



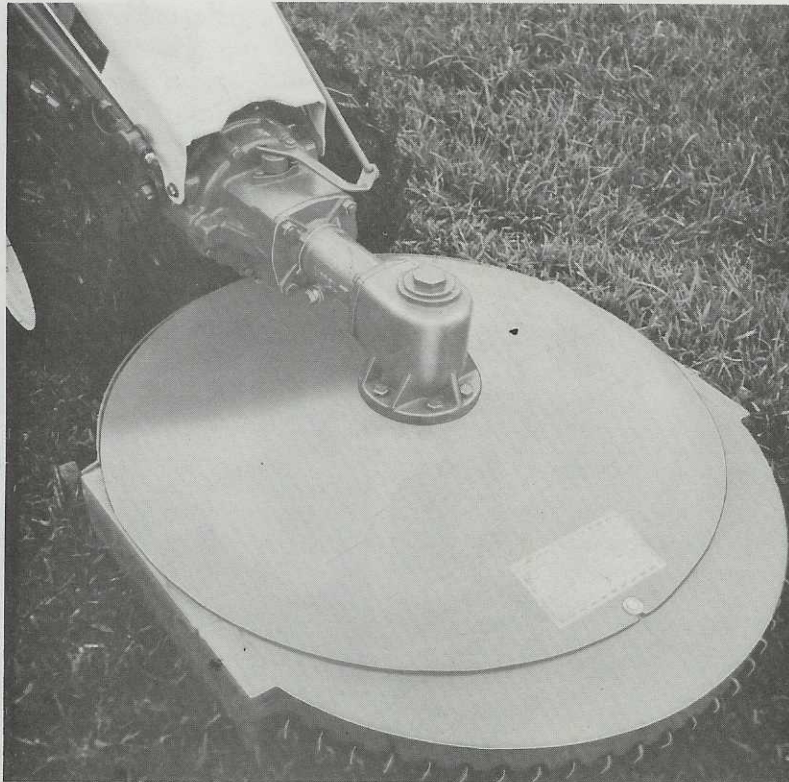
# GRAVELLY OPERATOR'S MANUAL

CLARKE-GRAVELLY CORPORATION  
A Studebaker-Worthington Company

## MANUAL

NAME: 30" ROTARY MOWER

PART NUMBER(S): Deck Assembly - 20468  
30" Mower Drive - 10230



30" ROTARY MOWER WITH 7.6 CUSTOM CONVERTIBLE TRACTOR

### GENERAL

1. The 30" Rotary Mower is designed and built to give many years of excellent service. The mower is recommended for rough mowing conditions; has all gear drive, heavy steel deck, rugged skids, and a heavy duty, adjustable blade. The mower attaches to all 7.6 convertible and C10A & C12 tractors.
2. The Owners Manual includes the parts list, setting up the mower, safety, operation, and maintenance instructions. Use the parts list for reference to individual part numbers. Contact the Gravely Dealer for further information.
3. CUTTING WIDTH: 30"  
LENGTH: 36 1/2"  
HEIGHT: 14 1/2"  
WIDTH: 32"  
WEIGHT: 120 lbs.  
DRIVE: Right angle bevel gear in cast iron housing, tapered roller bearings.  
DECK: Heavy duty 3/16" welded steel.  
BLADE: Steel, 30" length, 3/8" thick, hi-strength, hi-lift.  
FEATURES: All gear drive, adjustable swivel action, chain guard.  
USAGE: Heavy mowing conditions.  
APPLICATION: All 7.6 convertible tractors, C10A & C12 tractors.

To continue its program of quality and design improvement, the manufacturer reserves the right to change specifications, designs and prices without notice and incurring obligation.

Form No. 20758 (3-74)

Printed in U.S.A.

## OPERATION

1. Refer to the tractor Owners Manual for safety and operating instructions to engage and disengage P.T.O. (Power Take-Off).
2. After the P.T.O. is engaged run the engine at full speed. In thick, lush growth reduce ground speed (not engine speed) to allow the mower enough time to cut and discharge.

