



# Customer Bulletin

Commercial Products

August 04, 2022

## Stainless Steel Sprayer Pump Heads Multi Pro Sprayers

**Bulletin Type** Information Only

**Affected Units**

Model Number(s)	Serial Number(s)
41188, 41393, 41394, 41394CA, 41393TE, 41593, 41593N, and 41594	314000000 and Up

**Situation** Important Information

Corrosion and wear leading to premature pump head failure has been reported on some 6-piston spray system pumps.



Figure 1

Material wear can be attributed to 3 causal areas.

**1. Improper spray pump maintenance**

Improper rinsing and neutralizing can cause residual chemicals left in the diaphragm system to drain down and collect in the pump heads at the bottom of the pump. These chemicals degrade the internal surfaces.

Toro recommends a triple rinse every time the sprayer is used, along with chemical appropriate neutralizers (identified by the chemical manufacturer) for the particular chemical(s) being used. Refer to the sprayer *Operator's Manual* for additional product specific maintenance information and requirements.

## 2. Spray Pump Cavitation

Cavitation can be a leading cause of pump head and diaphragm failure. When the suction is restricted, this can cause excess vacuum that will introduce air into the pump inlet. When these air molecules change from a vacuum state to a pressure state in the pump, they will cause damage to the surrounding surface area.

Toro recommends sizing the suction and pressure filter accordingly to accommodate the viscosity of the chemical mixture being sprayed. For products that are the viscosity of water the 30 mesh suction filter screens are recommended.

### Sprayer Filter Reference Chart

	Suction	Pressure	Tip
	Current	Current	Current
16 MESH		133-0383	
30 MESH	100-6991	133-0384	
50 MESH	100-8642	133-0385	120-0699
80 MESH	100-6992	133-0386	
100 MESH		133-0387	120-0698

## 3. High Concentrations of Abrasive and Corrosive Chemicals

Heavy abrasives and corrosive mixtures (i.e., iron or copper-based products and salts) can accelerate the material wear of the pump and pump heads. It is known that heavy iron usage can lead to premature pump wear.

### Corrective Action

Customers who have experienced historical failures of spray pump heads are encouraged to purchase stainless steel spray pump heads as they are more resistant to chemicals such as iron and copper. Maintenance, cavitation, and corrosion will still be a threat to deterioration of the material surface and due diligence is still required in adhering to proper maintenance practices (i.e., rinsing and neutralizing).

### Safety Awareness

Follow reasonable and customary safety precautions.

### Parts

Currently available

Part replacements should be done as a set. Do not mix the older style pump heads with the stainless steel pump heads to avoid potential repeat pump head failures. Doing so will cause pump head interference and will not allow pump head to fully seat correctly.

<b>Toro Part No.</b>	<b>Part Description</b>	<b>Quantity</b>
145-3399	Pump Head Service Kit (6 Heads) (SS, 363/365)	1
136-2253	Replacement Pump (SS Heads), MP1750	1
136-2254	Replacement Pump (SS Heads), MP5800/MP WM	1

## References

Find the latest service manuals, diagnostic manuals, schematics, service bulletins and service alerts at [Toro](#).

<b>Resource</b>	<b>Search Term</b>
<i>Multi Pro 5600 Service Manual</i>	03123SL
<i>Multi Pro 1750 Service Manual</i>	15215SL
<i>Multi Pro 5700-D Service Manual</i>	04130SL
<i>Multi Pro 5800 Service Manual</i>	11181SL or 16232SL
Grounds for Success Newsletter article	<a href="#">Extend The Life Of Your Sprayer</a>
Service Bulletin Vehicles #01-01	Updated Multi Pro Filter Information