

L SERIES

**ROTARY CUTTER
OWNERS MANUAL**

L660

SAFETY PRECAUTIONS

DUE TO THE TYPE OF PERFORMANCE FOR WHICH THIS MACHINE WAS DESIGNED, THE OPERATOR SHOULD BE VERY CAREFUL AND PRACTICE ALL SAFETY PRECAUTIONS DURING OPERATION. BEING OF BASIC DESIGN THROUGHOUT THE FARM EQUIPMENT INDUSTRY, ROTARY CUTTERS HAVE FAST MOVING BLADES THAT CAN THROW OBJECTS THAT THE OPERATOR RUNS OVER. IT IS POSSIBLE TO DO SERIOUS INJURY TO YOURSELF OR TO OTHERS, IF YOU FAIL TO READ AND PRACTICE THE FOREGOING SAFETY RULES. ONLY EXPERIENCED AND TRAINED OPERATORS WITH A THOROUGH UNDERSTANDING OF THE RESPONSIBILITIES AND LIMITATIONS OF THIS MACHINE SHOULD OPERATE IT.

1. **IMPORTANT** READ AND BECOME FAMILIAR WITH THE INSTRUCTIONS ON THE ROTARY CUTTER DECALS, THESE DECALS HAVE BEEN PLACED AT VARIOUS PLACES ON THE MACHINE TO REMIND YOU TO BE CAUTIOUS FOR YOUR PROTECTION, AS WELL AS OTHERS.
2. BEFORE OPERATING THE ROTARY CUTTER, CAREFULLY INSPECT THE AREA ON WHICH THE ROTARY CUTTER WILL BE USED. BE SURE TO REMOVE ALL OBJECTS THAT MIGHT BE THROWN BY THE ROTATING BLADES. ALSO, NOTE ANY GULLIES, DITCHES, OR ROUGH TERRAIN WHEN YOU ARE INSPECTING THE AREA.
- 3 CHECK THE MACHINE FREQUENTLY TO BE SURE THERE ARE NO LOOSE BOLTS, AND THAT SNAP RINGS ARE IN PLACE.
4. ALWAYS USE, AND MAINTAIN IN PLACE, ALL PTO GUARDS FURNISHED WITH THE ROTARY CUTTER, AS WELL AS THE GUARDS FURNISHED WITH THE TRACTOR.
5. DISENGAGE THE PTO, AND CUT OFF THE TRACTOR ENGINE BEFORE LEAVING THE TRACTOR.
6. IT IS RECOMMENDED THAT THE TRACTOR BE EQUIPPED WITH A ROLL-BAR, AND A SEAT BELT. THIS IS THE OPERATOR'S OWN RESPONSIBILITY FOR HIS SAFETY.
7. IT IS NOTED THAT ON TRACTORS WITHOUT "LIVE" PTO, THE CENTRIFUGAL FORCE OF THE ROTATING BLADES WILL TEND TO FORCE THE TRACTOR IN THE DIRECTION OF TRAVEL. THIS CAN RESULT IN AN ACCIDENT, OR INJURY, IF THE OPERATOR DOES NOT REDUCE HIS SPEED BEFORE TURNING, OR ALLOWING ADEQUATE DISTANCE BETWEEN THE TRACTOR AND TURNING POINT, OR OBSTACLE. (YOUR DEALER HAS FREE-WHEEL. OVER-RUNNING COUPLERS, TO CURTAIL THE CENTRIFUGAL FORCE, THE COUPLERS SERVE AS AN ADDED SAFETY DEVICE).
8. THE BLADES, AND PTO SHAFT WILL CONTINUE TO ROTATE FOR A SHORT TIME AFTER THE TRACTOR PTO POWER IS CUT OFF. BE SURE ALL ROTATION HAS STOPPED BEFORE ATTEMPTING TO SERVICE THE MACHINE, OR APPROACH IT FOR ANY REASON.
9. NEVER CRAWL UNDER THE MACHINE FOR ANY REASON. IT COULD FALL ON YOU! NEVER MANUALLY FEED THE MACHINE FOR ANY REASON. NEVER REACH YOUR HANDS, OR FEET UNDER THE DECK OF THE CUTTER, WITHOUT FIRST BEING SURE THAT THE BLADES HAVE CEASED ALL MOVEMENT, AND ALL POWER IS CUT OFF.
10. CHAIN GUARDS (OPTIONAL EQUIPMENT) SHOULD BE ADDED TO THE MACHINE WHEN IT IS USED IN AREAS WHERE PEOPLE, ANIMALS, OR PROPERTY MAY BE HIT, OR ENDANGERED BY THROWN OBJECTS. THE RAPIDLY ROTATING BLADES MAY STRIKE, AND THROW WIRE, STICKS, LOOSE ROCKS, OR TRASH WITH CONSIDERABLE FORCE. EVEN WITH CHAIN GUARDS, IT IS RECOMMENDED THAT THE OPERATOR BE SURE TO KEEP ALL PERSONS, AND ANIMALS FAR ENOUGH AWAY FROM THE OPERATING AREA, TO BE COMPLETELY CLEAR OF THROWN OBJECTS.
11. NEVER ALLOW RIDERS ON MACHINE OR TRACTOR!
12. TRANSPORT MACHINE AT SAFE SPEED.

