

**OPERATOR'S MANUAL
AND
PARTS CATALOG**

**LAWN & GARDEN
TRACTOR**

BRILLION IRON WORKS, INC.
BRILLION, WISCONSIN

2E-100

OPERATION

Before attempting to operate your tractor read thoroughly all the instructions contained here and in the engine manual.

The first step is to see that the clutch control lever is in neutral. The clutch control lever on your tractor has five positions. (See Figure 1)

Make sure that the gasoline shut-off valve has been opened.

Open the throttle half-way before attempting to start engine.

TO PERMIT FREE WHEELING

Push clutch control lever to high speed position. Remove belt from fly wheel (see Fig. 2). When starting engine after replacing belt, be sure to move tractor forward before placing in reverse. Failure to do this can break small drive belt.

LUBRICATION

Use a good grade grease and pump until grease appears at the following fittings. Grease after every 25 hours of operation. (See Figure 3)

1. Front Wheel Hubs (1) and (2).
2. Variable Speed Pulley Shaft (3).
3. Layshaft Mounting Brackets (4) and (5).
4. Layshaft Bracket (6), (7) and (8).
5. Rear Axle Bearing Bracket (9) and (10).
6. Differential (11), (12) and (13).
7. King Pin (14).

Lubricate all other moving parts with motor oil as required.

ADJUSTMENTS

Your tractor is expertly adjusted before shipment but the following instructions are included for your future reference.

TO ADJUST CLUTCH CONTROL LEVER

(See Figure 4)

1. Place clutch lever (1) in neutral notch on latch plate (2).
2. Loosen nuts (3) and (4).
3. Locate pulley (5) to allow 1/16" clearance with reverse drive plate (6).
4. Tighten nuts (3) and (4).

TO ADJUST BELT GUIDES

(See Figure 4)

With clutch lever in neutral, locate belt guides (9) and (10) to allow belt to run in a line tangent with the O.D. of pulley (5) and pulley (11).

TO ADJUST LAYSHAFT BRACKET

(See Figure 2)

1. To compensate for belt stretching, loosen nut (1) and tighten nut (2).
2. To decrease clutch lever travel between reverse and forward position, loosen nut (2) and tighten nut (1).

TO ADJUST STEERING CABLE

(See Figure 5)

1. Tighten nuts (1) and (2) to maintain tension on cable rollers. Perform after first 30 days and at regular intervals thereafter.

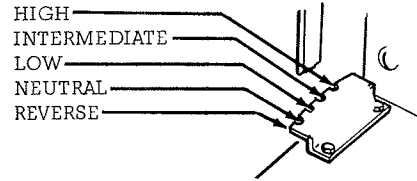


Fig. 1

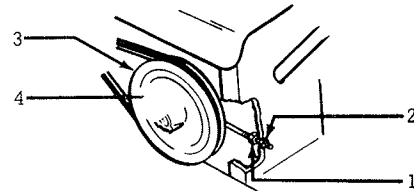


Fig. 2

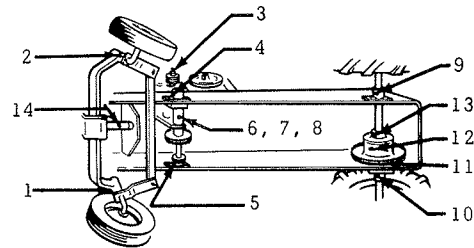


Fig. 3

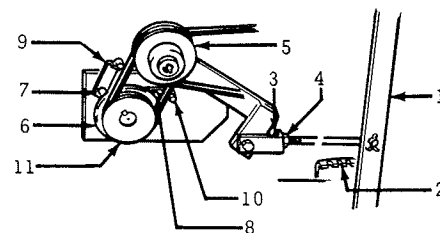


Fig. 4

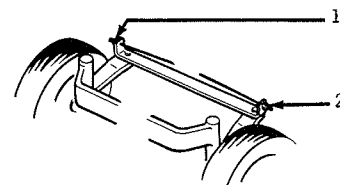


Fig. 5

MAINTENANCE

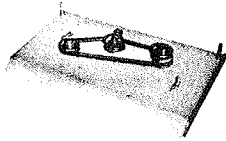
Detailed instructions for the care and maintenance of the engine are contained in the engine manufacturer's operating and parts instruction manual.

A careful periodic check should be made to see that all bolts are tight and that every part is being properly lubricated. This will assure you of the long, carefree service that is built into each tractor and attachment.

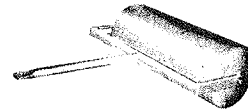
Air pressure of 6 to 8 lbs. must be maintained in the rear tires to obtain maximum traction and tire life. To obtain maximum traction, the arrows on the sides of the tires should rotate in their indicated direction when the tractor is in forward motion.

Air pressure of 28 to 30 lbs. should be maintained in front tires for maximum efficiency. If your tractor is equipped with semi-pneumatic tires, the only attention required is good care.

