

# Ruwac USA Industrial Vacuums

## Wet Collection Series

Installation, Operation, Maintenance & Service

Model No.

Serial No.

Filter No.

Start-Up Date

# WET COLLECTION VACUUMS



Version: 2.3 4/27/20

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## I. \_\_\_\_\_ **Warranty**

RUWAC warrants that new equipment which are complete units and are sold and/or manufactured by RUWAC, Inc. will be free from defects in material and workmanship for a period of 18 months from date of shipment or 12 months from date of start-up, whichever come first. RUWAC warrants that replacement parts sold hereunder will be free from defects in material or workmanship for a period of 120-days after the date of shipment. RUWAC machines that have been completely re-built at the factory will carry a 180-day warranty from date of shipment. All field repairs preformed by authorized RUWAC service personnel are covered by a 120-day parts only warranty.

RUWAC, Inc. will not assume any responsibility under the terms of this limited warranty on equipment, which has not been paid in full. This warranty does not apply to any equipment that has been disassembled, repaired, or otherwise altered by any person without the written authorization of RUWAC'S service department, nor does it apply to any product that has been subjected to failure sure to corrosive or abrasive attack, misused, damaged, or improperly installed, nor does it apply to motors, controls, and components not manufactured by RUWAC, Inc. Motors, controls, and other Sub vendor's components therefor are warranted only to the extent of the manufacture's warranty. All warranty work on such products must be authorized by RUWAC, Inc. and must be performed in an authorized shop as designated by the manufacturer. RUWAC sole liability and buyer's sole and exclusive remedy hereunder is the replacement or repair at RUWAC'S option of products not complying with this warranty. Such repair or replacement shall be F.O.B. RUWAC'S factory, and RUWAC reserves the right to invoice all expenses incurred when repairs are made in the field at the request of the customer, except as specifically set forth herein, RUWAC makes no warranty express or implied, with respect to the products and/or service supplied hereunder, this warranty is in lieu of and excludes all other warranties, including without limitation, any warranty of merchantability, fitness for a particular purpose, or conformance to purchaser's specifications.

## II. \_\_\_\_\_ **Safety**

**CAUTION: Standard Ruwac Wet Collection machines are not to be used for the removal of flammable, volatile, or explosive media. If you are unsure about your application requirements consult your Ruwac Representative.**

**CAUTION: Standard Ruwac Wet Collection machines are designed for intermittent use, i.e. not more than 2 hours continuously.**

**CAUTION: A dust mask should be worn when working with used filters.**

**CAUTION: Disconnect the machine from power before and during inspection or maintenance.**

**Use only Ruwac replacement parts, accessories and hoses specifically designed for your machine. Clean unit daily.**

**When in use, this machine should always be connected to a ground fault interrupter (GFCI/GFI), either the circuit breaker or receptacle type.**

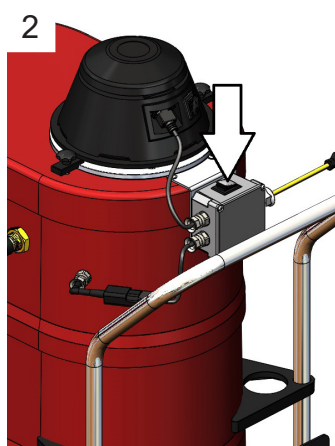
**CAUTION: Standard Ruwac Wet Collection machines are for the pick-up of wet material and solids only. Standard Wet Collection machines should not be used for the pickup of fine dust.**

**CAUTION: Hoses and accessories must be checked for continuity prior to each use when used in a hazardous application (i.e. combustible materials or environment).**

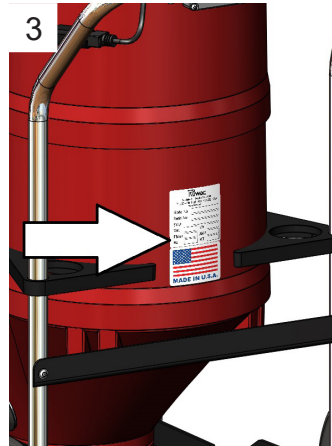
## WET COLLECTION SERIES INSTRUCTIONS: START UP / SHUTDOWN



Check that the shutoff plate is forward, foot lever is locked, and slide valve is closed.



