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# WE6 Windfoil Electric

## 6-ft Covered Walking Sprayer

# Assembly, Parts and Operator's Manual

Version WE6-1804

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# Safety

Many people die or suffer serious injury in job related accidents every year due to carelessness. Know your machinery and be aware of potential hazards. Put safety first in all your operations.

Review all instructions and procedures outlined in this manual annually. Every operator must familiarize himself with the operating instructions of the sprayer.

## Operational Safety

Shut down sprayer and power unit and wait for all parts to stop before adjusting, cleaning, or lubricating the power unit or sprayer.

Before spraying a field familiarize yourself with any rocks, debris, trees, ditches or gullies that may potentially be dangerous. Plan the spraying route to avoid these hazards.

Spray only chemicals that unit was designed for, (ie turf application). Do not use products for which unit was not designed, (ie PAINT, sealants, cleaning fluids, dust inhibitors, ice surfaces).

Minimize Chemical Drift

The **Windfoil** sprayer was designed in a wind tunnel to control air flow around and behind the sprayer minimizing drift to allow safer spraying in windy conditions.

Drift can blow off a field after it has been sprayed, especially in high winds. Reasonable caution should be taken in order to spray effectively and safely.

**For maximum drift control, keep curtain in contact with the ground to ensure a seal to it. Drift control of the *Windfoil* is less effective when the wind blows the curtain off the crop canopy breaking the seal between the curtain and the crop.**

# General Spraying Information

## Application Tips

Always use clean filtered water in the sprayer tank.

Your **Windfoil** Drift Containment Spray System (DCSS) comes standard with stainless steel insert tips. Please contact your manufacturer or see the application rate table in this manual for various sizes of tips available for your machine.

Check the flow rate from all nozzles using the capacity calibration technique; see the Calibration section for tables and instructions. Use clean filtered water for all calibration testing. Adjust the sprayer pressure to get the proper flow rate. The flow meters are not accurate enough in absolute terms to be used as a flow meter. In relative terms they are very accurate.

| | |
|---|---|
| **Caution:** | Conventional tips are rated at 40 psi (3 bar), for example a 8004 tip at 40 psi (3 bar) delivers 0.4 US gal/min (1.5 litres/min) . Only conventional 80° tips are recommended for the **Windfoil WE** series. Wider angle tips (110°) have a wider pattern than 80° and will hit the curtain at the ends of the boom and are not recommended. |

## Nozzles

Despite being the most important component for accurate uniform spraying application, nozzles are often neglected and abused.

Nozzle flow rate depends on effective orifice size and pressure. Spray tip manufacturers have supplied tables of nozzle application rates at various pressures, for the best results it is recommended that you follow these guidelines.

The rule of thumb is that as you increase the pressure to your unit the average droplet size decreases. Normally with conventional open boom sprayers large droplets are used to control drift but large droplets can roll off plants without sticking. With the **Windfoil** covered spray system you will be able to spray with smaller droplets, increase coverage, and not worry about drift.

The spray patterns must overlap for even coverage but should not interfere with one another. Nozzles are set at a 10° angle so that one edge of its pattern will be just behind the edge of its adjacent spray pattern, evading interference with one another.

Typically as a tip wears the spray pattern distorts output volumes usually increase, and the droplet characteristics change. Recalibration may correct for output changes, but cannot correct for spray pattern changes or the drop size generated.

| | |
|---|---|
| **Caution:** | When spraying next to a flower bed, do not spray over the turf edge as the spray will go under the curtain and onto the flowers. |

## Diaphragm Check Valve Nozzle Bodies

Diaphragm check valves close at approximately 15 psi (1 bar) to prevent excessive dripping. Should the cap on the valve loosen or the check valve diaphragm become misaligned, the body may leak. Stop the leak by, tightening the check valve cap or remove the cap and inspect the seal for damage or improper assembly.

To check for defective check valves when the spraying stop control has been actuated, the volume that drips from each nozzle should not exceed 2ml timed over a 5 minute period. The measuring is to start 8 seconds after the flow to the spray boom is shut off.

Nozzle caps are attached by engaging the cap and turning clockwise about a third of a turn. Self-aligning caps have a slot to align the tips. Ensure that the tips fit down into the slotted hole before installing caps.

Non-aligning caps are also available for special tips.

## Calibration

As a tip wears recalibration may be required. Collect the output from each nozzle for 60 seconds, using an accurate measuring cup. Use clear water for all testing. Record the output from each nozzle. Replace nozzles that are more than 5% above or below the average reading, or has a visibly distorted pattern.

## Capacities of Electric Walkers

Table 1 below shows the range of tips that can be used in the 3 models of electric walkers that allow the sprayer to reach 40 psi. The 3 foot walker (WE3/FE3) is capable of using 8001 tips to 8006 tips, the 6 foot walker (WE6/FE6) can run properly with only 8001 to 8003 tips. Please note that smaller tips result in better agitation, where as the larger tips give you more output but less agitation. Table 2 below shows application rates for various units, all of the calculations are based on a 3 mph walking speed. Table 3 shows the spray times for both the standard 5 and optional 10 USG tanks. In addition it shows the coverage per tank fill based on a 3 mph walking speed and 40 psi spray pressure.

### Table 1

USABLE TIPS FOR THE WE/FE SERIES WALKERS

| Tip Size for Electric Walkers | 8001 | 80015 | 8002 | 8003 | 8004 | 8005 | 8006 |
|---|---|---|---|---|---|---|---|
| WE3/FE3 - 3' Electric Walker | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| WE4/FE4 - 4' Electric Walker | Yes | Yes | Yes | Yes | Yes | Yes | No |
| WE6/FE6 - 6' Electric Walker | Yes | Yes | Yes | Yes | No | No | No |

### Table 2

APPLICATION RATES BASED ON WALKING SPEED OF 3 MPH.

| Tip Size for Electric Walkers | 8001 | 80015 | 8002 | 8003 | 8004 | 8005 | 8006 |
|---|---|---|---|---|---|---|---|
| Application rate-Gallons per acre (GPA) | 16.5 | 24.8 | 33 | 49.5 | 66 | 82.5 | 99 |
| Application rate USG/1000sqft | 0.38 | 0.57 | 0.76 | 1.13 | 1.51 | 1.89 | 2.27 |
| Application rate Liters/Hectare | 154 | 231 | 309 | 463 | 617 | 771 | 925 |

### Table 3

SPRAY TIMES AND COVERAGES BASED ON WALKING SPEED OF 3 MPH

WE6 & FE6 MODELS

| Tip Size for Electric Walkers | 8001 | 80015 | 8002 | 8003 | 8004 | 8005 | 8006 |
|---|---|---|---|---|---|---|---|
| **5 USG TANK** | | | | | | | |
| 5 USG Tank Spray Time (min) | 8.3 | 5.6 | 4.2 | 2.8 | | | |
| Coverage 6' Walker (Acres) | 0.30 | 0.20 | 0.15 | 0.10 | | | |
| Coverage 6' Walker (Sq ft) | 13,200 | 8,800 | 6,600 | 4,400 | | | |
| Coverage 6' Walker (Hectares) | 0.123 | 0.082 | 0.061 | 0.041 | | | |
| **10 USG TANK** | | | | | | | |
| 10 USG Tank Spray Time (min) | 16.7 | 11.1 | 8.3 | 5.6 | | | |
| Coverage 6' Walker (Acres) | 0.61 | 0.40 | 0.30 | 0.20 | | | |
| Coverage 6' Walker (Sq ft) | 26,400 | 17,600 | 13,200 | 8,800 | | | |
| Coverage 6' Walker (Hectares) | 0.245 | 0.164 | 0.123 | 0.082 | | | |

## Approximate Weight of WE Series

| MODEL | Weight dry (lbs) | Weight dry (kg) | Wt w/5usg tank full (lbs) | Wt w/5usgal tank full (kg) | Wt w/10usg tank full (lbs) | Wt w/10usg tank full (kg) |
|---|---|---|---|---|---|---|
| WE3 | 57.6 | 26.1 | 99.3 | 45 | 141 | 63.9 |
| WE4 | 63.4 | 28.8 | 105.1 | 47.7 | 146.8 | 66.6 |
| WE6 | 71.4 | 32.4 | 113.1 | 51.3 | 154.8 | 70.2 |

