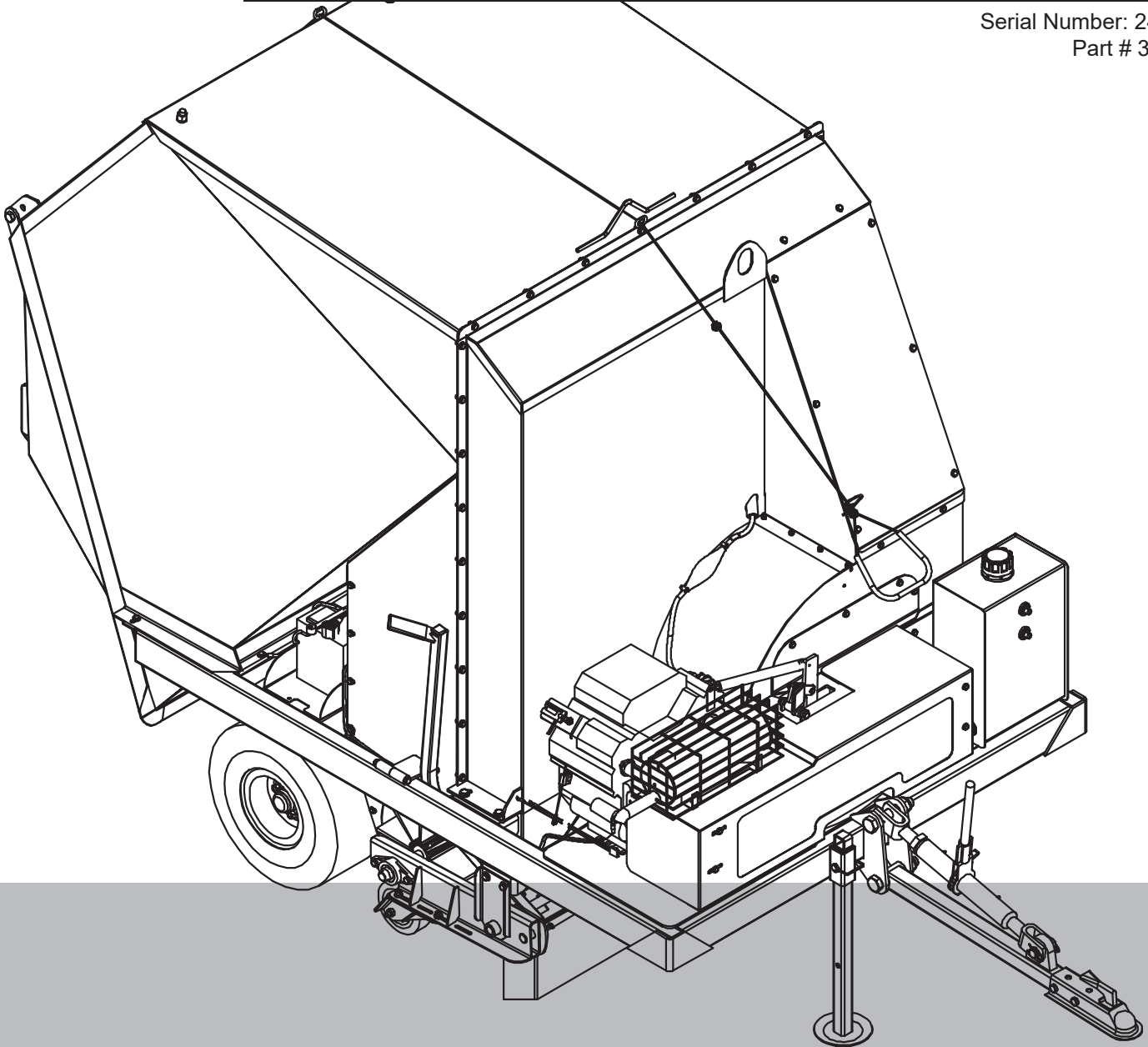


TURBO VAC 40RE-CARB

Serial Number: 24A01+
Part # 301035



OPERATOR'S & PARTS MANUAL

Thank you for purchasing a Harper Turbo Vac.

As with all Harper products, the Harper Turbo Vac has been developed through tough design and testing procedures to produce a machine that can be relied on. This manual gives assembly, operating, and service information for Model TV40RE Turbo Vacs. Please read and understand all instructional material included with the Turbo Vac or its components before assembling and operating the equipment.

A Turbo Vac can present hazards to an operator who follows unsafe procedures in either the operation or maintenance of the unit. Therefore, SAFETY WARNINGS are presented at certain locations in the text.

THIS SYMBOL:



SAFETY WARNING!



MEANING: Failure to understand and obey this warning may result in injury to you or others. Whenever this symbol is used, please pay very close attention to the information presented, and make sure you fully understand. If you do not, contact your dealer or Harper Industries, Inc. for clarification.



SAFETY WARNING!



ALL SHIELDS AND GUARDS MUST BE IN PLACE FOR PROPER AND SAFE OPERATION OF THIS EQUIPMENT. WHERE THEY ARE SHOWN REMOVED IN THIS MANUAL, IT IS FOR PURPOSES OF ILLUSTRATION AND INSTRUCTION ONLY. DO NOT OPERATE THIS EQUIPMENT UNLESS ALL SHIELDS AND GUARDS ARE IN PLACE.

Harper Industries, Inc. is continually striving to improve the design and performance of its products. We reserve the right to make changes in specifications and design without thereby incurring any obligation relative to previously manufactured products.

© 2026 Harper Industries, Inc.

The Harper name is a registered trademark of Harper Industries, Inc. All other brand and product names are trademarks or registered trademarks of their respective companies.

LIMITED WARRANTY

Harper Industries, Inc. (HII) warrants to each purchaser of a new Harper Turbo Vac from an authorized dealer or representative, that such equipment is free of manufacturer's defects in workmanship and materials which appear while in normal service for a period of ONE YEAR commencing with delivery to the original user.

The obligation of HII under this warranty is expressly limited, at our option, to replacement or repair at a service facility designated by Harper Industries or at the manufacturing plant in Harper, KS. A part will be replaced after inspection discloses it to have been defective. This warranty does not apply to defects caused by damage or unreasonable use (including failure to provide reasonable and necessary maintenance, or by performing functions without genuine Harper Turbo Vac accessories) while in the possession of the consumer.

Warranty is limited to parts, labor and ground freight delivery of replacement parts. HII shall not be liable for the consequential damages of any kind, including but not limited to consequential labor costs or transportation charges in connection with replacement or repair of defective parts.

This warranty does not apply to parts subjected to misuse, abuse, alteration, improper or inadequate maintenance, or normal wear (including belts, battery, chains, filters, knives, brush and broom).

Engines are not covered under this warranty. Refer to manufacturer's warranty for specific warranty information. Harper Industries, its agents or representatives, make or imply no other warranties.

Harper Industries makes no warranty with respect to trade accessories. They are subject to the warranties of their respective manufacturers.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. HII MAKES NO OTHER EXPRESS WARRANTY, NOR IS ANYONE AUTHORIZED TO MAKE ANY ON BEHALF OF HII.

For further information please contact your nearest Harper Turbo Vac dealer.

CALIFORNIA EVAPORATIVE EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and Harper Industries is pleased to explain the evaporative emission control system's warranty on your 2026 Harper Turbo Vac. In California, new equipment that use large off-road engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. Harper Industries must warrant the evaporative emission control system on your small Turbo Vac for the period listed below provided there has been no abuse, neglect or improper maintenance of your equipment.

Your evaporative emission control system may include parts such as: carburetors, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated components.

MANUFACTURER'S WARRANTY COVERAGE:

This evaporative emission control system is warranted for two years. If any evaporative emission-related part on your equipment is defective, the part will be repaired or replaced by Harper Industries.

OWNER'S WARRANTY RESPONSIBILITIES:

1. As the Turbo Vac's owner, you are responsible for performance of the required maintenance listed in your owner's manual. Harper Industries recommends that you retain all receipts covering maintenance on your Turbo Vac, but Harper Industries cannot deny warranty solely for the lack of receipts.
2. As the Turbo Vac owner, you should however be aware that Harper Industries may deny you warranty coverage if your fuel tank has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
3. You are responsible for presenting your Turbo Vac to a Harper Industries dealer as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact your authorized Harper Turbo Vac dealer or Harper Industries at (620) 896-7381.

GENERAL EVAPORATIVE EMISSIONS WARRANTY COVERGE

1. Any warranted part that is not scheduled for replacement as part of the regular maintenance program, shown in the operator's manual, provided with the mower, is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by Harper Industries. Any such part repaired or replaced under the warranty will be warranted for the remainder of the period.
2. Any warranted part that is scheduled only for regular inspection in the written instructions supplied is warranted for the warranty period stated above. Instructions that state "repair or replace as necessary" will not reduce the period of warranty coverage. Any such part repaired or replaced under the warranty will be warranted for the remainder of the period.
3. Any warranted part that is scheduled for replacement as part of the regular maintenance program, shown in the operator's manual, provided with the mower, is warranted for the period of time prior to the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part must be repaired or replaced by Harper Industries. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement date for the part.
4. Repair or replacement of any warranted part under the warranty provisions herein must be performed at an Authorized Harper Industries Dealer at no charge to the owner.
5. Notwithstanding the provisions of subsection (4) above, warranty service or repairs will be provided at an Authorized Harper Industries Dealer.
6. The Turbo Vac's owner will not be charged for diagnostic labor that is directly associated with diagnosis of defective, emission-related warranted part, provided that such diagnostic work is performed at an Authorized Harper Industries Dealer.
7. Harper Industries is liable for damages to other engine or equipment components proximately caused by a failure under warranty of warranted part.
8. Throughout the evaporative emission control system's warranty period stated above, Harper Turf Equipment will maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
9. Only Harper Industries approved replacement parts may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of Harper Industries.
10. Add-on or modified parts that are not exempt by the Air Resources Board may not be used. The use of a non-exempted add-on or modified part by the purchaser will be grounds for disallowing a warranty claim. Harper Industries will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

EMISSION WARRANTY PARTS LIST

The following emission warranty parts are covered: fuel tanks, fuel lines, fuel line fittings, fuel caps, carbon canisters, canister mounting brackets, carburetor purge port connections, filters*, vapor hoses, clamps, control valves*, control solenoids*, electronic controls*, vacuum control diaphragms*, purge valves, liquid/vapor separators.

* As they relate to the installed equipment evaporative control system.

RECORDS

Date of Purchase _____ / _____ / _____

Serial Number Machine _____

Dealer's Name _____

Serial Number Engine _____

Dealer's Phone _____

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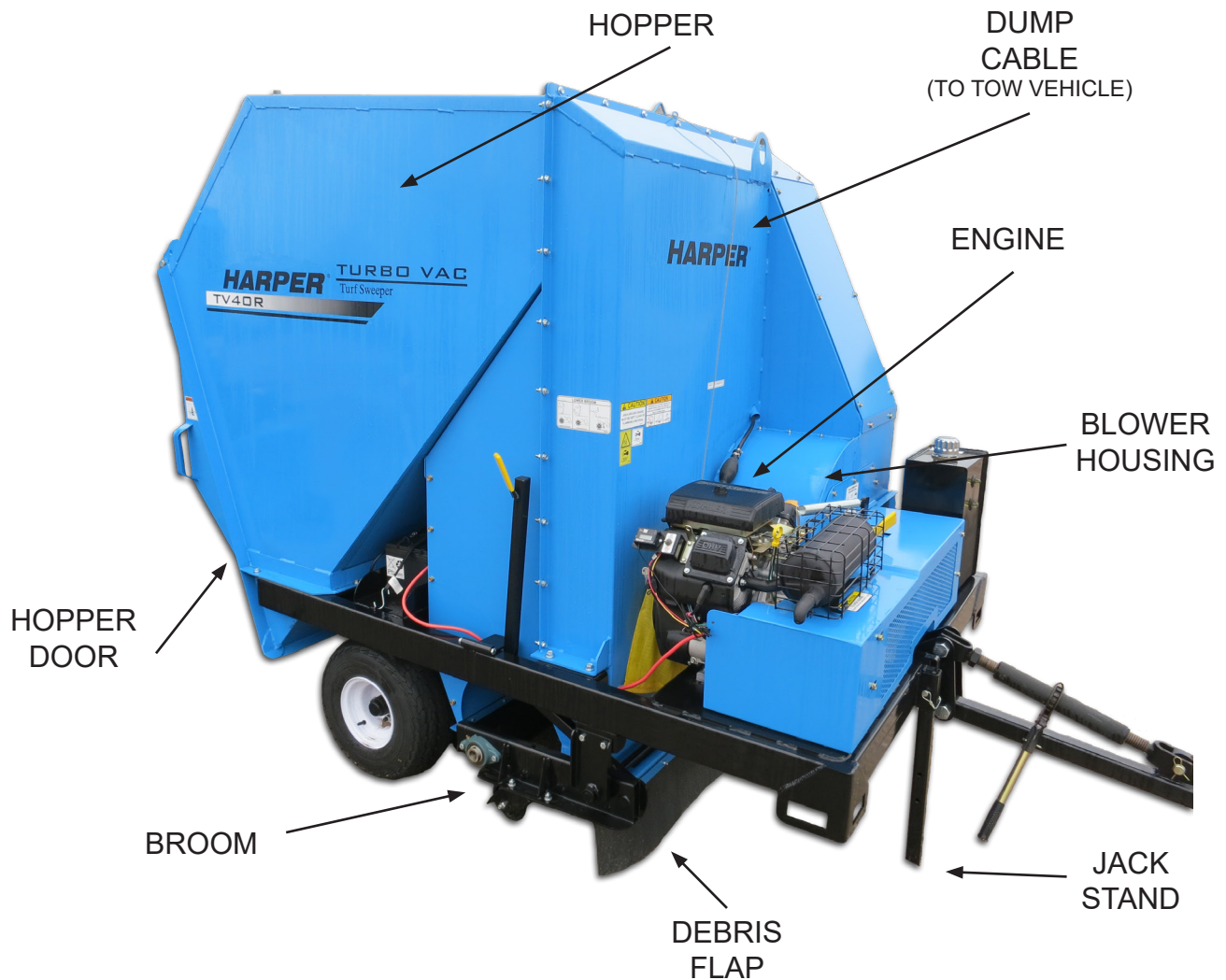
Specifications

Safety Features	Minimal dust generated, quiet operation - 90 dB
Blower Drive	Double V-belt drive with electric clutch
Blower Fan	25" diameter abrasion resistant steel with replaceable poly-liner 1 1/2" shaft with self-aligned bearings
Blower Discharge	Access plate for inspection and easy liner replacement
Airflow	Re-circulated air system
Brush Drive	Hydraulic motor direct drive
Engine	26.5 HP Kohler EFI gasoline
Hydraulics	Belt driven hydraulic pump
Hydraulic Oil	Crown AW 46; ISO 46 Hydraulic Oil See service schedule
Main Frame	11 gauge welded and reinforced steel tubing
Bearings	Greaseable sealed bearings
Hopper Capacity	4 cubic yards
Wheels/Tires	4-bolt wheels, 18.5 x 9.5 tires
Controls	Engine, blower & brush controls on machine
Sweeper	52" single sweeping head that follows the terrain with side mounted gauge wheels, rises to transport position, and lowers to operating position by handle located on the side; Brush and Rubber Fingers
Options	Curb brush and remote hose attachments.
Discharge	Mechanical trip and latch system
Tongue and Hitch	Adjustable tongue functions as pick-up height controller
Paint	Durable 2-part polyurethane
Dimensions	135" L x 64" W x 82" H
Weight	1600 lbs. - 730 kg
Fuel	6 gallon capacity - Gasoline

NOTE: Following publication of this manual, certain changes in standard equipment and/or options may have occurred which would not be included in these pages. Your Harper dealer is the best source for up-to-date information.

Control Identification

TV40RE



Hopper – The hopper stores up to 4 yards of material.

Engine – 26.5 HP Kohler EFI engine powers the blower and broom.

Hopper Door – Opens when the dump cable is pulled to release the material collected in the hopper.

Debris Flap – Helps to keep vacuum concentrated to the ground and to direct the material from the broom into the suction.

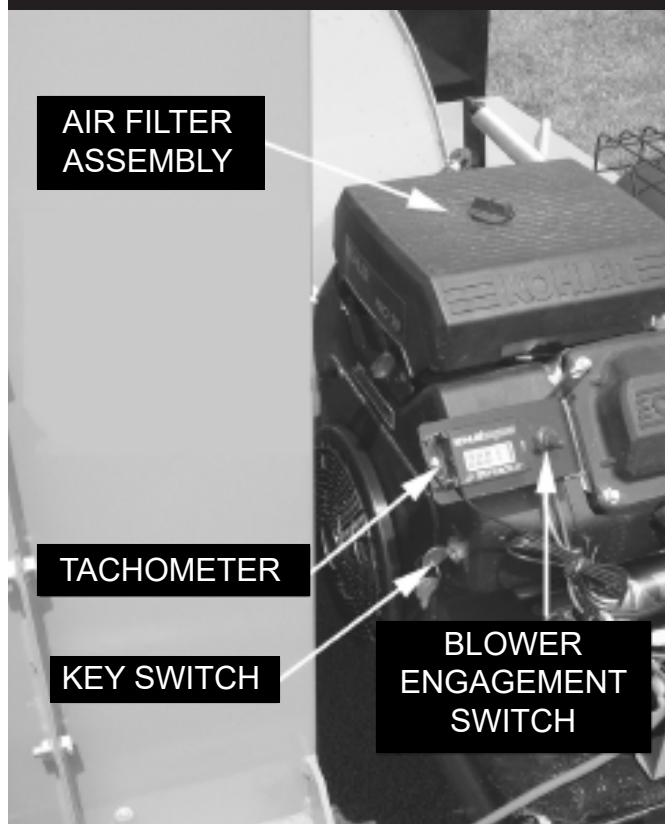
Blower Housing – Surrounds the fan and is covered on the inside by a plastic liner.

Broom (optional) – Assists material from the turf into the suction of the blower.

Dump Cable – Releases the hopper door.

Jack Stand – Supports the front of the Turbo Vac when it is not connected to a tractor. During operation, the jack stand must be up, with the wheel removed and in the transport location.

Engine Identification



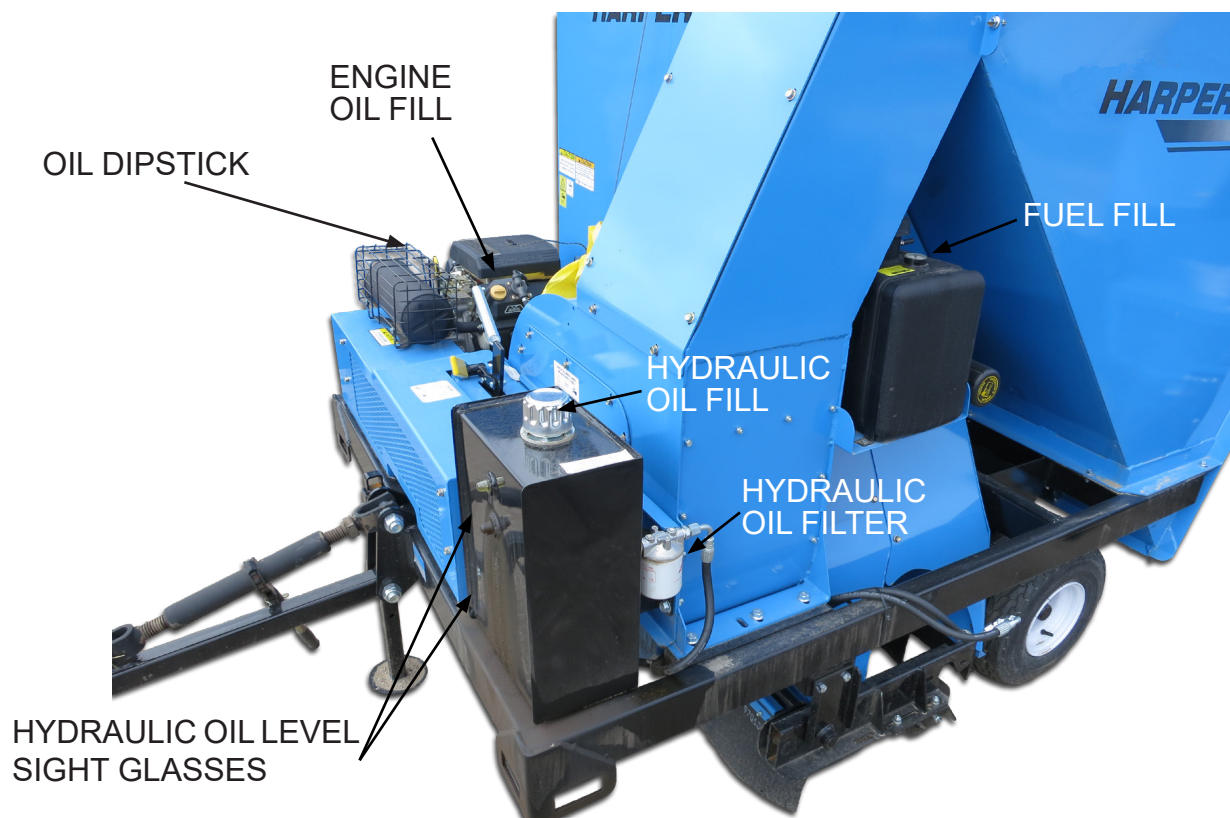
Air Filter Assembly – See service section for care information.

Tachometer – Shows the speed of the engine when running. Shows hours when engine is not running.

Key Switch – Used to start the engine

Blower Engagement Switch - Turns the blower on and off.

Fluid Maintenance Locations



Safety Guidelines

- Use genuine factory parts or parts with equivalent characteristics, including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/or others.
- If hardware is not secure, or if some of the hardware is over-tightened, equipment failure may result, posing possible safety hazards.
- To prevent possible eye injury, always wear SAFETY GLASSES while operating equipment.
- Replace locknuts and locking screws if you can tighten them without feeling considerable resistance for several turns before they are completely tight. Replace them with factory authorized parts or their equivalent.

Gasoline



Gasoline is extremely flammable and can be highly explosive.

- Always use an approved container for gasoline.
- Do not allow open flames or sparks while performing maintenance or refueling.
- Never remove the fuel tank cap or add gasoline when the engine is running or while it is hot.
- Never fill the fuel tank indoors (fumes can collect).
- Wipe up spilled gasoline immediately and completely.
- Do not store gasoline in a room with an appliance that has a pilot light to where electrical appliances or switches may cause sparks.
- Always store gasoline outside, in a safety can (a can which has a flame

arrestor and pressure relief valve in pour spout).

- Gasoline fumes are heavy and will sink to the lowest point, collecting and becoming more and more hazardous. 1 part gasoline in 20 parts air will explode easily and violently.
- Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- Be certain to provide adequate ventilation if an engine must be run indoors - exhaust fumes are dangerous.

Guards & Shields

- Keep all safety devices in place.
- Replace all worn, damaged, unusable, missing or lost safety shields and guards before operating the equipment.
- Keep the equipment in good operating condition.

Safety Decals

- If safety related or instructional decals become illegible or are removed, replace them immediately. New decals may be obtained from your local Harper Dealer.
- If you replace parts that have such decals attached to them, make sure the decals are replaced with current versions, and are on the replacement parts before the machine is operated again.

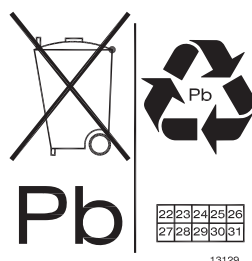
Safety Decals

- If **safety decals** become illegible or damaged, replace immediately. You can purchase new decals through your Harper dealer.
- If **parts with decals** are replaced, ensure the most current decals are attached to the new parts before operating the machine.

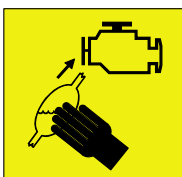
Safety Symbols

 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

1. P65 Warning



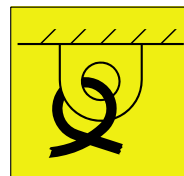
2. Recycle Battery



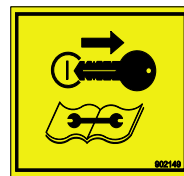
3. Engine Primer Bulb



4. Fuel Tank



5. Tie Down Point



6. Please read the manual before operation



7. Safety Alert



8. Hand can get caught in moving parts



9. Contact with moving parts will cause injury



10. Turn off equipment before performing maintenance



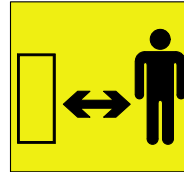
11. Don't enter machine during operation



17. High pressure spray can erode skin



12. Don't remove guards during operation



18. Stay at safe distance when machine is in use.



13. Hand can contact impeller if inserted into the shoot



19. Swinging door is a crush hazard



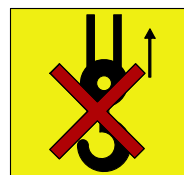
14. Hot surfaces will burn hands



20. Don't stand behind the machine



15. Turn off equipment before performing maintenance



21. Not a lift point



16. High pressure liquid can be injected into the body



22. Don't tilt the machine on soft or uneven surface

Battery



SAFETY WARNING!



Batteries can produce explosive gas. Use extreme caution when working on the battery.

