
Simplicity®

OWNER'S MANUAL

MFG. NO. 506 VACUUM COLLECTOR
MFG. NO. 624 LOW PROFILE TRAILER FRAME AND COVER
MFG. NO. 531 HIGH CAPACITY TRAILER FRAME AND COVER
MFG. NO. 447 ROVING NOZZLE
MFG. NO. 444 VACUUM COLLECTOR ADAPTER
MFG. NO. 445 VACUUM COLLECTOR ADAPTER

SIMPLICITY MANUFACTURING COMPANY, INC.



SER. FORM - OP24
LITHO IN U.S.A.

TP1325

PROTECT YOURSELF AND OTHERS

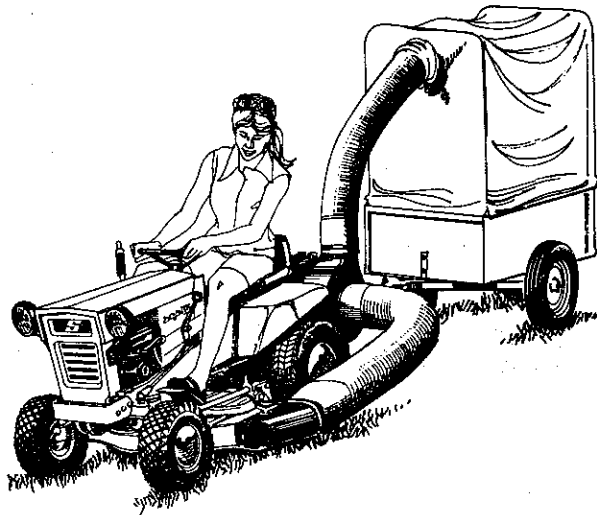
- Know the controls and how to stop quickly -- READ THE OWNER'S MANUAL.
 - Do not allow children or young teenagers to operate vehicle or adults to operate it without proper instruction.
 - Do not carry passengers. Keep children and pets a safe distance away.
 - Clear work area of objects which might be picked up and thrown.
 - Disengage all clutches and shift into neutral before starting engine.
 - Disengage power to implement (s) and stop engine before leaving operator position.
 - Disengage power to implement (s) and stop engine before making any repairs or adjustments.
 - Disengage power to implement (s) when transporting or not in use.
 - Take precautions, such as disengaging power take-off, lowering implements, shifting into neutral, setting parking brake, stopping engine and removing key when leaving vehicle unattended.
 - Don't stop or start suddenly when going uphill or downhill.
 - Reduce speed on slopes and in sharp turns to prevent tipping or loss of control.
 - Stay alert for holes in terrain and other hidden hazards.
 - Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Don't turn too sharp, and use care when backing.
 - D. Use counterweight (s) or wheel weights when suggested in owner's manual.
- Watch out for traffic when crossing or near roadways.
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
 - Handle gasoline with care -- it is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Replace gasoline cap securely.
 - D. Open doors if engine is run in garage -- exhaust gasses are dangerous.
 - Keep vehicle and attachments in good operating condition and keep safety devices in place. Use guards as instructed in owner's manual.
 - Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- Do not put hands or feet near or under rotating parts. Keep clear of discharge opening at all times.
 - Before cleaning, inspecting, adjusting, or repairing the tractor or any attachments stop the engine, remove the ignition key (electric start models) and be sure all blades and other moving parts have stopped.
 - Stop blade (s) when crossing gravel drive, walks or roads.
 - After striking a foreign object stop the mower and remove the ignition key. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.
 - If your equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
 - Do not run the engine indoors.
 - Look to be sure that children are not behind the tractor, before backing up.
 - When mowing with a tractor mounted mower, mow up-and-down on slopes, never across or horizontally. To prevent the danger of overturning, exercise extreme caution when stopping, starting or changing direction.
 - Check blade and engine mounting bolts for proper tightness at frequent intervals.
 - Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
 - Never store equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
 - To reduce fire hazard keep engine free of grass, leaves or excessive grease.
 - Never operate any attachment without all guards, deflectors, and other protective covering in place.
 - Keep the area of operation clear of all persons, particularly small children, and pets.
 - Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
 - Check fuel before starting engine. Do not fill gasoline tank when engine is running or while engine is still hot. Wipe off any spilled gasoline before starting engine. Do not smoke when fueling engine or around open gasoline containers.
 - Mow only in daylight or in good artificial light.
 - Do not change engine governor, settings or overspeed engine.

VACUUM COLLECTOR

BROADMOOR AND YEOMAN

The following separate attachments are used to make up the Vacuum Collector.

1. VACUUM COLLECTOR ADAPTER
Mfg. No. 444 Adapter for 36" Mower or
Mfg. No. 445 Adapter for 32" Mower
2. VACUUM COLLECTOR BLOWER
Mfg. No. 506
3. CART COVER
Mfg. No. 531 High Capacity or
Mfg. No. 625 Low Profile
4. 1,000 lb. DUMP CART
Mfg. No. 085
5. ROVING VACUUM NOZZLE
Mfg. No. 447 (optional)



INSTALLATION

Mfg. No. 444 or 445 Vacuum Collector Adapter

Remove the mower deflector plate. Mount the vacuum adapter in its place as follows:

1. Place the adapter over the side of the mower housing with the mounting holes aligned.
2. Install the 5/16 in. carriage bolt through the top hole from the inside. Install the 5/16 in. lockwasher and hex nut finger tight.
3. Install the 3/8 in. carriage bolt at the front hole, also from the inside. Install the 3/8 in. spacer in the hole and the large flat washer on the outside against the adapter. Secure the bolt with the 3/8 in. lockwasher and nut. Adjust the position of the adapter, then tighten both nuts (at the front and top of the adapter) securely. Install the flanged wingnut on the top mounting screw. (See Figure 1)

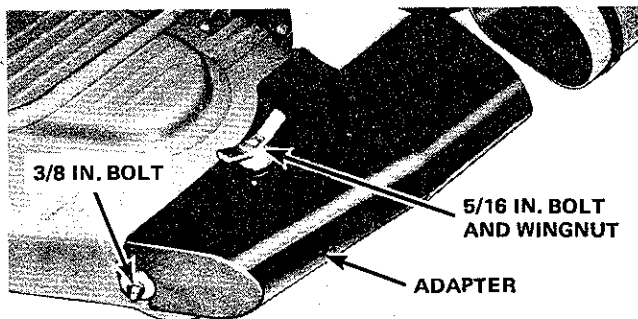


FIGURE 1

Mfg. No. 506 Vacuum Collector Blower

This unit is driven by its own 4 H.P. Briggs and Stratton engine. It simultaneously collects and mulches leaves and collects clippings while mowing.

