

Operating and Assembly Manual

Midwest Equipment Mfg. 5225 Serum Plant Road Thorntown, IN 46071

10/14/2018

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.

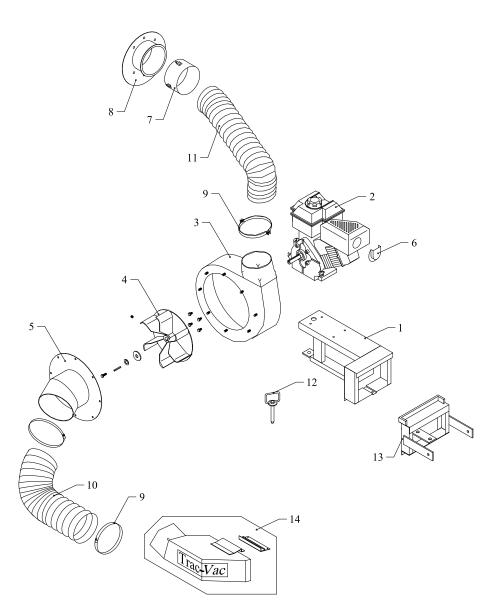


This symbol means Attention!!!!! It is used to point out safety precautions.

- 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.

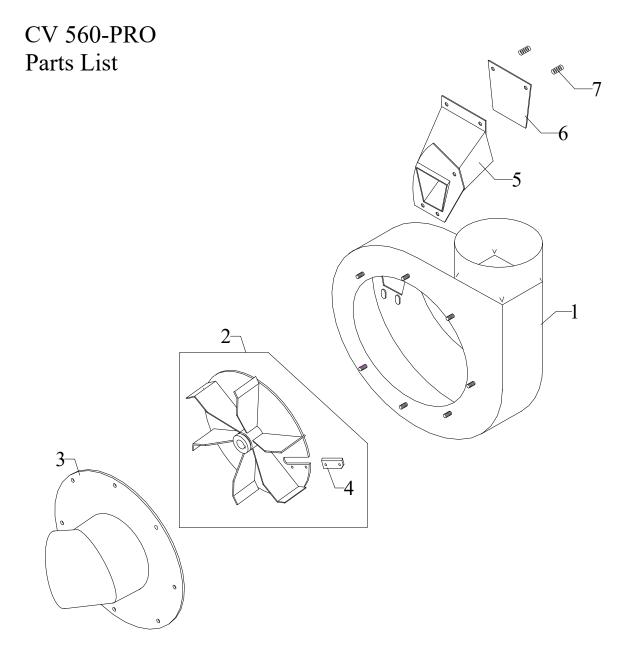


- Keep hands, feet, face, long hair and clothing out of inlet and discharge areas. There are **ROTATING BLADES** inside these openings.
- Make certain that all moving parts come to a complete stop before cleaning, repairing or inspection. Disconnect spark plug wire and keep away from plug to prevent 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 cart while engine in 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 cart 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 560 TRAC VAC

KEY	PART #	DESCRIPTION	KEY	PART #	DESCRIPTION
1	56010	Frame, RH	7	56060	Hose Connector, 6"
	56011	Frame, LH	8	56070	Cart Connector, 6"
	56012	Frame, Elec.	9	56102	Band Clamp, 6"
2	56021	Engine, INTEK 206 I/C 3/4"	10	45102	Intake Hose, 6" x 60"
	56022	Engine, GX160 Honda	11	56103	Exhaust Hose, 6" x 48"
	56018	Engine, 206CC Intek Pro 1"	12	58104	Hitch Pin
3	56030	Turbine Housing	13	*****	Hitch (tractor specific)
	46242	Turbine Housing, 560 Pro	14	****	Chute, (tractor specific)
4	56040	Turbine		58104	Key Switch (elec. only)
	46253	Turbine , 1" Bore		56029	Turbine Spaccer (Honda & elec.)
5	58050	Inlet, 580			
6	86115	Muffler Deflector			

