





Product Manual – 5 Foot Zip Cart

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Read this manual in its entirety prior to operation!

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Introduction

Roof Equipment LLC welcomes you to its growing family of new product owners. The 5 Foot Zip Cart has been designed with care and built by skilled workers using quality materials. Proper setup, maintenance and safe operating practices will help you get years of satisfactory use from this machine.

Description of Unit

The Roof Equipment 5 Foot Zip Cart is capable of spraying a 5 feet wide spray pattern of roofing construction adhesive. Each 80lb adhesive tank contains enough adhesive to cover 20 square of roof surface. The cart's 2 tank capacity allows for the coverage of 40 square of roof surface before changing out tanks.

Intended Usage

Use this cart as a pressurized sprayer system to apply roofing construction adhesive only. Do not modify the Zip Cart for use with any other chemical or for any other intended usage.

Models Covered

Roof Equipment 5 Foot Zip Cart

Model # RE-100-05

Using This Manual

This manual will familiarize you with the safety, assembly, operation, adjustments, troubleshooting and maintenance of the Roof Equipment 5 Foot Zip Cart. Read this manual in its entirety and follow the recommendations to help ensure safe and efficient operation.

The information in this manual is current at printing. Some parts may change to assure top performance.

Owner Assistance

If you need customer service or repair parts, contact Roof Equipment LLC. They have trained personnel and repair parts specially designed for Roof Equipment products.

Your machine's parts were specially designed and should only be replaced with Roof Equipment parts. Always use the serial number and model number when ordering parts from Roof Equipment LLC.

Record your sprayer cart model and serial number here for quick reference:

Model Number: RE-100-05

Serial Number: _____

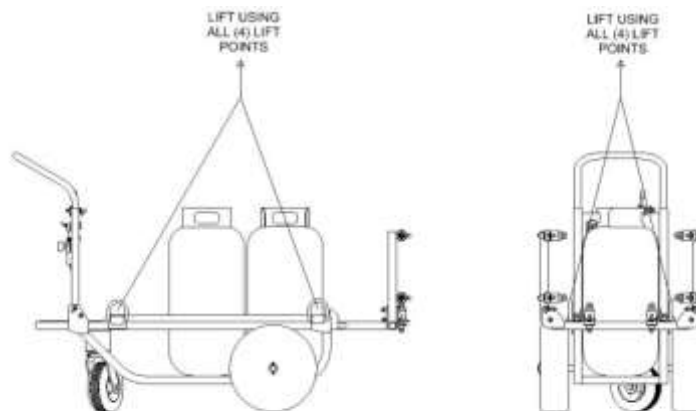
Roof Equipment LLC wants you to be satisfied with your new machine. If you do not understand any part of this manual or are not satisfied with the service received, please contact Roof Equipment LLC:

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Important Safety Information

Transport Machine Safely

- Before transporting the assembled cart to and from the job site:
 - Inspect the fluid adhesive system for leaks and address any that are found.
 - Fold up the sprayer boom arms.
 - Secure the arms by using the provided hardware.
 - Secure the adhesive tanks to the cart using the provided straps.
 - Remove the compressor if equipped with one.
- Before transporting the spray cart to and from the roof:
 - Inspect the fluid adhesive system for leaks and address any that are found.
 - Fold up the sprayer boom arms.
 - Secure the arms by using the provided hardware.
 - Secure the adhesive tanks to the cart using the provided straps.
 - Remove the compressor.
 - Attach the craning hooks to the four lifting points located on the spray cart as shown here:



LIFTING POINTS

Cart Weight: 180lbs
Full Adhesive Tanks: 2 X 100lbs = 200lbs
Total Combined Weight: 380lbs

- Stand clear of the sprayer cart.
- Carefully crane the sprayer cart from the ground to the roof (or roof to the ground).

Wear Protective Equipment

- The operator of this unit, as well as other people working around this unit, need to wear protective clothing and personal protective equipment that will prevent the adhesive sprayed by this unit from coming into contact with the body.
- Steel toe boots should be worn during assembly of this unit.

Handle Chemicals Properly

- Read and follow the chemical manufacturer's instructions.
- Do not smoke or have any open flames near the chemicals.
- Wear protective clothing.
- Handle all chemicals with care.
- Industrial chemicals can be dangerous.
- Improper use can seriously injure persons, animals, plants, soil and property.
- Store or dispose of unused chemicals as specified by the chemical manufacturer.
- Do not touch sprayer components with mouth or lips.
- If chemical is swallowed, carefully follow the chemical manufacturer's recommendations and consult with a doctor.
- If persons are exposed to a chemical in a way that could affect their health, consult a doctor immediately with the chemical label or container in hand. Any delay could cause serious illness or death.
- Dispose of empty chemical containers properly.
- Wash hands and face before eating after working with chemicals.
- Spray only with acceptable wind conditions that permit the controlled application of chemicals.
- Make sure wind drift of chemicals will not affect any surrounding land, people or animals.

