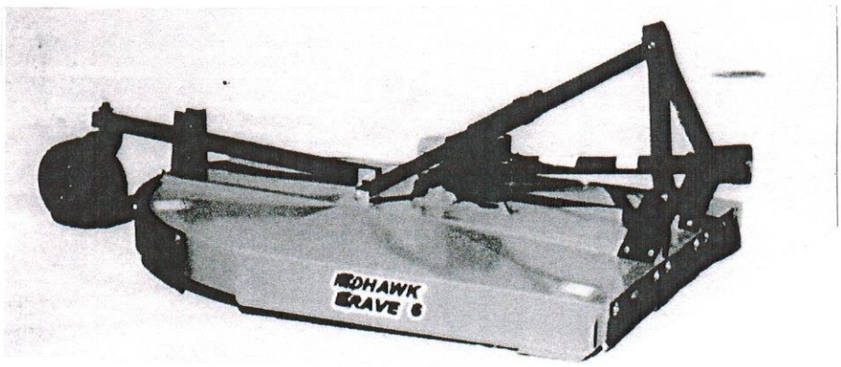
BRAVE 4, 5 & 6

DOMED DECK CUTTERS

PARTS LIST & OPERATING INSTRUCTIONS

MANUFACTERED BY AG-MEIER INDUSTRIES L.L.C.



AG-MEIER INDUSTRIES LLC
920 E. 6TH AVENUE
BELTON, TX 76513
254-939-3731
FAX 254-939-1351

JANUARY 2013

PARTS ORDERING GUIDE

The following instructions are offered to help eliminate needless delays and errors in purchasing parts.

1. The parts list is prepared in a logical sequence according to the basic machine drawings in the parts listing section of this manual. Part numbers and descriptions are given to help locate the parts and quantities required.

2. When ordering parts, contact the **AG-MEIER INDUSTRIES** dealer nearest you, or the dealer from whom you purchased your equipment.

3. When ordering parts, have the model and serial number of the equipment, part number, quantity and description of the machine for which parts are being ordered.

For maximum safety and to guarantee optimum product reliability, always use genuine **AG-MEIER INDUSTRIES** parts. The use of replacement parts manufactured by companies other than **AG-MEIER INDUSTRIES** invalidates the warranty and may cause premature or catastrophic failure which could result in serious injury or death. Direct any questions concerning repair parts to the dealer from whom the machine was purchased, the nearest **AG-MEIER INDUSTRIES** Dealer or:

AG-MEIER INDUSTRIES LLC

AG-MEIER INDUSTRIES LLC
920 E. 6TH AVENUE
BELTON, TX 76513

(254)939-3731 FAX# (800)634-3597

INTRODUCTION

This Rotary Cutter is designed with care and built with quality materials by skilled workers. Proper assembly, maintenance, and operating practices, as described in this manual, will help the owner/operator get years of satisfactory service from the machine.

The purpose of this manual is to familiarize, instruct, and train. The Assembly section instructs the owner/operator in the correct assembly of the cutter using standard and optional equipment. The Parts List section is designed to familiarize the owner/operator with replaceable parts on the cutter. This section provides enlarged assembly drawings of each cutter component illustrating each piece and the corresponding part number.

Careful use and timely service saves extensive repairs and costly downtime losses. The Operation and Maintenance sections of the manual instruct the owner/operator how to work the cutter correctly and attend to appropriate maintenance. The Trouble Shooting Guide helps diagnose difficulties with the cutter and offers solutions to the problem.

Safety is of primary importance to the owner/operator and to the manufacturer. The first section of this manual includes a list of Safety Messages that, if followed, will help protect the operator and bystanders from injury or death. Many of the safety messages will be repeated throughout the manual. The owner/operator should know these Safety Messages before assembly and be aware of the hazards of operating this cutter during assembly, use, and maintenance. The Safety Alert Symbol combined with a Signal Word, as seen below, is intended to warn the owner/operator of impending hazards and the degree of possible injury faced when operating this machine.

WARNING Serious injury or possible death!.
Decals are Red and White.

DANGER Imminent death/critical injury.
Decals are Red and White.

ATTENTION OWNER/OPERATOR, BEFORE OPERATING THIS MACHINE

1. Carefully read the Operator's Manual, completely understand the Safety Messages and instructions, and know how to operate correctly both the tractor and cutter.

2. Record the Cutter Model and Serial Numbers on the Warranty page at the end of the Operator's Manual. Keep this as part of the permanent maintenance file for the cutter.

SAFETY RULES

The safe operation of any machinery is a major concern to consumers and manufacturers. Your rotary cutter has been designed with many built-in safety features. However, no one should operate this machine before carefully reading this Owners Manual.

1. Keep PTO shielding in place and in good condition. **DO NOT** operate the cutter with any shields missing.
2. **DO NOT** allow anyone to operate this machine who has not read and understood this manual or has not been properly trained in its safe operation by you, the owner.
3. To prevent personal injury caused by thrown objects, the use of front safety chains is strongly recommended.
4. **DO NOT** let children operate the cutter.
5. **NEVER** allow passengers.
6. **NEVER** operate the cutter near people and **DO NOT** stand within 10 feet of the cutter while the blades are in motion.
7. Before cutting, clear the area of objects and debris that could be thrown from the cutter, cause damage to the cutter or blades, or become entangled in the blades.
8. If you strike an object while cutting, disengage the PTO, shut off the tractor and inspect for damages before continuing. Inspect the blades closely to insure the strike did not damage the blades. The cutter hood is designed to reduce the danger of thrown debris.
9. **DO NOT** operate the cutter in reverse. Debris may be thrown from the front of the cutter, thereby increasing the risk of injury to the operator.
10. Perform recommended maintenance and lubrication before each operation. Check the cutter before and after each use for loose hardware and tighten if necessary.
11. Travel slowly over rough terrain and be alert to holes and ditches.
12. When traveling on public roads, use necessary lights and safety devices for adequate warning to operators of other vehicles. Comply with all Federal, State and Local laws.
13. Never operate the cutter while in the raised transport position.
14. Be alert to traffic when crossing or cutting near roadways.
15. Disengage the PTO when raised for transport or backing up.
16. Wear proper eye protection to prevent injury from flying objects.
17. Always use proper PTO speed or machine damage may result. This cutter is designed to be used with a tractor using a **540 RPM** rear PTO.
18. In order to maintain steering control, add ballast to the tractor. To determine the amount of ballast required refer to the tractor operator's manual.
19. Before performing maintenance, be sure that the cutter is securely blocked on safe supporting stands.
20. **IMPORTANT: DO NOT ATTEMPT TO PICK UP THE CUTTER WITH A FORKLIFT.** This could bend the blade carrier and cause the blade to hit the deck when operating. PICK UP THE CUTTER BY THE GEARBOX ONLY.

SAFETY RULES

SAFETY ALERT SYMBOL

When you see the safety alert symbol.

PAY ATTENTION!

BE ALERT!

BECAUSE YOUR SAFETY IS INVOLVED!

Safety is important!

Accidents Can Disable!

Accidents Can Cost!

Accidents Can Kill!

Accidents can be Avoided!

The Safety Alert symbol identifies important safety messages in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Signal Words: Note the use of the signal words DANGER, WARNING, and CAUTION with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines.

DANGER

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

WARNING

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

CAUTION

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

SAFETY RULES

You are responsible for the safe operation and maintenance of your equipment. You must insure that you and everyone else who is going to operate, maintain or work around the equipment be familiar with the operating and maintenance procedures and related safety information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be adhered to while operating the equipment.

Remember, you are the key to safety. Good safety practices protect you and the people around you. Make the practices a working part of your safety program. Be certain that everyone operating this equipment is familiar with recommended operating and maintenance procedures and follows all the proper safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

Equipment owners must give operating instructions to operators or employees before allowing them to operate the equipment, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.

The most important safety device on this equipment is the operator. It is the operator's responsibility to read and understan all Safety and Operating instructions in the manual and to follow these. All accidents can be avoided.

In addtion to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training or personnel involved in the operation, transport, maintenance and storage of equipment. Train all new Personnel and review instructions frequently with existing workers. A person who has not read and understood all operating and safety instructions is not qualified to operate the machin. An untrained operator exposes himself and bystanders to possible serious injury or death.

Do not modify the equipment in anyway. Modification may inpair the function and/or safety and could affect the life of the equipment.

Think Safety! Work Safely!

You need to read and understand the Operator's Manual and all safetly signs before operating, maintaining, adjusting or unplugging the equipment. Never perform maintenance, adjustments, or unplug equipmen twhile tractor is running.

Have a first-aid kit available for use should the need arise and know how to use it.

Have a fire extinguisher available for use should the need arise and know how to use it.

Wear appropriate protective gear. This list includes but is limited to:

* A hard hat
* Protective shoes w/ slip resistant soles
* Protective goggles, glasses or face shield
* Suitable ear protection, ear plugs.
* Heavy gloves
* Protective clothing

Install and secure all guards before starting. Never operate equipment with loose or missing safety guards. Do not allow riders.

Place all controls in neutral, stop tractor engine set park, remove ignition key and wait for all moving parts to stop before dismounting tractor, prior to servicing, adjusting repairing or unplugging equipment.

Clear the area of people, especially small children, before starting the unit.

Review safety related items annually with all personnel who will be operating or maintaining the equipment.

SAFETY RULES

MAINTAINING EQUIPMENT SAFELY

Always follow the operating, maintenance and safety information in the manual. Support the machine with blocks or safety stands when beneath it, follow good shop practices. Keep service area Clean and dry, be sure electrical outlets and tools are properly grounded. Have adequate lighting in work area. Make sure tools, jacks and hoists have sufficient capacity for the job. Make sure all guards are in place and properly secured when maintenance work is completed. Keep hands, feet, hair and clothing away from moving parts. Clear are of bystanders, especially small children, while carrying out any maintenance and repairs or making any adjustments.

OPERATING EQUIPMENT SAFELY

Read and understand the Operator's Manual and all safety decals before operating, servicing, adjusting, repairing or unplugging equipment. Never allow riders. Have all shields and guards installed securely before starting or operating equipment. Keep hands, feet, hair, and clothing away from moving parts. Place all controls in neutral, stop tractor engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, repairing or unplugging equipment. Place all tractor and machine controls in neutral before starting. Start and operate machine only while sitting on tractor seat. Clear the area of bystanders, especially small children, before starting. Clean reflectors, SMV (Slow Moving Vehicle) emblem and lights before transporting. Use hazard flashers on tractor when transporting, unless prohibited by law. Keep hands and feet away from machine while tractor engine is running. Review safety instructions with all operators annually.

STORING EQUIPMENT SAFELY

Make sure the equipment is stored in an area away from human activity. Do not permit children to play on or around the stored equipment. Store the equipment in a dry, level area. Support the frame for stability if necessary.

TRANSPORTING EQUIPMENT SAFELY

Always comply with local regulations regarding transporting equipment on public roads and highways. Always use the SMV (Slow Moving Vehicle) emblem and all lights and reflectors that are required by tha local highway and transportation authorities. Make sure they are in place, are clean and can be seen clearly by all passing and oncoming traffic. Never allow anyone to ride on the equipment or tractor during transport. Do not exceed 20mph. Reduce speed on rough roads and surfaces and when turning. Use retainers on the mounting pins when attaching equipment. Always use hazard flasher on the tractor when transporting equipment, unless prohibited by law.

SAFETY DECALS

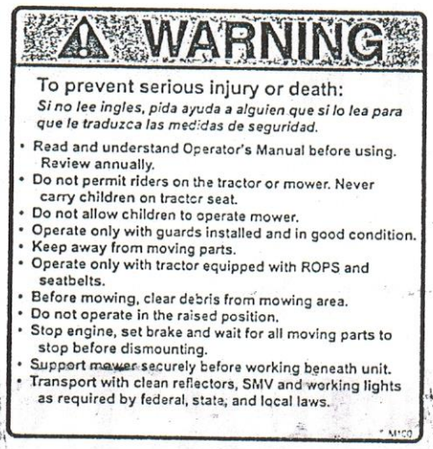
Replace safety decals that are missing or have become illegible. All replacement parts should have the correct safety decal installed before operating the equipment. Keep safety decals clean and legible at all times. Safety decals are available from your dealer or the factory. When installing safety decals, be sure that the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper. Align the decal over the area specified and carefully press the small portion with the exposed sticky backing in place. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place. Small air pockets can be pierced with a pin and smoothed out using a piece of the decals backing paper.

BRAVE SAFETY DECALS

ITEM D

ITEM C

ITEM B



ITEM A

ITEM F

MOHAWK

40000015

CAUTION
STAND CLEAR

85106

IMPORTANT

Your Rotary Cutter comes equipped with all safety decals in place. Always keep safety decals clean & legible.

Replace all damaged or missing safety decals. To order new safety decals contact your AG-MEIER IND. L.L.C. dealer.

