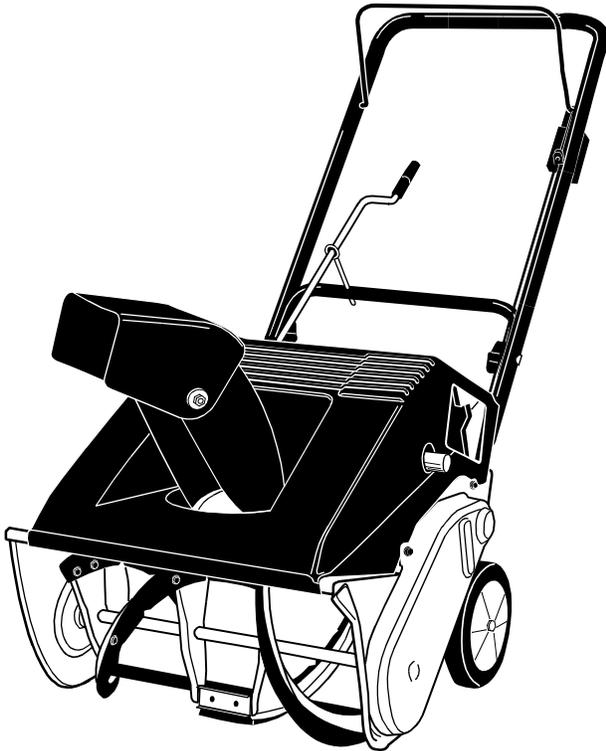


Operator's Manual



Single Stage Snow Thrower

Model Series
140 through E173

IMPORTANT: Read safety rules and instructions carefully before operating equipment.

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 368022 Cleveland, Ohio 44136-9722.

MTD PRODUCTS INC. P.O. BOX 368022 CLEVELAND, OHIO 44136-9722

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(3/2001)

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FINDING MODEL NUMBER

This Operator's Manual is an important part of your new snow thrower. It will help you to assemble, prepare and maintain the unit for best performance. Please read and understand what it says.



Before you start assembling your new snow thrower, please locate the model plate on the equipment and copy the information from it in the space provided below. The information on the model plate is very important if you need help from our Customer Support Department or an authorized dealer.

- You can locate the model number by standing behind the unit in the operating position and looking down at the dash panel . A sample model plate is explained below. For future reference, please copy the model number and the serial number of the equipment in the space below.

_____	_____
(Model Number)	(Serial Number)
MTD PRODUCTS INC CLEVELAND, OHIO 44136	

Copy the model number here: _____

Copy the serial number here: _____

CALLING CUSTOMER SUPPORT

If you have difficulty assembling this product or have any questions regarding the controls, operation or maintenance of this unit, please call the Customer Support Department.



Call **1- (330) 220-4MTD (4683)** or **1- (800)-800-7310** to reach a Customer Support representative. Please have your unit's model number and serial number ready when you call. See previous section to locate this information. You will be asked to enter the serial number in order to process your call .

SECTION 1: IMPORTANT SAFE OPERATION PRACTICES



WARNING: This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol—**heed its warning.**



WARNING: Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.



DANGER: This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

Training

1. Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.
3. Never allow children under 14 years old to operate this machine. Children 14 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
4. Never allow adults to operate this machine without proper instruction.
5. Thrown objects can cause serious personal injury. Plan your snow throwing pattern to avoid discharge of material toward roads, bystanders and the like.
6. Keep bystanders, helpers, pets and children at least 75 feet from the machine while it is in operation. Stop machine if anyone enters the area.
7. Exercise caution to avoid slipping or falling, especially when operating in reverse.
8. Let engine and machine adjust to outdoor temperature before starting to clear snow.
9. To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.
 - a. Use only an approved gasoline container.
 - b. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
 - c. Never fuel machine indoors.
 - d. Never remove gas cap or add fuel while the engine is hot or running.
 - e. Allow engine to cool at least two minutes before refueling.
 - f. Never over fill fuel tank. Fill tank to no more than ½ inch below bottom of filler neck to provide space for fuel expansion.
 - g. Replace gasoline cap and tighten securely.
 - h. If gasoline is spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting the engine.
 - i. Never store the machine or fuel container inside where there is an open flame, spark or pilot light (e.g. furnace, water heater, space heater, clothes dryer etc.).
 - j. Allow machine to cool at least 5 minutes before storing.

Preparation

1. Thoroughly inspect the area where the equipment is to be used. Remove all door mats, newspapers, sleds, boards, wires and other foreign objects which could be tripped over or thrown by the auger/impeller.
2. Always wear safety glasses or eye shields during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.
3. Do not operate without wearing adequate winter outer garments. Do not wear jewelry, long scarves or other loose clothing which could become entangled in moving parts. Wear footwear which will improve footing on slippery surfaces.
4. Use a grounded three wire extension cord and receptacle for all units with electric start engines.
5. Adjust collector housing height to clear gravel or crushed rock surfaces.
6. Disengage all clutch levers before starting the engine.
7. Never attempt to make any adjustments while engine is running, except where specifically recommended in the

Operation

1. Do not put hands or feet near rotating parts, in the auger/impeller housing or discharge chute. Contact with the rotating parts can amputate hands and feet.
2. The auger/impeller clutch lever is a safety device. Never bypass its operation. Doing so, makes the machine unsafe and may cause personal injury.
3. The clutch levers must operate easily in both directions and automatically return to the disengaged position when released.
4. Never operate with a missing or damaged discharge chute. Keep all safety devices in place and working.
5. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.

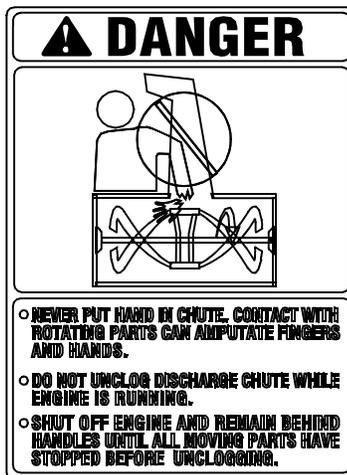
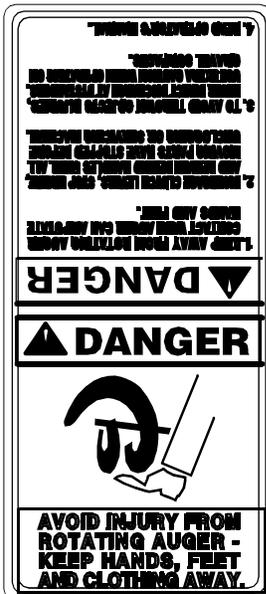
6. Do not operate machine while under the influence of alcohol or drugs.
7. Muffler and engine become hot and can cause a burn. Do not touch.
8. Exercise extreme caution when operating on or crossing gravel surfaces. Stay alert for hidden hazards or traffic.
9. Exercise caution when changing direction and while operating on slopes.
10. Plan your snow throwing pattern to avoid discharge towards windows, walls, cars etc. To avoid property damage or personal injury caused by a ricochet.
11. Never direct discharge at children, bystanders and pets or allow anyone in front of the machine.
12. Do not overload machine capacity by attempting to clear snow at too fast of a rate.
13. Never operate this machine without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, never run.
14. Disengage power to the auger/impeller when transporting or not in use.
15. Never operate machine at high transport speeds on slippery surfaces. Look down and behind and use care when in reverse.
16. If the machine should start to vibrate abnormally, stop the engine, disconnect the spark plug and ground it against the engine. Inspect thoroughly for damage. Repair any damage before starting and operating.
17. Disengage all clutch levers and stop engine before you leave the operating position (behind the handles). Wait until the auger/impeller comes to a complete stop before unclogging the discharge chute, making any adjustments, or inspections.
18. Never put your hand in the discharge or collector openings. Always use a clearing tool to unclog the discharge opening.
19. Use only attachments and accessories approved by the manufacturer (e.g. wheel weights, tire chains, cabs etc.).
20. If situations occur which are not covered in this manual, use care and good judgment. Contact your dealer or telephone 1-800-800-7310 for assistance and the name of your nearest servicing dealer.

Maintenance And Storage

1. Never tamper with safety devices. Check their proper operation regularly.
2. Disengage all clutch levers and stop engine. Wait until the auger/impeller come to a complete stop. Disconnect the spark plug wire and ground against the engine to prevent unintended starting before cleaning, repairing, or inspecting.
3. Check bolts, and screws for proper tightness at frequent intervals to keep the machine in safe working condition. Also, visually inspect machine for any damage.
4. Do not change the engine governor setting or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
5. Snow thrower shave plates and skid shoes are subject to wear and damage. For your safety protection, frequently check all components and replace with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
6. Check clutch controls periodically to verify they engage and disengage properly and adjust, if necessary. Refer to the adjustment section in this operator's manual for instructions.
7. Maintain or replace safety and instruction labels, as necessary.
8. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.
9. Prior to storing, run machine a few minutes to clear snow from machine and prevent freeze up of auger/impeller.
10. Never store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace ,clothes dryer etc.
11. Always refer to the operator's manual for proper instructions on off-season storage.

