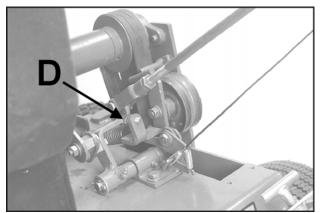
- 11. If the measurement is over 2" (51 mm) slide the engine forward to obtain correct measurement. If the engine has to be moved, check the reel belt measurement again for proper dimension.
- **NOTE**: Reel and drive belt adjustments are guidelines only. The reel drive belts should engage without slipping and disengage completely. The drive belt should engage without slipping and disengage so that the unit will not creep.
- 12. Tighten engine and transmission mounting hardware securely. Slide chain idler sprocket against the drive chain until there is 1/8" to 1/4" (3 to 6 mm) play in the chain opposite the sprocket and secure hardware.
- 13. Using a straight edge, align the belt drive pulley on the transmission with the drive pulley on the engine. Loosen the set screw on the transmission pulley and slide it in or out to achieve proper alignment.
- 14. Align the mounting plate L so that it is perpendicular to the chassis and the pillow block bearing is centered on the coupler shaft. Tighten the two plate mounting screws H at the bottom of the plate.
- 15. Align the pillow block bearing with the coupler shaft so that there is no vertical or side load on the shaft and tighten the pillow block mounting hardware. Torque the pillow block screws to 25 ft.-lbs. (34 N·m).
- 16. Tighten locking collar K on engine coupler shaft. Rotate collar counterclockwise on pillow block shoulder. Using hammer and punch, lock collar into position. Tighten set screw in collar K.
- 17. Engage reel drive clutch. Check the clearance from the idler pulley M to the belt stop N bolted to the mounting plate, clearance should be a minimum of 1/16" (2 mm). If necessary, loosen the belt stop hardware O and reposition it. Tighten hardware.

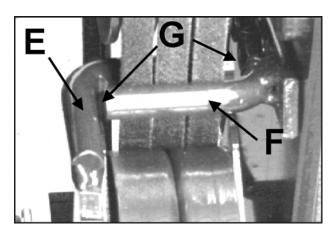




- 18. Check clutch control for positive over-center action in disengaged position. Adjust rod length if necessary.
- 19. To adjust rod length to achieve positive overcenter locking, loosen the jam nut on top of the clevis at the bottom of the clutch lever.
- 20. Remove the cotter pin **A** and clevis pin **B**, and the two bushings **C** on the control handle. Turn the rod to shorten or lengthen the rod as required and reattach the rod to the handle with the clevis pin.
- 21. Double check to ensure over-center locking action. When proper locking action is obtained, completely assemble control handle and tighten jam nut.
- 22. Engage and disengage clutch control lever several times and check to see that belt stops work properly. The belts should be held firmly, but not pinched severely, with reel drive lever disengaged.
- **NOTE**: Overtight belt stops will cause undo wear on reel drive belts.
- 23. Belt stop tension on the reel belts can be adjusted by loosening the screw **D** in the reel belt idler assembly and screwing it in or out to adjust the tension on the idler arm when it is in the disengaged position.
- 24. Disengage the clutch lever. Check the tips of the two belt stops E & F. The gap G should be a minimum of 1/32" (1 mm) between the tips of the stops. If necessary, loosen reel idler pivot plate and adjust accordingly.
- 25. The belt stops should be perpendicular to the reel belts and parallel to each other. Make sure reel drive idler pulley is centered and aligned over reel drive belts.

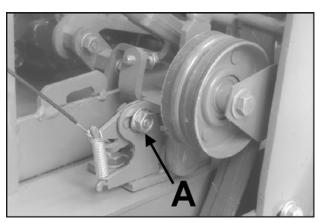


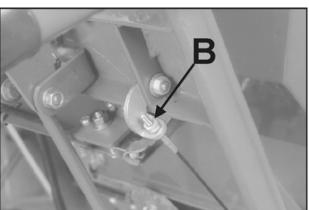




HOOK AND CABLE ADJUSTMENT

- Loosen the hardware securing the hook A. Slide the hook in the slot so that it captures the reel idler assembly when the clutch control is disengaged. When only the drive clutch is engaged, the hook should hold the reel idler assembly back far enough that the reel belts will not engage. Retighten the hook mounting hardware.
- After the hook has been adjusted. Loosen the two jam nuts B at the top of the cable. Adjust the bottom nut to take up any slack in the cable. Be careful not to overtighten the cable or the hook may not hold the reel idler assembly. Use the top nut to lock the lower nut into place.





REEL BELT AND DRIVE BELT REPLACEMENT

NOTE: Reel belts are serviced in matched sets of three belts. When replacement is required, always replace all three belts. It is a good idea to replace all belts (drive and reel) on the unit at the same time.

- 1. Remove the belt guards.
- 2. Tilt the unit forward and support the rear of the chassis with jack stands.

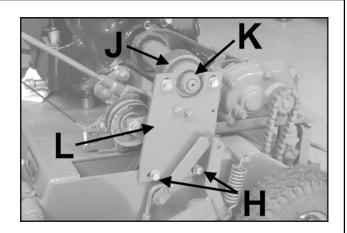


Use adequate jack stands when supporting the unit. Failure to do so may result in personal injury.

- 3. Remove the lower belt guard from under the chassis and take out the reel. Remove the jack stands and lower the unit.
- Loosen the set screw in the locking collar K on the drive shaft. Insert a punch in the small hole in the collar and use hammer to tap the collar clockwise (opposite direction of engine rotation) until it's loose (approx. 1/4 turn). Remove the collar.
- Remove the bolts H securing the mounting plate
 Remove plate and the pillow block J (leave the pillow block attached to the mounting plate).
- 6. Remove all three reel belts.

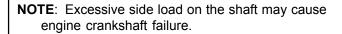
NOTE: Inspect the drive belt to the transmission after the reel belts have been removed. Replacing the drive belt now will save work and down time at a later date.

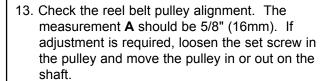
- 7. Install new belts (matched set of three).
- 8. Before reinstalling the mounting plate **L**, loosen but do not remove the pillow block **J**.
- Slide the pillow block bearing onto the shaft and loosely mount the plate to the chassis. Adjust the mounting plate L side-to-side so that there is no side load on the drive shaft. Tighten the mounting plate hardware H.



MATAWAY:

- Reinstall the locking collar against the bearing. Tighten locking collar by rotating counterclockwise on pillow block shoulder. Using punch and hammer, lock collar into position. Tighten set screw.
- 11 Adjust the pillow block up and down until it is centered on the shaft. Tighten the pillow block hardware.
- 12. Rotate the drive shaft by hand to make sure there is no side load.





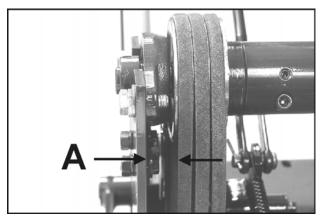
NOTE: The pulley is secured to the shaft by set screw and key. It may need to be tapped with a hammer for adjustment. Use a plastic, rubber, lead or leather head hammer to avoid damaging the pulley.

