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# Owner's Operating Service Instruction Manual

- ASSEMBLY
- OPERATION
- REPAIR PARTS

Model Nos. 2450-2-6 2460-2-6

20" Rotary Mowers

# Yard-Man

# 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.

# SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

#### **TRAINING**

- Read the Operating and Service Instruction Manual carefully. Be thoroughly familiar with the controls and the 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.

#### **PREPARATION**

- Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
- Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- 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.
- 4. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
- 5. Never attempt to make a wheel adjustment while the engine is running.
- 6. Mow only in daylight or in good artificial light.
- 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**

- Do not change the engine governor settings or overspeed the engine.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- 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.

- If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine whenever you leave the equipment, 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. Do not run the engine indoors.
- Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.
- Mow across the face of slopes, never up-anddown. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
- Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
- Never operate mower without proper guards, plates or other safety protective devices in place.
- 13. 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.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 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.
- Check the grass catcher bag frequently for wear or deterioration. Replace with new bag for safety protection.

# **ASSEMBLY**

This mower is shipped in one carton completely assembled with the handle assembly and missile deflector in storage position. To remove the mower, slit the end of the carton and roll the mower out. Do not lift the mower by the shroud. The.

- 1. Move the missile deflector down into operating position.
- 2. To place the handle in operating position: Be sure the handle knobs are loose enough to allow the upper section to pivot freely around the mounting bolts. Lift the handle assembly until the lower section snaps into the operating position, as shown. The upper section can now be moved into position. Tighten the handle mounting bolts.



#### **BEFORE STARTING ENGINE**

Remove the oil dip stick (models 2460 and 2450) or oil fill plug and fill the engine crankcase with 1 1/4 pints of SAE 30 oil.



Fill the gasoline tank with clean, fresh, regular grade gasoline. DO NOT MIX WITH OIL. Read the engine manual.

# TO START ENGINE

- 1. Place the throttle control in "START" position.
- 2. While standing on the left side of the mower (opposite the discharge chute) place your left foot on the housing to stabilize the mower, and pull the starter cord with a quick stroke.
- 3. When the engine starts, move the throttle control to SLOW speed until the engine warms up.

If the engine floods, place the throttle control in STOP position. Pull the starter cord at least 4 times. Then reposition the throttle control to START and repeat the starting procedure. Engine flooding is usually caused by a dirty air filter. If the engine continues to flood even with a clean filter, lean the mixture.



# TO ADJUST CUTTING HEIGHT

BE SURE ENGINE IS STOPPED.

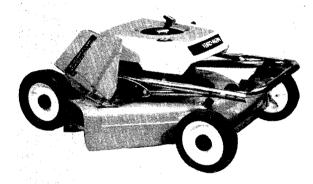
The cutting height can be adjusted easily through heights from ¾" to 2¾". Place your hand on the outside of the wheel, pull the adjusting lever away from the securing slots in the housing. Move the adjusting lever to the height desired and release the lever back into the securing slots.

Make the same adjustment on all four wheels.



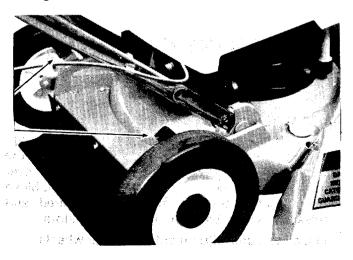
#### **FOLDING HANDLE**

Yard-Man's adjustable handle makes storage and transportation of the mower much simpler. You merely loosen the holding screws and fold the handle down, over the mower...reducing the mower to a compact, easily-handled size.



## **ADJUSTABLE CUTTING HEIGHTS**

Each wheel of this mower is equipped with an easy-to-move hand-set adjustment lever to change the cutting height of the blade. By simply pulling the adjustment lever out of its retaining slot, you can raise or lower the wheel (which raises or lowers the blade) to obtain a cutting height from 34" to 234".



#### **SNAP-ON-OFF ENGINE SHROUD**

The engine shroud can be "snapped" on and off for each access to the air filter and carburetor. You merely move the throttle to Stop position, disconnect the spark plug wire (securing it at least 1" away from the spark plug) and then just pull up on the shroud, freeing it from the four heavy duty, chrome snaps.



