OPERATING INSTRUCTIONS

AND PARTS LIST

Ariens



SNO-THRO

4 H. P. MODEL

Serial Number 10M4-04501 and up



WARRANTY

Ariens Company hereby warrants to the original retail purchaser all new products of its own manufacture to be free from defects in material and workmanship.

Engine, parts or accessories not manufactured by Ariens Company, even though incorporated into its products, are not covered by this warranty.

The warranty period shall be one year from date of original purchase, except when the product is used for rental purposes, in which case the warranty period shall be for 45 days from date of original purchase.

Any transportation charges incurred on any product claimed defective, which shall include the time and expense of the distributor or dealer for pickup and/or return of the unit, shall be borne by the purchaser.

This warranty shall not apply to any failure resulting from misuse, neglect or accident. Ariens Company shall not be responsible for damage in transit or handling by any common or contract carrier. Under no circumstances, within or without the warranty period, will the company be liable for damages for loss of use, or damages resulting from delay, or any consequential damages.

The company reserves the right to incorporate any changes in design into its products without obligation to make such changes on units previously manufactured.

SAFE SNOW REMOVAL IS NO ACCIDENT

Improper use of snow removal equipment on the part of the operator can result in injury. To reduce this possibility, give complete and undivided attention to the job at hand.

Protect Yourself and Others by Following These Safety Tips

- Stop motor before cleaning discharge, removing obstacles, making adjustments, or when leaving operating position.
- Never direct discharge at bystanders nor allow anyone in front of machine -- debris may be hidden in the snow.
- 3. Keep children and pets a safe distance away.
- Do not allow children to operate machine nor allow adults to operate it without proper instruction.
- Adjust height to clear gravel or crushed rock surface.
- Exercise caution to avoid slipping or falling, especially when operating in reverse.

- Know the controls and how to stop quickly -read the owner's manual.
- Handle gasoline with care -- it is highly flammable.
 - A. Use approved gasoline container.
 - B. Never add gasoline to a running engine -fill tank out of doors and wipe up spilled gasoline.
 - C. Replace gasoline cap securely.
 - D. Open doors if engine is run in garage -exhaust gases are dangerous.
- Disengage all clutches and shift into neutral before starting motor. Keep hands, feet, and clothing away from power driven parts.
- Use a grounded three wire extension cord for all plug-in electric units.
- 11. Keep machine in good operating condition and keep safety devices in place.

ASSEMBLY

1. GENERAL

When unpacking, 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

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).

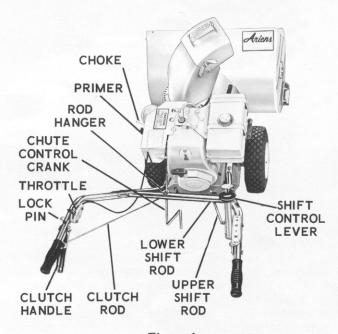


Figure 1

4. SHIFT ROD

- a. Pull up as far as possible 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
- 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 1) 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. 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.

7. CHUTE CONTROL ROD

- a. Slide the chute control rod through the hole in the rod hanger (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 the universal joint and insert the cotter pin.

LUBRICATION

See manufacturer's instruction book for engine

lubrication instructions.

- NOTE -

Use MS classification 5W-20 for operation below 40° F. Use MS classification SAE-30 oil for operation above 40° F.

2. TRACTOR DRIVE

1. ENGINE

- a. At the start of each season grease the gears, hex and fork shaft, jaw coupling, and chains.
- b. Two or three drops of light oil should be placed on the shift lever release rod.

with approximately 5 oz. of SAE-90 Ariens Gear Oil every 25 hours of operation.

- b. To drain and refill, remove drain plug and allow oil to drain. Tip machine back on handle bars (be sure clutch is locked in UP position). Pour oil into filler hole until it starts to run out of drain hole. Replace drain and filler plug.
- c. Oil rake oil holes (figure 2) every 25 hours of operation or each time a shear bolt is replaced.

