

TRAC VAC

Model 452-IC/H/LH



Operating and Assembly Manual

**Midwest Equipment Manufacturing, Inc.
5225 Serum Plant Road
Thorntown, IN 46071**

SAFETY RULES

Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times when using power equipment.



This symbol means Attention!!!! It is used to point out safety precautions.

- Read and follow all instructions in this manual before assembly or operation of this equipment. Failure to comply with these instructions may result in personal injury. Keep this manual for future reference and for ordering replacement parts.
- Read this instruction manual carefully. Become familiar with the controls and proper use of this equipment.
- Read the engine owners manual and safe operation rules before using this equipment.
- Never allow children less than 16 years of age to operate the Trac-Vac. Children 16 years and older should operate **only** under close parental supervision.
- Do not allow anyone to operate this equipment without proper instruction.
- Do not allow passengers to ride on the Trac-Vac or on the towing vehicle.
- Keep children and pets out of area of operation.
- Check fuel before starting engine. **Do Not** fill fuel tank indoors, or while engine is running or hot. Wipe off any spilled fuel before starting engine.
- Engine and muffler get **HOT! Do Not** touch! Keep debris from accumulating on or around engine and muffler to avoid fire hazard.
- Allow engine to cool before storing in any enclosed area. Never store Trac-Vac with fuel in tank.
- Do not operate engine if air cleaner or cover is removed, except for adjustments. Removal of the part could create a fire hazard.
- Keep hands, feet, face, long hair and clothing out of inlet and discharge areas. There are **ROTATING BLADES** inside these openings.
- Make certain that all moving parts come to a complete stop before cleaning, repairing or inspection. Disconnect spark plug wire and keep away from plug to prevent accidental starting.
- If Trac-Vac should become clogged with debris, **SHUT OFF ALL ENGINES** and wait until impeller comes to a complete stop before attempting to remove obstruction. Disconnect spark plug wire to prevent accidental starting.
- If excessive vibration occurs while operating your Trac-Vac, stop the engine immediately, disconnect the spark plug wire and allow all moving parts to stop completely before taking the following steps.
 - A. Inspect for damage.
 - B. Repair or replace any damaged parts.
 - C. Check for loose parts and tighten to assure continued safe operation.
- Check all hardware periodically to insure safe operation.
- Check cart cover periodically for wear and replace if worn or damaged.
- **Never** operate Trac-Vac without intake hose and exhaust hose attached in proper place.
- **Do Not** remove exhaust hose or attempt to empty contents of container while engine is running.
- Keep all shields and guards in place and securely attached.
- Always wear eye protection (safety glasses or goggles) when operating this equipment.
- **Do Not** stand behind unit in exhaust discharge area while engine is running.
- **Do Not** operate this equipment while intoxicated or while taking medications that could impair reactions or senses.
- Operate this equipment at reduced ground speed on rough terrain, along creeks and ditches and on slopes to prevent tipping or loss of control.
- Vehicle stability and braking are affected by the addition of this unit. Do not fill the Trac-Vac to its full capacity without checking the capability of the towing vehicle to safely pull and stop with the unit attached.
- **Do Not** operate on slopes in excess of 10 degrees. **STAY OFF OF STEEP SLOPES!**
- Follow the maintenance instructions outlined in this manual.