Keep Riders Off Machine

- This unit was designed to be used only for its intended purpose. It was not designed to transport other cargo or people.

Stay Off This Unit!

Be Aware of Your Changing Work Environment at All Times

- Be constantly aware of your surroundings.
- Know where the edges of your work environment are.
- Remove all obstacles and hazards from your work area that you can.
- Make note of any obstacles or hazards that cannot be removed.
- Continually scan your travel path to prevent trips and falls.

Safety at All Times

- Thoroughly read and understand the instructions in this manual before operation.
- Only properly trained personnel should operate this unit.
- Be familiar with the Zip Cart's function.
- Operate the unit from the operator's station only.
- Follow the manufacturer's safety guidelines for the compressor.
<https://servicenet.dewalt.com/Products/Detail/DCC2560T1#>
- Chalk the wheels of the spray cart when unattended.
- Do not use heating bands on the adhesive tanks.
- Do not use on a roof that has a pitch greater than 1/12.

Preparation and Setup

Follow these directions for proper unpacking and assembly of the unit. Doing so will help to ensure the unit performs to the highest of service standards.

Unpacking the Unit

The unit is shipped pre-assembled with the exception of the wheel and tire assemblies and windscreen.

Assembly

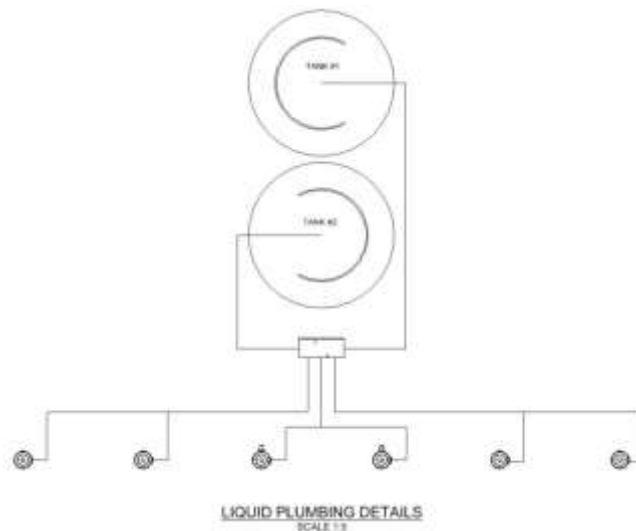
Follow these directions for proper assembly:

- 1) Wheel and hub assembly installation:
 - a) Use an appropriate lifting device to lift the spray cart high enough so that the front tires can be installed.
 - b) Install the front tire and hub assembly on the axle.
 - c) Install a flat washer on the axle.
 - d) Install a cotter pin through hole in the axle end.
 - e) Repeat this for the other side.
 - f) Bolt on the rear caster assembly.



- 2) Lower the boom assembly:
 - a) Lower the boom assembly and install locking hardware.

- 3) Windscreen assembly:
 - a) Install the windscreen as shown in the Diagrams & Spare Parts section of this manual.
- 4) Compressor installation:
 - a) Unpack the compressor.
 - b) Place the compressor on the cart frame deck.
 - c) Secure the compressor to the cart using the provided strap.
 - d) Connect to the air system via the quick connect fitting.
 - e) Fully charge the compressor batter prior to use.
- 5) Adhesive tank installation:
 - a) Set the tanks on the spray cart with the tanks oriented as illustrated below:



- b) Separate the swivel fittings located on the end of the tank hoses.
- c) Thread the tank side fittings on to the tanks.
- d) Thread the hose swivel fittings on to the installed tank fittings.

Setup

Follow these directions for proper setup:

- 1) Air system setup and check:
 - a) Set the spray cart air pressure regulator to 60 psi.
 - b) Set the air compressor regulator to 80 psi.
 - c) Ensure the compressor battery is fully charged prior to operation.
 - d) Turn on the air compressor.
 - e) Turn on the spray nozzles at the control panel by flipping the individual toggle switches to the on (down) position.
 - f) Move the joystick at the control panel to the "ON" position.

- g) Allow the air system to fully pressurize.
- h) Check for leaking air system hoses and fittings.
- i) Address any leaks in the air system.
- j) Move the joystick at the control panel to the off (left) position.
- 2) Fluid system setup and check.
 - a) Turn on the adhesive tank valves to pressurize the fluid adhesive system.
 - b) Allow the fluid adhesive system to fully pressurize.
 - c) Check for leaking fluid adhesive hoses and fittings.
 - d) Address any leaks in the fluid adhesive system.
- 3) Compressor battery check
 - a) Ensure the rechargeable air compressor battery is fully charged prior to operation.
- 4) Verify that the windscreen will not contact the roofing material or applied adhesive as the Zip Cart is being pulled. Trim the membrane portion of the windscreen as necessary to prevent contact. New windscreen membranes can be cut from common roofing membrane material.