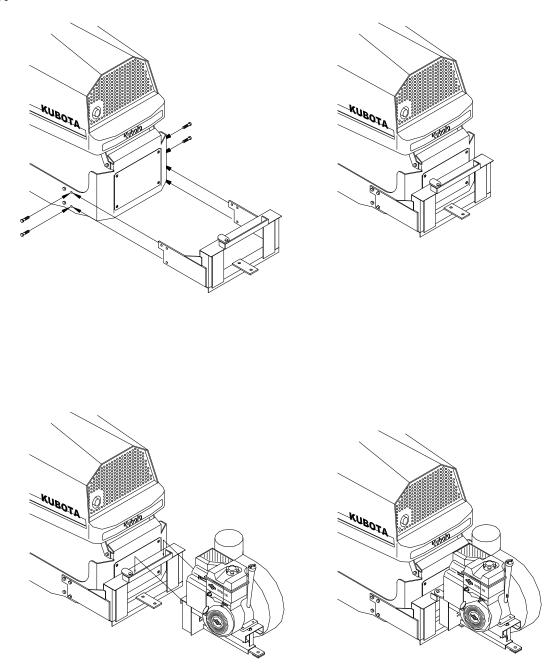


Key	Part No.	Description	Qty.
1	38030	Turbine Housing	1
2	56055	Pro Chipper Turbine, 1" Bore	1
3	58036	8" Inlet, CV Angled	1
4	38041	Chipper Knife	2
5	38065	Chipper Inlet	1
6	38066	Guard, Chipper	1
7	32108	Spring, Lock Pin	2

560 General Instructions

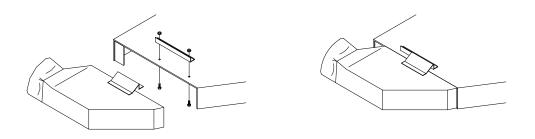
Your Model 560 TRAC VAC is designed to mount directly to your lawn and garden tractor and is assembled to make your task easier and quicker.

First, attach the tractor specific hitch to the rear of your tractor with the lip upward. Attach with pins or bolts supplied.



Next, mount air turbine assembly by hooking lip of attaching frame onto hitch and bolting securely to draw bar with 5/8" HHC screw, free spinning nut and lock washer.

To mount the discharge chute, it is sometimes necessary to remove the deflector shield or lift it out of the way. Place chute adapter on mower deck. Line up holes in chute adapter with the holes in mower deck. Attach with hardware included and tighten securely. If the holes do not line up with holes in chute adapter, place discharge chute in position mower deck. Mark and drill holes thru deck and attach adapter.



Next, attach hoses. Slip hose clamps over ends of hose. The 60 inch length connects air turbine assembly and discharge chute. **Fig. A** Fasten clamps about 1" from ends and tighten securely. The 48 inch hose attaches to discharge side of air turbine and snap connector. Try to keep the hose level or below where it connects to the cart. **Fig. B** Trim the hose if necessary.

