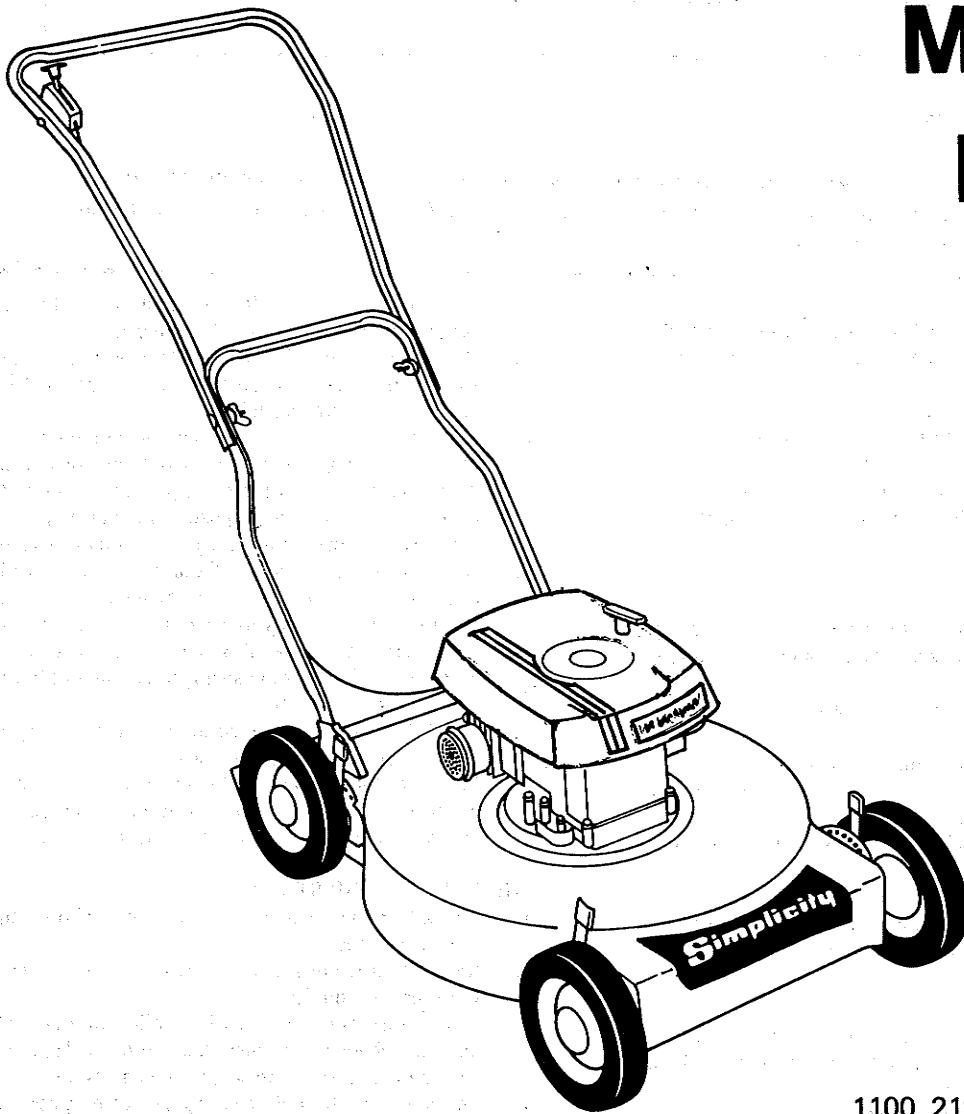


Simplicity

OPERATOR'S MANUAL

MODEL 1100



1100 21" MULCHING MOWER
MFG. NO. 1690364



**CAUTION: Read Manual Thoroughly
Before Operating**

FORM 1664126-01
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WARNING

Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury to yourself or bystanders, or damage to property or equipment affecting safety.

Safety Rules



This notation preceding Cautions and Warnings in the text signifies important precautionary steps which, if not properly followed, could result in personal injury or damage to your equipment affecting safety.

