

OPERATING INSTRUCTIONS AND PARTS LIST MANUAL

Ariens



SAFETY MESSAGE

The product for which you have requested information or replacement parts is not a current product. The replacement models incorporate product designs, safety features, safety instructions or warnings which represent the latest "State Of The Art" developments. For your safety and those around you please contact your nearest Ariens/Gravely Dealer for a demonstration of the current product safety provisions and features.

SNO-THRO

Models

10M-L60

10M-L35

Positive shift lever.
4 speeds - forward
and reverse.

Fingertip throttle control

Easily operated
clutch control

Powerful recoil
starting 6 H.P.
Tecumseh Snow
King engine

Pneumatic rubber tires
4:00x6 - 12" O.D.

All steel SNO-SCOOP
24" by 17"

Self-cleaning
SNO-ROTOR blades

Slicer bar

SNO-CHUTE swivels 180°
to discharge snow up to 25'

Adjustable deflector

10M-L60 Illustrated

WARRANTY

Ariens products are guaranteed to the original retail purchaser for 90 days from date of purchase. This guarantee does not include belts, tires, etc., and other items subject to normal wear. Ariens Company warranty DOES NOT APPLY ON ENGINES WHICH ARE SEPARATELY COVERED BY WARRANTY OF ENGINE MANUFACTURER. Ariens Company makes no warranty with respect to trade accessories, such being subject to the warranty of their respective manufacturer. No warranty is extended to sheet metal items or finishes.

The warranty will not apply to any products repaired or altered outside of our factory or any Ariens Authorized Service Distributor or Dealer which, in the company's judgment affects its condition or operation. Neither will the warranty apply to any failures resulting from misuse, neglect, or accident. Ariens Company is not responsible for damage in transit or handling by common carriers.

The company reserves the right to incorporate any changes in design without obligation to make them on units previously sold.

ASSEMBLY

1. GENERAL

The Ariens Sno-Thro is shipped in a single carton. Except for the handle bars and controls, the unit is completely assembled and banded to a wooden skid. Be sure to remove all loose items from the carton.

2. HANDLE BARS

a. Place the holes in the flat section of the lower handle bars over the studs projecting from the frame on each side of the engine.

b. Place a lockwasher and nut on each stud but do not tighten.

c. Remove the four bolts from the lower portion of the upper handle bar and slide the upper handle bar in place between the curved portions of the lower handle bars (figure 1).

d. Replace the bolts in the top hole of the lower handle bar and the matching hole in the upper handle bar. Fasten with locknut.

e. Hook the bent portion of the nameplate panel over the lower handle bar and slide it up until the holes in the panel line up with the lower holes in the lower handle bar. Fasten in place with bolts and locknuts.

f. Tighten the nuts holding the lower handle bar to the frame.

3. SHIFT CONTROL

a. Position the shift control (figure 1) on the

inside of the handle bars on the right hand side so that the holes in the control line up with the holes in the handle bar. Fasten the control to the handle bar with two hex head cap screws and lockwashers (figure 1).

4. SHIFT ROD

a. Pull up on the lower shift rod which projects from the rear of the engine mounting frame (figure 1). Screw the threaded portion of the upper shift rod over the lower shift rod.

b. Depress the rod in the center of the shift knob and pull the shift control back to the REVERSE position.

c. Thread the upper rod on the lower rod until the opposite end of the rod drops easily into the hole in the shift control. Place a washer over that portion of the rod which projects through the shift control and insert a cotter pin to hold the rod in place.

d. Tighten the locking nut on the lower shift rod.

5. TRACTOR CLUTCH ROD

a. Using a rubber band or piece of string, tie the clutch operating handle up against the handle bar.

b. Slide the straight end of the clutch rod through the ball joint mounted on the clutch arm (figure 5) and place the bent end of the rod through the hole in the clutch operating handle (figure 1).

c. Place the small washer over the rod and fasten in place with a cotter pin through the hole in the rod.

d. Tighten the clamping screw in the ball joint.

e. Remove the ties holding the clutch operating handle to the handle bar and remove the wedge from under the clutch arm.

f. Pull up on the clutch operating handle and lock the handle in place with the locking pin. Depress the button on top of the shift lever and move the lever to the neutral position. If the shift lever does not move freely to the neutral position, loosen the clamping screw in the ball joint, slide the wedge in a little farther, and retighten the clamping screw and remove the wedge.

