# 10ф

# Owner's Operating Service Instruction Manual

- ASSEMBLY
- OPERATION
- REPAIR PARTS

Model Nos. 244-670A 244-680A

## **POWER VACUUM**

#### WARRANTY

For one year from date of purchase, MTD Products Inc will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units, refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

MTD PRODUCTS INC . 5389 WEST 130th STREET . P. O. BOX 2741 CLEVELAND OHIO 44111

#### IMPORTANT

## SAFE OPERATION PRACTICES FOR POWER VACUUMS

- Read the operating and service instructing manual carefully. Be thoroughly familiar with the controls and proper use of the power vacuum.
- 2. Never allow children to operate this power vac-
- Keep the area of operation clear of all persons, particularly small children and pets.
- 4. Check fuel before starting engine. Do not fill fuel tank indoors, when engine is running, or while engine is hot. Wipe off any spilled fuel before starting engine.
- 5. Do not change engine governor settings.
- Do not put hands near rotating parts for any reason.
- If the power vacuum should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- 8. Before cleaning, repairing or inspecting make certain all moving parts have come to a complete stop. Disconnect spark plug wire and keep wire away from plug to prevent accidental starting. Also keep throttle control lever in the stop position.

- 9. If the power vacuum should become blocked with debris at any point shut engine off and wait until the impeller comes to a complete stop before attempting to remove the obstruction. Disconnect spark plug wire to prevent accidental starting.
- 10. Check all bolts for tightness at frequent periods.
- 11. Never store this power vacuum with fuel in the tank. Allow engine to cool before starting in any enclosure.
- Keep bag and equipment free of debris when not in use.
- 13. Never operate this power vacuum unless air duct and vacuum bag are properly affixed in their place. Large zippered end of bag must be closed when operating to prevent objects from being blown out.
- 14. Never empty vacuum bag when engine is running.
- Never change inlet nozzle or auxiliary hose attachment when engine is running.
- 16. The manufacturer recommends that the operator wear safety glasses or some other suitable eye protection when operating this machine.
- 17. Check the vacuum bag frequently for wear and replace when necessary.

#### **ASSEMBLY INSTRUCTIONS**

#### (Refer to figures 1, 2 and 3)

- Place the upper handle in position and fasten with four (4) hex screws and hex centerlock nuts provided.
- Place the air duct in position on the blower housing and fasten with four (4) flat washers and hex nuts provided.
- 3. Slide the vacuum bag over the back of the upper handle and snap the four flaps to hold the bag.
- 4. Slide the bag over the air duct.
- 5. Fasten the nozzle to the front of the vacuum with four flat washers and thumb nuts provided.
- Use the following steps on the self propelled unit only.
- Fasten the throttle control to the right hand side of the upper handle with one hex screw and hex center locknut provided.
- Secure throttle control cable to the lower handle with the cable clip provided. NOTE: Cable clip must be assembled to lower handle with the open end towards the engine. This will prevent wear to the bag.
- 9. Place ferrule through control lever.
- 10. Place flat washer over ferrule and thread control rod into ferrule about eight or nine turns.
- Hook formed end of control rod in the shifting finger.
- 12. Place curved face of spacer towards the outside of upper handle left hand side.
- Fasten control lever in position with hex screw and two hex nuts provided.
- 14. Engage and disengage control lever, check for free pivoting action. It may be necessary to readiust the control rod.

#### **OPERATION**

 Service engine with gas and oil. See engine manual packed with lawn mower for complete instructions for care and maintenance of engine. READ DIRECTIONS CAREFULLY.

#### START ENGINE

After the engine has been properly fueled and oiled (refer to engine operating and maintenance instructions), start engine in the following manner.

#### PUSH MODEL 244-670A

- Move throttle control lever on engine to START position.
- Crank engine. Pull recoil with a quick firm pull. Do not pull out so far that rope stops with a jerk as this will cause rope failure. Do not allow rope and handle to snap back into place.
- After two or three full firm pulls on recoil (or as soon as engine fires), move speed control to run position.
- Operate a new engine at intermediate speeds and light load for the first few hours as you would a new automotive engine.
- 5. To stop engine, move speed control lever on engine to STOP position.
- If carburetor needs adjustment to start or for operation, see "Carburetor Readjustment" section.

