

OPERATOR'S & PARTS MANUAL

BER VAC

by RAD Technologies Inc.

SE96 & SE104

**THREE POINT HITCH TWO STAGE
SNOWBLOWER**

MODELS STARTING AT SERIAL NO. 9600101

09/96
OM 0237

SAFETY PRECAUTIONS

WHENEVER YOU SEE THIS SYMBOL

IT MEANS:



ATTENTION !

BECOME ALERT !

YOUR SAFETY IS INVOLVED !



DANGER

The signal word " DANGER " signifies that a source of extreme danger to a person on or near a machine exists as a result of the very nature of the machine itself. This danger to persons is such that it would result in a high likelihood of death or permanent injury if the recommended precautions are not taken.



WARNING

The signal word " WARNING " indicates that a source of danger to a person on or near a machine exist which may result in death or injury if the recommended precautions are not taken.

A carefully operator is the best operator. Most accident can be avoided by observing certain precautions. Read and take the following precautions

before operating these attachments to help prevent accidents. Equipment should be operated only by those who are responsible and instructed to do so.

THE ATTACHMENT(S)

1. Read this manual carefully to acquaint yourself with the equipment as well as the tractor operator's manual. Working with unfamiliar equipment can lead to accidents. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the control quickly.
2. Keep all shield in place and properly tighten all mounting hardware.
3. Periodically inspect all moving parts for wear and replace with authorized service parts if an excessive amount of wear is present.
4. Replace all missing, illegible, or damaged safety and warning decals. See list of decals at the end of your attachment(s) section(s).
5. Do not modify or alter this equipment or any of its components, or any equipment function without first consulting your dealer.
6. Keep safety decals clean of dirt and grime.

GENERAL PREPARATION

1. Be sure the PTO is in OFF position before starting the engine.
2. Clothing worn by the operator should be fairly tight and belted. Loose clothing should not be permitted because of the danger of getting into moving parts.
3. Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable noises.

SAFETY PRECAUTIONS

The following precautions are suggested before operating each of these attachments to help prevent accidents.

1. Never allow anyone to ride on the attachment.
2. Clear the area of people and debris before commencing operation.
3. Never allow children to operate equipment. Never allow adults to operate equipment without proper instruction.
4. Always keep the attachment discharge directed away from people and objects which could be struck by debris.
5. Never allow anyone in front of units.
6. Never leave attachment in raised position.
7. Never operate the attachment without good visibility and lighting.
8. Never clean or adjust PTO-driven equipment with the tractor engine running.
9. When operating PTO-driven equipment, always shut off the engine and wait for the PTO to stop turning before getting off the tractor, before unplugging the collector/impeller housing or discharge chute and before making any repairs, adjustments or inspections.
10. Take all possible precautions when leaving the vehicle unattended. Disengage the PTO, lower the attachment, shift into neutral, set the parking brake, stop the engine and remove the key.
11. Disengage power to attachment when transporting or when not in use.
12. The operator must never get off the tractor while it is in motion.
13. Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for the hidden hazards of traffic.
14. Do not put hands or feet near rotating parts. Keep clear of discharge opening at all times.
15. Do not use hands or feet to unplug spout.
16. Keep a careful watch for debris that could enter the blower while operating.
17. Never operate the attachment without guards, shields and other safety protective devices in place.
18. Never operate machine at high transport speed on a slippery surface.
19. Use care when backing up.
20. After striking a foreign object, stop the engine, wait for all movements to stop, thoroughly inspect the attachment for damage and repair the damage before restarting and operating the attachment.
21. If the broom or snowblower should start to vibrate abnormally, stop the engine immediately and check for the cause. Vibration is generally a warning of trouble.
22. Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.

SAFETY PRECAUTIONS

THE TRACTOR

1. Read the operator's manual carefully before using tractor. Lack of operating knowledge can lead to accidents.
2. Do not permit anyone but the operator to ride on the tractor. There is not safe place for extra riders.

OPERATING THE TRACTOR

1. Never start the engine while standing beside the tractor. Always sit on the tractor seat while starting the engine or operating controls.
2. Never run the tractor engine in a closed building without adequate ventilation as the exhaust fumes are very dangerous.
3. Never allow an open flame near the fuel tank or battery.
4. Use an SMV emblem and the flasher warning lamp when traveling on public roads, day or night, unless prohibited by law in your state.
5. Make sure the PTO-driven equipment and always replace the PTO shield if damaged.
3. Always bring the tractor to a complete stop and shut off the engine before getting off the tractor.
7. Never park the tractor on a steep incline.
3. Use care when operating on steep grades 2 to maintain proper stability.

9. Keep the tractor in gear when going downhill.
10. Use of tire chains and wheel weights for better traction and stability is recommended. See tractor manual for recommended weighting.
11. Always drive the tractor at speeds compatible with safety, especially when operating over rough ground, crossing ditches, or when turning.
12. Handle fuel with care as it is highly flammable.
 - Use approved fuel container.
 - Never add fuel to a running engine or a hot engine.
 - Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - Replace fuel cap securely and wipe up spilled fuel.

MAINTENANCE AND STORAGE

1. Provide adequate blocking before working under an attachment when in raised position.
2. Make certain all moving parts have stopped before cleaning, repairing or inspecting.
3. Do not run engine indoors.
4. Do not attempt to repair or maintenance when the tractor is running, or when the attachment is raised.

SAFETY DECALS

REPLACE IMMEDIATELY IF DAMAGED

DANGER

ROTATING DRIVELINE
CONTACT CAN CAUSE DEATH
KEEP PEOPLE AND CLOTHING
WELL CLEAR

DO NOT OPERATE WITHOUT—

- ALL DRIVELINE, TRACTOR AND EQUIPMENT SHIELDS IN PLACE
- DRIVELINES SECURELY ATTACHED AT BOTH ENDS
- DRIVELINE SHIELDS THAT TURN FREELY ON DRIVELINE

TRANSMISSION ROTATIVE À CARDAN
TOUT CONTACT PEUT CAUSER LA MORT
TENIR VÊTEMENTS ET PERSONNES À L'ÉCART
NE PAS OPÉRER SANS—

- QUE TOUS LES PROTECTEURS DU TRACTEUR, DE L'ÉQUIPEMENT ET DE L'ARBRE À CARDAN SOIENT EN PLACE
- L'ARBRE À CARDAN FIXÉ SOLIDEMENT À CHAQUE BOUT
- QUE LES PROTECTEURS TOURNENT LIBREMENT SUR L'ARBRE À CARDAN

88

Located on driveline
656781

DANGER

TO AVOID SERIOUS INJURY:
KEEP HANDS OUT OF THIS
DISCHARGE CHUTE WHILE
ENGINE IS RUNNING

POUR ÉVITER DES BLESSURES GRAVES:
GARDER LES MAINS ÉLOIGNÉES
DE CETTE GOULOTTE LORSQUE
LE MOTEUR EST EN MARCHÉ

86

Located on back of chute deflector
656779

DANGER

**AVOID INJURY FROM
ROTATING AUGER**
KEEP HANDS, FEET AND
CLOTHING AWAY

**POUR ÉVITER DES
BLESSURES GRAVES:**
GARDER LES MAINS, LES PIEDS
ET LES VÊTEMENTS ÉLOIGNÉS
DES VIS SANS FIN

87

One place on each side
plate of blower housing
656780

WARNING

FAILURE TO FOLLOW SAFE OPERATING PROCEDURES MAY RESULT IN INJURY.

