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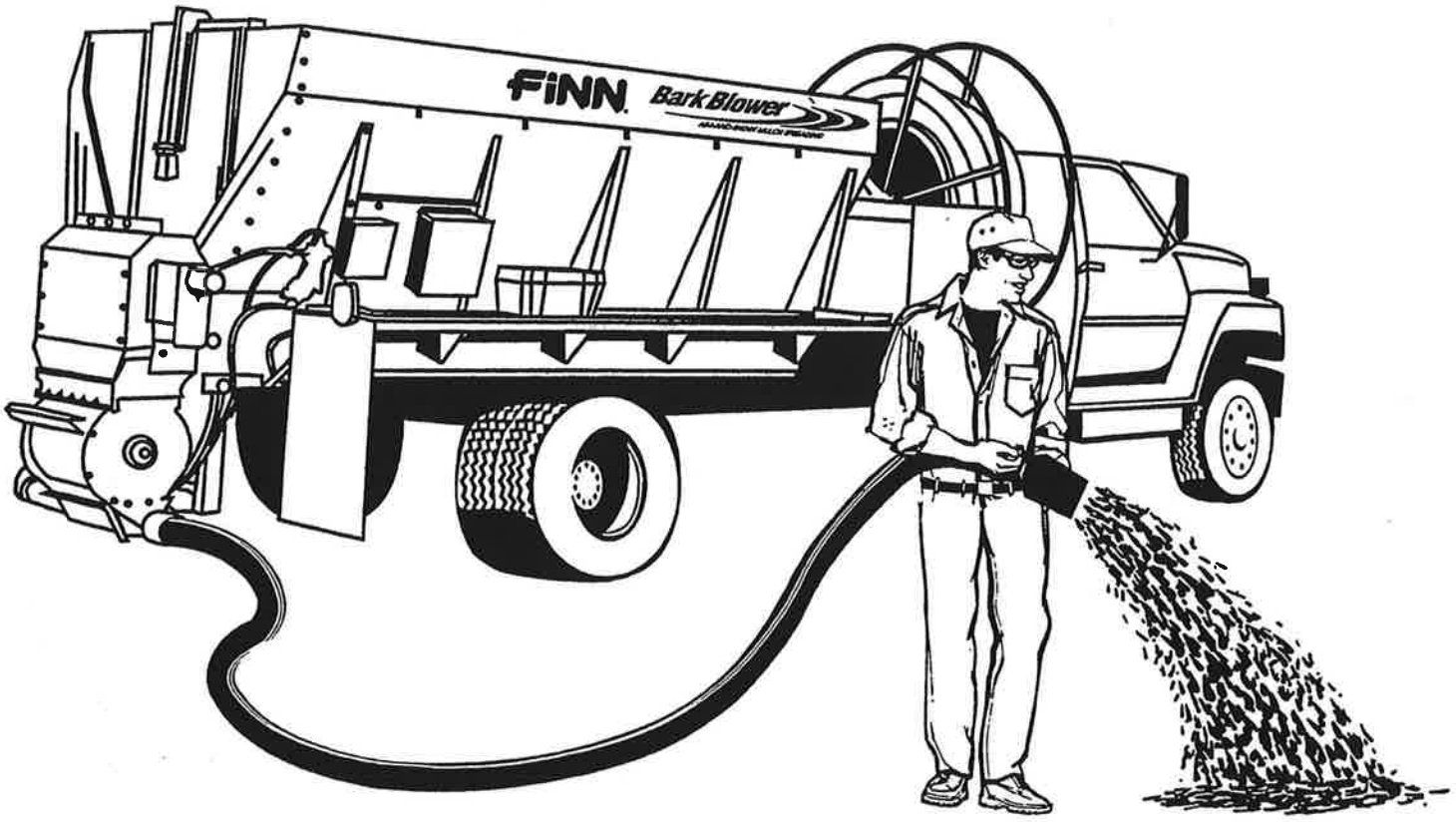


Bark Blower™

AIM-AND-SHOOT MULCH SPREADING

Models 808 & 816

Parts and Operator's Manual

Model No. RRB Serial No. _____

INDEX

SAFETY FIRST

With any piece of equipment, new or used, the most important part of its operation is SAFETY!

Finn Corporation encourages you and your employees to familiarize yourselves with your new equipment and to stress safe operation.

The first seven pages of this manual are a summary of all the main safety aspects associated with this unit. Be sure to read completely before operation of machine.

This symbol is used throughout the operation and maintenance sections of this manual to call attention to safety procedures.
- Pay Attention -

DANGER: Immediate hazards which WILL result in severe personal injury or death.

WARNING: Hazards or unsafe practices which COULD result in severe personal injury or death.

CAUTION: Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

IMPORTANT: Indicates that equipment or property damage could result if instructions are not followed.

NOTE: Gives helpful information.

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

P/N 12304

Finn Corporation

BARK BLOWER
SAFETY SUMMARY SECTION

It is important that all operators of this machine are familiar with all the safety aspects mentioned below before operating the machine. Always keep a copy of this manual with the machine. It is the responsibility of the operator of the machine to fully understand this safety sheet. Remember that YOU are the key to safety. Good safety practices protect not only you but also the people working with and around you. Keep in mind that this safety sheet is written for this type of machine only. Practice all other usual and customary safe working precautions; and above all, remember that safety is up to you.

I. PRE-START EQUIPMENT CHECK (equipment check is to be made with the engine off):

1. Verify that all guards are in place.

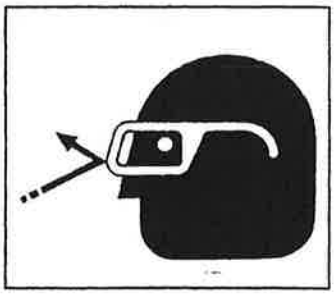
2. By carefully looking into the blower hopper and transition, inspect for and remove any foreign objects. Follow OSHA lockout/tagout procedure (29 CFR 1910.147)

3. Inspect all hydraulic hoses and tubes for cracks, bulges or damage. If hose is bad, replace immediately.

4. Inspect the material discharge hose and connections for cracks or damage. If damage is found, replace affected part immediately.

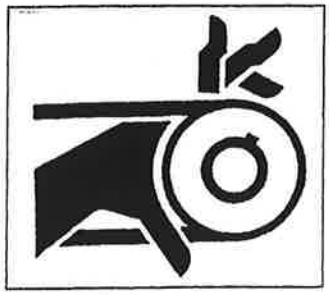
II. MACHINE OPERATION:

1. Always wear safety goggles when operating or feeding the machine. Other safety attire such as safety shoes, ear protection, gloves, hard hats, dust masks, etc., should be worn as required by warning decals on machine, operator's manuals, or job requirements. Remove rings, watches, etc. Avoid loose fitting clothing which may get caught in rotating machinery.



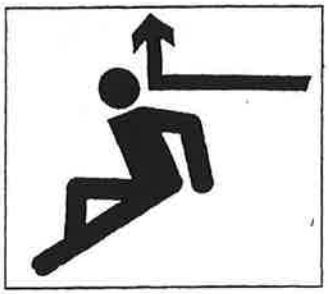
2. Do not override or tamper with the safety shutdown switches on the transition doors. If switches fail, use OSHA lockout/tagout procedure (29 CFR 1910.147) until switches are repaired or replaced.

3. Do not operate the machine without all guards in place.



4. Never attempt to connect or disconnect the discharge hose while the engine is running.

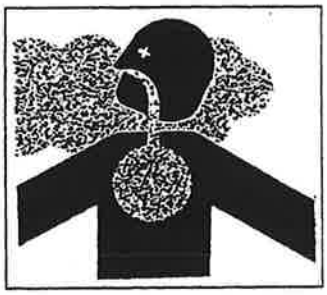
5. Make sure that no one is working in or on the machine. Make sure the discharge area is clear of all persons, animals, etc. Signal "All Clear" before starting the engine. Keep unauthorized personnel away from the machine and discharge hose at all times.



6. The driver of the towing vehicle is responsible for the safety of the operator(s) and feeder(s) of the machine. Make sure the driver is aware of and avoids all possible hazards, such as tree limbs, low power lines, etc.

7. Do not allow anyone to ride on the fenders or any other part of the blower for any reason.

8. Never operate machine in an enclosed area without venting the exhaust of both the equipment and the vehicle on which the equipment is mounted. Deadly carbon monoxide fumes can accumulate.



9. Never operate this or any other machinery when fatigued, tired, under the influence of alcohol, illegal drugs or medication. You must be in good physical condition and mentally alert to operate this machine.

10. Never modify the machine. Never remove any part of the machine (except for service and then reinstall before operating).

11. During application, high pressure can be exerted at the end of the hose. Always establish and maintain good footing and hold the hose firmly. Extra personnel may be required to help direct and hold the hose, especially when working on slopes. The proper technique for hose holding personnel is to firmly grasp the hose under both arms. Never hold the hose so it goes between the legs.

12. The blower discharges material at pressures and velocities that can cause severe bodily injury. Do not aim discharge at people, animals, etc. Only aim the discharge at the intended discharge area. Unless properly protected, do not place hand into the discharge stream.

13. Do not open any doors or access panels while machine is in operation. Severe injury may result from rotating parts.

14. Do not attempt to pull anything out of the blower hopper when machine is in operation. Shut down the engine, using OSHA lockout/tagout procedure (29 CFR 1910.147) before removing any foreign objects. Signal "All Clear" before restarting the machine.

15. When leaving the blower unattended for any reason, be sure to:

    A. Shut off conveyor drive.
    B. Shut off vehicle engine and blower engine.
    C. Place transmission of the vehicle in "neutral" or "park".
    D. Set parking brake firmly.
    E. Lock ignition and take keys with you.
    F. Lock vehicle cab.
    G. If on a steep grade, block the wheels.

    These actions are recommended to avoid unauthorized use, runaway, vandalism, theft and unexpected operation when the equipment is restarted.

16. Do not read, eat or otherwise lose or lessen your attention in any manner while operating the blower. Operating is a full time job.

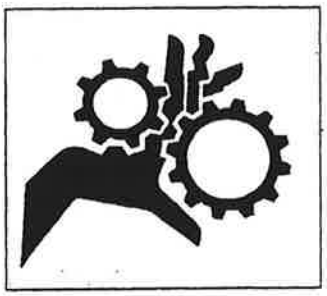
17. Be careful in getting on and off the blower, especially in wet, icy, snowy or muddy conditions. Clean mud, snow or ice from steps, fenders and footwear.

18. All personnel operating and/or around the machine must be aware that the blower can be controlled via remote control. For safety reasons and to prevent accidental starting, always keep the power switch on the remote receiver in the "OFF" position when the remote control is not being used.

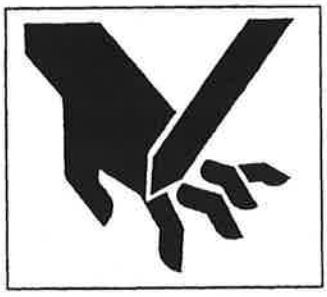
19. Turn slowly and travel on rough surfaces and side slopes carefully, especially with a loaded blower body.

III. MAINTENANCE:

1. Before servicing the machine, turn off engine and allow all moving parts to stop. Disconnect the battery cables to prevent accidental starting of the machine. Tag the engine operating area to show that the machine is being serviced. Use lockout/tagout procedure (29 CFR 1910.147).



2. Take extreme care when adjusting or replacing knives. Knife edge is very sharp and can cause severe bodily injury.



3. Radiator maintenance. Liquid cooling systems build up pressure as the engine gets hot. Before removing the radiator cap, stop the engine and let the system cool. Remove the radiator cap only after the coolant is cool.

4. Battery maintenance. Lead-acid batteries contain sulfuric acid which may damage eyes or skin on contact. Always wear a face shield to avoid acid in the eyes. If acid contacts eyes, flush immediately with clean water and get medical attention. Wear rubber gloves and protective clothing to keep acid off skin. Lead-acid batteries produce flammable and explosive gasses. Keep arcs, sparks, flames, and lighted tobacco away.

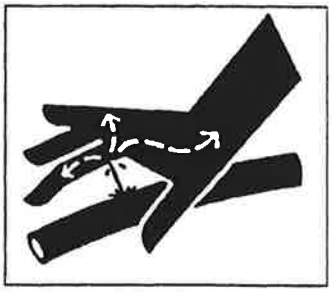
5. Filling of fuel. Never fill the fuel tank with the engine running, or while smoking or when near an open flame. Never smoke while handling fuel or working on the fuel system. The fumes in an empty container are explosive. Never cut or weld on fuel lines, tanks, or containers. Move at least 10 feet (3 meters) away from fueling point before starting engine. Wipe off any spilled fuel and let dry before starting engine.

NOTE: Be careful not to allow fuel, lubricant, hydraulic fluid, or cooling fluids to penetrate into the ground or be discharged into the water system. Collect all used fluids and dispose of them properly.

6. It is recommended that only authorized genuine FINN replacement parts be used on this machine.

7. Do not use ether cold start fluid if engine is equipped with glow plug type preheater or other intake manifold type preheater. It could cause an explosion or fire and severe injury or death.

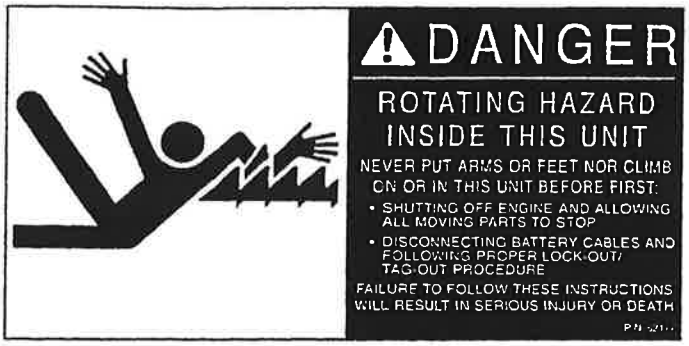
8. Diesel fuel or hydraulic fluid under pressure can penetrate the skin or eyes and cause injury, blindness or death. To check for such leaks, use a piece of cardboard or wood instead of your hand. Pressure may build up in the hydraulic system so use caution when removing the cap.

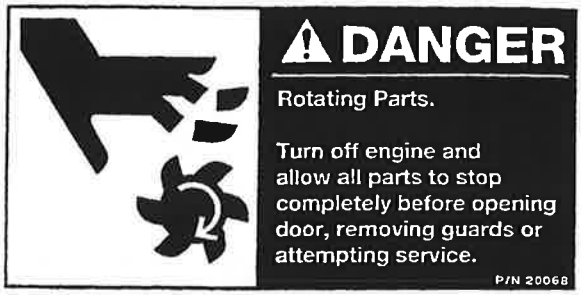


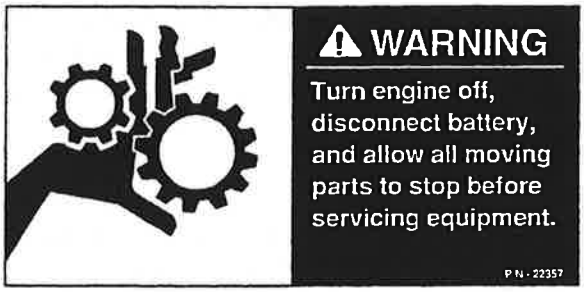
9. Some parts and assemblies are quite heavy. Before attempting to unfasten any heavy part or assembly, arrange to support it by means of a hoist, by blocking or by use of an adequate arrangement to prevent it from falling, tipping, swinging or moving in any manner which may damage it or injure someone.

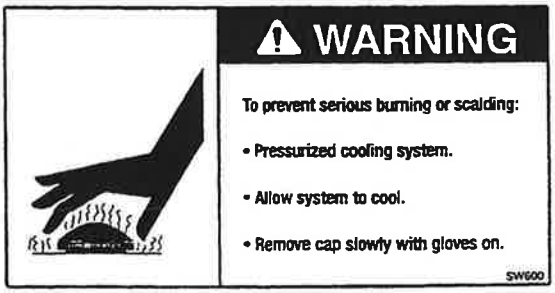
10. If repairs require use of a torch or electric welder, be sure that all flammable and combustible materials are removed. Fuel or oil reservoirs must be emptied, steam cleaned and filled with clean water before any cutting or welding on them is attempted. Do NOT weld or cut on any tank containing oil, gasoline or their fumes or other flammable material, or any container whose contents or previous contents are unknown.

CURRENT SET OF SAFETY DECALS









OPERATION AND MAINTENANCE OF THE FINN BARK BLOWER

THE FINN BARK BLOWER AND ITS FUNCTION:

The FINN Bark Blower is an apparatus for conveying and discharging bulk materials, such as bark mulch, at a fast and uniform rate utilizing a minimum amount of manpower. The product to be used is generally composted and processed and used as a soil amendment, a ground cover for erosion and weed control, or for decorative purposes on landscaping (bark mulch).

This manual is intended to provide step by step instructions on the operation, care, and maintenance of the Bark Blower. In addition, it contains illustrations and a complete list of parts and components for easy identification.

HOW THE BARK BLOWER WORKS:

The bulk material is loaded into the hopper by a loader or by an infeed elevator. Located at the bottom of the hopper is a drag conveyor, which conveys the bulk material to an opening containing a feed roll. The feed roll and drag conveyor feed the bulk material into a rotary air valve. The rotary air valve is specifically designed and built to handle tough, fibrous material. The function of the rotary air valve is to take the bulk material into open pockets exposed to the outside air and to convey it to an area where the pocket is closed off. At that point a high pressure air stream, created by the blower, is channeled through the pocket carrying the material off and through the hose for discharge.

IMPORTANT: **For best results and to insure safe operation and long life of the equipment, please read and follow all instructions carefully.**

MOUNTING THE BARK BLOWER:

The selection of the vehicle on which a blower is to be mounted has important safety aspects. To avoid overloading:

A. Do not mount a blower on a chassis which, when fully loaded with material to be spread, will exceed either the Gross Axle Weight Rating (GAWR) or the Gross Vehicle Weight Rating (GVWR) for the chassis, see below.

B. Do install the blower only on a vehicle with cab-to-axle dimension recommended for the blower body length selected, see below.

Once the proper carrier has been selected, the blower must be securely mounted to it.

CAUTION: Your FINN Bark Blower should be mounted by a qualified truck body installer.

IMPORTANT: Mounting the blower to the truck must allow for tire clearance as well as frame twist. Place hard wood spacers along the length of truck rails or use FINN spring mounting kit (#011562) or equivalent.

2. Follow mounting instructions given in figure 1(Page 10). If mounting conditions require deviation from these instructions, consult the factory.

DIMENSIONS, CAPACITIES, AND TRUCK REQUIREMENTS:

*CF - Back of cab to end of frame
C - Distance from front of Bark Blower to center of gravity
*CA/CT - Back of cab to center of rear axle or trunnion
*FE - Front axle weight – Empty
FL - Front axle weight – Loaded
G - Distance from center of rear axle or trunnion To Bark Blower Center of gravity
BW - Bark Blower weight
*RE - Rear axle weight – Empty
*RL - Rear axle weight – Loaded
*WB - Truck wheel base

		808	816
Truck GVW **	Pounds (kg)	25,900 (11,750)	36,000 (16,330)
CA/CT **	inches (cm)	142+ (361+)	166+ (422+)
C	inches (cm)	136 (345)	153 (390)
OAL	Inches (cm)	236 (600)	272 (690)
BW ***	Pounds (kg)	16,300± (7,394±)	25,300± (11,475±)

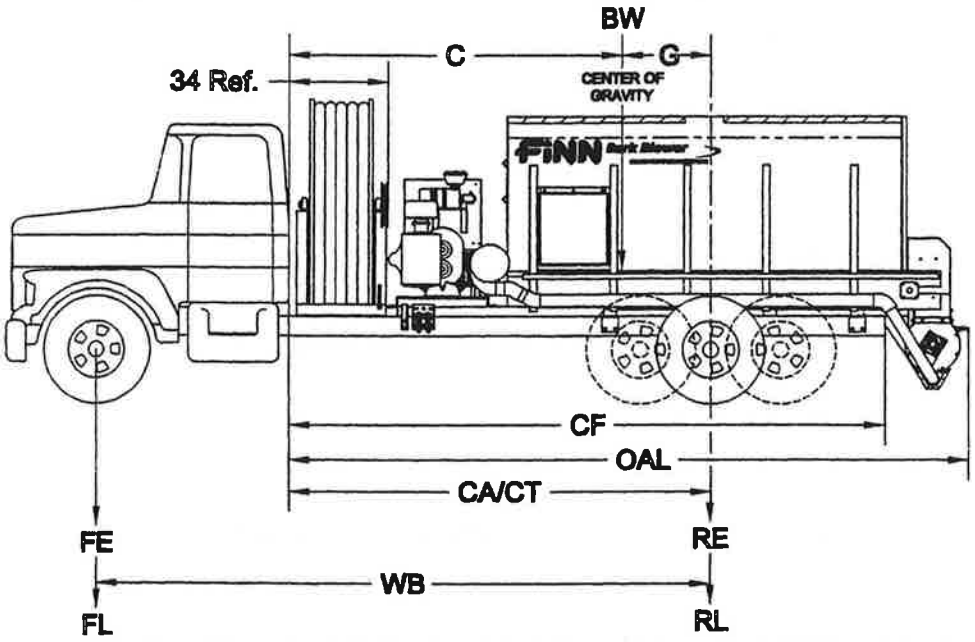
* These dimensions needed from the truck supplier as well as Front axle capacity and Rear axle capacity.

** Truck GVW depends on the truck weight. CA/CT dimensions are approximate only, and depend on the front and rear axle capacities, as well as the front and rear empty axle weights.

*** Weight of Bark Blower, hose reel and mulch. Weight may vary greatly due to the large variety of mulch materials.

NOTE: This table was developed including the hose reel with 200' of hose. If no hose reel is to be installed the OAL, CA/CT and C dimensions may be shortened by 34" as well as the BW reduced by 750 lbs.

