

# OWNER'S GUIDE

10 CENTS

**Model No. 121-570**

## SELF - PROPELLED ROTARY MOWER

### WARRANTY

For one year from date of purchase, MTD Products Inc., will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

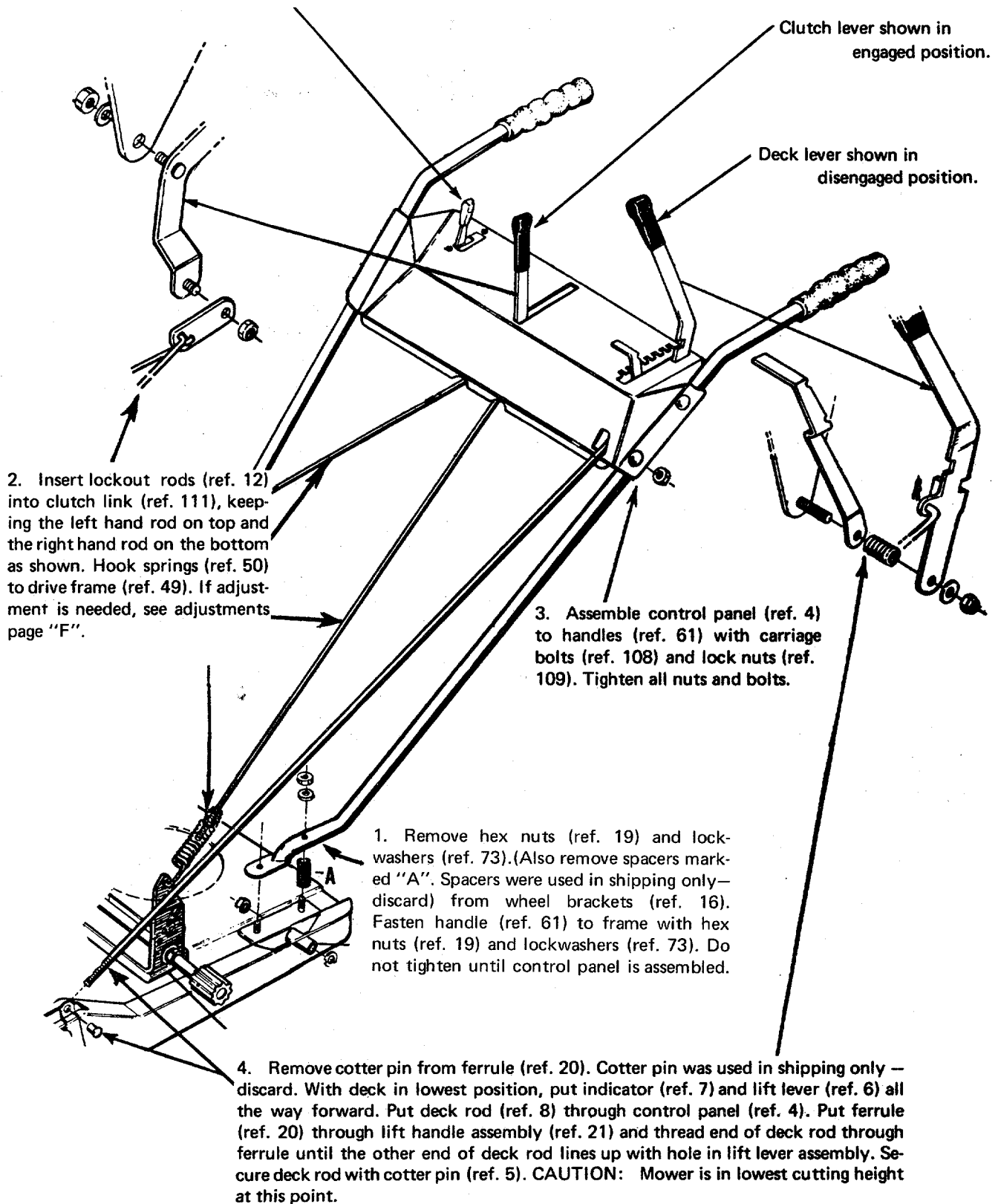
### SAFETY RULES

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

1. 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 repairs or refueling operations.
  3. Always start engine from side opposite discharge chute.
  4. 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. Do not fill gas tank while engine is running. Do not spill gasoline on hot engine.
  8. Keep children and pets away from area at all times during mowing operation. Never allow mower to discharge grass toward any person.
  9. Do not attempt to start engine while mower is resting in high grass.
  10. Check all nuts and bolts, particularly the blade bolts, for tightness. This is especially important during the initial operation period. Make this same check periodically thereafter.
  11. While operating the mower, if any foreign object is struck, stop the mower and inspect for damage. Do not restart or operate the mower until all damage has been repaired.
- WARNING:** Should excessive vibration develop, check your blade and blade shaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged blade shaft.