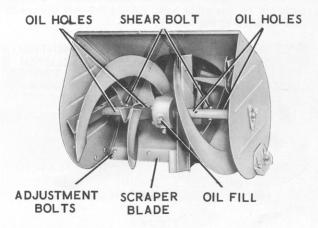


Figure 2

3. SNO-THRO UNIT

a. Drain and refill the snow rotor gear case

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 is 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 nonoperating 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.

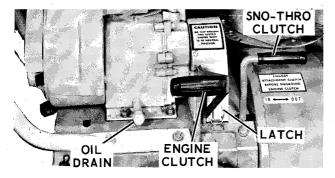


Figure 3

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

5. SNO-THRO CLUTCH

- a. The Sno-Thro clutch is controlled by a lever at the rear of the Sno-Thro blower housing (figure 3).
- b. To start the Sno-Thro auger and blower, start the engine, place the Sno-Thro clutch in the IN position (clockwise) and engage the engine clutch on the tractor.
- c. To stop the Sno-Thro auger and blower, disengage the engine clutch on the tractor and place the Sno-Thro clutch in the OUT position (counterclockwise).
- d. The tractor may be used to move the unit with the Sno-Thro auger and blower stopped by engaging the tractor clutch while leaving the Sno-Thro clutch in the OUT position.

6. THROTTLE CONTROL

The throttle control lever controls the speed of the engine and therefore, in conjunction with the shift control lever, the speed of the machine. Moving the lever toward "F" increases engine speed and moving it toward "S" decreases speed. Moving the lever to the STOP position will stop the engine. ALWAYS MOVE THE THROTTLE LEVER TO "PARK" AFTER ENGINE HAS STOPPED.

7. 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 four detent positions. Moving the lever toward the rear of the machine places it in the FULL CHOKE position. As it is moved forward, it will pass through the 3/4 CHOKE and 1/2 CHOKE positions to the NO CHOKE position fully forward.

8. RUNNERS

a. An adjustable runner is provided on each end of the housing blower (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.

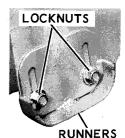


Figure 4

b. 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.

9. ENGINE STARTING INSTRUCTIONS

- a. Fill engine fuel tank with "regular" grade gasoline.
- b. Place engine clutch lever in down position and shift control lever in NEUTRAL.
 - c. Place choke lever in FULL CHOKE position.
- d. At temperatures below 10° F., depress primer button and pull recoil starter slowly past compression one time. Release primer button,

-CAUTION -

Do not use primer when temperature is above 10° F.

- e. Pull recoil starter handle quickly. When engine starts, move choke control lever to 3/4 CHOKE position (first notch). After 20-seconds, move choke control lever to 1/2 CHOKE position (second notch). After an additional 15-seconds, move choke control lever to NO CHOKE position.
 - f. If engine does not start on first pull, move

choke lever to 1/2 CHOKE position before pulling recoil starter a second time.

g. If engine does not start by the fifth pull starter twice. Repeat starting procedure. DO NOT REPRIME ENGINE BEFORE TRYING AT LEAST FIVE PULLS ON STARTER.

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

- a. 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.
- b. 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.

- 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.

3. DEPTH ADJUSTMENT

How clean the Sno-Thro will plow is determined by the adjustment of the runners. See paragraph 7 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 scaper blade.

4. PLOWING

- a. 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.
- b. 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