6. CHUTE CONTROL ROD

a. Slide the chute control rod through the hole in the bracket (figure 1) mounted on the left hand side of the handle bar.

b. Slide the rod into the hole in the universal joint.

c. Line up the hole in the rod with the hole in

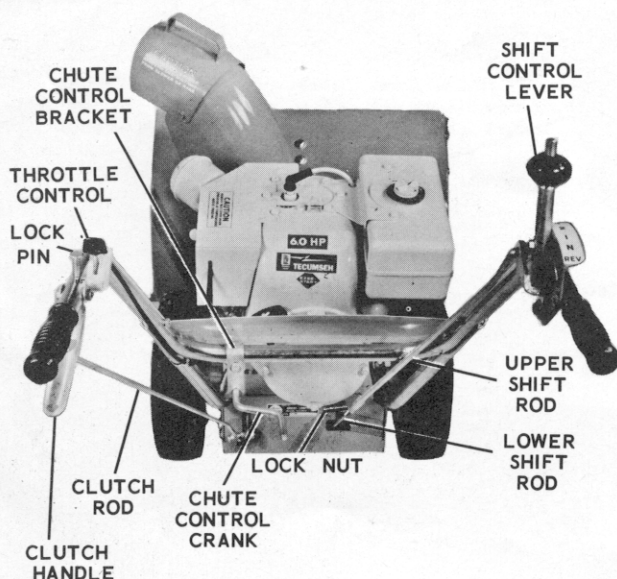


Figure 1

the universal joint and insert the cotter pin.

d. Position the bracket mounted on the handle bar so the chute control rod will turn freely. Tighten the bracket.

7. THROTTLE CONTROL LEVER

a. Using the two self-tapping screws provided, fasten the throttle control lever (figure 1) to the inside of the left hand handle bar.

b. Run the control cable down the inside of the handle bar and fasten in place with the spring clip.

For shipping purposes, the tires on the Sno-Thro have been inflated to greater than normal pressure. Before using the machine, deflate the tires slightly to provide greater traction. Be sure to balance the air pressure in both tires so the machine will travel in a straight line.

LUBRICATION

1. ENGINE

See manufacturer's instruction book for engine lubrication instructions.

NOTE

SAE-10 oil is recommended for use in the engine crankcase when operating at temperatures below 32 degrees Fahrenheit.

2. SNOW ROTOR GEAR CASE

Drain and refill the snow rotor gear case with Ariens Gear Oil every 25 hours of operation or at the beginning of each season (figure 2).

3. TRACTOR DRIVE

The wheel and blower drive is lubricated for life of the equipment. Drive chains and bearings are prelubricated. Occasional greasing of the shafts on

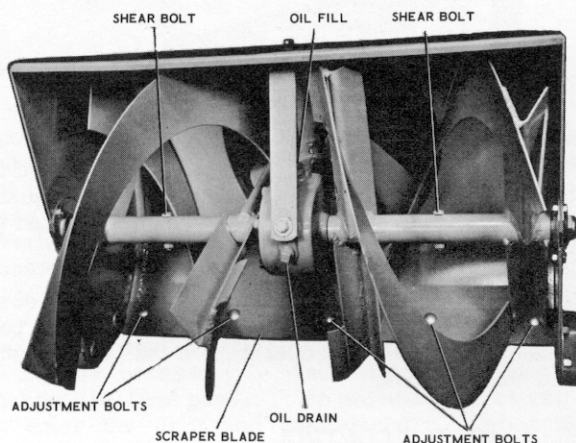


Figure 2

which the shift bracket and sprocket are located will result in easier operation.

OPERATING INSTRUCTIONS

1. ENGINE

Complete instructions for the operation, lubrication, and proper care of the engine will be found on the instruction plate attached to the engine fan housing and in the manufacturer's instruction book packed with the engine. Do not attempt to start the engine before following the manufacturer's recommendations for servicing the engine.

2. TRACTOR CLUTCH

a. The clutch operating handle mounted on the left handle bar serves to disengage the clutch so that the shift control lever may be moved to any one of the four forward speeds or reverse position.

b. When the clutch operating handle is squeezed together, the shift control lever may be moved to the desired position. Releasing the handle will cause the machine to move in the direction and at the speed selected. Once the tractor is in motion, it is possible, without using the clutch, to shift to a higher

or lower speed range. However, the clutch must be used when moving the shift control lever into neutral or reverse.

c. A locking device is provided on the clutch operating handle to hold the handle in the non-operating position. The lock is released by a light squeeze on the handle.

3. SHIFT CONTROL LEVER

a. The shift control lever mounted on the right handle bar governs the speed and direction of the tractor.

b. To move the shift control lever to a selected position, squeeze the tractor clutch operating handle together, depress the button on the center of the shift control lever knob and move the lever.

4. ENGINE CLUTCH

a. The engine clutch is controlled by a lever

mounted on the right hand side of the unit (figure 3) just forward of the engine.