ATTACHMENTS



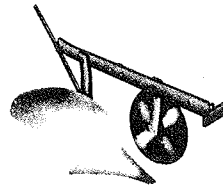
ROTARY MOWER
32" cut. Timken bearings.
Underneath mount. Individual clutch.
Model P32R - Wt. 48 lbs.



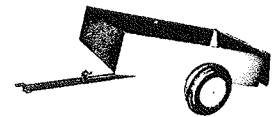
LAWN ROLLER
36" wide, 18" diameter heavy gauge steel.
Electrically welded. Water or sand filled.
Model U107 - Wt. 105 lbs..



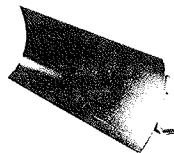
CULTIVATOR
Six steel blades, reversible.
Adjusts laterally and vertically.
Model P14 - Wt. 50 lbs.



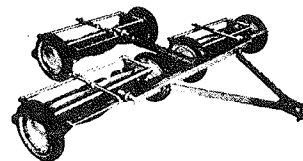
PLOW
6 1/2" turning plow. Adjustable depth.
Complete with coulter.
Model P15 - Wt. 41 lbs.



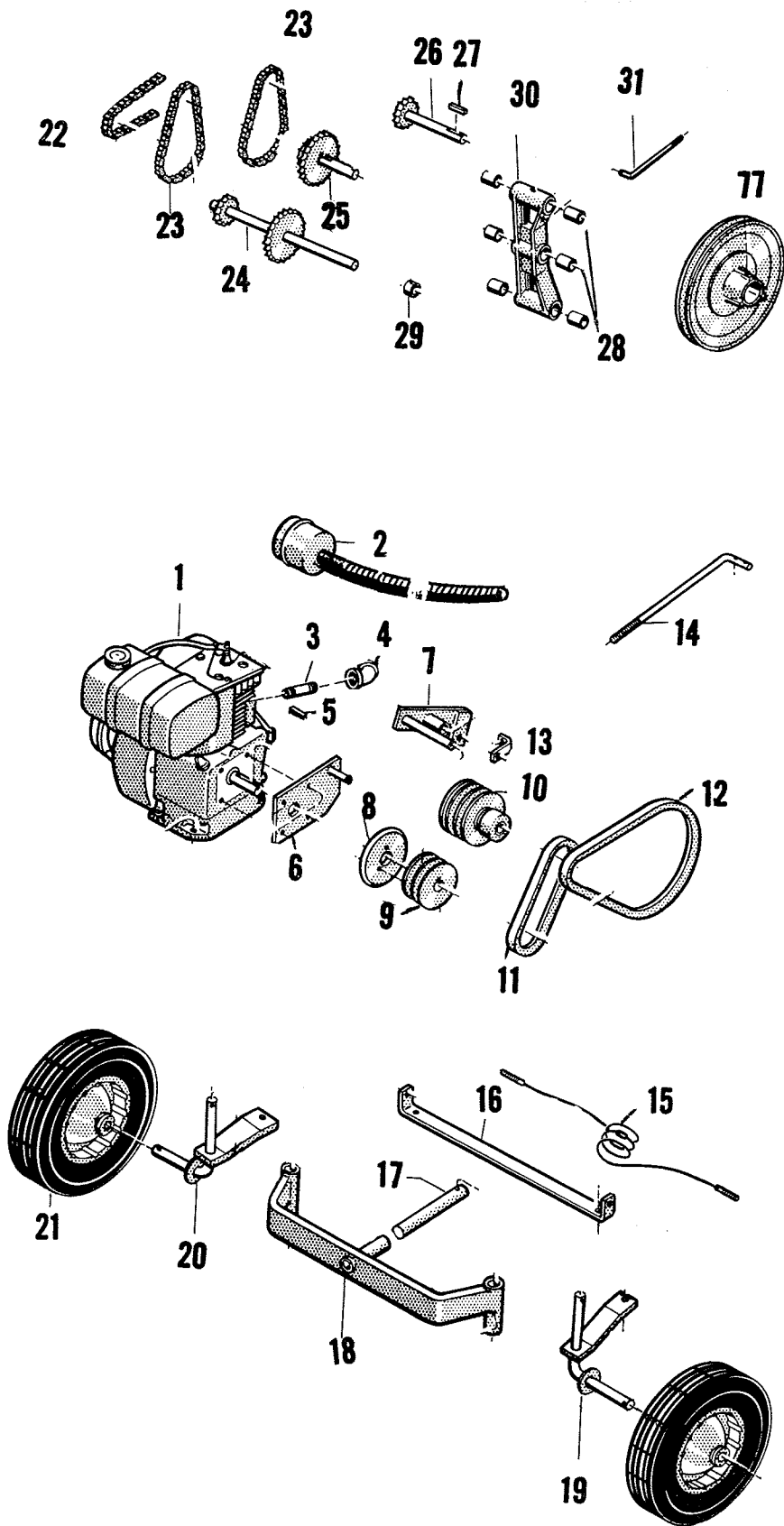
DUMP TRAILER
All steel body. 27 x 48 x 10 high.
Removeable tail gate. 500 lb. capacity.
Model U106 - Wt. 140 lbs.



