Parts and Instruction Manual
TRS 14
Total Recovery System
This manual is furnished with each new MINUTEMAN TRS 14. This provides the necessary operating and preventive maintenance instructions. Operators must read and understand this manual before operating or servicing this machine.

This machine was designed to give you excellent performance and efficiency. For best results and minimal cost, please follow the general guidelines below:

· Operate the machine with reasonable care.
· Follow the manufacturers suggested maintenance instructions as provided in this booklet.
· Use original Minuteman supplied parts.

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>TRS 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.</td>
<td>TRS14115</td>
</tr>
<tr>
<td>Vac Motor</td>
<td>3 Stage 1 HP</td>
</tr>
<tr>
<td>Water Lift</td>
<td>80” (203cm)</td>
</tr>
<tr>
<td>Capacity</td>
<td>14 gal. (53L)</td>
</tr>
<tr>
<td>Flow</td>
<td>250psi at nozzle, 1gpm</td>
</tr>
<tr>
<td>Wheels</td>
<td>12” (30.5cm)</td>
</tr>
<tr>
<td>Casters</td>
<td>5” (13cm)</td>
</tr>
<tr>
<td>Length</td>
<td>32” (81cm)</td>
</tr>
<tr>
<td>Width</td>
<td>43” (109cm)</td>
</tr>
<tr>
<td>Height</td>
<td>25” (63.5cm)</td>
</tr>
</tbody>
</table>
Contents

Safety Precautions ................................................................. 1
Grounding Instructions .......................................................... 1
Safety Labels ........................................................................... 2
Machine Components ............................................................... 2
Machine Set Up ........................................................................ 3
  Pre-Operation ........................................................................ 3
  Set Up .................................................................................. 3
  Operation ............................................................................. 3
Draining Recovery Tank .......................................................... 4
Machine Maintenance .............................................................. 4
  Daily Maintenance .............................................................. 4
  Weekly Maintenance .......................................................... 4
Storing Machine ...................................................................... 5
Troubleshooting ..................................................................... 5
Exploded Views ...................................................................... 7
  TRS 14 - Base Assembly .................................................... 7
  TRS 14 - Solution Tank Assembly ....................................... 8
  TRS 14 - Recovery Tank Assembly .................................... 9
  TRS 14 - Bill of Material .................................................... 10
Tools & Accessories ............................................................... 11
Minuteman International Made Simple Commercial Limited Warranty ....... 12
4. Before leaving or servicing machine:
   - Turn off machine.
   - Unplug cord from wall outlet.

5. When servicing machine:
   - Unplug cord from wall outlet.
   - Avoid moving parts.
   - Do not wear loose jackets, shirts, or sleeves.
   - Use manufacturer supplied or approved replacement parts.

WARNING: Hazardous Voltage. Shock or electrocution can result. Always unplug machine before servicing.

WARNING: Flammable materials can cause an explosion or fire. Do not use flammable materials in tank(s).

WARNING: Flammable materials or reactive metals can cause an explosion or fire.

Grounding Instructions
Machine must be grounded. This machine is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed in accordance with all local code and ordinances. Do not remove ground pin; if missing, replace plug before use.
Safety Labels
The safety labels appear on the machine in various locations. Replace labels if they become damaged or cannot be read.

⚠️ WARNING: Flammable materials can cause an explosion or fire. Do not use flammable materials in tank(s). Flammable materials or reactive metals can cause explosion or fire.

⚠️ WARNING LABEL- Located on back. Label warns operator of safe practices of equipment

Machine Components

A  RECOVERY TANK  E  MOTOR HOUSING/BASE
B  VACUUM HOSE CONNECTOR  F  PRIME VALVE
C  SOLUTION HOSE CONNECTOR  G  PRESSURE REGULATOR
D  SOLUTION TANK
Machine Set Up

Pre-Operation
1. Vacuum and remove all debris.
2. Perform MACHINE SETUP procedures.
3. Inspect power cord for damage.

Set Up
1. Carefully check carton for signs of damage. Report damage at once to freight carrier. The machine is shipped fully assembled and is ready for use.
2. Open lid of solution tank. Fill solution tank with water or approved cleaning agent.