14. Support the unit on jack stands and reinstall the reel and belt guard beneath the chassis.

ACAUTION

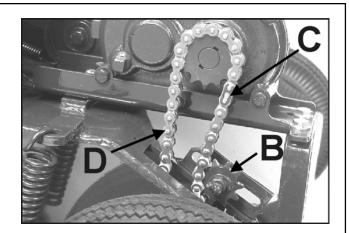
Use adequate jack stands when supporting the unit. Failure to do so may result in personal injury.

NOTE: Belts should be tight when the reel and drive are engaged and loose enough to slip when they are disengaged.



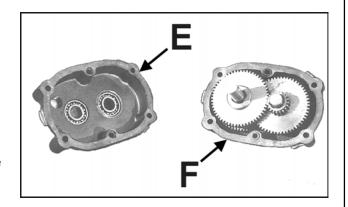
CHAIN REPLACEMENT

- 1. Remove belt guard.
- 2. Loosen the drive chain idler sprocket B.
- 3. Remove connecting link C and chain D.
- 4. Install new chain and connecting link.
- 5. Adjust the idler sprocket to allow approximately 1/8" (3 mm) to 1/4" (6 mm) of play in the chain (check for play on the straight section of chain opposite the sprocket).
- NOTE: Proper chain tension is essential. A tight chain will impose excessive bearing loads. A loose chain will cause noisy operation and chain pulsations, which may result in irregular sprocket speed and abnormal chain and sprocket wear.
- Tighten hardware and recheck tension on the chain.
- Lubricate the fitting on the idler sprocket and lightly oil the chain to prevent excessive dirt accumulation.
- 8. Install belt guard.



TRANSMISSION GEAR REPLACEMENT

- 1. Remove the transmission from the unit.
- 2. Remove the sprocket, pulley and keys.
- 3. Remove the plug and drain the oil from the gear case.
- 4. Remove the the remaining hardware. Take note of which side is the input side and which is the output side so that they can be reassembled correctly. Using a soft hammer, tap case on the tabs to break the seal, and pull halves E & F apart.



MATAWAY:

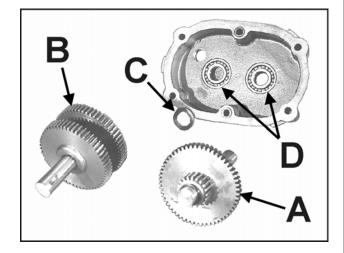
- 5. Remove the input shaft **A**, output shaft **B** and spacer **C**. Also remove the bearings **D** and grease seals.
- 6. Install new bearings into both case halves. **DO NOT** install new grease seals at this time.

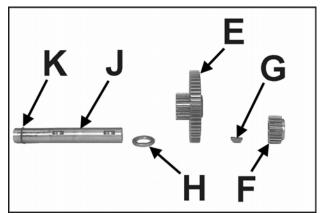
INPUT SHAFT

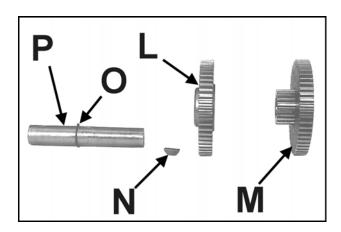
- 7. Remove large double gear **E**, small gear **F**, key **G**, and spacer **H** from input shaft **J**.
- 8. Check the input shaft for wear and replace if necessary (if shaft needs to be replaced, install the existing snap ring **K** on new shaft). If the shaft is NOT replaced, remove any burrs from keyways and/or shaft ends if necessary.
- Replace bushings in the large double gear E (or replace gear if necessary). When replacing bushings, make sure they are flush with the edge of the gear and that the oil holes on gear are aligned.
- 10. Install the spacer **H** onto shaft against the snap ring **K**. Install the large double gear **E**, with the small gear side against the spacer.
- 11. Install key **G** into keyway and slide the small gear **F** (flat side toward the larger gear) onto the shaft.

OUTPUT SHAFT

- 12. Remove large gear L , large double gear M and key N from shaft P. Check the shaft for wear and replace if necessary (if shaft needs to be replaced, install the existing snap ring O on new shaft). If the shaft is NOT replaced, remove any burrs from keyways and/or shaft ends if necessary.
- 13. Replace bushings on large double gear M (or replace gear if necessary). When replacing bushings, keep the bushings flush with the edge of the gear. Be sure oil holes on gear are aligned.

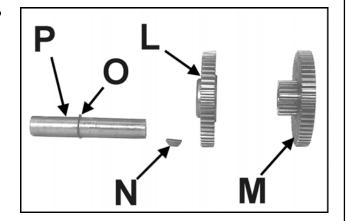






MATAWAY

- Install key N and large single gear L onto shaft P (be sure the deep-step side of gear is toward snap ring O).
- 15. Slide the large double gear **M** onto shaft, with the small gear toward the large single gear.
- 16. Install spacer onto output shaft.
- 17. Clean the old gasket material from the case halves.
- 18. Install the input and output shafts into the gear case half, making sure the spacer on the output shaft remains in place.
- 19. With shafts in gear case half, turn either shaft to make sure gears are turning. This will ensure the keys are properly set.
- Apply Loctite 515 sealant (or equivalent) to case halves. Make sure the spacer bushings are in the center top and bottom holes of the case half.
- 21. Position transmission onto the mounting bracket with the drain plug facing to the outside of unit. Reinstall the six screws removed during disassembly. Secure all six screws and torque to 16 + 2 ft.- lbs. (21.5 N·m).
- 22. Apply 30w oil onto the lips of the new grease seals. Install the seals, drive pulley, and sprocket.
- 23. With the gear case resting level on the mounting bracket, fill transmission with EP90w oil until the oil reaches the bottom of the threads in the plug hole. Install plug (use a teflon based thread sealer on the threads). The transmission will hold 1/2 pint (.4L) of oil.
- 24. Check the alignment of the belt pulley and chain sprocket. If necessary, loosen the set screws securing the pulley and sprocket to the shaft and position each until properly aligned. If alignment cannot be reached refer to the previous instructions for adjustment of belts and chain.



STORAGE INSTRUCTIONS

A WARNING

To prevent possible explosion or ignition of vaporized fuel, do not store equipment with fuel in tank or carburetor in enclosure with open flame (for example, a furnace or water heater pilot light).

Do not smoke, avoid sparks and open flames when draining or filling the fuel tank.

Before the equipment is put in to storage for any period exceeding 30 days, the following steps should be taken.

- 1. Drain all fuel from the fuel tank and fuel lines.
- 2. Start the engine and run until all the fuel is used from the carburetor float bowl.
- While engine is warm, drain the crankcase oil and replace it with the proper weight oil corresponding to the season the unit will next be used. Refer to the engine manual for proper oil recommendations.

ACAUTION

Do not attempt to service or make repairs near the engine area while the engine is still hot.

- 4. Remove the spark plug and squirt a small amount of clean motor oil into the cylinder. Turn the engine over a few times to distribute the oil and reinstall the sparkplug.
- 5. Lubricate all lubrication fittings.
- 6. Apply a light coat of oil to the blades and reel shaft to prevent rust.
- 7. Lubricate drive chain with Lubriplate #13563 or equivalent.

NOTE: Do not store unit with blades in the down position. Be sure all belts are free from tension (the clutch control lever in the disengaged position).

