



# TSS 15/55

# Hi-Lift Vacuum



## OPERATOR'S MANUAL



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THE FOLLOWING SYMBOLS & DEFINITIONS ARE FOUND THROUGHOUT THIS MANUAL AND ARE DESIGNED TO MAKE YOU AWARE OF POTENTIAL HAZARDS OR UNSAFE PRACTICES.

**⚠ WARNING**

A potentially hazardous situation exists which, if not avoided, could result in death or serious injury.

**⚠ CAUTION**

A potentially hazardous situation exists which, if not avoided, may result in minor or moderate injury or property damage.

**IMPORTANT**

A potential situation exists which, if not avoided, may result in product or property damage.

THE FOLLOWING SYMBOLS & LABELS MAY BE FOUND IN THIS MANUAL OR ON THE SAW



Read the operator's manual carefully and understand the contents before you use this equipment.



Always use:

- Protective helmet
- Ear protection
- Protective glasses or full face protection



Wear hand protection

**GENERAL SAFETY PRECAUTIONS**

- Always wear protective clothing, including hard hat, eye protection, hearing protection, and gloves.
- Avoid loose fitting clothing.
- Perform safety checks before starting each day.
- Always operate tool with solid footing and with both hands on cut-off saw.
- Remove or control slurry to prevent slippery conditions while cutting.
- Be sure there are no obstructions (plumbing, electrical conduit, air ducts) and no unnecessary people present.
- Set up a well-marked safety zone with a roped boundary and clear signs.
- Provide adequate ventilation when working in an enclosed area. Breathing exhaust gases is dangerous.
- To avoid electrical shock when operating the TSS-15/55 outdoors or on wet surfaces the machine must be properly grounded. The TSS-15/55 is equipped with an approved three conductor power cord grounding plug to fit a nominal 120 volt circuit shown in figure X. No adaptor should be used with this machine.

Electrical Requirement	115v, 15 amp, 60Hz
Electrical Cord	25' of 3 wire, 16 guage
Motor	2 HP bypass
Vacuum Lift	105 inches of water
Air Flow	112 cfm
Height	34 inches (86 cm)
Width	17 inches (43 cm)
Depth	25 inches (63 cm)
Shipping Weight: TSS-15	55 lbs (24.9 kg)
Shippng Weight: TSS-55	41 lbs (18.6 kg)
Tank Capacity: TSS-15	15 gallons (57 l)
Noise Level	78 dB at 3 feet (1 m)

**Tools Required:**

- 3/8" Combination Wrench
- 9/16" Combination Wrench
- Philips Srew Driver

**Float Installation:**

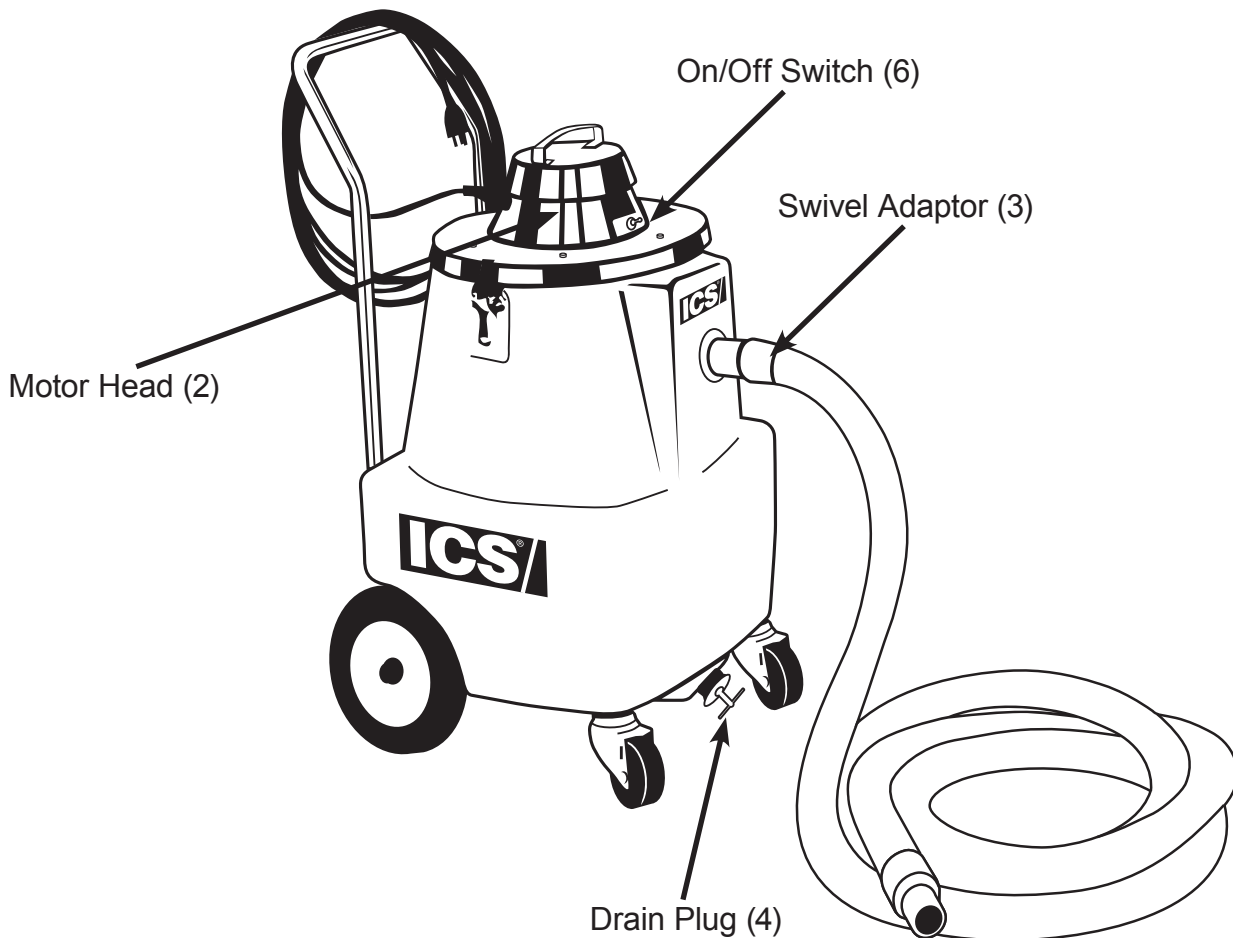
- Install float and float cage to the motor head assembly with te weighted bolt facing away from the vacuum head. Secure the float cage onto the motor head assembly with the bolt and nut provided.