WARNING: Flammable materials can cause an explosion or fire. Do not use flammable solutions or materials in tank(s).

FOR SAFETY: When using machine, follow mixing and handling instructions on chemical containers.

ATTENTION: If using powdered cleaning chemicals, mix prior to adding.

3. Attach solution hose. (Located front of machine.)

NOTE: Make sure the quick disconnects snap together firmly. As you do this, always inspect hoses for cracks or fraying. Do not use if hoses are damaged.

4. Attach other end of solution hose to wand.
5. Attach vacuum hose to recovery tank.

6. Locate a 20 Amp dedicated power circuit, and plug the machine cord in. The outlets must be properly grounded. Plugging into an ungrounded or improper outlet can result in equipment damage, fire, and/or harm to the operator. NEVER DISABLE THE GROUND PIN, AS SERIOUS PROBLEMS CAN RESULT!

FOR SAFETY: Do not operate machine unless cord is properly grounded.

FOR SAFETY: Do not operate machine with the use of an extension cord.

Operation
1. Turn pump switch to “Hi Pressure” setting.
2. Step lightly on Power Prime for 30 seconds to prime pump completely. Use regulator adjustment to set pump at desired pressure on gauge.
3. Hook up your auto fill and pump out hoses to the appropriate connections on the back of the machine.
4. Switch on Pump-Out pump. NOTE: Pump will not begin to operate until tank is partially filled. The pump out is controlled by a sensor in the tank. MAKE SURE YOUR PUMP OUT HOSE IS SECURED TO A DRAIN.

5. Attach Auto Fill hose to a water inlet, such as a sink or a garden hose. Turn on the water at medium to medium low pressure. Monitor solution tank as it fills for the first time, to ensure that the Auto Fill shuts off correctly.

6. Switch on both Vacuum 1 and Vacuum 2
7. Begin cleaning. As you clean, monitor your tank levels. The clean water tank should never be run empty, and the dirty water tank should never be run full.
To keep machine in good working condition, simply follow machine’s daily and weekly maintenance procedures.

FOR SAFETY: When servicing machine, unplug cord from wall outlet.

**Maintenance**

**DAILY:**

1. Empty and rinse out recovery tank thoroughly.
2. Wipe off power cord and check for damage, replace if necessary. Coil cord neatly after use.
3. Clean machine with an all purpose cleaner and damp cloth.

**Weekly Maintenance**

(EVERY 20 HOURS OF OPERATION)

1. Flush solution system with a system maintainer to dissolve normal chemical buildup.
   a. Pour 7.5L (2 gal) of hot water 60°C (140°F) into solution tank. Add system maintainer according to mixing instructions on bottle.
   b. Operate machine for one minute.
   c. Shut off machine and allow remaining solution to break down chemical buildup overnight.
   d. Next day, spray out remaining solution and flush system with 11L (3gal) of clean water.
2. Inspect vacuum hoses for holes and loose cuffs.
3. Inspect spray pattern for clogging. If clogged, remove spray tips and soak them in a recommended liquid neutralizer for up to six hours. To remove spray tip, twist spray tip body counter-clockwise. Do not use pointed objects to unplug tips, damage will occur.
4. Lubricate wheels with water resistant oil.
5. Inspect machine for water leaks and loose hardware.
6. Remove float shut-off screen from recovery tank and clean.

**Draining Recovery Tank**

FOR SAFETY: When servicing machine, unplug cord from wall outlet.

1. Turn machine off and unplug power cord.
2. Remove solution & vacuum hose
3. Lift up drain valve lever to empty solution tank.

**Machine Maintenance**

To keep machine in good working condition, simply follow machine’s daily and weekly maintenance procedures.

FOR SAFETY: When servicing machine, unplug cord from wall outlet.

**WARNING:** Flammable materials or reactive metals can cause an explosion or fire. Do not pick up.

1. Work away from outlet and power cord to prevent cord damage.
2. Use a recommended foam control solution in the recovery tank to prevent vacuum motor damage. Periodically check for excessive foam buildup in solution tank.
3. To clean heavily soiled areas, repeat cleaning path from different direction.
4. When ball float shuts off vacuum, it is time to empty the dirty water from the recovery tank, and refill solution tank.
5. After cleaning, relieve water pressure from tool before disconnecting hose. Squeeze trigger for five seconds after turning main power switch off.