TRUCK MOUNTING CALCULATIONS:



$$\frac{(WB \times FL) - (WB \times FE)}{BW} = G$$

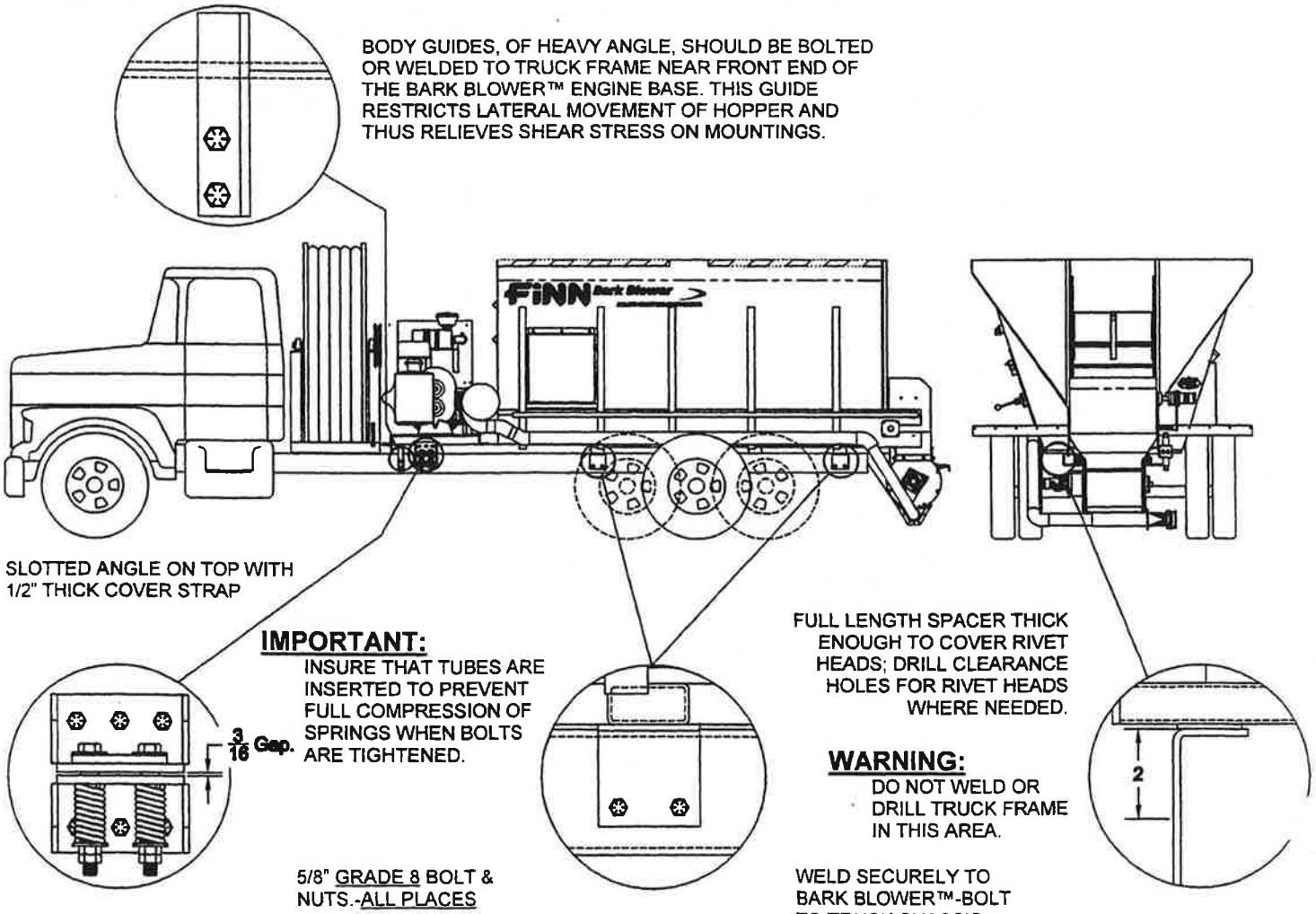
$$\frac{WB \times (RE + HW - RL)}{BW} = G$$

G + C must be equal to or less than CA

$$\frac{(WB \times FE) + (G \times BW)}{WB} = FL$$

$$\frac{(WB \times RE) + BW \times (WB - G)}{WB} = RL$$

GENERAL MOUNTING GUIDELINES:



MOUNTING KIT
#11562

Figure 1

SELECTING A MULCHING MATERIAL:

Several factors must be considered when selecting material to convey through the Bark Blower. The variety of the wood used, how it is processed, its moisture content, and the presence of foreign objects all effect the ability of the Bark Blower to convey the mulch at a uniform and acceptable rate.

The mulch material must be processed and/or screened so that a minimum of material is over 2 inches (5.1 cm) in any direction with no material exceeding 4 inches (10.2 cm) in length. The Bark Blower is not a wood processor. It only reduces mulch fibers when they protrude above the rotary air valve vanes. As the vanes rotate past the knife, the protruding fibers are sheared off. If the mulch contains long or large fibers, and if the wood fibers are harder to cut, then the machine's throughput is reduced. For example, if two mulches have the same mix of material sizes that the Bark Blower rotor must cut, but one is softwood like pine, and one is hardwood such as oak, the pine would go through at a higher rate because it is easier to cut.

Two characteristics must be considered when selecting a material: the "greenness" of the wood and the moisture of the mulch as a whole. Wood that is well seasoned is easier to cut then "green" wood. It also processes better, making a less stringy mulch. High moisture in the mulch may cause it to bridge in the hopper.

Avoid using mulches that contain any hard foreign objects such as rocks, nails, steel, cans, glass, etc. These objects could cause bodily injury as well as damage to machine components, especially the cutting knives in the rotary air valve.

PRE-START EQUIPMENT CHECK:

CAUTION: **Equipment check is made with the engine off and all rotating parts stopped.**

Safety check to insure operator safety:

1. Check that all the truck mountings are secure.
2. Insure that all guards are in place.
3. Tool Kit - see that it contains all prescribed items (see tool kit list, page 60).
4. Lubricate equipment - use handgun only (see lube chart, page 26-27).
5. Check engine oil - refer to engine operator' s manual.
6. Check liquid coolant level in radiator (protected to -34°F (-37°C) when shipped).
7. Check fuel level. Use #2-D diesel fuel oil unless operating at ambient temperature below 40°F (4°C) or at an altitude exceeding 5000 feet (1524 meters). In these instances use #1-D fuel oil.
8. Inspect the engine air cleaner (refer to the engine operator's manual), the radiator chaff screen, and the blower air cleaner for dust and dirt.
9. Check hopper and transition for foreign objects that could injure workers, or damage equipment.

10. Check the fluid level in the hydraulic tank. Proper level is midway between the upper and lower indicator mark on the sight gauge. (See "hydraulics" page 14 for oil specification).
11. Install the discharge hose. Use clamps provided with the machine.

CAUTION: **Do not use radiator type clamps. These clamps may not hold under machine operating pressure.**

STARTING PROCEDURE:

CAUTION: **See safety section of the manual (pages 2-7) before operating the machine.**

1. Turn the remote control to the off position on the remote control panel.
2. While holding the safety switch button in, turn key until starter engages and the engine fires.
3. Continue holding the safety switch button in until the operating oil pressure is obtained and the button stays in.

NOTE: This engine has a safety system that will shut the engine off if the engine oil pressure drops below 7 psi. (.48 bar). or if the water temperature reaches 230° Fahrenheit (110° Centigrade).

4. Check that the "ON/FUSE" and "DOOR SWITCH" lights are illuminated. If not, check the 10 AMP fuse in the control box (see Figure 6 pg. 19) and verify that the doors are closed at the air lock.
5. Allow the engine to warm up for three to five minutes.
6. Prior to mulch application, move the throttle position to fully open, and allow the governor to control the engine speed. Governed engine speed on the FINN Bark Blower should be 2300 to 2350 RPM under load.

CREW MEMBERS AND THEIR DUTIES:

1. The Operator controls the placement of the mulch by moving and aiming the discharge hose.
2. The Loader(s) feed material to the machine by using a skid steer or loader tractor dumping directly into the hopper.

THE MATERIAL FEED SYSTEM:

The material feed system on the Bark Blower has been designed to give fast and uniform mechanical feeding. The adjustable feeding rate and the automatic reverse control system allow the use of varied materials while obtaining maximum production. The system is an integration of the following four subsystems, all of which contribute to efficient material flow:

SUBSYSTEM 1: MATERIAL HANDLING GROUP

The four major components of the material handling group are the blower, the drag conveyor, the feed roll, and the rotary air valve.

The blower is a rotary lobe, positive displacement type unit having two double lobe impellers. It is direct driven off the engine flywheel by a flexible coupling; therefore whenever the engine is running, air is being pumped. The blower is equipped with a relief valve limiting maximum air pressure to 12 psi (0.8 bar), an inlet and outlet silencer for noise attenuation, and an inlet air filter.

The drag conveyor receives material from the agitated hopper and conveys it to an opening located at the rear of the hopper, where the feed roll is located. The feed roll insures a uniform feed of bulk material to the rotary air valve. The drag conveyor is powered by two variable speed hydraulic motors mounted to a common gearbox.

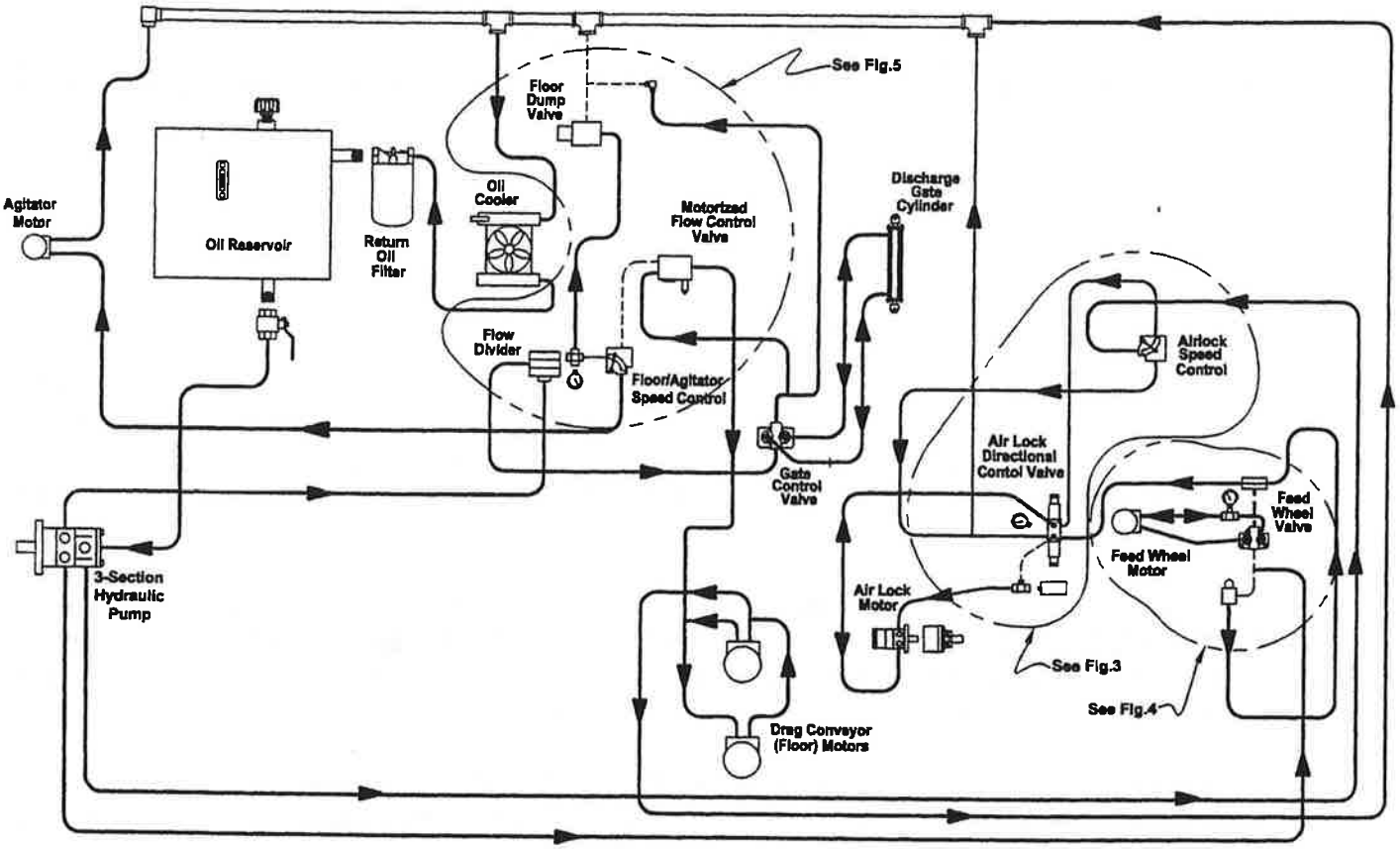
The rotary air valve receives the material from the drag conveyor and pressurized air from the blower. Its primary function is to convey the material from the atmospheric air to a sealed chamber where the blower air picks it up and blows it out of the hose. To enable the Bark Blower to convey fibrous material, the rotary air valve housing is equipped with two cutting knives, and the vanes on the rotor are angled and hardened. If any long material should protrude above a vane, it will be sheared off, before the vane enters the close tolerance of the housing, by a scissor like action between the vane and cutting knife. The rotor of the rotary air valve is direct coupled and driven by a bi-rotational hydraulic motor.

SUBSYSTEM 2: HYDRAULIC SYSTEM (See Figure 2)

Hydraulic power for the Bark Blower is generated by a fixed displacement 3-section hydraulic pump driven off of the engine auxiliary drive. The pump receives 10W-40 hydraulic fluid from the 32-gallon (121 liter) reservoir through a service valve and suction hose, and delivers it to the various control valves. Pressure driving the three individual hydraulic circuits can be monitored on the outlets of the pump by the gauges provided. Oil temperature is controlled by the hydraulic cooler located above the fender on the driver side.

A. ROTARY AIR VALVE

The front outside port of the 3-section pump feeds oil to the rotary air valve motor through a series of hydraulic valves. The first valve is the solenoid valve. The solenoid valve is an open center spool valve with built in relief. The relief valve is set at 2500 psi (172 bar). The spool in the valve is spring centered, and is moved by actuating a 12V DC solenoid on either



HYDRAULIC SCHEMATIC
Figure 2

end of the spool. Spool movement can be checked manually by pushing the button located at either end. Energizing a solenoid produces high pressure oil at the work port closest to that solenoid. Thus, energizing the bottom solenoid pushes the spool up and causes the oil supplied from the pump to be channeled to the bottom work port. This is "forward" position on the Bark Blower.

Oil flowing through the valve in the "forward" direction is directed to an adjustable flow control valve, which splits the oil flow between the rotary air valve motor and a bypass line back to the oil reservoir. Adjustment is made via a lever control with a set screw knob that rotates on a 45° quadrant. Proper flow control setting is between 5 and 10, which will produce an air valve speed range of approximately 24 to 36 RPM. (See figure 3 for valve orientation).

Oil flowing through the solenoid valve in the "reverse" direction (top solenoid energized) is channeled directly to the rotary air valve with no oil going back to the oil reservoir.

B. FEED ROLL

The rear port of the hydraulic pump delivers oil to the material feed roll through an adjustable and reversible manual control valve (See figure 4). A bypass valve in this circuit will stop the rotation of the feed roll automatically when the rotary air valve stalls and goes into the automatic reverse cycle. The roll returns to the set rotation when the air valve switches to normal forward rotation.

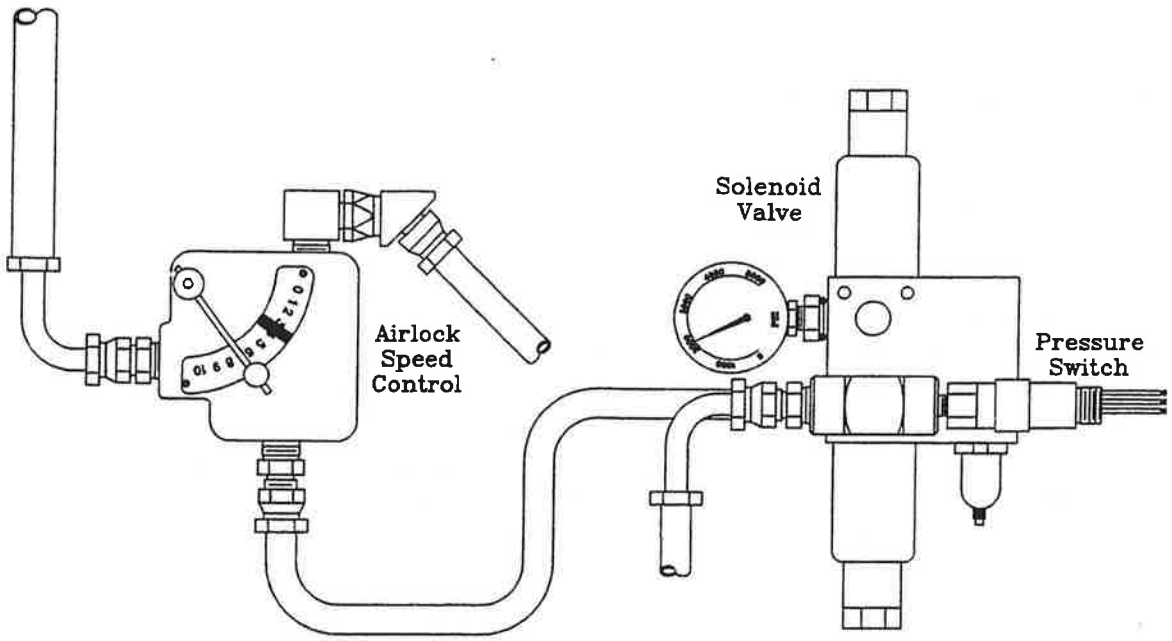


Figure 3

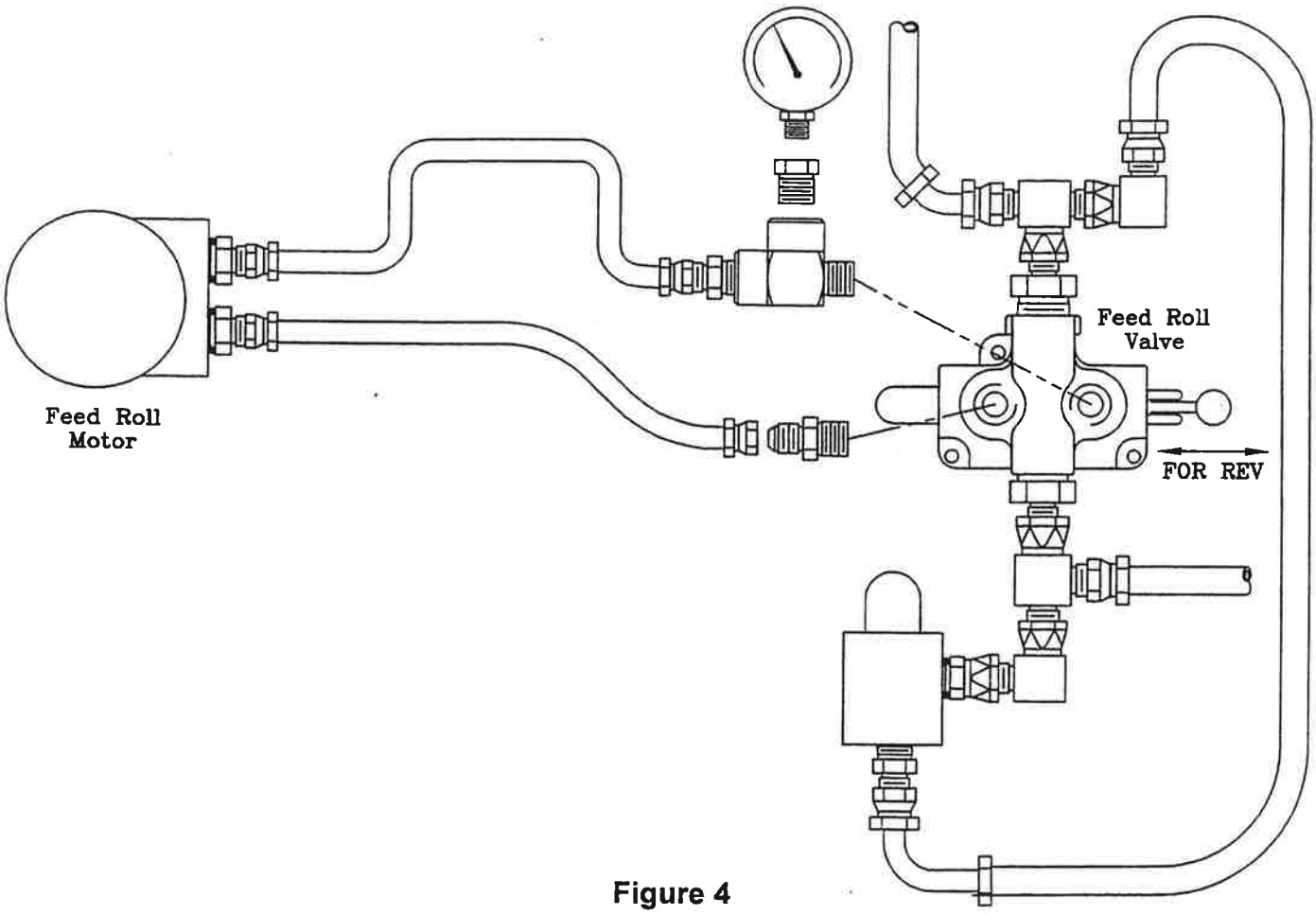


Figure 4

C. DRAG CONVEYOR/AGITATOR/GATE

The front inside port of the 3-section pump feeds oil to the drag conveyor and agitator motors through a "dump" valve system. The oil first passes through a divider sending a small amount to the three position, four way valve controlling the hopper discharge gate. The gate will function any time the engine is running. The remainder of the oil flows through the open center dump valve to the tank line. Energizing this valve closes the flow path and forces the oil through an adjustable flow control valve which controls the speed of the drag conveyor. Excess oil from this divider powers the agitator. This circuit is protected by a relief valve located in the dump valve, set at 2000 psi (138 bar). A motorized valve for the drag conveyor (Floor) oil flow is provided. This valve provides floor speed adjustment for varying the material flow rate through the third function on the radio remote control. (See figure 5 for valve orientation).

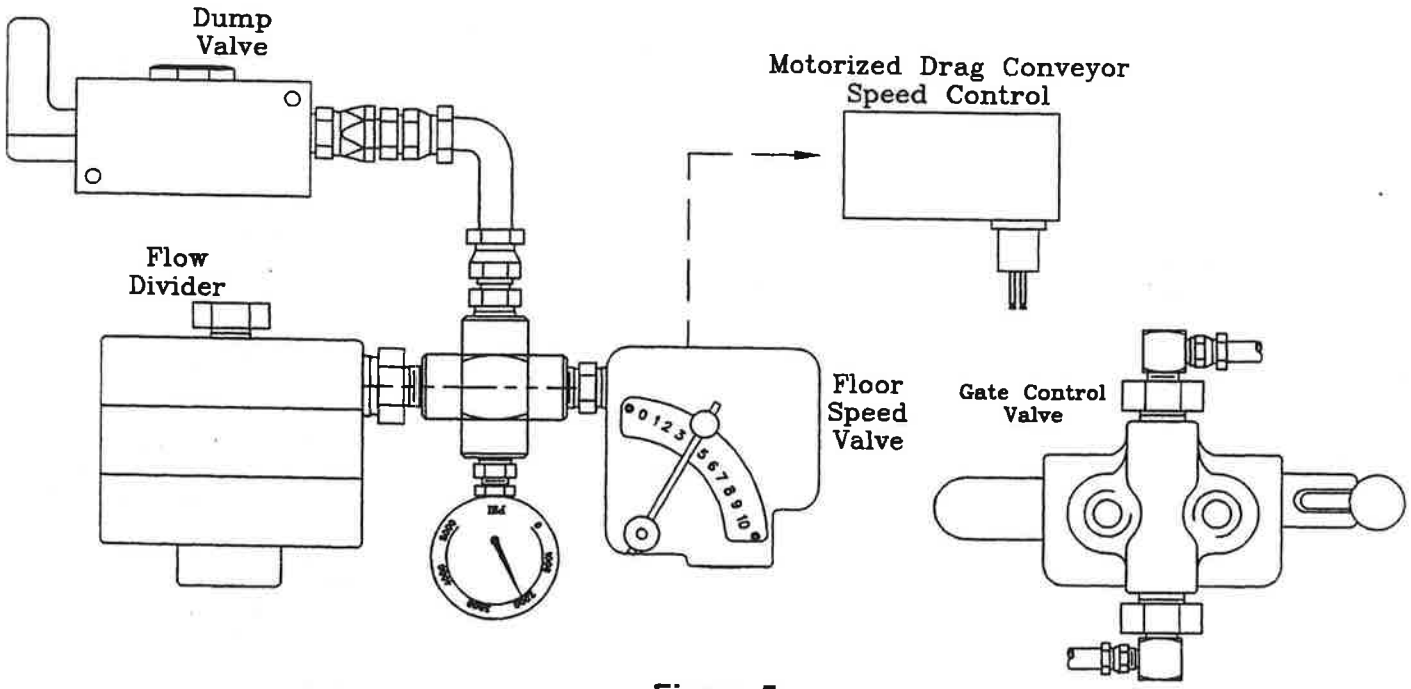


Figure 5

SUBSYSTEM 3: HYDRAULIC CONTROL SYSTEM

The hydraulic control system is an electrical system that controls the on-off function of the conveyor motors and the rotation direction of the rotary air valve motor. This 12-volt DC system runs off the engine electrical system. It is a series of relays, located in the box labeled "Material Feed Control", that controls the solenoid valves in the hydraulic system.