- FOR SAFE OPERATION FOLLOW ALL OPERATING INSTRUCTIONS AND SAFETY PRECAUTIONS IN OPERATOR'S MANUAL.
- EYE PROTECTION MUST BE WORN AT ALL TIMES.
- KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER DRIVEN PARTS.
- STOP ENGINE BEFORE LEAVING OPERATOR POSITION.
- WAIT FOR ALL MOVEMENTS TO STOP BEFORE STARTING TO ADJUST, LUBRICATE, CLEAN OR UNCLOG THE MACHINE.
- KEEP THE AREA OF OPERATION CLEAR OF ALL PERSONS AND ANIMALS.
- KEEP ALL GUARDS AND SHIELDS IN PLACE.
- NEVER DIRECT DISCHARGE TOWARD BYSTANDERS, BUILDINGS, CARS ETC.
- ALWAYS USE A DUST MASK WHEN WORKING IN DUSTY CONDITIONS.
- KEEP PLASTIC MATERIALS AWAY FROM INTENSE HEAT AND OPEN FLAME.
- NEVER ALLOW PASSENGERS ON THE ATTACHMENT.

229

Located on chute

MISE EN GARDE

NÉGLIGER DE SUIVRE LES PROCÉDURES SÉCURITAIRES D'UTILISATION PEUT ENTRAÎNER DES BLESSURES.

- POUR UNE UTILISATION SÉCURITAIRE SUIVRE TOUTES LES INSTRUCTIONS D'UTILISATION ET PRÉCAUTIONS SÉCURITAIRES DANS LE MANUEL DE L'OPÉRATEUR.
- PORTER DES LUNETTES DE SÉCURITÉ EN TOUT TEMPS.
- GARDER MAINS, PIEDS ET VÊTEMENTS ÉLOIGNÉS DES PIÈCES MOTRICES.
- ARRÊTER LE MOTEUR AVANT DE QUITTER LA POSITION DE L'OPÉRATEUR.
- ATTENDRE QUE TOUS LES MOUVEMENTS SOIENT ARRÊTÉS AVANT D'AJUSTER, LUBRIFIER, NETTOYER OU DÉBLOQUER LA MACHINE.
- GARDER L'ENDROIT D'UTILISATION DÉGAGÉ DE TOUTES PERSONNES ET ANIMAUX.
- GARDER TOUS LES ÉCRANS PROTECTEURS EN PLACE.
- JAMAIS DIRIGER L'ÉVACUATION VERS DES PIÉTONS, BÂTIMENTS, AUTOMOBILES, ETC.
- TOUJOURS UTILISER UN MASQUE À POUSSIÈRE DANS UN ENVIRONNEMENT POUSSIÉREUX.
- GARDER TOUTES LES MATIÈRES PLASTIQUES ÉLOIGNÉES DE LA CHALEUR INTENSE ET DES FLAMMES.
- NE JAMAIS PERMETTRE DE PASSAGERS SUR CETTE MACHINE.

230

Located on chute

660988

660989

ASSEMBLY

The snowblower is assembled at the factory, however, tractor mounting kit must be assembled. Open carton and lay out all parts for assembly. Separate bolts and nuts into various sizes.

After assembly, torque all bolts according to the Torque Specification Table inclosed at the end of the manual.

Right and left are determined by facing in direction snowblower will travel when in use.

STEP 1: DRIVELINE INSTALLATION

1. Remove paint from blower drive shaft (fig.1,item1) and grease driveline sliding surfaces and yoke.
2. Slide driveline yoke over drive shaft (fig.1,item 2) using the sliding action of the driveline. Make sure the driveline locking collar is well secured to the drive shaft.

STEP 2: 3 POINT HITCH INSTALLATION

1. Remove two bolts and lockwashers from rear of gear box (fig.1,item 5-6) and install driveline shield at that location (fig.1,item 4). Replace bolts and lockwashers.
2. Install the lower hitch tubes (fig.1,item 7) on blower using a 3/4" x 4" bolt (fig.1,item 8), lockwashers and nuts (fig.1,item 9).

NOTE: Attaching arms have two holes. Use holes depending on tractor lower link length to provide a minimum of 6" overlap of driveline sliding sections when snowblower is attached.

3. Install the two hitch arms (fig.1,item 10-11) to the upper hitch (fig.1,item 12) through the top hole using a 3/4" x 4" bolts (fig.1,item 13), lockwashers and nuts (fig.1,item 14).
4. Attach each hitch arm (fig.1,item 10-11) inside the hitch tubes (fig.1,item 7) using two 3/4" x 2" bolts (fig.1,item 15), lockwashers and nuts (fig.1,item 16).
5. Attach upper hitch (fig.1,item 12) to blower using a 3/4" x 2" bolt (fig.1,item 17), lockwasher (fig.1,item 18) and nut (fig.1,item 19)(lockwasher on top side).

NOTE : We recommend you install the storage chain only when you have the intention of storing your snowblower. Functioning your snowblower with it attached may be hazardous.

6. Install the driveline storage chain in the small hole in each hitch arm (fig.1,item 10-11) using two "S" hooks. Using pliers, close "S" hooks, leave one side of one "S" hook open (to attach and detach).
7. Attach driveline shield safety chain in same hole position as the "S" hook of section 6.
8. Install and bolt the flatbar (fig.1,item 20) on the end of the lower hitch tubes (fig.1,item 7) with four 1/2" x 4" hex. bolts (fig.1,item 21), lockwashers and nuts (fig.1,item 22).
9. Torque all bolts according to the Torque Specification Table.