To put the equipment into service after an extended period of storage:

- 1. Move unit to a level, well ventilated area.
- 2. Check unit for loose hardware and broken parts. Tighten and replace as necessary.
- 3. Check for cracked or split fuel lines.
- 4. Make sure the air cleaner filter is clean.
- 5. Check that the air cleaner components and all shrouds and belt covers are in place.
- 6. Check spark plug and plug wire.
- 7. Note if any blades need replacing.
- Determine if the transmission and engine oil need filling. Refill engine oil according to the manufacturers recommendations, and refer to the Preventive Maintenance section of this manual for correct oil weight and amount for the transmission.
- 9. Fill the tank with appropriate fuel as recommended by the engine manual.

AWARNING

Do not smoke, avoid sparks and open flames when draining or filling the fuel tank.

- 10. Make sure controls are in the disengaged or neutral position.
- 11. Start engine and let run (at slow speed) until approximate operating temperature has been reached.
- 12. While engine is running (and has reached operating temperature) visually inspect fuel lines and carburetor for leaks. If a leak is found, make sure the engine has cooled sufficiently before attempting any repairs.

MATAWAY

TRANSPORTING

The unit may be transported under it's own power. With the lift lever up and the clutch control disengaged, start the engine and compress and hold the operator presence lever. Engage only the drive transmission clutch by pushing the clutch control forward **without** pulling the reel control lever back. Set the throttle to the operator's desired walking speed.

The unit may be loaded into the back of a truck or trailer using a gradual sloped ramp and operating the unit in the same manner as stated previously.



AWARNING

Use adequate lifting device and/or assistance when loading and unloading unit. If loading by ramp, be sure ramp is properly supported.

Keep hands and feet from underneath the unit while operating or ramp loading the unit.

SPECIFICATIONS

mounted in self-aligning ball bearings welded to pivot arms Blades......Reversible, high carbon steel (hardened) (blade thickness varies by reel) 1/32" (.8mm); 1/16" (1.5mm); 1/8" (3mm) Chassis......3/16" (5 mm) formed and welded steel plate Clutch.....Belt tightener type for reel and forward travel Controls.....Throttle control, lift lever combined drive and reel clutch lever Depth Adjustment......Micrometer screw **Depth of Cut**......Up to 1" (25 mm) **Dimensions:** Width......36" (91cm) Height.....44" (112cm) including handle Length.....53" (135cm) including handle Width of cut...19" (483 mm) with blade spacing from 1/2" (13 mm) to 2" (50.8 mm) depending

on which reel is used

Drive..........."A" section belt from engine to gear box No. 40 sealed roller chain from gearbox to front axle Matched set of 3, V section belts from engine to reel
Engine.......Model No. CH11T, 11 H.P. Kohler Kohler specification number PS - 1630. Governor set at 3200 r.p.m. (no load). Engine displacement

Kohler specification number PS - 1630. Governor set at 3200 r.p.m. (no load). Engine displacement is 24.3 cu. in. (398 cc) and develops 20.2 ft.-lbs. (27.4 N·m) of torque at 2000 r.p.m.

Gear Case......22 to 1 reduction

Net Weight.......386 lbs. (175 Kg) with 544265 Reel

Reduction.....Engine to reel - 1:1 Engine to wheels - 48:1

Reel.....Quick change mounting
Rotation in opposite direction of forward motion

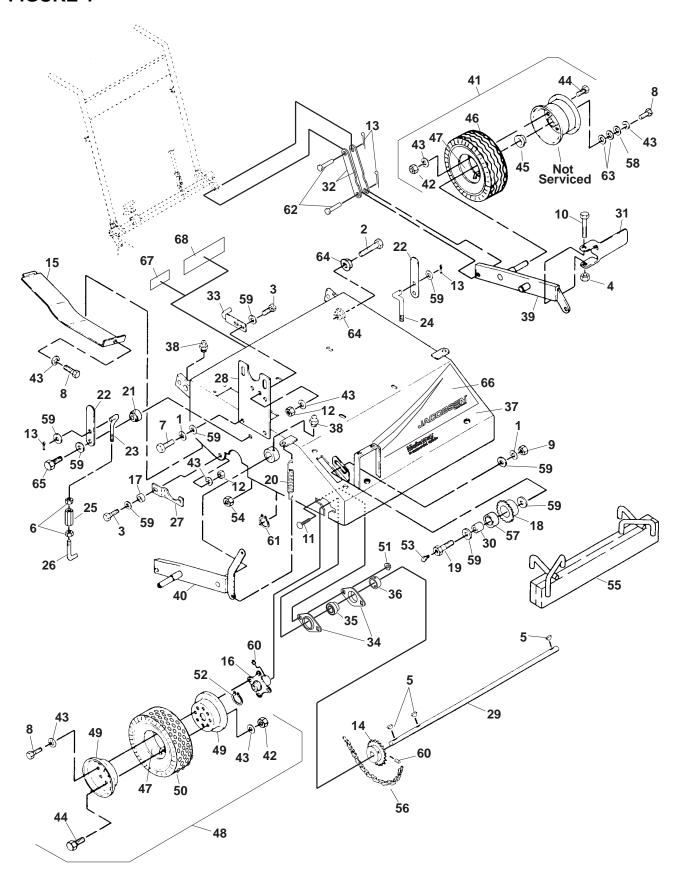
Reel Speed......3200 r.p.m.

Speed...264 ft./min.(81m/min.) at 3200 engine r.p.m.

Wheels.....Front; 4.10/3.50 - 4, pneumatic tires chain driven

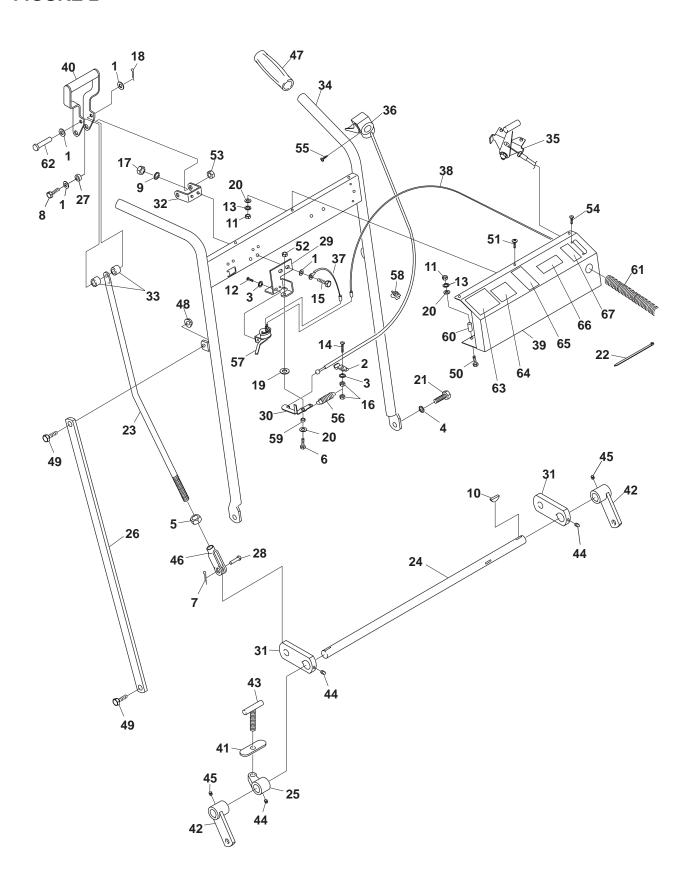
Rear; 4.10/3.50 - 4 pneumatic tires free wheeling on self-aligning ball bearings. Wheels on center line of reel to prevent scalping on rolling terrain and scuffing on turns.