## Application rate tables (American & Metric)

### American Application Rates at 12" Nozzle Spacing
### 80 Deg. Tips

| Rogers Part # | Tip Number | Tip Mfg | Liquid Press psi | Liquid Press bars | Capacity 1 nozzle gpm | U. S. GALLONS PER ACRE 2.5 mph | 3 mph | 4 mph | 5 mph | 7 mph | U. S. GALLONS PER 1000 SQ. FT. 2.5 mph | 3 mph | 4 mph | 5 mph | 7 mph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05872 | 800067SS | Teejet | 30 | 2.07 | 0.058 | 11.5 | 9.6 | 7.2 | 5.7 | 4.1 | 0.26 | 0.22 | 0.16 | 0.13 | 0.09 |
| | (200 mesh) | | 40 | 2.76 | 0.067 | 13.3 | 11.1 | 8.3 | 6.6 | 4.7 | 0.30 | 0.25 | 0.19 | 0.15 | 0.11 |
| | | | 50 | 3.45 | 0.075 | 14.8 | 12.4 | 9.3 | 7.4 | 5.3 | 0.34 | 0.28 | 0.21 | 0.17 | 0.12 |
| | | | 60 | 4.14 | 0.082 | 16.2 | 13.5 | 10.2 | 8.1 | 5.8 | 0.37 | 0.31 | 0.23 | 0.19 | 0.13 |
| 01369 | 8001VS | Teejet | 30 | 2.07 | 0.087 | 17.1 | 14.3 | 10.7 | 8.6 | 6.1 | 0.39 | 0.33 | 0.25 | 0.20 | 0.14 |
| | (100 mesh) | | 40 | 2.76 | 0.100 | 19.8 | 16.5 | 12.4 | 9.9 | 7.1 | 0.45 | 0.38 | 0.28 | 0.23 | 0.16 |
| | | | 50 | 3.45 | 0.112 | 22.1 | 18.4 | 13.8 | 11.1 | 7.9 | 0.51 | 0.42 | 0.32 | 0.25 | 0.18 |
| | | | 60 | 4.14 | 0.122 | 24.2 | 20.2 | 15.2 | 12.1 | 8.7 | 0.56 | 0.46 | 0.35 | 0.28 | 0.20 |
| 00827 | 80015VS | Teejet | 30 | 2.07 | 0.130 | 25.7 | 21.4 | 16.1 | 12.9 | 9.2 | 0.59 | 0.49 | 0.37 | 0.29 | 0.21 |
| | or | | 40 | 2.76 | 0.150 | 29.7 | 24.8 | 18.6 | 14.9 | 10.6 | 0.68 | 0.57 | 0.43 | 0.34 | 0.24 |
| 13351 | API-80015 | Albuz | 50 | 3.45 | 0.168 | 33.2 | 27.7 | 20.8 | 16.6 | 11.9 | 0.76 | 0.63 | 0.48 | 0.38 | 0.27 |
| | (100 mesh) | | 60 | 4.14 | 0.184 | 36.4 | 30.3 | 22.7 | 18.2 | 13.0 | 0.83 | 0.69 | 0.52 | 0.42 | 0.30 |
| 05876 | 8002VS | Teejet | 30 | 2.07 | 0.173 | 34.3 | 28.6 | 21.4 | 17.1 | 12.2 | 0.79 | 0.65 | 0.49 | 0.39 | 0.28 |
| | or | | 40 | 2.76 | 0.200 | 39.6 | 33.0 | 24.8 | 19.8 | 14.1 | 0.91 | 0.76 | 0.57 | 0.45 | 0.32 |
| 14384 | AXI-8002 | Albuz | 50 | 3.45 | 0.224 | 44.3 | 36.9 | 27.7 | 22.1 | 15.8 | 1.01 | 0.84 | 0.63 | 0.51 | 0.36 |
| | (50 mesh) | | 60 | 4.14 | 0.245 | 48.5 | 40.4 | 30.3 | 24.2 | 17.3 | 1.11 | 0.93 | 0.69 | 0.56 | 0.40 |
| 05877 | 8003VS | Teejet | 30 | 2.07 | 0.260 | 51.4 | 42.9 | 32.2 | 25.7 | 18.4 | 1.18 | 0.98 | 0.74 | 0.59 | 0.42 |
| | or | | 40 | 2.76 | 0.300 | 59.4 | 49.5 | 37.1 | 29.7 | 21.2 | 1.36 | 1.13 | 0.85 | 0.68 | 0.49 |
| 14385 | AXI-8003 | Albuz | 50 | 3.45 | 0.335 | 66.4 | 55.3 | 41.5 | 33.2 | 23.7 | 1.52 | 1.27 | 0.95 | 0.76 | 0.54 |
| | (50 mesh) | | 60 | 4.14 | 0.367 | 72.7 | 60.6 | 45.5 | 36.4 | 26.0 | 1.67 | 1.39 | 1.04 | 0.83 | 0.59 |
| 05878 | 8004VS | Teejet | 30 | 2.07 | 0.346 | 68.6 | 57.2 | 42.9 | 34.3 | 24.5 | 1.57 | 1.31 | 0.98 | 0.79 | 0.56 |
| | or | | 40 | 2.76 | 0.400 | 79.2 | 66.0 | 49.5 | 39.6 | 28.3 | 1.81 | 1.51 | 1.13 | 0.91 | 0.65 |
| 14061 | AXI-8004 | Albuz | 50 | 3.45 | 0.447 | 88.5 | 73.8 | 55.3 | 44.3 | 31.6 | 2.03 | 1.69 | 1.27 | 1.01 | 0.72 |
| | (50 mesh) | | 60 | 4.14 | 0.490 | 97.0 | 80.8 | 60.6 | 48.5 | 34.6 | 2.22 | 1.85 | 1.39 | 1.11 | 0.79 |
| 05879 | 8005VS | Teejet | 30 | 2.07 | 0.433 | 85.7 | 71.4 | 53.6 | 42.9 | 30.6 | 1.96 | 1.64 | 1.23 | 0.98 | 0.70 |
| | or | | 40 | 2.76 | 0.500 | 99.0 | 82.5 | 61.9 | 49.5 | 35.4 | 2.27 | 1.89 | 1.42 | 1.13 | 0.81 |
| 14386 | AXI-8005 | Albuz | 50 | 3.45 | 0.559 | 110.7 | 92.2 | 69.2 | 55.3 | 39.5 | 2.53 | 2.11 | 1.58 | 1.27 | 0.91 |
| | (50 mesh) | | 60 | 4.14 | 0.612 | 121.2 | 101.0 | 75.8 | 60.6 | 43.3 | 2.78 | 2.31 | 1.74 | 1.39 | 0.99 |
| 05880 | 8006VS | Teejet | 30 | 2.07 | 0.520 | 102.9 | 85.7 | 64.3 | 51.4 | 36.7 | 2.36 | 1.96 | 1.47 | 1.18 | 0.84 |
| | or | | 40 | 2.76 | 0.600 | 118.8 | 99.0 | 74.3 | 59.4 | 42.4 | 2.72 | 2.27 | 1.70 | 1.36 | 0.97 |
| 14387 | AXI-8006 | Albuz | 50 | 3.45 | 0.671 | 132.8 | 110.7 | 83.0 | 66.4 | 47.4 | 3.04 | 2.53 | 1.90 | 1.52 | 1.09 |
| | (50 mesh) | | 60 | 4.14 | 0.735 | 145.5 | 121.2 | 90.9 | 72.7 | 52.0 | 3.33 | 2.78 | 2.08 | 1.67 | 1.19 |

Please note your WE6 will only spray at 40 psi using 8001 - 8003 tips. Larger tips in your unit will not produce 40 psi at the tip, thus resulting in a lower quality pattern and thus poor results.