# ASSEMBLY INSTRUCTIONS

5. To assemble throttle control loosen, but do not remove, screw securing throttle control wire assembly at engine. Move throttle control lever on handle panel to "CHOKE" position. Move lever to which control wire is fastened to engine to full choke position. Retighten screw to secure throttle control wire assembly.



## OPERATION

1. Before starting engine, lubricate all bronze bearings on the drive shaft of the self-propelled mechanism.
2. Check lubricant in the gear box. This must be maintained half full at all times and should be checked prior to each mowing. See LUBRICATION.
3. Check lockout control levers for proper operation. If too great a pressure is needed to operate these controls, damage can be done to both the mechanism and the rods. Re-adjust so only a slight pressure is needed to operate both the blade engaging control and the self-propelled lockout control.
4. Service engine with gasoline and oil. See engine instructions for complete care and maintenance of engine. READ DIRECTIONS CAREFULLY.
5. Be sure engine crankcase is filled to capacity with proper grade of oil.
6. Move blade engaging lever to "OFF" position.
7. Move lockout control of "OFF" position.
8. Move throttle control to "CHOKE" position.
9. Crank engine; move throttle control lever to "FAST" position as soon as needed to keep engine running during warm-up period.
10. The deck lever is on the left side of the handle panel. It is used to engage the blade. The indicator lever is located to the lower part of the deck lever. It is used to set the mower deck at the desired cutting height. Forward position is for the lowest cutting height. Rear position is for the highest cutting height.
11. The clutch lever is located in the center of the handle of panel. It is used to engage or disengage the drive mechanism. The rear position disengages the drive. The forward position engages drive and puts mower into forward motion.
12. The throttle control is located on the right hand side of handle panel. This controls engine speed.
13. Fast engine speeds produce better cutting conditions. However, unit should be run at slower speeds until operator is thoroughly familiar with controls.
14. Never attempt to clean or make any adjustments with the engine running.
15. A brief break-in period is essential to insure maximum engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first five hours of operation. After the initial change, oil should be changed every twenty-five hours of operation or as operating conditions dictate. Always check oil before operating the mower. BE SURE CRANKCASE IS FULL!
16. Proper lubrication must be maintained at all times.
17. Appropriate clothing should be worn when cutting brush or heavy weeds. Safety shoes and safety glasses are highly recommended.
18. The engine is stopped by moving the throttle control lever to "STOP" position.

Refer to parts drawings. Lubricate after each 25 hours of operation the parts indicated. Use multipurpose

automotive grease on parts marked . . .



and SAE 30 engine oil on parts marked . . .



**IMPORTANT:** Always stop engine and disconnect spark plug wire before cleaning, lubricating, or doing any kind of work on the lawn mower.

1. **Wheels** — Wheel bearings are ball bearing. Lubricate periodically with a few drops of oil (SAE No. 10 or 20).
2. **Throttle** — Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil (SAE No. 10 or 20) for ease of operation.
3. **Engine** — Follow engine manual for lubrication instructions.
4. **Gear Box** — Check lubricant in the gear box. This must be maintained half full at all times and should be checked prior to each mowing. The gear box is packed at the factory with Alduralube Heavy or Temprite No. 2. It is suggested that this or an equivalent type and quality fibrous high heat wheel bearing grease be used in maintaining this mechanism.

## MAINTENANCE

1. **Cutting Blade** — The blade may easily be removed for grinding or replacement as follows:
  - a) Remove bolts and lockwashers holding blade and hub assembly to blade spindle shaft.
  - b) Remove blade and hub assembly from blade spindle shaft.
  - c) Remove two bolts, lockwashers, and nuts holding blade to blade hub.

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

Upon reassembling, make certain all parts are assembled properly and tightened securely.

