

TRAC VAC

Model 455-IC/PRO/H



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.



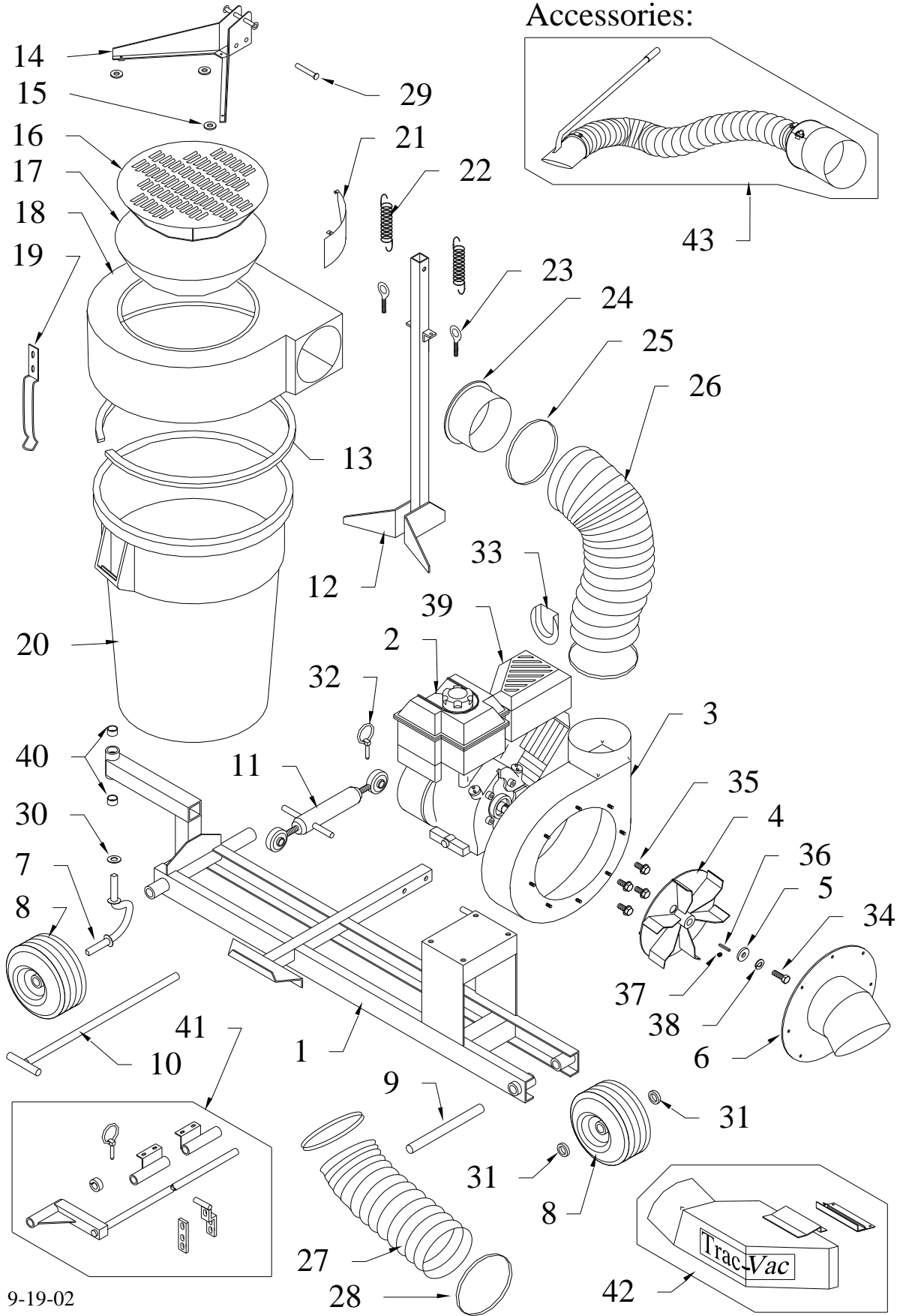
This symbol means Attention!!!! It is used to point out safety precautions.

- 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.



