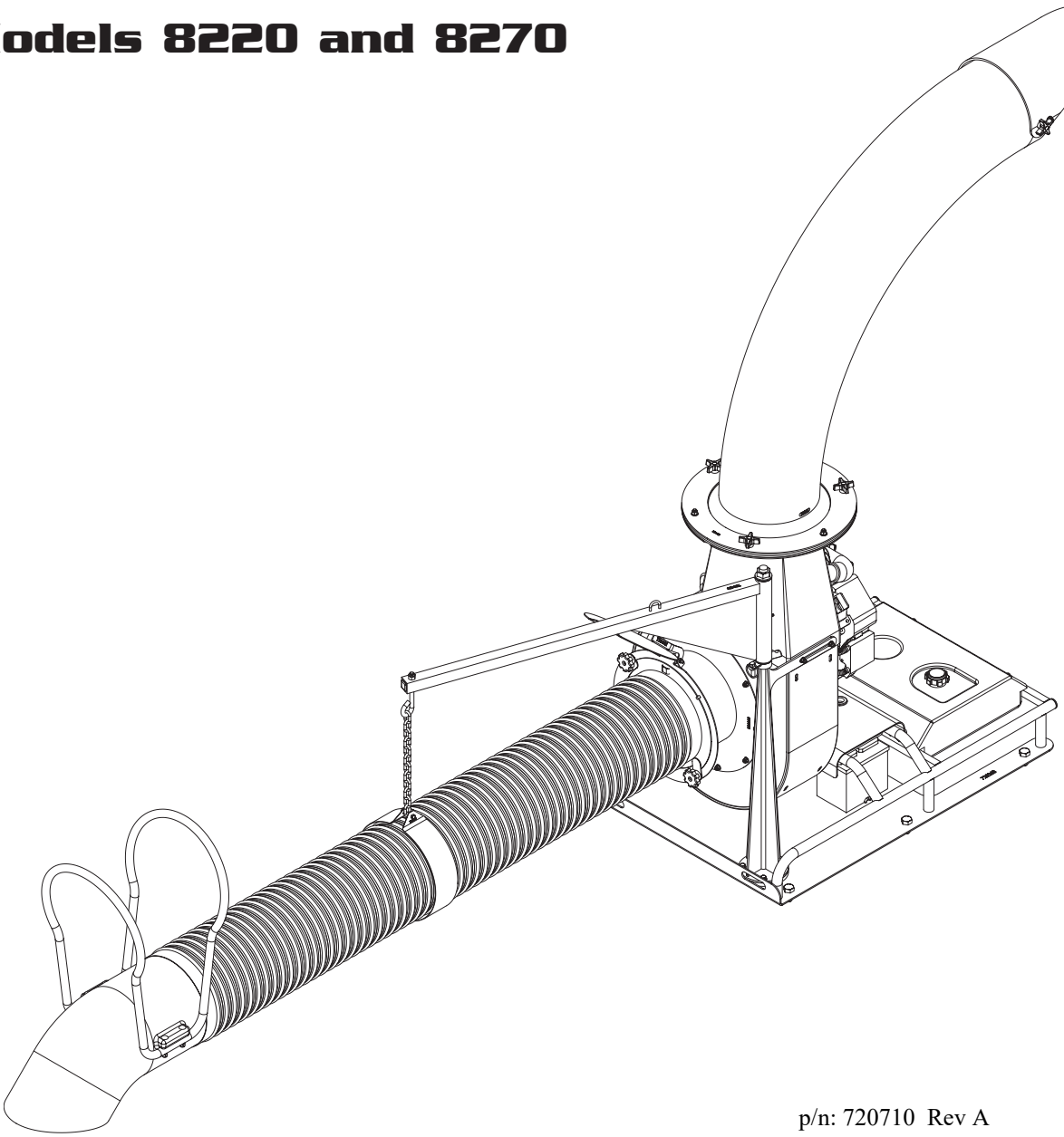
# LITTLE WONDER® Shredding TruckLoader

## Models 8220 and 8270



p/n: 720710 Rev A

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# Important Information

## A. Introduction

On behalf of everyone at ***Little Wonder***, we would like to thank you for your purchase of a ***Little Wonder*** Shredding TruckLoader. This professional debris handling machine was designed to the highest standards to ensure you many hours of uninterrupted service.

This manual provides the information necessary for safe and efficient operation and service. For your safety, it is critically important that you read and understand this entire manual before operating your Shredding TruckLoader.

**Specifications:**

| Model | Dry Weight | Max Rpm |
|---|---|---|
| 8220 | 500 lbs. | 3600 |
| 8270 | 500 lbs. | 3600 |

## B. Service Information

**Shredding TruckLoader Unit**

Contact your local ***Little Wonder*** dealer.

**Engine**

Contact an authorized Kohler dealer. Dealers are listed in the Yellow Pages under "Lawn and Garden Equipment Supplies", "Lawn Maintenance" or "Lawn Mowers". Your dealer will need to know the model and serial number of your engine. For their location, please consult the operator's manual provided with your engine.

## C. Special Safety Information

**⚠ WARNING ⚠ DANGER ⚠**

**ATTENTION: THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS**

**⚠ WHEN YOU SEE THIS SYMBOL ⚠**

**HEED ITS WARNING! STAY ALERT!**

**⚠ WARNING ⚠ DANGER ⚠**

**TO REDUCE THE POTENTIAL FOR ACCIDENTS, COMPLY WITH THE SAFETY INSTRUCTIONS IN THIS MANUAL. FAILURE TO COMPLY MAY RESULT IN SERIOUS PERSONAL INJURY AND OR EQUIPMENT AND PROPERTY DAMAGE.**

**⚠ WARNING ⚠ DANGER ⚠**

**THE ENGINE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.**

## Packaging

## Safety and Warnings

### A. Safety Decals

An important part of the safety system incorporated in this Shredding TruckLoader are the warnings and informational decals (labels) found on various parts of the unit.

These decals (labels) must be replaced if they become illegible due to abrasion, etc.

It is your responsibility to replace the decals (labels) when they become hard to read. The location of these decals and their part numbers for ordering are shown on the picture below.

**⚠ WARNING ⚠ DANGER ⚠**

**IMPROPER USE OR CARE OF THIS SHREDDING TRUCKLOADER, OR FAILURE TO WEAR PROPER PROTECTION CAN RESULT IN SERIOUS INJURY.**

**READ AND UNDERSTAND THE RULES FOR SAFE OPERATION AND ALL INSTRUCTIONS IN THIS MANUAL.**

**WEAR HEARING, EYE, AND BREATHING PROTECTION.**

Caution: Thrown objects.

Keep bystanders away.

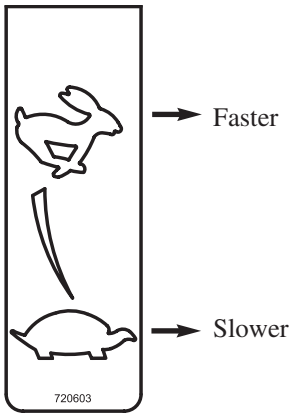
Always wear eye and ear protection.

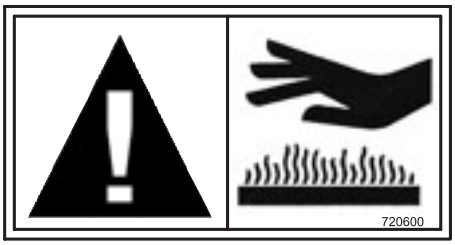
Before performing any service or maintenance, disconnect spark plug wire. Make sure throttle is in STOP position.

Read and understand the Owners Manual. Store your Owners Manual in a safe place.

