

# PARTS MANUAL

SERIAL NUMBER

MODEL NUMBER 932001 - 2.7 H.P.  
SERIAL NUMBER 000101 & UP

PM-32-77

PRICE \$ .50

# *Ariens*

## 2.7 HP.

## COMPACT SNO-THRO



**ARIENS COMPANY**

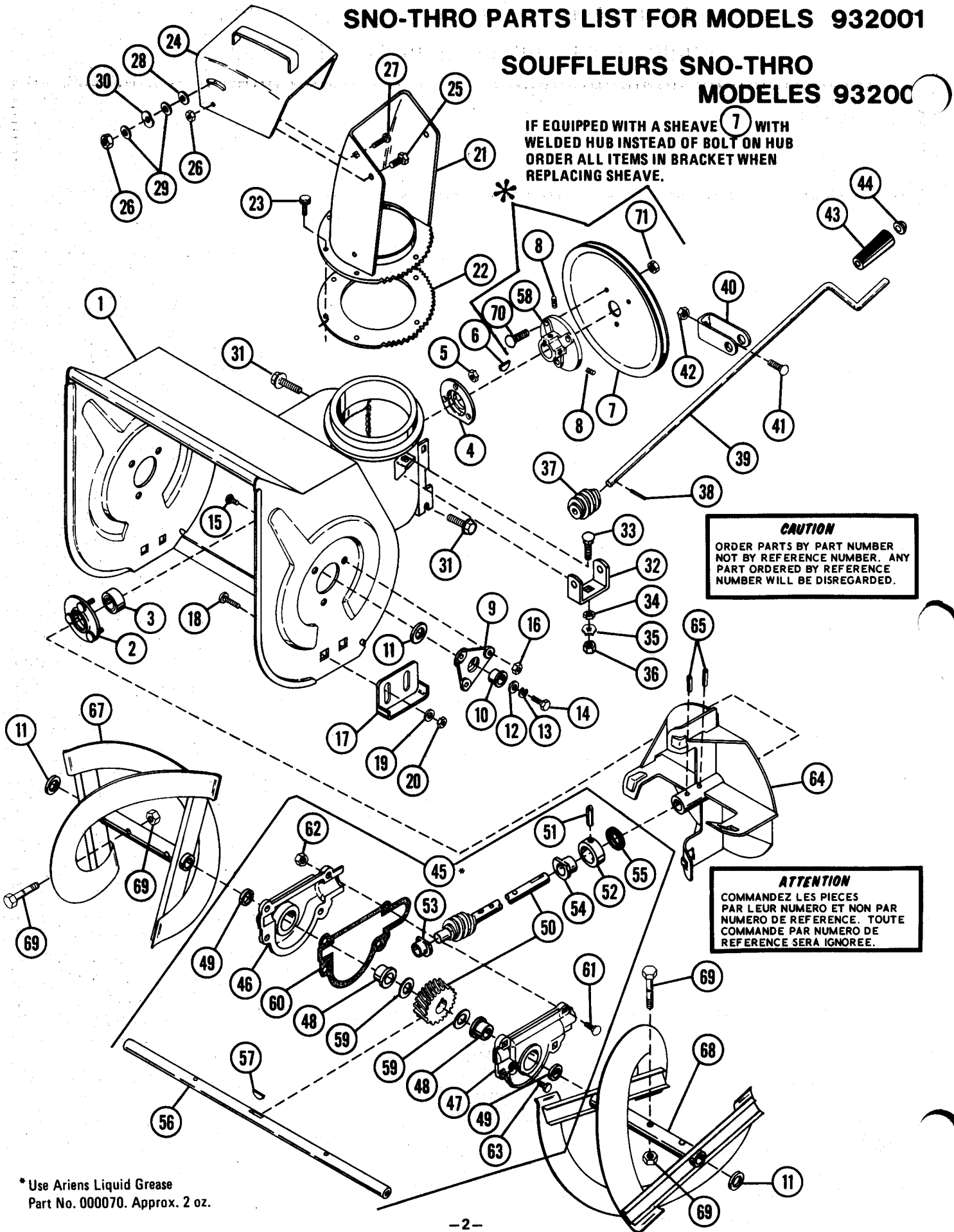


**BRILLION, WIS. 54110**

# SNO-THRO PARTS LIST FOR MODELS 932001

## SOUFFLEURS SNO-THRO MODELES 93200

IF EQUIPPED WITH A SHEAVE (7) WITH  
WELDED HUB INSTEAD OF BOLT ON HUB  
ORDER ALL ITEMS IN BRACKET WHEN  
REPLACING SHEAVE.



**CAUTION**  
ORDER PARTS BY PART NUMBER  
NOT BY REFERENCE NUMBER. ANY  
PART ORDERED BY REFERENCE  
NUMBER WILL BE DISREGARDED.

**ATTENTION**  
COMMANDEZ LES PIECES  
PAR LEUR NUMERO ET NON PAR  
NUMERO DE REFERENCE. TOUTE  
COMMANDE PAR NUMERO DE  
REFERENCE SERA IGNOREE.

\*Use Ariens Liquid Grease  
Part No. 000070. Approx. 2 oz.

