

Head to Head Demo Comparison Sheet

"Compare Apples to Apples, Make the Automatic Choice"

Task Force Tips Quadrafog® and Thunderfog® Selectable Gallonage Nozzle

The purpose of this document is to encourage you to compare TFT products head to head, apples to apples, with like models from our competitors. The section below explains the key elements we feel you should compare. The following pages explain how to do this in a fair, objective manner. Use Quad/Thunderfog Score Sheet to rate the key elements, that is available on our web site www.tft.com.

The TFT Quadrafog® and Thunderfog® 30-250 GPM should be compared to the Akron Turbojet® 30-250 GPM and Elkhart Select-O-Flow® 40-250 GPM, selectable gallonage nozzles.

When conducting a head to head comparison, consider the following elements:

Key Element	Comparison Information	What to Compare
Fog Teeth Material and Design	TFT Quadrafog/Thunderfog: Stainless Steel Spinning Design Akron Turbojet: Plastic, Spinning Design Elkhart Select-O-Flow: Plastic, Spinning Design	How durable are the fog teeth? Will they need regular maintenance and/or replacement?
Shutoff Ball Material	TFT Quadrafog/Thunderfog: Stainless Steel Valve Ball Akron Turbojet: Plastic Valve Ball Elkhart Select-O-Flow: Plastic Valve Ball	Is the ball resistant to wear and damage?
Stream Pattern Adjustment	TFT Quadrafog/Thunderfog: ½ turn Akron Turbojet: More than ¾ turn Elkhart Select-O-Flow: More than ¾ turn	How quickly can you change from straight stream to wide fog for protection? Compare straight stream and fog quality.
Valve Seat Design	TFT Quadrafog/Thunderfog: Quick change rear seat, no tools needed Akron Turbojet: Internal valve seat, tools required Elkhart Select-O-Flow: Internal valve seat, tools required	How quickly can the valve seat be replaced? Are any tools required to replace the rear valve seat?
Factory Support	TFT Quadrafog/Thunderfog: 5 year warranty, 24 hour repair policy Akron Turbojet: 5 year warranty Elkhart Select-O-Flow: 1 year warranty	Is the nozzle backed by a long-term warranty? If needed, how quickly will your nozzle be serviced, tested and returned?



2800 East Evans Avenue • Valparaiso, IN 46383-6940
 800-348-2686 • 219-462-6161 • Fax 219-464-7155
<http://www.tft.com> • E-mail: sales@tft.com

Quadrafog® and Thunderfog® are registered trademarks of Task Force Tips, Inc.
 Turbojet® is a registered trademark of Premier Farnell Corp.
 Select-O-Flow® is a registered trademark of Elkhart Brass Mfg. Co., Inc.