ASSEMBLY AND SET-UP INSTRUCTIONS

- A. SET UP A-FRAME AND POSITION HITCH PINS IN PROPER POSITION. BE SURE TO USE LOCK WASHERS AND TIGHTEN BOLTS SECURELY, ATTACH FLEX CHAIN BRACE TO A-FRAME THE FASTEN CHAIN END ON TAIL WHEEL ADJUSTMENT BRACKET.
- B. REMOVE THE SNAP RING FROM IN-PUT SHAFT ON GEAR BOX, ATTACH THE PTO SHAFT AND INSTALL SHEAR BOLT. BE SURE TO REPLACE THE SNAP RING TO GEAR BOX IN-PUT SHAFT. THE SNAP RING WILL HOLD THE PTO SHAFT IN PLACE IF THE SHEAR BOLT IS SHEARED.
- C. CHECK ALL BOLTS INCLUDING GEAR BOX MOUNTING BOLTS, BLADE BOLTS AND BLADE CARRIER BOLT.
- D. ADJUST THE TAIL WHEEL BRACKET TO LEVEL THE ROTARY CUTTER OR OBTAIN DESIRED CUTTING POSITION.
- E. LUBRICATE GEAR BOX, TAIL WHEEL HUB, TAIL WHEEL SPINDLE, PTO U-JOINTS.
- F. ATTACH ROTARY CUTTER TO THE TRACTOR.

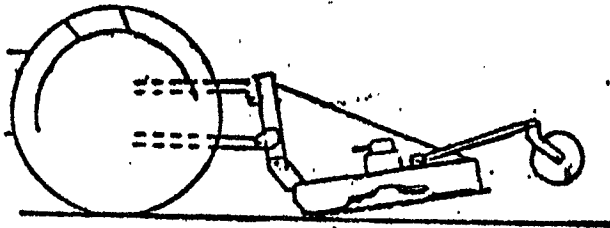
OPERATION

CUTTERS ARE DESIGNED FOR TRACTORS RANGING FROM 16 HP. BE SURE TO MATCH THE SIZE AND MODEL OF CUTTER TO YOUR TRACTOR FOR SAFETY AND RELIABILITY.

1. CHECK GEAR BOX FOR LUBRICANT,
2. CHECK ALL LUBRICATION POINTS ON PTO SHAFT AND TAIL WHEEL.
3. BE SURE ALL BOLTS ARE TIGHT AND SNAP RINGS ARE IN PLACE.
4. BE SURE THE ROTARY CUTTER IS PROPERLY MOUNTED ON TRACTOR.
5. ADJUST AND LEVEL ROTARY CUTTER FOR DESIRED CUTTING HEIGHT.

ADJUSTING LEVEL OF CUTTER ON YOUR TRACTOR

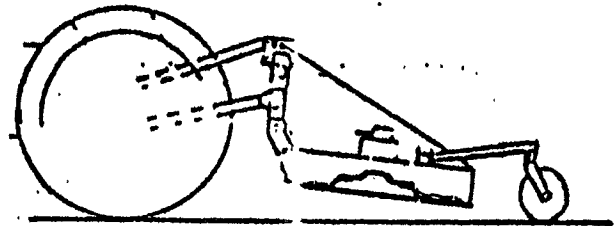
Cutter Too Low In Front



INCORRECT

BLADE TOO HIGH ON SIDES CAUSING SKIPPING AND UNEVEN CUTTING, BLADES BECOME BADLY WORN. BLADE STRIKING GROUND CAUSING SLIP CLUTCH TO SLIP EXCESSIVELY.

