

SpeedClean®

Innovative Maintenance Tools.

MODEL

CJ-200E

CoilJet® Portable
HVAC Coil
Cleaning System



SPEEDCLEAN®

OPERATING & MAINTENANCE INSTRUCTIONS

U.S. Patent: 9,381,549

Thank you for purchasing this SpeedClean CJ-200E CoilJet® Portable HVAC Coil Cleaning System. We appreciate your business and look forward to serving you in the future. As with all SpeedClean products, you can be assured that the finest quality components and workmanship have gone into this unit.

Please take a few minutes to read the following Operating and Maintenance Instructions. By carefully following these instructions, you will obtain years of trouble free service from this product. Please pay particular attention to the safety instructions and exercise caution when using this product.

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Limited Warranty

This unit has been carefully tested and inspected and is warranted to be free from defects in material or workmanship. The company will, under this warranty, repair or replace any parts which prove, upon examination, to be defective. This warranty is valid for one year from date of purchase by original purchaser.

This warranty excludes accessories, unusual wear, abuse, damage resulting from an accident, or unreasonable use of this machine. It is recommended that any repairs be done by SpeedClean as improperly performed repairs will void the warranty.

For repairs or warranty information DO NOT contact the place of purchase. Call SpeedClean Customer Service at (888) 700-3540.

To obtain warranty service a proof of purchase is required and the unit must be returned freight prepaid. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. SpeedClean reserves the right to improve products. Contact the factory for the latest configuration and uses.



Read and understand all instructions before using the unit. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.




Save these Instructions!!

- Always check the unit, hoses, fittings, etc. before each use.
- Do not fill with gasoline or any other flammable liquid. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- Make sure that there is adequate ventilation in the work area.
- Stay alert, watch what you are doing and use common sense when operating this unit.
- Keep bystanders, children, and visitors away while operating this unit.
- Turn unit off and relieve pressure in the hose when done.
- Do not use while tired or under the influence of drugs, alcohol, or medication.
- Be careful — a fully filled unit is heavy! Do not make any sudden movements when using this unit with the shoulder strap.
- Do not overreach or stand on unstable support. Keep proper footing and balance at all times.
- Wear rubber gloves, rubber boots, goggles or face-shield, etc. Detergents and chemicals may cause injuries to the eyes and skin. Protect yourself from direct skin contact with the chemicals and debris found in the coil cleaning environment.
- **Do not use any acid or cleaners that contain sodium or potassium hydroxide!** Call SpeedClean to check compatibility before using any chemical in the CoilJet®.
- **Do not mix chemicals!** Mixing incompatible chemicals may cause damage to the unit or cause dangerous, life-threatening chemical reactions.
- Do not use the unit if it does not operate properly or has been damaged. Do not try to service the unit yourself — call SpeedClean for assistance. Service must be performed only by qualified repair personnel. Service performed by unqualified personnel could result in a risk of injury and voids the warranty.
- Never point the spray gun at anyone. Do not direct stream at eyes or mouth.
- Always turn machine off after use or when tank is empty. Do not spray the unit with water or chemicals.
- Do not allow the unit to freeze or leave in freezing temperatures.
- Do not use water with a temperature of more than 140°F (60°C).
- Use only approved accessories and replacement parts.
- Follow maintenance procedures outlined in this manual.

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether the outlet is properly grounded.

DO NOT USE ANY TYPE OF ADAPTOR WITH THIS PRODUCT.

GUIDE TO GRAPHICAL SYMBOLS		
		
Read all instructions	Eye protection required	High Pressure Output. Direct spray away from persons, pets, equipment, and electrical outlets.

Ground Fault Circuit Interrupter Protection

The COILJET® is provided with a ground fault circuit interrupter (GFCI) built into the power supply cord. This device provides additional protection from the risk of electric shock. Should replacement of the plug or cord become necessary, use only identical replacement parts that include GFCI protection.

Extension Cords: Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from the product. Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking, "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the products. Do not use damaged extension cords. Examine extension cord before using and replace if damaged. Extension cords are not protected by the GFCI. A GFCI must be present on the power cord or a GFCI must be present in the outlet.

Do not abuse extension cord and do not yank on any cord to disconnect. Keep cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

WARNING: To reduce the risk of electrocution keep all connections dry and off the ground. Do not touch plug with wet hand.

Wear proper clothing: Protect yourself! Wear rubber gloves, rubber boots, etc. Wear eye and face protection, goggles or face-shield. Coil cleaning chemicals may cause injuries to the eyes and skin. Protect yourself from direct skin contact with the chemicals found in this environment. Remember that water splatter can send these chemicals toward you, so, again, protect yourself.

Environment: Make sure that there is adequate ventilation into the work area. Do not operate machine in areas where flammable gases or liquids are present.

Changing hoses and/or nozzles: ALWAYS turn machine off when changing hoses or nozzles. Never hold onto nozzle or point it at anyone with machine turned on. High-pressure water streams can cause serious bodily injury.

