



Operator's Manual



SPLIT DRUM VIBRATORY ROLLER MODEL 240V w/ Tow Package

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It is the Operator's Responsibility to READ, UNDERSTAND and Fully COMPLY with all CAUTIONS, WARNINGS, PROCEDURES and OPERATING INSTRUCTIONS outlined within the entirety of this manual.
FAILURE TO COMPLY WILL RESULT IN VOIDING OF WARRANTY

Safety Precautions

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.

WARNING

LETHAL EXHAUST GAS

An engine discharges carbon monoxide during operation which may cause death if inhaled for even a short period of time. Operate only where deadly exhaust can be safely dissipated!

WARNING

DANGEROUS FUEL

Never add fuel to the fuel tank while the engine is operating. Stop engine and allow it to cool thoroughly to prevent fuel from igniting on contact with hot parts.

WARNING

MOVING HOT PARTS

Careless operating of power equipment creates hazards to life and limb. Never operate with safety guards removed. Keep hands, feet, and clothing away from hot parts. Remember that an engine gets hot while operating, and exhaust system components get extremely hot. Never tamper with governor setting to gain more power. The governor establishes safe operating limits. Over speed not only shortens engine life but can be extremely hazardous. Keep people away from the operating area and be especially watchful for children. Stop the engine whenever you leave the machine. Do not allow it to idle unattended.

WARNING

AVOID RUNAWAY

Always engage the parking brake before dismounting the BASIC roller. When parking the machine overnight always park on a level surface when possible and secure the drum with blocks in the front and rear to prevent accidental rollaway. When it is not possible to park on level ground, position the machine at right angles to the slope. Make sure the machine is on a firm footing and that there is no danger of sliding.

- **Never mount or dismount a machine that is moving.**
- **Always maintain control of your machine.**
- **Always operate your machine slowly until you are fully familiarized with its operation.**
- **Constantly check your work area for possible hazards.**

240V FILTER QUICK REFERENCE

QTY	FILTERS	OUR PART #
1	<u>Lenz</u> 10 Micron, screw on, hydraulic return filter	FA10
	<u>Lenz 10 Micron, screw on, hydraulic suction filter</u>	CP-1282-10-50
1	<u>Kubota</u> screw on oil filter	16271-32090
1	<u>Donaldson</u> insertable air cleaner	P821575
1	<u>Kubota</u> screw on fuel filter	70000-43081
1	Hydraulic cap & filler port screen	TFA005715
1	<u>Donaldson</u> high pressure filter	P170311

PRESTART CHECKLIST

NOTE: To assure fluid level readings, be sure the machine is parked on a level surface.

Read Manual thoroughly and fully understand the contents before proceeding.

- **Inspect fuel level and replenish as necessary**
- **Check engine oil level and replenish as necessary to the full mark**
- **Check radiator coolant level and replenish as needed**
- **Check battery cable connections and ensure good contact is being made**
- **Check air cleaner for cleanliness and ensure that components are tight to prevent intake of unfiltered air**
- **Check front of radiator for debris and clean if necessary, Check hydraulic fluid level and replenish as necessary Inspect engine fan, all belts and hoses and adjust or**
- **replace if necessary**
- **Check the sprinkler tank water level and fill if roller is to be used in asphalt**
- **Make a general inspection of the machine for loose bolts and/or components**

CAUTION

Always check ALL fluid levels before starting machine. Perform regularly scheduled maintenance.

STARTING PROCEDURE

- **Engage parking brake**
- **Place the directional/speed control lever in the “park” position**
- **Set throttle control to idle position**
- **Turn key-switch to preheat position and hold for 10 to 15 seconds. If restarting a warm engine, no preheating is required**
- **Turn ignition key to “start” position and hold until engine starts. Release key, it will automatically return to “run” position**
- **Allow engine and hydraulic oil a few minutes to warm before beginning operations**
- **Make sure all personnel and objects are clear from the path of travel**
- **Release parking brake**
- **Slowly move the directional speed control lever to the desired direction of travel**

CAUTION

Never attempt to start the engine except from the operator’s station.

Never attempt to operate the controls except from the operator’s station.

Never mount or dismount a machine that is moving.

STOPPING PRECEDURE

- **Place the directional/speed control lever in the “neutral” position**
- **Engage parking brake**
- **Push engine throttle control to “idle” position Turn ignition key to “off” position**
- **Remove key**
- **Place block in front and rear of drums to prevent movement**
- **Park on level ground whenever possible. When not possible, position the machine at right angles to the slope. Make sure the machine is on a firm footing and that there is no danger of sliding.**

WARNING

Always ensure the machine is parked on level ground and parking brake is secure before dismounting machine.

