

TRAC VAC

Model 462-ZIC/ZH/ZPRO



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.



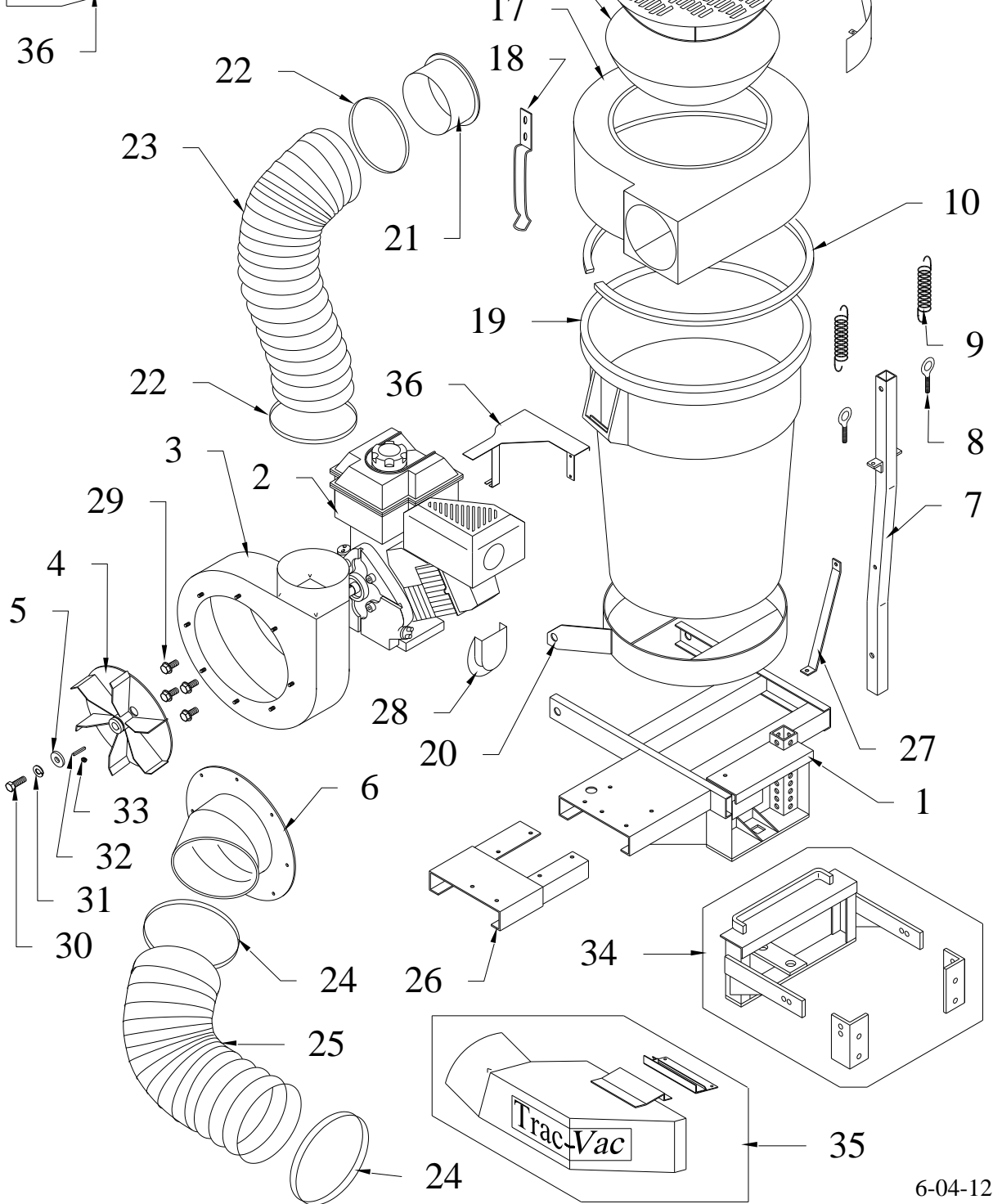
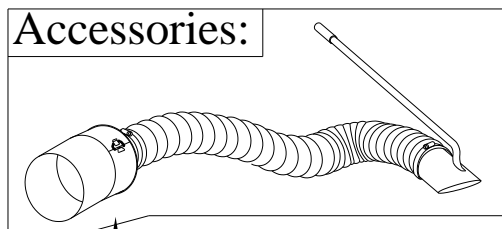
Model 462-Z/ZH/ZPRO/ZK Trac-Vac Parts List