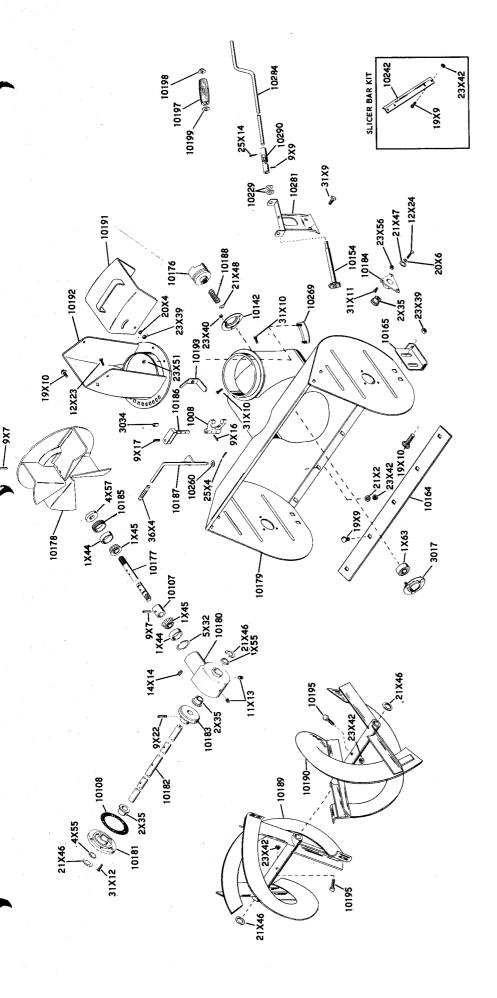
Occasionally a small object may enter the rotor and become jammed in the blades. When this occurs the shear bolts, located on the shaft on which the rotor is mounted, will break and allow the rotor to turn freely on the shaft. Before plowing can be continued, this shear bolt must be replaced. See figure 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.

- NOTE -

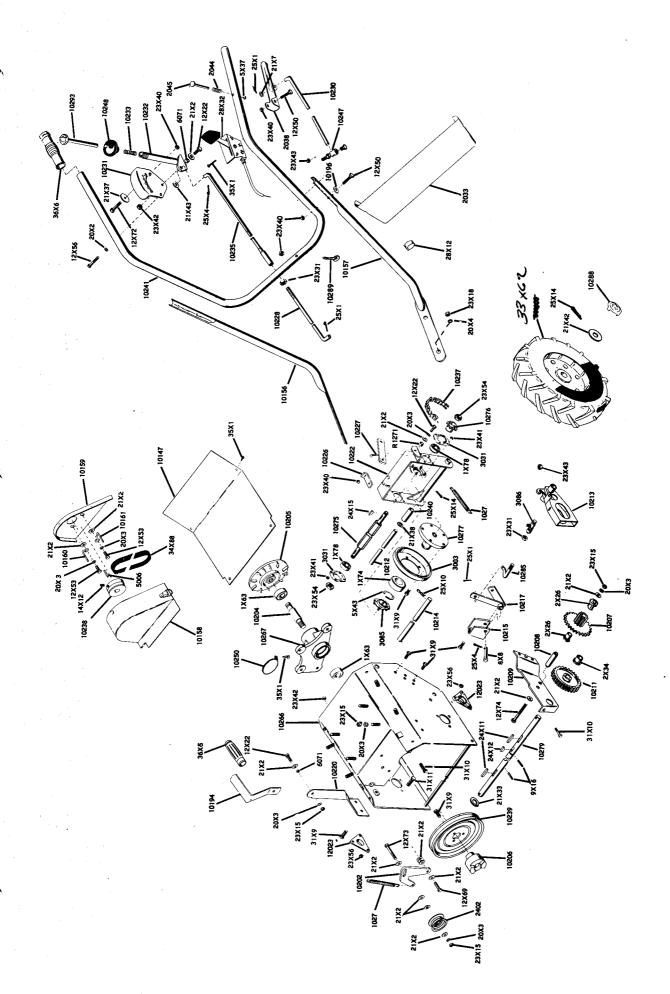
Each time a shear bolt is replaced, the rakes must be oiled and turned on the shaft by hand several times to insure that they will not bind.



Part No.	Description	No. Req'd.	Part No.	Description	No. Req'd.	Part No.	Description	No. Reg'd.	Part No.	Description	No. Req'd.
1008	Clutch Fork	1	10186	Fork Shaft	1	1X63	Ball Bearing	-	21X46	Washer 1.505 OD x 1.005 ID x 1/16	4
3017	Bearing Flange	-	10187	Fork Cam	-	2X35	Bushing	8	21X47	Washer 1.441 OD x .511 ID x 1/8	2
3034	Roller	н	10188	Spring	П	4X55	Seal	2	21X48	Washer 1.375 OD x .755 ID x 1/16	-
10107	Bearing Spacer	П	10189	R. H. Rake	-	4X57	Seal	-	23X39	Locknut 3/8-16	9
10108	Gasket	-	10190	L. H. Rake	-	5X32	Snap Ring	_	23X40	Locknut 1/4-20	က
10142	Bearing Flange	-	10191	Deflector	-	6X7	Roll Pin 1/4 x 1-1/4	m	23X42	Locknut 5/16-18	7
10154	Control Sprocket		10192	Discharge Chute	-		Roll Pin 1/8 x 1	-	23X51	Nut #10-24	9
10164	Scraper Blade	-	10193	Wing Nut $1/8 \times 1$	-	တ	Roll Pin 3/16 x 1	. ~	23X56	Nut 1/4-20	9
10165	Runner	7	10195	Shear Bolt	2		Roll Pin 5/16 x 1-1/4		25X4	Cotter Pin 1/8 x 1	-
10176	Sliding Jaw	-	10197	Grip			Roll Pin 5/16 x 1-3/8	, –	25X14	Cotter Pin 1/8 x 1-1/4	-
10177	Helicon Pinion	-	10198	Cap	-	m	Pine Plue 3/8 So. Hd	. ~	31X9	Flange Whizlock Screw 5/16-18 x 1/2	2
10178	Fan	-	10199	Fastener	-	12 X 23	Cansorew 3/8-16 v 3/4	. ~	31X10	Flange Whizlock Screw 3/8-16 x 1/2	7
10179	Blower Housing	П	10229	Wave Washer	1 or 2	12X24	Canscrew 1/2-13 v 1		31X11	Ribbed Neck Bolt 1/4-20 x 5/8	9
10180	Gear Case		10260	Wave Washer		14X14	Set Screw 1/4-20 v 1/4	1	31X12	Flange Whizlock Screw	S.
10181	Flange			Chute Clamp	က	19X9	Carriage Bolt 5/16-18 v 1/2	4 10	36X4	Grip 1/2 ID	
10182	Front Gear Shaft		10281	Chute Control Support	_	19X10	Carriage Bolt 3/8-16 x 1/2	. rc		1	
10183	Helicon Gear	-	10284	Chute Control Crank	_	20V4	Continge Date / C-10 A 0/ 1			SEICER DAR KII	
10184	Bearing Support	2	10290	Universal Joint	_	2076	Tookwasher 1/9	10	10242	Slicer Bar	-
10185	Adjustment Plug	П	1X44	Bearing Cup	7	21X2	Washer 5/16	1 15	19X9	Carriage Bolt 5/16-18 x 1/2	7
			1X45	Bearing Cone	7		10 10 10 10 10 10 10 10 10 10 10 10 10 1	,	23X42	Locknut 5/16-18	2

PARTS LIST FOR 4 HP TRACTOR

Spring	Part	Description	ž	5250	Description	3/4	1	December	
Strict Bandle Bar Panel 10231 Strict Quarker 12277 Capecreve M/18-10 s.1.3/4 10231 Strict Quarker 10232 Strict Quarker 10232 Strict Quarker 10233 Strict Quarker 10233 Strict Capecreve M/18-10 s.1.3/4 10233 Strict Capecreve M/18-10 s.1.4/4 10234 Strict Capecreve M/18-10 s.1.4/4 10334 Strict Capecreve M/18-10 s.1.4/4 Strict Capecreve M/18-10 s.1.4/4 Strict Capecreve M/18-10 s.1.4/4 Strict Capecreve M/18-10 s.1.4/4 Strict Ca	Š.		Req'd.			Req'd.	No.		Reg'd.
Handle Bar Panel 10223 Shiff Quadrant 12277 Capsarew Wills-16 2.13/4 10223 Caluth Lock Pinel 10223 Shift Quadrant 12277 Capsarew Wills-16 2.3/4 10223 Caluth Lock Pinel 10223 Caluth Bar 10223 C	1027	Spring	2	10230	Clutch Rod	1	12X72	Capscrew 1/4-20 x 1-1/4	-
Clutch Index Bandle 1 12278 Shiff Bandle 1 1274 Set Survey by [1-15 x 2/3/4] 1 Clutch Lock Pring 1 10229 Shiff Rod 1 1274 Set Survey by [1-15 x 2/3/4] 1 Clutch Lock Pring 1 10229 Shiff Rod 1 2072 Lockwasher 5/16 Still 1 Friction Wheel 1 10229 Shiff Rod 1 2022 Cockwasher 5/16 Still 1 Pertuin Wheel 1 10229 Shiff Ball 1 2127 Washer 5/16 Still 1 Bearing Flange 2 10241 Upper Handle Bar 1 2127 Washer 1/4 Still 1 Rey S/16 Sq. x I." 1 10224 Ball John 1 2123 Washer 1/4 Still 1 Spacer Bandle Bar 1 10227 Cachwasher Core (Not Illus) 2 1233 Washer 1/4 Stillus 1 Bodtom Core Not Stillus 1 21323 Washer 1/4 Stillus 1 2 2133 Washer 1/4 Stillus 1 Bodtom Core Not Stillus 1 1027 Part Stillus 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2033	Handle Bar Panel	-	10231	Shift Quadrant	П	12X73	<u>م</u> ى:	٠,
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Clutch Lock Pin 10235 Chain 10235 Chai	2044	Clutch Lock Spring	-	10233	Spring		14X12	Set Screw 5/16-18 x 3/8	. 0.
Higher 10237 Sheave 10237 Chain 10237 Sheave 10240 Chain 10247 Ball John 10247 Ball Ball Ball Ball Ball Ball Ball Bal	2045	Clutch Lock Pin	7	10235	Shift Rod	-	20X2	Lockwasher 1/4 Std.	1 N
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Bearing Fange 10241 Upper Handle Bar 131X3 Weather 1/4 10241 Upper Handle Bar 131X3 Weather 1/4 10242 Buil Joint 10247 Buil Joint 10245 Buil Joint 121X3 Weather 10245 Buil Joint 121X3 Weather 10275 Buil Joint 121X3 Wather 10275 Buil Joint 121X3 Wather 121X3 Wather 10275 Buil Joint 121X3 Wather 121X3 Wather 10275 Buil Joint 121X3 Wather 122X4 Wather 122X4 Wather 122X4 Wather 122X3 Wather	3031	Bearing Flange	7	10240	Idler Arm Hub Spacer		21X2		, <u>c</u>
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Dottom Cover 10272 Garburetor Cover (Not Illus) 121X4 Washer 10276 Packet 10276 Packet 10276 Packet 10277 Friction Disc Blub 123X18 Nut 5/16-18 123X19 Interpretation Disc Blub Interpretatio	R-1271		1	10267	Bearing Housing	-	21X42	Washer	
R. H. Lower Handle Bar 1 10276 How Shaft 1 23X18 Nut 5/16-18 Outer Beit Guard 1 10277 Friction Disc Rub 1 23X18 Nut 5/16-24 Inner Beit Guard 1 10277 Friction Disc Rub 1 23X31 Nut 5/16-24 Inner Beit Guard 1 10278 Axie Shaft 1 23X43 Nut 5/16-24 Inner Beit Guard 1 10288 Hub Cap 2 23X42 Lockmut 5/16-10-24 L. H. Beit Finger 1 10288 Hub Cap 2 23X42 Lockmut 5/16-10-24 Clutch Lever 1 10288 Bub Cap Bub Rockmut Syle 10-24 2 23X42 Lockmut 5/16-12-4 Almoile Bar Washer 1 10288 Bub Rock Barnes Handle 2 23X42 Lockmut 1/4-20 Dyind Bar Washer 1 10289 Bushing Rockmut 1/4-20 2 23X41 Reather 1/2-24 Jaw Coupling 1 1 1 2023 Bushing Rocket 2 23X1 Cotter Pin 1/8 2 23X1 Jaw Cokert 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10147	Bottom Cover	1	10272	Carburetor Cover (Not Illus.)	-	21X43	Washer	-
L. H. Lower Handle Bar 1 10276 Sprocket 1 23X31 Nut \$/6-16 Outer Belf Guard 1 10277 Friction Disc Hub 1 23X31 Nut \$/16-24 In mer Belf Guard 1 10286 Comecting Link 1 23X31 Nut \$/16-24 R. H. Belf Finger 1 10286 Comecting Link 2 23X42 Lockmut \$/16-24 Clutch Lever 1 10288 Bye Bolf Rod Hanger 2 23X42 Lockmut \$/16-24 Clutch Lever 1 10288 Bye Bolf Rod Hanger 2 23X42 Lockmut \$/16-24 Clutch Lever 1 10289 Bye Bolf Rod Hanger 2 23X42 Lockmut \$/16-24 Clutch Lever 1 10284 Brine Shave 2 23X42 Lockmut \$/16-24 Bandel Bar Washer 2 10283 Shift Release Handle 1 23X54 Lockmut \$/16-24 Spinde 1 12023 Bearing 2 23X42 Lockmut \$/16-24 1 1024 Jaw Coupling 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10156	R. H. Lower Handle Bar	-	10275	Hex Shaft	-	23X15	Nut 5/16-18	
Outer Belt Guard 1 1277 Friction Disc Hub 1 23331 Nut \$/19-24 R. H. Belt Finger 1 10279 Axie Shatt 1 23344 Lockmut 1/4-20 R. H. Belt Finger 1 10286 Hub Cap 2 23343 Lockmut 1/4-20 Clutch Lever 1 10289 Eye Boit Rod Hanger 1 23343 Lockmut 1/2-20 Clutch Lever 1 10289 Eye Boit Rod Hanger 1 23343 Lockmut 1/2-20 Spidler Arm 2 10289 Shift Release Handle 1 23343 Lockmut 1/2-20 Spidler Arm 1 10289 Barlin Support 2 24X11 Feather Key Drive Plate 1 1.863 Barlin Support 2 24X11 Feather Key Drive Plate 1 1.876 Bushing 2 24X11 Feather Key Drive Plate 1 1.876 Bushing 2 25X1 Cotter Pin 1/8 x 1-1/4 Support 2 25X2	10157	Lower Handle		10276	Sprocket		23X18	Nut 3/8-16	₩.
Inner Belf Guard 10279 Axie Shaft 10286 Connecting Link 1 23X40 Lockmut 1/4-20 10288 Hub Cap 2 23X42 Lockmut 5/16-124 10288 Hub Cap 2 23X42 Lockmut 5/16-128 10289 Eye Bolt Rod Hanger 1 23X43 Lockmut 5/16-124 23X43 Lockmut 5/16-24 23X44 Lockmut 5/16-24 23X43 Lockmut 5/16-24 23X43 Lockmut 5/16-24 24X12 Rockmut 5/16-26 24X11 Feather Rey	10158	Outer Belt Guard	-	10277	Friction Disc Hub	-	23X31	Nut 5/16-24	87
R. H. Beit Finger 1 02266 Commecting Link 1 23X41 Lockmut 3/16 10-24 Luth Lever 1 02288 Hub Cap 2 33X42 Lockmut 5/16-18 Luth Lever 1 02288 Hub Cap 2 33X42 Lockmut 5/16-24 Luth Lever 1 02286 Fry Boit Rod Hanger 1 23X54 Lockmut 1/2-20 Ider Arm 1 02284 Engine Sheave 2 23X1 Lockmut 1/2-20 John Pate 1 10228 Ball Bearing Support 2 23X1 Lockmut 1/2-20 Drive Plate 1 10228 Ball Bearing Support 2 23X1 Key #5 Woodruff Jaw Coupling 1 1000 Lockmut 1/2-20 2 24X1 Key #6 Woodruff Jaw Coupling 1 1000 Lockmut 1/2-20 2 24X1 Key #6 Woodruff Jaw Coupling 1 1000 Lockmut 1/2-20 2 24X1 Key #6 Woodruff Jaw Coupling 1 1000 Lockmut 1/2-20 2 24X1 Key #6 Woodruff Jaw Coupling 1 1000 Lockmut 1/2-20 2 24X1 Key #6 Woodruff Support Bracket 1 23X3	10159	Inner Belt Guard	-	10279	Axle Shaft	-	23X40	Locknut 1/4-20	∞
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Handle Bar Washer 2 10294 Shift Release Handle 1 23X54 Lockmut 1/2-20	10194	Clutch Lever	-	10289	Eye Bolt Rod Hanger		23X43	Locknut 5/16-24	7
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Drive Plate 1 1x63 Ball Bearing 2 24X12 Key #91 Woodruff Jaw Coupling 1 1x74 Thrust Bearing 1 24X15 Key #5 Woodruff Philon & Sprocket 1 1x78 Ball Bearing 2 25X4 Cotter Phi 3/32 x 3/4 Philon Stub Shaft 1 2x26 Bushing 2 25X1 Cotter Phi 1/8 x 1 Spur Gear 1 2x34 Bushing 2 25X10 Hair Cotter Phi 3/8 x 1 Spur Gear 1 5x43 Bushing 2 25X10 Hair Cotter Phi 1/8 x 1-1/4 Spur Gear 1 5x43 Bushing 2 25X10 Hair Cotter Phi 1/8 x 1-1/4 Spur Gear 2 25X10 Hair Cotter Phi 1/8 x 1-1/4 2 25X10 Hair Cotter Phi 1/8 x 1-1/4 Shur Gear 2 25X10 Hair Cotter Phi 1/8 x 1-1/4 2 25X10 Hair Cotter Phi 1/8 x 1-1/4 Shur Gear 1 2x37 Retaining Ring 1 2x31 Throttle Control Shur Shaft 1 12x22 Capscrew 1/4-20 x 1-1/2 2 31X9 Flange Whizlock Screw 5/16 x 1/2 Clutch Bracket 1 12x56 Capscrew 1/4-20 x 1-1/4 2 33x62 Thre & Wheel Assembly <	10204	Spindle	_	12023	Bearing Support	~ 1	24X11	Feather Key	77
1	10205	Drive Plate	-	1×63	Ball Bearing	7	24X12	Key #91 Woodruff	-
1	10206	Jaw Coupling		1X74	Thrust Bearing	-	24X15	Key #5 Woodruff	-
2.4.26 Bushing 2.55.4 Cotter Pin 1/8 x 1	10207	Pinion & Sprocket	-	1X78	Ball Bearing	~1	25X1	Cotter Pin $3/32 \times 3/4$	7
Support Bracket 1 2.8.34 Busning 2 25X10 Hair Cotter Pin Spur Gear 1 5X37 Retaining Ring 1 25X14 Cotter Pin 1/8 x 1-1/4 Bracket Pin 1 5X43 Snap Ring 1 28X12 Cable Clamp Sliding Fork 1 9X16 Roll Pin 3/16 x 1 28X32 Throttle Control Fork Shaft 1 12X22 Capscrew 5/16-18 x 3/4 3 31X11 Ribbed Champ Lever Bracket 1 12X50 Capscrew 1/4-20 x 1-1/2 5 31X11 Ribbed Neck Bolt 1/4-20 x 5/8 Clutch Bracket 1 12X55 Capscrew 5/16-24 x 3/4 2 33X62 Thre & Wheel Assembly Disc Bracket 1 12X56 Capscrew 1/4-20 x 1-1/4 2 34X89 Belt Neutral Catch 1 12X69 Capscrew 5/16-18 x 1-1/4 1 35X1 Self-Tapping Screw #10 x 1/2 Throwout Lever 1 36X6 Grip 3/4 x 3-1/2 36X6 Grip 3/4 x 3-1/2	10208	Pinion Stub Shaft	-	2X26	Bushing	7	25X4	Cotter Pin $1/8 \times 1$	တ
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Sudding Fork 1 28X32 Throttle Control Fork Shaft 1 9X16 Roll Pin 3/16 x 1 2 31X9 Flange Whizlock Screw 5/16-18 x 1/. Lever Bracket 1 12X22 Capscrew 5/16-18 x 3/4 3 31X10 Flange Whizlock Screw 5/16-18 x 1/. Transfer Lever 1 12X50 Capscrew 1/4-20 x 1-1/2 5 31X11 Ribbed Neck Bolt 1/4-20 x 5/8 Clutch Bracket 1 12X56 Capscrew 5/16-24 x 3/4 2 33X62 Thre & Wheel Assembly Disc Bracket 1 12X56 Capscrew 1/4-20 x 1-1/4 2 34X89 Belt Neutral Catch 1 12X69 Capscrew 5/16-18 x 1-1/4 1 35X1 Self-Tapping Screw #10 x 1/2 Throwout Lever 1 36X5 Grip 1 x 4-1/2 or 5 36X6 Grip 1 x 4-1/2 or 5	10012	Dracket Fin	ا -	0440	Shap King	-	28X12	Cable Clamp	
1 2ALD 2 2 2 2 2 2 2 2 2	10213	Silding Fork	- •	0.4.6	Clevis Pin Doli Pin 2/16 - 1	c	28X32	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	→ ;
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12X69 Capscrew 1/4 13X69 Capscrew 5/16-18 x 1-1/4 135X1 15X89 Capscrew 5/16-18 x 1-1/4 1 35X1 1 36X5 1	10222	Clutch Bracket		12X56	Capscrew 5/10-24 X 3/4	N C	33X0Z	Tire & Wheel Assembly	N +
Throwout Lever 1 12A09 Capscrew 3/10-18 x 1-1/4 1 35X1 36X5 Lower Shift Rod 1 36X6	10226	Miss Dracket	٦,	19780	4-ZO X I-I/4	N •	0470	Delt 2-10 m: : :1 0 110	٦,
Lower Shift Rod 1 36X6 Grip 1 x 4-1/2 or	10227	The caten	٦.	14400	10-18 x 1-1/		32A1	Self-Tapping Screw #10 x 1/2	4''•
2000 GIÐ 1 4-1/2 OF	10228	Lower Shift Rod	 -			-	3040 38¥6	v 6	ન ¢
	1000	DOWEL DAME TOU	7	į			2000	1 X 4-1/2 OF	7



SERVICE

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.

ACCESSORIES

1. SLICER BAR (3-10M)

The slicer bar is available as optional equipment for Model 10M4. 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 5

2. TIRE CHAINS (1-10M)

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

3. TIRE CHAINS (2-10M)

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

4. PNEUMATIC TIRE KIT (6-10M)

Pneumatic tire kit 6--10M is available for Model 10M4 Sno-Thro.

"GARD-N-YARD" TOOLS



ARIENS JET SERIES rotary tillers with Turbo Tines. Choice of 3, 4 or 5 h.p. with tine reverse drive.



ARIENS EMPEROR riding mower. Available with Flex-N-Float 26" or 32" rotary; Insta-hitch attachments. Electric or impulse starting 6 h.p. engine.



ARIENS SNO-THRO Self propelled, 2 stage, heavy duty, 4 or 6 h.p. rotary snow thrower. 180° swiveling SNO-CHUTE with hand crank directional control.

ARIENS COMPANY

109 CALUMET STREET .

BRILLION, WISCONSIN



ARIENS ROCKET rotary tiller with TURBO TINES and friction-drive Tine Reverse. 20" tilling width. 6 h.p. Lauson engine. For commercial, professional and home gardener use.



ARIENS TRANS-A-MATIC for heavy duty commercial tilling. Choice 9.0 h.p. or 16.5 h.p. Wisconsin engine; 20" or 28" tilling widths. Non-slip differential.



ARIENS TILLIVATOR. Tractor mounted, custom-built tillers for large scale vegetable growers.



Modern, efficient plant of the Ariens Company where GARD-N-YARD tools are manufactured.