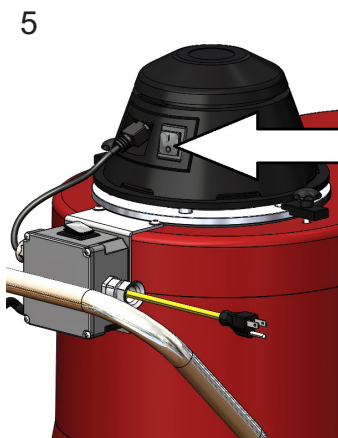
Make sure that the pump is off (if applicable).



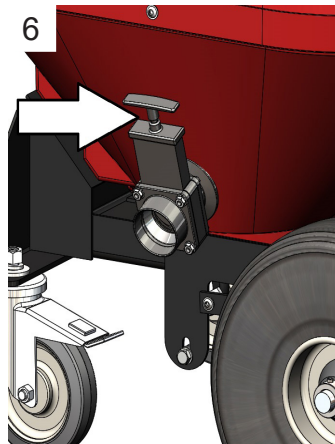
Connect to proper power source as indicated on the serial tag.



Start machine using the ON / OFF switch on the motor dome.



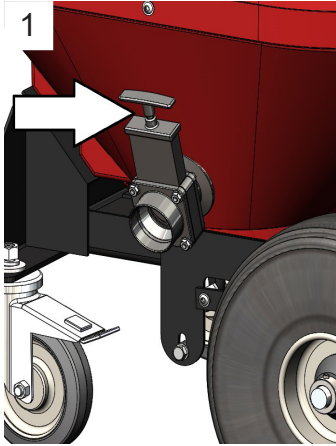
Turn machine off using the ON / OFF switch on the motor dome.



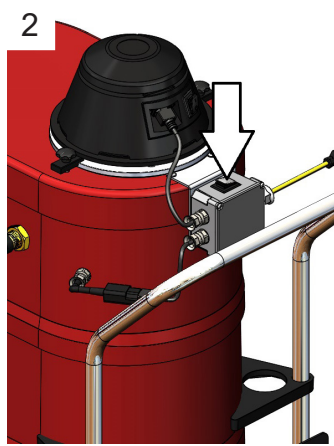
Machine should be emptied after every use.

**Note:** Electrical installation should be performed by a qualified electrician in accordance with governing national and local electrical codes.

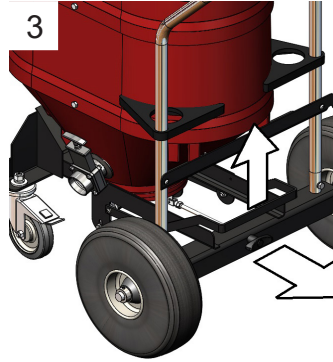
## WET COLLECTION SERIES INSTRUCTIONS: EMPTYING



Empty the machine using the slide gate.

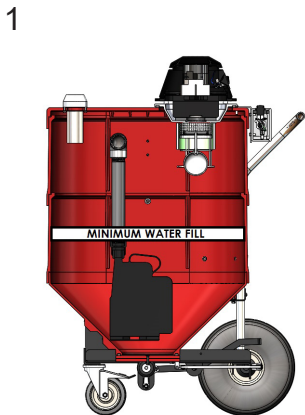


If included, the internal pump may be used. The pump will provide a faster emptying process.

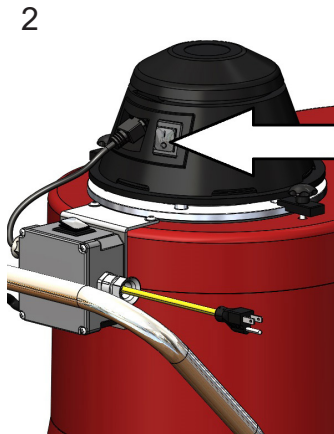


After the machine is completely drained, the bottom discharge may be used to remove excess sludge.

