# OPERATING INSTRUCTIONS

AND PARTS LIST



ARD-MAN Incorporated 1410 W. Ganson St., Jackson, Michigan

### **RULES FOR SAFE OPERATION**

Your Rotary Mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

- Remove all sticks, stones, wire, and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
- 2. Always disconnect spark plug cable during repair or refueling operations.
- 3. Always start engine from side opposite discharge chute.
- NEVER place hands or feet under mower or near discharge chute while engine is running.
- 5. Do not tilt mower at extreme angle while engine is running. Cut grass on hills and banks sideways, not up and down.
- 6. Always stop engine when not cutting grass.
- 7. Be sure minors are thoroughly instructed in correct operation and are properly supervised while using this mower.
- 8. Do not fill gas tank while engine is running. Do not spill gasoline on hot engine.
- Keep children and pets away from area at all times during mowing operation. Never allow mower to discharge grass toward any person.
- 10. Do not attempt to start engine while mower is resting in high grass.

Note: Should excessive vibration develop, check your blade and crankshaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged crankshaft.

## SUGGESTIONS FOR MORE EFFICIENT, AND MAINTENANCE-FREE OPERATION GENERAL MOWING:

- 1. Keep your lawn clear of rocks, stones, or any other objects that may be hit by mower blade, resulting in injury to persons, or damage to property or mower.
- 2. Always keep mower blade "Knife" sharp and balanced for maximum cutting efficiency.
- 3. Always start engine with mower on level surface where blade will not drag on tall grass or other obstructions. After starting, let engine warm up several minutes at slow speed before starting to mow.
- 4. When mowing under normal conditions, without grass catcher, run mower at 1/2 to 3/4 throttle for best results.
- 5. When cutting tall heavy growth, or on rough ground, place mower in highest cut position and gradually reduce to desired cutting height over course of two or three mowings.
- 6. Check oil level frequently and keep all screws and bolts tightened securely.
- 7. Keep mower clean (especially top engine well and underside of mower housing.)

### **USING GRASS CATCHER:**

- 1. When using grass catcher, operate mower engine at 3/4 to full throttle and move mower slowly.
- 2. In heavy dense turf, set cutting height in medium to high position.
- 3. Allow wet grass to dry before attempting to mow with grass catcher attached.
- 4. Empty catcher bag thoroughly before storage.

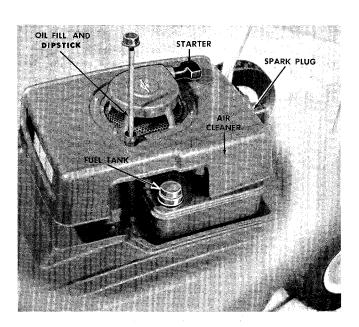
### LAWN CARE:

- 1. It is not advisable to cut off more than 1/3 of the total length of the grass at any one mowing.
- 2. When mowing thick, lush or wet grass, start at outside of lawn and mow in counter-clockwise direction to prevent mower from recutting clippings from previous rounds.
- 3. When mowing thin or dry grass, start at outside of lawn and mow in clockwise direction to progressively discharge clippings to center of lawn where they can easily be removed.
- 4. Recommended normal cutting heights for different types of grass:

1 1/2	to 21	<u> -</u>	Med. to Med. High	Marion blue grass
1 1/2	to 21/	<b>½</b> —	Med. to Med. High	Kentucky blue grass
1	to 2	_	MedLow to Med.	Fescues
1	to 2		MedLow to Med.	Rye grass
1	to 11/	<u>′</u> 2 —	Low to Med. Low	Bermuda
1	to 11/	<b>½</b> —	Low to Med. Low	Zoysia
1	to 2	_	MedLow to Med.	Bent grass

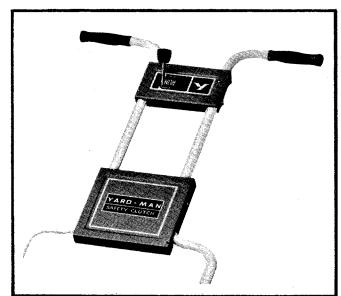
### BEFORE STARTING ENGINE

1. Remove oil dipstick and fill crankcase with 1½ pints S.A.E. No. 30 oil, replace dipstick securely.
2. Fill fuel tank with good grade regular, clean, fresh gasoline DO NOT MIX OIL WITH GASOLINE.
FOR COMPLETE ENGINE INFORMATION, READ ENGINE INSTRUCTION BOOKLET BEFORE STARTING OR OPERATING.



