Sears

owners manual

SNOW THROWER ATTACHMENT

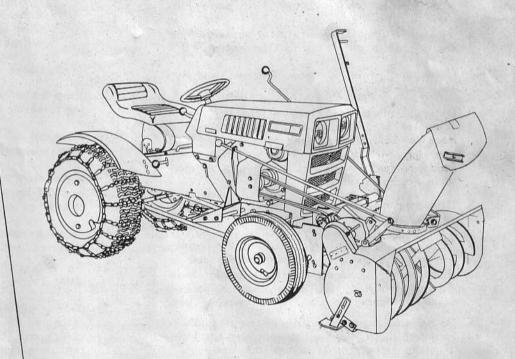
FOR 10 H.P. CUSTOM TRACTORS

ww.searstractormanuals.dom WODEL NO MODEL NO MOD MODEL NO. 917.250660

SNOW THROWER DRIVE V-BELT 1836-R

Rules for ESafe Operation and Instructions e Assembly
Operating

- Maintenance
- Repair Parts



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

SIMPSONS-SEARS LIMITED, CANADA



During the first year, we will repair your attachment free of charge if found defective in material or workmanship. This quarantee service is available by simply contacting any of our stores or service centers throughout the United States or Canada.

The guarantee is limited to 30 days if the item is used for commercial purposes.

IMPORTANT

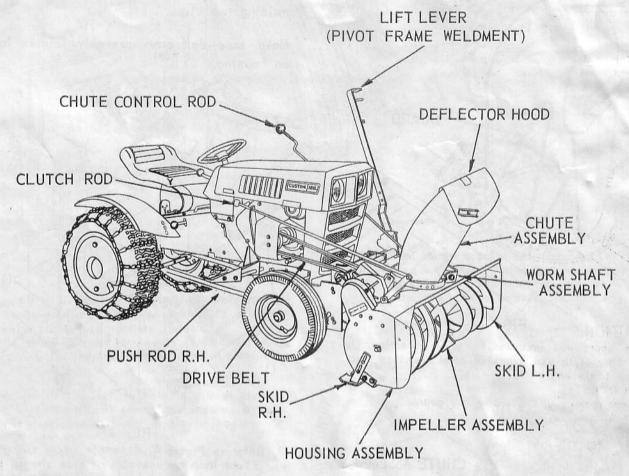
rules for safe operation

- Know the controls, and how to stop quickly -READ THE OWNER'S MANUAL.
- 2. Do not allow children to operate Tractor and Snow Thrower. Do not allow adults to operate them without proper instructions.
- 3. Do not carry passengers. Keep children and pets a safe distance away.
- 4. Clear work area of objects which might be picked up and thrown. This should be done in late summer or fall before first snow fall.
- 5. Disengage Snow Thrower clutch, and shift into neutral before attempting to start engine.
- 6. Disengage power to Snow Thrower, and stop engine before leaving operator position.
- 7. 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.
- 8. Disengage power to Snow Thrower when transporting or not in use.
- 9. Take all possible precautions when leaving tractor and Snow Thrower unattended: such as disengaging power take-off, lowering Snow Thrower, shifting into neutral, setting parking brake, stopping engine and removing key.
- 10. Do not stop or start suddenly when going uphill Drive up and down the face of steep slopes, never across the face.
- 11. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
- 12. Stay alert for holes in terrain and other hidden hazards.
- 13. Use care when pulling loads or using heavy
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counter weight (S) or wheel weights when suggested in owners manual.

- 14. Watch out for traffic when crossing or near roadways.
- 15. When using Snow Thrower never direct discharge of material towards bystanders or window, buildings nor allow anyone near vehicle while in operation.
- 16. Handle gasoline with care--it is highly flamm-
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage-exhaust fumes are dangerous. Do not run engine indoors.
 - D. Never smoke while refueling engine.
- 17. Keep tractor and Snow Thrower in good operating condition and keep safety devices in place.
- 18. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
- 19. Never store tractor with gasoline in tank inside a building where fumes may reach an open flame or spark.
- 20. Allow engine to cool before storing in any enclosure.
- 21. To reduce fire hazard keep engine free of grass, leaves or excessive grease.
- 22. Tractor and Snow Thrower should be stopped and inspected for damage after striking a foreign object and damage should be repaired before restarting and operating the equipment.
- 23. Do not change engine governor settings or overspeed engine.
- 24. When using tractor with Snow Thrower
 1. Throw snow in daylight or in good artificial light.
 - 2. Never make any adjustment while engine is running if operator must dismount to
 - 3. Shut engine off when unclogging chute.
 - 4. Check all bolts, nuts etc. for proper tightness at frequent intervals.



reference drawing for assembly and instructions



introduction

This tractor or attachment has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest Sears Roebuck or Simpson-Sears, Ltd. Store. They have well qualified, competent trained technicians and the proper tools to service or repair this unit.