ASSEMBLY

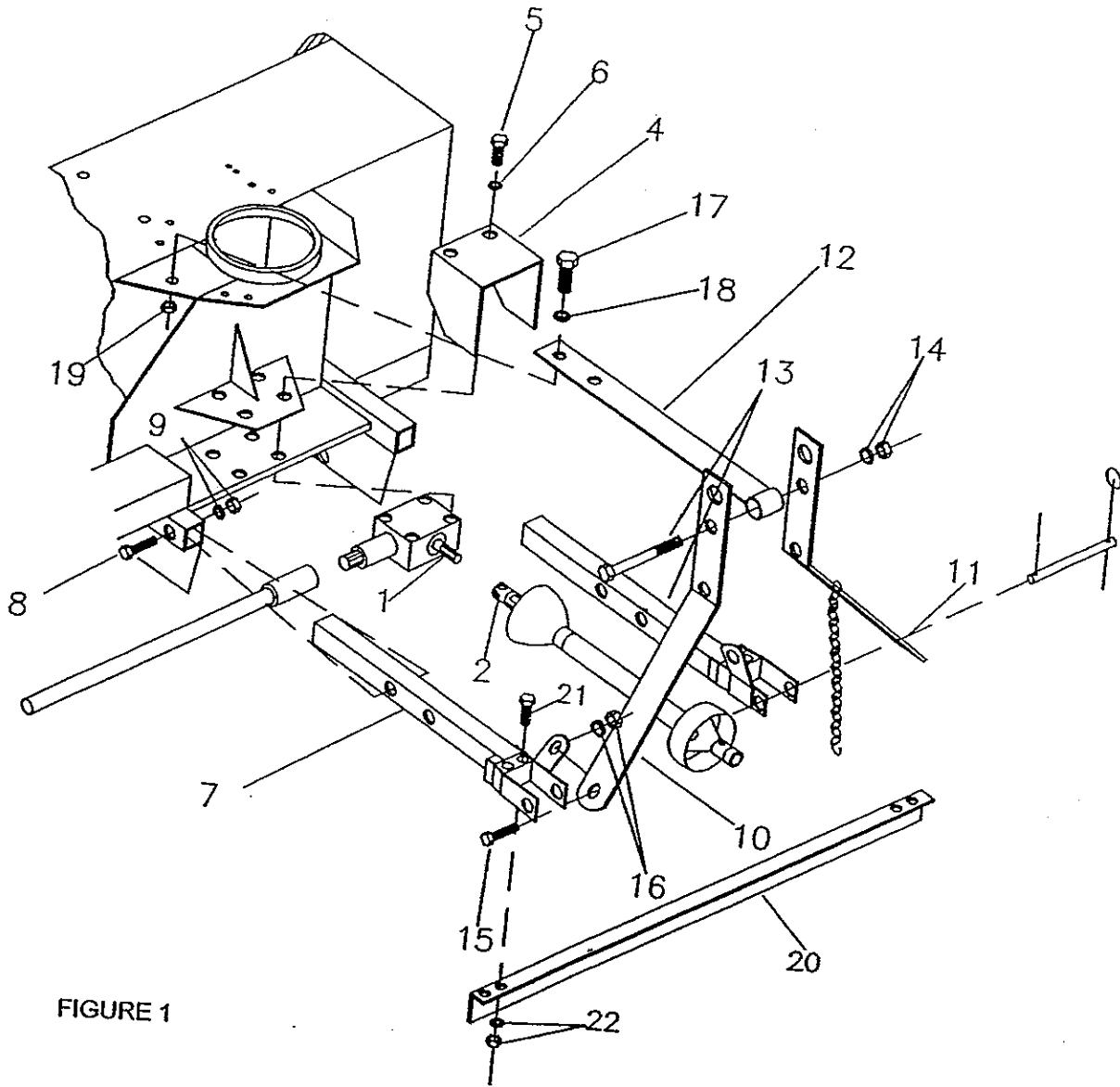


FIGURE 1

ASSEMBLY

STEP 3: SNOWBLOWER INSTALLATION

1. Attach tractor lower hitch arms (fig.2,item 1) to snowblower attaching arms (fig.2,item 7) using the hitch pins (fig.2,item 2) and secure with roll pins (fig.2,item 3) and linchpins (fig.2,item 4).
2. Install the tractor upper hitch (fig.2,item 5) in top hole of snowblower hitch arms (fig.2,item 9) using tractor pins (fig.2,item 6) and linchpin (fig.2,item 5).
3. To level snowblower front to back, adjust level using the tractor upper hitch (fig.2,item 5).
4. To level side to side, use levelling crank on right lower lift arm.
5. Set tractor anti-sway turnbuckles so that snowblower does not sway. Be sure the turnbuckles clear the tractor tires.

CAUTION : Before connecting snowblower driveline to tractor PTO shaft, make sure driveline is not too long in raised, lowered and middle position. If the driveline is too long it must be shortened (cut), to avoid damaged to tractor.

6. Connect driveline to tractor PTO shaft, making sure that the driveline locking collar is well secured to the tractor.
7. Secure driveline safety chain to tractor master shield to prevent driveline shield from rotating.

NOTE : Depending on tractor used, it may be necessary to install front tractor weights to maintain front end stability.

DETACHING SNOWBLOWER FROM TRACTOR

Select a level surface to detach. Remove driveline shaft and support it with chain. Detach top link using adjustment as required. Detach right lower link using adjustable link to assist if necessary. Detach left lower link.

IF USING MANUAL CHUTE ROTATION:

CAUTION : To avoid personal injury, check the full lifting range of the snowblower, to ensure that the chute rotation handle is clear of the operator's area when the snowblower is in raised position.

The safe operation of this machine is the responsibility of the operator. The operator should be familiar with the tractor and snowblower and all safety practices before starting operation.

IMPORTANT : To avoid damage to the snowblower, retorque all bolts after the first 10 hours of operation.