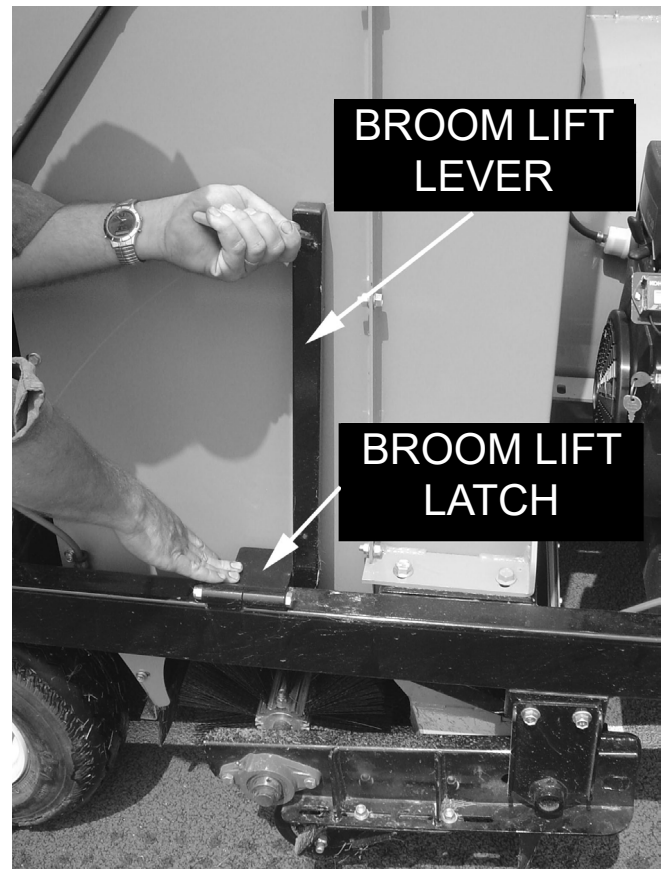
- Ventilate when charging battery or using in an enclosed space.
- DO NOT produce sparks from cable clamps, tools, or other sources; and DO NOT allow flames or smoking in the vicinity of the battery.
- Shield eyes when working near the battery.

Equipment & Controls

- Read and understand this manual.
- Altering this equipment in any manner which adversely affects its operation, performance, durability, or use will void the warranty and may cause hazardous conditions.
- Know the location and function of all controls and how to stop this equipment quickly in an emergency before you operate the equipment.
- Keep all nuts, bolts and screws tight to help ensure safe operation of this equipment.

Towing

- If towing on the highway, tail lights and turn signals must be attached before towing.
- Use a safety chain when towing.
- Make sure jack stand is up.
- Tire pressure should be 20 psi.
- Make sure lug nuts are tight.
- Broom should be locked up so that it does not rub on the ground.



Broom is locked up when the lift handle is in the vertical position and the latch is in place.

Hydraulics



SAFETY WARNING!



Escaping fluid under pressure can penetrate skin causing serious injury. To prevent serious injury or death:

- Relieve pressure on system before repairing, adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks.
- Use wood or cardboard instead of hands when looking for leaks.
- Keep all components in good repair.
- Do not use any type of heat, (welding, soldering, cutting torch, etc) near pressurized lines.

Before Operation

- Before operating this equipment, read and understand the Owner's Manual.
- Do not allow children to operate this machine.
- Tire pressure should be 20 psi. Make sure both tires have equal pressure.
- Wear approved eye and ear protection and other appropriate safety equipment while operating the machine.
- Make sure bolts holding tongue are secure and the jack is in the transport position. Use a safety chain.
- Engine governor settings are preset and should not be changed; any change can damage moving parts and void the warranty.
- Before starting the machine, visually inspect all nuts, bolts and other fasteners to see that they are properly secured. Nuts, bolts and other fasteners should be checked every 8 to 10 hours of operation for proper alignment and tightness.
- Replace damaged or missing safety decals.
- Replace locknuts and locking screws if you can tighten them without feeling considerable resistance for several turns before they are completely tight. Replace them with factory authorized parts or their equivalent.
- Make sure that all bearings or hinging parts are greased and or oiled properly. (See Service & Maintenance Section for more information)

During Operation

- Always keep a fire extinguisher near the Turbo Vac during operation.
- Keep clothing and all body parts away from rotating parts.
- Engine governor should not be changed; any change can damage moving parts and void warranty.

- When sweeping material into the machine, make certain there are no foreign materials such as rocks, cans, bottles or other hard materials included. Sweeping hard materials will reduce the life of the plastic liner in the blower housing.
- If a foreign object should strike the broom or blower mechanism and cause an unusual noise or vibration, shut the engine off immediately and allow it to come to a complete stop. Disconnect the spark plug wire from the spark plug from the power unit.

Do the following:

1. Inspect for damage.
2. Repair or replace any damaged parts.
3. Check for and tighten any loose bolts, nuts, fasteners or parts.

- Keep the engine area clean from debris and other accumulations to lessen the possibility of fire.
- Keep all safety shields and guards in place and in good working condition.
- If the Turbo Vac should become clogged, shut off the engine and allow it to come to a complete stop.
- Be sure to provide adequate ventilation if the engine must be run indoors – exhaust fumes are very dangerous.
- Hydraulic system operates under high pressure. Disable system prior to service.

Operations

Stopping Operation

1. Obtain and wear safety goggles before operating.
2. Fill the tank with gasoline. (Refer to engine manual for gasoline specifics.)



SAFETY WARNING!

Gasoline is extremely flammable and can be highly explosive. See Safety Guidelines for more information.

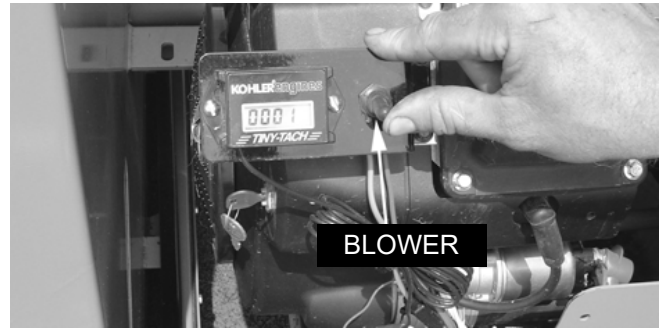


3. Make sure the vent valve on the gas cap is open. (If the cap is closed the engine will vapor lock and will not run.)

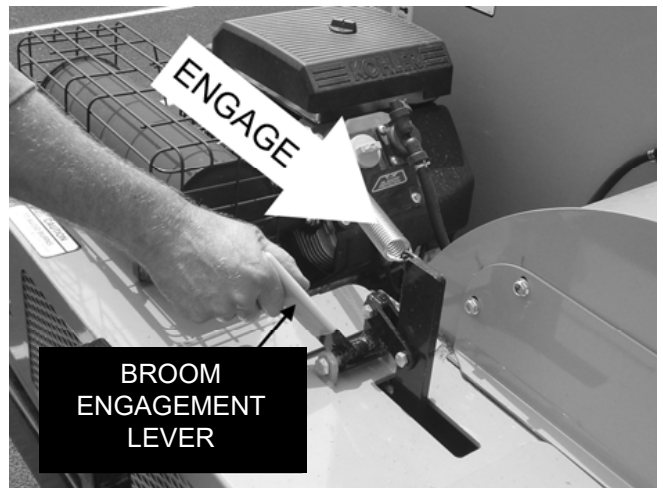


4. Attach the Turbo Vac to the tow vehicle. Be sure that the Turbo Vac is adjusted to the correct height. (Refer to adjustment section for setting the height.)
5. Run the dump cable to the tow vehicle to allow for convenient dumping. Attach with the pin provided to allow cable to break away from tow vehicle if it is not removed when unit is disconnected. This will help prevent any damage if the cable is forgotten.
6. Make sure that the blower and broom are disengaged.
7. Turn the key switch to the start position and release as soon as the engine starts. Do not turn the starter for more than 10 seconds.

8. Move the blower switch located beside the engine tachometer to the "on" position



9. If the unit has a broom, lower it and slowly engage broom lever.



10. Begin normal operation.

Stopping Operation



SAFETY WARNING!



Do not leave machine unattended, or attempt any service or inspection unless the machine has come to a complete stop, the engine has been shut off, and the spark plug has been disconnected.

1. Shut off tow vehicle and set the park brake.
2. Turn off the blower switch and disengage the broom lever.
3. Shut off the engine and allow the machine to come to a complete stop.

Unloading



SAFETY WARNING!



To reduce the risk of injury, do not stand near the back of the Turbo Vac while unloading.

1. Find a suitable place to dump the collected material.
2. Pull dump cable. Hopper door will open and material will slide out.
3. Drive forward to allow all the collected material to escape hopper.



4. Door will swing shut and latch when it clears the collected material.

Adjustments

Broom height

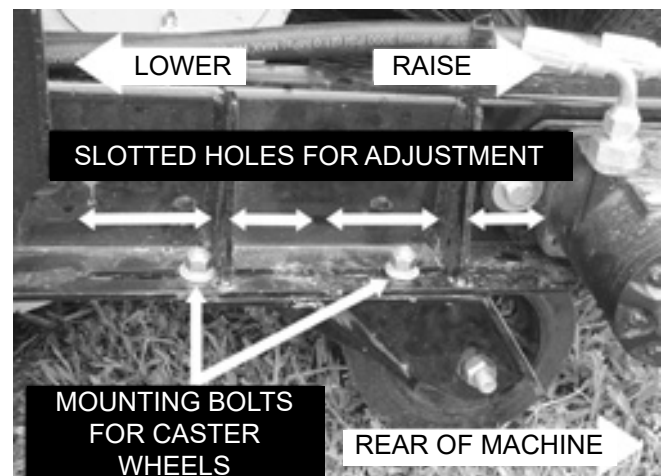
The broom height needs to be adjusted so that the broom is touching the top of the grass.



The broom height is determined by the caster wheels that it rides on. The caster wheel is attached with bolts located in slotted adjustment holes.

To adjust:

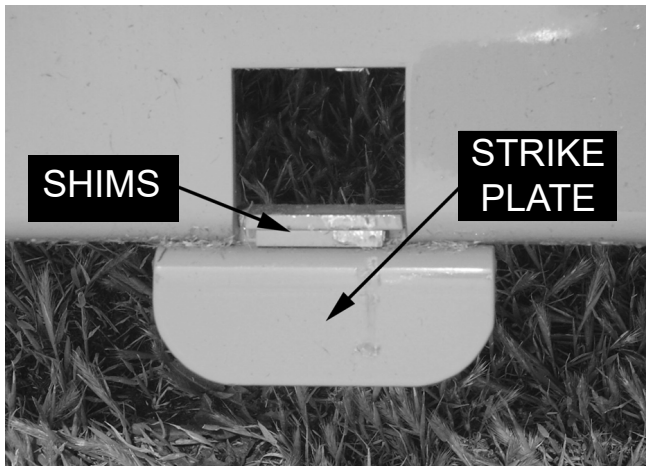
- Remove caster wheel mounting bolts.
- Adjust caster wheel to achieve desired broom height and tighten bolts.



Note: Brooms are originally 12" in diameter. When the broom wears to 10" the adjustment will not lower the broom enough for it to perform adequately and needs to be replaced. Part # 973001

Hopper Door Latch

Adjustment of the hopper door latch should never be necessary. If the hopper door won't latch or the hopper door does not seal against the hopper there are adjustments that can be made. There are shims that bolt on with the strike plate that can adjust the depth of the latch. It is possible to add or remove shims to make the door close properly.

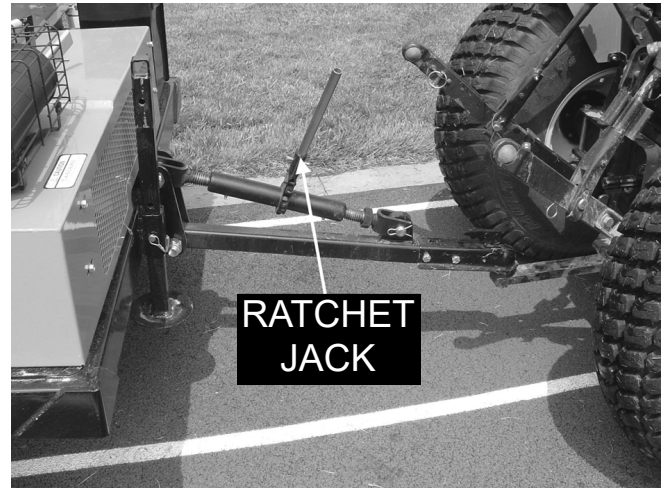


Height Adjustment

For best performance the Turbo Vac must be operating at the correct height. At the correct height the debris flap touches the top of the grass.



The height can be easily adjusted up or down by using the ratchet jack.

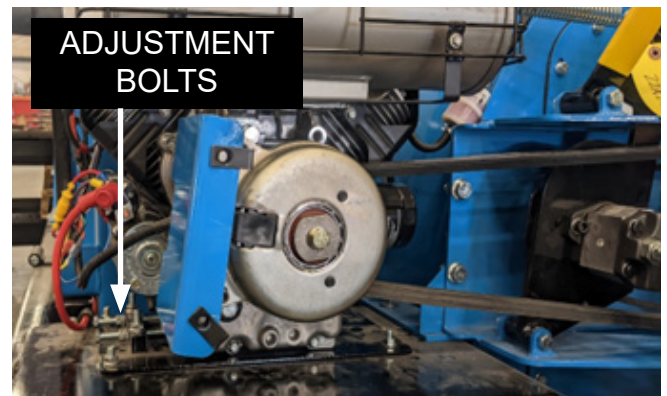


Blower Drive Belt Tension

The blower drive belt is adjusted by sliding the motor.

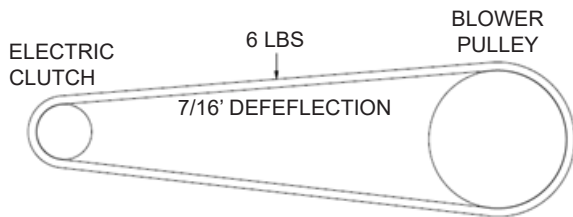
To Adjust:

- Loosen engine mounting bolts from underneath.
- Adjustment bolts are tightened to slide motor and increase belt tension



- Apply 6 lbs. of pressure to the mid-point between the electric clutch and blower pulley. The belt should deflect 7/16 in.
- Tighten engine mounting bolts.
- Too much tension (minimal deflection) can damage the belt and bearings. Too little tension (excessive deflection) will allow belt to slip and decrease blower performance.

- To replace the drive belt, loosen the belt tensioner and remove the old belt. Install the new belt, and follow the same procedure for adjusting tension as described previously.
- Inspect the belts frequently and maintain the correct tension and alignment.

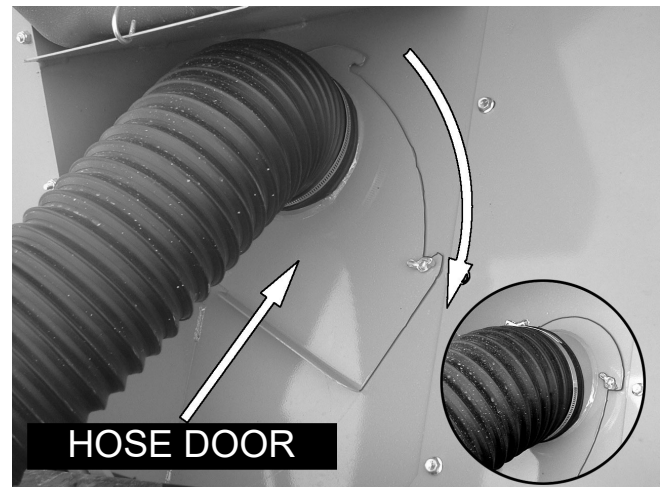


Electrical Wiring

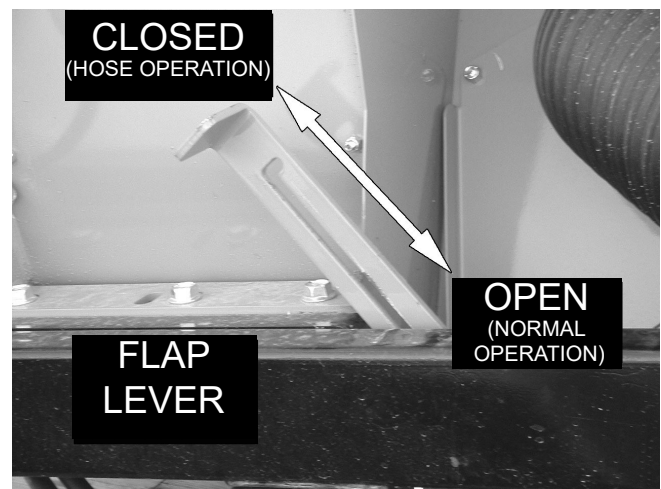
A 30 AMP fuse is located in-line between the blower switch and electric clutch.

Hose Option (900217)

1. Open the Hose Door by loosening the wing nut and swiveling the door down to the next notch.



2. Close the Flap. This blocks off air intake from underneath and creates suction in the hose.



3. Begin using hose.



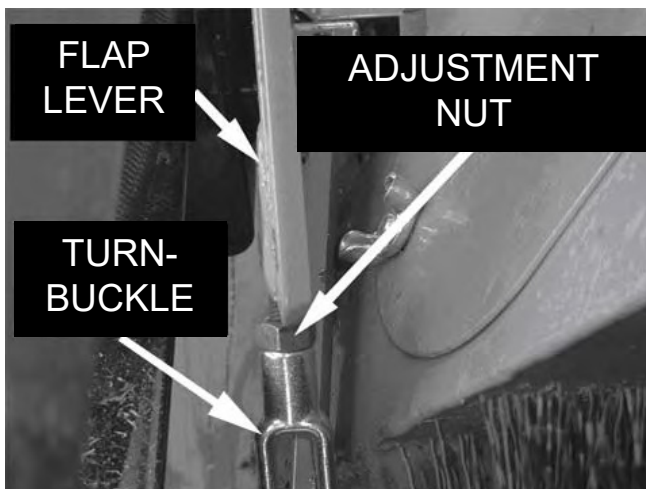
Stopping Operation

1. Move the flap lever to the open position.
2. Close the hose door.
3. Store hose in cavity between hopper and frame.



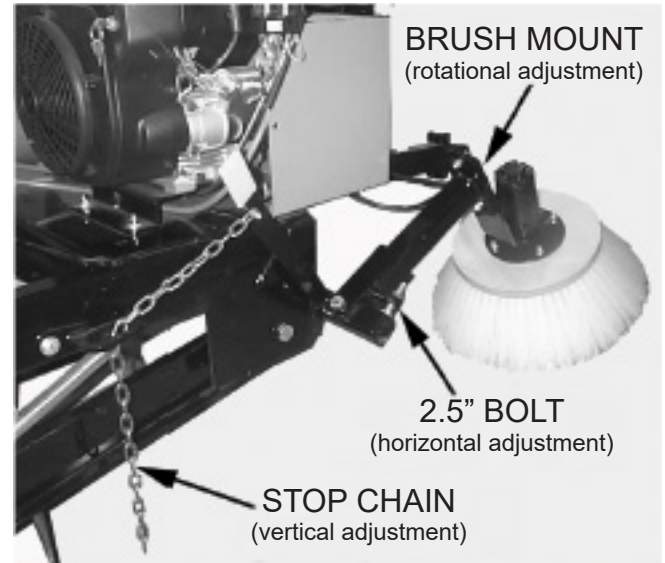
Flap Adjustment

- If there is not adequate suction at the hose make sure the flap is closing completely (a small gap will work because the vacuum will suck it shut). If there is a big gap, the flap may need adjusted. Loosening the adjustment nut will shorten the flap lever causing the flap to close tighter.



Edge Brush Option (900216)

- Follow instructions in Parts Section for installation of Edge Brush Option.
- The edge brush kit is used for cleaning areas along fences and curbs, etc., that are difficult to reach with the Turbo Vac broom.



- The edge brush can be adjusted vertically and horizontally, as well as rotated at an angle, so that debris is thrown into the Turbo Vac broom. For best results, angle the front edge of the brush downward.
- The stop chain is used to adjust the height of the brush during operation and to hold it up during transport.
- Never allow the brush to rest completely on the ground during operation.



SAFETY WARNING!



The Turbo Vac should never be transported with the edge brush in operating position. Always use the stop chain to suspend the brush during transport.

Contact your Harper Dealer for more information about optional equipment, or see the Harper Industries website at: www.harperindustries.com

Transporting

Transporting Machine on a Trailer

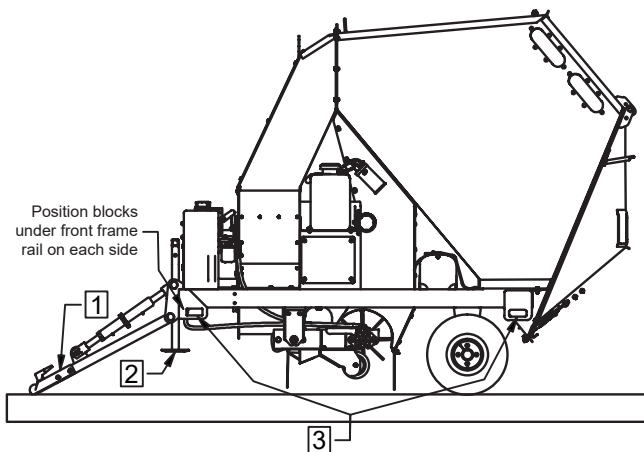
1. Use the ratchet jack to lower the hitch to support the front end of the machine. For extra stability, block up the outside edges of the front of the frame.
2. Raise the jack stand support so that it does not contact the trailer.
3. Use the front and rear tie down locations to secure the machine on the trailer.



IMPORTANT!



If the machine is secured with the jack stand support down, there is a risk of damage occurring to frame.



Service & Maintenance



SAFETY WARNING!



- Before servicing or inspecting the Turbo Vac, make sure the power source is shut off and all moving parts have stopped.
- Disconnect the spark plug wire from the spark plug or the negative battery cable to prevent the engine from being turned on accidentally during service.
- Always wear safety glasses and protective gloves when servicing the Turbo Vac.

Blower Liner

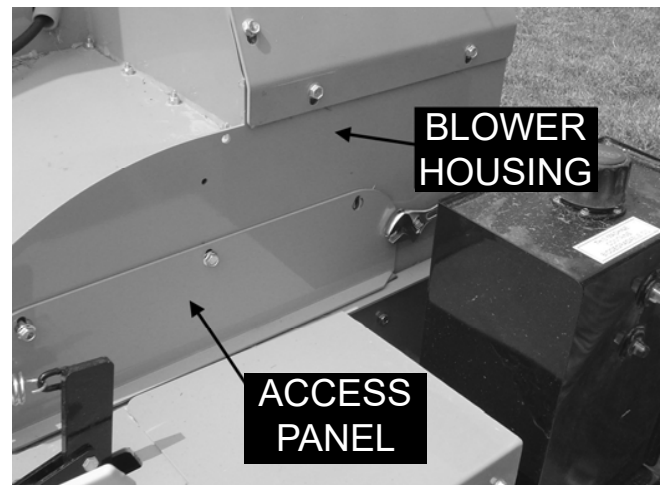


IMPORTANT!

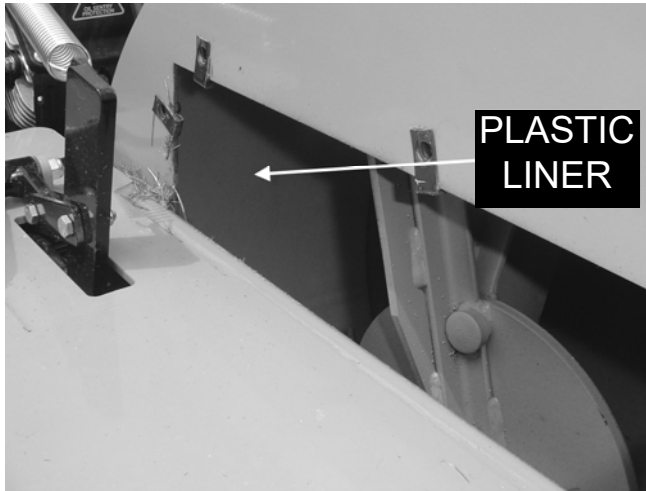


Regularly check the BLOWER LINER in the blower housing for wear. Failure to maintain blower liner may result in damage to the blower housing.

To check Blower Liner:
Remove access panel.



Check white plastic liner located around the inside walls of the blower housing around the blower fan.

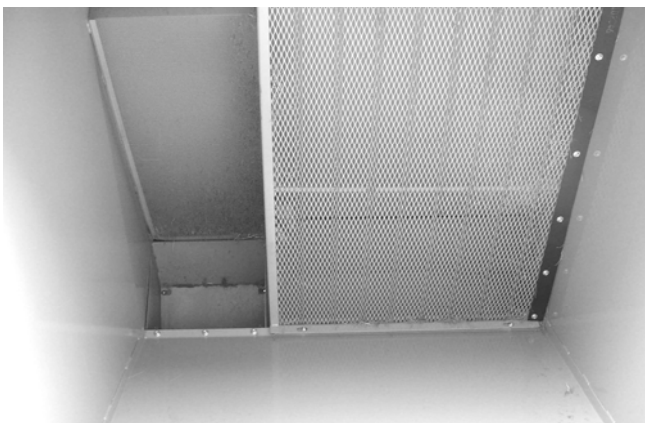


If liner is damaged or worn through; replace to avoid damage to blower housing. Part # 972010 or 972021 for a heavy duty urethane liner.

NOTE: Blower liner is a wear item and is not covered under warranty. Sandy conditions may shorten the life of the blower liner.

Screens

Periodically check the return air screens located in the hopper for excess buildup. Excess buildup can reduce performance and or negate the return air system causing an increase of dust.



To Clean Main Screen: Remove the two pins holding it in place. The screen will then swing down and can easily be cleaned out.

Hydraulic System

- The hydraulic system of the TV40RE is filled at the factory with Crown AW 46 hydraulic oil that has an ISO of 46.
- The TV40RE has a 10 micron, beta rated hydraulic oil filter designed for long life.