Operation

Guidelines

1. The unit and components need to be brought to a minimum temperature of approximately 70 degrees F before use. (Power Blankets for heating the unit can be purchased from Roof Equipment LLC.)
2. The unit should not be used to apply adhesive below the ambient air temperature threshold designated by the adhesive manufacturer. (normally 25 degrees F)
3. The unit should not be used at wind speeds that prohibit the even distribution of adhesive. (normally over 30 mph)
4. Follow adhesive manufacturer's guidelines regarding application in wet conditions.
5. Keep the tires as free of adhesive buildup as possible.
6. This machine should not be used with less than 2 adhesive tanks in operation.
7. **Do not depressurize the fluid adhesive system for more than 20 minutes.** Doing so will allow the fluid adhesive to harden within the system. If this happens, see Troubleshooting for actions to take. Keep the fluid adhesive system pressurized during normal operation and storage.

Operation

1. Peel off any dried residual glue from the spray nozzles. (Never put an object into the spray nozzle opening to unclog it. See Troubleshooting)
2. Ensure the rear wheel caster assembly is oriented correctly so that the spray cart will track straight immediately.
3. Turn on (down) the spray nozzles you want to use by engaging the corresponding toggle switches at the control panel.
4. Use the joystick at the control panel to pressurize and depressurize the air system to control the flow of adhesive from the nozzles. Move the joystick to the "ON" position when ready to move the cart to spray adhesive.
5. Pull the cart at the pace necessary to apply the adhesive manufacturer's recommended amount of adhesive. (Often approximately 100 feet per minute.)
6. Move the joystick to the "Off" position when finished with the spray pass.

Troubleshooting

If the unit is not functioning properly, use the following steps to attempt to fix the problem.

1. Check that the adhesive tank valves are turned on.
2. Check the adhesive system for leaking hoses or fittings.
3. Check that the air pressure system is on, the air compressor regulator is set to 80 psi and that the spray cart air pressure regulator is set to 60 psi.
4. Check all air pressure system components for leaks.
5. Check that there is air pressure to the spray nozzles.
6. If the spray nozzles are obstructed, depressurize the fluid adhesive system and remove the obstructed nozzle. Clean the nozzle using a solvent or cleaner prescribed by the adhesive manufacturer.
7. If the nozzle does not perform satisfactorily after cleaning, replace the nozzle. (See Diagrams & Spare Parts List)
8. If the fluid adhesive system is going to be depressurized longer than 20 minutes, the fluid adhesive system needs to be flushed with the adhesive manufacturer recommended solvent and flushing procedure.

Maintenance

- **Keep the fluid adhesive system pressurized during storage.**
- Keep the tires as clean and free of adhesive buildup as possible.
- Lubricate the wheel hub assembly annually.
- Lubricate the caster assembly annually.
- Check the air regulator weekly for fluid buildup. Drain as needed.
- Make sure air and fluid adhesive hoses are not pinched when folding the boom.
- Follow the compressor manufacturer's guidelines for compressor operation and maintenance.
<https://servicenet.dewalt.com/Products/Detail/DCC2560T1#>
- Remove the compressor from the cart when the cart is not in use to prevent exposure to inclement weather.

Specifications

Cart Measurements: See Diagrams & Spare Parts List.

Spray Pattern Width: 5 feet

Cart Spray Capacity (2 tanks): 40 square

The Roof Equipment 5 Foot Zip Cart is guaranteed to be free of defect in original material and workmanship.

Diagrams & Spare Parts List

See Attached Drawings & Diagrams

ROOF EQUIPMENT LLC 5 FOOT ZIP CART PRODUCT MANUAL

Item		Qty.	Part Number	Description	Fin. Wt.	Dwg. No.
1	2	2		PLATE, 0.100" 5052 AL., 9 5/16" X 22"	4 lbmass	
2	2	2		PLATE, 0.125" TYPE 304 S.S., 1 1/4" X 22"	2 lbmass	
3	2	2		PLATE, 0.250" TYPE 304 S.S., 1" X 8 5/8"	1 lbmass	
4	2	2		0.063" THICK RUBBER SHEET, 5" X 23"	0 lbmass	
5	10	4		HEX HEAD CAPSCREW, 1/4-20 X 3/4 IN LONG	0 lbmass	
6	4	24		HEX HEAD CAPSCREW, 0.375 - 16 X 1 IN.	0 lbmass	
7	24	8		FLAT WASHER, 1/4"	0 lbmass	
8	8	10		FLAT WASHER, 0.375 IN.	0 lbmass	
9	10	4		LOCKNUT, NYLON INSERT, 1/4 UNC	0 lbmass	
10	4	11		LOCKNUT, 0.375 IN.	0 lbmass	
11	2	12		UBOLT, STEEL, 1/4-20 X 1-1/4" INSIDE X 2"	0 lbmass	
12	4			STEEL ROUND KNURLED KNOB, 0.25-20	0 lbmass	