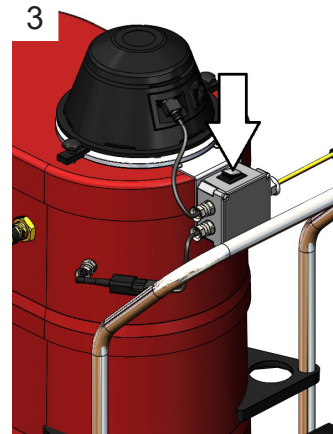
## PUMPING INSTRUCTIONS



To operate pump while running the vacuum, machine must first be filled halfway.



After the machine is properly filled, turn off vacuum.



Position the discharge hose appropriately, then turn the pump on.

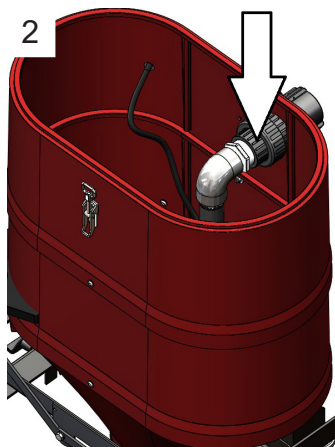


At this point, the vacuum may be turned back on.

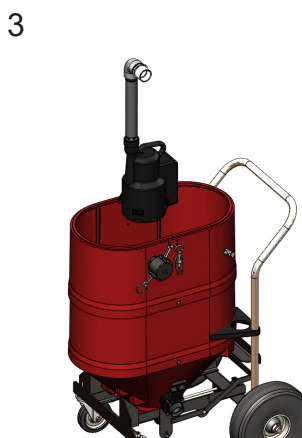
## WET COLLECTION SERIES INSTRUCTIONS: PUMP CLEANING INSTRUCTIONS



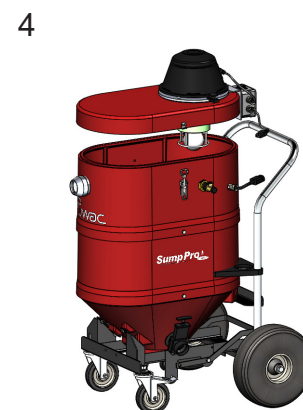
Remove the motordeck. (See pg. 8)



First, undo pipe union **(not necessary for H12G111P)**.



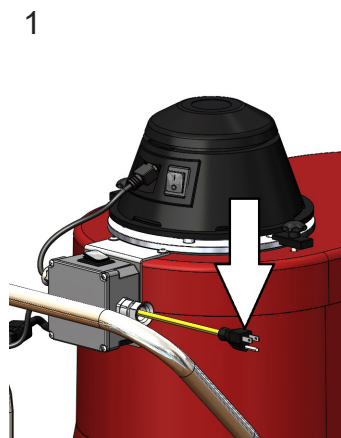
Remove the pump from the tank.



Rinse off the pump to remove any built-up material.

**Note:** Pump should be cleaned daily to ensure material doesn't build up and harden.

## MOTORDECK REMOVAL INSTRUCTIONS



Disconnect the machine from power before performing maintenance.



Disconnect clamps on either side.



Disconnect the pump from power if included.

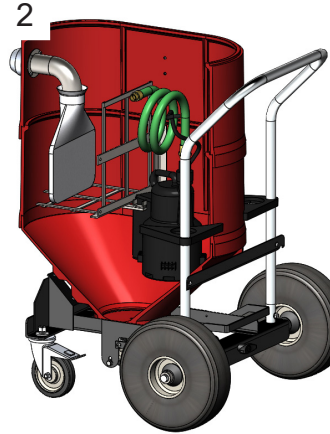


Remove motordeck and inspect foam filter. The filter is used to stop moisture from entering the motor and not for filtering dust.