Trac-Vac Model 455-IC/PRO/H/K

Accessories:



9-19-02

Model 455-/H/PRO/K 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	45510	Frame	1		32	85042	Lynch Pin, 1/4" x 1 3/4"	4
2	56021	Engine, 5.5 Briggs Intek IC	1		33	86115	Muffler Deflector (5.5 Briggs,	
	56018	Engine, 6.5 Briggs Intek Pro	1				Intek, 6.5 Briggs Intek Pro)	1
	56022	Engine, 5.5 HP Honda	1			560221	Honda Muffler Deflector	1
3	56030	Turbine Housing			34	3120608	Turbine Bolt, (5.5 Briggs	
		(5.5 Briggs Intek, Honda)	1				Intek)	1
	46242	Turbine Housing (6.5 Briggs				3130112	Turbine Bolt, Honda	1
		Intek Pro)	1			3760110	Turbine Bolt, 6.5 Intek Pro	1
4	56040	Turbine (5.5 Briggs Intek,			35	3120612	Housing Bolt, (5.5 Briggs	
		Honda)	1				Intek, 6.5 Briggs Intek Pro	4
	46253	Turbine, 6.5 Briggs Intek Pro	1			3120608	Housing Bolt, Honda	1
5	56107	Turbine Washer (5.5 Briggs			36	1871714	Turbine Key, (5.5 Briggs	
		Intek, 6.5HP Intek Pro,					Intek, Honda, 6 Kohler	
		5.5HP Honda)	1			2501716	Turbine Key, (6.5 Briggs	
6	88040	Inlet, 8" (5.5 Briggs Intek,					Pro)	1
		Honda)	1		37	3750238	Turbine Set Screw	1
	47050	Inlet, 8" (6.5 Briggs Intek			38	3750801	Turbine Lock Washer, 6.5	
		Pro)	1				Briggs Pro	1
7	45060A	Caster Yoke	1			3120801	Turbine Lock Washer, Honda	1
8	68050	Wheel	2			3120802	Turbine Lock Washer,	
9	48503	Axle Pin, 455	1				6 Kohler CS6T	1
10	48506	Frame Link, 455	1		39	56016	Muffler	1
11	48509	Swivel Arm, 455	1		40	200185	Bronze Bushing	2
12	45515	Vertical Support, 455	1		41	485**	Mount Kit, 455	
13	46219	Seal	1				(Tractor Specific)	1
14	46217	Top Support	1		42	***-8	Deck Chute Ass'y	
15	56115	Nylon Spacer	3				(Deck Specific)	1
16	46233	Filter Support	1			56122	Honda Engine Spacer Kit	1
17	46228	Filter	1			45131	Decal, Warning	1
18	46204	Molded Top	1			45133	Decal, White Trac-Vac	1
19	46235	Container Latch	1			48096	Decal, Danger	1
20	46210	44 Gallon Container	1					
21	46248	Filter Shield	1					
22	48038	Spring	2					
23	3120518	Eyebolt	2					
24	48040	Intake Nozzle	1					
25	56102	6" Band Clamp	2					
26	45501	Hose-HD, 6" x 28"	1					
27	45504	Hose, 8" x 30"	1					
28	18119	8" Band Clamp	2					
29	46218	Clevis Pin	1					
30	45061	Nylon Washer	1					
31	56029	Spacer	2					