Your Responsibility:

- Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.



SECTION 2: ASSEMBLING YOUR SNOW THROWER

Unpacking From Carton

- Cut along corners of the carton and lay it down flat. See Figure 1. Remove packing material.
- Remove any loose parts included with unit (i.e., operator's manual, etc.).
- Roll unit out of carton. Check carton thoroughly for any remaining loose part.

Remove loose parts

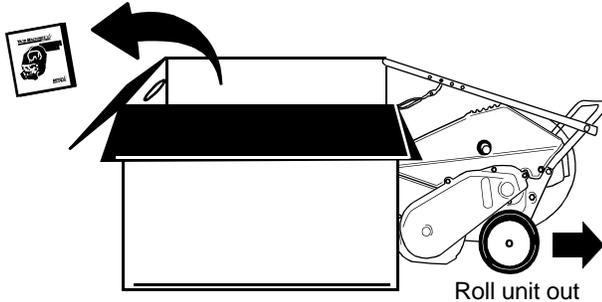


Figure 1

NOTE: This operator's manual covers several models of snow throwers. Use only the information that is appropriate for your model.

Hardware Pack

1. Ignition Keys* (2)

*One key may be in the switch on snow thrower.

Models with optional extended chute crank (Figure 2)

2. Eyebolt
3. Saddle Washer 5/16" I.D.
4. Hex Nuts 5/16-18 Thread (2)
5. Cotter Pin

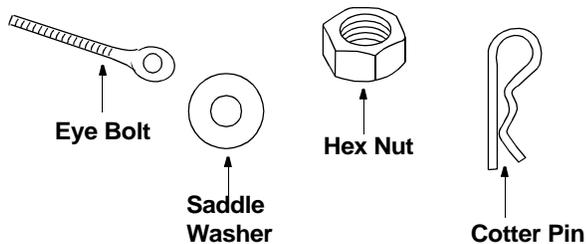


Figure 2

Items Required For Assembly

1. Pair of pliers (not necessary, but helpful)
2. Two cycle engine oil
3. Fresh gasoline

NOTE: All references to left or right side of the snow thrower is from the operating position only.

Before Assembly



WARNING: Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.

Raising Upper Handle

- Loosen the hand knob on each side of the handle. Remove packing material, if any.

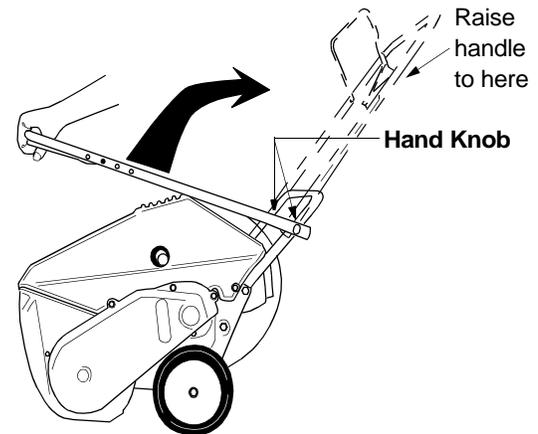


Figure 3

- Raise the upper handle in the direction shown in Figure 3 till it clicks into the operating position. Make sure not to pinch or crimp the cable.
- Tighten the hand knobs.

Attaching Control Cable

The control cable may already be attached to the control handle. If not attached, complete the following steps to attach it to the snow thrower housing.

- Route the control cable over the lower handle. Insert the end of the cable into the hole in the control housing as shown in Figure 4. Push the plastic fitting until it locks into the control housing.

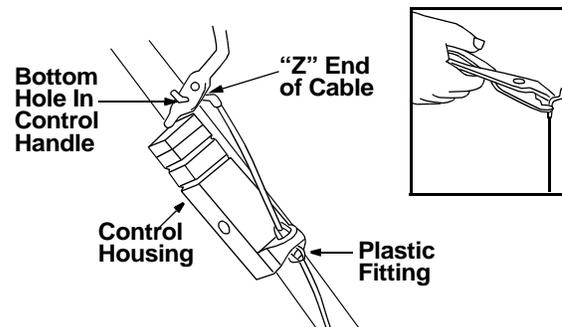


Figure 4

- Lift the control handle up, and hook the “Z” end of the control cable into the **bottom** hole in the control handle, from the outside to the inside . If necessary, pull up on the end of the cable with a pair of pliers to obtain slack in order to hook it into the control handle. Hold the “Z” fitting with the pliers, not the cable, to avoid damaging the cable.

NOTE: The upper hole in the control handle provides for adjustment in belt tension. Refer to page 9 of this manual for instructions.

Installing Chute Crank

Models with optional extended chute crank only

- Thread one 5/16” hex nut all the way onto the eyebolt. See Figure 5. All necessary hardware is included in the hardware pack shipped with your unit. See Figure 2 for more details.
- Slide the eyebolt onto the chute crank. Insert eyebolt into the hole in the lower handle.

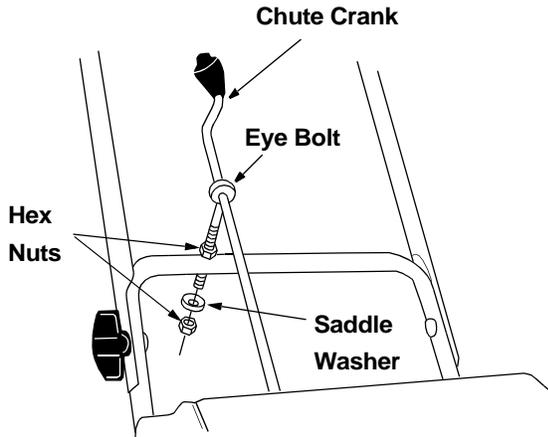


Figure 5

- Insert the chute crank into the coupler at the top right side of the snow thrower. See Figure 6.
- Rotate the crank to align holes, and insert the cotter pin. Bend ends of cotter pin in opposite directions to secure. See Figure 6.

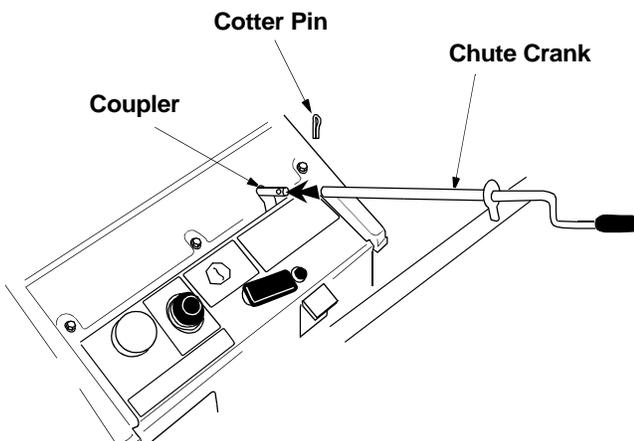


Figure 6

- Secure eyebolt with 5/16” saddle washer and hex nut. The cupped side of washer goes against the handle. Adjust lower hex nut until the eyebolt is positioned so that the chute crank turns freely (does not bind).
- Move upper hex nut down against the lower handle. Tighten lower hex nut securely.

Assembling Discharge Chute

The snow thrower has been shipped with the upper chute pivoted all the way down. Assemble as follows:

- Turn the chute crank until the chute faces straight to the front. See Figure 7 .

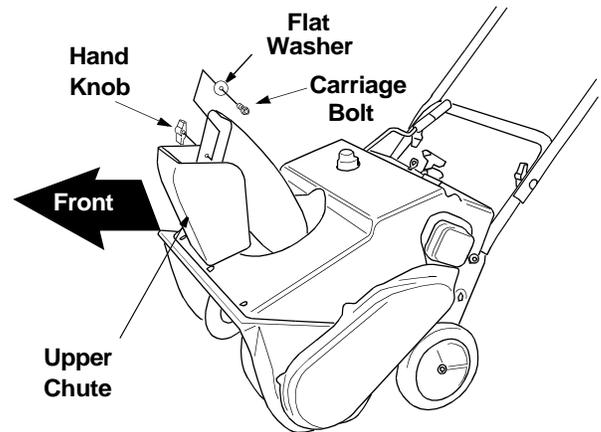


Figure 7

- Remove the hand knob, flat washer and carriage bolt from the upper chute. See Figure 7.
- Pivot the upper chute up so that there is no gap between the upper and the lower chute. See Figure 8. Secure with hardware just removed.