ASSEMBLY

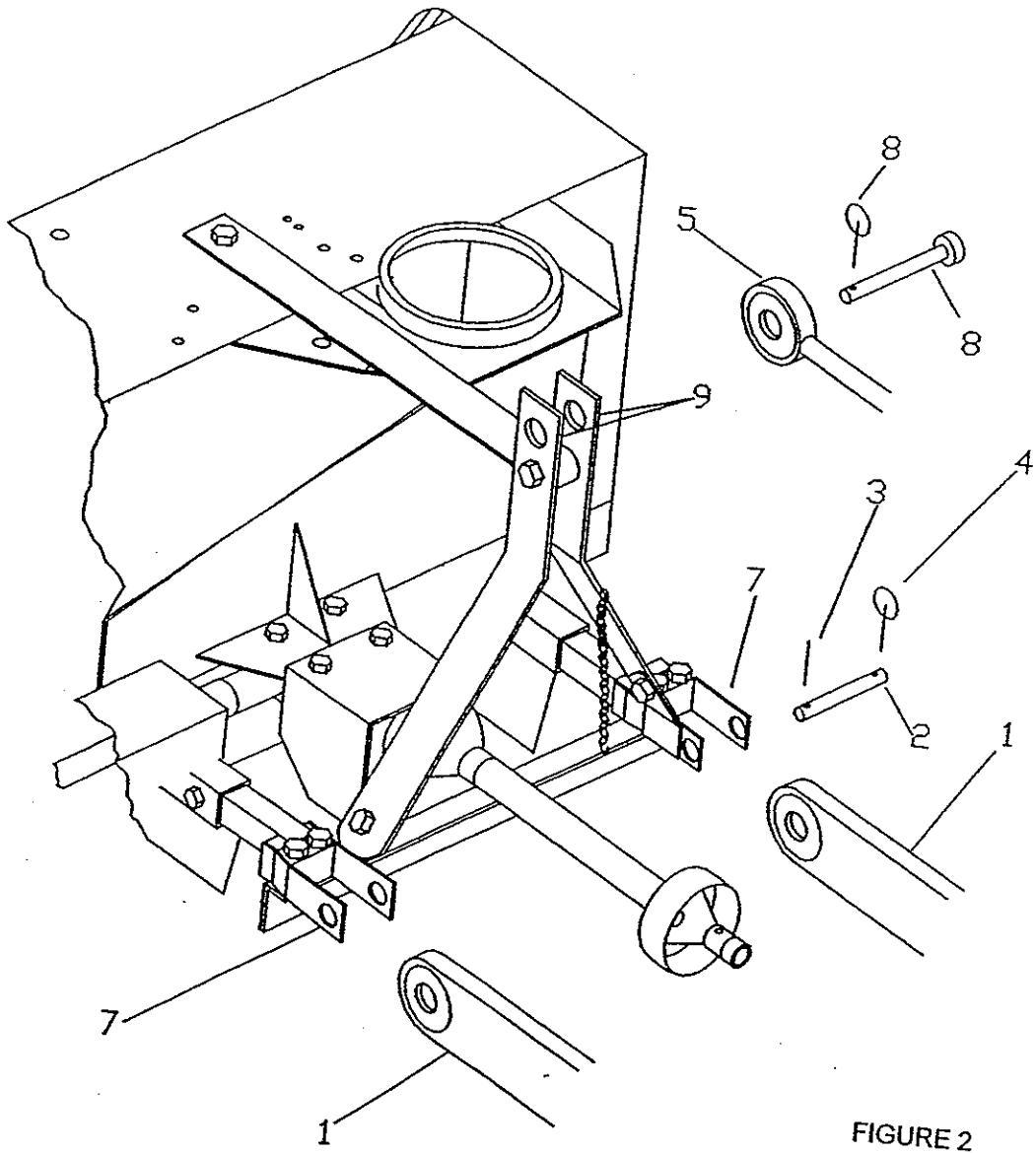


FIGURE 2

ASSEMBLY

STEP 4: MANUAL ROTATION INSTALLATION

1. Grease base of chute. Install chute over base of snowblower. Install three retaining plates using six 1/2" x 1" bolts (fig.3,item 3), lockwashers and nuts (fig.3,item 4-5).
2. Install manual rotation bracket (fig.3,item 10) on flatbar, left of chute. Secure with a 5/8" x 2 1/2" bolt (fig.3,item 7), two 11/16" flat washers (fig.3,item 8) and nylon lock nut (fig.3,item 9) on the left side, and 1/2" x 1 3/4" bolt (fig.3,item 6) with lockwasher and nut (fig.3,item 4-5) on the right side.

CAUTION : TO avoid personal injury:

Check the full lifting range of the snowblower, to ensure that the chute rotation handle is clear of the operator's area when the snowblower is in raised position.

CABLE INSTALLATION

1. Place discharge chute with opening parallel to front of blower.
2. Turn chute opening towards the right (clockwise) approximately 40 degrees.
3. Tape ends of cable (fig.3,item 1) with electrical tape to keep ends from fraying.
4. Pass the cable through the rotation tube (fig.3,item 11) keeping 8" spare and locking temporarily with the cable clamp (fig.3,item 2).
5. Turn the cable one full turn around the chute base in a clockwise direction.
6. Pass the cable through the two small holes (fig.3,item 12) of the base of the chute, with a in and out motion.
7. Continue to route the cable by passing under the pulley (fig.3,item 13).
8. Turn the chute in the opposite direction (same previous angle) by turning the rotation handle (fig.3,item 14) (counter clockwise) keeping a proper cable tension with the free hand.
9. Detach the cable clamp (fig.3,item 2). Replace between the two holes securing the two ends of the cable. Be sure the ends of the cable are under proper tension.

ASSEMBLY

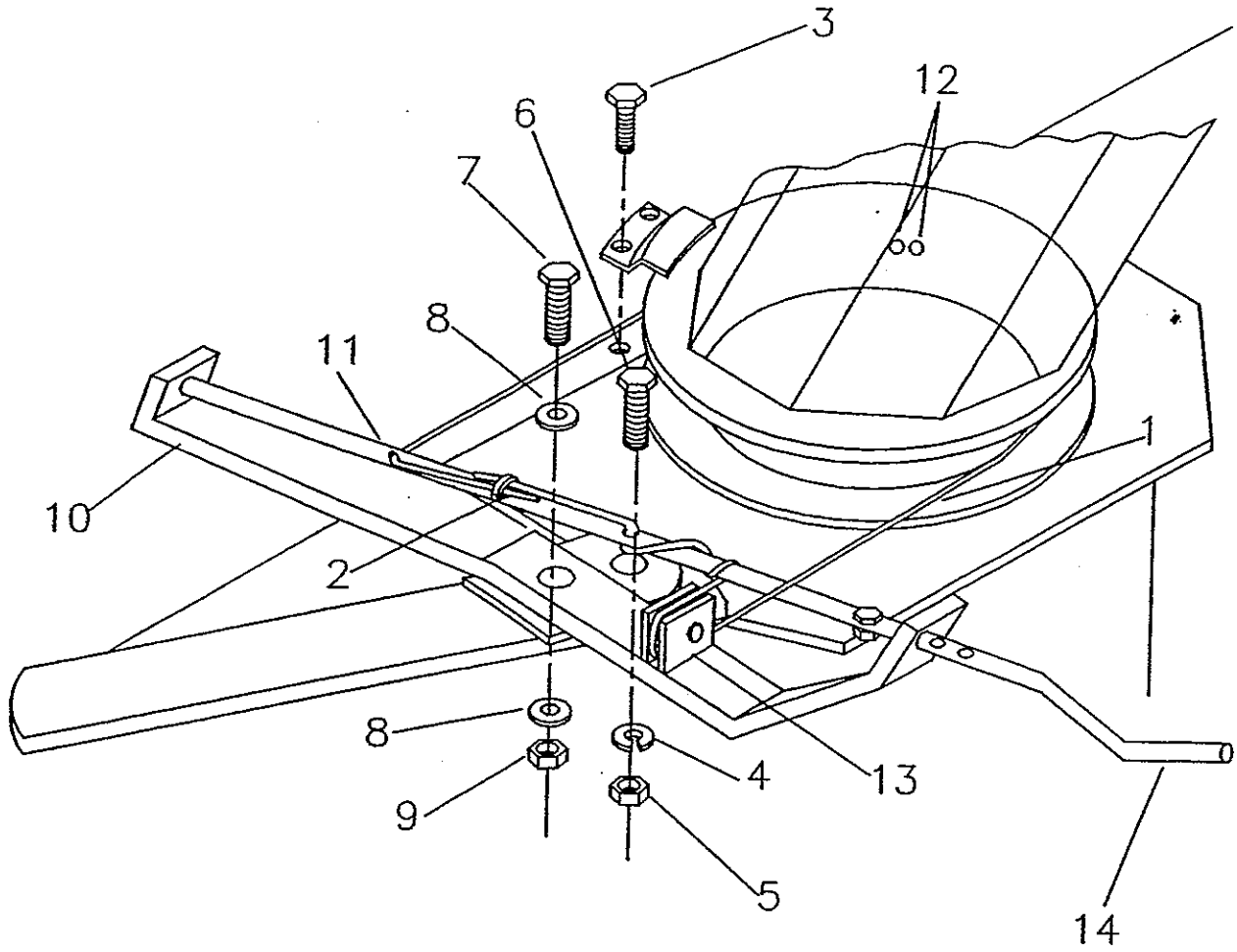


FIGURE 3

ASSEMBLY

STEP 5: HYDRAULIC ROTATION WITH CYLINDER INSTALLATION

1. Install hydraulic rotation arm with pulleys (fig.4,item 1) to the left side of chute. Secure with a 5/8" x 2" bolt (fig.4,item 2), two 11/16" flat washers (above the arm) and nylon locknut (fig.4,item 3-4). Tighten nut to remove end play but still allow arm to move.
2. Install cable holding arm (fig.4,item 5) on top of retaining plate using two 1/2" x 1 3/4" bolts (fig.4,item 6), lockwashers and nuts (fig.4,item 7-8). Tighten securely.
3. Drill a 9/16" dia. hole using the front cable holding arm as a guide. Insert a flat washer (fig.4,item 12) between blower body and arm.
4. Insert one 1/2" x 2" bolt with drilled cable hole (fig.4,item 10) at each end of the cable holding arm (fig.4,item 5) with a 1/2" bushing (fig.4,item 11). Secure loosely with two lockwashers and nuts (fig.4,item 7-8).
5. Attach one end of 3" x 8" hydraulic cylinder to hydraulic rotation arm (fig.4,item 13) and the other end of cylinder on the snowblower cylinder fixation flatbar. Attach hose to remote outlets on tractor. Position arm with pulleys in center of travel.