# **OIL DIP STICK**

Good maintenance practice is to check the oil level in the engine crankcase before every mowing. Use care not to overfill.

(Shown with shroud "snapped" off.)



#### HANDLE MOUNTED THROTTLE

This convenient handle-mounted throttle control gives you finger tip control at all times...for Start, Stop and engine speeds.



# **MAINTENANCE**

Your Yard-Man mower will give excellent service for many years with the reasonable care and maintenance outlined below:

- Keep the mower clean, especially the engine and underside of the mower housing. The top of the mower should be brushed or wiped. The underside can be cleaned with a hose through the Wash-Out Port.
- 2. Each time you mow, inspect the condition of bolts, nuts, cotter pins, etc., to be sure all are tight.
- 3. Check the oil level frequently. Oil should be changed every 25 hours of operation. For new mowers, oil should be changed after the first 5 hours of operation and after every 25 hours afterwards.
- Keep the cutting blade sharp. A dull blade not only does a poor mowing job but also puts additional strains on the engine...and causes additional vibration.
- 5. The air filter should be re-conditioned frequently...after every 25 hours of operation (refer to page 10 for proper procedure).
- 6. It is advisable to remove the wheels and apply a small amount of light oil to each axle at least once a season...more often under heavy usage.
- Should excessive vibration develop, check the blade and blade shaft for damage. Have the damage repaired before you operate the mower again.
- Periodically remove the spark plug and check its condition. However, don't clean badly fouled spark plugs. Better starting and operation is achieved by replacing with a new plug.
- Operate the mower within its limits. Remember excess strains only wear parts out faster.

# END-OF-SEASON STORAGE

At the end of the cutting season, the mower should be prepared for winter storage as follows:

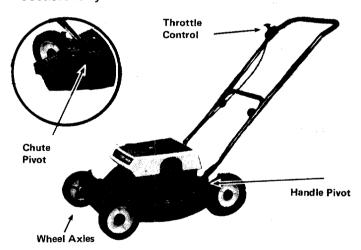
 Drain the gasoline tank completely. Then start the engine and run it out of gas. Gasoline which remains in the fuel system for long periods develops a varnish residue which can foul the carburetor and hinder the engine's operation.

- 2. As an alternative to the above, add a few drops of stabilizer to the gasoline. This will prevent formation of gum and varnish. Your service center can give you the facts on this.
- Remove the spark plug and inject an ounce of SAE 10 oil into the cylinder through the spark plug hole. Crank the engine several times to spread the oil over the cylinder wall. Replace the spark plug but leave the ignition wire unattached.
- 4. Lubricate all points outlined in the lubrication guide.
- 5. Place a protective cover over the mower to keep dust and dirt off.

# LUBRICATION

While your Yard-Man mower requires little lubrication, it is important that the points shown here be oiled periodically.

The wheel axles should be oiled once each season with light oil...more often under heavy usage. The handle and deflector chute pivot points and the throttle control cable need light oil occasionally.



# TUNE-UP ADJUSTMENTS

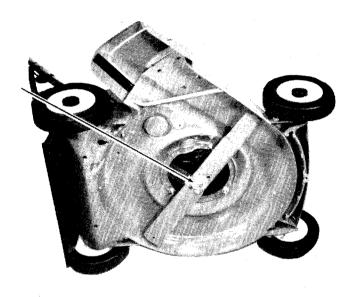
#### **CUTTING BLADE**

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

- 1. Remove bolt and lockwasher holding the and blade adapter to engine crankshaft.
- 2. Remove blade and blade adapter from engine crankshaft.

3. Remove two bolts, lockwashers 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 personal injury or damage to the mower. upon reassembly, make certain all parts are assembled properly and tightened securely.



