

Sears

owners manual

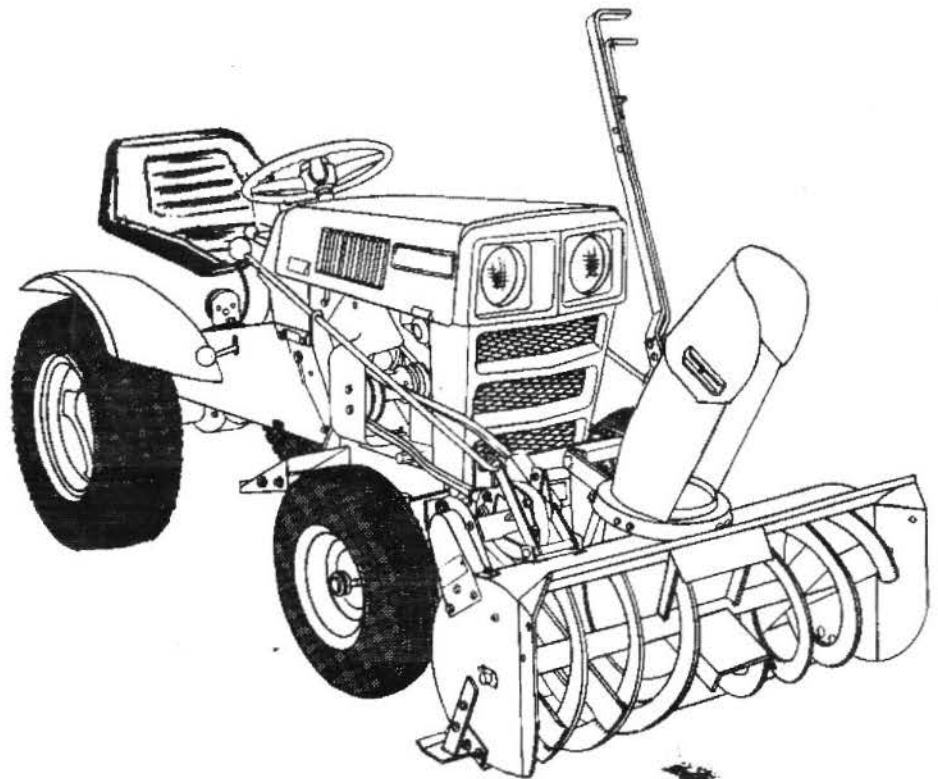
# SNOW THROWER ATTACHMENT

FOR 10 H.P. CUSTOM TRACTORS

MODEL NO.  
917.250540

**CAUTION:**  
Read Rules for  
Safe Operation  
and Instructions  
Carefully

- Assembly
- Operating
- Maintenance
- Repair Parts



SEARS, ROEBUCK AND CO. U.S.A.

SIMPSONS-SEARS LIMITED, CANADA

## SAFETY PRECAUTIONS

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.

1. Disengage all clutches and shift into neutral before starting engine. Keep hands, feet and clothing away from power driven parts.
2. Know the controls and how to stop quickly – read the owners manual thoroughly before operating snow thrower.
3. Use caution when handling gasoline – it is highly flammable. Use an approved gasoline container. Never add gasoline to a running engine or when engine is hot. Never smoke while refueling engine. Always fill engine from right side and while unit is outside of building. A spark from the fuel can touching battery could cause a fire. Wipe up any spilled gasoline, and replace gas cap securely. Never run engine indoors without opening doors or windows, exhaust gases can be very dangerous.
4. Be sure the area to be cleaned has no hidden objects which can be hit to damage machine or smaller objects which may be picked up and thrown. Adjust height to clear gravel or crushed rock surface.
5. Do not direct deflector towards persons or windows since small rocks can be picked up and thrown causing injury to bystanders or damage to windows or buildings.
6. Never direct discharge at bystanders nor allow anyone in front of machine. Debris may be hidden in snow.
7. Keep children and pets a safe distance away.
8. Do not allow children or adults to operate this machine unless properly supervised.
9. Never leave machine running unattended, and remove key from ignition switch to prevent children from starting tractor and snow thrower.
10. Do not attempt to clean discharge, remove obstacles or otherwise clean, adjust or repair machine before stopping tractor engine, and removing wire from spark plug. Never place hands or feet in or near deflector or impeller when engine is running.
11. Keep machine in good operating condition and keep safety devices in place.

SETTING UP INSTRUCTIONS - CONTINUED

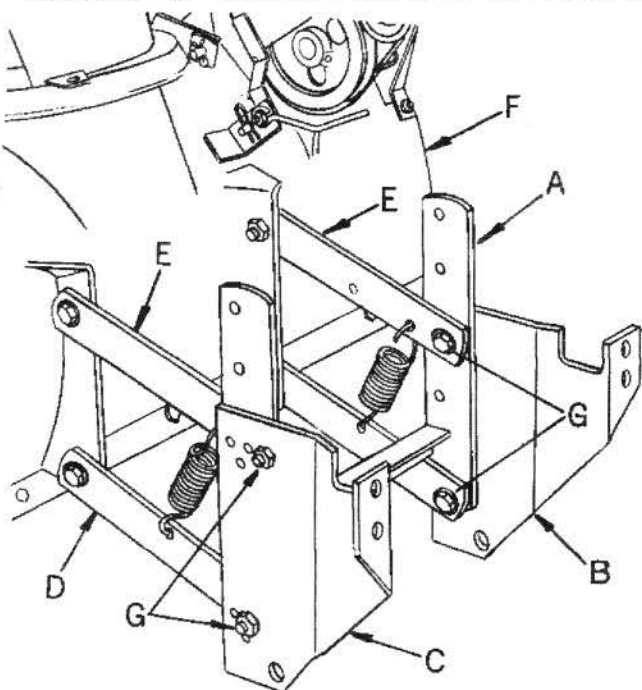


FIG. 2

3. Refer to Figure 2. Assemble upper swing bars (E) to housing assembly (F) as shown. Note: Bolt, washer, and bushing will go into upper swing frame then into housing bracket, and secure with gripco nuts. Bolts, washers, bushings, and nuts were in hole of housing bracket. Tighten nuts securely.
4. Remove nuts (G) from bolts in upper swing bars (E) swing frame-lower (D) and hanger bracket (A) assemble hanger bracket L.H. (C) and hanger bracket R.H. (B) as shown. Normally use top rear holes in hanger brackets as shown and secure with gripco nuts tighten securely. See Fig. 2.
5. Unhook springs from shipping position, and hook springs to rear holes in swing bars (E), and front holes in lower swing frame (D), as shown. See Figure 2.