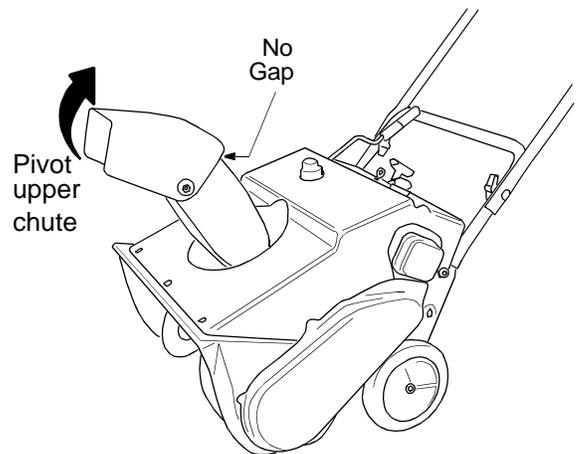


Figure 8

SECTION 3: KNOW YOUR SNOW THROWER



Be familiar with all the controls and their proper operation. Know how to stop the machine and disengage them quickly.

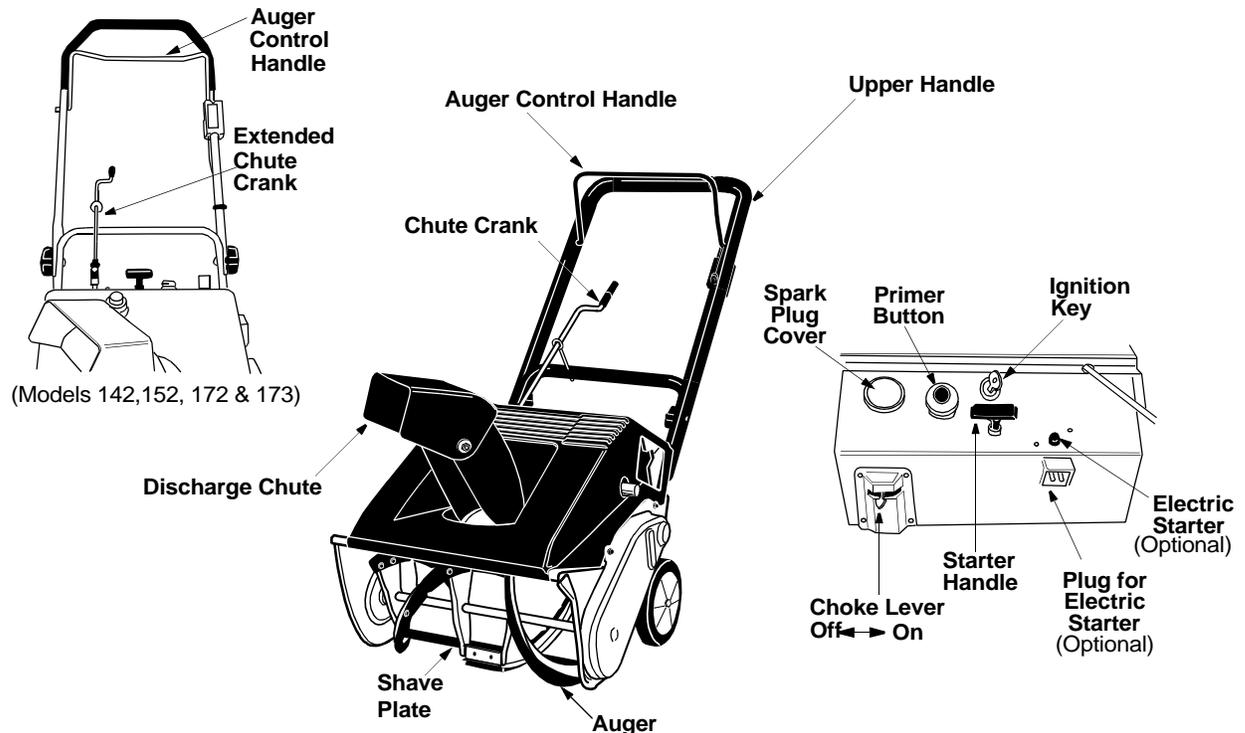


Figure 9

IMPORTANT: This unit is shipped without gasoline or oil. See separate engine operator's manual for proper fuel and engine oil recommendations.

Choke Lever

Place choke lever in "ON" position to start a cold engine.

Primer Button

Used to inject fuel directly into the carburetor to insure fast starts in cold weather. Follow engine manual to prime engine.

Ignition Key

Used to start engine. Put key in "ON" position to start.

Starter Handle

Used to manually start the engine.

Electric Starter (If equipped)

Used to start engine with a 120V power source

Plug for Electric Start (If equipped)

Requires use of a two-prong outdoor extension cord and a 120V power source

Spark Plug Cover

Spark plug located under the cover.

Auger Control Handle

Located on the upper handle, the auger control handle is used to engage and disengage the augers. The snow thrower is designed to be propelled by the rotation of the augers. Pull the control handle back against the upper handle to engage the augers; release to disengage.

Chute Crank

Located on right side of dash panel, the chute crank determines the direction that snow will be discharged. Turn clockwise to discharge snow to the left; turn counterclockwise to discharge to the right.

Discharge Chute

The angle of the discharge chute controls the distance that the snow is thrown. Tilt the discharge chute up for greater distance; tilt down for less distance. Loosen the hand knob on the side of the discharge chute to adjust. Tilt the chute to the desired position, and tighten the knob.

Stopping Engine

- Turn ignition key to OFF position and remove it from the snow thrower.

SECTION 4: OPERATING YOUR SNOW THROWER

Before Starting



WARNING: Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.

- The spark plug wire was disconnected for safety purposes during assembly. Attach spark plug wire to spark plug before starting.

Fuel And Oil Mixture



WARNING: Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel machine indoors or while the engine is hot or running. Extinguish cigarettes, cigars, pipes and other sources of ignition.

Your snow thrower uses a two cycle engine that requires a mixture of gasoline and two cycle engine oil. Refer to the engine operator's manual for proper oil and fuel recommendations.

- A plastic **cup** was provided inside the fuel fill opening on the fuel tank. Remove and discard this cup before filling up the tank. Use the separate fuel tank cap to close after fill-up.

Starting Engine

- To start the engine of your snow thrower, follow the starting instructions in the engine operator's manual.

Operating Snow Thrower

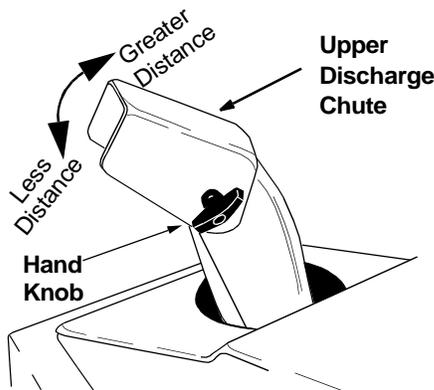


Figure 10

- Adjust the upper discharge chute up or down as shown in Figure 10. Then use the chute crank to position the discharge chute in order to discharge snow with the wind.

- After making sure no bystanders or obstacles are in front of the unit, engage the auger control handle. See Figure 11. As the snow thrower starts to move, maintain a firm hold on the handle, and guide the snow thrower along the path to be cleared.
- Release the auger control handle to stop the snow throwing action and the forward motion.

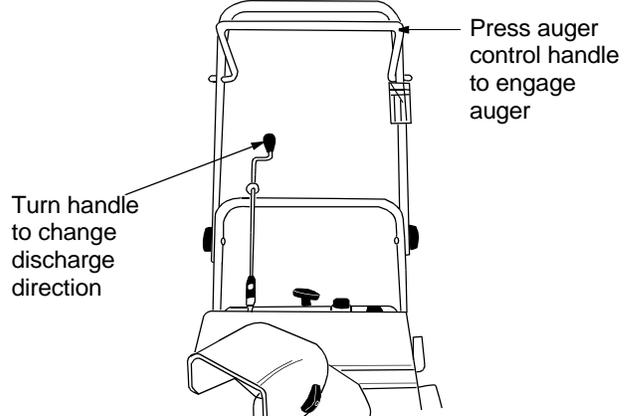


Figure 11

Stopping Engine

- Run the engine for a few minutes before stopping to help dry any moisture on the engine.
- To stop engine: Turn ignition key to OFF position and remove it from the snow thrower.

IMPORTANT: Keep the ignition key in a safe place. Engine will not start without it.

- Wipe all snow and moisture from the unit. Move the choke lever back and forth several times and leave it in the ON position.

Operating Tips

- Discharge snow downwind whenever possible. Slightly overlap each previously cleared path.
- Lifting up on the handle will allow the rubber on the augers to propel the snow thrower forward. Pushing downward on the handle will raise the augers off the ground and stop the forward motion.

NOTE: Excessive upward pressure on the handle will result in premature wear on the rubber auger blades which would not be covered by warranty.

- Run the engine for a few minutes before stopping to help dry any moisture on the engine.
- Clean the snow thrower thoroughly after each use.



WARNING: Muffler, engine and surrounding areas become hot and can cause a burn. Do not touch.

SECTION 5: MAKING ADJUSTMENTS



WARNING: NEVER attempt to make any adjustments while the engine is running, except where specified in the operator's manual.

