# GRAVELY CLEAN-CUT (20)

USER

MANUAL

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GRAVELY CLEAN-CUT MOWER

# LUBRICATION

 Use Only High Grade Lubricants Such As —

 Grease Fittings - Mobilgrease MP

 Gear Housings - Mobilube C140

 FILL TO CHECK PLUG LEVEL

 Engine —----Mobiloil A (SAE 30)

 Model Number

 Serial Number

 Manufactured by

 GRAVELY [LEAN-[UT MAWERS]

DIVISION STUDEBAKER PACKARD CORPORATION DUNBAR, WEST VIRGINIA

# GRAVELY CLEAN-CUT 20

#### INTRODUCTION

Your Gravely Clean-Cut 20 is a dependable, compact, quality-built mower that will give you years of rugged, satisfying service. We are happy to welcome you to the discerning family of Clean-Cut Users.

The Model 20 has the power, handlingease and adaptability to do large or small jobs equally well. It is ideal for the homeowner who wants a mower with a commercial users, a fleet of Clean-Cut 20's will save costly appropriations for annual equipment replacement.

By following these simple instructions, you will make sure that your Model 20 continues to save you both time and money.

## HANDLES AND WHEEL-DRIVE UNIT

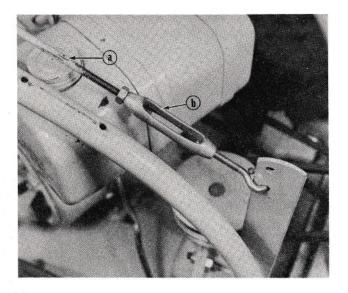
If the handles are folded in their shipping position when you receive your mower, you will have to raise them to their operating position and connect the Wheel-Drive Control Rod.

To raise handles:

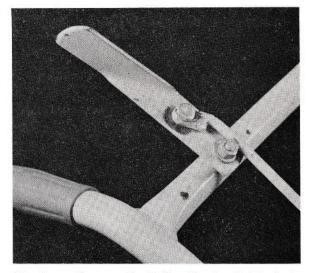
Take cap screws out of handle braces on either side.

Raise handles.

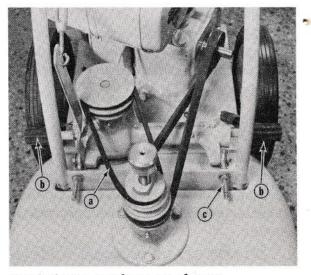
Reinsert cap screws and tighten nuts.



To connect the Wheel-Drive Control Rod: Place one end of the Control Rod (a) in turnbuckle (b). Do not tighten the turnbuckle.



Fasten other end of the Control Rod to lever. Lever should be positioned as shown.



Put belt (a) in place as shown.

Tighten turnbuckle to put tension on the belt and bring the rollers (b) back against the wheels.

Both rollers should touch the wheels simultaneously when the Drive Unit is aligned properly. If it isn't, adjust it yourself by loosening the nuts on either of the two eye bolts (c) and, by means of them, moving the Drive Unit back or forward as necessary.

#### CONTROLS

#### Starter

The Starter on your Clean-Cut 20 is integral with the engine and is a recoil type. To start the engine, pull the handle on top of it. The cord will automatically rewind when you release it.

#### Gear Lever

Stand behind the mower in the operator's position. The Gear Lever is the large one on the handle at your right hand. To put the Wheel-Drive Unit in gear, pull the Gear Lever back toward you. Push the lever forward when you wish to stop the mower.

#### Throttle Lever

From the operator's position, the Throttle Lever is the small one at your left hand. It controls the gas feed. Depress it to increase gas flow, raise it to decrease.

Make sure that the mower belt is installed as in illustration #3. When replacing it, put it on the motor pulley first--then on the mower pulley.

#### ENGINE

The engine on the Model 20 should be serviced as outlined in the engine manufacturer's instruction book. In case of trouble, consult your nearest authorized dealer.

DO NOT START the engine until you have serviced crank case and oil bath cleaner according to instructions.

#### LUBRICATION

Every 15 to 25 operating hours, lubricate the Mower Unit through zerk fitting with Mobilgrease MP. Overgreasing will do no harm, since surplus grease will move from the upper bearing down the threaded shaft to the lower bearing and eventually out through the grease retainer to form a better dust seal. The small wheels at the front of the Mower Unit require little attention as they carry no more than one pound each of the mower's weight. Check them occasionally to see that their spindles are tight in the frame and that the flat springs are snug.

The Wheel-Drive Unit should also be greased every 15 to 25 operating hours. Use Mobilgrease MP and lubricate through zerk fittings. Over-lubrication may cause excess grease to come out the ends and top of the unit, but will do no harm.

#### BLADE

The blade on your Clean-Cut 20 is made of the highest quality crucible spring knife steel. It is easy to sharpen and holds its cutting edge well.

You will notice that the blade is sharpened on all four edges. Only two of these are used at a time, the other two being held in reserve. When the original two cutting edges become dulled by use, turn the blade over and use the two sharp edges.

When all four cutting edges have been used, remove the blade and resharpen them. Use the original bevel marks as a guide.

To remove the blade, hold the boss on top of the mower pulley with a wrench. Take off the shaft nut and the flange washer at the bottom of the Mower Spindle.

After you have sharpened your blades, test its balance by holding it on the end of a nail, pencil or similar object. If it dips noticeably to one side, that side is too heavy. You can restore proper balance by grinding off some of the flat part of the heavy side of the blade.

When you replace the blade, make sure you tighten the shaft nut firmly since the pressure it exerts on the flange washer automatically gives the blade its proper degree of pitch.