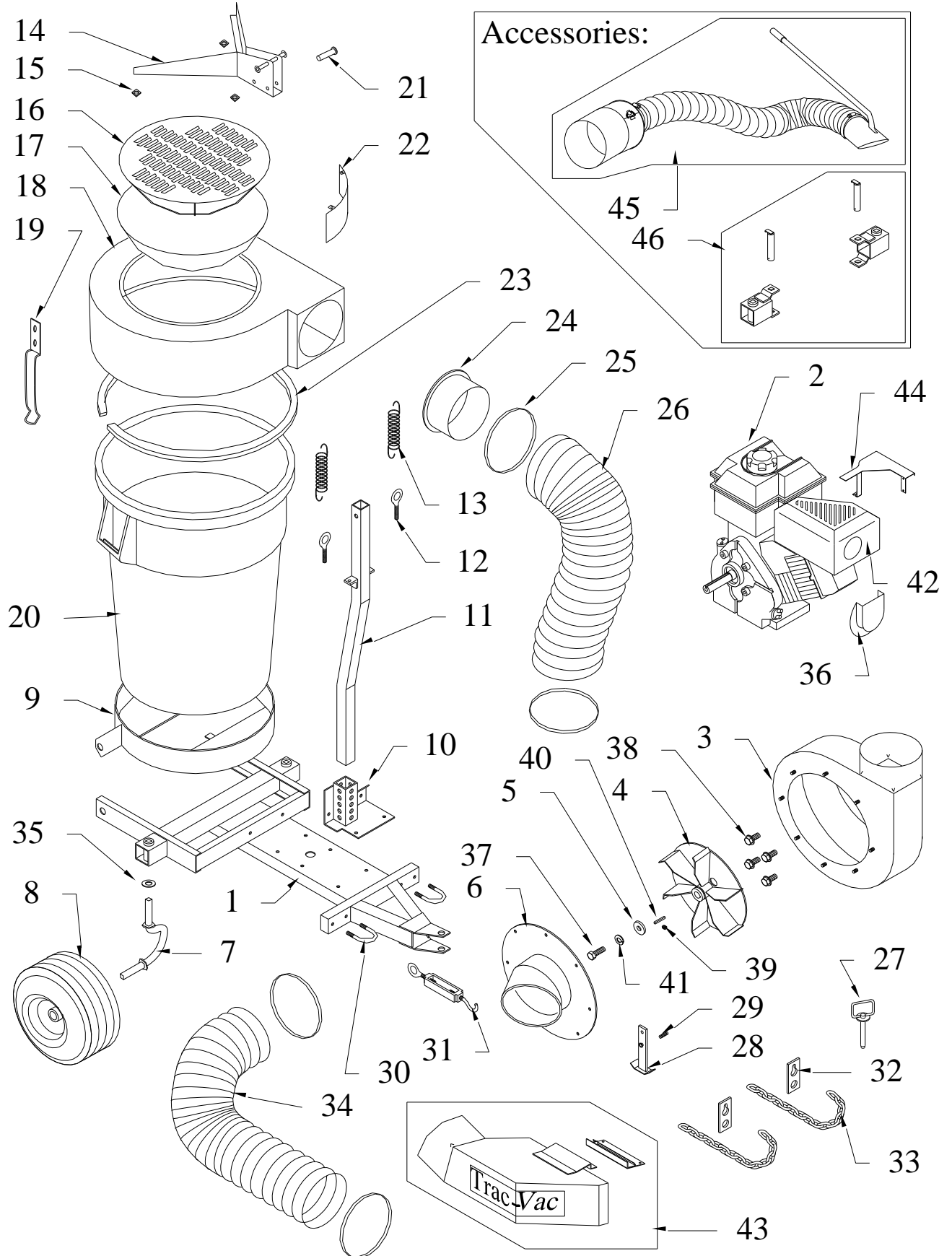
Model 452-IC/H/K/LH Trac-Vac Parts List

<u>Key</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>	<u>Key</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>
1	45210	Frame, RH	1	36	86115	Muffler Deflector (5.5 Briggs)	1
	45211	Frame, LH	1		560221	Muffler Deflector (Honda)	1
2	56021	Engine, 5.5 Briggs Intek IC	1	37	3120608	Turbine Bolt (5.5 Briggs, Honda)	1
	56022	Engine, 5.5 Honda	1	38	3120608	Housing Bolts (5.5 Honda)	4
3	56030	Turbine Housing (5.5 Briggs, Honda)	1	39	3750238	Turbine Set Screw	1
4	56040	Turbine (5.5 Briggs, Honda)	1	40	1871714	Turbine Key (5.5 Briggs, Honda)	1
5	56107	Turbine Washer	1	41	3120801	Turbine Lock Washer (5.5 Honda only)	1
6	58050	Inlet, 6" (5.5 Briggs, Honda)	1		3120802	Turbine Lock Washer (6 Kohler CS6T only)	1
7	45060A	Caster Yoke	2	43	***-6	Deck Chute Ass'y (Deck Specific)	1
8	68050	Wheel	2	44	58075	Engine Guard	1
9	45250	Container Holder, 452	1		56122	Honda Engine Spacer Kit	1
10	45227	Vertical Supp. Brkt., RH	1		45130	Decal, White Trac-Vac 3x12	1
	45229	Vertical Supp. Brkt., LH	1		45131	Decal, White Trac-Vac 2x8	1
11	45226	Vertical Support, 452	1		45133	Decal, Warning Stop Engine	1
12	3120518	Eyebolt	2		48096	Decal, Danger Stop Engine	1
13	48038	Spring	2				
14	46217	Top Support	1				
15	56115	Nylon Spacer	3				
16	46233	Filter Support	1				
17	46228	Filter	1				
18	47222	Molded Top	1				
19	46235	Container Latch	1				
20	46210	44 Gallon Container	1				
21	46218	Clevis Pin	1				
22	46248	Filter Shield	1				
23	46219	Seal	1				
24	48040	Intake Nozzle	1				
25	56102	6" Band Clamp	4				
26	65203	Hose-HD , 6" x 42"	1				
27	58104	Hitch Pin	1				
28	58071	Stand	1				
29	32108	Stand Spring	1				
30	45108	U-Bolt	2				
31	45114	Turnbuckle	1				
32	45111	Chainlock	2				
33	45110	Chain	2				
34	45102	Hose, 6" x 60"	1				
35	45061	Nylon Washer, Caster	2				

Optional Accessories:

<u>Key</u>	<u>Part No.</u>	<u>Description</u>
45	150	4" Remote Pickup Assembly
	160	6" Remote Pickup Assembly
46	45126	7" Caster Extensions