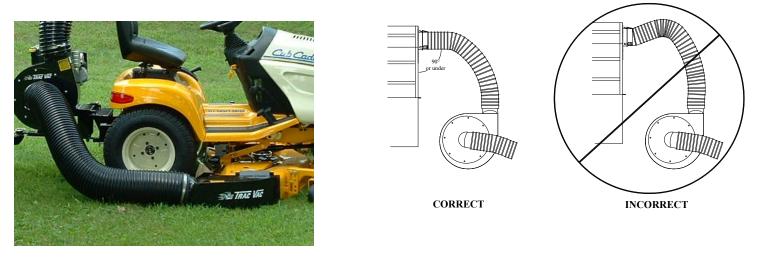


Fig. A

Fig. B

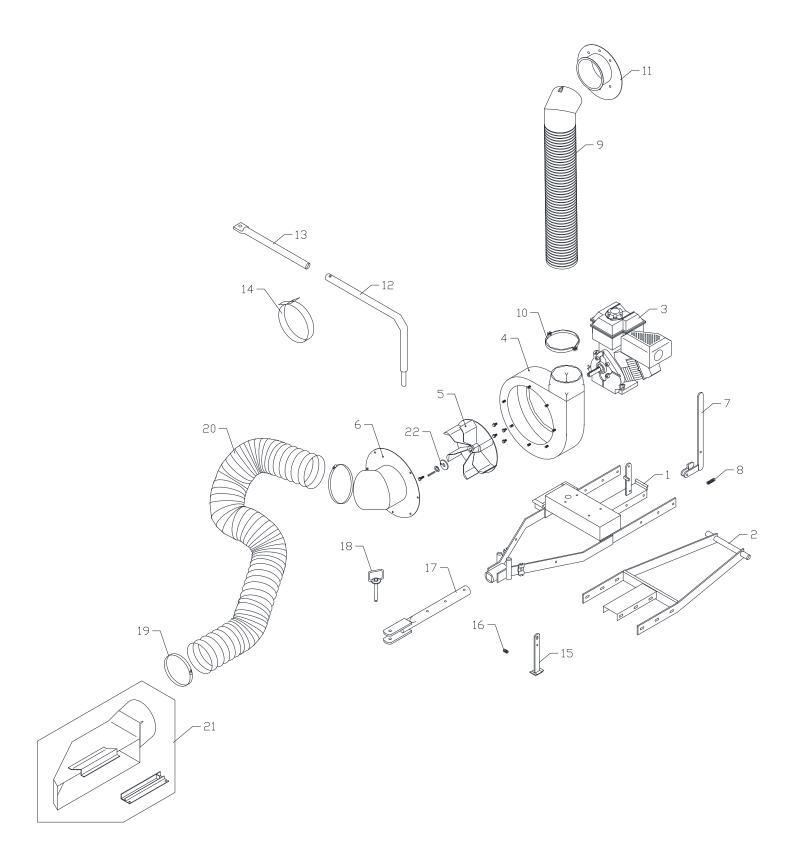
CAUTION!

Replace deflector shield when running mower without discharge chute. DO NOT remove discharge chute while tractor is running.

MODEL 580 Trac-Vac Parts List

Key	Part #	Description
1	58047	Main Frame
	58045	Main Frame, elec.
2	58048	Sub Frame
	58046	Sub Frame, 1" axle
3	56021	Engine, 5.5 HP Intek
	56022	Engine, 5.5 HP Honda
	56018	Engine, 6.5 HP Intek
	52048	Engine, 6.5 HP Vanguard
4	56030	Turbine Housing, 6"
	46242	Turbine Housing
5	46253	Turbine, 1" Bore
	56040	Turbine, 5 HP
6	58050	Inlet, 6" small back
	58036	Inlet, 6" big back
7	58061	Latch
8	58062	Latch Spring
9	58040	Exhaust Hose (Metal)
10	45101	Metal Hose Clamp
11	56070	Cart Connector, 6"
12	58023	Support Arm, 580
13	58022	Support Arm Extension, 15"
14	58072	Hose Support Strap
15	58071	Stand
16	32108	Stand Spring
17	58063	Drawbar
18	58104	Hitch Pin
19	56102	Band Clamp
20	58101	Intake Hose, 6" x 90"
21	560221	Muffler Deflector (Honda)
22	***-6	Chute Assembly (Deck Specific)
23	56107	Turbine Washer
	45131	Decal, 2 x 8 Trac-Vac White
	45133	Decal, Warning Stop Engine
	58095	Decal, 580 Serial #
	86027	Spacer, (580 elec.)
	56029	Turbine Spacer, (Honda & elec.)