Specifications

Model 240V Vibratory Roller

Overall Dimensions:

Length: 114"

Width: 47"

Height: 69" w/o ROPS

Height: 96" with ROPS

Weight:

Shipping Weight: 6120lbs.

W/ Tow Package: 6920bs.

Fluid Capacities:

Fuel: 12 US Gallons

Hydraulic: 12 US Gallons

Vibratory System: 3000

VPM rear drum

4000lb compactive weight

Water System:

70 gallon molded plastic tank

Spray Tips

(pressurized/replaceable)

3 On Front Drum

4 On Rear Drum

Travel Speed:

0-7 MPH Forward & Reverse

Steering:

**front drum power steering 30°
left or right from center**

Split Front Drum:

**2-30" diameter drums 18"W
Front Roll Width 36"**

Rear Drum:

30" diameter X 44" wide

Drive System:

**Servo controlled piston
pump**

**Direct drive motor w/
internal brake**

Engine:

Tier 4

**24.9 hp Kubota water-cooled
V1505 4-cylinder diesel
engine**

Tow Package:

**Hydraulically
operated lift system
with trailer light kit.
Rated for 45mph MAX**

OPERATION AT THE JOBSITE

- 1. Follow the instructions in Sections II and III of these operating instructions for prestart and starting procedures**
- 2. Determine the amount of compaction desired and fill the front and rear drum and ballast tanks with water**
- 3. Fill the sprinkler tank with water**
- 4. Position the machine next to the asphalt mat at the desired starting point**
- 5. Before driving the roller onto the asphalt, turn the water valve to the maximum open position and allow the water to completely flood the drums**
- 6. Set the engine throttle at desired RPM for speed and vibration frequency**
- 7. Slowly and steadily drive onto the asphalt**
- 8. Begin rolling the outermost edge of the mat**
- 9. Reduce the water sprinkling flow to the point that asphalt will not stick to the drum**
- 10. When the roller nears the end of its travel, slowly decelerate, and come to a smooth stop**
- 11. Reverse the direction of travel by slowly moving the directional speed control lever and gradually accelerating**
- 12. Gradually turn the steering wheel as the machine moves, to avoid leaving marks in the mat**
- 13. As the machine reverses its direction of travel, steer it so that the machine moves over one half the drum's width per pass**
- 14. Continue this method until an entire section of the mat has been completed**
- 15. Move on to the next section of asphalt and repeat steps 8 through 15 of the section**
- 16. If this unit is equipped with a vibratory system, use the vibratory system for additional compaction where it is needed. **NEVER leave the vibrator on while sitting still. NEVER run the vibratory system on hard surfaces such as cured concrete or asphalt.**

WARNING

NEVER run the vibration system unless the machine is in motion.

NEVER run the vibration system on a hard surface

NEVER tow at a rate of speed that exceeds 45mph.

**FAILURE TO COMPLY WITH ANY OF THESE
WARNINGS WILL VOID WARRANTY OF THIS
MACHINE**

TOW PACKAGE OPERATING PROCEDURE

Overview

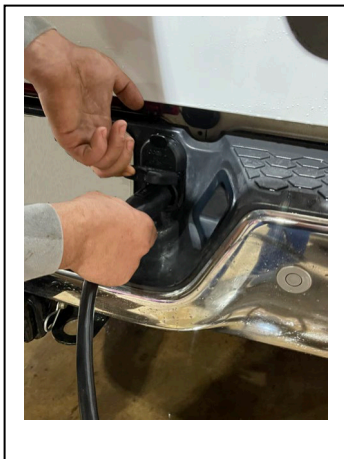
If the machine is equipped with a towing package, the machine may be transported by a suitable transport vehicle to and from the work site. The following requirements and procedures must be met to use this feature safely and effectively without risking bodily injury, harm to life or damage to the equipment.

Tow Vehicle Requirements

- 1) The tow vehicle must be of adequate size and capacity as to handle a minimum of 7,000 lbs. tow capacity**
- 2) Tow vehicle must be equipped with a 7 pole round RV style plug and electric brake control system**
- 3) Tow vehicle must be equipped with a proper hitch system to mate with the machine's tow package hitch equipment.**
- 4) Transport vehicle driver must be properly trained in the operation of the tow package system.**
- 5) The unit should never exceed 45mph tow speed when in tow**