# SNO-THRO PARTS LIST FOR MODELS 932001

## SOUFFLEURS SNO-THRO MODELES 932001

No DE REF.	No DE PIÈCE	CODE D'INV.	DESCRIPTION	QUANTITÉ	No DE REF.	No DE PIÈCE	CODE D'INV.	DESCRIPTION	QUANTITÉ
REF. PART NO.	PART NO.	STOCK CODE		NO REQ'D	REF. PART NO.	PART NO.	STOCK CODE		NO REQ'D
1	532003	S	BLOWER HOUSING, W/Decals	1	36	065015	M	NUT, Hex, 5/16-18	1
2	010142	M	BEARING FLANGE	1	37	022110	M	WORM GEAR	1
3	054063	F	BEARING, Radial	1	38	058034	M	ROLL PIN, 1/8 x 3/4	1
4	003017	M	BEARING FLANGE	1	39	022081	S	CHUTE CONTROL CRANK	1
5	065040	M	LOCKNUT	3	40	532004	M	BRACKET, W/Decal	1
6	066001	M	KEY, Woodruff, SAE 11	1	41	062001	M	CARRIAGE BOLT, 1/4-20 x 1-1/4	1
7	073080	M	SHEAVE	1	42	065040	M	LOCKNUT, 1/4-20	1
8	060005	M	SET SCREW	2	43	075039	M	GRIP	1
9	032044	M	SUPPORT, Bearing	2	44	010198	M	CAP	1
10	055113	F	FLANGED BUSHING	2	45	532002	M	GEAR CASE ASSEMBLY	1
11	064009	M	WASHER, 3/4 STD.	4	46	032032	S	GEAR CASE, Right Half	1
12	064128	M	WASHER	2	47	032033	S	GEAR CASE, Left Half	1
13	063003	M	LOCKWASHER 5/16 STD.	2	48	055102	F	FLANGED BUSHING	2
14	059002	M	CAP SCREW, 5/16-18 x 5/8, GR 2	2	49	056043	F	SEAL	2
15	070011	M	RIBBED NECK BOLT 1/4-20 x 5/8	6	50	532001	M	FAN SHAFT & WORM GEAR	1
16	065056	M	FLANGED WHIZ LOCKNUT 1/4-20	6	51	058003	M	ROLL PIN, 3/16 x 1-1/4	1
17	010165	F	RUNNER	2	52	032035	S	THRUST COLLAR	1
18	062010	M	CARRIAGE BOLT, 3/8-16 x 3/4	4	53	055111	F	FLANGED BUSHING	1
19	064002	M	WASHER, 5/16 STD.	4	54	055112	F	FLANGED BUSHING	1
20	065039	M	LOCKNUT, 3/8-16	4	55	056058	F	"O" RING	1
21	022159	S	CHUTE, Discharge	1	56	032036	S	RAKE SHAFT	1
22	022160	S	GEAR, Lower Collar	1	57	066014	M	KEY, Woodruff, SAE 61	1
23	074034	M	TAPTITE	6	58	002862	M	HUB	1
24	522006	S	DEFLECTOR CHUTE W/Decal	1	59	064161	M	WASHER	2
25	059039	M	CAP SCREW, 5/16-18 x 1/2, GR 2	2	60	032038	F	GASKET	1
26	065042	M	LOCKNUT, 5/16-18	3	61	062012	M	CARRIAGE BOLT, 1/4-20 x 3/4	4
27	062034	M	CARRIAGE BOLT, 5/16-18 x 3/4	1	62	065056	M	FLANGED WHIZLOCK NUT	4
28	064168	M	WASHER, Plastic 5/16	1	63	070010	M	FLANGE WHIZLOCK SCREW 3/8-16 x 1/2	1
29	064123	M	WASHER, 5/16 STD	2	64	032040	M	FAN	1
30	013202	M	WAVE WASHER	1	65	058007	M	ROLL PIN, 1/4 x 1-1/4	2
31	070009	M	FLANGE WHIZLOCK SCREW 5/16-18 x 1/2	4	66	064009	M	WASHER, 3/4 STD.	2
32	022123	S	WORM CLEVIS	1	67	032041	S	RAKE, Right	1
33	062011	M	CARRIAGE BOLT, 5/16-18 x 3/4	1	68	032042	S	RAKE, Left	1
34	063032	M	LOCKWASHER	1	69	532005	F	SHEAR BOLT W/Nut	2
35	063023	M	LOCKWASHER	1	70	070053	M	RIBBED NECK BOLT	3
					71	065078	M	FLANGE WHIZLOCK NUT	3

\*If equipped with a sheave (7) with welded hub instead of bolt on hub, order all items in bracket when replacing sheave.