Keep hands and feet away from air discharge areas. Rotating fan will cause serious injury.

P/N 910609
Warning Label

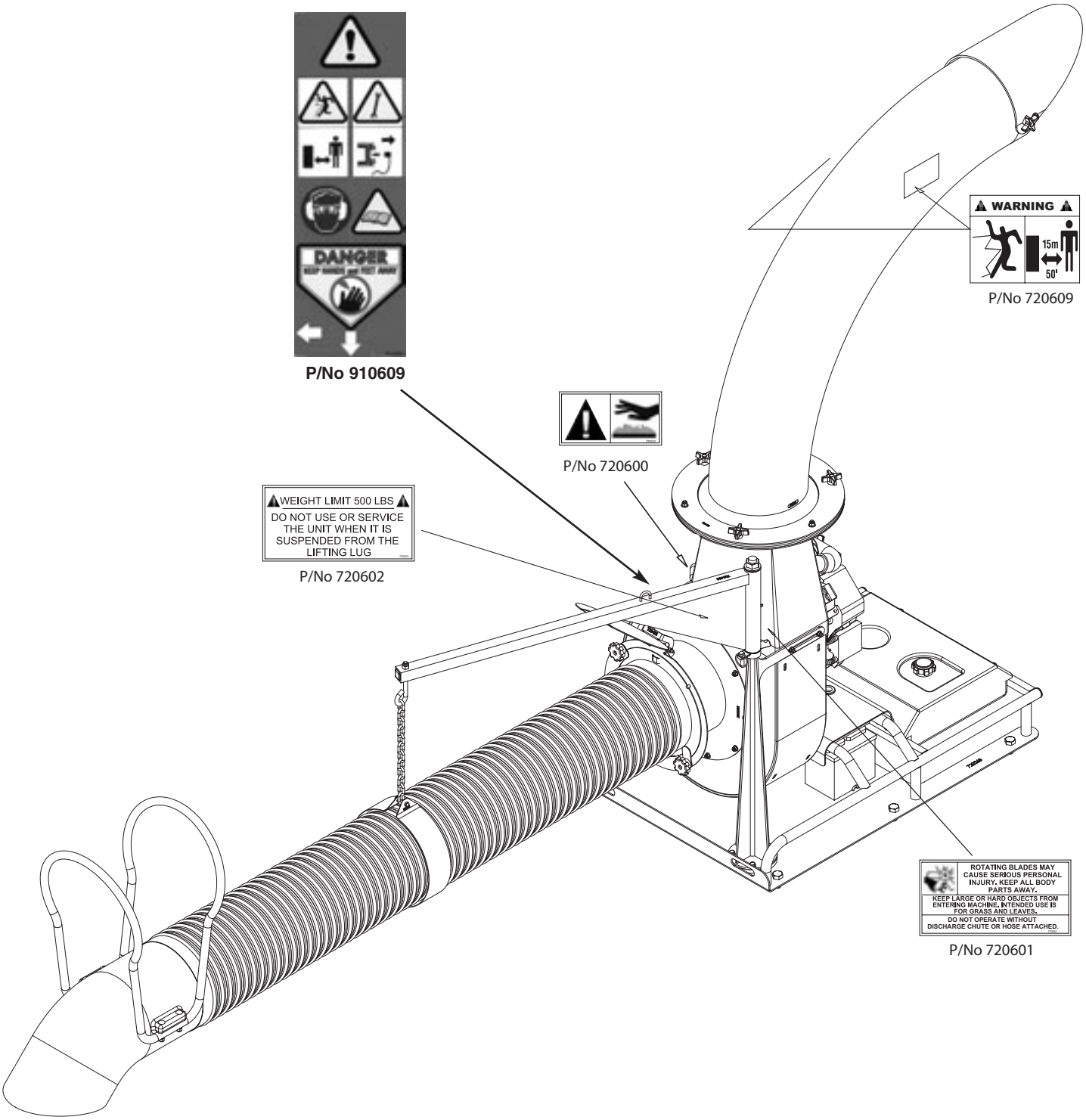



Caution: Hot Surface

Caution: Thrown objects. Keep bystanders away.

## Safety and Warnings



## General Safety Rules

1. Read and understand manual.
2. Wear eye, hearing, and breathing protection, proper clothing and footwear.
3. While operating the machine always be sure of a safe and secure operating position, maintain a firm footing and good balance at all times.
4. Keep area clear of children, pets and bystanders.
5. Never attempt to use an incomplete machine or one fitted with an unauthorized modification.
6. Avoid contact with and inhalation of harmful fluids, gases, mists, fumes, and dust.
7. Check operation of the safety interlock switch daily. Do not defeat interlock system; it is for your protection.
8. Do not allow children to operate machine.
9. Do not override or remove any safety devices.

**⚠ WARNING ⚠ DANGER ⚠**

10. FAN COASTS AFTER THE ENGINE IS TURNED OFF.

**⚠ WARNING ⚠ DANGER ⚠**

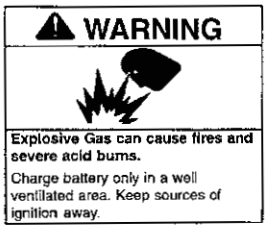
11. ROTATING FAN. DON'T ATTEMPT TO REMOVE MATERIALS FROM INTAKE OR DISCHARGE WHEN UNIT IS RUNNING, OR FAN IS ROTATING.

12. Keep hands away from hose inlet and discharge chute.
13. Disconnect spark plugs before doing any cleaning or maintenance – There are two spark plugs on the machine. Disconnect both.
14. If the Shredding TruckLoader is mounted on a trailer, make sure that the driver of the towing vehicle has the operator of the Shredding TruckLoader in full view at all times.
15. When operating the Shredding TruckLoader, operator must stay to the side of the machine, never in front or behind
16. Wear gloves to protect your hands.
17. Beware that the machine is loud and, during normal operation; may interfere with speech communication.
18. Check mounting hardware daily! Beware of the possibility that the machine may overturn, fall, or tip over because of unexpected movement of the vehicle.

**⚠ WARNING ⚠ DANGER ⚠**

DO NOT USE THE SHREDDING TRUCKLOADER IF THE MUFFLER IS DEFECTIVE OR MISSING.

### A. ⚠ Warnings - "Don'ts"




**Explosive Gas!**
*Batteries produce explosive hydrogen gas while being charged. To prevent a fire or explosion, charge batteries only in well ventilated areas. Keep sparks, open flames, and other sources of ignition away from the battery at all times. Keep batteries out of the reach of children. Remove all jewelry when servicing batteries.*

*Before disconnecting the negative (-) ground cable, make sure all switches are OFF. If ON, a spark will occur at the ground cable terminal which could cause an explosion if hydrogen gas or gasoline vapors are present.*

**Don't** attempt to remove materials from intake or discharge when Shredding TruckLoader is running, or fan is rotating.

**Don't** install or remove components while Shredding TruckLoader is running. Turn off engine to make changeover. Be sure throttle is in the stop position, and the Shredding TruckLoader has come to a complete stop. Remove the spark plug wires from the spark plug before removing material.

**Don't** point the Shredding TruckLoader discharge chute in the direction of people, cars, glass, or other similar items which could be injured or damaged by blown debris.

**Don't** attempt to repair Shredding TruckLoader. Have repairs made by qualified Little Wonder dealer or repairman. See that only Little Wonder and recommended engine manufacturers replacement parts are used.