Shave Plate

- To check the adjustment of the shave plate, place the unit on a level surface. See Figure 12. The wheels, shave plate and augers should all contact the level surface. Note that if the shave plate is adjusted too high, snow may blow under the housing. If the shave plate wears out excessively, or the unit will not self-propel, the shave plate may be adjusted too low.

NOTE: On new units or units with a new shave plate installed, the augers may be slightly off the ground.

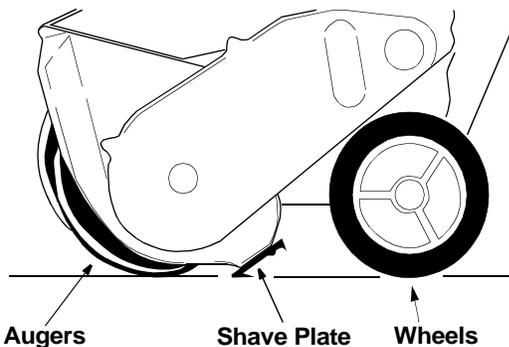
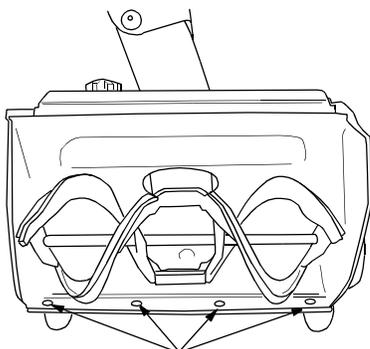


Figure 12

- To adjust, tip the snow thrower back so that it rests on the handle. Loosen the lock nuts and bolts which secure the shave plate to the housing. See Figure 13. Move the shave plate to desired position and retighten the nuts and bolts. Make certain all nuts and bolts are tightened securely.



Nuts & Bolts

Figure 13

Belt Tension

Periodic adjustment of the belt tension may be required due to normal stretch and wear on the belt. Adjust the

belt tension, following instructions below, if the augers seem to hesitate while turning although engine maintains the same speed.

- The upper hole in the control handle provides adjustment for belt tension. To adjust, disconnect the "Z" end of control cable from the bottom hole in the control handle. See Figure 14. Hook the cable into the upper hole in control handle as shown.

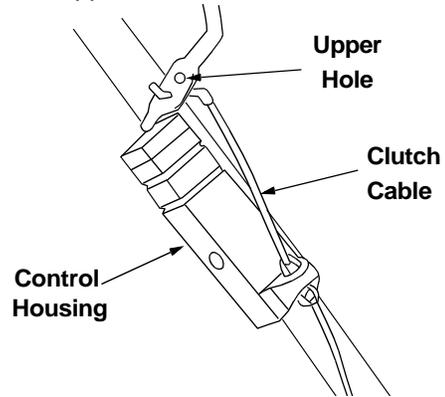


Figure 14

If additional adjustment is required, follow steps below.

- Remove the belt cover by removing five hex screws that hold it in place. See Figure 16.
- There are three adjustment holes provided in the idler bracket assembly. See Figure 15. To adjust, move the extension spring on the end of the clutch cable to the next higher adjustment position on the idler bracket assembly. Reassemble belt cover.

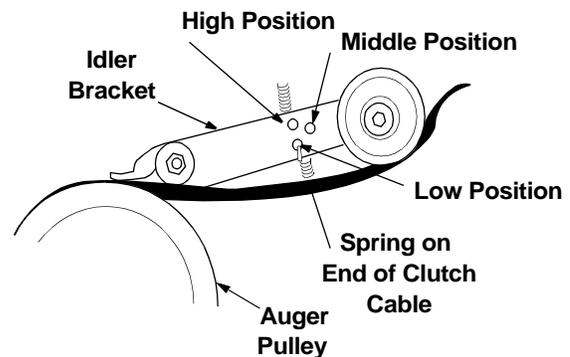


Figure 15

Carburetor



WARNING: If any adjustments need to be made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of muffler, engine and other surrounding heated surfaces.

- Refer to the separate engine manual, packed with your unit, for carburetor adjustment information.

SECTION 6: MAINTAINING YOUR SNOW THROWER



WARNING: Before servicing, repairing, or inspecting, disengage all clutch levers and stop engine. Wait until all moving parts have come to a complete stop. Disconnect spark plug wire and ground it against the engine to prevent unintended starting.

Replacing Belt

- Remove the belt cover by removing five hex screws. See Figure 16.

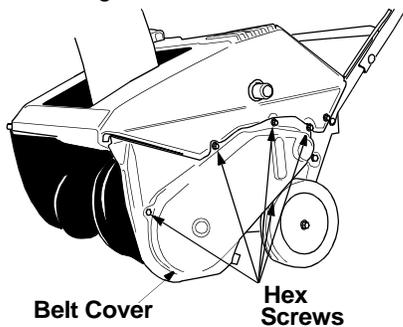


Figure 16

- Pull up on the idler pulley and slip the belt off the engine pulley.
- Push down on the idler pulley and slip the belt off the auger pulley.
- Reassemble new belt. See Figure 17.
- Reinstall the belt cover.

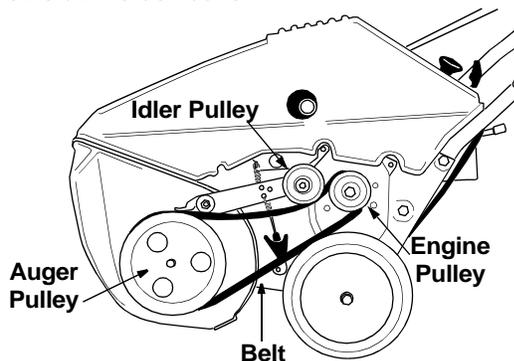


Figure 17

Replacing Shave Plate

The shave plate is subject to wear. It should be checked periodically. There are two wearing edges and the shave plate can be reversed. See Figure 18 .

- Remove the four carriage bolts and hex lock nuts which attach it to the snow thrower housing.
- Install new shave plate, making sure the heads of the carriage bolts are on the inside of the housing.
- Adjust the shave plate according to procedure in the "Making Adjustments" section of this manual.
- Tighten securely.

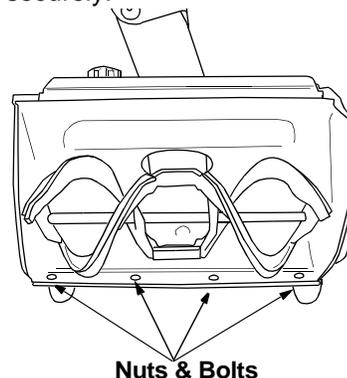


Figure 18

Engine

- Refer to the separate engine operator's manual packed with your snow thrower for all engine maintenance procedures.
- Check engine and snow thrower frequently for loose hardware, and tighten as needed.

Lubrication

- Lubricate pivot points on the control handle and the extension spring at the end of the clutch cable with a light oil once every season and before storage of the snow thrower at the end of the season.

SECTION 7: OFF-SEASON STORAGE



WARNING: Never store engine with fuel in tank indoors or in enclosed, poorly ventilated areas where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer, or other gas appliance.

- Clean snow thrower thoroughly.

- Lubricate as instructed above with a light oil.
- Follow "Storage" instructions in the Engine Manual.
- Store in a clean, dry area. Block the snow thrower up so it is not resting on the rubber auger blades.