## ROUTINE MAINTENANCE

1. Check rotor shaft nut to insure tightness.
2. Check P.T.O. attaching bolts and nuts to insure tightness.
3. Check drive assembly to deck nuts and bolts to insure tightness.
4. Perform the lubrication as described in LUBRICATION, paragraphs 1 and 2.
5. Keep mower blade sharp and balanced.
6. Clear the mower of cuttings and debris.

## REMOVAL FROM TRACTOR

1. Reverse procedure of INSTALLATION, paragraph 1.

## ADJUSTMENTS

1. Swivel action of the mower is regulated by the nut and bolt on the swivel casting, fig 2. Loosening allows more swivel action; tightening reduces the action. The swivel action should allow the mower to follow ground contour.

2. The cutting height of the mower is adjusted by the loose collars, See paragraph 3 of ASSEMBLY.
3. Safety clutch action is regulated by the attachment clutch assembly, fig 1, Item 1. Loosen all 6 locknuts, Item 8. Tighten the 6 bolts all the way into the threaded back plate, Items 1 & 7. Back off each bolt 1/2 turn. Lock the bolts in position with the nuts.

## STORAGE

1. Clean mower of all cuttings and dirt.
2. Perform all lubrication maintenance.
3. Apply a light coat of oil to preserve the finish and appearance.

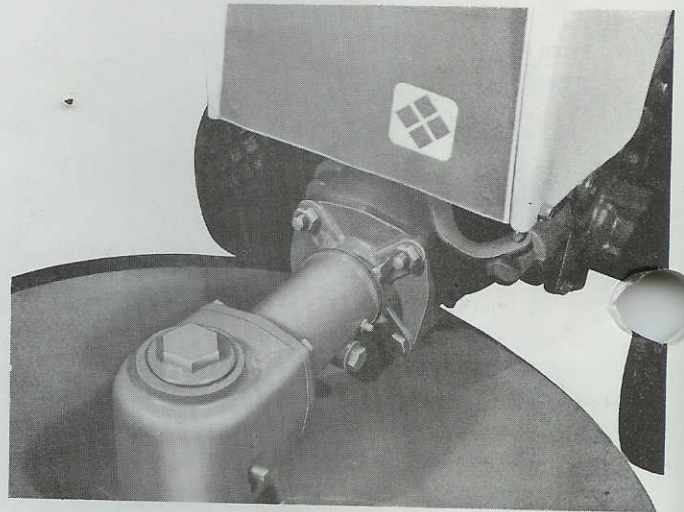


fig 3  
MOWER ATTACHED TO TRACTOR

## ASSEMBLY

1. Set the drive on the deck. Bolt it in place with the 6 bolts, flatwashers, lockwashers, and nuts. fig 1, Items 49, 50, 51, & 55. Insert the bolts from under the deck.
2. Remove nut, flatwashers, nut washers, and loose collars from the rotor shaft and install the blade as in fig 1.
3. Cutting height is determined by the placement of the loose collars above and below the blade, fig 1, Item 51. For an average cutting height, use 3 loose collars above and 3 loose collars below the blade. The 2 nut washers are always placed next to the flatwasher and nut as in fig 1. Tighten the rotor shaft nut to 100 ft. lbs. fig 1, Item 58. Equivalent tightness can be obtained with a 15367E1 Wrench or a 16" flex handle and socket.