#### **Cutting Height Adjustment**

To adjust the cutting height of the blade: Hold nut between Mower Pulley and the deck of the Mower with a lock wrench. Place another wrench on the boss at the top of the pulley. Turn boss counterclockwise to unlock spindle.

Turn knob clockwise to lower, counterclockwise to raise the blade height. When desired cutting height is obtained, place the two wrenches in their original positions and turn pulley boss clockwise to relock the spindle unit. The Clean-Cut 20 will give you two ground speeds. Put the Wheel-Drive belt (see (a) in illus. 3) on upper pulleys for high speed, on lower pulleys for low speed.

NOTE: DO NOT TURN ALLEN SET SCREW UNDERNEATH THE MOWER DECK. IT IS ADJUSTED AT THE FACTORY TO PREVENT THE SPINDLE HOUSING FROM VIBRATING.

#### Part No.

# Description

#### Price

#### WHEELS & ASSOCIATED PARTS

1055	Wheel Assembly, front gauge, 5 x 1	1.80
504	Wheel Only, front gauge, w/bushing	1.50
XX51	Bolt & Nut, gauge wheel spindle 3/8 x 2	.10
1010	Spring, flat gauge wheel tension	.20
2012	*Wheel & tire assembly, rear 12 x 2 w/bearings	5.50
2030	Bearing, rear wheel, 5/8 x 1 - 3/8 (2)	.60
XX255	Screw, 5/16 x 1/2 SAE rear wheel retaining	.10
XX254	Washer, 5/16 x 1-1/8 rear wheel retaining	.03
2015	Spring, compression (between wheel & frame)	.30
4050	Axle, rear, 5/8 x 19-3/8	2.00
3076	Guard, rock (swings on rear axle)	.50
	*Wheel and tire assembly not sold separately	
	CENTER ASSEMBLY	
5014	Center Assembly Complete	27.50
5027	Housing, Center Assembly	9.00
XX35	Bolts, Center Housing to Mower Frame 5/16 x 1 USS	.10
5044	Shaft, Vertical 15	3.00
5060	Adjusting Knob	.80
5100	Bearing & lock nut assembly upper #204	4.60
5162	Bearing, lower 20352	2.40
5140	Retainer, upper grease, (leather)	.10
5141	Washer, fiber	.10
5142	Retainer, lower grease (leather)	.10
5110	Ring, Upper Snap	.15
5120	Ring, lower snap	.15
5174	Sleeve, lower 6 - 1/2"	2.25
5190	Spacer, lower (above upper blade Washer)	.15
5180	Spring, lower sleeve tension	.15
XX261	Screw, Allen Hd. set (lower sleeve) 7/16" x 1/2"	.15
5200	Flange Washer, upper blade	1.00
5210	Flange Washer, lower blade	.85
5220	Blade, 20" x 2" x 1/8"	3.25
XX181	Nut, blade retaining, 1/2" USS Heavy Hx	.10
5090	Pulley, vertical shaft (S.P. models)	4.00
XX310	Grease Fitting, zerk, 1/4" straight	.15

# SELF PROPELLING UNIT

6510	S. P. Unit, complete	30.00
6511	Housing, complete (halves not sold separately)	7.00
6505	Pulley, 2 step	3.50
6512	Shaft, vertical	2.00
6514	Pinion Gear, Vertical Shaft	2.50
5160	Bearing, Vertical shaft #203 (1)	2.26
5162	Bearing, Vertical shaft ( $\#203SZ$ ) (1)	2.40
5162	Bearing, Horizontal Shaft (#203SZ) (2)	2.40
6522	Shaft, Horizontal	3.50
6524	Gear, Miter (horizontal shaft)	3.10
6530	Roller, Drive (Drives against wheel)	1.00
XX235	Screw, Allen Head Set 5/16 x 5/16 (drive roller)	.10
6534	Spring, 4" (S.P. unit to handle)	.40
6542	Turnbuckle 1/4"	.35
6546	Rod, Control to S.P. unit	.80
XX13	Bolt, 1/4 x 3/4 USS (holds rod to throwout lever)	.05
6550	Lever, throwout (bolts to handle cross bar)	.50
XX117	Bolt, throwout lever mounting $1/4 \ge 1-3/4$	.10
6554	Bracket, operating (on S.P. unit)	.75
3570	Bolt, adjusting (L shape)	.30
6580	Eyebolt, 3/8 x 3/4 SAE (S.P. Unit to Handle Cross Piece (2)-	.35
XX37	Bolt, $5/16 \ge 1-1/4$ USS (mounts S.P. unit to eyebolt) (2)	.10
XX122	Washer, eyebolt spacer, 3/4" (10)	.03
XX254	Washer, 5/16 x 1-1/8 (2)	.03
XX310	Zerk, Grease 1/4 straight (2)	.15
	HANDLES & ATTACHING PARTS	
8032	Handles, complete	10.00
8052	Throttle Control	1.50

8040	Grip, Handle, plastic 7/8"	.25
8036	Brace, upright 17" (2)	.75
XX161	Nut, upright Brace to Mower frame 7/16 USS	.10

# MISCELLANEOUS PARTS

8101	Cleaner, Right Rear Wheel	.25
3020	Mower Frame	48.00
3512	Pulley, Engine, 3/4" Shaft Opening	1.50
8074	Decal	
3520	Pulley, engine 5/8 shaft opening	1.50
8064	Plate, name (4" x 14" handle cross piece)	1.00
8076	Clip, Throttle Housing	.10
5539	Belt, Drive (engine to center shaft pulley)	2.06
XX39	Bolt, engine mounting $5/16 \ge 1-1/2$ (4)	.10
5525	Belt, Self-Propelling	1.24
8110	Leaf Pulverizer Screen w/blade	8.50
4124	Engine, Clinton Model 900 - 3-1/4 HP	66.40