When the "Start" button is pushed the CR1 and CR2 relays in figure 6 (pg. 19) are energized. This in turn energizes the "forward" solenoid on the solenoid valve, starting the air lock and the drag conveyor, assuming the conveyor toggle switch is "On". As material drops into the top of the rotary air valve, the pressure required to cut the material is monitored by a pressure switch located on the bottom work port of the solenoid control valve (see figure 3 pg. 15). The switch is normally open. It closes when the rotary air valve motor stalls, causing high pressure due to the air valve encountering an object it can not cut. The amount of time the pressure switch is closed is monitored by the relay TR1 in figure 6 (pg. 19). If the switch remains closed for more than 0.5 seconds, TR1 energizes timer relay TR2. TR2 automatically reverses the rotary air valve by energizing the "Reverse" solenoid and de-energizing the "Forward" solenoid, and de-energizes the dump valves, shutting off the drag conveyor and the feed roll. The unit will remain in "Reverse" until TR2 times out, which is approximately 1 second. Timer relay TR3 delays the restart of the drag conveyor and feed roll allowing the rotary air valve to clear itself. The setting for TR3 should be approximately 1.5 seconds.

When the "Stop" button is pushed, power is cut to the relays. This stops the hydraulic motors on the conveyor, the feed roll, and the rotary air valve by shutting off power to the solenoids. The hydraulics can also be stopped by shutting off the ignition key. Please note that the hydraulics will also stop if either transition door, between the conveyor and air lock, the feed roll cover, or the material discharge funnel is opened and cannot be restarted unless all of the above are closed, and the start button is pushed.

SUBSYSTEM 4: RADIO REMOTE CONTROL

This Bark Blower is equipped with a Radio Remote to control the Material Feed Start, Stop, the material flow rate, and the engine throttle. It also contains an Emergency Stop button that activates the Murphy shutdown system on the engine.

If using the Radio Remote, a certain start-up sequence must be followed to activate the remote. When using the remote, start as follows:

1. Place the Radio Remote ON/OFF switch, located on the Radio Remote box, to the "OFF" position.

2. Place the switch, located on top of the Radio Transmitter, to the "OFF" position.

3. Start the engine and allow to warm up as specified in the Bark Blower instruction manual.

4. Place the radio remote switch located on the radio remote box to the "ON" position.

5. Place the radio transmitter switch to the "ON" position.

Pushing the red button located next to the antenna on the Radio Transmitter activates the Murphy shutdown system. To reset the warning system:

1. Flip the Radio Transmitter ON/OFF switch to "OFF".

2. Re-start the engine.

3. Flip the radio transmitter ON/OFF switch to "ON".

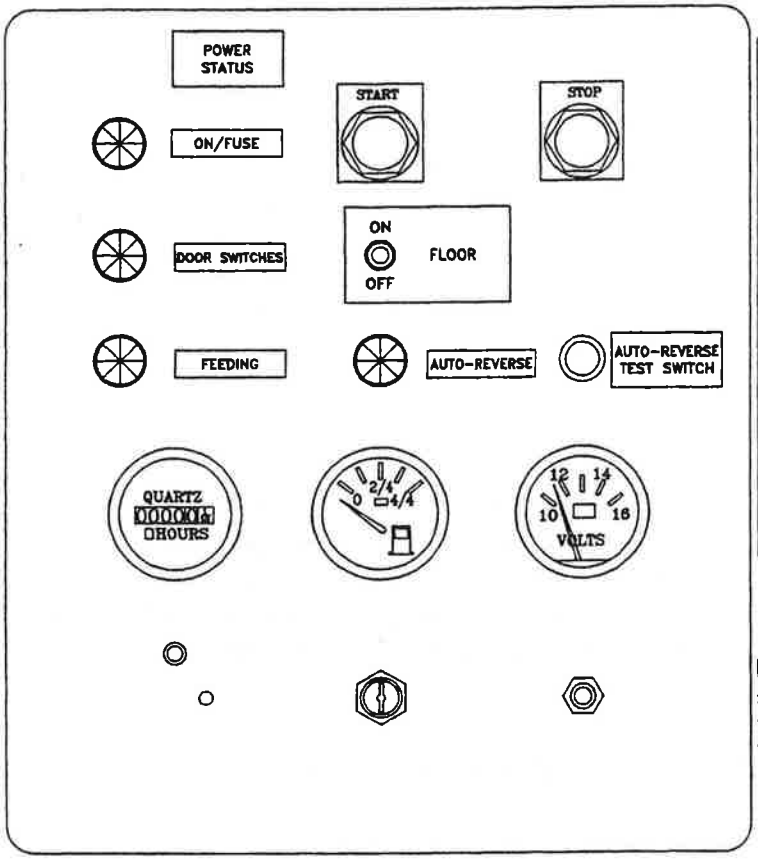
To utilize the Material Feed Start/Stop feature of the Radio Remote, the initial "Start" must occur at the Start/Stop station on the Bark Blower. The hard-wired, Start/Stop on the unit is the primary and overriding set of controls. Pushing of the "Stop" button, as well as a loss of power to the Material Feed Control (i.e. open transition door or blown main fuse), deactivates the material Feed Start/Stop feature of the Radio Remote until power is restored to the Material Feed Control and the "Start" button on the machine is pushed. For use of the engine RPM function and the material flow control function refer to "Mulching with the Bark Blower" on page 19.

Bark Blower Power Status Lights: (See Figure 6)

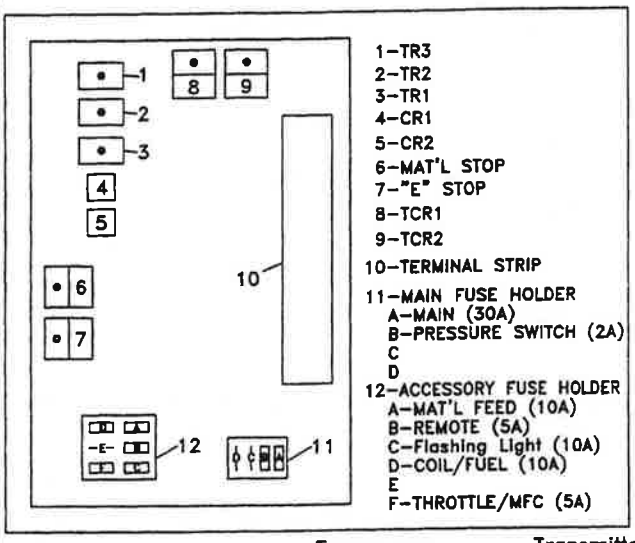
The Bark Blower is equipped with four Power Status Lights on the Material Feed Control Box. Each glowing light indicates that a function is ready for operation. A list of the lights as they appear from top to bottom and the meaning of each follows:

Light Color	Function	Indicator
Blue	ON/FUSE	Should be glowing when engine key is on. Shows power from the ignition switch through the 10 amp main fuse into the Material Feed Control Box.
Green	Door Switches	Should be glowing when engine key is on if the transition doors at the air lock are both closed and the interlock switches are making proper contact.
Amber	Feeding	Should be glowing whenever the "START" button is pushed activating the Bark Blower hydraulic system*.
Red	Auto-Reverse	Should be glowing whenever the unit Auto-Reverses while feeding*.

* Note: The amber light will deactivate whenever the Red Auto-Reverse light comes on.

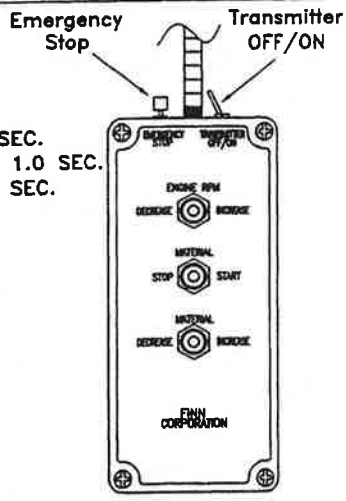


Main Control Panel



NORMAL TIMER SETTINGS:
#1-TR3(FLOOR DELAY) 1.5 SEC.
#2-TR2(AIR LOCK REVERSE) 1.0 SEC.
#3-TR1(PRESS SWITCH) 0.5 SEC.

(See Page 21 for timer instructions.)



Radio Remote

Figure 6

MULCHING WITH THE BARK BLOWER:

1. Check all areas listed under "Pre-Start Equipment Check" (pages 11-12).
2. Start the engine following all the steps listed under "Starting Procedure" (page 12).
3. Set the rotary air valve flow control on #10.
4. Set the Feed Roll Valve to the full speed forward direction.
5. Set the floor speed control to 2-1/2.
6. Open the gate to the maximum opening.
7. Refer to the remote control start-up procedure on page 17.
8. Put the drag conveyor "Floor" switch to the "ON" position.
9. Press the material feed control "START" button on the main control panel to activate the material start/stop feature on the remote.
10. Press material stop on the remote.
11. Increase the throttle to full.
12. With a firm grip on the end of the hose, press the material start button on the remote.
13. Adjust material feed speed from 2-1/2 for smooth flow. Watch for auto-reversing of the air lock as well as shock waves through the hose.
14. Use the "Engine RPM" button on the remote to decrease and increase air and material flow.
15. Use the "Material" decrease/increase button on the remote to adjust material flow without changing engine RPM.
16. At the end of the load, hit material stop, close gate, and shut down engine.

BARK BLOWER ADJUSTMENTS:

There are several components on the Bark Blower that may need periodic adjustments while operating due to changing material conditions. These are the drag conveyor speed, the rotary air valve, and the automatic reverse time interval the air valve RPM (speed) and the feed roll speed and direction. Knowing how and when to adjust these is the key to getting consistent material flow and high production from the Bark Blower. Below is a description and location for each item, its function and a list of symptoms indicating what settings to correct.

A. Drag Conveyor Speed Control:

This hydraulic valve is located on the left side of the hopper on the rear gusset. It is a control with a lever that rotates on a 90° quadrant. A set screw knob locks the lever into position. The quadrant is labeled from 0-10. Moving the lever to a lower number slows the drag conveyor thus decreasing the amount of material delivered to the rotary air valve, while moving the lever to a higher number increases the amount of material delivered to the rotary air valve. Optimum setting is usually between 2 and 4.

B. Automatic Reverse Time Interval And Floor Delay:

When the rotary air valve pressure switch closes due to high pressure, a series of relays is triggered in the electrical control system that automatically reverses the rotary air valve and stops the drag conveyor. The length of time the system remains in reverse is determined by the setting on the timer relay TR2 (see figure 6 pg. 19). This relay is located inside and near the top of the electrical control box labeled "MATERIAL FEED CONTROL". The relay has a digital dial graduated 0-6 seconds, indicating the approximate length of time the reverse cycle will last. Optimum setting is 1 second. A third timer relay, TR3, delays the restart of the drag conveyor to allow the rotary air valve to clear itself of material before restarting of material flow. TR3 is located above TR2 and its optimum setting is 1.5 seconds.

C. Rotary Air Valve Speed Control:

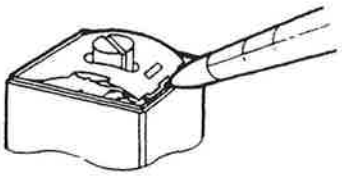
This hydraulic valve is located on the right rear side of the unit above the air valve. It is adjustable the same way as the drag conveyor valve described above, but its range is limited to a setting of between 5-10. Moving the lever to a lower number reduces the air valve RPM, while a higher number increases it. The rotary Air Valve RPM range is approximately 24 RPM (setting 5) to 36 RPM (setting 10). Most materials run well at the top setting of 10, but a lower setting which reduces the air valve RPM may allow certain materials more time to drop into the air valve vanes and produce a smoother discharge flow.

D. Feed Roll Speed And Direction Control:

The hydraulic valve for the feed roll control is located on the right rear side of the hopper. The valve handle provides variable speed control in both directions. The center handle position directs the hydraulic flow back to tank with no flow to the roll motor. Most materials run best with the valve set at full speed "Forward". Certain materials, especially those that are dense and compacted, may feed better with the roll running in "Reverse" where the roll produces a fluffing action and a more even flow to the rotary air valve.

TIMER RANGE PROGRAMING INSTRUCTIONS:

1. Removing The Face Plate



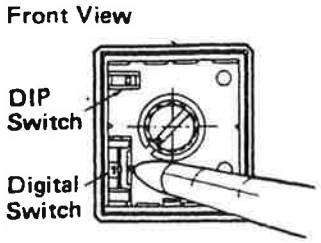
TYPE NO. DEVELOPMENT

RTE-B 1 1-12VAC/DC

P:Pin	**Power Voltage**
B:Blade	
Operation Mode Group	**Time Range Group**
1: Interval or Delay on Make	**1: 1 sec to 10 min**
2: Single Shot or Delay On Break	**2: Not used**

2. Selecting The Mode of Operation

Select the operation mode by moving the DIP switch to the right or the left position. (After installing the face plate, the knob set to the left position is visible through the face plate window.)



DIP Switch Position	Left	Right
	Interval	Delay On Make

3.) Selection The Time Range

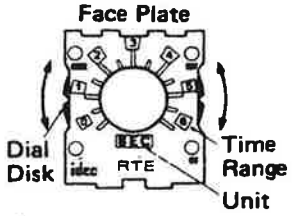
Select the time range by rotating the digital switch.

Digital Switch Position	0	1	2	3	4	5	6	7
Time Range	1 sec	3 sec	6 sec	10 sec	60 sec	30 sec	5 min	10 min
Face Color	PINK	YELLOW	YELLOW	PINK	YELLOW	YELLOW	PINK	PINK

NOTE: When the digital switch is at position 8 or 9, the time range setting is the same as at position 0 or 1, respectively.

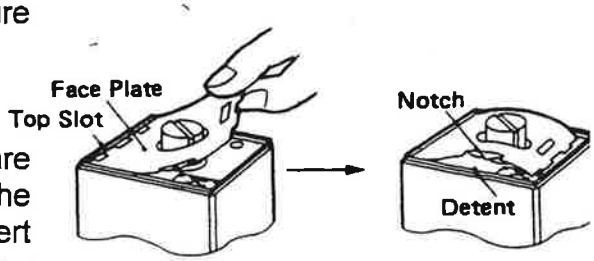
4.) Setting The Face Plate

Each timer is provided with a face indicating the time range on both sides in different colors per time range group. The dial disk has four notches on its perimeter at every 90 degrees. Choose the side with the correct face color from above chart containing your required time range and turn the dial disk to the position where the required time range figure and unit appear in the windows.



5.) Installing The Face Plate

When the operation mode and timer range settings are complete, place the face plate onto the timer by inserting the edge into the top slots. Bend the face plate slightly and insert the bottom edge into the bottom slot on the timer. Make sure the dial disk notch is retained in place.



See page 47 of parts manual, for full illustrations of timer faces with proper settings.

TROUBLE SHOOTING CHART:

Symptom	Probable Cause	Remedy
No material discharge.	Drag conveyor not turning.	Turn conveyor switch on. Reset speed control.
	Electrical control system off.	Verify that engine key is on. Check that transition doors are closed.
	Reverse interval too long.	Reset timer TR2. (1 second)
Air valve auto-reverses excessively	Feed rate too high.	Slow speed control.
	Dull air valve knives.	Sharpen and reset knives.
	Pressure switch delay set too low.	Reset timer TR1. (0.5 seconds)
Air valve motor stalls in reverse, cycling forward-reverse.	Over-feeding.	Slow material speed control.
	Foreign object in transition or hose outlet.	Shut-off engine. Remove object.
	Floor delay set too low	Reset Timer TR3. (1.5 seconds)
Air valve motor stalls in forward, no auto reverse.	Reverse time interval too short.	Reset timer TR2. (1 second)
	Knives dulled, chipped-knife clearance too large.	Sharpen blades, reset knife clearance.

MAINTENANCE:

CAUTION: **Turn off engine and disconnect battery before servicing equipment.**

Weekly - After every 50 hours of operation:

1. Lubricate the bearings on the drag conveyor, the blower, the agitator, and on each shaft of the feed roll. Wipe each bearing before lubrication to remove dirt and prevent overheating.

2. Blow out radiator fins with dry compressed air. Do not use a pressure washer. This will damage the radiator fins.

3. Remove and clean air cleaner elements on the engine and rotary blower using dry, clean compressed air.

4. Check the oil in the rotary air valve gearbox, the drag conveyor gearbox, and the agitator gearbox.

5. Check the gear case on the blower (see blower manual).

6. Check rotary air valve knives for wear, chips, and clearance. To change:

DANGER: **Knives have very sharp edges that can cause serious injury. Handle with care.**

a) Remove five bolts holding knives and transition doors to rotary air valve knife shelves.

b) Remove doors and knives.

c) Clean all dirt or debris from shelves.

d) Back out the two center jacking screws on each shelf.

e) Compare replacement knives to those removed. If the new knife is wider, back the two outside jacking screws out at least this amount. Count the turns, and back both screws out evenly.

f) Lay the knife on the knife shelf. Insure the knife is installed with the **cutting angle edge facing down** as shown in Figure 7. Install loosely the two outer, and the middle knife mounting bolts. Tighten the mounting bolts just enough to hold the knife in position while still allowing it to be moved.

g) Install a block of wood (approximately 2" x 4" x 6" long (5x10x15 cm)) in between the knife and the closest vane at the center of the rotor length. Pinch the wood between the knife and the vane by turning the rotor shaft with a pipe wrench.

h) While keeping pressure on the knife, tighten the three mounting bolts.

i) Remove the wood block, and check the clearance between the knife and the rotor vane using a feeler gauge at the three mounting bolts.

NOTE: If the knife touches the vane at any point, loosen the three mounting bolts, back off the jacking screws evenly, and repeat steps g, h, and i until clearance is obtained.

j) Loosen the three mounting bolts, and use the jacking screws to close the gap. One full turn of the screw moves the knife 0.070 inches (1.8 mm).

k) Tighten mounting bolts as in step g and h.

l) Repeat steps, g, h, i, and j until a knife to vane clearance of no more than 0.006 inches (0.15 mm) is obtained at the closest point(s).

m) Once set, install the other two mounting bolts and tighten.

n) Run two center jacking screws in to contact the knives. Lock all jacking screws in place with the jamnuts.

o) Remove three mounting bolts for transition door, and install the door.

p) Repeat procedure for other knife.

q) Immediately have removed set of knives sharpened. Do not attempt to grind the knives by hand. They must be ground straight and true on a surface grinder by an experienced knife sharpener. Grind the knives to the profile shown below:

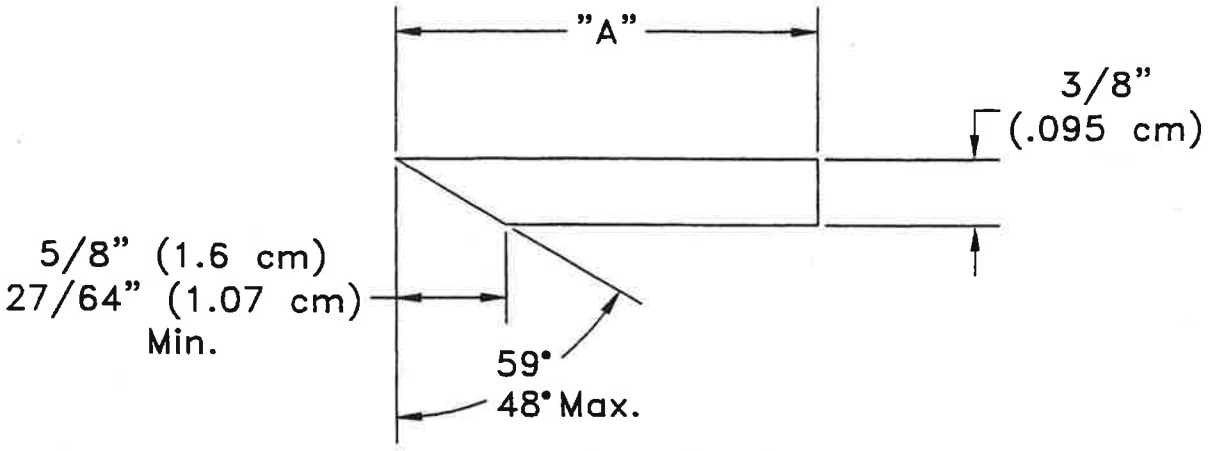


Figure 7

When dimension "A" has been reduced to 2- 3/8 inches (6 cm) the knife must be discarded.

After First 100 Hours of Operation:

1. Change engine oil and filter after 100 hours, every 250 hours after that following engine manufacturer's recommendations.

