DANGER

ALWAYS TAKE THE FOLLOWING PRECAUTIONS BEFORE ANY SERVICE OR ROUTING MAINTENANCE IS PERFORMED:

- REMOVE FASTENERS
- REMOVE FUEL CELL
- REMOVE BATTERY

REMOVE THE MAGAZINE ASSEMBLY

Loosen and remove knob (part #801124).

Slide the magazine back and away from nose.
REMOVE HANDLE ASSEMBLY (Part 1)

Lift off cap, grill and filter with screw driver.

Loosen four screws using a 5/32” hex key (Part # 7405061).

Lift off cap assembly (Part # 401365).
REMOVE HANDLE ASSEMBLY (Part 1)

Remove Screw at bottom of Handle Assembly (Part # 7405065).

Remove Cam Bushing (Part # 401397).
Push Cam Bushing out of Handle from side where the Screw was removed.
REMOVE MOTOR ASSEMBLY

Pull Handle Assembly away from Motor Assembly until fan clears combustion chamber assembly.

Do not scratch combustion chamber walls with fan blades.

Set Handle Assembly down carefully so that Fan Blades are not damaged and Fan Motor Shaft is not bent.

When removing handle from housing, be sure not to bend fan blades.

⚠️ CAUTION

Be sure leads and connectors are positioned so that leads are not pinched when installing cap.

⚠️ WARNING

DO NOT operate tool until all screws are tightened.

⚠️ DANGER

NEVER attempt to operate tool without cap assembly securely fastened. Cap assembly secures cylinder head to combustion chamber.

Operating TrakFast with cap assembly off or loose will cause burning fuel to escape through top of tool, causing burns and damage to tool.
**Motor/Cylinder Head Assembly**

Torque Head Switch to 5-10 in-lbs.

Torque Spark Plug to 20-25 in-lbs.

Install Stem Adapter as illustrated.

Notice the difference between one end of the Sleeve to the other. One side of the sleeve has a rib. The other side does not. The ribs should be to the inside and should touch the fan motor.

****CRITICAL****

Install the Motor Sleeve as illustrated. Pay careful attention to the orientation of the “split” which is pointing at the Spark Plug and how the ends of the Motor Sleeve face each other. This process determines how well the motor shaft will be centered after the motor is inserted.
**Motor/Cylinder Head Assembly (cont’d)**

Apply a small amount of oil or lubricant to the inside of the bore where the Fan Motor is positioned.

Insert Motor Assembly as illustrated.

The Motor Sleeve orientation will determine how well the spacing will be around the shaft. Make sure that it is equally spaced all the way around.

SOMETIMES you may have to adjust the Motor Sleeve clockwise or counterclockwise to help center the shaft.
**Motor/Cylinder Head Assembly (cont’d)**

Make sure the “flat” side of the shaft is where the Set Screw on the Fan Blade will be tightened.

Position the Fan Blade approximately .120” away from the bottom of the cylinder head. Feeler Gages or an 1/8” drill bit works well as a spacer.

Carefully place the Fan Blade until it is flat and leveled over the Fan Blade Spacer.

Tighten Set Screw no more than 8 to 10 in-lbs of torque.
## CYLINDER HEAD ASSEMBLY