PARTS SECTION



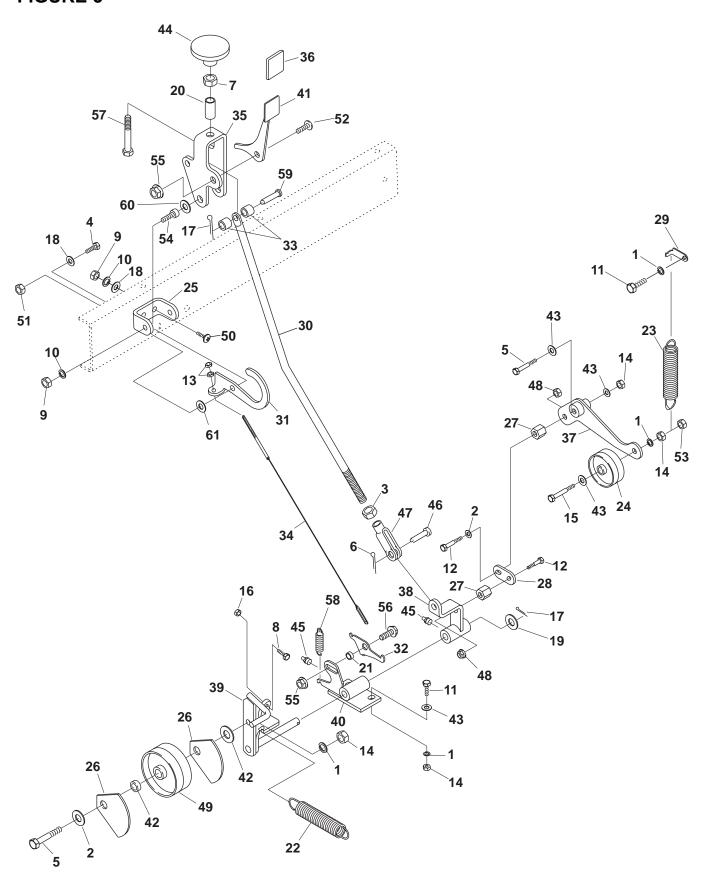
MATAWAY ====

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1-1	64006-03	WASHER, 3/8 HELICAL LC	K 3	1-48	4124197	WHEEL ASSY	2
1-2	64123-82	BOLT-HEX 3/8-16X2-1/2	1			S ITEMS 42-44, 47, 49, 50)	
1-3		BLT-HEX 5/16-18X7/8	4		,	, , -,,	
1-4	64151-15	5/16-18 HEX NUT CNTRLC		1-49	517332	RIM	1
1-5	64164-19	KEY WOODRUFF.19X.75 #		1-50	523264	TIRE	1
1-6	64001-2	NUT-JAM 3/8-24	4	1-51	64141-6	NUT, 5/16-18	4
1-7	64123-50	BOLT-HEX 3/8-16X1	2	1-52	64144-02	SNAP RING 3/4	2
1-8	306555	SCREW, 5/6-18 X 5/8	_ 11	1-53	807443	FTG, GREASE 45D.25-28	1
1-9	64025-05	NUT-3/8-16 HEX	1	1-54	64151-18	NUT, HEX	2
1-10		BLT-HEX 5/16-18X2-3/4	2	1-55	547634	WEIGHT AY	1
1-11	64018-9	BLT-CRG 5/16-18X3/4 G5	4	1-56	523477	CHAIN, SEALED ROLLER	1
1-12	64025-02	NUT-HEX 5/16-18	2	1 00		S 522122 LINK CONNECTO	
1-13	306956	COTTER PIN	6		(11402002)	O OZZ IZZ ZIIVIK OOMNEOTO	11)
1-14	841261	SPROCKET, 16T 1/2P BLK		1-57	521845	BEARING,NEEDLE	1
1-15	516825	GUARD	1	1-58	64163-55	WASHER .328X.75X14 GA	
1-16	516944	HUB	2	1-59	64163-61	WSHR .81X.406X16GA	13
1-17	517226	BRG,SLV .33 .50 .20 IRON	2	1-60	548201	SETSCREW, 5/16-18 X 5/1	
1-18	517348	SPROCKET	1	1-61	64144-03	SNAP RING 7/8"	2
1-19	517641	SCRW,SPCL.38-16 1.75 H	-	1-62	548456	PIN,CLEVIS.438 1.25 YS	4
1-20	518506	SPRING	` 2	1-63	548477	WASHER	4
1-21	519038	BUSHING	2	1-64	64141-4	NUT-WLF 3/8-16	2
1-22	519039	LEVER	2	1-65	64123-87	BOLT-HEX 3/8-16X1-3/4	2
1-23	519040	HOOK, UPPER RIGHT	1	1-66	4124287	LABEL-FRONT, MATAWA	
1-24	519041	HOOK, UPPER LEFT	1	1-67	524544	DECAL, REEL HEIGHT AD	
1-25	519042	NUT	2	1-68	869081	DECAL, DANGER	1
1-26	519043	CLAMP, ROD LOWER	2	1 00	000001	DEO/IE,D/IIVOEIV	•
1-27	519045	CLAMP, REEL	2				
1-28	519057	PLATE	1				
1-29	519059	SHAFT,FRONT	1				
1-30	519874	RACE,INNER	1				
1-31	522714	SCRAPER, WHEEL	2				
1-32	524508	LINK, LIFT	4				
1-33	547743	STOP, BELT	1				
1-34	548962	HOUSING,BEARING	4				
1-35	521856	BEARING,BALL	2				
1-36	521857	COLLAR, BRG LOCKING	2				
1-37	540195	FRAME	1				
. •.	(INCLUDES		·				
1-38	548224	FITTING,GREASE 1/4 SPC	4				
1-39	540236	ARM, LEFT	1				
1-40	540237	ARM, RIGHT	1				
1-41	4124194	WHEEL, 4.10/3.50-4 2PLY	2				
	INCLUDES	ITEMS 42-47)					
1-42	306320	NUT-5/16-24	4				
1-43	64006-02	LOCKWSHR-HELICAL 5/16					
1-44	306861	SCRW,.31-24.625 YS HX	4				
1-45	548123	BEARING, WHEEL	2				
1-46	548543	TIRE-4.10/3.50-4, 2 PLY	1				
1-47	548546	TUBE	1				