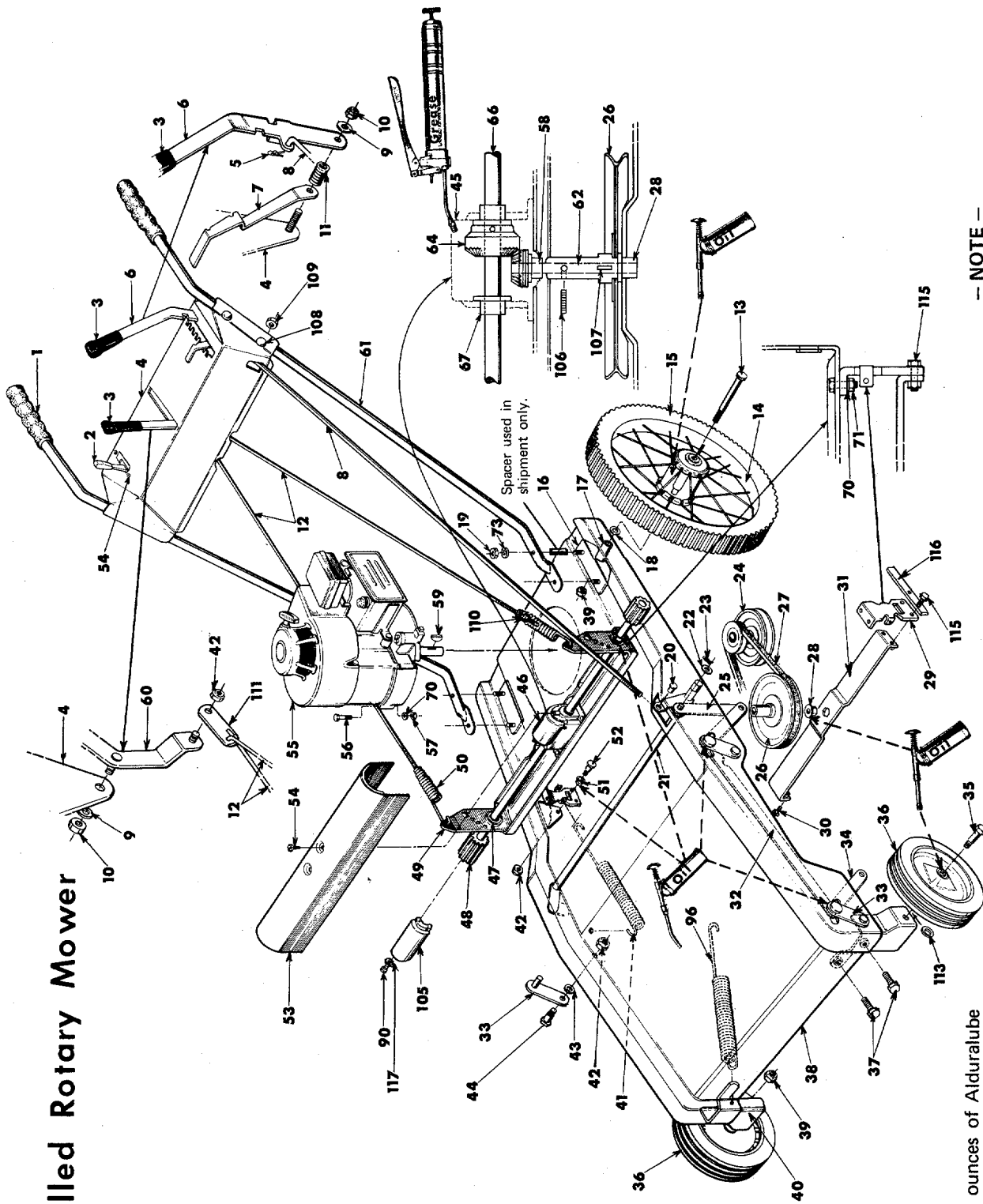
2. **Deck** — The underside of the mower deck should be cleaned after each period of use as grass clippings, leaves, dirt, and other matter accumulates. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at next cutting.

The deck may be cleaned by tilting the mower backward or on its right side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.

**CAUTION:** Do not direct the stream of water at a hot engine as damage to the engine may result.

# Self-Propelled Rotary Mower 121-570

## Figure 1



Gear box is lubricated with two ounces of Alduralube Heavy. Order by part number 727-111.