SCRAPER
Heavy 7 gauge steel plate.
36" wide with adjustable skids and hitch.
Operator controlled.
Model P12 - Wt. 65 lbs.

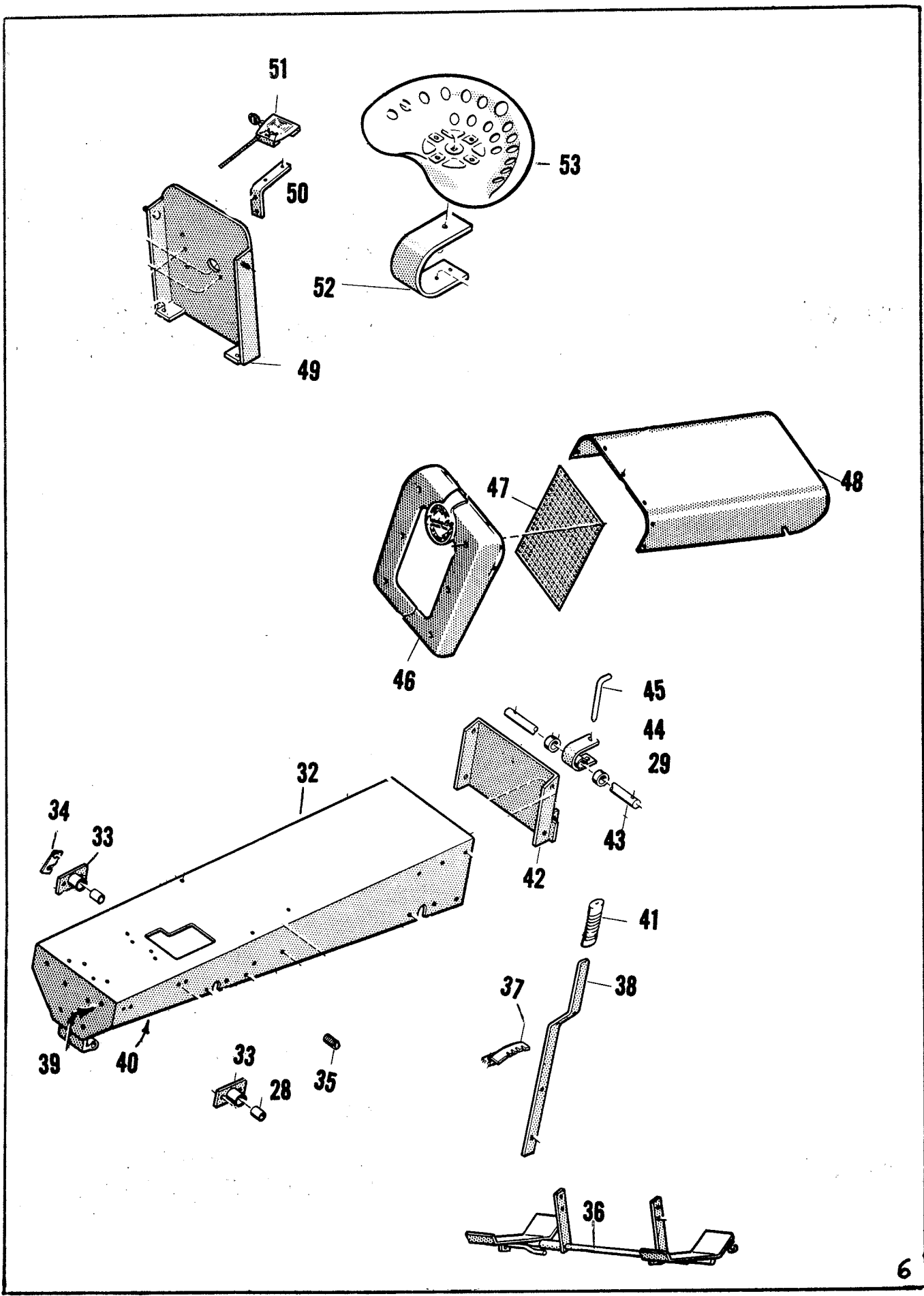


3 GANG REEL MOWER
Heavy duty construction. Cuts 58" swath.
Complete with gang hitch.
Model U100 - Wt. 237 lbs.



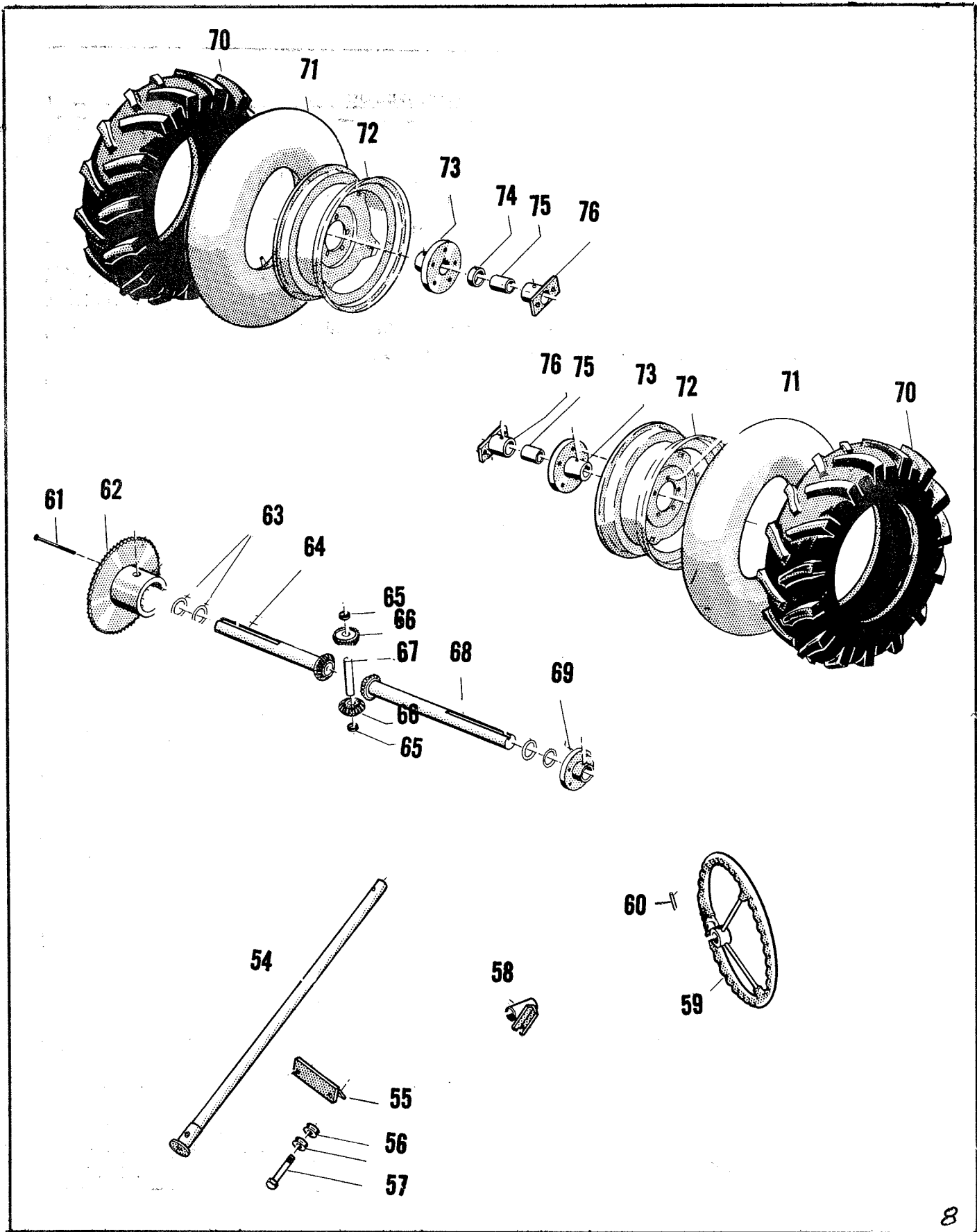
2E-100

Index No.	Part No.	Description
1	2E 4	Engine 5-3/4 H.P.
2	2E 160	Muffler & Pipe Assembly
3	2E 161	Pipe Nipple
4	2E 162	Pipe Elbow
5	2E 158	Key
6	2E 111	Idler Bracket Adaptor
7	2E 112	Shift Bracket
8	2E 140	Reverse Drive Plate
9	2E 177	Drive Pulley
10	2E 114	Variable Speed Pulley
11	2E 14	Belt
12	2E 15	Belt
13	2E 113	Clutch Rod Extension
14	2E 18	Clutch Rod
15	2E 45	Steering Cable
16	2E 171	Tie Rod Assembly
17	2E 24	King Pin
18	2E 21	Front Axle Assembly
19	2E 22	L. H. Spindle Assembly
20	2E 23	R. H. Spindle Assembly
21	2E 8	Front Wheel
22	2E 12	Drive Chain
23	2E 129	Layshaft Chain
24	2E 128	Sprocket & Shaft Assembly
25	2E 127	Int. Sprocket Assembly
26	2E 126	Sprocket & Shaft Assembly
27	2E 446	Key
28	2E 83	Bushing
29	2E 31	Collar
30	2E 125	Layshaft Bracket
31	2E 40	Layshaft Adj. Rod
77	2E 130	Layshaft Pulley