**FOR SAFETY:** When using machine, follow mixing and handling instructions on chemical containers.

1. Work away from outlet and power cord to prevent cord damage.
2. Use a recommended foam control solution in the recovery tank to prevent vacuum motor damage. Periodically check for excessive foam buildup in solution tank.
3. To clean heavily soiled areas, repeat cleaning path from different direction.
4. When ball float shuts off vacuum, it is time to empty the dirty water from the recovery tank, and refill solution tank.
5. After cleaning, relieve water pressure from tool before disconnecting hose. Squeeze trigger for five seconds after turning main power switch off.

**Draining Recovery Tank**

FOR SAFETY: When servicing machine, unplug cord from wall outlet.

1. Turn machine off and unplug power cord.
2. Remove solution & vacuum hose
3. Lift up drain valve lever to empty solution tank.

**Machine Maintenance**

To keep machine in good working condition, simply follow machine’s daily and weekly maintenance procedures.

FOR SAFETY: When servicing machine, unplug cord from wall outlet.
Storing Machine

1. Before storing machine, be certain to completely drain and rinse tanks of all water and solution.
2. Drain and dry the vacuum hose as well, using the drain hose provided.
3. Store machine in a dry area in the upright position.
4. Open recovery tank cover to promote air circulation.

Troubleshooting

SYMPTOM: UNIT WILL NOT TURN ON:

PROBLEM: Not plugged in.
SOLUTION: Plug machine in proper outlet.

PROBLEM: Circuit breaker has popped.
SOLUTION: Reset circuit breaker. Make sure no other items are running on the same circuit as machine. Outlet must be a 15-amp circuit.

PROBLEM: Wire from power cord has become disconnected from terminal block.
SOLUTION: Reattach wire to terminal block.

SYMPTOM: PUMP IS NOT RUNNING PROPERLY:

PROBLEM: Quick disconnects are not completely locked together.
SOLUTION: Snap quick disconnects firmly together.

PROBLEM: The solution tank is empty.
SOLUTION: Fill the solution tank up with a premixed detergent.

PROBLEM: Jet on tool is clogged.
SOLUTION: Clean jet with soft wire brush or remove jet and flush clean.

PROBLEM: Filters are clogged.
SOLUTION: Remove filters and rinse clean with water.

PROBLEM: Brass check valve is stuck.
SOLUTION: Replace with new check valve.

PROBLEM: Pump wire has become disconnected.
SOLUTION: Reconnect wire.

PROBLEM: Switch on switch plate is bad.
SOLUTION: Replace switch.

PROBLEM: Pump motor brushes are worn out.
SOLUTION: Replace pump.
SYMPTOM: VACUUM MOTOR IS NOT WORKING PROPERLY:

PROBLEM: Hose not connected tightly to upholstery tool or machine.
SOLUTION: Connect hose tightly.

PROBLEM: Drain valve is not shut completely.
SOLUTION: Close drain valve completely.

PROBLEM: Vacuum tank lid is not on tightly.
SOLUTION: Secure the vacuum tank tightly.

PROBLEM: Ball float is shut off.
SOLUTION: Empty the vacuum tank of all wastewater.

PROBLEM: Water is coming out of vacuum motor.
SOLUTION: Use a low foaming detergent.

PROBLEM: Floor wand is clogged with hair, carpet fibers and or debris.
SOLUTION: Clean floor wand.