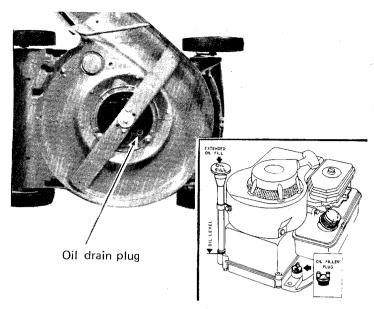
# **CHANGE OIL**

Engine oil should be changed after the first 5 hours of operation and every 25 hours thereafter.

Oil should be drained only when the engine is warm to get a complete drain. Mower should be on a level surface.

Disconnect the spark plug wire and secure it at least 1" away from the plug. Set a shallow one quart container under the oil drain. Remove the oil drain plug and allow the oil to drain completely.

Replace the oil plug and refill with SAE 30 detergent oil ( $1\frac{1}{4}$  pints approx.).

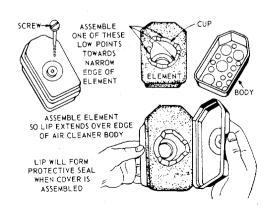


# **RECONDITION AIR FILTER**

A dirty air filter can cause poor engine performance. The filter should be reconditioned every 25 hours of service.

- Remove the engine shroud to expose the air filter. Remove the filter cap screw and carefully remove the inner filter element. Be careful to prevent any dirt from falling into the carburetor.
- 2. Recondition the filter as recommended in the engine manual.

Under unusually dusty conditions, the filter should be reconditioned or replaced more often.

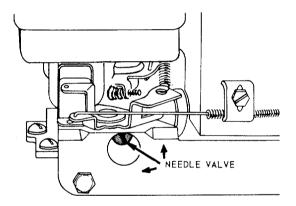


# **ADJUST CARBURETOR**

Minor carburetor adjustments may be required to compensate for differences in fuel, temperature, altitude and load.

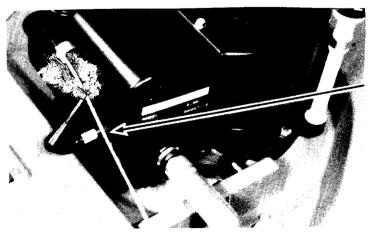
- a. The gasoline content of the fuel mixture is adjusted by turning the needle valve. Clockwise to close...counterclockwise to open.
- b. To adjust the fuel mixture, throttle the engine to middle operating speed. Slowly turn the needle valve clockwise until the engine begins to lose speed (too-lean mixture). Then slowly turn the valve counterclockwise PAST the point of smoothest engine performance, until the engine begins to run unevenly (too-rich mixture). Then turn the needle valve back slightly until the engine is smooth.
- c. If the engine runs uneven under heavy load, make the fuel mixture a little richer by turning the needle valve slightly counterclockwise.

For greater detail on carburetor adjustments, see the engine manual.



# **CHANGE SPARK PLUG**

The spark plug is the heart of the engine and its condition directly effects how the engine performs.



The spark plug should be checked frequently and cleaned if fouled. However, if the plug is badly fouled, it is better to replace with a new plug. A new spark plug will give better starting and general all around performance.

Care should be taken not to damage the spark plug in removing it from the engine. Use the proper plug wrench for the job.