**NOTE:** Set screws in pulleys are treated with a nut and bolt sealant. Remove with Allen wrench while applying heat with a small torch. Sealant disintegrates at 400°.

### — NOTE —

To engage the blade with the engine running . . .

1. Move the throttle control lever to "FAST" position.
2. Engage the blade engagement lever *SLOWLY*.
3. Adjust engine speed.

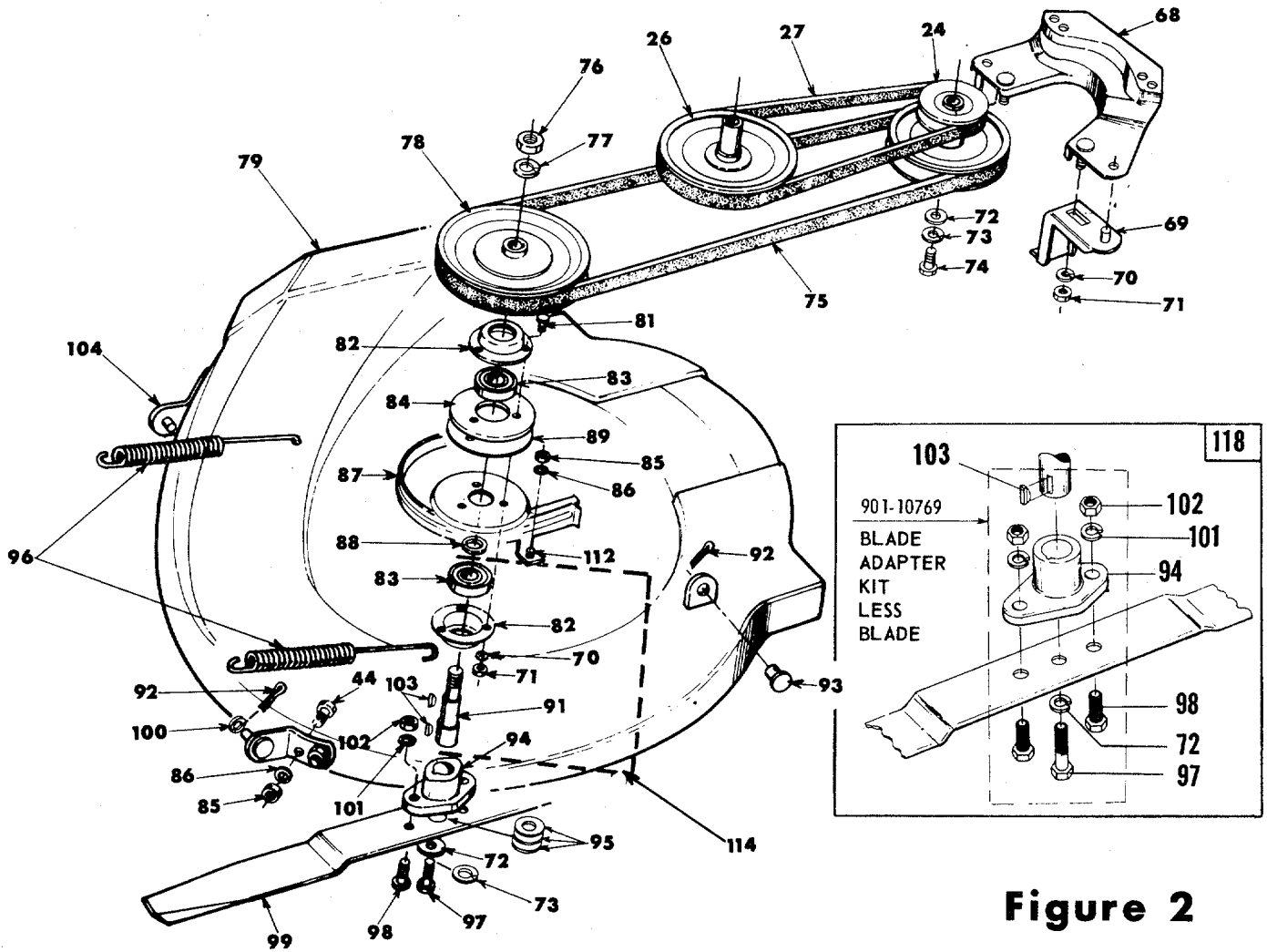
**PARTS LIST FOR MODEL 121-570**

Ref. No.	Part No.	DESCRIPTION	Ref. No.	Part No.	DESCRIPTION
1	305-1166	Grips	55	-----	Engine 130902-0213-01
2	310-10449	Control - Throttle Complete) +	56	710-158	Hex Hd. Cap Scw. 5/16-24 x 1-1/4" Lg. *
	305-7470	Knob +	57	712-123	Hex Nut 5/16-24 *
	310-9848	Throttle Control Bracket +	58	748-108	Flange Bearing 1/2" Dia.
	901-7627	Ferrule Assembly +	59	714-365	Hi-Pro Key #505
	732-200	Conduit and Wire +	60	310-10270	Clutch Lever
3	720-142	Flat Grips	61	310-10323	Handle
4	437-10314	Control Panel	62	901-10254	Pinion Assembly
5	714-507	Cotter Pin *	64	748-135	Bevel Gear
6	310-10324	Lift Lever	66	310-10322	Drive Shaft
7	310-10325	Indicator	67	748-110	Flange Bearing 5/8 Dia.
8	711-424	Deck Rod	68	438-10423	Belt Guard - Cup Assembly
9	736-300	Flat Washer .39 I.D. *	69	438-10426	Belt Keeper Assembly
10	712-116	Hex Elastic Stopnut 3/8-24 Thread *	70	736-119	Spring Lockwashers 5/16 Screw *
11	732-193	Compression Spring	71	712-267	Hex Nut 5/16-18 *
12	711-397	Lockout Rods	72	310-7386	Flat Washer .39 I.D. x 1-3/4 O.D. *
13	738-114	Axle Bolts - Rear	73	736-217	Spring Lockwasher 3/8 Scw. Heavy Duty ††
14	501-8761	Wheel Assembly - Rear	74	710-152	Hex Hd. Cap Scw. 3/8-24 x 1" *
15	734-178	Tire 16 x 1.75	75	754-144	V-Belt 21/32 x 55" Lg.
	734-180	Wheel - Rear	76	712-923	Lock Nut 5/8-18 *
	711-426	Wheel Spacer	77	736-158	Spring Lock Washer 5/8 Screw *
	741-138	Ball Bearings	78	756-143	Deck Pulley
16	438-10297	Rear Wheel Bracket Assembly - L.H.	79	438-10303	25" Deck
	438-10298	Rear Wheel Bracket Assembly - R.H.	81	710-322	Sems Hex Hd. Cap Scw. 5/16-18 x 1" Lg. *
17	711-425	Spacer - Rear Axle	82	310-8253	Housing
18	736-192	Flat Washer .53 I.D. *	83	741-919	Ball Bearing
19	712-798	Hex Nut 3/8-16 Thread *	84	438-10069	Deck Reinforcement Plate
20	711-179	Adjustment Ferrule	85	712-287	Hex Nut 1/4-20 *
21	438-10300	Lift Handle Assembly	86	736-329	Spring Lockwasher 1/4 Screw *
22	736-192	Flat Washer .53 I.D. *	87	438-10058	Belt Guard