## Metric Application Rates at 12" Spacing (0.3 meters)
## 80 Deg. Tips

| Rogers Part # | Tip Number | Tip Mfg | Liquid Press psi | Liquid Press bars | Capacity 1 nozzle gpm | U. S. GALLONS PER ACRE 2.5 mph | 3 mph | 4 mph | 5 mph | 7 mph | Liters/Hectare 4 kph | 4.8 kph | 6.4 kph | 8 kph | 11.2 kph |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05872 | 800067SS | Teejet | 30 | 2.07 | 0.058 | 11.5 | 9.6 | 7.2 | 5.7 | 4.1 | 107 | 90 | 67 | 54 | 38 |
| | (200 mesh) | | 40 | 2.76 | 0.067 | 13.3 | 11.1 | 8.3 | 6.6 | 4.7 | 124 | 103 | 78 | 62 | 44 |
| | | | 50 | 3.45 | 0.075 | 14.8 | 12.4 | 9.3 | 7.4 | 5.3 | 139 | 116 | 87 | 69 | 50 |
| | | | 60 | 4.14 | 0.082 | 16.2 | 13.5 | 10.2 | 8.1 | 5.8 | 152 | 127 | 95 | 76 | 54 |
| 01369 | 8001VS | Teejet | 30 | 2.07 | 0.087 | 17.1 | 14.3 | 10.7 | 8.6 | 6.1 | 160 | 134 | 100 | 80 | 57 |
| | (100 mesh) | | 40 | 2.76 | 0.100 | 19.8 | 16.5 | 12.4 | 9.9 | 7.1 | 185 | 154 | 116 | 93 | 66 |
| | | | 50 | 3.45 | 0.112 | 22.1 | 18.4 | 13.8 | 11.1 | 7.9 | 207 | 172 | 129 | 103 | 74 |
| | | | 60 | 4.14 | 0.122 | 24.2 | 20.2 | 15.2 | 12.1 | 8.7 | 227 | 189 | 142 | 113 | 81 |
| 00827 | 80015VS | Teejet | 30 | 2.07 | 0.130 | 25.7 | 21.4 | 16.1 | 12.9 | 9.2 | 240 | 200 | 150 | 120 | 86 |
| | or | | 40 | 2.76 | 0.150 | 29.7 | 24.8 | 18.6 | 14.9 | 10.6 | 278 | 231 | 174 | 139 | 99 |
| 13351 | API-80015 | Albuz | 50 | 3.45 | 0.168 | 33.2 | 27.7 | 20.8 | 16.6 | 11.9 | 310 | 259 | 194 | 155 | 111 |
| | (100 mesh) | | 60 | 4.14 | 0.184 | 36.4 | 30.3 | 22.7 | 18.2 | 13.0 | 340 | 283 | 213 | 170 | 121 |
| 05876 | 8002VS | Teejet | 30 | 2.07 | 0.173 | 34.3 | 28.6 | 21.4 | 17.1 | 12.2 | 321 | 267 | 200 | 160 | 115 |
| | or | | 40 | 2.76 | 0.200 | 39.6 | 33.0 | 24.8 | 19.8 | 14.1 | 370 | 309 | 231 | 185 | 132 |
| 14384 | AXI-8002 | Albuz | 50 | 3.45 | 0.224 | 44.3 | 36.9 | 27.7 | 22.1 | 15.8 | 414 | 345 | 259 | 207 | 148 |
| | (50 mesh) | | 60 | 4.14 | 0.245 | 48.5 | 40.4 | 30.3 | 24.2 | 17.3 | 453 | 378 | 283 | 227 | 162 |
| 05877 | 8003VS | Teejet | 30 | 2.07 | 0.260 | 51.4 | 42.9 | 32.2 | 25.7 | 18.4 | 481 | 401 | 301 | 240 | 172 |
| | or | | 40 | 2.76 | 0.300 | 59.4 | 49.5 | 37.1 | 29.7 | 21.2 | 555 | 463 | 347 | 278 | 198 |
| 14385 | AXI-8003 | Albuz | 50 | 3.45 | 0.335 | 66.4 | 55.3 | 41.5 | 33.2 | 23.7 | 621 | 517 | 388 | 310 | 222 |
| | (50 mesh) | | 60 | 4.14 | 0.367 | 72.7 | 60.6 | 45.5 | 36.4 | 26.0 | 680 | 567 | 425 | 340 | 243 |
| 05878 | 8004VS | Teejet | 30 | 2.07 | 0.346 | 68.6 | 57.2 | 42.9 | 34.3 | 24.5 | 641 | 534 | 401 | 321 | 229 |
| | or | | 40 | 2.76 | 0.400 | 79.2 | 66.0 | 49.5 | 39.6 | 28.3 | 741 | 617 | 463 | 370 | 264 |
| 14061 | AXI-8004 | Albuz | 50 | 3.45 | 0.447 | 88.5 | 73.8 | 55.3 | 44.3 | 31.6 | 828 | 690 | 517 | 414 | 296 |
| | (50 mesh) | | 60 | 4.14 | 0.490 | 97.0 | 80.8 | 60.6 | 48.5 | 34.6 | 907 | 756 | 567 | 453 | 324 |
| 05879 | 8005VS | Teejet | 30 | 2.07 | 0.433 | 85.7 | 71.4 | 53.6 | 42.9 | 30.6 | 802 | 668 | 501 | 401 | 286 |
| | or | | 40 | 2.76 | 0.500 | 99.0 | 82.5 | 61.9 | 49.5 | 35.4 | 926 | 771 | 579 | 463 | 331 |
| 14386 | AXI-8005 | Albuz | 50 | 3.45 | 0.559 | 110.7 | 92.2 | 69.2 | 55.3 | 39.5 | 1035 | 862 | 647 | 517 | 370 |
| | (50 mesh) | | 60 | 4.14 | 0.612 | 121.2 | 101.0 | 75.8 | 60.6 | 43.3 | 1134 | 945 | 709 | 567 | 405 |
| 05880 | 8006VS | Teejet | 30 | 2.07 | 0.520 | 102.9 | 85.7 | 64.3 | 51.4 | 36.7 | 962 | 802 | 601 | 481 | 344 |
| | or | | 40 | 2.76 | 0.600 | 118.8 | 99.0 | 74.3 | 59.4 | 42.4 | 1111 | 926 | 694 | 555 | 397 |
| 14387 | AXI-8006 | Albuz | 50 | 3.45 | 0.671 | 132.8 | 110.7 | 83.0 | 66.4 | 47.4 | 1242 | 1035 | 776 | 621 | 444 |
| | (50 mesh) | | 60 | 4.14 | 0.735 | 145.5 | 121.2 | 90.9 | 72.7 | 52.0 | 1360 | 1134 | 850 | 680 | 486 |

Please note your WE6 will only spray at 40 psi using 8001 - 8003 tips. Larger tips in your unit will not produce 40 psi at the tip, thus resulting in a lower quality pattern and thus poor results.

## Speed Test tables

Run a speed test in the area to be sprayed. The sprayer must be up to speed before starting the test run. To determine the speed mark off a distance as found on one of the tables. Push the sprayer over this distance carefully noting and recording the time to cover the distance. The speed traveled can be found for the specific distance and time to travel using the tables below.

After the nozzles have been individually checked and matched, the sprayer should be calibrated to determine the correct speed for the desired application volume. To get area covered multiply the width (WE3 – 3ft(.91m), WE4 – 4ft(1.22m), WE6 – 6ft(1.83m)) x distance.

**Table 4:** Time in Seconds to Travel Distance of:

| | 10 | 25 | 50 | 100 | 200 |
|---|---|---|---|---|---|
| mph | (ft) | (ft) | (ft) | (ft) | (ft) |
| 1 | 6.8 | 17.0 | 34.1 | 68.2 | 136.0 |
| 1.5 | 4.5 | 11.4 | 22.7 | 45.5 | 90.9 |
| 2 | 3.4 | 8.5 | 17.0 | 34.1 | 68.2 |
| 2.5 | 2.7 | 6.8 | 13.6 | 27.3 | 54.5 |
| 3 | 2.3 | 5.7 | 11.4 | 22.7 | 45.5 |
| 4 | 1.7 | 4.3 | 8.5 | 17.0 | 34.1 |
| 5 | 1.4 | 3.4 | 6.8 | 13.6 | 27.3 |
| 6 | 1.1 | 2.8 | 5.7 | 11.4 | 22.7 |

**Table 5:** Time in Seconds to Travel a Distance of:

| | 10 | 25 | 50 | 100 | 200 |
|---|---|---|---|---|---|
| Km/h | (m) | (m) | (m) | (m) | (m) |
| 1 | 36.0 | 90.0 | 180.0 | 360.0 | 720.0 |
| 1.5 | 24.0 | 60.0 | 120.0 | 240.0 | 480.0 |
| 2 | 18.0 | 45.0 | 90.0 | 180.0 | 360.0 |
| 2.5 | 14.4 | 36.0 | 72.0 | 144.0 | 288.0 |
| 3 | 12.0 | 30.0 | 60.0 | 120.0 | 240.0 |
| 4 | 9.0 | 22.5 | 45.0 | 90.0 | 180.0 |
| 5 | 7.2 | 18.0 | 36.0 | 72.0 | 144.0 |
| 6 | 6.0 | 15.0 | 30.0 | 60.0 | 120.0 |

**Note:** Tip pressure is usually less than the pressure at the pump. Losses occur in valves, hoses, etc. Always check the flow by the above calibration method.