1. Remove the drawbar bracket bolts from the rear support plate on the transmission. Place the hitch plate between the drawbar bracket and the support with the notches up. Secure with the 3/8-16 x 1-1/2 in. capscrews, nuts and lockwashers provided. (See Figure 2)

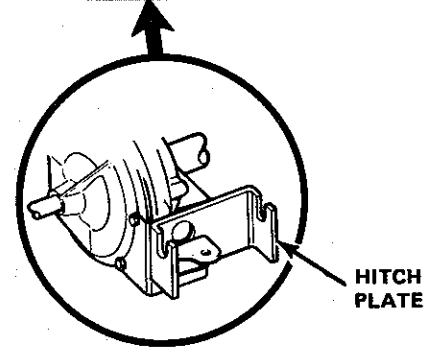
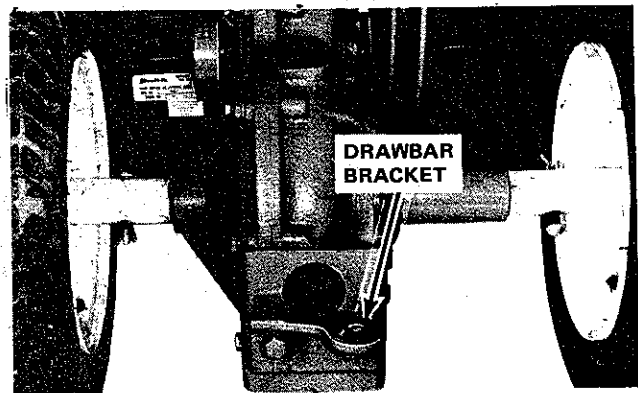


FIGURE 2

2. Install the engine and blower assembly on the tractor. Tilt it back and engage the lower frame rod in the hitch slots. Tilt it forward to align the blower frame holes with the mating holes in the seat support. Insert the long pin and secure with two spring clips. (See Figure 3)

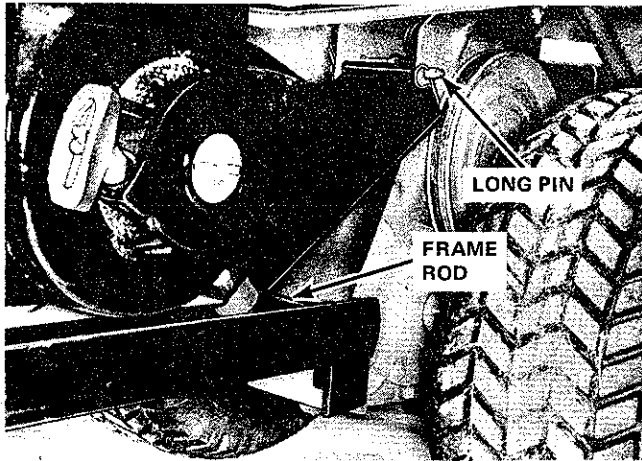


FIGURE 3

3. Attach the hose deflector plate to the top of the blower housing. The deflector fits on the outside of the blower outlet. Secure with the three No. 10 self-tapping screws. (See Figure 4)

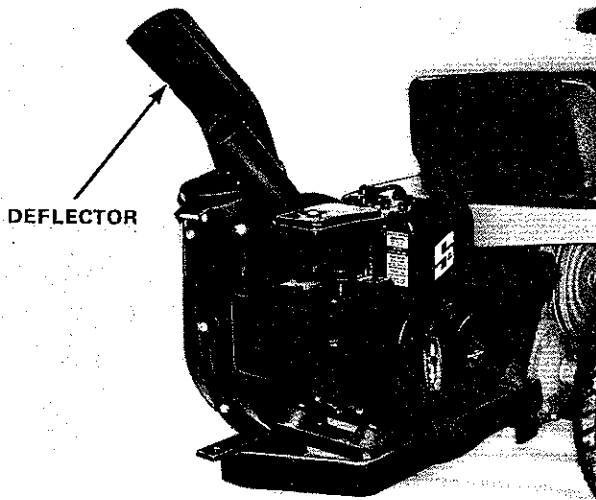


FIGURE 4

4. Install the round flange on one end of the 7 in. intake hose. Secure the clamp on the hose end with a 1/4-20 x 3 in. machine screw, lockwasher and nut. Slide the flange into the slots on the blower housing. (See Figure 5).

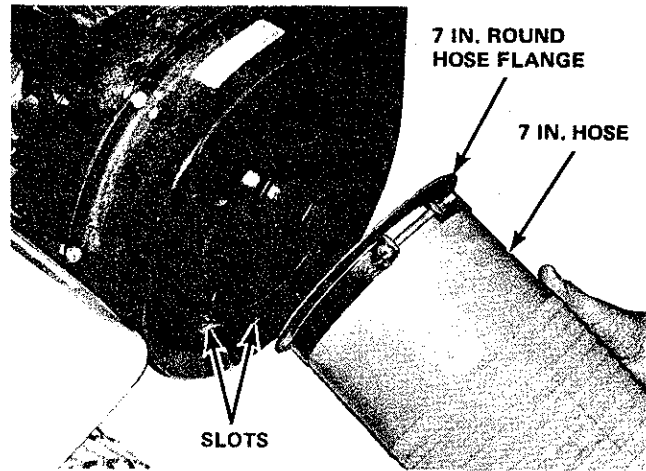


FIGURE 5

5. Attach the other end of the 7 in. hose to the mower adapter using the oval-shaped clamp with 1/4-20 x 3 in. machine screw, lockwasher and nut. Place the 6 in. clamp around the outlet hose end loosely. Slide the hose end down over the blower deflector against the blower housing. Tighten the clamp screw securely. (See Figure 6).

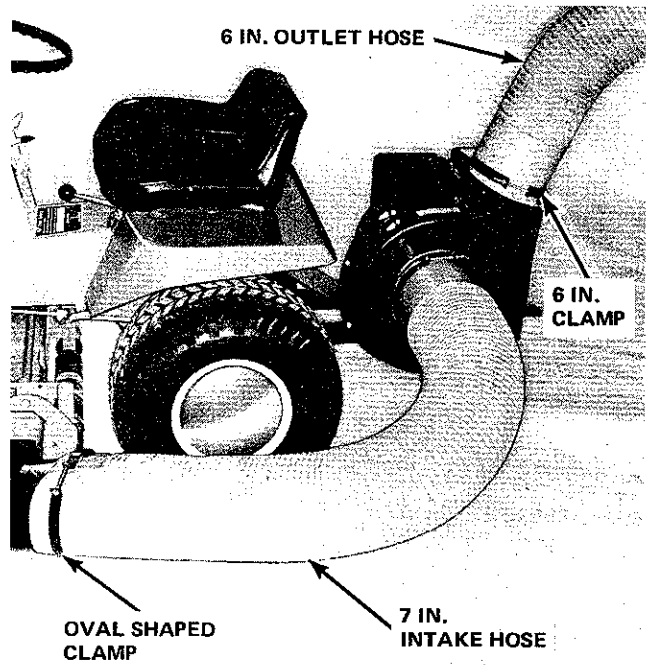


FIGURE 6

the cart cover opening. Insert the hose end well into the sleeve and tighten the strap. (See Figure 7).

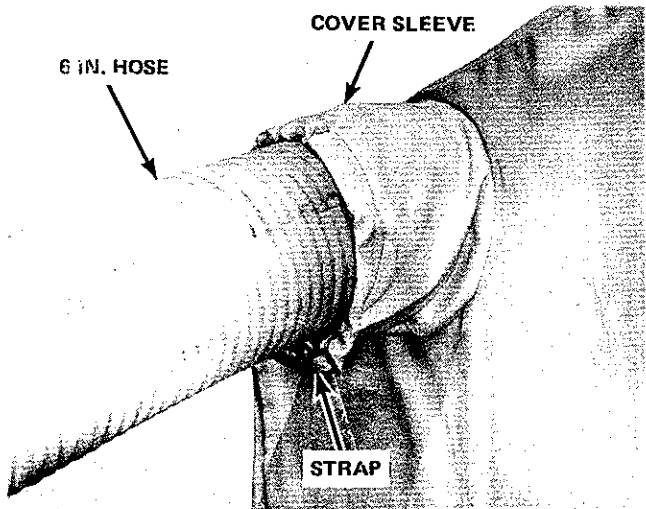


FIGURE 7

6. Attach the cart tongue to the blower hitch with a pin and spring clip. Attach the outlet end of the 6 in. hose to

Mfg. No. 531 High Capacity Cart Cover

The canvas cart cover is preassembled to the frame except for the front catch and the upper hanger brackets. The rear door is stored separately. Remove the dump cart tailgate before installing the cover.