**WET COLLECTION SERIES INSTRUCTIONS:  
H12G111P FILTER BAG**



Remove the motordeck  
(See pg. 8)



Place the filter bag  
under the bottom of the  
elbow.



Secure the clamp  
around the bag.



Remove and clean bag  
as needed to  
maintain optimal  
performance.

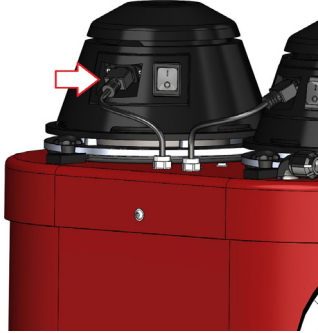
**WET COLLECTION SERIES INSTRUCTIONS:  
MOTOR COVER DISASSEMBLY FOR BRUSH INSPECTION**

1



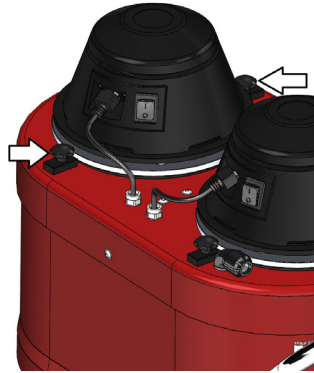
Turn the machine off,  
then disconnect the  
power source.

2



Disconnect motor  
terminal.

3



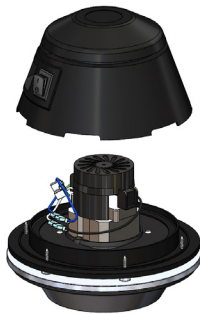
Loosen the motor  
retaining knobs  
enough to remove  
motor under negative  
pressure.

4



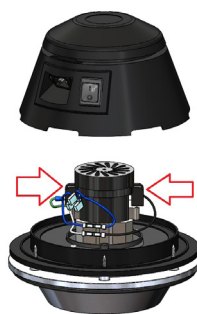
Remove the 6 screws  
attached to each motor  
assembly.

5



Remove the plastic  
motor cover to access  
the top of the motor.

6



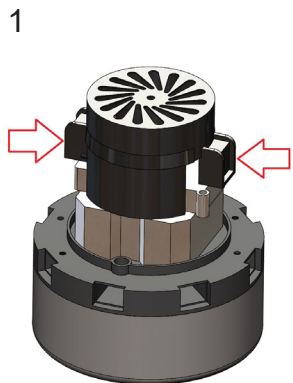
Remove the 2 metal  
motor-cap-retaining  
clips locating on each  
motor (**for Ametek  
motors only**)

**SEE PAGE 9 FOR  
AMETEK  
MOTOR BRUSH  
INSPECTION  
INSTRUCTIONS**

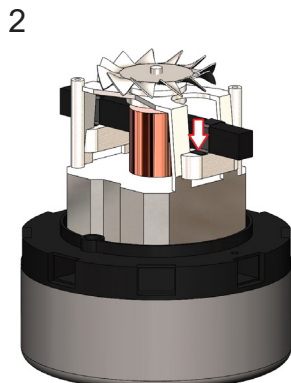
**SEE PAGE 10 FOR  
ELECTRO MOTOR  
MOTOR BRUSH  
INSPECTION  
INSTRUCTIONS**

**WET COLLECTION SERIES INSTRUCTIONS:  
AMETEK MOTOR BRUSH INSPECTION**

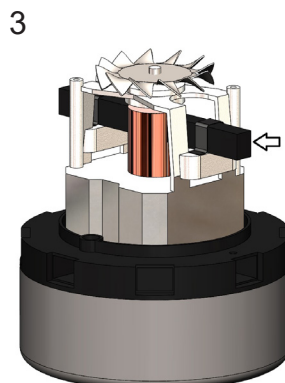
**NOTE:** A motor brush should be replaced if its length is less than 0.25 inches.