Optional Accessories

<u>Key</u>	<u>Part No.</u>	<u>Description</u>
43	190	8" Remote Pickup Assembly

Model 455- Trac-Vac Assembly Instructions

1. Slip axle pin (9) thru frame (1) support tube and wheel (8), trapping one $\frac{3}{4}$ " flatwasher and one spacer (31) on each side of wheel. Place one $\frac{3}{4}$ " flatwasher on each end of axle pin and secure with $\frac{1}{8}$ " cotter key. **Fig. 1**
2. Slip $\frac{3}{4}$ " nylon washer (30) over caster yoke (7) assembly pin. Slip $\frac{3}{4}$ " flatwasher over pin. Insert caster pin thru rear frame support tube. Slip $\frac{3}{4}$ " flatwasher over pin and secure assembly with $\frac{1}{8}$ " cotter key. **Fig. 2**
3. With turbine housing (3) facing front of frame, align engine with engine plate holes and secure with four $\frac{5}{16}$ " x $1\frac{1}{4}$ " bolts and $\frac{5}{16}$ " locknuts. **Fig. 3**
4. Place vac assembly beside tractor with engine to the front. Front wheel of vac **must** align with drive wheel of mower. **Fig. 4**
5. Attach mounting kit to tractor. See instructions supplied with each mounting kit.
6. Align rear frame tube with swingarm tube and slip frame link (10) thru. Secure with $\frac{1}{4}$ " lynch pin (#). **Fig. 5**
If necessary, adjust swivel arm (11) until frame parallels tractor. **Fig. 6**
7. With vertical support (12) in position, slip lower brackets over frame tube. Secure with $\frac{3}{8}$ " x $2\frac{1}{2}$ " bolt and whizlock nut. Do not tighten. **Fig. 7**
8. Spin $\frac{5}{16}$ " hexnuts onto eyebolts (23). Fit eyebolts thru eyebolt brackets on vertical support and secure with $\frac{5}{16}$ " whizlock nuts. **Fig. 8**
9. Place molded top assembly on top of container. Align pivot hole on top support to pivot hole on vertical upright. Secure with $\frac{1}{2}$ " x $2\frac{1}{4}$ " bolt and $\frac{1}{2}$ " nylock nut. Tighten until slight drag is felt when pivoting top. Pivot upwards until springs (22) can be attached to spring retainer on top support and onto eyebolts. Lower top assembly and slip clevis pin (29) thru locking pin hole. Secure with $\frac{1}{8}$ " x 1 " cotter key. With container sitting flat on frame, tighten bolts at base of vertical upright. **Fig. 9**
10. Align slots on container latch (19) to holes on molded top and secure with $\frac{1}{4}$ " x $\frac{1}{2}$ " truss screws and whizlocks. **Fig. 10**
11. Peel paper backing away from seal (13). Apply adhesive surface to lip on bottom of molded top as shown. **Fig. 11**
12. Fit filter (17) over filter support assembly (16). **Fig. 12**
13. Slide intake nozzle (24) thru intake opening of molded top with lip inside. Slip 6 " x 28 " hose (26) over intake nozzle. Seat hose against molded top and secure with 6 " band clamp (25). **Fig. 13**
14. Slip free end of 6 " x 28 " hose over turbine housing (3) neck and secure with 6 " band clamp. **Fig. 14**
15. Attach chute to deck opening on tractor with pins or bolts supplied. **Fig. 15**
16. Slip one end of 8 " x 30 " hose (27) over chute and secure with 8 " band clamp (28). Slip remaining end of hose over turbine inlet (6) and secure with 8 " band clamp. If necessary, trim off excess hose. **Fig. 16**
17. Grease all zerk fittings. Read engine operating instructions and service engine before starting. **Fig. 17**