Assembly

1. Install the front catch as shown, using a 3/8 x 1 cap-screw flat washer and locknut. Tighten the locknut enough to hold securely but still allow the catch to pivot. (See Figure 8).

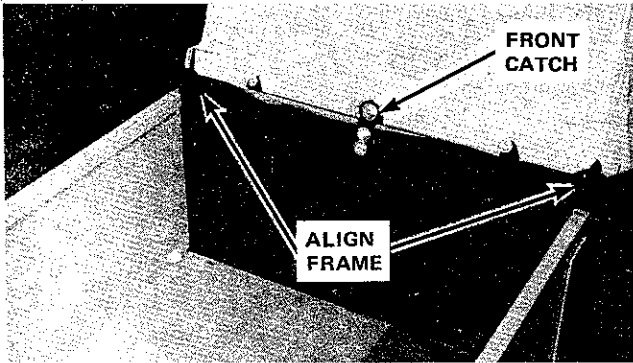


FIGURE 8

2. Unfold the canvas and frame assembly so that the vertical frame members are upright. Align the ends of the frame channels with the cart side wall upper edges and slide the assembly forward onto the cart. Turn the catch down over the front edge of the box. (See Figure 8)

3. Secure the four corner braces with the hardware attached. (See Figure 9).

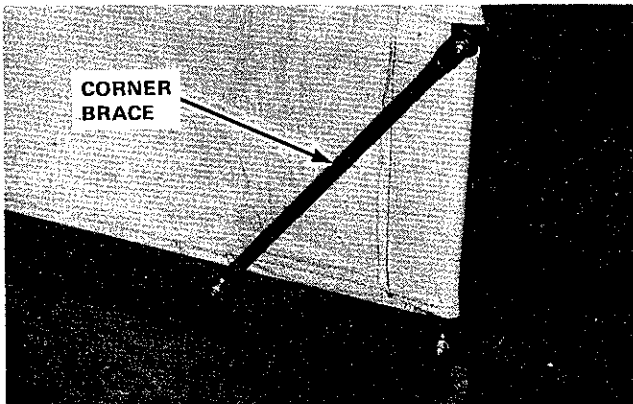


FIGURE 9

4. Install the rear door upper hanger brackets as shown. (See Figure 10)

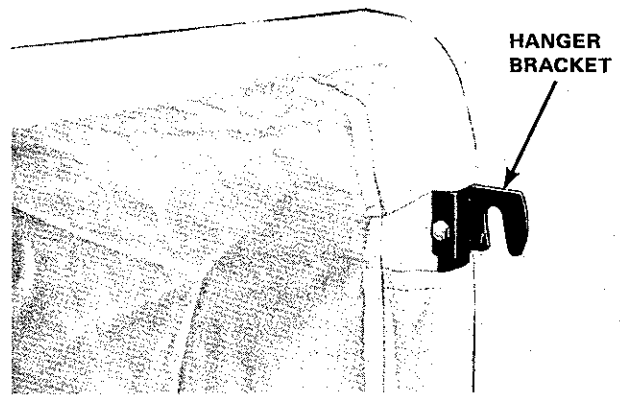


FIGURE 10

5. Install the rear door. Engage the upper door frame side capscrews in the hanger bracket notches and push the bottom edge into place on the box bed. Engage the rear latch handles to the door side screw as shown. (See Figure 11)

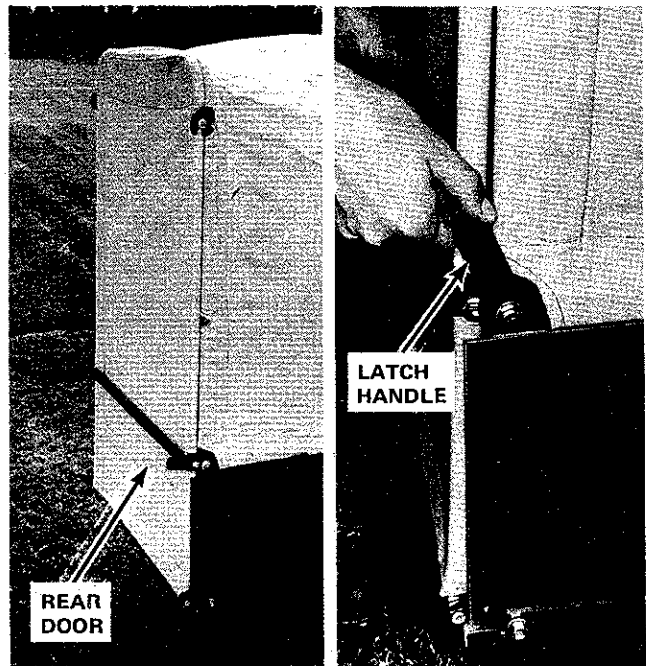
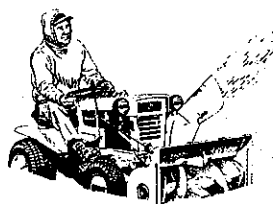


FIGURE 11



Mfg. No. 624 Low Profile Cart Cover

The low profile cart cover is preassembled to the frame. The cover is installed with the cart tailgate in place.

1. Install the front stops on the cover front frame (the end with the hose sleeve.) The special studs are inserted from the inside. Hardware to be installed as shown in the insert of Figure 12.

2. Lay the assembly on the cart with the canvas side flaps inside the cart. Engage the front stops over the box front edge, then pull the rear strap down and hook it under the box rear edge. (See Figure 13)

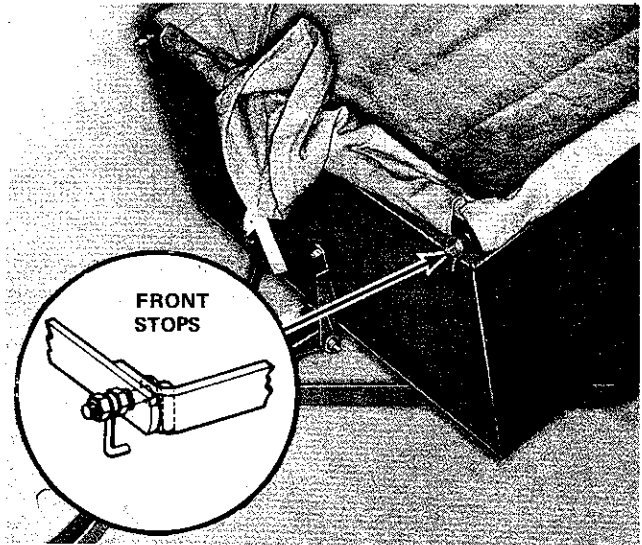


FIGURE 12

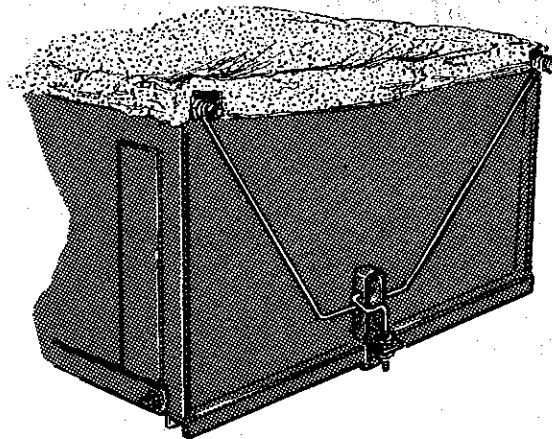


FIGURE 13

Mfg. No. 447 Roving Vacuum Nozzle (optional)

The nozzle attaches to the blower inlet in place of the hose from the mower. For storage, a rack is provided for installation on the front of the dump cart.