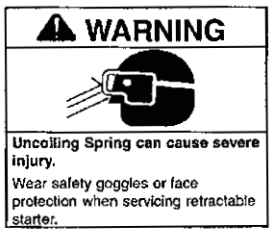
**⚠ WARNING ⚠ DANGER ⚠**

DO NOT SMOKE WHEN FILLING FUEL TANK

**Don't** leave the engine running while the Shredding TruckLoader is unattended.

**Don't** store, spill, or use gasoline near flames or spark

### B. ⚠ Warnings - "Do's"



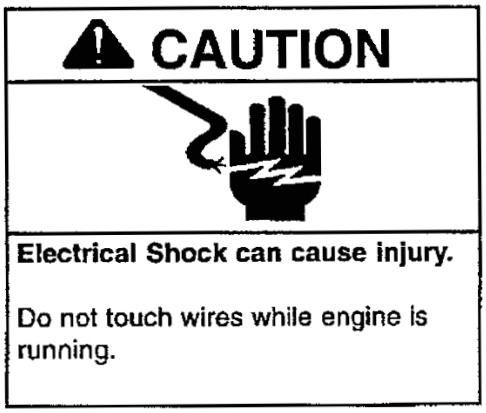

**Spring Under Tension!**
*Retractable starters contain a powerful, recoil spring that is under tension. Always wear safety goggles when servicing retractable starters and carefully follow instructions in the "Retractable Starter" Section 7 for relieving spring tension.*

**Always** dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of sturdy gloves, non-skid footwear and safety glasses are recommended. Always wear ear protectors where possible. Use face filter to avoid breathing dust.

**Always** stay alert. Watch what you are doing and use common sense. Do not operate Shredding TruckLoader when fatigued.

**Always** keep hands away from air intake and air outlet chute. Keep both hands on handles when power is on.

**Always** maintain and examine Shredding TruckLoader with care. Follow maintenance instructions given in manual.




**Electrical Shock!**
*Never touch electrical wires or components while the engine is running. They can be sources of electrical shock.*

## B. ⚠ Warnings - "Do's" Con't

**Always** store Shredding TruckLoader indoors. When not in use, store Shredding TruckLoader indoors in a sheltered area (a dry place) where it's not accessible to children. The Shredding TruckLoader, as well as fuel, should not be stored in a house. Keep throttle in the stop position.

**Always** be sure Shredding TruckLoader is fully assembled. Never operate Shredding TruckLoader without all guards and defectors in place. Ensure that all nuts, bolts, screws are installed and properly tightened.

**Always** keep the throttle in the "stop" potion when not in use.

**Always** keep a safe distance between two or more operators when working together simultaneously.

**⚠ WARNING ⚠ DANGER ⚠**

**IF THE SHREDDING TRUCKLOADER IS USED IMPROPERLY OR SAFETY PRECAUTIONS ARE NOT FOLLOWED, THE USER RISKS SERIOUS INJURY TO THEMSELVES AND OTHERS.**

**READ AND UNDERSTAND THE FOLLOWING BEFORE ATTEMPTING TO OPERATE THIS SHREDDING TRUCKLOADER.**

## C. ⚠ Engine/ Fuel Warnings - "Don'ts"

**Don't** fuel, refuel or check fuel while smoking or near an open flame or other ignition source. Stop engine and be sure it is cool before refueling.

**Don't** leave the engine running while the Shredding TruckLoader is unattended. Stop engine before putting the Shredding TruckLoader down or while transporting from one place to another.

**Don't** start, run this TruckLoader indoors, or in an improperly ventilated area as poisonous carbon monoxide and other gasses are emitted.

**Don't** run engine when electrical system causes spark outside the cylinder. During periodical checks of the spark plug, keep plug a safe distance from cylinder to avoid burning of evaporated fuel from cylinder.

**Don't** check for spark with spark plug or plug wire removed and grounded. Use an approved tester. Sparks can ignite fumes.

**Don't** run engine when the odor of gasoline is present or other explosive conditions exist.

**Don't** operate the unit if gasoline is spilled. Clean up spill completely before starting engine.

**Don't** refuel indoors or in an improperly ventilated area.

**Don't** operate your Shredding TruckLoader if there is an accumulation of debris around the muffler, and cooling fins.

**Don't** touch hot mufflers, cylinders or cooling fins as contact may cause serious burns.

## D. ⚠ Engine/ Fuel Warnings - "Do's"

**Always** use fresh gasoline in the fuel mixture. Stale gasoline can cause leakage.

**Always** handle fuel with care; it is highly flammable. Never add fuel to a machine with a running or hot engine. Do not inhale fuel fumes as they are toxic.

The use of spark arrestor mufflers is required by law in the state of California (Section 4442 of the California Public Resources Code), as well as in other states or municipalities. Federal laws apply on federal lands.

**⚠ WARNING ⚠ DANGER ⚠**

**HANDLE FUEL WITH CARE. IT IS HIGHLY FLAMMABLE. FUELING A HOT ENGINE OR NEAR AN IGNITION SOURCE CAN CAUSE A FIRE AND RESULT IN SERIOUS PERSONAL INJURY AND/ OR PROPERTY DAMAGE.**

# Assembly Instructions

This unit is designed for vacuuming leaves, grass clippings, other organic materials, and quickly loading them from the ground into a truck.

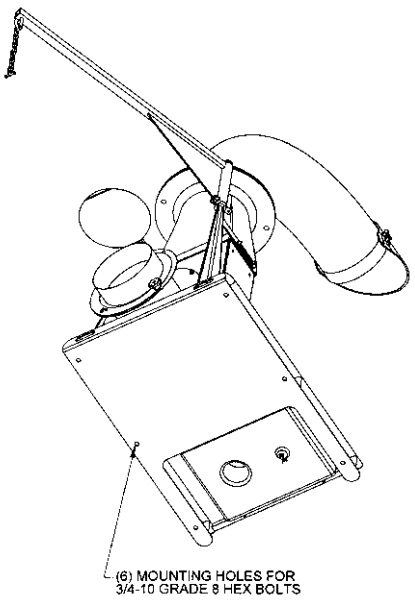
Vacuuming sand, rocks, and hard litter will affect the longevity of this machine, and can cause part damage. The Shredding TruckLoader is designed to be used in conjunction with a truck that has a receiver box installed. Be sure the receiver box is strong enough to withstand a high velocity and force of the incoming debris.

**⚠ WARNING ⚠ DANGER ⚠**

**NEVER RUN OR OPERATE YOUR MACHINE UNLESS DISCHARGE CHUTE IS DIRECTED INTO A RECEIVER BOX, AND THE INTAKE HOSE IS INSTALLED.**

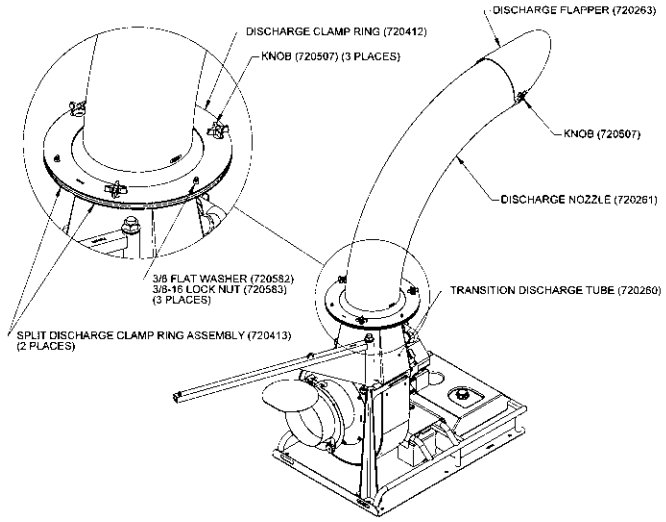
## A. Mount the Shredding TruckLoader Frame

Mount the Shredding TruckLoader frame, secure frame with four 3/4" hex head bolts (supplied).