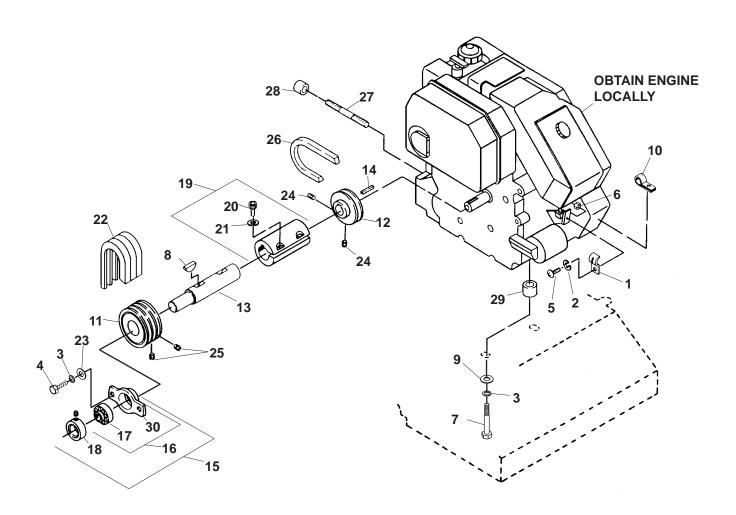
MATAWAY ====

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
2-1	64163-55	WASHER .328X.75X14 GA	6	2-51	800026	SCREW, .25-20.75 YS	4
2-2	111898	CLAMP,CABLE	1	2-52	64151-17	LOCKNUT, HEX	1
2-3	120052	LOCKWASHER	3	2-53	64151-15	5/16-18 HEX NUT CNTRLO	CK 2
2-4	64006-05	LOCKWSHR-HELICAL 1/2	2	2-54	819195	TSCRW,#8-18.50 YS	2
2-5	64001-10	NUT-HEX JAM 7/16-20	1	2-55	800896	TSCRW,.190-24.75 YS	1
2-6	64123-89	BOLT-HEX 1/4-20X3/4	1	2-56	805421	SPRING,EXTENSION	1
2-7	304636	COTTER PIN, 12 x 1.12 YS	1	2-57	806800	SWITCH,STOP LIGHT	1
2-8	64123-107	BLT-HEX 5/16-18X7/8	2	2-58	813840	CLIP	1
2-9	64006-02	LOCKWSHR-HELICAL 5/1	3 2	2-59	814585	BUSHING	1
2-10	64164-19	KEY WOODRUFF.19X.75 #	# 9 5	2-60	820529	SPACER (PLATING)	1
2-11	64025-01	NUT-1/4-20 HEX	6	2-61	826190	TUBING, CONVOLUTED 5	0'A/R
2-12	306391	SCRW,#10-32.31 YS	2	2-62	826633	PIN,CLEVIS.31 2.38 ZS	1
2-13	64006-01	LOCKWSHR-1/4 HELICAL	6	2-63	524496	DECAL, CONTROL DRIVE	1
2-14	306401	SCREW, MACHINE-RNDH	D 1	2-64	524497	DECAL, CONTROL REEL	1
2-15	64123-68	BOLT-HEX 5/16-18X1	2	2-65	00903491	DECAL, OPERATING INST	R 1
2-16	306531	NUT, 10-24 YS HEX	2	2-66	524547	DECAL, WARN-HEARING	1
2-17	64025-02	NUT-HEX 5/16-18	2	2-67	524564	DECAL,THROTTLE	1
2-18	306956	COTTER PIN	1			- , -	
2-19	64163-55	WASHER .328X.75X14 GA	. 1				
2-20	64163-03	WSHR256X.62X18GA.	6				
2-21	64123-73	BLT-HEX 1/2-13X1	2				
2-22	65286-4A	TIE,CABLE 11-5/8 BLACK	2				
2-23	515838	ROD, CONTROL	1				
2-24	516855	SHAFT	1				
2-25	516859	LEVER, ADJUSTING	1				
2-26	516972	BRACE	2				
2-27	521679	BUSHING	2				
2-28	548456	PIN,CLEVIS.438 1.25 YS	1				
2-29	524490	MOUNT, SWITCH (PLATED					
2-30	524493	ARM,PIVOT	1				
2-31	524513	ARM, LIFT	2				
2-32	524526	BRACKET, LIFT HANDLE	1				
2-33	524578	BUSHING, .328X.63X.6	2				
2-34	540242	HANDLE AY	1				
2-35	540243	CONTROL AY, THROTTLE	1				
2-36	540245	CONTROL AY, KILL SWITC					
2-37	540265	WIRE AY, 7.5"	1				
2-38	540266	WIRE AY, 75"	1				
2-39	540272	COVER, CNTRL W/DECAL	S 1				
2-40		HANDLE AY	1				
2-41	2702111	HANDLE AY, LOCKING PL	=				
2-42		ARM AY,FRAME LIFT	2				
2-43	546321	SCREW AY, ADJUST PLTI	_				
2-44	548201	SETSCREW, 5/16-18 X 5/1					
2-45	548204	SSCRW,.38-16.38 BS NH	2				
2-46	548507	CLEVIS	1				
2-40 2-47	548518	HAND GRIP	2				
2-47 2-48	64141-4	NUT-WLF 3/8-16	2				
2-40 2-49	548905	SCREW, .38-16 1.00 YS	4				
2- 4 9 2-50	800024	SCRW, .25-20 1.50 YS	1				
2-50	50002 1	JUINTY, 20-20 1.00 10	'				



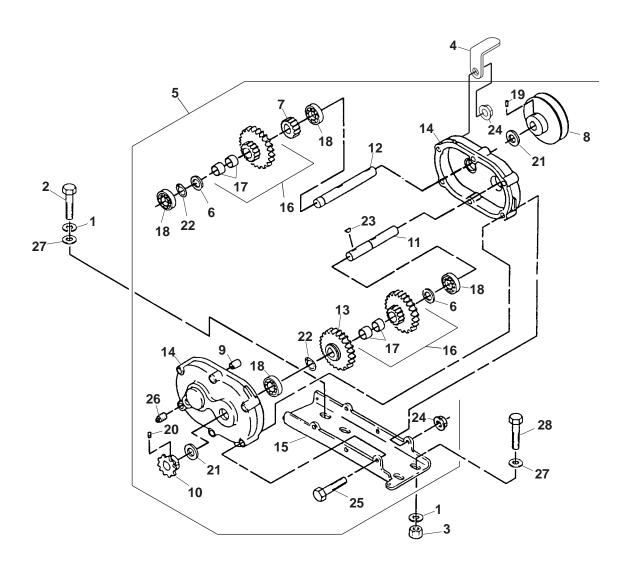
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ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
3-1	64006-03	WASHER, 3/8 HELICAL LC	K 5	3-51	64151-15	5/16-18 HEX NUT CNTRLO	K 1
3-2	64163-55	WASHER .328X.75X14 GA	. 3	3-52	800177	SCRW,.31-18.75 YS PR	1
3-3	64001-10	NUT-HEX JAM 7/16-20	1	3-53	64151-18	NUT, HEX	1
3-4	64123-89	BOLT-HEX 1/4-20X3/4	1	3-54	800492	CAPSCREW,HEX	2
3-5	64123-82	BOLT-HEX 3/8-16X2-1/2	2	3-55	64268-02	NUT-FL NYLN LCK 5/16-18	
3-6	304363	PIN, COTTER 1/8X1-1/8	1	3-56		BLT-FLG HD 5/16-18 X 3/4	
3-7	64025-04	NUT-3/8-24 HEX	1	3-57	800883	SCRW,.38-24 2.25 YS HX	1
3-8		BLT-HEX 5/16-18X7/8	1	3-58	805421	SPRING, EXTENSION	1
3-9		NUT-1/4-20 HEX	3	3-59	830005	PIN,CLEVIS.308 1.69 PS	1
3-10	64006-01	LCKWSHER-1/4 HELICAL	3	3-60	809183	WSHR,.25.75.10 YS FLAT	2
3-11	64123-50	BOLT-HEX 3/8-16X1	3	3-61	64163-34	WSHR.256/.267X1X11GA	1
3-12	64123-69	BOLT-5/16-18X1-1/2 HEX	2				
3-13	306531	NUT, 10-24 YS HEX	2				
3-14 3-15	64025-05	NUT-3/8-16 HEX	4 1				
3-15 3-16	64025-02	BOLT-3/8-16X2-1/4 HEX NUT-HEX 5/16-18	1				
3-10 3-17	306956	COTTER PIN	2				
3-17 3-18		WSHR256X.62X18GA.	3				
3-10	64163-67	WASHER516X1X12GA	1				
3-20	516544	BUSHING (PLATING)	1				
3-21	517226	BRG,SLV .33 .50 .20 IRON					
3-22	2701258	SPRING, TSN 1.0X3.62X14					
3-23	518487	SPRING	1				
3-24	522882	PULLEY,IDLER	1				
3-25	522604	BRACKET, HANDLE	1				
3-26	523508	GUIDE, BELT	2				
3-27	524507	NUT,SSPCL.312-18 Z HX	2				
3-28	524509	LINK (PLATING)	1				
3-29	524560	RETAINER, SPRING	1				
3-30	524561	ROD, CONTROL	1				
3-31	524565	CAM, CONTROL (PLATED)	1				
3-32	524576	TRIGGER, LOCKING PLTD	1				
3-33	524577	BUSHING,.328X.63X.41	2				
3-34	524579	CABLE,CONTROL	1				
3-35	524585	HANDLE, CONTROL	1				
3-36	524591	COVER,VINYL	1				
3-37	540241	ARM AY	1				
3-38	540246	PIVOT	1				
3-39	540247	IDLER ARM	1				
3-40	540270	BRACKET	1				
3-41	540271	LEVER AY, CONTROL PLT					
3-42	822474	SPACER	1				
3-43	64163-61	WSHR .81X.406X16GA	5				
3-44	548171	KNOB	1				
3-45 3-46	548224	FITTING, GREASE 1/4 SPC PIN, CLEVIS. 438 1.25 YS					
3-46 3-47	548456 548507	CLEVIS	1				
3-47 3-48	548507 64141-6	NUT, 5/16-18	1 2				
3-40 3-49	548942	PULLEY, PLAIN FLAT 3.25					
3- 4 9	800026	SCREW, .25-20.75 YS PR	2				
0 00	300020	33.1211, .20 20.70 TOTAL	_				



