

OWNER'S MANUAL

- ASSEMBLY
- OPERATION
- MAINTENANCE
- PARTS LIST

*3.5HP, 4 Cycle, B&S Vertical Roll
QUICK EXTERNAL ADJUST 3/4 to 3 1/2"*

*7" x 1.50" - 18" - 142A
- 142A
3.5HP { 7" x 1.50" - 20" - 152A }
8" x 1.75" - 22" - 162A } 3.5HP*

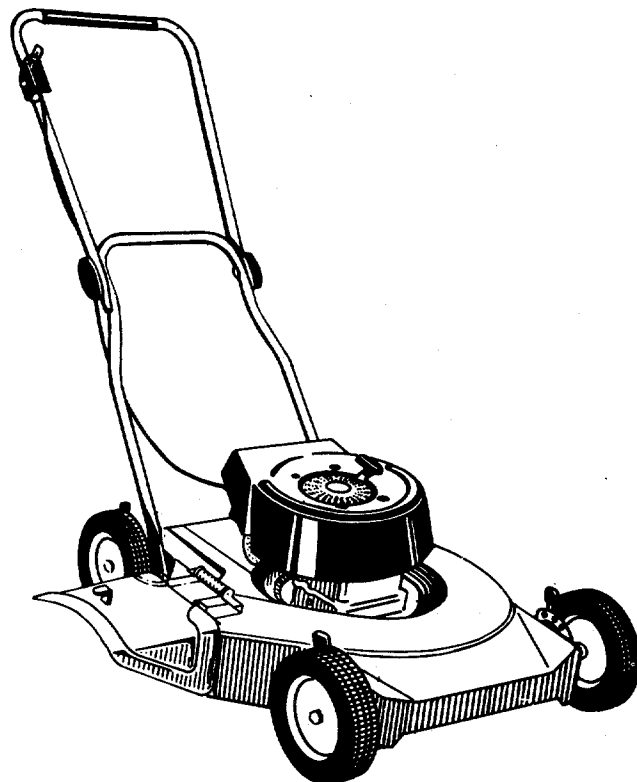
Model Nos.

117-142A
117-152A
117-162A
117-142-300
117-152-300
117-162-300

Important:

**Read Safety Rules and
Instructions Carefully**

**18", 20" & 22"
ROTARY
MOWERS**



IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

TRAINING

1. Read the Operating and Service Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power mower. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
3. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower in any direction.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Do not wear loose fitting clothing that could get caught on the mower.
4. Check the fuel before starting the engine. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine.
5. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
6. Never attempt to make a wheel or cutting height adjustment while the engine is running.
7. Mow only in daylight or in good artificial light.
8. Never operate the 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 the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
3. Stop the blade(s) when crossing gravel drive, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug,

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

5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Stop the engine whenever you leave the mower, before cleaning the mower housing, and when making any repairs or inspections.
7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
8. Before attempting to unclog the mower or discharge chute, stop the engine and be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
9. Do not run the engine indoors.
10. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
11. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
12. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
13. Never operate mower without proper guards, plates or other safety protective devices in place.
14. Keep washout ports and other mower-housing service openings closed when mowing.