### STARTING ENGINE

- 1. ALWAYS LOWER SAFETY CLUTCH PEDAL TO DISENGAGE BLADE BEFORE STARTING ENGINE.
- 2. Move hand throttle to choke position.
- 3. Pull starter rope with quick, full stroke once. Move hand throttle to fast position and pull starter rope again.
- 4. When engine starts, move hand throttle to "IDLE" position until engine warms up.

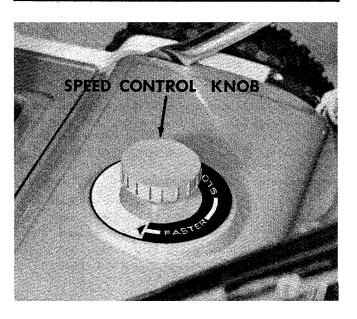


### **OPERATING INSTRUCTIONS**

TO PROPEL MOWER FORWARD, simply raise the handle . . . TO STOP MOWER, lower the handle.

### SPEED CONTROL

The forward speed of your mower can be adjusted as desired. To adjust speed, lower the handle to stop mower and turn speed control knob CLOCKWISE for faster speed or COUNTER-CLOCKWISE for slower speed.



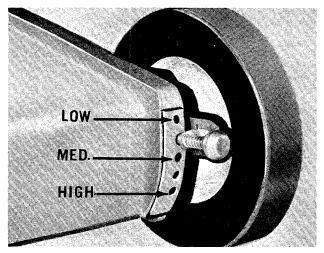
### HEIGHT OF CUT ADJUSTMENT

The cutting height of your mower can easily be adjusted from low to high cut. DO NOT MAKE ADJUST-MENTS WITH ENGINE RUNNING.

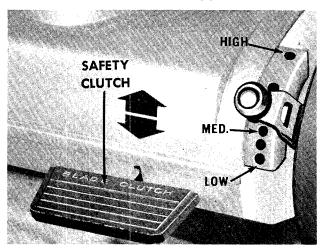
### TO ADJUST CUTTING HEIGHT

- 1. Pull out plungers on front wheel adjust levers and move levers DOWN for higher cut or UP for lower cut as shown and release plungers. Be sure plungers are firmly seated in adjustment holes.
- 2. Pull out plungers on rear wheel adjust levers and move levers UP for higher cut, or DOWN for lower cut as shown and release plungers. Be sure plungers are firmly seated in adjustment holes.





FRONT WHEEL



REAR WHEEL

### **BLADE CLUTCH**

The blade clutch provides the utmost safety in mower operation, ALWAYS DISENGAGE CLUTCH before starting engine. To engage blade clutch with maximum ease and efficiency follow these simple steps

- 1. Tilt mower back slightly on rear wheels.
- 2. Move to right of mower as shown, place left foot under clutch pedal and "flip" pedal upward.
- 3. The blade clutch engages gradually within 2 or 3 seconds to prevent unnecessary wear. Allow engine to regain normal speed before lowering front wheels and mowing.
- 4. To disengage clutch, step to right of mower as shown and with left foot, press pedal downward.

### TO ADJUST PROPELLING UNIT

As propelling unit "wears-in" it is possible that handle may have to be lifted higher to engage propelling unit. To reduce the amount of handle travel required remove rear cover from propelling unit at rear of mower and turn drive cable adjusting nut COUNTER-CLOCKWISE 1 or 2 turns. Then tighten jam nut by turning CLOCKWISE to lock adjustment securely.

### TO ADJUST BLADE CLUTCH

If blade slips under load, adjust clutch as follows:

Remove rear cover from propelling unit. Loosen clutch adjusting jam nut. Rotate clutch adjusting turnbuckle ¼ turn clockwise from operators position. Hold turnbuckle in position and tighten jam nut securely.

# Drive Cable Adjusting Turnbuckle Jam Nut Drive Cable Drive Cable Drive Cable

### LUBRICATION AND MAINTENANCE

All wheel bearings are pre-lubricated at the factory and require no further attention until mower is serviced.

Engine oil should be changed after the first 5 hours of operation and each 20 hours of operation thereafter.