Trac-Vac Model 452-IC/H/K/LH



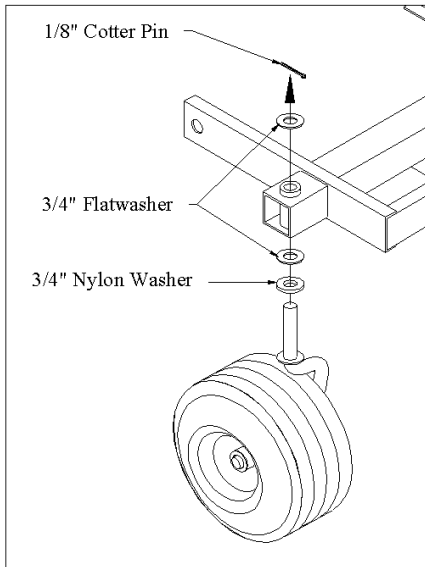


Fig. 1

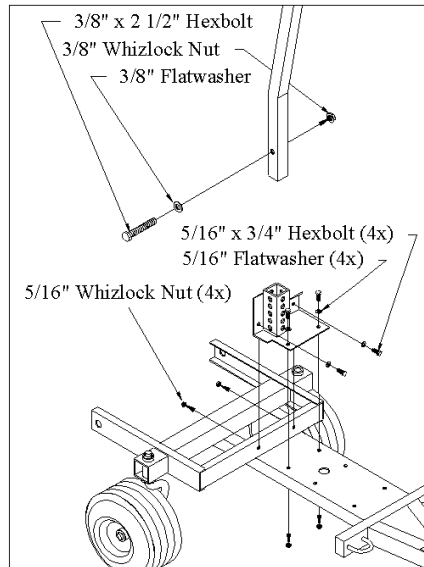


Fig. 2

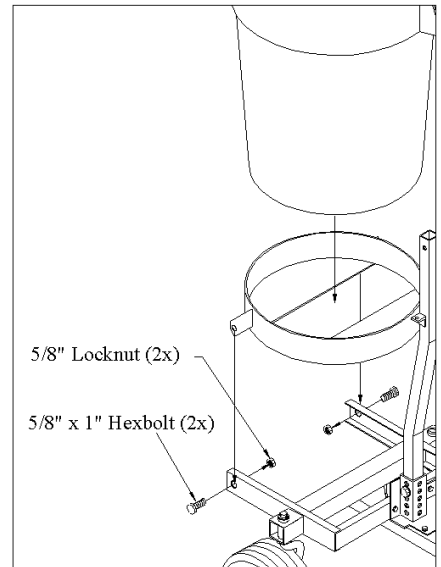


Fig. 3

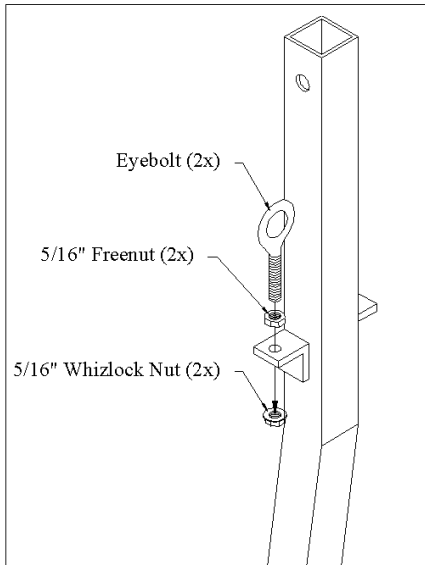


Fig. 4

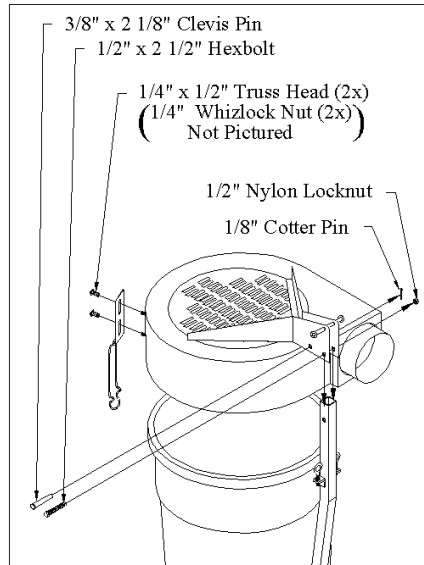


Fig. 5

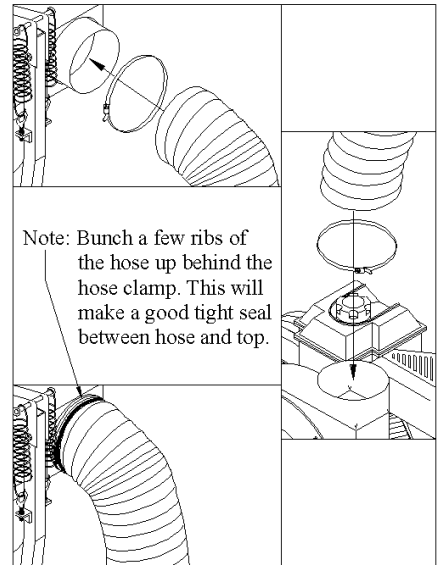


Fig. 6

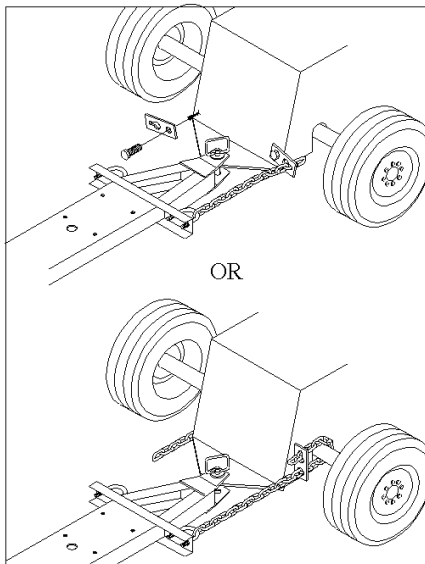


Fig. 7

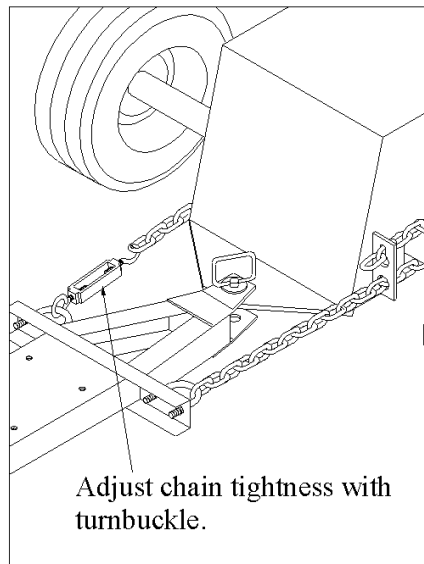


Fig. 8

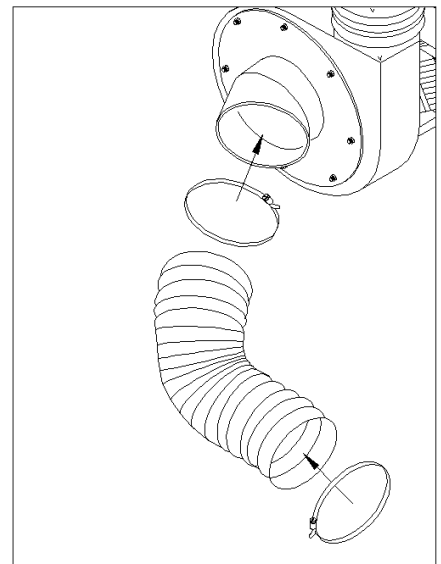


Fig. 9

Model 452 Assembly Instructions

1. Slip one nylon washer (35) over each caster yoke (7) pin. Slip one 3/4" flatwasher over each pin. Insert caster into frame (1). Slip another 3/4" flatwasher over pin and secure with 1/8" cotter pin. **Fig. 1**
2. With vertical support bracket (10) in position as shown, align with holes on frame. Secure with 5/16" x 3/4" hexbolts, 5/16" flatwashers as shown and 5/16" whizlock nuts. **Do not tighten.** Slip vertical upright (11) into receiver tube on support bracket as far as it will slide and align with a mount hole in tubes. Secure with 3/8" x 2 1/2" hexbolt, 3/8" flatwasher and 3/8" whizlock nut. **Again do not tighten.** **Fig. 2**
3. Attach container holder (9) to frame with 5/8" x 1" hexbolt and 5/8" locknut. Place container (20) in holder and tighten bolts until holder supports the container (20) in the tilted position. **Fig. 3**
4. Attach eyebolts (12) to vertical support upper brackets, trapping brackets between 5/16" hexnut and 5/16" whizlock nut. Rotate eyebolts so eyelets face from front to back. **Fig. 4**
5. The molded top assembly is partially assembled by the manufacturer. Attach latch (19) to molded top (18) with 1/4" x 1/2" truss head screws and 1/4" whizlock nuts. Fit filter (17) over filter support (16). Slide intake nozzle (24) thru opening in molded top with lip on inside. Set top assembly on