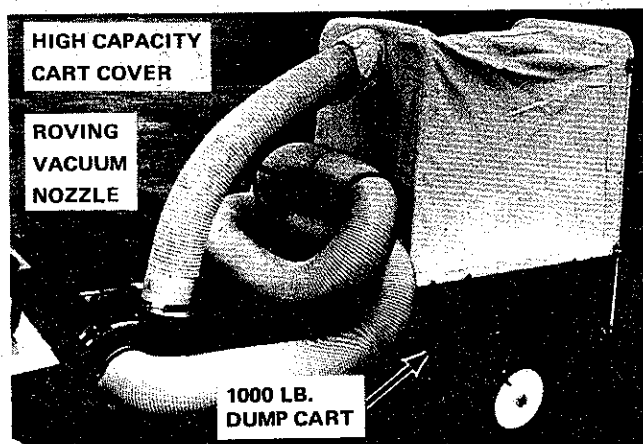


FIGURE 14

1. Install the mounting flange and clamp on the plain end of the hose. Tighten the clamp screw securely. (See Figure 15)

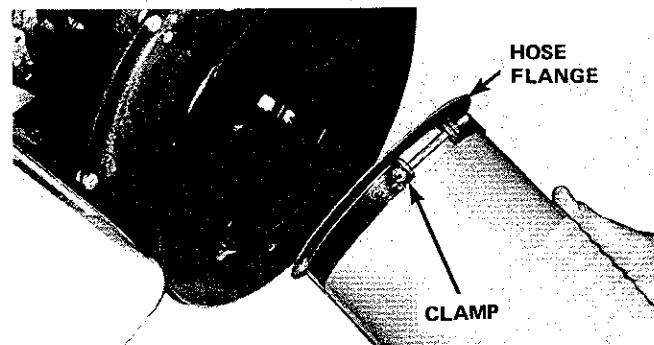


FIGURE 15

2. Install the hose handle clamps the desired distance from the pickup end of the hose and attach the handle. (See Figure 16)

3. Attach the flanged end of the roving nozzle to the blower housing, seating the flange fully in the notches. (See Figure 15)

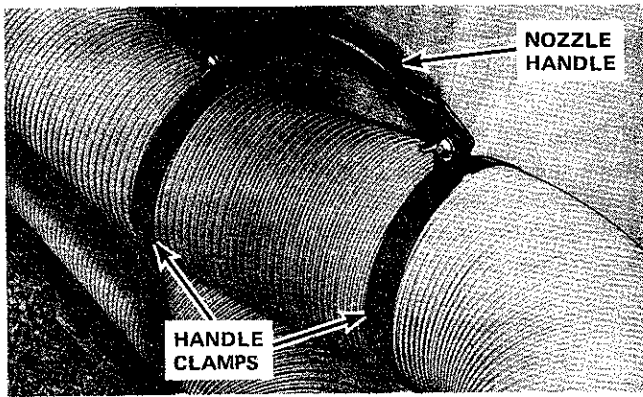


FIGURE 16

4. The storage rack is assembled and hung onto the front of the cart as shown. No hardware for mounting is required. (See Figure 17)

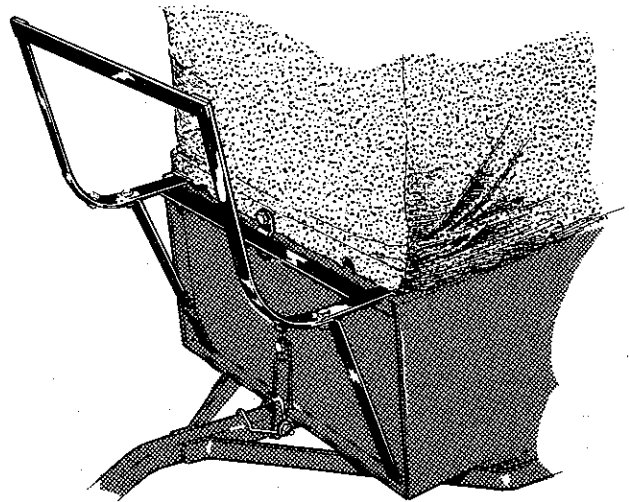


FIGURE 17

OPERATION

BEFORE OPERATION

Engine service: Service the blower, for the season it is to be used, according to the manufacturers recommendations. In addition, check to be sure it is filled with a good quality motor oil of grade MS.

Above 40° F - SAE-30

Below 40° F - SAE 5W-20

Fill the fuel tank with clean, fresh leaded or non-leaded "regular" grade automotive gasoline.

Engine Muffler: Position the blower engine muffler so that the exhaust holes are directed away from the engine. (See Figure 18)

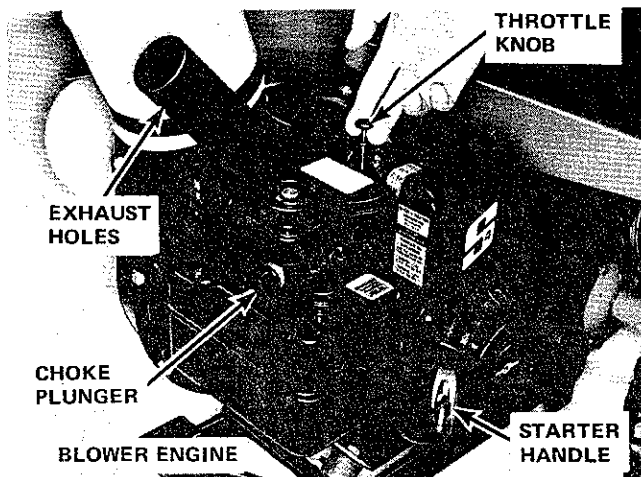


FIGURE 18

Cart Cover:

Open the zipper on the canvas trailer cover for air release during normal operation. At times it may be desired to have the zipper half open or closed. (See Figure 19) DO NOT OPERATE THE VACUUM COLLECTOR UNLESS THE HOSES ARE CONNECTED AT BOTH ENDS.



FIGURE 19

Starting the Engine:

Start the blower engine as follows:

1. Pull the choke plunger out to "CHOKE" position.
2. Pull the throttle knob all the way up.
3. Grasp the recoil starter handle firmly in your right

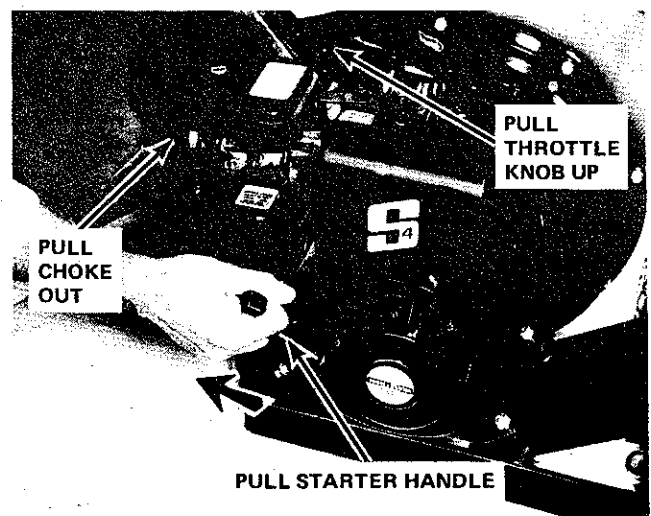


FIGURE 20

hand and pull sharply straight out to start the engine. After the engine starts, return the choke lever or plunger to "OFF" position. If the engine fails to start after four or five pulls, it may be flooded. Return the choke lever or plunger to "OFF" position and pull the starter handle to clear the excess fuel. (See Figure 20)

To stop the engine, push the throttle knob straight down all the way.