GENERAL

1. Read the Operating and Service Instruction Manual carefully. Be thoroughly familiar with the controls and proper use of the equipment.
2. Never allow children to operate a power mower.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. Use only attachments or accessories designed for your machine. See your dealer for a complete list of approved attachments or accessories.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
2. Do not operate equipment barefoot or wearing open sandals. Always wear substantial footwear.
3. Handle gasoline with care — it is highly flammable.
4. Disengage self-propelled mechanism or drive clutch on units so equipped before starting engine.
5. Never attempt to make a wheel height adjustment while engine is running.
6. Mow only in daylight or in good artificial light.
7. Never operate equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.

OPERATION

1. Do not change engine governor setting or overspeed engine.
2. Do not put hands or feet near or under rotating parts. Keep clear of discharge opening at all times.
3. Stop blade when crossing gravel drive, walks or roads.
4. After striking a foreign object stop the engine, remove spark plug wire and fasten away from the plug. Thoroughly inspect

the mower for any damage, and repair the damage before restarting and operating the mower.

5. If the engine should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Stop engine whenever you leave the equipment, before cleaning mower housing, and when making any repairs or inspections.
7. When cleaning, repairing or inspecting, make certain blade and all moving parts have stopped. Disconnect spark plug wire and keep wire away from plug to prevent accidental starting.
8. Do not run engine indoors. Exhaust fumes are deadly.
9. Shut engine off and wait until blade comes to a complete stop before removing grass catcher and/or unclogging chute.
10. Mow across the face of slopes, never up and down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
11. NEVER operate mower without proper guards, plates or other safety protective devices in place.
12. Be especially careful not to touch mower or attachment parts which might be hot from operation. Allow such parts to cool before attempting to maintain, adjust or service.

MAINTENANCE AND STORAGE

1. Check blade and engine mounting bolts at frequent intervals for proper tightness.
2. Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
3. Never store equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
4. To reduce fire hazard keep engine free of grass, leaves or excessive grease.

All WARNING, CAUTION, and other instructional messages on this unit should be carefully read and obeyed. Personal bodily injury can result when these instructions are not followed. The information is for your safety, and it is important.

**Place Foot Here
When Starting**

LOCATION: LEFT SIDE OF HOUSING.

PROTECTIVE FEATURES

This mower has certain features designed to comply with current standards recommended for added protection for the user. These features include the trailing plate and the starting footpad (located on the top of the mower housing on the left side). **THE MOWER SHOULD NEVER BE OPERATED WITHOUT THE TRAILING PLATE IN PLACE!**

TRAILING PLATE

The trailing plate helps prevent accidental contact with the blade from the rear and helps to reduce the danger from objects thrown to the rear of the mower.

STARTING FOOTPAD

Always place one foot on the starting footpad when pulling the starting cord, and be sure the other foot is clear of the mower. This will help prevent dangerous movement of the mower during starting.

Rotary mowers require careful operation. These features reduce the hazards much below the level of earlier machines, but they are not a complete protection and do not eliminate the need for care and judgment in use of the equipment.

SETTING UP THE MOWER

HANDLE

The mower is equipped with a folding handle. After the mower is removed from the carton, all that is required is to grasp the handle and pull it back toward you and upward at the same time. The handle will snap into position when it has straightened out. Tighten the wing nuts at the joint securely. **MAKE SURE YOU DO NOT KINK THE THROTTLE CABLE WHEN FOLDING OR UNFOLDING THE HANDLE.** A kink will make the throttle difficult or impossible to operate.

STARTING THE MOWER

1. Start the mower on level ground if possible and preferably on a walk or driveway. Do not try to start in high grass.
2. Move the throttle lever to "Start" position. The engine is equipped with an automatic choke.
3. Place one foot on the mower housing as indicated by decal on left side of housing.
4. Grasp starter cord and pull sharply. A new mower may require several pulls to get gasoline into the carburetor and engine.
5. As soon as the engine starts, allow to warm up for a minute or so and then move throttle to the desired speed. For best mulching results, this will be the "Fast" position. You are ready to mow.

ENGINE OIL

The engine must be filled with oil before starting. Remove the oil filler plug located on the right side of the engine at the front near the mounting flange. Remove the plug and fill the crankcase to overflowing with mower level. Replace plug.