## General Maintenance

### Cleaning

Sprayers need to be cleaned to prevent corrosion and cross contamination of chemicals. Trace amounts of one chemical can react with another or carry over to the next spraying and cause crop damage, especially with pesticides. Long exposures with even small amounts of some chemicals can damage sprayer components either by corrosion or gum deposits. If you spray crops that are very susceptible to injury from the last chemical used (ie vegetables, turf, and ornamentals) clean the unit especially well.

Always try to end the day with an empty tank; avoid contamination of water supplies and injury to plants or animals. Do not make puddles that might be accessible to children, pets, farm animals, or wildlife. Flush with clean water preferably after each day's operation. If you plan to use the same material over several days most chemicals may be kept in the tank overnight, labels on the chemical usually indicate those that may not. Rinse the outside of the sprayer. Surfactants combined with chemicals, when they are compatible, will provide some cleaning action in the sprayer.

Some chemical combinations (especially if oil is used) may produce a putty type paste (buttering out) in the sprayer tank and components; flushing with water after each load may prevent an accumulation. If water alone does not dissolve and remove the buildup, add solvent, kerosene, or other low flammable solvent; allow paste to dissolve, then agitate and flush. Next, flush with detergent and finally with clean water. Check with your chemical agent.

Whenever pesticides are changed, or before sprayer storage, clean sprayers thoroughly with a cleaning solution. The solution used depends on the chemical to be removed from the sprayer. Check the chemical label for cleaning instructions.

First flush with water, then add the cleaning solution to the tank and thoroughly agitate before flushing. Always flush with clean water to remove the cleaning solution. Remove nozzle tips and screens; clean them in a strong detergent solution or kerosene, using a soft brush such as an old toothbrush. Never use a metal probe to clean the orifice of a spray tip!

Follow the same safety precautions during cleaning as for applications. Use a respirator, rubber gloves, or other protective gear as may be directed by label instructions.

If a nozzle becomes blocked, turn the sprayer off. Note that the spray lines could still be pressurized; therefore, prior to removing the cap on the nozzle body, proper safety equipment should be worn, (ie gloves, eye protection, etc).

### Sunshine

Many plastic sprayer parts are degraded by ultra violet light, especially the nozzle flow indicators. Store the sprayer in the shade to extend the length of service.

### Winterizing

After the sprayer is thoroughly cleaned, put 2-5 gallons (7-19 litres) of rust inhibitor or antifreeze in the tank prior to the final flushing to help prevent corrosion. As the water is pumped from the sprayer, the antifreeze will leave a protective coating on the inside of the tank, pump, and plumbing. Remove nozzle tips, screens and no-drip valves (if used) and store them in a can of light oil such as diesel fuel or kerosene to prevent corrosion. Close nozzle openings with tape to prevent dirt, insects, mice, or other contaminants from entering.

During the final cleaning, completely check the sprayer. Look at the hoses, clamps, connections, nozzle tips, and screens for needed replacements. Store the sprayer in a reasonably clean and dry building.

## Assembly

There is more than one way to successfully assemble your **Windfoil** sprayer. Following the outlined steps will help to ensure a simple, trouble free assembly. All assembly references to left and right are referring to the sprayer left and right when facing the rear of the sprayer. Two people are required to remove sprayer from carton, or for any general lifting of the equipment (ie. lifting into transport).

### Step 1 - Front Wheel Installation

1. See General Assembly drawing for layout.
2. Locate four, (4) holes on the front of the sprayer, two, (2) to each side of the Windfoil logo.
3. Bolt the front wheel mount to these holes.
4. Slide front castor fork through castor bushing and insert cotter pins to secure.
5. Grease castor prior to use if required.
6. Install all three poly wheels.

### Step 2 - Handle Attachment

1. Place the handle in position so that the tube is on the outside of the mounting plates.
2. Bolt handle into place.
3. Plug in pump wire harness.

### Step 3 - Hose & Tank

1. Thread one end of hose (1/2”FNPT) into bottom fitting on tank (if required). Insert other end into input on pump (left side); slide lock down to clamp into place.
2. Set tank on brackets; studs in tank should line up with holes on brackets. Secure with ¼” nylock nuts.

### Step 4 - Last Check

1. Recheck all assembled parts for completeness and secure connections.
2. Locate the grease nipple on the front caster wheel and grease it.
3. Your sprayer is now ready for a wet test, to ensure complete operation.

## Operation

NOTE : Stainless steel insert tips are supplied with the **Windfoil WE series**; it can also use ceramic, brass or plastic insert tips that give an actual 80º spray pattern.

NOTE : Test the unit using clear water on a firm surface such as asphalt or concrete before using spray solution. This will illustrate the effectiveness of the individual spray patterns.

1. Be sure that the toggle switch on the handle bar is off, pump should not run once clips are on battery.
2. With the unit fully assembled, attach the battery clips to the battery on the front of the unit. (NOTE: Red clip is for positive post on battery).
3. With liquid in the tank, loosen the pressure regulator fully, ie. loosen lock nut on regulator and turn top knob on pressure regulator counter clockwise. Next turn unit on by flipping the switch on the handle bar. Slowly tighten pressure regulator (turn clockwise) until pressure on gauge rises to 40 psi (3 bar). (NOTE: to obtain optimum pattern, you should always try and operate your spray nozzles as close to 40 psi (3bar) as possible). Due to losses in the system you might want to run your system at 42-43 psi, this should give you close to 40 psi at the tip. (NOTE: Be careful not to run the pump on an empty tank as this could cause a vapour lock in the system. To fix the problem, make sure there is something in the tank; remove the output supply hose on the pump and start the system, take precautions as your chemical will start coming through the pump, once the liquid starts flowing shut the system off, reconnect the line and continue spraying). Watch each of the balls in the flow indicator as you spray, they should all raise to an equal level. If they are not equal the lower ball(s) indicate tips that are plugged or partially plugged. Check and clean the appropriate tip(s). If the balls are right at the top, the flow rate is too high for them. Replace them with the required balls for the tips (see the flow monitor page).

NOTE : As this is a self contained sprayer with a small tank and does not have a separate fresh water tank, it is recommended that when filling and working with chemicals a fresh water supply is always kept in close proximity for safety reasons.

#### Battery

A 12 volt battery is not supplied with the sprayer. The recommended battery is a sealed, deep cycle battery with bolt on connections, but any small utility battery will work. Recommended battery dimensions are approximately 8” long x 5” wide x 6” high.