**Handle Installation:**

- Remove screws, washers and nuts from handle and slide handle through the tubes located between the rear wheels. Replace the screws, washers and nuts.

## TSS OPERATION

- **STEP 1** - The blue cloth filter bag must be used for both WET and DRY operation.
- **STEP 2** - Place motor head on top of tank and secure with clamps on either side of the tank to ensure that the head assembly seals.
- **STEP 3** - Attach the swivel adaptor (white) to the end of the hose intake on the front of the TSS-15/55
- **STEP 4** - Check the drain plug on the bottom of the TSS-15/55 to make sure it is secure. If drain plug is loose, turn clockwise to tighten.
- **STEP 5** - The TSS-15/55 vacuums are equipped with overflow protection. When the tank is full, the float will shut off airflow, and the suction will stop making to motor run at a much higher RPM. When this happens immediately turn off the motor and empty the tank.
- **STEP 6** - Always turn off the motor and unplug prior to emptying the tank. To empty, remove the drain plug or motor head cover.





Concrete slurry is extremely tough on all products and vacuums are no exception. The biggest issue you will run into comes from not cleaning out the unit after each use. Not only does concrete slurry turn back into concrete as it dries out, but it can also be very corrosive.

**Failure to clean out the vacuum leads to two major problems:**

- **1** - Inoperable vacuum shut off when the vacuum is full. The shut off system uses a float, and as the vacuum container fills to capacity, the float device moves to close to the suction hole, and therefore, the motor will still run, but not produce any suction. If the concrete slurry is not cleaned off of the float, it will harden and build up to the point that the device will become inoperable. When this happens the vacuum will continue to suck slurry until it overflows the container and gets into the motor turbines. This leads to the second problem.
- **2** - Inoperable motor. If slurry and concrete get into the turbines of the motor, they will cause the motor to burn out prematurely, necessitating replacement.

**TSS MAINTENANCE**

- **1** - Remove the motor head after every use (5 hours of operation) and thoroughly wash the blue pleated filter bag and float assembly with water until the debris is removed.
- **2** - Periodically remove the float assembly and inspect the tubular plastic screen located around the float assembly to see if it is clogged with debris.
- **3** - If the head assembly becomes flooded during operation turn off the power immediately, remove head assembly from tank and place it on the floor. Wash float assembly with water and then turn on the power for 3 minutes to remove the liquid from the power unit.
- **4** - If the TSS-15/55 performance decreases during operation, turn off power and remove head and check intake elbow for blockage. If the intake is clear, check the hose for blockage or damage.
- **5** - Empty the TSS-15/55 of any liquids and wash out after each use to prevent undesirable odors and corrosion.

**TROUBLESHOOTING**

- **SUCTION WEAKENS** – Obstruction in hose or nozzle. Check nozzle, hose and connections for obstructions and remove it if present.
- **NO SUCTION** - Internal float is seated against the intake of the motor. Remove motor head assembly and loosen float
- **AIR LEAK** - Make sure all fittings are tight and that the motor head assembly is sealed properly in the tank.
- **MOTOR WON'T RUN** - No power to vacuum or receptacle. Check that the cord is firmly plugged into the wall receptacle and that all circuits are live.

**Further questions?  
Call 1-800-321-1240  
or  
visit our website at:  
[icsdiamondtools.com](http://icsdiamondtools.com)**



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