<u>Key</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>
1	46267	Heavy Frame, RH	1
2	56021	Engine, 5.5 HP Briggs Intek IC	1
	56022	Engine, 5.5 HP Honda	1
	56018	Engine, 6.5 HP Briggs Intek Pro	1
	56014	Engine, 6 HP Robin/Subaru	1
	52048	Engine, 6.5 HP Vanguard	1
3	56030	Turbine Housing (5.5 Briggs, Honda)	1
	46242	Turbine Housing (6.5 Briggs)	1
4	56040	Turbine (5.5 Briggs, Honda)	1
	46253	Turbine (6.5 Briggs Pro)	1
5	56107	Turbine Washer	1
6	88040	Inlet, 8" (5.5 Briggs, Honda)	1
	47050	Inlet, 8" (6.5 Briggs, Kohler)	1
7	46246	Vertical Support, 462-Z	1
8	3120518	Eyebolt	2
9	48038	Spring	2
10	46219	Seal	1
11	46248	Filter Shield	1
12	46218	Clevis Pin	1
13	46217	Top Support	1
14	56115	Nylon Spacer	3
15	46233	Filter Support	1
16	46228	Filter	1
17	46204	Molded Top	1
18	46235	Container Latch	1
19	46210	44 Gallon Container	1
20	46230	Container Holder	1
21	48040	Intake Nozzle	1
22	56102	6" Band Clamp	2
23	46103	Hose, 6" x 36"	1
24	18119	8" Band Clamp	2
25	86101	Hose, 8" x 60"	1
26	46244	Engine Plate Extension	1
27	46247	Support Brace	1
28	86115	Muffler Deflector (5.5, 6.5 Briggs)	1
	56016A	Muffler Deflector (Kohler CS)	1
	560221	Muffler Deflector (Honda)	1
29	3120612	Housing Bolt, 5/16"-24 x 5/8" (5.5, 6.5 Briggs)	4
	3120608	Housing Bolt, 5/16"-24 x 1" (Honda)	4
30	4370109	Turbine Bolt, 7/16"-20 x 1 1/4" (5.5 Briggs)	1
	3130112	Turbine Bolt, 5/16"-24 x 1 1/2" (Honda)	1
	3760110	Turbine Bolt, 3/8"- 24 x 1 1/4" (6.5 Briggs)	1
31	3120801	Turbine Bolt Lock Washer (Honda)	1
	3750801	Turbine Bolt Lock Washer (6.5 Briggs)	1
32	1871714	Turbine Key (5.5 Briggs, Honda)	1
	2501716	Turbine Key (6.5 Briggs)	1
33	3750238	Turbine Set Screw (5.5, 6.5 Briggs, Honda)	1
34	46***	Hitch Ass'y, 462 (Tractor Specific)	1
35	***-8	Deck Chute Ass'y (Deck Specific)	1
36	58075	Engine Guard	1
	56122	Honda Engine Spacer Kit	1
	56016	Kohler Muffler CS	1
	45130	Decal, 3 x 12, T-V White on Clear	1
	45131	Decal, 2 x 8, T-V White on Clear	1
	45133	Decal, Warning	1
	48096	Decal, Danger	1

Optional Accessories:

<u>Key</u>	<u>Part No.</u>	<u>Description</u>
36	190	8" Remote Pickup Assembly

Trac-Vac Model 462-ZIC/ZH/ZPRO/ZK



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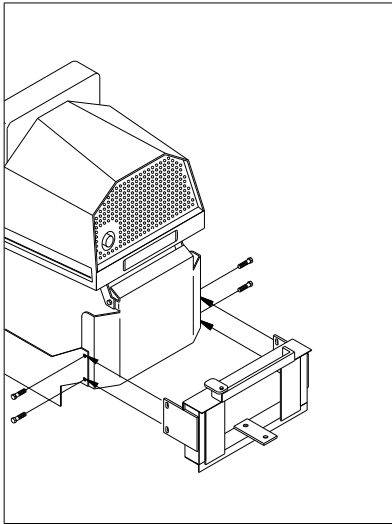


Fig. 1

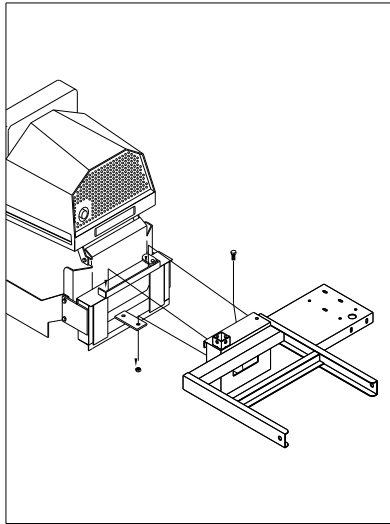


Fig. 2

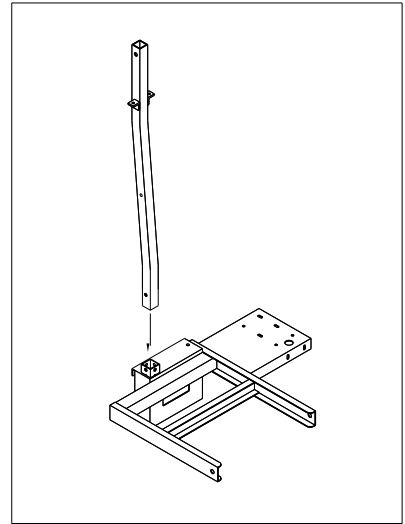


Fig. 3

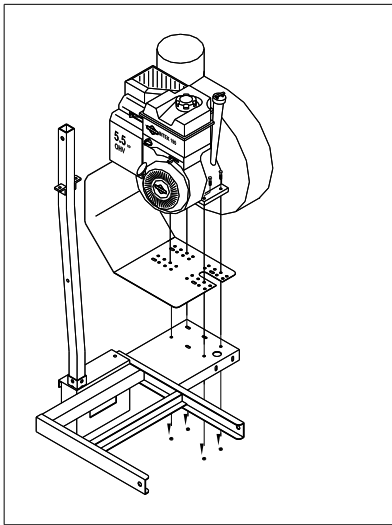


Fig. 4

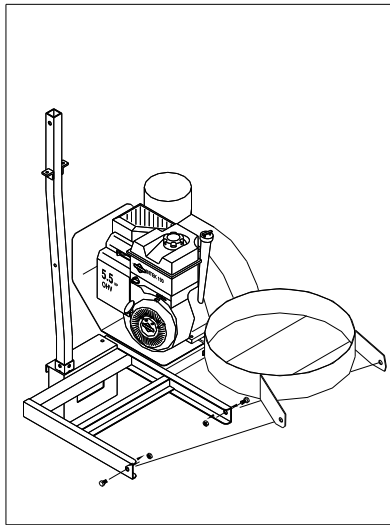


Fig. 5

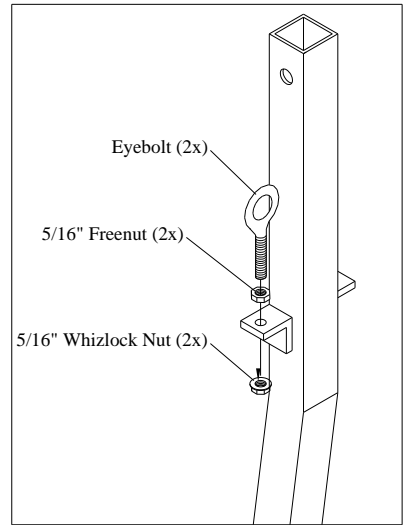


Fig. 6

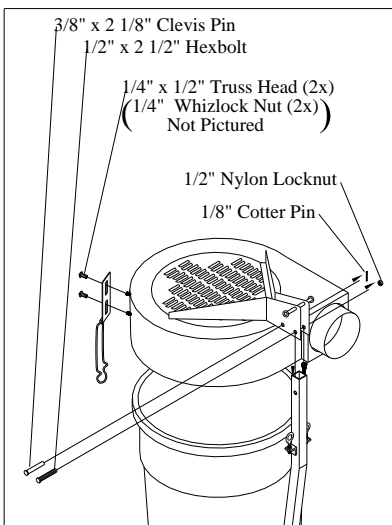


Fig. 7

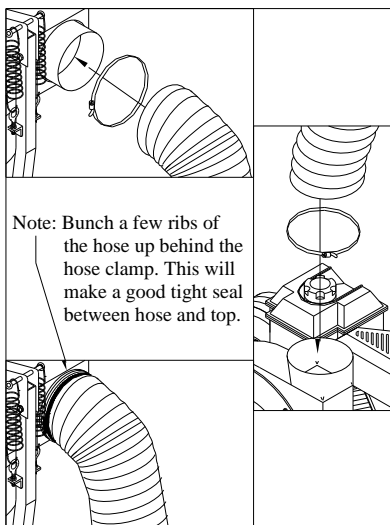


Fig. 8

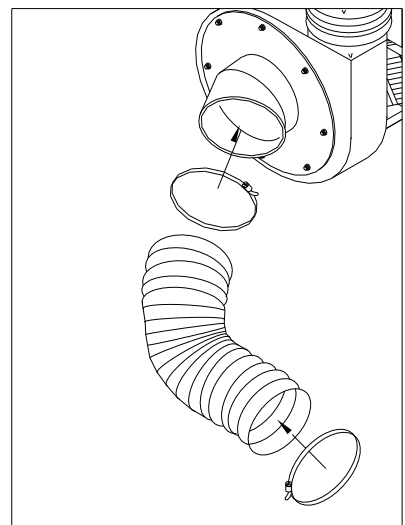


Fig. 9

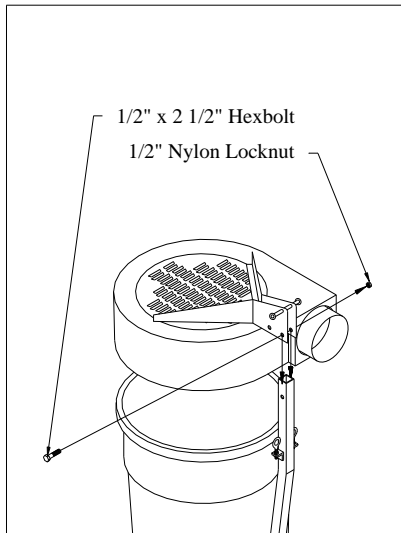


Fig. 10

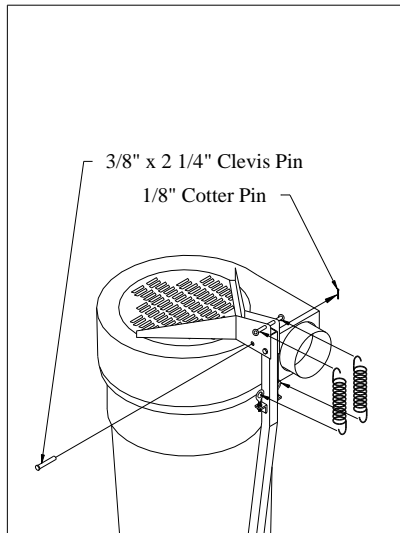


Fig. 11