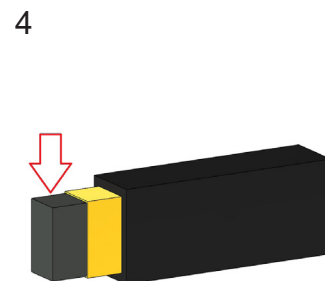
Remove motor fan cover by pressing down on clips located on each side.



Remove the two screws securing the brush. Repeat the process for the other side.



Pull brush out from wire clip.

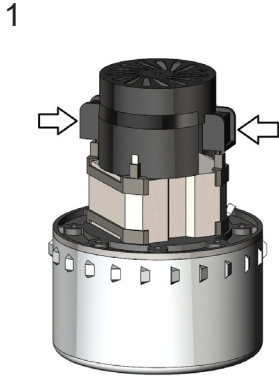


Remove brush from wire clip by sliding off groove. If brush is worn down to a length of 0.25" or less, replace brush.

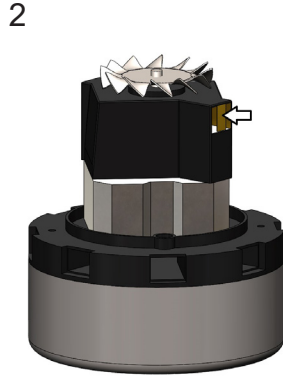
To replace or reinstall brush, repeat process in reverse.

## WET COLLECTION SERIES INSTRUCTIONS: ELECTRO MOTOR BRUSH INSPECTION

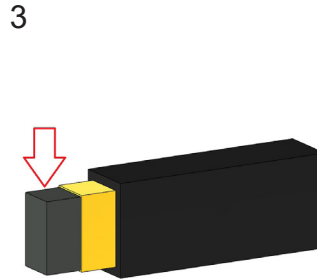
**NOTE:** A motor brush should be replaced if its length is less than 0.25 inches.



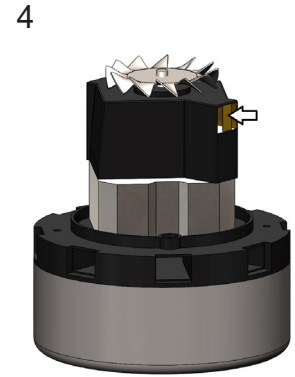
Carefully dislodge the plastic motor cap via the built-in hooks on both sides of motor brush. **(TIP: Dislodge one side of a cap first followed by the other.)**



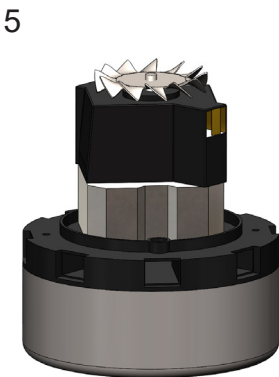
With a flathead screwdriver, flip brush tab upward. Use pliers to then pull the brush out by the tab.



If the brush is worn down to a length of 0.25" or less, replace the brush. To replace or reinstall brush, hold down internal spring using the tool supplied with brush.



While holding spring down, push the brush back in. Remove the brush tool once the brush is in.



Push the motor brush in until it's flush.