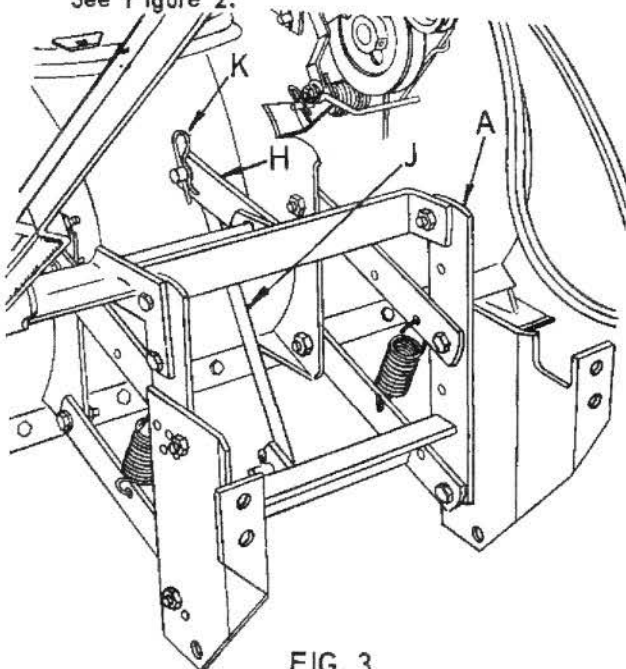


FIG. 3

6. Refer to Fig. 3. Assemble pivot frame weldment (H), to hanger weldment (A), with 3-3/8 x 1-1/4 hex bolts and gripco nuts as shown. NOTE: Heads of bolts to outside. Tighten bolts securely. Bolts and nuts will be found in plastic bag.
7. Assemble lift link (J), to hole in arm of pivot frame weldment (H), as shown and secure with retainer spring (K), found in plastic bag.

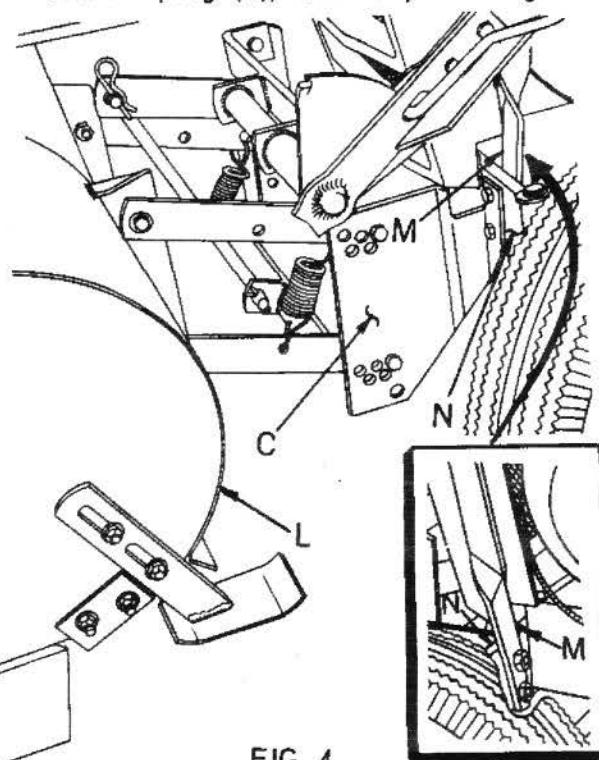


FIG. 4

8. Place snow thrower (L), on six inch blocks as shown in Fig. 4, and push tractor into position to assemble to snow thrower.
9. Bolt L. H. hanger bracket (C), and spout rod support (M), to rocker bar (N), with two 3/8 x 1-1/2 hex bolts and gripco nuts. Bolts and nuts will be found in plastic bag. Leave bolts loose. NOTE: Spout rod support (M), is assembled to rear of rocker bar (N).

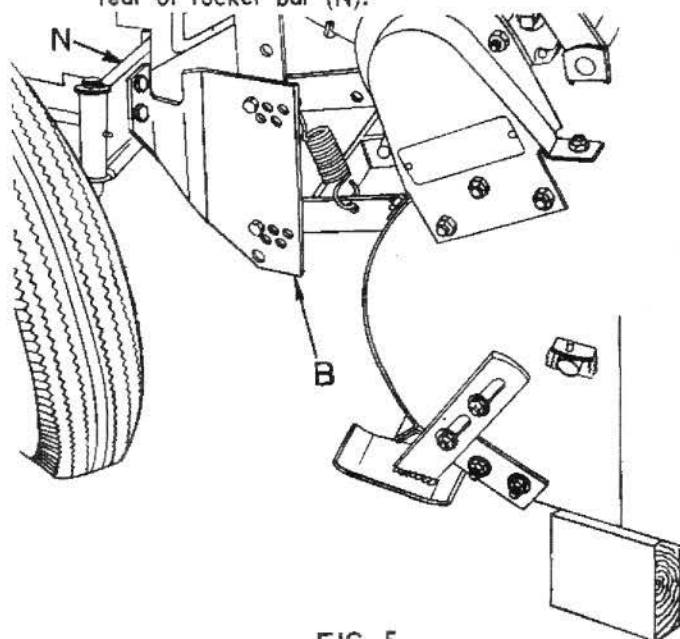
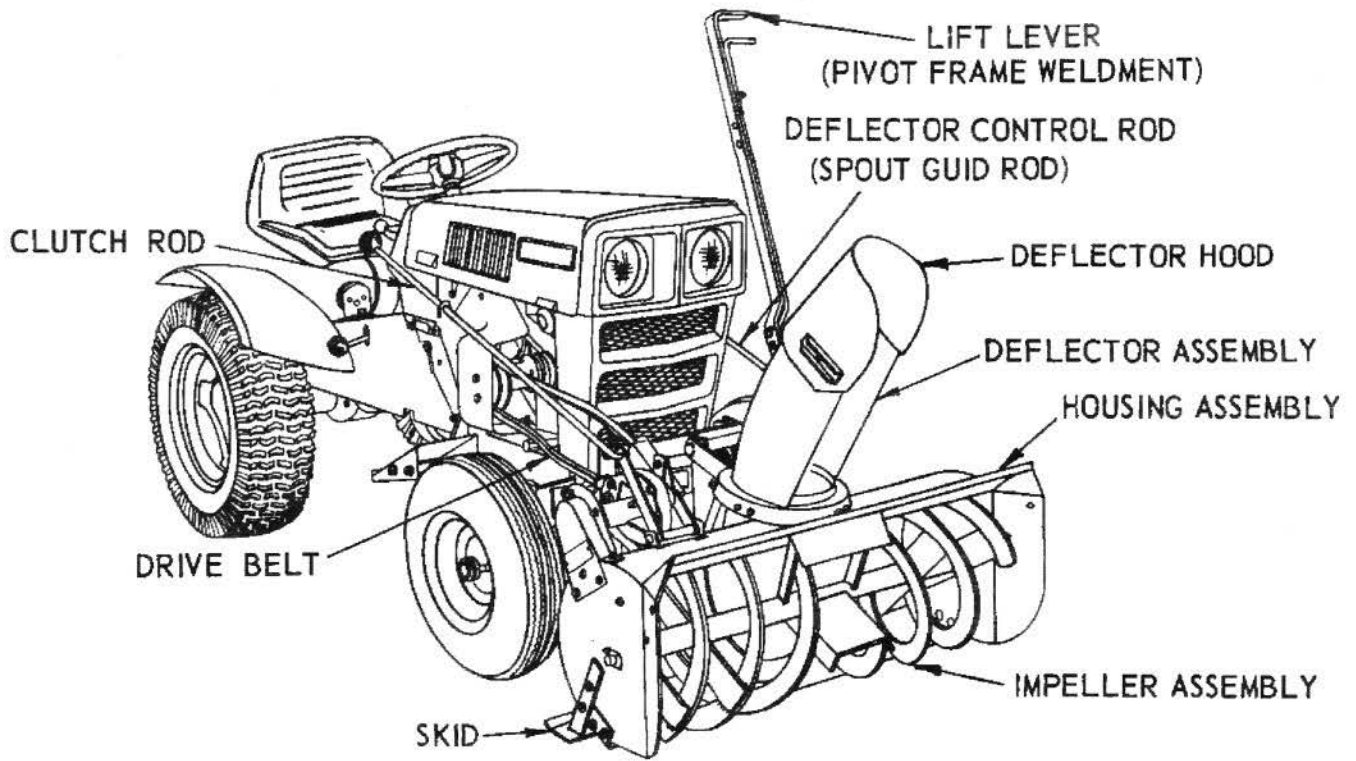


FIG. 5

## PARTS IDENTIFICATION



The snow thrower has been shipped from the factory partially assembled. The operating controls were left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc. necessary to complete assembly of the unit have been included in a plastic bag.

It is suggested that this manual furnished with the unit be read in its entirety before attempting to assemble or operate your unit.

A key letter in the following paragraph refers to a key letter in an adjoining illustration.

When R.H. (right hand) or L.H. (left hand) is used it should be understood to mean from a position behind and facing the snow thrower or direction of travel.

Drain oil from engine crankcase of tractor and refill with SAE 10W Motor oil for easier starting in cold weather.

Wheel weights, and tire chains added to rear wheels will greatly improve the performance of the snow thrower.

1. Remove snow thrower from carton, and cut all wires.
2. Refer to Fig. 1. Apply grease (pressure gun grease or equivalent) to upper and lower part of deflector flange on housing assembly as shown. Attach deflector assembly to housing assembly with 3 deflector clips six  $\frac{1}{4}$  x  $\frac{1}{2}$  hex bolts, lock washers and hex nuts as shown. Tighten nuts securely.

**Important:** Make sure clips are positioned as shown and turn deflector to side and assemble front clip first. Rotate deflector assembly so that deflector faces forward and assemble remaining two clips. Make sure deflector assembly rotates freely on housing.

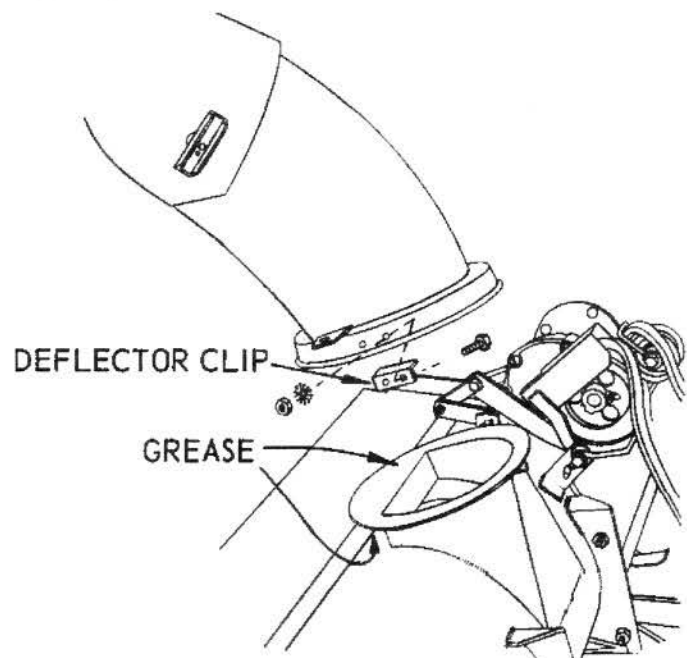


FIG 1

## SETTING UP INSTRUCTIONS - CONTINUED

10. Bolt R.H. hanger bracket (B), to rocker bar (N), as shown with other two  $3/8 \times 1\text{-}1/2$  hex bolts and gripco nuts. Bolts and nuts will be found in plastic bag. Leave bolts loose. See Fig. 5.

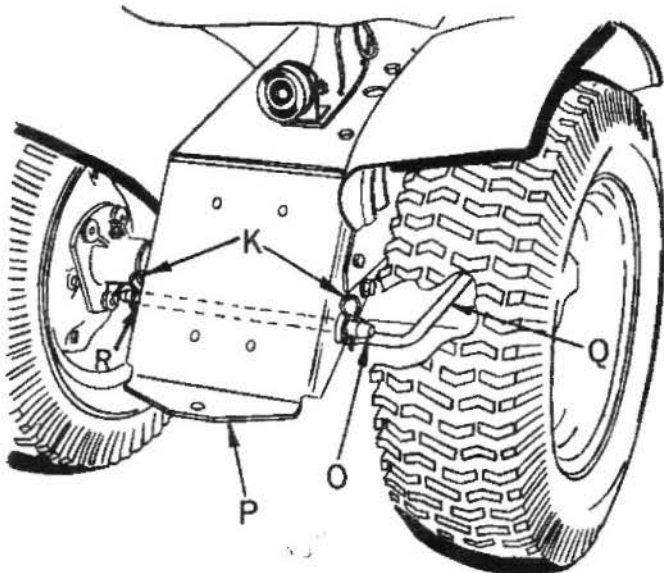


FIG. 6

11. Refer to Fig. 6. Slip lower link pin (O) through holes in sides of tractor drawbar (P) as shown. NOTE: Insert and spread  $3/16 \times 1$  cotter pins in lower link pin (O) under and between sides of drawbar (P).

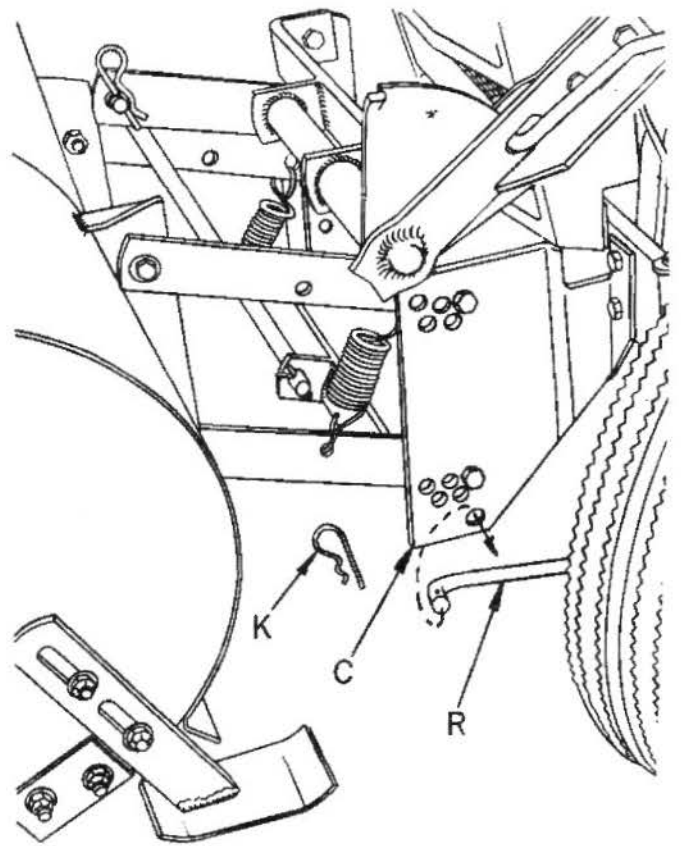


FIG. 8

13. Refer to Fig. 8. Assemble L.H. push rod (R) to hanger bracket L.H. (C) as shown and secure with spring retainer (K).
14. Refer to Fig. 6. Slip R.H. and L.H. push rods (Q & R) over ends of lower link pin (O) as shown and secure with retainer springs (K). Tighten four (4) bolts in hanger brackets R.H. and L.H. (B & C) and rocker bar (N) left loose in steps 9 & 10.

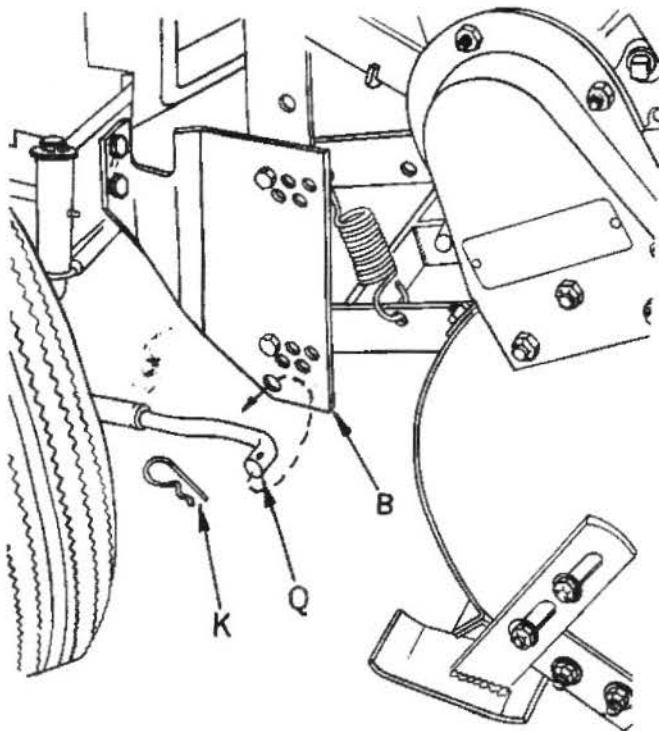


FIG. 7

12. Refer to Fig. 7. Assemble R.H. push rod (Q) to hanger bracket R.H. (B) as shown and secure with spring retainer (K).

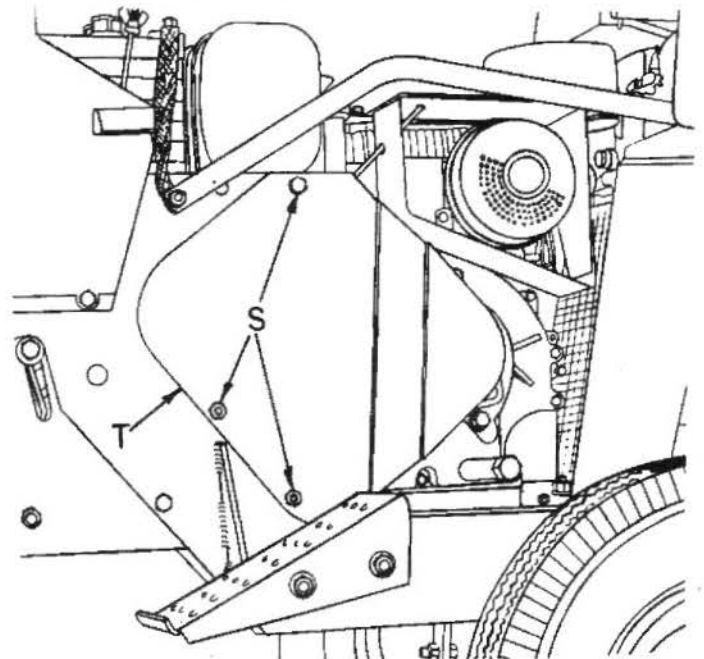


FIG. 9

15. Remove 3 bolts (S), holding belt guard (T), to tractor and remove belt guard from tractor.

SETTING UP INSTRUCTIONS - CONTINUED

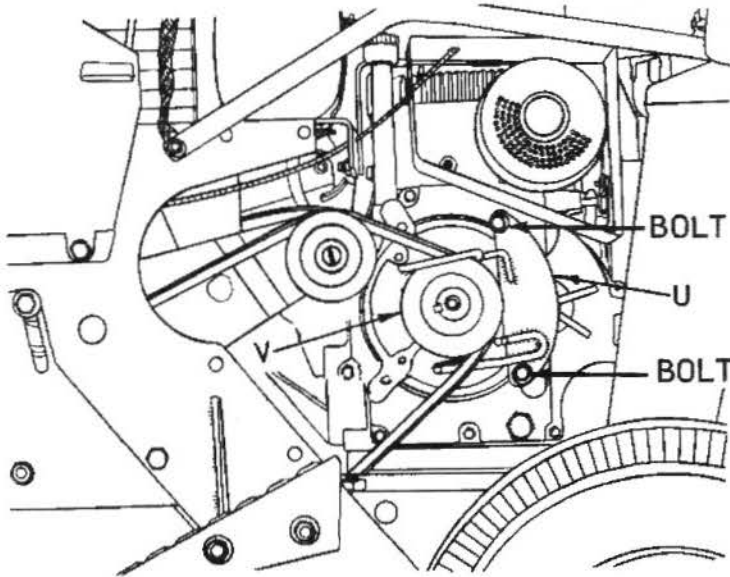


FIG. 10

16. Refer to Fig. 10. Remove two bolts holding belt guide assembly (U) to engine as shown and remove belt guide assembly.
17. Depress clutch pedal and engage parking brake. Loosen two set screws in engine pulley (V), then slide pulley and belt from engine shaft.

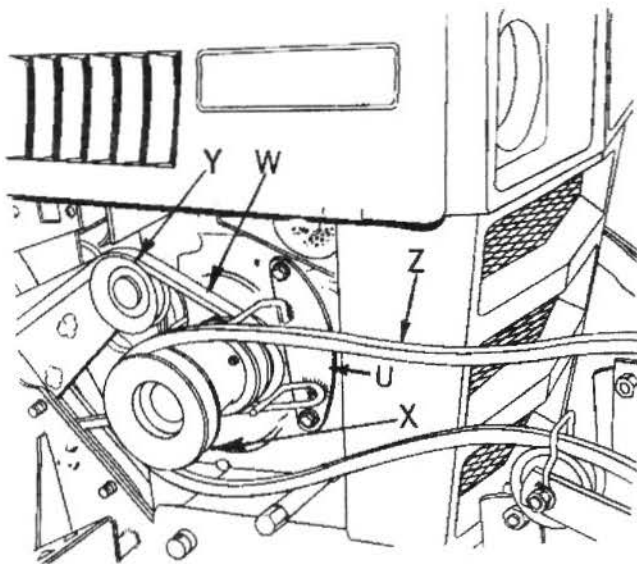


FIG. 11

18. Place transaxle drive belt (W), on new engine pulley (X), and slip new engine pulley on engine shaft as shown. Align new pulley (X), with idler pulley (Y). Tighten set screws in new engine pulley securely. New pulley can be left on for use with mower. New pulley guard must also be used with new pulley.
19. Install snow thrower drive belt (Z), on new engine pulley (X), as shown.
20. Replace belt guide assembly (U), removed in step 16, Fig. 10.

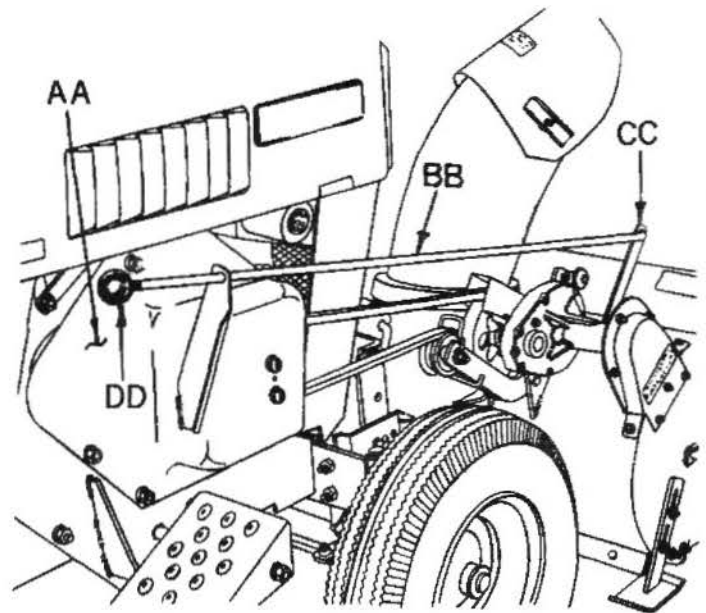


FIG. 12

21. Assemble pulley guard weldment (AA), to tractor as shown. Use bolts removed with original guard step 15 for assembling new guard.  
NOTE: Be sure that snow thrower drive belt is on new engine pulley, and that belt retainer on inside of pulley guard weldment clears belt when snow thrower is engaged (belt tight). Release parking brake. Place lift lever in raised position and remove blocks from under snow thrower.

Important--Nuts must be to outside of tractor.

22. Slip clutch rod (BB), through hole of bracket in pulley guard (AA), and assemble to idler arm (CC), and secure with cotter pin 1/8 x 3/4. Screw control knob (DD), on threaded end of clutch rod as shown. Washer, cotter pin, and control knob will be found in plastic bag.

## SNOW THROWER TIPS

1. Never leave machine with engine running.
2. Keep people, particularly children, away from the discharge area.
3. Throw snow downwind whenever possible.
4. In deep heavy hard packed snow use first gear in low range. In lighter snow a higher gear may be used. Use the gear which seems to do the best job of throwing snow. First gear low range is  $\frac{1}{4}$  M.P.H.
5. Snow can be thrown to right by pushing spout guide rod forward, to left by pulling back on rod. Snow can also be thrown forward when in a narrow passageway or where it cannot be thrown to right or left.
6. On driveways, etc. all the snow can be thrown in one direction or it can be thrown to each side.
7. Adjusting deflector hood up or down increases or decreases the distance snow is thrown. Depth of snow, type of snow, and speed also control distance. Generally keep deflector hood low enough to keep snow from blowing back on the operator and still get distance.
8. Skid adjustment is provided. Raising skid will leave very little snow on sidewalk or smooth driveway. Lower skids for operation on gravel driveways. This prevents picking up and throwing stones. See "Skid Adjustment", below.
9. Wax inside of deflector assembly and deflector hood with a good hard wax. This will allow snow to be discharged easier and not be so apt to plug.
10. Install tire chains and add wheel weights to rear tractor wheels for added traction. This will greatly reduce rear wheel slippage, and greatly increase performance of the unit.

## SKID ADJUSTMENT

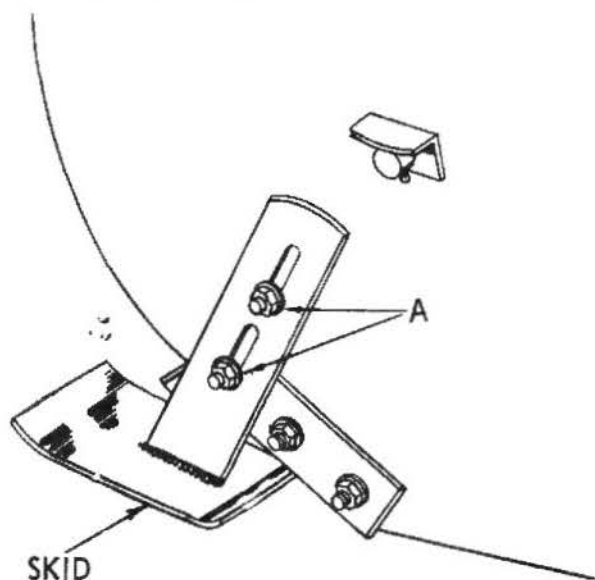


FIG. 16

Loosen two nuts (A), on each skid. Adjust skids to desired height and retighten bolts. Lower skids for gravel drives. Raise skids for smooth sidewalks or drives.

**ALWAYS DRIVE AT SPEEDS SLOW ENOUGH TO INSURE SAFETY. KNOW WHAT IS BEHIND YOU BEFORE BACKING UP.**

## CHAIN ADJUSTMENT

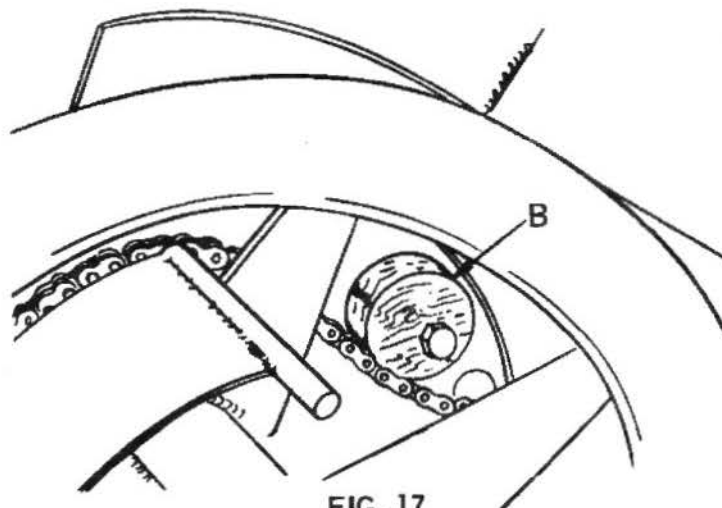


FIG. 17

A (wooden cam) chain block (B), is located inside housing assembly for tightening chain. Loosen bolt and turn wooden cam to tighten chain. Chain has proper tension when chain can be deflected slightly with slight pressure by hand. Retighten bolt.

## CARE OF SNOW THROWER

After each use, clean snow from snow thrower and tractor. Store in warm area, if possible, for easier starting. Like your automobile or any other piece of equipment this tractor and snow thrower will need some care and maintenance for good performance. Wax or oil inside of deflector assembly to prevent rust in storage.

**DO NOT ATTEMPT TO CLEAN DISCHARGE, REMOVE OBSTACLES OR OTHERWISE CLEAN, ADJUST OR REPAIR MACHINE BEFORE STOPPING TRACTOR ENGINE AND REMOVING WIRE FROM SPARK PLUG. NEVER PLACE HANDS OR FEET IN OR NEAR DEFLECTOR OR IMPELLER WHEN ENGINE IS RUNNING.**

## SETTING UP INSTRUCTIONS - CONTINUED

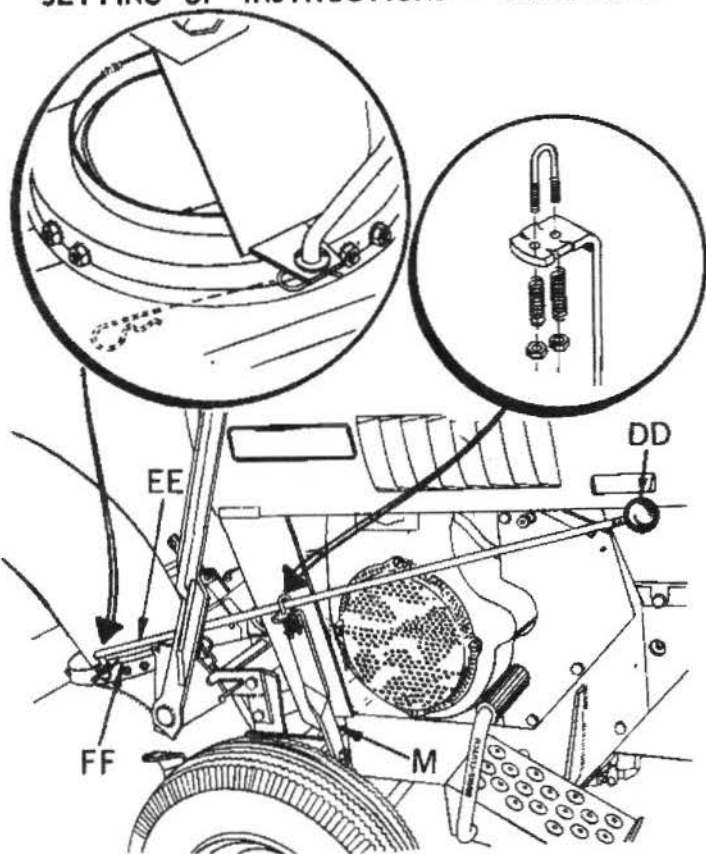


FIG. 13

23. Assemble spout guide rod (EE), to deflector bracket (FF), with a washer on each side of deflector bracket and secure with small retainer spring found in plastic bag.
24. Assemble spout guide rod (EE), See Fig. 13, to spout rod support (M) with U-bolt, two springs and two gripco nuts found in bag. Tighten nuts just tight enough to hold spout guide rod.
25. Screw remaining control knob (DD), on upper end of spout guide rod.

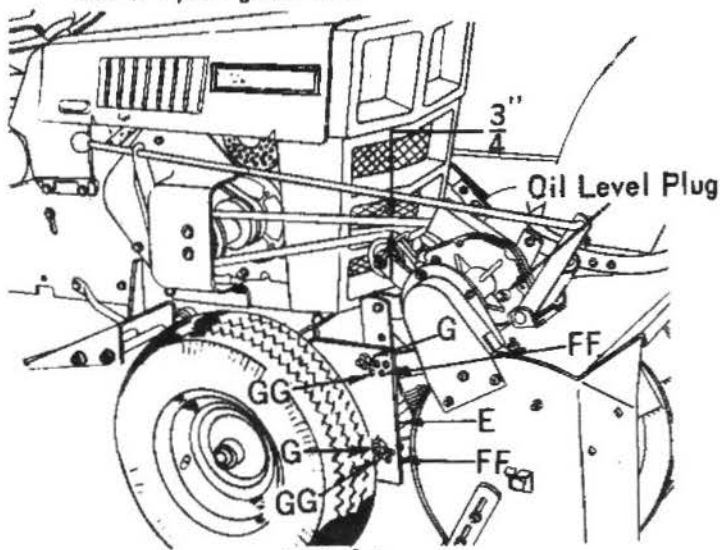


FIG. 14

With clutch engaged (rod pushed forward), and snow thrower in raised position, snow thrower drive belt must have  $\frac{3}{4}$ " clearance between belt as shown in Fig. 14. If clearance is much greater than  $\frac{3}{4}$ " clutch will not release properly. If clearance is

much less than  $\frac{3}{8}$ " belt may slip. Use the necessary holes in hanger bracket (B, Fig. 14), to acquire this clearance. Refer to Fig. 14. If there is  $\frac{3}{8}$ " or less, clearance between belt, remove bolts (G), in both R.H. and L.H. hanger brackets and insert bolts through holes (FF). Tighten bolts securely. If clearance is over 1" between belt, move bolts in L.H. and R.H. hanger brackets to holes (GG), and tighten securely. This will give less clearance to belt so that it will release properly.

## LUBRICATION

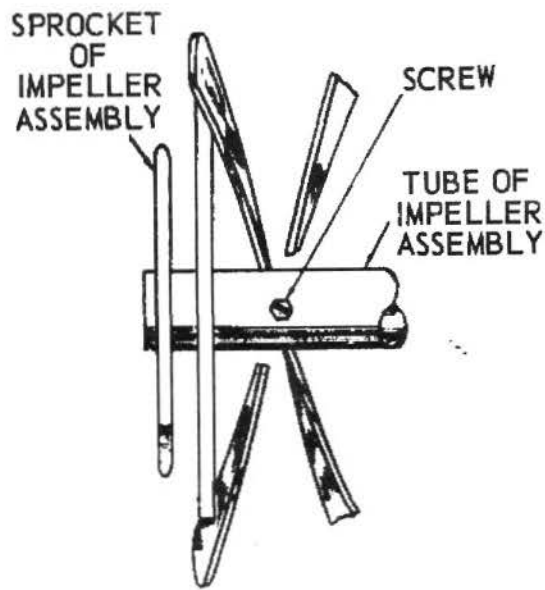


FIG. 15

Gear case was filled at factory, but check oil level before operating, and at start of each season. Oil level must be to level of front lower plug on gear case (see Fig 14.) when Snow Thrower is in operating position.

The impeller assembly has two screws in impeller tube near each end of impeller. Refer to Fig. 15. Remove screws, and squirt 2 oz. of light motor oil in each hole. Replace screws. This should be done starting each season. Oil all other moving parts with light oil including chain.

## OPERATING CONTROLS

The snow thrower has only two controls, clutch rod is pushed forward to engage impeller, pulled back to disengage. Spout guide rod is pushed forward to throw snow to the right, pulled back to throw snow to left.

## KEEP ALL SHIELDS AND GUARDS IN PLACE.

IMPROPER USE OF A TRACTOR AND SNOW THROWER CAN RESULT IN PERSONAL INJURY. TO REDUCE THIS POSSIBILITY, GIVE COMPLETE ATTENTION TO THE JOB AT HAND





SNOW THROWER--MODEL NUMBER 917.250540

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	4940M	Retainer Spring	63	4647H	Pinion
2	1049R	Lower Link Pin	64	175H	Roll Pin 3/16 x 3/4
3	2511P	Cotter Pin 3/16 x 1	65	5855H	Relief Valve
4	626A290	Push Rod Assembly R.H.	66	8118M	Bearing
5	9439M	Control Knob	67	4200H	Oil Seal
6	5319H	Clutch Rod	68	4001P	Pipe Plug 1/4 N.P.T.
7	2505P	Cotter Pin 1/8 x 3/4	69	626A87	Gear Case and Bearings
8	4338M	Lever Clip - Lower	70	5325H2	Gear Shaft
9	626A249	Pivot Frame Weldment	71	9858M1	Woodruff Key 3/16 x 5/8
10	1513P	Washer 13/32 x 13/16 x 16 Ga.	72	4648H1	Gear
11	1539U1	Spring	73	626A85	Gear Case Cover W/Bearings
12	6580H	Lever Plunger	74	8447H	Fiber Washer
13	626A289	Push Rod Assembly L.H.	75	7836M	Roll Pin 3/16 x 1-1/8
14	932R	Roller Chain	76	-----	Model Plate
15	943R	Spout Guide Rod	77	937R	Chain Guard
16	277H	Roller Link	78	931R	Sprocket 19 Tooth
17	276H	Connecting Link	79	938R	Chain Guard Bracket
18	172H	Roll Pin 1/8 x 3/4	80	626A100	Gear Case Assembly
19	4621H	U-Clamp	81	4701H	Chain Block
20	4921H	Retainer Spring	82	634A199	Scrapers and Reinforcement
21	940R	Spout Rod Support	83	1570P	Washer 21/32 x 2-1/8 x 16 Ga.
22	1006R	Spring			(0-2) Required
23	4632H	Gripco Nut #10 - 24	84	4696H	Bearing
24	942R	Hanger Bracket L.H.	85	626A279	Impeller W/Bearings
25	5329H	Swing Bar	86	5324H	Impeller Shaft
26	626A96A	Hanger Weldment	89	1605H	Gripco Nut 1/4 - 20
27	7425H	Lift Link	90	1275H	Gripco Nut 3/8 - 16
28	941R	Hanger Bracket R.H.	91	280M1	Bushing
29	626A142A	Belt Retainer and Bracket	92	514P	Nylok Nut 3/8 - 16
30	626A191A	Engine Pulley W. set Screws	93	1002P	Lockwasher 1/4
31	930R	V-Belt (Snow Throwing Drive)	94	503P	Hex Nut 1/4
32	626A124A	Pulley Guard Weldment	95	1511P	Washer 3/8 x 7/8 x 14 Ga.
33	4705H	Spring	96	1685H	Gripco Nut 5/16 - 18
34	634A150	Swing Frame - Lower	97	532P	Hex Nut 5/16 - 18
35	4702H	Idler Pulley	98	1003P	Lockwasher 5/16
36	7851H	Belt Retainer	A	3004P	Hex Bolt 1/4 - 20 x 1
37	7850H	Spacer	B	3025P	Hex Bolt 3/8 - 16 x 1-1/4
38	5860H1	Idler Spring	C	3027P	Hex Bolt 3/8 - 16 x 1-1/2
39	634A153	Pulley Guard and Strap	D	3027P	Hex Bolt 3/8 - 16 x 1-1/2
40	7436H	Drilled R.H. Rivet 5/16 x 4-1/2	E	6012P	Slotted Pan Hd. Mach. Screw W/Lockwasher 5/16 - 18 x 1/2
41	634A149A	Toggle Lever Assembly	F	3031P	Hex Bolt 3/8 - 16 x 2-1/2
42	1508P	Washer 9/32 x 1-1/8 x 7 Ga.	G	3064P	Flat Hd. Screw 1/4 - 20 x 3/4
43	5850H	Handle Link	H	3116P	Hex Bolt 1/4 - 20 x 7/8
44	626A292	Handle Nut	J	3114P	Hex Bolt 1/4 - 20 x 1/2
45	4614H	Compression Washer	K	16P	Carriage Bolt 5/16 - 18 x 3/4
45A	1522P	Washer 1/2 x 1/4 x 14 Ga.	L	3011P	Hex Bolt 5/16 - 18 x 1
46	626A277	Deflector Assembly	M	3012P	Hex Bolt 5/16 - 18 x 1-1/4
46A	16P	Carriage Bolt 5/16 - 18 x 3/4	N	3012P	Hex Bolt 5/16 - 18 x 1-1/4
47	939R	Deflector Hood	O	10P	Carriage Bolt 1/4 - 20 x 1/2
48	4597H	Deflector Clip	P	14P	Carriage Bolt 5/16 - 18 x 1/2
49	626A276	Skid	Q	6033P	Slotted Pan Hd. Mach. Screw W/Lockwasher 1/4 - 20 x 1
50	626A164	Housing Assembly	R	4511P	Set Screw Hex Socket Hdless 5/16 - 24 x 3/8 C.P.
51	1507P	Washer 5/16 x 3/4 x 16 Ga.	S	4507P	Set Screw Hex Socket Hdless 1/4 - 20 x 5/16
52	1537P	Washer 11/32 x 11/16 x 16 Ga.	T	3012P	Slotted Pan Hd. Mach. Screw 1/4 - 28 x 3/8
53	7852H1	Belt Guide	U	7755E	Wrench, Allen Set Screw
54	4689H1	Pulley		954R	Instruction Book and Parts List
55	7440H	U-Bolt			
56	626A84	Idler Arm and Bushing			
57	7445H1	Drilled R.H. Rivet 5/16 x 4			
58	8119M	Bearing			
59	4692H	Gasket			
60	4644H1	Pinion Shaft			
61	5863H	Woodruff Key 1/8 x 1/2			
62	6266H	Thrust Washer			

*CUSTOM SERVICE*

*PART #*

*7836R*

*626 x 93*

*REPLACE 12/86 #150*

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Sears

owners manual

# SNOW THROWER ATTACHMENT

FOR 10 H.P. CUSTOM TRACTOR

MODEL NO.  
917.250540

The Model Number will be found on a plate attached to the chain guard. Always mention the Model Number when requesting service or repair parts for your Snowthrower.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER  
917.250540
4. The NAME OF ITEM—  
Snow Thrower

Your Sears Merchandize takes an added value when you discover that Sears has over 2,000 Service Units throughout the country. Each is staffed by Sears-trained, professional technicians using Sears approved parts and methods.

SEARS SERVICE  
IS AT YOUR SERVICE  
WHEREVER YOU LIVE  
OR MOVE  
IN THE U.S.A.

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