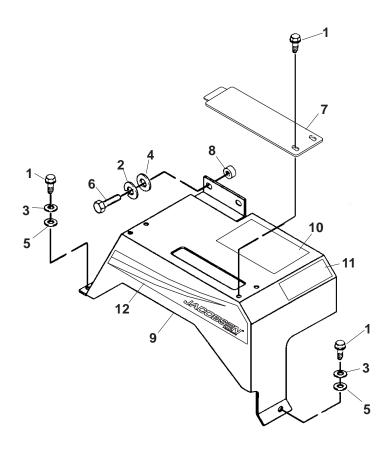
MATAWAY ===

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
4-1	111898	CLAMP,CABLE	1				
4-2	120052	LOCKWASHER	1				
4-3	64006-03	WASHER, 3/8 HELICAL LO	CK 6				
4-4	64123-50	BOLT-HEX 3/8-16X1	2				
4-5	64152-06	10-24X1/2 MACH SCREW	1				
4-6	306531	NUT, 10-24 YS HEX	1				
4-7		BOLT-3/8-16X2-1/4 HEX	4				
4-8	64164-25	KEY-1/4X7/8 #807	2				
4-9	515390	WASHR,.39 1.25.19 FLAT	4				
4-10	515755	CLIP	1				
4-11	516892	PULLEY, REEL BELT	1				
4-12	517101	PULLEY,3 IN. DIA BLK	1				
4-13	517123	SHAFT	1				
4-14	520574	KEY,.25 X.25 X 2.50 PS	1				
4-15	544068	PILLOW BLOCK COMPLE	TE 1				
	(INCLUDES	S ITEMS 16, 17, 18 & 30)					
4-16	547835	PILLOW BLOCK AY	1				
	(INCLUDES	S ITEMS 17 & 30)					
4-17	521856	BEARING,BALL	1				
4-18	521857	COLLAR, BRG LOCKING	1				
4-19	547755	COUPLING	1				
	(INCLUDES	S ITEMS 20 & 21)					
4-20	330748	SCRW,.31-18 1.00 BS HS	2				
4-20 4-21	548183	LWSHR, 31.09 HI-COLLAF					
4-22	547759	BELT, DRIVE, SET OF 3	1				
4-23	64163-61	WSHR .81X.406X16GA	2				
4-24	548201	SETSCREW, 5/16-18 X 5/1					
4-25	548204	SSCRW,.38-16.38 BS NH	2				
4-25 4-26	548403	V-BELT	1				
4-20 4-27	800400	NIPPLE,.38-18NPT 5.0 GS					
4-27 4-28	800400	CAP,.38-18NPT GS PIPE	1				
4-28 4-29	838790	SPACER, ENG MNT PLTD					
4-29	519809	PILLOW BLOCK	1				
1 -00	010000	I ILLOW BLOOK	'				



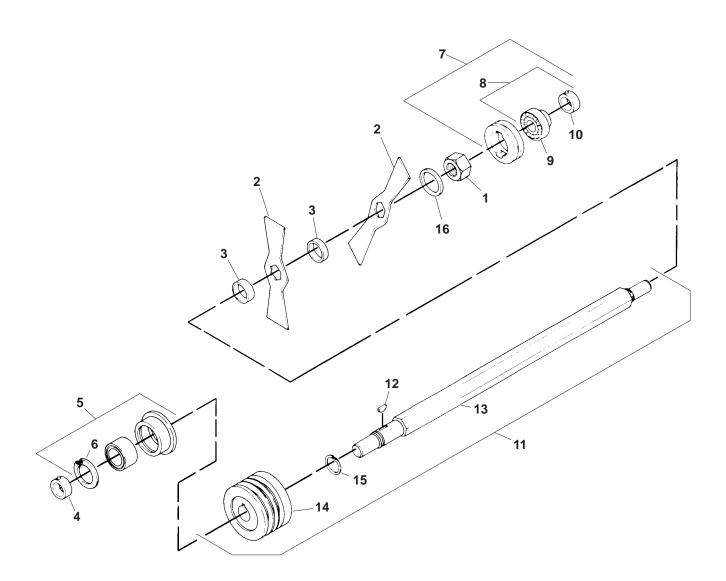
MATAWAY ===

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
5-1	64006-03	WASHER, 3/8 HELICAL LC	K 4				
5-2	64123-50	BOLT-HEX 3/8-16X1	2				
5-3	64025-05	NUT-3/8-16 HEX	2				
5-4	524536	GUIDE,BELT (PLATING)	1				
5-5	2702128.2	TRANSMISSION AY	1				
	(INCLUDE	S ITEMS 6-26)					
5-6	516700	SPACER	2				
5-7	516724	GEAR	1				
5-8	517137	PULLEY,4" DIA "A" SIZE	1				
5-9	517226	BRG,SLV .33 .50 .20 IRON	2				
5-10	517342	SPROCKET	1				
5-11	518820	SHAFT, OUTPUT	1				
5-12	518826	SHAFT, INPUT	1				
5-13	518827	GEAR	1				
5-14	522638	CASE, GEAR	2				
5-15	523515	BRACKET, MOUNTING	1				
5-16	2702142	GEAR AY,IDLER 56T/20T	2				
	(INCLUDE	S ITEM 17)					
5-17	515511	BUSHING	2				
5-18	548119	BRG,BALL.75 1.62.31 "OP'	4				
5-19	548201	SETSCREW, 5/16-18 X 5/1	6 2				
5-20	548204	SSCRW,.38-16.38 BS	1				
5-21	548274	OIL SEAL	2				
5-22	548324	RING,EXT RET.691ID.042					
5-23	548369	KEY, WOODRUFF.19 X.62					
5-24	548911	NUT,.31-18 YS HSF	6				
5-25	548958	SCREW, .31-18 3.50 YS HX					
5-26	800120	PLUG,.38-18NPT PS SQ H					
5-27	64163-61	WSHR .81X.406X16GA	4				
5-28	551094	SCREW, 3/8X1-3/4	2				