PROBLEM: Ball float is not installed correctly.
SOLUTION: Make sure that ball float is firmly installed on the elbow.
<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>121017</td>
<td>1</td>
<td>elbow, brass, 90 deg, 1/2&quot; barb x 3/8&quot; mpt, ball end</td>
</tr>
<tr>
<td>2</td>
<td>121016</td>
<td>1</td>
<td>adapter, brass, 1/2&quot; barb x 3/8&quot; SW, ball end</td>
</tr>
<tr>
<td>3</td>
<td>121190</td>
<td>1</td>
<td>screw, #10 x 5/8&quot; hex, head, zinc</td>
</tr>
<tr>
<td>4</td>
<td>121182</td>
<td>2</td>
<td>handle, breeze</td>
</tr>
<tr>
<td>5</td>
<td>121041</td>
<td>1</td>
<td>bolt, 1/4-20 x 1/2&quot; serrated hex flange, zinc</td>
</tr>
<tr>
<td>6</td>
<td>121154</td>
<td>5</td>
<td>plate, wand mount, 1-1/8&quot; od x 3/16&quot; id</td>
</tr>
<tr>
<td>7</td>
<td>121175</td>
<td>2</td>
<td>washer, 3/8&quot; flat, s/s</td>
</tr>
<tr>
<td>8</td>
<td>121128</td>
<td>8</td>
<td>screw, #10 x 5/8&quot; hex head, zinc 100psi</td>
</tr>
<tr>
<td>9</td>
<td>121167</td>
<td>16</td>
<td>nut, 1/4&quot; flange, s/s</td>
</tr>
<tr>
<td>10</td>
<td>121157</td>
<td>6</td>
<td>washer, 1/2&quot; x 21&quot;, Breeze, M-series</td>
</tr>
<tr>
<td>11</td>
<td>121198</td>
<td>2</td>
<td>elbow, brass, 90 deg, 3/8&quot;mpt x 1/4&quot;mpt</td>
</tr>
<tr>
<td>12</td>
<td>121199</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>13</td>
<td>121018</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>14</td>
<td>121104</td>
<td>1</td>
<td>filter, cup, in-line</td>
</tr>
<tr>
<td>15</td>
<td>121061</td>
<td>2</td>
<td>guard, brass, 90 deg, 1/2&quot; barb x 3/8&quot; mpt, ball end</td>
</tr>
<tr>
<td>16</td>
<td>121075</td>
<td>1</td>
<td>plate, mounting, QD</td>
</tr>
<tr>
<td>17</td>
<td>121063</td>
<td>1</td>
<td>sol tank, m series</td>
</tr>
<tr>
<td>18</td>
<td>121192</td>
<td>1</td>
<td>vac hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>19</td>
<td>121131</td>
<td>1</td>
<td>pipe, pvc, 1-1/2&quot;</td>
</tr>
<tr>
<td>20</td>
<td>121201</td>
<td>1</td>
<td>elbow, brass, 90 deg, 1/4&quot; barb x 3/8&quot; mpt, ball end</td>
</tr>
<tr>
<td>21</td>
<td>121124</td>
<td>2</td>
<td>latch, front breeze</td>
</tr>
<tr>
<td>22</td>
<td>121053</td>
<td>1</td>
<td>fitting, strain relief, cord</td>
</tr>
<tr>
<td>23</td>
<td>121205</td>
<td>1</td>
<td>base, m series</td>
</tr>
<tr>
<td>24</td>
<td>121196</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>25</td>
<td>121117</td>
<td>1</td>
<td>vac support, 3 stage, 4-1/16&quot;</td>
</tr>
<tr>
<td>26</td>
<td>121215</td>
<td>1</td>
<td>pipe, pvc, 1-1/2&quot;</td>
</tr>
<tr>
<td>27</td>
<td>121216</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>28</td>
<td>121208</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>29</td>
<td>121202</td>
<td>1</td>
<td>vac motor, 4 stage, 1-1/16&quot;</td>
</tr>
<tr>
<td>30</td>
<td>121201</td>
<td>1</td>
<td>vac support, 3 stage, 4-1/16&quot;</td>
</tr>
<tr>
<td>31</td>
<td>121213</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>32</td>
<td>121205</td>
<td>1</td>
<td>vac motor, 3 stage, 1-1/16&quot;</td>
</tr>
<tr>
<td>33</td>
<td>121214</td>
<td>1</td>
<td>pipe, pvc, 1-1/2&quot;</td>
</tr>
<tr>
<td>34</td>
<td>121208</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>35</td>
<td>121203</td>
<td>1</td>
<td>vac support, 3 stage, 4-1/16&quot;</td>
</tr>
<tr>
<td>36</td>
<td>121216</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>37</td>
<td>121202</td>
<td>1</td>
<td>vac motor, 4 stage, 1-1/16&quot;</td>
</tr>
<tr>
<td>38</td>
<td>121208</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>39</td>
<td>121213</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>40</td>
<td>121205</td>
<td>1</td>
<td>vac motor, 3 stage, 1-1/16&quot;</td>
</tr>
<tr>
<td>41</td>
<td>121214</td>
<td>1</td>
<td>pipe, pvc, 1-1/2&quot;</td>
</tr>
<tr>
<td>42</td>
<td>121208</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>43</td>
<td>121216</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>44</td>
<td>121202</td>
<td>1</td>
<td>vac motor, 4 stage, 1-1/16&quot;</td>
</tr>
<tr>
<td>45</td>
<td>121208</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>46</td>
<td>121213</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
<tr>
<td>47</td>
<td>121205</td>
<td>1</td>
<td>vac motor, 3 stage, 1-1/16&quot;</td>
</tr>
<tr>
<td>48</td>
<td>121214</td>
<td>1</td>
<td>pipe, pvc, 1-1/2&quot;</td>
</tr>
<tr>
<td>49</td>
<td>121208</td>
<td>1</td>
<td>adapter, brass, 1/4&quot; barb x 1/4&quot; mpt, ball end</td>
</tr>
<tr>
<td>50</td>
<td>121216</td>
<td>1</td>
<td>clamp, hose, 2&quot;, wire reinforced</td>
</tr>
</tbody>
</table>