Job completion: Always turn machine off before disconnecting water supply. Running a water pump "dry" may cause serious damage.

Maintenance: Keep machine clean and dry to maximize performance and longevity. Follow maintenance outlined in this manual, such as checking for weak spots, leaks, slices or cuts in hose, replace nozzles when worn. Keep antifreeze in hose & pump when storing in freezing temperatures. Additional maintenance details follow in this manual. If the machine does not operate properly or has been damaged or exposed to water, call the factory for assistance — do not try to service the unit yourself.

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Parts Breakdown

- 1. 9647-1-G Cap
- 2. CJ2-01-S Water/ Chemical Tank
- 3. CJ2-14-S-ASSM Shoulder Strap
- 4. 8940-200E-20FT 20 ft (6 meters) Self-Coiling Hose
- 5. CJ2-22 Power Switch
- 6. 8943-RB Spray Gun with Quick Connect
- 7. Spray Nozzles:
Yellow: 15° Fan
CJ-QDN-15025Y
Green: Soap Nozzle
CJ-QDN-2508G
- 8. 8933-ASSEMBLY Chemical Valve Assembly



Common Optional Accessories

90° SPRAY WANDS	
8945-24	24" (61 cm)
8945	36" (91 cm)
8945-48	48" (122 cm)
8945-60	60" (152 cm)
8945-FLEX-24	Flexible 24" (61 cm)

OPTIONAL NOZZLES ACCESSORIES	
CJ-QDN-0003-R	Size 3 Pinpoint
CJ-QDN-90	90° Adapter
CJ-QDN-45	45° Adapter

OTHER ACCESSORIES	
CJ2-05-115	Motor/ Pump
CJ2-07	Chemical Check Valve
CJ2-07-1	Water Check Valve

Pre-Operation Checklist

- Check for adequate water and chemical cleaner supply (use only mild cleaners).
- Check spray nozzles and make sure orifice is not blocked or worn to excess.
- Check pressure hose for wear or kinks.
- Check all connections, fittings, screws and fasteners.

Normal Coil Cleaning Operation

1. The COILJET® is a very versatile machine and has two operational modes. It is equipped with an Auto-Shut-Off function. When the trigger is released the pump turns off and comes on when the trigger is pulled. Please remember to turn main switch off when done.
2. Fill the water and chemical tanks. Before priming the pump, make sure chemical valve is fully closed.
3. The COILJET® is equipped with a two position water valve. Set the chemical valve to the "Off" position and set the water valve to "Tank" for on-board water or "Garden Hose", as appropriate.
4. Plug the 3-prong male GFCI plug into a normal AC power outlet (110-volt, 60 hertz) and depress the GFCI reset button. The COILJET® will be ready to operate when you flip the power switch to the "On" position.
5. For best results and maximum self-contained operation time, it is advisable to fully prime the pump before normal operation. Remove any nozzle that may be attached to the spray gun. Squeeze the spray gun trigger to prime the pump until steady flow of water appears.
6. NOTE: If you are having trouble priming the pump, make sure the water tank is fully filled or garden hose is attached to it, place the unit on a table or support, hold the spray gun below the level of the pump and squeeze the trigger until a steady flow of water appears.
7. When switching between "Garden Hose" and "Tank", it is best to re-prime the pump.
8. Fully open the chemical valve (counter-clockwise). Squeeze the spray gun trigger repeatedly until chemical is primed.
9. The COILJET® comes with 2 quick-connect nozzle attachments:
 - Yellow Rinsing Nozzle – a 15° fan-spray high-flow rinsing nozzle.
 - Green Soap Nozzle – a 25° nozzle to apply soap to coils.
10. Attach nozzle to spray gun.
11. Apply water/chemical solution evenly to coils.
12. Close the chemical valve finger tight (clockwise). Do NOT overtighten.
13. If possible, let foaming coil cleaner solution sit for the recommended dwell time (according to chemical instructions) to penetrate into coils.
14. Rinse coils with clean water.
15. *NOTE: There may be a ten second delay for the chemical to be removed from the hose.
16. When done using the COILJET®, make sure the power switch is in the "Off" position. This is to prevent accidental discharge from the spray gun.
17. After shutting off the power, always relieve the pressure by pointing the spray gun lance in a safe direction and squeezing the spray gun trigger.
18. Adjust chemical valve to desired dilution ratio (see table below).

Chemical Dilution Ratios

Turn Chemical Valve counter-clockwise to open, clockwise to close.

1 Turn Open	= 30:1	3 Turn Open	= 6:1
2 Turns Open	= 20:1	Full Open	= 4:1
2.5 Turns Open	= 10:1		

Water Sources

The CJ-200E give you the option to use either on-board water supply or garden hose supply. To use the on-board water supply, turn the knob to the "Tank" position as shown. Fill the tank with water, then prime the unit and then equip the nozzle necessary for cleaning. (Please see Normal Coil Cleaning Operations for priming instructions).