#### SELF PROPELLED MODEL 244-680A

- 1. Place drive engagement lever in the neutral position (towards the operator).
- 2. Move throttle control lever on handle to START position.
- Crank engine. Pull recoil with a quick firm pull.
  Do not pull out so far that rope stops with a jerk
  as this will cause rope failure. Do not allow rope
  and handle to snap back into place.

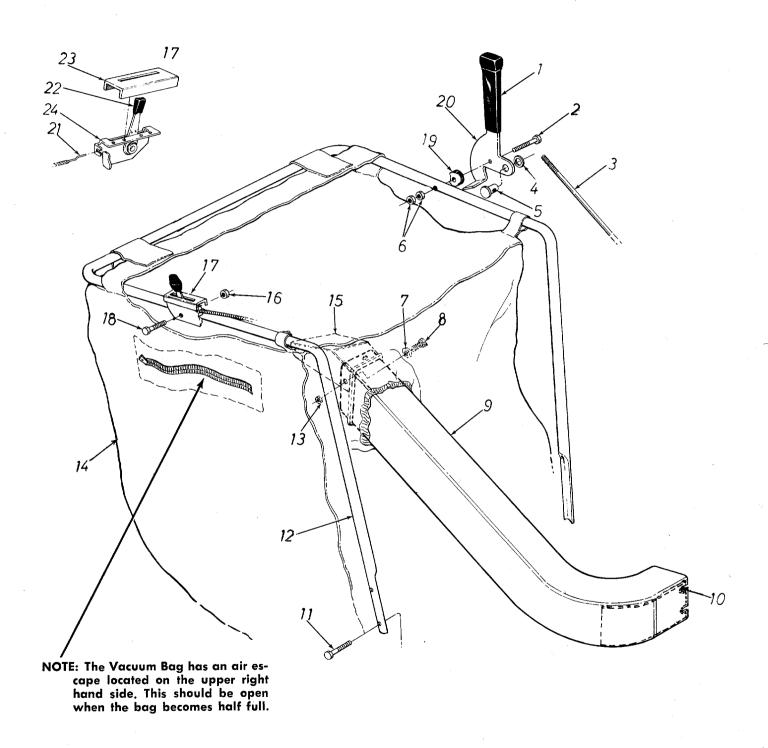


FIGURE 1. EXPLODED VIEW OF UPPER HANDLE

#### PARTS LIST FOR MODELS 244-670A AND 244-680A (FIGURE 1)

REF. NO.			DESCRIPTION	NEW PART
1 2	720-142 710-606		Grip (244-680A Hex Scr. ¼-20 x 1.50" Lg.* (244-680A	
3 4	711-596 736-108		Control Rod (244-680A FI Wash510" I.D. x .75" O.D. (244-680A	
5 6	711-179 712-107		Adj. Ferrule (244-680A Hex Center L-Nut ¼-20 Thd. (244-680A	
7	736-173		Flat Wash28" I.D. x .75" O.D. x .063	
8 9	710-289 731-212		Hex Scr. ¼-20 x .50" Lg.* Air Duct	
10 11	12262 710-106		Air Duct Liner Hex Scr. ¼-20 x 1.25" Lg.*	N
12 13	12234		Upper Handle Hex Center L-Nut ¼-20 Thd.	
14	712-107 764-127		Vacuum Bag	
15 16	12104 712-107		Deflector Hex Center L-Nut ¼-20 Thd.	
17	11609		Throttle Control Ass'y.—Comp. (244-680A)	
18 19	710-606 748-210		Hex Scr. ¼-20 x 1.50" Lg.* Spacer (244-680A)	
20	12226		Control Lever (244-680A)	
21	746-229		Conduit and Wire (244-680A) Only)	
22	7470	0	Throttle Control—Knob (244-680)	N)
23 24	731-180 11598		Plastic Label (244-680A) Throttle Control Ass'y. (244-680A)	

#### (463—Top Flite Red)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Top Flite Red Finish—12236 (463).) NOTE: This instruction manual covers various models and all accessories shown do not necessarily apply to your model vacuum.