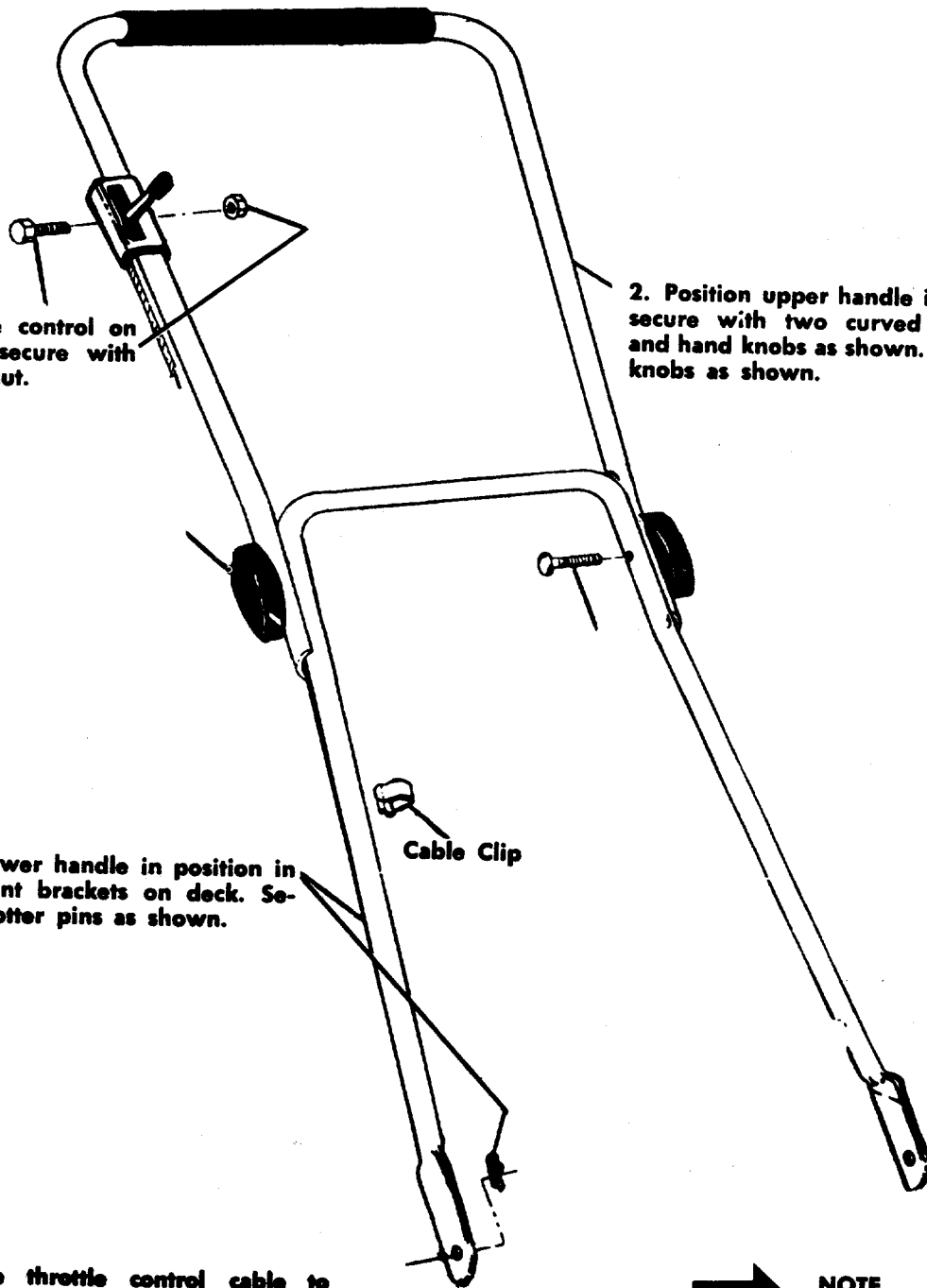
MAINTENANCE AND STORAGE

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

HANDLE ASSEMBLY



NOTE: Follow instructions starting with Number 1 and continue through Number 5.