To install new safety decals:

1. Clean the area where the decal is to be placed.
2. Peel backing from the decal and press firmly onto the surface.

BRAVE SAFETY DECALS

BRAVE

40100004

BRAVE 5

40100007

DO NOT REMOVE
SAFETY SHIELD

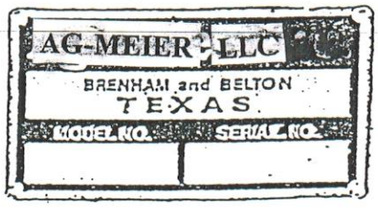
85019

BRAVE 6

40100008

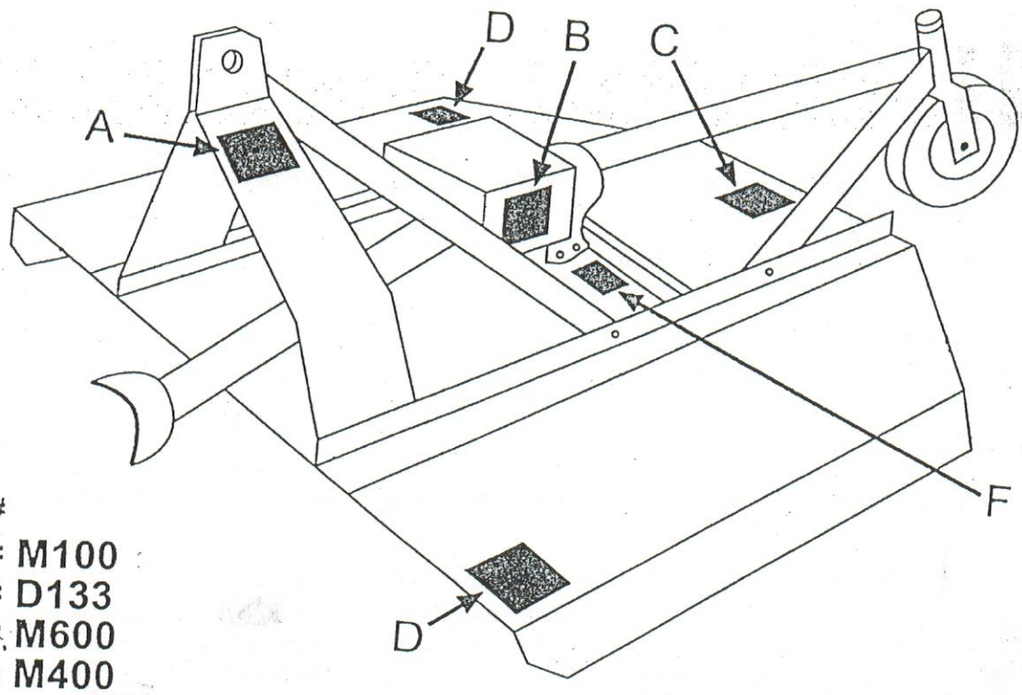
AG-MEIER INDUSTRIES L L C

85107



85018

BRAVE SAFETY DECALS



ITEM #

A = M100
B = D133
C = M600
D = M400

F = D400

Ref.No.	Part No.	Description	No. Req'd.
1.	40100004	Decal, Brave	2
2.	40100007	Decal, Brave 5	2
3.	40100008	Decal, Brave 6	2
4.	85107	Decal, AG.-MEIER	1
5.	85018	Plate, Model & Serial No.	1
6.	85019	Decal, Do Not Remove Safety Shield	1
7.	85106	Decal, Caution Stand Clear (LARGE)	1
8.	40000015	Decal, MOHAWK	2
A.	M100	Decal, Warning To Prevent Serious Injury or Death	1
B.	D-133	Decal, Danger Rotating Driveline Hazard	1
C.	M600	Decal, Danger Thrown Object Hazard	1
D.	M400	Decal, Danger Rotating Blades-Keep Away	2
F.	D400	Decal, Lubricate Gearbox Before Using	1

UNIVERSAL JOINT DRIVE DECALS - NOT SHOWN

	85021	Decal, Be Careful 1
	85019	Decal, Do Not Remove Safety Shield 1
	85016	Decal, Important 1
	85105	Decal, Danger Rotating Driveline 1

OPERATION

TRACTOR PREPARATION

BALLAST (FRONT END WEIGHT)

Add enough weight to assure that at least 20% of the tractor's original weight is on the front wheels for safe transport.

WHEEL TREAD

Tractor wheel tread spacing should be increased when working on inclines or rough ground to reduce the possibility of tipping.

STABILIZER BARS OR SWAY BLOCKS

Use stabilizer bars or sway blocks to prevent side sway of the cutter.

DRAFT LINKS

The linkage to the lower draft links should be set in the "Float Position", allowing the unit to follow the contour of the terrain.

DRAWBAR

Shorten or remove the tractor drawbar so it will not interfere with the up and down movement of the cutter.

MOUNTING THE CUTTER TO THE TRACTOR

To mount the cutter, be sure it is sitting on as level ground as possible and follow the steps outlined in the tractor manual for attaching a three-point hitch implement. Attach the cutter hitch pins to the lower three-point lift arms of the tractor. Connect the tractor top link to the hole in the top of the A-Frame link or the cutter using the pin supplied. With the rotary cutter attached to the tractor's three point hitch, proceed to connection of the PTO as follows:

1. If the cutter is equipped with a friction clutch, attach the friction clutch hub to the gearbox on the cutter. To do this, pull the spring loaded collar to release the locking balls and slide the yoke onto the input shaft of the gearbox. Slide the yoke back and forth to insure it is locked onto the shaft.
2. Slide the yoke with the quick disconnect pin onto the tractor PTO shaft. Move the yoke back and forth to insure it is locked onto the shaft.
3. Attach the safety chain to a stationary point to prevent the shield from spinning.

TRANSPORTING

Pay particularly close attention to the SAFETY MESSAGES regarding cutter transport. Avoid unnecessary injuries and equipment damage by exercising cautious and conscientious travel procedures.

Attaching the cutter to the tractor increases the overall length of the working unit. Allow additional clearance for the cutter to swing when turning.

Raise the cutter as high as possible for transporting while maintaining clearance between the driveline and the deck of the cutter.

Tire pressure should be kept at around 20 PSI to decrease shock during transport. When using puncture-proof, laminated tires, be sure that the flat side of the lug nut is against the wheel.

WARNING

When transporting the cutter on a road or highway, use tractor warning lights, SMV sign, reflectors, and other safety devices for adequate warning to the operators of other vehicles. Check the traffic regulations governing the locale where mowing is to be done, and work safely within those guidelines.

OPERATION

WARNING

Be sure that the tractor lift lever is locked into the "transport" detent before attempting to transport the cutter. Make certain that at least 20% of the tractor weight is on the front tires.

WARNING

Hold transport speed to 15 mph, especially when using puncture-proof, laminated tires. These tires are designed for off road use only. They can be used on road surfaces at very low speeds and then only for a short distance. Heat from pavement friction can build up causing the tire to ignite. The steel band holding the sections in place could break, causing extensive damage to the cutter and tractor as well as possible injury to the operator and passerby. When transporting up slopes with reduced front end weight, the tailwheel should be lowered as far as possible to provide a stop if the tractor rears up.

CUTTING HEIGHT ADJUSTMENT

WARNING

Avoid personal injury. Be sure the tractor engine is off and the key is removed before making any adjustments

IMPORTANT: Avoid very low cutting heights. Striking the ground with the blades gives the most damaging shock loads a cutter can encounter and will cause damage to the cutter and driveline.

To achieve maximum cutting efficiency and provide the most uniform cut, the cutter should be operated with the rear slightly higher (1/2"-3/4") than the front.

1. Place the tractor and cutter on a level surface.
2. Raise the cutter to the approximate desired cutting height with the tractor hydraulic lift control lever.
3. Remove the two gauge wheel adjusting bolts from the mainshield adjusting brackets. Adjust the gauge wheel mainframe to the desired cutting height and reinstall bolts.
4. Lower slowly until the cutter is 1/2"-3/4" higher at the rear than the front. Position the adjustable stop on the tractor lift quadrant against the lift control lever so that the cutter can be returned to the same cutting height.

IMPORTANT: When raising the cutter to transport height, be sure there is clearance between the front of the deck and driveline. Damage will result if the driveline hits the cutter deck.

STARTING AND STOPPING THE CUTTER

Power for operating the cutter is supplied from the tractor PTO. Refer to the tractor manual for instructions on engaging and disengaging the PTO. Always engage the PTO at low engine RPM. Always operate at 540 RPM. Learn how to stop the tractor and cutter quickly in case of an emergency.

IMPORTANT: Stop the cutter and tractor immediately upon striking an obstruction. Inspect the cutter and repair any damage before resuming operation.

WARNING

Avoid personal injury. When attempting to stop a tractor which does not have live PTO, the momentum created by the cutter can cause the tractor to be pushed forward.

OPERATION

The installation of an overrunning clutch is recommended if the operating tractor does not have live power take off. See your dealer for additional information.

To start operation, reduce engine speed and engage the tractor PTO. Before starting to cut, gradually increase engine speed to develop 540 RPM at the PTO.

DANGER

Install chain guards if operating with people or livestock in the area or close to highways or buildings.

Enter the area to be cut with the cutter operating at 540 RPM and, if it becomes necessary to temporarily regulate engine speed during operations, increase or decrease the throttle gradually - **never exceed 540 RPM.**

To transport, disengage the PTO and raise the machine to full transport height.

CUTTING SPEED

Proper ground speed for the cutter will depend upon the height, type and density of the material to be cut.

Normally, ground speed will range from 2 to 5 mph. Tall dense material should be cut at low speed, while medium height material can be cut at a faster ground speed.

CUTTING TIPS

Always operate PTO at 540 RPM when cutting. This is necessary to maintain proper blade speed and to produce a clean cut.

Under certain conditions, tractor tires may roll some grasses down and prevent them from being cut at the same height as the surrounding area. When this occurs, reduce the tractor ground speed, but maintain 540 PTO RPM. The lower speed will permit grasses to at least partially rebound and be cut. Taking a partial cut or reversing the direction of travel may also produce a cleaner cut.

WARNING

Avoid personal injury. Pick up all rocks and other debris before cutting. Enter new areas carefully. Drive slowly and cut material higher the first time to allow the cutter to clear unseen objects. Never assume an area is clear. Always check for hidden hazards.

Extremely tall grass should be cut twice. Raise the cutter and cut twice the desired height. Cut the second time at the desired height at 90 degrees to the first pass.

Remember, sharp blades produce cleaner cuts and use less power.

Before cutting, study the area to determine the best cutting procedures. Consider the height and type of material and the terrain type: hilly, level, or rough.

Avoid tractor rollovers: Be careful when operating the tractor and cutter on uneven ground. Equip your tractor with a roll bar (ROPS) and seat belts and keep belts tightened securely.

In uneven terrain, rear wheel weights, front tractor weight and/or front tire ballast should be used to improve stability. Pass diagonally through sharp dips and avoid drops to prevent "hanging up" the tractor and cutter.

Avoid sudden stops and starts while traveling up or down hills.

When cutting on slopes, always operate the cutter in a downward motion and do not travel across the face of a slope. Avoid operation on steep slopes. Slow down on sharp turns and slopes to prevent tipping or loss of control.

MAINTENANCE

MAINTENANCE AND LUBRICATION

Proper servicing and adjustments are the key to the long life of any machine. With careful and systematic inspection of the Rotary Cutter, you can avoid costly maintenance, time and repair.

WARNING: For safety reasons, each maintenance operation must be performed with the PTO shaft disengaged, the cutter lowered completely to the ground or on safety supported blocking, the tractor engine shut off and the ignition key removed.

LUBRICATE DAILY:

1. Pivoting upper hitch
2. Tailwheel spindle tube
3. Tailwheel hub
4. PTO U-Joint Cross Kits and Profiles

GEARBOX

Lubricate every 50 hours of operation. On the Brave 5 & 6, the flange mounted gearbox oil reserve is 26 ounces. If the oil reserve is below the stated normal level, check for a crack in the gearbox or a leaking seal. The oil level must be checked after every 10 hours of operation. If oil flows out of the 1/8" oil level plug then the proper lubrication level is being maintained. If oil does not flow out of the plug, add oil until it does.

Recommended lubricant is SAE80W-90EP oil. Check the oil in the gearbox when the cutter is level. **DO NOT** over fill gearboxes. This will cause pressure to build up and cause grease seals to leak.

UNIVERSAL JOINTS

Grease fittings are located on the cross of each U-Joint. **Grease after each 10 hours of use.**

DRIVELINE

The telescoping PTO shaft inside the shielding **must be lubricated daily.**

Disconnect the driveline from the tractor and pull the halves apart. Insert grease into the cavity on the half attached to the gearbox and spread evenly. Install the driveline halves together. Reconnect the driveline to the tractor. Raise and lower the cutter after applying grease to spread over joint working area.

WARNING: When attaching the PTO yoke to the tractor PTO shaft, it is important that the spring activated locking pin is seated in the groove on the PTO shaft. A loose shaft could slip off and result in personal injury or damage to the cutter.

SLIP CLUTCH (OPTIONAL)

If a slip clutch is incorporated in the driveline, it is designed to slip, absorb the shock load, and protect the driveline and cutter. **NOTE:** Slip clutch equipped units use a Grade 8 bolt to retain the clutch to the gearbox shaft. Always use Grade 8 bolts when replacing.

Clutch torque setting is factory set and cannot be changed. If the clutch slips excessively, check friction discs for excessive wear. Discs are 1/8" thick when new. Replace after 1/32" wear.

It is important that the clutch slips when an obstacle or load heavier than the clutch setting is encountered. Before using the cutter each season, use the following procedure to make sure the clutch will slip and give the overload protection required.