## B. Install Discharge Chute to Power Unit

1. Position the discharge nozzle's flange (#720261) on top of the transition discharge to be (#720260) as shown.
2. Slide the discharge clamp ring (#720412) over the discharge nozzle and down to the transition discharge tube flange.
3. Line up the round holes in the discharge clamp ring with the round holes in the transition discharge tube.
4. Install the split discharge clamp rings (#720413) by inserting the studs through the transition discharge tube flange and discharge clamp ring.
5. Secure with either the flat washer (#720582) and lock nut (#720583) or knob (#720507) as shown.
6. Direct discharge into receiver box of the transport vehicle as shown. Tighten knobs to lock position.
7. Position discharge flapper (#720263) to desired opening and tighten adjusting knob (#720507).

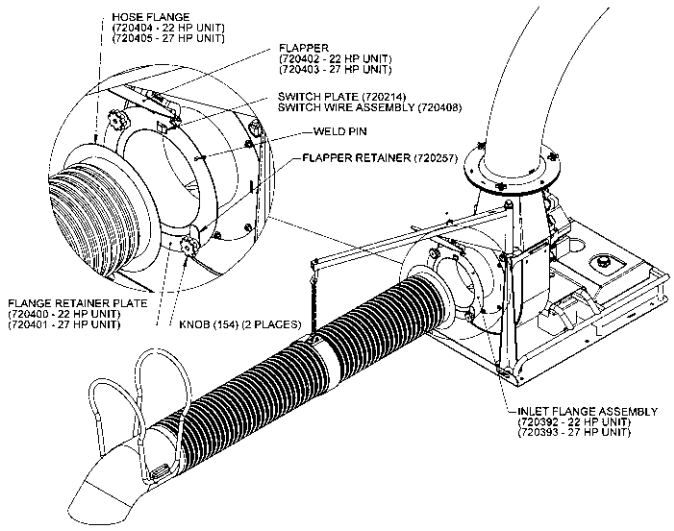



## C. Change Discharge Chute Direction

1. Loosen knobs (#720507) and nuts (#720583).
2. Swivel discharge chute to desired direction.
3. Affix chute by retightening knobs and nuts.
4. Additional tools are not needed.

## D. Attach Hose to Power Unit

1. Insert the Hose flange attached to the hose in the space (gap) between inlet flange and flange retainer plate. Welded retaining pin on the inlet flange will prevent hose from sliding out of the slot.
2. The flange will activate the safety switch plate (#720214) that will allow you to operate the unit.



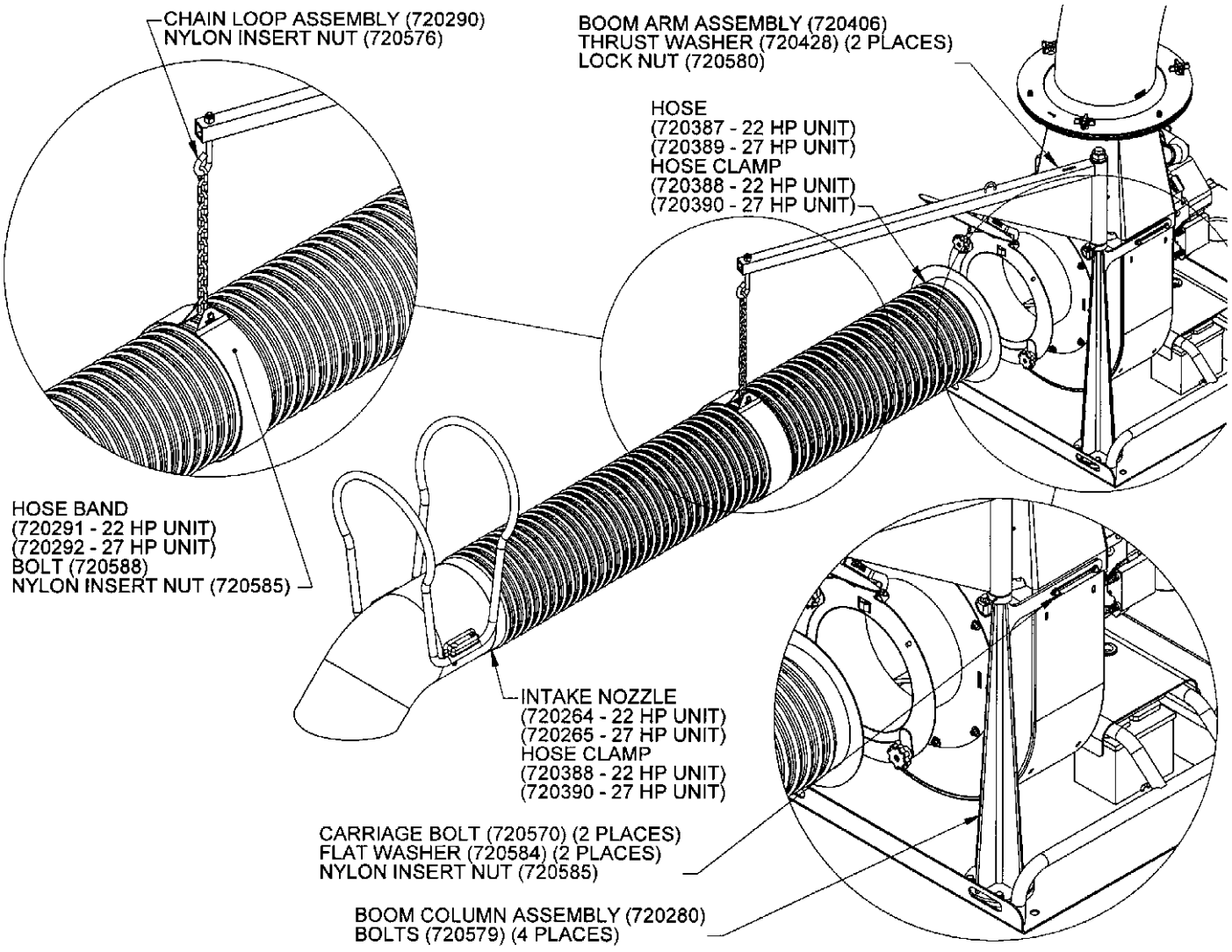
3. When hose is disconnected you can use the flapper retainer to lock the flapper in the closed position during the transportation.
4. In order to change the orientation of the intake nozzle, loosen knobs on inlet flange to rotate hose of the intake nozzle, once in the desired position re-tighten the knobs.

**⚠ WARNING ⚠ DANGER ⚠**

HOSE WEIGHT IS APPROX 26 LBS. OBTAIN ADEQUATE HELP WHEN LIFTING.

## E Hose Assembly

1. Remove hose from the box and stretch it.
2. Hold the hose, and stretch each end as far as possible to open internal diameter.
3. Insert the intake nozzle into one of the open ends.
4. Secure the hose to the nozzle by installing the hose clamp and tighten.
5. Insert the inlet flange assembly into the remaining opening of the hose.
6. Install second hose clamp and tighten.



## F. Installing Boom Column Assembly to the Skid Mounting Frame

1. Remove the (2) Nuts (#720585) and Washers (#720584) from the Bolts (#720570) that were used to secure the Transition Discharge Tube (#720260) to the Housing Assembly as shown.
2. Be sure not to lose the (2) Bolts, accessible from the inside of the Transition Tube.
3. Position the Boom Column Assembly (#720280) by aligning the mounting holes to the threaded holes of the mounting pad provided on the Frame and positioning the slot of the Boom Column supporting rib to the bolts noted in Step #2.
4. While reaching inside the Transition Discharge tube to support the bolts, install the hardware that was removed in Step #1. This will secure the Boom Column to the Housing Assembly.
5. Next, secure the Column base to the Frame using (4) (#720579) Bolts.