MATAWAY ===

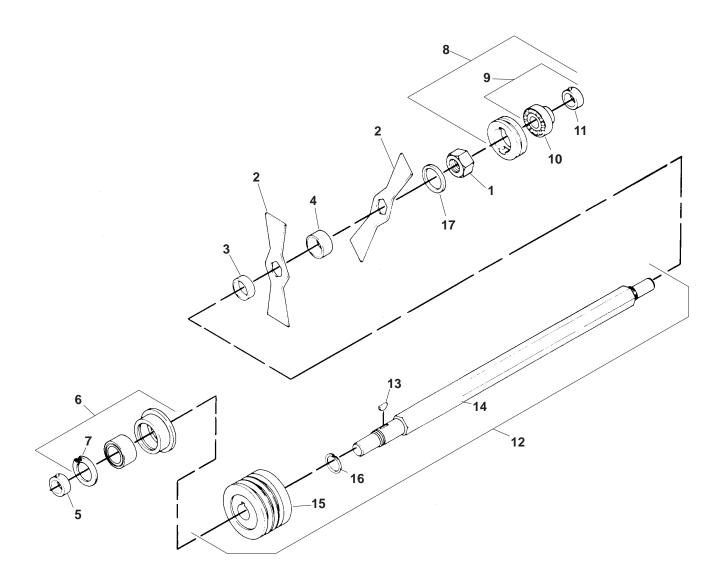
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
6-1	112050	TSCRW,.25-20.62 YS HW	7				
6-2	64006-06	LCKWSHER-HELICAL 7/16	2				
6-3	64006-01	LCKWSHER-1/4 HELICAL	3				
6-4	64163-55	WASHER .328X.75X14 GA	2				
6-5	64163-03	WSHR256X.62X18GA.	3				
6-6	64123-84	BLT-HEX 7/16-14X1-1/2	2				
6-7	522668	PLATE, COVER	1				
6-8	522982	SPACER (PLATING)	1				
6-9	540278	GUARD, W/DECALS	1				
6-10	524568	DECAL,OP INST	1				
6-11	840697	DECAL, WARNING HANDS	1				
6-12	4124288	LABEL-SIDE, MATAWAY R	H 1				



MATAWAY ===

FIGURE 7

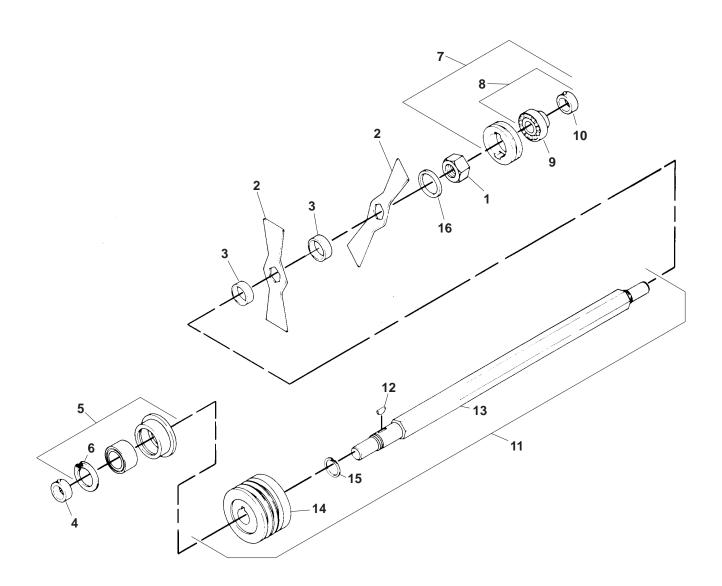
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
7-1 7-2 7-3 7-4 7-5	305134 516901 516903 521857 544287 (INCLUDE	NUT,.88-14 YS HX JAM BLADE, 1/32" (0.8mm) SPACER, .500 (12.7mm) COLLAR,BRG LOCKING BLOCK AY,PILLOW S ITEM 6)	1 36 36 1 1				
7-6 7-7	548354 545640 (INCLUDE	RING, INTERNAL RETAIN PILLOW BLOCK AY S ITEM 8)	1 1				
7-8	548101 (INCLUDE	BEARING S ITEMS 9 & 10)	1				
7-9 7-10 7-11	521856 521857 545967 (INCLUDE	BEARING,BALL COLLAR,BRG LOCKING SHAFT, COMPLETE S ITEMS 12-15)	1 1 1				
7-12 7-13 7-14 7-15 7-16	DOES NO	KEY, WOODRUFF SHAFT PULLEY RING,RETAINING WASHER, FLAT 116 AS REQUIRED SO ITEN T CONTACT THE HEX SHAR					
7-17*	544260 (INCLUDE	REEL S ITEMS 1-16)	1				
NOTE:							
		L ASSEMBLY IS BEST USEI /ERIZING CORES AFTER 3.	D				
		RE SPACED AT 1/2" S ON THE REEL.					
		F CUTTING SHOULD BE VHEN USING CLOSELY BLADES.					