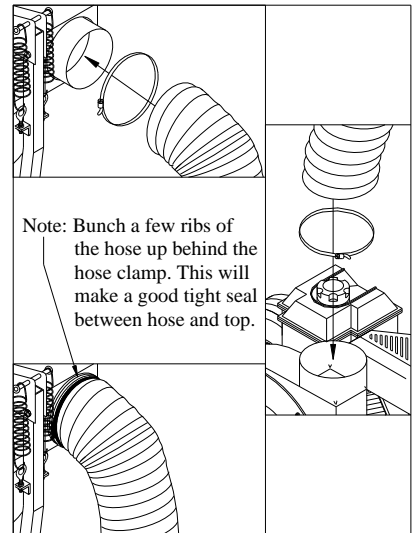


Fig. 12

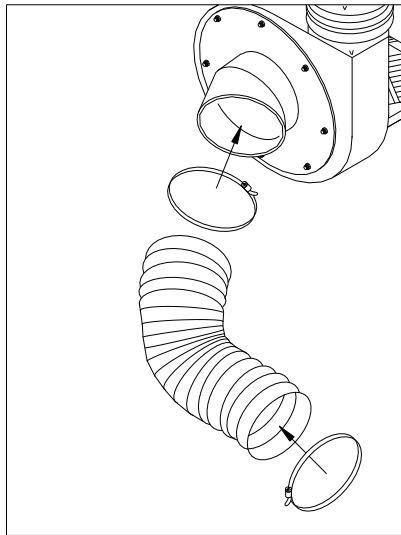


Fig. 13

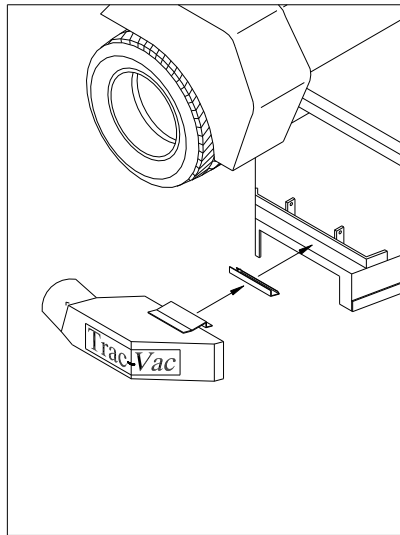


Fig. 14

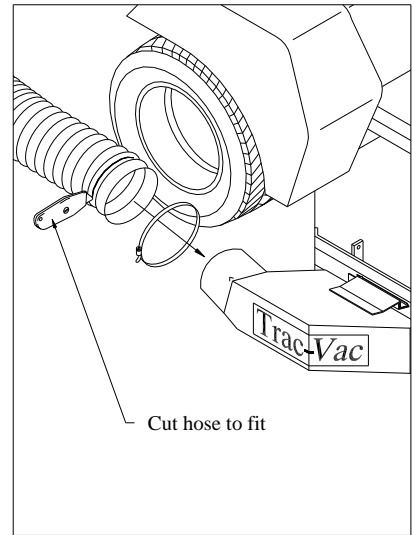


Fig. 15

1. Mount hitch (29) to tractor. Each different tractor has its own specific hitch so the look and method of attachment may be slightly different than pictured but the hitch should always be mounted with the lip upward. Many come with specific instructions in the box with the hitch. **Fig. 1**
2. Attach frame (1) onto hitch (29) by hooking lip of frame box onto lip of hitch and sliding the frame to the right or left until hole in bottom of hitch box aligns with hole in drawplate of the hitch installed in step 1. Secure with 5/8" x 1 1/2" carriage bolt, 5/8" split lock washer and 5/8" hexnut. Once secured, pivot lock tab over corner of lip on the frame (1) and tighten bolt. **Fig. 2**
3. Slip vertical support (7) into receiver tube on frame (1), with offset towards tractor (away from frame) as shown. Align slot in support brace (27) with hole about halfway up vertical support (7) and loosely secure with 3/8" x 2 1/2" hexbolt and whizlock nut. Adjust the height of the vertical support until the lower hole in the brace aligns with the hole in the top of the box on the frame (1). Loosely secure the upright with a 3/8" x 2 1/2" hexbolt and whizlock nut and the bottom of the brace with a 3/8" x 1" hexbolt and whizlock nut. **Fig. 3**

