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# BK10T /BK12T

(Boom Kit 10ft /12ft, Triplex Nozzles)

## With BK Cover Kit



## Assembly, Parts and Operator's Manual

Version BK10-12T-2015

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# Safety

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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 him or herself 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 the unit was designed to spray (i.e. turf application). Do not use products for which the unit was not designed to spray (i.e. paint, sealants, cleaning fluids, dust inhibitors, ice surfaces, etc.).

### Minimize Chemical Drift

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.

(With optional covered boom attachment)

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

## General Spraying Information

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### Application Tips

Always use clean filtered water in the sprayer tank.

Your **Rogers Sprayers Inc. BK Series Boom** comes standard with 80 degree stainless steel or ceramic 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.

<b>Caution:</b>	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 <b>BK Series Boom</b> . Wider angle tips (i.e. 110°) can be used in the boom configuration, but the height needs to be adjusted to achieve proper overlap. 110° tips CANNOT be used with the wind deflector attachments.
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## 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.

A 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 optional 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. Replacement tips can be purchased through Rogers Sprayers Inc. parts department.

**Be cautious as this could possibly happen when using the wind breaker attachment:**

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 15-20 psi (1.4 bar) to prevent excessive dripping from the tip after the sprayer has been turned off. Should the tip continue to drip, stop the leak by either tightening the check valve cap or removing the cap in order to inspect the seal for damage, excessive wear, 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 one third of a turn. Self-aligning caps have a slot to align the tips. Ensure that the tips are pressed down into the slotted hole before installing caps on the nozzle body.

Non-aligning caps are also available for special tips.

## American Application Rates at 20" Nozzle Spacing

### 80 Degree Tips

Rogers Part #	Tip Number	Tip Mfg	Liquid	Liq.	Cap.	U. S. GALLONS PER ACRE					U. S. GALLONS PER 1000 SQ. FT.				
			Press	Press	/noz.	2.5	3	4	5	7	2.5	3	4	5	7
			psi	bars	gpm	mph	mph	mph	mph	mph	mph	mph	mph	mph	mph
01369	8001VS (100 mesh)	Teejet	30	2.07	0.087	10.3	8.6	6.4	5.1	3.7	0.24	0.20	0.15	0.12	0.08
			40	2.76	0.100	11.9	9.9	7.4	5.9	4.2	0.27	0.23	0.17	0.14	0.10
			50	3.45	0.112	13.3	11.1	8.3	6.6	4.7	0.30	0.25	0.19	0.15	0.11
			60	4.14	0.122	14.5	12.1	9.1	7.3	5.2	0.33	0.28	0.21	0.17	0.12
00827 or 13351	80015VS API-80015 (100 mesh)	Teejet	30	2.07	0.130	15.4	12.9	9.6	7.7	5.5	0.35	0.29	0.22	0.18	0.13
			40	2.76	0.150	17.8	14.9	11.1	8.9	6.4	0.41	0.34	0.26	0.20	0.15
		Albuz	50	3.45	0.168	19.9	16.6	12.5	10.0	7.1	0.46	0.38	0.29	0.23	0.16
			60	4.14	0.184	21.8	18.2	13.6	10.9	7.8	0.50	0.42	0.31	0.25	0.18
05876 or 14384	8002VS AXI-8002 (50 mesh)	Teejet	30	2.07	0.173	20.6	17.1	12.9	10.3	7.3	0.47	0.39	0.29	0.24	0.17
			40	2.76	0.200	23.8	19.8	14.9	11.9	8.5	0.54	0.45	0.34	0.27	0.19
		Albuz	50	3.45	0.224	26.6	22.1	16.6	13.3	9.5	0.61	0.51	0.38	0.30	0.22
			60	4.14	0.245	29.1	24.2	18.2	14.5	10.4	0.67	0.56	0.42	0.33	0.24
05877 or 14385	8003VS AXI-8003 (50 mesh)	Teejet	30	2.07	0.260	30.9	25.7	19.3	15.4	11.0	0.71	0.59	0.44	0.35	0.25
			40	2.76	0.300	35.6	29.7	22.3	17.8	12.7	0.82	0.68	0.51	0.41	0.29
		Albuz	50	3.45	0.335	39.8	33.2	24.9	19.9	14.2	0.91	0.76	0.57	0.46	0.33
			60	4.14	0.367	43.6	36.4	27.3	21.8	15.6	1.00	0.83	0.62	0.50	0.36
05878 or 14061	8004VS AXI-8004 (50 mesh)	Teejet	30	2.07	0.346	41.2	34.3	25.7	20.6	14.7	0.94	0.79	0.59	0.47	0.34
			40	2.76	0.400	47.5	39.6	29.7	23.8	17.0	1.09	0.91	0.68	0.54	0.39
		Albuz	50	3.45	0.447	53.1	44.3	33.2	26.6	19.0	1.22	1.01	0.76	0.61	0.43
			60	4.14	0.490	58.2	48.5	36.4	29.1	20.8	1.33	1.11	0.83	0.67	0.48
05879 or 14386	8005VS AXI-8005 (50 mesh)	Teejet	30	2.07	0.433	51.4	42.9	32.2	25.7	18.4	1.18	0.98	0.74	0.59	0.42
			40	2.76	0.500	59.4	49.5	37.1	29.7	21.2	1.36	1.13	0.85	0.68	0.49
		Albuz	50	3.45	0.559	66.4	55.3	41.5	33.2	23.7	1.52	1.27	0.95	0.76	0.54
			60	4.14	0.612	72.7	60.6	45.5	36.4	26.0	1.67	1.39	1.04	0.83	0.59
05880 or 14387	8006VS AXI-8006 (50 mesh)	Teejet	30	2.07	0.520	61.7	51.4	38.6	30.9	22.0	1.41	1.18	0.88	0.71	0.50
			40	2.76	0.600	71.3	59.4	44.6	35.6	25.5	1.63	1.36	1.02	0.82	0.58
		Albuz	50	3.45	0.671	79.7	66.4	49.8	39.8	28.5	1.82	1.52	1.14	0.91	0.65
			60	4.14	0.735	87.3	72.7	54.6	43.6	31.2	2.00	1.67	1.25	1.00	0.71

### Capacity of the SMA50E (Skid Mount Sprayer)

The SMA50E is only designed to spray up to 8006 tips. Please note that with the unit spraying at max capacity, there will be little to no agitation back into the tank.

## Metric Application Rates at 20" Nozzle Spacing (0.5 meters)

### 80 Degree Tips

Rogers Part #	Tip Number	Tip Mfg	Liquid Press psi	Liquid Press bars	Cap /noz. gpm	U. S. GALLONS PER ACRE					Liters/Hectare				
						2.5	3	4	5	7	4	4.8	6.4	8	11.2
						mph	mph	mph	mph	mph	kph	kph	kph	kph	kph
01369	8001VS (100 mesh)	Teejet	30	2.07	0.087	10.3	8.6	6.4	5.1	3.7	96	80	60	48	34
			40	2.76	0.100	11.9	9.9	7.4	5.9	4.2	111	93	69	56	40
			50	3.45	0.112	13.3	11.1	8.3	6.6	4.7	124	103	78	62	44
			60	4.14	0.122	14.5	12.1	9.1	7.3	5.2	136	113	85	68	49
00827  13351	80015VS or API-80015 (100 mesh)	Teejet	30	2.07	0.130	15.4	12.9	9.6	7.7	5.5	144	120	90	72	52
			40	2.76	0.150	17.8	14.9	11.1	8.9	6.4	167	139	104	83	60
		Albuz	50	3.45	0.168	19.9	16.6	12.5	10.0	7.1	186	155	116	93	67
			60	4.14	0.184	21.8	18.2	13.6	10.9	7.8	204	170	128	102	73
05876  14384	8002VS or AXI-8002 (50 mesh)	Teejet	30	2.07	0.173	20.6	17.1	12.9	10.3	7.3	192	160	120	96	69
			40	2.76	0.200	23.8	19.8	14.9	11.9	8.5	222	185	139	111	79
		Albuz	50	3.45	0.224	26.6	22.1	16.6	13.3	9.5	248	207	155	124	89
			60	4.14	0.245	29.1	24.2	18.2	14.5	10.4	272	227	170	136	97
05877  14385	8003VS or AXI-8003 (50 mesh)	Teejet	30	2.07	0.260	30.9	25.7	19.3	15.4	11.0	289	240	180	144	103
			40	2.76	0.300	35.6	29.7	22.3	17.8	12.7	333	278	208	167	119
		Albuz	50	3.45	0.335	39.8	33.2	24.9	19.9	14.2	373	310	233	186	133
			60	4.14	0.367	43.6	36.4	27.3	21.8	15.6	408	340	255	204	146
05878  14061	8004VS or AXI-8004 (50 mesh)	Teejet	30	2.07	0.346	41.2	34.3	25.7	20.6	14.7	385	321	240	192	137
			40	2.76	0.400	47.5	39.6	29.7	23.8	17.0	444	370	278	222	159
		Albuz	50	3.45	0.447	53.1	44.3	33.2	26.6	19.0	497	414	310	248	177
			60	4.14	0.490	58.2	48.5	36.4	29.1	20.8	544	453	340	272	194
05879  14386	8005VS or AXI-8005 (50 mesh)	Teejet	30	2.07	0.433	51.4	42.9	32.2	25.7	18.4	481	401	301	240	172
			40	2.76	0.500	59.4	49.5	37.1	29.7	21.2	555	463	347	278	198
		Albuz	50	3.45	0.559	66.4	55.3	41.5	33.2	23.7	621	517	388	310	222
			60	4.14	0.612	72.7	60.6	45.5	36.4	26.0	680	567	425	340	243
05880  14387	8006VS or AXI-8006 (50 mesh)	Teejet	30	2.07	0.520	61.7	51.4	38.6	30.9	22.0	577	481	361	289	206
			40	2.76	0.600	71.3	59.4	44.6	35.6	25.5	666	555	417	333	238
		Albuz	50	3.45	0.671	79.7	66.4	49.8	39.8	28.5	745	621	466	373	266
			60	4.14	0.735	87.3	72.7	54.6	43.6	31.2	816	680	510	408	292

## 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 that have a visibly distorted pattern.

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. Operate 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 (i.e. BK10T – 10ft (3.04m), BK12T – 12ft (3.66m) x distance).