VACUUM COLLECTING

Engage the mower and run the tractor at about three fourths throttle. Under wet conditions or when collecting thick, heavy material, run at slower ground speed (first or second gear) and full blower engine speed to increase vacuum.

When collecting leaves and tall grass, raise the mower to highest cutting height on the first pass, then lower it for the second pass.

In wet and extremely high grass it may be necessary to use only half the width of the mower to prevent the hoses from clogging up. Check the hoses and blower housing periodically to make sure the material does not accumulate, blocking the flow to the cart.

After operating, be sure to clean out the hoses and the cart thoroughly, especially at the cover sleeve connection.

TROUBLE SHOOTING

If leaves and grass are not being completely picked up, check the following:

1. Run the blower engine at full engine speed.
2. Run the tractor at slower ground speed (first gear).
3. Check all hose connections to be sure they are tight.

If the hoses become plugged, check the following:

1. Grass may be too high or wet, use only half the mower width.
2. Run the tractor in a lower gear.
3. Raise the mower adjustment for the first pass, lower it to make a second pass.

MAINTENANCE

AFTER EACH USE

Be sure to clean out the hoses and cart thoroughly, especially at the cover sleeve connection.

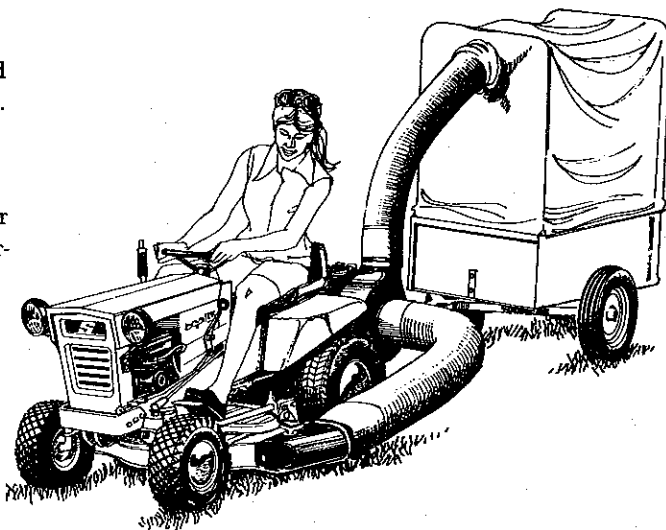
EVERY 25 HOURS

Follow the Briggs and Stratton manual and change the oil in the engine crankcase. Be sure to service the engine according to the season it will be used in. See "Before Starting" Section.

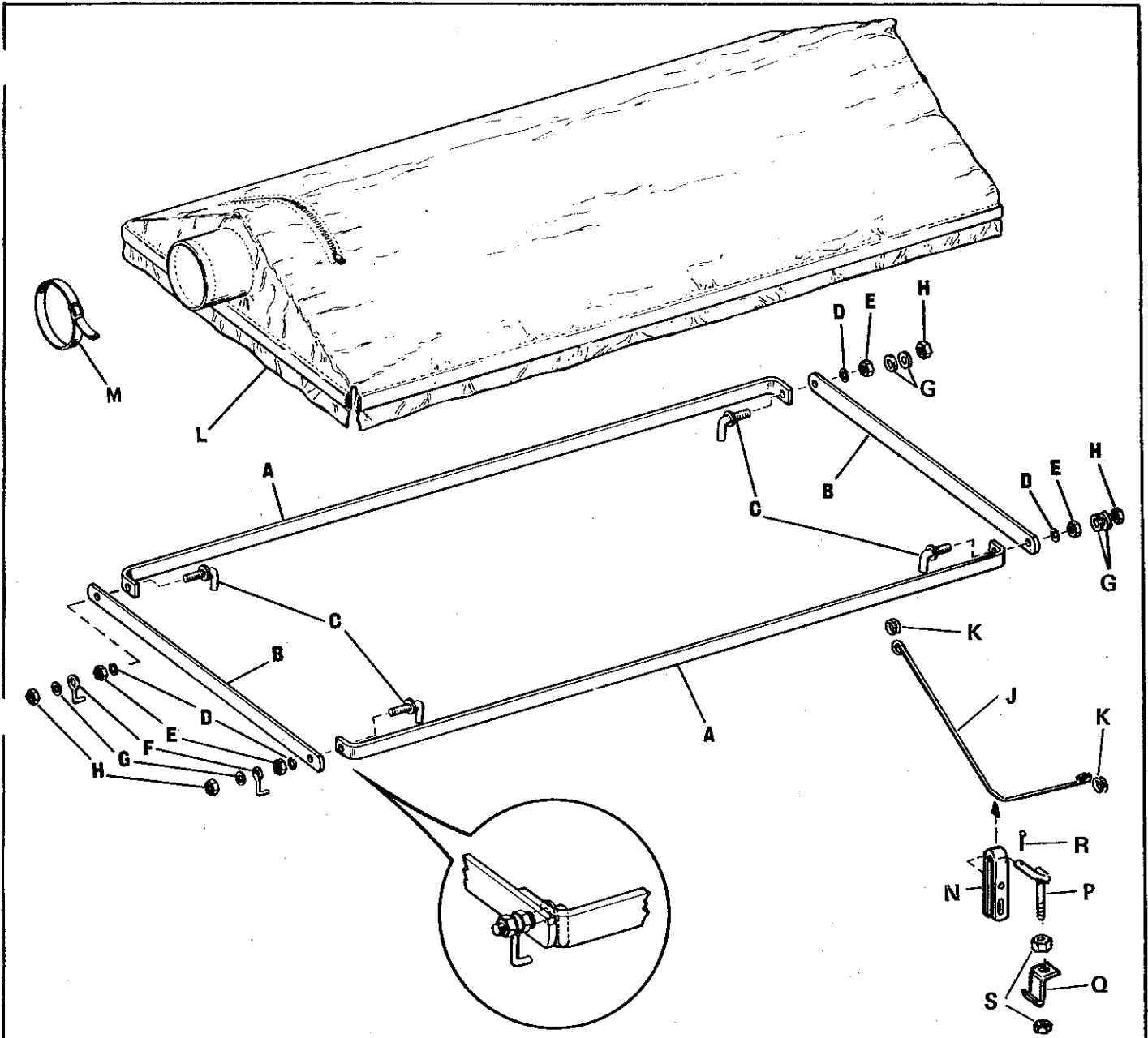
NOTE: When changing engine oil be sure the funnel and tube are free of dirt. Dirt in the oil will shorten engine life.

STORAGE

Remove the door cover on the high capacity cart cover or the entire low profile cover and place it where air will circulate around it. This will prevent rotting of the fabric.