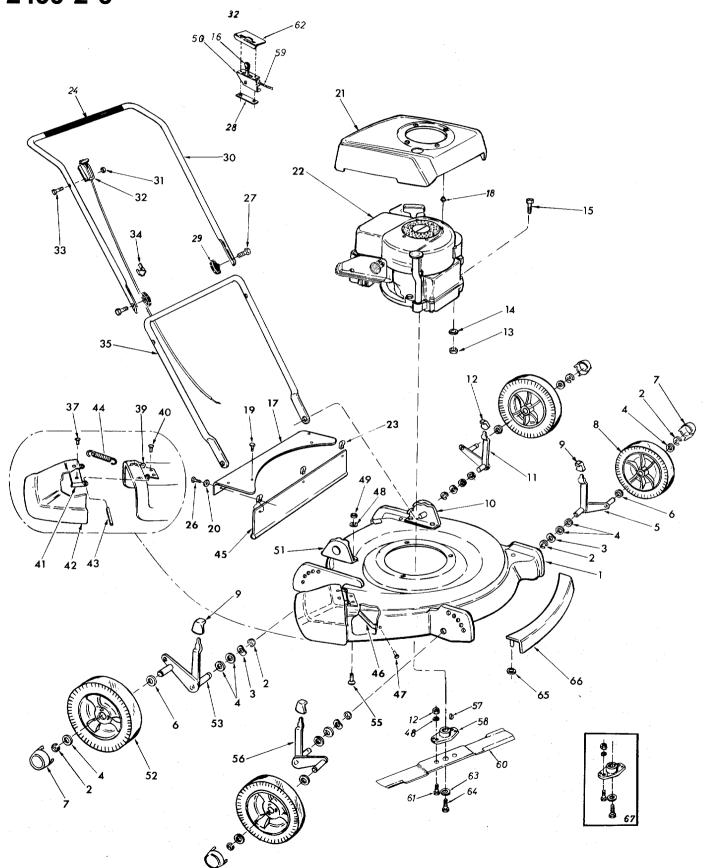
# **ENGINE OPERATING TIPS**

- 1. If the engine won't start, check the gas tank. Be sure the shut off valve is open.
- 2. Be sure the holes in the gas cap are open and will allow air to enter the gas tank.
- Be sure the air filter is kept in good, operating condition. Cutting grass can be a dusty affair and any dust which gets past the filter can damage the engine. Also a dirty air filter will reduce the engine's operating efficiency.
- 4. When you finish cutting grass, don't just shut the engine off and store the mower. Rather, close the fuel shut-off valve and let the engine run out of gas. This empties the carburetor and helps to prevent build-up of gum and varnish.
- Never use old gas in the engine. In addition to bringing on problems with gum and varnish, old gas makes for hard starting.
- 6. If the engine misses, check the spark plug and plug wire. In particular clean the plug inside and out and check for cracks in the porcelain. Regap the plug according to the engine manual. If the engine continues to misfire, replace the plug. Excessively dirty plugs should not be cleaned. They should be replaced.

If the engine continues to misfire with a new plug, the problem can be loose engine bolts, a leaky head gasket, a kinked fuel line, sticky valves, etc. For these conditions it is suggested a certified service center be contacted for advice.

- 7. If the engine overheats, the air cooling fins may be clogged. Also, a too-lean fuel mixture can cause overheating.
- 8. Don't put the engine under full power as soon as it starts. The piston in a cold engine is not a tight fit and fast RPM before the engine warms up can cause excessive piston wear.
- Do not idle the engine at too slow a speed for extended periods of time. Oil will not circulate properly and excessive wear can result...also the engine can overheat.