## G. Installing the Boom Arm Assembly to the Boom Column Assembly

1. Slide (1) (#720428) Thrust Washer onto the shaft of the Boom Column Assembly (#720280).
2. Install the Boom Arm Assembly (#720406) onto the shaft of the Boom Column Assembly.
3. Slide a 2nd (#720428) Thrust Washer onto the shaft of the Boom Column Assembly.
4. Secure the Boom Arm Assembly and Washers to the shaft with a (#720580) Lock Nut.

## H. Installing the Chain Loop Assembly to the Boom Arm Assembly

1. Slip the threaded hook of the Chain Loop Assembly (#720290) through the hole in the end of the Boom Arm Assembly (#720406).
2. Once through, secure the hook with the Nut (#720576).
3. The level position of the hose to the Inlet can be control by the adjusting the position of the nut to the thread of the hook.

## I. Installing the Hose Band to the Chain Loop Assembly

1. After wrapping the Hose Band around the Hose, attach the Hose Band to the Chain Loop Assembly (#720290) by inserting the Bolt (#720588) through the holes in the Hose Band and bottom link of the Chain Loop Assembly.
2. Once through, secure the Bolt with the Nut (#720585).
3. Make sure the Hose Band is in the proper position with the Hose to allow free movement with the Boom Arm Assembly.

## J. Use of Lifting Lug

Little Wonder Shredding TruckLoader is supplied with convenient Lifting Lug that can be used when you need to move the unit. This Lug can hold weight up to a total of 500lbs.

**⚠ WARNING ⚠ DANGER ⚠**

**DO NOT USE OR SERVICE THE UNIT WHEN IT'S SUSPENDED FROM THE LIFTING LUG.**

## K. Liner Exchange

Little Wonder Shredding TruckLoader is equipped with a replaceable liner (#720416).

In order to replace the liner you will need the following tools:

1/2" wrench and a 1/2" hex socket wrench.

Liner exchange procedure:

1. Remove inlet flange assembly.
2. Remove Impeller and Talon Ring.
3. Remove bolts that attach existing liner to the housing, using above specified tools, and remove worn parts.
4. Install the new liner into the housing, noting the chamfered end needed at the discharge opening.
5. Position liner holes with the slots in the housing.
6. Attach the liner to the housing (one hole at a time) with 10 bolts, washers and nuts. Insert bolt from, the inside of the liner, and attach washer and nuts from the outside of the housing.

## L. Put Oil in Engine, Add Gas and Connect Battery Before Starting

1. Little Wonder recommends using SAE 30 Oil. The use of multi- viscosity oil will result in high oil consumption and possible engine damage.
2. Add gasoline to the fuel tank, 87 Octane or higher.
3. Connect the red battery cable (#720339) to the positive lug of the battery and the black battery cable (#720340) to the negative lug with the bolt (#720573) and nut (#720574) provided.

**⚠ WARNING ⚠ DANGER ⚠**

**HANDLE FUEL WITH CARE. IT IS HIGHLY FLAMMABLE. FUELING A HOT ENGINE OR NEAR AN IGNITION SOURCE CAN CAUSE A FIRE AND RESULT IN SERIOUS PERSONAL INJURY AND/ OR PROPERTY DAMAGE.**

See Engine Operating & Maintenance instructions for more detail description of type and amount of oil and gasoline used.

# Operation

**⚠ WARNING ⚠ DANGER ⚠**

**THE OPERATOR OF THIS SHREDDING TRUCKLOADER IS RESPONSIBLE FOR ACCIDENTS OR HAZARDS OCCURRING TO HIMSELF, OTHER PEOPLE OR THEIR PROPERTY.**

## A. Starting the Engine

**⚠ WARNING ⚠ DANGER ⚠**

**FUEL IS EXTREMELY FLAMMABLE. HANDLE IT WITH CARE. KEEP AWAY FROM IGNITION SOURCES. DO NOT SMOKE WHILE FUELING YOUR EQUIPMENT.**

1. Check oil level before starting the engine.
2. Put choke control to “choke” position.
3. Move throttle control to “fast”.
4. Turn key to start engine.
5. Let engine warm up. Slowly adjust choke toward “run” position.

**⚠ WARNING ⚠ DANGER ⚠**

**ENGINE EMITS CARBON MONOXIDE. DO NOT OPERATE OR REFUEL IN ENCLOSED AREA.**

## B. Vacuuming

1. With machine fully assembled and running, hold the handles of the intake nozzle and move intake nozzle in sweeping motions over debris. Or rotate flange 90 degrees, put nozzle on the ground and rake the debris in the direction of the nozzle opening.
2. Move nozzle close to debris, but do not block airflow into the nozzle.
3. To increase hose life, periodically rotate hose flange and reposition nozzle, so the hose will wear evenly.

**⚠ WARNING ⚠ DANGER ⚠**

**KEEP RECOIL STARTER SCREEN AND ENTIRE ENGINE CLEAR OF ALL DEBRIS. DO NOT OPERATE ENGINE WITH AN ACCUMULATION OF GRASS, DIRT, LEAVES OR OTHER COMBUSTIBLE MATERIAL NEAR MUFFLER.**

DO NOT operate unit if excessive vibration occurs; shut engine off immediately! Remove spark plug wires and check for damaged impeller or talon ring, loose impeller bolt, loose impeller key, or lodged foreign objects.

## C. Removing Clog in Hose

1. Fully stretch hose in a straight line (with engine running and unit secured).
2. If hose does not clear, use "Removing Blockage Blockage in Moving Parts" instructions below.

## D. Removing Blockage in Moving Parts

### Manually clear the clog

## E. Stopping the Engine

1. Move throttle to "slow".
2. Turn key to the "off" position.

## F. Refueling the Engine

1. Stop engine and allow it to cool for a few minutes before refueling.

**⚠ WARNING ⚠ DANGER ⚠**

**TURN OFF ENGINE BEFORE YOU DISCONNECT HOSE, AND MAKE SURE ALL MOVING PARTS COME TO A COMPLETE STOP.**

**⚠ WARNING ⚠ DANGER ⚠**

**BE SURE THROTTLE IS IN "STOP" POSITION, AND FAN HAS COME TO A COMPLETE STOP.**

## G. Transporting the Shredding TruckLoader

1. Disconnect intake hose assembly from the inlet flange.
2. Rotate the boom arm to the back of the unit boom assembly from the frame and lock in place with linch pin lock.
3. Remove discharge chute.
4. Place all listed above parts in the bed of the truck and secure them with rope or hardware.
5. Before towing check safety chains for proper attachment.

**⚠ WARNING ⚠ DANGER ⚠**

**WHEN TRANSPORTING THE SHREDDING TRUCKLOADER, DO NOT EXCEED 30 M.P.H.!**

**HIGH-SPEED DRIVING AND POOR ROAD CONDITIONS CAN CAUSE DAMAGE TO THE UNIT.**

**⚠ WARNING ⚠ DANGER ⚠**

**DISCONNECT THE SPARK PLUG WIRES BEFORE ANY CLEANING OR MAINTENANCE!**

**⚠ WARNING ⚠ DANGER ⚠**

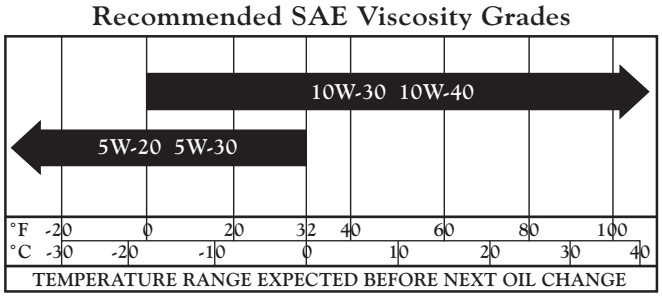
**WEAR GLOVES, THE CLOG MAY CONTAIN SHARP MATERIALS.**

## Oil Recommendations

Using the proper type and weight of oil in the crankcase is extremely important. So is checking oil daily and changing oil regularly. Failure to use the correct oil, or use dirty oil, causes premature engine wear and failure.