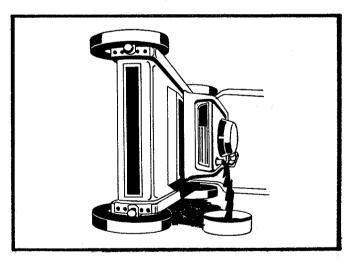
### TO CHANGE OIL

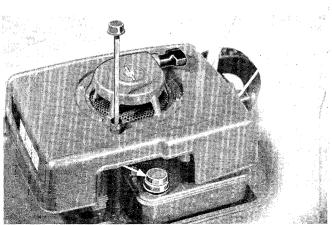
Oil should be drained while engine is warm. Disconnect spark wire and secure at least 1" away from spark plug. Drain gasoline from fuel tank, remove oil dipstick and tilt mower on it's left side to allow oil to drain completely into a small can as shown. After draining, refill crankcase with 1½ pints S.A.E. No. 30 oil and replace dipstick securely.

The air cleaner protects the engine against grit and dirt. Extremely dirty air cleaner element may cause engine to stall. SEE ENGINE INSTRUCTION MANUAL FOR PROPER AIR CLEANER MAINTENANCE.

### **BREAK-IN PERIOD**

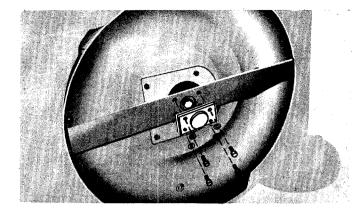
During the first ten hours of operation, check the following items frequently.
OIL LEVEL
Check oil level by removing dipstick.
SAFETY CLUTCH ADJUSTMENT
(See safety clutch adjustment.)
CHECK ALL BOLTS, NUTS AND SCREWS FOR TIGHT-NESS.

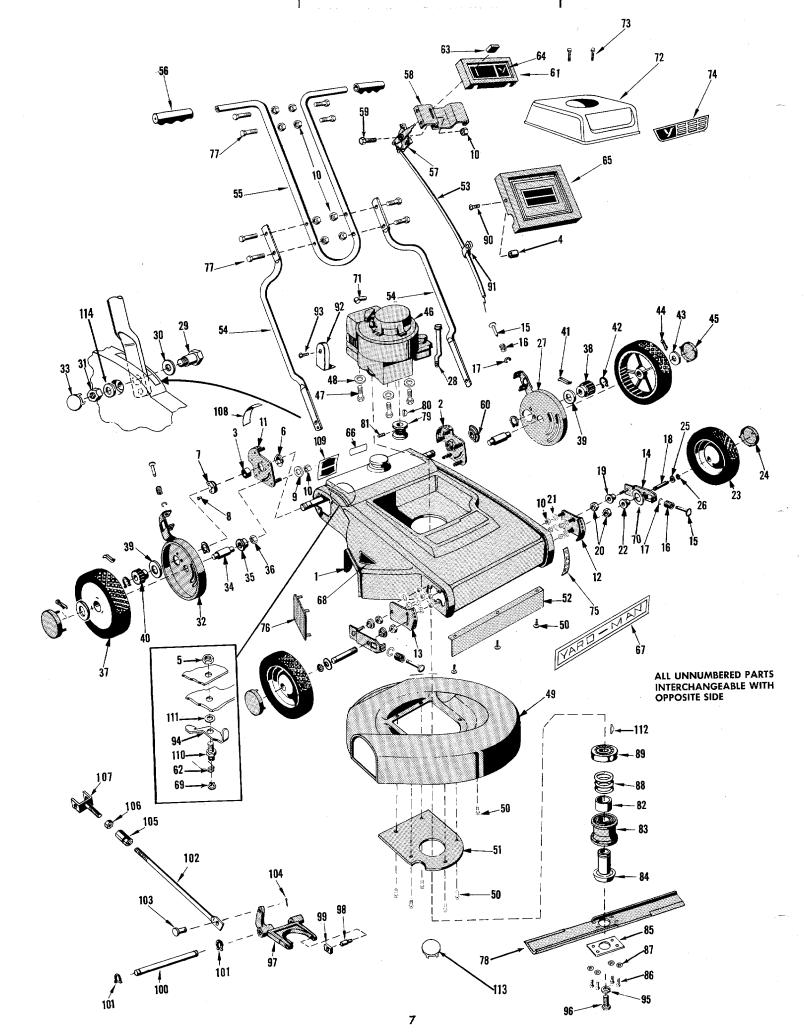




### TO REPLACE BLADE

- 1. Be sure engine is stopped, disconnect spark plug wire and secure at least 1" away from spark plug.
- 2. Tip mower with carburator side up.
- 3. Remove blade bolts and washers.
- 4. Remove blade and replace with a new one.
- 5. Sharpen dull blade maintaining proper balance.