3. Place the throttle control on upper handle and secure with hex head bolt and nut.

2. Position upper handle in place and secure with two curved head bolts and hand knobs as shown.

1. Fasten lower handle in position in handle mount brackets on deck. Secure with cotter pins as shown.

Cable Clip

4. Secure throttle control cable to handle with cable clips provided.

5. Check ALL nuts and bolts for correct tightness.



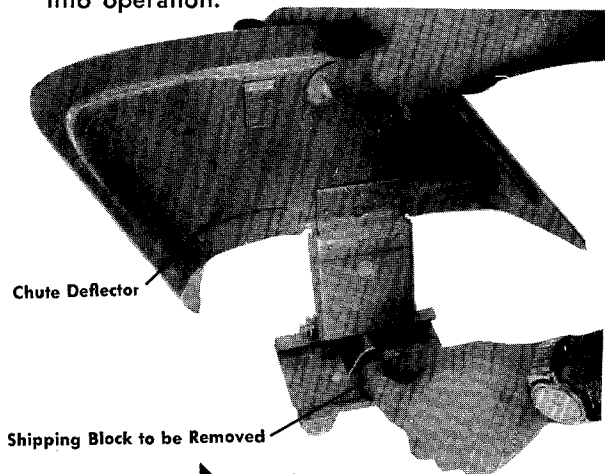
NOTE

It may be necessary to pull open the lower handle. This will insure a tight fit when assembled into handle mount brackets.



CAUTION

Please note that the chute deflector on your mower is in an upright position. It is held in that position by a shipping block. This block is used for shipping purposes only. It must be removed and discarded before your mower is put into operation.



NOTE

For shipping purposes your mower is set with the wheels in a low cutting height position. For best results raise the cutting position until it is determined which height is best for your lawn. See adjustments.

1. Service engine with gas and oil. See engine manual packed with lawn mower for complete instructions for the care and maintenance of engine. **READ DIRECTIONS CAREFULLY.**
2. When ready to start engine, place throttle control lever on handle in "START" position and start engine in accordance with instructions in engine manual. After engine starts, move throttle control lever on handle to desired engine speed. The engine is stopped by placing control lever on handle in the "STOP" position.
3. Be sure that lawn is clear of stones, sticks, wire or other objects which could damage lawn mower or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.

ADJUSTMENTS



CAUTION

Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

CUTTING HEIGHT

An adjusting plate and thumb lever at each wheel position provides cutting height adjustment. Each adjusting plate has five holes. Height of cut will be changed when the thumb lever is moved from one hole to another. Simply depress thumb lever towards wheel and move wheel and lever assembly to desired position. All wheels must be positioned in relative height of cut positions.

LUBRICATION



IMPORTANT

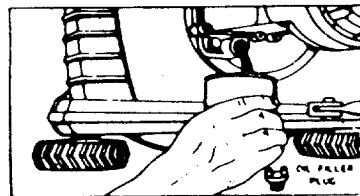
Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

Wheels—Wheel bearings are of self-lubricating Fortiflex. They require no lubrication. If your unit is provided with optional ball bearing wheels, lubricate at least once a season with light oil.

Protective Shield—The pivot points on the protective shield should be lubricated periodically with light oil to prevent any rust or binding.

Chute Deflector—The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Deflector must work freely.

Engine—Follow engine manual for lubrication instructions.



Change oil after first 5 hours of operation while engine is warm. Thereafter, change oil every 25 hours of operation while engine is warm. Engine may be drained through oil filler opening. Be sure to replace drain plug and oil filler cap.

MAINTENANCE

CUTTING BLADE

The blade may easily be removed for grinding or replacement as follows:

1. Remove bolt and lock washer holding blade and blade adapter to engine crankshaft.
2. Remove blade and blade adapter from engine crankshaft.

3. Remove two bolts, lock washers and nuts holding blade to blade adapter (if necessary).

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.



NOTE

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

Deck—The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.



CAUTION

Do not direct the stream of water at a hot engine as damage to the engine may result.

STORAGE

The following steps should be taken to prepare lawn mower for storage.

HANDLE STORAGE

This model is so equipped to provide easy fold away handle storage.

1. Loosen the two plastic knobs on each side, center of handle.
2. Pull inward on the bottom of each side of the lower handle and push forward.
3. Fold the upper handle back and down as shown at right.

To Take the Handle out of Storage Position.

1. Lift the upper handle up and towards the rear as shown.

1. Clean and lubricate mower thoroughly as described in the preceding instructions.
2. Refer to Engine Manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Place blocks under deck to raise tires clear of floor.
5. Store mower in a dry, clean area.