## Maintenance

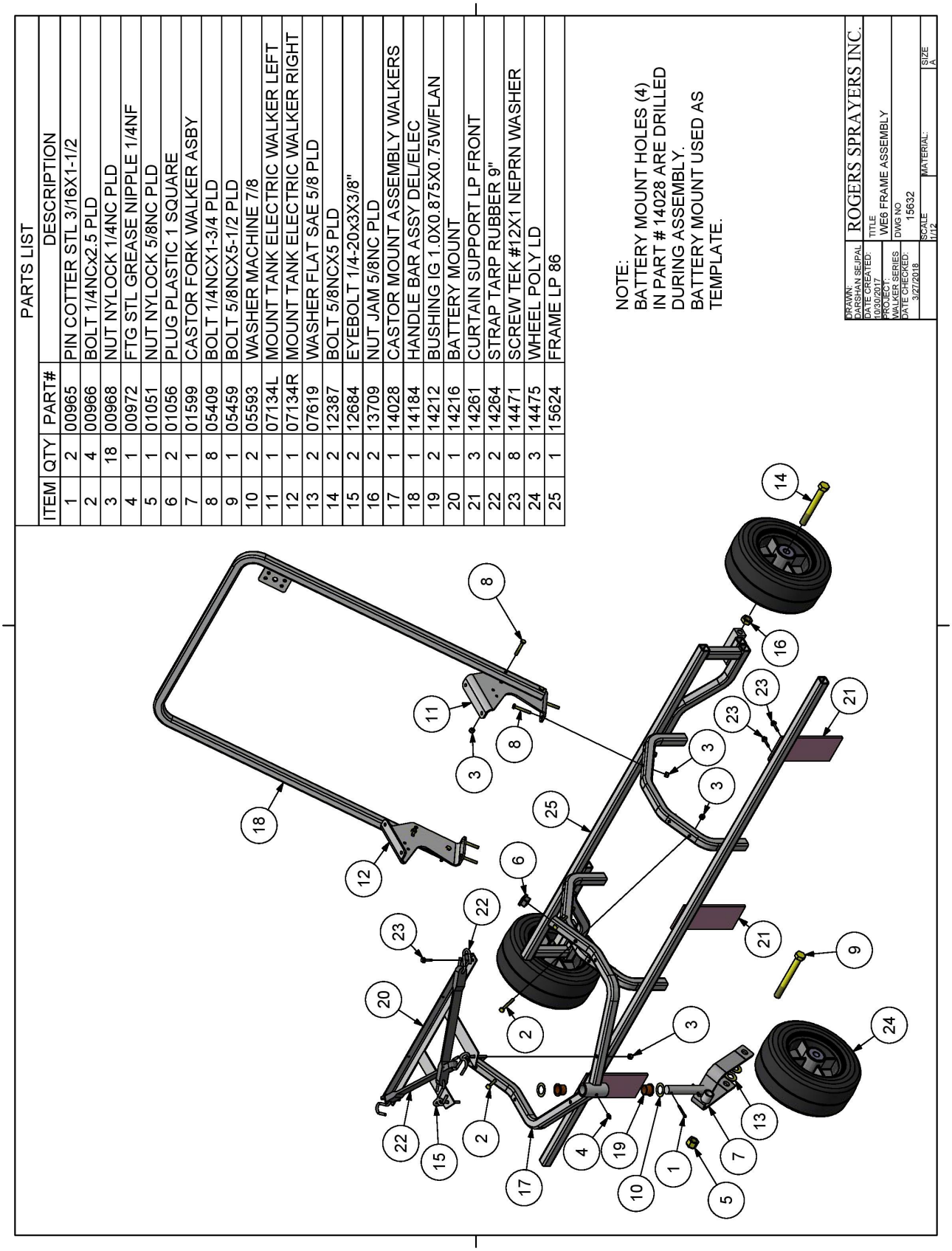
Cleaning and flushing with clear water after using.

Do not leave water in the unit at freezing temperatures. When storing the sprayer at freezing temperatures, run some windshield washer antifreeze through to prevent ice damage in the plastic parts.

Avoid storage of your sprayer in direct sunlight for prolonged periods. Certain plastic parts on the **Windfoil WE** are not UV resistant.

Keep the unit covered or stored indoors.

## WE6 Frame Assembly Part # 15632



PARTS LIST

| ITEM | QTY | PART# | DESCRIPTION |
|---|---|---|---|
| 1 | 2 | 00965 | PIN COTTER STL 3/16X1-1/2 |
| 2 | 4 | 00966 | BOLT 1/4NCx2.5 PLD |
| 3 | 18 | 00968 | NUT NYLOCK 1/4NC PLD |
| 4 | 1 | 00972 | FTG STL GREASE NIPPLE 1/4NF |
| 5 | 1 | 01051 | NUT NYLOCK 5/8NC PLD |
| 6 | 2 | 01056 | PLUG PLASTIC 1 SQUARE |
| 7 | 1 | 01599 | CASTOR FORK WALKER ASBY |
| 8 | 8 | 05409 | BOLT 1/4NCX1-3/4 PLD |
| 9 | 1 | 05459 | BOLT 5/8NCX5-1/2 PLD |
| 10 | 2 | 05593 | WASHER MACHINE 7/8 |
| 11 | 1 | 07134L | MOUNT TANK ELECTRIC WALKER LEFT |
| 12 | 1 | 07134R | MOUNT TANK ELECTRIC WALKER RIGHT |
| 13 | 2 | 07619 | WASHER FLAT SAE 5/8 PLD |
| 14 | 2 | 12387 | BOLT 5/8NCX5 PLD |
| 15 | 2 | 12684 | EYEBOLT 1/4-20x3X3/8" |
| 16 | 2 | 13709 | NUT JAM 5/8NC PLD |
| 17 | 1 | 14028 | CASTOR MOUNT ASSEMBLY WALKERS |
| 18 | 1 | 14184 | HANDLE BAR ASSY DEL/ELEC |
| 19 | 2 | 14212 | BUSHING IG 1.0X0.875X0.75W/FLAN |
| 20 | 1 | 14216 | BATTERY MOUNT |
| 21 | 3 | 14261 | CURTAIN SUPPORT LP FRONT |
| 22 | 2 | 14264 | STRAP TARP RUBBER 9" |
| 23 | 8 | 14471 | SCREW TEK #12X1 NEPRN WASHER |
| 24 | 3 | 14475 | WHEEL POLY LD |
| 25 | 1 | 15624 | FRAME LP 86 |

NOTE:
BATTERY MOUNT HOLES (4)
IN PART # 14028 ARE DRILLED
DURING ASSEMBLY.
BATTERY MOUNT USED AS
TEMPLATE.

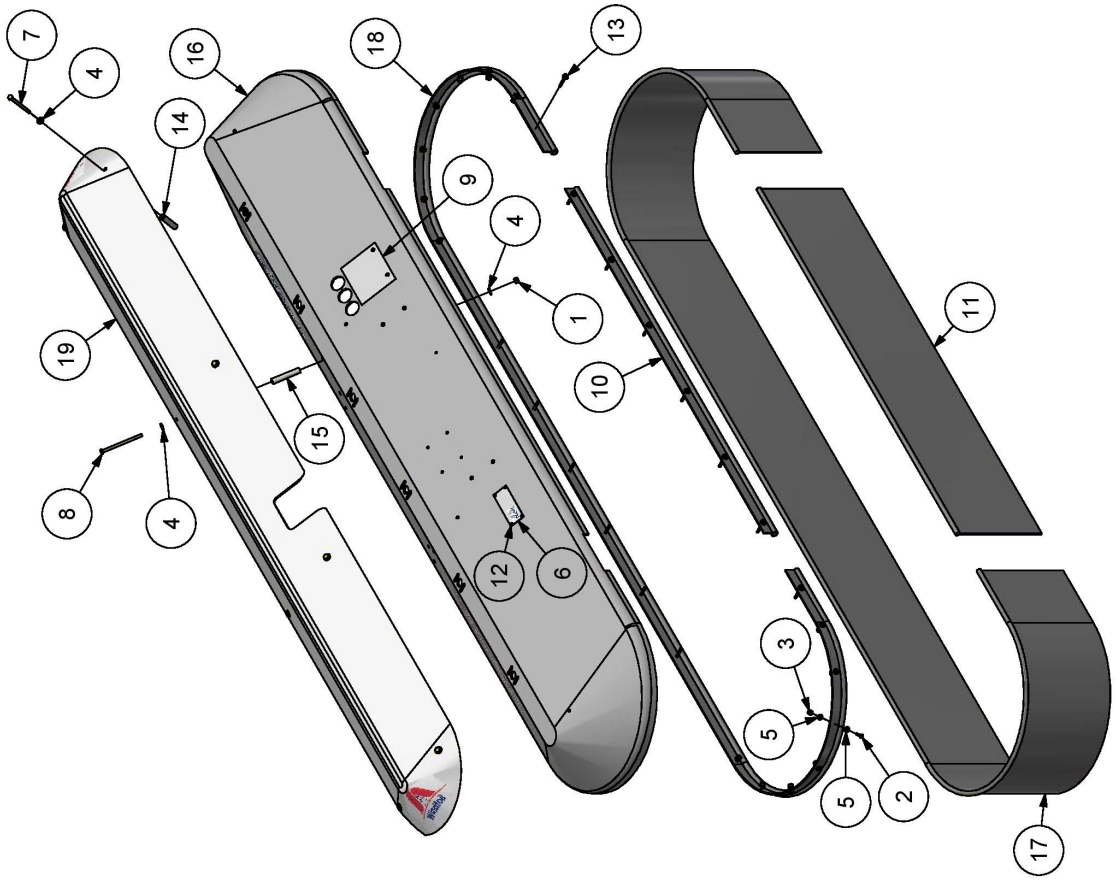
| | |
|---|---|
| DRAWN: DARSHAN SEJPAL | ROGERS SPRAYERS INC. |
| DATE CREATED: 10/30/2017 | TITLE: WE6 FRAME ASSEMBLY |
| PROJECT: WALKER SERIES | DWG NO: 15632 |
| DATE CHECKED: 3/27/2018 | SCALE: 1/12 |
| | MATERIAL: |
| | SIZE: A |