4. Mount air turbine assembly onto frame (1) with four 5/16" x 1 1/4" hexbolts, 5/16" flatwashers and 5/16" locknuts. Trap the exhaust shield between the engine and the engine plate as shown. Note: some applications require rotating the engine assembly 90° from the standard location to avoid interference between the engine assembly and the rear of the tractor. If needed, slip the engine plate extension (26) into the end of engine plate on frame (1) and secure with a minimum of two 5/16" x 3/4" hexbolts and whizlock nuts. (Note: bolt #3 may be omitted if recoil housing on engine will not allow it). The exhaust shield is not needed when air turbine assembly mounts 90° with the engine plate extension. **Fig. 4-6**
5. Attach container holder (20) to frame with two 5/8" x 1" hexbolts and locknuts. Tighten bolts until ring supports the container (19) in a tilted position. **Fig. 7**
6. Attach eyebolts (8) to brackets on vertical support by trapping brackets between 5/16" hexnut and 5/16" whizlock. Rotate eyebolts so that eyelets face from front to back. **Fig. 8**
7. The molded top assembly has been partially assembled by the factory. Fit the filter (16) over the filter support inside the top. Slide intake nozzle (21) through hole in top from the inside out with the lip inside. Attach the latch (18) to molded top with two 1/4" x 1/2" truss head screws and whizlock nuts. **Fig. 9**
8. Place container in container ring. Set top assembly down onto container. Align 1/2" swivel hole in top assembly (hole furthest from top) with top hole in vertical support. Secure with 1/2" x 2 1/2" hexbolt and 1/2" nylon locknut. Tighten until slight drag can be felt when pivoting assembly. **Fig. 10**
9. Pivot top assembly back until the springs (9) can be attached to upper spring retainers on top support and to the eyebolts on vertical support installed in step 6. Once springs are attached pull top assembly down onto container and immediately slip 3/8" x 2 1/4" clevis pin through locking hole in top support and secure with 1/8" cotter key. This locking pin will not allow top to rotate all the way around and allow the springs to come off. Rotate container until container latch (18) lines up with a handle on container (19) and secure latch by locking it over handle. Note: latch may have to be adjusted to be tight on handle. Once achieved, tighten bolts in vertical support (7) and vertical support brace (27). **Fig. 11**
10. Attach discharge hose (23) to intake nozzle in molded top with 6" band clamp (22) Note: try to bunch a few ribs of hose up between the band clamp and the molded top to achieve a more airtight attachment. Once achieved, attach the other end of exhaust hose to the exhaust on the blower housing with the other 6" band clamp (22) provided. **Fig. 12**
11. Attach intake hose (25) to inlet on blower housing with 8" band clamp (24). **Fig. 13**
12. Attach chute to mower deck, the chutes are also deck specific so your chute may look and attach differently than what is pictured. Usually the chutes require mounting an adapter to the deck to accept the bracket on the chute or for the chute to pin into it. Most of the time the adapters pick up existing holes on the deck but occasionally they do not. If they do not, clip or pin the chute into the adapter, hold the chute up to the deck and adjust to the best fit. Once best fit is achieved, mark and drill holes through the deck. If 1/4" hardware is to be used drill with 9/32" bit, if 5/16" hardware is to be used drill with 11/32" bit and if 3/8" hardware is to be used drill with 13/32" drillbit. After drilled, attach with hardware provided. **Fig. 14**
13. Cut intake hose to fit and attach free end of intake hose (25) to discharge chute with 8" band clamp (24). **Fig. 15**
14. Read engine-operating instructions 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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