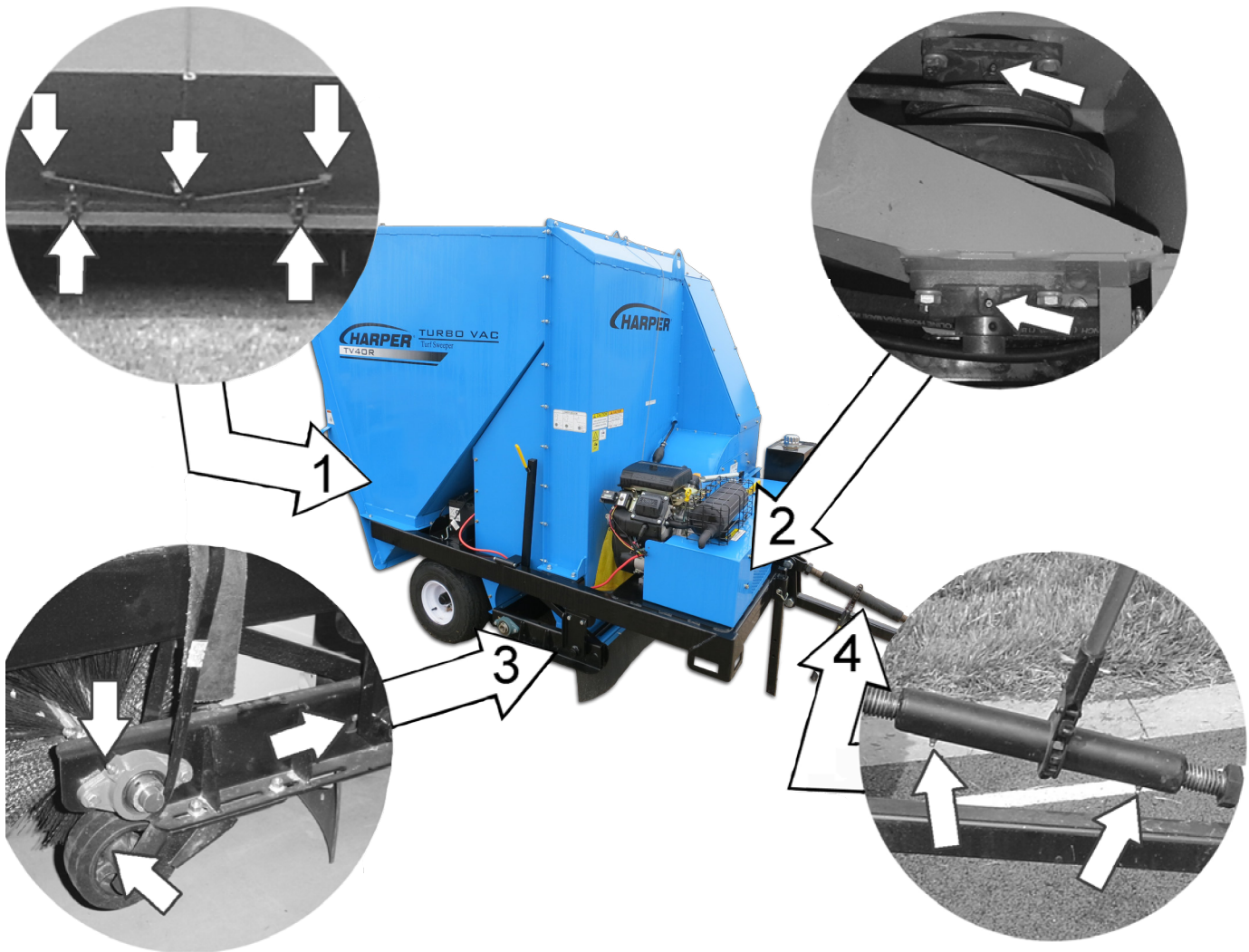
The following list of hydraulic fluids are compatible and can be mixed with Terresolve hydraulic fluid. However, mixing these hydraulic oils could reduce the biodegradability of the oil in the system. For warm environments, it is suggested that a fluid with a viscosity of ISO 68 be used. **MIXING OTHER OILS THAT ARE NOT INCLUDED ON THIS LIST COULD CAUSE GELLING AND DAMAGE TO THE HYDRAULIC COMPONENTS.** If another type of oil is desired, then the system must be completely drained and flushed first.

Appropriate replacements:

ISO 46: Recommend for running in ambient air temperatures of 32°F-110°F, and it contains a kinematic viscosity rating around 46 cSt at 40°C. (1cSt = 1mm²/s)

- Mobil DTE 25
- Mobil DTE 15M
- Amoco Rykon Premium Oil ISO 46
- Chevron Rykon Premium Oil ISO 46
- Conoco Hydroclear AW MV 46
- Exxon Univis N 46
- Pennzoil AWX MV 46
- Shell Tellus 52 M46
- Shell Tellus 52 V46
- Texaco Rando HDZ 46

Grease Locations



1. Hopper Door Latch Mechanism

The two latches and three shoulder bolts should be periodically oiled to prevent rusting and ensure proper operation.

2. Blower Shaft

The two grease zerks located on the shaft bearings should be greased every 10 hours. To access these bearings the front safety shield must be removed.

3. Broom Bearings, Pivot Arms & Wheel

The grease zerks located on the ends of the broom shaft, the pivot arms and the caster wheel should be greased every 10 hours. The pivot arm grease zerks are accessed through a hole in the frame.

4. Ratchet Jack

There are two grease zerks on the ratchet jack that should be greased annually.

Service Schedule

*Refer to engine manual for more information on engine servicing

**Disclaimer – On engine applications KOHLER Engine Co. recommends the following:

Daily or Before Starting Engine

Check engine oil level.....	SAE 10W-30
Check hydraulic oil level.....	Crown AW 46 or appropriate replacement - oil has shelf life of two years
Fill fuel tank.....	Clean unleaded, 87 Octane or higher
Check air cleaner.....	No dirty, loose or damaged parts.
Check air intake and cooling areas.....	Clean if necessary
Visually inspect machine.....	Check for loose bolts, fitting and hoses
Grease.....	Refer to service section
Check tire pressure.....	20 PSI

25 Hour Service (including previous items)

Check plastic liner (replace if necessary).....	DewEze part # 972010
---	----------------------

50 Hour Break-in Service (perform after first 50 hours of use)

Change hydraulic filter.....	DewEze part # 220559
------------------------------	----------------------

100 Hour Service (including previous items)

Clean outer air cleaner element.....	Kohler part # 25 083 01-S
Change oil.....	SAE 10W-30
Clean cooling areas by removing cooling shrouds	
Check serviceability of battery	

200 Hour Service (including previous items)

Check spark plug condition and gap.....	Gap to .76 mm (.030 in.) Kohler part # 12 132 02-S Spark Plug – Champion RC12YC
Change oil filter.....	Kohler part # 12 050 01-S

250 Hour or Annually Service (including previous items)

Change hydraulic filter.....	DewEze part # 220559
Change outer air cleaner element.....	Kohler part # 25 083 01-S
Check inner air cleaner element (change if dusty from severe conditions)	Kohler part # 25 083 04-S

500 Hour or Annually Service (including previous items)

Have Bendix starter drive serviced***	
Have solenoid shift starter disassembled and cleaned***	
Have crankshaft spline lubricated***	
Change hydraulic oil.....	5 gallons - Crown AW46 or equivalent.
Change inner air cleaner element.....	Kohler part # 25 083 04-S

***Should be serviced by an authorized Kohler Dealer

Troubleshooting

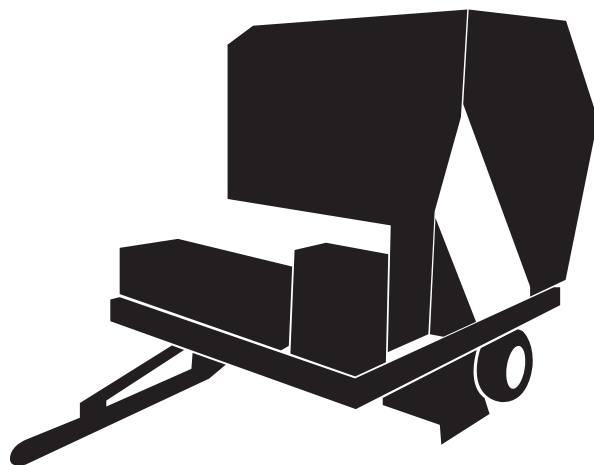
Engine:

Problem:	What to Check:
Engine will not start	<ul style="list-style-type: none">• Improper control settings• Engine may be low on fuel• Engine may be low on oil• Battery charge may be too low• Possible internal problems• Make sure engine is primed with gas from the manual primer bulb
Problem: What to Check:	
Engine shuts off during operation	<ul style="list-style-type: none">• Engine may be low on fuel• Engine may be low on oil• Air filter may be clogged

Vacuum:

Problem:	What to Check:
Turbo Vac won't sweep up material	<ul style="list-style-type: none">• Hopper may be full• Turbo Vac may not be close enough to the ground• Air screens in hopper may be plugged• Nozzle may be plugged• Door for hose option may be closed

Parts Section



TURBO VAC 40

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PARTS SECTION

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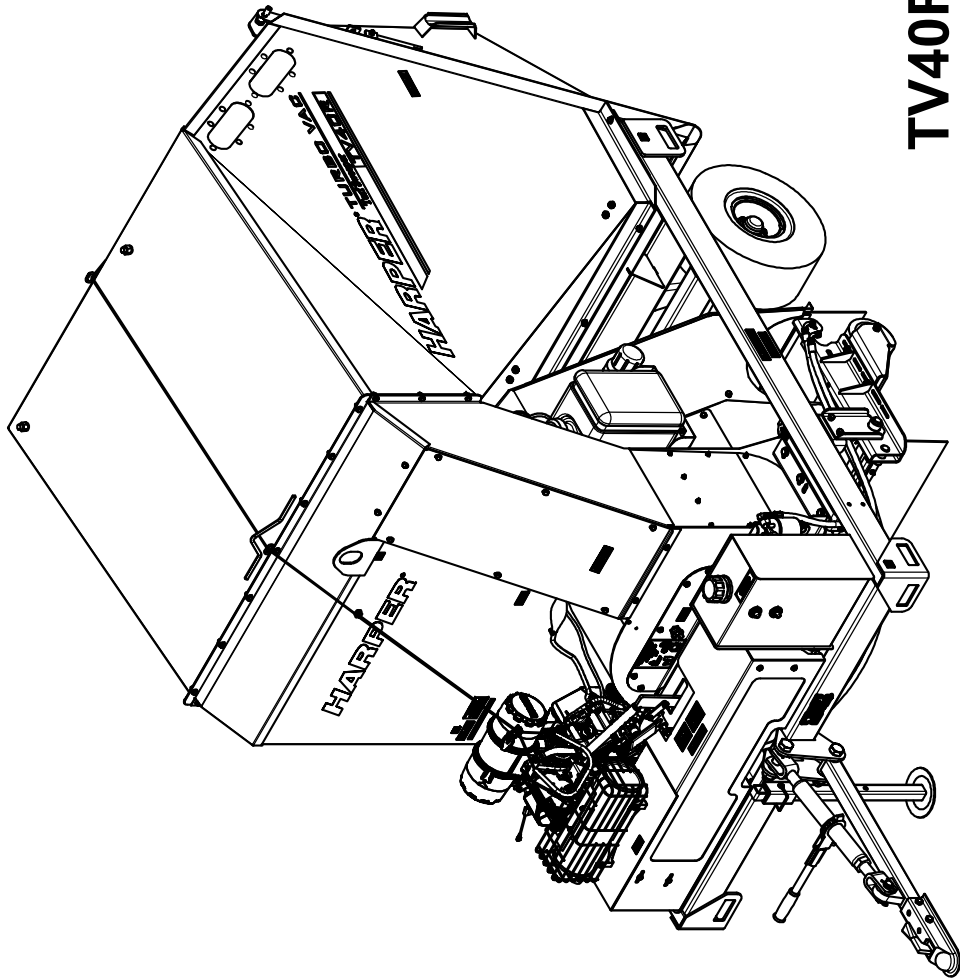
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Parts List

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1	1	905179	INSTALLATION, TV40RE FRAME
2	1	905180	INSTALLATION, TV40RE HOPPER
3	1	905181	INSTALLATION, TV40RE ACCESS PANELS
4	1	905183	INSTALLATION, TV40RE ELECTRONICS
5	1	905184	INSTALLATION, TV40RE HYDRAULICS
6	1	905185	INSTALLATION, TV40RE BLOWER HOUSING
7	1	905186	INSTALLATION, TV40RE DECALS
8	1	905187	INSTALLATION, TV40RE DECK LIFT
9	1	905200	INSTALLATION, TV40RE ENGINE, CARB



TV40RE BASIC MACHINE, CARB

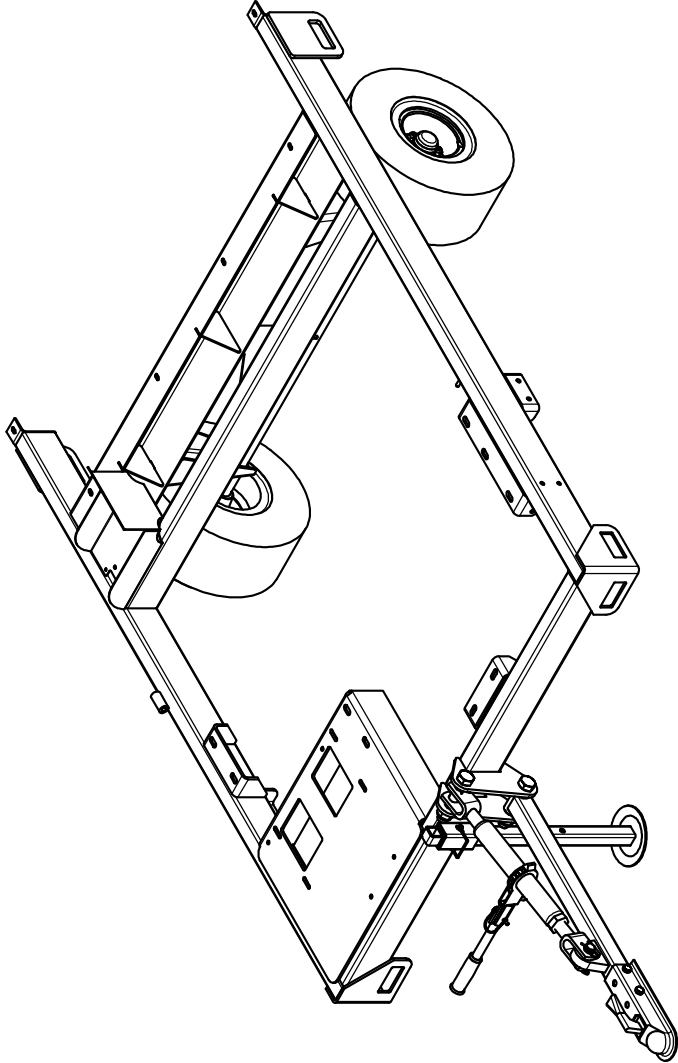
905179

REV: C

C

1Parts List

Item	Qty	Part #	DESCRIPTION
1	1	102141	Pin, Lock .1875 x 1.625
2	1	110304	Pin, Lock 3/8 X 2.5 Sq
3	2	110361	Bolt, 1-8 X 5.5
4	2	110428	Bolt, 1/2-13 X 3.0
5	2	110602	Nut, 1-8 Lock Nylon Insert
6	2	110613	Nut, Castle 3/4-16
7	2	110615	Nut, 1/2-13, Unitorque Lock
8	2	110678	Washer, 3/4 Flat SAE
9	2	510235	Hub Assembly
10	2	510463	Cotter Pin, 1/8 X 1.25
11	1	902175	Grip, Handle 7/8" Rnd X 4.56"
12	1	912100	Ball Coupler, 2"
13	1	942160	Ratchet Jack
14	2	943051	Tire & Wheel Assy, 9.5-8 X 18 Turf
15	1	975189	Frame, TV40
16	1	975601	Hitch Assy Wldmnt
17	1	975610	Jack Stand Wldmnt



TV40RE FRAME INSTALLATION

1Parts List				1Parts List				1Parts List				905179		REV: C
Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION			
1	1	102141	Pin, Lock .1875 x 1.625	9.3	2	510466	BEARING CONE, TAPER 1.0 X .58	11	1	902175	Grip, Handle 7/8" Rnd X 4.56"			
2	1	110304	Pin, Lock 3/8 X 2.5 Sq	9.4	1	510467	SEAL, CR 12407	12	1	912100	Ball Coupler, 2"			
3	2	110361	Bolt, 1-8 X 5.5	9.5	1	510469	DUST CAP	13	1	942160	Ratchet Jack			
4	2	110428	Bolt, 1/2-13 X 3.0	9.6	1	511073	HUB	14	2	943051	Tire & Wheel Assy, 9.5-8 X 18 Turf			
5	2	110602	Nut, 1-8 Lock Nylon Insert	10	2	510463	Cotter Pin, 1/8 X 1.25	15	1	975189	Frame, TV40			
6	2	110613	Nut, Castle 3/4-16					16	1	975601	Hitch Assy Widmnt			
7	2	110615	Nut, 1/2-13, Unitorque Lock					17	1	975610	Jack Stand Widmnt			
8	2	110678	Washer, 3/4 Flat SAE											
9	2	510235	Hub Assembly											
9.1	4	110617	LUGNUT, 1/2-20 GR 5											
9.2	2	510465	BEARING CUP, 1.98 X .42											

HUB INSTALLATION

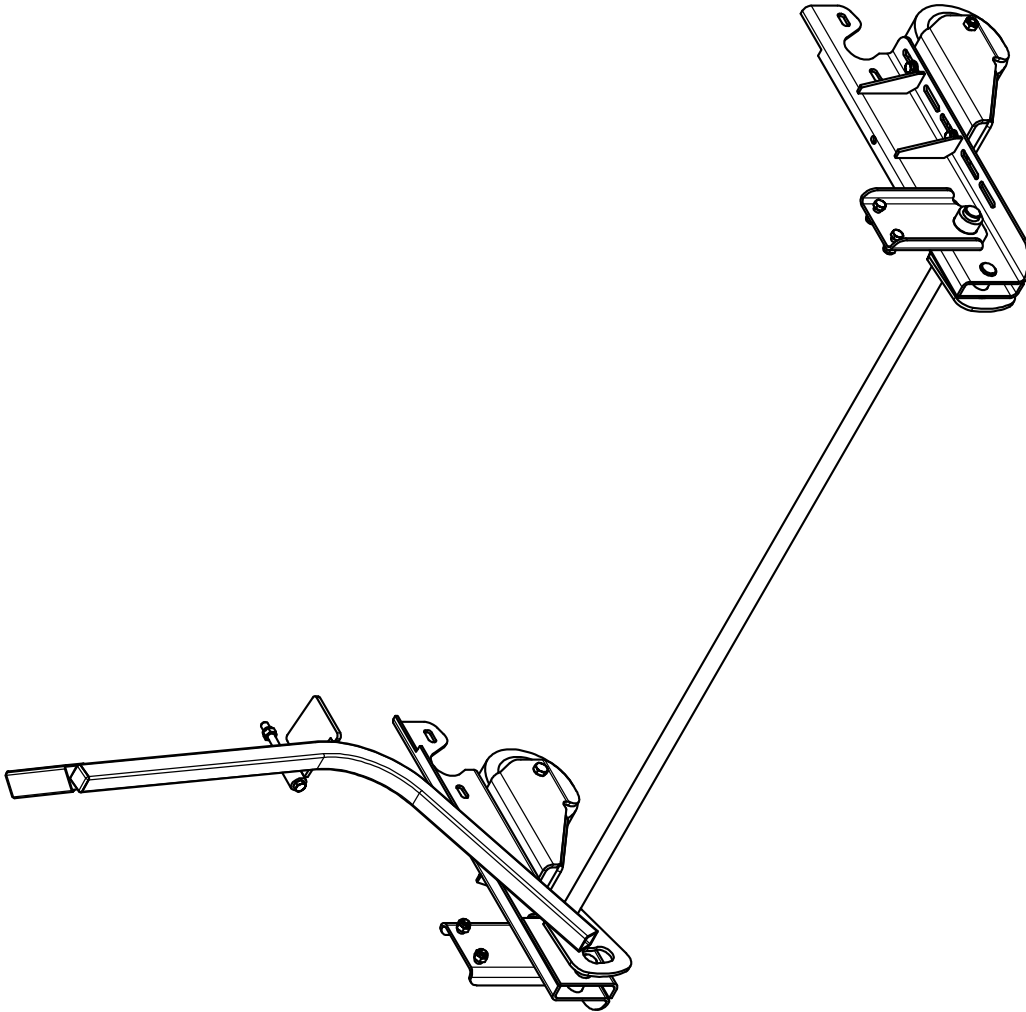
1. TIGHTEN NUT ON SPINDLE WHILE ROTATING HUB
2. TORQUE NUT TO 50 FT LBS
3. BACK OFF NUT UNTIL FIRST CASTELLATION ALIGNS WITH HOLE
4. INSTALL COTTER PIN IN HOLE

DISCARD PIN AND USE 110361 & 110602 TO SECURE

(13) Comes with rubber grip, (11) is grip service part.

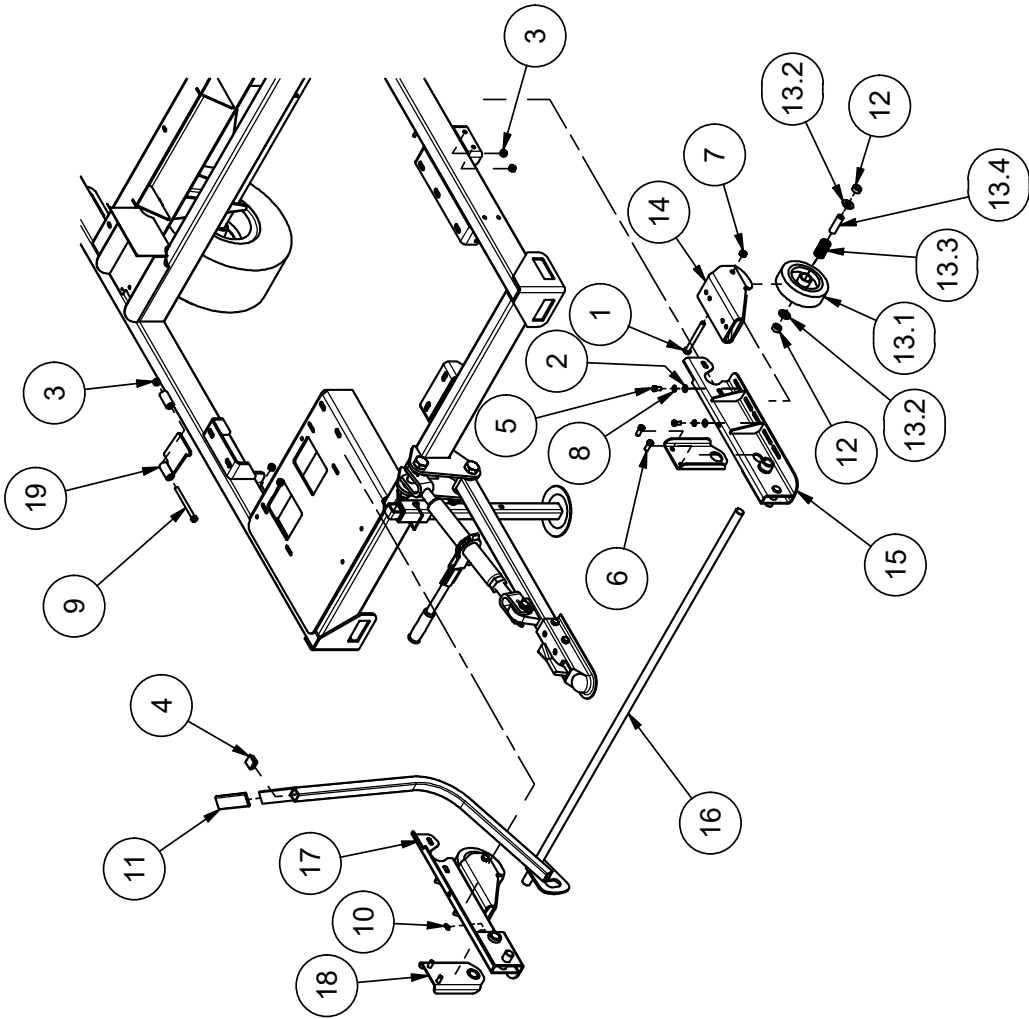
TORQUE LUGNUTS TO 100 FT-LBS

905187		REV: B	
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	110004	BOLT, 1/2-13 X 4.5
2	4	110155	WASHER, 3/8" FLAT SAE
3	5	110219	NUT, 7/16-14 LOCK NYLON INSERT
4	1	110313	1-1/4 SQ PLUG
5	4	110433	BOLT, 3/8-16 X .75
6	4	110528	BOLT, 7/16-14 X 1.0
7	2	110642	NUT, 1/2-13 HEX JAM GR 2
8	4	110672	WASHER, 3/8" LOCK
9	1	110710	BOLT, 7/16-14 X 5.0
10	2	500231	GREASE ZERK, 1/4-28 45deg
11	1	910044	COVER, VINYL .25 X 1.5 X 4 GRIP
12	4	910050	ENGAGING CHANNEL SPACER
13	2	940043	CASTER WHEEL ASSY
14	2	975188	Weldment, TV40 Caster Wheel Bracket
15	1	975614	LEFT BROOM ARM WLDMNT
16	1	975615	BROOM LIFT WLDMNT
17	1	975616	RIGHT BROOM ARM WLDMNT
18	2	975617	BROOM PIVOT WLDMNT
19	1	975623	BROOM LATCH WLDMNT