It is important that the operator ALWAYS OBSERVES THE "RULES FOR SAFE OPERATION" as well as other instructions contained in these manuals.

The exposed front edge of the auger (impeller) gathers snow in the same way a rotating paddle drives a river boat. The auger (impeller) is designed to flow snow to the center where a flat plate or paddle expells the snow through a discharge chute by centrifugal force while turning at approximately 730 to 930 R.P.M.'s depending on engine H.P. and engine R.P.M.'s.

To obtain maximum performance it is recommended that wheel weights, and tire chains be installed on the tractor when using snow removal equipment.

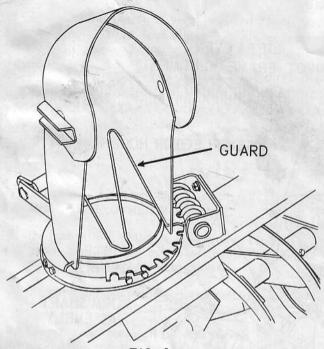
The snow thrower has been shipped from the factory partially assembled. The operating controls were left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc. necessary to complete assembly of the unit have been included in a plastic bag.

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.

assembly

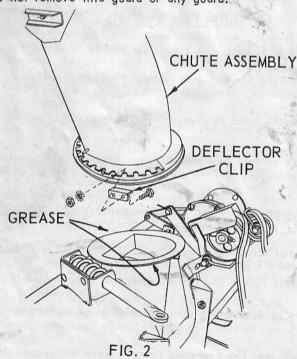


CAUTION:

FIG. 1

This guard was installed for your protection. Do not attempt to use hands or other items to clear chute while engine is running.

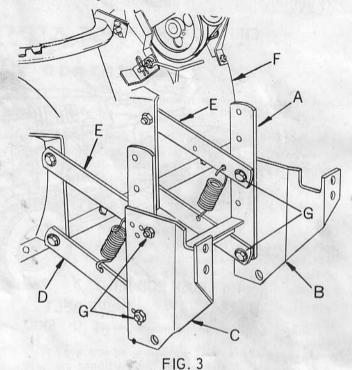
IMPORTANT:
Do not remove this guard or any guard.



- Remove snow thrower from carton, and cut all packaging wires.
- 2. Refer to Fig. 2. Apply grease (pressure gun grease or equivalent) to upper and lower part of deflector flange on housing assembly as shown. Attach chute assembly to housing assembly with 3 deflector clips six ½ x ½ 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.

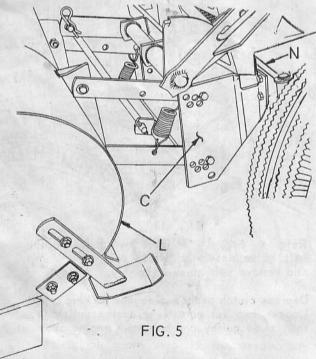


- 3. Refer to Figure 3. Assemble upper swing bars (E) to housing assembly (F) as shown. Note: Bolt, washer, and bushing will go into upper swing frame then into housing bracket, and secure with gripco nuts. Bolts, washers, bushings, and nuts were in hole of housing bracket. Tighten nuts securely.
- 4. 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. 3.
- 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 3.

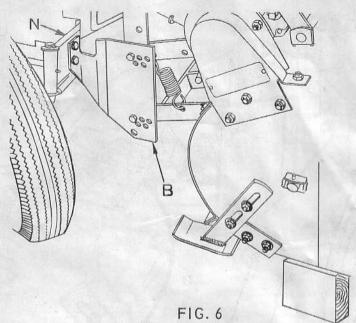
assembly

9 another free manual from www.searstractormanuals.com FIG. 4

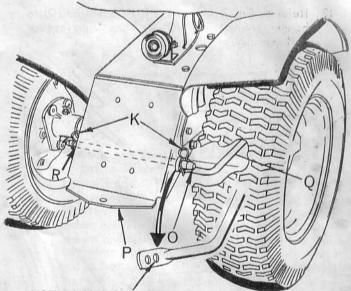
- 6. Refer to Fig. 4. Assemble pivot frame weldment (H), to hanger weldment (A), with (3)-3/8 \times 1-1/4 hex bolts and gripco nuts as shown. NOTE: Heads of bolts to outside. Tighten bolts securely. Bolts and nuts will be found in plastic
- Assemble lift link (J), to hole in arm of pivot frame weldment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