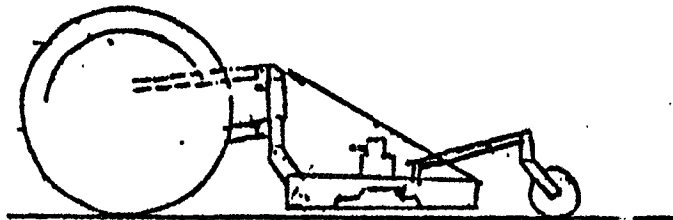
Cutter Too Low In Rear



INCORRECT

EXCESSIVE WEAR AND TEAR ON ON TAILWHEEL, REAR SKIRT DRAGGING CAUSING BALLING UP PROBLEMS. BLADE TOO HIGH ON SIDES CAUSING SKIPPING AND UNEVEN CUTTING

Cutter Level

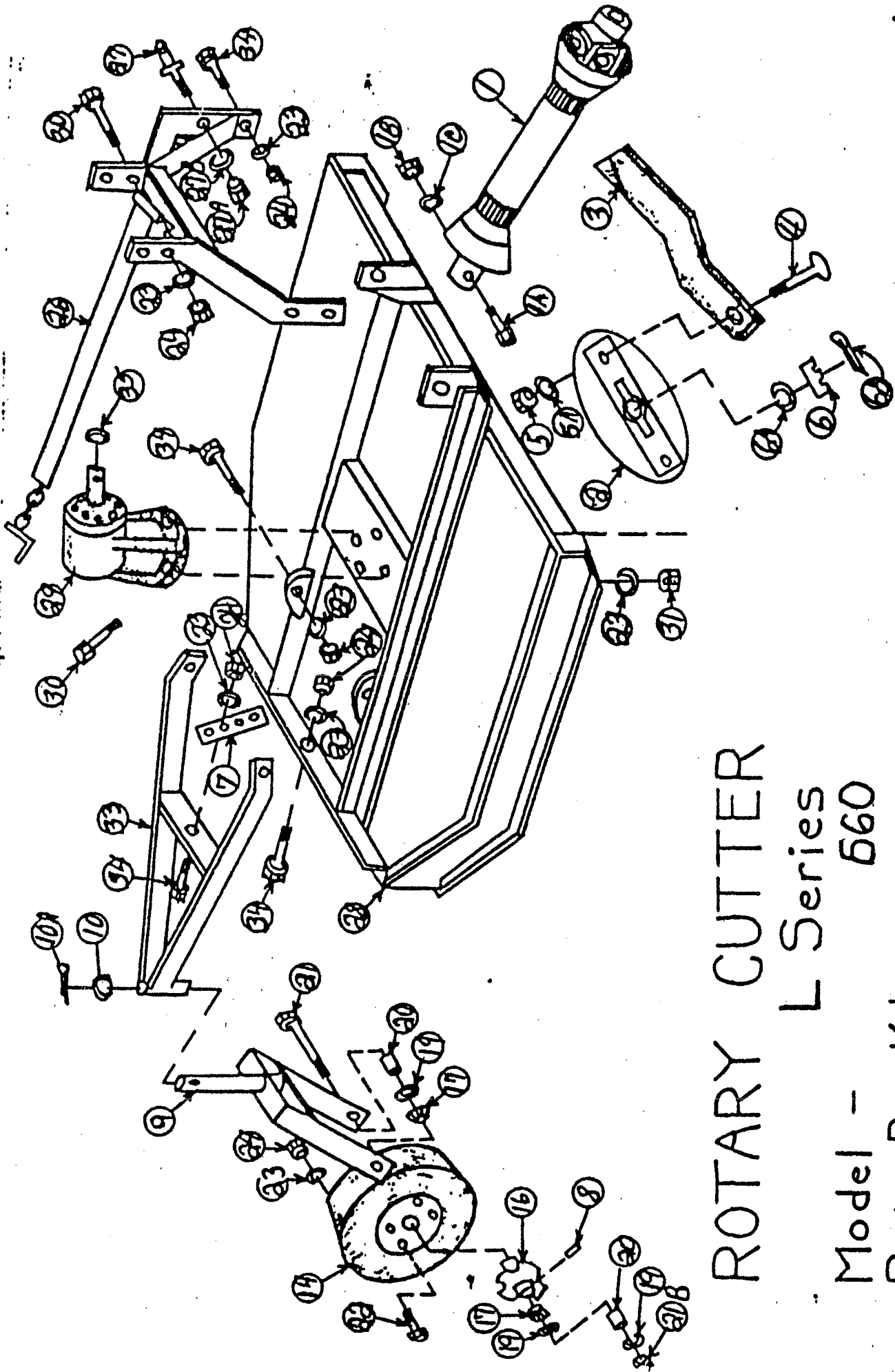


CORRECT

BLADE CUTTING EVENLY WITH GRASS BEING SPREAD EVENLY.