container. Align 1/2" swivel hole on top support (14) with hole on vertical support (11). Secure with 1/2" x 2 1/2" hexbolt and 1/2" nylock nut. Tighten until slight drag is felt when pivoting molded top assembly. Grasp top assembly and pivot upward until springs (13) can be attached to upper spring retainer (on top support) and to eyebolts (on vertical support). Lower top assembly to operating position and immediately slip 3/8" x 2 1/8" clevis pin (21) thru locking pinhole. Secure with 1/8" cotter pin. Slip latch over handle of container. Tighten all bolts to vertical support bracket and vertical support in step 2. **Fig. 5**
6. Slip exhaust hose (26) over intake nozzle (24) and secure with 6" band clamp (25). Note: bunch a few ribs up between the band clamp and the molded top. This will achieve a nice airtight fit to the top. **Fig. 6**
7. To attach unit to tractor, align vacuum drawbar to tractor drawbar hole and drop in hitch pin (27). With vacuum unit attached to tractor, align unit to be directly behind tractor. Attach chain attached to the frame (1) to the rear housing or axle of the tractor keeping chains in line with draw plate of tractor. To attach to the rear housing it may be necessary to bolt the chain locks to the housing. To attach to axle of tractor, slip chain lock onto the chain (through round hole in chain lock), wrap chain around axle and back through chain lock. Pull chain lock snug against axle, pull chain snug through chain lock and lock chain into the chain lock. Attach loose chain in the same manner to opposite side. Attach turnbuckle (31) to end of free chain and to u-bolt (30) on frame (1) of unit. Tighten chains by turning the turnbuckle. Note: do not over tighten chains, frame of vac needs to pivot slightly for the unit to caster efficiently, but be sure the chains are tight enough not to come loose from tractor. **Fig. 7 & 8**