2. Change the gear box oil on the blower (see blower manual). Change oil every 1000 hours thereafter.

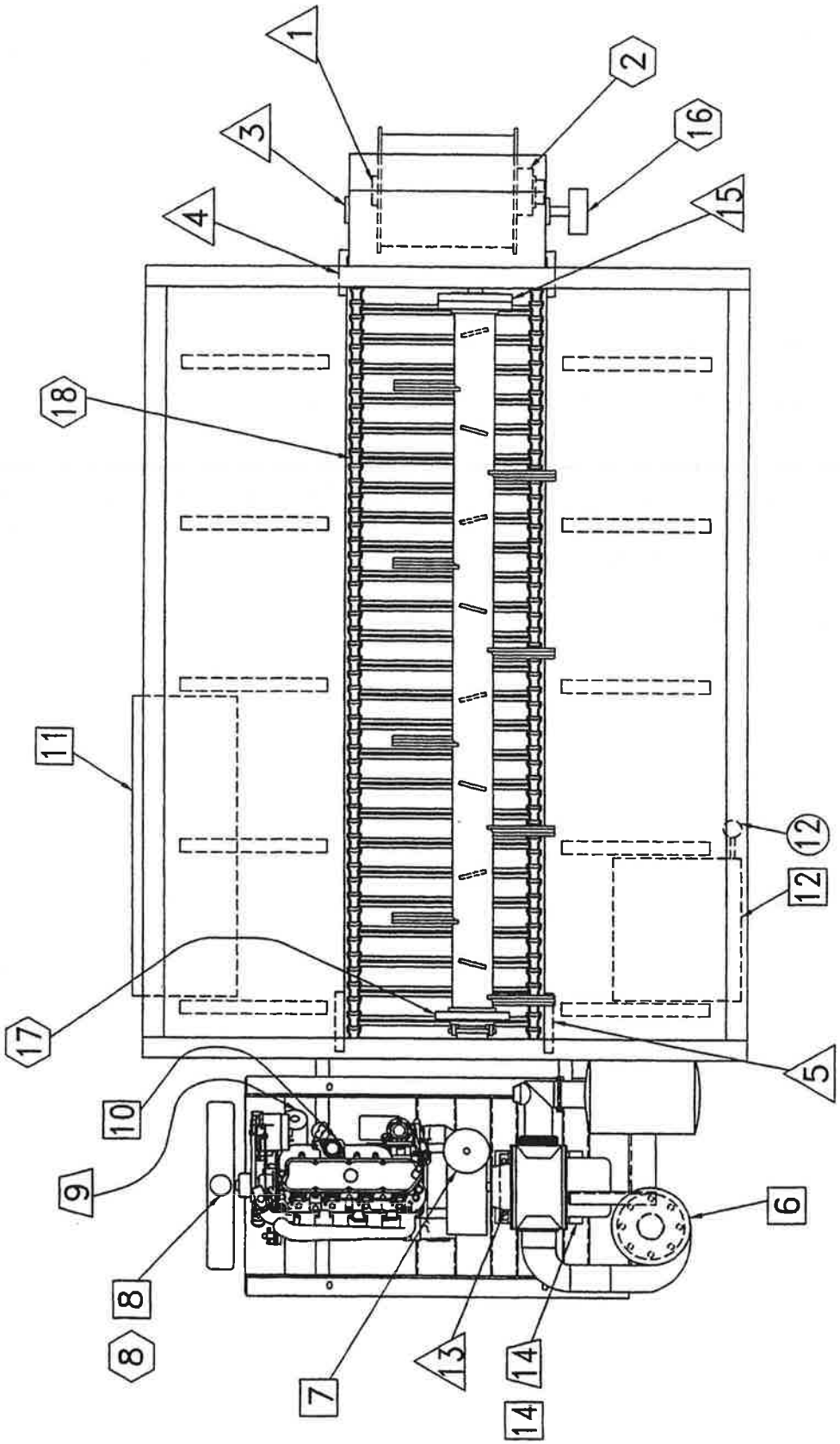
3. Change the gearbox oil on the rotary air valve, the drag conveyor and the agitator using SAE 80W90 oil, filling to the side plug. Change every 1000 hours thereafter.

Winter Shutdown and Storage:

1. Blow all material out of machine, turn off engine and disconnect battery cables.

2. Remove the inlet elbow to the blower air chamber and coat internals of impeller cylinder with a rust preventative such as "WD-40". Reconnect piping to prevent foreign debris from entering blower chamber. Rotate drive shaft three or four revolutions. Repeat this process every month or as conditions may require.

3. Store machine inside or protect as best as possible.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LUBRICATION CHART

Ref. No.	Location	Lubricant	Frequency	Number
1	Air Lock Bearing	CL	Weekly	1
2	Air Lock GearBox	GO	Seasonally	1
3	Feeder Roll Bearing	CL	Weekly	2
4	Floor Bearing	CL	Weekly	2
5	Take-Up Bearing	CL	Weekly	2
6	Check Blower Inlet Filter		Daily	1
7	Check Engine Air Cleaner		Daily	1
8	Check Coolant Level	AF	Daily	1
	Change Engine Coolant	AF	Seasonally	1
9	Change Engine Oil and Filter	MO	See Engine Manual	1
10	Check Engine Oil Level	MO	Daily	1
11	Check Fuel Level	DF	Daily	1
12	Check Hydraulic Oil Level	HO	Daily	1
	Change Hydraulic Oil and Filter	HO	Annually	1
13	Blower Bearing	CL	Weekly	2
14	Check Blower Oil Lever	MO	Daily	1
	Change Blower Oil	MO	See Blower Manual	1
15	Agitator Bearing	CL	Weekly	1
16	Change Floor Drive GearBox	GO	Seasonally	1
17	Change Agitator GearBox	GO	Seasonally	1
18	Occasionally Lubricate Floor Chain (with light weight oil or chain lubricant)			

LUBRICANT OR FLUID USED

CL	Chassis Lubricant
MO	Motor Oil SAE 30 CD/SF
AF	50/50 Anti-Freeze and Water Mixture
DF	Diesel Fuel
HO	Hydraulic Oil 10W-40 SE Motor Oil
GO	90W Gear Oil

TIME KEY

DAILY (8 hours) 

WEEKLY (40 hours) 

SEASONALLY (500 hours) 

ANNUALLY (2000 hours) 

SEE ENGINE MANUAL 

FLUID CAPACITIES

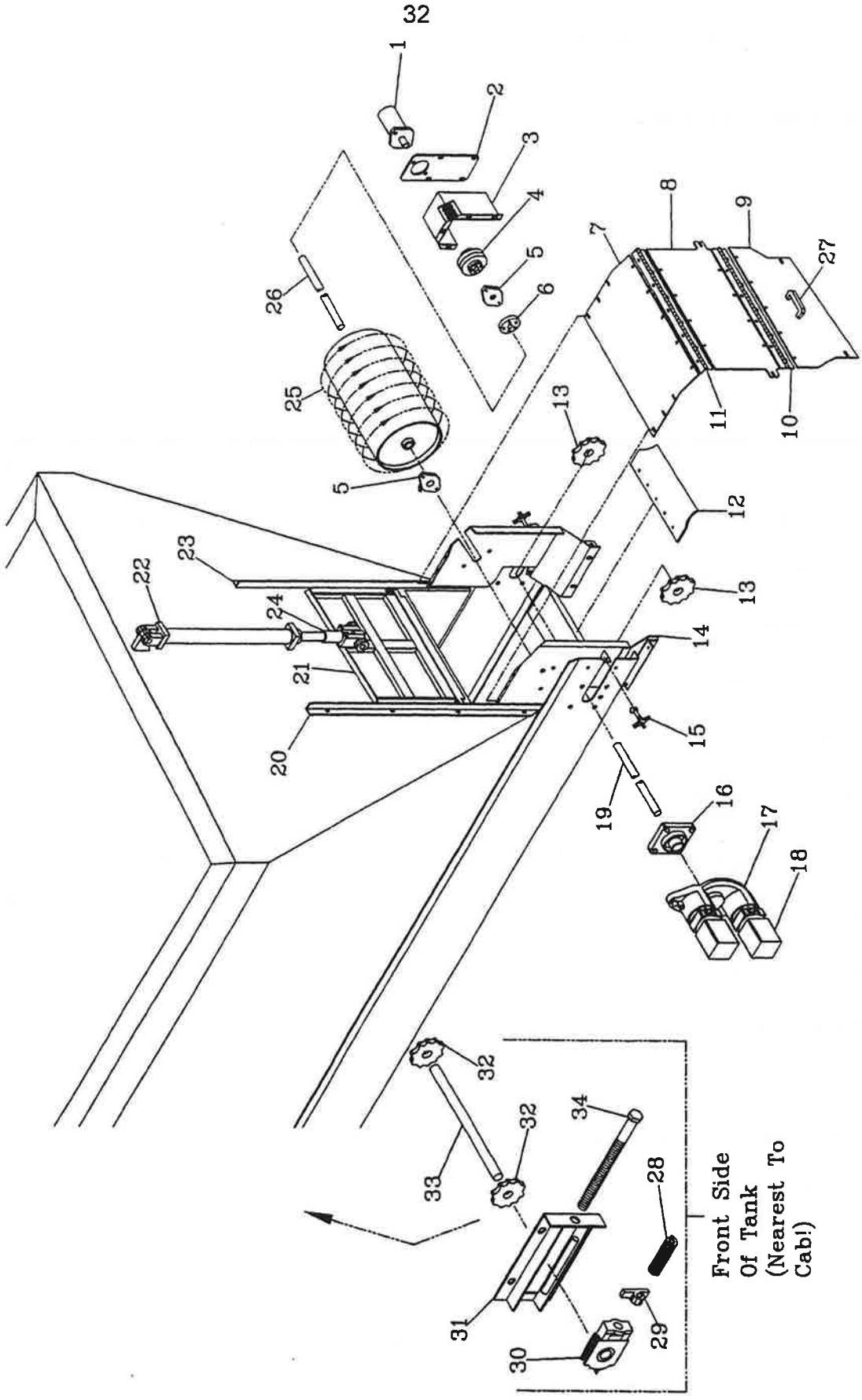
Fuel - 35 Gallons (132L)
Hydraulic Oil - 32 Gallons (121 L)
Engine Coolant - 4 Gallons (15.1 L) 50/50 Mix Only
Engine Oil – See Engine Manual
GearBox Oil - 2 Quarts (1.9 L)

BARK BLOWER
Models 808 & 816
Parts Manual

Model No. RRA Serial No. _____

NOTE: The Parts Manual Section of this manual may be removed. The Operator's manual must remain with the machine at all times for continued reference.

INDEX

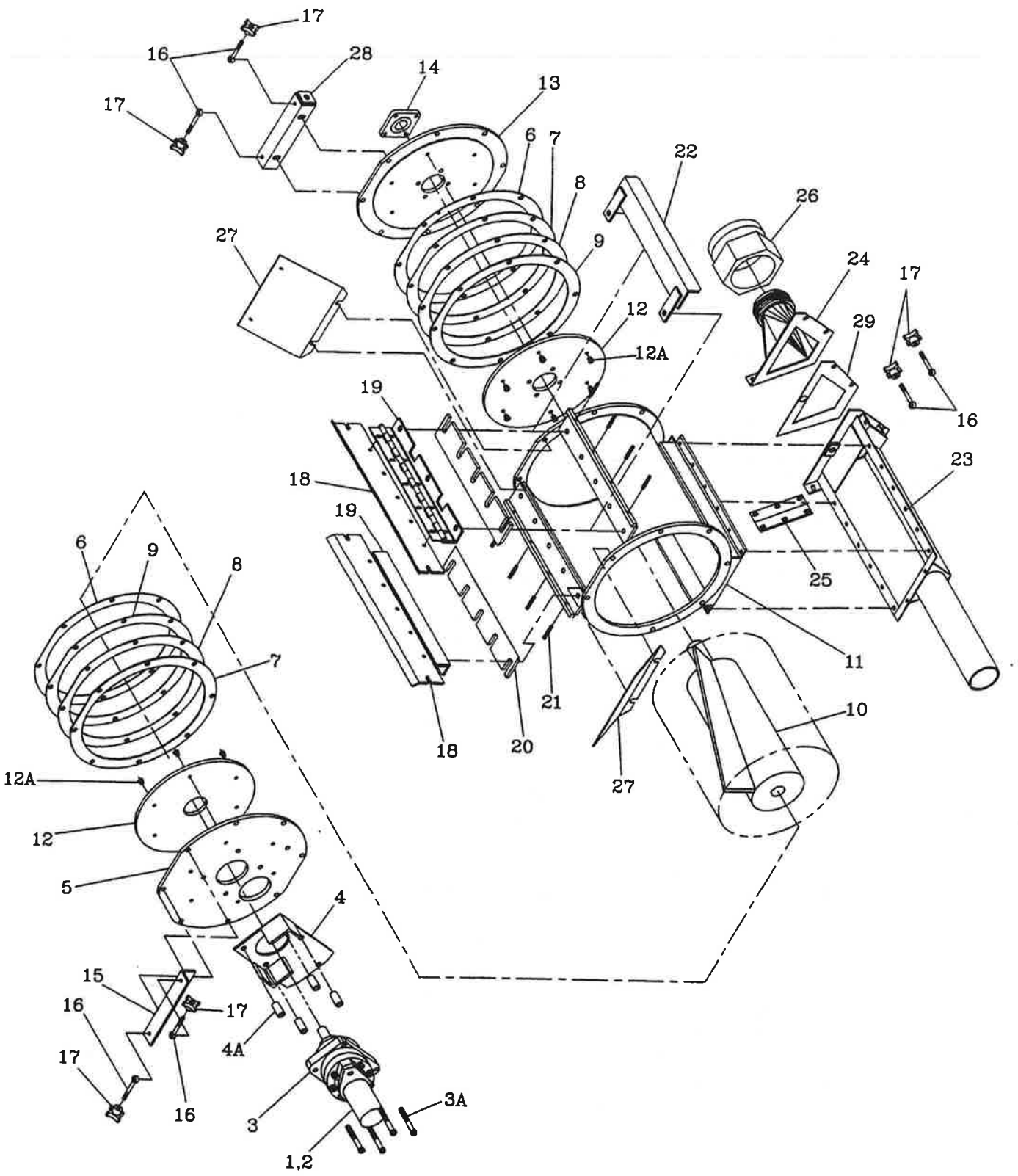


WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

Floor & Feed Roll Parts

Ref. No.	Part Number (808)	Part Number (818)	Description	No. Req'd
1	080482	080482	Hydraulic Motor	1
2	055267-01	055267-01	Motor Mount	1
3	052342	052342	Coupling Guard	1
4	055259	055259	Coupling	1
	020813B	020813B	1" Bushing	1
	020679	020679	1-1/4" Bushing	1
5	020586	020586	Flange Bearing	2
6	021440	021440	1-1/4" Bushing	1
7	052365-01	052365-01	Top Cover	1
8	052365-02	052365-02	Center Cover	1
9	052365-03	052365-03	Bottom Cover	1
10	052066-04	052066-04	Bottom Door Hinge	1
11	052066-03	052066-03	Top Door Hinge	1
12	HW27243	HW27243	Rear Wiper	1
13	052224	052224	Drive Sprocket	2
14	052156	052156	Funnel	1
15	055433	055433	Swing Bolt	2
	070583	070583	Black Knob	2
16	HW6465	HW6465	Bearing	2
17	052226	052226	Dual Pinion Gear Box	1
18	052391	052391	Hydraulic Motor	2
19	HW38600	HW38600	Drive Shaft	1
20	HW70288	HW70288	Left Side Slide	1
21	052159	052159	Rear Gate	1
22	HW55377	HW55377	Hydraulic Cylinder	1
	HW58782	HW58782	Pin	2
	HW58783	HW58783	Clip	4
23	HW70286	HW70286	Right Side Slide	1
24		52370-04	Spacer	1
25	052072	052072	Feed Wheel	1
26	052078-05	052078-05	Feed Roll Shaft	1
27	055586	055586	Rear Door Handle	1
28	HW2704		Take-up Spring	2
29	HW3908	HW20651	Tightening Nut	2
30	052220	052220	Idler Bearing	2
31	HW2126	HW74655	Bearing Bracket	2
32	075218	075218	Idler Sprocket	2
33	HW10015	HW10015	Idler Shaft	2
34	HW2124	HW57457	Machine Bolt	2
	052829	052782	Drag Chain Floor(Not Shown)	1
	HW36699	HW36699	Link-Pintle	
	HW36697	HW36697	Pin-Chain Link	
	HW20817	HW20817	Link Cotter Pin	
	004630		Torque Arrestor for Gearbox	

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



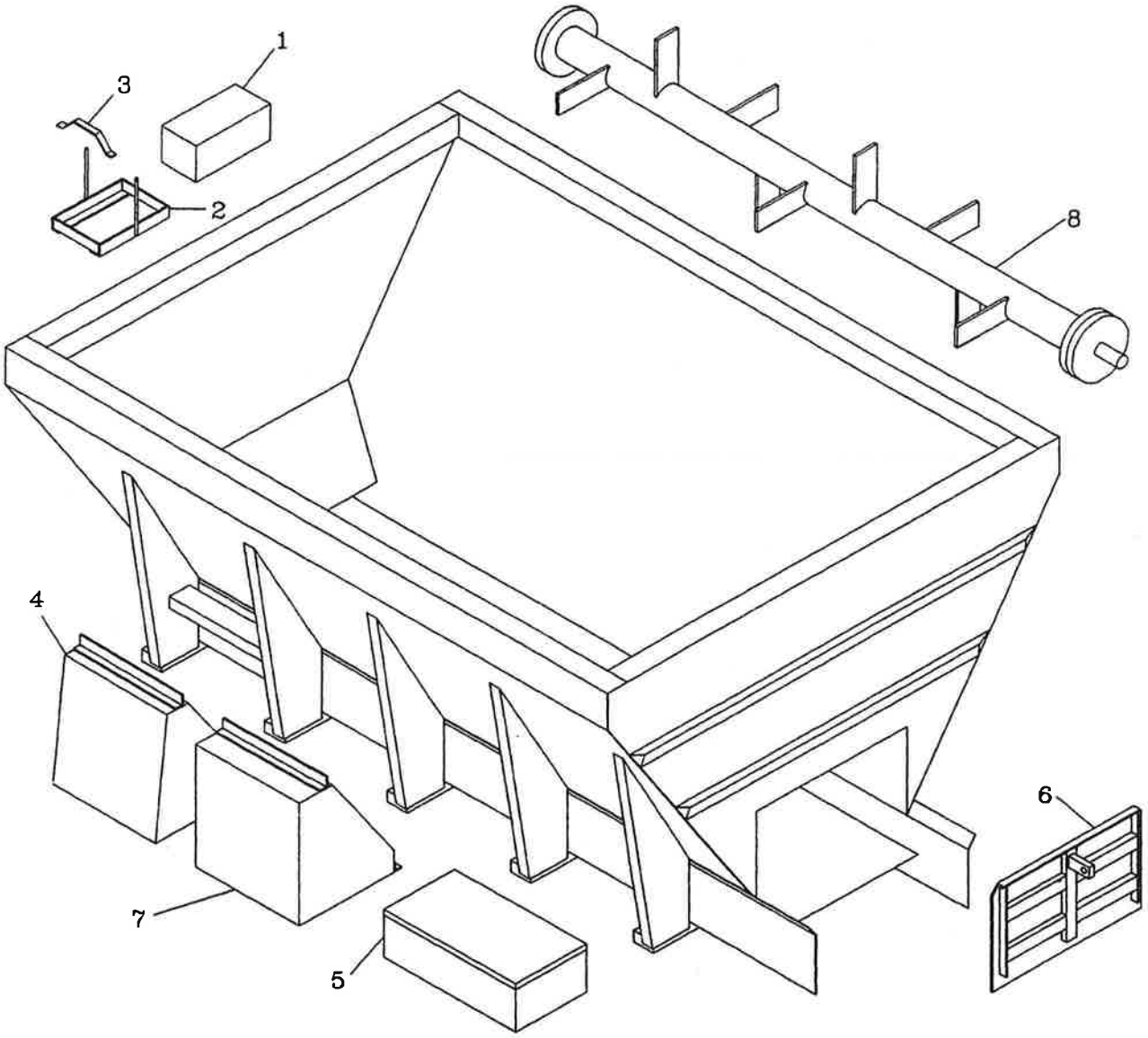
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

AIR LOCK PARTS

Ref. No.		Part Number	Description	No. Req'd
		052153	Replacement Air Lock Assembly (Includes * &**)	
		055657	Air Lock Seal Kit (Includes **)	
1	*	052007	Hydraulic Motor (#158-1084) (See Pg. 44-45)	1
2	*	055517	Motor Gasket	1
3	*	055464	Air Lock Gearbox	1
3A	*	X0860SH	½"-13 UNC Socket Head x 3 ¾" Lg.	4
4	*	052493	Inlet Flanged Gearbox Mount	1
4A	*	052139-03	Spacers (Must be within 0.002" of each other)	4
5	*	055439-02	Air Lock Inlet End Plate	1
	*	X0828	½' Bolt x 1 ¾" Lg.	3
	*	X0832	½" Bolt x 2" Lg.	5
	*	W08F	½" Flat Washer	8
	*	W08L	½" Lock Washer	8
	*	055332	½" Expansion Plug	1
6	**	055148-04	.006" Thick Style 50 Gasket	†
7	**	055148-01	1/32" Thick Style 50 Gasket	†
8	**	055148-02	1/16" Thick Style 50 Gasket	†
9	**	055148-03	1/64" Thick Style 50 Gasket	†
10	*	055423	Finished Rotor	1
	*	Z0408	¼"-20 UNC x ½" Lg. Set Screw ‡	2
	*	055463	Hex Plug ‡	2
	*	055402	Hardened Rotor Key ‡	1
11	*	052430	Air Lock Housing	1
12	**	052128	Seal Plate	2
12A	*	055694	3/8"-16-UNC x ¾" Lg. Seal Plate Bolt	6 per
13	*	052103	Air Lock Outlet Plate	1
	*	X0828	½" Bolt x 1 ¾" Lg.	3
	*	X0832	½" Bolt x 2" Lg.	5
	*	W08F	½" Flat Washer	8
	*	W08L	½" Lock Washer	8
14		055701	Rotor Shaft Bearing	1
15		055432-03	Left Door Mount	1
16		055433	Swing Bolt	6
17		070583	Black Knob	6
18		F816-0010	Knife Door	2
		W05F	5/16" Flat Washer	5 per
		W05L	5/16" Lock Washer	5 per
		Y05	5/16" Hex Nut	5 per
19		055432-01	Door Hinge Mount	2
20	*	055113	Chipper Knife	2
	*	X0828	½" Bolt x 1 ¾" Lg.	4 per
	*	W08	½" Flat Washer	4 per
	*	W08L	½" Lock Washer	4 per
21	*	XS0444	Chipper Knife Alignment Screw	4
22		052064	Set Screw Cover	1
23		052432	Air Lock Discharge	1
		052436	Water Proof Door Switch ‡	1
24		052431	Discharge Funnel	1
25		052427-05	Discharge Hinge	1
26		055374A	Aluminum Hose Adapter	1
27		052353	Deflector Plates	2
28		055432-02	Right Door Mount w/Switches	1
		055407	Door Interlock Switch ‡	2
29		052435	Air Lock Discharge Gasket	1

NOTE: †-As Req'd: Use As Needed For Proper Tolerance And Spacing
‡-Not Shown For Clarity