1. Tighten the four nuts on the back side of the clutch until they contact the spring plate and then turn approximately three turns. This will release most spring pressure off clutch discs.
2. Attach the machine to the tractor, set engine at approximately half throttle and quickly engage PTO. This procedure will break clutch facings loose and allow the proper torque to be maintained.
3. Return the four nuts to the original position at the end of the thread studs.

IMPORTANT: Nuts must not contact the spring plate at any time during field operation.

NOTE: If the machine sits outside longer than 30 days and is exposed to rain and humid air, the clutches should be removed from the machine and stored in a dry area. Clutch facings will soak up moisture, causing the metal plates to rust badly. When this occurs, the break away torque increases greatly and damage to the gearbox, driveline, or tractor PTO can occur.

MAINTENANCE

SERVICING CUTTING BLADES

WARNING

Use only **AG-MEIER INDUSTRIES LLC** blades.They are made specifically for this cutter. Substitute blades may not meet Specifications and could be dangerous.

For servicing of the blades, the manufacturer has provided an access hole in the cutter deck on the BRAVES.

All blades should be sharpened at the same angle as the original cutting edge. All blades must be replaced or reground at the same time to maintain proper balance in the cutting unit.

Keep all blade bolts tight and, for better cutting, keep all blades sharp.Inspect the blades before each use to determine that they are properly installed and in good condition.Replace any blade that is bent, excessively nicked, worn or has any other damage.Small nicks can be ground out when sharpening.

BLADE CARRIER

Always disconnect the driveline from the tractor and block the cutter securely before working on the blades or blade carrier.

Inspect the blade carrier frequently. After operation, check the blade carrier hub for tightness on the gearbox output splined shaft. Keep all blade bolts tightened to 600 ft. lbs. and, for better cutting, keep all blades sharp. Always use **AG-MEIER INDUSTRIES LLC** blades. When replacing blades, check the cutting edges in relation to the blade carrier rotation. For removing the blade carrier hub from the gearbox, use a drift punch through the access hole or gear puller. DO NOT hammer on the end of the gearbox output drive shaft, as this may cause damage to the bearings.

TO REPLACE BLADES

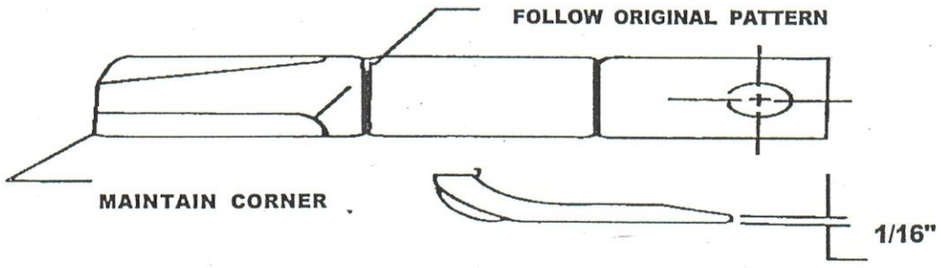
1.Replace all blades at the same time to maintain proper balance in the cutting unit.
2.Order **AG-MEIER INDUSTRIES LLC** blades and blade bolt kit.
3.Torque blade bolt lock nut to 600 ft. pounds. An extended cheater bar may be required to achieve proper torque.

BLADE SHARPENING

1.Sharpen all blades at the same time to maintain balance. The difference in blade weight should not exceed 1 ounce.Unbalanced blades will cause excessive vibration which can damage gearbox bearings.Vibration may cause structural cracks in the cutter housing.
2.Examine bolts for excessive wear and replace if necessary.
3.Follow the original pattern of the blade.
4.Sharpen the blades by grinding.Do not heat and pound out the edge. Do not sharpen to a razor edge, but leave a 1/16" blunt edge.Do not sharpen the back side of the blade. See Figure 13.

NOTE:Care should be taken in order not to remove any more material than necessary when sharpening the blades.

FIGURE 13

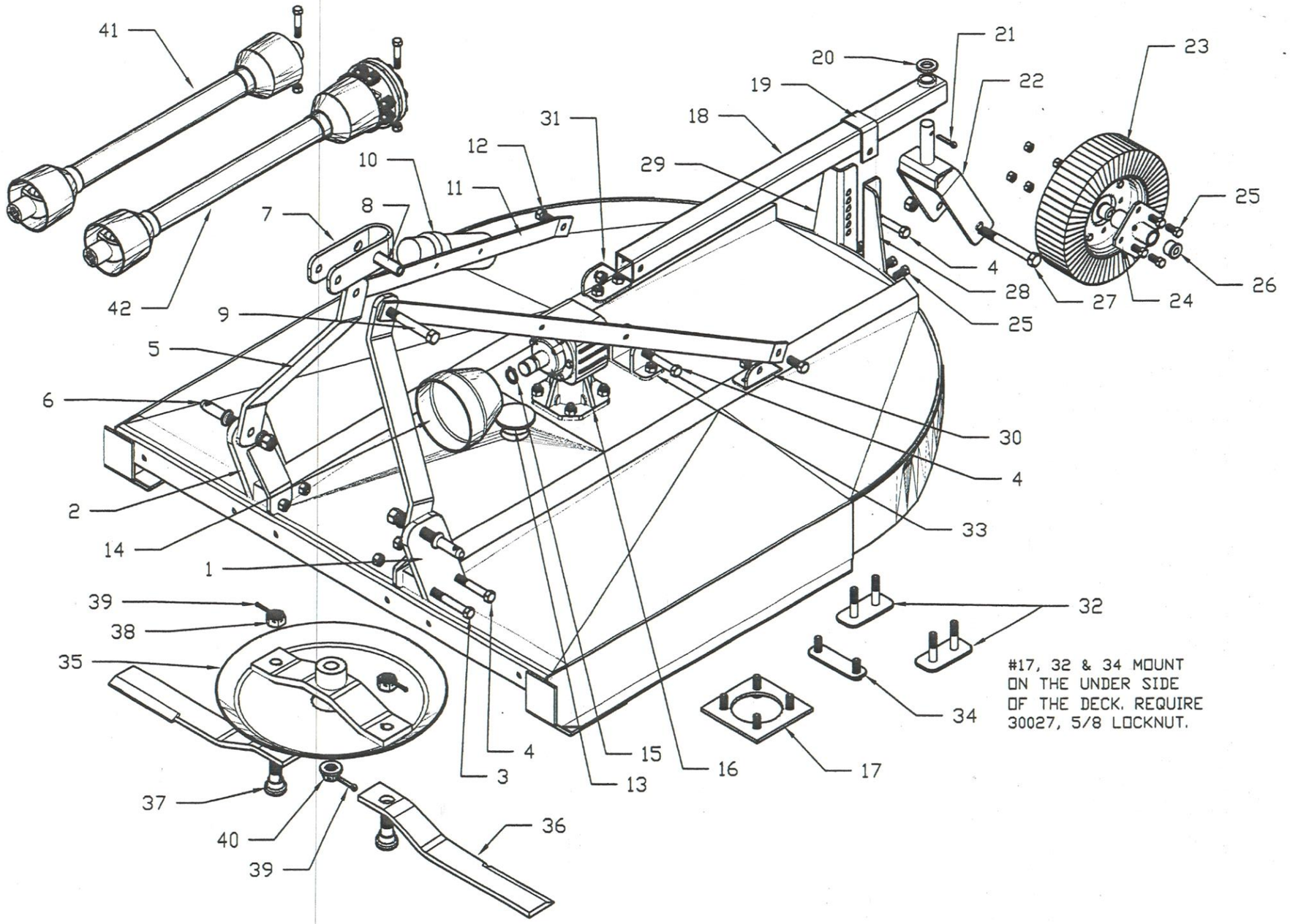


MAINTENANCE

STORAGE

Your rotary cutter represents an investment from which you should get the greatest possible benefit. Therefore, when the season is over, the cutter should be thoroughly checked and prepared for storage so that a minimum amount of work will be required to put it back into operation for the next season. The following are suggested storage procedures.

1. Thoroughly clean the cutter.
2. Lubricate the cutter as covered in the Maintenance Section.
3. Tighten all bolts to the recommended torque.
4. Check the cutter for worn or damaged parts. Make replacements immediately using genuine AG-MEIER IND. L.L.C.
5. Store the cutter in a clean, dry place with the cutter housing resting on blocks.
6. Use spray touch-up enamel where necessary to prevent rust and maintain the appearance of the cutter.

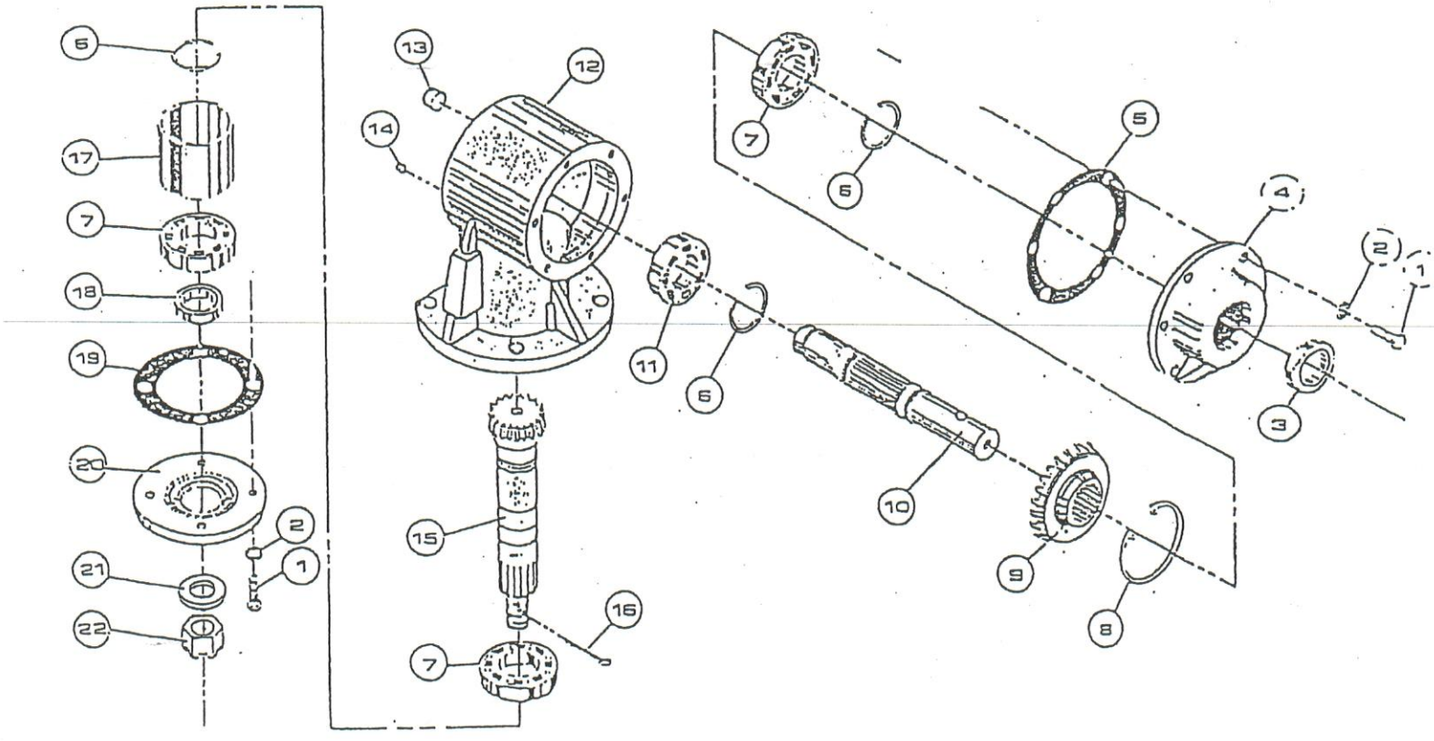

41
42
7
8
10
11
12
31
18
19
20
21
22
23
29
25
4
28
27
24
26
25
9
5
6
30
4
2
14
33
1
39
38
35
32
34
17
16
15
13
4
3
37
40
39
36
#17, 32 & 34 MOUNT
ON THE UNDER SIDE
OF THE DECK. REQUIRE
30027, 5/8 LOCKNUT.