**Table 1:** 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 2:** 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.

## Assembly & Installation

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For safety reasons, please do not try and install your BK Series Boom with one person; a minimum of 2 people are required for assembly and installation. Remove the boom (either BK10T or BK12T) from box or packaging. Use safe location on frame for lifting and moving around.

Attach Center Frame to the Mount Frame. Due to height differences between work vehicles, the placement of the center frame will be different. With the open boom, optimum height is anywhere from 24-30 inches off the ground (measured from the tip to the target). With the wind deflector boom attachments, the wind deflectors are designed to have the tip exactly 24 inches from the target, so you will want to set your boom accordingly. If there is too much space in between the boom mount angles and the skid mount angles, please insert washers before tightening. Mounting bolts should be preloaded in frame for ease of assembly.

Install boom hose to output on pressure regulator on skid frame.



Figure 1. Install center boom



Figure 2. Install wings



Figure 3. Install Wing Hose

Install wings using pin in pivot first, then load in break away mechanism. With wing loaded, install chain and hose. Use top bolt spring and chain links to adjust height of boom to be level with center section.

## Testing After Assembly

After assembling the spray boom, check for field readiness. Points to consider are:

- a) Remove the nozzle body caps with the spray tips and the tip screens. Flush the entire system with clear water.
- b) Install the tip screens and nozzle caps with spray tips. Check for proper alignment of the nozzle caps. Pressure test all the booms inspecting hose connections, nozzle caps, spray pattern and diaphragm nozzle bodies.
- b) Move all hinge or swivel joints through the full arc of movement. Check for interference and ease of movement.
- c) Check all fasteners to see that they are tightened firmly or allowed to pivot if required.
- d) Calibrate the sprayer.

## Last Check

- ⇒ Recheck all assembled parts for completeness and secure connections.
- ⇒ Your sprayer is now ready for a wet test to ensure complete operation.

## Operation

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### **IMPORTANT:**

Ideal spraying pressure is 40 psi. You will need to adjust the regulator as you change tip sizes.

This unit is equipped with Tee Jet brand Triplex nozzle bodies. It is able to switch between 3 different nozzle tips by rotating the head around. Note: Only adjust the spray tips when the unit is not in operation/spraying. Make sure one of the nozzles is pointed towards the ground. If not, a nozzle will impact with the frame when placing the wing in an upright position.

### **Breakaway Operation**

Should the wing hit a large or fairly heavy object on the field, the wing will pivot back out of the way. Stop and shut off the sprayer immediately. Reset the boom manually after such an incident. Swing the boom forward and the catch mechanism will lock the boom in place. Note: Be aware of all pinch points while the boom is being reset.

# General Maintenance

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## 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 (i.e. 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, (i.e. 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.

# Trouble Shooting

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## Leaking Nozzles

If 1 or 2 tips drip until the line is empty, check:

- For deteriorated diaphragms
- For material under the diaphragm
- For a weak spring
- For a deterioration of the diaphragm sealing surface

If all tips spray for more than 3 seconds after shut off, check:

- To see if the sprayer shut off valve is leaking

If all tips spray for less than 3 seconds after shut off, check:

- For air accumulation in the line
- For swelling of the feed hoses

If the diaphragm leaks out the diaphragm spring body, check:

- For loose spring body
- For ruptured diaphragms
- For misaligned diaphragm
- For broken diaphragm body

## Wing Breaks Away Too Easily

Adjust the bolt on the top of the spring; tightening the bolt adds tension making it more difficult to breakaway.

## Striping

At end of Shroud – check:

- If tips are spraying at a greater angle than 80°.
- High tip pressure; over 40 psi (2.8 Bar), will cause a wider spray pattern by extending the spray pattern angle.

Between Tips – check:

- Low tip pressure will cause a narrower pattern. Actual tip pressure should be as close to 40 psi (1.7 - 2.8 bar) as possible.
- Check tip screens to see if they are plugged.

## Blocked Nozzles

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 (i.e. gloves, eye protection, etc).

# BK Cover Kit Assembly Instructions



Figure 1

The first thing is to find the center of the frame and draw a vertical line down on the frame. Then make lines for outside holes as shown above in figure 1. Note figure 1 shows dimensions for the BK12T frame, the BK10T frame measurements are 19 inches from center

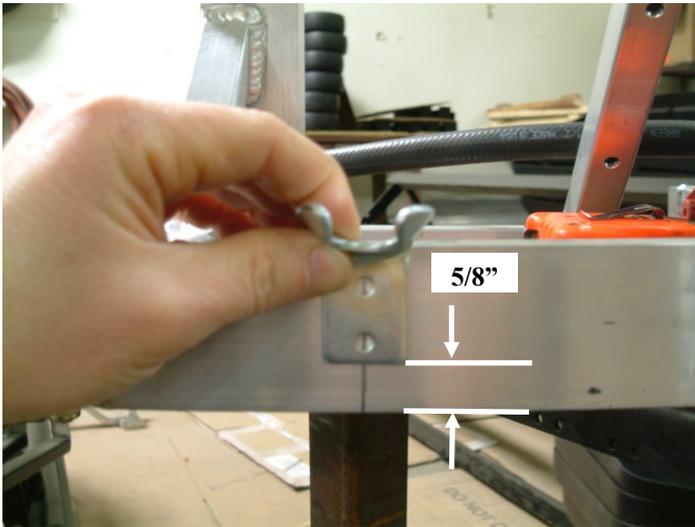


Figure 2

Place hardware on marks made in figure 1 so that the bottom of the catch is 5/8" from the bottom of the center frame. Mark actual holes in hardware on the center frame.

Drill marked holes with 3/16" drill bit.

Attach hardware to frame as seen in figure 3.



Figure 3



Rear view of center frame



Figure 5

Use supplied hardware to attach catch to rear of center frame as shown in figure 5.

These catches can be adjusted with the u bolts to set desired tension in rubber latch.

No drilling is required for this step.

Wing Frame



Figure 6

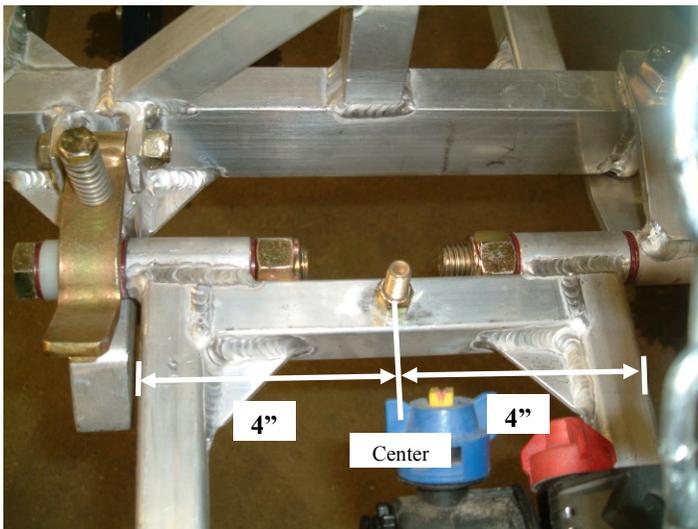


Figure 7

Drill 3/8" diameter holes in center of wing frame as shown in figure 7 and 8.



Figure 8

Install supplied 3/8" X 2" bolt through hole from bottom and secure with 3/8" nylock nut.

When wing covers are in place, secure with rubber washer, 3/8" flat washer, 3/8" lock washer and wing nut.