### Key

<table>
<thead>
<tr>
<th>KEY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>401365</td>
<td>Cap, grill &amp; filter assembly</td>
</tr>
<tr>
<td>3</td>
<td>7505018</td>
<td>Foam filter only</td>
</tr>
<tr>
<td>4</td>
<td>901065A</td>
<td>Screw kit, #10-24 x 1-1/4” Sems (pkg. 4)</td>
</tr>
<tr>
<td>8</td>
<td>900271</td>
<td>P.C board assembly</td>
</tr>
<tr>
<td>8A</td>
<td>7405090</td>
<td>P.C board screw &amp; washer, #8-32 x 1/2” (pkg. 3)</td>
</tr>
<tr>
<td>11</td>
<td>900525A</td>
<td>Fan motor kit**</td>
</tr>
<tr>
<td>12</td>
<td>7505166</td>
<td>MSU spark wire &amp; boot only</td>
</tr>
<tr>
<td>12A</td>
<td>404397</td>
<td>Spark plug boot only (for 401341 plug)</td>
</tr>
<tr>
<td>13</td>
<td>7505164</td>
<td>Black spark plug (with O-Ring)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(for tools after serial no. 39809144)</td>
</tr>
<tr>
<td>13A</td>
<td>401341</td>
<td>Red spark plug (with O-Ring)</td>
</tr>
<tr>
<td>15</td>
<td>401356</td>
<td>Motor sleeve</td>
</tr>
<tr>
<td>16</td>
<td>900470</td>
<td>Motor mount</td>
</tr>
<tr>
<td>17</td>
<td>401355</td>
<td>Motor retaining ring</td>
</tr>
<tr>
<td>18</td>
<td>404601</td>
<td>Head switch assembly</td>
</tr>
<tr>
<td>20</td>
<td>401340</td>
<td>Red stem adaptor</td>
</tr>
<tr>
<td>21</td>
<td>401336</td>
<td>Cylinder head</td>
</tr>
<tr>
<td>22</td>
<td>403992</td>
<td>O-Ring (cylinder head)</td>
</tr>
<tr>
<td>23</td>
<td>403167</td>
<td>Fan blade (with set screw)</td>
</tr>
</tbody>
</table>

**Note:** It is important to use all kit parts when replacing the fan motor. Failure to do so will greatly reduce the life of the motor.

**The Fan Motor Kit includes:** Fan Motor, Motor Mount, Motor Sleeve, Snap Ring and Fan Blade.
Handle Assembly (part 2)

Remove Trigger Cam (part #401396).

Remove Belt Hook and screw.
(screw, part #7405065)
(Belt Hook, part #401495)

Remove (3) screws (part #7405067).
Remove (1) screw (part #7405066).
Lift off Handle half.

Remove Actuator Assembly (part #401400A).
Handle Assembly - Part 2 (cont’d)

Remove Trigger and Spring from Handle.
(Trigger, part #401394A)
(Spring, part #401395)

Remove Trigger Switch with screw driver.
Undo the two screws and lift out.

Unplug from the Spark Unit.
(Trigger Switch, part #404990)
(Trigger screws, part #7405091)

Using a Phillips screw driver, remove screw. This will disconnect the Handle from the Cylinder Head (part #7405065).

Lift out wire Cover Plate (part #900012).
Handle Assembly - Part 2 (cont’d)

Lift up Spark Plug wire and remove from Handle half (part #7505166).

Unplug Spark Wires from Spark Unit.

Lift up with screw driver to remove Spark Unit (part #7405163).

Note: MSU Spark Units are held in place with silicone.

Disconnect Head Switch from P.C. Board (part #404601) and unscrew Head Switch.
Handle Assembly - Part 2 (cont’d)

Remove Fan Blade Set Screw (requires #T-7). (Fan Blade part #403167 with screw)

With Phillips screwdriver remove (3) screws (part #7405090) holding P.C. Board. Unplug Fan Connector.

Pull out red Stem Adapter (part #401340).

Lift up O-Ring and remove (part #403992).

Inspect O-Ring. Replace is any damage is noted.
Handle Assembly - Part 2 (cont'd)

Remove Spark Plug (part #7505164).

Fan Motor Kit (part #900525A).