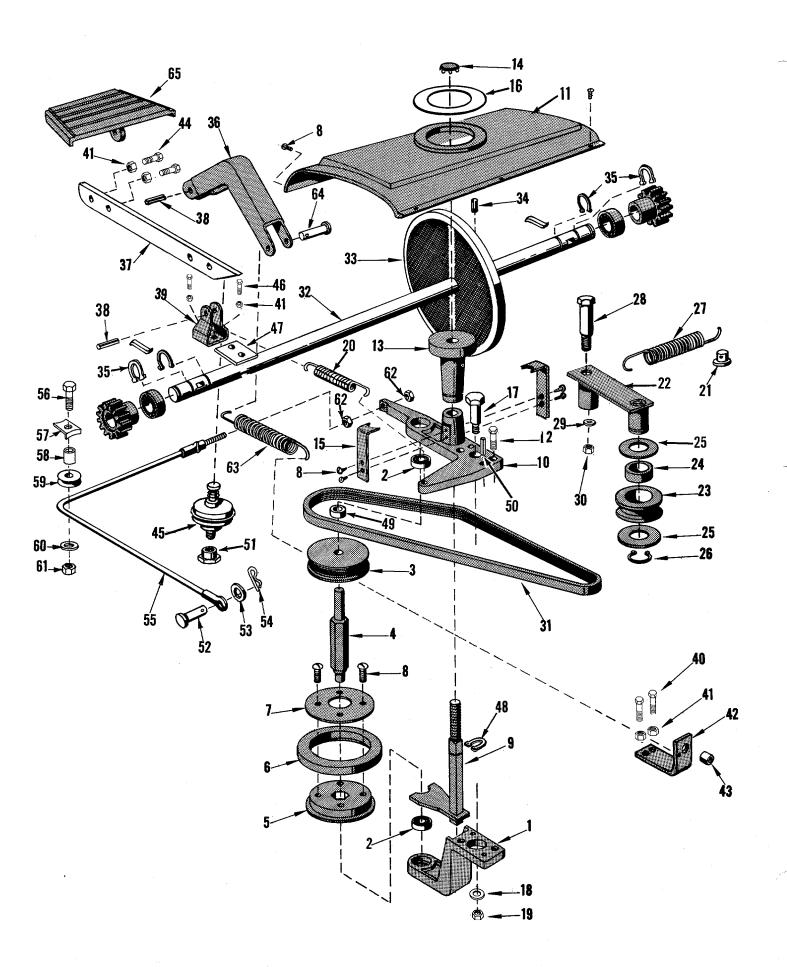


### **PARTS LIST**

### MODEL 2210-0

Your Mower is right hand (R.H.) or left hand (L.H.) as you mow.