Figure 9

## Required Plumbing Changes

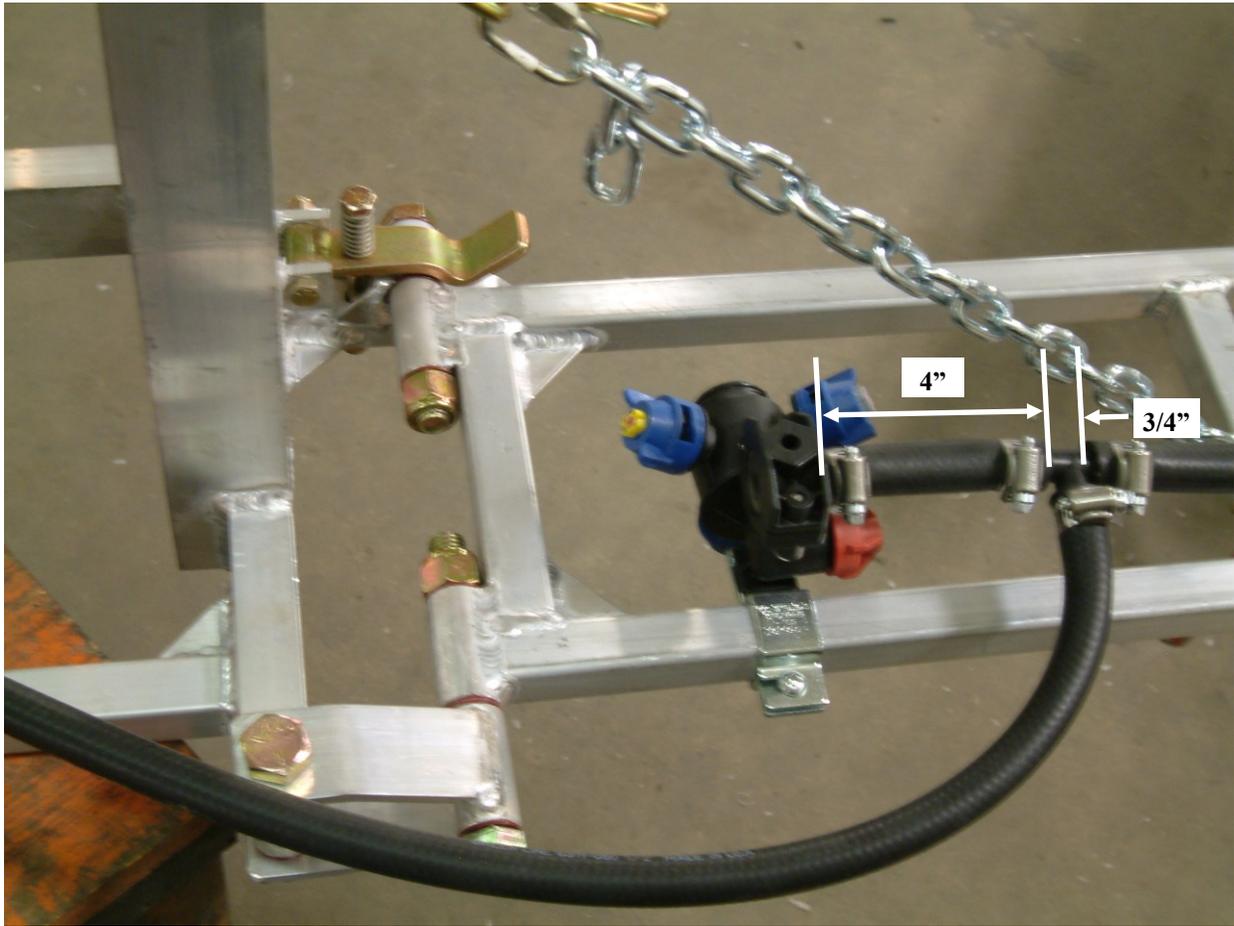


Figure 10

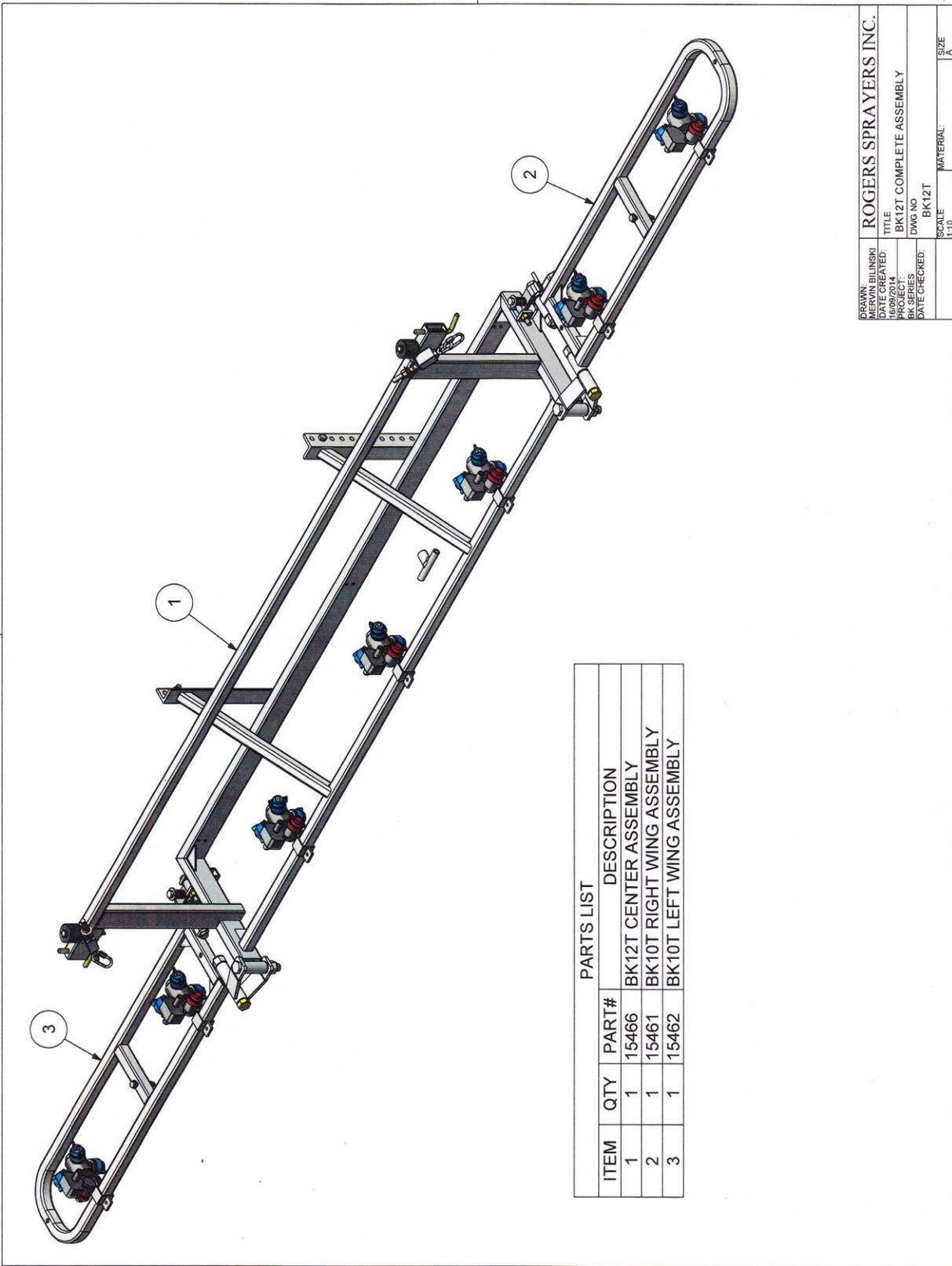
For the BK12T plumbing replace existing double hose barb adapter in nozzle body with single hose barb adapter. This is done to the inner nozzle body on each wing.

Make a cut in existing wing hose 4" from innermost wing nozzle body as shown in figure 10. Insert 1/2" hose barb tee. The tee require a 3/4" opening in the hose.

Attach supplied hose from outer center nozzle body to the tee hose barb you just placed in wing hose.

Hose now runs on top of frame.

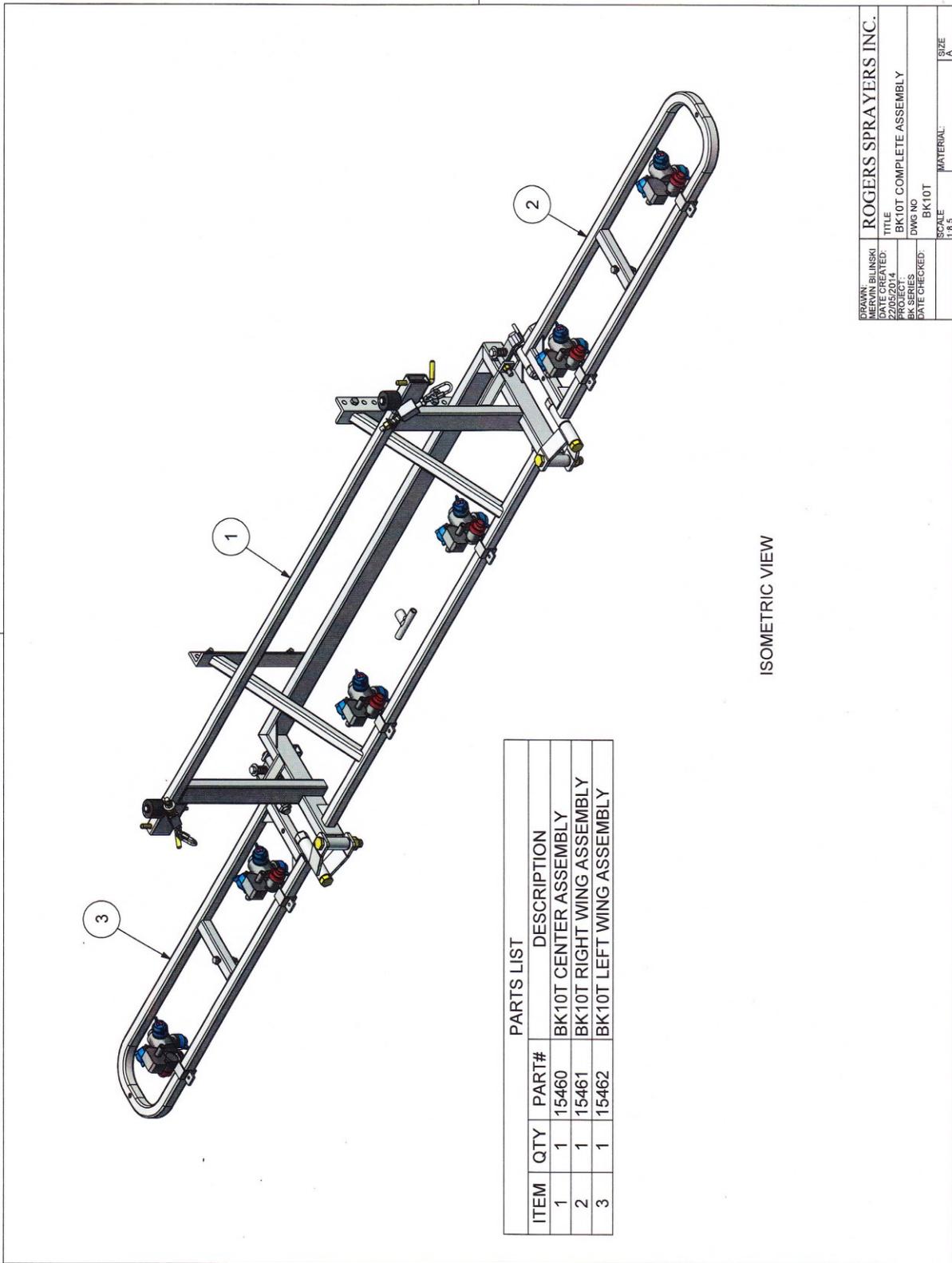
# Frame Assembly BK12T



PARTS LIST		QTY	PART#	DESCRIPTION
1	15466	1	BK12T CENTER ASSEMBLY	
2	15461	1	BK10T RIGHT WING ASSEMBLY	
3	15462	1	BK10T LEFT WING ASSEMBLY	