STARTING FOR THE FIRST TIME

1. IF EVERYTHING IS IN PLACE, AND THE ROTARY CUTTER IS PROPERLY CONNECTED TO THE TRACTOR, START THE TRACTOR, AND RAISE THE ROTARY CUTTER SLOWLY, WATCHING THE PTO SHAFT, RAISE AND LOWER THE ROTARY CUTTER UNTIL YOU HAVE POSITIONED THE PTO SHAFT TO THE SHORTEST TELESCOPING POINT. THIS POSITION WILL CHECK THE PTO SHAFT TO MAKE IT IS NOT TOO LONG. WITH THE SHAFT POSITIONED AT IT'S SHORTEST LENGTH, THE TWO TELESCOPING SHAFTS SHOULD LACK TWO(2) INCHES MEETING. NOW, CHECK THE PTO SHAFT TO BE SURE THE PTO SHAFT IS NOT TOO SHORT. POSITION THE ROTARY CUTTER SO THAT THE PTO SHAFT WILL BE AT IT'S LONGEST POSITION. AT THIS POSITION, THE TWO TELESCOPING SHAFTS SHOULD ENGAGE AT LEAST SIX (6) INCHES. BE SURE THE PTO CLEARS THE FRONT OF THE CUTTER DECK, WHEN CUTTER IS RAISED. IF IT DOES NOT CLEAR, RE-ADJUST THE TOP-LINK ON YOUR TRACTOR, TO CORRECT THIS PROBLEM. YOU MAY WANT TO SET THE STOP ON YOUR HYDRAULIC CONTROL LEVER, SO THAT THE CUTTER WILL NOT ACCIDENTLY BE RAISED TOO HIGH. NOW, ENGAGE THE PTO, SLOWLY, LET THE ROTARY CUTTER RUN SLOWLY FOR SEVERAL SECONDS AND GRADUALLY INCREASE THROTTLE TO OPERATING SPEED. WATCH CAREFULLY FOR SIGNS OF EXCESSIVE VIBRATION, OR UNUSUAL NOISES. IF ANY ARE NOTICED, DISENGAGE PTO, CUT OFF TRACTOR IMMEDIATELY, WAIT FOR COMPLETE STOP OF ALL MOVING PARTS, AND INVESTIGATE CAUSE. A NEW GEAR BOX MAY BE NOISY AT FIRST, BUT USUALLY A FEW HOURS USE WILL MESH THE GEARS, AND CREATE A QUIETER, SMOOTHER OPERATION.
 2. WE SUGGESTED THAT YOU GET THE FEEL OF YOUR ROTARY CUTTER ON OPEN FAMILIAR GROUND. REMEMBER THAT THE CENTRIFUGAL FORCE OF THE ROTARY BLADES AND CARRIER CAN KEEP PUSHING YOU FORWARD, EVEN AFTER YOU HAVE DISENGAGED YOUR CLUTCH, UNLESS YOUR TRACTOR IS EQUIPPED WITH LIVE PTO OR AN OVER-RUNNER. THEREFORE, APPROACH OBSTACLES WITH CAUTION.
- **** IF IT IS DETERMINED THAT THE PTO SHAFT IS EITHER TOO LONG OR TOO SHORT, FOR YOUR TRACTOR, SEE YOUR DEALER FOR CORRECT SHAFT LENGHTS. THIS IS NOT A FREQUENT PROBLEM, HOWEVER, THE CORRECT SHAFT LENGTH SHOULD BE CHECKED TO AVOID DAMAGE TO THE PTO SHAFT, OR OTHER COMPONENTS.