## V. --- Troubleshooting

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Insufficient Vacuum	<ul style="list-style-type: none"> <li>- Hose blocked</li> <li>- Filter clogged or improperly seated</li> <li>- Vacuum leak</li> </ul>	<ul style="list-style-type: none"> <li>- Unplug hose.</li> <li>- Follow filter inspection procedure (Section IV)</li> <li>- Check that motor deck is properly seated and secured. Also, check all hoses.</li> </ul>
<b>Air Leaks</b>	<ul style="list-style-type: none"> <li>- Worn or poorly seated seals, Retainers improperly installed</li> </ul>	<ul style="list-style-type: none"> <li>- Block the inlet with a flat and rigid material to place the unit under vacuum pressure then remove retainers and turn the unit off. Inspect the seals for completeness, then reseal and secure components again under vacuum pressure.</li> </ul>
<b>Unable to Control Pump Manually</b>	<ul style="list-style-type: none"> <li>- Incorrect pump setting</li> </ul>	<ul style="list-style-type: none"> <li>- Remove the motor deck (Section IV), then check that the internal sump pump switch (near handle) is set to the manual "HAND" position, i.e. the switch is pushed up.</li> </ul>
<b>Unusual or High Pitched Noises</b>	<ul style="list-style-type: none"> <li>- Motor bearings, turbine bearing</li> <li>- Worn or poorly seated seals, Retainers improperly installed</li> </ul>	<ul style="list-style-type: none"> <li>- Follow relevant motor / turbine inspection procedure, Section III. Check motor bearings for noise by hand.</li> <li>- Block the inlet with a flat and rigid material to place the unit under vacuum pressure then remove retainers and turn the unit off. Inspect the seals for damage, then reseal and secure components again under vacuum pressure.</li> </ul>

**ACCEPTANCE:** The terms and conditions of sale set forth herein apply to any order accepted or acknowledged by RUWAC, Inc. Buyer's acceptance of RUWAC'S proposal or delivery of all or any part of the goods covered hereunder constitutes acceptance of the terms and conditions of sale contained herein, and RUWAC hereby rejects any additions to or modification to these terms and conditions. Any representations, promises, warranties, or statements by RUWAC or its agents that differ in anyway from these terms and conditions shall be given no force or effect. No contract is final until accepted in writing by RUWAC at its corporate office in Holyoke, Massachusetts.

**PRICES:** Prices quoted orally expire the same day they are made unless accepted in writing on that day or confirmed by written communication by RUWAC. Written price quotations are guaranteed for thirty (30) days after the date issued, but may be terminated by written notice within that period. After thirty (30) days, any written price quotations are subject to adjustment to reflect prices in effect at the time of shipment, including any changes in packing, storage, or shipping charges. This order or proposal includes only the equipment specified herein, and does not include freight or installation of RUWAC equipment. All prices are F.O.B. RUWAC'S plant in Holyoke, Massachusetts and are exclusive of all taxes, levies, and duties that may be assessed in connection with the sale or delivery of goods, and Buyer shall be responsible for all such taxes, levies, and duties. In the event RUWAC pays any such tax, levy, or duty, Buyer shall promptly reimburse RUWAC therefor. Any packaging requirements other than RUWAC'S standard packaging and commercial container will be invoiced as an extra charge.

**PAYMENT:** Payment is due in full thirty (30) days after the date of invoice. All invoices paid after the due date will be assessed a late payment charge of one and half percent (1.5%) per month or any portion thereof, or the maximum amount allowed by applicable law, whichever is less. Buyer shall be responsible for all costs of collection, including reasonable legal fees. Sales on the foregoing terms are subject to the approval of RUWAC'S credit department and may be changed at any time at RUWAC'S sole discretion. If RUWAC has reasonable grounds with respect to Buyer's ability or willingness to make timely payments for the goods. RUWAC may at any time suspend performance, decline to ship, or require advance payment in cash or other adequate assurance satisfactory to RUWAC.

**SHIPMENTS AND DELIVERY:** RUWAC shall use its reasonable efforts to meet all shipment or delivery dates recited in RUWAC'S proposal or in Buyer's order but any such dates are estimated only and are not guaranteed. RUWAC shall have no liability to Buyer for damages or penalties, direct or indirect, for any delay in shipment or delivery, whether such delay is minor or substantial, nor shall Buyer have the right to declare a breach of contract because of any such delay. In any event, delivery schedules are based upon the effective date of the order and are subject to prompt receipt by RUWAC of all necessary down payments, information and instructions from Buyer, including any required approval of drawings. RUWAC shall have the right to make partial shipments, and invoiced covering the same shall be payment terms hereof. RUWAC will attempt to ship in accordance with Buyer's instructions, but RUWAC will make the final selection of a method of shipment and a carrier unless Buyer clearly and conspicuously specifies that shipment must be by a particular method of carrier. RUWAC is not responsible for damage or loss in transit, and all such claims must be by Buyer directly against the carrier.