**SUGGESTED PARTS STOCKING CODE**

F - FAST                      S - SLOW  
M - MEDIUM                O - CUSTOMER ORDER ONLY

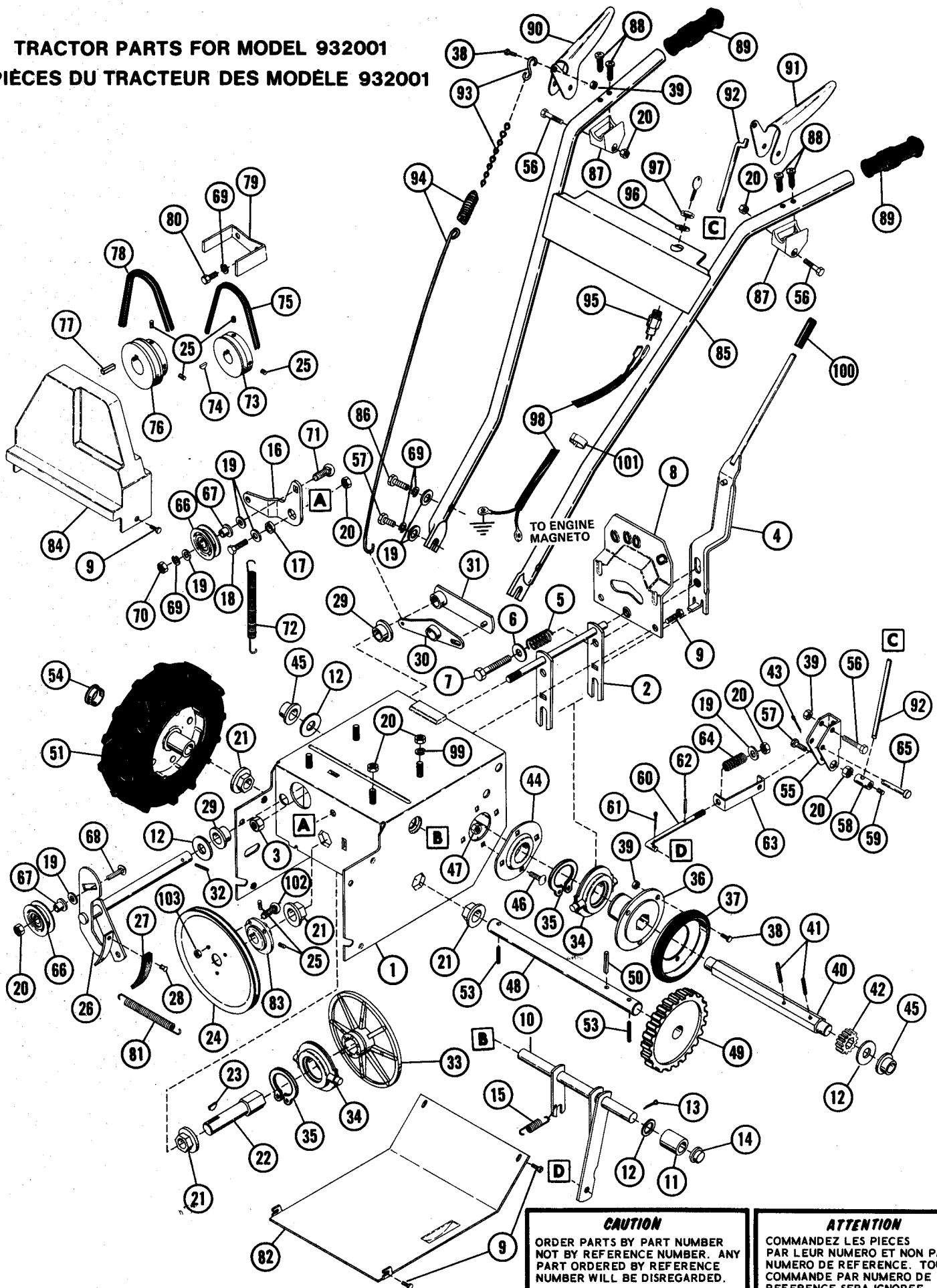
NOTE: DECALS SEE PAGE 8.

**CODE SUGGÉRÉ D'INVENTAIRE DES PIÈCES**

F - FAST (rapide)            S - SLOW (lent)  
M - MEDIUM (moyen)      O - Commande du client seulement

NOTE: DÉCALQUES (voir p. 8.)

**TRACTOR PARTS FOR MODEL 932001**  
**PIÈCES DU TRACTEUR DES MODÈLE 932001**



**CAUTION**  
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**ATTENTION**  
 COMMANDEZ LES PIÈCES  
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**TRACTOR PARTS FOR MODEL 932001**  
**PIÈCES DU TRACTEUR DES MODÈLE 932001**