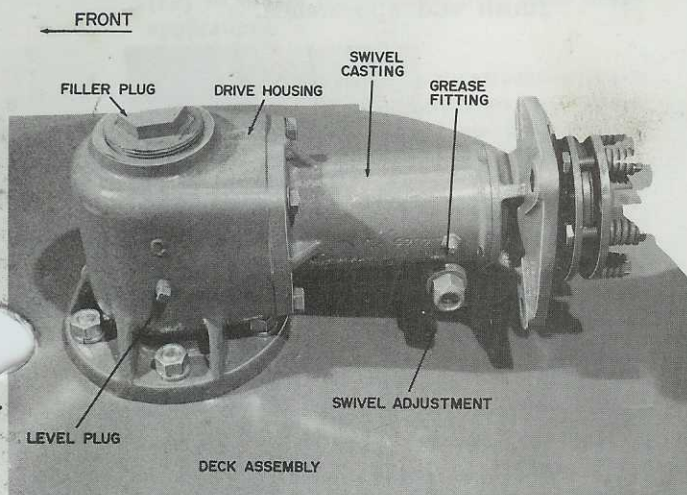


fig 2  
DRIVE MOUNTED ON DECK

## LUBRICATION

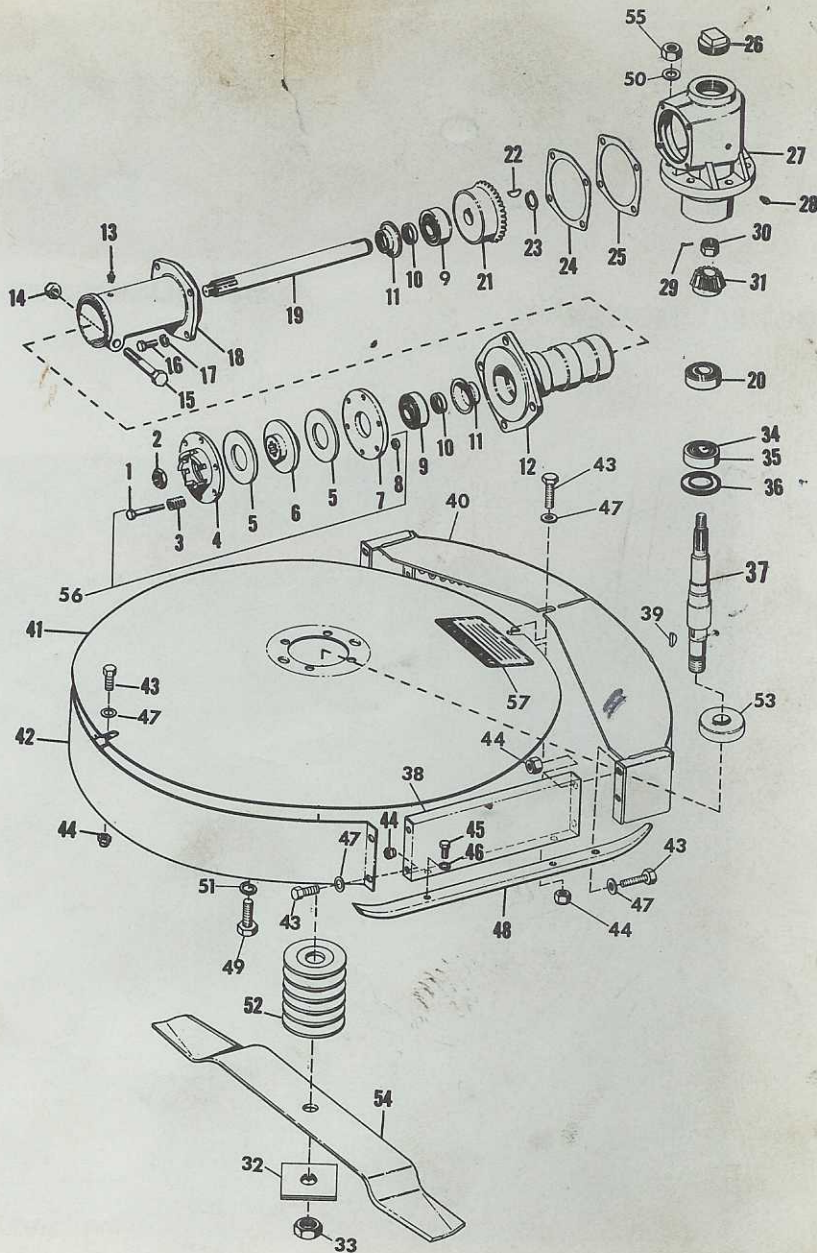
1. Remove the filler plug and level plug in fig 2. Fill the drive housing to the oil level plug with SAE 90 gear lubricant. Replace the plugs. Check the level periodically especially if signs of leakage are present.
2. Grease the swivel casting through the grease fitting on the casting with general purpose grease. Add grease until it comes out under the swivel adjustment. Regrease once a season; fig 2.