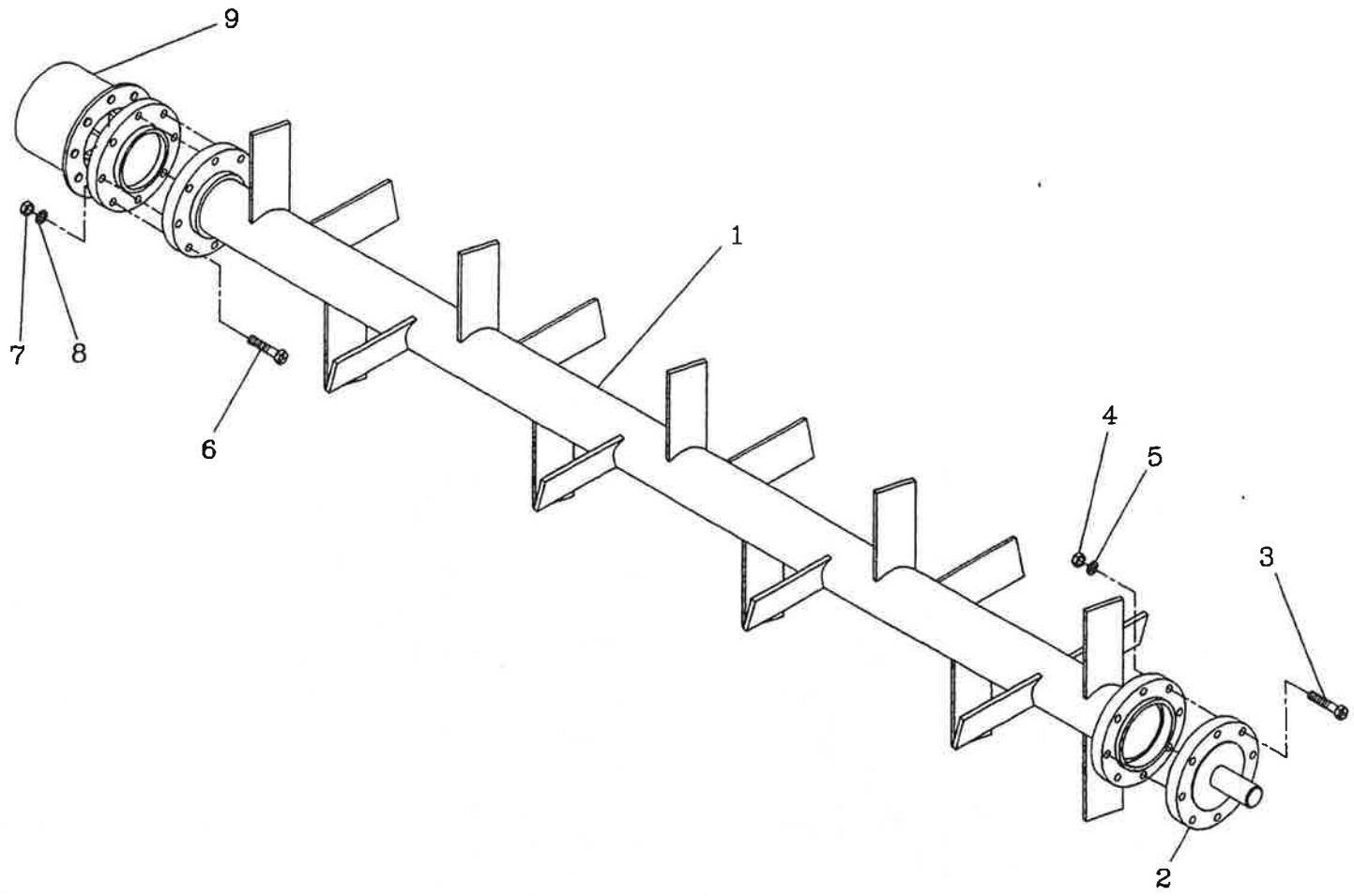
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



LOOSE PARTS

Ref. No.	Part Number (808)	Part Number (816)	Description	No. Req'd
1	011770	011770	Battery Box	1
2	011851	011851	Battery	1
3	080220	080220	Battery Holdown Strap	1
4	HW39346	HW74774-X1	Hydraulic Reservoir	1
5	052160	052160	Tool Box	1
6	052159	052159	Rear Feed Gate (See Pages 32-33)	1
	052372-01	052372-01	Rear Gate Seal	1
	052372-02	052372-02	Seal Fasting Strap	1
7	052090	052090	Fuel Tank	1
8	052433-01	052433-02	Agitator Assembly (See Page 37)	1

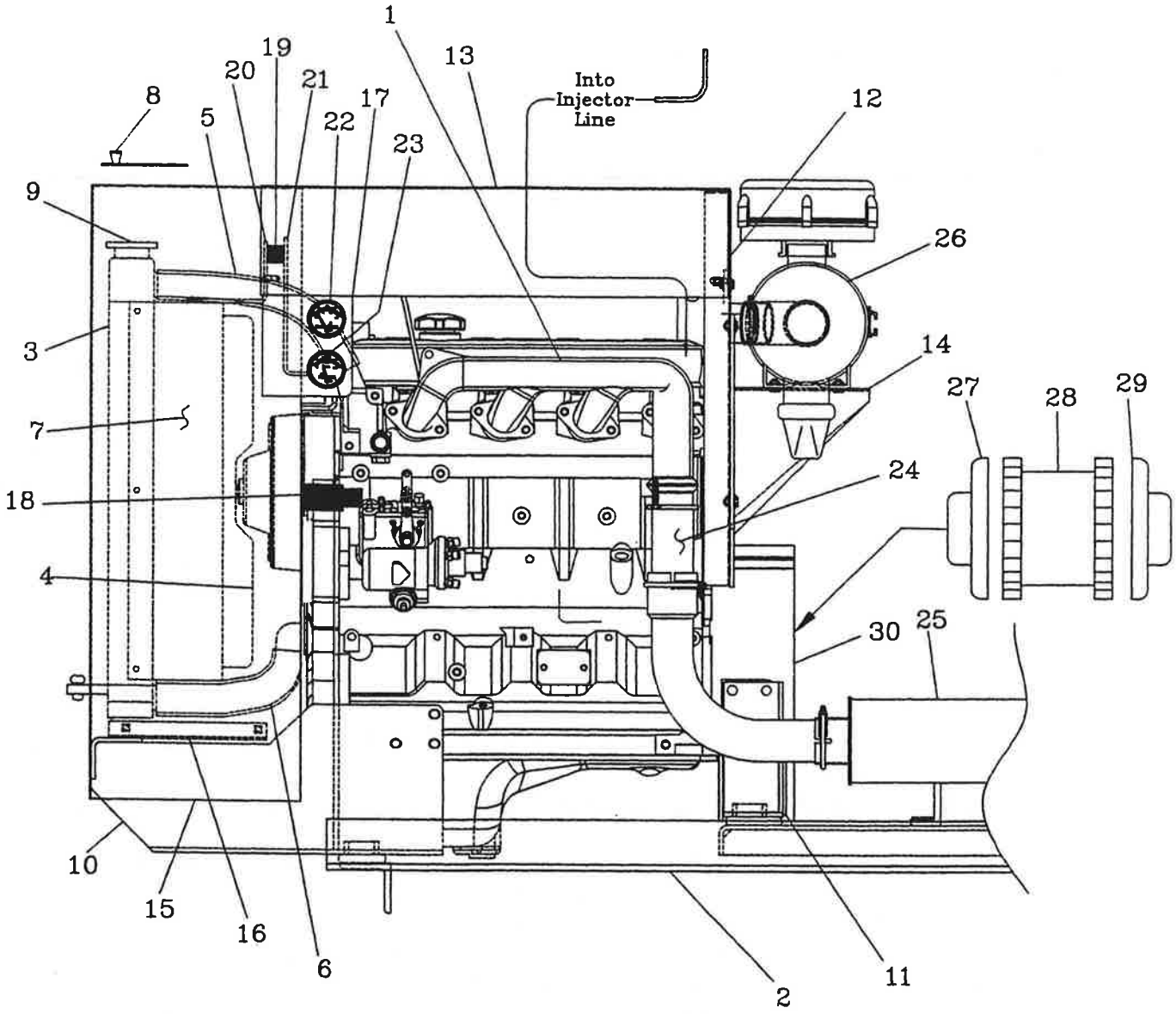
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



AGITATOR ASSEMBLY

Ref. No.	Part Number		Description	No. Req'd
	052433-01	052433-02	Agitator Assembly (Includes Items 1 thru 5)	1
1	052458-01	052458-02	Agitator Shaft	1
2	052420	052420	Agitator Stub Shaft	1
3	X1260	X1260	¾"-10 UNC HHCS x 3 ¾" Lg.	8
4	Y12L	Y12L	¾"-10 UNC Lock Nut	8
5	W12L	W12L	¾" Lock Washer	8
6	X1040	X1040	5/8"-11 UNC HHCS x 2 ½" Lg.	8
7	Y10L	Y10L	5/8"-11 UNC Lock Nut	8
8	W10L	W10L	5/8" Lock Washer	8
9	052446	052446	Auburn Gear Box #8 (Not Included In Assembles)	1
	052447	052447	Hydraulic Motor #104-1032 (Not Shown)	1

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

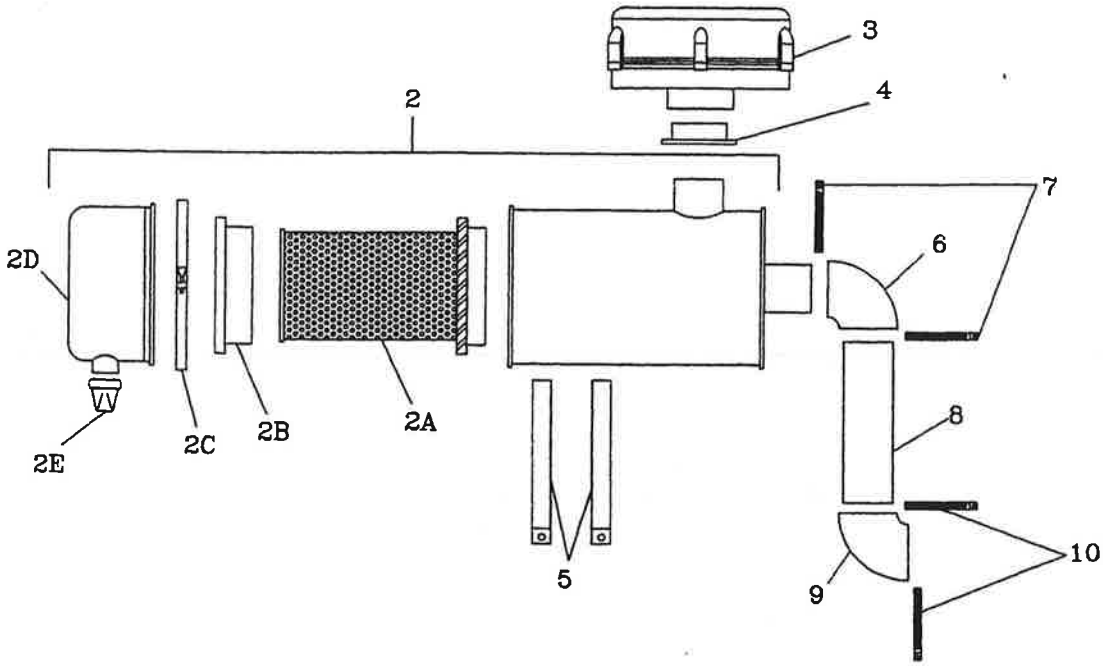


WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

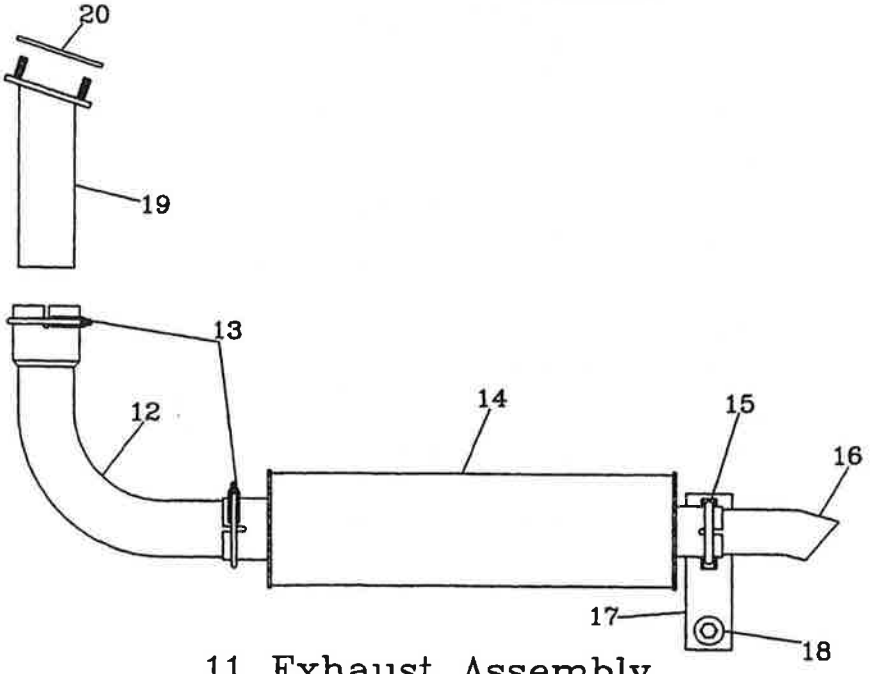
POWER SYSTEM

Ref. No.	Part Number	Description	No. Req'd
1	008576	Engine Assembly	1
2	052425	Engine Cradle	1
3	023805	Radiator	1
	008279	Rubber Mount	2
	022452	Drain Cock	1
4	007678	Fan	1
5	JDR128455	Upper Radiator Hose	1
	022450	Hose Clamp	2
6	JDR54534	Lower Radiator Hose	1
	022450	Hose Clamp	2
7	052378	Fan Shroud	1
8	023784-06	Radiator Cap Cover	1
	023817	Spring Loaded Plunger	1
9	023807	Radiator Cap	1
10	052426	Front Engine Foot	1
	007433	Rubber Shock Mount	2
	007887	Snubbing Washer	2
11	052397	Rear Engine Foot	2
	007433	Rubber Shock Mount	1 per
	007887	Snubbing Washer	1 per
12	F816-0017	Rear Engine Panel	1
	052398-08	Rear Panel Spacer	2
13	F816-0016	Top Cover	1
14	023526-01	Air Cleaner Mount	1
15	F816-0015	Radiator Shroud	1
16	F816-0014	Air Deflector	1
17	F816-0007	Gauge Panel	1
18	023814	Throttle Actuator	1
	F260-0007	Throttle Actuator Mount	1
19	023438	Rubber Shock Mount	1
20	052398-06	Radiator Stay Arm	1
21	023812-02	Radiator Arm Support Bracket	1
22	021839	Temperature Gauge	1
	012537	Temperature Switch Adapter	1
23	007706	Oil Gauge	1
	008473	Oil Line Kit	1
24	052013	Exhaust Extension	1
25	052168	Exhaust Assembly (See Pages 40-41)	1
26	052468	Air Cleaner Assembly (See Pages 40-41)	1
27	052001	Coupling Half-Engine	1
28	011774	Coupling Insert	1
29	011772	Coupling Half-Blower	1
30	F816-0009	Coupling Guard	1
		NOT ILLUSTRATTED	
	F816-0008-01	Fan Guard	1
	F816-0008-02	Fan Guard Mounting Strap	1
	052006	Hydraulic Pump	1
	052025	Flywheel Adapter Plate	1

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



1 Air Intake Assembly



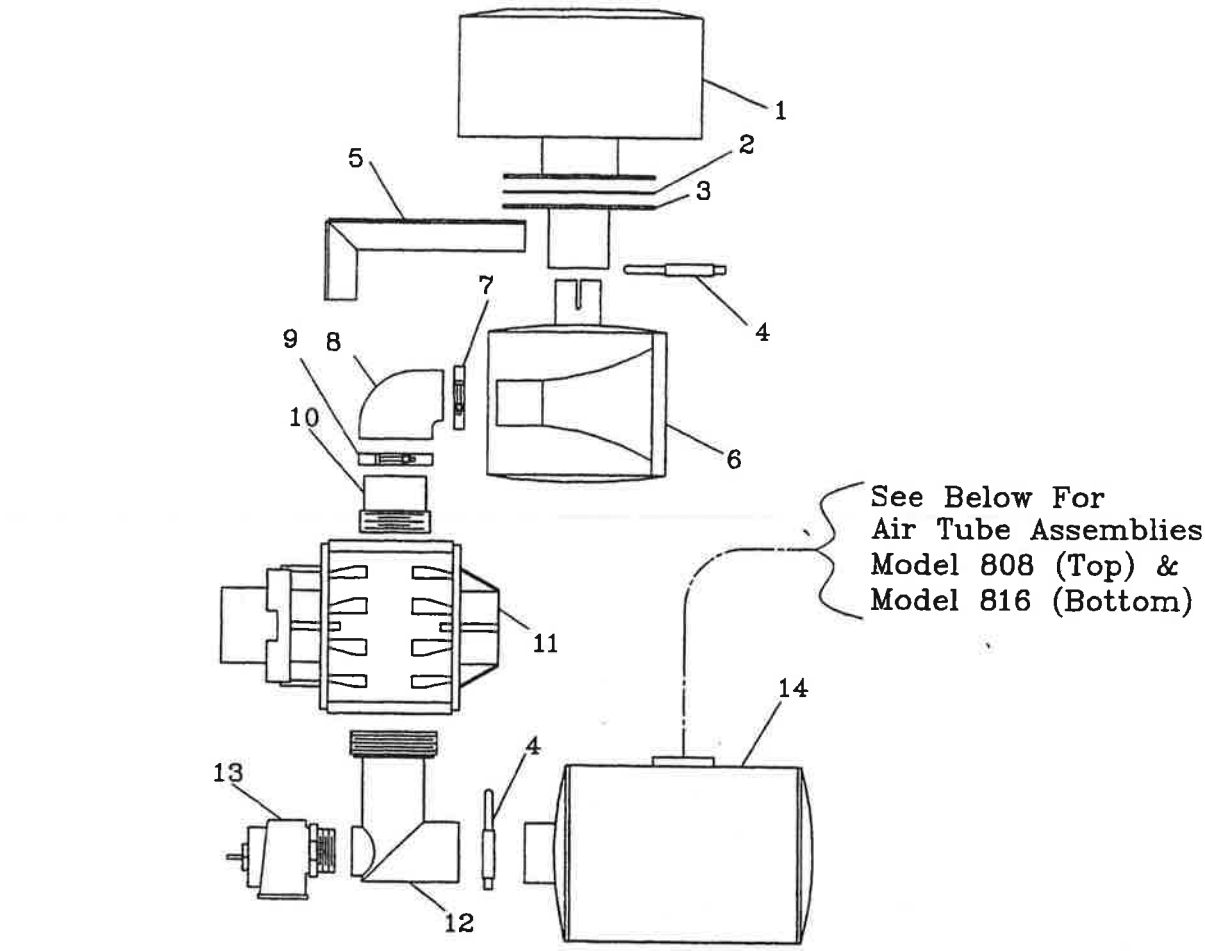
11 Exhaust Assembly

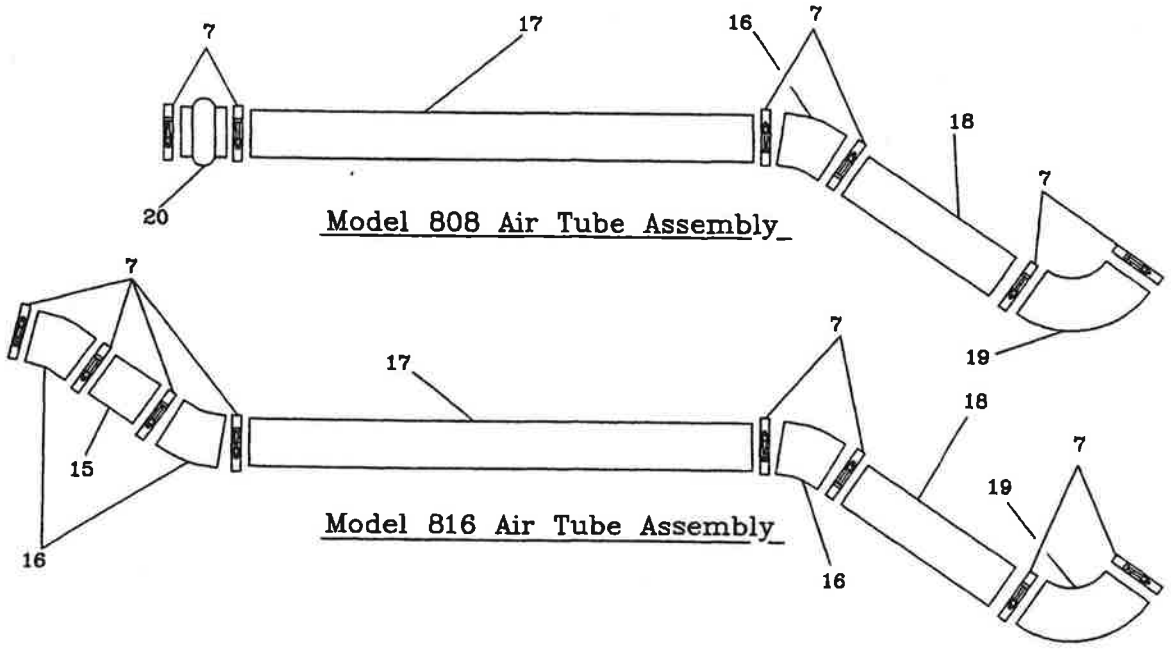
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

AIR INTAKE AND EXHAUST SYSTEMS

Ref. No.	Part Number	Description	No. Req'd
1	052468	Air Intake Assembly (Includes Items 2-10)	1
2	007987	Air Cleaner Assembly	1
2A	007739	Filter Element	1 per
2B	DNP10-2510	Baffle Assembly	1 per
2C	DNP00-2940	Clamp Assembly	1 per
2D	DNP10-3836	Vacuator Cup Assembly	1 per
2E	007994	Vacuator Valve	1 per
3	008613	Pre-Cleaner	1
4	008614	Pre-Cleaner Adapter	1
5	007990	Mounting Band	2
6	007993	Rubber Elbow	1
7	022450	Clamp	2
8	008587-01	Connecting Pipe	1
9	052399	Large Rubber Elbow	1
10	007391	Clamp	2
11	052168	Exhaust Assembly (Includes Items 12-18)	1
12	011211	Exhaust Elbow	1
13	020052	Muffler Clamp (#250)	2
14	007456	Muffler	1
15	023801	Muffler Clamp (#200)	1
16	052110	Exhaust Turn Down	1
17	052398-07	Muffler & Support Strap	1
18	008279	Rubber Mount	1
19	052013	Exhaust Extension	1
20	011218	Flange Gasket	1

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE





WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

BLOWER COMPONETS

Ref. No.	Part Number (808)	Part Number (816)	Description	No. Req'd (808)	No. Req'd (816)
1	052469	052469	Air Cleaner Filter 5"	1	1
	0[illegible] 052004		Replacement Element	1	1
2	052141	052141	Air Cleaner Mounting Gasket	1	1
3	052023-01	052023-01	Air Cleaner Flange	1	1
4	055336	055336	4" U-Clamp	2	2
5	052021	052021	Air Cleaner Support	1	1
6	052093	052093	Inlet Silencer	1	1
7	055335	055335	4" Band Clamp	7	9
8	052010	052010	90° Reducer Elbow	1	1
9	052011	052011	5" Band Clamp	1	1
10	052023-02	052023-02	Blower Inlet Nipple	1	1
11	052005	052005	Blower Model 68	1	1
12	052137	052137	Blower Discharge	1	1
13	052008	052008	Relief Valve	1	1
14	052020	052020	Outlet Silencer	1	1
15		052011-11	Short Air Tube		1
16	052012	052012	45° Rubber Elbow	1	3
17	052022-07	052022-09	Long Air Tube	1	1
18	052022-13	052022-14	Medium Air Tube	1	1
19	055334	055334	90° Rubber Elbow	1	1
20	055367		4" Hump Hose	1	

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

86	52521	1	1/2" Hose x 160" OAL	COMM
85	52447	1	Agitator Motor	COMM
84	55230	1	Lenz #A3405-8-8	COMM
83	55357	1	Lenz #6402-8-8	COMM
82	52134	1	Flow Control Valve	COMM
81	FW71786	1	Lenz #A3405-6-8	COMM
80	52165	1	3/8" 100R1x15" w/ #6FJ & #8FJ-90°	COMM
79	FW75148	3	LENZ #A3105-12-10 Adapter	COMM
78	52040	1	3/4" Hose x 42" OAL	COMM
77	5639	1	LENZ #16FPE Pipe Elbow	COMM
76	11868	1	Hydraulic Return Filter	COMM
75	41152	1	LENZ #3105-16-20 Adapter	COMM
74	52388	1	1" Hose x 30" OAL	COMM
73	52387	1	1" Hose x 44" OAL.	COMM
72	52187-02	1	Return Header Assembly	COMM
71	FW71873	1	LENZ #3755SW-12	COMM
70	52095	1	LENZ #3605SW-8	COMM
69	52336	1	Pressure Switch	COMM
68	85189	2	LENZ #3355SW-6	COMM
67	70377	1	LENZ #8SM-8UAD Union	COMM
66	55230	1	LENZ #A3405-8-8 Adapter	COMM
65	52052	2	1/2" Hose x 60" OAL	COMM
64	55464	1	Gear Box	COMM
63	52007	1	Air Lock Hydraulic Motor	COMM
62	12086	2	LENZ #A3105-8-10 Adapter	COMM
61	23621	3	LENZ #A3405-8-10	COMM
60	52164	1	Lenz #8HP	COMM
59	52053	3	1/2" Hose x 174" OAL	COMM
58	FW71452	3	Lenz #3405-16	COMM
57	80482	1	Feeder Roll Hydraulic Motor	COMM
56	85014	2	LENZ #A3105-6-10 Adapter	COMM
55	52036	2	3/8" Hose x 18" OAL	COMM
54	FW71784	1	Lenz #3755SW-8	COMM
53	5628	1	HEAT EXCHANGER W/ FAN	COMM
52	52049	1	1/2" Hose x 31" OAL	COMM
51	55232	4	LENZ #A3105-8-8 Adapter	COMM
50	FW71618	2	LENZ #8-4APC Adapter	COMM
49	52485	2	Solenoid Valve	COMM
48	55233	1	LENZ #A3105-12-8 Adapter	COMM
47	52055	1	3/4" Hose x 103" OAL	COMM
46	5640	3	LENZ #3105-12-16 Adapter	COMM
45	52039	1	3/4" Hose x 33" OAL	COMM
44	52391	2	Floor Hydraulic Motor(104-1143)	COMM
43	FW71492	5	LENZ #3505SW-12 Adapter	COMM
42	41191	1	LENZ #12SM-12UAD	COMM
41	52038	1	1/2" Hose x 36" OAL	COMM
ITEM	PART NO.	QTY.	DESCRIPTION	DWG. NO.