BRAVE 4, 5, 6

REF.	PART NO.	DESCRIPTION	QTY.
1.	30900492	HITCH ARM LUG, LEFT, BRAVE 5 & 6	1
2.	30900491	HITCH ARM LUG, RIGHT, BRAVE 5 & 6	1
3.	10100552	HEX BOLT, 5/8 X 5	2
4.	31378	HEX BOLT, 5/8 X 4-1/2	4
5.	30900363	3 POINT HITCH ARM MAST	2
6.	KTR161	CAT 1 PIN	2
7.	30900447	TOP LINK CLEVIS	1
8.	30900448	PIVOT BUSHING	1
9.	32517	HEX BOLT, 3/4 X 6	1
	30032	HEX LOCK NUT, 3/4	1
10.	OMG-1	OWNERS MANUAL CANISTER	1
	30042	HEX BOLT, 1/4 X 1	2
	30133	FLAT WASHER, 1/4	4
	30122	LOCK WASHER, 1/4	2
	30015	HEX NUT, 1/4	2
11.	22713	REAR LINK	2
12.	30084	HEX BOLT, 5/8 X 1-1/4	2
13.	32387	3" PLUG	1
14.	69351	INPUT SHIELD, SHEAR PIN	1
	51800047	INPUT SHIELD, SLIP CLUTCH – PLASTIC BOOT	1
	30246	HEX BOLT, 5/16 X 3/4	4
	30134	FLAT WASHER, 5/16	4
	30123	LOCK WASHER, 5/16	4
15.	30504	RETAINING RING	1
16.	31338	GEARBOX	1
17.	30900578	BACKUP PLATE FOR GEARBOX, BRAVE 5 & 6	1
18.	21966	WHEEL LEG, BRAVE 4 & 5	1
	30900449	WHEEL LEG, BRAVE 6	1
19.	22706	TAILWHEEL STRAP	1
20.	21886	WASHER	1
21.	30150	COTTER PIN, 1/4 X 2-1/4	1
22.	24870	TAILWHEEL YOKE	1
23.	33406	LAMMINATED TAILWHEEL	1
24.	33407	HUB, TAILWHEEL	1
25.	30068	HEX BOLT, 1/2 X 1-1/4	8
	30022	HEX LOCK NUT, 1/2	8
26.	33833	REPLACEMENT BUSHING, TAILWHEEL HUB	2
27.	33213	AXLE PIN	1
	30032	HEX LOCK NUT, 3/4	1
28.	30900452	TAILWHEEL MOUNT, LEFT	1
29.	30900491	TAILWHEEL MOUNT, RIGHT	1
30.	30900494	REAR LINK MOUNT ANGLE, LEFT, BRAVE 5 & 6	1
31.	30900493	REAR LINK MOUNT ANGLE, RIGHT, BRAVE 5 & 6	1
32.	30900495	BACKUP PLATE FOR REAR LINK MOUNT, BRAVE 5 & 6	2
33.	30900496	TAILWHEEL MOUNT, MID-DECK, BRAVE 5 & 6	1
34.	30900497	BACKUP PLATE FOR TAILWHEEL MNT., BRAVE 5 & 6	1
35.	30900450	BLADE PAN	1
36.	31467	BLADE, BRAVE 4	2
	31339	BLADE, BRAVE 5	2
	31777	BLADE, BRAVE 6	2
37.	10100822	BLADE BOLT, 1-1/8 X 2-1/2, DRILLED	2
38.	10200056	CASTLE NUT, 1-1/8 - 12, FOR BLADE BOLT	2
39.	30148	COTTER PIN, 3/16 X 2	3
40.	10200053	CASTLE NUT,	1
41.	50100506	DRIVELINE, SHEAR PIN	1
	30078	SHEAR BOLT, 1/2 X 3 GRADE 2	1
42.	50100508	DRIVELINE, SLIP CLUTCH – SMOOTH ON 1 END	1
	10100380	HEX BOLT, 1/2 X 3, GR 8 (DO NOT USE FOR SHEAR PIN)	1
42.	50100509	DRIVELINE, SLIP CLUTCH – SPLINED ON BOTH ENDS	

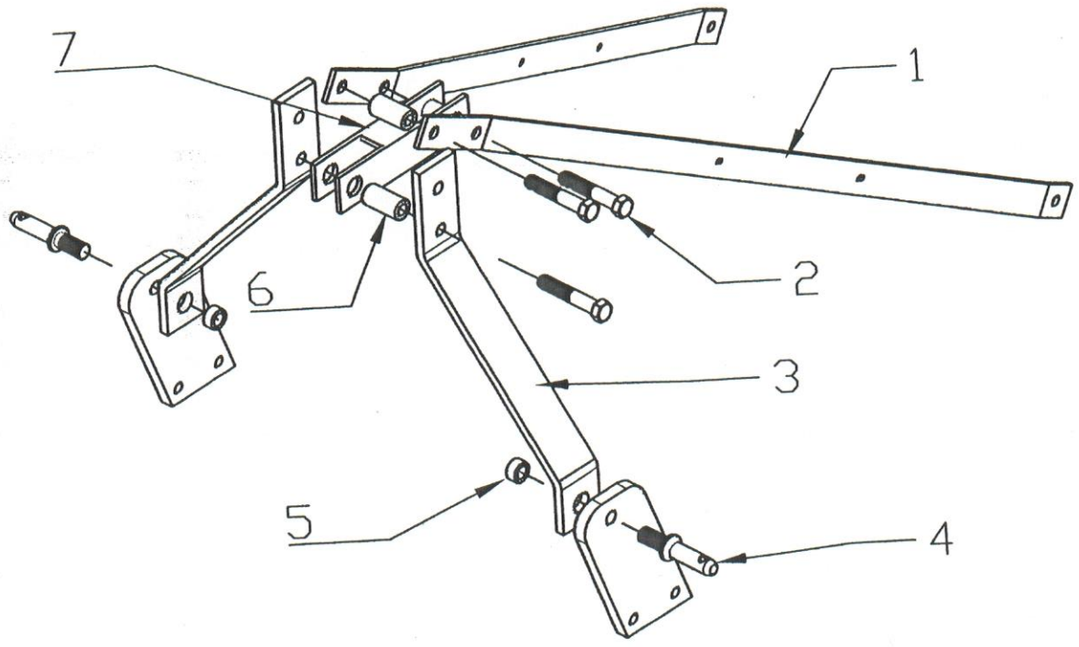
BRAVE 4, 5 & 6 GEAR BOX

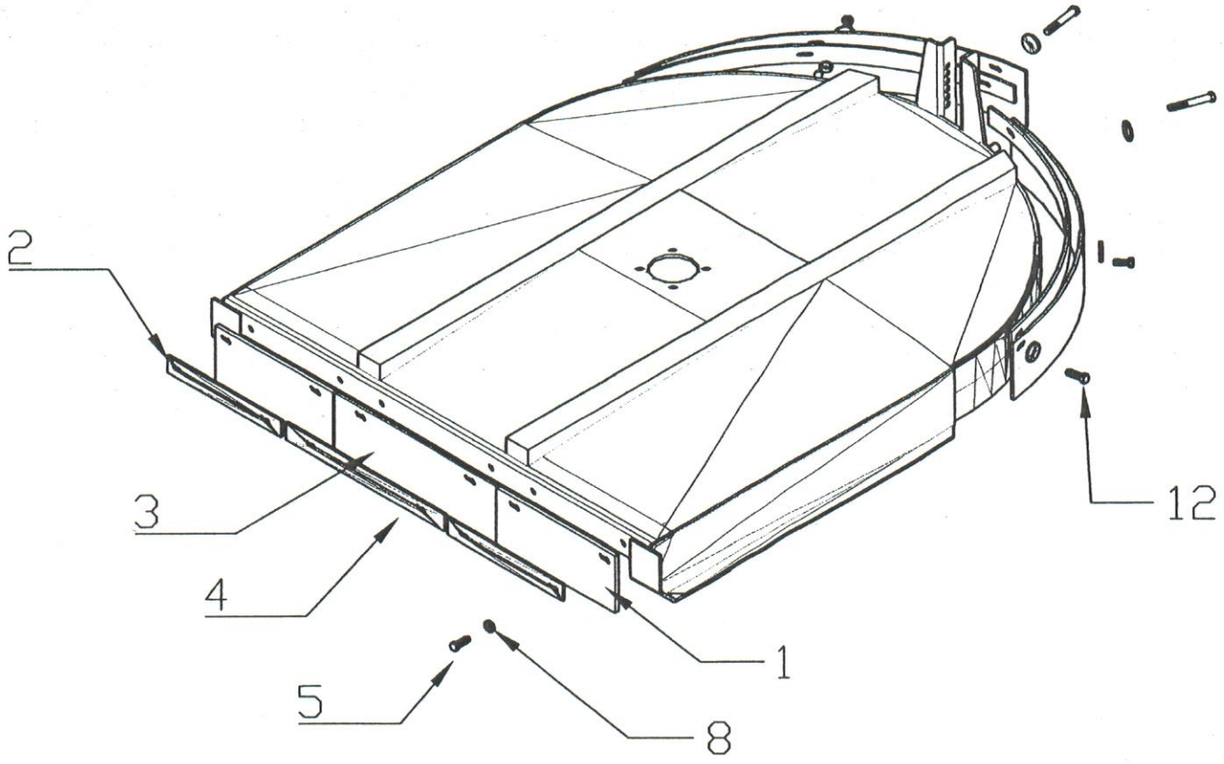
Ref.No.	Part No.	Description	No. Req'd.
1.	30053	3/8"-16 x 1" Gr.2 Hex Head Cap Screw	10
2.	30124	3/8" Lock Washer	10
3.	WA47-110D	Oil Seal	1
4.	KTR211	Input Cap	1
5.	31368	Input Cap Gasket	1
6.	31062	Snap Ring	3
7.	30977	208K Ball Bearing	3
8.	31367	Input Cap Bearing Retaining Ring	1
9.	31363	Input Gear - 22 Teeth	1
10.	31360	Input Shaft	1
11.	31375	207K Ball Bearing	1
12.	31357	Housing	1
13.	FS72	Square Head Plug, 1/2"-14 NPTF	1
14.	31364	Socket Head Plug, 1/8"-14 NPTF	1
15.	31362	Output Pinion - 15 Teeth	1
16.	30148	3/16" x 2" Cotter Pin	1
17.	31361	Output Bearing Spacer	1
18.	30593	Output Shaft Seal	1
19.	KTR213	Output Cap Gasket	1
20.	31359	Output Cap	1
21.	31371	Special 1" Flat Washer	1
22.	R5R215	1"-14 Slotted Nut	1
	31338	Complete Gear Box Assembly	

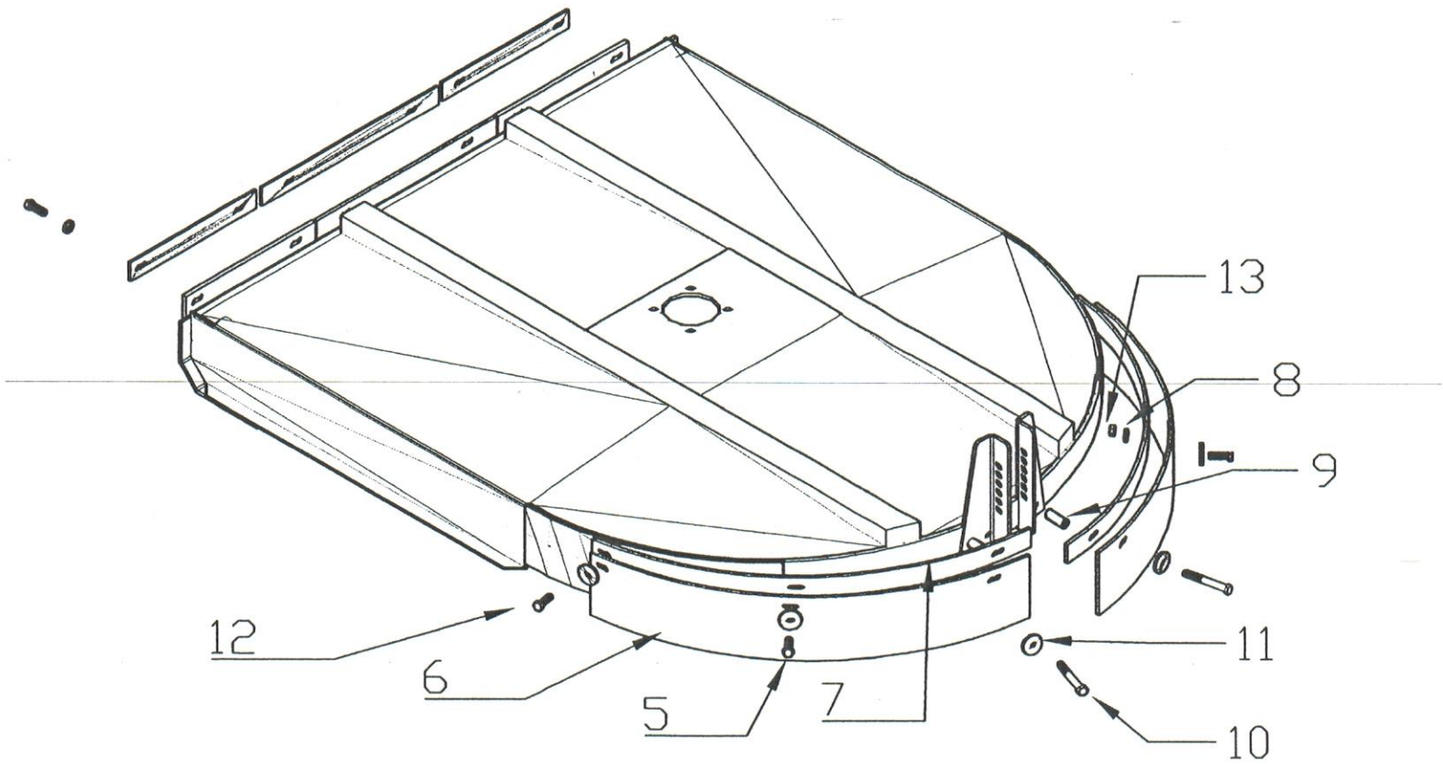


BRAVE QUICK HITCH

REF.	PART NO.	DESCRIPTION	QTY.
1.	30900551	REAR LINKS	2
2.	10100640	3/4" X 4-1/2" HEX BOLT	3
	30032	3/4" LOCKNUT	3
3.	30900552	HITCH ARMS	2
4.	KTR-161	CAT. 1 PIN WITH NUT AND LOCKWASHER	2
5.	30900555	PIVOT BUSHINGS FOR HITCH ARMS	2
6.	30900554	UPPER PIVOT BUSHINGS	3
7.	30900566	PIVOT LINKAGE	1