### Oil Type

Use high-quality detergent oil of **API (American Petroleum Institute) Service Class SF,SG, or SH**.Select the viscosity based on the air temperature at the time of operation as shown in the following table.




Note: Using oil other than service class SF, SG or SH oil or extending oil change intervals longer than recommended can cause engine damage.

A logo or symbol on oil containers identifies the API service class and SAE viscosity grade. See figure 1-3.

**Figure 1-3. Oil Container Logo**

**Refer to Section 6 - "Lubrication System" for detailed procedures on checking th oil, changing the oil and changing the oil filter.**

## Fuel Recommendations

### ⚠ Warning Explosive Fuel!

Gasoline is extremely flammable and its vapors can explode if ignited. Store gasoline only in approved containers, in well ventilated, unoccupied buildings, away from sparks or flames. Do not fill the fuel tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use gasoline as a cleaning agent.

### General Recommendations

Purchase gasoline in small quantities and store in clean, approved containers. A container with a capacity of 2 gallons or less with a pouring spout is recommended. Such a container is easier to handle and helps eliminate spillage during refueling.

Do not use gasoline left over from previous season, to minimize gum deposits in your fuel system and to ensure easy starting.

Do not add oil to the gasoline.

Do not overfill the fuel tank. Leave room for the fuel to expand.

### Fuel Type

For best results, use only clean, fresh, unleaded gasoline with a pump sticker octane rating of 87 or higher. In countries using the Research method, it should be 90 octane minimum.

Unleaded gasoline is recommended, as it leaves fewer combustion chamber deposits. Leaded gasoline may be used in areas where unleaded is not available and exhaust emissions are not regulated. Be aware, however, that the cylinder head will require more frequent service.

### Gasoline/Alcohol blends

Gasohol (up to 10% ethyl alcohol, 90% unleaded gasoline by volume) is approved as a fuel for Kohler engines. Other gasoline/alcohol blends are not approved.

### Gasoline/Ether blends

Methyl Tertiary Butyl Ether (MTBE) and is unleaded gasoline blends (up to a maximum of 15% MTBE by volume) are approved as a fuel for Kohler engine. Other gasoline/ether blends are not approved.

## Periodic Maintenance

### ⚠ Warning Accidental Starts!

Before servicing the engine or equipment, always disconnect the spark plug leads to prevent the engine from starting accidentally. Ground the leads to prevent sparks that could cause fires.

Make sure the equipment is in neutral.

### Maintenance Schedule

These required maintenance procedures should be performed at the frequency stated in the table. They should also be included as part of any seasonal tune-up.

| Frequency | Maintenance Required | Refer to: |
|---|---|---|
| **Daily or Before Starting Engine** | Fill fuel tank.<br>Check oil level.<br>Check air cleaner for dirty[1], loose, or damaged parts.<br>Check air intake and cooling areas, clean as necessary[1]. | Section 5<br>Section 6<br>Section 4<br>Section 4 |
| **Every 25 Hours** | Service precleaner element[1]. | Section 4 |
| **Every 100 Hours** | Service air cleaner element[1].<br>Change oil.<br>Remove cooling shrouds and clean cooling areas[1]. | Section 4<br>Section 6<br>Section 4 |
| **Every 200 Hours** | Change oil filter.<br>Check spark plug condition and gap. | Section 6<br>Section 8 |

[1] Perform these maintenance procedures more frequently under extremely dusty, dirty conditions.

### Storage

If the engine will be out of service for two months or more, use the following storage procedure:

1. Clean the exterior surfaces of the engine.

2. Change the oil and oil filter while the engine is still warm from operation. See “Change Oil and oil Filter” in Section 6.

3.The fuel system must be completely emptied, or the gasoline must be treated with a stabilizer to prevent deterioration. If you choose to use a stabilizer, follow the manufacturer’s recommendations, and add the correct amount for the capacity of the fuel system. Fill the fuel tank with clean, fresh gasoline. Run the engine for 2 to 3 minutes to get stabilized fuel into the carburetor.

To empty the system, drain the fuel tank and carburetor, or run the engine until the tank and system are empty.

4. Remove the spark plugs and add one tablespoon of engine oil into each spark plug hole. Install plugs and **ground** spark plug leads-do not connect the leads to the plug. Crank the engine two or three revolutions.

5. Store the engine in a clean, dry place.

## Storage and Maintenance

### A. Storage

1. When not in use store Shredding TruckLoader, in sheltered area (a dry place) not accessible to children. Keep throttle in the “Slow” position and switch “OFF”.
2. The Shredding TruckLoader, as well as fuel, should not be stored in a house or poorly ventilated areas.
3. Do not store fuel in the engine’s gas tank longer then 30 days.
4. To prolong Hose life, store it in the sheltered area out of sunlight and out of high ambient temperatures, and where it can’t be stepped on or crushed by other objects.