40	FW71504	2	LENZ #3355SW-8 Adapter	COMM
39	55140	1	Speed Control Valve	COMM
38	11504	1	LENZ #8PN Pipe Nipple	COMM
37	52045	1	1/4" Hose x 23" OAL	COMM
36	55273	2	LENZ #3405-4-6 Adapter	COMM
35	52185	1	Hydraulic Cylinder	COMM
34	FW71910	1	LENZ #3105-4-4 Adapter	COMM
33	52047	1	1/4" Hose x 70" OAL	COMM
32	52046	1	1/4" Hose x 64" OAL	COMM
31	FW71450	3	LENZ #3405-4-4 Adapter	COMM
30	55229	6	LENZ #8-4HB Hex Bushing	COMM
29	52157	1	Feed Gate Valve	COMM
28	52044	1	3/8" Hose x 30" OAL	COMM
27	55234	2	LENZ #3405-6-6 Adapter	COMM
26	190188-84	5-1/4"	LT 8.065 S.S. Tube x 5-1/4 Lg.	COMM
25	190188-72	4-1/2"	LT 12.049 S.S.Tube x 4-1/2 Lg.	COMM
24	80268	3	LENZ #12-6HB Hex Bushing	COMM
23	FW85222	1	LENZ #12-16RPN Pipe Nipple	COMM
22	22346	1	LENZ #12ST Street Tee	COMM
21	41163	1	Floor Dump Valve	COMM
20	55231	2	Lenz #A3105-6-8	COMM
19	52037	1	1/2" Hose x 25" OAL	COMM
18	41053	4	LENZ #3105-8-8 Adapter	COMM
17	12044	3	Pressure Gauge	COMM
16	52099	2	AEROQUIP #FC9605-8	COMM
15	52097	2	AEROQUIP #FC275-8	COMM
14	52098	2	AEROQUIP #FF9605-12	COMM
13	52096	2	AEROQUIP #FC2875-12	COMM
12	52033	1	LENZ #8FPC Pipe Cross	COMM
11	23206	1	LENZ #8-12RPN Pipe Nipple	COMM
10	22292	1	Priority Divider Valve	COMM
9	52034	1	LENZ #3355-8-12 Adapter	COMM
8	22592	1	LENZ #8ST Streeet Tee	COMM
7	FW71870	5	LENZ #3505SW-8 Adapter	COMM
6	55359	4	LENZ #A3105-8-12 Adapter	COMM
5	52466	1	Hydraulic Pump	COMM
4	52401	1	Lenz #A3405-20	COMM
3	52404	1	1-1/4" Hose x 68" OAL	COMM
2	52030	1	LENZ #3405-20 Adapter	COMM
1	20511	1	1-1/4" Ball Valve	COMM
ITEM	PART NO.	QTY.	DESCRIPTION	DWG. NO.

FINN CORPORATION

FAIRFIELD OHIO

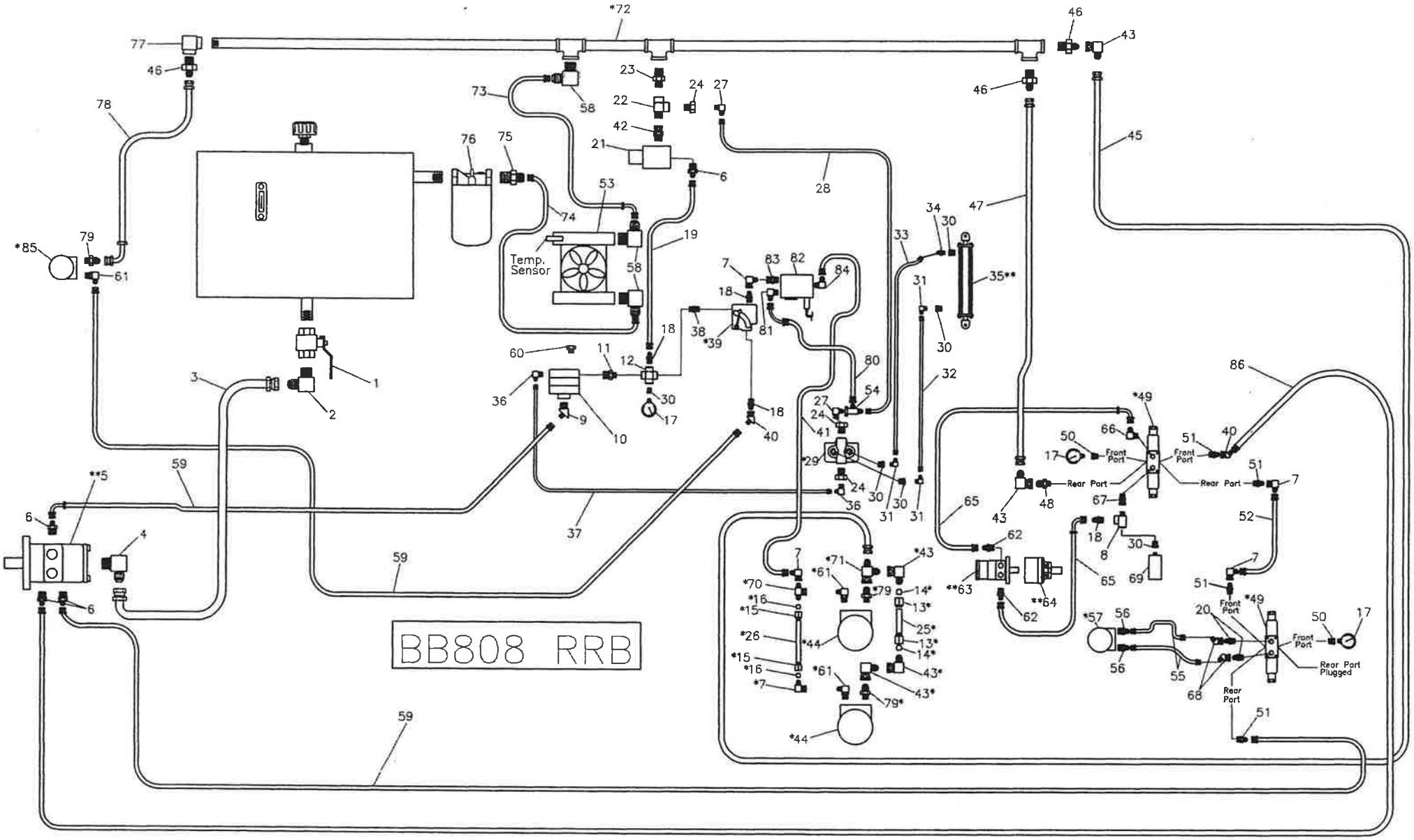
PART NAME

PART NO. BB808 RRB

UNIT

DRAWN SCALE CHK'D DATE

SHEET OF


BB808 RRB
Temp. Sensor
Front Port
Rear Port
Rear Port Plugged

89	52166	3	1/2" Hose x 45" OAL	COMM
88	FW75101	1	Lenz #3355SW-4	COMM
87	52101	1	1/2" Hose x 36" OAL	COMM
86	52522	1	1/2" Hose x 152" OAL	COMM
85	52447	1	Agitator Motor	COMM
84	55230	1	Lenz #A3405-8-8	COMM
83	55357	1	Lenz #6402-8-8	COMM
82	52134	1	Flow Control Valve	COMM
81	FW71786	1	Lenz #A3405-6-8	COMM
80	52185	1	3/8" 100R1x15" w/ #8FJ & #6FJ-90°	COMM
79	FW75148	3	LENZ #A3105-12-10 Adapter	COMM
78	52040	1	3/4" Hose x 42" OAL	COMM
77	5639	1	LENZ #16FPE Pipe Elbow	COMM
76	11868	1	Hydraulic Return Filter	COMM
75	41152	1	LENZ #3105-16-20 Adapter	COMM
74	52390	1	1" Hose x 36" OAL	COMM
73	52389	1	1" Hose x 40" OAL.	COMM
72	52187-02	1	Return Header Assembly	COMM
71	FW71873	1	LENZ #3755SW-12	COMM
70	52095	1	LENZ #3605SW-8	COMM
69	52336	1	Pressure Switch	COMM
68	85169	2	LENZ #3355SW-6	COMM
67	70377	1	LENZ #8SM-8UAD Union	COMM
66	55230	1	LENZ #A3405-8-8 Adapter	COMM
65	52052	2	1/2" Hose x 60" OAL	COMM
64	55464	1	Gear Box	COMM
63	52007	1	Air Lock Hydraulic Motor	COMM
62	12086	2	LENZ #A3105-8-10 Adapter	COMM
61	23621	3	LENZ #A3405-8-10	COMM
60	52164	1	Lenz #6HP	COMM
59	52053	3	1/2" Hose x 174" OAL	COMM
58	FW71452	3	Lenz #3405-16	COMM
57	80482	1	Feeder Roll Hydraulic Motor	COMM
56	85014	2	LENZ #A3105-6-10 Adapter	COMM
55	52036	2	3/8" Hose x 18" OAL	COMM
54	FW71784	1	Lenz #3755SW-6	COMM
53	5628	1	HEAT EXCHANGER W/ FAN	COMM
52	52049	1	1/2" Hose x 31" OAL	COMM
51	55232	4	LENZ #A3105-8-8 Adapter	COMM
50	FW71618	2	LENZ #8-4APC Adapter	COMM
49	52485	2	Solenoid Valve	COMM
48	55233	1	LENZ #A3105-12-8 Adapter	COMM
47	52055	1	3/4" Hose x 103" OAL	COMM
46	5640	3	LENZ #3105-12-16 Adapter	COMM
45	52405	1	3/4" Hose x 29" OAL	COMM
44	52391	2	Floor Hydraulic Motor(104-1143)	COMM
43	FW71492	5	LENZ #3505SW-12 Adapter	COMM
42	41191	1	LENZ #12SM-12UAD	COMM
41	52038	1	1/2" Hose x 38" OAL	COMM
ITEM	PART NO.	QTY.	DESCRIPTION	DWG. NO.

40	FW71504	2	LENZ #3355SW-8 Adapter	COMM
39	55140	1	Speed Control Valve	COMM
38	11504	1	LENZ #8PN Pipe Nipple	COMM
37	52045	1	1/4" Hose x 23" OAL	COMM
36	55273	2	LENZ #3405-4-6 Adapter	COMM
35	52185	1	Hydraulic Cylinder	COMM
34	FW71910	1	LENZ #3105-4-4 Adapter	COMM
33	52047	1	1/4" Hose x 70" OAL	COMM
32	52046	1	1/4" Hose x 64" OAL	COMM
31	FW71450	3	LENZ #3405-4-4 Adapter	COMM
30	55229	6	LENZ #8-4HB Hex Bushing	COMM
29	52157	1	Feed Gate Valve	COMM
28	52044	1	3/8" Hose x 30" OAL	COMM
27	55234	2	LENZ #3405-6-6 Adapter	COMM
26	190168-84	5-1/4"	LT 8.065 S.S. Tube x 5-1/4 Lg.	COMM
25	190168-72	4-1/2"	LT 12.049 S.S.Tube x 4-1/2 Lg.	COMM
24	80268	3	LENZ #12-6HB Hex Bushing	COMM
23	FW65222	1	LENZ #12-16RPN Pipe Nipple	COMM
22	22348	1	LENZ #12ST Street Tee	COMM
21	41163	1	Floor Dump Valve	COMM
20	55231	2	Lenz #A3105-6-8	COMM
19	52037	1	1/2" Hose x 25" OAL	COMM
18	41053	4	LENZ #3105-8-8 Adapter	COMM
17	12044	3	Pressure Gauge	COMM
16	52099	2	AEROQUIP #FC9605-8	COMM
15	52097	2	AEROQUIP #FC275-8	COMM
14	52098	2	AEROQUIP #FF9605-12	COMM
13	52096	2	AEROQUIP #FC2875-12	COMM
12	52033	1	LENZ #8FPC Pipe Cross	COMM
11	23206	1	LENZ #8-12RPN Pipe Nipple	COMM
10	22292	1	Priority Divider Valve	COMM
9	52034	1	LENZ #3355-8-12 Adapter	COMM
8	22592	1	LENZ #8ST Streeet Tee	COMM
7	FW71870	4	LENZ #3505SW-8 Adapter	COMM
6	55359	4	LENZ #A3105-8-12 Adapter	COMM
5	52466	1	Hydraulic Pump	COMM
4	52401	1	Lenz #A3405-20	COMM
3	52042	1	1-1/4" Hose x 83" OAL	COMM
2	52030	1	LENZ #3405-20 Adapter	COMM
1	20511	1	1-1/4" Ball Valve	COMM
ITEM	PART NO.	QTY.	DESCRIPTION	DWG. NO.

FINN CORPORATION

FAIRFIELD OHIO

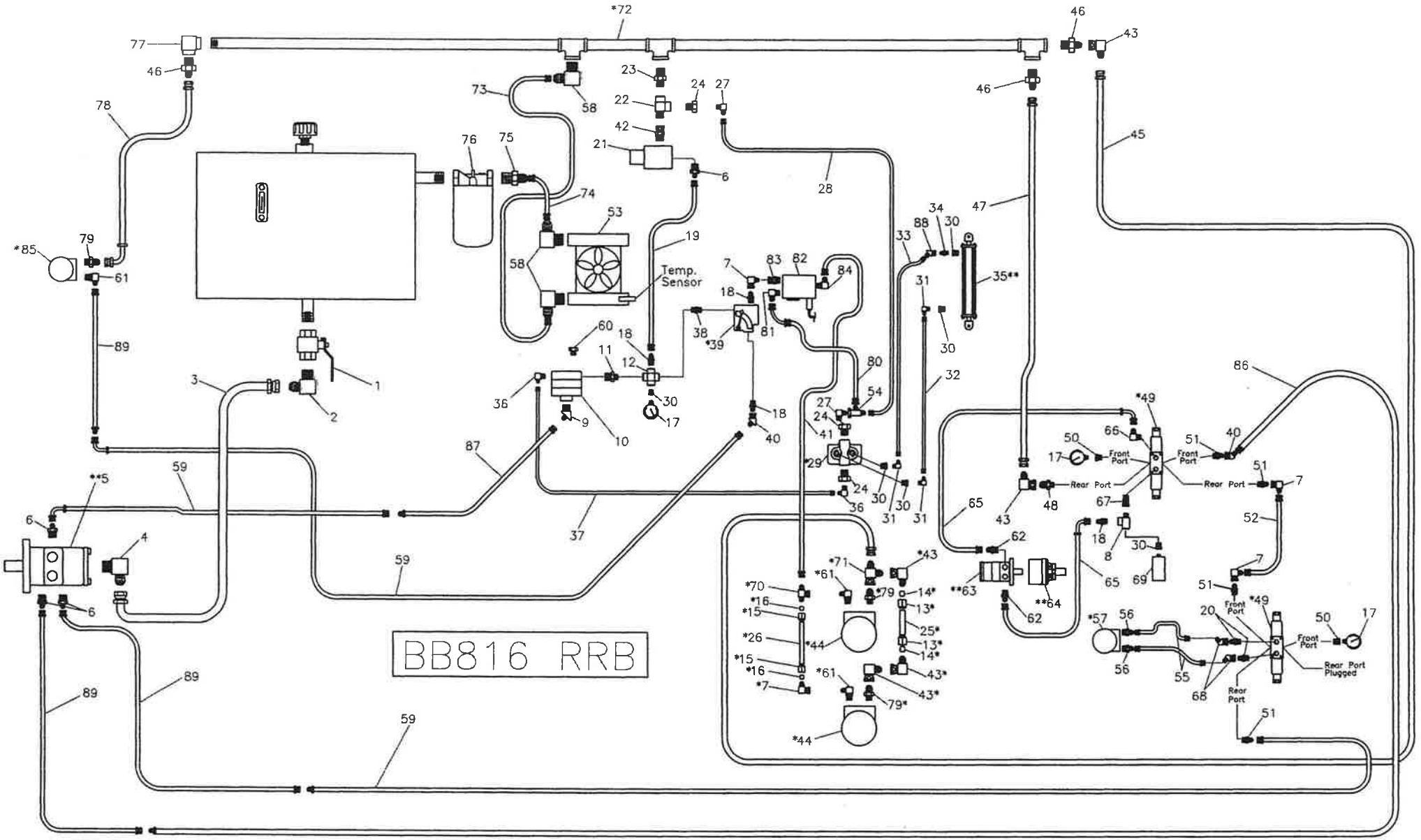
PART NAME

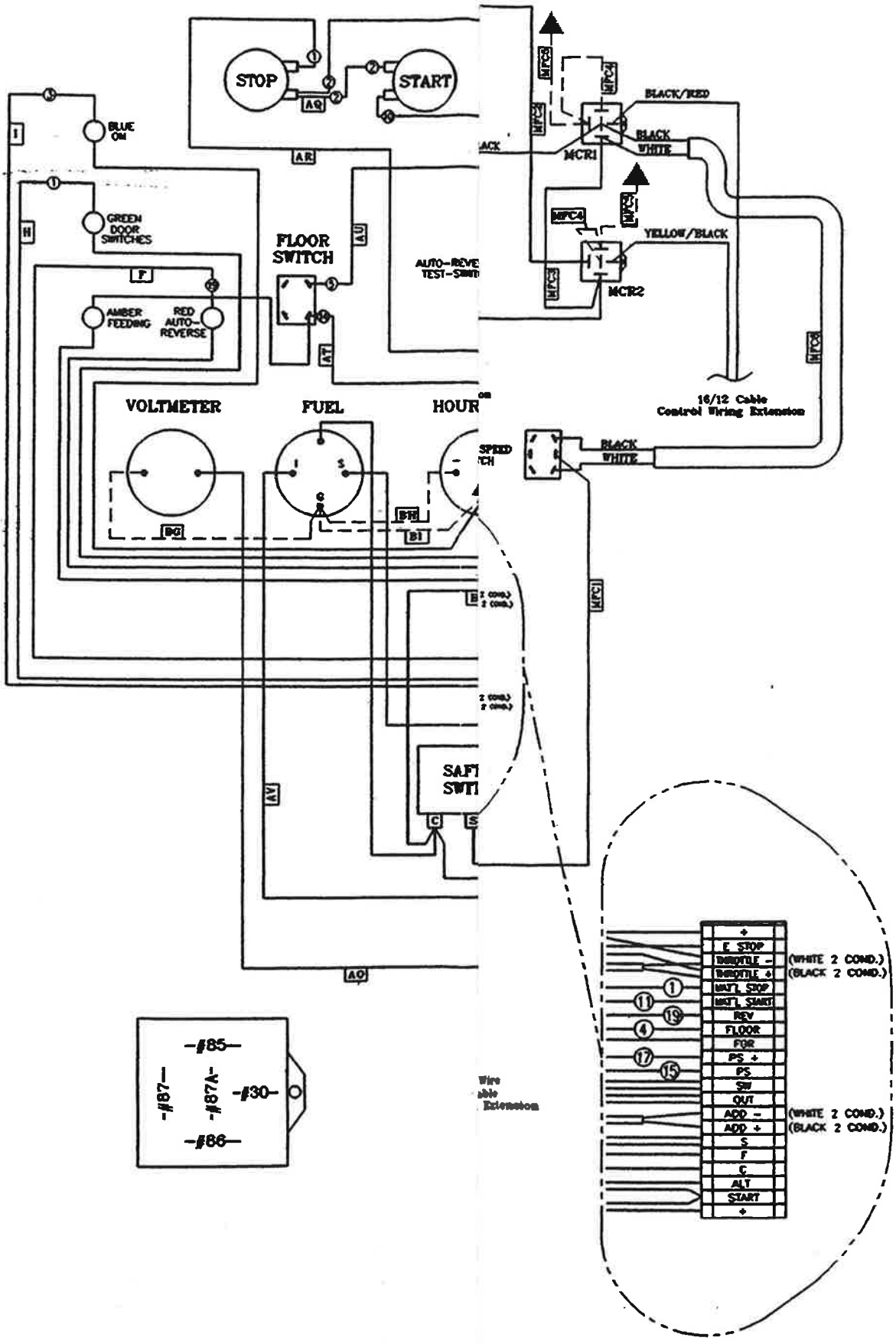
PART NO. BB816 RRB

UNIT

DRAWN SCALE CHK'D DATE

SHEET 15

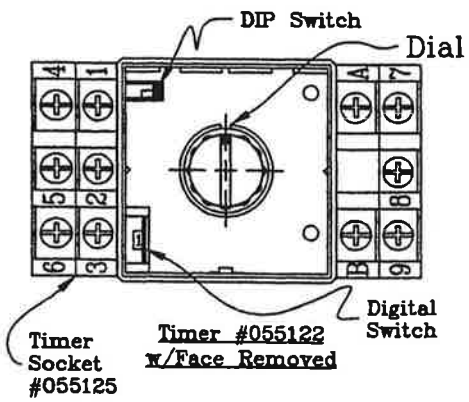

BB816 RRB
Temp. Sensor
Front Port
Rear Port
Rear Port Plugged

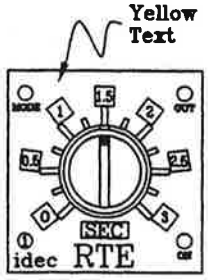

STOP
START
AQ
AR
BLUE ON
GREEN DOOR SWITCHES
FLOOR SWITCH
AU
AT
AMBER FEEDING
RED AUTO-REVERSE
VOLTMETER
FUEL
HOUR
BG
PH
BI
AV
AO
MPC3
MPC4
MPC1
BLACK/RED
BLACK
WHITE
MCR1
MCR2
YELLOW/BLACK
16/12 Cable
Control Wiring Extension
BLACK
WHITE
#85
#87
#87A
#30
#86
+
E STOP
THROTTLE -
THROTTLE +
MAT'L STOP
MAT'L START
REV
FLOOR
FOR
PS +
PS
SW
OUT
ADD -
ADD +
S
F
C
ALT
START
+
(WHITE 2 COND.)
(BLACK 2 COND.)
(WHITE 2 COND.)
(BLACK 2 COND.)