MATAWAY ====

FIGURE 8

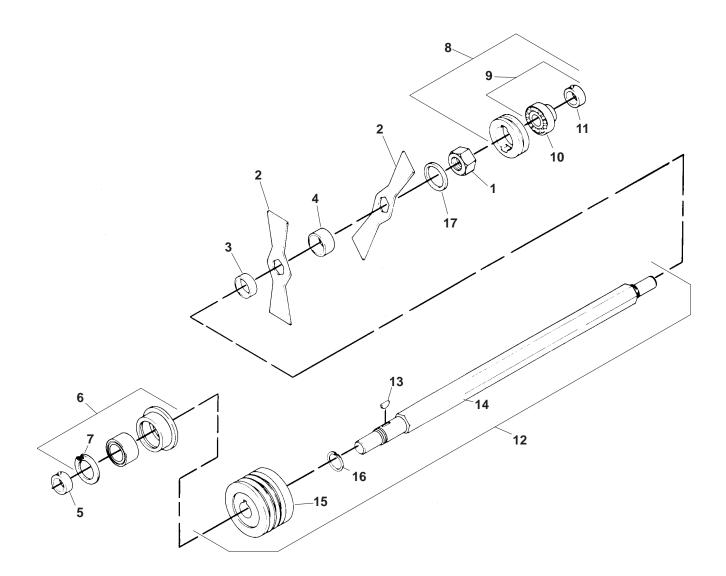
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
8-1 8-2 8-3 8-4 8-5 8-6	305134 516901 516903 516905 521857 544287 (INCLUDE	NUT,.88-14 YS HX JAM BLADE, 1/32" (0.8mm) SPACER, .500 (12.7mm) SPACER, .900 (23mm) COLLAR,BRG LOCKING BLOCK AY,PILLOW S ITEM 7)	1 21 1 20 1				
8-7 8-8	548354 545640 (INCLUDE	RING, INTERNAL RETAIN PILLOW BLOCK AY S ITEM 9)	1 1				
8-9	548101 (INCLUDE	BEARING S ITEMS 10 & 11)	1				
8-10 8-11 8-12	521856 521857 545967 (INCLUDE	BEARING,BALL COLLAR,BRG LOCKING SHAFT, COMPLETE S ITEMS 13-16)	1 1 1				
8-13 8-14 8-15 8-16 8-17	`	KEY, WOODRUFF SHAFT PULLEY RING,RETAINING WASHER, FLAT 1 17 AS REQUIRED SO ITEN T CONTACT THE HEX SHAI					
8-18*	544261 (INCLUDE	REEL S ITEMS 1-17)	1				
NOTE: THIS REEL ASSEMBLY IS BEST SUITED FOR THATCH CONTROL OF FINE BENT GRASSES AS WELL AS GRAIN ONTROL. BLADES ARE SPACED AT 1" INTERVALS ON THE REEL.							



MATAWAY ====

FIGURE 9

ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
9-1 9-2 9-3 9-4 9-5	305134 516900 516905 521857 544287 (INCLUDE	NUT,.88-14 YS HX JAM BLADE, 1/16" (1.5mm) SPACER, .900 (23mm) COLLAR,BRG LOCKING BLOCK AY,PILLOW S ITEM 6)	1 20 20 1 1				
9-6 9-7	548354 545640 (INCLUDE	RING, INTERNAL RETAIN PILLOW BLOCK AY S ITEM 8)	1 1				
9-8	548101 (INCLUDE	BEARING S ITEMS 9 & 10)	1				
9-9 9-10 9-11	521856 521857 545967 (INCLUDE	BEARING,BALL COLLAR,BRG LOCKING SHAFT, COMPLETE S ITEMS 12-15)	1 1 1				
9-12 9-13 9-14 9-15 9-16	DOES NO	KEY, WOODRUFF SHAFT PULLEY RING,RETAINING WASHER, FLAT 1 16 AS REQUIRED SO ITEN T CONTACT THE HEX SHAI					
9-17*	544262 (INCLUDE	REEL S ITEMS 1-16)	1				
NOTE: THIS REEL ASSEMBLY IS BEST USED FOR RENOVATING HEAVY GRASSES AND BEFORE OVERSEEDING.							
	BLADES ARE SPACED AT 1" INTERVALS ON THE REEL.						



MATAWAY ==

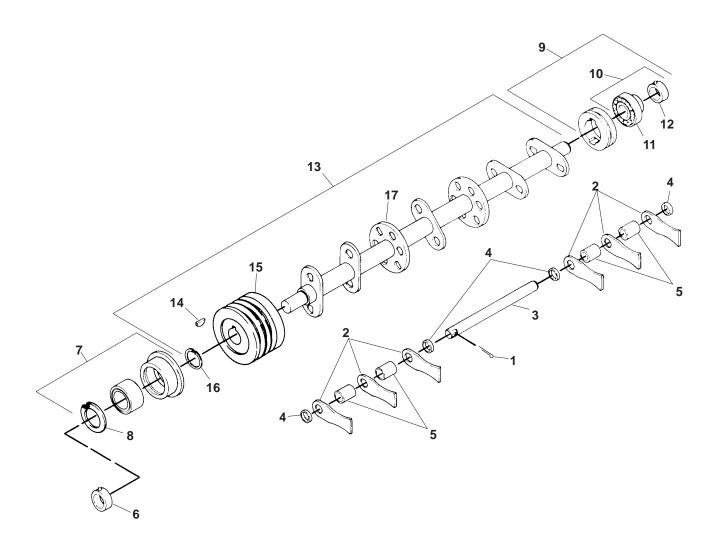
FIGURE 10

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
10-1 10-2 10-3 10-4 10-5 10-6	305134 516900 516903 516905 521857 544287 (INCLUDE:	NUT,.88-14 YS HX JAM BLADE, 1/16" (1.5mm) SPACER, .500 (12.7mm) SPACER, .900 (23mm) COLLAR,BRG LOCKING BLOCK AY,PILLOW S ITEM 7)	1 14 13 13 1 1				
10-7 10-8	548354 545640 (INCLUDE:	RING, INTERNAL RETAIN PILLOW BLOCK AY S ITEM 9)	1 1				
10-9	548101 (INCLUDE:	BEARING S ITEMS 10 & 11	1				
10-11	521856 521857 545967 (INCLUDE:	BEARING,BALL COLLAR,BRG LOCKING SHAFT, COMPLETE S ITEMS 13-16)	1 1 1				
10-14 10-15 10-16	`	KEY, WOODRUFF SHAFT PULLEY RING,RETAINING WASHER, FLAT 1 17 AS REQUIRED SO ITEN T CONTACT THE HEX SHAN					
10-18*	544265 (INCLUDE:	REEL S ITEMS 1-17)	1				
NOTE:	THIS REEL	_ ASSEMBLY IS BEST USEI DVATING AND THINNING A STEMMED GRASSES.					

* NOT ILLUSTRATED

ON THE REEL.

BLADES ARE SPACED AT 1" INTERVALS



MATAWAY =

FIGURE 11

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
11-1	306956	COTTER PIN	6				
11-2	516897	BLADE,FLAIL	36				
11-3	517155	SHAFT	6				
11-4	517162	SPACER, .328 (8mm)	24				
11-5	517163	SPACER, .891 (23mm)	24				
11-6	521857	COLLAR,BRG LOCKING	1				
11-7	544287 (INCLUDES	BLOCK AY,PILLOW S ITEM 8)	1				
11-8	548354	RING, INTERNAL RETAIN	1				
11-9	545640	PILLOW BLOCK AY S ITEMS 10-12)	1				
11-10	548101 (INCLUDE:	BEARING S ITEMS 11 & 12)	1				
11-11	521856	BEARING,BALL	1				
	521857	COLLAR, BRG LOCKING	1				
11-13	545966	SHAFT, COMPLETE S ITEMS 14-17)	1				
	(5 11 <u>2</u> 11 11 1					
11-14	306367	KEY, WOODRUFF	1				
11-15	522543	PULLEY	1				
11-16	522545	RING,RETAINING	1				
11-17	545913	SHAFT AY	1				
11-18*	544269	REEL	1				
	(INCLUDE:	S ITEMS 1-17)					
NOTE:							

NOTE:

THIS REEL ASSEMBLY IS BEST USED FOR THATCH CONTROL AND FOR PULVERIZING CORES AFTER AERATING.

BLADES ARE SPACED AT 1" INTERVALS ON THE REEL.

World Class Quality, Performance And Support



Equipment from Jacobsen, a Textron company, is built to exacting standards ensured by ISO 9001 and ISO 14001 registration at all our manufacturing locations.

A worldwide dealer network and factory-trained technicians backed by Textron Parts Xpress provide reliable, high-quality product support.