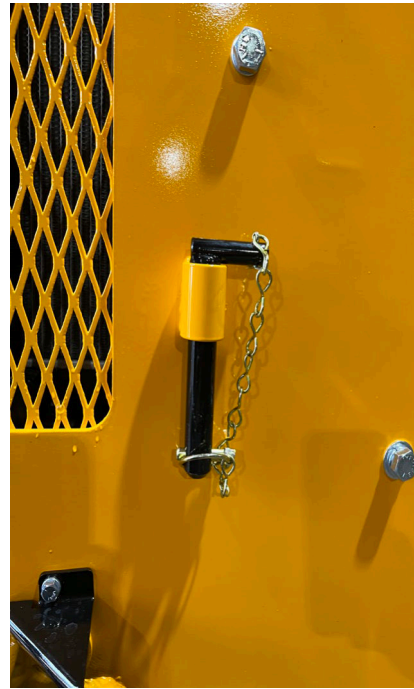
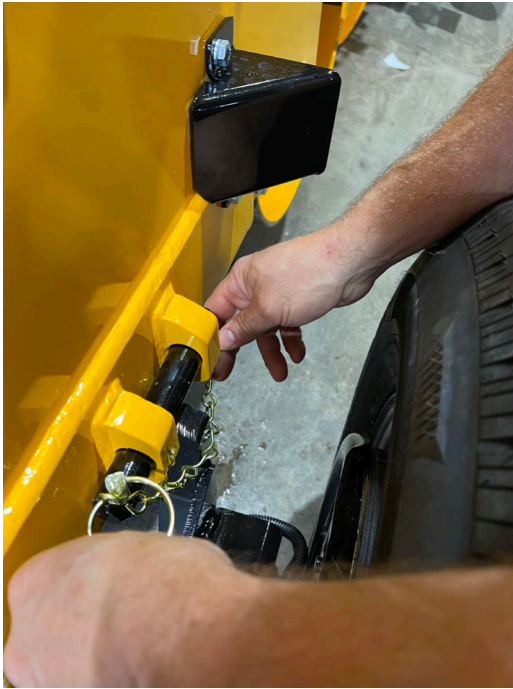
Procedures for CONNECTING to Transport Vehicle

- 1. Machine operator must be fully aware of all hazards and properly trained to operate this Machine safely and efficiently.**
- 2. Park tow vehicle safely on a flat, level surface. Lock the parking brake and block wheels.**
- 3. Adjust the Machine's tow hitch to the proper height to match the tow vehicle.**
- 4. Make sure the tow hitch of the tow vehicle is in the open position.**
- 5. Start the machine. With engine speed at idle speed, slowly approach the vehicle hitch straight on with the Machine. Have the Machine's tongue in the horizontal position.**
- 6. As the operator approaches the tow vehicle, it will be necessary to stop the machine and adjust the tongue elevation using the tongue hydraulic control valve lever in order to engage the hitch of the tow vehicle.**
- 7. When the hitch is properly engaged and secure, set the Machine's parking brake, turn off the engine, safely exit the Machine then lock the hitch, connect safety chains, electrical plug and safety break away cable.**

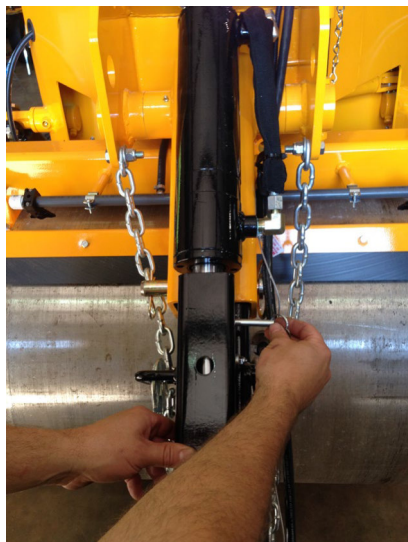


- 8. Board the machine, start the engine at idle, release the parking brake. Using the left and right tow wheel hydraulic control valve levers, evenly lower the tow wheels until the hydraulic tow wheel cylinders are fully extended by moving the levers towards the "DOWN" position.**
- 9. Using the tongue control valve lever, fully extend the tongue cylinder moving the tongue in the downward direction by moving the lever towards the "DOWN" position.**
- 10. Set the parking brake, turn off the engine, and safely exit the machine.**

11. Install both the left and right Lock Pins into Wheel Lock Body Mounts and Install both left and right Latch Pin Retainers



12. Remove the keeper pin from the tongue cylinder safety lock and fold the cylinder safety lock down over the tongue cylinder rod. Re-install the safety lock keeper pin so the cylinder lock cannot disengage the cylinder rod.