**CHANGE ORDERS:** RUWAC shall not be obligated to make any changes in or additions to the scope of the work which are initiated by Buyer or result from circumstances beyond RUWAC'S control unless there is an equitable adjustment in price and or delivery.

**CANCELLATION, SUSPENSION OR DELAY:** In the event Buyer requests or causes a cancellation, suspension or delay in any RUWAC'S work under this proposal or order based thereon, Buyer shall indemnify and pay to RUWAC all appropriate charges, including but not limited to any costs, expenses, and commitments incurred by RUWAC up to the date of receipt of notice of such cancellation, suspension or delay, plus RUWAC'S overhead and reasonable profit. If shipment is delayed on account of Buyer, the purchase price shall be due and payable as if delivery had been made. Additionally, all charges related to storage, disposition and/or resumption of work, at RUWAC'S plant or elsewhere, shall be for Buyer's sole account and Buyer thereto shall assume all risks incidental.

**CLAIMS: NOTICE OF DEFECTS:** Buyer shall give written notice of rejection of any shipment or portion thereof within thirty (30) days after the date of shipment specifying the reasons therefor. Failure to give such notice shall be deemed a waiver of any right of rejection and any claim with respect thereto (except as to claims under the warranty) and shall be deemed an acceptance of such shipment. Buyer shall set aside and hold rejected goods without further processing until RUWAC has an opportunity to inspect and advise of the disposition, if any, to be made of such goods. In no event shall any rejected goods be returned reworked, or scrapped by Buyer without the express written authorization of RUWAC.

## VI. Terms & Conditions

**INSPECTION OF EQUIPMENT:** RUWAC shall have the right to inspect, after prior notices, the equipment supplied by it when in operation. If Buyer requires, RUWAC shall execute an appropriate secrecy agreement.

**CONFIDENTIALITY:** All proposals, drawings, diagrams, specification, pricing, and other materials relating to the goods included are the property and confidential information of RUWAC. Buyer shall not disclose such material or information without the written approval of RUWAC.

**BACK CHARGE:** RUWAC will pay claims for expenses of Buyer relating to labor and/or material supplied by Buyer only if (a) RUWAC is advise in writing before such expenses are incurred (2) RUWAC gives Buyer its prior written consent to the supply of such labor and/or material by buyer.

**LIMITED WARRANTY:** RUWAC warrants that new equipment which are complete units and are sold and/or manufactured by RUWAC, Inc. will be free from defects in material and workmanship for a period of 18 months from date of shipment or 12 months from date of start-up, whichever comes first. RUWAC warrants that replacement parts sold hereunder will be free from defects in material and workmanship for a period of 120-days after the date of shipment. RUWAC machines that have been completely re-built at the factory will carry a 180-day warranty from date of shipment. All field repairs by authorized RUWAC service personnel are covered by a 120-day parts only warranty. RUWAC, Inc. will not assume any responsibility under the terms of this limited warranty on equipment, which have not been paid for in full. This warranty does not apply to any equipment that has been disassembled, repaired, or otherwise altered by any person without the written authorization of RUWAC'S service department, nor does it apply to any product that has been subject to failure due to corrosive or abrasive attack, misused, damaged, or improperly installed, nor does it apply to motors, controls, and components not manufactured by RUWAC, Inc. Motors, controls, and other Sub vendor's components therefor are warranted only to the extent of the manufacturer's warranty. All warranty work on such products must be authorized by RUWAC, Inc. and must be performed in an authorized shop as designated by the manufacturer. RUWAC sole liability and buyer's sole and exclusive remedy hereunder is the replacement or repair at RUWAC'S option of products not complying with this warranty. Such repair or replacement shall be F.O.B. RUWAC'S factory, and RUWAC reserves the right to invoice all expenses incurred when repairs are made in the field at the request of the customer, except as specifically set forth herein, RUWAC makes no warranty express or implied, with respect to the products and/or service supplied hereunder, this warranty is in lieu of and excludes all other warranties, including without limitation, any warranty of merchantability, fitness for a particular purpose, or conformance to purchaser's specifications.