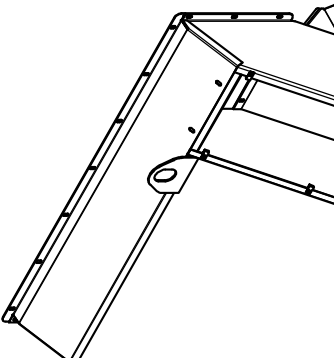


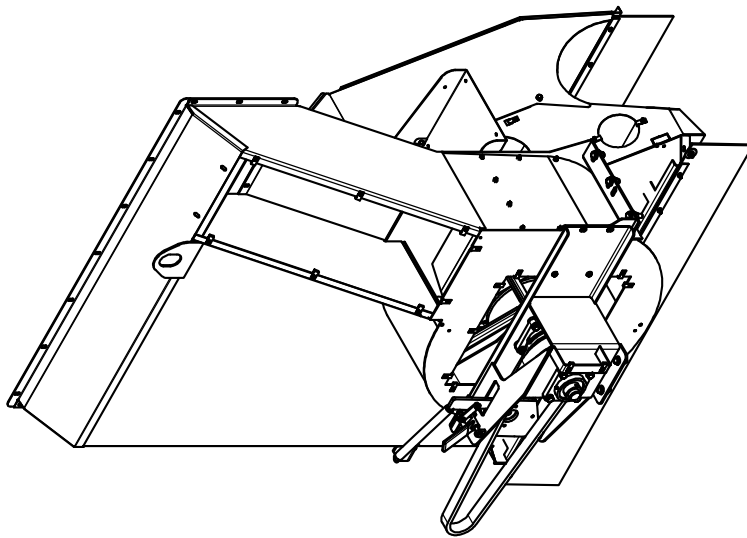
DECK LIFT INSTALLATION

Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	110004	BOLT, 1/2-13 X 4.5
2	4	110155	WASHER, 3/8" FLAT SAE
3	5	110219	NUT, 7/16-14 LOCK NYLON INSERT
4	1	110313	1-1/4 SQ PLUG
5	4	110433	BOLT, 3/8-16 X .75
6	4	110528	BOLT, 7/16-14 X 1.0
7	2	110642	NUT, 1/2-13 HEX JAM GR 2
8	4	110672	WASHER, 3/8" LOCK
9	1	110710	BOLT, 7/16-14 X 5.0
10	2	500231	GREASE ZERK, 1/4-28 45deg
11	1	910044	COVER, VINYL .25 X 1.5 X 4 GRIP
12	4	910050	ENGAGING CHANNEL SPACER
13	2	940043	CASTER WHEEL ASSY
13.1	1	942071	CASTER WHEEL 6"
13.2	2	942115	RETAINING SEAL
13.3	1	942116	ROLLER BEARING
13.4	1	942164	SPANNER BUSHING, .75X.5X2.437
14	2	975188	Weldment, TV40 Caster Wheel Bracket
15	1	975614	LEFT BROOM ARM WLDMNT
16	1	975615	BROOM LIFT WLDMNT
17	1	975616	RIGHT BROOM ARM WLDMNT
18	2	975617	BROOM PIVOT WLDMNT
19	1	975623	BROOM LATCH WLDMNT



905185				REV: D																			
Parts List								Parts List								Parts List							
Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION								
1	9.5'	100613	Seal	11	2	110421	Bolt, 5/16-18 X 1-1/4	33	2	940113	Key, 3/8 X 5												
2	53"	100623	Seal	12	2	110423	Bolt, 5/16-18 X 1.0	34	1	942004	Belt, A37												
3	10	110001	Bolt, 1/2-13 X 1.25, Wiz Flange	13	6	110437	Bolt, 3/8-16 X 0.75, Wiz Flange	35	1	942053	Belt, Powerband 2b70												
4	2	110049	Washer, 5/16" X 1 1/2 Fender	14	23	110444	Bolt, 5/16-18 X 0.75, Wiz Flange	36	1	942054	Spring												
5	4	110093	Setscrew, 3/8-16 X 1.25	15	20	110464	Bolt, 1/4-20 X 1.0	37	1	942067	Bushing, Sk 1 1/2												
6	2	110219	Nut, 7/16-14 Lock Nylon Insert	16	2	110472	Bolt, 3/8-16 X .375 Shcs	38	1	942152	Sheave, 2a8.2/B8.6 Qd-Sk												
7	55	110319	Nut, 5/16-18 U-Type .751	17	2	110547	Bolt, 7/16-14 X 3.5	39	1	942180	Bushing, Qd 1-1/2" Sds												
8	12	110326	Bolt, 1/4-20 X 1 In Carriage	18	11	110588	Nut, 1/2-13 Wiz Flange	40	2	970161	Blower Liner Retainer, Inner												
9	4	110379	Bolt, 1/2-13 X 2.0	19	2	110603	Nut, 5/16-18 Lock (Nylon)	41	2	970162	Blower Liner Retainer, Outer												
10	4	110419	Bolt, 1/2-13 X 1.75	20	32	110630	Nut, 1/4-20 Lock (Nylon Insert)	42	1	970646	Air Return, Left												
				21	6	110645	Nut, 3/8-16 Wiz Flange	43	1	970647	Air Return, Right												
				22	8	110666	Washer, 1/2" Lock	44	1	970684	Debris Flap Rear												
				23	1	110670	Washer, 7/16" Flat Standard	45	1	970685	Main Debris Flap												
				24	4	110673	Washer, 1/4" Flat Standard	46	1	970688	Air Return, Back												
				25	4	110826	Nut, 3/8-16 Gr 5	47	1	970711	Belt Guard												
				26	1	111222	Bolt, 1/2-13 X 1.75, Wiz Flange	48	2	970723	Clamp Bar, Debris Flap												
				27	2	410851	Bearing, 4fng 1 1/2"	49	1	972010	Blower Liner, .250 Uhmw												
				28	1	540304	Sheave, 1a5.6/B6.0 Qd-Sds	50	1	975195	Fan Assy												
				29	2	810629	Handle Clamp	51	1	975602	Blower Housing Widmnt												
				30	1	910044	Cover, Vinyl .25 X 1.5 X 4 Grip	52	1	975605	Pump Mount Widmnt												
				31	1	940037	Sheave, 1a4.7 X .531 Kss	53	1	975618	Blower Support Widmnt												
				32	1	940041	Blower Shaft	54	1	975619	Pump Disengage Weldment												

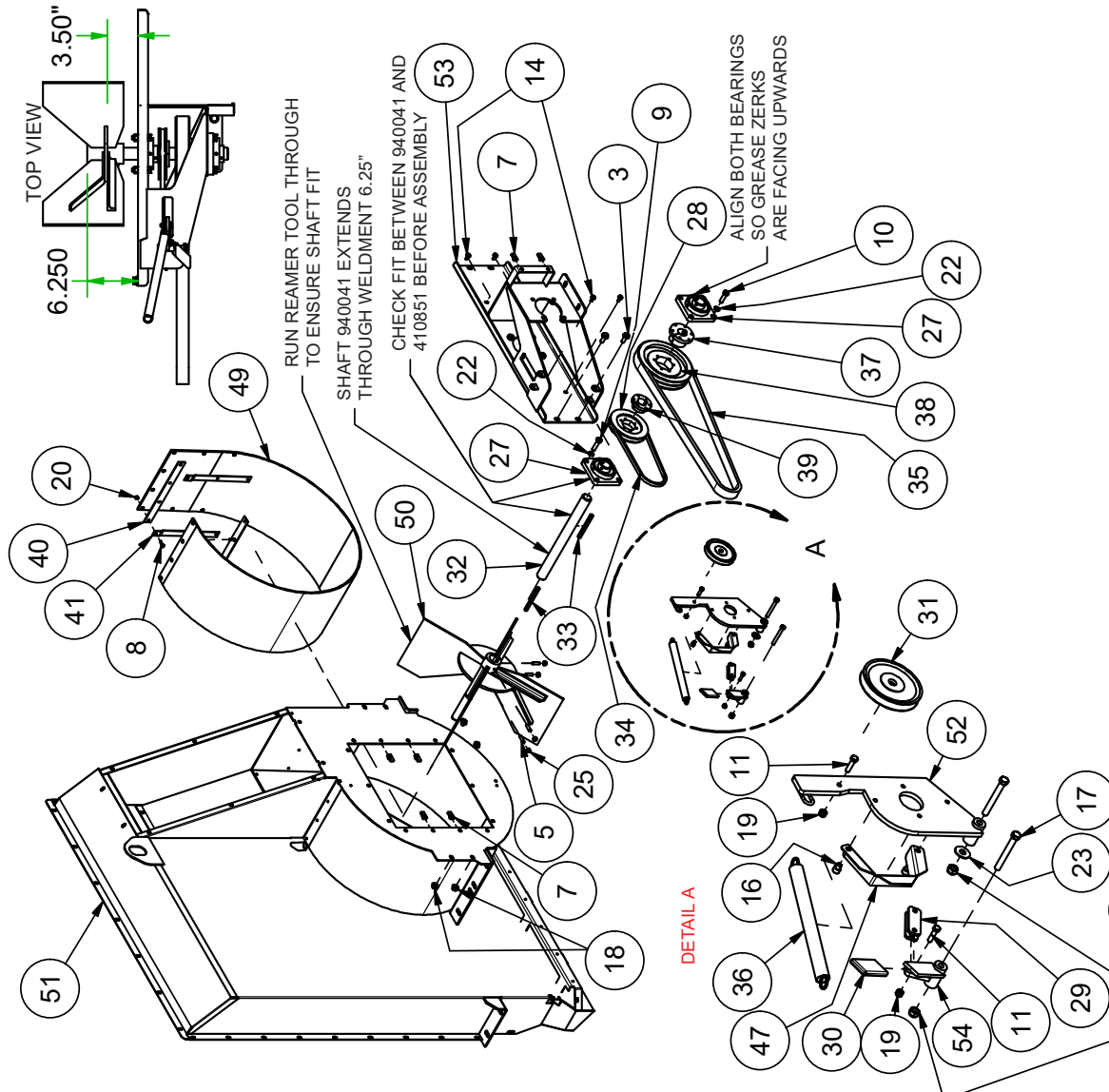




BLOWER HOUSING INSTALLATION

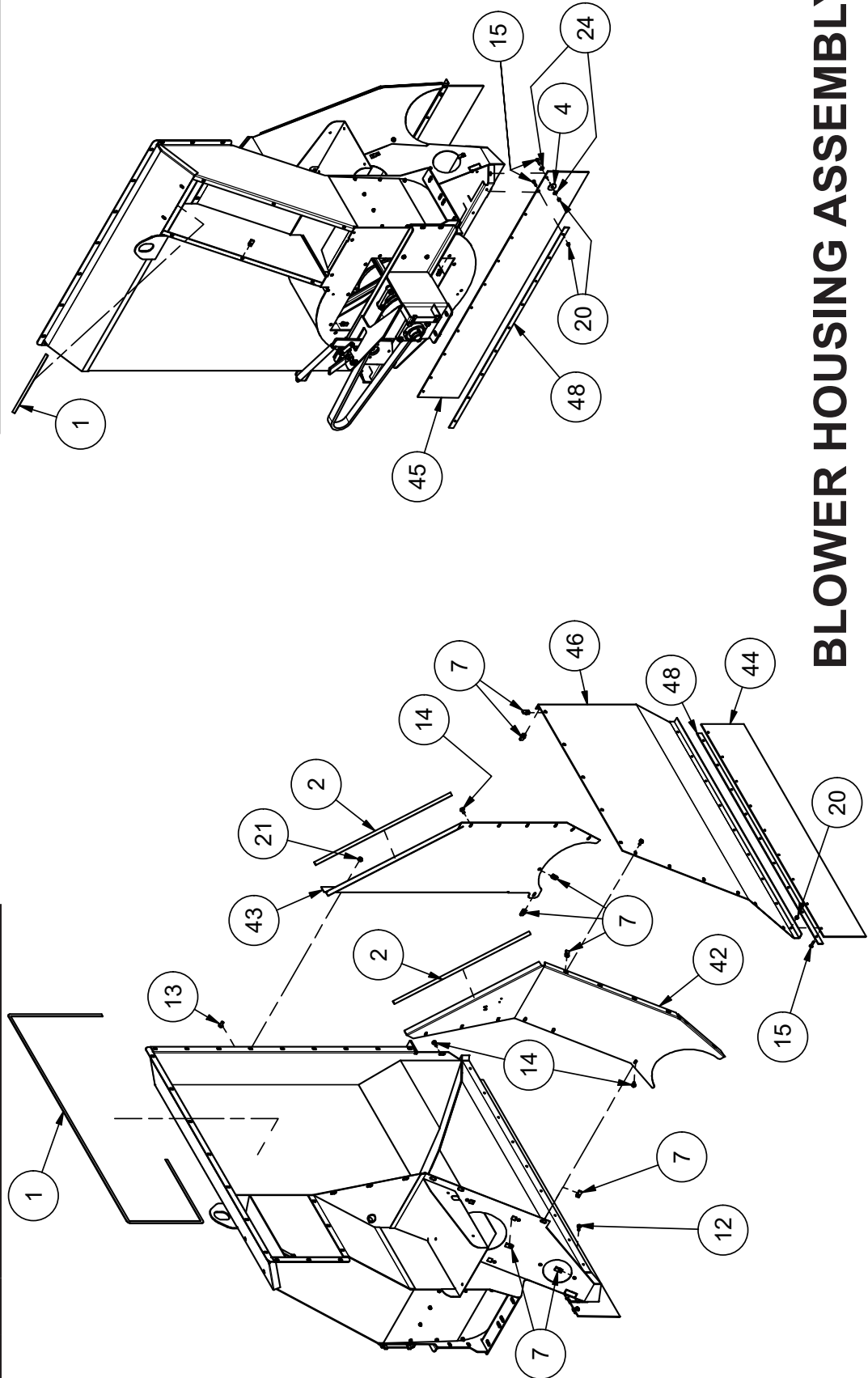
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Parts List		
Item	Qty	Part # DESCRIPTION
3	10	110001 Bolt, 1/2-13 X 1.25, Wiz Flange
5	4	110093 Setscrew, 3/8-16 X 1.25
6	2	110219 Nut, 7/16-14 Lock Nylon Insert
7	55	110319 Nut, 5/16-18 U-Type .75l
8	12	110326 Bolt, 1/4-20 X 1 In Carriage
9	4	110379 Bolt, 1/2-13 X 2.0
10	4	110419 Bolt, 1/2-13 X 1.75
11	2	110421 Bolt, 5/16-18 X 1-1/4
14	23	110444 Bolt, 5/16-18 X 0.75, Wiz Flange
16	2	110472 Bolt, 3/8-16 X .375 Shcs
17	2	110547 Bolt, 7/16-14 X 3.5
18	11	110588 Nut, 1/2-13 Whiz Flange
19	2	110603 Nut, 5/16-18 Lock Nylon
20	32	110630 Nut, 1/4-20 Lock (Nylon Insert)
22	8	110666 Washer, 1/2" Lock
23	1	110670 Washer, 7/16" Flat Standard
25	4	110826 Nut, 3/8-16 Gr 5
27	2	410851 Bearing, 4fng 1 1/2"
28	1	540304 Sheave, 1a5.6/B6.0 Qd-Sds
29	2	810629 Handle Clamp
30	1	910044 Cover, Vinyl .25 X 1.5 X 4 Grip
31	1	940037 Sheave, 1a4.7 X .531 Kss
32	1	940041 Blower Shaft
33	2	940113 Key, 3/8 X 5
34	1	942004 Belt, A37
35	1	942053 Belt, Powerband 2b70
36	1	942054 Spring
37	1	942067 Bushing, Sk 1 1/2
38	1	942152 Sheave, 2a8.2/B8.6 Qd-Sk
39	1	942180 Bushing, Qd 1-1/2" Sds
40	2	970161 Blower Liner Retainer, Inner
41	2	970162 Blower Liner Retainer, Outer
47	1	970711 Belt Guard
49	1	972010 Blower Liner .250 Uhmw
50	1	975195 Fan Assy Wldmnt
51	1	975602 Blower Housing Wldmnt
53	1	975618 Blower Support Wldmnt
54	1	975619 Pump Disengage Weldment



FAN AND LINER INSTALLATION

Parts List				Parts List				Parts List				Parts List			
Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION
1	9.5	100613	Seal	14	23	110444	Bolt, 5/16-18 X 0.75, Wiz Flange	42	1	970646	Air Return, Left	43	1	970647	Air Return, Right
2	53	100623	Seal	15	20	110464	Bolt, 1/4-20 X 1.0	44	1	970684	Debris Flap Rear	45	1	970685	Main Debris Flap
4	2	110049	Washer, 5/16" X 1 1/2 Fender	20	32	110630	Nut, 1/4-20 Lock (Nylon Insert)	46	1	970688	Air Return, Back	48	2	970723	Clamp Bar, Debris Flap
7	55	110319	Nut, 5/16-18 U-Type .75l	21	6	110645	Nut, 3/8-16 Wiz Flange								
12	2	110423	Bolt, 5/16-18 X 1.0	24	4	110673	Washer, 1/4" Flat Standard								
13	6	110437	Bolt, 3/8-16 X 0.75, Wiz Flange												

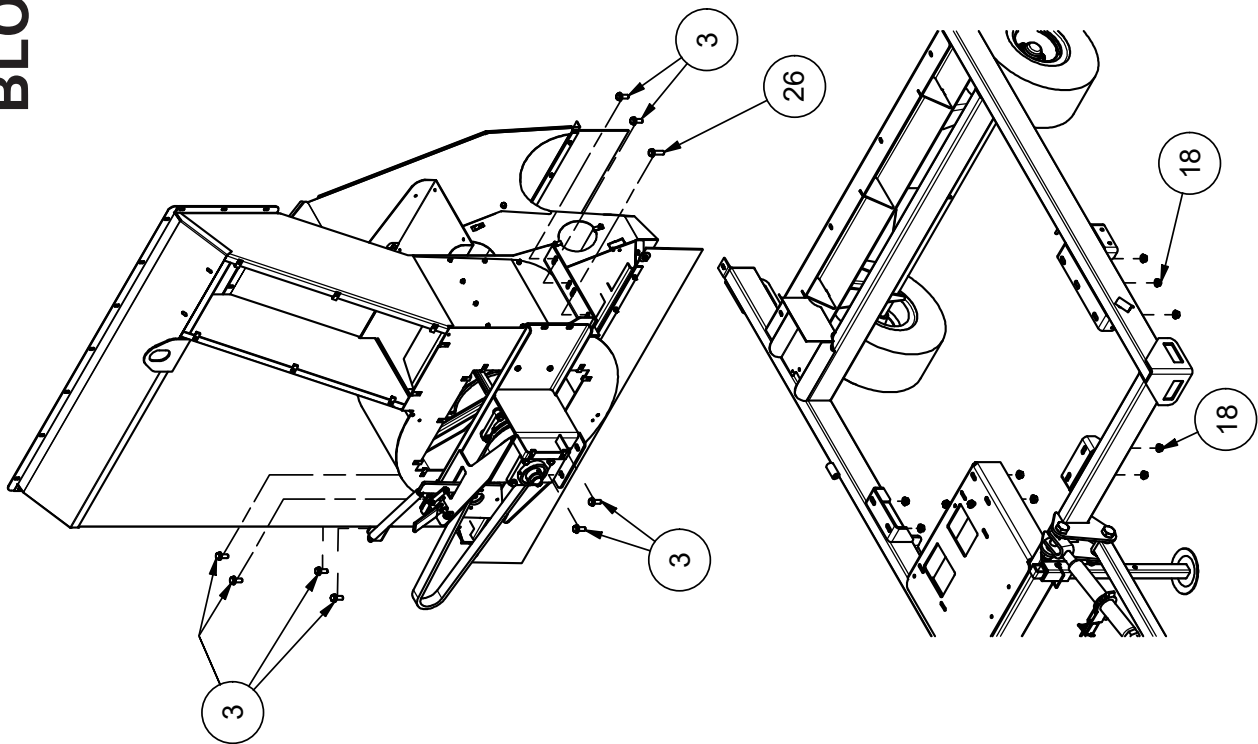


BLOWER HOUSING ASSEMBLY

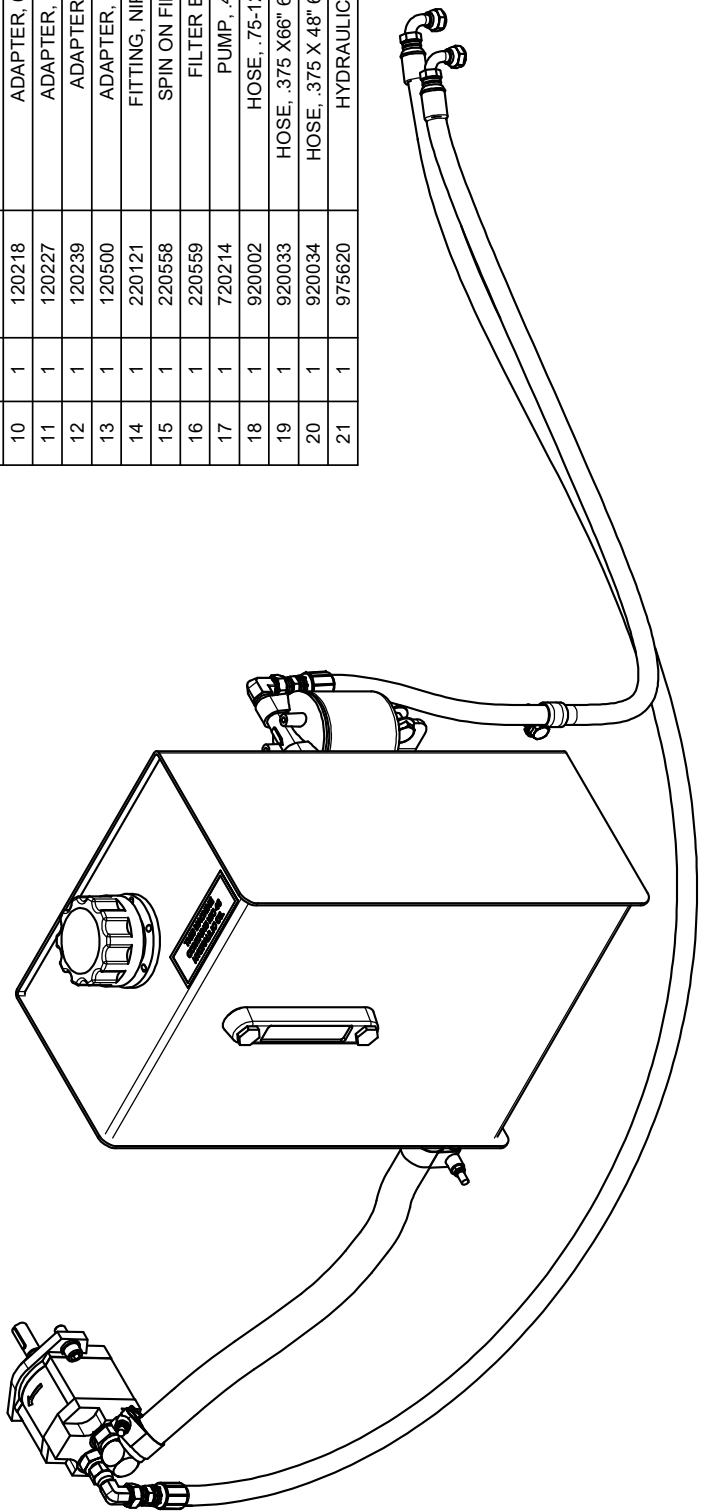
905185 REV: D

BLOWER HOUSING INSTALL TO FRAME

Parts List			
Item	Qty	Part #	DESCRIPTION
3	10	110001	Bolt, 1/2-13 X 1.25, Wiz Flange
18	11	110588	Nut, 1/2-13 Wiz Flange
26	1	111222	Bolt, 1/2-13 X 1.75, Wiz Flange