- 13. When the Tow Wheel Arm Lock Pins are installed and secured and the tongue cylinder safety lock is properly engaged, board the machine. Do not start the machine. Slowly lower the machine on to the Tow Wheel Lock Stop Pins using the hydraulic control valve levers moving the wheel valve levers towards the “UP” position. Slowly relieve pressure on the tongue lift cylinder until it rests on the tongue cylinder safety lock using the hydraulic control valve levers moving the tongue valve lever towards the “UP” position.**
- 14. Safely exit the machine. Confirm that both Tow Wheel Lock Pins are fully engaged beneath the tow wheel lock stops and the tongue cylinder safety lock is secure over the cylinder rod and against the cylinder tube.**
- 15. Install the front drum sway Stabilizer Pin and Latch Pin Retainers.**



- 16. Re-inspect all connections between the tow vehicle and the Machine. Re-inspect tow wheel locks and tongue cylinder safety lock. Check proper functions of the turn signals, running lights and brake lights, electric brakes and Brake Away System.**
- 17. Verify that the Machine is level behind the tow vehicle and that there is proper clearance between the machine's drums and the road surface. NOTE** If there is not, the machine must be safely disconnected from the tow vehicle and the hitch height must be adjusted to the proper height setting. **See Procedures for Disconnecting from Transport Vehicle instructions.**
- 18. The machine is now safe to transport at speeds not to exceed 45mph.**

Procedures for Safely Towing the Machine

- 1. The driver towing the machine must have experience in safe and proper towing of trailered vehicles.**
- 2. Obey all federal, state, and local traffic laws.**
- 3. Thoroughly inspect the unit to be towed for any safety or towing issues. This would include checking or inspecting conditions of hitch height, tires, electrical wiring, lights, safety chains, break-away switch and cable and looking for any cracks or broken welds in structural members.**
- 4. Be certain there are no loose parts or debris on the machine that may come loose or fly off during transport.**
- 5. Never attempt to connect or disconnect the machine unless you are safely parked on a flat level surface.**
- 6. Follow all procedures in order, outlined in Procedures for CONNECTING to Transport Vehicle section of this manual.**
- 7. Adjust tow vehicle mirrors so the machine is always visible.**
- 8. Never exceed **45 MPH** at any time while towing this unit. Because of the unique circumstances in the design of the "tow package" machines, it is a rigid structure with no suspension whatsoever to absorb impact or rough roadway conditions during transport. The operator should always tow machines with this in mind for the major purpose of safety, but to also care for the machine.**
- 9. The machine should always be towed at a much lower speed on travel ways with potholes, overpasses, speed breakers, railroad/bridge crossings and any other obstacles that could pose danger or cause damage to the machine. Extreme caution should also be used when making sharp turns near curbing, ditches or any other raised or lowered elevations. Failure to heed these warnings could cause risk of bodily injury, harm to life or damage to the equipment.**
- 10. Always avoid making any sudden starts or stops when towing the machine.**
- 11. Always use extreme caution when backing the machine. Avoid blind spots and use a spotter when necessary.**

****FAILURE TO UNDERSTAND AND COMPLY WITH ALL OF THE ABOVE STATED WARNINGS, CAUTIONS, DIRECTIONS AND REQUIREMENTS WILL RESULT IN **VOIDING OF WARRANTY******

Procedures for DISCONNECTING from Transport Vehicle

- 1. Park tow vehicle safely on a flat, level surface. Lock the parking brake and block the wheels.**
- 2. Remove and stow the front drum sway stabilizer pin.**
- 3. Board the Machine, start the engine at idle. Using the left tow wheel and right tow wheel hydraulic control levers, slowly and evenly raise the tow wheels until the hydraulic tow wheel cylinders are fully extended.**
- 4. Using the tongue hydraulic control lever, fully extend the tongue cylinder moving the tongue in the downward direction.**
- 5. Assure the Parking Brake is set. Turn off the engine, and safely exit the machine. Remove both left and right Tow Wheel Arm Lock Pins and stow them in the Lock Pin Holders.**
- 6. Remove the keeper pin from the tongue cylinder lock and fold the cylinder safety lock away from the cylinder rod. Reinstall keeper pin with safety lock secured to the retainer tab and in the down (work) position.**
- 7. Board the machine, start the engine at idle, release the parking brake. Using the tongue hydraulic control lever, slowly retract the tongue hydraulic cylinder until the Machine's front drum sits on the ground and the tongue weight is just off the tow vehicle hitch.**
- 8. Using the left and right tow wheel hydraulic control levers evenly raise the left and right tow wheels in the upward direction until both hydraulic tow wheel cylinders are fully retracted.**
- 9. Set the parking brake and turn off the engine. After engine is off, relieve all hydraulic pressure from the tongue hitch assembly by moving the tongue tow valve lever to the "up" and "down" positions. Safely exit the Machine. Release the tow vehicle hitch lock, disconnect the safety chains, disconnect the electrical connector plug and safety breakaway cable.**
- 10. Board the machine, start the engine at idle and release the parking brake. Using the hydraulic tongue control handle, slowly raise the tongue while slowly reversing away from the tow vehicle.**
- 11. When the machine is clear of the tow vehicle, fully retract the tongue to the upright "work" position and assure that all safety chains, electrical connectors, safety locks and cables are stowed securely on the machine and the unit is ready for work or storage.**