USING YOUR ROTARY MOWER

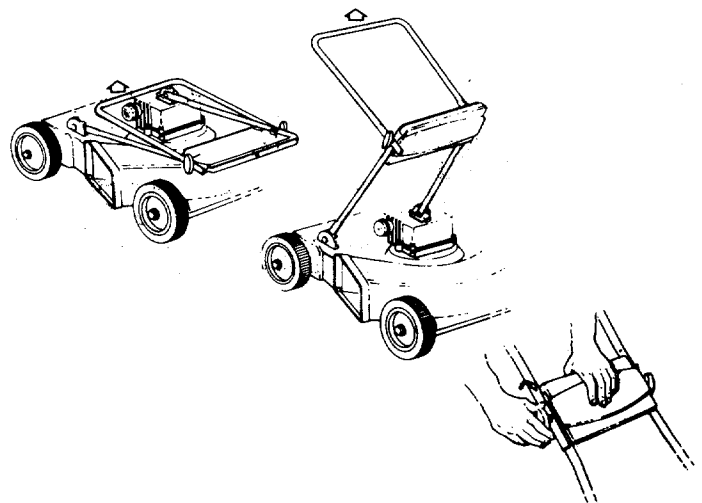
For the best results do not cut wet grass because it tends to stick to the underside of the mower, thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.

2. Pull the handle back until it **Locks** into the operator's position.
3. Tighten the two plastic knobs securely.



 **NOTE**

The manufacturer DOES NOT recommend the use of any accessory on this Rotary Mower other than those manufactured by MTD Products Inc.