CONTROL BOX WIRING

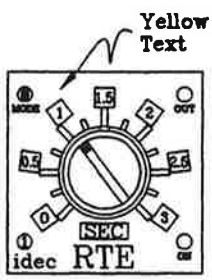
Part Number	Description	No. Req'd
007274	Hourmeter	1
FW71972	Fuel Gauge	1
007958	Voltmeter	1
022219	Safety Switch	1
052076	Ignition Switch	1
FW71555	Throttle Switch	1
052112	Floor Switch	1
080526	Toggle Switch Boot	2
020886	Auto-Reverse Test Button	1
055127	Start Button	1
055128	Stop Button	1
055403	Amber Light	1
055404	Blue Light	1
055405	Green light	1
055406	Red Light	1
FW71749-02	30 Amp Relay	6
055120	12V Relay (CR1,CR2)	2
055122	12V Timer (TR1,TR2,TR3) See Below	3
055123	Relay Socket	2
055125	Timer Socket	3
055132	Terminal Block	21
055451	Terminal End Piece	1
052118	6 Circuit Fuse Block	1
055447	4 Circuit Fuse Block	1
052119	30 Amp Fuse	3
055449	10 Amp Fuse	2
055450	5 Amp Fuse	1
052120	2 Amp Fuse	1
052069	Enclosure Box	1
052070	Sub-Panel	1
023076	Key for Ignition Switch	

For Further Instructions On How To Set Timers See Page 21 In Operators Manual.

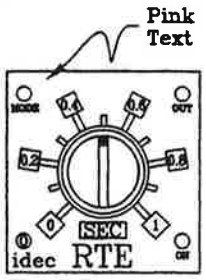




TR3–Floor Delay Settings (Using Timer #055122)

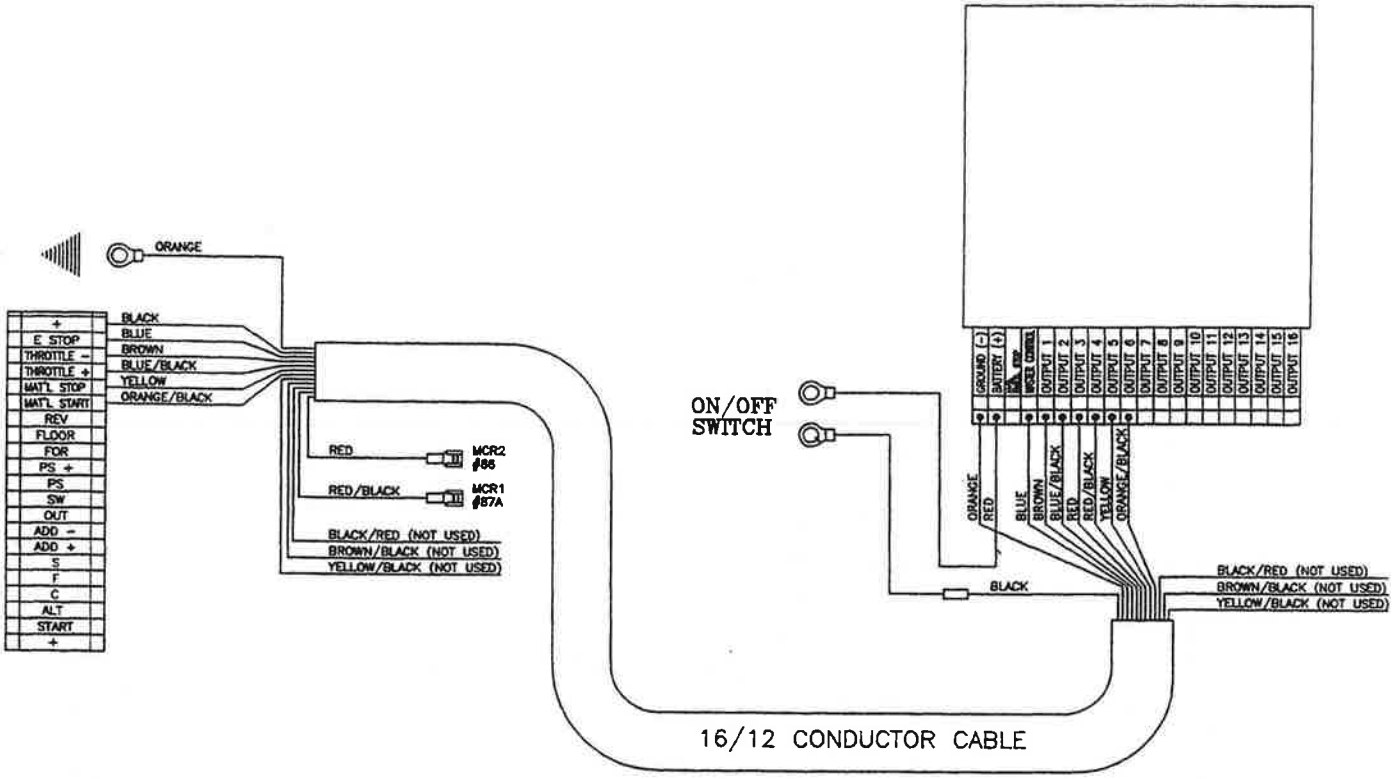


TR2–Air Lock Reverse Settings (Using Timer #055122)



TR1–Pressure Switch Settings (Using Timer #055122)

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

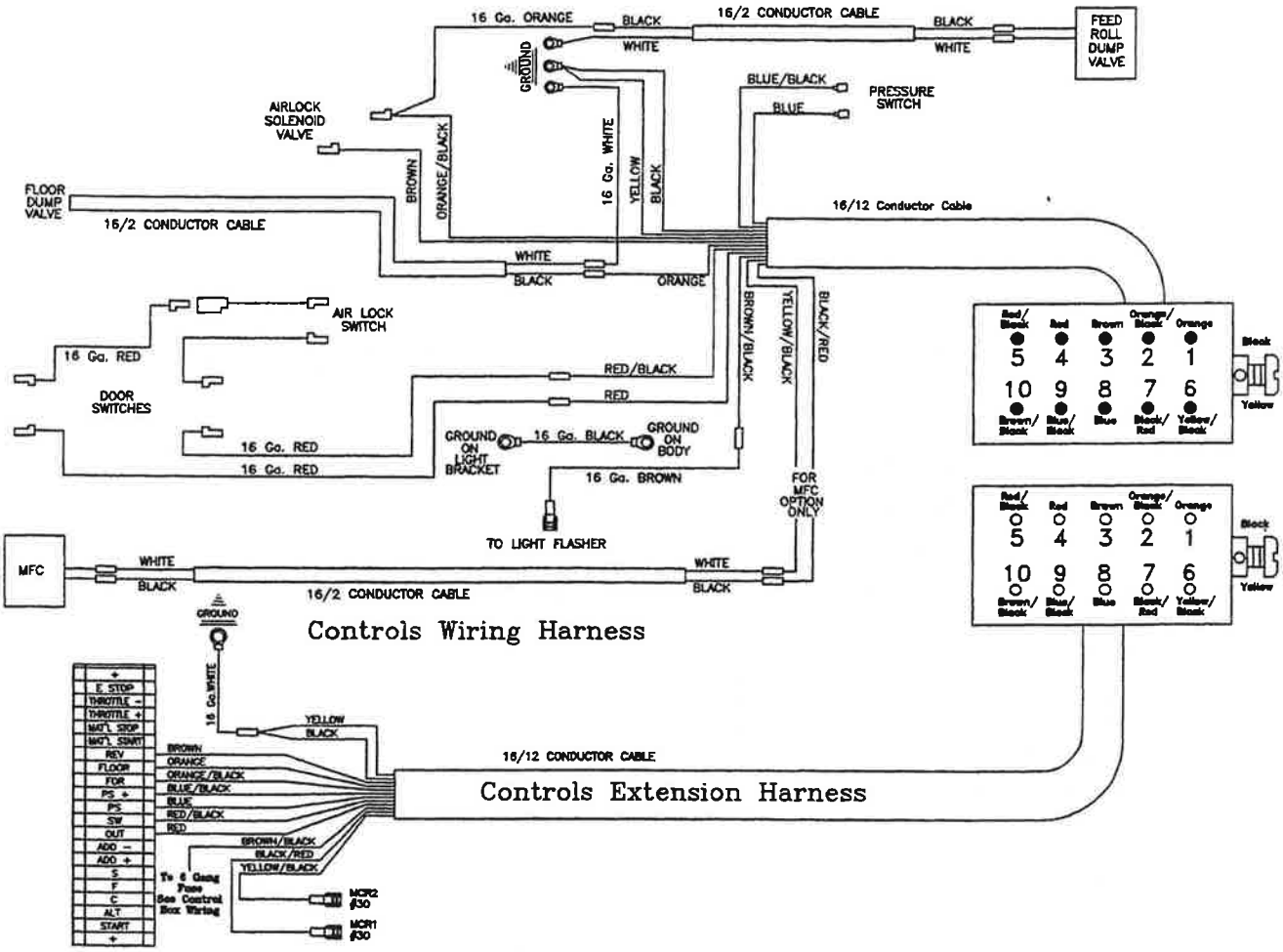


RADIO REMOTE CONTROL WIRING
with MFC

Part Number	Description	No. Req'd
052133T	Radio Remote Controller w/MFC	1
052133B	Radio Remote Receiver	1
052009C	Radio Remote Antenna	1
052112	Toggle Switch	1
080526	Toggle Switch Boot	1
052056-01	Radio Receiver Enclosure	1
052215-01	Radio Remote Control Wiring Harness w/ MFC	1

For radio remote control receiver part numbers and illustration see page 61.

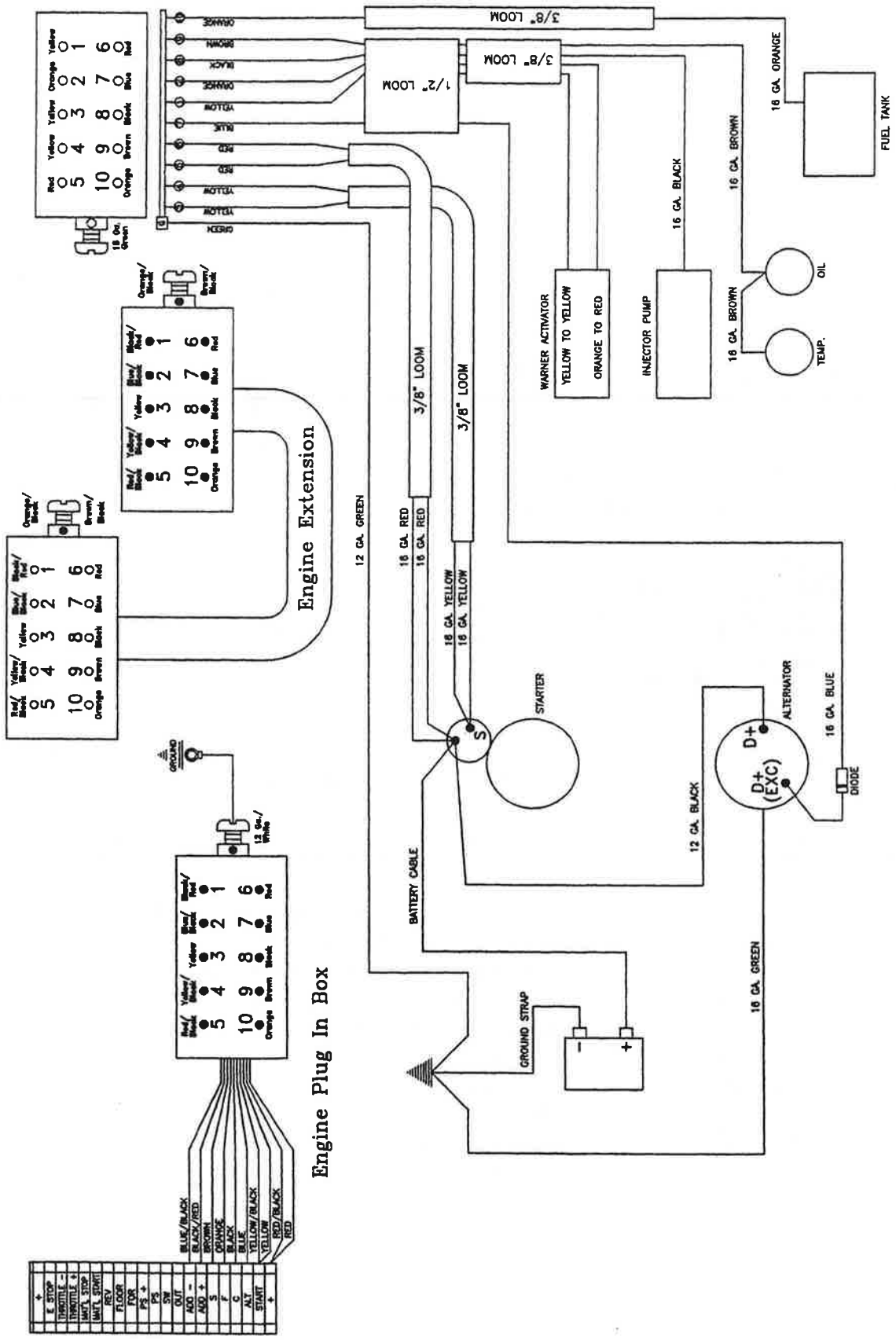
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



CONTROLS WIRING

Part Number	Description	No. Req'd
052213-01	Controls Wiring Harness w/MFC Option	1
052214	Controls Extension Harness	1
005561	Base Mount Housing (Wiring Harness)	1
023604	Hood Cover Housing (Extension Harness)	1
023601	Male Insert Receptacle	1
023602	Female Insert Receptacle	1
055407	Air Lock Door Switch	2
052436	Air Lock Switch (Marine Grade)	1
055115	Solenoid Valve	1
052336	Pressure Switch	1
041163	Floor Dump Valve	1

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

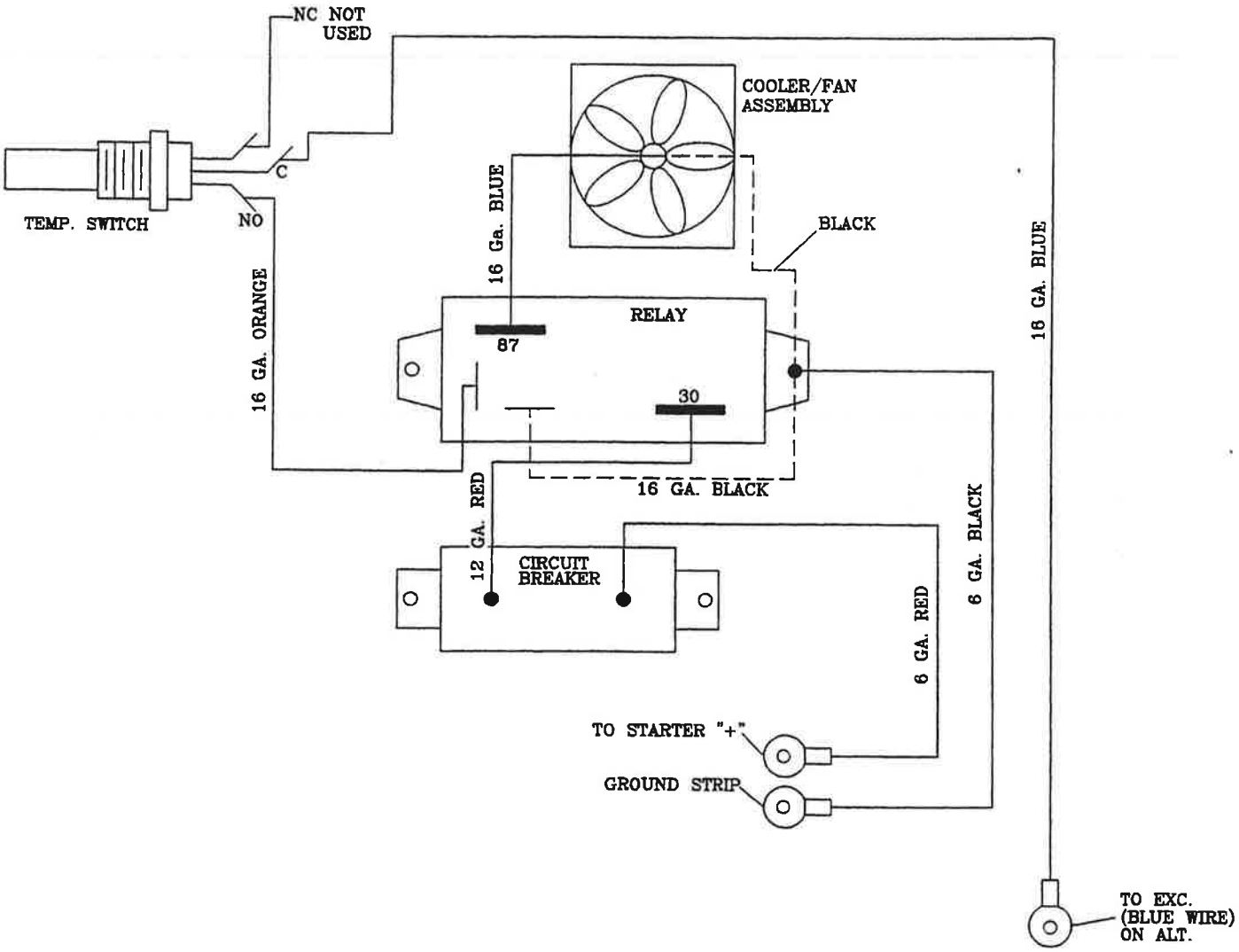


WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

ENGINE WIRING

Part Number (808)	Part Number (818)	Description	No. Req'd
052406	052406	Engine Wiring Harness	1
052419-01	052419-02	Engine Extension Harness	1
005561	005561	Base Mount Housing (Engine Wiring Harness)	1
023602	023602	Female Insert Receptacle	2
023604	023604	Hood Cover Housing (Engine Extension Harness)	2
023601	0223601	Male Insert Receptacle	2
023603	023603	Panel Mount (Control Box)	1
080304	080304	Water Tight Fitting	4
011851	011851	Battery	1
031031	031031	Battery Cable	1
010516	010516	Ground Strap	1
023814	023814	Warner Throttle Actuator	1
055384	055384	Temperature Switch	1
007706	007706	Oil Gauge	1
FW71978	FW71978	Fuel Level Sender	1
022425	022425	Diode	1

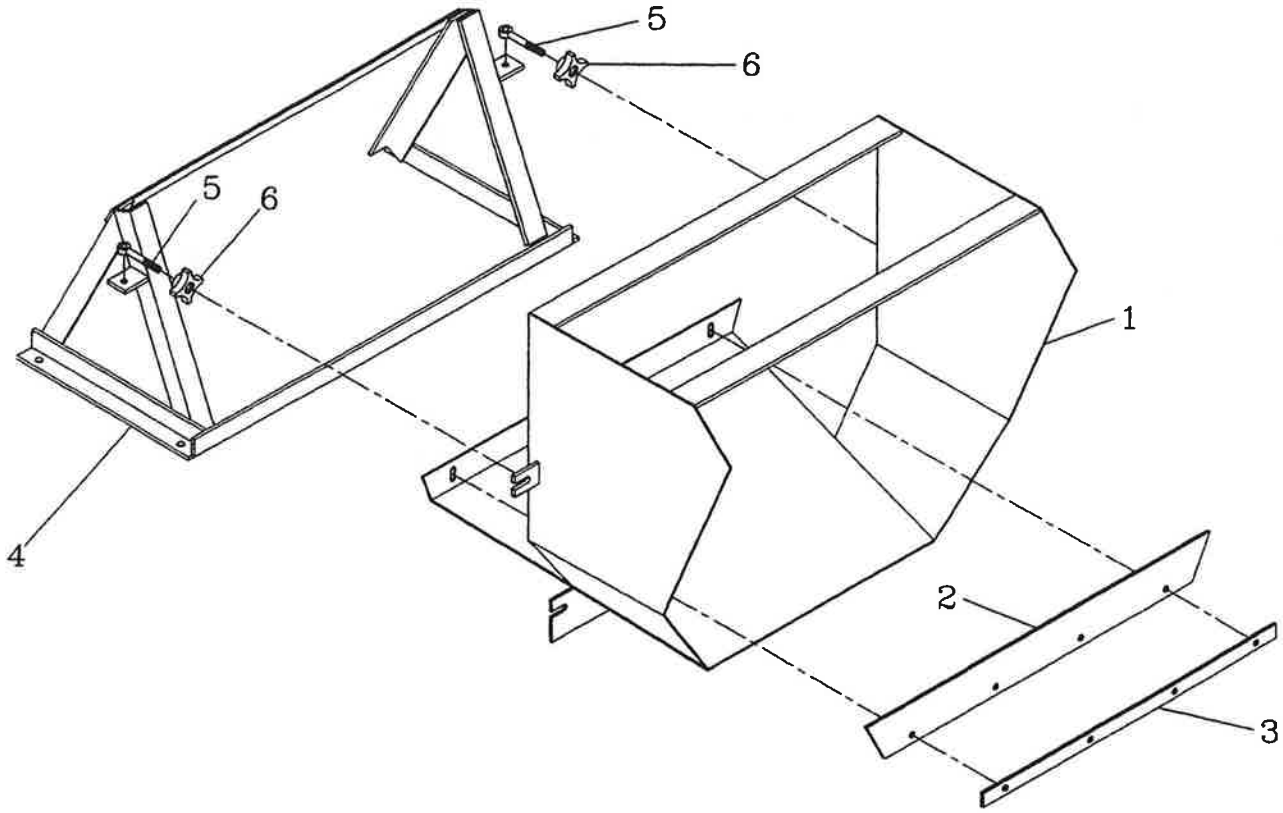
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