Mfrs. NO. 624 LOW PROFILE TRAILER FRAME & COVER

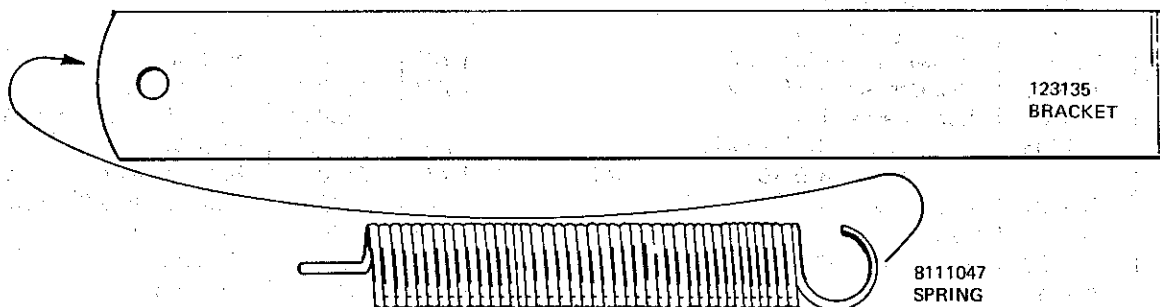
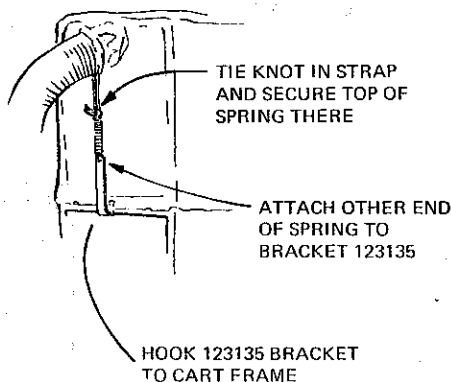
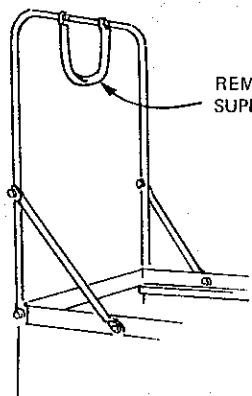


Ref. Let.	Part No.	Description
A	123130	Side Member-Frame
B	123131	End Bracket-Frame
C	123132	Stud Ass'y-Special
D	720001	Lock Washer, 5/16"
E	717001	Hex Nut Full 5/16"-18NC
F	123134	Stop
G	719002	Washer-Plain 5/16"
H	717511	Hex Nut Full Lock, 5/16"-18NC
J	170003	Bail
K	170134	Repair Link
L	123136	Cover W/Hose Strap
M	123049	Hose Strap (Service Only)
N	170002	Lever
P	170001	Latch Rod
Q	170000	Latch
R	722006	Cotter Pin, 1/8" x 1"
S	717510	Hex Nut Full Lock, 3/8"-16

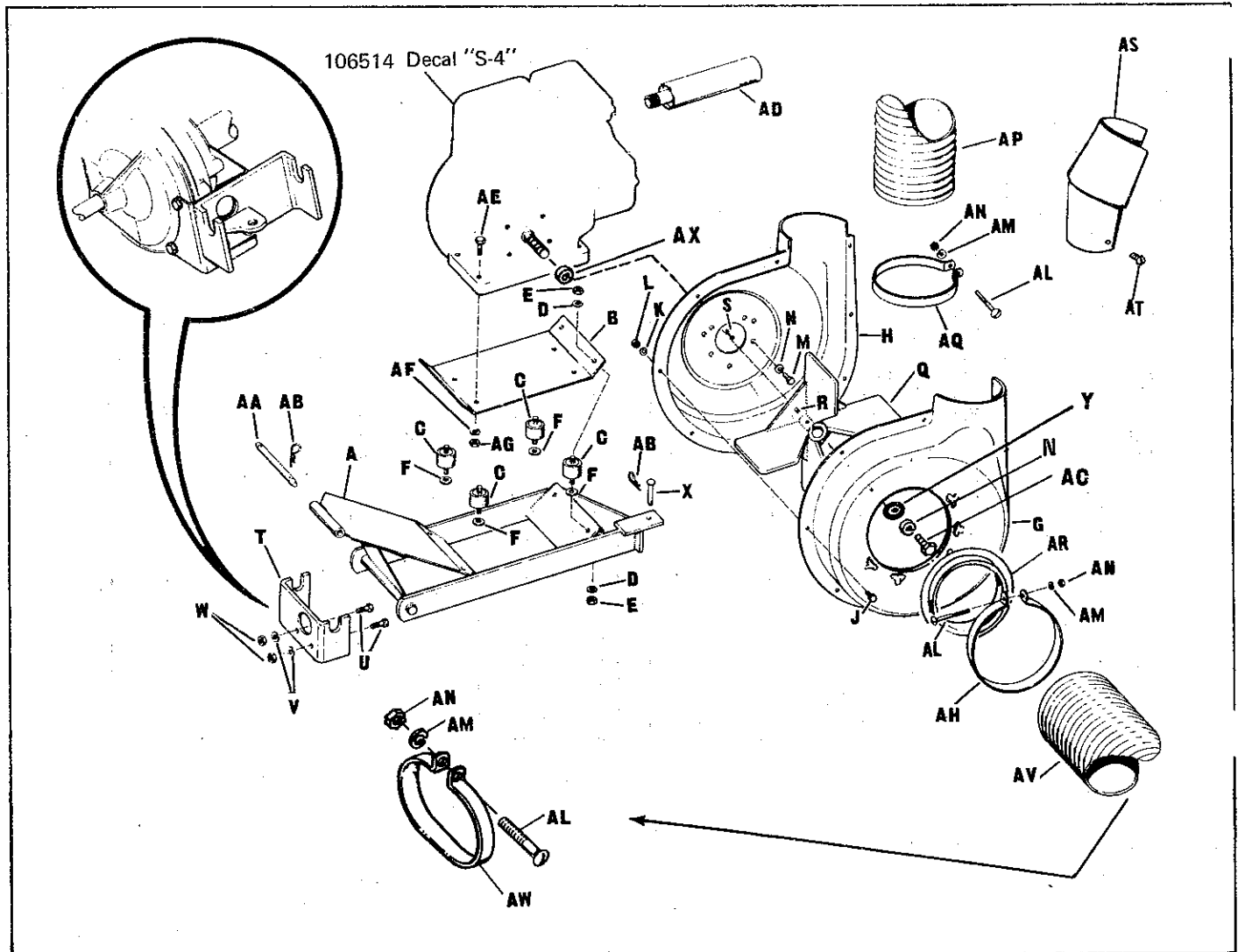
Mfrs. NO. 531 HIGH CAPACITY TRAILER FRAME & COVER

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
A	123036	"Z" Bar, Side	AC	705030	Hex Capscrew, 1/4"-20 x 3/4" lg.
B	123037	Front Bar	AD	719006	Plain Washer, 1/4"
C	123038	Front and Rear Upright	AE	720003	Lock Washer, 1/4"
D	705007	Hex Capscrew, 5/16"-18 x 1" lg.	AF	717005	Hex Nut, Full, 1/4"-20
E	719002	Plain Washer, 5/16"	AG	123042	Tube, Rear Door
F	720001	Lock Washer, 5/16"	AH	123043	Rod, Rear Door
G	717001	Hex Nut, Full, 5/16"-18	AJ	720004	Lock Washer, 1/2"
H	112060	Bracket	AK	717006	Hex Nut, Full, 1/2"-13
J	705005	Hex Capscrew, 3/8"-16 x 1" lg.	AL	123044	Bar, Rear Door
K	719001	Plain Washer, 3/8"	AM	123045	Spacer
L	717510	Hex Lock Nut, Full, 3/8"-16	AN	705025	Hex Capscrew, 1/4"-20 x 1-3/4" lg.
M	123039	Hose Support	AP	719006	Plain Washer, 1/4"
N	705008	Hex Capscrew, 1/4"-20 x 1-1/4" lg.	AQ	720003	Lock Washer, 1/4"
P	720003	Lock Washer, 1/4"	AR	717005	Hex Nut, Full, 1/4"-20
Q	717005	Hex Nut, Full, 1/4"-20	AS	123046	Top Rear Door
R	123038	Front and Rear Upright	AT	123047	Catch, Door, R. H.
S	123040	Rear Door Latch	AU	123048	Catch, Door, L. H.
T	156150	Spacer	AV	123045	Spacer
U	705001	Hex Capscrew, 5/16"-18 x 7/8" lg.	AW	705053	Hex Capscrew, 1/4"-20 x 1-3/4" lg.
V	719002	Plain Washer, 5/16"	AX	719006	Plain Washer, 1/4"
W	720001	Lock Washer, 5/16"	AY	705008	Hex Capscrew, 1/4"-20 x 1-1/4" lg.
X	717001	Hex Nut, Full, 5/16"-18	AZ	720003	Lock Washer, 1/4"
Y	172652	Hold Down Strip, Side	BA	717005	Hex Nut, Full, 1/4"-20
Z	123052	Hold Down Strip, Front	BB	123049	Cart Hood
AA	123053	Cross Brace Tube	BD	123051	Door Cover
AB	703008	Hex Capscrew, 1/4"-20 x 1-1/4" lg.			