DRAWN: MERVIN BILINSKI		ROGERS SPRAYERS INC.	
DATE CREATED: 07/20/07		TITLE: BK12T COMPLETE ASSEMBLY	
PROJECT: BK12T		DWG NO: BK12T	
BK SERIES: BK12T		SCALE: 1:10	
DATE CHECKED:		MATERIAL: ALUMINUM	
		SIZE: A	

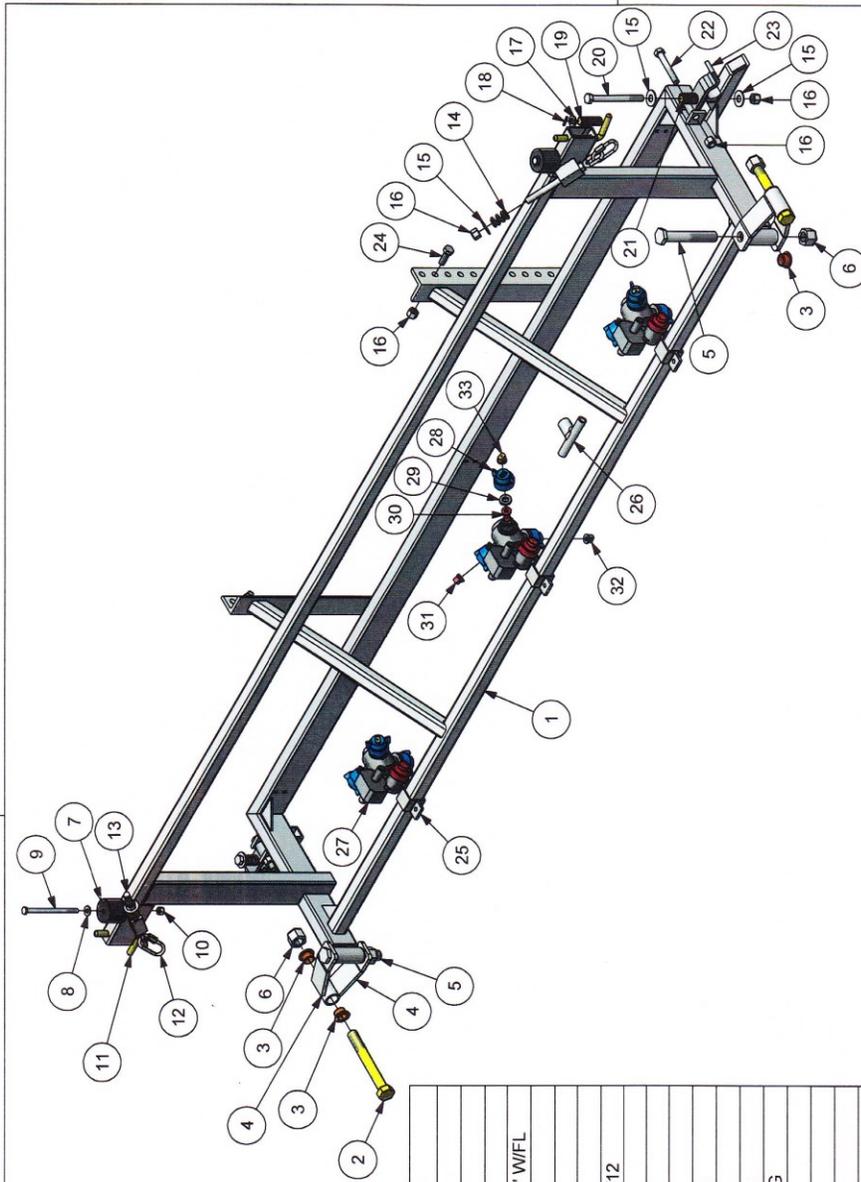
# Frame Assembly BK10T



PARTS LIST	
ITEM	DESCRIPTION
1	BK10T CENTER ASSEMBLY
2	BK10T RIGHT WING ASSEMBLY
3	BK10T LEFT WING ASSEMBLY

ROGERS SPRAYERS INC.	
DESIGNER: MERVIN BIJINSKI	TITLE: BK10T COMPLETE ASSEMBLY
DATE CREATED: 22/05/2014	DWG NO: BK10T
PROJECT: BK10T	SCALE: 1:8.5
DATE CHECKED:	MATERIAL:
	SIZE: A

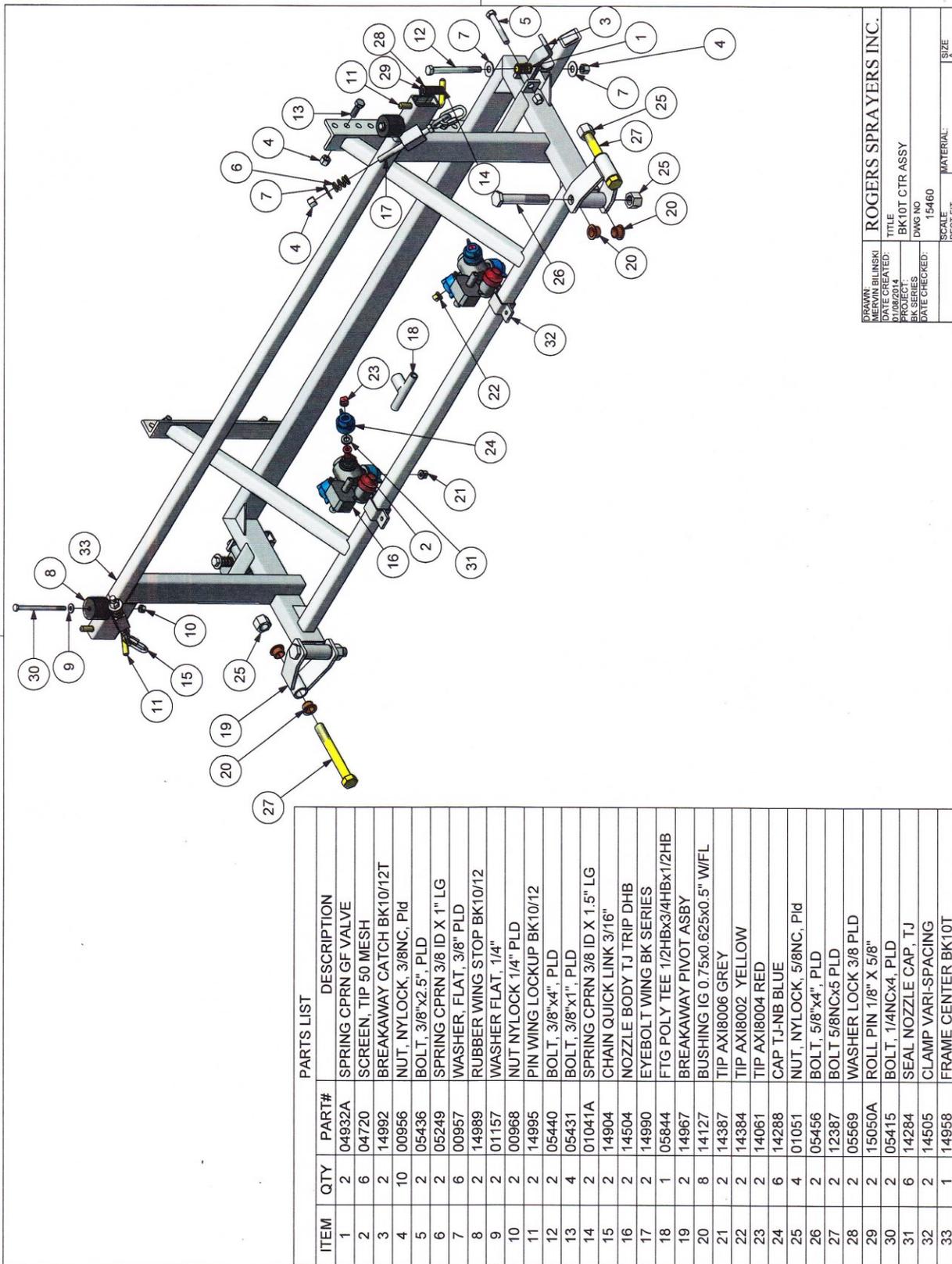
# Frame Assembly BK12T Center



PARTS LIST		ITEM	QTY	PART#	DESCRIPTION
		1	1	15018	FRAME CENTER BK12T
		2	2	12387	BOLT 5/8NCx5 PLD
		3	8	14127	BUSHING IG 0.75x0.625x0.5" W/FL
		4	2	14967	BREAKAWAY PIVOT ASBY
		5	2	05456	BOLT, 5/8"x4", PLD
		6	4	01051	NUT, NYLOCK, 5/8NC, PLD
		7	2	14989	RUBBER WING STOP BK10/12
		8	2	01157	WASHER FLAT, 1/4"
		9	2	05415	BOLT, 1/4NCx4, PLD
		10	2	00968	NUT NYLOCK 1/4" PLD
		11	2	14995	PIN WING LOCKUP BK10/12
		12	2	14904	CHAIN QUICK LINK 3/16"
		13	2	14990	EYEBOLT WING BK SERIES
		14	2	05249	SPRING CPRN 3/8 ID X 1" LG
		15	6	00957	WASHER, FLAT, 3/8" PLD
		16	10	00956	NUT, NYLOCK, 3/8NC, PLD
		17	2	05569	WASHER LOCK 3/8 PLD
		18	2	15050A	ROLL PIN 1/8" X 5/8"
		19	2	01041A	SPRING CPRN 3/8 ID X 1.5" LG
		20	2	05440	BOLT, 3/8"x4", PLD
		21	2	04932A	SPRING CPRN GF VALVE
		22	2	05436	BOLT, 3/8"x2.5", PLD
		23	2	14992	BREAKAWAY CATCH BK10/12
		24	4	05431	BOLT, 3/8"x1", PLD
		25	3	14505	CLAMP VARI-SPACING
		26	1	05844	FTG POLY TEE 1/2HBx3/4HBx1/2HB
		27	3	14504	NOZZLE BODY TJ TRIP DHB
		28	9	14288	CAP TJ-NB BLUE
		29	9	14284	SEAL NOZZLE CAP, TJ
		30	9	04720	SCREEN, TIP 50 MESH
		31	3	14061	TIP AXI8004 RED
		32	3	14387	TIP AXI8006 GREY
		33	3	14384	TIP AXI8002 YELLOW