The engine is NOT under warranty by the vacuum

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."



<sup>\*</sup>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.

# 244-670A 244-680A

NOTE:

Cable clip must be assembled to lower handle as shown, with open end towards the engine. This will prevent wear to the bag. IF YOU WRITE TO US ABOUT THIS ARTICLE OR IF YOU ORDER REPLACEMENT PARTS AL-WAYS MENTION THIS MODEL & SERIAL NO M O D E L

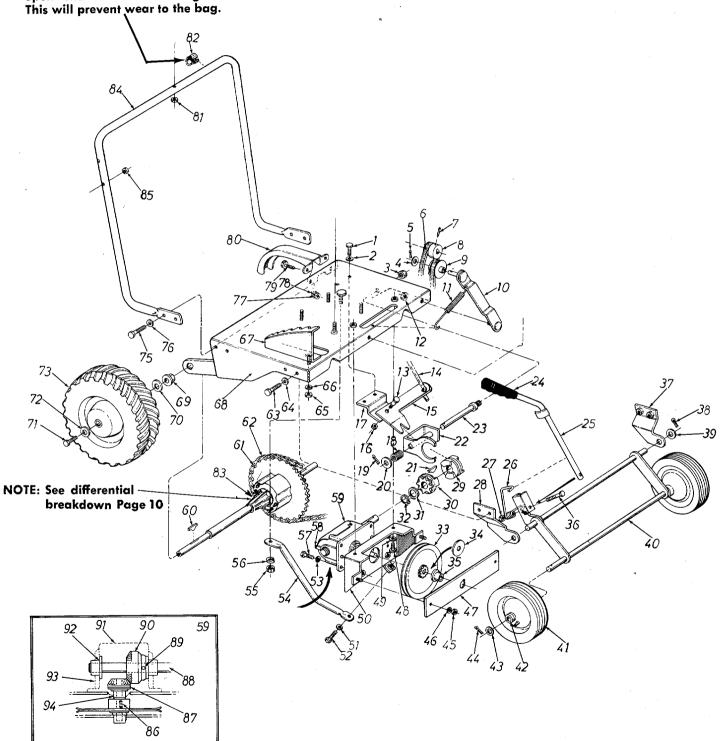


FIGURE 2. EXPLODED VIEW OF FRAME

#### PARTS LIST FOR FIGURE 2

REF NO	PART NO.	COLOR		NEW PART		PART NO.	COLOR	DESCRIPTION	NEW PART
1	710-25	8	Hex Scr. ¼-20 x .62" Lg.*		48	710-11	8	Hex Scr. 5/16-18 x .75" Lg.	
2	724 20	0	(244-680A)					(244-680A)	
2	736-32	<b>7</b> .	Spring L-Wash. 1/4" Scr.* (244-680A)		49	736-11		L-Wash. 5/16" Scr.* (244-680	A)
3	712-11	6	Hex Ins. L-Nut %-24 Thd.		50	1221	1452	Gear Box Mtg. Brkt. Ass'y.	
			(244-680A)		51	736-11	<b>Q</b> -	(244-680A)	
4	736-117		FlWash. (244-680A)	•	52	710-11		L-Wash. 5/16" Scr.* (244-680 Hex Scr. 5/16-18 x .75" Lg.*	(A)
5	714-127	7	Cotter Pin 1/16" Dia.x.75"		""	, , , , , ,	Ü	(244-680A)	
- 6	754-176	<b>.</b>	(244-680A) "V"-Belt ¼" x 22.76" Lg.		53	736-32	29	L-Wash. 1/4" Scr.* (244-680A)	
•			(244-680A)		54		2—452	7	
7	710-938	3	Set Scr. ¼-28 x .25" Lg.		55	712-26	57	Hex Nut 5/16-18 Thd.*	
0	711 500		(244-680A)		56	736-11	9	(244-680A)   L-Wash. 5/16" Scr.*(244-680	Δ)
8 9	711-590 756-194		P.T.O. Sheave (244-680A)		57	710-25		Hex Scr. ¼-20 x .62" Lg.*	A)
1Ó	12206		Idler Pulley (244-680A) Idler Brkt. Ass'y. (244-680A)					(244-680A)	
11	732-157		Spring .38" O.D. (244-680A)		58	710-14	18	Hex Wash, Hd. F-Tapp, Scr ±	<u>+</u> 8
12	712-429		Hex Ins. L-Nut 5/16-18 Thd.					-32 x .38" Lg. (244-680A)	i
. ^	700.140		(244-680A)		59	-		Gear Box Breakdown See Ref	
13	738-140		Shoulder Bolt .437" Dia. x .180 (244-680A)			ļ		No's. 86 through 94 (244-680 Only)	
14	711-596		Control Rod (244-680A)		60	714-12	6	#9 Hi-Pro-Key 3/16" x 34" Di	'a
15	12231	ŀ	Shifting Finger (244-680A)	`	/1	710.11		(244-680A)	
16	712-429		Hex Ins. L-Nut 5/16-18 Thd.		61	713-11	8	Chain #41 x 61 Links	
17	12213	_452	(244-680A)		62	713-72	3	(244-680A) #41 Master Link ½" Pitch Ty	_
	732-273		Pivot Brkt. Ass'y. (244-680A) Compression Spring (244-680A)					II (244-680A)	be
19	714-474		Cotter Pin 1/8" Dia. x .75" Lg.*		63	710-11		Hex Scr. 5/16-18 x .75" La.*	1