To use the garden hose water supply, turn the knob to the "Garden Hose" position as shown. Securely connect the garden hose to the garden hose fitting on the side of the unit, then turn on the water supply. Prime the unit and equip the nozzle necessary for cleaning. (Please see Normal Coil Cleaning Operations for priming instructions).

Warnings

The motor is equipped with an automatic shut-off that disconnects power when the spray gun trigger is released. The unit may appear to be "off" (not running), but if the power switch is on or the system pressure is not relieved the unit will discharge when the spray gun trigger is squeezed. Do not leave the unit in automatic shut-off condition for more than 10 minutes.



The cords, wires, and/or cables supplied with this product may contain chemicals, including lead or lead compounds, known to the State of California to cause cancer and birth defects or other reproductive harm. Always wash hands after using.

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General Maintenance & Storage

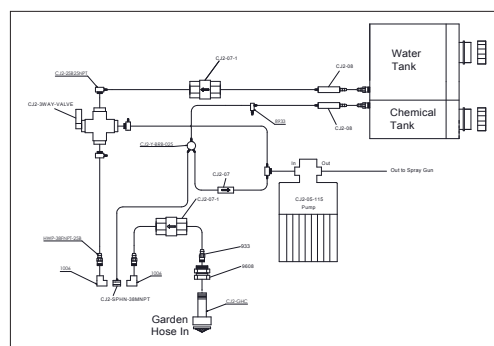
1. When done using the unit, run clean water through the pump.
2. Protect unit from freezing temperatures. Do not store unit outdoors.
3. The unit can be stored above freezing temperatures for short periods of time (less than 1 week) with liquid in the tanks.
4. To protect the unit from damage, chemical and water should be drained from the tanks and the pump and chemical valve flushed with clean water before the unit is placed in long term storage.
5. If the unit is to be stored for an extended period of time in an unheated location, pour about 1 quart of RV antifreeze into the tanks. Open the chemical valve and run the pump until antifreeze exits the spray gun. Turn unit off and relieve pressure. **IMPORTANT: Use only RV Antifreeze. Normal Antifreeze is corrosive and may damage the pump.**
6. When using the unit after long term storage, flush with clean water before use.

Specifications

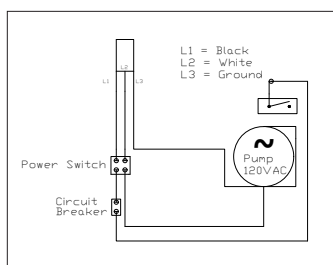
CJ-200E	
Motor Power	0.2 HP
Input Power	115V 50/60Hz 1.5A 230V 50/60Hz 0.8A
Water Requirements	On-Board
Output Water Pressure	200 PSI (13.8 bar)
Output Water Flow	0.40 – 1.10 GPM (1.5 - 4.1 liters)
Pump	Positive displacement diaphragm
Water Tank	3.3 gallons (12.5 liters)
Soap Tank	1.75 quarts (1.6 liters)
Noise Level	66 dBA
Dimensions:	19" high x 18" wide x 10" deep (48.2 cm x 45.7 cm x 25.4 cm)
Weight:	22 lbs (10 kilos) net dry; 52 lbs (12.5 liters) at 3.3 gallons water and 1.75 quarts (1.6 liters) chemical

Troubleshooting

PROBLEM	PROBABLE CAUSE	SOLUTION
Inconsistent and/or erratic pressure	<ul style="list-style-type: none"> Nozzle worn Nozzle clogged Water/chemical is low Air sucked into system Air in pump (not properly primed) Vacuum lock (cap vent clogged) Water temp too high 	<ul style="list-style-type: none"> Replace nozzle Clean nozzle orifice Add water and/or chemical Fill Tank(s) Remove nozzle, prime pump Clean cap air vent Add cold water to reduce temp
Motor continues to run even though trigger is released	<ul style="list-style-type: none"> High pressure system or pump hydraulic circuit not watertight Air in system Tank(s) empty Garden hose off 	<ul style="list-style-type: none"> Check for leaks at spray gun and pump Re-prime the unit Fill tank(s) Turn valve on
Motor stops abruptly	<ul style="list-style-type: none"> Power switch off Thermal breaker tripped Plug not connected properly GFCI was tripped 	<ul style="list-style-type: none"> Turn switch on Turn off, let unit cool Place plug completely into receptacle Reset GFCI
Motor buzzes but fails to start or does not start at all	<ul style="list-style-type: none"> Problems with pump auto shut-off Unit in disuse for extended time Pressure needs to be relieved 	<ul style="list-style-type: none"> Contact factory Contact factory Squeeze trigger and relieve pressure
water tank not priming	air block in the line	Prime machine through the garden hose side. Prime the tank with the garden hose still attached then take off the garden hose.



Plumbing Diagram



Wiring Diagram

**SPEEDCLEAN®**

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SpeedClean is a registered trademark of Crossford International.
 SpeedClean reserves the right to improve products;
 contact the factory for the latest configuration and uses.

P/N: MNL-CJ200E 0119