2
3
4
5
8
1
12

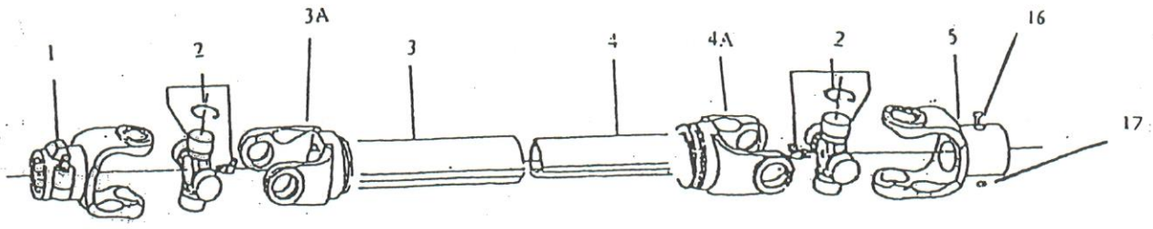

13
8
9
12
6
5
7
11
10

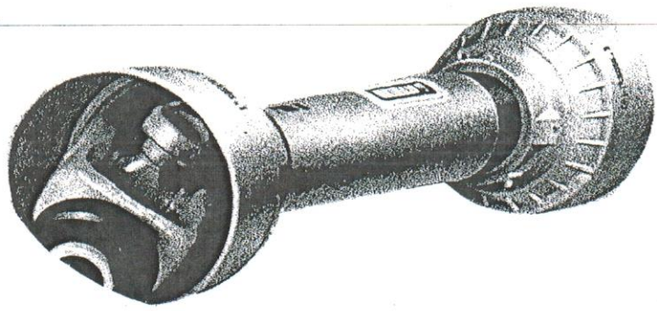
BRAVE RUBBER GUARDS

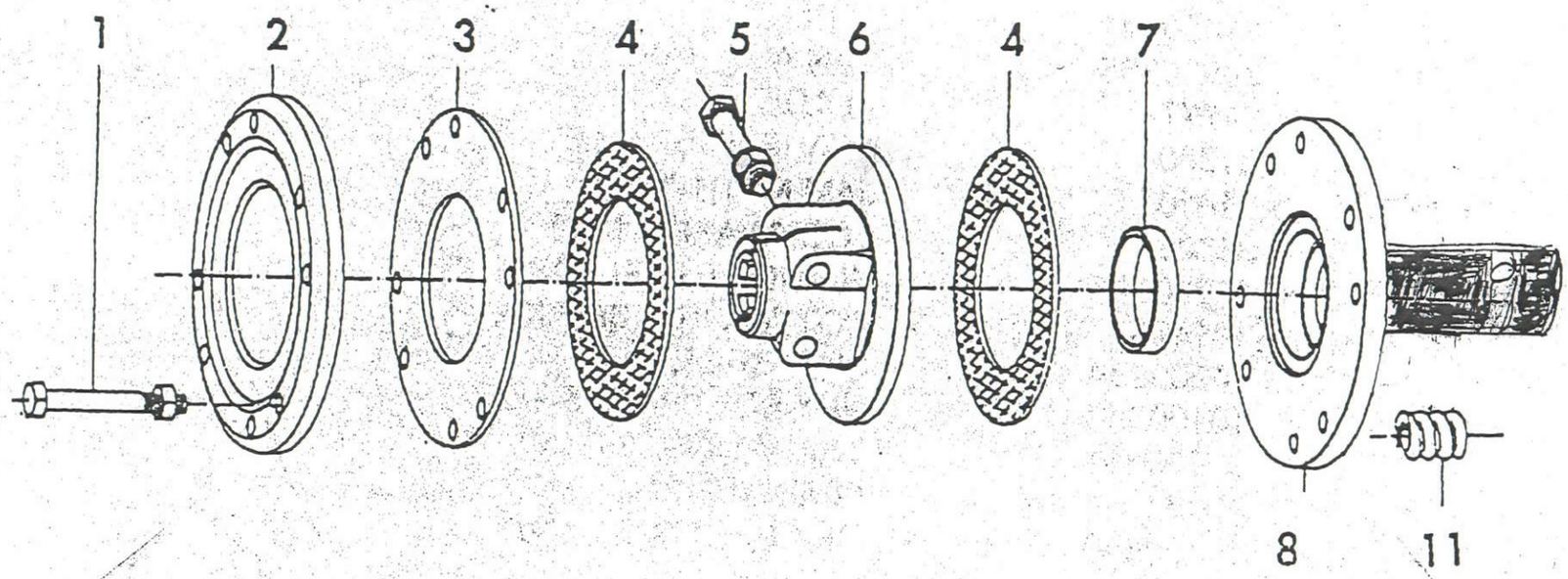
REF.	PART NO.	DESCRIPTION	QTY.
1.	30900547	FRONT OUTER RUBBER, BRAVE 4	2
	30900545	FRONT OUTER RUBBER, BRAVE 5	2
	30900550	FRONT OUTER RUBBER, BRAVE 6	2
2.	30900532	FRONT OUTER GUARD STRIP, BRAVE 4	2
	30900531	FRONT OUTER GUARD STRIP, BRAVE 5	2
	30900529	FRONT OUTER GUARD STRIP, BRAVE 6	2
3.	30900535	FRONT CENTER RUBBER	1
4.	30900530	FRONT CENTER GUARD STRIP	1
5.	30068	HEX BOLT, 1/2" X 1-1/4"	8
6.	30900548	REAR RUBBER, BRAVE 4	2
	30900546	REAR RUBBER, BRAVE 5	2
	30900549	REAR RUBBER, BRAVE 6	2
7.	30900556	REAR RUBBER MOUNT, BRAVE 4	2
	30900543	REAR RUBBER MOUNT, BRAVE 5	2
	30900541	REAR RUBBER MOUNT, BRAVE 6	2
8.	30138	FLAT WASHER, 1/2"	10
9.	30900567	SPACER FOR REAR GUARD MOUNT	2
10.	30081	HEX BOLT, 1/2" X 4-1/2"	2
11.	33835	WASHER, 1/2" x 2" OD.(AGAINST REAR RUBBER)	6
12.	30071	HEX BOLT, 1/2" X 1-3/4"	2
13.	30022	LOCKNUT, 1/2"	12

BRAVE 4, 5, & 6
UNIVERSAL JOINT ASSEMBLY

Ref. No.	Part No.	Description	No. Required
1.	31373	Yoke Assembly (Tractor End)	1
2.	31370D	Cross Assembly	2
3.	33060D	Outside Tube (Cut to Length)	1
3A.	31378D	Yoke	1
4.	33052D	Inside Tube (Cut to Length)	1
4A.	31379D	Yoke	1
5.	32201D	Yoke Assembly (Implement End)	1
16.	30078	Shear Bolt ½"-12 X 3" Grade 2	1
17.	30020	Lock Nut ½"	1
	50100506	Complete U-Joint Assembly (Includes Shield)	
	36725	Complete Shield (Includes plastic tube bearing locks on each end)	







33253 SLIP CLUTCH

REF. NO.	PART NO.	DESCRIPTION	QTY:
1.	50100132	BOLT 10MM X 80MM, NUT	8
2.	DJ32487	PRESSURE PLATE - OUTER	1
3.	DJ32551	PRESSURE PLATE - INNER 180MM	1
4.	50100261 → ~~DJ31953~~	FRICTION DISC - 140MM (5.5")	
		3-5/16 CENTER HOLE	1
5.	DJ32505	BOLT ONLY 12MM X 70MM	2
	DJ33996	LOCKWASHER 12MM	2
	DJ32506	NUT 12MM	2
6.	~~33940~~	HUB 1-3/8 Smooth	1
7.	50100126	SLEEVE	1
8.	33911	FLANGE W/ SL adj	1
11.	50100124	SPRING - TENSION	1

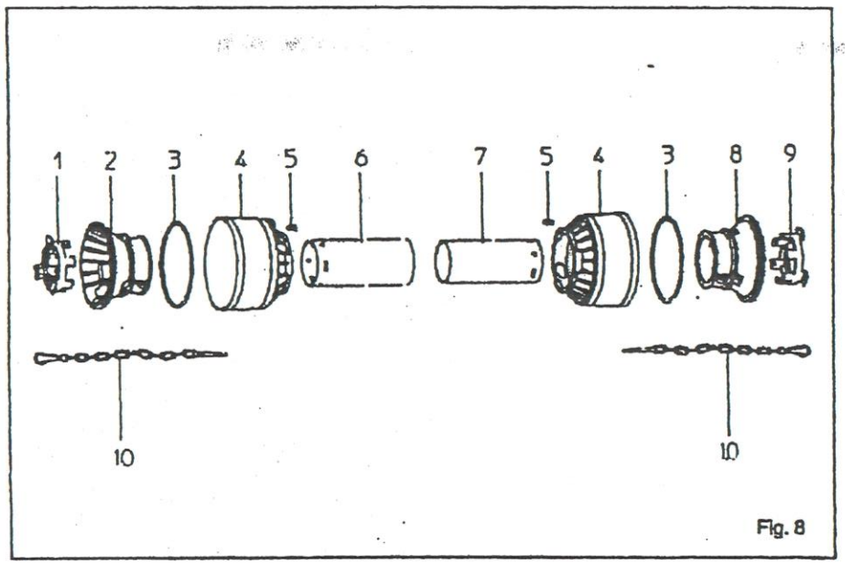


Fig. 8

ENG **CHARACTERISTIC OF THE P1/4 GUARD:**
The P1/4 guard is constructed in several parts which are assembled together on the cardan shaft. It is divided into two halves which are engaged respectively on the two parts of the shaft, sliding on each other. FIG. 8 illustrates the parts which make up the protective device:

1) Connecting ring nut for outer tube
2) Cap for outer tube
3) Metal reinforcement ring
4) Cowling
5) Fastening Pin
6) Outer tube
7) Inner tube
8) Cap for inner tube
9) Connecting ring nut for inner tube
10) Antirotation chain

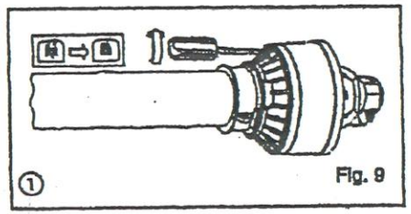


Fig. 9

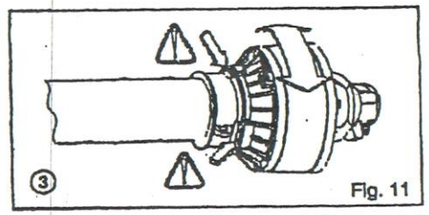


Fig. 11

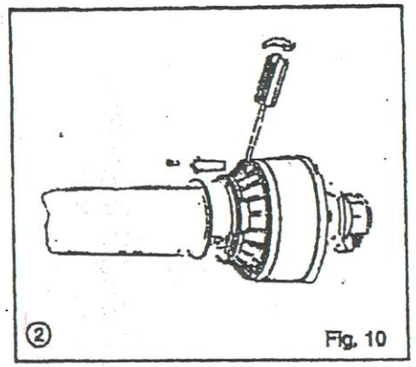


Fig. 10

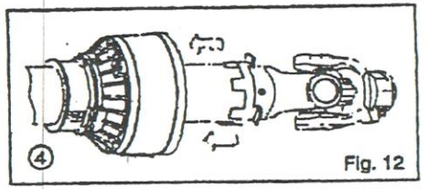


Fig. 12

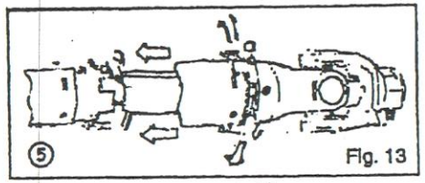


Fig. 13

ENG DISMANTLING THE PROTECTIONS: 1)Grease the seat of the connecting ring nut on the inner fork. 2)Insert the connecting ring nut in its housing on the fork and, contemporaneously, on the slot of the guard tube. 3)Insert the cap-cowling unit on the half joint, taking care to match up the projections and the slots of the ring nut with the corresponding ones on the cap. Push the tabs of the ring nut firmly into place in their respective housings on the cap.4) Rotate the cowling until the hole for greasing the articulation is temporarily uncovered. 5) Insert the fastening pin in its seat on the cowling and, pushing forcefully with a flat screwdriver, rotate it by half a turn until the far edge of the head is fixed into the slot on the housing. Rotating the cowling, close the greasing hole.