2450-2-6 2460-2-6



8

# **PARTS LIST FOR MODELS 2450-2-6 AND 2460-2-6**

	REF.	PART NO.	COLOR	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
	1	1102-24	7—497	20" Deck Ass'y.		33	710-060	6	Hex Scr. 1/4-20 x 1.50" Lg.*	
ı	2	716-010	)4	"E"-Ring for .50" Dia. Shaft		34	746-012		Cable Clip	
	3	1552-2		Wave Wash. for .50" Scr.		35	749-023		Lower Handle	N
	4	1540-90	)	FI-Wash51" I.D. x 1.00"		37	728-055		Rivet .188" Dia. x .25" Lg.	
				O.D. x .030		39	2708-11		Deflector Hinge	
	5	2123-31		Front Axle Ass'y.—L.H.		40	728-012	0	Pop Rivet .250" Dia. x .447"	
	6	1540-86	3	FI-Wash51" I.D. x 1.00"					Ĺg.	
				O.D. x .125		41	1708-12		Deflector Hinge	
	7	731-018		Hub Cap		42		<del></del> 497	Chute Deflector	
	8	2108-23	30	Front Wheel Ass'y. Comp. —		43	1548-31		Roll Pin .188" Dia. x 4.25"	
				7 x 1.75					Lg.	
	9	2643-43		Height Adjustment Knob		44	1642-14	3	Deflector Spring	
	10	2132-16	88	Handle Mount Brkt. Ass'y.—		45	3556-41		Rear Protective Flap	
				_ L.H.		46	2639-68		Toe Guard	
	11	2123-33		Rear Axle Ass'y.—L.H.		47	1533-18		Pop Rivet .188" Dia. x .652"	
	12	2643-43		Height Adjustment Knob					Lg.	
	13	712-026		Hex Nut 5/16-18 Thd.*		48	736-032		L-Wash. 1/4" Scr.*	]
	14	736-011		L-Wash. 5/16" Scr.*		49	712-010		Hex Cent. L-Nut 1/4-20 Thd.	
	15	710-044		Hex Scr. 5/16-18 x 1.50" Lg.*		50	746-017		Throttle Control Ass'y.	
	16	731-018	39	Throttle Control Knob		51	2132-16	6	Handle Mount Brkt.	1
	17		75—497	Deck Cover—Rear			i		Ass'y.—R.H.	
	18	1549-29	9	Shroud Retaining Stud #8 x		52	2108-22	6	Rear Wheel Ass'y. Comp.	
				.38" Lg.					8 x 1.75	
	19	1.51.1-31		Hex Sems Scr. #10-24 x .44"		53	2123-32		Rear Axle Ass'y.—R.H.	
		<b>_</b> .	_	Lg.		55	710-013	4	Carriage Bolt ¼-20 x .62"	
	20	1540-55	5	FI-Wash22" I.D. x .62"					Lg.*	
				O.D. x .060		56	2123-30		Front Axle Ass'y.—R.H.	
	21	3153-54	4	Shroud Ass'y.		57	714-013	8	#6 Woodruff Key 5/32" x	
_	_ 22			Engine					_ 5/8" Dia.	
	23	726-013		Speed Nut #10Z		58	748-025		Blade Adapter	N
1	24	1710-51		Grip		59	746-022		Conduit and Wire	
	26	710-058	39	Hex AB Tap Scr. #10 x .75"		60	742-017		20" Blade	N
- 1	07	740 040	\-	Lg.*		61	710-011		Hex Scr. 5/16-24 x 1.00" Lg.	
	27	710-040	ט ט	Curved Carriage Bolt 5/16-18		62	731-034		Plastic Label—Throttle	N
	00	700 047		x 1.75" Lg.		63	736-021		L-Wash. 3/8" Scr. H.D.	
	28	726-013	<del>)</del>	Speed Nut #8-32 Twin Type		64	710-019		Hex Scr. 3/8-24 x 1.25" Lg.	
	29	09966	25	Hand Knob	N	65	1539-20		Special Nut	
	30	749-022 712-010		Upper Handle Hex Cent. L-Nut 1/4-20 Thd.	I,N	66	3699-10		Front Deck Cover	
	31 32			Throttle Control Ass'y.—		67	753-013	ວ	Blade Adapter Kit	N
	ა∠	746-020	12	Comp.						
Ł				comp.						

<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.

(497-Yard-Man Red)

When ordering parts if color or finish is important, use color code shown at left. (e.g. Yard-Man Red Finish 1102-247 (497).)

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."



**SERVICE RECORD** 

DATE	DESCRIPTION					

# PARTS INFORMATION

# POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all YARD-MAN 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.