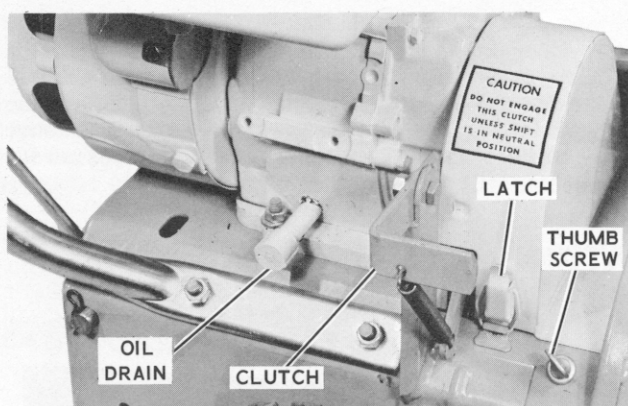


Figure 3

b. When the clutch control lever is pulled up, the idler pulley bears against the drive belt causing the engine to drive the tractor transmission and the blower.

c. When the clutch control lever is pushed down, the idler pulley moves away from the drive belt, loosening the belt and operation of the transmission and blower stops.

5. THROTTLE CONTROL

a. The throttle control lever mounted on the left handle bar controls the speed of the engine and, therefore, in conjunction with the shift control lever, the speed of the machine during operation.

b. Pushing the lever forward toward the "F" mark on the control, increases the speed of the engine and moving the lever toward "S" decreases the speed. During operation, the lever may be set at any position between these marks.

c. Pulling the throttle control lever back to the STOP position will stop the engine.

6. CHOKE

A manual choke is provided which is operated by a lever projecting from the carburetor cover on the left hand side of the engine. The lever can be placed in any one of three detent positions. When the lever is moved toward the rear of the machine, the choke is in the fully closed or "choke" position. When placed in mid-position, the choke is half open and when it is moved toward the front of the machine, the choke is fully open.

7. MANUAL STARTING

a. Place the throttle control midway between the "F" and "S" positions.

b. Place the engine clutch control lever in the DOWN position.

c. Operate the tractor clutch and move the shift control lever to the NEUTRAL position.

d. Place the choke in the CHOKE position.

e. Pull the recoil starter handle. When the engine starts, move the choke control to the mid-position. Leave the choke in mid-position until the engine warms up and will run smoothly when the choke is moved to the OFF position.

8. ELECTRIC STARTING

a. Plug the AC cord from the starter control box into a 120 volt AC receptacle.

b. Plug the DC cord from the starter control box into the starter on the Sno-Thro.

c. Follow steps a, b, and c in paragraph 7 above.

d. Operate the switch on the starter control box.

e. With the starter operating the engine, move the choke control to the CHOKE position. As soon as the engine starts, release the switch on the starter control box and move the choke lever to the mid-position.

9. RUNNERS

An adjustable runner is provided on each end of the blower housing (figure 4). Raising or lowering these runners controls the distance the scraper blade is held above the surface being plowed. Adjustment is accomplished by loosening the two nuts on each of the runners to the desired position and retightening the nuts.

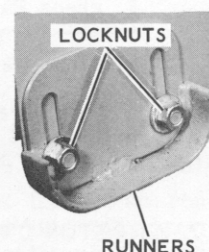


Figure 4

In wet snow which packs easily, it may be necessary to remove the runners or turn them upside down so the scraper blade will scrape clean.

10. SCRAPER BLADE

An adjustable scraper blade (figure 2) is provided along the bottom edge of the blower housing. During operation, this blade runs along the surface being plowed directing the snow into the rotor and insuring a clean plowed surface. After considerable usage, this blade may wear and should be adjusted. The blade is adjusted by loosening the five nuts holding it to the housing, sliding it down to the new position and retightening the nuts. The blade is also designed so that it may be reversed if one side becomes worn beyond further adjustment.

11. CHUTE

The chute is designed so that it can be rotated through an angle of 180 degrees by means of the chute control crank mounted on the handle bar. By turning the handle of the control rod, the blown snow can be directed either to the right or left or straight ahead. An adjustable deflector on the chute can be moved up or down to control the height and distance the snow will be blown.

OPERATING TIPS

1. PRE-OPERATION PRECAUTIONS

a. Before the first snowfall, be sure the area on which the Sno-Thro is to be operated is free of sticks, stones, toys, or other obstructions which might be picked up by the machine during operation.