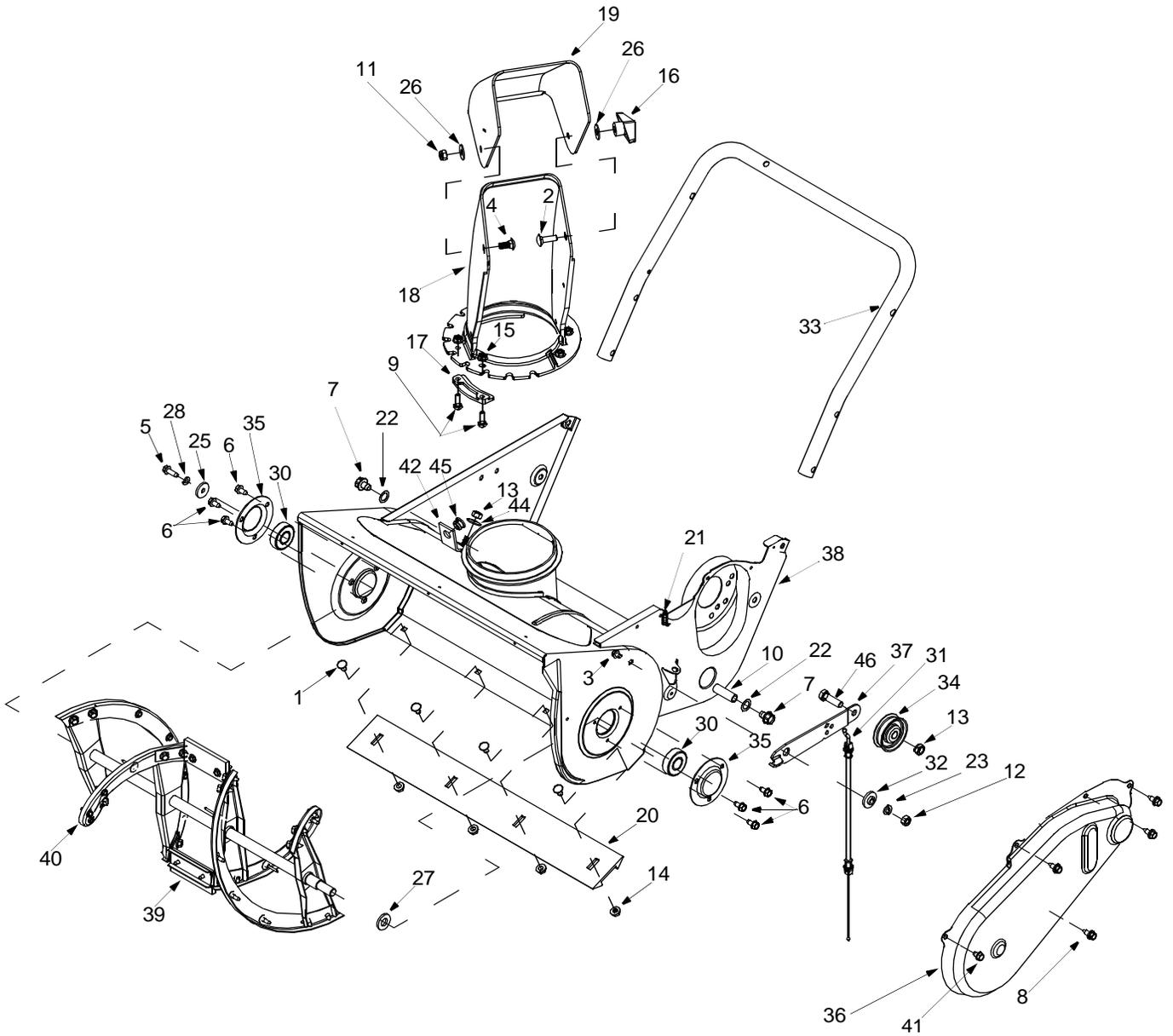
NOTE: When storing any type of power equipment in an poorly ventilated or metal storage shed, care should be taken to rustproof the equipment, especially springs, cables and all moving parts.

SECTION 8: TROUBLESHOOTING GUIDE

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> 1. Fuel tank empty, or stale fuel 2. Blocked fuel line 3. Key not in ON position 4. Spark plug wire disconnected 5. Faulty spark plug 6. Gasoline and oil not mixed correctly 	<ol style="list-style-type: none"> 1. Fill tank with clean fresh gasoline/oil mixture as specified in the engine manual. 2. Clean fuel line 3. Insert key and turn to ON position 4. Connect wire to spark plug. 5. Clean spark plug, readjust gap, or replace. 6. Refer to engine manual
Engine runs erratic	<ol style="list-style-type: none"> 1. Unit running on choke 2. Fuel line blocked, or stale fuel 3. Water or dirt in fuel system 4. Carburetor out of adjustment 	<ol style="list-style-type: none"> 1. Move choke lever to off position. 2. Clean fuel line and fill tank with fresh, clean gasoline. 3. Refer to engine manual on remedy. 4. Refer to engine manual.
Engine overheats	<ol style="list-style-type: none"> 1. Gasoline and oil not mixed correctly 2. Carburetor out of adjustment 	<ol style="list-style-type: none"> 1. Drain fuel tank and refill with proper fuel mixture. 2. Refer to engine manual.
Loss of power	<ol style="list-style-type: none"> 1. Spark plug wire loose 2. Vent in gas cap plugged 3. Exhaust port plugged. 	<ol style="list-style-type: none"> 1. Connect and tighten spark plug wire. 2. Clear vent. 3. Clean port.
Excessive vibration	<ol style="list-style-type: none"> 1. Loose parts or damaged auger 	<ol style="list-style-type: none"> 1. Stop engine immediately and disconnect spark plug wire. Check for possible damage. Tighten all bolts and nuts. Repair as needed. If the problem persists, take unit to an authorized service dealer.
Unit fails to self-propel	<ol style="list-style-type: none"> 1. Drive cable out of adjustment 2. Drive belt loose or damaged 	<ol style="list-style-type: none"> 1. Adjust drive cable following instructions on snow thrower. 2. Replace drive cable following instructions on snow thrower.
Unit fails to discharge snow	<ol style="list-style-type: none"> 1. Discharge chute clogged 2. Foreign object lodged in auger 3. Drive cable not adjusted properly 4. Drive belt loose or damaged 	<ol style="list-style-type: none"> 1. Stop engine immediately and disconnect spark plug wire. Clean discharge chute and the auger housing. 2. Stop engine immediately and disconnect spark plug wire. Remove object . 3. Adjust drive cable following instructions on snow thrower. 4. Replace drive belt following instructions on snow thrower.

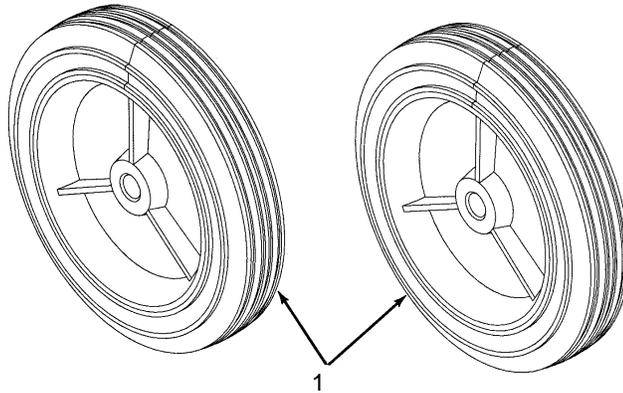
NOTE: For repairs beyond the minor adjustments listed above, contact your nearest authorized service representative or call 1-800-800-7310 for the Customer Support Center. Refer to separate engine manual packed with your snow thrower for more engine related information.

SECTION 9: PARTS LIST FOR MODEL SERIES 140 THROUGH E173



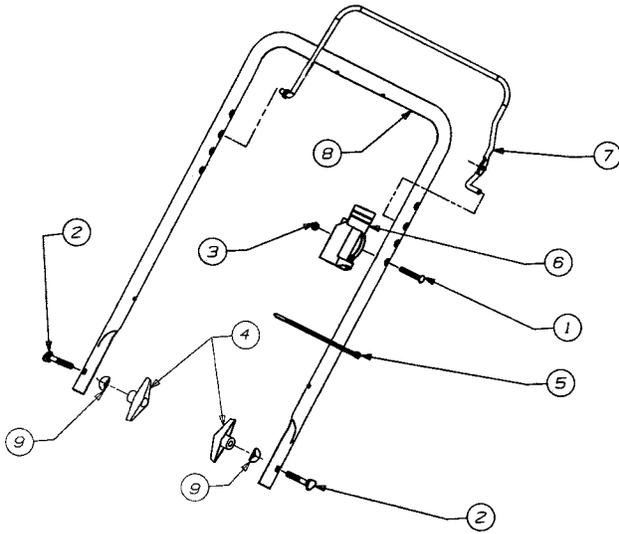
Model Series 140 Through E173

Ref. No.	Part No.	Part Description	Ref. No.	Part No.	Part Description
1.	710-0167	Carriage Bolt	25.	736-0176	Flat Washer
2.	710-0276	Carriage Bolt	26.	736-0159	Washer
3.	710-0323	Pan Head Screw	27.	736-0326	Flat Washer
4.	710-0451	Carriage Bolt	28.	736-0329	Lock Washer
5.	710-0642	Hex Washer Screw	30.	741-0600	Ball Bearing
6.	710-1005	Hex Washer Screw	31.	746-0910A	Cable—Clutch
7.	710-0773	Hex Washer Screw	32.	748-0234	Spacer
8.	710-0896	Hex Washer Screw	33.	749-0796	Handle—Lower
9.	710-3015	Hex Cap Screw	34.	756-0313	Flat Idler
10.	711-0848A	Axle	35.	784-5174	Bearing Cup
11.	712-0429	Hex Center Lock Nut	36.	784-5176	Cover—Belt
12.	712-3010	Hex Nut	37.	784-5175B	Idler/Brake Bracket
13.	712-0116	Hex Lock Nut	38.	684-0114	Blower Housing
15.	712-3027	Hex Lock Flanged Nut	39.	784-5485	Auger Ass'y. Comp.
16.	720-0284	Knob	40.	753-0613	Auger Rubber Replacement
17.	731-0851A	Chute Keeper	41.	710-0352	Hex Washer Screw
18.	731-0915B	Lower Chute	42.	784-5720	Crank Bracket
19.	731-0921	Upper Chute	43.	710-0451	Cap Screw
20.	731-1033	Shave Plate	44.	736-0242	Bell Washer
21.	732-0357A	Extension Spring	45.	741-0475	Bushing
22.	736-0108	Flat Washer	46.	710-0191	Hex Screw
23.	736-0119	Lock Washer			