No DE REF.	No DE PIECE	CODE D'INV.	DESCRIPTION	QUANTITÉ	No DE REF.	No DE PIECE	CODE D'INV.	DESCRIPTION	QUANTITÉ
REF. PART NO.	PART NO.	STOCK CODE		NO. REQ'D.	REF. PART NO.	PART NO.	STOCK CODE		NO. REQ'D.
1	032001	O	TRACTOR FRAME	1	56	059062	M	CAP SCREW, 1/4-20 x 1-3/4, GR 2	3
2	032002	S	SHIFTING FORK	1	57	059022	M	CAP SCREW, 5/16-18 x 3/4 GR 2	3
3	065039	M	LOCKNUT 3/8-16	1	58	022135	S	ROD ADAPTER	1
4	032003	S	SHIFT HANDLE	1	59	060012	M	SETSCREW 5/16-18 x 3/8	1
5	083090	M	SPRING	1	60	032027	M	ROD, Traction Clutch	1
6	064123	M	WASHER, 5/16 STD	1	61	067020	M	HAIR PIN, 3/32 x 1-3/16	1
7	059045	M	CAP SCREW, 5/16-18 x 1-1/2 GR 2	1	62	058035	M	ROLL PIN, 1/8 x 1/2	1
8	032004	S	QUADRANT	1	63	032028	S	STRAP	1
9	070012	M	FLANGE WHIZLOCK SCREW 1/4-20 x 3/8	8	64	083091	M	BRAKE SPRING	1
10	032005	S	CLUTCH FORK	1	65	002813	M	CLEVIS PIN	1
11	031053	S	SPACER	1	66	012132	M	IDLER	2
12	064003	M	WASHER, 1/2 STD	4	67	012131	M	BEARING SPACER	2
13	067004	M	PIN, Cotter, 1/8 x 1	1	68	062022	M	CARRIAGE BOLT, 5/16-18 x 1-3/8	1
14	012086	F	CAP	1	69	063003	M	LOCKWASHER 5/16 STD	6
15	083141	M	SPRING, Extension	1	70	065015	M	NUT 5/16-18	1
16	032006	S	IDLER ARM	1	71	062048	M	CARRIAGE BOLT 5/16-18 x 1-1/4	1
17	010358	M	SPACER BUSHING	1	72	083172	M	SPRING, Extension	1
18	059002	M	CAP SCREW, 5/16-18 x 5/8 GR 2	1	73	032018	S	SHEAVE, Camshaft	1
19	064002	M	WASHER, 5/16, STD	9	74	066015	M	KEY, Woodruff, SAE 5	1
20	065042	M	LOCKNUT, 5/16-18	8	75	072106	F	VEE BELT	1
21	055109	F	FLANGED BUSHING	4	76	032019	S	SHEAVE, Engine	1
22	032007	M	HEX SHAFT	1	77	066013	M	KEY, Straight, 3/16 x 3/16 x 1	1
23	066003	M	KEY, Woodruff, SAE 9	1	78	072107	F	VEE BELT	1
24	073074	M	SHEAVE	1	79	032020	M	BELT FINGER	1
25	060014	M	SETSCREW 1/4-20 x 1/4	6	80	059053	M	CAP SCREW, 5/16-18 x 1/2 GR 2	1
26	632001	S	BRAKE CLUTCH ARM W/Lining	1	81	083171	M	SPRING, Extension	1
27	022178	S	BRAKE LINING	1	82	032021	S	COVER, Bottom	1
28	068062	S	RIVET	2	83	032050	S	HUB	1
29	055037	F	FLANGED BUSHING	2	84	032022	M	BELT COVER	1
30	032009	S	LEVER	1	85	532006	S	HANDLEBAR W/Decal	1
31	032010	S	LEVER CLUTCH	1	86	059069	M	CAP SCREW, 5/16-18 x 1-1/4, GR 2	2
32	058026	M	ROLL PIN, 5/32 x 7/8	1	87	022129	S	HANDLE PIVOT	2
33	032011	M	FRICTION PLATE	1	88	074039	M	SCREW, Self Tapping	4
34	032012	M	BEARING FLANGE	2	89	075081	M	GRIP	2
35	057043	F	SNAP RING	2	90	532008	S	HANDLE W/Decal	1
36	032029	S	FRICTION WHEEL HUB	1	91	532007	S	HANDLE W/Decal	1
37	022013	F	FRICTION DISC	1	92	032026	M	ROD, Clutch	1
38	059028	M	CAP SCREW, 1/4-20 x 1/2	4	93	002042	M	CHAIN & CONNECTOR	1
39	065040	M	LOCKNUT, 1/4-20	7	94	083008	M	CLUTCH SPRING	1
40	032013	M	HEX SHAFT	1	95	011134	M	KEY SWITCH	1
41	058009	M	ROLL PIN, 1/8 x 1	2	96	063019	M	LOCKWASHER	1
42	022011	S	PINION	1	97	065075	M	NUT, Special	1
43	067001	M	PIN, Cotter, 3/32 x 3/4	1	98	022161	S	WIRE, Shorting	1
44	032014	M	BUSHING FLANGE	2	99	063018	M	LOCKWASHER	1
45	055110	F	FLANGED BUSHING	2	100	075086	M	GRIP, Speed Control	1
46	062049	M	CARRIAGE BOLT 10-24 x 3/8	8	101	069099	M	CLAMP, 2 Wire	1
47	065094	M	TWIN WHIZLOCK NUT 10-24	8	102	070053	M	RIBBED NECK BOLT, 5/16-18 x 3/4	3
48	032015	S	AXLE SHAFT	1	103	065078	M	LOCKNUT, 5/16-18	3
49	032016	S	GEAR	1					
50	058065	M	GROOVE PIN, 3/16 x 1-1/4	1				ENGINE, Tecumseh HSK35-45503M	1
51	071121	S	WHEEL ASSEMBLY, Right	1					
52	071122	S	WHEEL ASSEMBLY, Left	1					
53	058064	M	ROLL PIN, 7/32 x 1-1/4	2					
54	075085	M	HOLE PLUG	2					
55	032017	S	BRACKET	1					

NOTE: DECALS SEE PAGE 8.