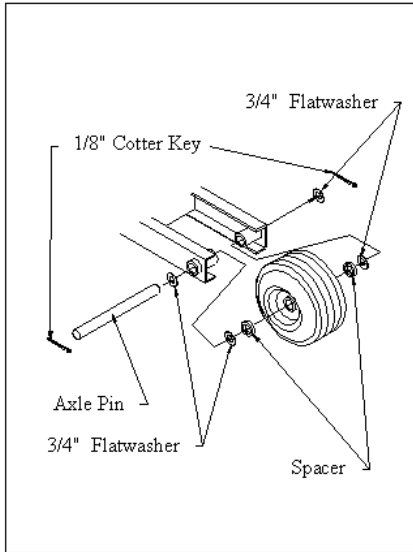


Fig. 1

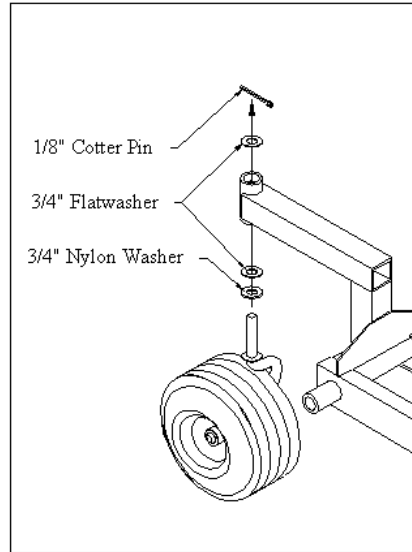


Fig. 2

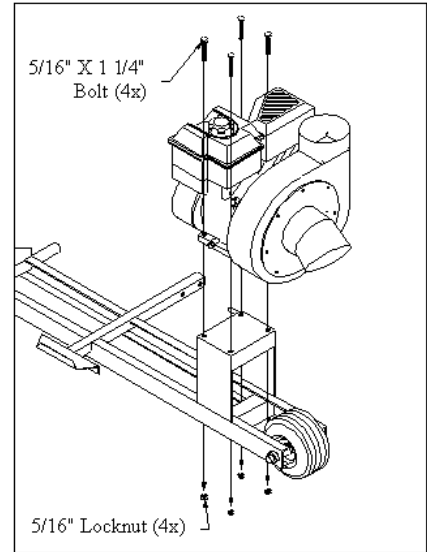


Fig. 3

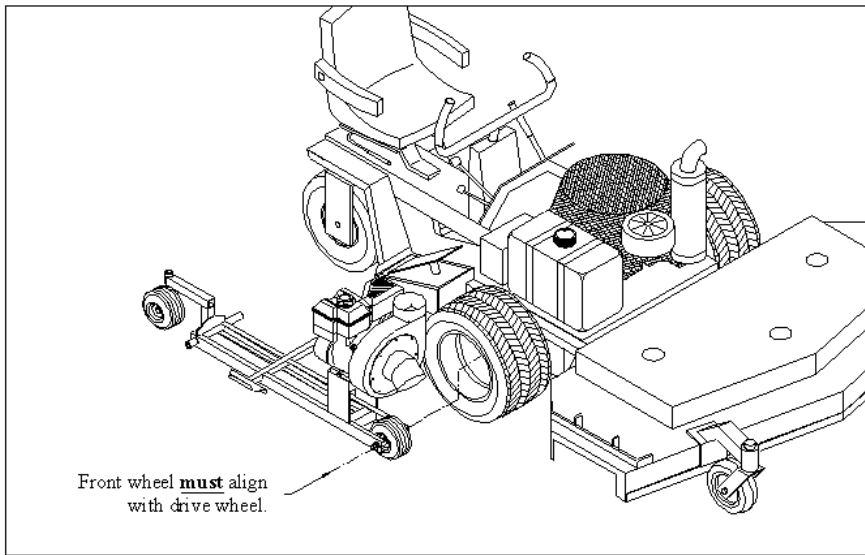


Fig. 4

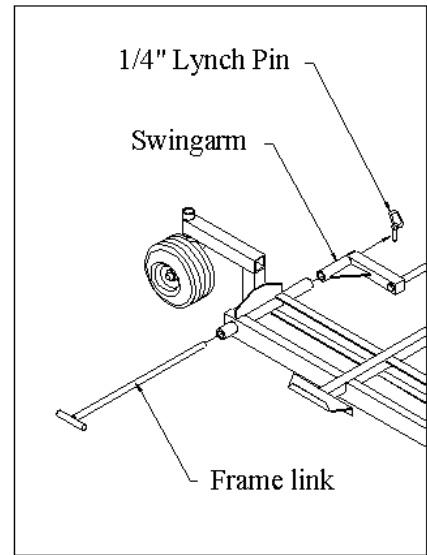


Fig. 5

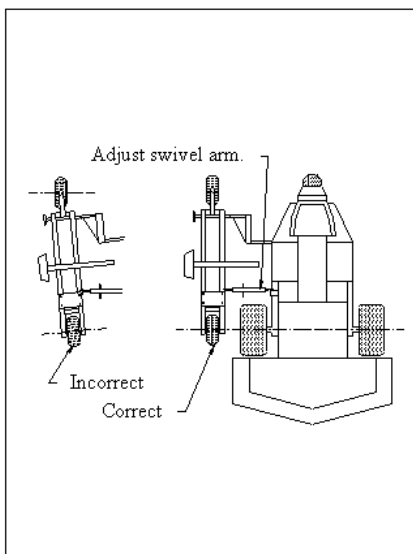


Fig. 6

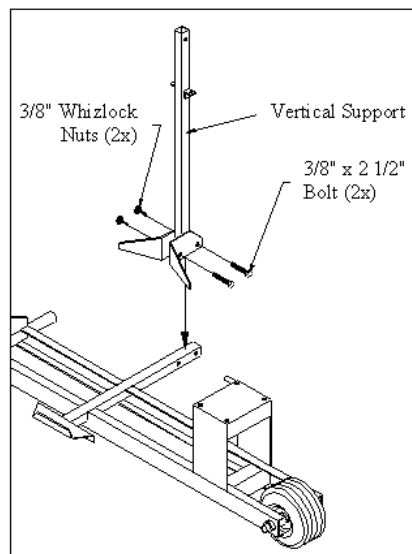


Fig. 7