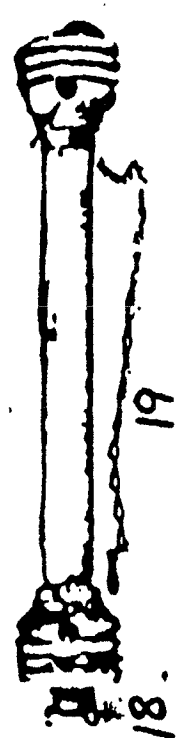
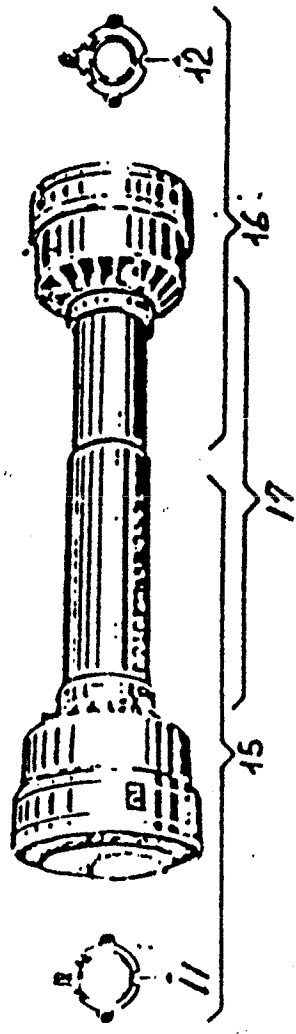
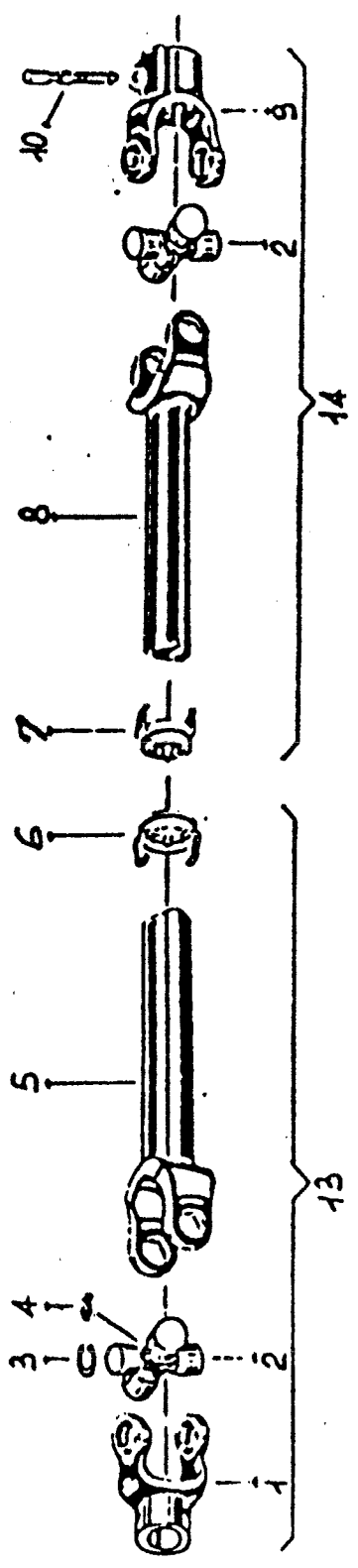