COOLING FAN WIRING

Part Number (808)	Part Number (818)	Description	No. Req'd
052407-01	052407-02	Cooling Fan Wiring Harness	1
FW75254	FW75254	Temperature Switch	1
005626	005626	Cooler/Fan Assembly	1
052400	052400	Cooling Fan Mount	1
023438	023438	Rubber Shock Mount	4
FW72063	FW72063	Circuit Breaker	1
FW75307	FW75307	Relay	1

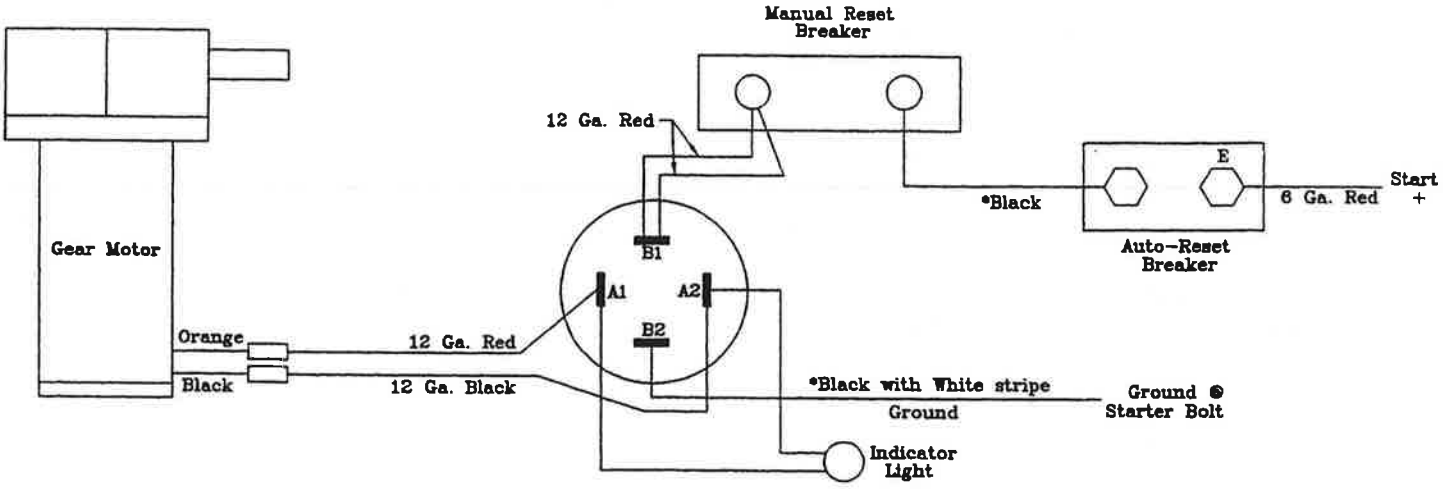
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



QUICK DISCHARGE CHUTE OPTION

Ref. No.	Part Number	Description	No. Req'd
	061011	Quick Discharge Chute Attachment:	1
1	052369	Quick Discharge Chute	1
2	052368-03	Conveyor Seal	1
3	052368-02	Seal Clamping Strip	1
4	052382	Quick Discharge Chute Mounting Frame	1
5	055433	Swing Bolt	2
6	070583	Black Knob	2

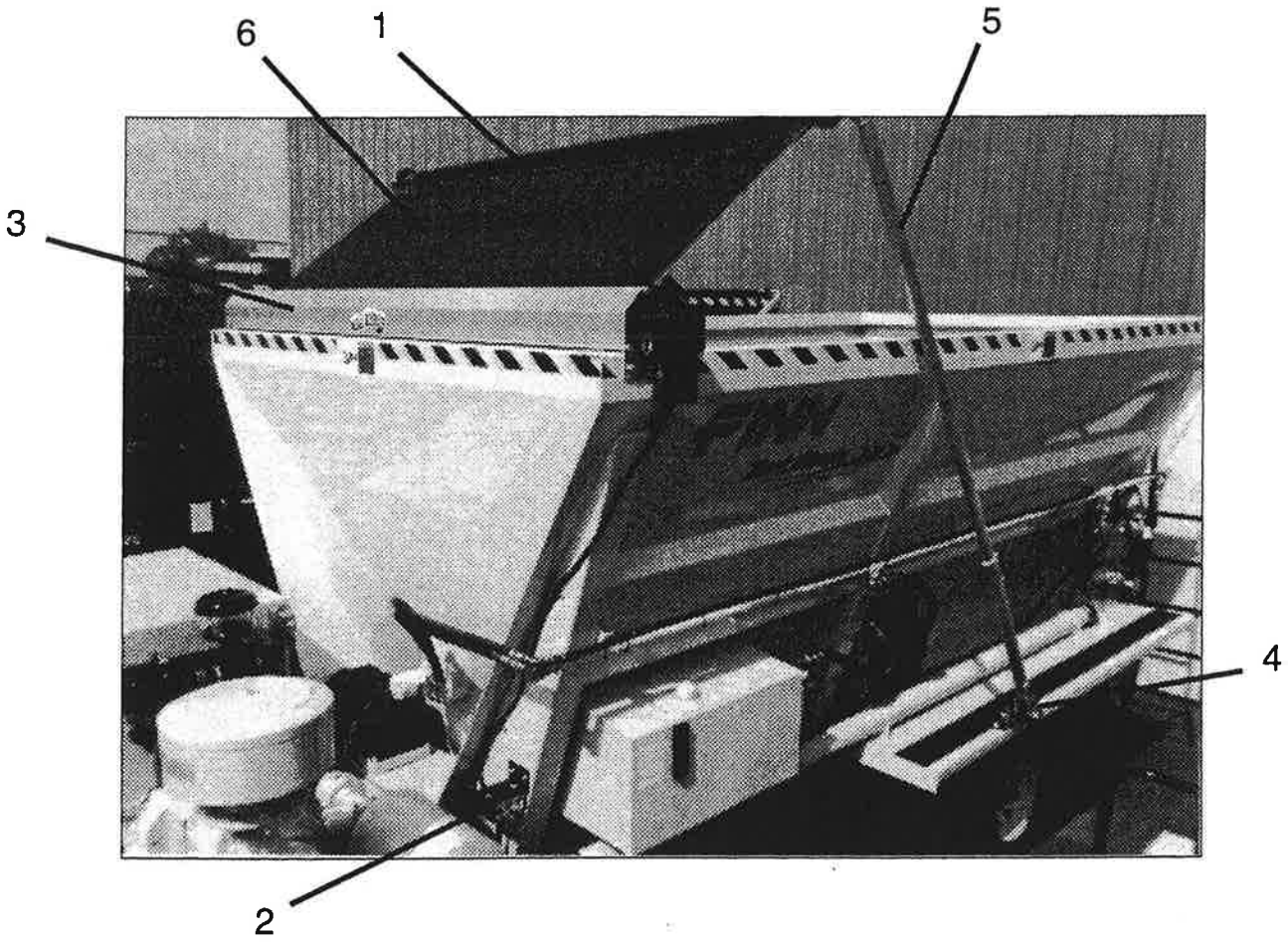
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



TARP WIRING

Part Number	Description	No. Req'd
RR1031	Electric Gear Motor	1
RR1050	Electric Kit (Switch, Mounting Bracket, Ect.)	1

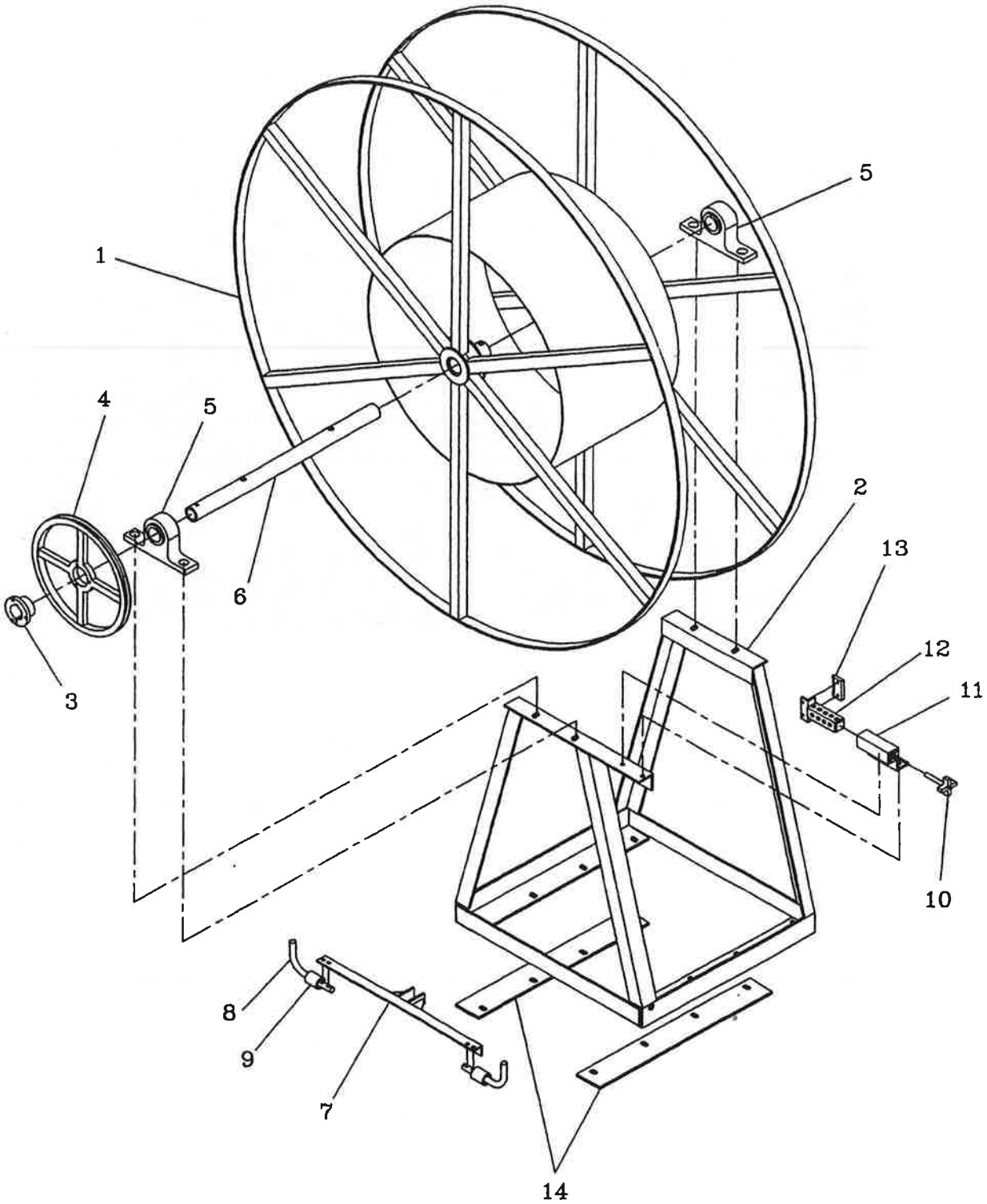
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



TARP ASSEMBLY

Ref. No.	Part Number		Description	No. Req'd
	(808)	(816)		
	052376	052377	Tarp Assembly:	1
1	RR1031		Electric Gear Motor w/Protective Cover	1
	RR102E-08	RR102E-16	Pre-Threaded Aluminum Tarp Axle	1
2	RR1050		Electric Kit (Switch, Mounting Bracket, etc.)	1
3	RR635-W71-3/8	RR635-W71-3/8	Wind Deflector	1
4	RR640-3	RR640-3	3-Spring Pivot Set	2
5	RR670-08	RR670-16	Tarp Bow Set	1
6	64" x 14' KMT	88" x 16' KMT	Knit Mesh Tarp	1

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

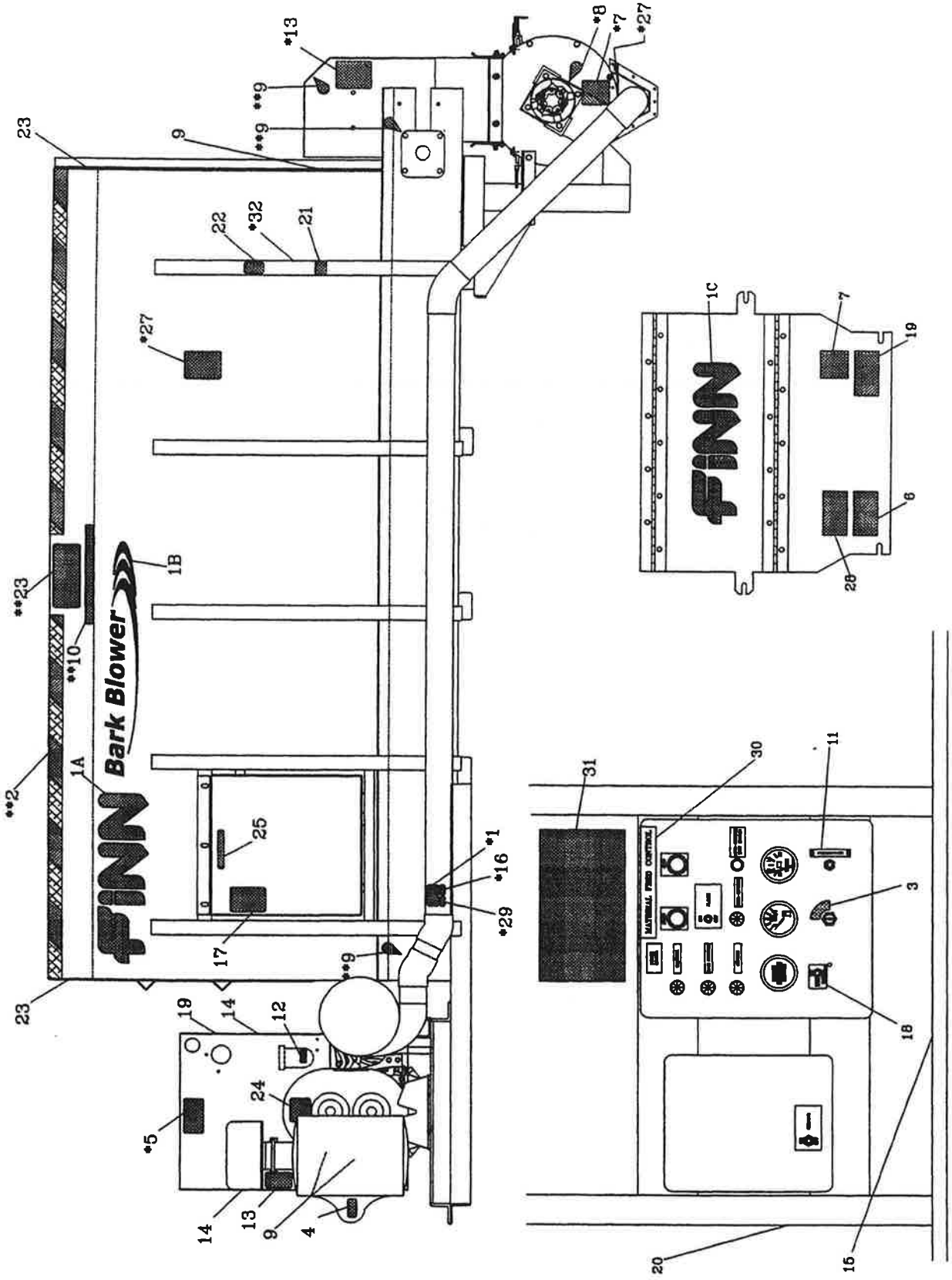


WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

150' HOSE REEL ASSEMBLY

Ref. No.	Part Number	Description	No. Req'd
	052417	150' Hose Reel Assembly includes:	1
1	052416	Hose Reel Drum	1
2	052383	Hose Reel Mounting Frame	1
3	052339	Locking Bushing	1
4	052338	Brake Sheave	1
5	052337	2" Pillow Block Bearing	2
6	052384-01	Drum Shaft	1
7	052350	Hose Reel Lock	1
8	052350-02	Lock Handle	2
9	052384-05	Handle Spacer	2
10	052346-02	Brake Adjusting Knob	1
11	052346-14	Brake Mount LH	1
12	052346-03	Brake Extension Arm	1
13	052347-02	Brake Pad	1
14	052384-06	Reel Mounting Pad	2

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

DECALS

Ref. No.	Part Number	Description	No. Req'd
1	011690	FINN Name Plate	1
1A	023174	"FINN" Decal	2
1B	055639	"Bark Blower" Decal	2
1C	031235	Small "FINN" Decal	1
2	190173	Yellow-Black Warning Tape	40'
3	KL2411303	Decal "IGN" Kohler	1
4	012278	Decal "DANGER! HOT EXHAUST" #SW-7	1
5	012279	Decal "WARNING! RADIATOR" #SW-600	1
6	055219	Decal "DANGER! SHARP KNIFES"	1
7	055280	Decal #SW805 :WARNING OBJECTS MAY BE THROWN"	2
8	007230	Decal "SERVICE DAILY"	1
9	007231	Decal "SERVICE WEEKLY"	9
10	022690	Decal "WEAR EYE PROTECTION"	2
11	007535	Decal "THROTTLE"	1
12	007607	Decal "DRAIN WATER DAILY"	1
13	012179	Decal "WARNING! DO NOT OPERATE WITHOUT"	2
14	012251	Decal "WARNING! ROTATING FAN"	2
15	012260	MAINTAIN SAFETY DECAL PLATE	1
16	020976	Decal "PATENT INFRINGEMENT"	1
17	021665	Decal "HYDRAULIC INSTRUCTIONS"	1
18	022082	Decal "HOLD BUTTON IN"	1
19	022357	Decal "WARNING! TURN OFF ENGINE"	2
20	052170	Decal "FEED ROLL-FOR/REV"	1
21	052171	Decal "GATE-OPEN/CLOSE"	1
22	052172	Decal "FLOOR-FAST/SLOW"	1
23	052177	Decal "DANGER-ROTATING HAZARD"	4
24	052178	Decal "IMPORTANT"	1
25	012272	Decal "HYDRAULIC OIL ONLY"	1
26	023391	Decal "DIESEL FUEL ONLY"	1
27	023519	Decal "CAUTION! WEAR EYE PROTECTION"	2
28	020068	Decal "DANGER! DO NOT OPEN DOOR"	1
29	055216	Decal "PATENT NUMBERS"	1
30	055217	Decal "MATERIAL FEED CONTROL"	1
31	055655	Decal "OPERATING INSTRUCTIONS"	1

Note: Safety Decals Must be ordered as a kit-
Part # 053037

NOTE: 1. * Located on opposite side
** Located on both sides
2. Item 26. Not Shown; Located on fuel tank near fill neck.

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

TOOL KIT

Part Number	Description	No. Req'd
012681A	Spray Paint	1
	Engine Parts Manual	1
	Engine Operators Manual	1
	Blower Operators Manual	1
	Radio Remote Control Manual	1
	Bark Blower Parts/Operators Manual	1

DISCHARGE HOSE

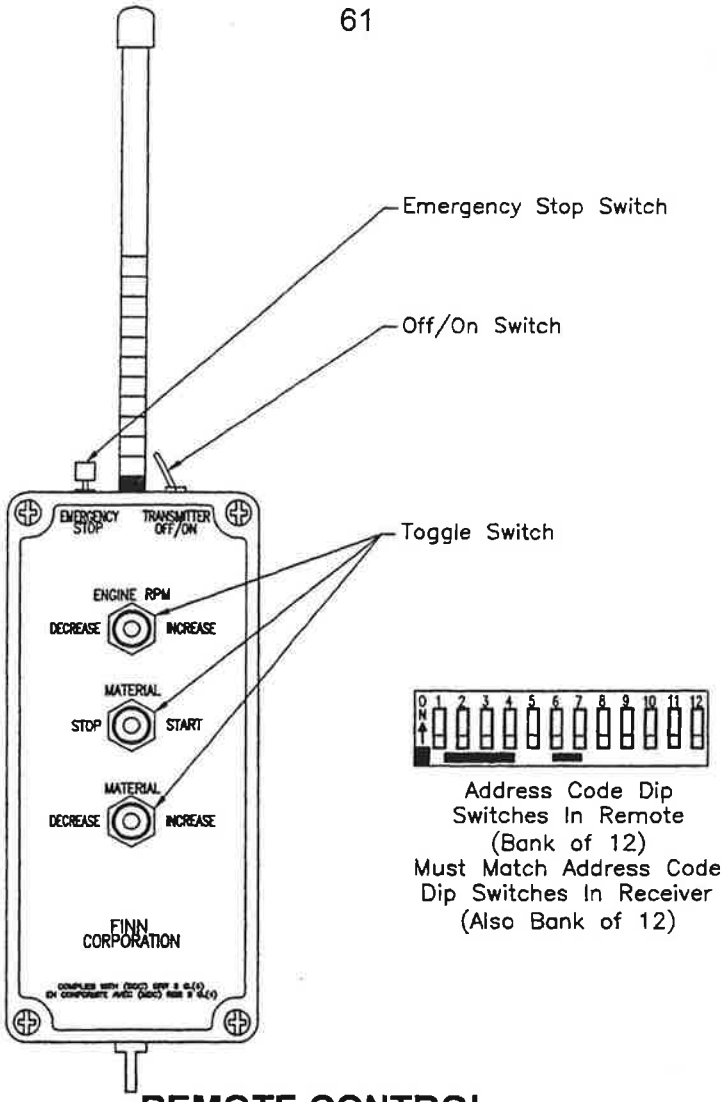
Part Number	Description	No. Req'd
055398B	50' Discharge Hose Assembly	
055399B	100" Discharge Hose Assembly	3
055377	Hose Adapter	4
055304	Clamp	4
055337	Shoulder Strap	1
055374A	Aluminum Adapter	2
055375A	Aluminum Coupler	2

RECOMMENDED SPARE PARTS

Part Number	Description
052004	Blower Filter Element
011869	Hydraulic Oil Return Filter Element
JDRE60021	Fuel Filter
JDRE59754	Engine Oil Filter
JDR123442	Fan Belt
007739	Air Cleaner Element
055113	Air Lock Knives (2 Sets)
055407	Air Lock Door Interlock Switch
052436	Air Lock Discharge Safety Switch

Recommended spare parts are available to help avoid unnecessary down time.

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



REMOTE CONTROL
(3-Function)

Part Number	Description
052133	3-Function Radio Remote Control (complete unit)
052133A	3-Function Hand Radio Remote Controller (Spec Band)
052133T	3-Function Radio Remote Receiver (Spec Band)
052009C	Antenna & Hardware for remote; A003 Antenna, AY135 Hardware
052009D	Female Belt Clip w/ loop
052009E	Toggle Switch
052009F	Emergency Stop Switch
052009G	Belt Clip Set w/Loop
052009H	Cab Clip Set w/o Loop
052009I	Battery Door Clip
052009J	Single Battery Door
052009K	Female Belt Clip No loop (Cab clip)
052009L	Male Belt Clip (No loop)
052009M	Off/On Switch
052009N	Antenna Extension Cable

WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE