

OPERATING INSTRUCTIONS AND PARTS LIST

Ariens

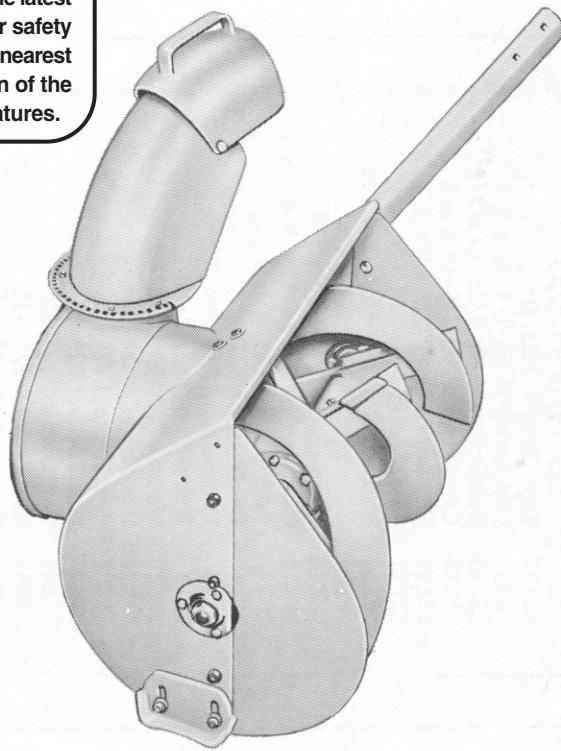


⚠ SAFETY MESSAGE ⚠

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 ATTACHMENT

Serial No.
7-10M 47001
and up



PRICE \$25

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.

OPERATING INSTRUCTIONS

| Part No. | Description | No. Req'd. | Part No. | Description | No. Req'd. |
|----------|-------------------------|------------|----------|--------------------------------|------------|
| 1038 | Jaw Clutch | 1 | 4X50 | Seal | 1 |
| 3017 | Bearing Flange | 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 1/4 x 1-1/4 | 3 |
| 10108 | Gasket | 1 | 9X9 | Roll Pin 1/8 x 1 | 1 |
| 10110 | Front Gear Shaft | 1 | 9X22 | Roll Pin 5/16 x 1-3/8 | 1 |
| 10111 | Fan | 1 | 11X13 | Pipe Plug 3/8 Sq. Hd. | 2 |
| 10113 | R. H. Rake | 1 | 12X1 | Cap Screw H. H. 1/4-20 x 3/4 | 5 |
| 10114 | L. H. Rake | 1 | 12X22 | Cap Screw H. H. 5/16-18 x 3/4 | 4 |
| 10142 | Bearing Flange | 5 | 12X23 | Cap Screw H. H. 3/8-16 x 3/4 | 2 |
| 10154 | Control Sprocket | 1 | 12X28 | Cap Screw H. H. 1/4-20 x 1/2 | 6 |
| 10164 | Scraper Blade | 1 | 12X71 | Shear Bolt | 2 |
| 10165 | Runner | 2 | 14X12 | Socket Set Screw 5/16-18 x 3/8 | 2 |
| 10229 | Wave Washer | 1 or 2 | 19X9 | Carriage Bolt 5/16-18 x 1/2 | 11 |
| 10242 | Slicer Bar | 1 | 19X10 | Carriage Bolt 3/8-16 x 3/4 | 4 |
| 10244 | Helicon Gear | 1 | 19X11 | Carriage Bolt 5/16-18 x 3/4 | 3 |
| 10245 | Helicon Pinion Shaft | 1 | 20X2 | Lockwasher 1/4 | 5 |
| 10264 | Blower Housing | 1 | 20X3 | Lockwasher 5/16 | 7 |
| 10265 | Front Gear Case Support | 1 | 20X4 | Lockwasher 3/8 | 4 |
| 10269 | Chute Clamp | 3 | 21X2 | Wrought Washer 5/16 | 15 |
| 10281 | Chute Control Support | 1 | 21X36 | Washer .880 ID x 1.375 x 1/16 | 4 |
| 10284 | Chute Control Crank | 1 | 23X15 | Hex Nut 5/16-18 | 3 |
| 10286 | R. H. Rotor Shield | 1 | 23X30 | Hex Locknut 3/4-16 | 2 |
| 10287 | L. H. Rotor Shield | 1 | 23X39 | Hex Locknut 3/8-16 | 6 |
| 10289 | Rod Hanger | 1 | 23X40 | Hex Locknut 1/4-20 | 12 |
| 10290 | Universal Joint | 1 | 23X42 | Hex Locknut 5/16-18 | 13 |
| 10291 | Deflector Chute | 1 | 23X51 | Keps Nut #10-24 | 6 |
| 10292 | Discharge Chute | 1 | 24X1 | Woodruff Key #11 | 1 |
| 1X44 | Bearing Cup | 2 | 25X14 | Cotter Pin 1/8 x 1-1/4 | 1 |
| 1X45 | Bearing Cone | 2 | 40X12 | LABELS NOT ILLUSTRATED | 1 |
| 1X63 | Ball Bearing | 3 | 40X14 | Sno-Thro Label | 1 |
| 2X22 | Flange Bushing | 2 | 40X14 | Caution Label | 1 |

a. Sno-Thro Attachment.

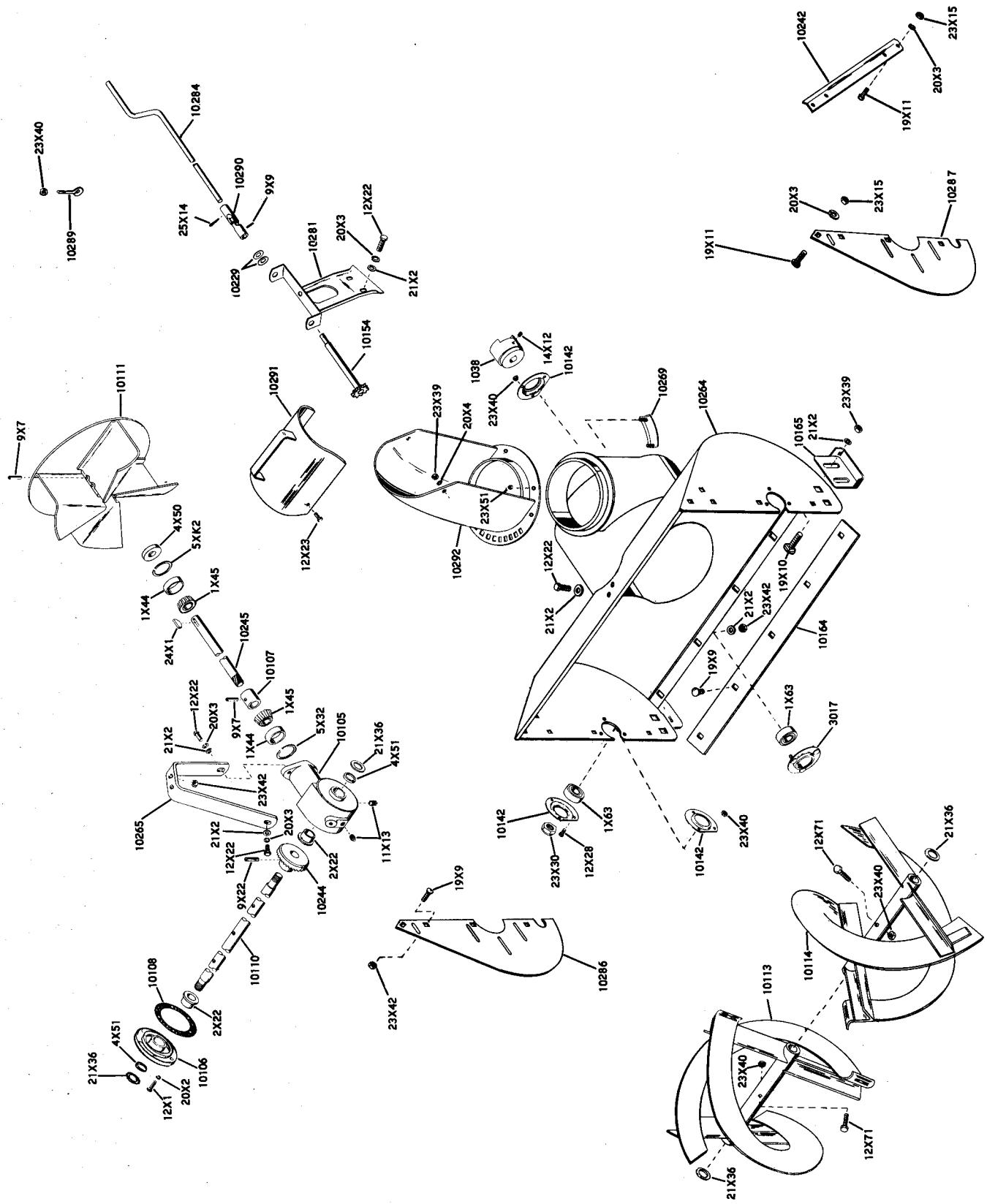
- (1) Hook the notches in the lower portion of the Sno-Thro Attachment frame over the rod passing through the forward section of the tractor frame.
- (2) Tip the two sections together, being sure the jaw clutch on the Sno-Thro Attachment and tractor are lined up.