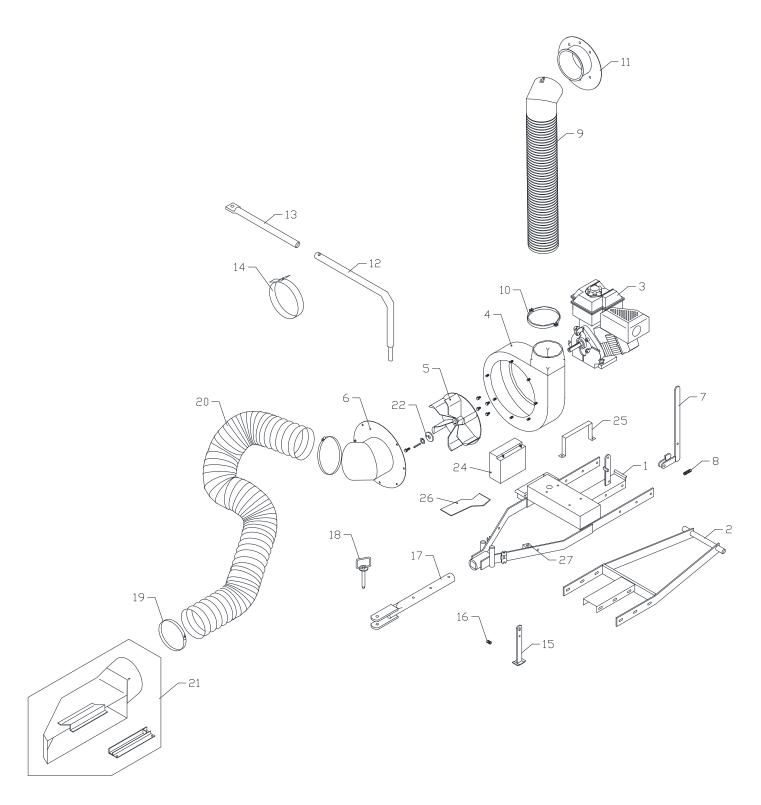
MODEL 580 TRAC VAC

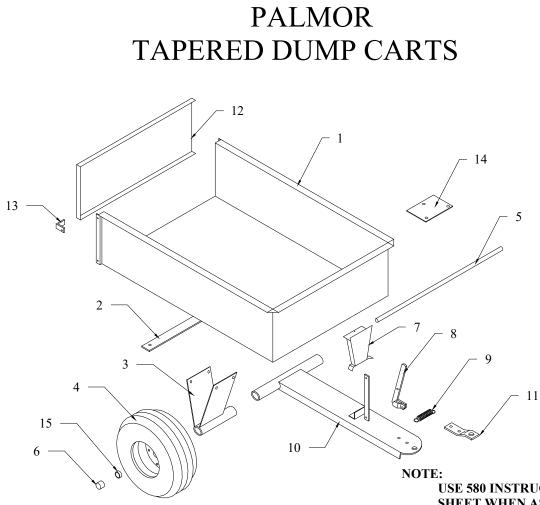


MODEL 580-EL Trac-Vac Parts List

Key	Part #	Description
1	58047	Main Frame
	58045	Main Frame, elec.
2	58048	Sub Frame
	58046	Sub Frame, 1" axle
3	56021	Engine, 5.5 HP Intek
	56022	Engine, 5.5 HP Honda
	56018	Engine, 6.5 HP Intek
4	56030	Turbine Housing, 6"
	46242	Turbine Housing
5	46253	Turbine, 1" Bore
	56040	Turbine, 5 HP
6	58050	Inlet, 6" small back
	58036	Inlet, 6" big back
7	58061	Latch
8	58062	Latch Spring
9	58040	Exhaust Hose (Metal)
10	45101	Metal Hose Clamp
11	56070	Cart Connector, 6"
12	58023	Support Arm, 580
13	58022	Support Arm Extension, 15"
14	58072	Hose Support Strap
15	58071	Stand
16	32108	Stand Spring
17	58063	Drawbar
18	58104	Hitch Pin
19	56102	Band Clamp
20	58101	Intake Hose, 6" x 90"
21	560221	Muffler Deflector (Honda)
22	***-6	Chute Assembly (Deck Specific)
23	56107	Turbine Washer
24	16009	Battery
25	16045	Strap, battery
26	16008	Pad, battery
27	18110	Key Switch
	45131	Decal, 2 x 8 Trac-Vac White
	45133	Decal, Warning Stop Engine
	58095	Decal, 580 Serial #
	86027	Spacer, (580 elec.)
	56029	Turbine Spacer, (Honda & elec.)