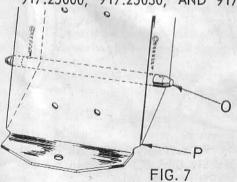
- 8. Place snow thrower (L), on six inch blocks as shown in Fig. 5, and push tractor into position to assemble to snow thrower.
- Bolt L.H. hanger bracket (C), to rocker bar (N), with two $3/8 \times 1 \frac{1}{2}$ hex bolts, and gripco nuts. Bolts and nuts will be found in plastic bag. Leave nuts loose.



10. Bolt R.H. hanger bracket (B), to rocker bar (N), as shown with other two 3/8 x 1-½ hex bolts and gripco nuts. Bolts and nuts will be found in plastic bag. Leave bolts loose. See Fig. 6.



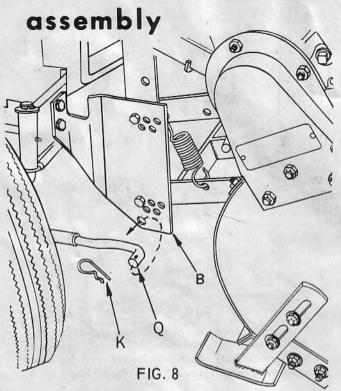
USE THIS HOLÉ FOR TRACTOR MODEL NOS. 917.25000, 917.25030, AND 917.25040 ONLY.



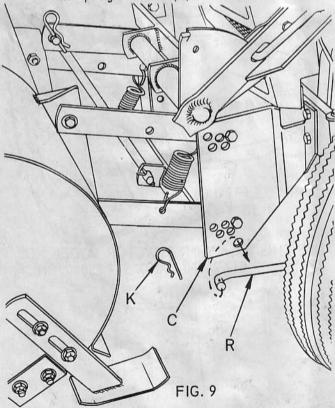
11. Refer to Fig. 7. Slip lower link pin (O) through holes in sides of tractor drawbar (P) as shown. Pin may also be inserted through slot in wheel into holes in drawbar. If this cannot be done remove rear wheel to insert lower link pin (O). NOTE: Insert and spread (2) 3/16 x 1 cotter pins in lower link pin (O) under and between insides of drawbar (P).

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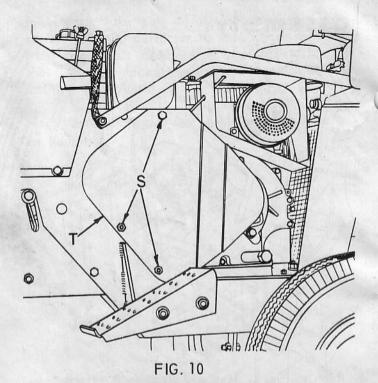


12. Refer to Fig. 8. Assemble R.H. push rod (Q) to hanger bracket R.H. (B) as shown and secure with spring retainer (K).

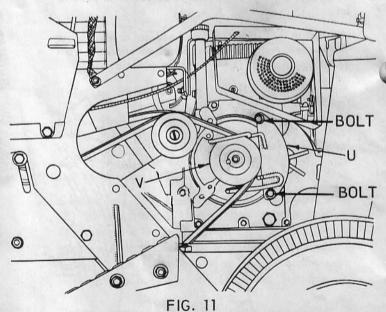


13. Refer to Fig. 9. Assembly L.H. push rod (R) to hanger bracket L.H. (C) as shown and secure with spring retainer (K).

14. Refer to Fig. 7. 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.

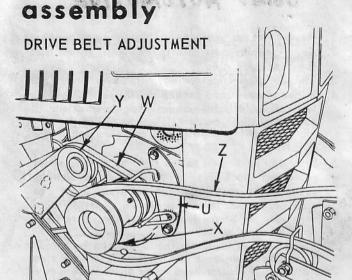


 Remove 3 bolts (S), holding belt guard (T), to tractor and remove belt guard from tractor.



 Refer to Fig. 11. Remove two bolts holding belt guide assembly (U) to engine as shown and remove belt guide assembly.

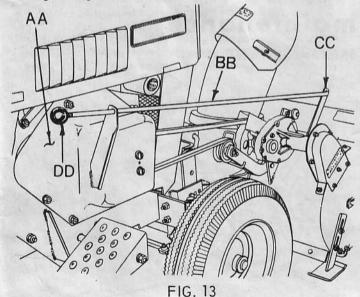
 Depress clutch pedal and engage parking brake. Loosen two set screws in engine pulley (V), then slide pulley and belt from engine shaft.



- FIG. 12

 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.
- Replace belt guide assembly (U), removed in step 16, Fig. 11.

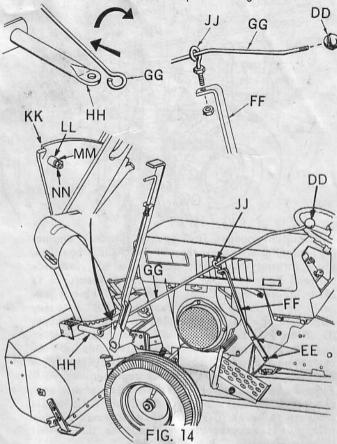
CAUTION: To prevent damage to belt guide be sure belt guide assembly is in proper position before tightening bolt.



 Assemble pulley guard weldment (AA), to tractor as shown. Use bolts removed with original guard step 15 for assembling new guard. Nuts to be outside of tractor.

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.

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 ¾. Screw control knob (DD), on threaded end of clutch rod as shown. Cotter pin, and control knob will be found in plastic bag.



23. Remove two bolts (EE) from tractor frame and assemble spout control rod bracket (FF) to tractor frame as shown using the two bolts (EE) just removed. Tighten bolts securely.

24. Position spout control rod (GG) so that it will enter hole in worm shaft assembly (HH), as shown and rotate crank end of control rod (GG), back into operating position, being sure eye of rod is hooked into hole of worm shaft assembly.

25. Assemble 5/16 hex nut found in plastic bag on eye bolt (JJ) and slip eye bolt and hex nut over crank end of control rod. Insert eye bolt (JJ) into hole of spout control rod bracket (FF) and secure with other 5/16 hex nut. NOTE: One nut will be on each side of bracket tighten nuts securely. Eye bolt and hex nuts will be found in plastic bag.

26. Screw remaining control knob (DD), on upper end (crank end) of spout control rod (GG).

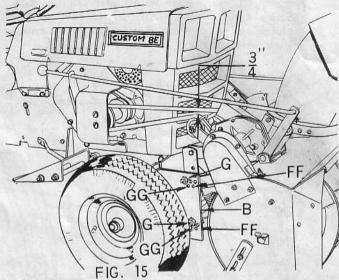
LIFT LEVER STOP

Use of the lift lever stop is optional. When the operator desires to keep the blade edge raised from the ground. The optional stop when installed in the lift lever quadrant, will hold the attachment in a partially raised position without the use of skid shoes.

Assemble bolt (KK) lift lever stop (LL) in quadrant as shown in insert and secure with lockwasher (MM), and hex nut (NN). Tighten nut securely. Note bolt, and lift lever stop will be to outside of quadrant as shown.

SNOW THROWER-V-BELT Nº 3550 JOINT AUTOMOTIVE

assembly



With clutch engaged (rod pushed forward), engine NOT running and snow thrower in RAISED position, snow thrower drive belt must have 3/2" clearence between belt as shown in Fig. 15. If clearance is much greater than 3/4" clutch will not release properly. If clearance is much less than 3/8" belt may slip. Use the necessary holes in hanger brackets (B, Fig. 15), to acquire this clearance. Refer to Fig. 15. If there is 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.

operating

SAFETY PRECAUTIONS BEFORE REMOVING SNOW

Before using your Snow Thrower, again refer to the "rules for safe operation" as shown on the inside of front cover of this manual. Always be careful.

OPERATING CONTROLS

The Snow Thrower has only two controls, clutch control, and spout control. Push clutch rod forward to engage impeller, pull back to disengage. Turn spout rod guide clockwise to throw snow to the right and counter clockwise to throw snow to the 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

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 3/4 M.P.H.

5. Snow can be thrown to the right by turning spout guide rod clockwise, or to the left by turning spout guide rod counter clockwise. Snow can also be thrown forward when in a narrow passage way, or where it cannot be thrown to right or left.

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.

 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.

 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.

maintenance

SKID ADJUSTMENT

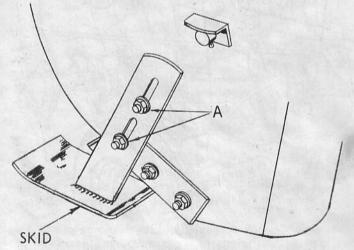


FIG. 16

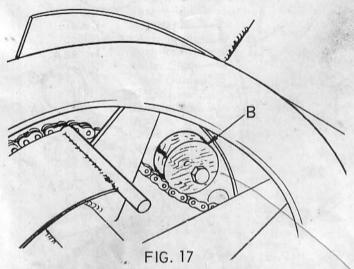
Loosen two nuts (A), on each skid. Adjust skids to desired height and retighten bolts. Lower skids for gravel drives. Raise skids for smooth sidewalks or drives.

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

maintenance

CAUTION: ALWAYS DISENGAGE CLUTCH AND STOP TRACTOR ENGINE BEFORE MAKING ANY INSPECTION, REPAIRS, OR ADJUSTMENTS. NEVER ATTEMPT TO REMOVE FOREIGN OBJECTS WHICH MAY BECOME LODGED IN HOUSING OR IMPELLER BY ROTATING THE IMPELLER BY HAND.

CHAIN ADJUSTMENT



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.

Check oil in gear case every season. Keep filled with SAE 80 to level of plug, (Illustration 68 of parts list). If this cannot be obtained SAE 90 is acceptable.

LUBRICATION

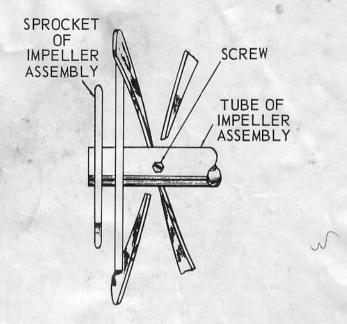


FIG. 18

The impeller assembly has two screws in impeller tube near each end of impeller. Refer to Fig. 18. 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.



Sears, Roebuck and Co. or Simpsons-Sears Limited in Canada reserves the right to make any changes in design or improvements without imposing any obligation to install the same upon its items heretofore manufactured.