DRAWN: MERVIN BILINSKI			
DATE PREPARED: 17/08/2014			
PROJECT: BK12T CENTER ASSEMBLY			
DWG NO: 15466			
DATE CHECKED: 15466			
SCALE: 1:1.0	MATERIAL:	SIZE: A	
<b>ROGERS SPRAYERS INC.</b>			

# Frame Assembly BK10T Center



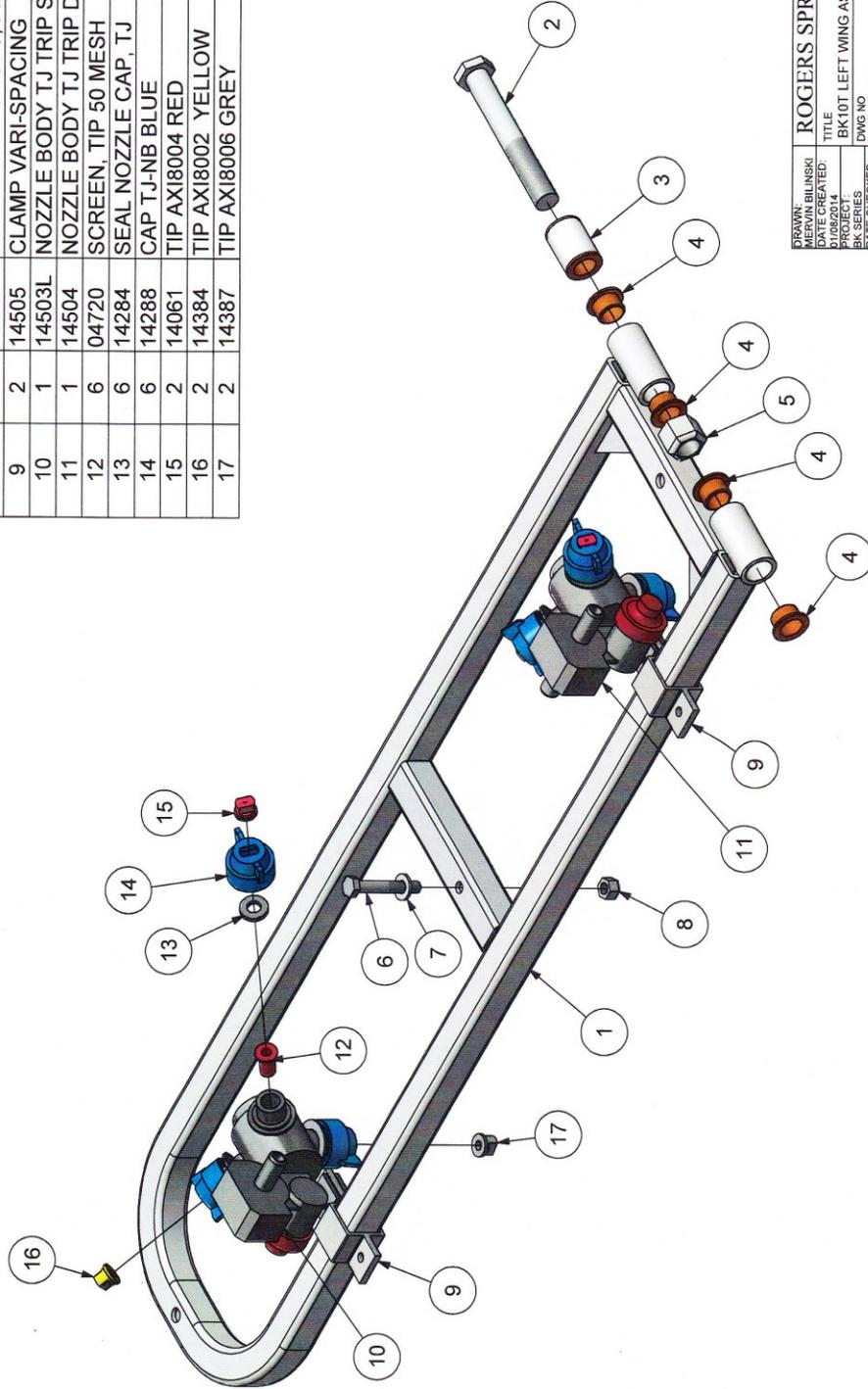
PARTS LIST			
ITEM	QTY	PART#	DESCRIPTION
1	2	04932A	SPRING CPRN GF VALVE
2	6	04720	SCREEN, TIP 50 MESH
3	2	14992	BREAKAWAY CATCH BK10/12T
4	10	00956	NUT, NYLOCK, 3/8NC, PLD
5	2	05436	BOLT, 3/8"x2.5", PLD
6	2	05249	SPRING CPRN 3/8 ID X 1" LG
7	6	00957	WASHER, FLAT, 3/8" PLD
8	2	14989	RUBBER WING STOP BK10/12
9	2	01157	WASHER FLAT, 1/4"
10	2	00968	NUT NYLOCK 1/4" PLD
11	2	14995	PIN WING LOCKUP BK10/12
12	2	05440	BOLT, 3/8"x4", PLD
13	4	05431	BOLT, 3/8"x1", PLD
14	2	01041A	SPRING CPRN 3/8 ID X 1.5" LG
15	2	14904	CHAIN QUICK LINK 3/16"
16	2	14504	NOZZLE BODY TJ TRIP DHB
17	2	14990	EYEBOLT WING BK SERIES
18	1	05844	FTG POLY TEE 1/2HBx3/4HBx1/2HB
19	2	14967	BREAKAWAY PIVOT ASBY
20	8	14127	BUSHING IG 0.75x0.625x0.5" W/WL
21	2	14387	TIP AXI8006 GREY
22	2	14384	TIP AXI8002 YELLOW
23	2	14061	TIP AXI8004 RED
24	6	14288	CAP T,J-NB BLUE
25	4	01051	NUT, NYLOCK, 5/8NC, PLD
26	2	05456	BOLT, 5/8"x4", PLD
27	2	12387	BOLT 5/8NCx5 PLD
28	2	05569	WASHER LOCK 3/8 PLD
29	2	15050A	ROLL PIN 1/8" X 5/8"
30	2	05415	BOLT, 1/4NCx4, PLD
31	6	14284	SEAL NOZZLE CAP, TJ
32	2	14505	CLAMP VARI-SPACING
33	1	14958	FRAME CENTER BK10T

DRAWN:	MERVIN BLINSKI	ROGERS SPRAYERS INC.
DATE CREATED:	05/04/14	TITLE
PROJECT:	BK10T CTR ASSY	DWG NO
BK SERIES:		DATE CHECKED:
		15460
		SCALE:
		BEST FIT
		MATERIAL:
		SIZE
		A