## INSTALLATION

1. The mower attaches to the tractor with 2 bolts and 2 nuts as shown in fig 3. Do not damage the threaded studs.

## SAFETY

1. REFER to the tractor Owners Manual to familiarize yourself with all controls before operation.
2. DO NOT ALLOW PASSENGERS to accompany operator at any time.
3. DO NOT ALLOW CHILDREN to operate equipment, nor allow adults to operate it without proper instructions.
4. INSPECT WORK AREA for rocks, glass, metal, bones, and any other foreign objects. Stay alert for holes and other hidden hazards.
5. USE EXTREME CAUTION when operating on slopes.
6. REDUCE SPEED on all side slopes and sharp turns.
7. DO NOT OPERATE equipment except from proper operator's position.
8. KEEP SAFETY devices and shields in place at all times.
9. DISENGAGE POWER to attachment and stop engine prior to making any adjustment or clearing the unit.
10. DO NOT WEAR LOOSE fitting clothing.
11. KEEP HANDS, feet, hair, clothing, etc., away from moving parts.
12. KEEP BYSTANDERS and pets removed from the work area.
13. EXERCISE CAUTION to avoid slipping or falling, especially when operating in reverse.
14. DIRECT DISCHARGE so as not to endanger life or property; such as people, pets, structures, cars, etc.



ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	181618	5/16-24 x 1-3/4 Hex Head Bolt	34	13142P1	Cone, Roller Bearing
2	13412P1	5/8-18 Locknut Esna	35	13139P1	Race, Roller Bearing
3	12871P1	Spring	36	13171P1	Oil Seal (Dual Lip)
4	12867P1	Dog Plate	37	19844P1	Rotor Shaft
5	12870P1	Friction Washer	38	12855P1	Skid Panel
6	12869P1	Drive Plate	39	124549	Key Woodruff #9
7	12868P1	Back Plate	40	10260A1	Chain Guard
8	18277P1	5/16-24 Thin Light Esna	41	10110A3	Deck Weldment
9	13143P1	Bearing Race	42	10109A1	Rear Fender Weldment
	13144P1	Bearing Cone	43	181596	5/16-24 x 7/8 Hex Head Bolt
10	13122P1	Oil Seal	44	190139	5/16-24 Hex Washer Insert Locknut
11	12550P1	Oil Seal Retainer	45	181593	5/16-24 x 5/8 Hex Head Bolt
12	11815P1	Shaft Housing	46	138538	5/16 Internal Tooth Lockwasher
13	94110100	Lincoln #5000 or Equiv. Grease Fitting	47	120386	5/16 x 47/64 x .065 Flatwasher
14	435507	1/2-13 Washer Insert Locknut	48	12866P1	Chain Guard Skid
15	180191	Bolt 1/2-13 x 3-1/4 Hex Head	49	180177	1/2-13 x 1-1/2 Hex Head Bolt
16	180122	3/8-16 x 1 Hex Head Bolt	50	120390	9/16 x 1-3/8 x .109 Flatwasher
17	138542	3/8 Internal Tooth Lockwasher	51	120384	1/2 Spring Lockwasher
18	12023P1	Swivel Casting	52	12858P1	Loose Collar 1/4"
19	12566P1	Drive Shaft	53	12861P1	Collar, Fixed
20	13145P1	Race, Roller Bearing	54	13209P1	Rotary Mower Blade, Heavy Duty
	13146P1	Cone, Roller Bearing	55	120378	1/2-13 Light Semi-Finish Hex Nut
21	12862P1	Bevel Gear	56	10102A1	Attachment Clutch Asser
22	120502	#11 Woodruff Key	57	18549P1	Decal, Danger
23	13187P1	Retaining Ring	NS	13646P1	Gear Shim .010
24	12490P1	Gear House Shim .005	NS	12852P1	Gear Shim .005
25	12491P1	Gasket	NS	14101P1	Gear Shim .020
26	10499P1	Pipe Plug	NS	13584P1	3 Link Chain
27	12853P1	Gear Housing	NS	13585P1	2 Link Chain
28	103877	1/8 Square Head Pipe Plug (Steel)			
29	119120	3/32 x 1-1/4 Cotter Pin			
30	125384	5/8-18 Hex Thick Slotted Nut			
31	12850P1	Bevel Gear			
32	20626P1	Washer, Spindle Nut			
33	451543	Nut, 7/8-9 Hvy. Jam Hex			