23	714-101	Hair Pin	88	750-142	Spacer - Blade Spindle
24	756-154	Two-Step Pulley (Engine)	89	310-9103	Bearing Spacer
25	438-10318	Deck Links 3-3/4 Lg.	90	710-224	Hex Hd. Self Tap Scw. Type (A) #10 x 1/2 Lg. *
26	756-155	Pulley 6-1/2" Dia.	91	711-405	Blade Spindle
27	754-143	Belt 3 V x 28"	92	714-115	Cotter Fin 1/8 *
28	748-226	Flange Bearing 1/2" Dia.	93	711-332	Lift Bracket Pins
29	438-10320	Bottom Drive Frame Plates	94	748-189	Blade Adapter ††
30	710-198	Sems Hex Hd. Cap Scw. 5/16-18 x 3/4*	95	736-300	Flat Washers (3)
31	901-10328	Bottom Drive Frame Assembly	96	732-153	Extension Spring
32	438-10319	Connecting Rod	97	710-459	Hex Hd. Cap Scw. 3/8-24 x 1-1/2" Lg. Heat Treated ††
33	438-9721	Pivot Link Assembly	98	710-117	Hex Hd. Cap Scw. 5/16-24 x 1" Lg. * Heat Treated ††
34	438-10317	Deck Links 4-3/4 Lg.	99	312-9283	Blade 25"
35	738-213	Axle Bolts - Front	100	736-192	Flat Washer .53 I.D. *
36	514-8310	Wheel Assembly - Front	101	736-119	Spring Lockwasher 5/16 Screw †††
	741-114	Ball Bearings	102	712-123	Hex Nut 5/16-24 †††
37	710-259	Sems Hex Hd. Cap Scw. 5/16-18 x 5/8 Lg. *	103	714-365	Hi-Pro Key #505 ††
38	438-10292	Frame	104	438-10306	Deck Bracket Assembly R.H.
39	712-181	Toplock Hex Nut 3/8-16 Thread *		438-10305	Deck Bracket Assembly L.H.
40	438-10294	Wheel Bracket Assembly R.H.	105	438-10289	Pinion Cover
	438-10293	Wheel Bracket Assembly L.H.	106	710-421	Allen Set Screw 5/16-18 x 1/4" *
41	732-206	Extension Spring	107	714-229	Woodruff Key #2
42	712-429	Hex Elastic Stop Nut 5/16-18 *	108	710-256	Carriage Bolt 1/4-20 x 1-1/2" Lg. *
43	736-264	Flat Washer .33 I.D. x 3/4 O.D. *	109	712-107	Hex Center Locknut 1/4-20 *
44	711-118	Shoulder Bolt 5/16-18 *	110	712-324	Hex Elastic Stop Nut 1/4-20 *
45	717-108	Gear Box	111	310-10469	Clutch Link
46	438-7716	Cover Gear Box	112	710-289	Hex Hd. Cap Scw. 1/4-20 x 1/2" Lg. *
47	741-138	Ball Bearing .627 I.D.	113	736-105	Belleville Washer
48	748-182	Drive Pinion	114	901-10150	Blade Spindle Assembly Complete
49	438-10321	Top Drive Frame		727-111	Alduralube Grease
50	732-184	Spring	115	710-322	Sems Hex Hd. Cap Scw. 5/16-18 x 1" Lg. *
51	748-180	Pivot Slide	116	348-10883	Drive Frame Stop
52	711-105	Shoulder Bolt 5/16-18 *	117	736-722	Spring Lockwasher #10 Screw
53	438-8100	Cover - Top Drive Frame	118	901-10769	Blade Adapter Kit/Less Blade
54	710-148	Hex Hd. Slotted Thd. Cut Scw. #8-32 x 3/8 Lg. *			