# Frame Assembly BK12T / 10T Left Wing

## PARTS LIST

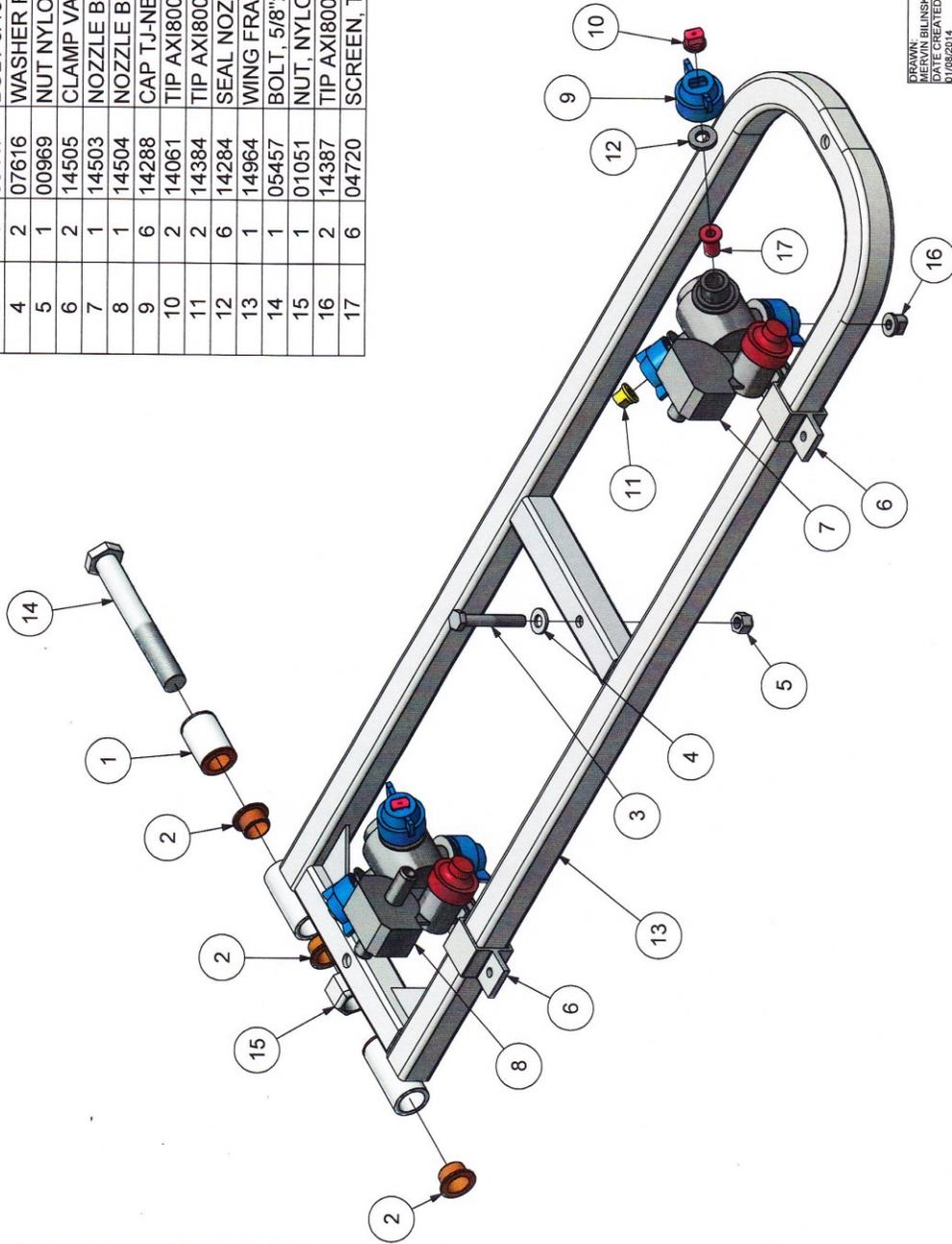
ITEM	QTY	PART#	DESCRIPTION
1	1	14964	WING FRAME BK10/12 SERIES
2	1	05457	BOLT, 5/8"x4.5", PLD
3	1	15049	PIVOT BUSHING, NYL
4	4	14127	BUSHING IG 0.75x0.625x0.5" W/FL
5	1	01051	NUT, NYLOCK, 5/8NC, Pld
6	1	05447	BOLT 5/16"x2", PLD
7	2	07616	WASHER FLAT SAE 5/16 Pld
8	1	00969	NUT NYLOCK 5/16NC, Pld
9	2	14505	CLAMP VARI-SPACING
10	1	14503L	NOZZLE BODY TJ TRIP SHB
11	1	14504	NOZZLE BODY TJ TRIP DHB
12	6	04720	SCREEN, TIP 50 MESH
13	6	14284	SEAL NOZZLE CAP, TJ
14	6	14288	CAP T-J-NB BLUE
15	2	14061	TIP AXI8004 RED
16	2	14384	TIP AXI8002 YELLOW
17	2	14387	TIP AXI8006 GREY



DRAWN: EHLINSKI		ROGERS SPRAYERS INC.	
REVISED: 01/08/2014		TITLE	
PROJECT: BK10T LEFT WING ASSEMBLY		DWG NO	
DATE CHECKED:		15462	
SCALE: 1:4		MATERIAL:	
SIZE: A			

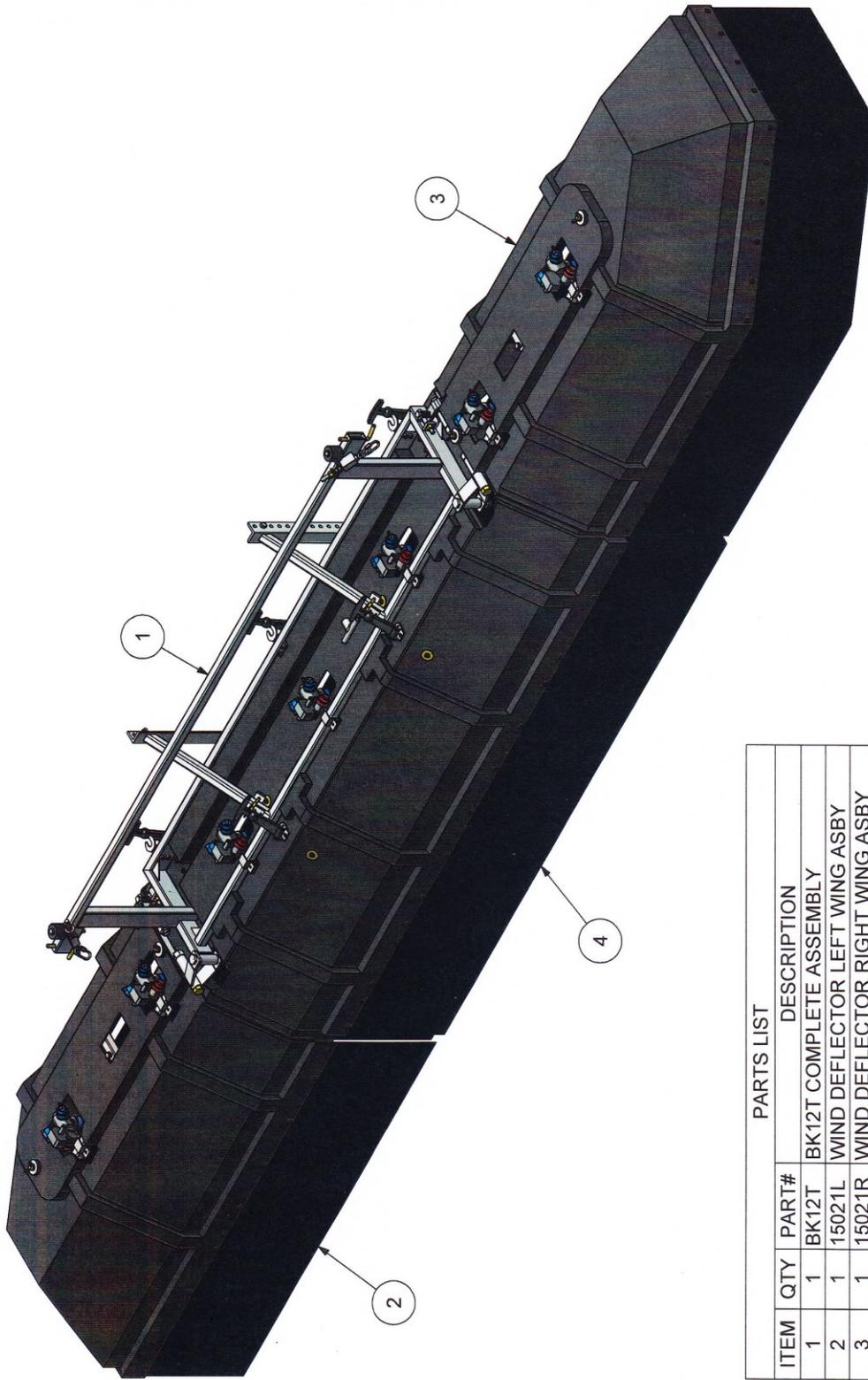
# Frame Assembly BK12T / 10T Right Wing

PARTS LIST		
ITEM	QTY	DESCRIPTION
1	1	PIVOT BUSHING, NYL
2	4	BUSHING IG 0.75x0.625x0.5" W/FL
3	1	BOLT 5/16"x2", PLD
4	2	WASHER FLAT SAE 5/16 Pld
5	1	NUT NYLOCK 5/16NC, Pld
6	2	CLAMP VARI-SPACING
7	1	NOZZLE BODY TJ TRIP SHB
8	1	NOZZLE BODY TJ TRIP DHB
9	6	CAP TJ-NB BLUE
10	2	TIP AXI8004 RED
11	2	TIP AXI8002 YELLOW
12	6	SEAL NOZZLE CAP, TJ
13	1	WING FRAME BK10/12 SERIES
14	1	BOLT, 5/8"x4.5", PLD
15	1	NUT, NYLOCK, 5/8NC, Pld
16	2	TIP AXI8006 GREY
17	6	SCREEN, TIP 50 MESH



DRAWN:	MERVIN BILINSKI	ROGERS SPRAYERS INC.
DATE CREATED:	01/06/11	TITLE
PROJECT:	BK10T RIGHT WING ASSEMBLY	DWG NO
BK SERIES:		DATE CHECKED:
SCALE:	1:1	MATERIAL:
SIZE:	A	