WARNING

Do not allow children to run through the snow being discharged from the machine. Small objects picked up by the machine may be thrown out of the chute with considerable force and can cause serious injury.

b. During the fall of the year, start the machine regularly once each week and allow the engine to run for a period of five to ten minutes. Periodic operation will insure faster starts. Keep gas tank full. A full tank prevents condensation caused by sudden temperature changes, which may result in faulty operation.

c. Always allow the engine to warm up to operating temperature before operating the machine in snow.

d. Operate the machine in a cleared area before operating in snow for the first time. Become familiar with all controls before attempting to plow.

2. CHUTE ADJUSTMENT

The distance the Ariens Sno-Thro will throw the snow will depend on the type of snow being plowed. In general, the position of the deflector will determine the distance the snow will be thrown. Tipping the deflector down will decrease the throw and tipping the deflector up will increase the throw.

The distance the snow is blown can also be controlled to some extent by the engine speed. Slowing down the engine by means of the throttle control will decrease the throw and increasing speed will increase the throw. By a combination of engine speed and deflector adjustment, the snow can be blown a distance suitable for nearly every situation.

Always adjust the chute so as to blow the snow with the wind whenever possible. In very light snow, it may be advisable to blow the snow straight ahead

NOTE

When operating the Sno-Thro in wet snow, occasionally a sufficient amount of snow may stick inside the chute causing partial clogging. To prevent this, it is suggested that the inside of the chute be coated with a light layer of "paste" or "spray" wax. It is recommended that the inside of the chute be waxed two or three times each season.

of the machine until a sufficient amount has been accumulated for the machine to pick up and blow to the side.

3. DEPTH ADJUSTMENT

How clean the Sno-Thro will plow is determined by the adjustment of the runners. See paragraph 9 of Operating Instructions. When plowing on concrete or other hard surfaces, these runners should be adjusted so that they are approximately 1/8-inch below the scraper blade. When plowing gravel driveways or other gravel areas, adjust the runners so that they are 1-1/4-inch below the scraper blade.

4. PLOWING

When plowing reasonable depths of ordinary snow, it is only necessary to guide the machine along the path to be plowed and to adjust the chute to blow the snow with the wind. When making the second pass on a sidewalk or driveway, allow the machine to overlap the previous path slightly to insure complete removal of snow.

When plowing through a very heavy drift, such as one formed by the passing of the street plow, it may be necessary to "inch" into the drift when making the first pass. To do so, allow the machine to enter the drift and then declutch. Allow the machine to blow away the accumulation of snow and then move the machine forward deeper into the drift by releasing the clutch handle. Again declutch and allow the machine to clear away the snow. Continue this process until a complete path has been cleared through the drift. On the second pass through the drift, allow the path of the machine to overlap the first path.

5. SHEAR BOLT REPLACEMENT

Occasionally a small object may enter the rotor and become jammed in the blades. When this occurs the shear bolts, located on the shaft on which the rotor is mounted, will break and allow the rotor to turn freely on the shaft. Before plowing can be continued, this shear bolt must be replaced. See figure 2. **USE ONLY ARIENS SHEAR BOLTS. USE OF OTHER TYPES OF BOLTS MAY RESULT IN SEVERE DAMAGE TO MACHINE.**

WARNING

If it becomes necessary to replace the shear bolts or necessary to remove any obstruction from either the rotor, blower, or chute, **STOP THE ENGINE.**

SERVICE AND ADJUSTMENTS

1. GENERAL

Ariens dealers will provide any service which may be required to keep the Sno-Thro operating at peak efficiency. The Sno-Thro is equipped with the finest quality engine obtainable. However, should servicing be required, it can be obtained from an Ariens dealer or authorized engine manufacturer's service station. Consult an Ariens dealer for details.

2. ENGINE

Refer to the engine instruction book and nameplate on the engine for maintenance instructions. If repairs or service are needed for engine, see an Ariens dealer or nearest authorized engine service station.

3. REPLACING BELT

- a. Remove the belt guard by unsnapping the latch (figure 3) on each side and lifting off the guard.
- b. Turn the snow chute all the way to the left until the slot in the swivel lines up with a tooth on the control gear.
- c. Remove the two thumb screws and separate the unit by tipping the blower and engine sections apart.
- d. Replace the belt.
- e. Tip the two sections together, being sure the jaw clutch sections are lined up.
- f. Replace the thumb screws and guard.