NOTE: DÉCALQUES (voir p. 8.)

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# MAINTENANCE

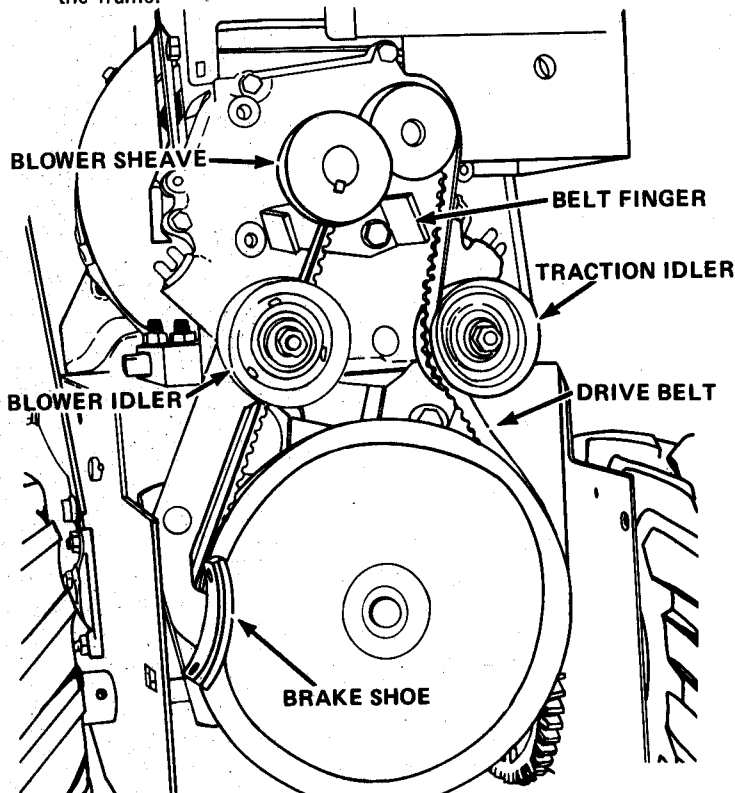
## BELT REPLACEMENT

### CAUTION:

**SINCE REPLACING THE BELTS WILL INVOLVE TURNING THE ENGINE OVER WITH THE STARTER, THE SPARK PLUG WIRE MUST BE DISCONNECTED DURING THIS PROCEDURE.**

The drive belt and the attachment drive belt are both accessible by tipping apart the blower housing and tractor as follows:

1. Remove the nut and washer holding the worm clevis on the bracket. Remove the chute crank by sliding it back in the bracket and out of the way.
2. Remove the two flanged whizlock screws securing the belt guard to the tractor. Remove the belt guard.
3. Remove the top cap screws and loosen the lower cap screws on each side that secures the blower housing to the frame. As the blower housing and tractor are tipped apart, roll the belt off the engine sheave between the sheave and belt finger. This can be easily done by pulling the recoil starter rope to rotate the engine sheave. With the belt disconnected, the blower housing may then be tipped from the frame.



## REPLACEMENT OF THE BLOWER DRIVE BELT

The blower drive belt remains on the sheave on the blower housing. Place the new belt on the sheave. Hold it in position on the sheave as the blower is tipped into position on the tractor. Be sure the brake shoe seats on the belt as the units are tipped together. Once assembled, roll the blower belt on to the engine sheave and position the idler on the outside of the belt.

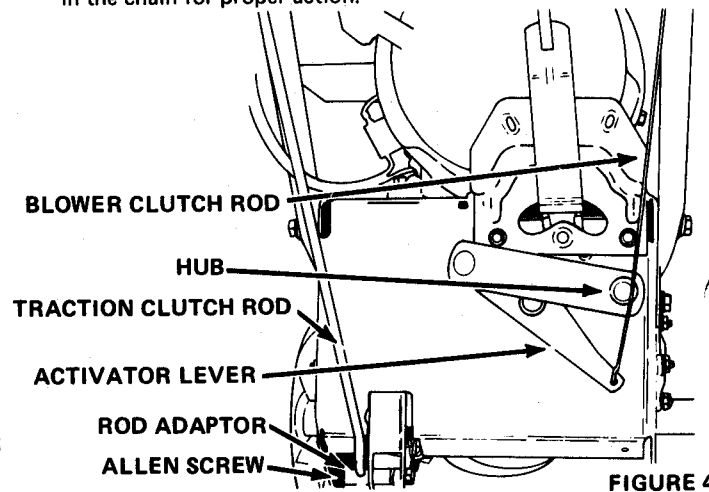
## REPLACEMENT OF TRACTION DRIVE BELT

With the blower and tractor tipped apart, spring the idler from the drive belt and remove from around the lower sheave and engine sheave. Install the new belt on the engine sheave and lower sheave. Then spring the idler back into position on the outside of the drive belt.

With the belts in position and the idler in place, check the belt alignment. The engine sheave and the tractor sheave must align with one another. If the sheaves are not properly aligned, loosen the setscrews on the engine sheave and align the sheaves. Retighten the setscrews.