See inserts for Motor/Cylinder Assembly.
### Handle Assembly

<table>
<thead>
<tr>
<th>KEY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>7405163</td>
<td>Spark Unit (MSU)</td>
</tr>
<tr>
<td>52A</td>
<td>7505166</td>
<td>Red Wire and Boot Only (MSU) (For tools after serial no. 398091440)</td>
</tr>
<tr>
<td>53</td>
<td>900012</td>
<td>Wire Cover Plate</td>
</tr>
<tr>
<td>54</td>
<td>404619</td>
<td>Insulator (under Trigger Switch)</td>
</tr>
<tr>
<td>55</td>
<td>404490</td>
<td>Trigger Switch</td>
</tr>
<tr>
<td>56</td>
<td>403999</td>
<td>Handle Contact Board</td>
</tr>
<tr>
<td>59</td>
<td>401400A</td>
<td>Actuator Assembly</td>
</tr>
<tr>
<td>61</td>
<td>7405148</td>
<td>Left &amp; Right Side Handle Halves</td>
</tr>
<tr>
<td>62</td>
<td>7405067</td>
<td>Screws &amp; washers, #6-32 x 1” (pkg. 3)</td>
</tr>
<tr>
<td>63</td>
<td>401408</td>
<td>Screw &amp; washer, #10-32 x 9/16”</td>
</tr>
<tr>
<td>64</td>
<td>401406</td>
<td>Screw &amp; washer, #6-32 x 1-1/2”</td>
</tr>
<tr>
<td>66</td>
<td>401495</td>
<td>Belt Hook</td>
</tr>
<tr>
<td>69</td>
<td>401395</td>
<td>Trigger Spring</td>
</tr>
<tr>
<td>70</td>
<td>401394A</td>
<td>Trigger Assembly</td>
</tr>
<tr>
<td>72</td>
<td>401396</td>
<td>Trigger Cam</td>
</tr>
<tr>
<td>73</td>
<td>7405091</td>
<td>Trigger Screws, #2 x 5/8” (pkg. 2)</td>
</tr>
<tr>
<td>75</td>
<td>401397</td>
<td>Cam Bushing</td>
</tr>
<tr>
<td></td>
<td>401450</td>
<td>Fuel Cell Pad (not shown)</td>
</tr>
</tbody>
</table>
**Magazine Assembly**

Remove (2) screws holding Foot (part #7505146).

Remove Foot (part #801113).

Pull off Magazine.

Remove Lower Rail (part #801110).

Pull and slide out rear of Magazine.

Remove (3) screws from Magazine (part #7405070).

Remove (1) screw (part #7405071).

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*Rev. 09/07*
Magazine Assembly (cont’d)

Remove (2) screws from Shear Block (part #7405147).

Remove Magazine halves (part #7405149).

Remove Upper Rail (part #801112).
Inspect Upper Rail for heavy burrs.

Remove Cover Plate (part #7506006).
Magazine Assembly (cont'd)

Remove Battery Contact (part #7505017).

Inspect Battery Contact for bent or broken terminals. Replace Contact Assembly if these conditions exist.

Remove Shear Block.

Take out (2) screws (part #7405147).

Shear Block (part #7405145).

Remove Battery Clip screw (part #401423).

Remove Battery Clip (part #401422).
Magazine Assembly (cont’d)

Remove Carrier Assembly from Magazine half.

⚠️ CAUTION

Hold Carrier firmly and slide forward to front of Magazine towards the post and lift Constant Force Spring off post (part #7405168).

Remove Lockout Bracket screw (part #801122).

Remove Lockout Bracket (part #801106).

Remove Spring and Hub (part #7405169).
Magazine Assembly (cont'd)

Remove pin from Spring Carrier/Follower Assembly (part #7405168).