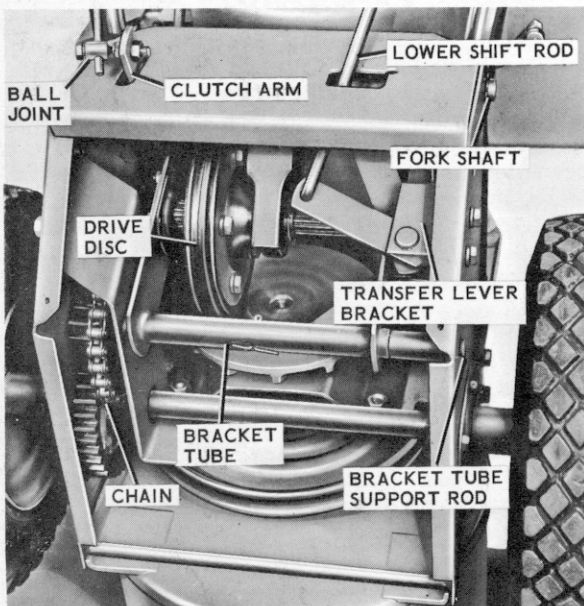


Figure 5

4. REPLACING DRIVE DISC

After considerable usage, it may become necessary to replace the drive disc. In order to replace the disc, proceed as follows: See figure 5.

- a. Tip the machine up on the blower and block it securely.
- b. Remove the two self-tapping screws holding the bottom cover to the frame and remove the cover.
- c. Remove snap ring securing the right hand wheel to the axle and remove the wheel.
- d. Remove the cotter key and washer securing the upper shift rod to the shift control and remove the rod from the control.
- e. Loosen the locking nut on the lower shift rod and unscrew the upper shift rod from the lower shift rod.
- f. Remove the hex nut securing the ball joint to the clutch arm and remove the ball joint from the arm (figure 5).
- g. Remove the two cap screws and lockwashers securing the transfer lever bracket to the frame (figure 5).
- h. Disconnect the ball joint from the transfer lever and remove lever.
- i. Remove the connector link from the chain and remove the chain (figure 5).
- j. Remove the quick pin from the left side of the fork shaft and pull the fork shaft out of the right side of the frame (figure 5).
- k. Remove the cotter pin from the center of the bracket tube and remove the bracket tube support rod through the right side of the frame (figure 5).
- l. Pull the shift bracket outward until the pin on the clutch arm is free of the slot in the top of the frame.
- m. Tip the bottom of the bracket up until the clutch spring comes free of the frame.
- n. Tip the right hand side of the bracket outward until the bottom right hand corner clears the frame and the sprocket clears the support bracket. Remove the bracket.
- o. Remove the shifting fork.
- p. Remove the large locknut from the end of the splined shaft OPPOSITE the sprocket.
- q. Remove the four hex locknuts holding the

bearing flange to the bracket **ON THE SPROCKET END** of the shaft.

r. Pull the splined shaft out of the right hand bearing and the left hand bearing out of the bracket.

s. Pull the drive disc and hub from the splined shaft.

t. Remove the five cap screws and lockwashers

securing the drive disc to the hub and remove the disc.

u. Replace the drive disc and reverse the above procedure for assembly.

5. STORAGE

Refer to the engine instruction manual for storage of the engine.

ATTACHMENTS

1. SNO-ROTOR SHIELD KIT (4-10M)

The SNO-ROTOR SHIELD KIT is available as optional equipment for either model SNO-THRO. It consists of two semi-circular steel plates which bolt to the sides of the SNO-SCOOP to protect the SNO-ROTOR blades from damage due to obstacles hidden in the snow.

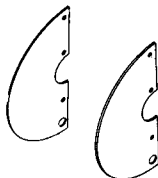


Figure 6

2. SLICER BAR (3-10M)

The slicer bar is furnished as standard equipment on Model 10M-L60 SNO-THRO and is available as optional equipment for Model 10M-L35. The SLICER BAR is designed to cut through deep snow and dislodge crusted or drifted snow. The bar can be installed on either side of the SNO-SCOOP.

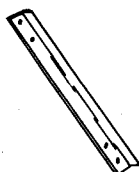


Figure 7

3. TIRE CHAINS (1-10M)

Tire chain kit number 1-10M is available for 3x12 semi-pneumatic tires.

4. TIRE CHAINS (2-10M)

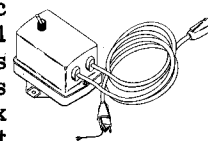
Tire chain kit number 2-10M is available for 4:00x6 pneumatic tires.

5. PNEUMATIC TIRE KIT (6-10M)

Pneumatic tire kit 6-10M is available for Model 10M-L35 Sno-Thro.

6. ELECTRIC STARTER (5-10M)

A 110 volt AC operated electric starter kit is available for the Model 10M-L60 Sno-Thro. The kit consists of a 110 volt DC starter which mounts permanently on the engine and a box containing a momentary contact switch and a set of rectifiers.



In operation the rectifier is plugged into a 110 volt AC receptacle and the output of the rectifier connected to the starter motor by means of a polarized cord. Pressing the switch then operates the starter. When the engine has started, the cord is disconnected from the starter and the Sno-Thro operated in the usual manner.