GRASS CATCHER Model No. 197-003A is available as optional equipment for the mowers shown in this manual.



WARNING

1. The mower should not be operated without the entire grass catcher or chute deflector in place.
2. The mower should not be operated without the protective shield on the rear of the deck in place.

 **NOTE:**

Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0119.

 **IMPORTANT**

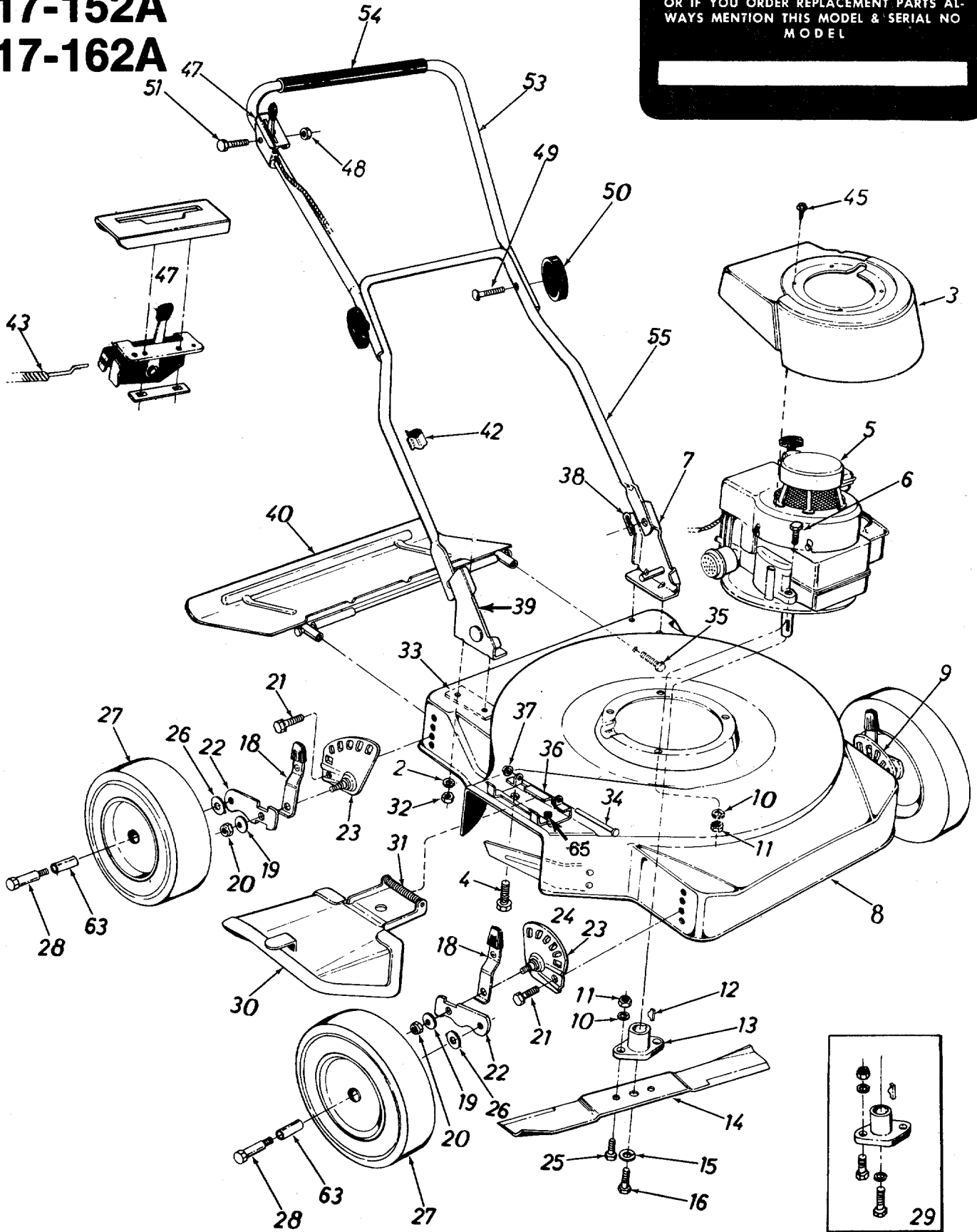
After striking a foreign object, stop the engine, remove wire from spark plug. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