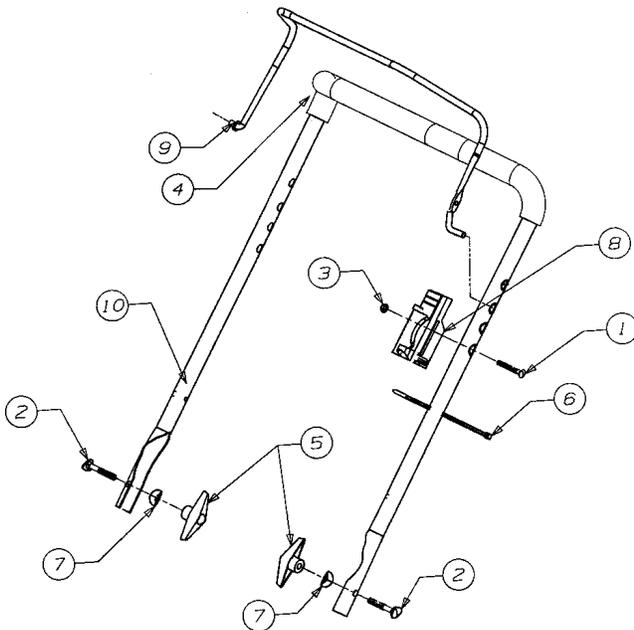
Ref. No.	Part No.	Description
1	734-1176	Wheel Ass'y.

Models 140, 150, E150 and E151



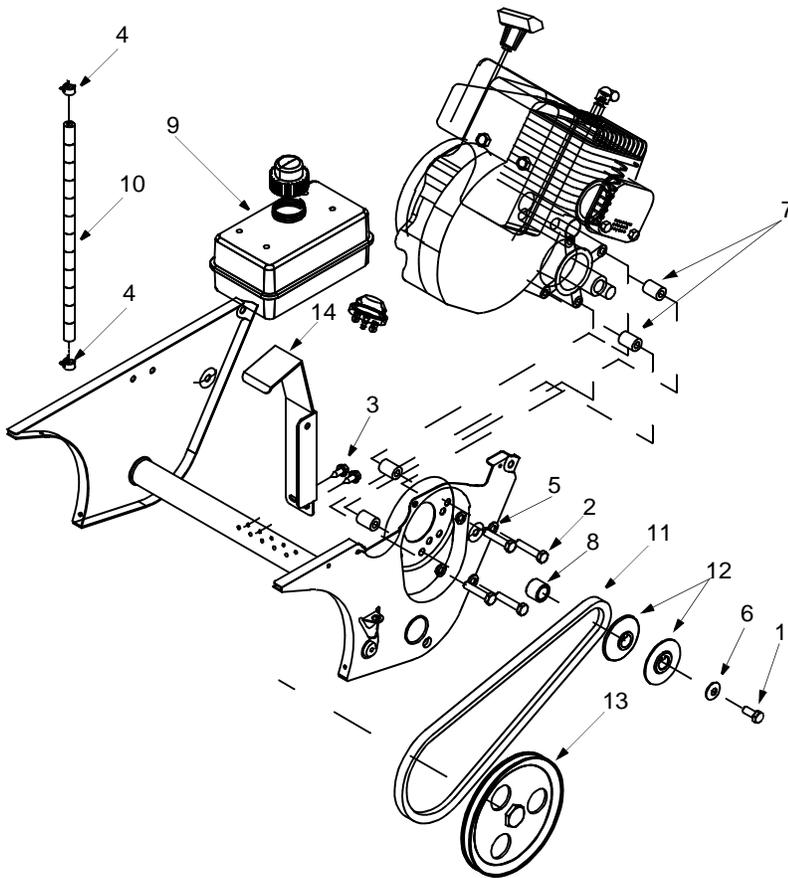
Ref. No.	Part No.	Part Description
1.	710-1270	Oval C-Sunk Screw
2.	710-0487	Carriage Bolt
3.	712-0324	Lock Nut
4.	720-0284	Handle Knob
5.	725-0157	Cable Tie
6.	746-0883	Control Lever
7.	747-0946	Control Handle Assembly
8.	749-0705	Upper Handle
9.	736-0451	Saddle Washer

Models 142, E152, E172 and E173



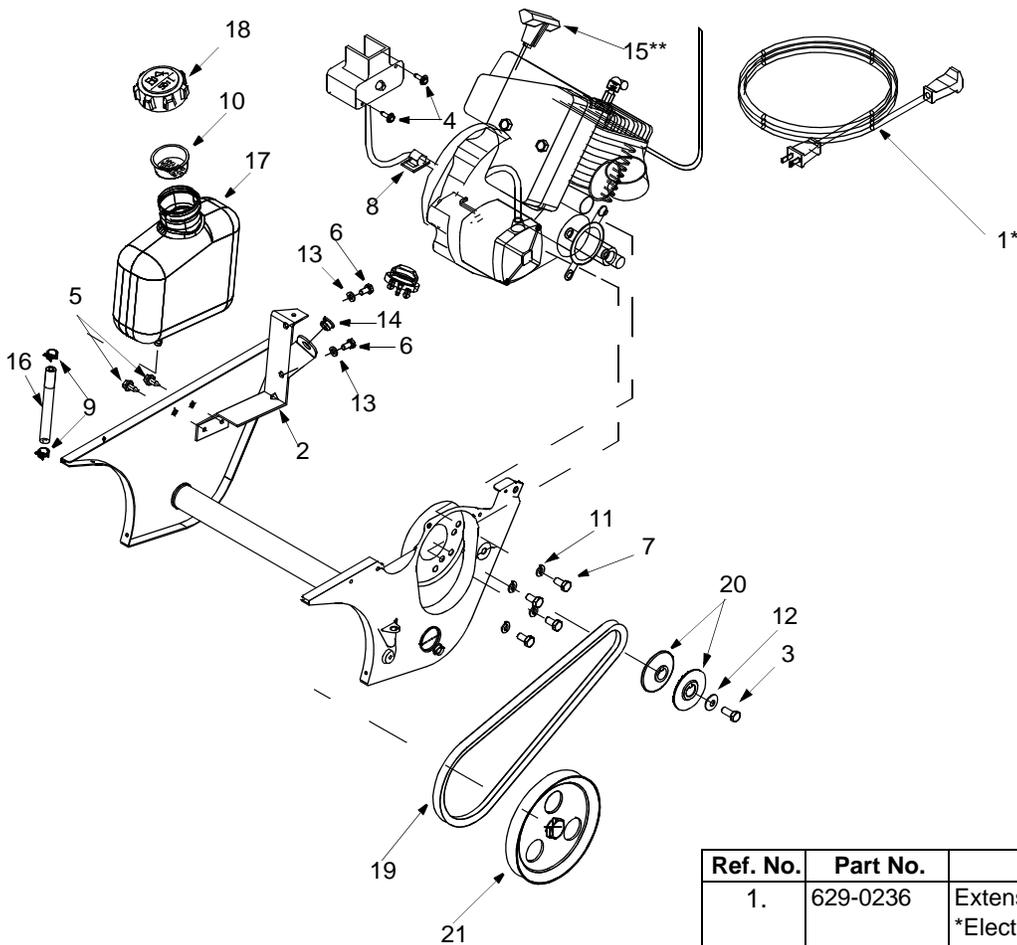
Ref. No.	Part No.	Part Description
1.	710-1270	Oval C-Sunk Screw
2.	710-0487	Carriage Bolt
3.	712-0324	Lock Nut
4.	720-0295	Foam Grip
5.	720-0284	Handle Knob
6.	725-0157	Cable Tie
7.	736-0451	Saddle Washer
8.	746-0883	Control Lever
9.	747-0956	Control Handle Assembly
10.	749-0711A	Upper Handle