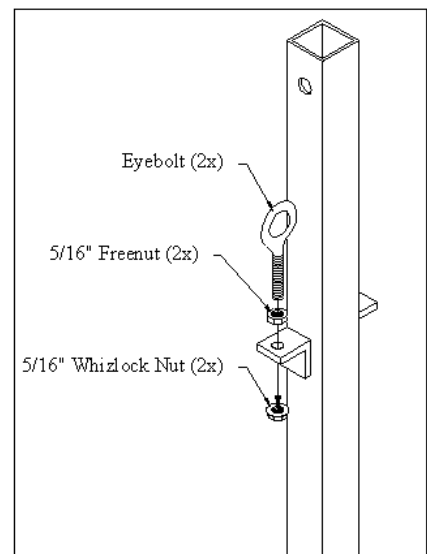


Fig. 8

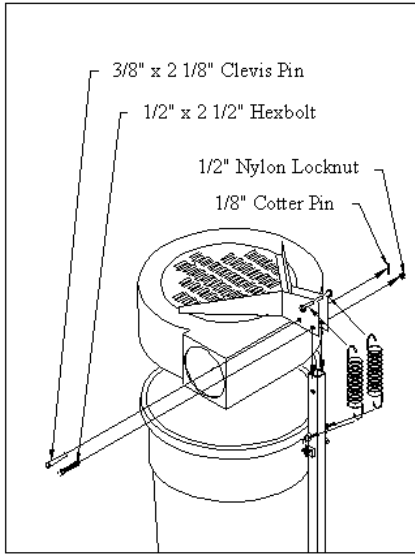


Fig. 9

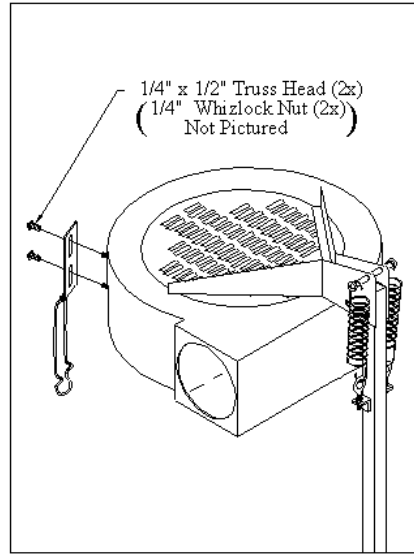


Fig. 10

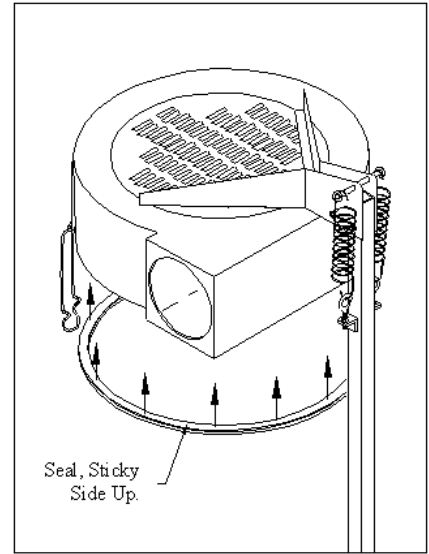


Fig. 11

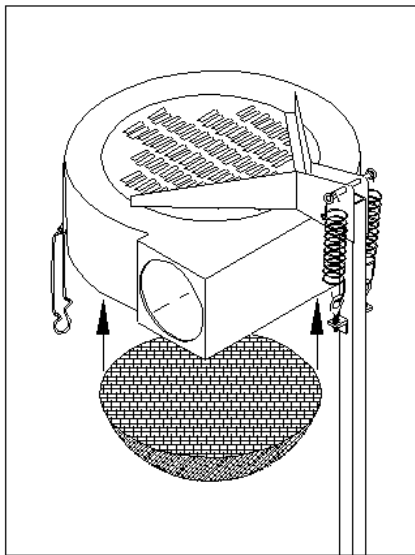


Fig. 12

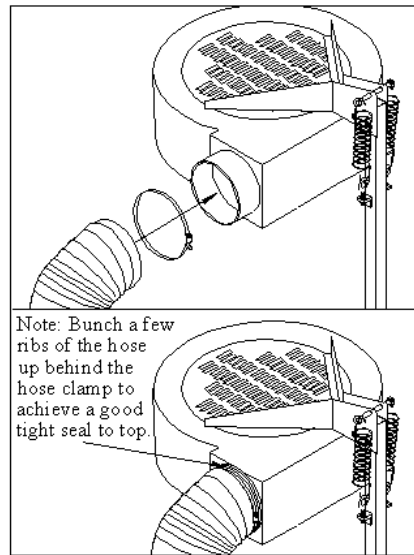


Fig. 13

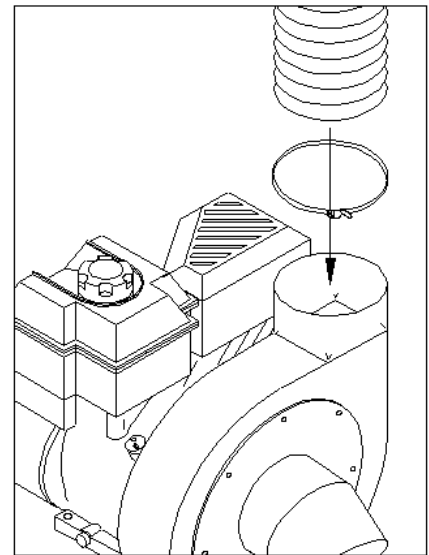