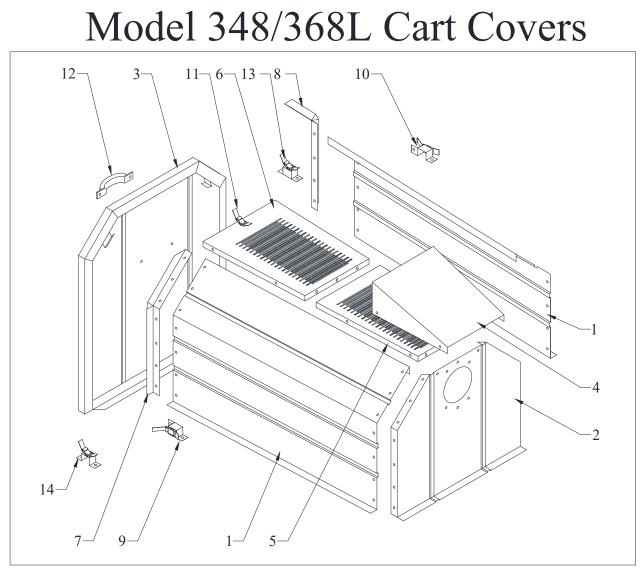
MODEL 580-EL TRAC VAC





E: USE 580 INSTRUCTION SHEET WHEN ASSEMBLING FOR MODEL 580 APPLICATION

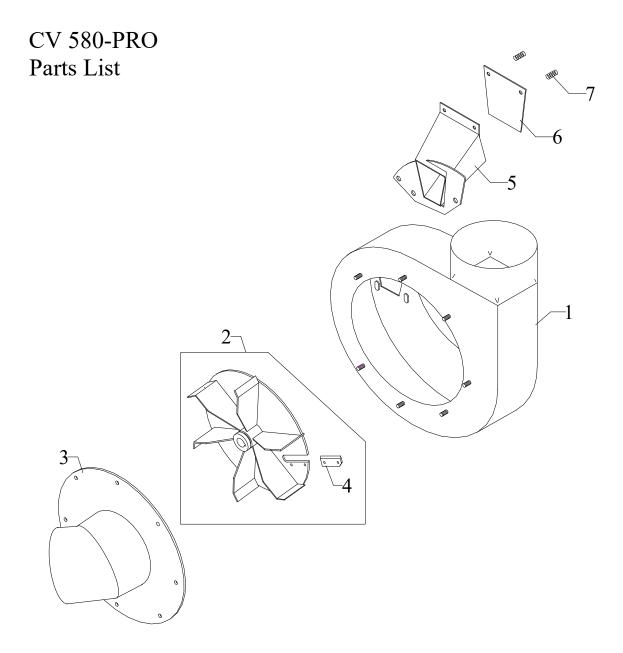
	Mo 10 cub	del 348-X		Model 368-X					
Item	Part No.	Description	Item	Part No.	Description				
1	58120	Cart Body	1	88120	Cart Body				
2	58052	Axle Holder Brace	2		(only on 348)				
3	58053	Axle Holder	3	88114	Axle Holder				
4	58109	Wheel 16-6.5 x 3/4	4	88054	Wheel 16-6.5 x 1				
5	58055	Axle, 3/4" x 32 1/2"	5	88113	Axle, 1" x 40 1/2"				
6	58058	Hub Cap	6	58058	Hub Cap				
7	58057	Drawbar Spacer	7	88116	Drawbar Spacer				
8	58056	Latch Arm	8	58056	Latch Arm				
9	58062	Latch Spring	9	58062	Latch Spring				
10	58121	Drawbar	10	88121	Drawbar				
11	58067	Hitch Plate	11	58067	Hitch Plate				
12	58065	Tailgate	12	88119	Tailgate				
13	58066	Tailgate Brackets	13	58066	Tailgate Brackets				
14	88122	Reinforcement Plate	14	88122	Reinforcement Plate				
15	58111	Bushing, 3/4" ID	15	88111	Bushing, 1" ID				