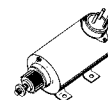


Figure 8

7. RATCHET WHEEL KIT (8-10M)

A ratchet wheel kit is available for the Model 10M-L60 Sno-Thro which provides easy maneuverability on corners.

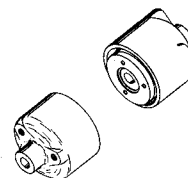


Figure 9

PARTS LIST TRACTOR

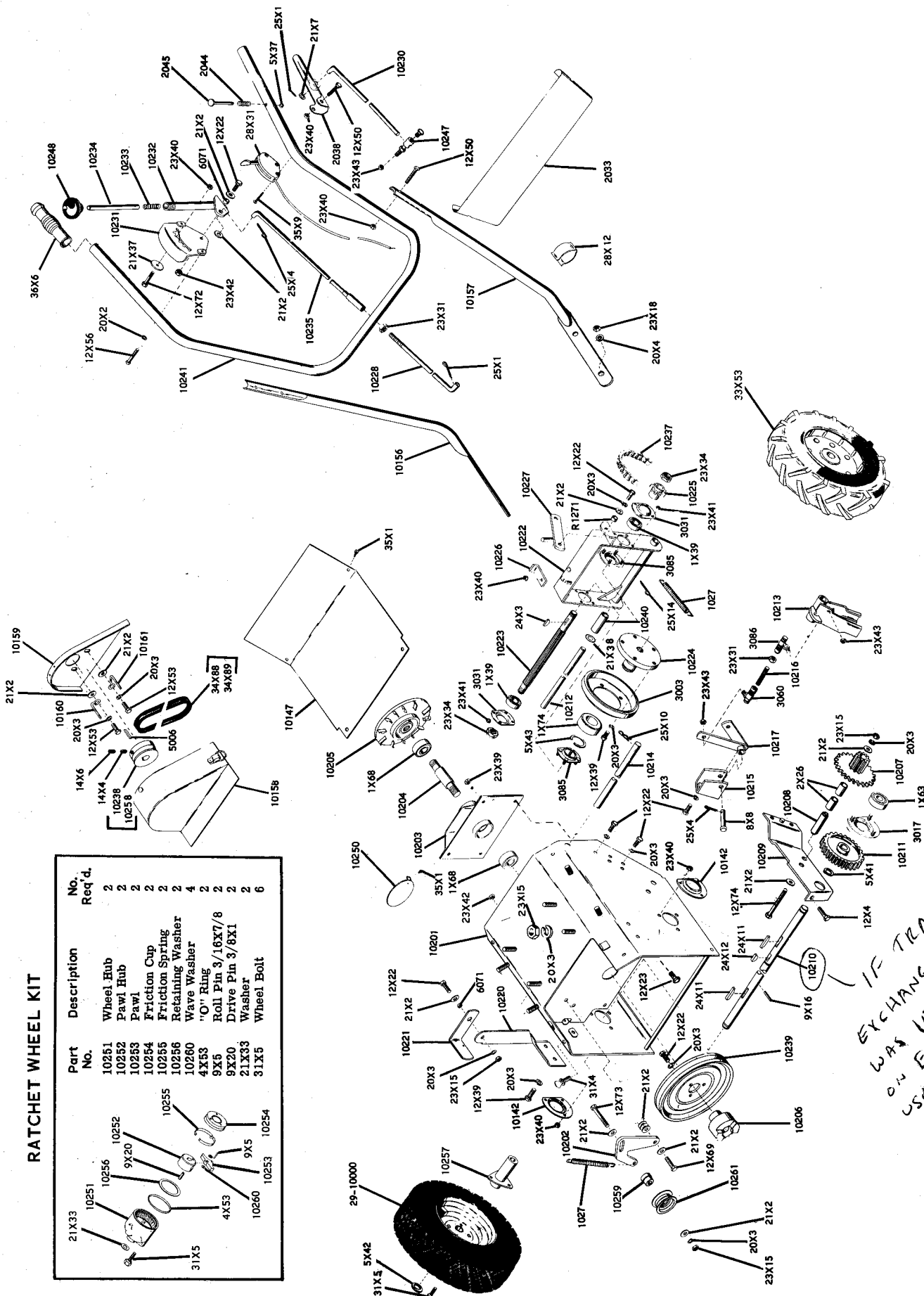
PART LISTED ARE USED ON BOTH MODELS EXCEPT AS OTHERWISE INDICATED

Part No.	Description	No. Req'd.	Part No.	Description	No. Req'd.	Part No.	Description	No. Req'd.
1027	Spring	2	10223	Splined Shaft	1	12X72	Cap Screw H. H. 1/4-20x1-1/4	1
R1271	Spacer Bushing	1	10224	Friction Disc Hub	1	12X73	Cap Screw 5/16-18x1-3/4	1
2033	Handle Bar Panel	1	10225	Sprocket	1	12X74	Cap Screw H. H. 5/16-18x2-3/4	1
2038	Clutch Handle	1	10226	Neutral Catch	1	14X4	Socket Head Set Screw	1
2044	Spring	1	10227	Throwout Lever	1	14X6	Socket Head Set Screw (10M-L60)	1
2045	Lock Pin	1	10228	Lower Shift Rod	1	20X2	Lockwasher	2
3003	Friction Disc	1	10230	Clutch Rod	1	20X3	Lockwasher 5/16	24
3017	Bearing Flange	2	10231	Shift Quadrant	1	20X4	Lockwasher 3/8	4
3031	Bearing Flange	2	10232	Shift Handle	1	21X2	Wrought Washer 5/16	14
3060	Ball Joint -Quick Disconnect	1	10233	Spring	1	21X7	Wrought Washer 1/4	1
3085	Bearing Flange	2	10234	Release Rod	1	21X37	Wrought Washer 9/32	1
3086	Ball Joint -Solid	1	10235	Shift Rod	1	21X38	Shim Washer	1 or 2
5006	Key	1	10237	Chain	1	23X15	Hex Nut 5/16-18	7
6071	Spacer	2	10238	Engine Sheave (10M-L60)	1	23X18	Hex Nut 3/8-16	4
10142	Bearing Flange	2	10239	Sheave	1	23X31	Hex Nut 5/16-24	2
10147	Bottom Cover	1	10240	Spacer 3/4	1	23X34	Hex Locknut 5/8-18	2
10156	R. H. Lower Handle Bar*	1	10241	Upper Handle Bar *	1	23X39	Hex Locknut 3/8-16	4
10157	L. H. Lower Handle Bar*	1	10247	Ball Joint	1	23X40	Hex Nut 1/4-20	13