RECOMMENDED OIL
above 40°F (Summer SAE 30)
below 40°F (Winter SAE 5W-20)

GASOLINE

Fill gas tank nearly full with fresh, clean regular or regular no-lead gasoline. Wipe up any gasoline which may have overflowed.

USING THE MULCHING MOWER

The mulching mower is a somewhat different experience from the usual mower. A few rules should be followed for best results.

1. Do not attempt to mow wet grass. The mulching action of the blade requires that the grass be free flowing as it is cut and recut under the housing. Wet grass will not provide this free flowing action and clumping will result. Wait until the sun has had a chance to dry out the grass before starting to mow.

2. Do not attempt to cut more than one-third of the total height of the grass. That is, if the grass is about three inches high, do not cut it to less than two inches high. The mulcher will make a heavier cut than this but the mulching action will be reduced and you will probably leave an excess of grass on the top of the lawn.
3. If the engine starts to slow down perceptibly due to the heaviness of the cut, mulching will be inhibited and clumping may result. Slow the forward motion of the mower until the engine is able to attain its former speed. If the grass is too heavy for the mower to handle properly, set the height of cut upward until the mower will handle the grass. Wait a day and recut at the desired height.

The above are the only rules which need to be observed other than common sense and observing the safety rules on the front of this manual. When the mulcher is being used properly, there will be very little visible signs of grass being left on the top of the lawn.

WHAT THE MULCHER DOES

Beneath the circular housing is a special blade. This blade differs from the ordinary blade because it has two levels of cutting edges. The outer edge is similar to an ordinary blade. It makes the first cut, sucking the grass upward, cutting it off and blowing it into the tunnel of the housing. The other cutting edge is higher up inside the housing and toward the center of the blade. As the whirling grass descends this cutting edge recuts and shreds the grass finely and then blows it down into the lawn by the fan action of the downward turned trailing edge.

The fineness of the clippings can be seen if the mower is shut down in the middle of a row. A circle of grass will be deposited and this can be studied. Pick up a handful of this grass. You will see some very finely shredded grass along with some coarser clippings. The finely shredded grass is that which has been cut and shredded with the inner edge of the blade. The coarser grass is that which has not yet gone through the shredding process. This fine grass will decompose rapidly, fertilizing the lawn, as well as making grass catching unnecessary.

The mulching mower may be used on leaves in the fall. The results will vary considerably depending on the type of leaves shredded. Large, tough leaves such as oak leaves will leave some deposit on the surface of the lawn although if they are thoroughly dried out the visible deposit will probably not be objectionable. Smaller, more easily shredded leaves will leave very little deposit on the lawn. If the amount of leaves on the lawn is extremely heavy, it may be necessary to go over the lawn more than once to finely shred the leaves.

MAINTENANCE

GENERAL

Keep all bolts tight. Inspect several times during the cutting season. If engine won't start, remove spark plug wire and place 1/16" from end of plug. Pull starter sharply. A spark jumping the gap should be visible. If no spark occurs after several tries, the magneto system is probably faulty. Take the mower to your authorized service station for repair. Perform this check in the shade as the spark may not be visible in bright sun.

BLADE SHARPENING (SEE "REMOVING THE BLADE")

Always disconnect spark plug wire before working on the mower! It is especially important to keep the blade sharp on your mulching mower. A dull blade will not cut and shred the grass properly and a poor job of mulching will result.

The blade may be sharpened with a file or a grinding wheel. Make sure you sharpen the entire length of the cutting edge. This cutting edge extends to within about two inches of the center of the blade. Make sure blade is in balance before use. Balance of blade may be determined by balancing blade on sharp edge or hanging it on a string or wire through the center hole.