8. Attach chute (42) to mower deck. Attach intake hose to chute and inlet (6). Secure each end with 6" band clamp (25). **Fig. 9**
9. Read engine operating instructions and service engine before starting.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Engine fails to start	<ol style="list-style-type: none"> 1. Spark plug wire disconnected 2. Fuel tank empty 3. Faulty spark plug 	<ol style="list-style-type: none"> 1. Connect wire to spark plug 2. Fill tank with clean fuel 3. Clean, adjust gap or replace
Loss of power or erratic operation	<ol style="list-style-type: none"> 1. Spark plug wire loose 2. Blocked fuel line 3. Water or dirt in fuel system 4. Dirty air cleaner 5. Unit running on choke 	<ol style="list-style-type: none"> 1. Connect & tighten spark plug wire 2. Clean fuel line 3. Disconnect fuel line at carburetor drain fuel tank. Refill with fresh fuel 4. Service air cleaner (refer to engine manual) 5. Move choke lever to OFF position
Engine overheats	<ol style="list-style-type: none"> 1. Engine oil level low 2. Operating below full RPM 	<ol style="list-style-type: none"> 1. Fill crankcase with proper oil 2. Run throttle full open.
Excessive vibration	<ol style="list-style-type: none"> 1. Damaged turbine or loose parts 	<ol style="list-style-type: none"> 1. Stop engine immediately and disconnect spark plug wire. Tighten all bolts & nuts. Make necessary repairs. If vibration continues, have unit serviced by an authorized dealer.
Unit won't pick up.	<ol style="list-style-type: none"> 1. Discharge chute clogged 2. Foreign object lodged in turbine. 3. Container full 	<ol style="list-style-type: none"> 1. Stop engine & disconnect spark plug wire. Clean inside of discharge chute. 2. Stop engine and disconnect spark plug wire. Remove lodged object in turbine. 3. Stop engine and empty container.