# WE6 Shroud Assembly Part # 15608

PARTS LIST

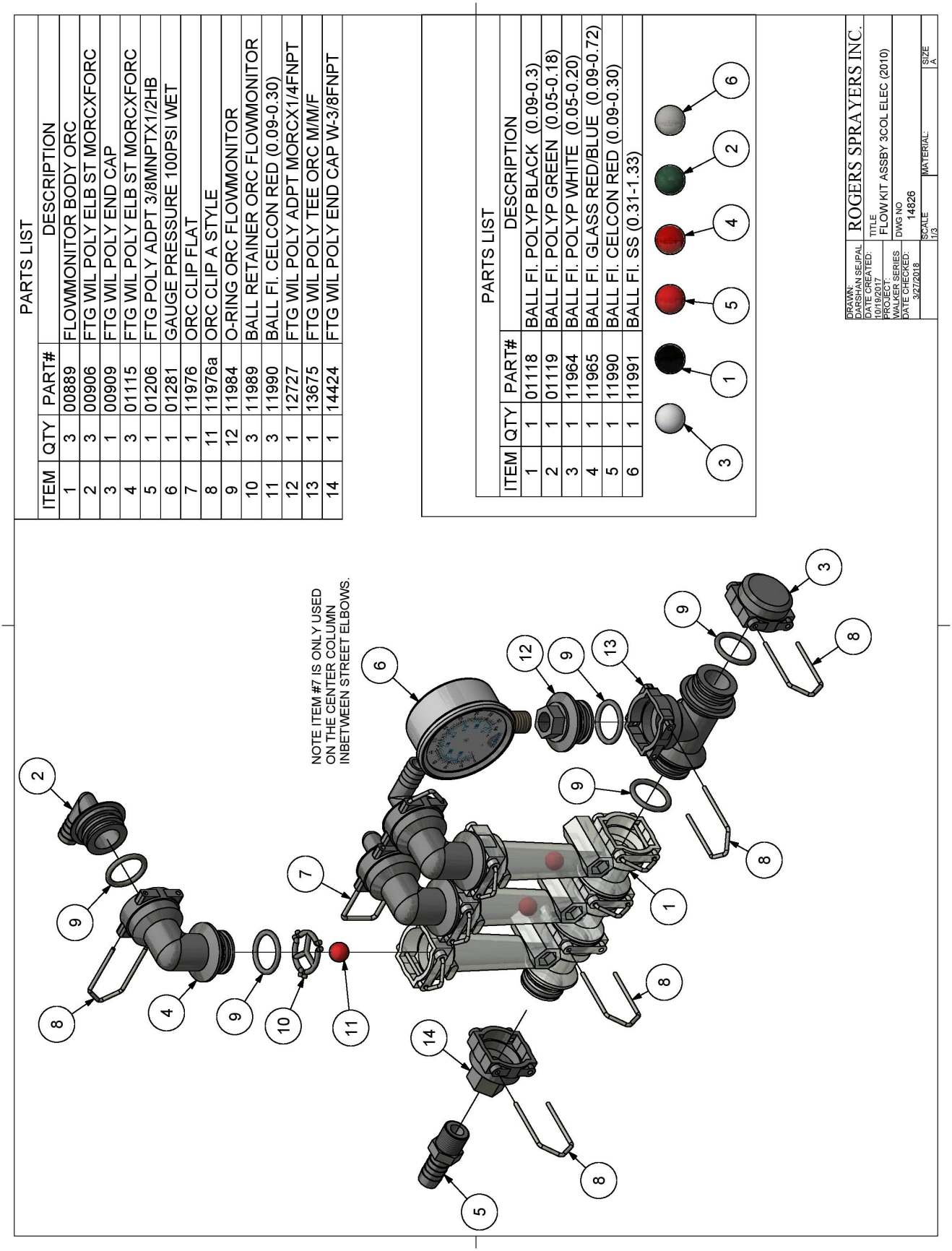
| ITEM | QTY | PART# | DESCRIPTION |
|---|---|---|---|
| 1 | 8 | 00968 | NUT NYLOCK 1/4NC PLD |
| 2 | 14 | 01152 | SCREW MACH C #10-24X3/4 TRUSS |
| 3 | 14 | 01153 | NUT NYLOCK #10 PLD |
| 4 | 16 | 01157 | WASHER FLAT SAE 1/4 |
| 5 | 28 | 01183 | WASHER FLAT #10 |
| 6 | 1 | 01398 | SERIAL PLATE |
| 7 | 4 | 05413 | BOLT 1/4NCX3-1/2 PLD |
| 8 | 4 | 05415 | BOLT 1/4NCX4 PLD |
| 9 | 1 | 13402 | BACK PLATE 3 COL. FLOWMONITOR |
| 10 | 1 | 14207 | FLEXI-SHIELD HANGER 44" |
| 11 | 1 | 14209 | FLEXI-SHIELD 9.625WX44" |
| 12 | 4 | 14470 | RIVET POP 1/8X1/2 AL/STL |
| 13 | 14 | 14472 | SCREW TEK #12X1-1/4 NEPRN WASHER |
| 14 | 4 | 14843 | AIRFOIL STANDOFF BACK TUBE |
| 15 | 4 | 14844 | AIRFOIL STANDOFF FRONT TUBE |
| 16 | 1 | 15529WE | SHROUD LP 86 GREY PREP WE |
| 17 | 1 | 15545 | FLEXI-SHIELD 9.625WX139" |
| 18 | 1 | 15546 | FLEXI-SHIELD HANGER 139" |
| 19 | 1 | 15567 | AIRFOIL 86" PREPPED WG/WE |

DRILL HOLES ON SHROUD
ONLY AT THE INSTALLATION
OF SERIAL NUMBER PLATE




| | |
|---|---|
| DRAWN: DARSHAN SEJPAL | ROGERS SPRAYERS INC. |
| DATE CREATED: 10/30/2017 | TITLE: WE6 SHROUD ASSEMBLY |
| PROJECT: WALKER SERIES | DWG NO: 15608 |
| DATE CHECKED: 10/30/2017 | SCALE: 1/15 |
| | MATERIAL: |
| | SIZE: A |