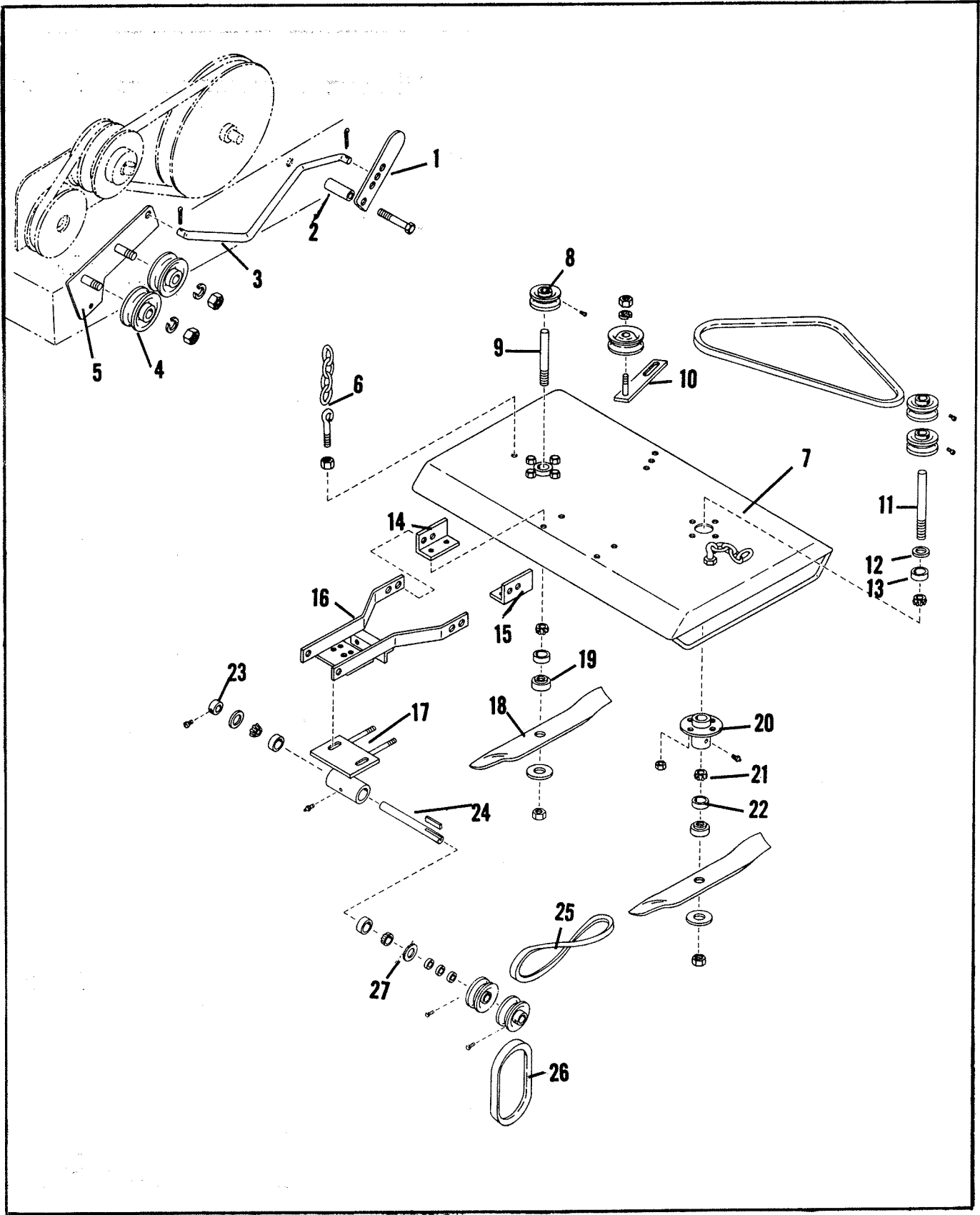
2E-100

Index No.	Part No.	Description
32	2E 150	Frame
33	2E 125	Layshaft Mtg. Bracket Assembly
34	2E 49	Foot Pedal Latch
35	2E 47	Clutch Lever Spring
36	2E 37	Foot Pedal Assembly
37	2E 35	Shift Bracket
38	2E 36	Clutch Lever
39	2E 154	Front Axle Support Assembly
40	2E 153	Front Support Assembly
41	2E 16	Handle Grip
42	2E 27	Rear Brace Assembly
43	2E 32	Drawbar
44	2E 30	Clevis Assembly
45	2E 34	Drawbar Pin
46	2E 109	Hood Casting
47	2E 110	Grille
48	2E 108	Top Hood
49	2E 20	Dash Assembly
50	2E 46	Throttle Bracket
51	2E 5	Throttle Control
52	2E 48	Seat Spring
53	2E 6	Seat