10158	Outer Belt Guard	1	10248	Shift Ball	1	23X41	Hex Locknut 3/16-24	8
10159	Inner Belt Guard	1	10250	Starter Hole Cover (10M-L60)	1	23X42	Hex Locknut 5/16-18	2
10160	R. H. Belt Finger	1	10257	Hub	2	23X43	Hex Locknut 5/16-24	3
10161	L. H. Belt Finger	1	10258	Pulley (10M-L35)	1	24X3	Woodruff Key	1
10201	Tractor Frame	1	10259	Bearing Spacer	1	24X11	Feather Key	2
10202	Idler Arm	1	10261	Idler	1	24X12	Woodruff Key	1
10203	Bearing Housing	1	1X39	Ball Bearing	2	25X1	Cotter Pin 3/32x3/4	2
10204	Spindle	1	1X63	Ball Bearing	2	25X4	Cotter Pin 1/8x1	2
10205	Drive Plate	1	1X68	Ball Bearing	2	25X10	Hair Pin Cotter	2
10206	Jaw Coupling	1	1X74	Thrust Bearing	1	25X14	Cotter Pin 1/8x1-1/4	1
10207	Pinion & Sprocket	1	2X26	Bushing	2	28X12	Cable Clip	1
10208	Pinion Stub Shaft	1	5X37	Snap Ring	1	28X31	Throttle Control	1
10209	Support Bracket	1	5X41	Snap Ring	1	31X4	Thumb Screw 3/8-16x3/4	2
10210	Axle Shaft	1	5X42	Spirolox Snap Ring	2	31X5	Wheel Bolt (10M-L60)	6
10211	Spur Gear	1	5X43	Snap Ring	1	33X49	Tire (10M-L60)	2
10212	Bracket Pin	1	8X8	Clevis Pin	1	33X50	Tube (10M-L60)	2
10213	Sliding Fork	1	9X16	Roll Pin 3/16x1	1	33X52	Wheel (10M-L60)	2
10214	Fork Shaft	1	12X4	Cap Screw H. H. 3/8-16x1	1	33X53	Tire & Assembly (10M-L35)	2
10215	Lever Bracket	1	12X22	Cap Screw H. H. 5/16-18x3/4	10	34X88	Belt (10M-L60)	1
10216	Connecting Link	1	12X23	Cap Screw H. H. 3/8-16x3/4	3	34X89	Belt (10M-L35)	1
10217	Transfer Lever	1	12X39	Cap Screw H. H. 5/16-18x1/2	7	35X1	Tapping Screw #10x1/2	3
10220	Clutch Bracket	1	12X50	Cap Screw H. H. 1/4-20x1-1/2	5	35X9	Tapping Screw #10x1	2
10221	Clutch Lever	1	12X53	Cap Screw H. H. 5/16-24x3/4	2	36X6	Plastic Grip	2
10222	Disc Bracket	1	12X56	Cap Screw H. H. 1/4-20x1-1/4	2			
			12X69	Cap Screw 5/16-18x1-1/4	1			