		- 1	(244-680A)		64 65	736-11 712-26		L-Wash. 5/16" Scr.*	
20	736-300		FlWash. (244-680A)		66	736-11		Hex Nut 5/16-18 Thd.* L-Wash. 5/16" Scr.*	
21	714-137		Hi-Pro-Key 3/16" x 3/4" Dia.		67	1222	4	Index Plate Ass'v	
22	12216	1	x 1.062" Lg. (244-680A) Shifting Yoke Ass'y. (244-680A)		68	1220	0452	Engine Mtg. Frame Ass'v	
23	711-594		Shifting Fork Rod (244-680A)		69 70	748-22 736-11	7	Hex Flange Bearing .630" I.D.	
	720-132		Grip ´		71	710-25	8	FlWash.	
25 26	12208 732-231		Index Handle Ass'y.		72	736-21	ĭ	Hex Scr ¼-20 x .62" Lg.* FlWash.	-
	712-107		Torsion Spring Hex Center L-Nut ¼-20 Thd.	İ	73	734-57		Rear Wheel Ass'y, Comp.	
28	12240-		Pivot Brkt. Ass'y.—R.H.		75 76	710-11 736-11		Hex Scr. 5/16-18 x .75" Lg.*	
29	/48-161		Clutch Collar (244-680A)		77	712-28		L-Wash. 5/16" Scr.* Hex Nut ¼-20 Thd.* (244-68)	ا ۱
	748-164 736-116	1 -	Sprocket 10 Teeth (244-680A)		78	736-32		L-Wash. 1/4" Scr. * (244-680A)	JA)
	716-115		FlWash. (244-680A)		79	710-25		Hex Scr. 1/4-20 x .62" Lg.*	
	,	1	Snap Ring for .625" Dia. (244-680A)				_	(244-680A)	
	756-195	1	Drive Pulley (244-680A)		80 81	1223 712-10	2	Chain Guard (244-680A)	
	736-160		FlWash. (244–680A)	l	82	746-12		Hex Center L-Nut 1/4-20 Thd. Cable Clip	1
	748 <del>-742</del> 710-136		Flange Bearing (244-680A)	ļ	83	738-18		Rear Axle (244-680A)	
37		-452 F	Hex Scr. ¼-20 x 1.75" Lg.* Pivot Brkt. Ass'y.—L.H.		ĺ	717 <b>-</b> 28	4	Differential Ass'y. Comp.	ľ
	/ 14-115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		0.4	1000	,	(244-680A)	ļ
	736-116	] 1	-I.Wash.		84 85	1223 712-10		Lower Handle	
40 11	12217- 734 <b>-</b> 225		ront Axle Ass'y		86	714-22		Hex Center L-Nut ¼-20 Thd. #2 Woodruff Key 3/32 x ½"	
	748-176		ront Wheel Ass'y.—Comp. lange Bearing .630" I.D.—					Dia. Hdn. (244-680A)	
	736-116	ļ.	IWash.		87	748-13	6	Pinion Gear .50" I.D. x 14 Tee	th
	714-115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		88	711-59	2	(244-680A)	
5 7	712-107	-	lex Center L-Nut 1/4-20 Thd.	ĺ	89	715-24		Drive Shaft (244-680A) Spring Pin Spirol 3/16" Dia. x	1
6 7	736-329	. ]	(244-680A)					1.25 (244-680A)	
			-Wash. ¼" Scr.* (244-680A)		90	748-13	5	Bevel Gear .62" I.D. 28 Teeth	
7	12227-	-452  B	earing Support Brkt. (244–680A)		91	010	7	(244-680A)	
					92	818 748-11		Gear Box Cover (244-680A) Flange Bearing .630" I.D.	
								(244-680A)	
	÷				93	818		Gear Box (244-680A)	
				7	94	<i>7</i> 48-10	8	Flange Bearing .503" I.D.	
								(244-680A)	