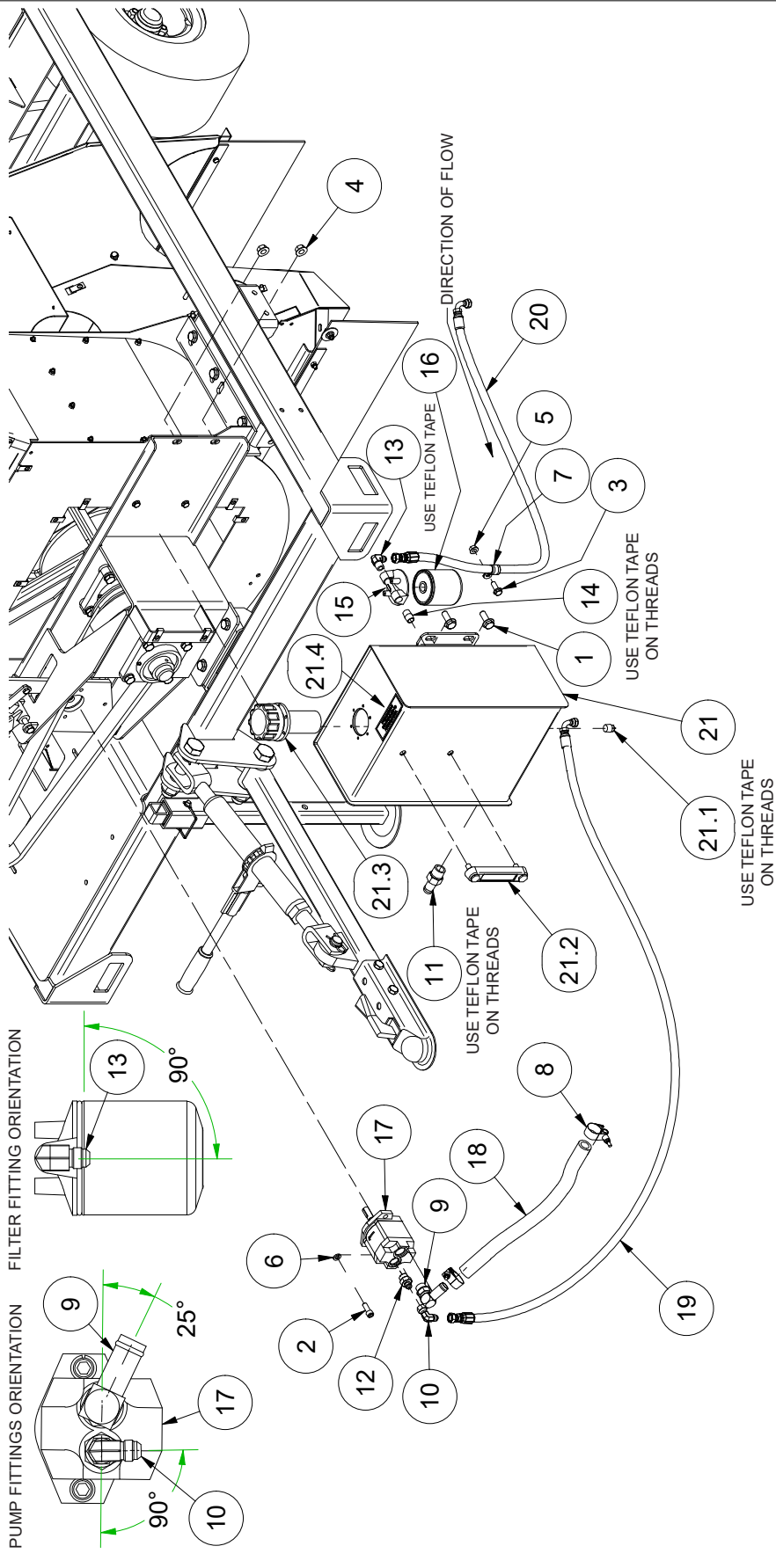


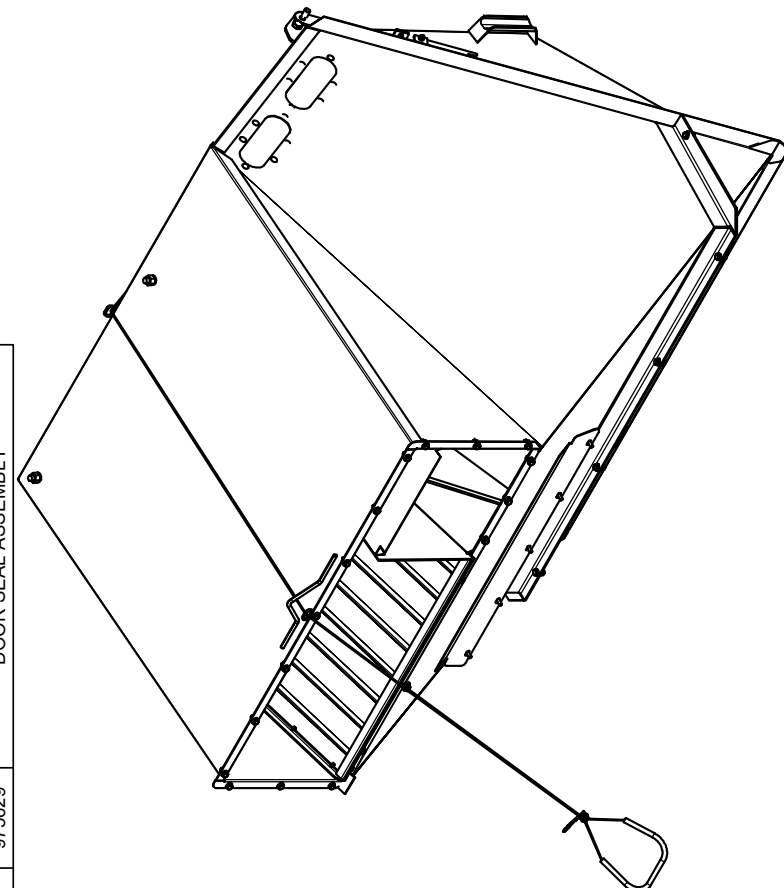
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	110001	BOLT, 1/2-13 X 1.25, WIZ FLANGE
2	2	110395	BOLT, 3/8-16 X 1.0 SHCS
3	1	110440	BOLT, 3/8-16 X 1, WIZ FLANGE
4	2	110588	NUT, 1/2-13 WIZ FLANGE
5	1	110645	NUT, 3/8-16 WIZ FLANGE
6	2	110672	WASHER, 3/8" LOCK
7	1	110727	CLAMP, ADEL .75WX.75IDX.406HOLE
8	2	112008	CLAMP, 1.25", T-BOLT
9	1	120184	ADAPTER, 12BH-10MB90
10	1	120218	ADAPTER, 6MJ-6FJX90
11	1	120227	ADAPTER, 12BH-12MP
12	1	120239	ADAPTER, 6MJ-8MB
13	1	120500	ADAPTER, 6MJ-6MP90
14	1	220121	FITTING, NIPPLE 3/8 X 1
15	1	220558	SPIN ON FILTER HEAD
16	1	220559	FILTER ELEMENT
17	1	720214	PUMP, .43 CI, AA
18	1	920002	HOSE, .75-124 HWR X 20
19	1	920033	HOSE, .375 X66" 6FJX90M-6FJX90M
20	1	920034	HOSE, .375 X 48" 6FJX90M-6FJX90M
21	1	975620	HYDRAULIC TANK ASSY



HYDRAULICS INSTALLATION

Parts List				Parts List				Parts List			
Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION
1	2	110001	Bolt, 1/2-13 X 1.25, Wiz Flange	9	1	120184	Adapter, 12bh-10mb90	17	1	720214	Pump, .43 Ci, Aa
2	2	110395	Bolt, 3/8-16 X 1.0 Shcs	10	1	120218	Adapter, 6mj-6fx90	18	1	920002	Hose, .75-124 Hwr X 20
3	1	110440	Bolt, 3/8-16 X 1, Wiz Flange	11	1	120227	Adapter, 12bh-12mp	19	1	920033	Hose, .375 X66" 6fx90m-6fx90m
4	2	110588	Nut, 1/2-13 Wiz Flange	12	1	120239	Adapter, 6mj-8mb	20	1	920034	Hose, .375 X 48" 6fx90m-6fx90m
5	1	110645	Nut, 3/8-16 Wiz Flange	13	1	120500	Adapter, 6mj-6mp90	21	1	975620	Hydraulic Tank Assy
6	2	110672	Washer, 3/8" Lock	14	1	220121	Fitting, Nipple 3/8 X 1	21.1	1	720108	Fitting, Plug 3/8" Pipe
7	1	110727	Clamp, Adel .75wx.75idx.406hole	15	1	220558	Spin On Filter Head	21.2	1	922142	Sight Glass, Hydraulic Tank
8	2	112008	Clamp, 1.25", T-Bolt	16	1	220559	Filter Element	21.3	1	923001	Breather/Filler Cap
								21.4	1	902204	Decal, ISO 46 Hydraulic Oil



Parts List				Parts List			
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION
1	1	100621	THIMBLE, WIRE ROPE 1/8"	38	1	970727	HANDLE, CABLE
2	4	100622	CLIP, WIRE ROPE 1/8"	39	1	970729	DEBRIS FLAP-RETURN SCREEN
3	31.5 FT	100623	SEAL	40	2	970733	STRIKE PLATE
4	12	110020	Bolt, 5/16-18 X 0.75 in Carriage	41	1	975600	HOPPER
5	5	110155	WASHER, 3/8" FLAT SAE	42	1	975606	RETURN SCREEN WLD MNT
6	2	110305	Pin, Lynch 7/16 x 1 3/4	43	1	975613	LEVER WLD MNT, RIGHT DOOR LATCH
7	1	110328	BOLT, 5/16-18 X 1 FLT HD SKT	44	1	975629	DOOR SEAL ASSEMBLY
8	8	110357	BOLT, 10-24 X 1.25 SHCS				
9	4	110423	BOLT, 5/16-18 X 1.0				
10	16	110437	BOLT, 3/8-16 X 0.75, WIZ FLANGE				
11	3	110439	BOLT, 3/8 X 3/8 SHOULDER SHCS				
12	8	110440	BOLT, 3/8-16 X 1, WIZ FLANGE				
13	5	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE				
14	2	110576	BOLT, 5/8-11 X 1.5 GR 5				
15	5	110603	NUT, 5/16-18 LOCK (NYLON)				
16	12	110606	NUT, 5/16-18 WIZ FLANGE				
17	8	110631	NUT, 10-24 LOCK NYLON INSERT				
18	2	110639	NUT, 5/8-11, UNITORQUE LOCK				
19	22	110645	NUT, 3/8-16 WIZ FLANGE				
20	8	110673	WASHER, 1/4" FLAT STANDARD				
21	2	110743	BOLT, 5/16-18 X 2 EYE				
22	2	110826	NUT, 3/8-16 GR 5				
23	2	111114	SPRING, 4.50" X .625"OD EXTENSION				
24	1	210326	CLIP, HAIRPIN				
25	2	311691	SIGHT GLASS, HOPPER				
26	2	311692	Backing Plate, Sight Glass				
27	2	315257	PIN WELDMENT, HOPPER DOOR				
28	8	710586	SCREW, 1/4 X 1 TEK SELF-TAP				
29	1	905188	ASSY, TV40 HOPPER DOOR W/ DECALS				
30	2	910046	ENGAGING CHANNEL CLIP				
31	2	942161	PIN, STABILIZER				
32	2	950002	DOOR LATCH				
33	1	970211	BAR, PROP				
34	1	970622	LEVER, LEFT DOOR LATCH				
35	2	970678	LATCH SHIM				
36	1	970715	LATCH CABLE TV40				
37	2	970725	LATCH SPACER				

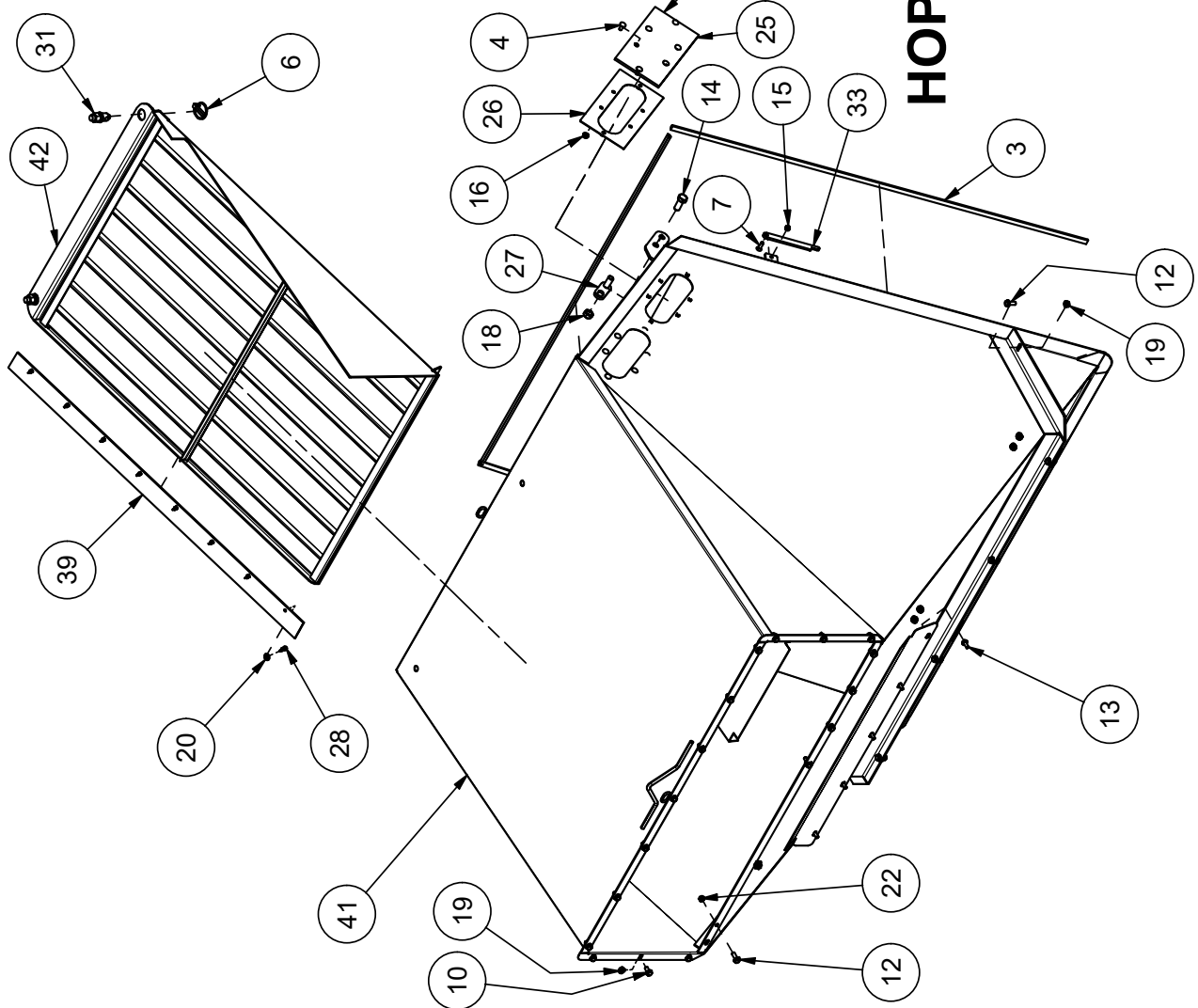
HOPPER INSTALL

905180

REV: A

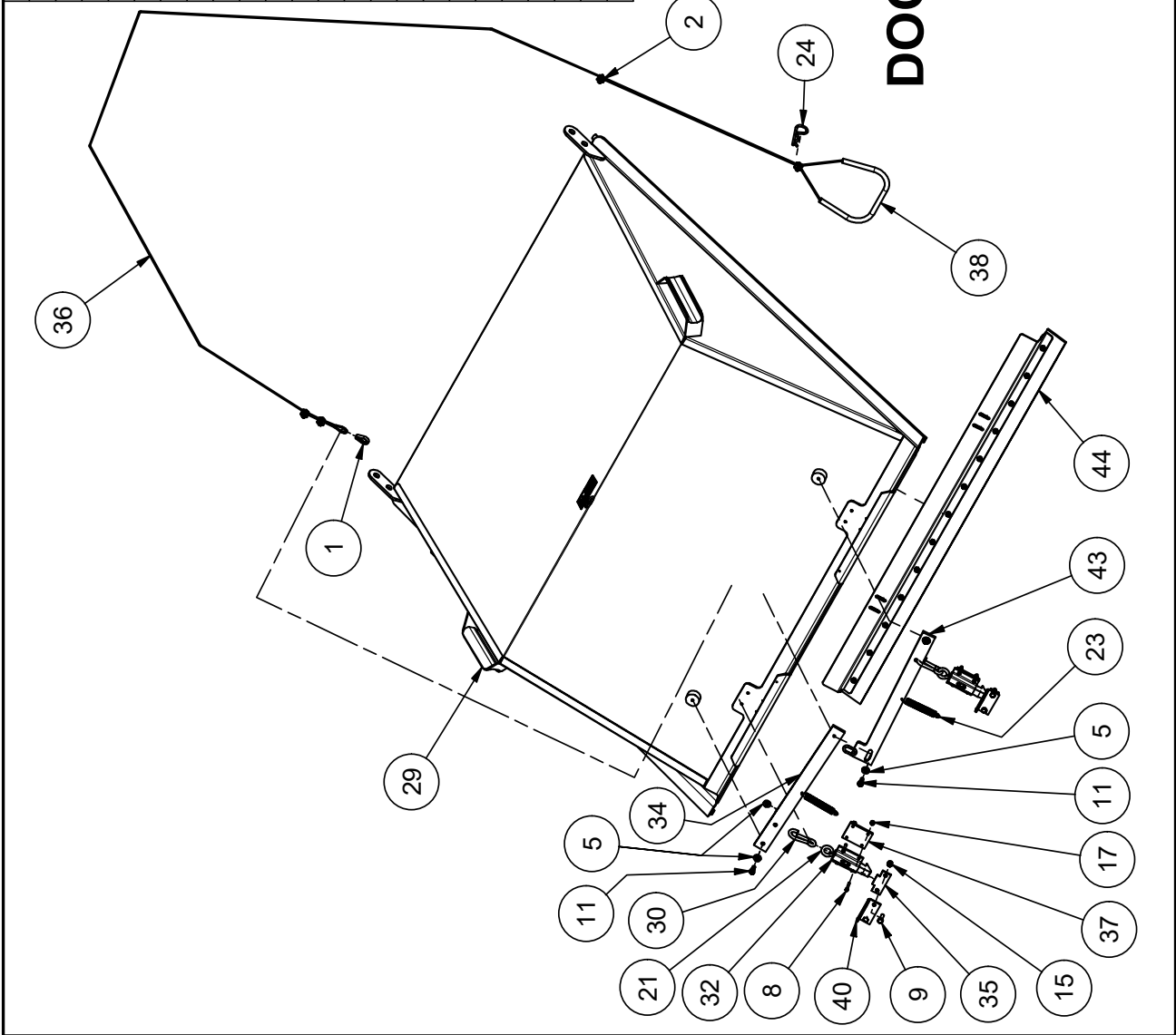
Parts List

ITEM	QTY	PART #	DESCRIPTION
3	31.5 FT	100623	SEAL
4	12	110020	Bolt, 5/16-18 X 0.75 in Carriage
6	2	110305	Pin, Lynch 7/16 x 1 3/4
7	1	110328	BOLT, 5/16-18 X 1 FLT HD SKT
10	16	110437	BOLT, 3/8-16 X 0.75. WIZ FLANGE
12	8	110440	BOLT, 3/8-16 X 1, WIZ FLANGE
13	5	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
14	2	110576	BOLT, 5/8-11 X 1.5 GR 5
15	5	110603	NUT, 5/16-18 LOCK (NYLON)
16	12	110606	NUT, 5/16-18 WIZ FLANGE
18	2	110639	NUT, 5/8-11, UNITORQUE LOCK
19	22	110645	NUT, 3/8-16 WIZ FLANGE
20	8	110673	WASHER, 1/4" FLAT STANDARD
22	2	110826	NUT, 3/8-16 GR 5
25	2	311691	SIGHT GLASS, HOPPER
26	2	311692	Backing Plate, Sight Glass
27	2	315257	PIN WELDMENT, HOPPER DOOR
28	8	710586	SCREW, 1/4 X 1 TEK SELF-TAP
31	2	942161	PIN, STABILIZER
33	1	970211	BAR, PROP
39	1	970729	DEBRIS FLAP-RETURN SCREEN
41	1	975600	HOPPER
42	1	975606	RETURN SCREEN WLDMNT



HOPPER & RETURN SCREEN

Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	1	100621	THIMBLE, WIRE ROPE 1/8"
2	4	100622	CLIP, WIRE ROPE 1/8"
5	5	110155	WASHER, 3/8" FLAT SAE
8	8	110357	BOLT, 10-24 X 1.25 SHCS
9	4	110423	BOLT, 5/16-18 X 1.0
11	3	110439	BOLT, 3/8 X 3/8 SHOULDER SHCS
15	5	110603	NUT, 5/16-18 LOCK (NYLON)
17	8	110631	NUT, 10-24 LOCK NYLON INSERT
21	2	110743	BOLT, 5/16-18 X 2 EYE
23	2	111114	SPRING, 4.50" X .625"OD EXTENSION
24	1	210326	CLIP, HAIRPIN
29	1	905188	ASSY, TV40 HOPPER DOOR W/ DECALS
30	2	910046	ENGAGING CHANNEL CLIP
32	2	950002	DOOR LATCH
34	1	970622	LEVER, LEFT DOOR LATCH
35	2	970678	LATCH SHIM
36	1	970715	LATCH CABLE TV40
37	2	970725	LATCH SPACER
38	1	970727	HANDLE, CABLE
40	2	970733	STRIKE PLATE
43	1	975613	LEVER W/DMNT, RIGHT DOOR LATCH
44	1	975629	DOOR SEAL ASSEMBLY



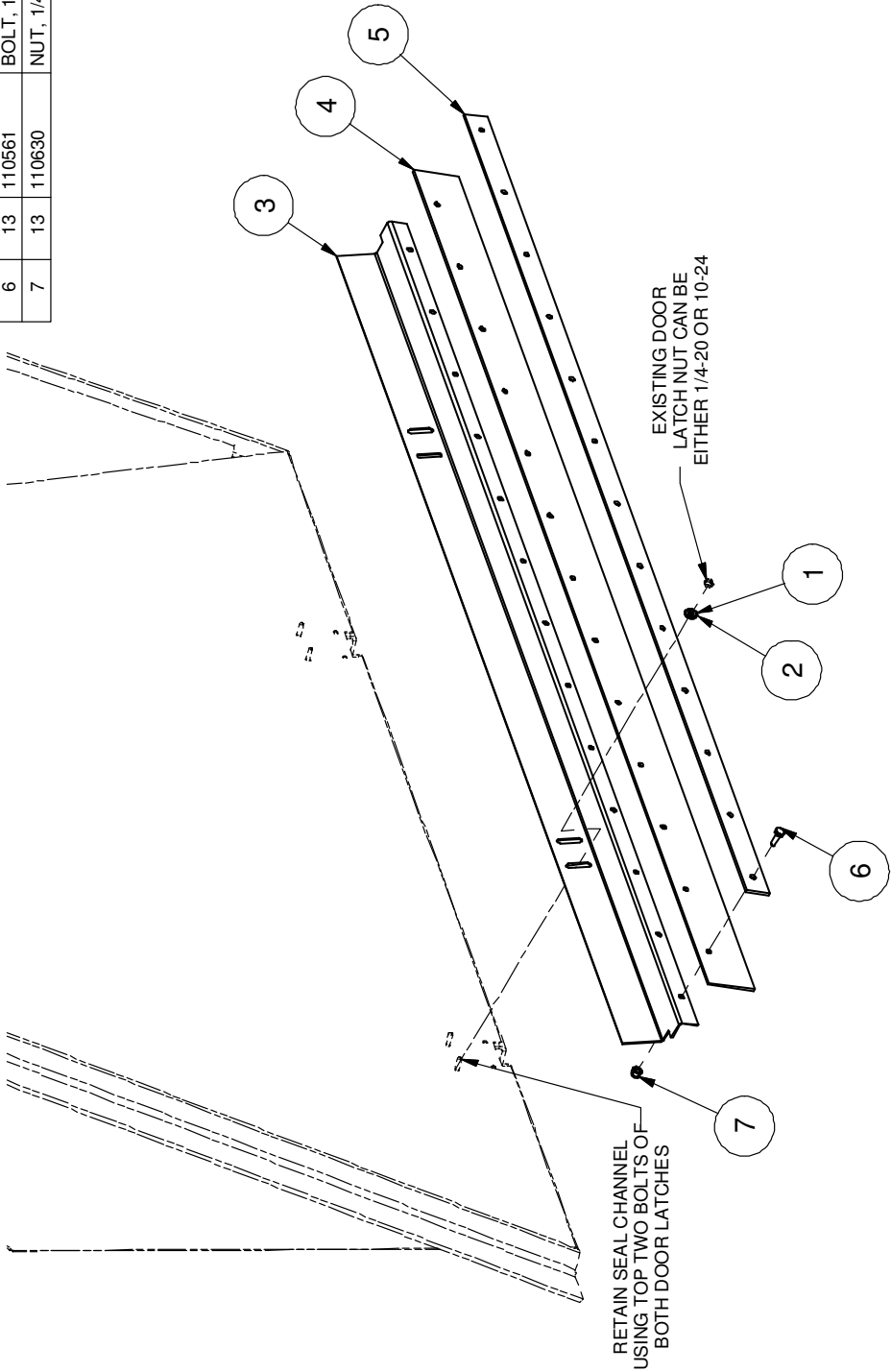
DOOR & LATCH INSTALL

DOOR SEAL ASSEMBLY

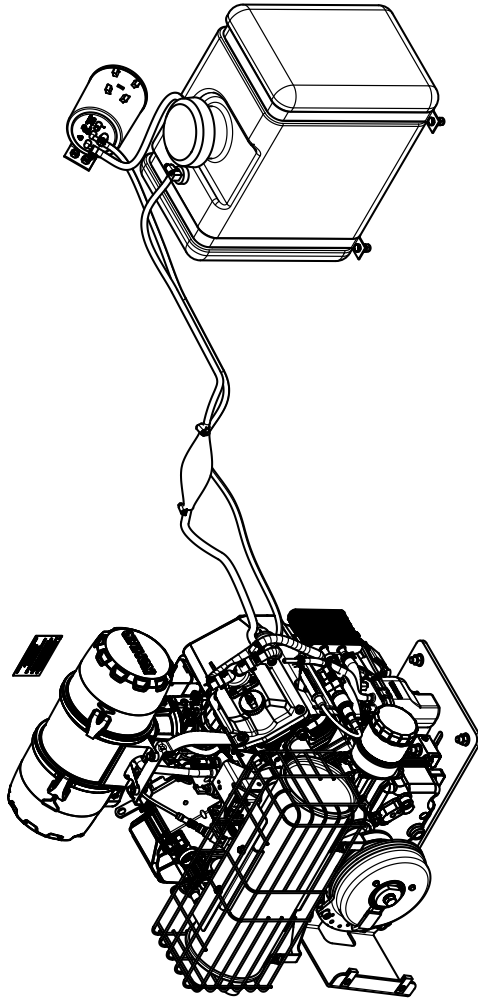
975629

Parts List

ITEM	QTY	PART #	DESCRIPTION
1	4	110090	WASHER, #10 FLAT STANDARD
2	4	110298	WASHER, 1/4" FLAT SAE
3	1	970744	ZCHANNEL, DOOR SEAL
4	1	972017	DOOR SEAL
5	1	970745	BACKING PLATE, DOOR SEAL
6	13	110561	BOLT, 1/4-20 X .75
7	13	110630	NUT, 1/4-20 LOCK (NYLON INSERT)