Model Series 140



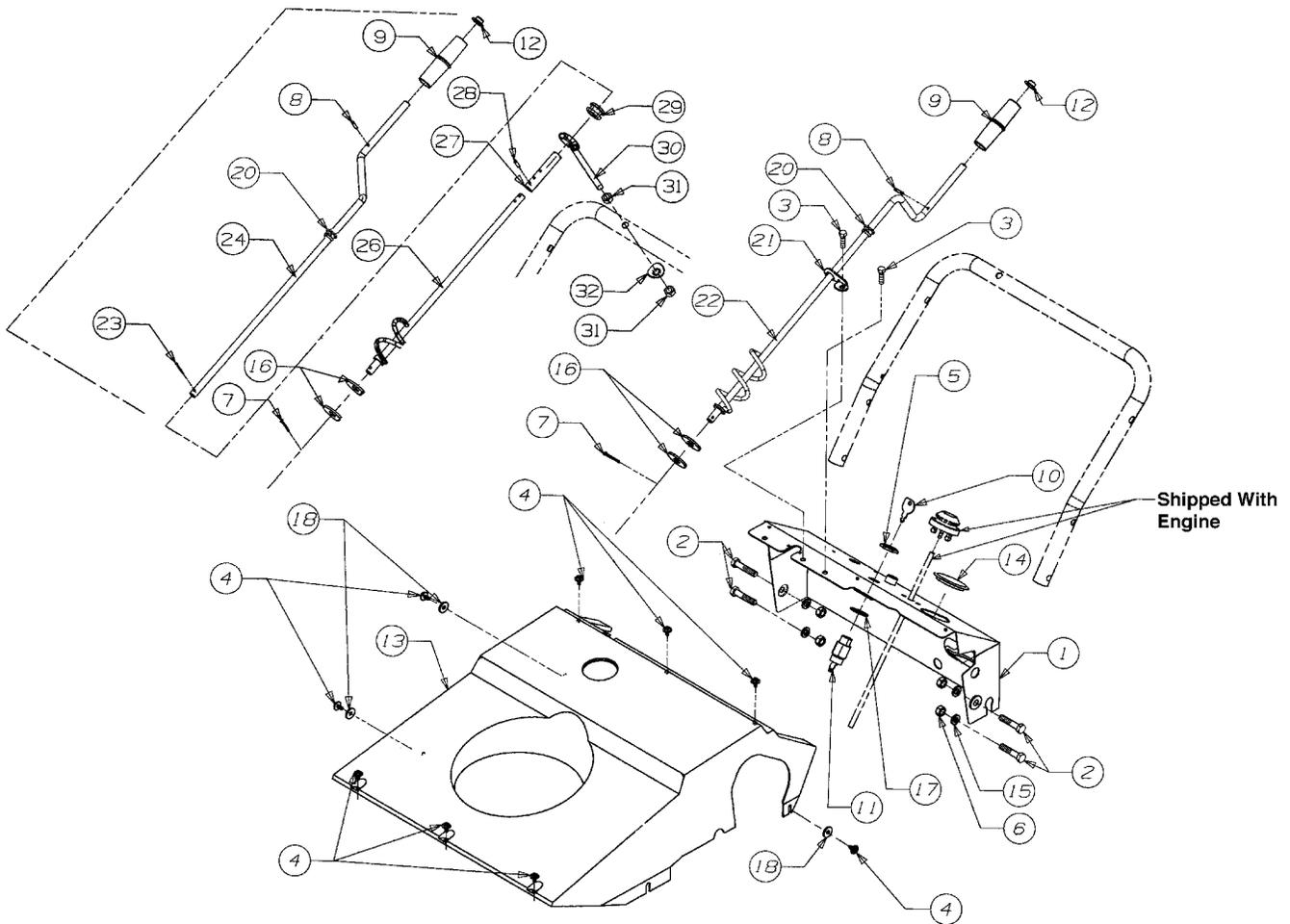
Ref. No.	Part No.	Part Description
1.	710-0157	Hex Screw 5/16-24 x 0.75"
2.	710-0805	Hex Screw 5/16-18 x 1.5"
3.	710-1652	Self-Tapping Screw 1/4-20 x .625"
4.	726-0205	Hose Clamp
5.	736-0119	Lock Washer
6.	736-0242	Beleville Washer
7.	750-0589	Spacer
8.	750-0716	Spacer
9.	751-0352	Gas Tank : 1 quart
10.	751-0535	Fuel Line Hose
11.	754-0367	V-Belt
12.	756-0416B	V-Pulley Half
13.	756-0550	V-Pulley
14.	784-5177	Engine Support Bracket
—	OEM-390-697	Electric Start Kit (Optional)

Models 150 through 172, E150 through E172



Ref. No.	Part No.	Part Description
1.	629-0236	Extension Cord *Electric start models only
2.	705-5139A	Support Bracket: Gas Tank
3.	710-0157	Hex Screw 5/16-24 x .75"
4.	710-1003	Special Screw
5.	710-1652	Self-Tapping Screw
6.	710-3013	Hex Screw 1/4-20 x .50"
7.	710-3025	Hex Screw 5/16-24 x .625
8.	726-0152	Mounting Clamp
9.	726-0205	Hose Clamp
10.	731-2113A	Cup
11.	736-0119	Lock Washer
12.	736-0242	Beleville Washer
13.	736-0329	Lock Washer
14.	741-0475	Plastic Bushing
15.	—	Recoil Handle **Obtain from engine manufacturer
16.	751-0535	Fuel Line Hose
17.	751-0540A	Fuel Tank: 2 Quart
18.	751-0800	Fuel Cap
19.	754-0101A	V-Belt
20.	756-0416B	V-Pulley Half
21.	756-0475	Pulley
—	OEM-390-996	Electric Start Kit (Optional)

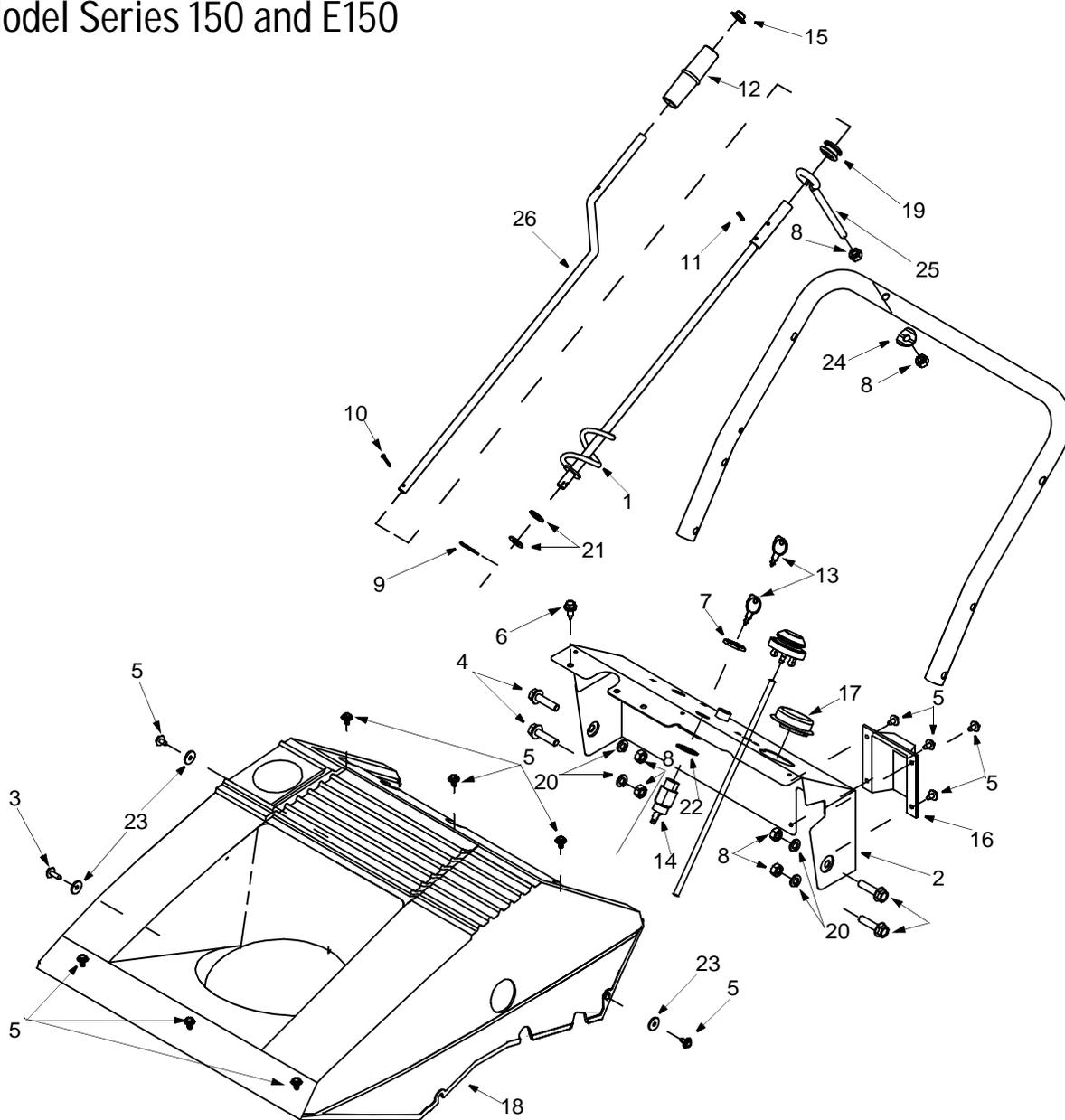
Models 140 and E142



Ref. No.	Part No.	Part Description	Ref. No.	Part No.	Part Description
1.	684-0056	Dash—21"	16.	736-0185	Flat Washer
2.	710-1090	Hex Flange Screw	17.	736-0225	Internal Lock Washer
3.	710-0895	Hex Tap Screw	18.	736-0400	Flat Washer
4.	710-1268	Hex Tap Screw	20.	741-0475	Bushing
5.	712-0252	Hex Nut	21.	784-5178A	Bracket, Chute Crank
6.	712-3010	Hex Nut	22.	784-5344	Crank Assembly, Chute
7.	714-0104	Cotter Pin	23.	714-0111	Cotter Pin †
9.	720-0201A	Chute Crank Knob	24.	747-0737	Chute Crank—Upper †
10.	725-0201	Key—Ignition	26.	684-0126	Chute Crank—Lower †
11.	725-1425	Switch—Key	27.	750-0785	Spacer †
12.	726-0100	Nut Push	29.	735-0234	Grommet - Rubber †
13.	731-0702	Shroud	30.	747-0697	Eyebolt - Chute Crank †
14.	731-1133B	Plug	31.	712-3010	Nut - Hex †
15.	736-0119	Lock Washer	32.	736-0451	Washer - Saddle †