NOTES

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117-142A
117-152A
117-162A

IF YOU WRITE TO US ABOUT THIS ARTICLE
OR IF YOU ORDER REPLACEMENT PARTS AL-
WAYS MENTION THIS MODEL & SERIAL NO
MODEL



PARTS LIST FOR MOWER MODELS 117-142A, 117-152A AND 117-162A

Ref. No.	Part No. 117-142A	COLOR CODE	Part No. 117-152A	Color Code	Part No. 117-162A	Color Code	Description	New Part
2	736-0329		736-0329		736-0329		L-Wash. 1/4" Scr.*	
3	731-0275		731-0275		731-0275		Shroud	
4	710-0289		710-0289		710-0289		Hex Scr. 1/4-20 x .50"	
5	—		—		—		Engine	
6	710-0158		710-0158		710-0158		Hex Scr. 5/16-24 x 1.25" Lg.*	
7	12927		12927		12927		Handle Mtg. Brkt. Ass'y.—L.H.	
8	12839	—462	12428	—462	12421	—462	Deck Assembly—Complete	
9	10950		10950		10950		Height Adj. Ass'y.—Complete L.H.	
10	736-0119		736-0119		736-0119		Spring L-Wash. 5/16 Scr.*	
11	712-0123		712-0123		712-0123		Hex Nut 5/16-24 Thd.*	
12	714-0365		714-0365		714-0365		#6 Hi-Pro-Key 5/32 x 5/8" Dia.	
13	10769		10769		10769		Blade Adapter Kit	
14	742-0121		742-0123		742-0125		Blade	
15	736-0217		736-0217		736-0217		Spring L-Wash. 3/8" Scr.—H.D.	
16	710-0459		710-0459		710-0459		Hex Hd. Cap Scr. 3/8-24 x 1.50" Lg.—H.T.	
18	10949		10949		10949		Spring Lever Ass'y. with Knob	
19	736-0219		736-0219		736-0219		Belleville Washer	
20	712-0116		712-0116		712-0116		Elastic L-Nut 3/8-24 Thd.	
21	710-0209		710-0209		710-0209		Sems Hex Scr. 3/8-16 x .62" Lg.	
22	10937		10937		10937		Pivot Bar	
23	10935		10935		10935		Index Plate Ass'y.—L.H.	
	10934		10934		10934		Index Plate Ass'y.—R.H.	
24	10951		10951		10951		Height Adj. Ass'y.—Complete R.H.	
25	710-0117		710-0117		710-0117		Hex Scr. 5/16-24 x 1.00" Lg.—H.T.	
26	736-0105		736-0105		736-0105		Belleville Washer	
27	09392-502		09392-502		09392-501		Wheel Ass'y.—Complete	
28	738-0102		738-0102		738-0102		Axle Bolt	
29	10769		10769		10769		Blade Adapter Kit	
30	11679	—462	11679	—462	11679	—462	Chute Deflector Ass'y.	
31	732-0253		732-0253		732-0253		Torsion Spring	
32	712-0287		712-0287		712-0287		Hex Nut 1/4-20 Thd.*	
33	08405		08405		08405		Reinforcement Plate	
34	711-0555		711-0555		711-0555		Pivot Pin	
35	710-0567		710-0567		710-0567		Hex Scr. 1/4-28 x .62" Lg.	
36	11130	—462	11130	—462	11130	—462	Adapter Plate	
37	726-0106		726-0106		726-0106		Push-on Flange Palnut	
38	714-0104		714-0104		714-0104		Hair Pin Cotter	
39	12928		12928		12928		Handle Mtg. Brkt. Ass'y.—R.H.	
40	11195	—462	12251	—462	11197	—462	Rear Protective Shield Ass'y.—Comp.	
42	746-0128		746-0128		746-0128		Cable Clip	
43	746-0174		746-0174		746-0174		Conduit and Wire	
45	710-0227		710-0227		710-0227		Hex Wash. Hd. AB-Tapp. Scr. #8 x .38" Lg.	
47	746-0234		746-0234		746-0234		Throttle Control Comp.	
48	712-0107		712-0107		712-0107		Hex Cent. L-Nut 1/4-20 Thd.	
49	710-0405		710-0405		710-0405		Curved Hd. Bolt 5/16-18 x 1.75" Lg.	
50	09966		09966		09966		Hand Knob	
51	710-0606		710-0606		710-0606		Hex Scr. 1/4-20 x 1.50" Lg.*	
53	11204		11204		11204		Upper Handle	
54	718-0143		718-0143		718-0143		Grip	
55	749-0104		749-0104		749-0104		Lower Handle	
63	07006		07006		07006		Fortiflex Bearing	
65	712-0107		712-0107		712-0107		Hex Cent. L-Nut 1/4-20 Thd.	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