fig 1

ILLUSTRATED PARTS LIST



## ATTACHMENT LIMITED WARRANTY

This Limited Warranty is issued by Clarke-Gravely Corporation, Gravely Division, and consists of the following terms:

1. Only the original purchaser of new Gravely manufactured attachments is covered by this Warranty.
2. This Warranty covers repair or replacement of parts manufactured by Gravely which are defective in material or workmanship. Gravely will pay for parts and labor only.
3. The Warranty starts the date of purchase and lasts for NINETY (90) DAYS for attachments used in Roofer applications, and TWELVE (12) MONTHS for products used in all other applications.
4. Some components of Gravely attachments are not covered by the Gravely Warranty. These components are covered by the original manufacturer's warranty. They are:
  - (a) Tires - Goodyear, Goodrich, Armstrong, General and Firestone
5. To obtain warranty service on Gravely attachments including components not manufactured by Gravely, use this procedure:
  - (a) Notify the Gravely dealer from whom you purchased the attachment.
  - (b) If you have moved and it is not convenient to notify the selling dealer, notify the nearest Gravely dealer. You should supply this dealer with a copy of the bill of sale as proof of the date of purchase.
  - (c) Make arrangements to have the attachment delivered to the dealer (refer to paragraph 6(a) below).
  - (d) If you have any questions concerning the Gravely Warranty, they should be referred to:

Gravely  
Clarke-Gravely Corporation  
A Studebaker-Worthington Company  
One Gravely Lane  
Clemmons, N. C. 27012  
Attn: Manager of Customer Services
  - (e) Warranty service on Gravely attachments must be performed by an authorized Gravely dealer or Gravely factory branch.
6. This Warranty does not cover the following:
  - (a) Transportation between owner's home or place of business and the dealership. If the dealer provides the transportation of the attachment, he will charge the owner his usual rate for such service.
  - (b) Normal maintenance services and normal replacement of items such as belts lubricants, mower, plow or cultivator blades.
7. GRAVELY MAKES NO OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE PERIOD SET OUT IN PARAGRAPH 3 ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE STATEMENT MAY NOT APPLY TO YOU.
8. GRAVELY SHALL HAVE NO RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WARRANTY, INCLUDING, BUT NOT LIMITED TO, INCONVENIENCE, RENTAL OR PURCHASE OF REPLACEMENT EQUIPMENT, LOSS OF PROFITS OR COMMERCIAL LOSS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
9. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.
10. A Gravely registration card is supplied with each Gravely attachment. Please complete the card and return it to Gravely at the address listed on the card. The registration card will be used by Gravely for:
  - (a) Recording date of purchase.
  - (b) Notification of owners in compliance with the Consumer Product Safety Act, should any notification be necessary.The return of registration card is not required in order to take advantage of this Warranty.
11. This Warranty is not subject to change or modification by anyone, including Gravely dealers and no Gravely dealer is authorized to make any representations or promises on Gravely's behalf.