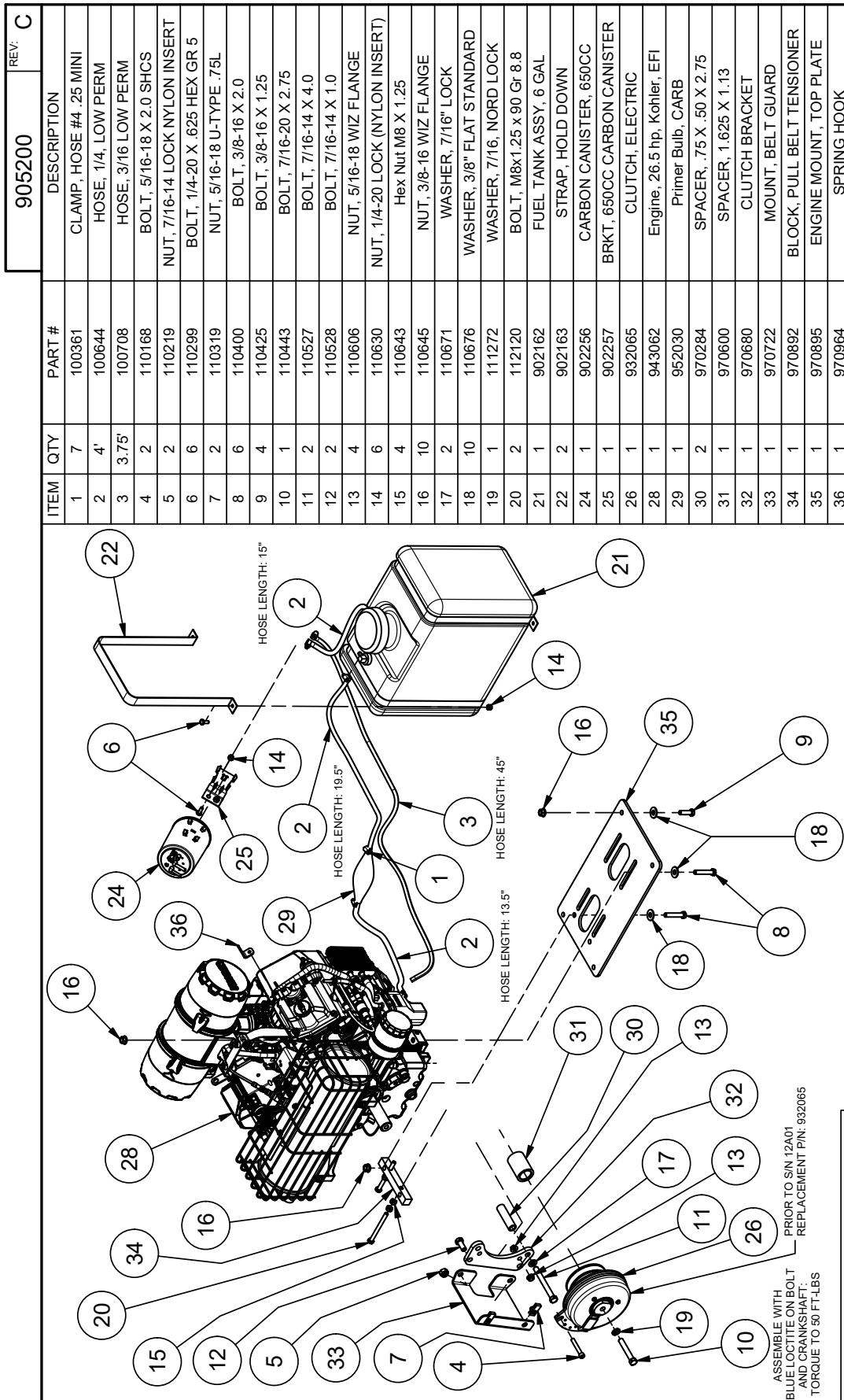


ENGINE INSTALLATION, CARB



Parts List

ITEM	QTY	PART #	DESCRIPTION
1	7	100361	CLAMP, HOSE #4 .25 MINI
2	4'	100644	HOSE, 1/4, LOW PERM
3	3.75'	100708	HOSE, 3/16 LOW PERM
4	2	110168	BOLT, 5/16-18 X 2.0 SHCS
5	2	110219	NUT, 7/16-14 LOCK NYLON INSERT
6	6	110299	BOLT, 1/4-20 X .625 HEX GR 5
7	2	110319	NUT, 5/16-18 U-TYPE .75L
8	6	110400	BOLT, 3/8-16 X 2.0
9	4	110425	BOLT, 3/8-16 X 1.25
10	1	110443	BOLT, 7/16-20 X 2.75
11	2	110527	BOLT, 7/16-14 X 4.0
12	2	110528	BOLT, 7/16-14 X 1.0
13	4	110606	NUT, 5/16-18 WIZ FLANGE
14	6	110630	NUT, 1/4-20 LOCK (NYLON INSERT)
15	4	110643	Hex Nut M8 X 1.25
16	10	110645	NUT, 3/8-16 WIZ FLANGE
17	2	110671	WASHER, 7/16" LOCK
18	10	110676	WASHER, 3/8" FLAT STANDARD
19	1	111272	WASHER, 7/16, NORD LOCK
20	2	112120	BOLT, M8x1.25 x 90 Gr 8.8
21	1	902162	FUEL TANK ASSY, 6 GAL
22	2	902163	STRAP, HOLD DOWN
23	1	902248	DECAL, EMISSIONS COMPLIANCE, CARB
24	1	902256	CARBON CANISTER, 650CC
25	1	902257	BRKT, 650CC CARBON CANISTER
26	1	932065	CLUTCH, ELECTRIC
27	1	932081	HARNES, TV40 CARB IDLE CONTROL
28	1	943062	Engine, 26.5 hp, Kohler, EFI
29	1	952030	Primer Bulb, CARB
30	2	970284	SPACER, .75 X .50 X 2.75
31	1	970600	SPACER, 1.625 X 1.13
32	1	970680	CLUTCH BRACKET
33	1	970722	MOUNT, BELT GUARD
34	1	970892	BLOCK, PULL BELT TENSIONER
35	1	970895	ENGINE MOUNT, TOP PLATE
36	1	970964	SPRING HOOK



ENGINE SERVICE PARTS	
PART #	DESCRIPTION
840027	FILTER ELEMENT, AIR
932008	KIT, SOLENOID
932019	SOLENOID
932079	SWITCH, IGNITION
942068	DELLECTOR, EXHAUST
942271	GUARD ASSY, MUFFLER
942298	KIT, MUFFLER
942301	FILTER, FUEL

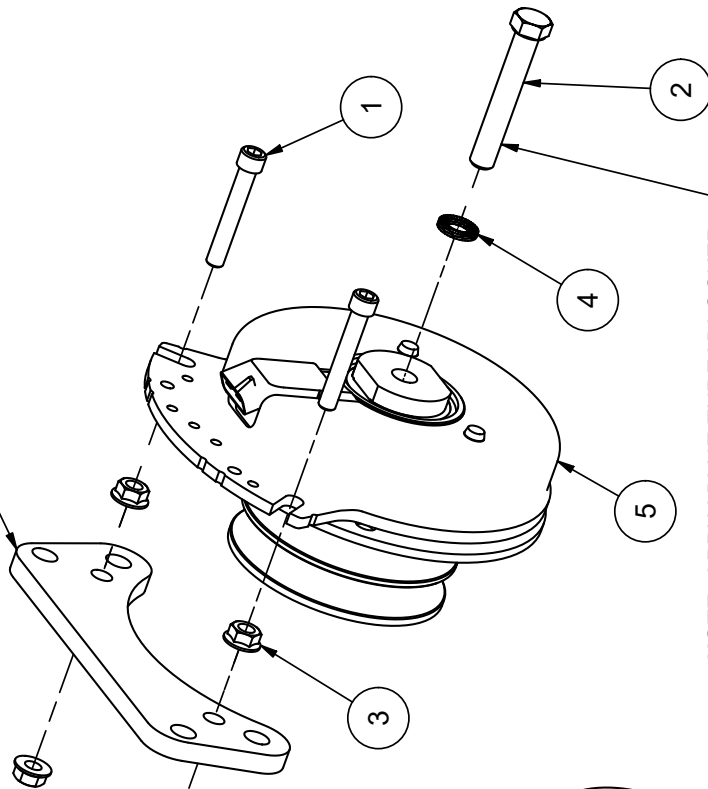
ELECTRIC CLUTCH REPLACEMENT KIT

ALL SERIAL NUMBERS

INSTRUCTIONS

1. DISCARD THE CURRENT BOLTS AND NUTS INSTALLED IN THE THREADED HOLES.
2. ORIENT AND INSTALL THE NEW BOLTS AND NUTS AS SHOWN IN THE PICTURES.

NOTE: BRACKET NOT INCLUDED



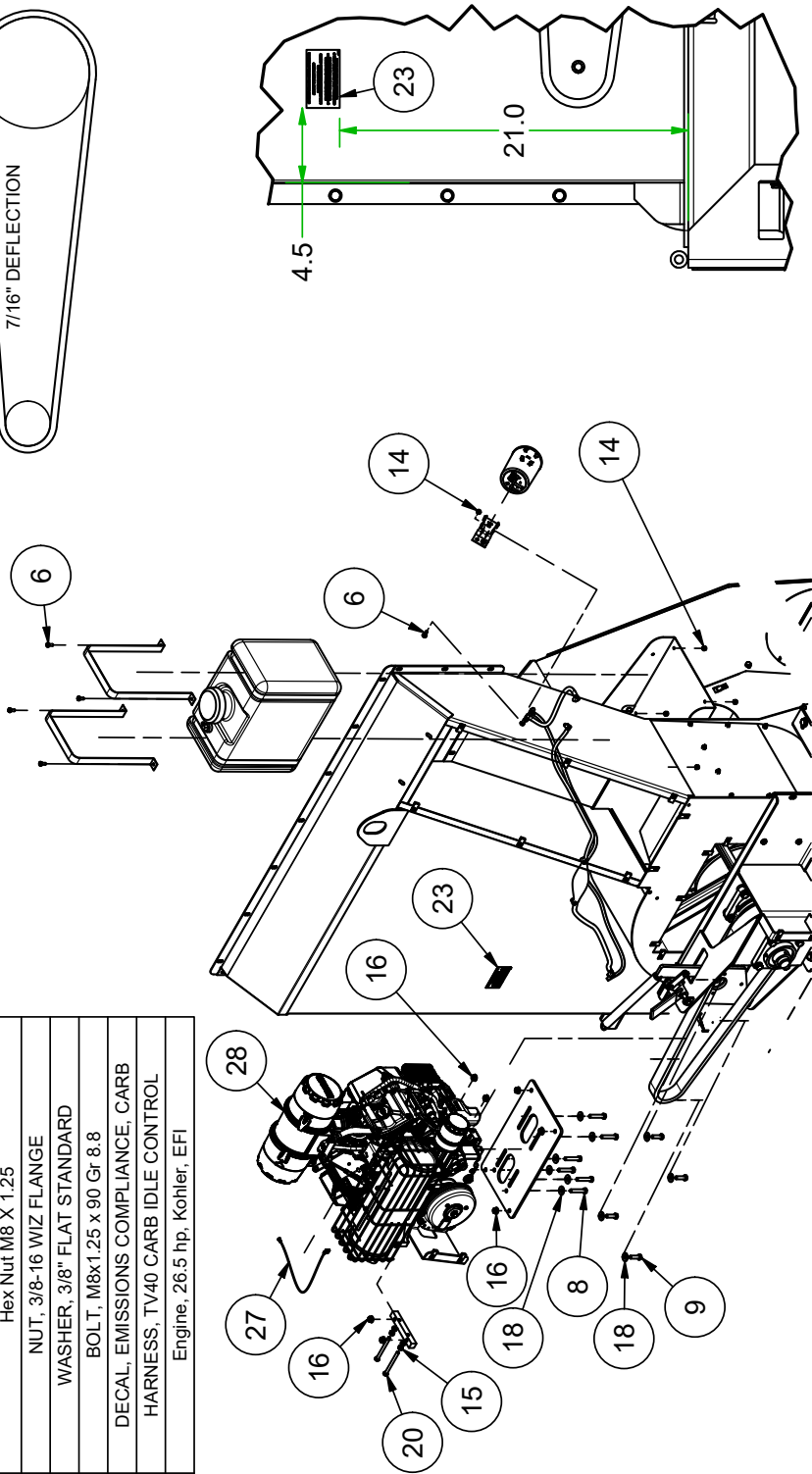
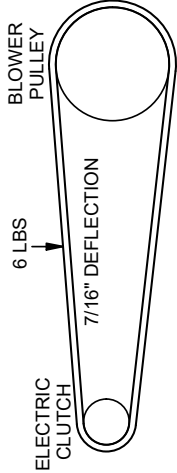
NOTE: APPLY BLUE THREADLOCKER TO BOLT AND CRANKSHAFT THREADS TORQUE TO 50 FT-LBS

NOTE: AFTER INSTALLATION IS COMPLETE, ENSURE THAT THE CLUTCH HOUSING CAN SLIGHTLY ROTATE FREELY ABOUT IT'S CENTER AXIS (MOVE BACK & FORTH). THIS WILL PREVENT THE CLUTCH FROM BINDING.

Parts List			DESCRIPTION
ITEM	QTY	PART #	
1	2	110168	BOLT, 5/16-18 X 2.0 SHCS
2	1	110443	BOLT, 7/16-20 X 2.75
3	4	110606	NUT, 5/16-18 W/IZ FLANGE
4	1	111272	WASHER, 7/16, NORD LOCK
5	1	932018	CLUTCH, ELECTRIC

Parts List			DESCRIPTION
ITEM	QTY	PART #	
6	6	110299	BOLT, 1/4-20 X .625 HEX GR 5
8	6	110400	BOLT, 3/8-16 X 2.0
9	4	110425	BOLT, 3/8-16 X 1.25
14	6	110630	NUT, 1/4-20 LOCK (NYLON INSERT)
15	4	110643	Hex Nut M8 X 1.25
16	10	110645	NUT, 3/8-16 WIZ FLANGE
18	10	110676	WASHER, 3/8" FLAT STANDARD
20	2	112120	BOLT, M8x1.25 x 90 Gr 8.8
23	1	902248	DECAL, EMISSIONS COMPLIANCE, CARB
27	1	932081	HARNESS, TV40 CARB IDLE CONTROL
28	1	943062	Engine, 26.5 hp, Kohler, EFI

BLOWER DRIVE BELT TENSION
SEE MANUAL FOR MORE INFORMATION



MOUNTING ENGINE TO TV40

905183REV: B

Parts List

Item	Qty	Part #	DESCRIPTION
1	4	110444	Bolt, 5/16-18 X 0.75, Wiz Flange
2	3	110606	Nut, 5/16-18 Wiz Flange
3	2	110631	Nut, 10-24 Lock Nylon Insert
4	2	110726	Clamp, Adel .75wx.5idx.406 Hole
5	1	130021	Switch, Spdt, No Center
6	1	132014	Insulator Cap, (Alternator)
7	1	132069	Battery Terminal Cover, Positive
8	1	132070	Battery Terminal Cover, Negative
9	2	510960	Screw, 10-24 X 0.5, Rhms
10	1	905191	Assy, Tachometer Bracket W/ Decals
11	1	910957	Brkt, Battery Hold Down
12	1	932007	Tachometer / Hour Meter
13	1	932053	Battery, 12v Gel
14	1	932066	Battery Cable, Positive 4 Ga - 60"
15	1	932067	Battery Cable, Ground
16	1	935008	Fuse Link
17	1	935009	Clutch Wire Assy

The diagram illustrates the electrical and mechanical connections for the vehicle's electronics. It shows a battery being connected to the engine's positive and negative terminals. A positive battery cable (4 Ga - 60") connects the battery to the positive terminal cover. A negative battery cable connects the battery to the negative terminal cover. A tachometer and hour meter are connected to the battery and the engine. A clutch wire assembly is also shown.

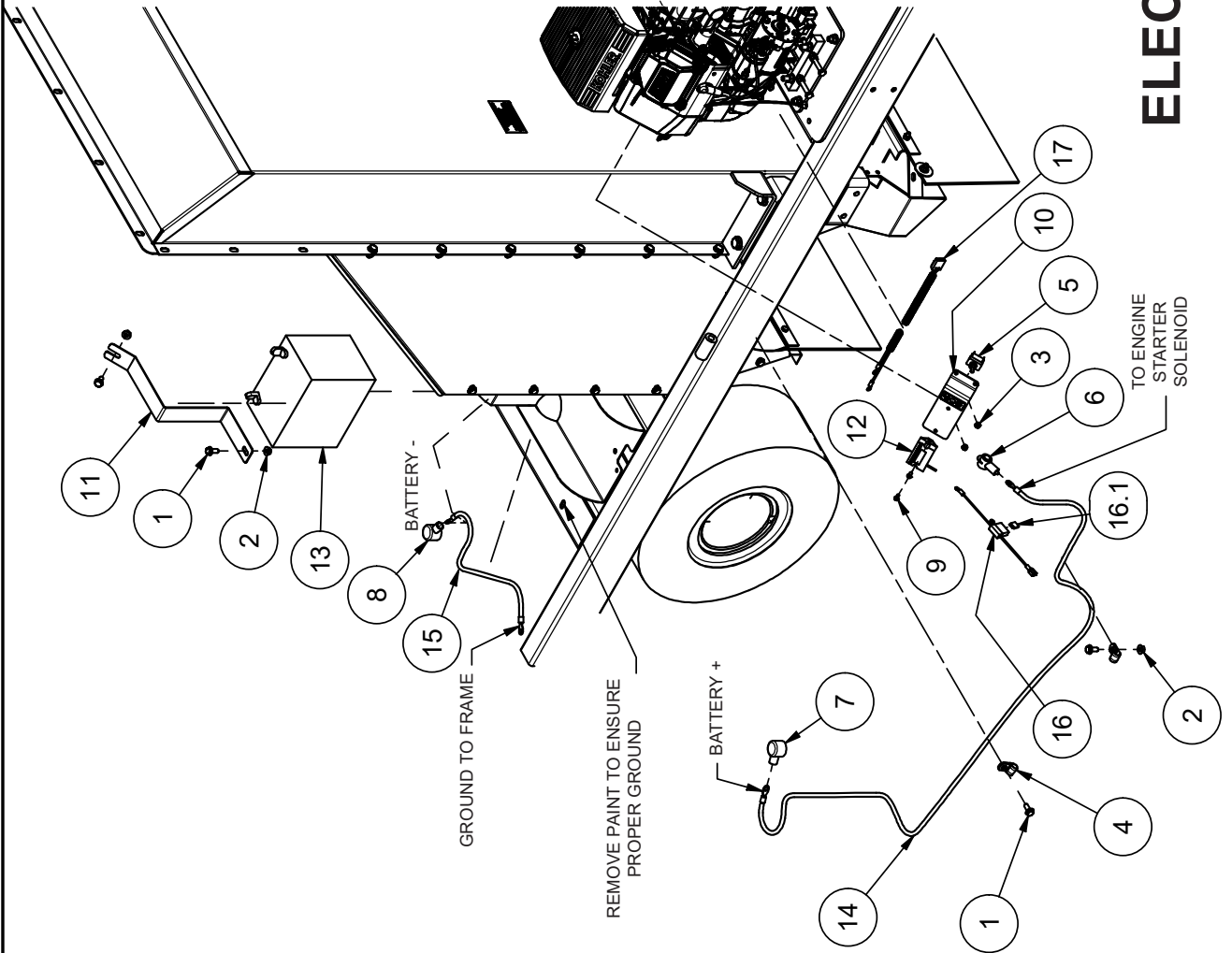
ELECTRONICS INSTALLATION

905183 REV: B

Parts List			
Item	Qty	Part #	DESCRIPTION
1	4	110444	Bolt, 5/16-18 X 0.75, Wiz Flange
2	3	110606	Nut, 5/16-18 Wiz Flange
3	2	110631	Nut, 10-24 Lock Nylon Insert
4	2	110726	Clamp, Adel .75wx.5idx.406 Hole
5	1	130021	Switch, Spdt, No Center
6	1	132014	Insulator Cap, (Alternator)
7	1	132069	Battery Terminal Cover, Positive
8	1	132070	Battery Terminal Cover, Negative
9	2	510960	Screw, 10-24 X 0.5, Rhms
10	1	905191	Assy, Tachometer Bracket W/ Decals
11	1	910957	Brkt, Battery Hold Down
12	1	932007	Tachometer / Hour Meter
13	1	932053	Battery, 12v Gel
14	1	932066	Battery Cable, Positive 4 Ga - 60"
15	1	932067	Battery Cable, Ground
16	1	935008	Fuse Link
16.1	1	132002	Fuse, Mini 30 Amp
17	1	935009	Clutch Wire Assy

WIRING INSTRUCTIONS FOR 130021:

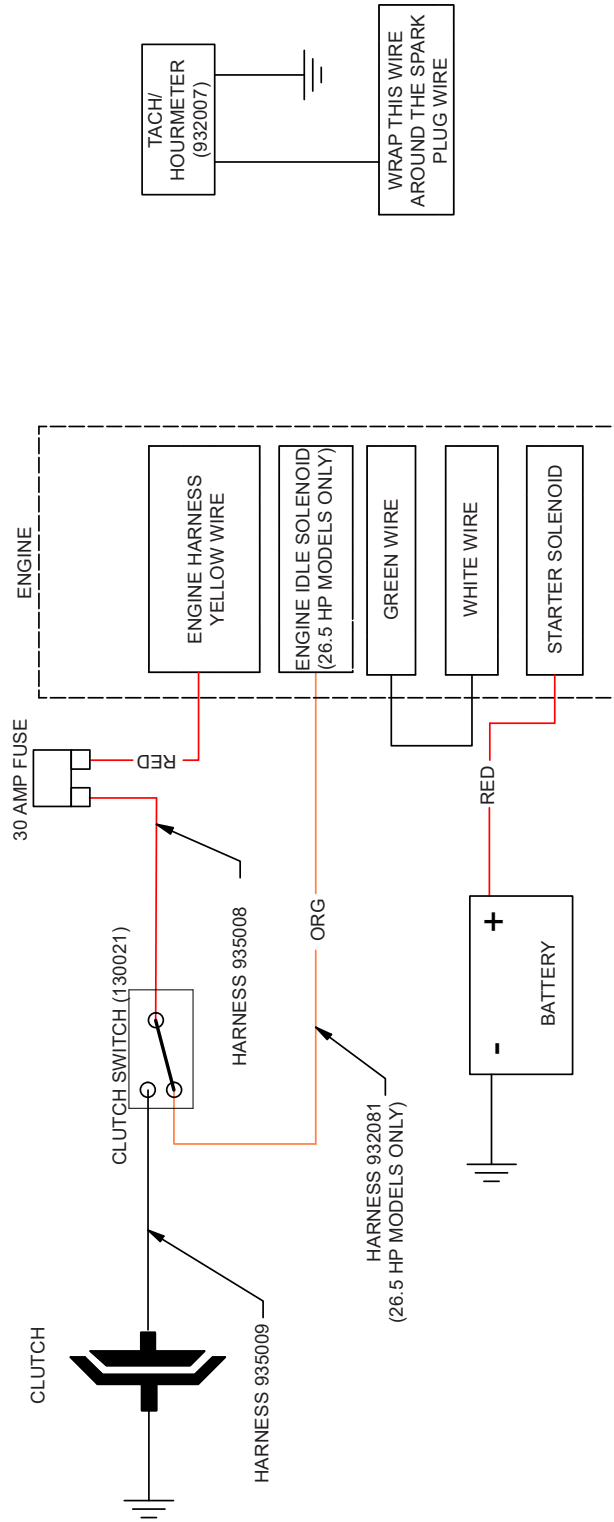
935008 TO MIDDLE OF SWITCH
 RED WIRE OF 935009 TO BOTTOM OF SWITCH
 932081 TO TOP OF SWITCH (26.5 HP MODELS ONLY)