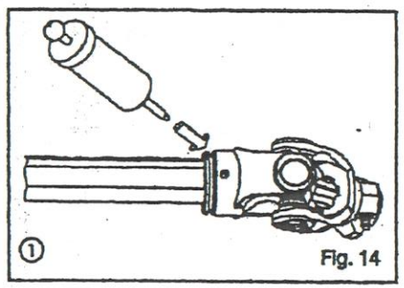


Fig. 14

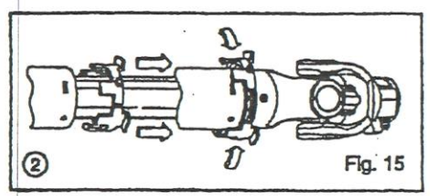


Fig. 15

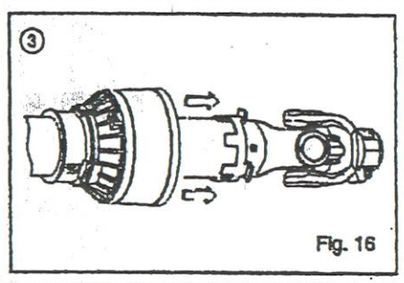


Fig. 16

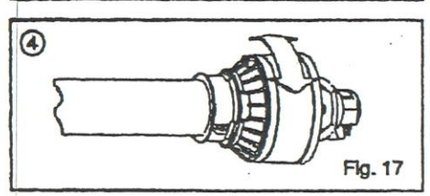


Fig. 17

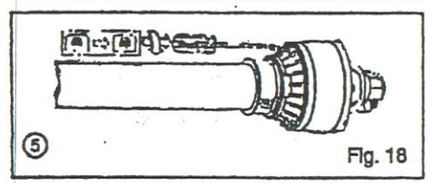
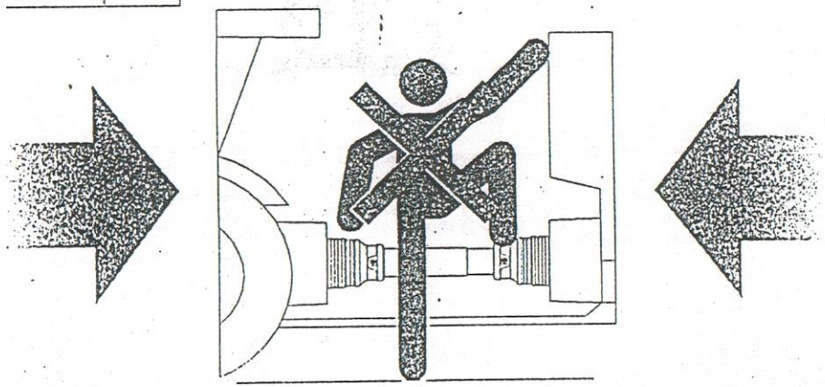


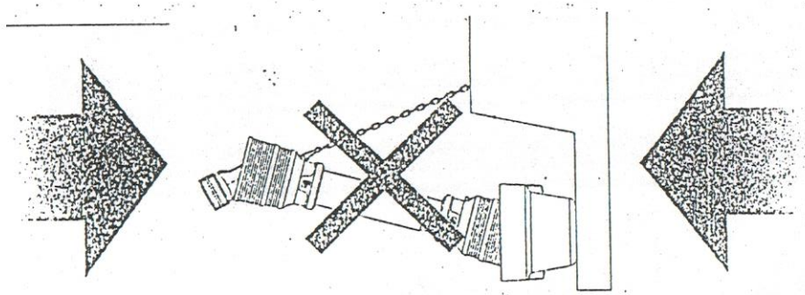
Fig. 18

ENG **ASSEMBLY OF THE P1/4 GUARD:** 1)Grease the seat of the connecting ring nut on the inner fork. 2)Insert the connecting ring nut in its housing on the fork and, contemporaneously, on the slot of the guard tube. 3)Insert the cap-cowling unit on the half joint, taking care to match up the projections and the slots of the ring nut with the corresponding ones on the cap. Push the tabs of the ring nut firmly into place in their respective housings on the cap.4) Rotate the cowling until the hole for greasing the articulation is temporarily uncovered. 5) Insert the fastening pin in its seat on the cowling and, pushing forcefully with a flat screwdriver, rotate it by half a turn until the far edge of the head is fixed into the slot



ENG Do not use the Cardan transmission as a support or running board.

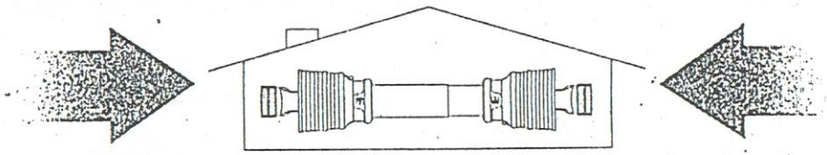
ES No utilizar la transmisión cardánica como apoyo o como estribo.



ENG Do not use the anti-rotation chain to support or transport the transmission when it is detached from the tractor. Use the special support on the machine.

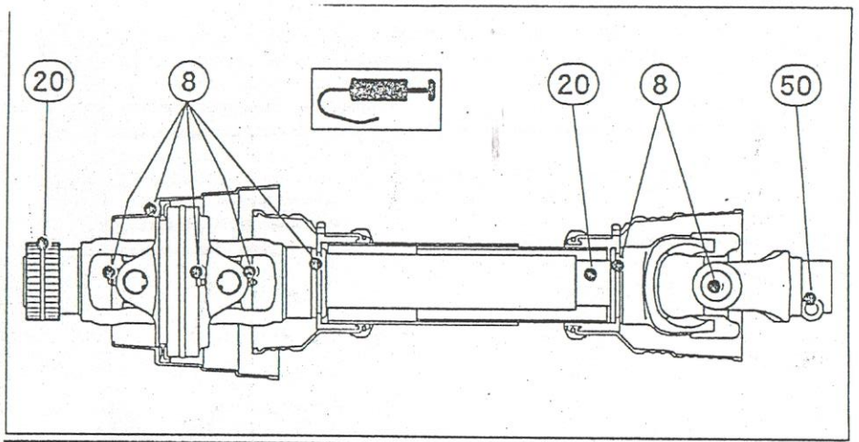
ES No utilizar la cadena anti-rotación para sostener o transportar la transmisión cardánica cuando está separada del tractor. Usar el correspondiente soporte sobre la máquina.

Eurocardan



ENG PERIODS OF NON-USE. In the case of long periods of non-use, clean and grease the shaft and store it away from atmospheric agents. On resuming work, lubricate and check efficiency of the various parts.

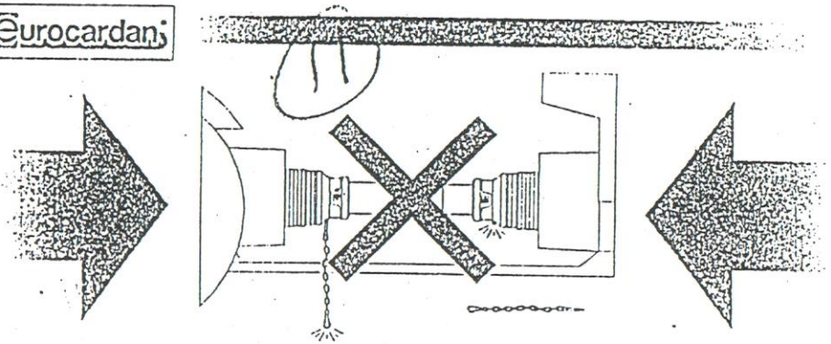
ES PERÍODOS DE INACTIVIDAD. En el caso de largos períodos de inactividad, hay que limpiar y engrasar el eje y guardarlo al reparo de los agentes atmosféricos. Cuando se reanuda el trabajo, hay que lubricar y controlar la eficiencia de las diferentes piezas.



ENG LUBRICATION AND MAINTENANCE
General diagram
Grease the shaft at the points indicated in the and at the intervals shown in hours.
Use lithium grease for extreme pressures (EP).

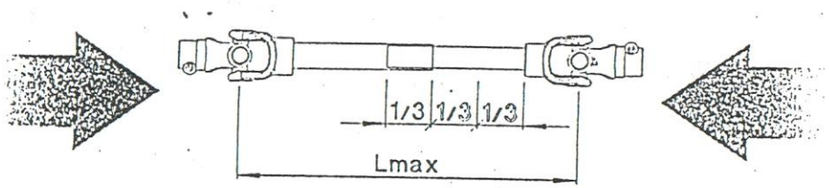
ES LUBRICACIÓN Y MANUTENCIÓN
Esquema general
Engrasar el eje en los puntos indicados en el esquema y según las frecuencias en horas evidenciadas.
Utilizar grasa al litio para presiones extremas (EP).

Eurocardan



ENG Use of the Cardan transmission without the anti-rotation chains, or without the chains being properly connected to the transmission, the tractor and the machine, is forbidden.

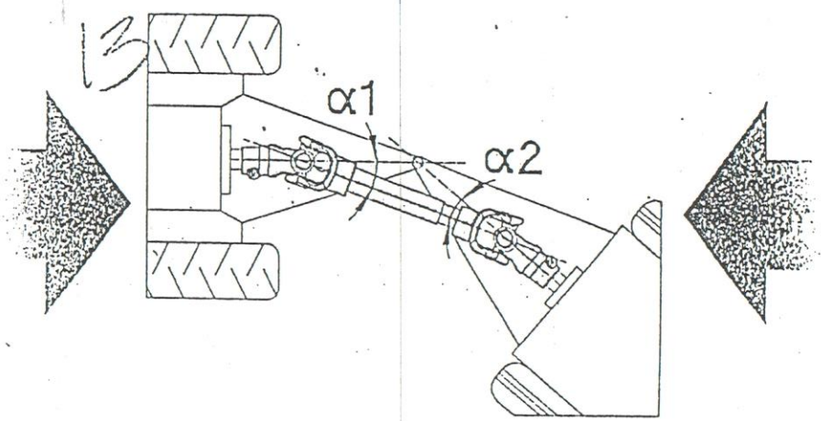
ES Está prohibido utilizar la transmisión cardánica sin las cadenas anti-rotación o sin que las mismas estén enganchadas correctamente a la transmisión, al tractor y a la máquina.



ENG LENGTHS. Check that the maximum length (Lmax) and the minimum are compatible with the required working lengths and that in any case the minimum overlap of the tubes is not less than 1/3 of their free length.

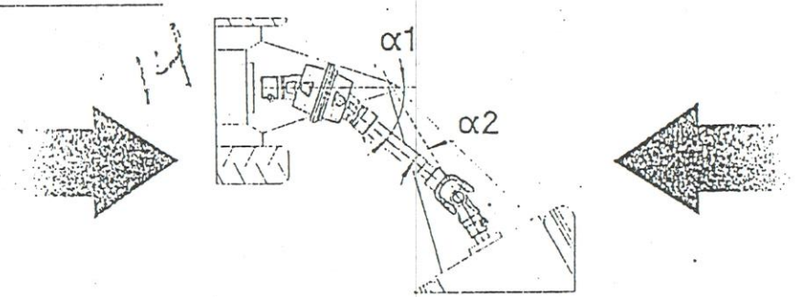
ES LONGITUDES. Verificar que la longitud máxima (Lmax) y la mínima sean compatibles con las longitudes de trabajo requeridas y que, de todos modos, la superposición mínima de los tubos no sea inferior a 1/3 de su longitud libre.

Eurocardan



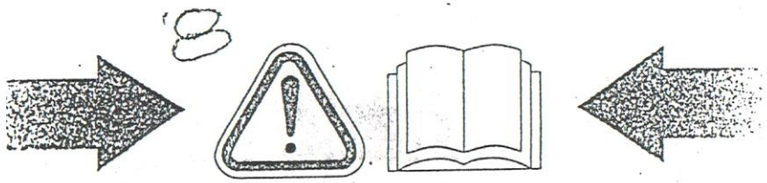
ENG Maximum working angles.
Work with swivel angles a1 e a2 equal and contained.
Disengage the drive whenever manoeuvres must be carried out that involve angles of the individual joints greater than 35°.

ES Ángulos máximos de trabajo.
Trabajar con ángulos de articulación a1 y a2 iguales y contenidos.
Desconectar la toma de movimiento siempre que se efectúan maniobras que implican angulaciones de las juntas individuales superiores a los 35°.



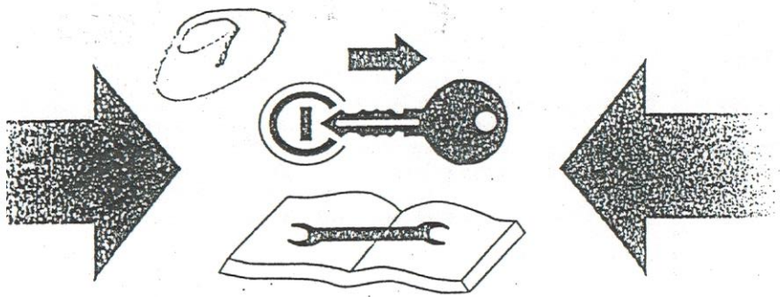
ENG MAXIMUM WORKING ANGLES FOR 80° HOMOKINETIC JOINT. Work with swivel angles a1 up to 50° for continuous work and up to 80° for brief periods, e.g. for steering.

ES ÁNGULOS MÁXIMOS DE TRABAJO PARA LA JUNTA HOMOCINÉTICA 80°. Trabajar con ángulos de articulación a1 hasta los 50° para trabajo continuativo y hasta los 80° para períodos breves, por ejemplo para virajes.



Read the Cardan transmission user manual carefully, as well as those of the tractor and operating machine, before starting them up. In particular check if the machine requires safety devices (and if so which) and how they should be set.