NOTE: Please contact the nearest authorized service dealer for repairs beyond the minor adjustments above.

OPERATING PROCEDURE



BEFORE STARTING, Follow the engine manufacturer's instructions in preparing engine for operation. Never fill fuel tank indoors, with engine running or while engine is hot. **Do not smoke while filling tank!**

1. Inspect area to be vacuumed and pickup all harmful objects and litter. Rocks and other harmful debris can do serious damage to vacuum assembly and cause bodily injury.
2. For best vacuuming results operate tractor at manufacturer's recommended speed for best cutting. If grass is high, mow first and vacuum on the second pass.
3. Your vacuum is preset to run at approximately 3800-RPM at no load. Do not slow down engine.
4. SHUT OFF ENGINE TO UNLOAD.
5. When operating tractor on slope or grade, exercise **EXTREME CAUTION**. Do not cut across grade or slope. Mow directly up and down hills.
6. Periodically check all fasteners for tightness.
7. Listen for unusual vibration of engine or air turbine. If excessive vibration is present, **STOP** engine and check for damage to turbine fan.
8. Always shut off tractor engine and vacuum engine before servicing.
9. Replace deflector shield when discharge chute is removed.
10. When removing clogs, **SHUT OFF ALL ENGINES and wait for all moving parts to come to a complete stop! Failure to do so can cause serious bodily injury!**
11. Do not tow unit on public roads
12. Do not carry passengers on unit
13. Avoid sudden turns or maneuvers.



CAUTION!!!!
SPINNING BLADE

EXTENDED STORAGE PROCEDURES

1. Wash and clean vacuum, and lubricate any lubrication points.
2. Drain fuel from the tank and run vacuum until fuel is exhausted in carburetor.
3. Drain and change the engine oil.
4. Clean tires and check pressure. Raising and supporting unit with weight off tires is recommended.
5. When storing a unit with Rubbermaid® containers, leave containers latched to top.
6. Store inside a clean dry area, when not in use.

TRAC VAC WARRANTY POLICY

Midwest Equipment Manufacturing, Inc. will repair or replace, free of charge, any part, or parts that are defective in material or workmanship or both for a period of one year residential use, and 90 day's for commercial and rental use. The purchaser will pay transportation charges on parts submitted for replacement under warranty. For warranty service, contact your local dealer from whom the unit was purchased. There are no other express or implied warranties. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and 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.

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