2E-100

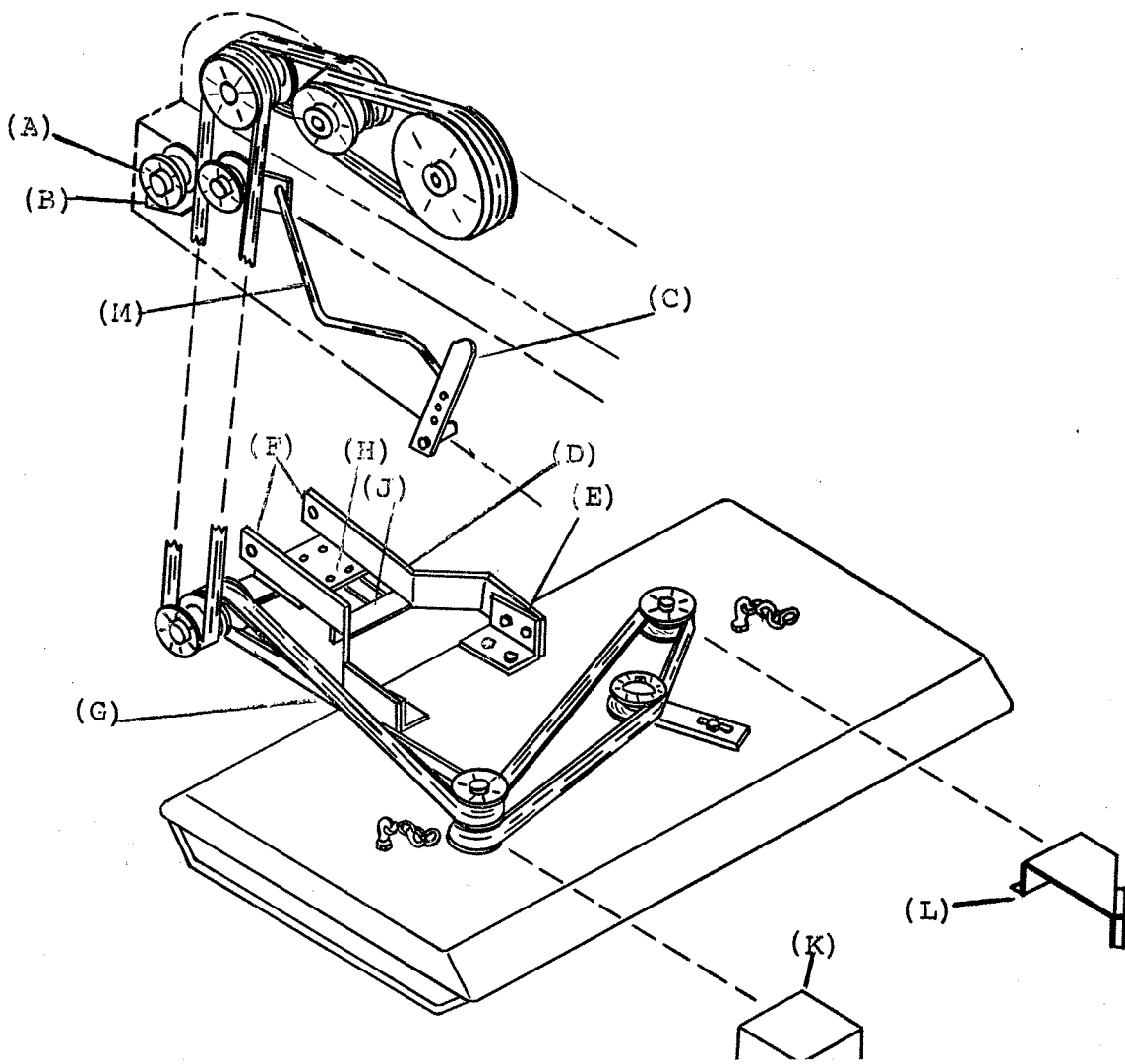
Index No.	Part No.	Description
54	2E 42	Steering Shaft
55	2E 77	Steering Bracket
56	2E 78	Idler Pulley
57	2E 79	Bolt
58	2E 44	Dash Steering Bracket
59	2E 7	Steering Wheel
60	1C 659	Rollpin
61	2E 155	Bolt
62	2E 91	Housing Assembly
63	2E 92	Shim Washer
64	2E 87	R.H. Axle Assembly
65	2E 89	Spacer
66	2E 94 ⁹³	Shim Washer <i>Differential Gear</i>
67	2E 90	Shaft Spider
68	2E 86	L.H. Axle Assembly
69	2E 88	Housing Cap
70	2E 145	Tire
71	2E 146	Tube
72	2E 144	Rim
73	2E 29	Hub
*	2E 167	Key
74	2E 149	Collar
75	2E 102	Bushing
76	2E 28	Rear Axle Bracket Assembly