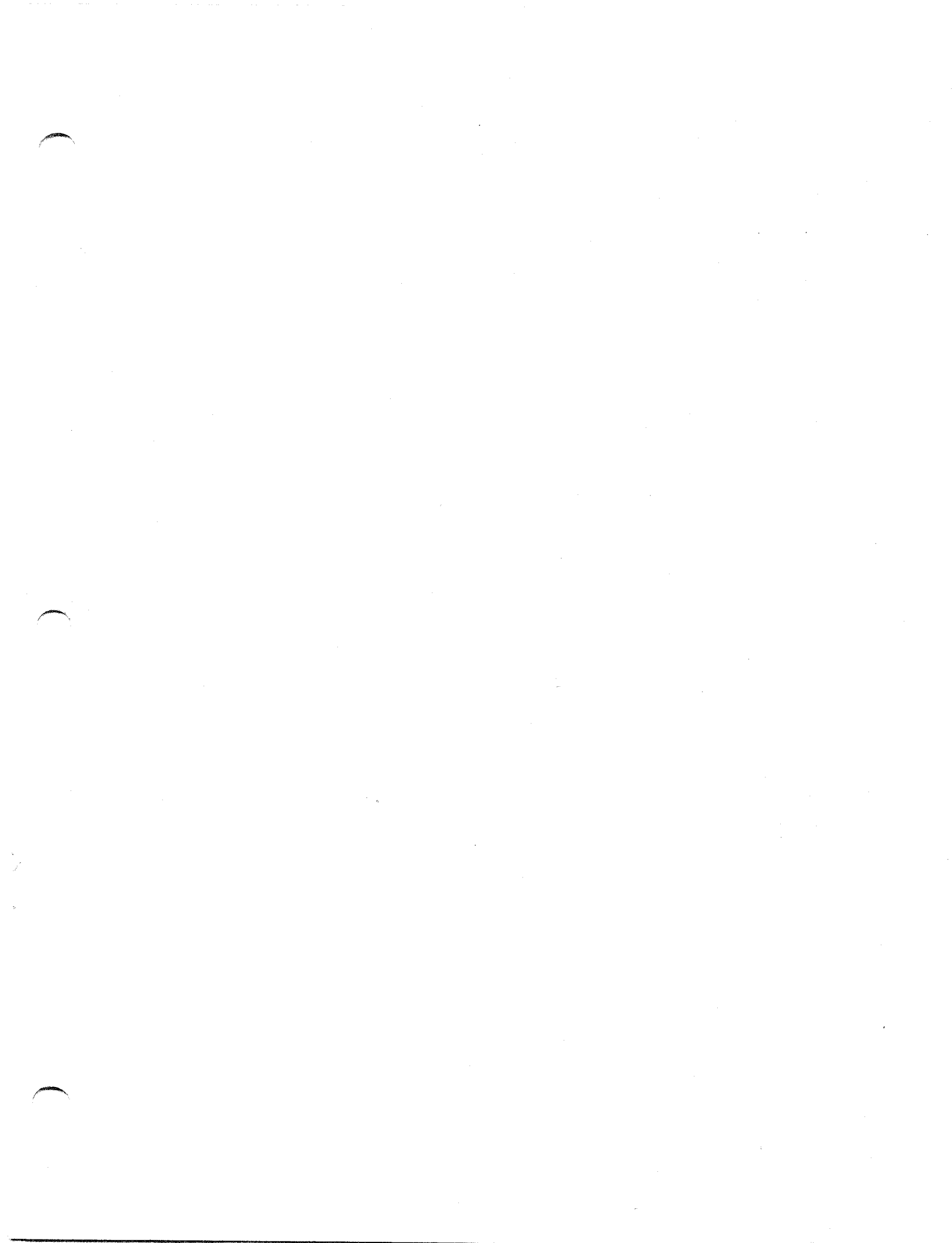
(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Red Flake Finish—12609 (462))

NOTE: The engine is not under warranty by the mower manufacturer . . . If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."







PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts numbers, description of parts and the quantity of each part required.