# Flow Monitor Assembly (Part# 14826)




PARTS LIST

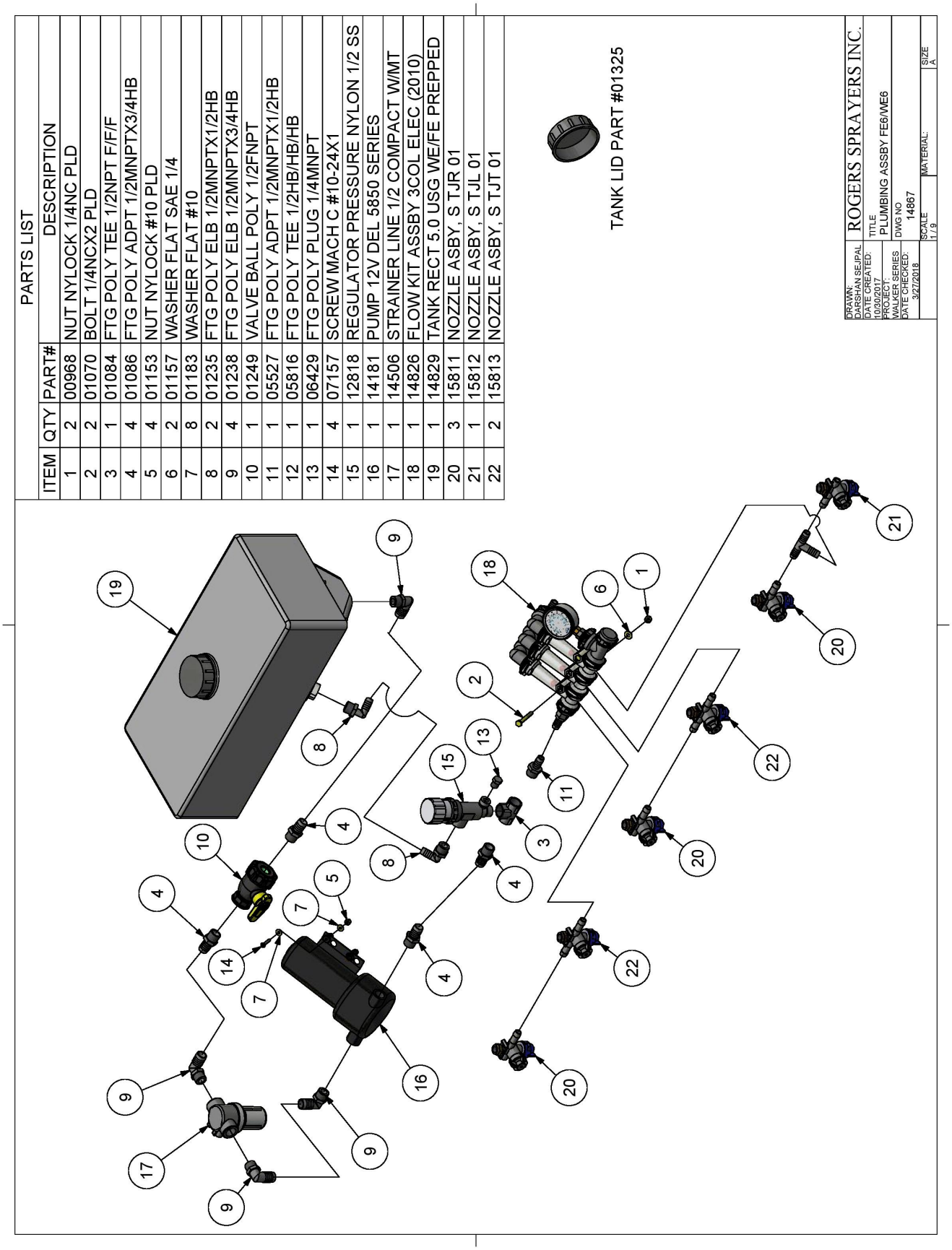
| ITEM | QTY | PART# | DESCRIPTION |
|---|---|---|---|
| 1 | 3 | 00889 | FLOWMONITOR BODY ORC |
| 2 | 3 | 00906 | FTG WIL POLY ELB ST MORCXFORC |
| 3 | 1 | 00909 | FTG WIL POLY END CAP |
| 4 | 3 | 01115 | FTG WIL POLY ELB ST MORCXFORC |
| 5 | 1 | 01206 | FTG POLY ADPT 3/8MNPTX1/2HB |
| 6 | 1 | 01281 | GAUGE PRESSURE 100PSI WET |
| 7 | 1 | 11976 | ORC CLIP FLAT |
| 8 | 11 | 11976a | ORC CLIP A STYLE |
| 9 | 12 | 11984 | O-RING ORC FLOWMONITOR |
| 10 | 3 | 11989 | BALL RETAINER ORC FLOWMONITOR |
| 11 | 3 | 11990 | BALL FI. CELCON RED (0.09-0.30) |
| 12 | 1 | 12727 | FTG WIL POLY ADPT MORCX1/4FNPT |
| 13 | 1 | 13675 | FTG WIL POLY TEE ORC M/M/F |
| 14 | 1 | 14424 | FTG WIL POLY END CAP W-3/8FNPT |

PARTS LIST

| ITEM | QTY | PART# | DESCRIPTION |
|---|---|---|---|
| 1 | 1 | 01118 | BALL FI. POLYP BLACK (0.09-0.3) |
| 2 | 1 | 01119 | BALL FI. POLYP GREEN (0.05-0.18) |
| 3 | 1 | 11964 | BALL FI. POLYP WHITE (0.05-0.20) |
| 4 | 1 | 11965 | BALL FI. GLASS RED/BLUE (0.09-0.72) |
| 5 | 1 | 11990 | BALL FI. CELCON RED (0.09-0.30) |
| 6 | 1 | 11991 | BALL FI. SS (0.31-1.33) |

| | | | |
|---|---|---|---|
| DRAWN: DARSHAN SEJPAL | ROGERS SPRAYERS INC. | | |
| DATE CREATED: 10/19/2017 | TITLE: FLOW KIT ASSBY 3COL ELEC (2010) | | |
| PROJECT: WALKER SERIES | DWG NO: 14826 | | |
| DATE CHECKED: 3/27/2018 | SCALE: 1/3 | MATERIAL: | SIZE: A |