rep	oair p	oarts snow thrower				
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION	
1	4940M	Retainer Spring	65	5855H	Relief Valve	
2	1049R	Lower Link Pin	66	8118M	Bearing	
3	2511P	Cotter Pin 3/16 x 1	67	4200H	Oil Seal	
4	626A313 9439M	Push Rod Assembly R.H. Control Knob	68 69	4001P 626A87	Pipe Plug ¼ N.P.T.	
2 3 4 5 6	5319H	Clutch Rod	70	5325H2	Gear Case and Bearings Gear Shaft	
7	2505P	Cotter Pin 1/8 x 3/4	71	9858M1	Woodruff Key 3/16 x 5/8	
8	4338M	Lever Clip-Lower	72	4648H1	Gear	
9		Pivot Frame Weldment	73	626A85	Woodruff Key 3/16 x 5/8 Gear Gear Case Cover W/Bearings	
10	1513P	Washer 13/32 x 13/16 x 16 Ga.	74 75	8447H	Fiber Washer Roll Pin 3/16 x 1-1/8	
11 12	1539U1 6580H	Spring Lever Plunger	76	7836M	Model Plate	
13	626A314	Push Rod Assembly L.H.	77	937R	Chain Guard	
14	1786R	Roller Chain	- 78	1785R	Sprocket 18 Tooth	
15	1780R	Chute Guide Rod	79	2274R	Chain Guard Bracket	
16	277H 276H	Roller Link	80 81	626A100 4701H	Gear Case Assembly Chain Block	
17.	6564H	Connecting Link Eyebolt	82	634A199	Scraper and Reinforcement	
21	1781R	Chute Control Rod Bracket	83	1570P	Washer 21/32 x 2-1/8 x 16 Ga.	
23	4632H	Gripco Nut #10-24			(0- 2 Required)	
24	942R	Hanger Bracket L.H.	84	4696H	Bearing	
25	5329H	Swing Bar	85	626A279 5324H	Impeller W/Bearings Impeller Shaft	
26 27	626A96A 7425H	Hanger Weldment Lift Link	86 87	626A299	Skid R.H.	
28	941R	Hanger Bracket R.H.	15 (89	1605H	Gripco Nut ¼ - 20	
29	626A142A	Belt Retainer and Bracket	TEN 55 90	545P	Gripco Nut 3/8 - 16	
30	626A312	Engine Pully W/set Screws	4- 91	280M1	Bushing	
30 31 32 33	(1836R)	Hanger Bracket R.H. Belt Retainer and Bracket Engine Pully W/set Screws V-Belt (Snow Thrower Drive) Pulley Guard Weldment Spring	50 92 93	514P 1002P	Nylock Nut 3/8 - 16 Lockwasher 1/4	
32	4705H	Spring	94	503P	Hex Nut 1/4	
34	634A150	Swing Frame-Lower	73	1511P	Washer 3/8 × 7/8 × 14 Ga.	
34 35	4702H	Idler Pulley	96	1685H	Gripco Nut 5/16 - 18	
36	7851H	Belt Retainer	97 98	532P 1003P	Hex Nut 5/16 - 18 Lockwasher 5/16	
37 38	7850H 5860H1	Spacer Idler Spring	99	9833E	Lift Lever Stop	
39	634A153	Pulley Guard and Strap	100	1004P	Lockwasher 3/8	
40	7436H	Drilled R.H. Rivet 5/16 x 41/2	101	501P	Hex Nut 3/8	
41		Toggle Lever Assembly	A	3004P 3025P	Hex Bolt ¼ - 20 x 1 Hex Bolt 3/8 - 16 x 1-¼	
42	1508P	Washer 9/32 x 1-1/8 x 7 Ga.	B C	3027P	Hex Bolt 3/8 - 16 x 1-1/2	
43	5850H 626A292	Handle Link Handle Nut	D	3027P	Hex Bolt 3/8 - 16 x 1-1/2	
44A	1522P	Washer ½ x 1¼ x 14 Ga.	E	6012P	Slotted Pan Hd. Mach. Screw	
45	4614H	Compression Washer		20210	W/Lockwasher 5/16 - 18 x ½	
45A	16P	Carriage Bolt 5/16 - 18 × ¾	F G	3031P 3064P	Hex Bolt 3/8 - 16 × 2½ Flat Hd. Screw ¼-20 × ¾	
46	626A305 1783R	Deflector Assembly Deflector Hood	H	3116P	Hex Bolt 1/4 - 20 x 7/8	
47 48	4597H	Deflector Clip	J	3114P	Hex Bolt ¼ - 20 x ½	
48A	1789R	Guard	K	16P	Carriage Bolt 5/16 - 18 × 3/4	
49	626A298	Skid L.H.	Ä	3011P 3012P	Hex Bolt 5/16 x 18 x 1 Hex Bolt 5/16 x 18 x 1-1/4	
50	626A306	Housing Assembly	N	3012P	Hex Bolt 5/16 x 18 x 1-1/4	
50A 51	626A304 1507P	Worm Shaft Assembly Washer 5/16 x 3/4 x 16 Ga.	O	14P	Carriage Bolt 5/16-18 × ½	
52	1537P	Wahser 11/32 x 11/16 x 16 Ga.	P	14P	Carriage Bolt 5/16 - 18 × ½	S
53	7852H1	Belt Guide	Q	6033P	Slotted Pan Hd. Mach. Screw	R
54	4689H1	Pulley	R	4511P	W/Lockwasher ¼ - 20 x 1 Set Screw Hex Socket Headless	
55	7440H	U- Bolt Idler Arm and Bushing		73.11	5/16 - 24 × 3/8 C.P.	3
56 57	626A84 7445H1	Drilled R.H. Rivet 5/16 x 4	S	4507P	Set Screw Hex Socket Headless	d
58	8119M	Bearing		00100	1/4 - 20 × 5/16	
59	4692H	Gasket	I	3012P	Slotted Pan Hd. Mach. Screw 1/4-28 × 3/8	8
60	4644H1	Pinion Shaft	U	1.843R	Wrench, Allen Set Screw 3/16 hex	THE PERSON NAMED IN
61	5863H	Woodruff Key 1/8 x ½ Thrust Washer	w	7412H	Cowling Pivot Bolt	500
62 63	6266H 4647H	Pinion	X	17P ,	Carriage Bolt 5/16 - 18 x 1	6
64	17.5H	Roll Pin 3/16 x 3/4	Y	4525P	Set Screw Hex Socket Headless 3/8 - 16 x 3/8	1
			¬ Z	3137P	Hex Bolt 3/8 - 16 x 11/4 H.T.	
1817R	-9.8.71		- 10 -	1817R	Instruction Book and Parts List	10
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Sears

owners manual

SNOW THROWER ATTACHMENT

FOR 10 H.P. CUSTOM TRACTORS

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 fur shed 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 917.250660
- 4. The NAME OF ITEM— Snow Thrower

Your Sears Merchandize takes on 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.

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OR MOVE
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