ELECTRONICS INSTALLATION

TV40 ELECTRICAL SCHEMATIC

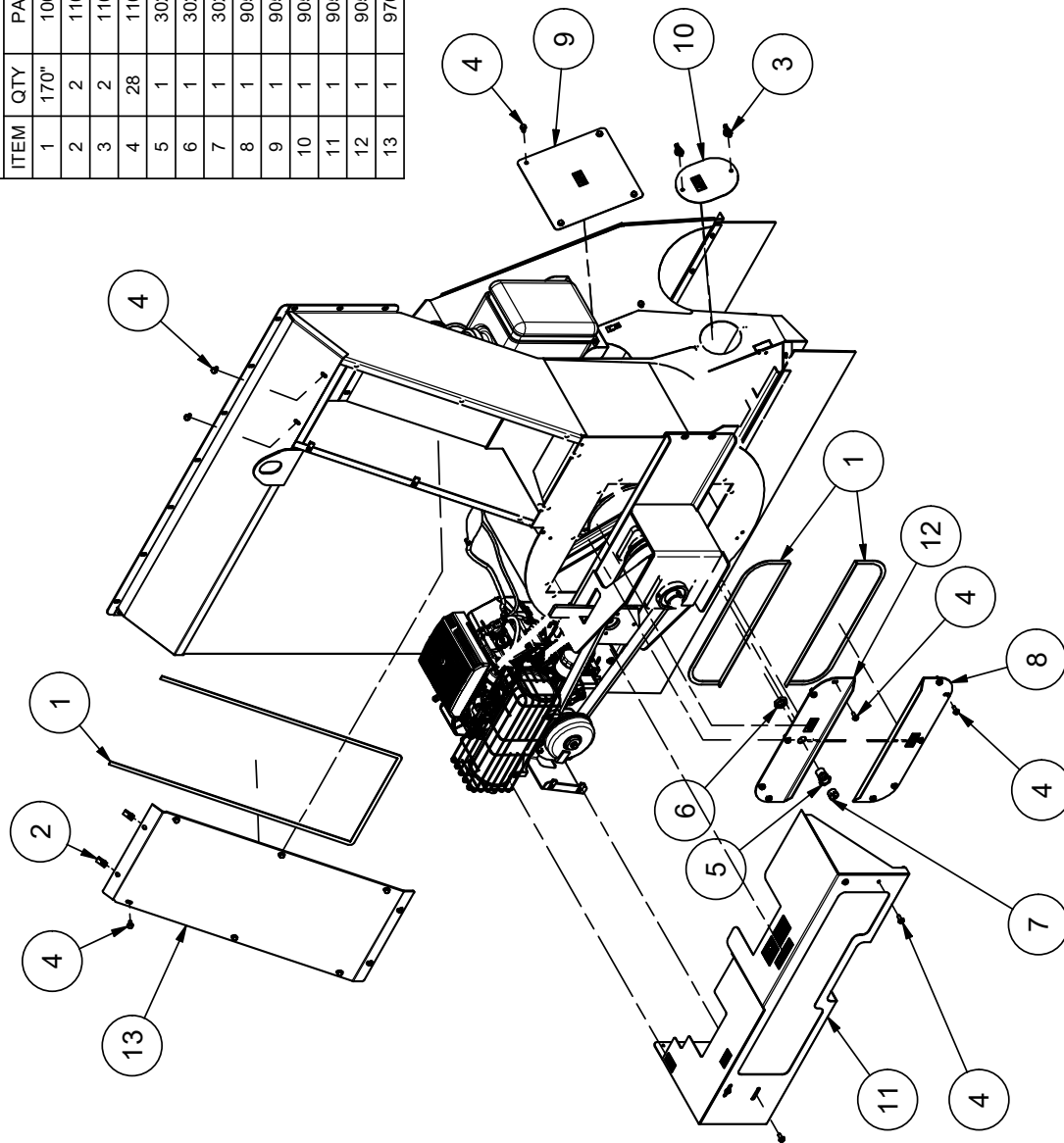
905183 REV: B



905181 REV: A

Parts List

ITEM	QTY	PART #	DESCRIPTION
1	170"	100613	SEAL
2	2	110319	NUT, 5/16-18 U-TYPE .75L
3	2	110327	NUT, 5/16-18 WING
4	28	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
5	1	302060	SWIVEL, GARDEN HOSE-TO-PIPE
6	1	302061	LOCKNUT, 3/4 NPT
7	1	302062	PLUG, GARDEN HOSE
8	1	905120	Assembly, Bottom Fan Access Panel
9	1	905121	Assembly, Hose Option Cover
10	1	905122	Assembly, Nozzle Access Cover
11	1	905189	ASSY, BELT GUARD W/ DECALS
12	1	905190	ASSY, FAN ACCESS PANEL W/ DECALS
13	1	970697	DOOR, REMOVABLE



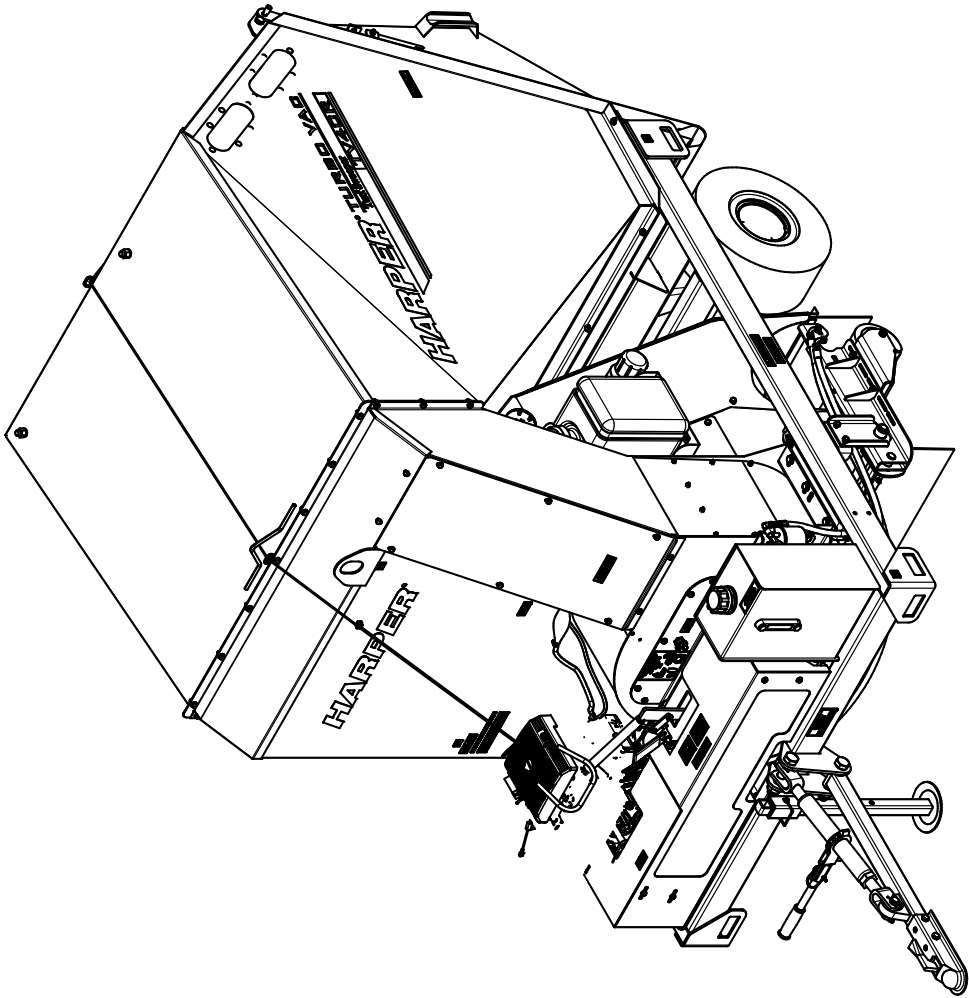
ACCESS PANEL INSTALL

905186REV: C

Parts List

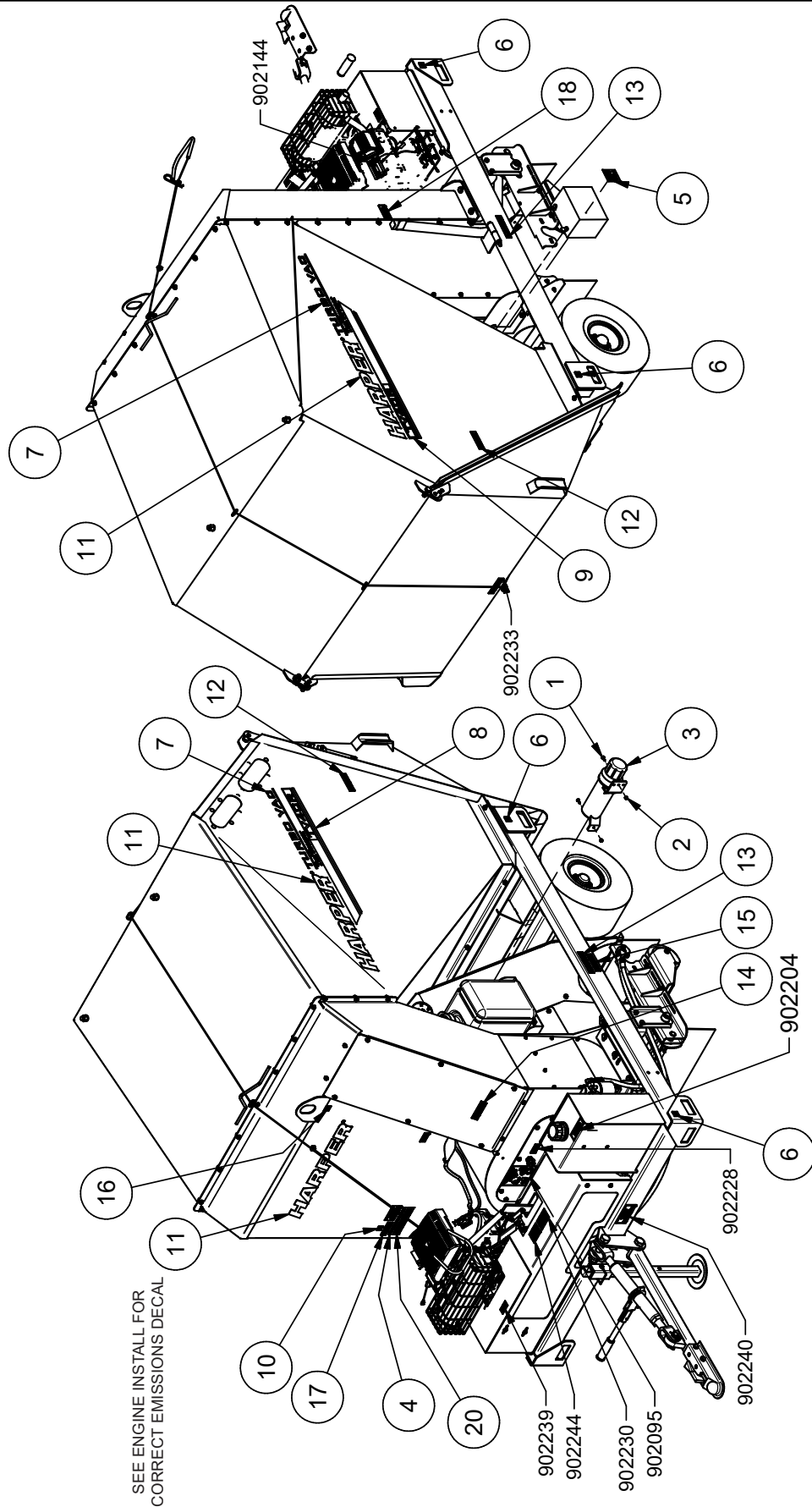
Item	Qty	Part #	DESCRIPTION
1	2	110299	Bolt, 1/4-20 X .625 Hex Gr 5
2	2	110630	Nut, 1/4-20 Lock (Nylon Insert)
3	1	152004	Holder, Manual
4	1	202134	Decal, Prop 65, Short Form
5	1	800195	Decal, Recycle Battery
6	4	802067	Decal, Tie Down Point
7	2	902084	Decal, Turbo Vac, Turf Sweeper
8	1	902085	Decal, Tv40 Stripe, Left
9	1	902086	Decal, Tv40 Stripe, Right
10	1	902149	Decal, Read Operators Manual.
11	3	902195	Decal, Harper 2.87 X 24.00, Black Gloss
12	2	902226	Decal, Hopper Crushing
13	2	902227	Decal, Entanglement
14	1	902229	Decal, Impeller Shield
15	1	902232	Decal, High Pressure Injection
16	1	902234	Decal, No Lift
17	1	902235	Decal, Safe Distance, No Slope
18	1	902238	Decal, Lower Broom
19	1	902246	Decal, Fuel Primer Location
20	1	902259	Decal, California Spark Arrester

DECAL INSTALLATION

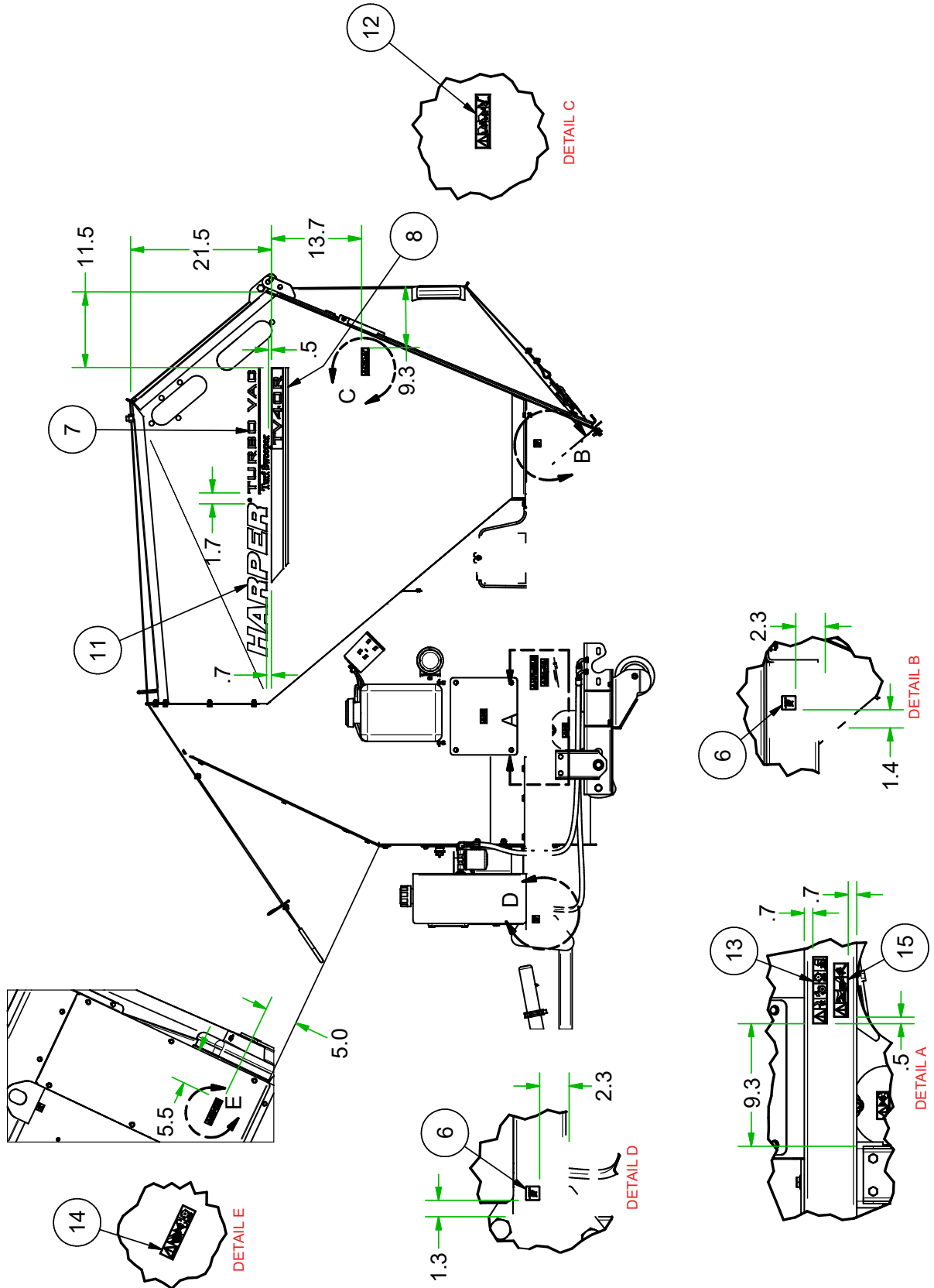


DECAL INSTALLATION

DECAL INSTALLATION



DECAL INSTALLATION



Technical drawing of a motor vehicle chassis, showing the engine, transmission, and rear axle assembly. The drawing includes various dimensions and callouts for specific components.

Dimensions:

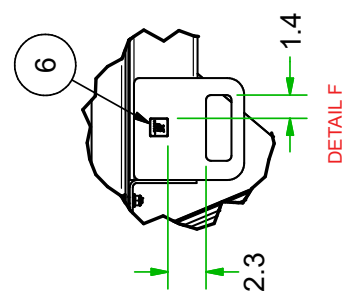
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- 21.5
- 13.7
- 9.3
- 17.0
- 3.7
- 1.3
- 2.3
- 1.7
- 0.5
- 0.7

Callouts:

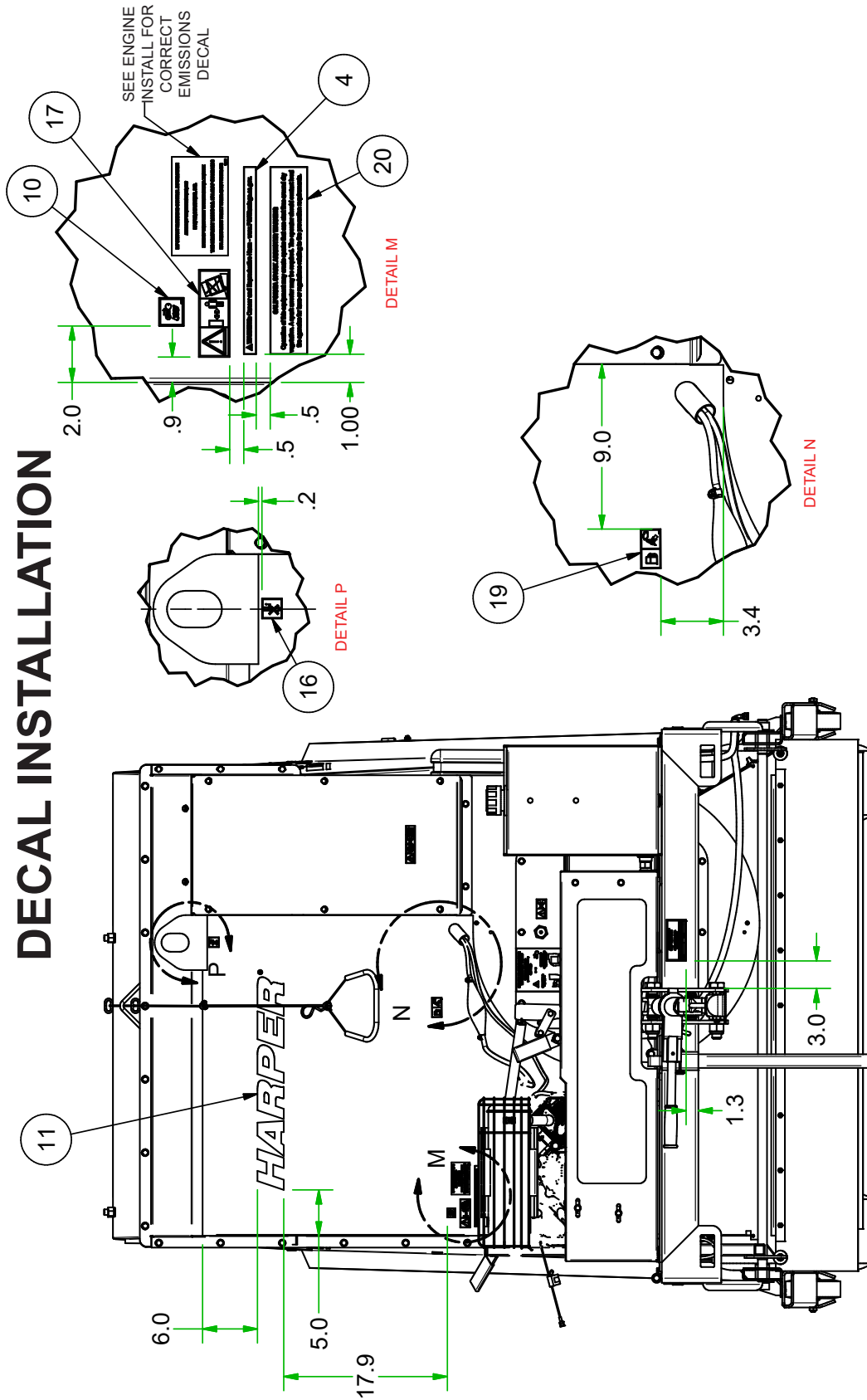
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- 6
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- 9
- 11
- 12
- 18
- G
- H
- J
- K
- L

Labels:

- DETAIL J
- DETAIL K
- DETAIL L
- HARPER TURBO VAG
- 1.7
- 0.5
- 0.7



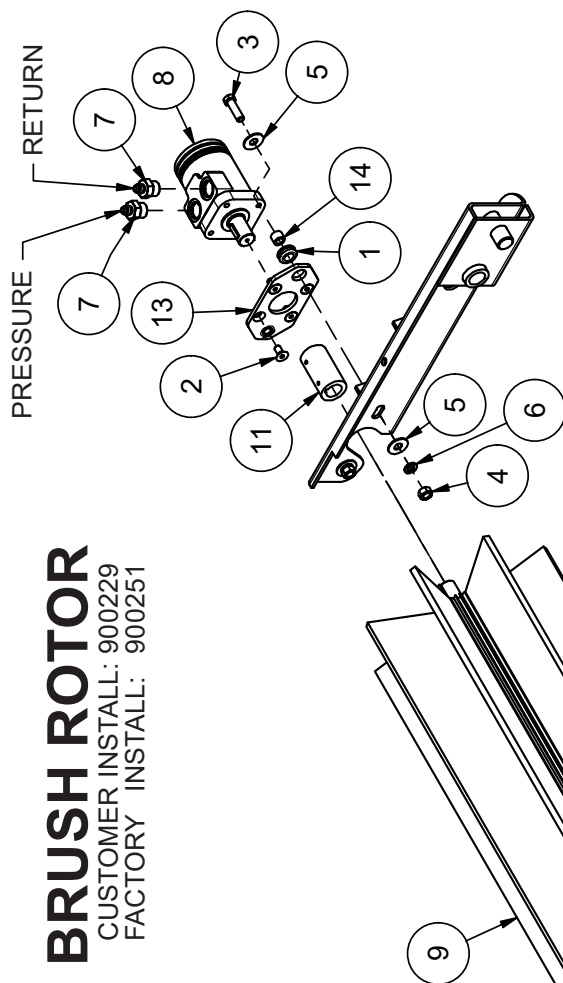
DECAL INSTALLATION



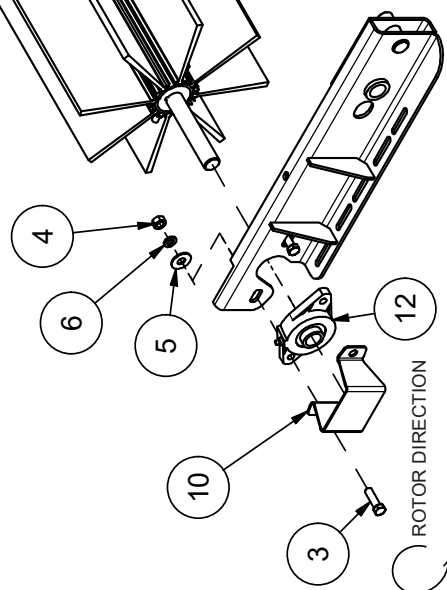
900229 REV: E

Parts List		
Item	Qty	Part # DESCRIPTION
1	2	102005 Grommet, Rubber .875 Od X .625 Id
2	4	110126 Bolt, 3/8-16 X .75 Flt Hd Skt Hd
3	4	110535 Bolt, 7/16-14 X 1.5
4	4	110641 Nut, 7/16-14
5	6	110670 Washer, 7/16" Flat Standard
6	4	110671 Washer, 7/16" Lock
7	2	120144 Adapter, 6mj-10mb
8	1	420127 Motor, Eaton 101-1009
9	1	905192 Assy, Tv40 Strip Brush
10	1	911078 Shield, Bearing, Tv40 Arm
11	1	942064 Coupler, 1" Shaft
12	1	942080 Bearing, 1" 2 Bolt Flange
13	1	970147 Mount - Motor Plate
14	2	970230 Broom Motor Spacer
15	1	900288 TV40RE Brush Rotor Installation Instructions

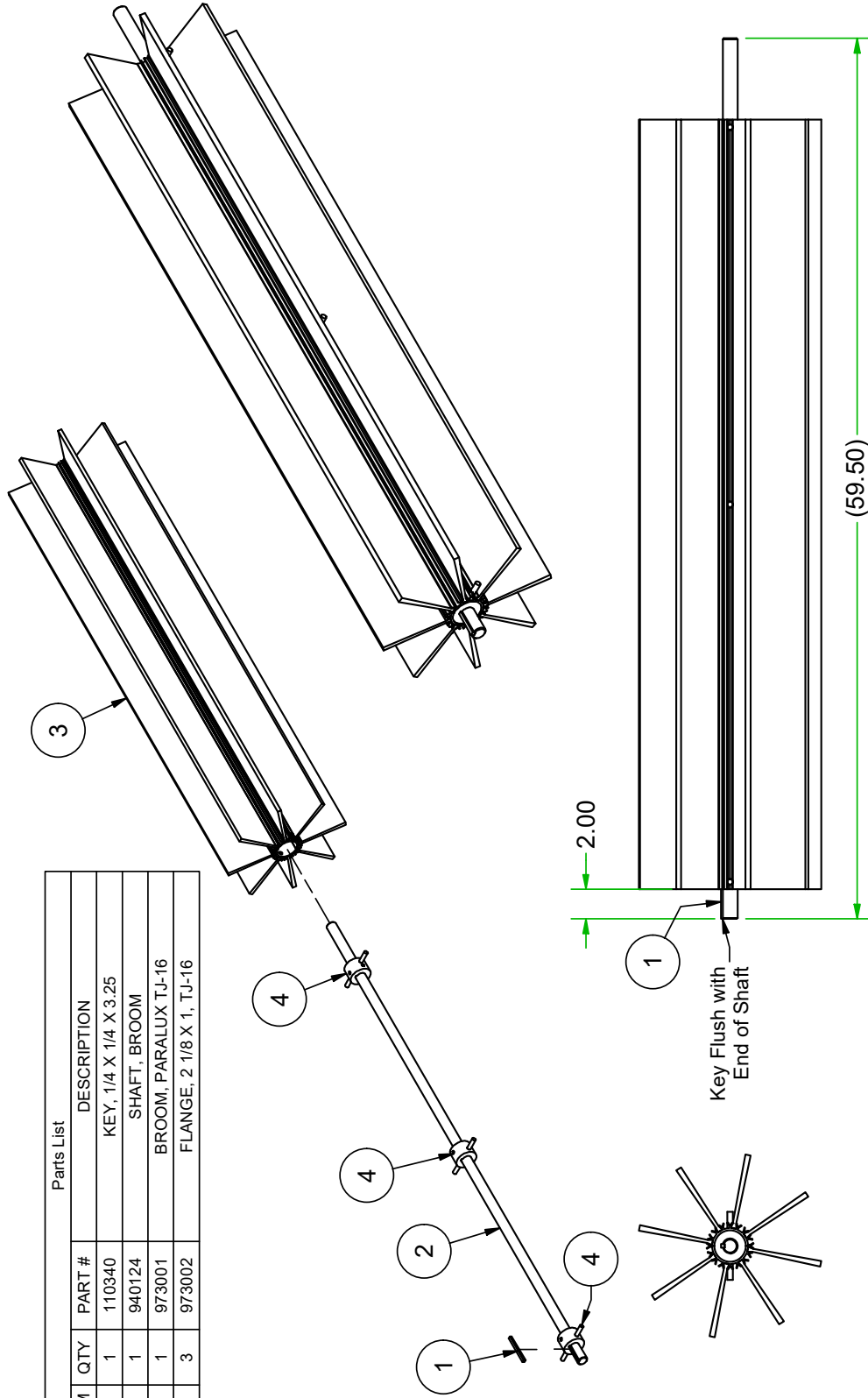
BRUSH ROTOR

 CUSTOMER INSTALL: 900229
 FACTORY INSTALL: 900251


SERVICE NOTE:
 Due to Part Availability, 2022 & 2023 models may have been equipped with a Full Brush Rotor (905158) or a Strip Brush Rotor (905192) See the bush assembly page for service part details.