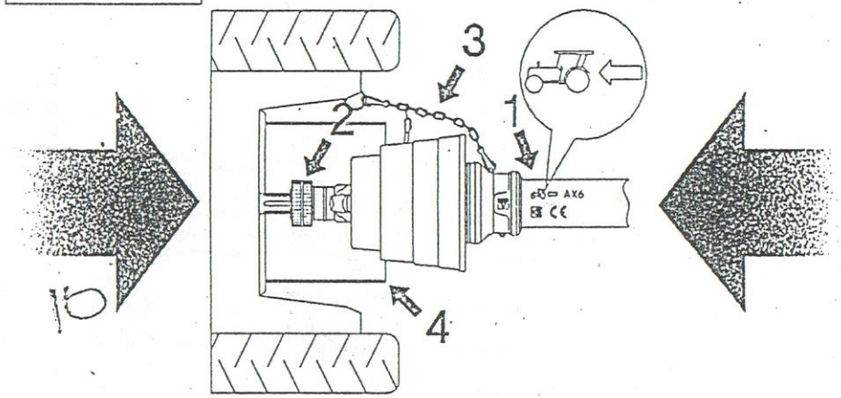
Leer atentamente el manual de uso de la transmisión cardánica como así también los del tractor y de la máquina operadora antes de ponerlos en función. Verificar especialmente si y cuáles dispositivos de seguridad requiere la máquina operadora y cómo deben ser eventualmente regulados.



Ensure that the tractor engine is switched off and the ignition key removed before any maintenance operation.

Antes de cualquier operación de manutención asegurarse de apagar el motor y extraer la llave del tractor.

Eurocardan

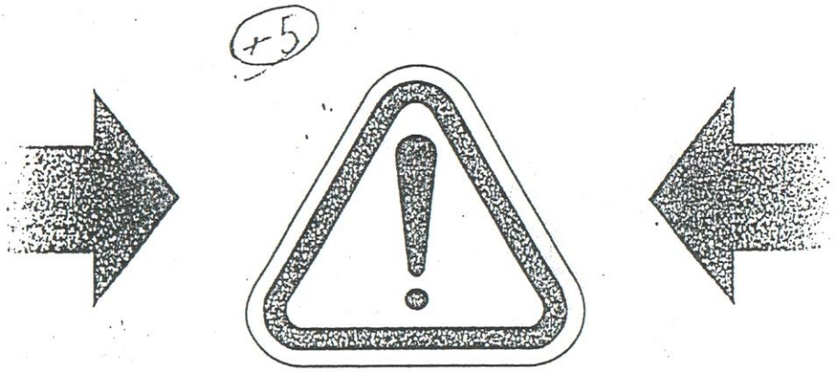


ENG

Hook-up.
1) Be sure to install on the tractor the part of the transmission with the image of a tractor stamped on the protection tube. Clean and lubricated the tractor and machine couplings.
2) Ensure that the tractor and machine's devices for hook-up to the coupling are well attached.
3) Fix the protection anti-rotation chain to fixed points on the tractor and machine checking that they do not obstruct articulation of the transmission or come into contact with moving parts.
4) Check that tractor side and machine side protections are correctly installed and overlap those of the transmission. Any missing or damaged parts must be replaced.

ES

Puesta en obra.
1) Asegurarse de instalar en el tractor la parte de la transmisión cardánica que tiene la imagen del tractor pegada sobre el tubo de protección. Limpiar y lubricar las tomas de potencia del tractor y de la máquina.
2) Comprobar que los dispositivos de unión a la toma de fuerza del tractor y de la máquina estén bien enganchados.
3) Fijar las cadenas anti-rotación de la protección sobre puntos fijos del tractor y de la máquina verificando que no obstaculicen la articulación de la transmisión y que no entren en contacto con piezas en movimiento.
4) Verificar que las protecciones del lado tractor y del lado máquina estén correctamente instaladas y que se superpongan a las de la protección de la transmisión. Eventuales piezas faltantes o dañadas deben ser substituidas.



ENG

GENERAL USE AND SAFETY NORMS

Before installing the Cardan transmission check that it has the suitable requisites with regard to power, length and any safety devices. These last must be assembled from the machine side.

Check moreover that the transmission has the prescribed protection and that it is correctly integrated by the tractor side and machine side protections.

Further check that the transmission does not come into contact, during its motion, with parts of the tractor or machine. In particular, remove the tractor tow-bar when not required and, in the case of towed machines, check that it does not come into contact with the transmission protection.

ES

NORMAS GENERALES SOBRE EL USO Y LA SEGURIDAD

Antes de instalar la transmisión cardánica, asegurarse que la misma cumpla con los requisitos aptos en lo que se refiere a la potencia, la longitud y los eventuales dispositivos de seguridad. Estos últimos deben ser montados en el lado máquina.

Además, hay que asegurarse que la transmisión tenga la protección prescrita y que esté integrada correctamente por las protecciones del lado tractor y del lado máquina. Hay que comprobar además que la transmisión no entre en contacto durante su movimiento con piezas del tractor o de la máquina. En particular, extraer la barra de remolque del tractor cuando no es requerida y, en el caso de máquinas remolcadas, verificar que no entre en contacto con la protección de la transmisión.

Eurocardan

ENG Danger of winding. Do not approach the Cardan transmission area of action. Do not wear loose clothes that could get caught in the transmission. Contact may cause very serious accidents.

ES Peligro de arrollamiento. No acercarse al área de acción de la transmisión cardánica. No vestir batas o indumentos con partes que puedan ser enganchadas por la transmisión. El contacto puede causar accidentes muy graves.

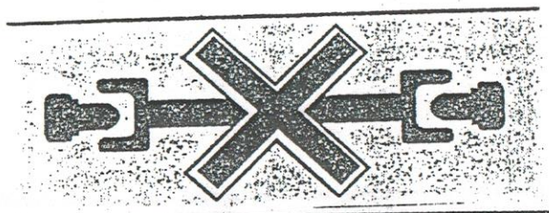
Eurocardan

ENG Do not work with the Cardan transmission if its protection or parts thereof are missing. Any missing or damaged parts must be replaced immediately with original spares before using the transmission.

ES No trabajar con la transmisión cardánica sin su protección o partes de la misma. Todos los componentes que eventualmente están dañados o que faltan, deben ser substituidos con piezas de repuesto originales antes de poner la transmisión en funcionamiento.

1. LABEL ON EXTERNAL TELESCOPIC TUBE
Danger of winding. Do not approach the Cardan transmission area of action..
Do not wear loose clothes that could get caught in the transmission.
Contact may cause serious very serious accidents.

1. ETIQUETA SOBRE EL TUBO TELESCÓPICO EXTERIOR
Peligro de arrollamiento. No acercarse al área de acción de la transmisión cardánica.
No vestir batas o indumentos con partes que puedan ser enganchadas por la transmisión. El contacto puede causar accidentes muy graves.



2. LABEL ON EXTERNAL TELESCOPIC TUBE
Do not work with the Cardan transmission if its protection or any part there of is missing. Any damaged or missing parts must be replaced immediately with original spares before using the transmission.

2. ETIQUETA SOBRE EL TUBO TELESCÓPICO EXTERIOR
No trabajar con la transmisión cardánica sin su protección o partes de la misma. Todos los componentes que eventualmente están dañados o que faltan deben ser substituidos con piezas de repuesto originales antes de poner la transmisión en funcionamiento.

ENG

3. LABEL ON EXTERNAL TELESCOPIC TUBE
Switch off the engine and remove the key from the tractor.
Read the user manual carefully.

ES

3. ETIQUETA SOBRE EL TUBO TELESCÓPICO EXTERIOR
Apagar el motor y extraer la llave del tractor.
Leer atentamente el manual de uso.

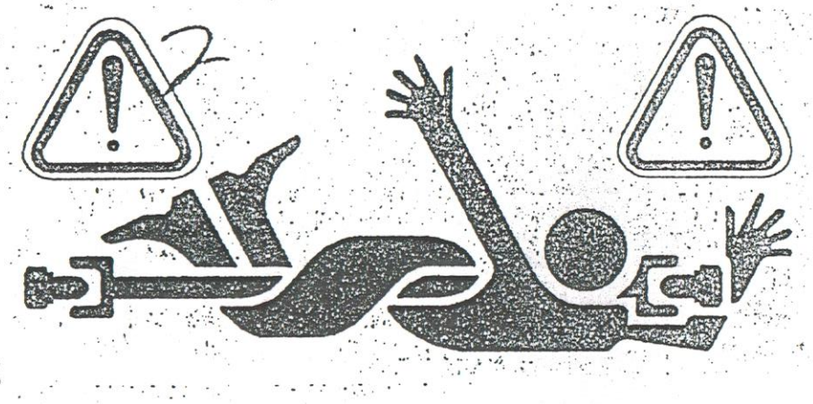
AX-XE-ME UE-XY-MY UY-MX-TX BX	YT YE YF	 540 kw	(HP)	 1000 kw	(HP)
5		42	(57)	65	(88)
6		51	(69)	78	(106)
7		60	(81)	91	(124)
8		71	(93)	109	(148)
9		92	(125)	141	(192)
10		109	(148)	167	(227)
	6	56	(75)	86	(115)
	8	77	(105)	118	(161)
	9	100	(136)	154	(209)
	10	112	(152)	173	(235)

ENG

POWER TO BE TRANSMITTED
Before installing the Cardan transmission ensure that the power to be transmitted, a function of rotation speed, is compatible with the values shown in the table.

ES

POTENCIAS A TRANSMITIR
Antes de instalar la transmisión cardánica, asegurarse que la potencia a transmitir, función de la velocidad de rotación, sea compatible con los valores presentados en el cuadro.

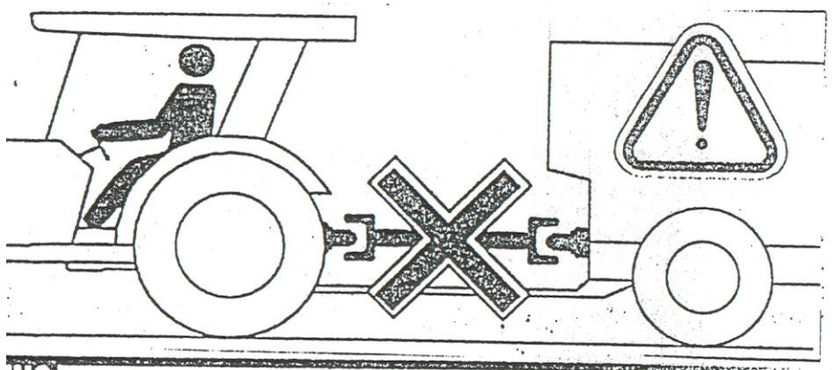


ENG

1. LABEL ON EXTERNAL PROTECTION TUBE
Danger of winding. Do not approach the Cardan transmission area of action..
Do not wear loose clothes that could get caught in the transmission.
Contact may cause serious very serious accidents.

ES

1. ETIQUETA SOBRE EL TUBO DE PROTECCIÓN EXTERIOR
Peligro de arrollamiento. No acercarse al área de acción de la transmisión cardánica.
No vestir batas o indumentos con partes que puedan ser enganchadas por la transmisión. El contacto puede causar accidentes muy graves.

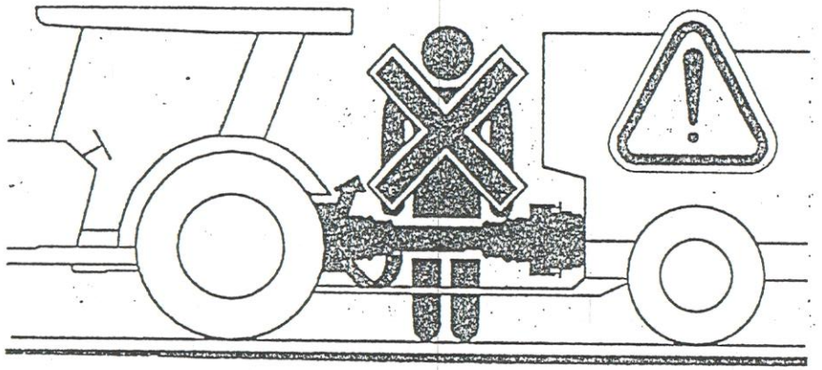


ENG

2. LABEL ON EXTERNAL PROTECTION TUBE
Never work with the shaft unprotected or with part of the protection missing.
Furthermore, check the presence and efficiency of the guards on the tractor and on the machine. Replace all missing or damaged parts before using the transmission.

ES

2. ETIQUETA SOBRE EL TUBO DE PROTECCIÓN EXTERIOR
No trabajar en ningún caso con el eje desprovisto de su protección o partes de la misma.
Verificar además la presencia y la eficiencia de las protecciones sobre el tractor y sobre la máquina. Substituir las piezas faltantes o dañadas antes de utilizar la transmisión.