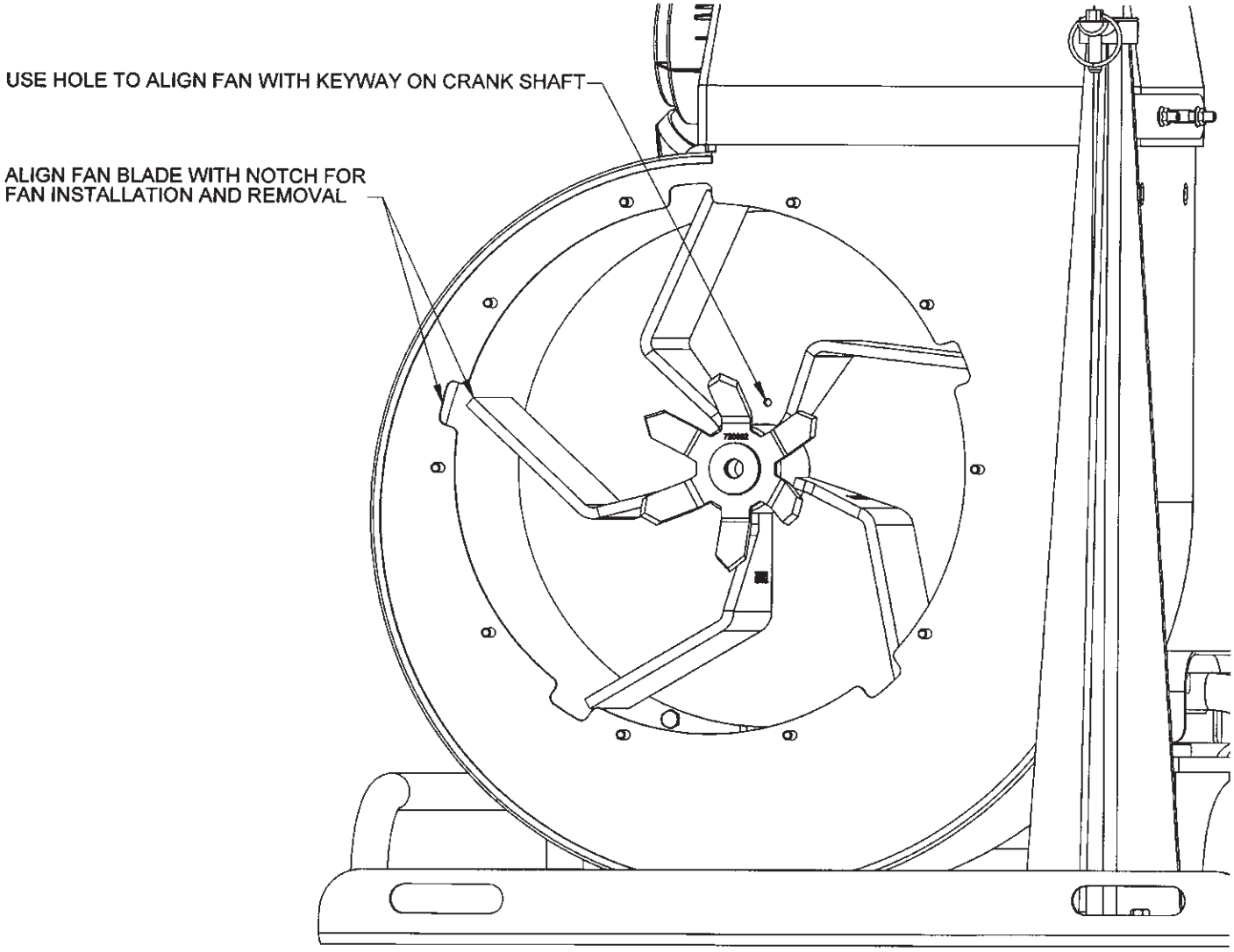
### B. Maintenance

| Area | Every Use | Every 5 Hrs | After First 8 Hrs of Use | Every 25 Hours | Every 50 Hours |
|---|---|---|---|---|---|
| Engine | See Engine Manual | | | | |
| Check muffler area for accumulation of debris | ✔ | | | | |
| Check operation of the safety interlock switch | ✔ | | | | |
| Check for excessive vibration | ✔ | | | | |
| Inspect for loose or damaged parts | | ✔ | | | |
| Inspect for clean hose | ✔ | | | | |
| Inspect labels condition | ✔ | | | | |
| Check oil level | | ✔ | | | |

1. To drain the oil, a valve is located on the engine block underneath the muffler for this purpose. To accomplish this task, remove the yellow cap, attach a hose that will drain into an oil waste container, and twist the valve to release the oil.
2. Once the oil has drained, reverse the order of instructions in Step #1 before adding fresh oil to the engine.

**C. Directions for removing the Fan and Talon ring, and reinstallation**

1. Remove the two spark plug wires from the spark plugs.
2. Remove the inlet flange assembly.
3. Remove bolt securing fan and talon ring to engine crankshaft.
4. Remove talon ring
5. Align notch in the front plate of the housing, and fan blades.
6. Insert a 3/4-16 x 5" long grade 5 (or better) bolt and jack or push the fan off the engine crank shaft (Little Wonder P/no 910505 jacking screw is recommended.) Take note of this fan orientation in order to replace.
7. Replace damages or worn fan with a new one. If during the fan removal, the Key #720293 came loose from the keyway, reinstall it by applying a few drops of the Loc-tite 380 instant adhesive ("Black Max" P/no 38050) on the key, and load the key in the keyway of the engine crank shaft. (The cure time is approx. 1 min.)
9. Replace fan in the same orientation as removed in Step #7. The fan keyway should line up with the drive shaft to install the fan.
10. Align talon ring "D" hole with the fan hub, and install talon ring (#720362).
11. Use a new bolt (#720572) and complete fan and talon ring installation. Insure a secure fit upon re-assembling.



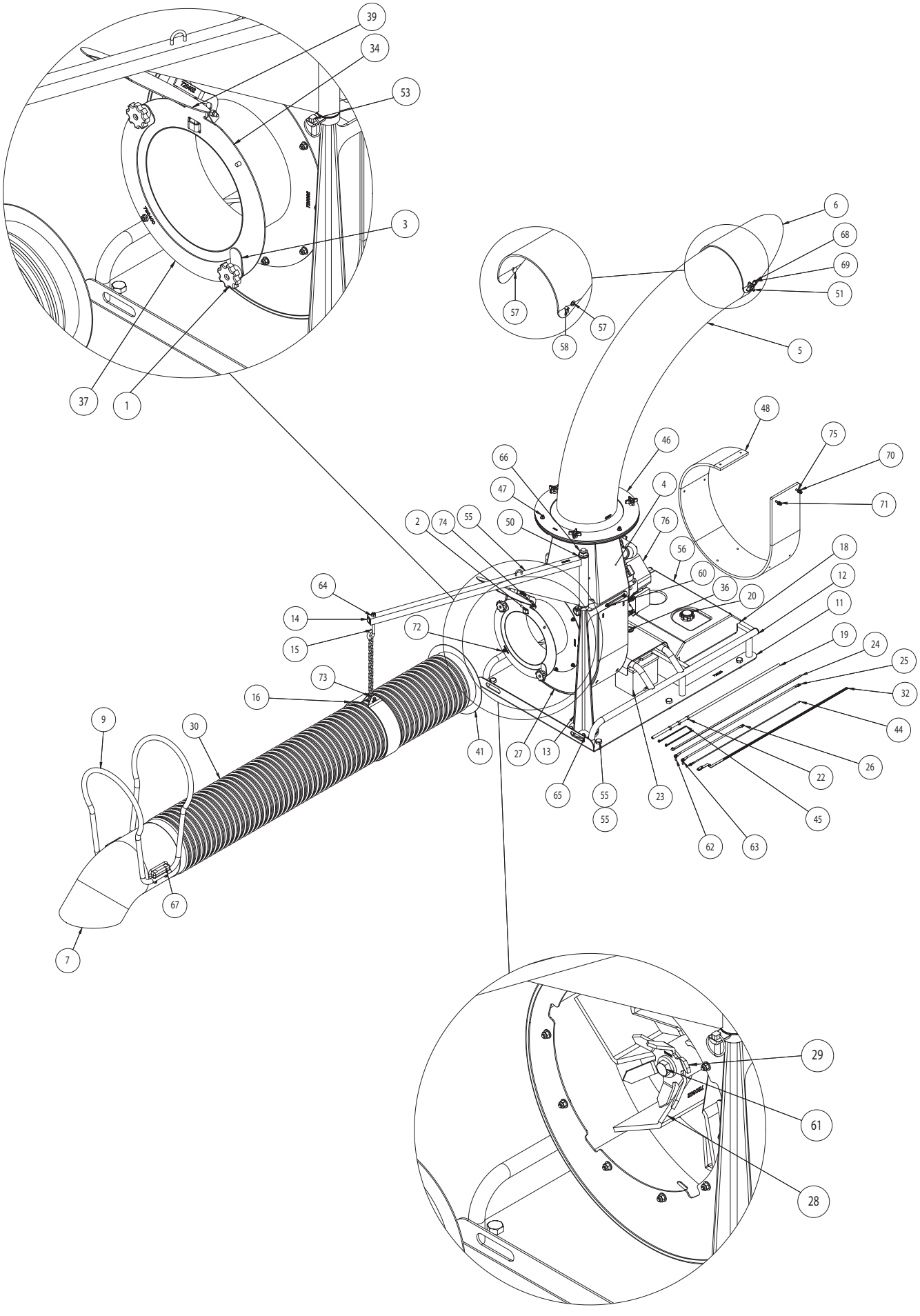
**D. Shredding TruckLoader bolt/nut Torque specification**

| Location | Bolt/ Nut Size | Part No. | Max torque Ft-Lbs (in-lbs) |
|---|---|---|---|
| Housing to engine face | $^{3}/_{8}$ - 16 x $^{3}/_{4}$ flange head, Grade 5 | 720579 | 36 (432) |
| Housing to engine mounting plate | $^{3}/_{8}$ - 16 flange nut | 720562 | 36 (432) |
| Engine to engine mounting plate | $^{3}/_{8}$ - 16 x 1 - $^{3}/_{4}$ gr. 8 | 720567 | 36 (432) |
| Fan to crankshaft | $^{5}/_{8}$ - 18 x 3 gr. 8 | 720572 | 245 (2,940) |
| Inlet assembly to housing | $^{5}/_{16}$ - 18 flange nut | 720586 | 24 (288) |