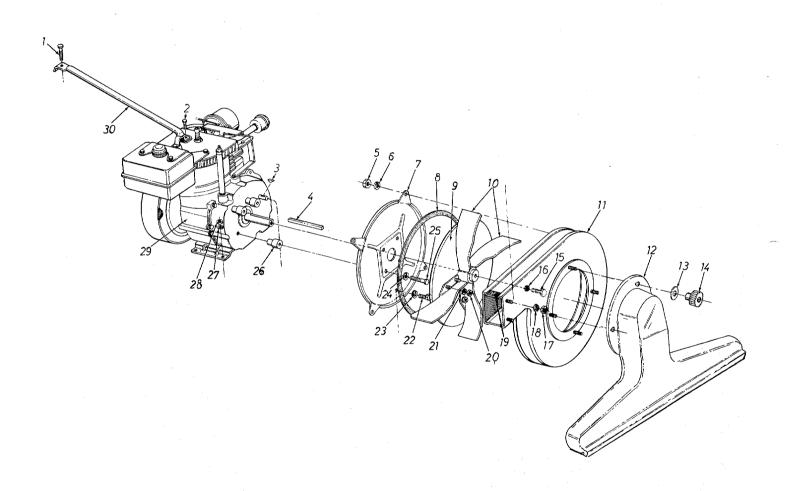


FIGURE 3. EXPLODED VIEW OF DRIVE ASSEMBLY

## PARTS LIST FOR MODELS 244-670A AND 244-680A (FIGURE 3).

REF. NO.		COLOR CODE	DESCRIPTION	NEW PART
1	710-106		Hex Scr. 1/4-20 x 1.25" Lg.*	<del></del>
2 3			Part of Engine	ļ
3	714-108		Woodruff Key (244-680A)	
4	714-114	1	Sq. Key ¼" x 2.00" Lg.	
5	712-267		Hex Nut 5/16-18" Thd.*	
6	736-119		L-Wash. 5/16" Scr.*	
7	11452	463	Hopper to Engine Mtg. Plate	
8	721-128	3	Gasket Strip—Pressure Sensitive	!
9	12203	3463	Vane Plate Ass'y.	
10	12230		Air Vane	
11		463	Blower Housing Ass'y.	ĺ
12	731-211		Nozzle	
13	736-159	<b>'</b>	FlWash344" I.D. x .88" O.D. x .063	
14	712-254	1	Thumb Nut 5/16-18 Thd.	
15	710-539	)	Hex Scr. %-24 x 1.75" Lq. H.T.	
16	736-217	'	L-Wash. ¾" Scr. Heavy Duty	
	712-107	'	Hex Center L-Nut ¼-20 Thd.	
18	736-211		Fl-Wash285" I.D. x 1.25" O.D. x .060	
19	721-129	,	Dust Pad—Pressure Sensitive	
20	712-241		Hex Nut %-24" Thd.*	
21	736-217		L-Wash. %" Scr. Heavy Duty	
22	710-118		Hex Scr. 5/16-18 x .75" Lg.*	
23	736-119	)	L-Wash. 5/16" Scr.*	
	736-119	•	L-Wash 5/16" Scr.*	
	710-409	١	Hex Scr. 5/16-24 x 1.75" Lg.*	
26	711-591		Engine Spacer	
27	736-119		L-Wash. 5/16" Scr.*	
28	712-267		Hex Nut 5/16-18 Thd.*	
29			Engine	
30	12228	1	Handle Brace	