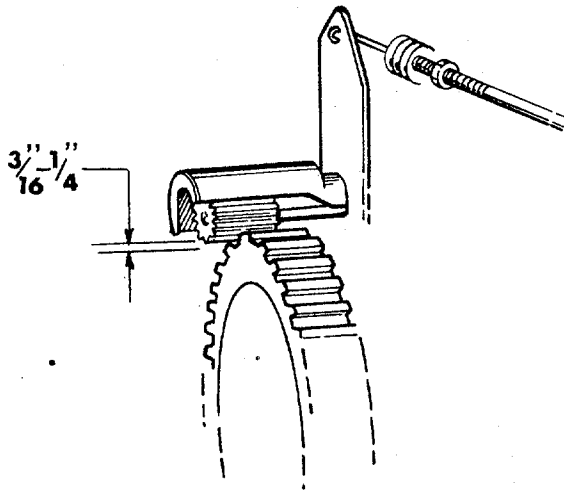
\* For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

+ Part of Control Throttle Complete 310-10449. †† Part of Blade Adapter Kit/Less Blade 901-10769 Drive Assembly - Complete 901-10267.

# Self-Propelled Rotary Mower



**Figure 2**



Clearance should be  $\frac{3}{16}$ " to  $\frac{1}{4}$ ".  
Screw the hex nut in or out on rod to obtain this clearance. More than  $\frac{1}{4}$ " clearance will cause excessive belt wear.

If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines-Gasoline".