**Bill Of Material - TRS 14**

*TRS 14 - Bill of Material*
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>121092</td>
<td>TRS 14 Tool Assembly Complete</td>
</tr>
<tr>
<td>121089</td>
<td>1-1/2” Curved Telescopic Wand</td>
</tr>
<tr>
<td>121086</td>
<td>1-1/2” Gulper Tool</td>
</tr>
<tr>
<td>121090</td>
<td>Scrub &amp; Vac Tool</td>
</tr>
<tr>
<td>121091</td>
<td>1-1/2” Vac Hose Assy 25 FT.</td>
</tr>
<tr>
<td>121082</td>
<td>Faucet Fill Hose Assy</td>
</tr>
<tr>
<td>121101</td>
<td>Blower Attachment</td>
</tr>
<tr>
<td>121097</td>
<td>Slimline Injection Sprayer</td>
</tr>
</tbody>
</table>
Minuteman International Made Simple Commercial Limited Warranty

Minuteman International, Inc. warrants to the original purchaser/user that the product is free from defects in workmanship and materials under normal use. Minuteman will, at its option, repair or replace without charge, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals. All warranty claims must be submitted through and approved by factory authorized repair stations.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Minuteman are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman for procedures in warranty claims against these manufacturers.

Special warning to purchaser -- Use of replacement filters and/or prefilters not manufactured by Minuteman or its designated licensees, will void all warranties expressed or implied. A potential health hazard exits without original equipment replacement.

All warranted items become the sole property of Minuteman or its original manufacturer, whichever the case may be.

Minuteman disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Minuteman assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Minuteman is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctions of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

Cord Electric Group .......... Three years parts, two years labor, ninety days travel (Not to exceed two hours)

Exceptions .......... Port-A-Scrub, one year parts, six months labor
MPV 13, one year parts
MPV 14 and 18, two years parts, one year labor
RapidAir blower, one year parts, one year labor
Explosion-Proof Vacuum, one year parts, one year labor
Pneumatic Vacuums, three years parts, one year labor
EX 12 and EX12H, one year parts, one year labor

Battery Operated Group ..... Three years parts, two years labor, ninety days travel
(Not to exceed two hours)

Exceptions ......Sweepers, one year parts, one year labor, ninety days travel
(Not to exceed two hours)

Internal Combustion Group .... One year parts, one year labor, ninety day travel
(Not to exceed two hours)

Replacement Parts .......... Ninety days

Batteries ......................... 0-3 months replacement, 4-12 months pro-rate

Polypropylene Plastic Tanks ... Ten years, no additional labor