CABLE INSTALLATION

1. Position the chute to blow directly in front of blower auger.
2. Tape ends of cable (fig.4,item 9) with electrical tape to keep ends from fraying.
3. Pass the cable through the two small holes (fig.4,item 13) on the base of the chute from inside out.
4. Wind cable ends in opposite directions around the chute.
5. Pass the cable around pulleys from outside to inside.
6. Insert the cable ends through special 1/2" x 2" bolts (fig.4,item 10).
7. With rotation arm in center of travel (parallel to snowblower ends) and chute positioned to blow directly in front of blower auger.
8. Tighten the cable at each bolt (fig.4,item 10) and tighten the nut (fig.4,item 8).

ASSEMBLY

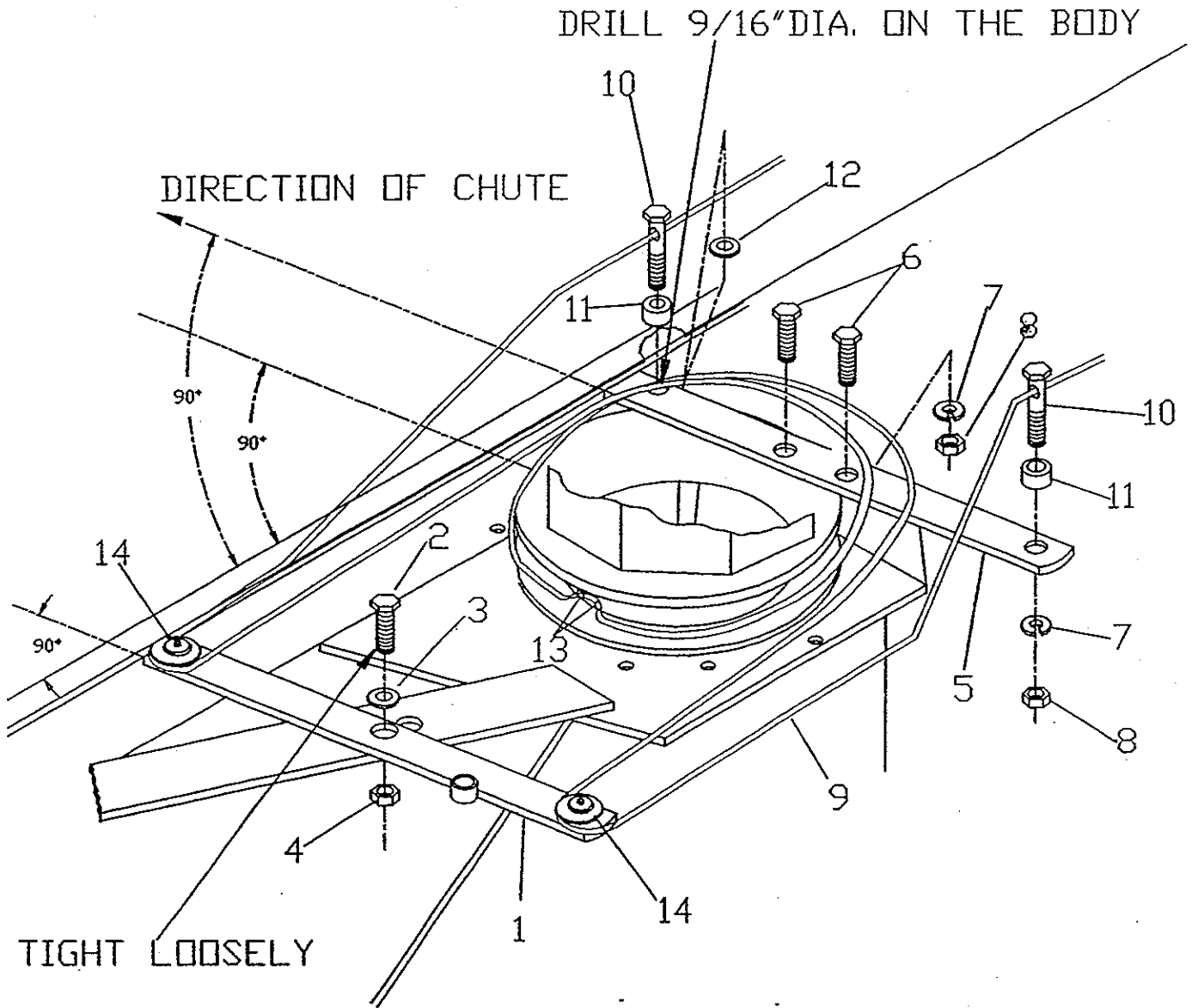


FIGURE 4

OPERATIONS

PREPARING FOR SNOW REMOVAL

1. Read the Operator's Manual carefully before using the tractor and snowblower. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Make sure the blower is clear of snow before engaging the PTO.
3. Make sure the auger and fan operate freely.
4. Check the oil level in the worm gear box and if necessary, add SAE 90 gear oil.
5. Check the three shearbolts, one on each auger section and one between the fan and gearbox for proper tightness.
6. Adjust so that the snowblower skid shoes run level.
7. Wear adequate winter outer garments while operating equipment.

OPERATING CONTROLS

- **MANUAL CHUTE ROTATION**
Turning the handle in a clockwise direction, turns the chute in the clockwise direction.
- **RAISED AND LOWERING THE SNOWBLOWER**
Move the 3 point control lever on right hand side of seat down or forward to lower, and up or rearward to raise.
- **PTO OPERATION**
The mid PTO is activated by pulling up the PTO lever on left side of seat. Push down to disengage.

ADJUSTMENTS

WARNING: To avoid personal injury, be sure the tractor engine is off, the PTO disengaged, and all movement has stopped before making any adjustments.

- **DEFLECTOR ADJUSTMENT**
Set the angle of deflection according to the distance the snow must be thrown. To set the deflector angle, loosen the two deflector knobs,

adjust the deflector to the appropriate angle, and retighten the two knobs securely.

- **SKID SHOE ADJUSTMENT**
Adjust the snowblower so that the skid shoes run level. Adjust the skid shoes according to the surface being cleared. Adjust downwards for rough or uneven surface conditions so that stones are not thrown with the snow, and adjust upwards for smooth surfaces. Adjust both skid shoes to the same height to keep the cutting edge level.
- **REDUCTION CHAIN TENSION ADJUSTMENT**
Remove chain cover. Loosen the two bolts of the idler support of the chain. Tighten the chain by sliding the idler sprocket in the groove of support. Leave approximately 1/8" deflection in the bottom span of chain. Tighten the two bolts. Do not tighten too much to prevent wear. Install the chain cover.
- **WORK AND TRAVEL**
Working ground speed will depend on the depth and density of the snow to be cleared. Normally, ground speed will range from 4 to 7 mph for light, dry snowfalls (3-6"), and 1-3 mph for heavy, wet or drifted snow.
To transport, disengage the PTO, and raise the snowblower to full transport height.

MAINTENANCE

TIRE PRESSURE

Inflate front wheel tires to 26-27 psi.

Inflate rear wheel tires to 6-7 psi.

MAINTENANCE SERVICE AND STORAGE

1. Always use the special shearbolts on the fan, and the special grooved shearbolts on the auger sections, as shown on the shearbolt decal inside the collector housing.
2. Check the shearbolts at frequent intervals for proper tightness to be sure the blower is in safe working condition.
3. Never store the tractor with fuel in the fuel tank inside a building where open flame or sparks are present. Allow the engine to cool before storing in any enclosure.
4. Run the snowblower a few minutes after blowing snow to prevent freeze up of the auger and the impeller.
5. Provide adequate blocking before working under the snowblower when in the raised position.