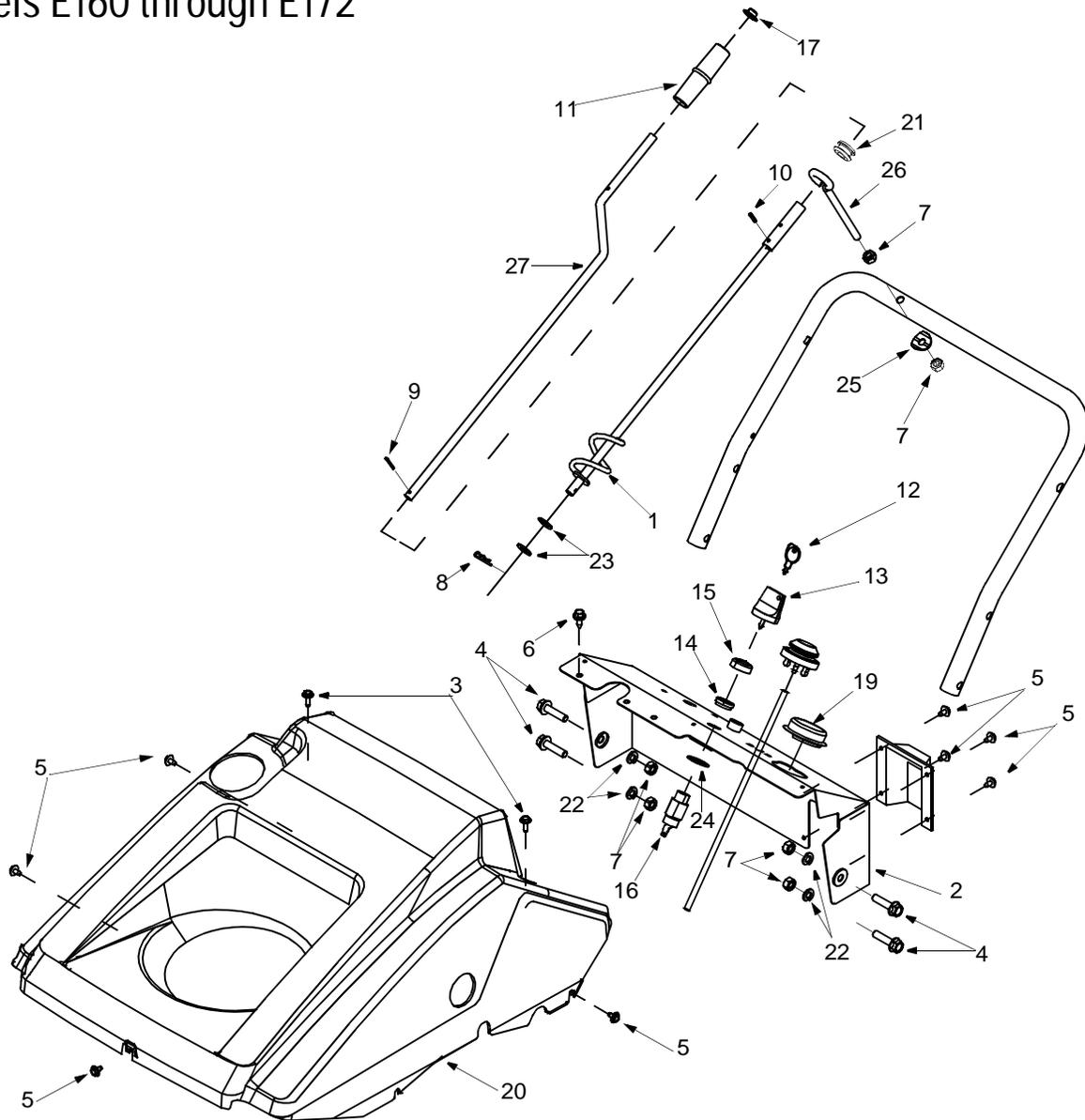
† Optional chute crank assembly on Model 140 only

Model Series 150 and E150



Ref. No.	Part No.	Part Description	Ref. No.	Part No.	Part Description
1.	684-0126	Chute Crank Assembly	15.	726-0100	Push Cap
2.	684-0160	Dash Assembly	16.	731-1089A	Choke Cover
3.	710-1003	Special Screw	17.	731-1133B	Cap
4.	710-1090	Hex Flange Screw	18.	731-1988	Shroud: 21" Yellow
5.	710-1268	Special Screw		731-1087	Shroud: 21" Black
6.	710-1652	Self-Tapping Screw	19.	735-0234	Rubber Grommet
7.	712-0252	Jam Nut	20.	736-0119	Lock Washer
8.	712-3010	Hex Nut: 5/16-18	21.	736-0185	Flat Washer
9.	714-0104	Hairpin Clip	22.	736-0225	Internal Lock Washer
10.	714-0507	Cotter Pin	23.	736-0400	Flat Washer
11.	715-0138	Roll Pin	24.	736-0451	Saddle Washer
12.	720-0201A	Knob	25.	747-0697	Eye Bolt
13.	725-0201	Ignition Key	26.	747-0737	Upper Chute Crank
14.	725-1425	Key Switch	27.	750-0785	Spacer

Models E160 through E172



Ref. No.	Part No.	Part Description	Ref. No.	Part No.	Part Description
1.	684-0126	Chute Crank Assembly	15.	725-1347	Ignition Switch Cap
2.	684-0160	Dash Assembly	16.	725-1425	Switch: Recoil Start Key
3.	710-1003	Special Screw	17.	726-0100	Push Cap
4.	710-1090	Hex Flange Screw 5/16-18 x 1.25"	18.	731-1089A	Choke Cover
5.	710-1268	Special Screw	19.	731-1133B	Cap
6.	710-1652	Self-Tapping Screw 1/4-20 x .625"	20.	731-1765	Shroud: 21" Black
7.	712-3010	Hex Nut 5/16-18	21.	735-0234	Rubber Grommet
8.	714-0104	Hairpin Clip	22.	736-0119	Lock Washer: 5/16
9.	714-0507	Cotter Pin	23.	736-0185	Flat Washer: .375 x .738 x .063
10.	715-0138	Roll Pin	24.	736-0225	Int. Lock Washer: 5/8 x 1.058 x .046
11.	720-0201A	Knob: Chute Crank	25.	736-0451	Saddle Washer: 320 ID x .93 OD
12.	725-0201	Ignition Key	26.	747-0697	Eyebolt
	725-1341B	Ignition Key w/o Logo	27.	747-0737	Upper Chute Crank
14.	725-1346	Ignition Switch Nut	28.	750-0785	Spacer

MANUFACTURER'S LIMITED WARRANTY

The limited warranty set forth below is given by MTD PRODUCTS INC ("MTD") with respect to new merchandise purchased and used in the United States, its possessions and territories.

MTD warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water or damage because of other peril or natural disaster. Damage resulting from the installation or use of any accessory or attachment not approved by MTD Products Inc. for use with the product(s) covered by this manual will void your warranty as to any resulting damages.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear part or component failures will be covered on the product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear part failures will be covered ONLY IF caused by defects in material or workmanship of OTHER component parts. Normal wear parts and components include, but are not limited to, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires. Batteries are covered by a 90-day limited replacement warranty.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE THROUGH YOUR LOCAL AUTHORIZED SERVICE DEALER. To locate the dealer in your area, please check for a listing in the Yellow Pages or contact the Customer Service Department of MTD PRODUCTS INC by calling 1-800-800-7310 or writing to P.O. Box 368022, Cleveland, Ohio 44136-9722.

This limited warranty does not provide coverage in the following cases:

- a. The engine or component parts thereof. These items carry a separate manufacturer's warranty. Please refer to the applicable manufacturer's warranty on these items.
- b. Log splitter pumps, valves and cylinders have a separate one year warranty.

- c. Routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments; and normal deterioration of the exterior finish due to use or exposure.
- d. MTD does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through MTD's authorized channels of export distribution.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product shall bind MTD. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sales. MTD shall not be liable for incidental or consequential loss or damages including, without limitation, expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser, original lessee or the person for whom it was purchased as a gift.

How State Law Relates to this Warranty: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.