ROTARY CUTTER

L Series

Model - 660

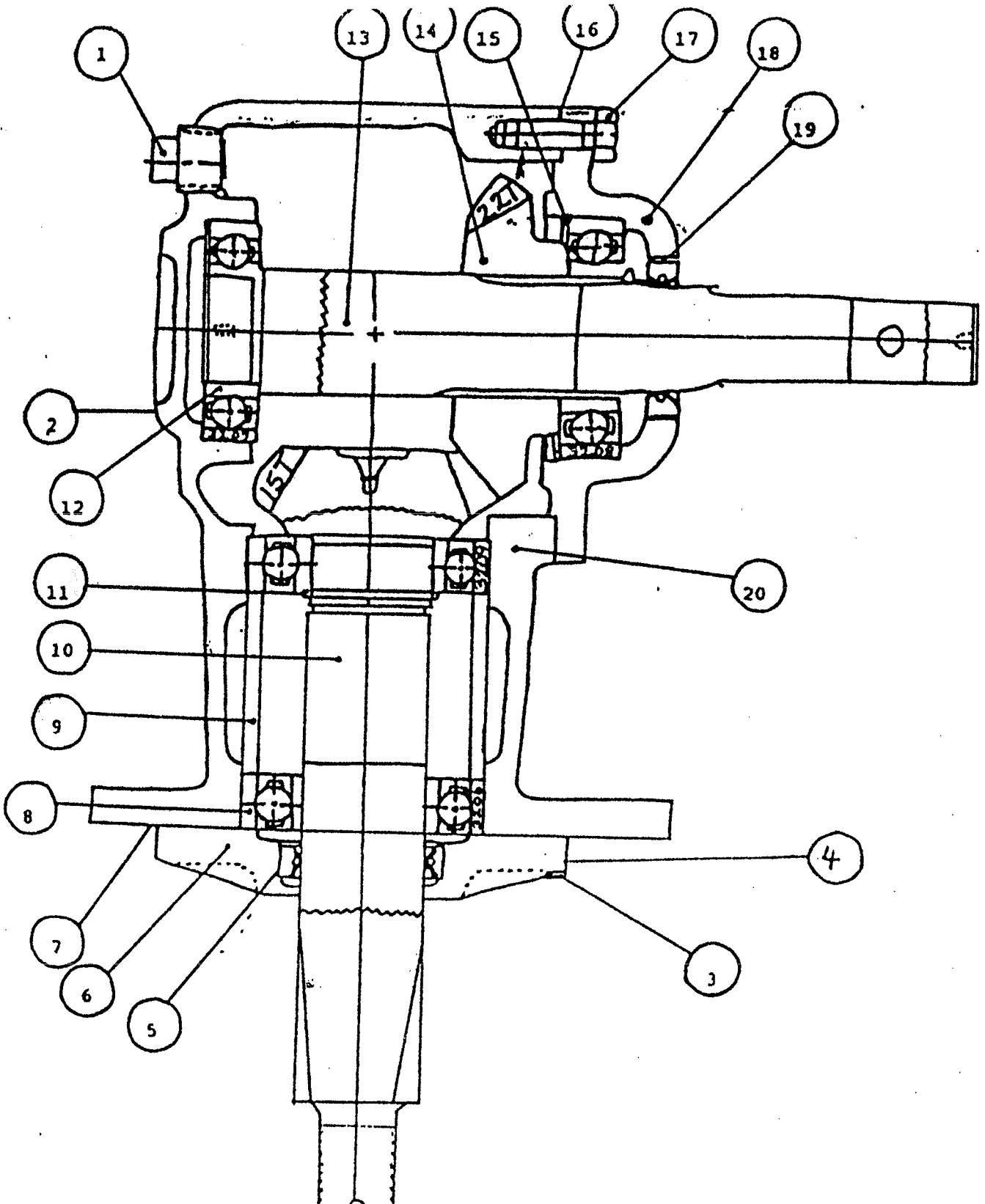
Parts Breakdown



BONDIOLI PARTS APPLICATION TO PTO SHAFTS
("L" SERIES)

REF.	PART NO.	DESCRIPTION	APPLICATION			
			L440	L540	L560	L660
1	63481	IMPLEMENT YOKE	*	*	*	
1	62423	IMPLEMENT YOKE				
2	4.41	BEARING & CROSS KIT	*	*	*	*
2	5.41	BEARING & CROSS KIT				
3	4.11	CIRCLIP	*	*	*	*
3	6.11	CIRCLIP				
4	2.44	GREASE ZERK	*	*	*	*
5	204.61-465	YOKE & OUTER TUBE	*	*	*	*
5	204.61-590	YOKE & OUTER TUBE		*	*	
5	505.61-720	YOKE & OUTER TUBE				
6	3.17.02	RING FOR OUTER TUBE	*	*	*	*
6	5.17.02	RING FOR OUTER TUBE				
7.	3.18.02	RING FOR INNER TUBE	*	*	*	*
7	5.18.02	RING FOR INNER TUBE				
8	204.62.490	YOKE & INNER TUBE	*			*
8	204.62.615	YOKE & INNER TUBE		*	*	
8	505.62.745	YOKE & INNER TUBE				
9	4.05.07	QUICK RELEASE YOKE	*	*	*	*
9	5.05.07	QUICK RELEASE YOKE				
10	1.08.25.01	RELEASE YOKE PIN	*	*	*	*
11	4.G5.02	LOCK FOR OUTER SHIELD	*	*	*	*
11	5G5	LOCK FOR OUTER SHIELD				
12	4.G6.02	LOCK FOR INNER SHIELD	*	*	*	*
12	5G5	LOCK FOR INNER SHIELD				
13	M12664.70	COMPLETE IMPLEMENT HALF	*		*	*
13	M12666.70	COMPLETE IMPLEMENT HALF		*	*	
13		COMPLETE IMPLEMENT HALF				
14	M12664.71	COMPLETE TRACTOR HALF	*			*
14	M12666.71	COMPLETE TRACTOR HALF		*	*	
14		COMPLETE TRACTOR HALF				
15	3.75.420	OUTER HALF SHIELD	*			*
15	3.75.545	OUTER HALF SHIELD		*	*	
15	5G7660	OUTER HALF SHIELD				
16	3.74.420	INNER HALF SHIELD	*			*
16	3.74.545	INNER HALF SHIELD		*	*	
16	5G8660	INNER HALF SHIELD				
17	M12664Z	COMPLETE SHIELD with LOCKS AND RINGS	*			*
17	M12666Z	COMPLETE SHIELD with LOCKS AND RINGS		*	*	
17		COMPLETE SHIELD with LOCKS AND RINGS				
18	M14251	COMPLETE PTO SHAFT 32" SERIES #4	*			*
18	M14255	COMPLETE PTO SHAFT 37" SERIES #4		*	*	
18	M14250	COMPLETE PTO SHAFT 43" SERIES #4				
19		STAY CHAIN	*	*	*	*