*Specify plated or painted

RATCHET WHEEL KIT

Part No.	Description	No. Req'd.
10251	Wheel Hub	2
10252	Pawl Hub	2
10253	Pawl	2
10254	Friction Cup	2
10255	Friction Spring	2
10256	Retaining Washer	2
10260	Wave Washer	4
4X53	"O" Ring	2
9X5	Roll Pin 3/16X7/8	2
9X20	Drive Pin 3/8X1	2
21X33	Washer	2
31X5	Wheel Bolt	6



IF TRACTOR
EXCHANGE KIT
WAS INSTALLED
ON FIRST MODEL
USE 10299 SHAFT

PARTS LIST SNO-SC00P

SLICER BAR 3-10M

PARTS LISTED ARE USED ON BOTH MODELS EXCEPT AS OTHERWISE INDICATED

Part No.	Description	No. Req'd.	Part No.	Description	No. Req'd.
1038	Jaw Clutch	1	2X22	Flange Bushing	2
3017	Bearing Flange	1	4X50	Seal	1
10104	Blower Housing	1	4X51	Seal	2
10105	Gear Case	1	5X32	Snap Ring	1
10106	Gear Case Flange	1	5XK2	Snap Ring	1
10107	Bearing Spacer	1	9X7	Roll Pin 1/4x1-1/4	1
10108	Gasket	1	9X9	Roll Pin 1/8x1	3
10110	Front Gear Shaft	1	9X17	Roll Pin 5/16x1-1/4	1
10111	Fan	1	11X13	Pipe Plug 3/8 Sq. Hd.	1
10112	Discharge Chute	1	12X1	Cap Screw H. H. 1/4-20x3/4	2
10113	R. H. Rake	1	12X22	Cap Screw H. H. 5/16-18x3/4	5
10114	L. H. Rake	1	12X28	Cap Screw H. H. 1/4-20x1/2	6
10142	Bearing Flange	5	12X50	Cap Screw H. H. 1/4-20x1-1/2	8
10150	Rod Hanger	1	12X71	Shear Bolt	1
10152	Chute Control Crank	1	14X12	Socket Set Screw 5/16-18x3/8	2
10154	Control Sprocket	1	17X1	Machine Screw Rd. Hd.	2
10162	Chute Clamp	2	19X9	Carriage Bolt 5/16-18x1/2	4
10163	Front Gear Case Support	1	20X2	Lockwasher 1/4	5
10164	Scraper Blade	1	20X3	Lockwasher 5/16	7
10165	Runner	2	20X11	Lockwasher 3/16	4
10166	Universal Joint	1	21X2	Washer 5/16	4
10167	Deflector	1	21X36	Washer 1-3/8x.880x1/16	15
10229	Wave Washer	1 or 2	23X30	Hex Locknut 3/4-16	4
10236	Chute Control Support	1	23X39	Hex Locknut 3/8-16	2
10244	Helicon Gear	1	23X40	Hex Locknut 1/4-20	4
10245	Helicon Pinion Shaft	1	23X42	Hex Locknut 5/16-18	14
1X44	Bearing Cup	2	24X1	Woodruff Key	7
1X45	Bearing Cone	2	25X14	Cotter Pin 1/8x1-1/4	1
1X63	Ball Bearing	3			1

SNO-ROTOR SHIELD KIT 4-10M

Part No.	Description	No. Req'd.
10242	Slicer Bar	1
12X22	Cap Screw H. H. 5/16-18x3/4	2
20X3	Lockwasher 5/16	2
23X15	Hex Nut 5/16-18	2

Part No.	Description	No. Req'd.
10243	Rotor Guard	2
12X22	Cap Screw H. H. 5/16-18x3/4	6
20X3	Lockwasher 5/16	6
23X15	Hex Nut 5/16-18	6

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ARIENS SUPER JET rotary tiller with TURBO TINES. 24" tilling width. Choice of 4 famous make engines — 3 h.p. to 4½ h.p. with tine reverse drive.



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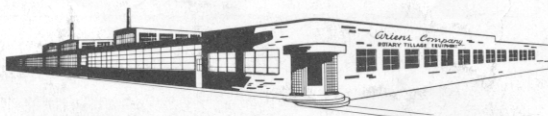
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