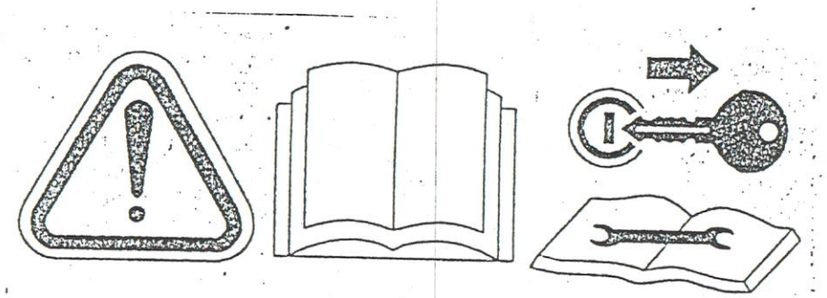


ENG

3. LABEL ON EXTERNAL PROTECTION TUBE
Do not approach or permit others to approach the transmission while it is rotating.
Before entering the transmission area of action ensure that the engine is switched off and the ignition key removed from the tractor.

ES

3. ETIQUETA SOBRE EL TUBO DE PROTECCIÓN EXTERIOR
Está prohibido hacer acercar y acercarse a la transmisión mientras está en rotación.
Antes de entrar al área de acción de la transmisión, asegurarse de haber apagado el motor y extraído la llave del mismo.



ENG

4. LABEL ON EXTERNAL PROTECTION TUBE
Read the Cardan transmission user manual, as well as those of the tractor and the machine, before starting them up. Switch off the engine and remove the key from the tractor before any maintenance operation.

ES

4. ETIQUETA SOBRE EL TUBO DE PROTECCIÓN EXTERIOR
Leer atentamente el manual de uso de la transmisión cardánica como así también los del tractor y de la máquina antes de ponerlos en funcionamiento. Antes de cualquier operación de manutención asegurarse de apagar el motor y extraer la llave del tractor.

Eurocardan

ENG

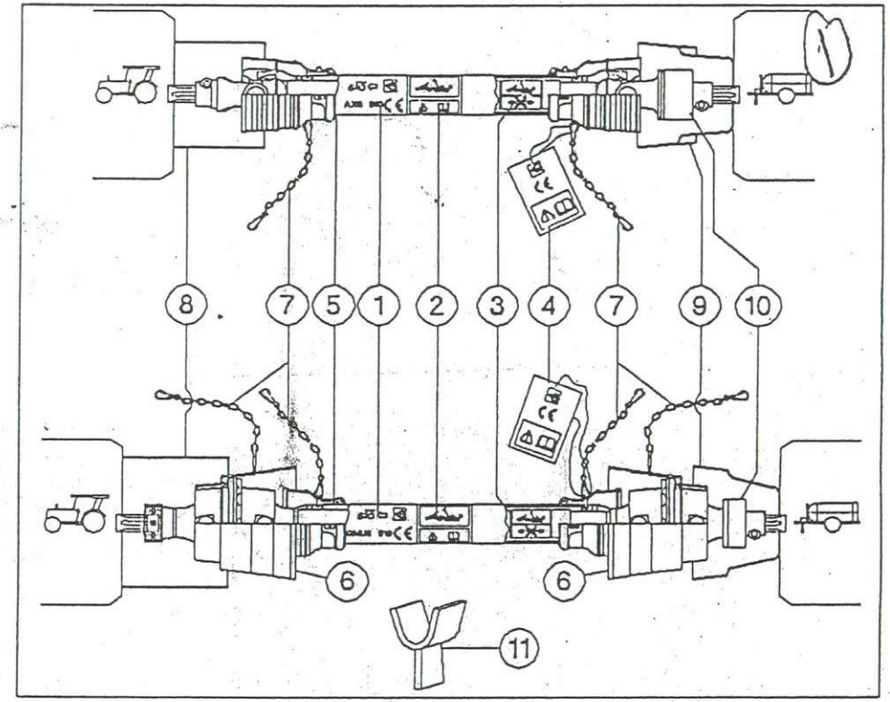
INSTRUCTION MANUAL FOR INSTALLATION, USE AND MAINTENANCE OF UNIVERSAL SHAFTS

AX5,AX6,AX7,AX8,XE6,ME6,UE6,XE8,ME8,UE8,XY6,MY6,UY6,XY8,MY8,UY8,MX5,MX6,MX7 MX8,TX6,BX5,BX6,BX7,BX8,BX9,BX10,YT8,YT9,YT10,YE6,YE8,YE10, YF6,YF8,YF10

ES

MANUAL DE INSTRUCCIONES PARA LA INSTALACIÓN, EL USO Y LA MANUTENCIÓN DE LOS EJES CARDÁNICOS

AX5,AX6,AX7,AX8,XE6,ME6,UE6,XE8,ME8,UE8,XY6,MY6,UY6,XY8,MY8,UY8,MX5,MX6,MX7 MX8,TX5,BX5,BX6,BX7,BX8,BX9,BX10,YT8,YT9,YT10,YE6,YE8,YE10, YF6,YF8,YF10



ENG

DIAGRAMS AND DESCRIPTION OF LABELS

Transmission diagram. KEY:

1. Identification of shaft: series, dimension, length, indication of assembly side, Eurocardan mark, EC mark. 2. External protection tube label. 3. External telescopic tube label. 4. Log book with Statement of EC conformity and instructions for installation, use and maintenance. 5. Universal shaft protection long enough to cover, with the hoods, at least the ends of the internal yokes. 6. Homokinetic?? joint protection long enough to cover at least the ends of the internal yokes. 7. Anti-rotation safety chain. 8. Tractor side guard. 9. Machine side guard. 10. Safety device to be applied only on machine side. 11. Cardan transmission support detached from the coupling.

ES

ESQUEMAS E DESCRIPCIÓN DE LAS ETIQUETAS

Esquema de la transmisión. LEYENDA:

1. Identificación del eje: serie, dimensión, longitud, indicación del lado de montaje, marca Eurocardan, marca CE. 2. Etiqueta tubo di protección exterior. 3. Etiqueta tubo telescópico exterior. 4. Manual con Declaración de conformidad CE e instrucciones para la instalación, el uso y la manutención. 5. Protección del eje cardánico de longitud tal que cubra, con las envolturas, por lo menos los extremos de las horquillas interiores. 6. Protección de la junta homocinética de longitud tal que cubra por lo menos los extremos de las horquillas interiores. 7. Cadenas anti-rotación de seguridad. 8. Protección lado tractor. 9. Protección lado máquina. 10. Dispositivo de seguridad para aplicar sólo sobre el lado máquina. 11. Soporte para la transmisión cardánica separada de la toma de fuerza.

TROUBLE SHOOTING GUIDE

TROUBLE	POSSIBLE CAUSE	POSSIBLE REMEDY
EXCESSIVE VIBRATION	1. Check Gearbox bolts	Tighten if loose
	2. Check for loose nuts on bladeholder & blades	Tighten if loose
	3. Check for bent output shaft. If shaft is bent, oil will normally leak from bottom seal	Replace shaft if bent
	4. Check to see if blades are free swinging	Free blades so they will swing
	5. Check for even wear on each blade tip. Were all blades changed at the same time?	Weigh blades. Weight should be within 1 oz. Always replace both blades
	6. Blade broken	Replace blades, in sets
	7. Blade carrier bent	Replace blade carrier
GEARBOX OVERHEATING	1. Low on lubricant	Fill to level plug
	2. Improper type lubricant	Replace with proper lubricant
	3. Excessive trash build up around gearbox	Remove trash
	4. Bearing or gears set up improperly	Consult your dealer
NOT CUTTING CLEAN	1. Blades dull	Sharpen or replace blades
	2. Carrier RPM too low	Use correct PTO speed and check for correct gearbox ratio. See specifications
	3. Cutter not level	See cutting height adjustment
	4. Tractor tires mashing down grass	Reverse direction of cutting and drive with one tractor tire out of cutter overlap area. Conditions too wet to cut
	5. Ground speed too fast	Reduce ground speed by shifting to a lower gear
	6. Blades locked back	Free blades
	7. Blades riding up due to blade bolt wear or loose bolts	Replace blade bolts

TROUBLE SHOOTING GUIDE

TROUBLE	POSSIBLE CAUSE	POSSIBLE REMEDY
STREAKING CONDITIONS	1. Conditions too wet for cutting. Blades unable to cut that part of grass pressed down by path of tractor tires	Allow grass to dry before cutting. Slow ground speed of tractor but keep engine running at full PTO RPM. Cutting lower may help
	2. Dull blades	Sharpen or replace blades
	3. Height of cutter lower at front or rear	See Cutting Height instructions
BLADE BOLTS LOOSE	1. Bolts not tightened	Tighten bolts to 350 ft. lb.
	2. Bolt hole elongated or oversized	Replace bushing or blade carrier
	3. Lock nut worn out	Replace lock nut
GEARBOX NOISY	1. Rough gears	Run in or change gears
	2. Worn bearings	Replace bearings
GEARBOX LEAKING	1. Damaged oil seal	Replace seal
	2. Bent shaft	Replace oil seal & shaft
	3. Oil seal installed wrong	Replace seal
	4. Oil level too high	Drain oil to proper level
	5. Pin hole leak in gearbox housing	Replace housing or gearbox
	6. Gasket damaged	Replace gasket
	7. Bolts loose	Tighten bolts
SHEAR PIN SHEARS EXCESSIVELY	1. Tractor PTO not being run at 540 RPM	Run at 540 RPM
	2. Heavy material	Reduce ground speed. Raise cutting height
	3. Not using proper pin	Replace, only with recommended pin
CLUTCH SLIPS EXCESSIVELY	1. Not operating at 540 RPM	Operate at 540 RPM
	2. Too much load for clutch	Reduce ground speed & material intake
	3. Oil on facing	Replace facings
	4. Clutch linings worn or plates warped	Repair clutch per maintenance section
BLADE WEARS TOO FAST	1. Cutting in sandy conditions	Increase cutting height. Keep blade at least 1" above the ground
	2. Cutting in rocky conditions	Increase cutting height

WARRANTY

AG-MEIER INDUSTRIES LLC warrants to the original purchaser of new AG-MEIER INDUSTRIES LLC Product, that they are free of defects in material and workmanship. This warranty is applicable only for the normal life expectancy of the unit or individual components for a period of one year from the date of original purchase if for personal use; 90 days for commercial or rental purposes. Warranty coverage is limited to replace any part, at no charge to the original purchaser that, in our judgement, shows evidence of a defect: provided that upon written request, any such defective part is returned to AG-MEIER INDUSTRIES LLC within 30 days of failure.

This Warranty does not apply to any part or product which in AG-MEIER INDUSTRIES LLC judgement has been subjected to negligence, alteration, or modification. Equipment that has been damaged due to lack of proper maintenance or use of the wrong oil or lubricants, or that has been used for a purpose for which the product is not designed is also excluded from the Warranty.

For maximum safety and to guarantee optimum product reliability, always use genuine AG-MEIER INDUSTRIES LLC parts. The **use of replacement parts manufactured by companies other than AG-MEIER INDUSTRIES LLC invalidates this Warranty.**

Claims under this Warranty must be made to the dealer which originally sold the product. AG-MEIER INDUSTRIES LLC reserves the right to make changes in material or design of the product at any time without notice.

This Warranty shall not be interpreted to render AG-MEIER INDUSTRIES LLC liable for damages of any kind; direct, consequential, or contingent, to property. Furthermore, AG-MEIER INDUSTRIES LLC shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to any expense due to loss for labor, supplies, rental machinery or for any other reason. This Warranty does not apply to any part of any internal combustion engine, driveline component, or expendable items such as blades, shields, guards, or tires as specifically found in the Operator's Manual.

Except as provided herein, no employee, agent, Dealer or other person is authorized to give any warranties of any nature on behalf of AG-MEIER INDUSTRIES LLC. This Warranty is not effective unless the Purchaser returns the Registration Form to the Manufacturer within 30 days of purchase.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written Warranty are hereby disclaimed and excluded from this sale.

If any provision of this limited Warranty shall violate any applicable law, and is held to be unenforceable, then the invalidity of such provision shall not invalidate any other provision herein.

BRAVE CUTTER MODEL # _____

BRAVE CUTTER MODEL # _____

RETURN WITHIN 30 DAYS TO:
AG-MEIER INDUSTRIES
(BELTON DIVISION)
WARRANTY REGISTRATION
920 E. 6TH AVENUE
BELTON, TX 76513

FOLD ALONG DOTTED LINES, STAPLE AND MAIL

PRODUCT NAME _____ SERIAL NUMBER _____
PURCAHSER _____ DATE DELIVERED _____
ADDRESS _____ CITY _____
COUNTY _____ STATE _____ ZIP _____
DEALER _____ DEALER ACCOUNT # _____
CITY _____ STATE _____ ZIP _____

I have recieved and read the operating manual for the product described from my dealer or AG-MEIER INDUSTRIES and fully understand the WARRANTY PROVISIONS, OPERATIONS, SAFETY, SAFE OPERATION OF THE PRODUCT, MAINTENANCE, LUBRICATION, ADJUSTMENT and SAFETY EQUIPMENT.

I have examined the product and accept it in complete and satisfactory condition. I have also examined all the warning/safety labels and understand the dangers of unauthorized repairs and alterations of the product. I futher understand that attempting to operate this product outside of the specified design parameter will void the warranty as stated in the operating manual. I also understand that this warranty is considered null and void if I use any replacement parts other than those approved by AG-MEIER INDUSTRIES. All warranty work MUST BE APPROVED by the warranty manager at AG-MEIER INDUSTRIES factory BEFORE any item replacement or labor costs will be reimbursed.

DATE _____

PRINTED OR TYPED NAME _____

PURCHASER'S SIGNATURE _____