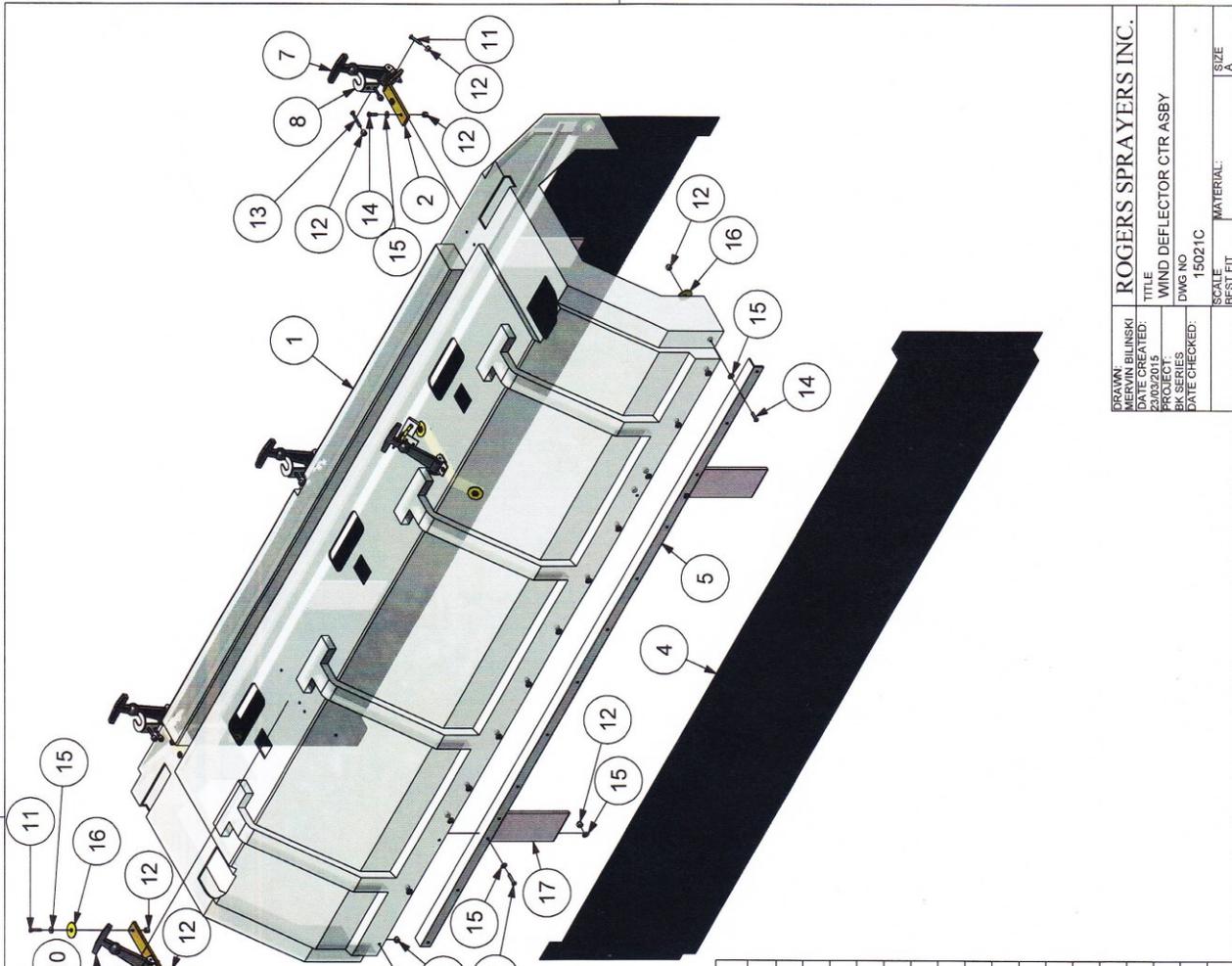
BK12T Cover Kit Part # 15021



PARTS LIST			DESCRIPTION
ITEM	QTY	PART#	
1	1	BK12T	BK12T COMPLETE ASSEMBLY
2	1	15021L	WIND DEFLECTOR LEFT WING ASBY
3	1	15021R	WIND DEFLECTOR RIGHT WING ASBY
4	1	15021C	WIND DEFLECTOR CTR ASBY

DRAWN: MERVIN BILINSKI		ROGERS SPRAYERS INC.	
DATE CREATED: 14/10/2014	TITLE: WIND DEFLECTOR KIT BK12T	SCALE: BEST FIT	SIZE: A
DESIGNED BY: M. BILINSKI	DWG NO: 15021	MATERIAL:	
DATE CHECKED:			

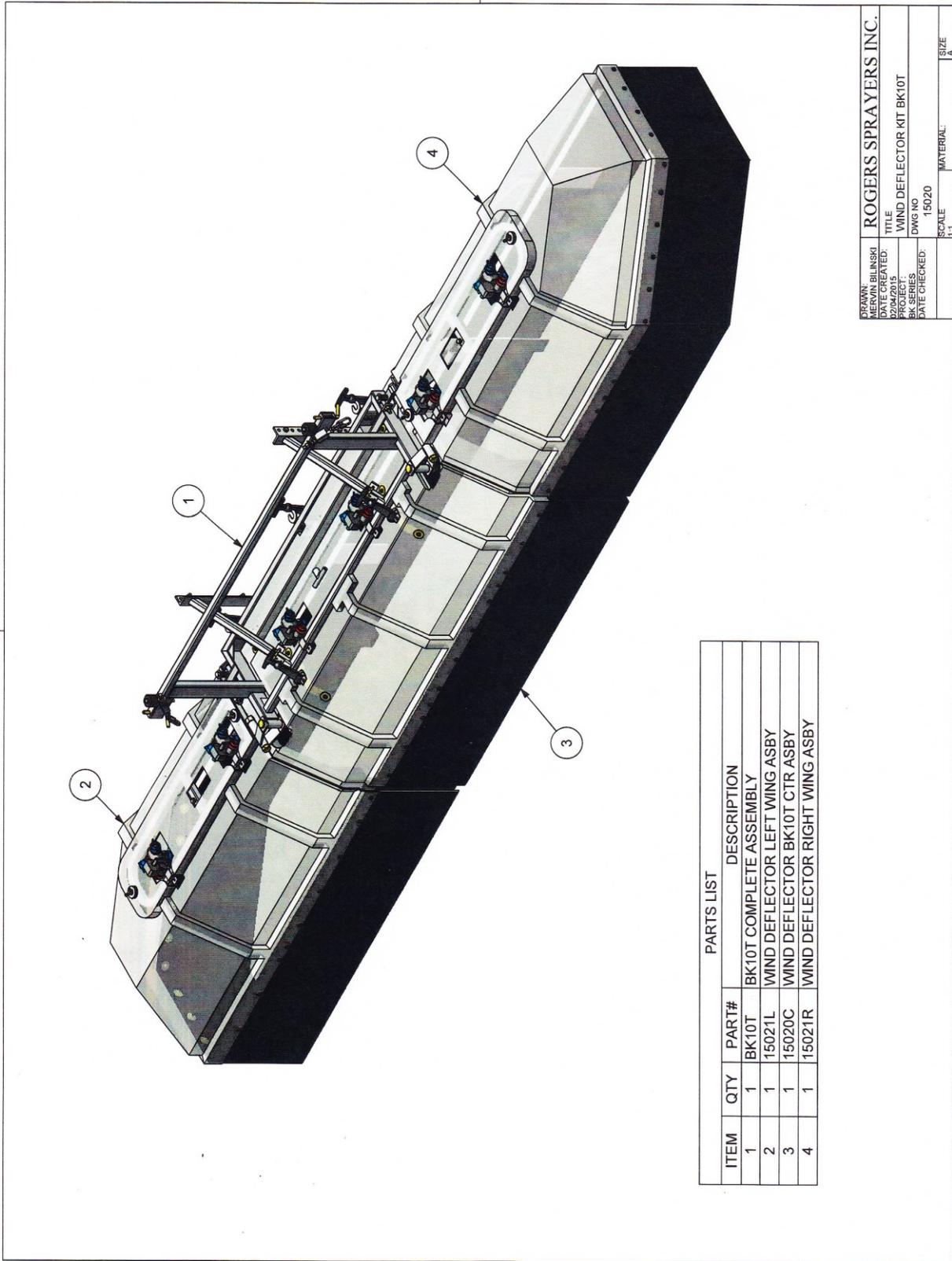
**BK12T Cover Kit Center Part # 15021C**



DRAWN:	MERVIN BILINSKI	ROGERS SPRAYERS INC.
DATE CREATED:	2/20/2015	TITLE
PKG SERIES:	BK SERIES	WIND DEFLECTOR CTR ASBY
DATE CHECKED:		DWG NO
		15021C
		SCALE
		BEST FIT
		MATERIAL:
		SIZE
		A

PARTS LIST			DESCRIPTION
ITEM	QTY	PART#	
1	1	14949	SHROUD BK12T CENTER
2	2	14954	FRONT TOP SUPPORT PLATE
3	2	14955	BACK TOP SUPPORT PLATE
4	2	14957	FLEXISHIELD BK12T CTR
5	2	14952	SHROUD EDGE SUPPORT BK12
6	2	14953	CENTER SHROUD BACK MT PLATE
7	5	14956	HOOD LATCH RUBBER 4.875"
8	5	14956C	HOOD LATCH CATCH
9	2	01049	UBOLT, 1/4x1x2, SQ
10	4	00968	NUT NYLOCK 1/4" PLD
11	20	07157	SCREW MACH. #10-24x1, TRUSS
12	56	01153	NUT, NYLOCK #10-24 PLD
13	6	05385	SCREW MACH. #10-24x1.5, TRUSS
14	30	01152	SCREW MACH. #10-24x3/4, TRUSS
15	54	01183	WASHER FLAT #10
16	9	09754	WASHER, 1/4" FENDER
17	4	14261	CURTAIN SUPPORT LP FRONT

BK10T Cover Kit Part # 15020



PARTS LIST

ITEM	QTY	PART#	DESCRIPTION
1	1	BK10T	BK10T COMPLETE ASSEMBLY
2	1	15021L	WIND DEFLECTOR LEFT WING ASBY
3	1	15020C	WIND DEFLECTOR BK10T CTR ASBY
4	1	15021R	WIND DEFLECTOR RIGHT WING ASBY

<b>ROGERS SPRAYERS INC.</b>	
PERSON: MERVIN BILINSKI	TITLE: WIND DEFLECTOR KIT BK10T
DATE CREATED: 02/04/2015	DWG NO: 15020
PROJECT: BK10T	SCALE: 1:1
DATE CHECKED:	MATERIAL:
	SIZE: A