Fig. 14

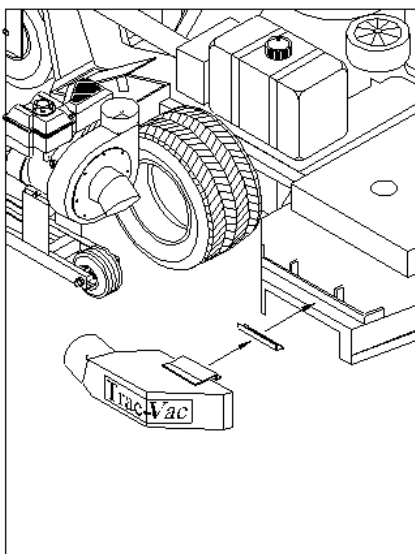


Fig. 15

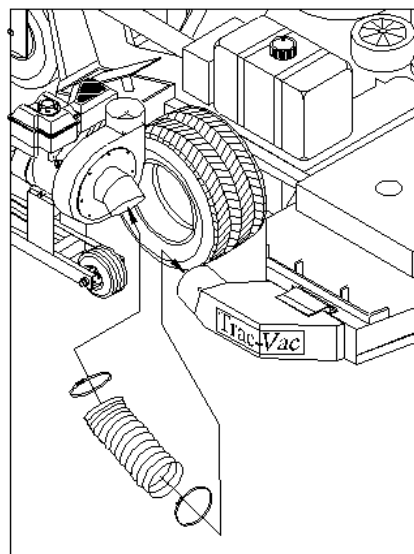


Fig. 16

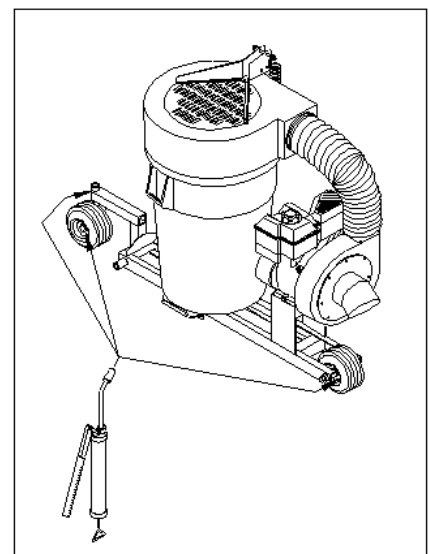


Fig. 17

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 3200-RPM (380), 3800-RPM (385), 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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