MOWER HOUSING

It is important that the underside of the mulcher mower housing be kept free of grass buildup. Grass buildup will restrict the free flow of the grass, resulting in poor mulching. After every use, tilt the mower up to expose the underside and wash out with a stream from the hose. Another way to do this is to direct the stream of the hose down against

PARTS LIST FOR MODEL 1690364

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	922837	Bolt - Throttle	1	25	1664197	Bearing - Wheel	8
2	1664070	Washer - Curved	2	26	1664089	Bolt - Axle	4
3	1664054	Control - Throttle	1	27	1664075	Spacer - Wheel	4
4	923358	Nut - Throttle	1	28	1664081	Arm - Q.W.A.	4
5	1664049	Handle - Folding	1	29	1664059	Plate - Wheel Adj.	4
6	108778	Bolt - Handle	2	30	927187	Screw - Engine	3
7	923300	Washer	2	31	923428	Nut - Baffle	4
8	918468	Nut - Wing	2	32	910224	Key - Engine Shaft	1
9	1664051	Yoke	1	33	1664061	Blade Adapter Assembly	1
10	108812	Clamp - Throttle	1	34	1664074	Spacer - Blade Adapter	1
11	1664068	Screw - Casing	1	35	916965	Washer - Blade	1
12	1664062	Clamp - Casing	1	36	927008	Bolt - Blade	1
13	1664053	Bracket Assembly - R.H.	1	37	1664042	Blade	1
14	1664063	Clip - Hairpin	2	38	1664198	Baffle - Rear	1
15	1664052	Bracket Assembly - L.H.	1	39	1664078	Decal - "Place Foot Here...."	1
16	1664056	Trailguard	1	40	1664073	Baffle - Front	1
17	1664064	Clip	2	41	917642	Washer - Cupped	4
18	924280	Pop Rivet	2	42	1664045	Housing	1
19	917642	Washer - 3/8 Flat	4	43	1664082	Shroud	1
20	925391	Bolt - 1/4-20 x 5/8	4	44	928690	Screw - Shroud	4
21	1664084	Tip - Q.W.A.	4	45	1663835	Decal - Deck, Simplicity	1
22	1664080	Spring - Q.W.A.	4	46	1663836	Decal - Stripe	1
23	1664066	Bolt - Shoulder Q.W.A.	4	47	106719	Decal - Simplicity 6"	1
24	1664048	Wheel Assembly w/Bearing 8"	4	48	1663833	Decal - Mulcher 21"	1

the driveway at the edge of the mower housing while the engine is running. The blade will pick up some of the water and fling it into the housing, washing the excess grass out. Make sure that you do not direct the stream of water directly on the hot engine.

WINTER LAYUP

When the cutting season ends, drain or run all the gasoline out of the gas tank. Drain the crankcase of oil and refill with fresh oil. Pull the starter rope vigorously several times to work the oil through the system. Store the mower in a protected place. Clean all the grass buildup from beneath the deck.

REMOVING BLADE (See Fig. 2)

BEFORE WORKING ON BLADE DISCONNECT SPARK PLUG WIRE! Most new blades are razor sharp and should be handled with extreme care. Used blades may have sharp edges and burrs also. To protect against cuts, wrap ends of blade in cloth. A long 9/16" offset box end wrench is the safest and easiest to use for removing the blade bolt (36). Hold the padded blade with one hand while loosening the bolt with the wrench. When the bolt is removed entirely the blade will come loose.

After sharpening or when replacing with a new blade, first inspect the blade adapter (33) for cracks. If the adapter has been removed, be sure the woodruff key (32) is in the engine slot and does not slip out as the adapter is slid onto the engine shaft. Replace blade with rectangular washer (34) and lock washer (35) as shown and tighten engine bolt (36) securely. Recommended torque is 35 ft.-lbs.

AN UNBALANCED OR BENT BLADE WILL CAUSE VIBRATION DAMAGE NOT COVERED BY WARRANTY.

Keeping a spare sharp blade on hand will avoid delay when replacement becomes necessary. (See parts list for ordering instructions.)

ENGINE

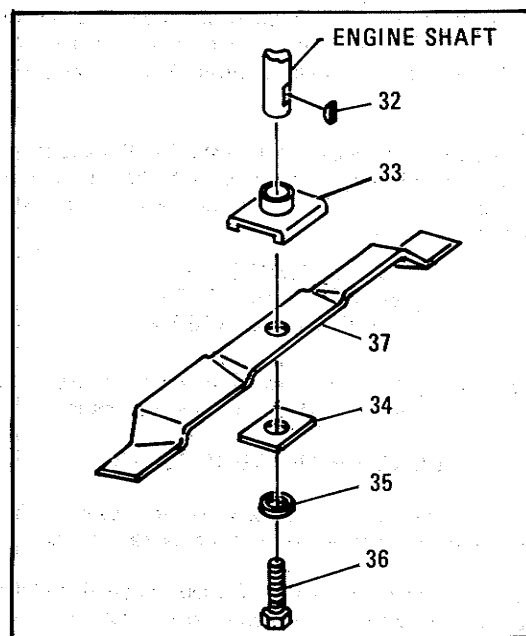
Refer to the Engine Manual supplied with this mower for engine maintenance. Engine warranty is not covered under the mower manufacturer's warranty. (See Engine Manufacturer's warranty.)