Model 280/348L Cart Cover Model 280/368L Cart Cover

Key	Part No.	Description
1	28047	Side Panel
2	28030	Front Panel
3	28236	Tailgate
4	28232	Deflector
5	28242	Front Screen
6	28243	Rear Screen
7	28100	Rear Angle RH
8	28101	Rear Angle LH
9	28102	Latch Ass'y RH
10	28103	Latch Ass'y LH
11	28105	Top Latch
12	28104	Handle

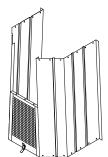
Key	Part No.	Description
1	28059	Side Panel
2	28035	Front Panel
3	28238	Tailgate
4	28235	Deflector
5	28240	Front Screen
6	28241	Rear Screen
7	28100	Rear Angle RH
8	28101	Rear Angle LH
9	28102	Latch Ass'y RH
10	28103	Latch Ass'y LH
11	28105	Top Latch
12	28104	Handle
13	28156	Latch Ass'y LH
14	28157	Latch Ass'y RH



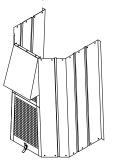
Key	Part No.	Description	Qty.
1	38030	Turbine Housing	1
2	56055	Pro Chipper Turbine, 1" Bore	1
3	58036	8" Inlet, CV Angled	1
4	38041	Chipper Knife	2
5	58035	Chipper Inlet	1
6	38066	Guard, Chipper	1
7	35269	Spring, Lock Pin	2

Model 280 Cart Cover Assembly Instructions

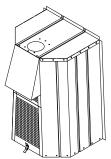
NOTE: Do not tighten any bolts until the end of construction.



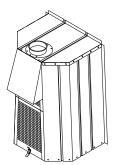
Place side panels on end with decal outward and about a foot apart at top. Place screen with latch, (rear screen), on end between sides with latch outward and to the floor. Attach to sides with $1/4 \times 1/2$ bolts.



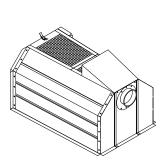
Place screen without latch, (front screen), on top of rear screen and between sides. Secure to rear screen with $1/4 \times 1/2$ bolts. Slip deflector between sides and front screen with tapered end up. Secure with $1/4 \times 1/2$ bolts.



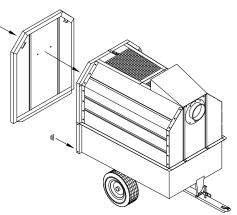
Place front on sides with flanges on outside . Start corner bolts in sides and screen before tightening. Start bolts at top & bottom of side panels and work your way toward center, with truss head, round, to the outside.



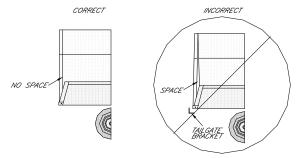
Place connector, (packed in with vac), on outside of front with the lip to the outside. Attach with $1/4 \ge 1/2$ bolts.



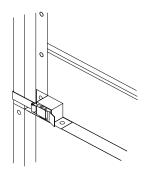
Place cover flat on floor and attach angles to side panels at rear of cover with angles on the outside of cover. Secure with 1/4 x1/2 bolts. Start at the top and second hole from the bottom, (latch uses bottom hole), then work towards the center of the panels. Bolts truss, (round), head should be to the inside of cart.



Attach handle to tailgate on smooth side. Place cover on cart. Make sure the two lower black angle brackets have been installed on the lower rear of the cart. Fit tailgate to the cover using the top latch and lower brackets only.



Gently move cover to the rear to insure contact between the tailgate and cover, (along entire contacting surface). Center front on cart. Mark hole locations, and drill 9/32" holes. Attach cover with $1/4 \ge 1/2$ bolts.