# WE6 Plumbing Assembly Part # 14867



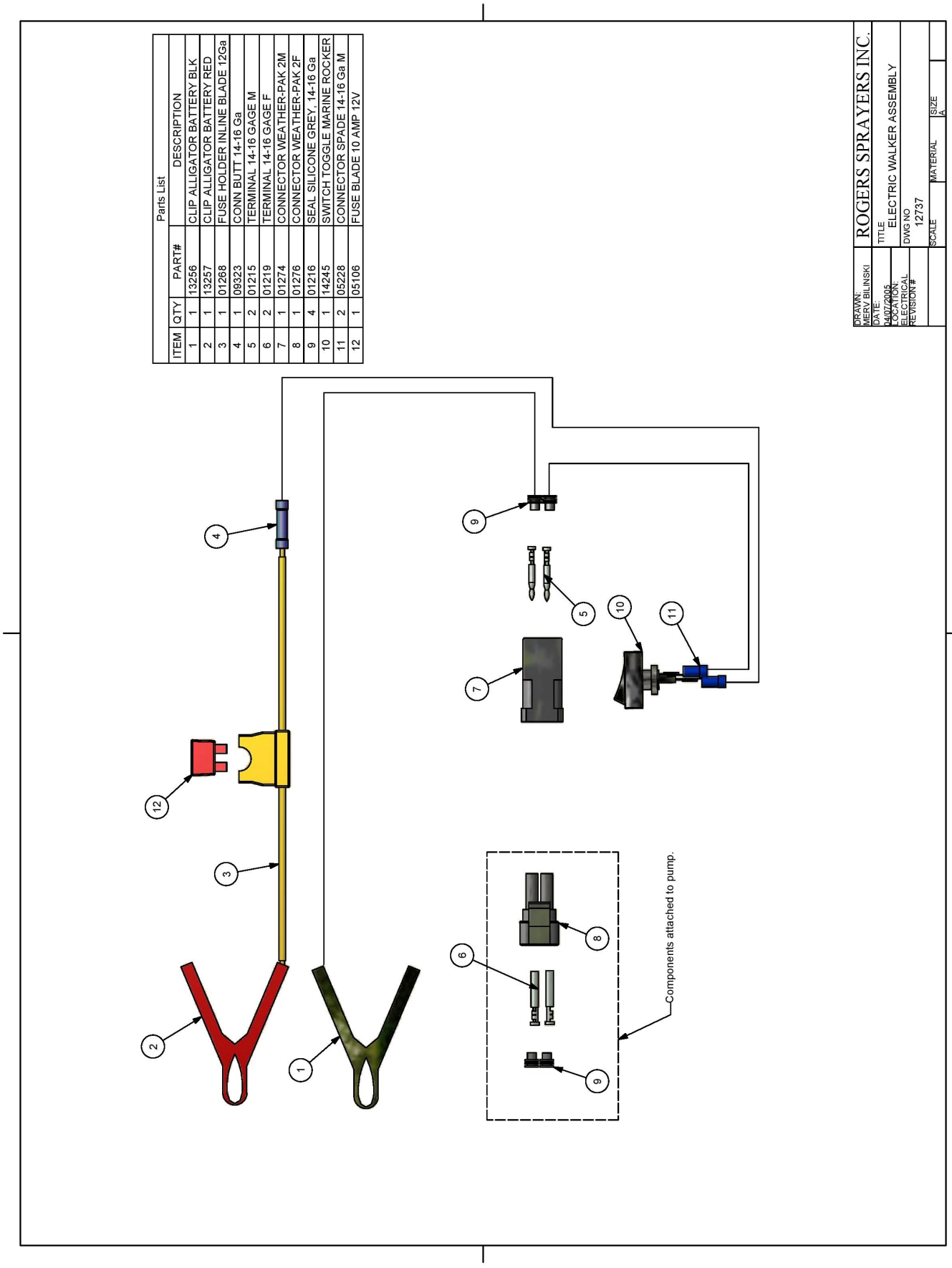
PARTS LIST

| ITEM | QTY | PART# | DESCRIPTION |
|---|---|---|---|
| 1 | 2 | 00968 | NUT NYLOCK 1/4NC PLD |
| 2 | 2 | 01070 | BOLT 1/4NCX2 PLD |
| 3 | 1 | 01084 | FTG POLY TEE 1/2NPT F/F/F |
| 4 | 4 | 01086 | FTG POLY ADPT 1/2MNPTX3/4HB |
| 5 | 4 | 01153 | NUT NYLOCK #10 PLD |
| 6 | 2 | 01157 | WASHER FLAT SAE 1/4 |
| 7 | 8 | 01183 | WASHER FLAT #10 |
| 8 | 2 | 01235 | FTG POLY ELB 1/2MNPTX1/2HB |
| 9 | 4 | 01238 | FTG POLY ELB 1/2MNPTX3/4HB |
| 10 | 1 | 01249 | VALVE BALL POLY 1/2FNPT |
| 11 | 1 | 05527 | FTG POLY ADPT 1/2MNPTX1/2HB |
| 12 | 1 | 05816 | FTG POLY TEE 1/2HB/HB/HB |
| 13 | 1 | 06429 | FTG POLY PLUG 1/4MNPT |
| 14 | 4 | 07157 | SCREW MACH C #10-24X1 |
| 15 | 1 | 12818 | REGULATOR PRESSURE NYLON 1/2 SS |
| 16 | 1 | 14181 | PUMP 12V DEL 5850 SERIES |
| 17 | 1 | 14506 | STRAINER LINE 1/2 COMPACT W/MT |
| 18 | 1 | 14826 | FLOW KIT ASSBY 3COL ELEC (2010) |
| 19 | 1 | 14829 | TANK RECT 5.0 USG WE/FE PREPPED |
| 20 | 3 | 15811 | NOZZLE ASBY, S TJR 01 |
| 21 | 1 | 15812 | NOZZLE ASBY, S TJL 01 |
| 22 | 2 | 15813 | NOZZLE ASBY, S TJT 01 |

TANK LID PART #01325

| | |
|---|---|
| DRAWN: DARSHAN SEJPAL | ROGERS SPRAYERS INC. |
| DATE CREATED: 10/30/2017 | TITLE PLUMBING ASSBY FE6/ME6 |
| PROJECT: WALKER SERIES | DWG NO 14867 |
| DATE CHECKED: 3/27/2018 | SCALE 1 / 9 |
| | MATERIAL: |
| | SIZE A |

# WE Electrical Assembly Part # 12737



# Optional Parts for WE/FE Series Sprayer

## 10 US Gallon Tank Upgrade
**Part # 14302**

This tank is a direct drop-in for the standard 5 US gallon tank that comes standard on all WE/FE series sprayers. It provides twice the spraying time while still retaining the sprayers agility. This part can be ordered to be installed from factory or is easily installed later.

## Tow Hitch Upgrade
**Part # F111**

This attachment allows you to tow your sprayer behind a small utility vehicle outfitted with a pin hitch. The hitch attaches to a mounting bracket located on the front castor wheel of the sprayer. Tow bar installs and removes in seconds.

*Note: It is not recommended to tow the unit with full tank and battery installed.

## Speedometer Kit
**Part # 13368**

The Speedometer Kit provides a reading in mph or kph of your forward speed. This aids in the accuracy of applying specific application rates. This option can be ordered installed from factory or later on as a kit.

## Sprayer Wand Kit
**Part # 13357**

The Wand Kit is a very handy device that allows the operator to spot spray directly from their WE/FE series sprayer. Includes spray wand, 25’ coil hose, ball valve, handle bar hook, and necessary fittings to tap into existing plumbing. This option can be ordered installed from factory or as a kit.

## Optional Flow Monitor Balls
**See *Flow Monitor Assembly Drawing* for Part Numbers**

Various colors and weights of balls are available to assist accurate viewing of the flow indicators. Ie. Heavier balls are used for larger application rates.

***Rogers Sprayers Inc. (RSI)***
141 - 105th Street East
Saskatoon, SK S7N 1Z2 Canada

Tel.: (306) 975-0500 or (888) 975-8294
Fax: (306) 975-0499
Email: info@rogerssprayers.com

# ROGERS SPRAYERS INC OWNER WARRANTY AGREEMENT

***Windfoil*** Drift Containment Spray Systems (DCSS) are warranted to be free of factory defects under normal and intended use for a period of one (1) year from date of purchase to the original purchaser. Equipment must be setup in accordance with factory instructions and operated, maintained and used in accordance with the operator's manual. Equipment used for rental has a warranty period of forty five (45) days. Any customization or modifications to the original equipment voids warranty immediately.

RSI reserves the right not to warranty any items that are not directly manufactured by RSI. Such components need to be returned to the factory for inspection and tested by either RSI or the original manufacturer for defects. Examples of these parts include actuators, engines, pumps and electrical systems.

**All warranty Claims must be pre-authorized by the factory!**

To obtain warranty, all defective parts must be returned to the factory; in some cases, location of part might require only photo of defective part. RSI must be contacted to determine which route is required. RSI through its designated dealer or factory appointed representative will repair or replace, at its option, any or all parts that are proven to be defective free of charge.

RSI DOES NOT pay or reimburse for any travel time or investigation time to determine the defective part. Warranty labor will be based on the time required for RSI to replace only the part. Warranty labor rates and replacement times will be assessed yearly and will be included in a labor replacement sheet.

This warranty does not apply to damage caused by misuse, accident, acts of god, and/or operation without proper servicing. RSI will not be responsible for consequential damages; its liability is limited to replacement of parts.

Standard wear components (see list) such as belts, nozzles, screens, bearings, wheels, flow indicator bodies or flow indicator parts are only warranted for 30 days after original purchase.

RSI makes no other expressed, implied or statutory warranty; nor is anyone authorized to make any on our behalf.

## Complete your Warranty Registration online at www.rogerssprayers.com

The warranty registration is found on the Contact page of our website. The warranty registration **MUST** be filled out completely and submitted to RSI to activate the warranty. If you would prefer, a printable copy is also available online.

**It is our intention to manufacture durable, user-friendly products. Any suggestions you have as to how we may improve our equipment are greatly appreciated.**

# EC Declaration of Conformity

**WE,**

Rogers Sprayers Inc.
141 - 105th St East
Saskatoon, Saskatchewan, S7N 1Z2
Canada

**declare that the following products**

Machine Type: Rear mounted spray boom

Model: WGF11, FGF11, WA5000E, WA5000, FA5000E, FA5000

Machine Type: Pedestrian Boom

Model: WG3, WG4, WG6, FG3, FG4, FG5

Machine Type: Pedestrian Spray Boom

Model: WE3, WE4, WE6, FE3, FE4, FE6

**is in conformity with the provisions of the following European Directive(s)**

| Directive | Number | Certification Method |
|---|---|---|
| Machinery Directive | 98/37/EC | Self-Certification |
| Machinery Directive | 2006/42/EC | Self-Certification |

**And the following Standard:**

SS-EN 907
EN ISO 4254-1:2009
EN ISO 4254-6:2009

The original copy of this document is kept at Rogers Sprayers Inc. with copies of the relevant test data and certificates, which constitute the required technical file for self declaration.

Place of declaration: Saskatoon, Saskatchewan, Canada
Date of declaration: May 3, 2011

Name: Mervin Bilinski, P. Eng.
Title: President
Rogers Sprayers Inc.

ROGERS SPRAYERS INC.

141 - 105th Street East
Saskatoon, SK  S7N 1Z2
Canada

Phone: (306) 975-0500
Fax: (306) 975-0499
Email: info@rogerssprayers.com
Web: www.rogerssprayers.com