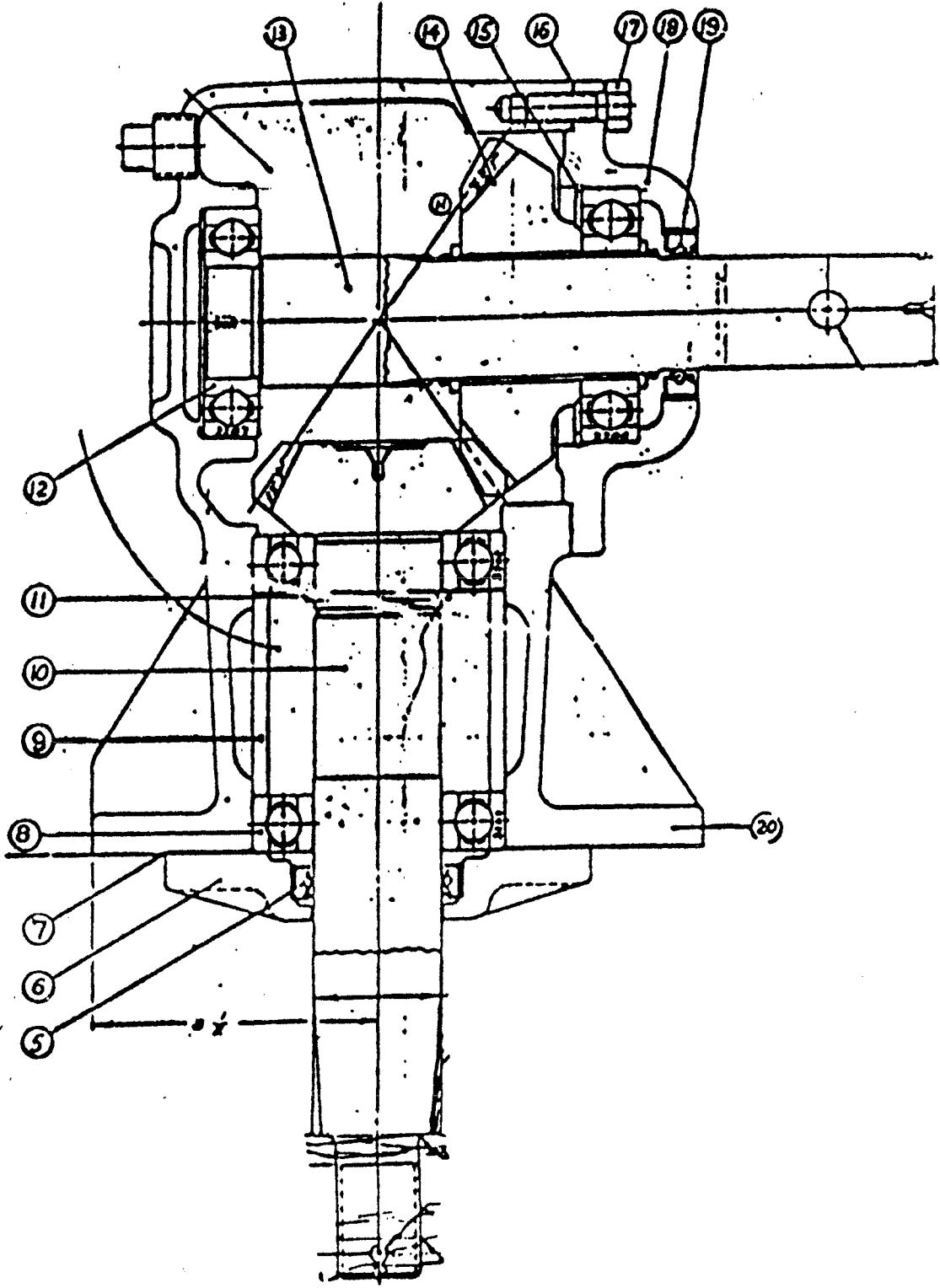
40 HP GEARBOX (SMOOTH INPUT SHAFT)



40 HP GEAR BOX BREAKDOWN

<u>REFERENCE NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER REQUIRED</u>
1	03-04-101-12	PIPE PLUG (FILL) (1/2-14)	1
2	03-04-101-09	PIPE PLUG (CHECK) (1/8-27)	1
3	03-02-103-05	CAPSCREW 3/8" X 1"	6
4	03-03-102-08	LOCKWASHER	10
5	05-04-105-33	BOTTOM OIL SEAL	1
6	10-30-104-11	BOTTOM CAP, BEARING RETAINER	1
7	WA-48-12	GASKET	1
8	04-03-104-03	BEARING(3208)	3
9	10-30-107-01	SPACER	1
10	WA50-SE	OUTPUT PINION	1
11	03-05-101-09	RETAINING RING	1
12	04-03-104-02	BEARING(3207)	1
13	10-30-103-02	INPUT SHAFT SHEAR PIN	1
14	10-30-106-11	INPUT GEAR	1
15	10-40-143-01	RETAINER RING	1
16	WA50-10-10A	SHIM (.004)	AS REG.
17	03-002-103-04	CAPSCREW 3/8" X 1 1/4"	4
18	10-30-105-11	SIDE HOUSING (FRONT CAP)	1
19	05-02-106-06	OIL SEAL (TOP) (N450135)	1
20	10-30-102-11	HOUSING	1