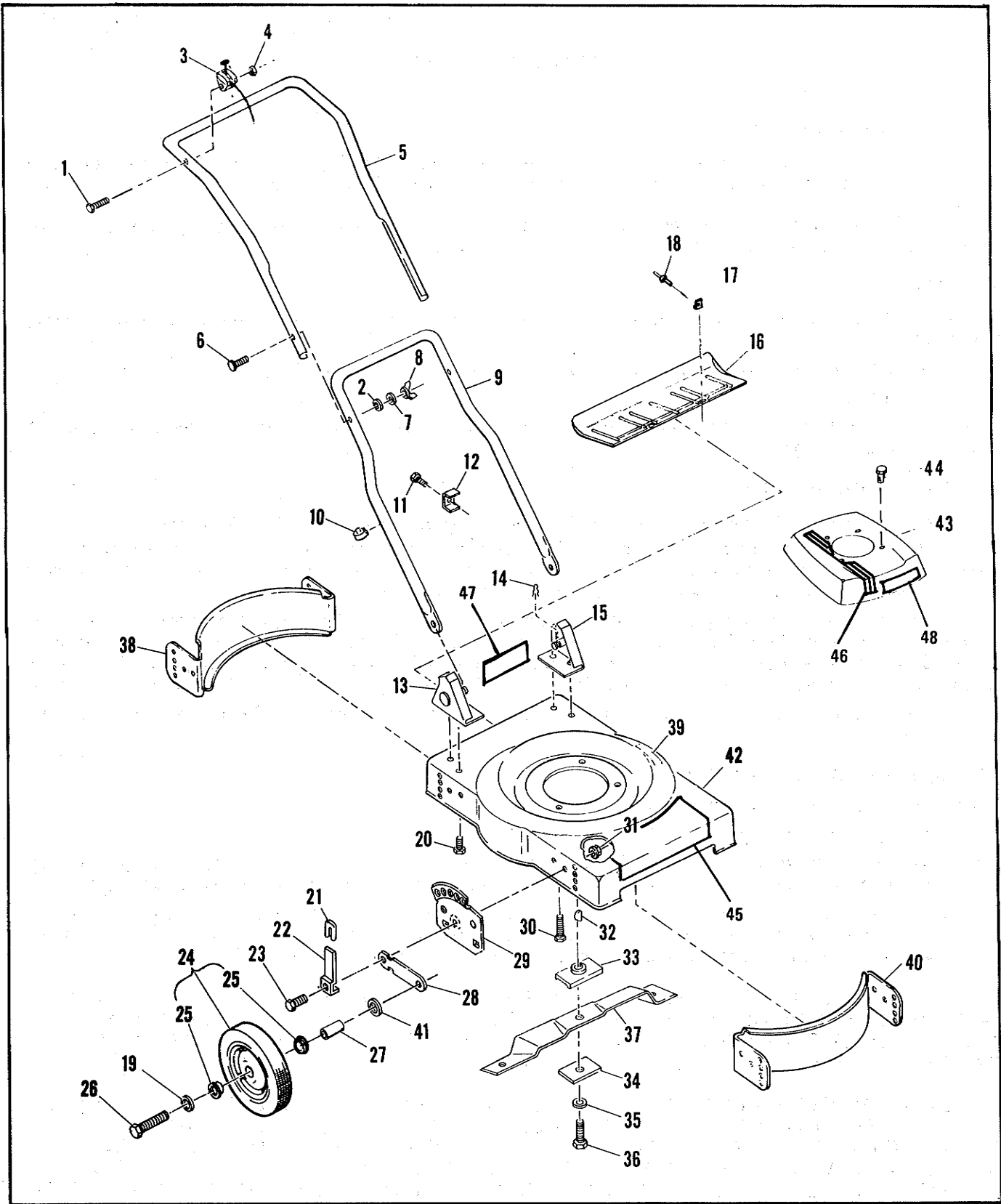
CUTTING HEIGHT ADJUSTMENT

This mower is equipped with individual wheel height adjusters. **CHANGES IN WHEEL HEIGHT SHOULD ALWAYS BE MADE WITH ENGINE SHUT OFF!**