COLLECTOR & BLOWER HOUSING

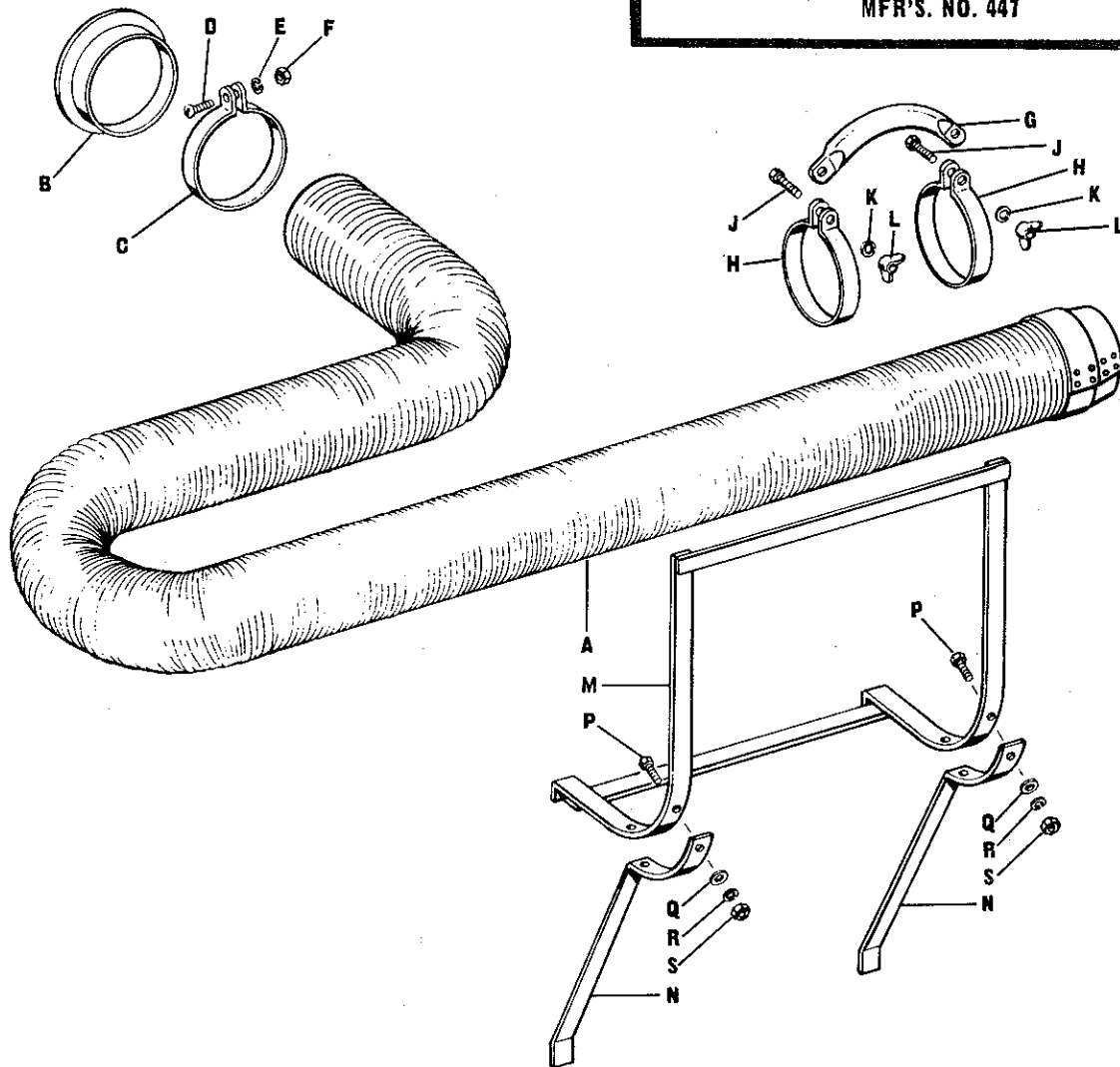


Ref. Let.	Part No.	Description
A	123088	Frame Assembly
B	123095	Engine Plate
C	157094	Connector, Cushion
D	720001	Lock Washer 5/16"
E	717001	Full Hex Nut 5/16"-18NC
F	719002	Plain Washer 5/16"
G	123109	Housing, Inlet Half
H	123013	Housing Half-Blower, R.H.
J	705002	Hex Cap Screw 1/4"-20NC x 1/2"
K	720003	Lock Washer 1/4"
L	717005	Full Hex Nut 1/4"-20NC
M	706016	Hex Cap Screw 5/16"-24 NF x 5/8"
N	720001	Lock Washer 5/16"
O	123015	Fan Assembly
R	713006	Set Screw 5/16"-18 x 1/2"
S	8221042	Key
T	123096	Hitch
U	705009	Hex Cap Screw 3/8"-16 x 1-1/2"
V	720002	Lock Washer 3/8"
W	717003	Full Hex Nut 3/8"-16NC
X	118053	Pin

Ref. Let.	Part No.	Description
Y	123144	Washer
AA	156268	Counterweight Pin
AB	8161045	Spring Clip
AC	715088	Hex Capscrew, 5/16-24 x 3/4"
AD	123104	Muffer
AE	705018	Hex Capscrew 5/16"-18 x 1-1/2"
AF	720001	Lock Washer 5/16"
AG	717001	Full Hex Nut 5/16"-18NC
AH	123065	Hose Clamp
AL	715069	Hd. Rd. Mach. Screw 1/4"-20 x 3"
AM	720003	Lock Washer 1/4"
AN	717005	Full Hex Nut 1/4"-20NC
AP	174264	Exhaust Hose 6" Diameter
AQ	123067	Hose Clamp
AR	123111	Flange-Hose
AS	123107	Deflector
AT	714014	Self-Tapping Screw No. 10x3/8"lg.
AV	174265	Intake Hose 7" Diameter
AW	123105	Hose Clamp
AX	123140	Spacer