#### (463—Top Flite Red)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Top Flite Red Finish—12236 (463).) NOTE: This instruction manual covers various models and all accessories shown do not necessarily apply to your model vacuum.

The engine is NOT under warranty by the vacuum manufacturer.

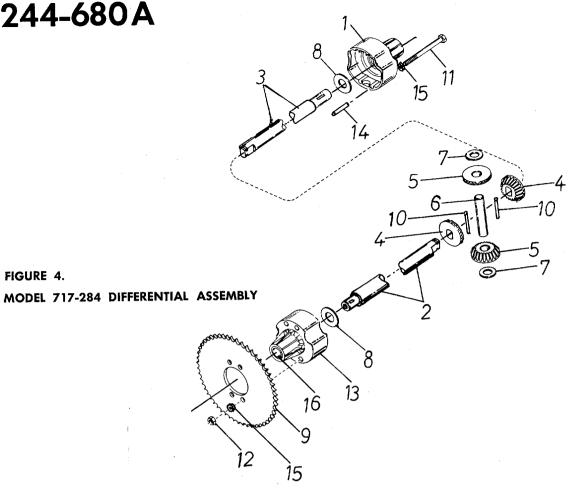
If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines —Gasoline."



<sup>\*</sup>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.

# 244-680A

FIGURE 4.



### PARTS LIST FOR FIGURE 4 USED ON MODEL 244-680 A ONLY

REF.		COLOR CODE	DESCRIPTION	NEW PART
1	719-15	in	Housing Half (1)	
	738 <b>-2</b> 1		Shaft—Short (1) 8.31" Lg. (1)	
1 -	738-21	•	Shaft—Long (1) 15.38" Lg. (1)	
	748-18	-	Gear—Double "D" Hole (2)	
	748-15		Gear—Round Hole (2)	!
	711-27	-	Drive Pin (1)	
	736-18		Flat Washer (2)	,
	736-188		Washer (2)	
9	9054		Sprocket 40 Tooth (1)	
10	715-24		Spirol Pin 3/16" Dia. x 1.00"	
, ,		.,	Lg.* (2)	
111	710-52	26	Hex Hd. Cap Scr. 5/16-24 x	
' '	,	-	4.00" Lg.* (4)	
12	712-2	37	Hex Locknut 5/16-24 Thd. (4)	
	719-1		Housing Half (1)	[
14	715-1		Dowel Pin 3/16" Dia. x .62"	
			Lg. (2)	ļ
15	736-119		Spring Lockwasher 5/16"	
.	'		Scr. * (8)	
16	748-169		Flange Bearing (2)	
17	737-1	20	Grease—High Temp. 450 F.	1
			(2 oz.)	

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

## **PARTS INFORMATION**

o the factory immediately. Such claims must include your model number and date of purchase.