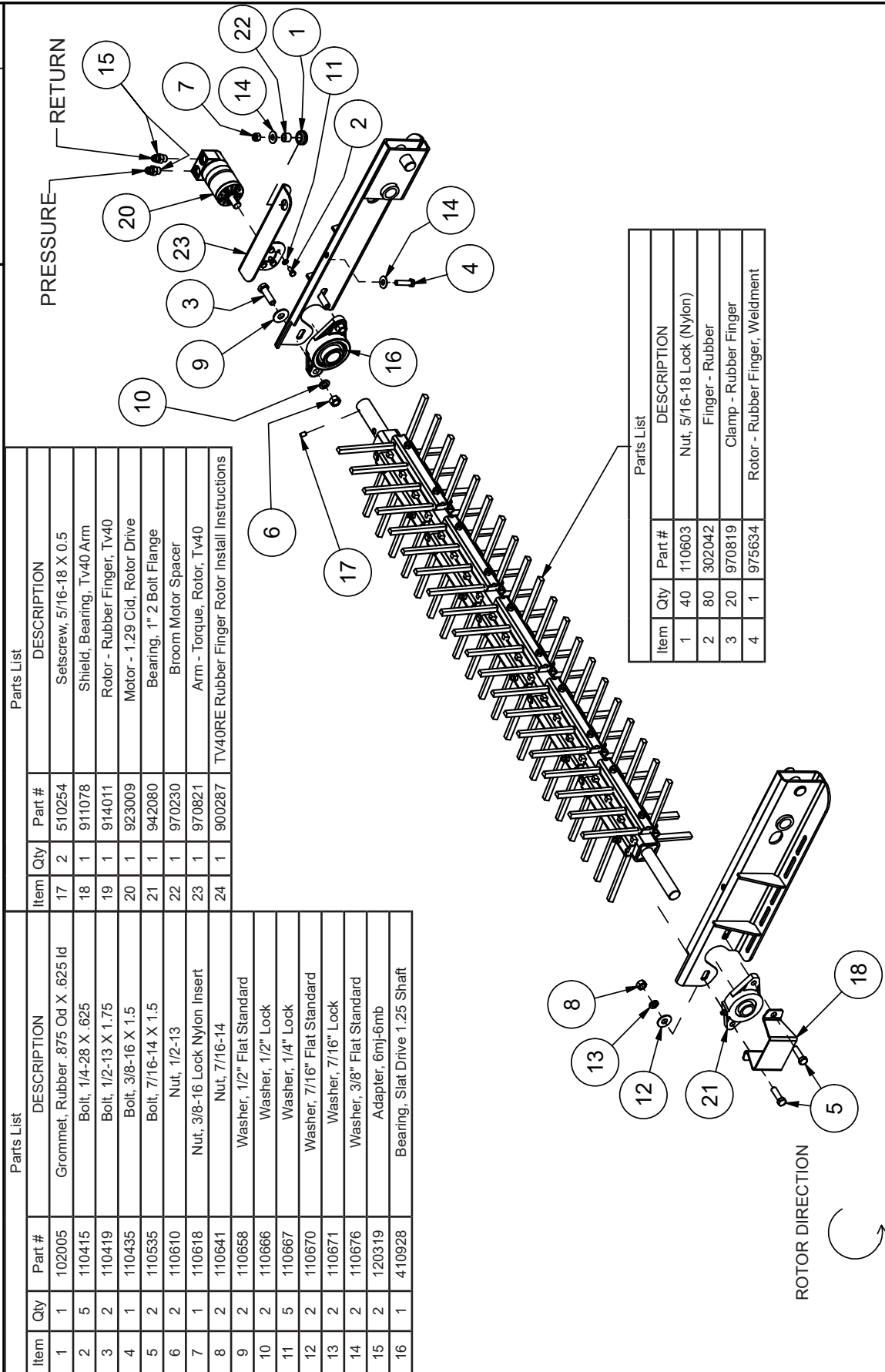


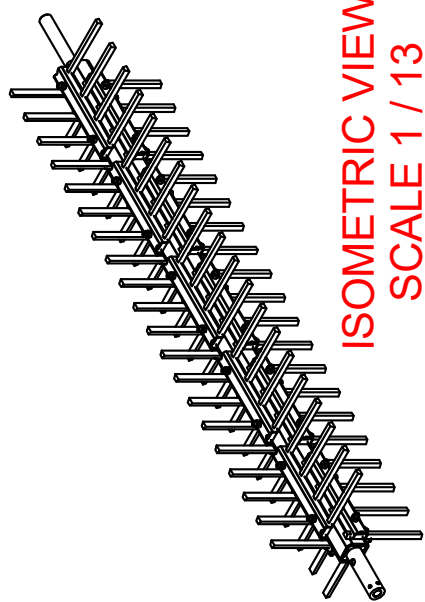
Parts List			DESCRIPTION
ITEM	QTY	PART #	
1	1	110340	KEY, 1/4 X 1/4 X 3.25
2	1	940124	SHAFT, BROOM
3	1	973001	BROOM, PARALUX TJ-16
4	3	973002	FLANGE, 2 1/8 X 1, TJ-16



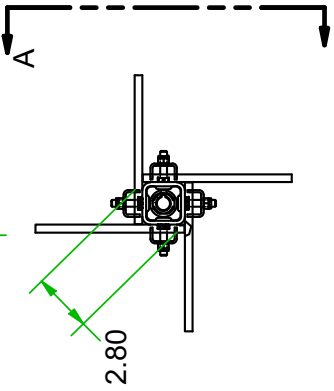
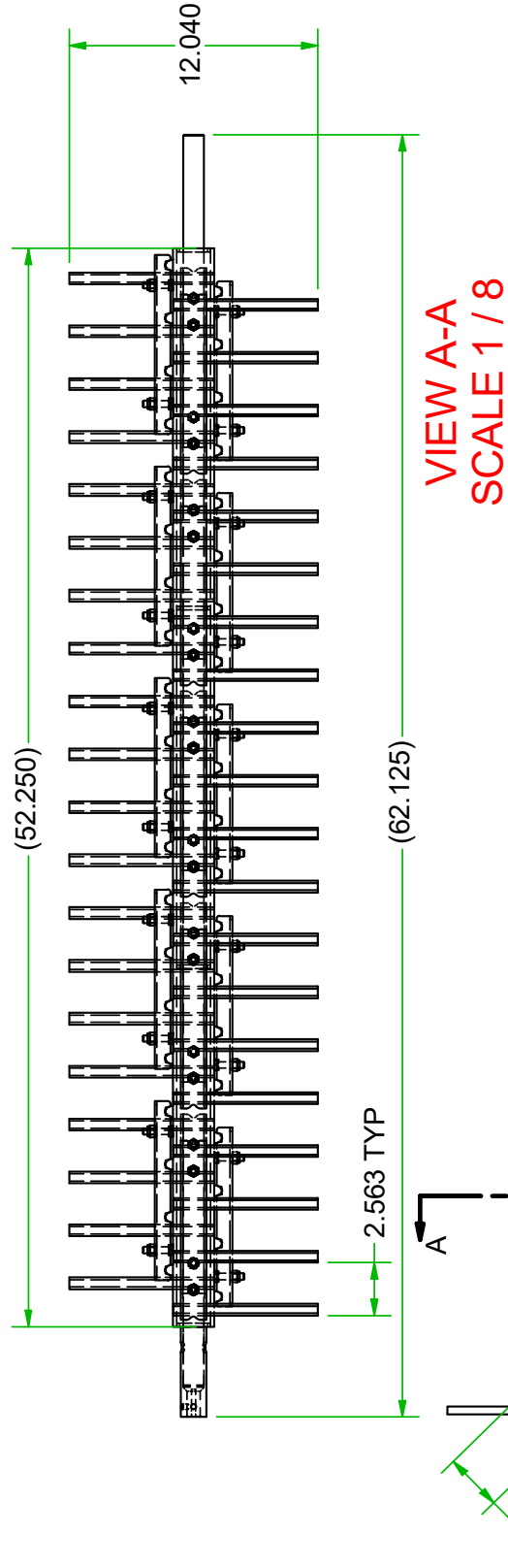
BRUSH ASSEMBLY

900225 REV: C



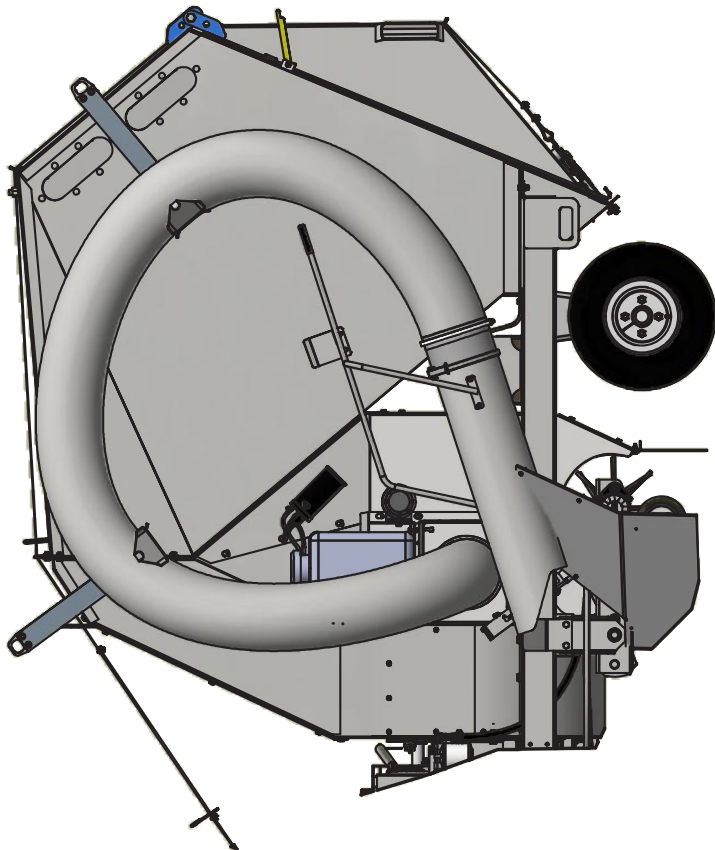


PARTS LIST			
ITEM	QTY	PART #	DESCRIPTION
1	40	110603	NUT, 5/16-18 LOCK (NYLON)
2	80	302042	FINGER - RUBBER
3	20	970819	CLAMP - RUBBER FINGER
4	1	975634	ROTOR - FINGER, RUBBER, WELDMENT

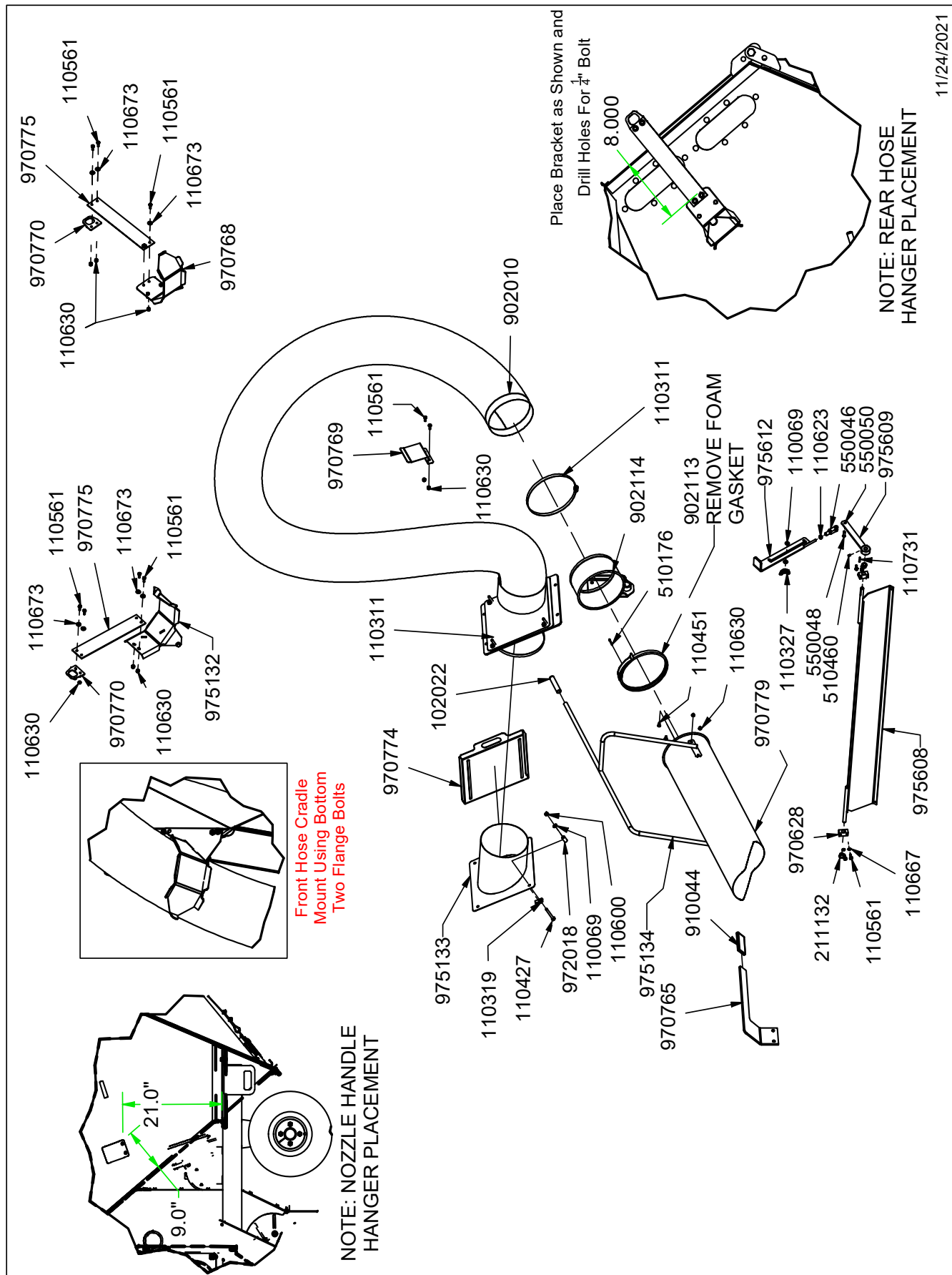


REMOTE HOSE OPTION

SUCTION WHEN PROPERLY INSTALLED: 1436 cfm



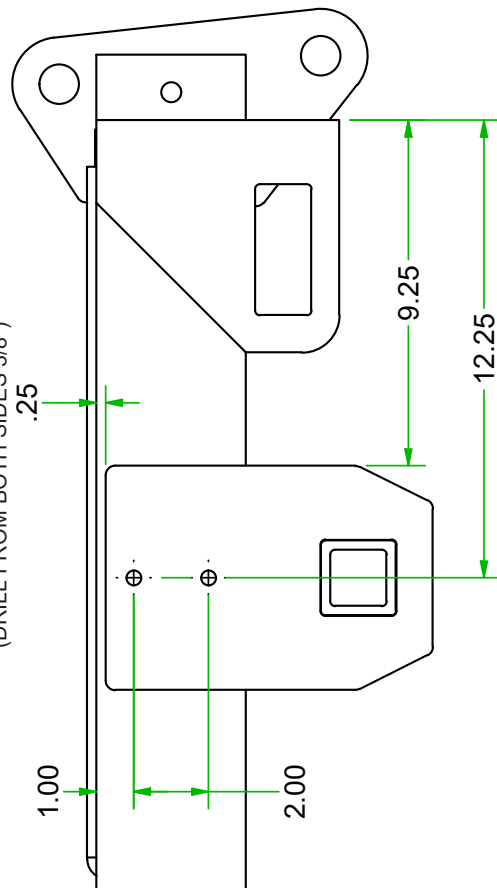
900217		REV: B
905081: KIT, SMALL PARTS, 8" HOSE OPTION		
Qty	Part #	DESCRIPTION
1	102022	Cover, Vinyl 5/8" X 4 3/4"
6	110069	Washer, 5/16" Flat Sae
2	110311	Clamp, Hose #912 8.00"
1	110319	Nut, 5/16-18, U-Type
5	110327	Nut, 5/16 Wing
4	110427	Bolt, 5/16-18 X 2.5 Tap
1	110437	Bolt, 3/8-16 .75 Wiz Flng Zinc
4	110451	Bolt, 1/4-20 X .5, Machine Head
2	110539	Bolt, 7/16-14 X 1.25
16	110561	Bolt, 1/4-20 X .75 Hhcs Zinc
6	110561	Bolt, 1/4-20 X .75
1	110623	Nut, 5/16-24
16	110630	Nut, 1/4-20, Lock Nylon
6	110645	Nut, 3/8-16, Wiz Flng
4	110667	Washer, 1/4 Lock
8	110673	Washer, 1/4" Flat Standard
1	110731	Key, 1/8 X 1/8 X 1
2	211132	Bushing, .625 X .5
1	510176	Cotter Pin, 1/8 X 1
1	510460	Set Screw, 1/4-20
1	550046	Clevis Yoke, 5/16-24
1	550048	Clevis Pin, 5/16
1	550050	Cotter Pin, 3/32 X 1
1	910044	Cover, Vinyl .25 X 1.5 X 4 Grip
2	970628	Flap Pivot Block
2	970770	Ring, Hose Hanger
4	972018	Spring, Compression
1	902010	Hose, 8 Inch
1	902113	Clamp, Nozzle Swivel
1	902114	Adaptor, Hose Swivel
1	970765	Bracket, Nozzle Support
1	970768	Cradle, Rear Hose
1	970769	Hanger, Nozzle Handle
1	970774	Slide, Hose Option
2	970775	Hanger Strap
1	970779	Nozzle Tube
1	975132	Front Hose Cradle Weldment
1	975133	Side Hose Adapter Weldment
1	975134	Nozzle Handle Weldment
1	975608	Flap Weldment
1	975609	Flap Arm Weldment
1	975612	Flap Handle Weldment
1	900286	TV40RE Remote Hose Install Instructions



900216			REV: B				
Parts List							
Parts List				Parts List			
Item	Qty	Part #	DESCRIPTION	Item	Qty	Part #	DESCRIPTION
1	1	902112	Brush, 18" X 6" X 40 Deg	3.17	12	110672	Washer, 3/8" Lock
2	1	902236	Decal, Curb Brush Warning	3.18	6	110676	Washer, 3/8" Flat Standard
3	1	905079	Kit, Sm Parts Tv40 Fence Brush	3.19	6	110826	Nut, 3/8-16 Gr 5
3.1	1	110298	Washer, 1/4" Flat Sae	3.20	2	120144	Adapter, 6mj-10mb
3.2	1	110378	Bolt, 5/16-18 X 2.0	3.21	1	910044	Cover, Vinyl .25 X 1.5 X 4 Grip
3.3	1	110385	Bolt, 5/8-11 X 4.0	3.22	1	970304	Pump Stop Chain
3.4	4	110400	Bolt, 3/8-16 X 2.0	3.23	1	970763	Washer, 1.50 X .320
3.5	4	110420	Bolt, 3/8-16 X 1.0	3.24	1	970764	Spacer, 1.700 X 1.005 X .320
3.6	2	110435	Bolt, 3/8-16 X 1.5	4	1	922004	Motor, Eaton 101-1009
3.7	1	110464	Bolt, 1/4-20 X 1.0	5	1	922089	Hose .375 X 96 6fx90m
3.8	1	110474	Bolt, 1/4-20 X 1-1/2	6	1	970748	Arm, Brush Motor Mount
3.9	2	110495	Bolt, 3/8-16 X 3.75	7	1	970759	Shaft, Lift Pivot
3.10	1	110553	Bolt, 1/2-13 X 2.5 Tap	8	1	975125	Lift Tube Weldment
3.11	1	110603	Nut, 5/16-18 Lock (Nylon)	9	1	975127	Lift Lever Weldment
3.12	1	110610	Nut, 1/2-13	10	1	975128	Brush Adaptor Weldment
3.13	2	110618	Nut, 3/8-16 Lock Nylon Insert	11	1	975129	Outer Lift Hanger Weldment
3.14	1	110630	Nut, 1/4-20 Lock (Nylon Insert)	12	1	975130	Lift Latch Weldment
3.15	1	110639	Nut, 5/8-11, Unitorque Lock	13	1	975131	Inner Lift Hanger Weldment
3.16	1	110667	Washer, 1/4" Lock	14	1	975131	Installation Instructions, Curb Brush

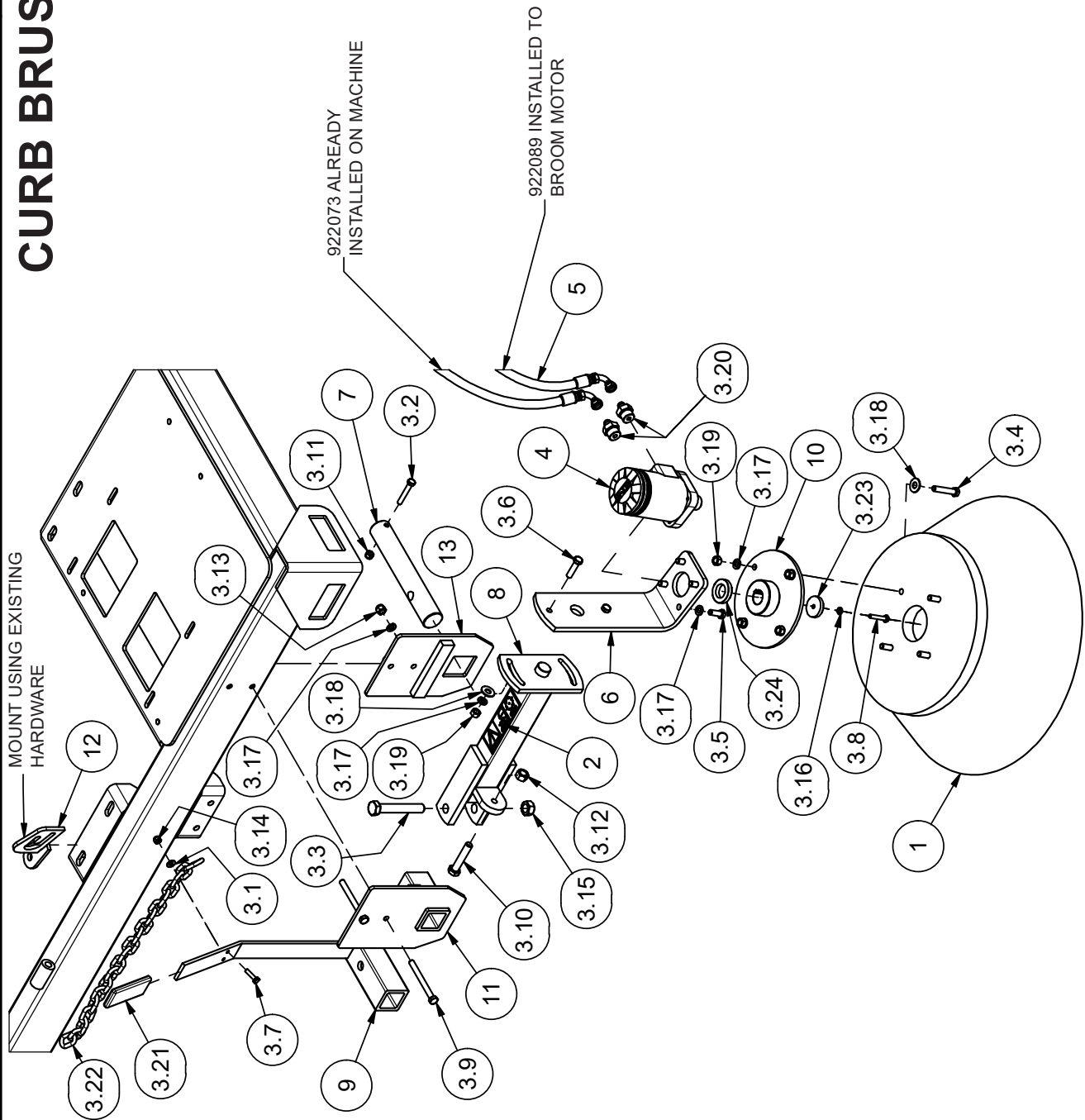
BRUSH HANGER INSTALLATION

(DRILL FROM BOTH SIDES 3/8")



CURB BRUSH OPTION

CURB BRUSH OPTION



NOTES

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