## BLOWER CLUTCH ADJUSTMENT

The blower clutch is adjusted by connecting the spring on the clutch rod into the proper link on the clutch handle chain. Properly adjusted, the spring should be slightly extended with the clutch handle down. This should occur without the attachment activator lever touching the hub. If the activator lever touches the hub, the blower belt idler pulley must be adjusted in the idler arm. Loosen the cap screw on the idler and move the idler IN TOWARD the belt. Readjust the spring in the chain for proper action.



## DRIVE DISC ADJUSTMENT

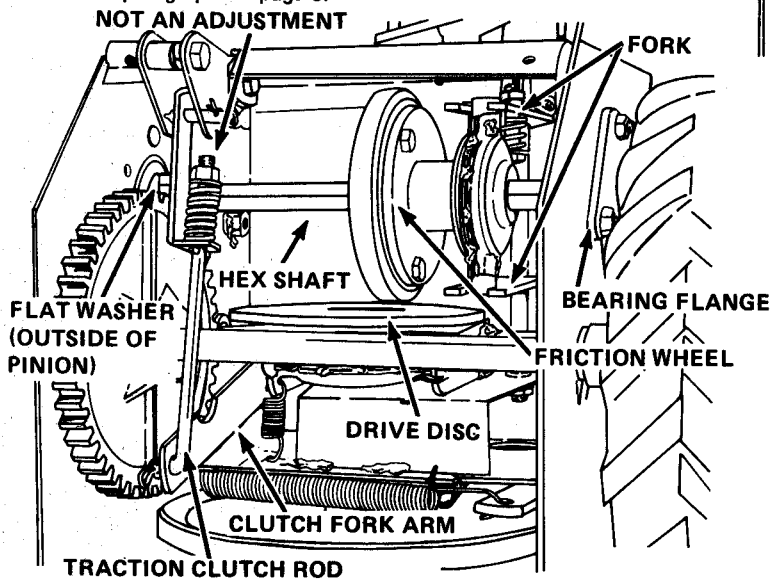
The only adjustment for the drive disc is made by adjusting the length of the traction clutch rod. With the clutch handle in the full upright position and the clutch bracket down against the stop, tighten the allen screw in the rod adaptor. To check the adjustment, push the Sno-Thro with the clutch handle up; it should roll freely. While pushing the Sno-Thro, slowly lower the clutch handle. The wheels should start to drag with the clutch handle approximately halfway down to the handlebar grip when properly set. If necessary, adjust the clutch rod in the rod adaptor to secure this adjustment.

**NOTE:** The hex nut on the clutch link just above the spring on the clutch linkage is NOT an adjustment. This nut should be tightened just enough to hold the spring snug and prevent the spring from rattling when traction clutch is released.

## REPLACEMENT OF FRICTION WHEEL

1. Tip the machine up on the blower housing and brace securely. Remove two cap screws at back of frame securing the bottom cover and loosen two cap screws at front frame sides and remove the cover.
2. Remove the four whizlock nuts holding the bearing flange on the right hand side of the frame. Remove the bearing flange and carriage bolts.

3. Remove the hairpin cotter from the traction clutch rod. Pull this rod from the clutch fork arm and tip it up and out of the way.
4. Slide the friction wheel assembly and hex shaft to the right until the left end of the hex shaft comes free of the left bearing. Then slip the whole assembly back to the right and pull it forward out of the frame.
5. With the friction wheel assembly out of the frame, the three cap screws holding the friction wheel to the hub may be removed and the friction wheel removed.
6. Position a new friction wheel on the hub and secure with the three cap screws. Tighten securely.
7. Slip the right end of the complete friction wheel assembly and hex shaft into the hole in the right side of the frame. Position the friction wheel hub in the forks. Slide the hex shaft to the left and into the left bearing being sure flat washer is in position. See that the pinion gear meshes with the large gear.
8. Replace the bearing flange on the right side of the frame and secure with the four carriage bolts and nuts. Reconnect the traction clutch rod in the clutch fork arm and secure with a hairpin cotter. Readjust the drive disc as described in the paragraph on page 6.



## LUBRICATION

### ENGINE

Fill the crankcase with Ariens Sno-Thro oil 5W-20 when using the Sno-Thro.

Use Ariens Gard-N-Yard oil MS classification SAE-30 when using lawn attachments.

Refer to engine owners manual for appropriate crankcase oil substitutes.

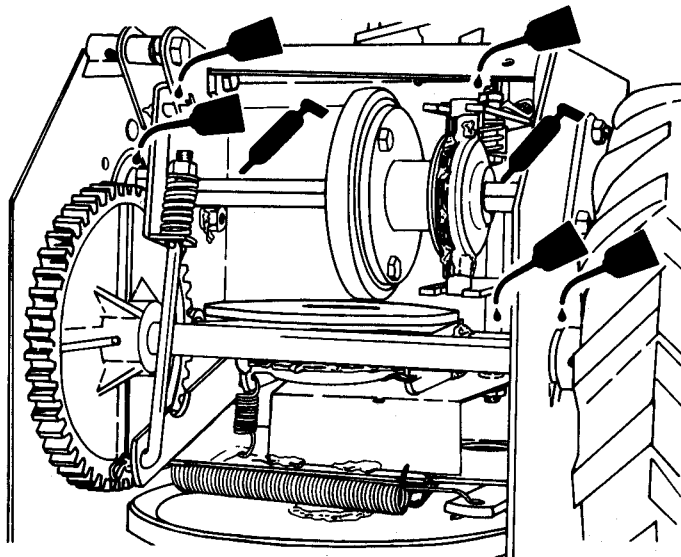
Fill the fuel tank with fresh, clean, unleaded automotive type gasoline. (Leaded "regular" grade gasoline is an acceptable substitute.)