P 32 R ROTARY MOWER PARTS LIST

Index No.	Part No.	Description
1	2E-439	Idler Control Lever
2	2E-438	Idler Lever Sleeve
3	2E-437	Idler Control Rod
4	2E-450	Idler Pulley (3)
5	2E-435	Idler Plate Assembly
6	2E-411	Chain Assembly (2)
7	2E-401	Hood Weldment
8	2E-420	Pulley (5)
9	2E-415	Short Spindle
10	2E-408	Idler Link Weldment
11	2E-414	Long Spindle
12	2E-423	Spacer 1/8"
13	2E-419	Spacer 1/4"
14	2E-407	Bracket Angle, L. H.
15	2E-406	Bracket Angle, L. H.
16	2E-426	Arm Assembly
17	2E-430	Idler Plate Assembly
18	2E-425	Blade (2)
19	2E-424	Adjusting Collar (2)
20	2E-416	Spindle Housing (2)
21	5C-911	Bearing Cone (6)
22	5C-912	Bearing Cup (6)
23	2E-31	Collar
24	2E-434	Countershaft
25	2E-405	V-Belt, 5L 520
26	2E-404	V-Belt, 5L 430 (2)
27	2E-421	Cup Closure (6)
*	2E-422	Flinger (6)

MOWER BELT DRIVE ASSEMBLY



RF-100

Installation And Operation

2E400 32" Rotary Mower

The drawing on the opposite page shows the 32" Rotary Mower with all parts in their relative mounted positions. Careful attention to these operating instructions will assure long trouble-free mower life.

Your mower, as shipped, consists of three major assemblies, 2 loose belts and two pulley guards together with the necessary hardware. Open the package and identify these parts by comparing them to the drawing.

The belt idler assembly (A) is mounted on the tractor frame at hole (B) using the bolt with the spring on it. The plate is placed against the frame on the outside and the spring, washer and nut are inside the frame. Draw the nut up to compress the spring, stopping when about $\frac{1}{4}$ " of bolt projects through the nut. The operating lever (C) is mounted in the open hole on the LH side of the tractor frame by removing one nut, placing the assembly bolt through the hole, and replacing the nut on the inside. These nuts, one outside, one inside, are then tightened against each other. They are positioned on the bolt allowing just enough slack for the lever to move freely.

The mounting bracket assembly (D) is next attached to the mower mounting angles at (E). Notice that one of the holes in the mounting angles is slotted, allowing adjustment. With the mower sitting on a level floor, the hitch pin holes (F) should be 8" above the floor. Tighten the nuts securely.

The drive belt marked 2E405 is installed at (G) over the top mower pulley and the inner countershaft pulley EXACTLY AS SHOWN. THE BELT MUST COME OFF THE LEFT SIDE OF THE MOWER PULLEY AND GO OVER THE TOP OF THE COUNTERSHAFT PULLEY. If this is not done, the mower will run the wrong direction.

The tension on this belt is adjusted by loosening the bolts (H) and making the necessary adjustments on the two studs at (J) loosening one nut and tightening the other. The belt tension is correct when the belt can be moved up and down about $\frac{1}{2}$ " with a light finger pressure midway between pulleys. When the adjustment is correct, retighten all nuts at (H) and (J). This adjustment should be checked monthly during the mowing season.

The pulley guards (K) and (L) can now be mounted with the hardware provided.

The mower may now be mounted under the tractor. This is easily done by raising the tractor front end 6 or 8 inches and sliding the mower under. Line up the mower mounting bracket arm holes with the accessory bracket under the tractor, and put the hitch pin through, securing it with the spring hairpin. Lower the tractor to the ground.

The last belt is now installed as shown, over the engine outer pulley, down the REAR side of the two idlers, and over the outer countershaft pulley. Tension is applied to this belt when the mower is placed in operation by moving the lever (C) downward to the rear. Tension is adjusted by placing the control rod (M) in proper lever hole. New belts usually require use of the inner or the center hole.

The two chain-eyebolt assemblies are now hooked into the U-brackets under the foot pedals. The eyebolt height must be adjusted to individual taste as to how high the mower is to lift when the pedal is depressed. The chain can be hooked through different links also, to make height adjustments.

Before attempting to operate the mower, check all bolts and nuts to be sure they are tight.

OPERATION AND MAINTENANCE

This type of rotary mower is designed for lawn care only, and is not recommended for brush clearing or removal of dense weedy overgrowth. Such heavy material will clog the mower unless it is handled with a series of cuts, starting high and cutting progressively lower, and taking care to clear the mower from time to time by backing up and allowing material to be ejected.

The more ordinary type of lawn care requires little such attention, and can be mowed at a pace consistent with easy handling around shrubbery etc.

Start your mower when the tractor is in neutral gear and the engine at about half throttle. Slowly move the operating lever downward to the rear until it locks in position. Mowing may now proceed. Fairly high engine speeds are usually used together with 1st or 2nd gear tractor speeds.