VACUUM COLLECTOR ROVING NOZZLE

MFR'S. NO. 447

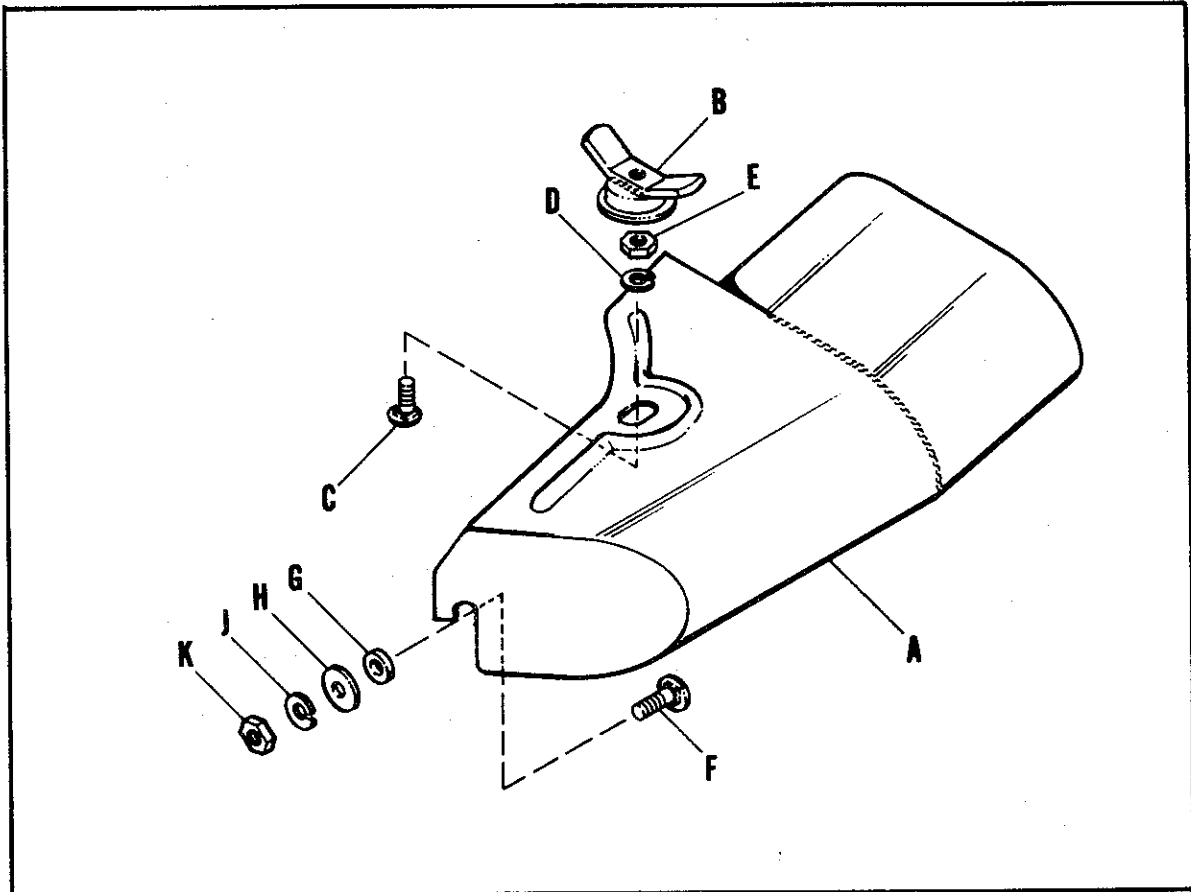


Ref. Let.	Part No.	Description
A	123127	Hose Assembly
B	123111	Hose Flange
C	123065	Hose Clamp
D	715069	Rnd. Slot. Hd. Machine Screw, 1/4"-20 x 3"
E	720003	Lock Washer, 1/4"
F	717005	Full Hex. Nut, 1/4"-20
G	123129	Hose Handle
H	123128	Hose Clamp Handle
J	705017	Hex. Cap Screw, 5/16"-18 x 3/4"
K	720001	Lock Washer, 5/16"
L	718006	Wing Nut, 5/16"-18
M	123122	Hose Carrier Assembly
N	123125	Carrier Support
P	705001	Hex. Cap Screw, 5/16"-18 x 7/8"
Q	719002	Plain Washer, 5/16"
R	720001	Lock Washer, 5/16"
S	717001	Full Hex. Nut, 5/16"-18

Adapter Kit

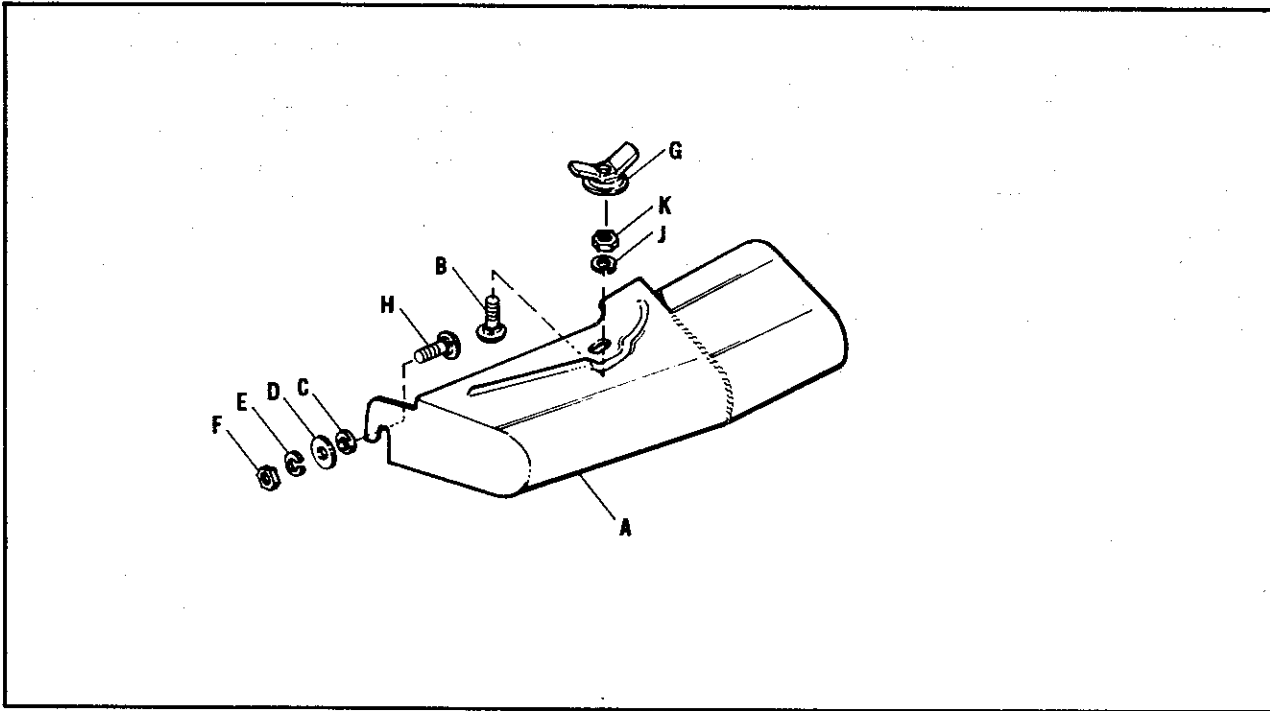
Mfr's. No. 444

FOR 36" ROTARY MOWER



Ref. Let.	Part No.	Description
A	123118	Adaptor Assembly
B	123103	Nut Assembly
C	703010	Carriage Bolt, 5/16"-18 x 1" lg., w/sq. neck
D	720001	Lock Washer, 5/16"
E	717001	Nut, Hex, Full, 5/16"-18
F	703002	Carriage Bolt, 3/8"-16 x 1-1/4" lg.
G	153081	Spacer
H	157169	Washer
J	720002	Lock Washer, 3/8"
K	717003	Nut, Hex, Full, 3/8"-16

Adapter Kit for Vacuum Collector Mfr's. No. 445



Ref. Let.	Part No.	Description
A	123098	Housing Assembly
B	703002	Carriage Bolt 3/8-16 x 1-1/4" lg.
C	153081	Spacer
D	157169	Washer
E	720002	Lock Washer 3/8"
F	717003	Hex Nut, Full 3/8-16
G	123103	Nut Assembly
H	703010	Carriage Bolt 5/16-18 x 1" lg.
J	720001	Lock Washer 5/16"
K	717001	Hex Nut, Full 5/16-18

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