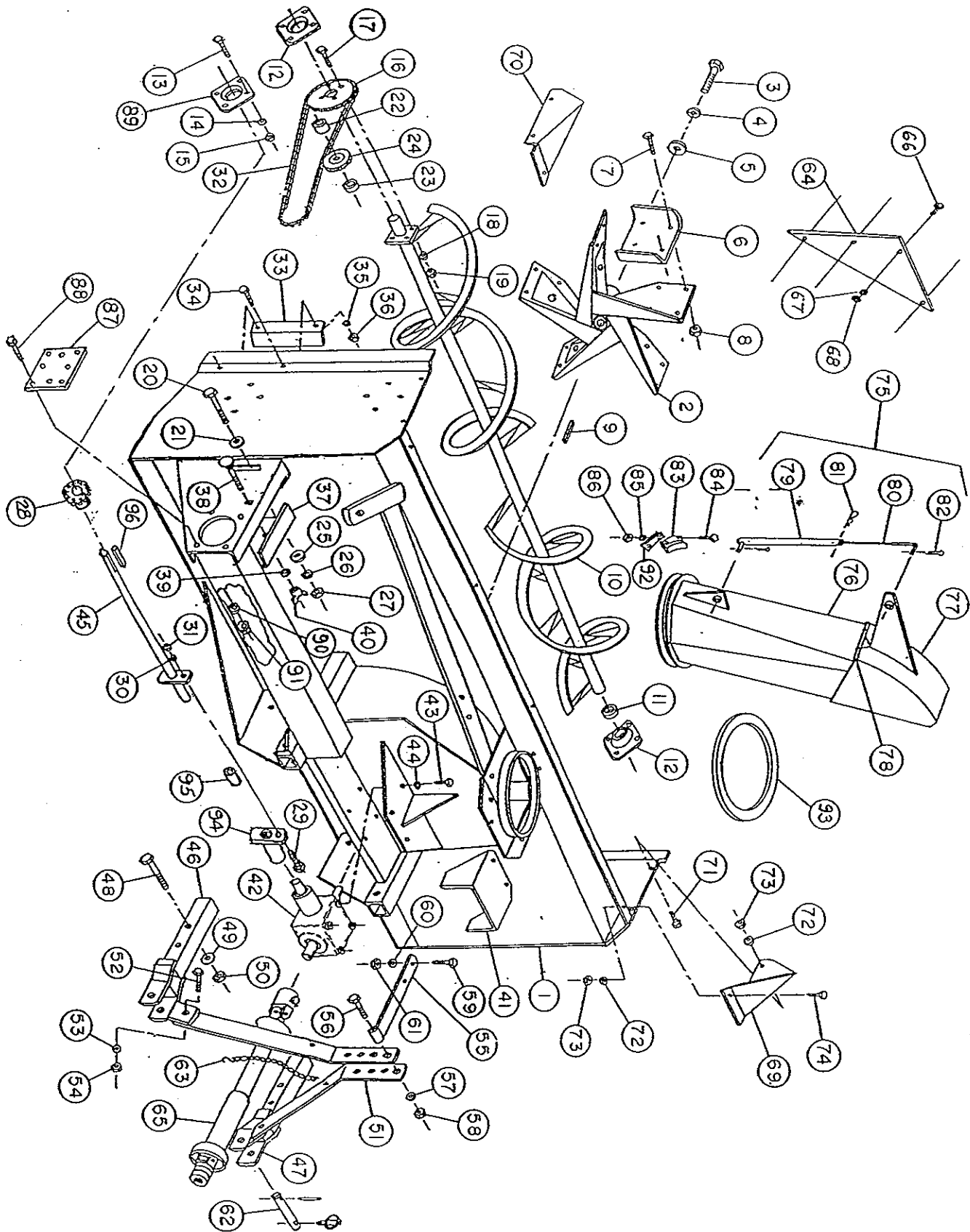
LUBRICATION

1. **GEARBOX:** Check the oil level in the worm gear drive every month. If necessary add AGMA 5EP, or API GL-5 SAE90 gear oil.
2. **AUGER SECTIONS :** Grease the fitting on each auger section every 24 hours of operation or once a year.
3. **REDUCTION CHAIN(front mount only) :** Lubricate with chain saw chain lubricant every 4 hours of operation and after each use.
4. **PTO DRIVELINE(S) :** Grease each U-joint fitting every 8 hours of operation. Slide drive shaft apart and coat sliding surfaces with grease every 8 hours of operation.

END OF SEASON STORAGE

1. Clean the snowblower thoroughly.
2. Repaint all parts from which paint has worn.
3. When the snowblower is dry, oil all moving parts. Apply oil liberally to all surfaces to protect against rust.
4. Lubricate the snowblower as instructed above.
5. List the replacement parts that will be needed before the next season.
6. Store the snowblower in a dry place.

SNOWBLOWER, CHUTE AND HITCH ASS'Y



SNOWBLOWER

SE96

SE104

REF	DESCRIPTION	# PARTS	QTY	
1	Frame	662870	1	****
		662873	****	1
2	Fan	662935	1	1
3	Hex. bolt 5/8"NC x 1 1/2"	O/L	1	1
4	Lock washer 5/8"	O/L	1	1
5	Flat washer 11/16" dia.	O/L	1	1
6	Fan blade	661820	5	5 → same as on B-108
7	Carriage bolt 7/16"NC x 1"	O/L	20	20
8	Stover lock nut 7/16"NC	O/L	20	20
9	Key 1/2" x 1/2" x 4 3/4"	662380	1	1
10	Auger assembly	662678	1	****
		662676	****	1
11	Spacer	662368	1	1
12	Bearing with locking collar	654758	2	2
13	Hex. bolt 1/2"NC x 1 1/2"	O/L	12	12
14	Lockwasher 1/2"	O/L	12	12
15	Hex. nut 1/2"NC	O/L	12	12
16	Sprocket 60A38, 1 1/4"dia. hole	662353	1	1
17	Hex. bolt 3/8"NC x 1 1/4"	O/L	4	4
18	Lockwasher 3/8"	O/L	4	4
19	Hex. nut 3/8"NC	O/L	4	4
20	Hex. bolt 5/8"NC x 5"	O/L	1	1
21	Flat washer 11/16" dia.	O/L	1	1
22	Spacer 2 3/8" lg.	662345	1	1
23	Spacer 1 1/16" lg.	663052	1	1
24	Idler sprocket	654756	1	1
25	Flat washer 11/16" dia.	O/L	1	1
26	Lockwasher 5/8"	O/L	1	1
27	Hex. nut 5/8"NC	O/L	1	1
28	Sprocket	656678	1	1
29	Hex. bolt 5/16"NC x 2", gr.5	O/L	1	1
30	Lockwasher 5/16"	O/L	1	1
31	Hex. nut 5/16"NC	O/L	1	1
32	Chain #80 x 75 links	655955	1	1
	Connecting link	655549	1	1
	Half link only	655550	1	1
33	Chain guard	655961	1	1
34	Hex. bolt 3/8"NC x 1"	O/L	2	2
35	Lockwasher 3/8"	O/L	2	2
36	Hex. nut 3/8"NC	O/L	2	2
37	Chain cover	662940	1	1
38	Carriage bolt 3/8"NC x 4 1/2"	O/L	1	1
39	Lockwasher 3/8"	O/L	1	1
40	Wing nut 3/8"NC	O/L	1	1
41	Driveline guard	662942	1	1