# Part Numbers

## A. Housing Assembly

| Key No. | Part No. | Description | Qty. |
|---|---|---|---|
| 1 | 154 | 5/16-18 FEMALE THREADED KNOB | 2 |
| 2 | 720214 | SWITCH PLATE | 1 |
| 3 | 720257 | FLAPPER RETAINER | 1 |
| 4 | 720260 | TRANSITION DISCHARGE TUBE | 1 |
| 5 | 720261 | DISCHARGE NOZZLE | 1 |
| 6 | 720263 | DISCHARGE FLAPPER | 1 |
| 7 | 720264 | 12" PLASTIC INTAKE NOZZLE | 1 |
| 7 | 720265 | 14" PLASTIC INTAKE NOZZLE | 1 |
| 9 | 720266 | 12" PLASTIC INTAKE NOZZLE HANDLE | 1 |
| 9 | 720267 | 14" PLASTIC INTAKE NOZZLE HANDLE | 1 |
| 11 | 720268 | SKID MOUNT FRAME | 1 |
| 12 | 720279 | 1-1/4" ROUND TUBE PLUG | 2 |
| 13 | 720280 | PAINTED BOOM COLUMN ASSEMBLY | 1 |
| 14 | 720289 | 1-1/2" x 1/4" WALL SQUARE TUBE PLUG | 1 |
| 15 | 720290 | CHAIN ASSEMBLY | 1 |
| 16 | 720291 | 22 HP HOSE BAND | 1 |
| 16 | 720292 | 27 HP HOSE BAND | 1 |
| 18 | 720294 | GAS TANK | 1 |
| 19 | 720295 | 1/4" ID x 1/2" OD x 36" LG FUEL-LINE HOSE | 1 |
| 20 | 720296 | GAS TANK FUEL GAUGE | 1 |
| 21 | 720297 | GAS TANK SHUT-OFF VALVE | 1 |
| 22 | 720298 | HOSE CLAMP | 3 |
| 23 | 720299 | HEAVY DUTY 12V BATTERY | 1 |
| 24 | 720338 | BATTERY TIE-DOWN STRAP | 1 |
| 25 | 720339 | RED BATTERY CABLE | 1 |
| 26 | 720340 | BLACK BATTERY CABLE | 1 |
| 27 | 720341 | PAINTED HOUSING ASSEMBLY | 1 |
| 28 | 720352 | 22 HP FAN ASSEMBLY | 1 |
| 28 | 720359 | 27 HP FAN ASSEMBLY | 1 |
| 29 | 720362 | TALON RING ASSEMBLY | 1 |
| 30 | 720387 | 12" DIA x 7' LG INTAKE HOSE | 1 |
| 30 | 720389 | 14" DIA x 7' LG INTAKE HOSE | 1 |
| 32 | 720388 | 12" HOSE CLAMP | 1 |
| 32 | 720390 | 14" HOSE CLAMP | 1 |
| 34 | 720392 | 22 HP PAINTED INLET ASSEMBLY | 1 |
| 34 | 720393 | 27 HP PAINTED INLET ASSEMBLY | 1 |
| 36 | 720396 | 1" ID RUBBER GROMMET | 1 |
| 37 | 720400 | 22 HP PAINTED HOSE FLANGE RETAINER PLATE | 1 |
| 37 | 720401 | 27 HP PAINTED HOSE FLANGE RETAINER PLATE | 1 |
| 39 | 720402 | 22 HP PAINTED INLET FLAPPER | 1 |
| 39 | 720403 | 27 HP PAINTED INLET FLAPPER | 1 |
| 41 | 720404 | 22 HP PAINTED HOSE FLANGE ASSEMBLY | 1 |
| 41 | 720405 | 27 HP PAINTED HOSE FLANGE ASSEMBLY | 1 |
| 55 | 720406 | PAINTED BOOM ARM ASSEMBLY | 1 |
| 44 | 720408 | SWITCH WIRE ASSEMBLY | 1 |
| 45 | 720411 | GAS HOSE TIE-DOWN STRAP | 2 |
| 46 | 720412 | DISCHARGE CLAMP RING | 1 |
| 47 | 720413 | PAINTED SPLIT DISCHARGE CLAMP RING ASSEMBLY | 2 |
| 48 | 720416 | RUBBER LINER | 1 |
| 49 | 720417 | TRANSITION DISCHARGE TUBE CLAMP PLATE | 1 |
| 50 | 720428 | 1" THRUST WASHER | 2 |
| 51 | 720507 | 3/8-16 FEMALE THREADED KNOB | 4 |
| 52 | 720509 | 5/16" WASHER (1/8" THK) | 2 |
| 53 | 720559 | LINCH PIN LOCK | 1 |
| 54 | 720560 | 3/4-10 GRADE G LOCK FLANGE NUT | 6 |
| 55 | 720561 | 3/4-10 x 1-1/2" LG HEAVY HEX CAP SCREW | 6 |
| 56 | 720562 | 3/8-16 GRADE F LOCK FLANGE NUT | 15 |
| 57 | 720564 | 3/8-16 x 1" LG SQ. NECK CARRIAGE BOLT | 2 |
| 58 | 720566 | 3/8-16 x 1-1/4" LG SQ. NECK CARRIAGE BOLT | 1 |
| 59 | 720567 | 3/8" x 1-3/4" LG. GR 8 HEX BOLT | 4 |
| 60 | 720570 | 5/16-18 x 1-1/4" LG SQ. NECK CARRIAGE BOLT | 4 |
| 61 | 720572 | 5/8-18 x 3" LG. GR 8 HEAVY HEX CAP SCREW | 1 |
| 62 | 720573 | 1/4-20 x 1" LG. GR 8 HEAVY HEX CAP SCREW | 2 |
| 63 | 720574 | 1/4-20 GRADE G LOCK FLANGE NUT | 2 |
| 64 | 720576 | 1/2-13 NYLON INSERT NUT | 1 |
| 65 | 720579 | 3/8-16 x 3/4" LG. GR 5 HEX BOLT | 8 |
| 66 | 720580 | 1-8 GRADE G LOCK FLANGE NUT | 1 |
| 67 | 720581 | 3/8-16 x 2-3/4" LG SQ. NECK CARRIAGE BOLT | 7 |
| 68 | 720582 | 3/8 SAE GRADE 8 FLAT WASHER | 9 |
| 69 | 720583 | 3/8-16 NYLON INSERT NUT | 12 |
| 70 | 720584 | 5/16 SAE GRADE 8 FLAT WASHER | 14 |
| 71 | 720585 | 5/16-18 NYLON INSERT NUT | 35 |
| 72 | 720586 | 5/16-18 GRADE G LOCK FLANGE NUT | 1 |
| 73 | 720588 | 5/16-18 x 1-3/4" LG GRADE 8 BOLT | 1 |
| 74 | 720590 | 5/16-18 x 4" LG GRADE 8 BOLT | 1 |
| 75 | 720592 | 5/16-18" x 1" LG. GR 5 HEX BOLT | 2 |
| 76 | 720901 | 22 HP KOHLER ENGINE | 1 |
| 76 | 720902 | 27 HP KOHLER ENGINE | 1 |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