RE NO	F. D. PART NO.	NAME OF PART	REF	: . PART NO.	NAME OF PART
1		Housing—Blade	53	0171-29	Conduit and Wire
2	2111-69-17	Assembly—Plate-wheel adjust—	54	4712-47-41	Handle-Lower
_		L.H. Rear	55	4712-45-41	Handle—Upper
. 3		Bearing—Rear Drive	56	1710-15	Grip—Handle
4	- ,	Spacer	57	2142-56	Throttle Control
5		*Nut (¼-20 Hex. Lock)	58	3609-264-17	Bracket—Throttle Control
6		Retainer—Bearing	59	1509-74	*Bolt (¼-20 x % Hex. Hd.)
7		Assy—Retainer & Spacer R.H	60	1182-4	Retainer Assy-L.H.
8	9	Rivet (3/16 dia. x 13/32)	61	2118-28-17	Cover—Throttle Control
9	1540281	Washer (17/64 I.D. x ¾ O.D.	62	1642-75	Spring
10	1538-8	x 16 GA.) *Nut (¼-20 Hex. Lock)	63	1643-34-40	Knob
11	2111-70-17	"Nut (¼-20 Hex. Lock)	64	1616-186	Label—Throttle Control
, ,	2111-70-17	Assembly—Plate — Wheel Adjust	65	3500-225	Cover—Handle
12	2111-71-1 <i>7</i>	R.H. Rear	66	1605-313	Name—Plate
12	4111-71-17	Assembly—Plate — Wheel Adjust	67	2616-183	Yard-Man Label
13	2111-72-17	L.H. Front	68	1616-138	Label—Caution
, 13	2111-72-17	Assembly—Plate — Wheel Adjust	69	1650-31	Ring—Retaining
7.4	1110 00:17	R.H. Front	70	1540-84	Washer—Axle to Plate
14		Lever-Wheel Adjust	.71	1624-126	Sleeve—Spark plug wire
15	1547-9	Pin-Adjusting	72	4699-64-41	Shroud-Engine
16 17	1642-18 1650-10	Spring—Pin Actuating	73	1511-23	Screw (#6 x ¼ Thd. Cut
18		Ring-Retaining	<b>-</b> ,	0414 14	"Sems")
_	1631-5	Axle-Wheel	74	2616-141	Label—Shroud
19	1657-10	Bushing—Pivot & Wheel Adjust	75	1616-193	Label—Wheel Adjust Front
20	41-028	*Nut (5/16-24 Hex. Hd.)	76	3104-6-17	Mulcher Plate
21	1540-81	Washer— $(17/64 \times \% \times #16 GA.)$	77	1509-90	*Bolt (¼-20 x 1¼ Hex. Hd.)
22	1 <b>657-</b> 7	Bushing—Axle to Adjusting	78	3604-40-01	Blade
		Plate	79	1626-60	Pulley
23	1108-100-41	Assembly Wheel & Tire—Front	80	1009	Key
24	2674-32-01	Hub Cap—Front	81	1508-14	Set Screw
25	39-012	Washer—Axle (½ x 1" x .058)	82	1652-62	Bearing
26	1650-1	Ring	83	2601-106	Clutch Housing
27	2118-23-17	Assy-Cover & Adjusting	84	1145-12	Assy-Sleeve, Ring & Plug
		Lever L.H.	85	2622-78	Blade Cover
28	0170-3	Oil Dipstick Assy	86	1509-94	Bolt (14-20 x 9/16 Hex. Hd.)
29	1513-54	Bolt Special	8 <b>7</b>	1018	Lockwasher
30	1552-9	Wave Washer	88	1642-70	Spring
31	41-028	Nut (5/16-24 Hex. Lock)	89	1652-65	Bearing—Blade Clutch
32	2118-22-17	Assy-Cover & Adjusting	90	1511-18	*Screw (#10-32 x % Thd. Cut)
		Lever R.H.	91	1689-2	Cable—Clamp
33	159	*Washer (5/16 x % x 1/16)	92	2189-2-47	Muffler Extension
	1631-26	Axle-Wheel	93	1511-30	*Screw (#8-32 x % Thd. Cut)
35	1657-7	Bushing	94	1609-262	Bracket
36	1538-23	*Nut-Lock (5/16-24 Hex. Lock)	95	1076	Lockwasher (% Split)
37	1108-101	Assembly Wheel & Tire—Regr	96	1509-24	*Bolt (%-24 x 1% Hex. Hd.)
38	425	Pinion—L.H.	97	2678-17	Yoke
39	109	Washer—Felt	98	1645-15	Trunnion
40	428	Pinion—R.H.	99	1704-5	Brake Shoe
41	323	Pawl	100	1547-27	Pivot Pin
42	1650-21	Ring—Retaining		1650-8	Retaining Ring
43	141	*Washer	102	2683-51	Clutch Rod
44	142	Cotter Pin—Wheel Retaining		1545-11	Clevis Pin
45	2674-33-01	Hub Cap	104	3-88	Cotter Pin
46		Engine Ass'y B & S Model		1539-45	Nut
,		# 82992 Type 0203-01		1534-23	*Nut (¼-28 Hex.)
47	1513-56	Bolt—Engine Mounting (%-16		1132-61	Adjusting Bracket
		x 1¼ Hex. Hd. "Tap-Tite")		1616-194	Label—WHL. HDJ. — Rear
48	1076	Washer—Lock — Split		1616-197	Label—Clutch
49	2162-6-17	Assembly—Grass Baffle		1513-60	Bolt—Special
50	1117	*Screw (#10-32 x % Thd. Cut)		1540-23	Washer
51	2606-75-17	Plate—Baffle Access		1646-8	Key
52	2602-28-17	Comb—Front (Stamping)	113	1649-38	Plug
E.	م±يسسدوررااا س	• -	114	159	*Washer
го	r Illustration—S	ee rage	40		