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.

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—Power Products.

A 1 Engine & Mower Co. 327 East 9th Street Salt Lake City, Utah 84102

American Electric Ignition Co. 124 N. W. 8th Street Oklahoma City, Oklahoma 73102

Auto Electric & Carburetor Co. 2625 4th Avenue, S. P. O. Box 1948 Birmingham, Alabama 35233

Automotive Equipment Service Co. 3117 Holmes Street Kansas City, Missouri 64109

Bailey's Rebuild Inc. 1325 E. Madison Street Seattle, Washington 98102 Bleckrie, Inc. 7900 Lorain Avenue

Cleveland, Ohio 44102

Brown Equipment Distributor Inc. 110 Beech Street Corydon, Indiana 47112

Bullard Supply 2409 Commerce Street Houston, Texas 77003

Carl A. Anderson Co. 623 S. 16th Street Omaha, Nebraska 68102 Catto & Putty, Inc.

P. O. Box 2408
510 Soledad Street
San Antonio, Texas 78205

Center Supply Company 6867 New Hampshire Avenue Takoma Park, Maryland 20012

Dixie Sales Company
P. O. Box 1408
327 Battleground Avenue
Greensboro, North Carolina 27402

East Point Cycle & Key Shop 1617 Whiteway East Point, Georgia 30044 Gamble Distributors
West End Avenue
Carthage, New York 13619

Garden Equipment Co., Inc. 6600 Cherry Avenue Long Beach, California 90805

Gardenville Supply, Inc. Pipersville, Pennsylvania 18947

Henry W. O'Neil & Assoc., Inc. 410 North Goodman Street Rochester, New York 14609

Henzler, Inc. 2015 Lemay Ferry Road St. Louis, Missouri 63125

Kenton Supply 8216 North Denver Avenue Portland, Oregon 97217

Kimber's Inc. 115 W. Geddes St. Syracuse, New York 13204

The Lawnmower Shop 1340 El Camino Real San Carlos, California 94070

Marr Brothers 423 E. Jefferson Dallas, Texas 75203

Mathews Auto Electric Co. 420 East 2nd Street Tulsa Oklahoma 74120

McClure Lawn & Garden Supply
1114 Lexington Avenue
Mansfield, Ohio 44907

Memphis Cycle & Supply Co. 421 Monroe Avenue Memphis Tennessee 38103

Morton B. Collins Co. 300 Birnie Avenue Springfield, Massachusetts 01107

Moz-All of Florida, Inc. 365 Greco Avenue Coral Gables, Florida 33146

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National Central, Div. of Joe Sterling, Inc. Drawer "D" 687 Seville Rd. Wadsworth, Ohio 44281

Parts & Sales Inc. 2101 Industrial Pkwy. Elkhart, Indiana 46514

Power Equipment Distributor 36463 So. Gratiot Avenue Mt. Clemens, Michigan 48043

Power Lawn & Garden Equip. Co. 2551-2571 J. F. Kennedy Road Dubuque, Iowa 52001

Radco Distributors 2403 Market Street P. O. Box 3216 Jacksonville, Florida 32206

Raub Supply Company
James & Mulberry Sts.
Lancaster, Pennsylvania 17604

Richmond Battery & Ignition
P. O. Box 25369 — 957 Myers St.
Richmond, Virginia 23260

Smith Hardware Company 515 N. George Street Goldsboro, North Carolina 27530

South Denver Lawn Equip. Co. 527 West Evans Denver, Colorado 80223

Suhren Engine 8330 Earhart Bivd. New Orleans, Louisiana 70118

Sutton's Lawn Mower Shop Route 4, Box 343 North Little Rock, Arkenses 72117

Warner Equipment
7520 Lyndale Avenue, So.
Minneapolis, Minnesota 55423

Woodson Sales & Service 1702 North Sylvania Ft. Worth, Texas 76111

#### 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

- Replacement of Missing Parts on new equipment.
- Replacement of Defective Parts within the warranty period.
- 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.

. . . .