**LIMITATION OF LIABILITY:** RUWAC'S responsibility with respect to the goods and RUWAC'S obligations related thereto should in no event exceed the purchase price of the goods. RUWAC shall not be liable to Buyer for any special incidental, indirect, or punitive damages for any reason whatsoever, including, but without limitation damages in the form of (a) loss of profits, revenues, or anticipated savings resulting from the failure of the equipment to meet specifications or warranties (b) damages suffered by Buyer as a result of loss of production facilities or equipment (c) cost of replacement equipment (d) damages suffered by customers of the Buyer (e) any fines or penalties assessed for failure to comply with any law or government regulations.

**REPAIR OF GOODS EXPOSED TO HAZARDOUS, TOXIC, OR INFECTIOUS MATERIAL:** Buyer shall ensure that any goods submitted by Buyer or any of its customers to RUWAC for repairs or other service have been decontaminated and cleaned (including sterilization, if appropriate) of any hazardous, toxic or infectious materials, including without limitation any materials listed by the Environmental Protection Agency, OSHA, or any applicable state law as deserving or requiring special treatment. Upon RUWAC'S request, Buyer or its customer shall certify in writing that such goods contain no such hazardous, toxic, or infectious materials, and that such decontamination has taken place in accordance with accepted parties and in accordance with all applicable laws and regulations. If special safety equipment is required to protect RUWAC'S service personnel from any such hazardous, toxic, or infectious materials during field service work or otherwise. Buyer shall ensure that such safety equipment is provided and that the personnel are properly instructed. The provision of this paragraph shall apply to all work to be performed by RUWAC'S service personnel at any time, whether or not covered by warranty. Buyer shall defend and indemnify RUWAC for any and all losses, liabilities, expenses, and damages (including attorneys' fees) arising out of any failure of buyer or its customer to comply fully with the terms of this paragraph.

**BUYER SUPPLIED DATA:** Buyer acknowledges that RUWAC has relied upon all specifications and other data supplied by Buyer to RUWAC in the selection and design of the equipment and the preparation of this proposal. In the event the site operating conditions differ from those represented by Buyer and relied upon by RUWAC, any warranties or performance guarantees contained herein affected by such conditions shall be null and void, unless otherwise mutually agreed upon in writing.

## VI. \_\_\_\_\_ Terms & Conditions

**REMEDIES OF SELLER:** In addition to any other remedies of RUWAC provided hereby or by law, in the event Buyer becomes bankrupt, insolvent, assigns assets for the benefit of creditors or its financial condition has substantially deteriorated, RUWAC may, at its sole option, declare a breach of contract, stop all work hereunder or demand payments in advance as security for its performance hereunder.

**FACTIONS: GOVERNING LAW:** Any dispute, controversy, or claim against RUWAC with respect to the goods or any of RUWAC'S obligations related thereto must be commenced within one year from the date of shipment. All contract between Buyer and RUWAC shall be governed by and construed in accordance with the laws of the state of Massachusetts except that body of laws controlling conflict of laws.

**BONDS:** In addition to the price specified herein, Buyer shall pay the cost of any bonds, which Buyer requires RUWAC to obtain.

**ENTIRE AGREEMENT:** These terms and conditions, together with the provisions of the proposal constitute the entire agreement between the parties pertaining to the goods, and they supersede any prior or contemporaneous agreements, representations, or understandings between the parties. No waiver or modification of these terms and conditions is binding unless such waiver or modification is set out in writing signed by an authorized manager or officer of RUWAC. RUWAC'S failure to strictly enforce any right on one occasion does not constitute a waiver of that or any on any other occasion.