- (3) Insert and tighten the two 3/8-inch cap-screws through the top of the tractor frame and into the Sno-Thro Attachment.

b. Chute Control Rod.

- (1) Insert the rod hanger through the hole in the upper handle bar and secure with the 1/4-inch locknut.
- (2) Fasten the chute control support to the tractor with the hardware provided. Position the support so that the gear meshes properly with the holes in the chute. Fasten securely.

- (3) Slide the chute control rod through the rod hanger and into the end of the universal joint. Secure the rod to the universal joint with a cotter pin.



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OPERATING INSTRUCTIONS

2. OPERATION

a. Tractor. For operation, see the section on OPERATION in the instruction book packed with the tractor.

b. Sno-Thro Attachment.

(1) 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.

(2) To start the Sno-Thro Attachment, start the engine and engage the engine clutch on the tractor.

(3) To stop the Sno-Thro Attachment, disengage the engine clutch on the tractor.

3. RUNNERS

a. An adjustable runner is provided on each end of the blower housing (figure 1). 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. 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 sideways or other gravel areas, adjust the runners so that they are 1-1/4-inch below the scraper blade.

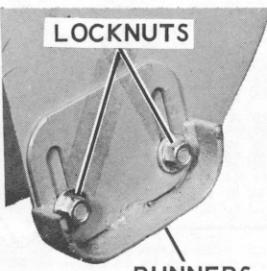


Figure 1

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.

4. 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.

5. CHUTE

a. 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.

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.

6. 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. STOP THE ENGINE BEFORE ATTEMPTING TO REMOVE OBSTRUCTIONS OR REPLACE SHEAR BOLTS.

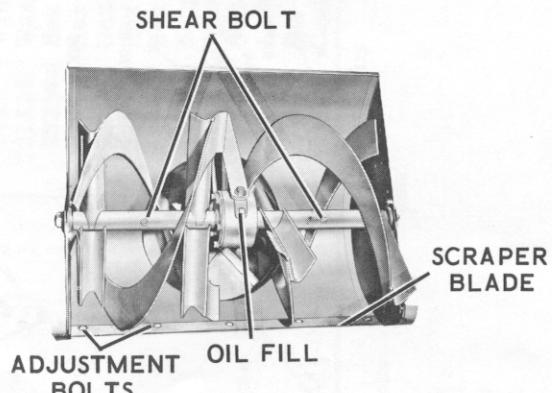


Figure 2

7. LUBRICATION

a. Drain and refill the snow rotor gear case with 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.