60 HP GEARBOX (SMOOTH INPUT SHAFT)



60 HP GEAR BOX BREAKDOWN

<u>REFERENCE NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER REQUIRED</u>
1		MAIN HOUSING	1
2	10-50-105-11	GEAR INPUT	1
3	10-50-122-11	PINION OUTPUT	1
4	10-50-123-01	SHAFT INPUT	1
5	10-50-124-01	SPACER	1
6	10-50-104-12	BOTTOM CAP (BRG, RETAINER)	1
7	05-02-112-12	OIL SEAL (TOP)	1
8	05-04-133-34	OIL SEAL (BOTTOM)	1
9	04-01-102-18	CUP, BEARING	1
10	04-01-101-23	CONE, BEARING	1
11	04-01-102-17	CUP, BEARING	1
12	04-01-101-22	CONE, BEARING	1
19	04-01-101-13	CONE, BEARING	1
20	04-01-102-09	CUP, BEARING	2
21	03-05-101-11	RETAINING RING	1
22		3/8" LOCK WASHER	8
23	03-04-101-09	PIPE PLUG	
26	10-50-102-12	SIDE HOUSING TOP PLATE	1
92		WASHER	1
93		1" CASTLE NUT	1

PROCEDURES FOR REMOVING BLADES FROM ROTARY CUTTERS

There are two (2) ways to remove blades from the rotary cutters for replacement and/or sharpening. One procedure is accomplished by cutting a hole in the top deck of the rotary cutter either directly behind or in front of the gearbox. The preferred position would be in the front but either place is permissible. To find the center of the gearbox. This point will be the center of the hole to be drilled. The location of this hole will also be approximately two (2) inches from the gearbox mounting plate. The hole you cut (drill) should be at least three inches in diameter. This hole will allow you to utilize a socket fast and easy removal of the blades from the stump jumper.

The second method of removal is by taking the key and castle nut off of the gearbox output shaft. This allows you to remove the complete stump jumper. Alternating blows to the head of the blade bolts allows you to "walk" the entire jumper from the shaft. When removal of the jumper from the shaft is completed you need only to remove the blades from the jumper to sharpen or replace.

CAUTION: ALWAYS BE SURE TO WEAR PROTECTIVE EYE GEAR TO AVOID INJURY WHILE CUTTING OR HAMMERING.

CAUTION: BE SURE BLADES ARE NOT IN MOTION BEFORE ATTEMPTING TO REMOVE BLADES FROM MACHINE.

GENERAL MAINTENANCE

1. Check oil level in gear box periodically. Keep level up to check plug. Use SAE 90 or SAE 140 transmission oil. Use caution not to over fill.
2. Lubricate universal joint on PTO shaft every few hours of use. Keep PTO shaft free of dirt and foreign materials so that it will telescope freely to avoid damage to your tractor or rotary cutter.
3. Lubricate tail wheel.
4. Keep blades sharp. When replacing worn blades, be sure to replace in pairs to maintain rotary balance.
5. Keep all bolts tightened properly.

WARRANTY

We warranty each new rotary cutter against defect in material or workmanship for a period of 90 days or a reasonable period of time dependent upon the type of use of the machine.

In the event it is necessary to replace or repair any part(s) during the warranty period go to your dealer with the defective part(s) and he will assist you in securing the needed replacement, or return the defective part(s) to
D.H.E.-Warranty Division, P.O. Box 140, Red Bay, AL.
35582.

Neither manufacturer or the dealer shall be held responsible for loss of use of the machine, loss of time, inconvenience, commercial loss or consequential damages.

In order for your rotary cutter to be covered by our warranty policy, the equipment registration from on the back cover must be completed and returned within 10 days after the purchase date.

The warranty policy is not effective unless the equipment registration is recorded in our office.

OWNER REGISTRATION

OWNERS NAME: _____

STREET ADDRESS: _____

CITY: _____ COUNTY: _____ STATE: _____ ZIP: _____

PURCHASED FROM: _____

STREET ADDRESS: _____

CITY: _____ COUNTY: _____ STATE: _____ ZIP: _____

DATE PURCHASED: _____

DATE: _____ OWNER'S SIGNATURE: _____

MODEL: _____

EQUIPMENT NAME: _____

SIZE: _____