## BELT REPLACEMENT

**IMPORTANT:** Always stop engine and disconnect spark plug wire before doing any kind of work on the lawn mower.

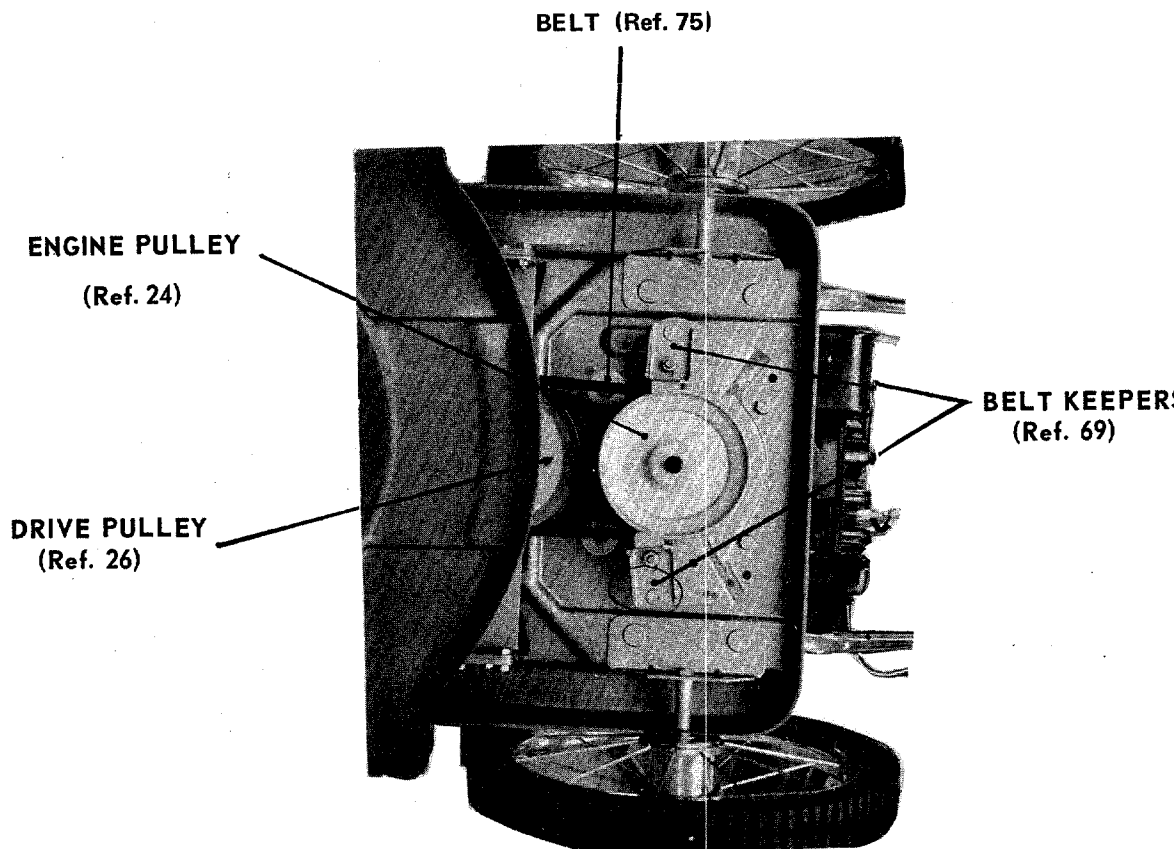
### TO REPLACE THE DRIVE BELT

1. Engage deck and tip mower on its right side. (See diagram below.)
2. Remove belt keeper (ref. 69).
3. Remove belt guard (ref. 87) at deck by removing hex head cap screws 1/4-20 x 1/2" long (ref. 85), spring lock washers (ref. 86).
4. Disengage deck and remove blade belt from engine pulley.
5. Engage deck and remove cotter pins (ref. 92) from link pins (ref. 93). Then remove link pins (ref. 93) from deck, let deck drop down.
6. Remove four hex head cap screws 5/16-18 x 3/4" long (ref. 30) and pull down bottom drive frame assembly (ref. 31).
7. Loosen allen set screw (ref. 106). Remove hex head cap screw 3/8-24 x 1" (ref. 74), lock washer (ref. 73) and flat washer (ref. 72).