ARKANSAS LITTLE ROCK
Industrial Equip Service2816 W. 12th St72204 PINE BLUFF
Northern Saw CoW. 4th & Hwy. 65 Box 741271601 CALIFORNIA CHICO
Midway Equip. Co., Inc2863 Midway95926
SAN BERNARDINO  Lawnmower Supply Co25608 E. Baseline95926
SANTA FE SPRINGS
Midway Equip. Co., Inc 13517 Alondra Blvd90670 DELAWARE ELSMERE, WILMINGTON
Jay C. Pownall, Inc 2 N. Colonial Ave 19805
ELOPINA COPAL GARLES MIAMI
Moz-All of Florida, Inc365 Greco
Lovell Bros., Inc320 N.W. 10th St32670
Spicola Hardware CoBox 5087-605 19th St33605
JACKSONVILL E Radco Dist., Inc2403 Market St
GEORGIA ATLANTA
Beck & Gregg Industries Outdoor Power Products Div. Box 984-217 Luckie St., N. W 30301
ILLINOIS SALEM
The C.J. Heck CoRt. #37 North-Box 689 62881
INDIANA EVANSVILLE Midwest Equip. & Supply901 Keck
FORT WAYNE
Lynn Koehlinger Co 3675 North Wells-Box 9646801 KENTUCKY HEBRON
J.A. Stevens Mower Co P.O. Box 38
HOPKINSVILLE Cayce Mill Supply Co 505 East First St42240
LOUISIANA BATON ROUGE
S&S Distributing Co 1307 Main StBox 2321 70821
MAINE BANGOR M.L. Coffin Co
MASSACHUSETTS SOUTHBORD
Crandall-Hicks Co Rt.# 9 01772
MICHIGAN FERNDALE Ideal Mower Sales, Inc811 Woodward Heights 48220
GRAND RAPIDS
Jac Van Dist., Inc 4477 E. Paris, S.E49508
JACKSON Factory Branch
MISSOURI ROLLA
Ozark Equip. Co., Inc Hwy. 63 & Black StBox 78465401
MONTANA BILLINGS Parker Montana Co511 North 21st. St59101
NEBRASKA OMAHA K.K. Co., Inc
NEW JERSEY PARSIPPANY
Elmco Dist., Inc

## 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

NEW YORK	BINGHAMTON
Kingsley Co., Inc.	Bo x 726
NORTH CAROLINA	
Carswell Dist., Co	3750 N. Liberty StBox 4193 North Station27105
NORTH DAKOTA	FARGO
Pott-Keller Supply	Co1620 First Ave., North58102
OHIO	CLEVELAND
Tecca Dist., Co	4747 Manufacturing Ave 44135
UKI VHUMV	MUSKOGEE
C.J. Heck Co. of C	OklahomaBox 1572-Hwy. 69 South 74401
	ADA.
ADA Auto Supply	Box 338-301 E. 12th St 74820
PENNSYLVANIA	ALLISON PARK
Northern Seed & Tro	actor, Inc4630 Rt.#815101
RHODE ISLAND	JOHNSTON
	o27 Mill St
TENNESSEE	ardware Co 5th St. Extension37623
Witchell-rowers in	NASHVILLE
Garrett-Moore, Inc.	1310 Davidson St37206
ourien moore, me	KNOXVILLE
Master Repair Serv	rice2423 Broadway, N.E37917
	UNION CITY
Graves Dist. Co.,	Inc1318 Stad Ave38261
TEXAS	FORT WORTH
Woodson Sales Co	rp 1702 N. Sylvania
0.1 5 1	HOUSTON
	c8000 Harwin StBox 42146777  SALT LAKE CITY
UTAH Partar Walton Co	Box 1619-470 W. 6th S. St8411u
VIRGINIA	LYNCHBURG
	rdware Co 1016-26 Commerce St 24505
Bullo, opolical ila	RICHMOND
Universal Tractor	Equip. Corp. Box 5489
	928 N. Meadow St 23220
	ROANOKE
Graves. Humphreys	, Inc 1948 Franklin Rd- S.W 24014
WEST VIRGINIA	BLUEFIELD
	Co Box 269-Mercer St24701
WISCONSIN	CHILTON nc 444 N. Madison St53014
norst Dist. Co., II	OAK CREEK
Four Season's Fa	uip. Co7373 South Sixth St53145
1 our Season's Equ	orp. Co. 17575 coom orxii on minimo 145
CANADA	NORTH BURNABY, B.C.
Challenger Equip.	., LTDBox 2010-6939 Hastings St
<b>-</b> 11	POINTE CLAIRE, QUEBEC
lerry Industries .	180 Labrosse Ave
Dalah Wilsen	EDMONTON, ALBERTA Co., LTD. 9653-105A Ave
καιρη Π. Wilson &	CO., LID. Y033-103A AVE

#### 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.