ALABAMA	BIRMINGHAM	Auto Electric & Carburetor Co. 2625 4th Ave. S. 35233
ARKANSAS	NORTH LITTLE ROCK	Sutton's Lawn Mower Shop Rt. 4, Box 368 72117
	FORT SMITH	Mity Mite Motors, Inc. 2515 Towson Ave. 72901
CALIFORNIA	SAN BERNARDINO	Lawn Mower Supply Co. 25608 E. Baseline 92410
	SAN FRANCISCO	J.W. Jewett Co. 981 Folsom St. 94107
	SACRAMENTO	Luttig & Severson 2030 28th St. 95818
COLORADO	DENVER	South Denver Lawn Equip. 527 West Evans 80223
CONNECTICUT	SUFFIELD	The Jones & Ramsey Co. 850 Thompsonville Rd. 06078
FLORIDA	JACKSONVILLE	Radco Distributors 2403 Market St. 32206
	CORAL GABLES	Moz-All of Florida, Inc. 365 Greco Ave. 33146
GEORGIA	EAST POINT	East Point Cycle & Key 2834 Church St. 30344
ILLINOIS	LYONS	Keen Edge Co. 8615 Ogden Ave. 60534
INDIANA	ELKHART	Parts & Sales Inc. 2101 Industrial Pkwy. 46514
IOWA	DUBUQUE	Power Lawn & Garden Equip. . 2551 J.F. Kennedy 52001
KANSAS	WICHITA	Hixon, Inc. 3030 Mascot 67204
LOUISIANA	NEW ORLEANS	Suhren Engine Co. 8330 Earhart Blvd. 70118
MARYLAND	TAKOMA PARK	Center Supply Co. 6867 New Hampshire Ave. 20012
MASSACHUSETTS	SPRINGFIELD	Morton B. Collins Co. 300 Birnie Ave. 01107
MICHIGAN	MOUNT CLEMENS	Power Equipment Dist. 36463 South Gratiot... 48043
	LANSING	Lorenz Service Co. 2500 S. Pennsylvania.. 48900
MINNESOTA	MINNETONKA	Hance Distributing Inc. 11212 Wayzata Blvd. ...55343
MISSISSIPPI	BILOXI	Biloxi Sales & Service, Inc. 506 Caillavet St. 39533
MISSOURI	KANSAS CITY	Automotive Equip. Service 3117 Holmes St. 64109
	ST. LOUIS	Henzler, Inc. 2015 Lemay Ferry Rd. 63125
NEW YORK	CARTHAGE	Gamble Dist., Inc. West End Ave. 13619
	SYRACUSE	Kimber's, Inc. 115 N. Geddes St. 13204

BRIGGS & STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing *Engines* — *Gasoline*, Briggs & Stratton or Tecumseh Lauson —

NORTH CAROLINA	GREENSBORO	Dixie Sales Company 327 Battleground Ave.. 27402
	GOLDSBORO	Smith Hardware Co. 515 N. George St. 27530
OHIO	WADSWORTH	National Central 687 Seville Rd. 44281
	CLEVELAND	Bleckrie, Inc. 7900 Lorain Ave. 44102
	CARROL	Stebe's Mid-State Mower Supply Box 366 43112
	WILLARD	Sunshine Wholesale Tire Outlet Route 224 44890
	MANSFIELD	McClure Lawn & Garden Supply...1114 Lexington Ave. . 44903
OKLAHOMA	MUSKOGEE	Victory Motors, Inc. 605 S. Cherokee 74401
	ADA	Ada Auto Supply 301 E. 12th St. 74820
OREGON	PORTLAND	Kenton Supply Co. 8216 N. Denver Ave. . 97217
PENNSYLVANIA	LANCASTER	Raub Supply Co. James & Mulberry Sts...17604
	PITTSBURGH	Bluemont Co. 1125 Frankstown Rd.. 15235
TENNESSEE	KNOXVILLE	Master Repair Service 2423 Broadway, N.E. ...37917
	MEMPHIS	Memphis Cycle & Supply Co. 421 Monroe Ave. 38103
	AMERICAN SALES & SERVICE, INC.	1922 Lynnbrook 38116
TEXAS	DALLAS	Marr Brothers, Inc. 423 E. Jefferson 75203
	HOUSTON	Bullard Supply Co. 2409 Commerce St. 77003
	SAN ANTONIO	Catto & Putty, Inc. P.O. Box 2408 78206
	FORT WORTH	Woodson Sales Corp. 1702 N. Sylvania 76111
UTAH	SALT LAKE CITY	A-1 Engine & Mower Co. 437 E. 9th St. 84111
VERMONT	BURLINGTON	Vermont Appliance Co. 44 Lakeside Ave. 05401
VIRGINIA	RICHMOND	RBI Corp. 963 Myers St. 23260
WASHINGTON	SEATTLE	Bailey's Rebuild, Inc. 1325 E. Madison St. ...98102
WEST VIRGINIA	CHARLESTON	Young's, Inc. 233 Virginia St., E. ... 25301
WISCONSIN	APPLETON	Automotive Supply Co. 123 S. Linwood Ave. ...54911

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.