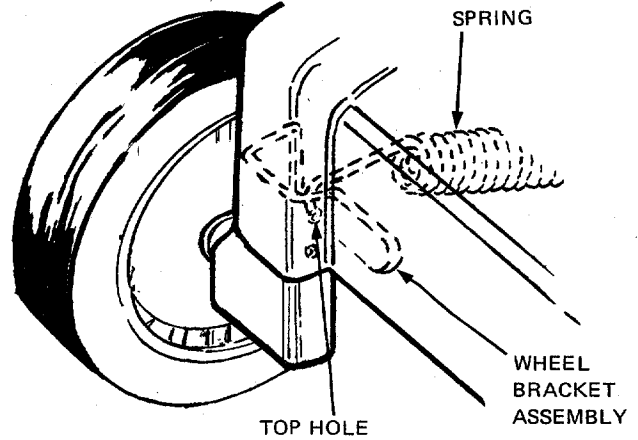
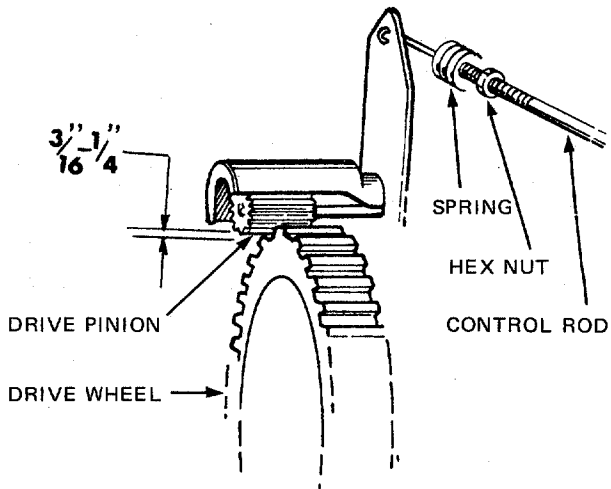
8. Pull drive pulley (ref. 26) and engine pulley (ref. 24) down together and remove old drive belt.
9. Reverse the above steps for reassembling. Be sure all nuts and bolts are tightened securely.

### TO REPLACE THE BLADE BELT

1. Engage deck and tip mower on its right side. (See diagram below.)
2. Remove belt keepers (ref. 69).
3. Remove belt guard (ref. 87) at deck by removing hex head cap screws 1/4-20 x 1/2" long (ref. 85), spring lock washers (ref. 86).
4. Disengage the deck and remove the belt. Replace with new belt and reverse the above steps. Be sure all nuts and bolts are tightened securely.

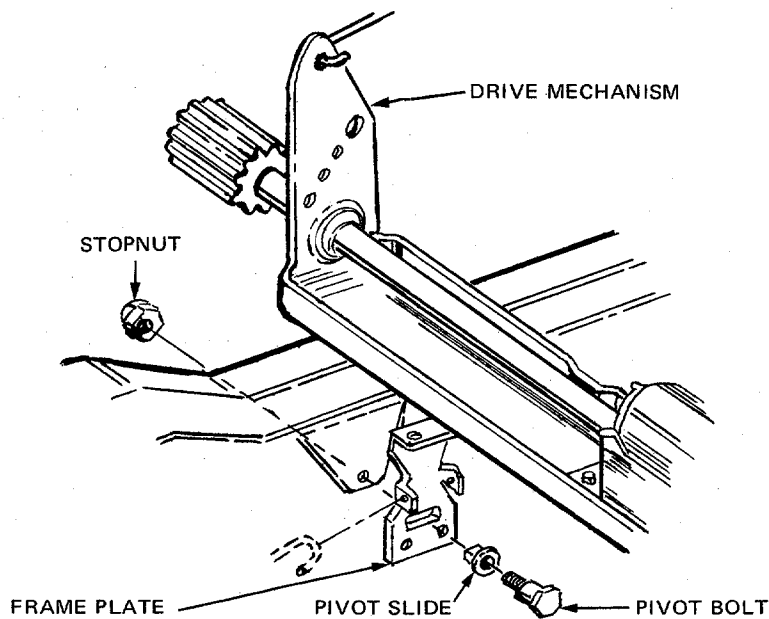


# SERVICE NOTES



Clearance between Drive Pinion and Drive Wheel should be  $\frac{3}{16}$ " to  $\frac{1}{4}$ " when control is in "DIS-ENGAGED" position. Adjust Hex Nut on Control Rod as required. Excess clearance will cause premature belt wear.

The right hand Deck Extension Spring must be assembled over the top of the Wheel Bracket Assembly and attached through the top mounting hole. Assembly otherwise will prevent correct disengagement when raising the deck.



If Drive Mechanism does not pivot freely on frame plates, loosen stop nuts on each side. Belts will damage and wear prematurely if mechanism does not move freely.