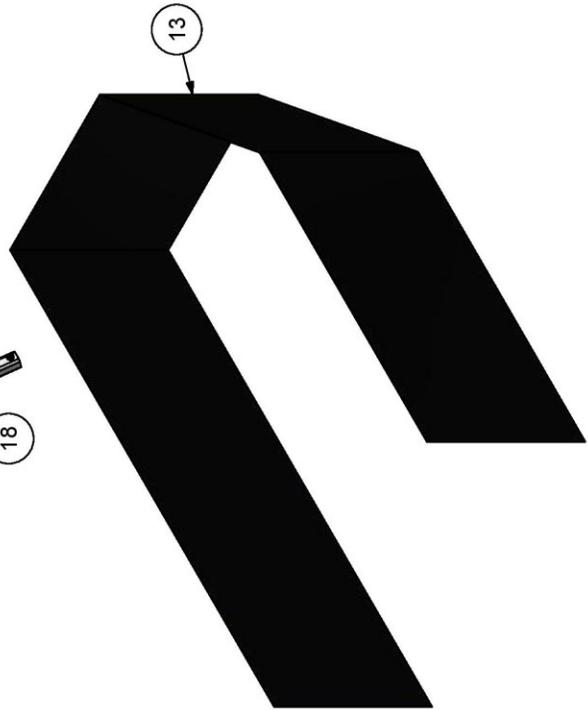
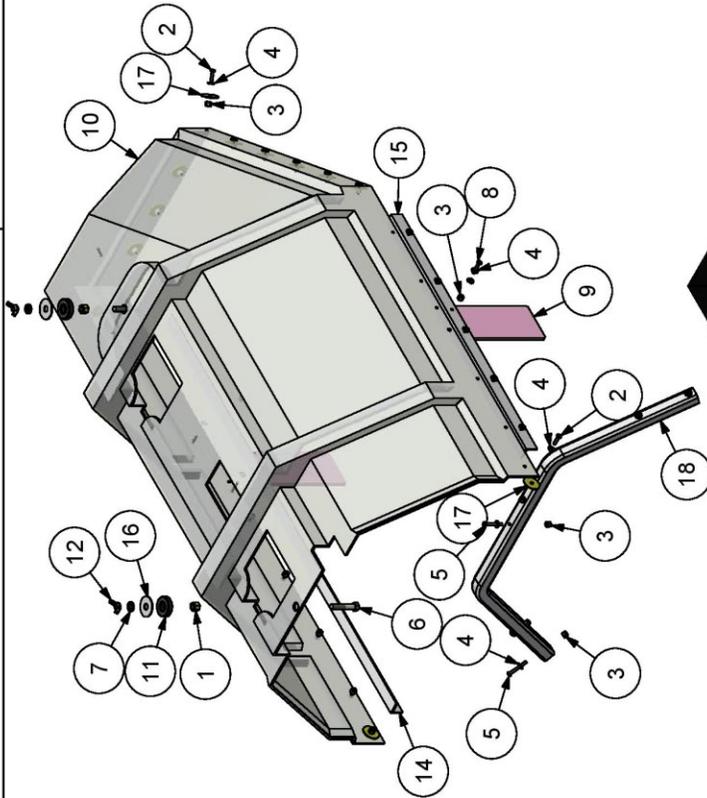
# BK10T Cover Kit Center Part # 15020C

DRAWN: J. BILASKI		ROGERS SPRAYERS INC.	
DATE CREATED: 04/01/2015		TITLE: WIND DEFLECTOR BK10T CTR ASBY	
PROJECT: BK SERIES		DWG NO: 15020C	
DATE CHECKED:		SCALE: 1:1	
		MATERIAL:	
		SIZE: A	

PARTS LIST		
ITEM	QTY	PART# DESCRIPTION
1	1	14950 SHROUD BK10T CENTER
2	5	14956C HOOD LATCH CATCH
3	5	14956 HOOD LATCH RUBBER 4.875"
4	2	01049 UBOLT, 1/4x1x2, SQ
5	4	00968 NUT NYLOCK 1/4" PLD
6	2	14953 CENTER SHROUD BACK MT PLATE
7	2	14955 BACK TOP SUPPORT PLATE
8	24	07157 SCREW MACH. #10-24x1, TRUSS
9	50	01183 WASHER FLAT #10
10	11	09754 WASHER, 1/4" FENDER
11	52	01153 NUT, NYLOCK #10-24 PLD
12	6	05385 SCREW MACH. #10-24x1.5, TRUSS
13	22	01152 SCREW MACH. #10-24x3/4, TRUSS
14	2	14954 FRONT TOP SUPPORT PLATE
15	2	14966 SHROUD EDGE SUPPORT BK10
16	2	14968 FLEXISHIELD BK10T CTR
17	4	14261 CURTAIN SUPPORT LP FRONT

# BK12T/BK10T Cover Kit Left Wing

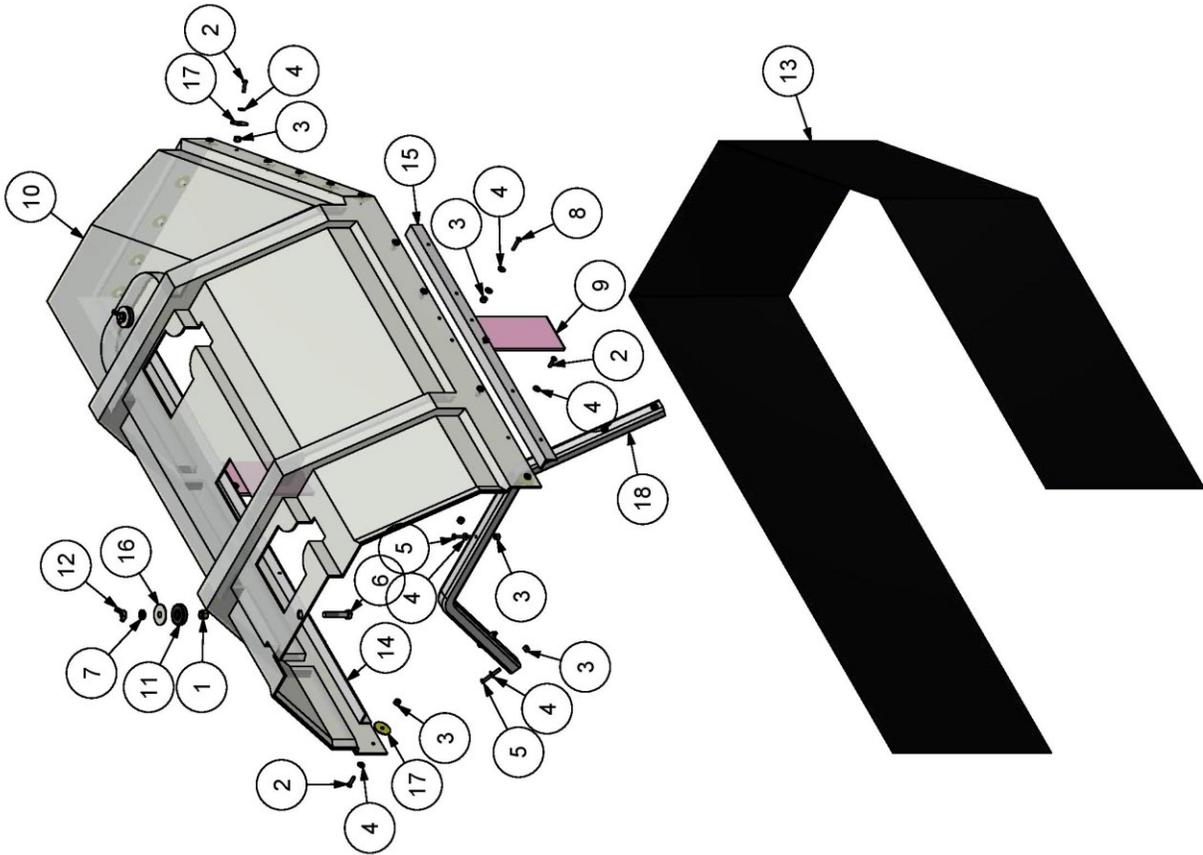
PARTS LIST		DESCRIPTION
ITEM	QTY	PART#
1	2	00956
2	22	01152
3	31	01153
4	35	01183
5	5	05385
6	2	05435
7	2	05569
8	4	07157
9	2	14261
10	1	14948L
11	2	14959
12	2	14960
13	1	14961
14	1	14962
15	1	14963
16	2	14965
17	12	15492
18	1	15693



DRAWN:	MERVIN BILINSKI	ROGERS SPRAYERS INC.
DATE CREATED:	23/03/2015	TITLE
APPROVED:		WIND DEFLECTOR LEFT WING ASBY
PK SERIES:		DWG NO
DATE CHECKED:		15021L
		SCALE
		1/2
		MATERIAL:
		SIZE
		A

# BK12T/BK10T Cover Kit Right Wing

PARTS LIST		DESCRIPTION
ITEM	QTY	PART#
1	2	00956
2	22	01152
3	31	01153
4	35	01183
5	5	05385
6	2	05435
7	2	05569
8	4	07157
9	2	14261
10	1	14948R
11	2	14959
12	2	14960
13	1	14961
14	1	14962
15	1	14963
16	2	14965
17	12	15492
18	1	15693



DRAWN:	MERVIN BILINSKI	ROGERS SPRAYERS INC.
DATE CREATED:	23/03/2015	TITLE
PROJECT:	BK SERIES	WIND DEFLECTOR RIGHT WING ASBY
DATE CHECKED:		DWG NO
		15021R
		SCALE
		1/2
		MATERIAL:
		SIZE
		A

**Rogers Sprayers Inc. (RSI)**  
141 - 105<sup>th</sup> 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](http://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.**



## **ROGERS SPRAYERS INC.**

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

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Email: [info@rogerssprayers.com](mailto:info@rogerssprayers.com)  
Web: [www.rogerssprayers.com](http://www.rogerssprayers.com)