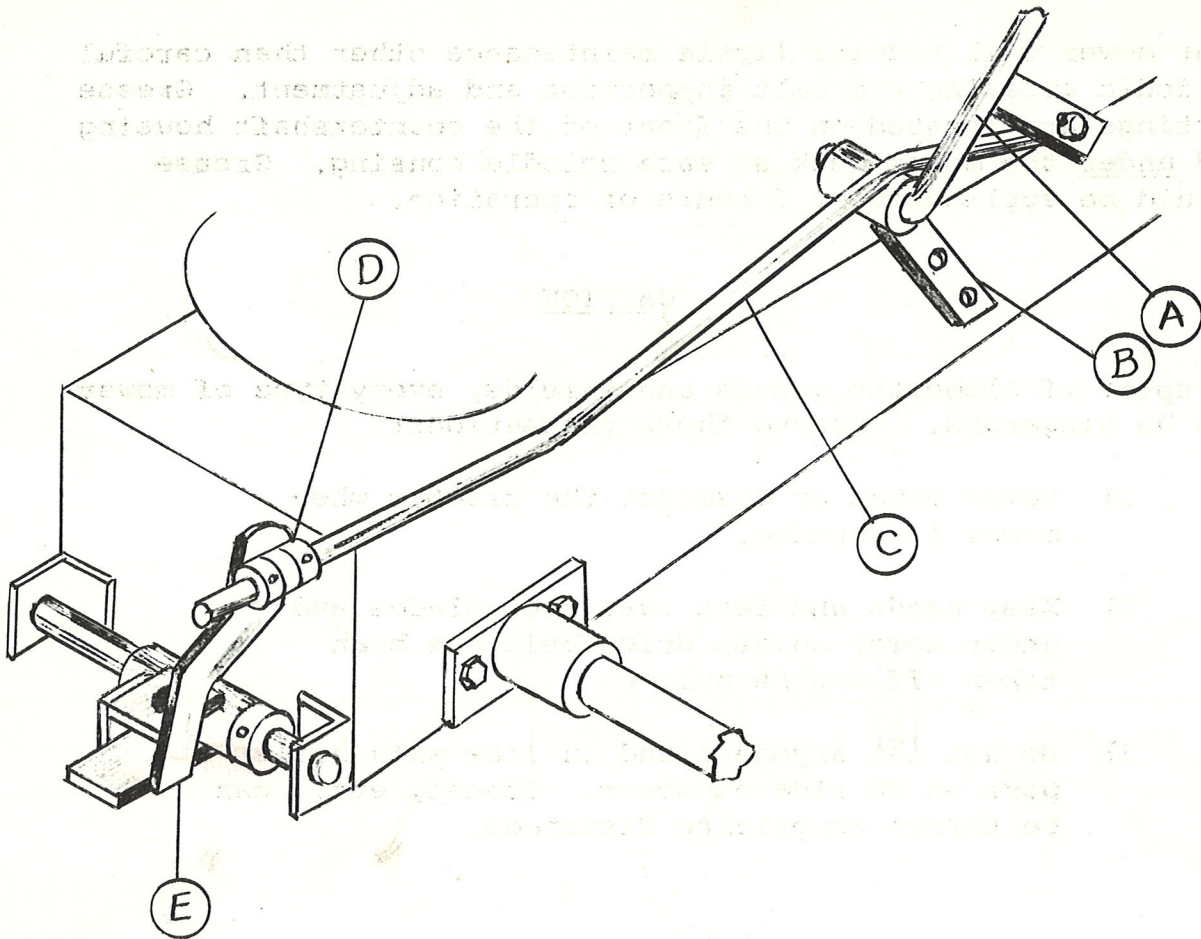
Your mower will require little maintenance other than careful periodic greasing and belt inspection and adjustment. Grease fittings are located on the front of the countershaft housing and under the mower deck at each spindle housing. Grease should be applied every 5 hours of operation.

CAUTION

In spite of elaborate guards and shields, every type of mower can be dangerous. Observe these precautions:

- 1) Never mount or dismount the tractor when mower is running.
- 2) Keep hands and feet away from blades and under mower unless drive belt has been taken off engine pulley.
- 3) Do not let anyone stand in line with outlet port on RH side of mower. Stones, etc., can be thrown surprising distances.

2E-100



2E 594

Tool Lift Kit

Your Brillion Tool Lift Kit is shipped to you completely assembled. It is to be installed on the right side of the GT-6 Tractor as shown above.

Remove the two bolts holding the right foot pedal bracket at (B) above. Position the tool lift bracket over the holes and bolt it, together with the foot pedal bracket, using the longer bolts supplied. In the correct position, the lift rod (C) is toward the inside of the lift handle (A).

The hitch bracket (E) is mounted on the drawbar at the rear by fitting it over the drawbar rod. The pull-type hitch supplied with the Tractor may be moved to the left or removed entirely. Use the set collars to position the hitch bracket in the center, or elsewhere if desired.

The position of the mounted implement is controlled by placing the two collars (D) such that the implement is clear of the ground when lift handle (A) is all the way forward and locked.