It is easiest to change wheel heights by adjusting the two front or the two rear wheels at the same time. To do this, put the thumb on the white tab on the end of the locking spring at each wheel, and put the other fingers on the outside of the wheel. Squeeze the tab toward the wheel until the locking tab disengages the plate. Wheel arm is now free to turn in either up or down. Turn both wheel arms the same amount and release the spring so the locking tab engages the desired hole. Repeat for the other wheels. **NEVER PUT FINGERS UNDER THE HOUSING TO LIFT. EVEN A STOPPED BLADE HAS SHARP EDGES WHICH CAN CUT.**

Wheel cutting heights are as follows: 3/4", 1-1/4", 1-3/4", 2-1/4", 2-3/4", 3-1/4".





INSTRUCTIONS FOR ORDERING PARTS . . . MOWER PARTS can be ordered from the dealer from whom your mower was purchased or from an authorized parts distributor. Be sure to specify the part number, not reference number, and the description of each required item - also, the model and serial number of your mower.

LIMITED WARRANTY

COVERED BY WARRANTY

Simplicity Manufacturing Company, Division of Allis Chalmers Corporation (The Company), warrants to the owner that each new product listed below is merchantable and free of defects in workmanship and material.

During the warranty period, any authorized Company Dealer will provide, free of charge, both parts and labor necessary to correct any defect in workmanship and material.

WARRANTY PERIOD

The Simplicity Products listed below are warranted for the stated period from the date of the original purchase:

- | | |
|---|-----------|
| (1) All lawn, garden, snow, and other equipment | 12 Months |
| (2) Repair Parts | 90 Days |

Repair parts installed on products receive the same warranty period remaining for the product or 90 days, whichever is longer.

OWNER RESPONSIBILITIES

The owner of a new Simplicity Product must do the following to qualify for warranty service:

(1) Retain the original invoice or other proof of purchase or send in your warranty registration card to avoid unnecessary difficulties in determining your eligibility for warranty work. (Warranty registration card not required to obtain warranty work if other proof of purchase is shown.)

(2) Notify your nearest Simplicity dealer as soon as possible after discovery of a possible defect, and provide proof of original purchase or warranty registration card (if any). If you are not aware of your nearest Simplicity dealer write for such information to: Simplicity Manufacturing Company, Division of Allis Chalmers Corporation, Attn: Customer Services, 500 N. Spring Street, Port Washington, WI 53074.

(3) Return your equipment, or parts, to your nearest authorized Simplicity Dealer for inspection and warranty service.

NOT COVERED BY WARRANTY

The following are not covered by this warranty:

- (1) Transportation charges to and from dealers; OR
- (2) New products which have been subject to operation in excess of recommended capacities, misuse, negligence or accident, or have been altered or repaired in a manner not authorized by Company; OR
- (3) Engine, tires, generators, voltage regulators, transaxles, or accessories that are warranted separately by their respective manufacturers, except Company agrees to make available to the owners whatever warranty benefits may be made available to the Company by the manufacturers.

ALL IMPLIED WARRANTIES, EXCEPT TO THE EXTENT PROHIBITED BY ANY APPLICABLE LAW, SHALL HAVE NO GREATER DURATION THAN THE WARRANTY PERIOD FOR THE APPLICABLE PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

THE COMPANY'S LIABILITY ARISING OUT OF WARRANTIES, REPRESENTATIONS, INSTRUCTIONS, OR DEFECTS FROM ANY CAUSE, SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACING PARTS UNDER THE CONDITIONS IN THIS WARRANTY, AND IN NO EVENT WILL COMPANY BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

SIMPLICITY MANUFACTURING COMPANY

500 North Spring Street Port Washington, Wisconsin 53074