TOP VIEW
SCALE 1:5

SIDE VIEW
SCALE 1:5

END VIEW
SCALE 1:5

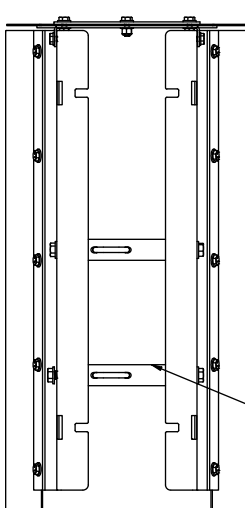
ISO VIEW

REV	DESCRIPTION	DATE	BY	CKD	BY
1	CHANGED HOLES TO SLOTS IN ITEM #3	12/31/2019	RLP	RLP	

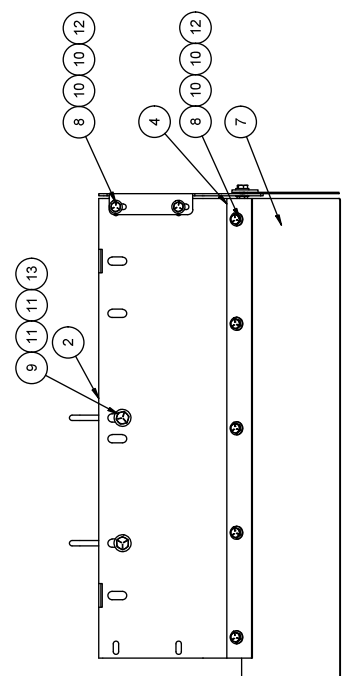
REVISION	DESCRIPTION	DATE	BY	CKD	BY
1	WINDSCREEN, CENTER SECTION, 5 FT. CART				
PART NUMBER: RE004-100					
SHEET 1 OF 2					

ROOF EQUIPMENT LLC

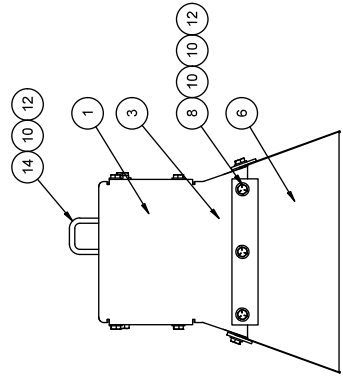
Bill Of Materials			1		
Item	Qty.	Part Number	Description	Fin Wt	Dwg. No.
1	1		PLATE, 0.100" 5052 AL., 7 7/8" X 8 5/8"	1 lbmass	
2	2		PLATE, 0.100" 5052 AL., 9 5/16" X 22"	4 lbmass	
3	1		PLATE, 0.125" TYPE 304 S.S., 1 1/4" X 7"	0 lbmass	
4	2		PLATE, 0.125" TYPE 304 S.S., 1 1/4" X 22"	2 lbmass	
5	2		PLATE, 0.250" TYPE 304 S.S., 1" X 8 5/8"	1 lbmass	
6	1		0.063" THICK RUBBER SHEET, 4 3/8" X 11 1/2"	0 lbmass	
7	2		0.063" THICK RUBBER SHEET, 5" X 23"	0 lbmass	
8	17		HEX HEAD CAPSCREW, 1/4-20 X 3/4 IN LONG	0 lbmass	
9	4		HEX HEAD CAPSCREW, 0.375-16 X 1 IN.	0 lbmass	
10	38		FLAT WASHER, 1/4"	0 lbmass	
11	8		FLAT WASHER, 3/8"	0 lbmass	
12	17		LOCKNUT, NYLON INSERT, 1/4 UNC	0 lbmass	
13	4	100008	LOCKNUT, 0.375 IN.	0 lbmass	
14	2		UBOLT, STEEL, 1/4-20 X 1-1/4" INSIDE X 2"	0 lbmass	
15	4		STEEL ROUND KNURLED KNOB, 0.25-20	0 lbmass	




TOP VIEW
SCALE 1:5



SIDE VIEW
SCALE 1:5




END VIEW
SCALE 1:5



ISO VIEW

REV	DESCRIPTION	DATE	BY	CKD	RLP
1	CHANGED HOLES TO SLOTS IN ITEM #5	12/31/2019			

DRAWN BY	RPL	10/18/2019	12 LB	RE004-200	1
CHECKED BY	RLP				
SCALE	AS SHOWN				
DESCRIPTION	WIND SCREEN ROOM SECTIONS, 5 FT CART				
REVISION DESCRIPTION	SHEET 1 OF 3				



ROOF EQUIPMENT LLC