SNOWBLOWER

SE96

SE104

REF	DESCRIPTION	# PARTS	QTY	
42	Gear box ass'y	662281	1	1
43	Hex. bolt 1/2"NC x1"	O/L	8	8
44	Lockwasher 1/2"	O/L	8	8
45	Auger cross shaft	662344	1	****
		662384	****	1
46	Lower hitch left	656096	1	1
47	Lower hitch right	656097	1	1
48	Hex. bolt 3/4"NC x 4"	O/L	2	2
49	Lockwasher 3/4"	O/L	2	2
50	Hex. nut 3/4"NC	O/L	2	2
51	Hitch arm	656098	2	2
52	Hex. bolt 3/4"NC x2"	O/L	2	2
53	Lockwasher 3/4"	O/L	2	2
54	Hex. nut 3/4"NC	O/L	2	2
55	Upper hitch	656095	1	1
56	Hex. bolt 3/4"NC x 4"	O/L	1	1
57	Lockwasher 3/4"	O/L	1	1
58	Hex. nut 3/4"NC	O/L	1	1
59	Hex. bolt 3/4"NC x2"	O/L	1	1
60	Lockwasher 3/4"	O/L	1	1
61	Hex .nut 3/4"NC	O/L	1	1
62	Pin with linch pin	655813	2	2
63	Chain with 2 "S" hooks	654200	1	1
64	Restrictive plate	661821	1	1
65	Driveline	662288	1	1
66	Hex. bolt 3/8"NC x 3/4"	O/L	4	4
67	Lockwasher 3/8"	O/L	4	4
68	Hex. nut 3/8"NC	O/L	4	4
69	Body brace R.H.	656347	1	1
70	Body brace L.H.	656293	1	1
71	Hex. bolt 3/8"NC x 1 1/4"	O/L	4	4
72	Lockwasher 3/8"	O/L	6	6
73	Hex. nut 3/8"NC x 1"	O/L	6	6
74	Hex. bolt 3/8"NC x 1"	O/L	2	2
75	Chute assembly with decals	663274	1	1
76	Chute base	654073	1	1
77	Deflector	654072	1	1
78	Pin 3/32"dia. x 1"	O/L	1	1
79	Adjustment pipe	654076	1	1
80	Adjustment rod	654074	1	1
81	Hair pin 3/16"dia. x 3 3/4"	O/L	1	1
82	Cotter pin 1/4"dia. x 2"	O/L	2	2
83	Retaining plate	654077	3	3
84	Hex. bolt 1/2"NC x 1 1/4"	O/L	6	6
85	Lockwasher 1/2"	O/L	6	6

SNOWBLOWER

SE96

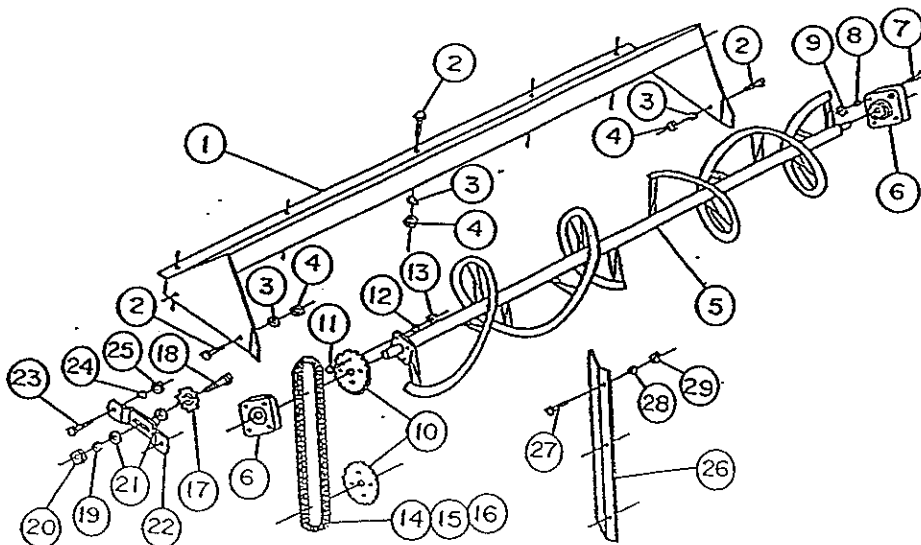
SE104

REF	DESCRIPTION	# PARTS	QTY	
86	Hex. nut 1/2"NC	O/L	6	6
87	Drive shaft support	662874	1	1
88	Hex. bolt 3/8"NC x 1"	O/L	4	4
89	Bearing with locking collar	662355	1	1
90	Lockwasher 3/8"dia.	O/L	4	4
91	Hex. nut 3/8"NC	O/L	4	4
92	Retaining plate spacer	661643	3	3
93	Anti-friction ring	662861	1	1
94	Shear plate	658812	1	1
95	Bushing	658813	1	1
96	Key 3/8" x 3/8" x 1 1/2"	656518	1	1

DOUBLE AUGER CONVERSION KIT

SE96(9152) SE104(9491)

REF	DESCRIPTION	# PARTS	QTY	
1	Snow frame extension	6596274	1	****
		662959	****	1
2	Hex. bolt 3/8"NC x 1"	O/L	9	9
3	Lockwasher 3/8"	O/L	9	9
4	Hex. nut 3/8"NC	O/L	9	9
5	Auger assembly	655997	1	****
		662442	****	1
6	Bearing	654082	2	2
7	Hex. bolt 1/2"NC x 1 1/2"	O/L	8	8
8	Lock washer 1/2"	O/L	8	8
9	Hex. nut 1/2"NC	O/L	8	8
10	Sprocket #60, 32 teeth	654167	2	2
11	Hex. bolt 3/8"NC x 1 1/4"	O/L	8	8
12	Lockwasher 3/8"	O/L	8	8
13	Hex. nut 3/8"NC	O/L	8	8
14	Auger drive chain #60, 81 links	654788	1	1
15	Connecting link	655025	1	1
16	Half-link	654839	1	1
17	Idler sprocket	654010	1	1
18	Hex. bolt 5/8"NC x 2 1/2"	O/L	1	1
19	Lockwasher 5/8"	O/L	1	1
20	Hex. nut 5/8"NC	O/L	1	1
21	Flat washer 11/16"	O/L	2	2
22	Adjuster	655782	1	1
23	Hex. bolt 3/8"NC x 1 1/4"	O/L	2	2
24	Lockwasher 3/8"	O/L	2	2
25	Hex. nut 3/8"NC	O/L	2	2
26	Chain guard	656279	1	1
27	Hex. bolt 3/8"NC x 1"	O/L	3	3
28	Lockwasher 3/8"	O/L	3	3
29	Hex. nut 3/8"NC	O/L	3	3