NOTE: For detailed instructions on engine refer to manufacturer's booklet packed with the machine.

### TRACTOR DRIVE

At start of season, grease gears, hex and axle shaft as indicated in the figure below. Use Ariens Moly Lithium grease.

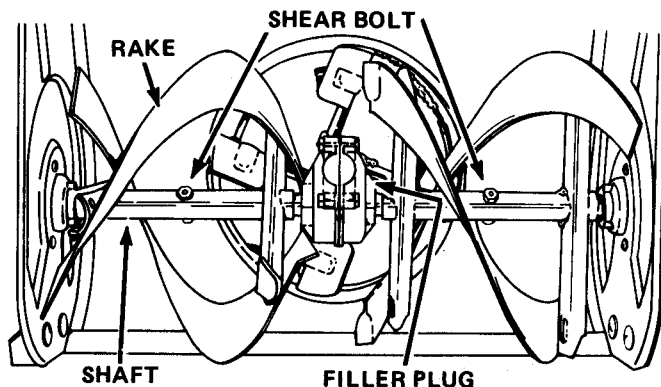
Put two or three drops of light oil on shift lever and other linkage points. **CAUTION:** Do not allow grease or oil to come in contact with friction wheel, drive disc or belts.



### SNO-THRO UNIT

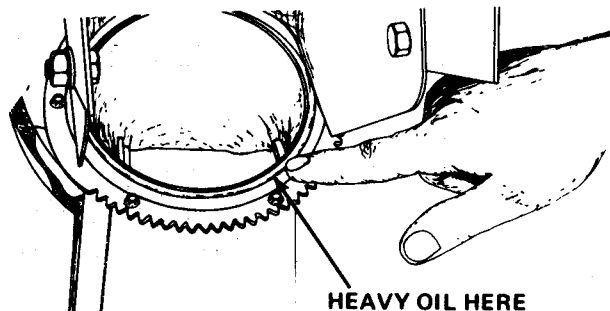
Check the lubrication in the blower gear case by removing the filler plug on the side of the gear case just above the left hand auger shaft. Lubricant should be even with the hole with the machine sitting level.

To Drain Gear Case: Remove fill plug. Tip up on blower housing and allow oil to drain. Tip unit back on wheels. Fill gear case with Ariens Liquid Grease (Part No. 000070).



Oil rake shaft periodically or each time a shear bolt is replaced. At the end of the season, remove shear bolts, oil rake shaft through shear bolt holes, turn rakes on shaft several times and replace shear bolts.

Oil the discharge chute with several drops of heavy oil.



# Ariens

ARIENS COMPANY BRILLION, WISCONSIN U.S.A.

78061



**CLUTCH LEVER DEPRESS FOR ATTACHMENT DRIVE**  
78455

**CLUTCH LEVER DEPRESS FOR WHEEL DRIVE**  
78324

**WARNING**  
ROTATING PARTS  
STOP ENGINE AND REMOVE SPARK  
PLUG IGNITION WIRE BEFORE  
REMOVING OBSTRUCTIONS  
78323

**27HP**  
78458

**DISCHARGE**  
RIGHT LEFT  
78325

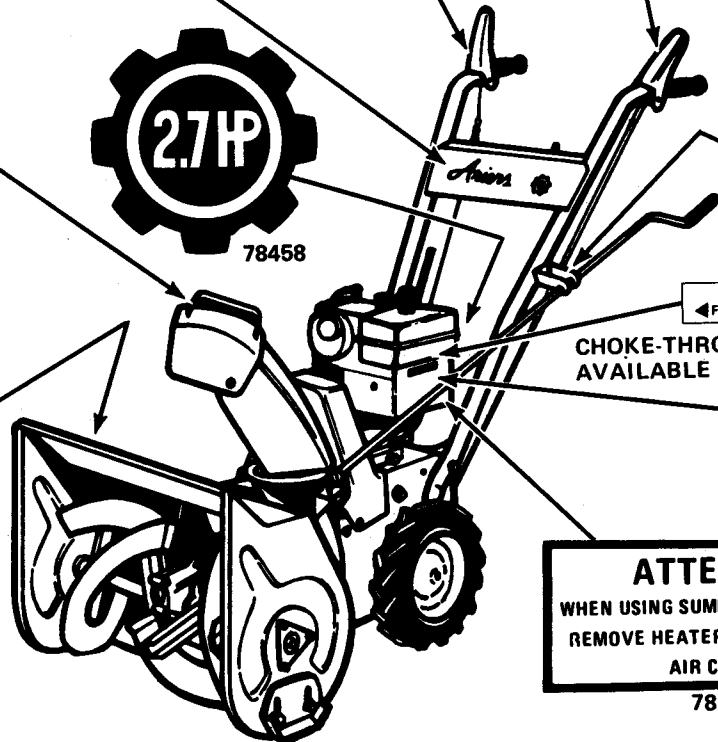
**WARNING**  
ROTATING PARTS  
KEEP CLEAR OF COLLECTOR  
RAKES WHILE ENGINE  
IS RUNNING  
78327