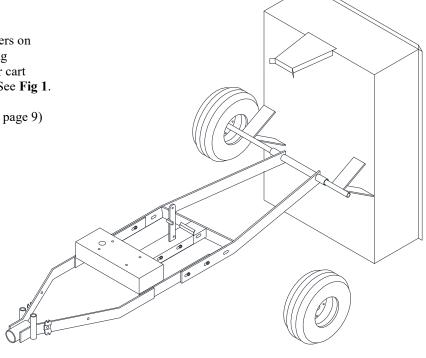


Place latch on each side of cart with tongue of latch to rear. Attach to side panel and cart with $1/4 \ge 1/2$ bolts. Tighten all hardware.

580 TRAC VAC Assembly Instructions

The Model 580 frame has two components: the Main frame (1) and the Sub frame (2). When using the 345 or 348-P dump cart, slide Main frame over sub frame to shortest position. Using bolt holes #1 & #2 on the main frame and bolt holes #1 and #3 on both Main and sub frames. Fasten with 3/8" X 1" HHC and nut. If using 348-X cart, use bolt holes #1 & #3 on both main and sub frames. Secure the center channel as well.

- 2. Lift rear of frame and align with axle risers on cart. Slide axle through tubing connecting cart and vac frame. Mount wheels, lower cart and attach to tractor with hitch pin (18) See Fig 1.
- 3. Assemble cart cover. (see instructions on page 9)



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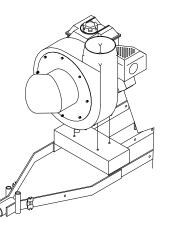
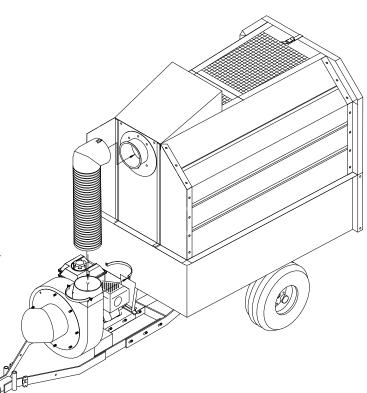


Fig. 2

- 4. Attach engine assembly (2) to engine plate on main frame. Fig. 2
- 5. Stretch metal hose (9) to it's full length. Slip hose over turbine housing neck.

(4). Attach two piece metal hose clamp (10) on first two convolutions of metal hose and tighten. Attach other end of metal hose into cart connector (11) on cart cover. **Fig. 3**





6. Fit support arm (12) into support stand tube on frame. Slide support arm extension (13) into support arm.
7. Attach chute to mower deck.
8. Slip intake hose (20) thru hose support strap (14) and attach to turbine housing inlet (6) and chute using 6" hose clamps (19)
9. Slip drawbar (17) onto frame (1) and secure. Fig. 4
Fig. 4

MAINTENANCE



DANGER: The Trac-Vac 560/580 was built to be operated according to the rules for safe operation as outlined in this manual. Carelessness or error on the part of the operator can result in serious injury. This unit is capable of amputating fingers or hands and throwing objects. Failure to comply with the safety instructions could result in serious injury or death.



MAINTENANCE SCHEDULE	Before each use	After each use	Every season	Before Stoarage	Service Dates								
Check engine oil level	х												
Check tire pressure	Х												
Check all hardware for tightness	Х												
Lubricate			Х										
Clean		Х		Х									
Maintain engine per engine manual													

BEFORE EACH USE

CHECK FOR LOOSE HARDWARE

• Make a thorough visual check of the unit for any bolts and nuts which may have become loose. Retighten any loose nuts and bolts

CHECK TIRE PRESSURE

- Check tire pressure regularly. The recommended tire pressure is printed on the tire. CHECK ENGINE OIL LEVEL
- Check oil level before each use. Maintain engine oil as instructed in engine manual.