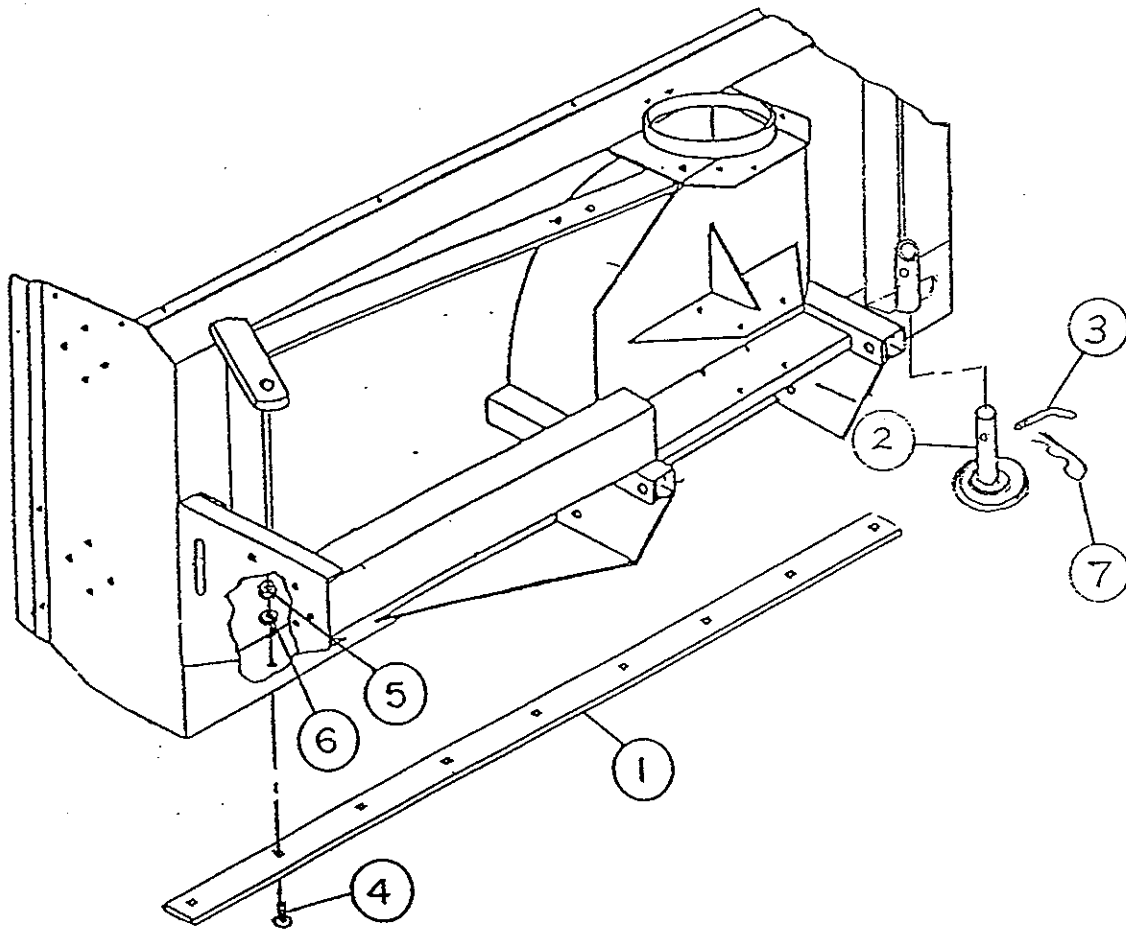


CUTTING EDGE AND SKID SHOES

SE96

SE104

REF	DESCRIPTION	# PARTS	QTY	
1	Cutting edge	662846	1	****
		662849	****	1
2	Skid shoe	662705	2	2
3	Skid shoe pin	662706	2	2
4	Plow bolt 7/16"NC x 1 1/2"	O/L	11	13
5	Hex. nut 7/16"NC	O/L	11	13
6	Lockwasher 7/16"	O/L	11	13
7	Hair pin 5mm x 100mm lg.	O/L	2	2

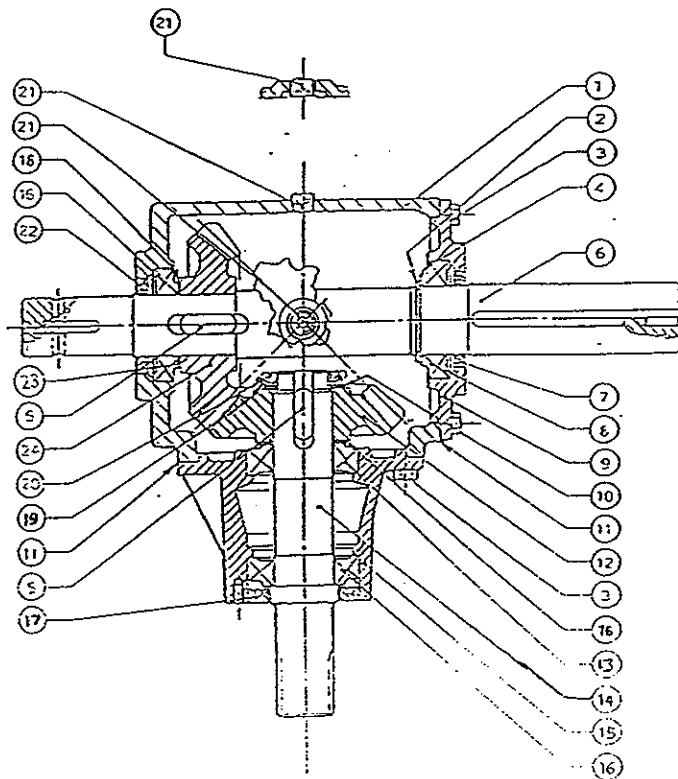


GEAR BOX(662281)

SE96

SE104

REF	DESCRIPTION	# PARTS	QTY	
1	Casing	658850	1	1
2	Snap ring	662311	1	1
3	Bolt M10 x 22	658852	16	16
4	Shim	658853	1	1
5	Parallel key	658854	2	2
6	Shaft	662282	1	1
7	Oil seal 50 x 72 x 40	658856	1	1
8	Bearing	658857	1	1
9	Cover	658858	1	1
10	Shim	658870	1	1
11	Gasket	658860	2	2
12	Gear Z21	658861	1	1
13	Bearing	658862	1	1
14	Shaft 1 3/4"	658863	1	1
15	Extension AC	658864	1	1
16	Bearing	658865	2	2
17	Oil seal 52 x 35 x 10	658866	1	1
18	Shim	658867	2	2
19	Spring washer	658868	1	1
20	Locknut M40 x 1,5	658869	1	1
21	Plug 3/8" gas	658872	4	4
22	Double lip seal 45 x 72 x 8	658871	1	1
23	Shim	662283	1	1
24	Gear	662435	1	1



DRIVELINE

Ref.	Description	Qty.	SE96"	SE104"
	Driveline		662288	662288
1	Push pin yoke assembly	1	662289	662289
2	Universal joint kit	2	662023	662023
3	Outer tube and yoke assembly	1	662290	662290
4	Outer yoke	1	663152	663152
5	Roll pin for outer tube	1	663153	663153
6	"DANGER" label for outer tube	1	663121	663121
7	Bush with grease fitting	1	663154	663154
8	Outer tube	1	663155	663155
9	Inner tube and yoke assembly	1	662292	662292
10	Inner tube	1	663156	663156
11	Roll pin for inner tube	1	663157	663157
12	Inner yoke	1	663158	663158
13	Yoke and hub assembly	1	662294	662294
14	Yoke for hub	1	663159	663159
15	Hub	1	663160	663160
16	Bolt and nut	2	662297	662297
17	Grease fitting	1	663148	663148
18	Ball	24	663162	663162
19	Shear bolt and nut	1	662296	662296
20	Shields with safely chain	1	662298	662298
21	Safely pin	1	662291	662291