**THROTTLE**  
FAST — SLOW — STOP

**CHOKE-THROTTLE DECALS**  
AVAILABLE FROM TECUMSEH

OFF 1/2 3/4 FULL  
CHOKE

**ATTENTION**  
WHEN USING SUMMER ATTACHMENTS  
REMOVE HEATER BOX AND INSTALL  
AIR CLEANER  
78189



**SAFETY INSTRUCTIONS**  
AVOID POTENTIAL HAZARDS  
1. READ OWNERS MANUAL FOR OPERATING AND SAFETY INSTRUCTIONS.  
2. OBSERVE ALL LABELS AND INSTRUCTIONS.  
3. DO NOT DEFEAT INTERLOCK SYSTEM. IT IS FOR YOUR PROTECTION.  
4. STOP ENGINE AND WAIT FOR ALL MOVEMENT TO STOP BEFORE UNBLOCKING OR SERVICING MACHINE.  
5. NEVER ALLOW CHILDREN TO OPERATE THE EQUIPMENT. NEVER ALLOW ADULTS TO OPERATE THE EQUIPMENT WITHOUT PROPER INSTRUCTION.  
6. KEEP THE AREA OF OPERATION CLEAR OF ALL PERSONS, ESPECIALLY CHILDREN.  
7. NEVER DIRECT DISCHARGE AT BYSTANDERS OR ALLOW ANYONE IN FRONT OF UNIT.  
8. KEEP MACHINE PROPERLY MAINTAINED AND SERVICED WITH ALL SHIELDS, GUARDS, AND PROTECTIVE DEVICES IN PLACE.  
78416

**KEY SWITCH**  
OFF RUN  
**OPERATING INSTRUCTIONS**  
REFER TO OWNERS MANUAL  
TO START TURN KEY SWITCH ON AND PULL STARTER  
TO STOP TURN KEY SWITCH TO OFF AND REMOVE KEY  
78457

**SPEED SELECTOR**  
3 — 2 — 1 — R  
78456

**120 VOLT A.C. ELECTRIC STARTER**  
**PUSH TO START**  
78357  
(120V AC STARTER KIT ONLY)

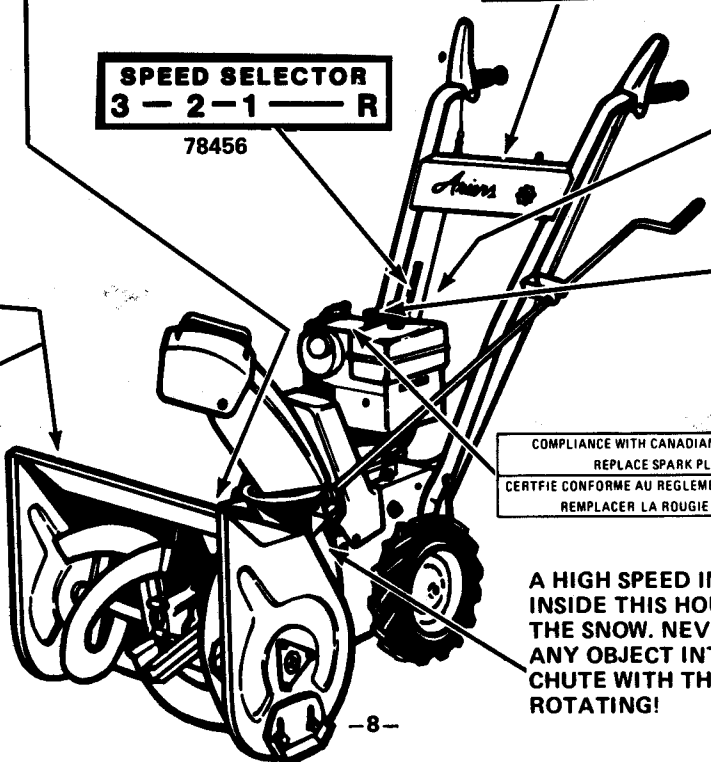
**ENGINE PRIMER**  
PUSH TO PRIME  
78395

**Ariens**  
78174



78345

COMPLIANCE WITH CANADIAN RADIO INTERFERENCE REGULATIONS CERTIFIED  
REPLACE SPARK PLUG WITH RESISTOR SPARK PLUG ONLY!  
CERTIFIE CONFORME AU REGLEMENT CANADIEN SUR LE BROUILLAGE RADIOELECTRIQUE  
REPLACER LA ROUGIE PAR UNE ROUGIE A RESISTANCE SEULEMENT!  
78400



A HIGH SPEED IMPELLER ROTATES  
INSIDE THIS HOUSING TO THROW  
THE SNOW. NEVER REACH OR PUSH  
ANY OBJECT INTO THE DISCHARGE  
CHUTE WITH THE IMPELLER  
ROTATING!