### **PARTS LIST**

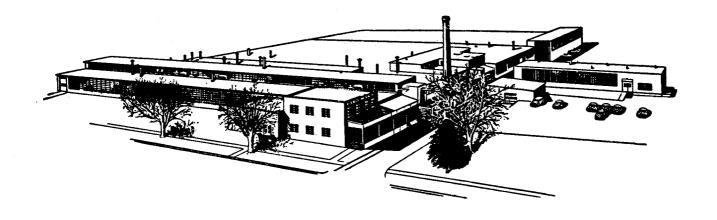
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REF.	PART NO.	NAME OF PART	REF. NO.	PART NO.	NAME OF PART
1	2678-18	YokeLower	30	1538-13	* Nut-Lock (%-16 Hex. Lock)
2	1652-64	Bearing	31	1651-36	Belt-Poly-"V" ("J" Section
3	1626-59	Pulley—Poly-V "J" Section—			4 rib)
3	1020-37	Hex. Drive	32	2632-113	Shaft—Rear Wheel Drive
4	1632-111	Shaft—Ring Drive	33	2675-16	Disc-Friction Drive
<del>4</del> 5	1644-65	Hub—Friction Ring	34	1548-12	Pin-Disc to Drive Shaft
_	1607-12	Ring-Friction	35	1650-21	Ring-Shaft Retaining
6 7		Ring—Retaining Friction Ring	36	2625-20	Clutch Link
8	1607-10	* Screw—(#10-32 x 7/16 "Sems"	37	2680-43	Arm
8	1117	Phillips Hd.)	38	1548-20	Roll Pin
_	10		39	2609-248	Bracket
9	1119-40	Assembly Yoke & Shaft	40	1509-35	Bolt (¼-20 x % Hex. Hd.)
10	3678-19	Yoke-Upper	41	1538-8	Nut (¼-20 Hex. Lock)
11	3622-72-41	Cover—Rear	42	1609-249	Bracket
12	1509-74	* Bolt (¼-20 x % Hex. Hd.)	43	1657-28	Bushing
13	1643-30	Knob—Speed Change	43 44	1509-34	<del>-</del>
14	1649-24	Plug—Button			* Bolt (¼-20 x ¾ Hex. Hd.)
15	1609-252	Bracket—Knob Retaining	45	1133-5 1016	Actuator Assy
16 17	1616-172 1513-50	LabelBolt—Shoulder Yoke to	46	1010	*Bolt (¼-20 x % Hex. Hd. Thd. Cutting)
		Housing	47	1609-284	Bracket—Arm Stop
18	1008	* Washer—(13/32 x 13/16 x	48	1650-1	Ring Retaining
	.000	1/16)	49	1540-80	*Washer (½ x 11/16 x 3/32)
19	1538-13	* Nut (%-16 Hex. Lock)	50	1548-21	Roll Pin (3/16 x 3/32)
20	1642-72	Spring Yoke Actuating	51	1539-47	Nut—Special
21	1545-11	Pin—Clevis Spring Mounting	52	1545-11	Pin-Clevis (¼ x ½)
22	1132-63	Assembly Idler Bracket &	53	1540-61	*Washer (¼ x ½ x 1/16)
	1102 00	Spacer	54	1547-4	Hairpin
23	1626-61	PulleyIdler Poly-V "J"	55	2127-6	Assy—Clutch Cable
20	1020-01	Section	56	1509-88	*Bolt (10-32 x 11/16 Hex. Hd.)_
24	1652-18	Bearing—Idler Tension	57	1629-34	Retainer—Cable
24 25	1543-16	Washer—Thrust (Sintered	58	1624-46	Spacer
25	1545-10	Bronze)	59	1626-37	Pulley
07	1750 0	•	60	1097	*Washer
26	1650-9	Ring—Retaining (Tru-Arc	61	1534-8	*Nut (#10-32 Hex. Lock)
^-	1740 73	#5133-62)	62	1534-1	*Nut (#10-32 Jam)
27	1642-71	Spring—Idler Tension	63	1642-60	Spring
		Bolt—Shoulder Idler Pivot	64	41-049	•
28	1513-58	(%-16 Shoulder)	65	2663-12-40	Pin—Clevis (¼ x 1½) Pedal—Clutch
29	1076	* Washer-Lock Idler Pivot		3622-72-41	
		(% Split)	66		Cover—Rear
			67	1616-172	Label

For Illustration—See Page 9

<sup>\*</sup>Standard Hardware Item—May Be Purchased Locally



"You are cordially invited to visit our plant at any time."