LUBRICATION

- Use a light machine oil to lubricate the axle where the hitch tongue pivots and the latch and pivot bolt at the beginning of each season.
- Grease or oil wheel bearings, using automotive wheel bearing grease at least once every season.



WARNING: Always stop engine and disconnect spark plug wire before lubricating, cleaning or before maintenance or repairs.

ENGINE MAINTENANCE

- Check oil level before each use, maintain engine oil according to the engine manual
- Service air cleaner after every 25 hours of normal conditions. Under extremely dusty conditions, clean every few hours. Poor engine performance usually indicates that the air cleaner needs to be serviced.
- Clean spark plug and reset gap once every season. It is recommended that the spark plug be replaced at the start of each season. Check the engine manual for the correct spark plug and gap specifications.

CLEANING

- Clean the cart & top after each use. Grass clippings and leaves can mildew and cause damage if not properly cleaned.
- Clean the engine regularly with a cloth or brush. Remove all dirt and debris from muffler area.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION						
Engine fails to start	 Spark plug wire disconnected Fuel tank empty Faulty spark plug 	 Connect wire to spark plug Fill tank with clean fuel Clean, adjust gap or replace 						
Loss of power or erratic operation	 Spark plug wire loose Blocked fuel line Water or dirt in fuel system 	 Connect & tighten spark plug wire Clean fuel line Disconnect fuel line at carburetor drain fuel tank. Refill with fresh fuel 						
	4. Dirty air cleaner5. Unit running on choke	4. Service air cleaner (refer to engine manual)5. Move choke lever to OFF position						
Engine overheats	 Engine oil level low Operating below full RPM 	 Fill crankcase with proper oil Run throttle full open. 						
Excessive vibration	1. Damaged turbine or loose parts	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.	1. Discharge chute clogged	1. Stop engine & disconnect spark plug wire. Clean inside of discharge chute.						
	2. Foreign object lodged in turbine.	2. Stop engine and disconnect spark plug wire. Remove lodged object in turbine.						
	3. Container full	3. Stop engine and empty container.						
NOTE: Please contact the nearest authorized service dealer for repairs beyond the minor adjustments above.								

Operation OPERATING PROCEDURE

BEFORE STARTING, Follow 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 pick up all harmful objects and litters.
- 2. For best vacuuming results, operate tractor at manufacturer's recommended speed for best cutting. If grass is high, mow and vacuum the second time.
- 3. Your vacuum engine is preset to run approximately 3800 RPM no- load. Do not slow engine down.
- 4. Do not overload cart. When cart is filled, **SHUT OFF ALL ENGINES** and disconnect hose at snap disconnect, remove tailgate and dump.
- 5. When operating tractor on slope or grade, exercise **EXTREME CAUTION**. Do not cut across grade or slopes. Mow directly up or down hill.
- 6. Avoid sudden turns or maneuvers.
- 7. Periodically check all hardware for tightness.
- 8. Listen for unusual vibration of engine or air turbine. If excessive vibration is present, **STOP ALL ENGINES** and check for damaged blade.
- 9. 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
- 10. Always shut off tractor engine and vacuum engine before servicing,
- 11. Replace deflector shield when discharge chute is removed.
- 12. Do not carry passengers in cart.
- 13. Do not tow cart on public roads

MAINTENANCE AND EXTENDED STORAGE PROCEDURES

- 1. Wash and clean vacuum and lubricate any lubrication points. Grease wheel at axle for longer life.
- 2. Drain fuel from tank and run until fuel is exhausted in carburetor.
- 3. Drain and change engine oil.
- 4. Clean tires and check pressure. Raising and supporting unit with weight off tires is recommended.
- 5. Store inside a clean, dry area, when not in use

TRAC VAC WARRANTY POLICY

Midwest Equipment Mfg. 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.

MIDWEST EQUIPMENT MFG. 5225 Serum Plant Rd. Thorntown, IN 46071 Phone: 1-800-Trac-Vac

Web Page: www.trac-vac.com E-Mail: sales@trac-vac.com