Remove spring from Carrier (part #7405168).
### Magazine Assembly

#### Tool Disassembly

#### Key

<table>
<thead>
<tr>
<th>KEY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>801114</td>
<td>Screws and washers, #6-32 x 3/4&quot; (pkg. 3)</td>
</tr>
<tr>
<td>31</td>
<td>7405070</td>
<td>Screws and washers, #6-32 x 1/2&quot; (pkg. 3)</td>
</tr>
<tr>
<td>32</td>
<td>7405071</td>
<td>Screws and washers, #6-32 x 1/4&quot; (pkg. 3)</td>
</tr>
<tr>
<td>34</td>
<td>7405146</td>
<td>Food screws, #6 x 7/7&quot; (pkg. 2)</td>
</tr>
<tr>
<td>35</td>
<td>801113</td>
<td>Magazine foot</td>
</tr>
<tr>
<td>91</td>
<td>401422</td>
<td>Battery clip screw, #6-32 x 1-1/4&quot;</td>
</tr>
<tr>
<td>92</td>
<td>801117</td>
<td>Shear block (for Telescoping Nosepiece tools)</td>
</tr>
<tr>
<td>92A</td>
<td>801118</td>
<td>Shear block kit with screws &amp; washers (for Original Nosepiece tool) Pre August 2001</td>
</tr>
<tr>
<td>93</td>
<td>7405147</td>
<td>Shear block screws &amp; washers only (fits both type shear blocks)</td>
</tr>
<tr>
<td>94</td>
<td>4015149</td>
<td>Left &amp; right magazine halves (with battery clip)</td>
</tr>
<tr>
<td>95</td>
<td>7505017</td>
<td>Battery contact assembly</td>
</tr>
<tr>
<td>96</td>
<td>401422</td>
<td>Battery clip</td>
</tr>
<tr>
<td>98</td>
<td>401423</td>
<td>Battery clip screw, #6-32 x 1-1/4&quot;</td>
</tr>
<tr>
<td>99</td>
<td>7506906</td>
<td>Cover plate</td>
</tr>
<tr>
<td>10C</td>
<td>801112</td>
<td>Upper rail</td>
</tr>
<tr>
<td>1U1</td>
<td>801111</td>
<td>Lower rail</td>
</tr>
<tr>
<td>1U3</td>
<td>4015168</td>
<td>Carrier/Follower assembly</td>
</tr>
<tr>
<td>7405177</td>
<td></td>
<td>Follower/Lockout assembly complete</td>
</tr>
</tbody>
</table>

* Screw use Loctite 242 (Blue)
**Housing Assembly**

Remove (3) screws (part #7405060).

Lift off Dust Shield (part #7505013).

Lift off Housing (part #7505148).

Lift off Nosepiece Assembly (part #801130A).
**Housing Assembly (cont’d)**

Remove Piston Stop Retaining Ring (part #401328), using Snap Ring pliers (part #401333).

Make sure when you reassemble that Retaining Ring ends are not positioned in the vertical notches in the Sleeve.

Slide Piston out of Mid-check Assembly (part #7502000).

Lift off Air Dam (part #401313).

Check position of Air Dam when reassembling.

Note notches in the Air Dam.

Remove (4) Cage screws (part #092769).
**Housing Assembly (cont’d)**

Slide off Cage and Spring.

(part #7405144 only comes as an assembly)

(Spring, part #401488)

Lift out Mid-check Retaining Ring (part #401322).

Remove with Snap Ring Pliers (part #401333).

Remove 2 Wave Washers and 1 Seal Washer (part #7405056).

Remove Bumper (part #7505109) using Bumper Removal Tool.
Housing Assembly (cont’d)

Lift off O-Ring (part #404482).

Lift off Piston Rings (part #7405055).

Always make sure the Piston Ring end gaps are opposite each other.
Nose Assembly

Remove (2) screws (part #7405059).

Lift off Stop Plate (part #801127).

Lift off Lock-out Probe (part #801128).

Lift off Work Contact Element (part #801129).

Inspect Work Contact Element for burring or damage. Replace if burring or damage is noted.
Nose Assembly (cont'd)

Remove (2) screws (part #7405059).

Lift off Guide Block (part #801131).

Slide out Upper Probe (part #801132).

Inspect rubber Grommet for damage. Replace Upper Probe if grommet is damaged.