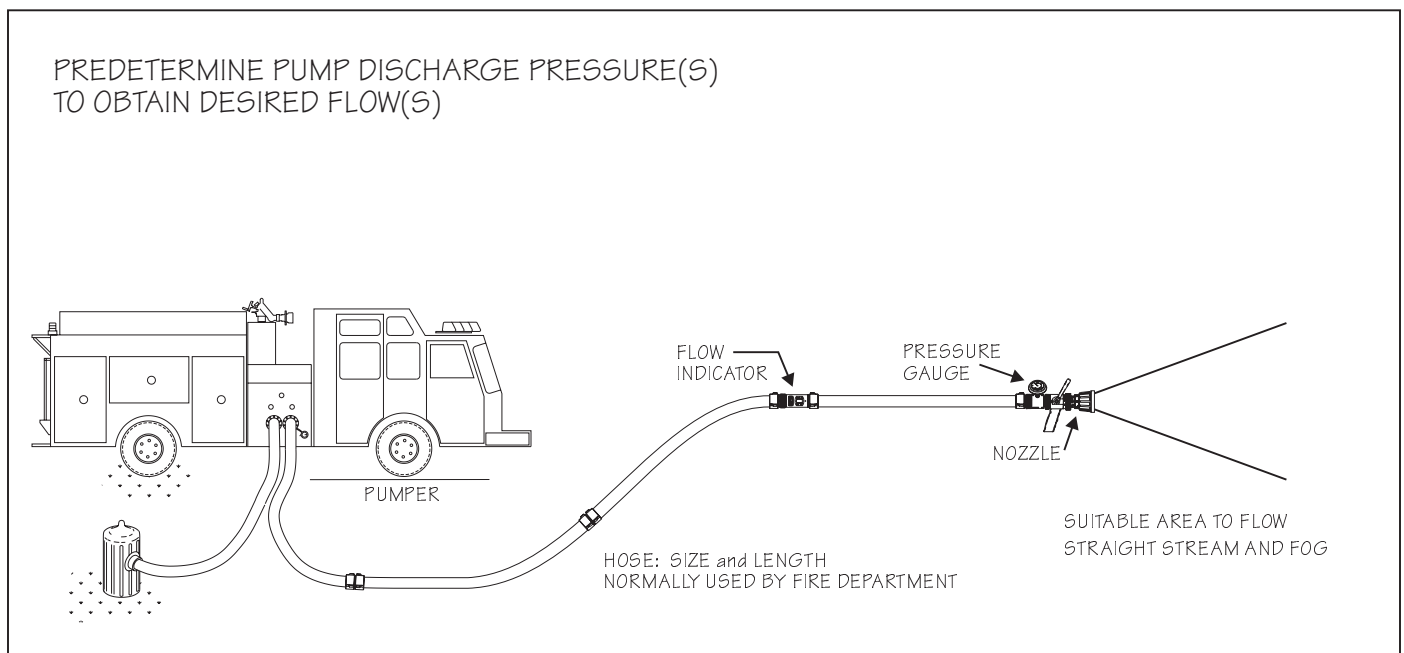


Demonstration and flow evaluation procedures and layout

Comparisons should be repeated under the same conditions, same flows, and same pressures for each nozzle evaluated in order to accurately compare features. Use the Quad/Thunderfog Rating Score Sheet to record ratings as you make the side by side comparisons, available on our web site www.tft.com.

Preparation for Demonstration

- 1) Always compare TFT Quadrafog® and Thunderfog® nozzles to competitors' like models, Akron Turbojet®, Elkhart Select-O-Flow®.
- 2) For each demonstration, assure the evaluation procedures and layouts are identical for each of the nozzles being evaluated. Changing any of the variables will result in unfair, inaccurate and inconclusive results. These items include the hose, pumper, discharge used, pressure gauges, flow indicators or meters, valves, pump discharge pressure, and any appliances used.
- 3) Using length and size of hose normally used by the department, predetermine the pump discharge pressure(s) to obtain the desired flow(s) for the models being evaluated.



Equipment Set Up

- 1) Lay out the hose from the pump to an area suitable to show fog pattern and straight stream, and foam application if required.
- 2) Attach a reliable flow indicator or meter anywhere in the hoseline (preferably 50 feet back from the nozzle for easier observation). A properly calibrated apparatus flow meter may be used.
- 3) Attach a reliable pressure gauge to the nozzle end of the hoseline.
- 4) Attach the competitor's nozzle to the gauge making sure nozzle is off.
- 5) Slowly charge hoseline while pump is engaged with minimal pressure.
- 6) Slowly open the nozzle slightly to eliminate any air in the hoseline.
- 7) Close the nozzle and increase pump pressure to predetermined discharge pressure.

Evaluation Procedure

- 1) With adequate personnel holding the hoseline, open the nozzle slowly to the fully open position.
Observe pressure gauge and flow indicator or meter. They should indicate the proper nozzle pressure and flow rate.
- 2) Adjust straight stream by focusing it to achieve maximum reach.
Note the distance that the majority of the water reaches.
Observe the stream, looking at how cohesive the stream is.
- 3) Adjust to wide fog pattern.
Note how many turns and the amount of hand movement required to change from straight stream to wide fog.
If so equipped, observe when the spinning teeth begin to rotate.
Observe fog pattern for uniformity and width.
- 4) Rotate selector ring to the flush position, if provided.
Note the amount of effort and number of turns required to move the selector ring *into* the flush position.
- 5) Rotate the selector ring out of the flush position using caution as nozzle reaction force (kickback) will increase.
Note the amount of effort required to move the selector ring *from* the flush position.
- 6) Shut the nozzle slowly and close the discharge.
- 7) Remove the competitor's nozzle and replace with another competitor's nozzle or with TFT Quadrafog® or Thunderfog® nozzle and open the discharge.
- 8) Repeat Evaluation Procedure Steps 1-6 for each of the nozzles using the same pump pressures and hose lays.
- 9) With the TFT Quadrafog® or Thunderfog® removed from the hose, remove the rear hose gasket. With the valve slightly closed, the rear seat insert can be removed by pulling it out with your finger. Replace the insert and hose gasket to demonstrate the quick change rear valve seat.
- 10) After all nozzles are flow tested, look at each of the nozzles closely.
Observe overall fit and finish for quality.

Foam Aspirating Attachment Evaluation Procedure

- 1) Set up the foam proportioning system to be used following manufacturer's recommendations. Several types of proportioners are available including: in-line or built-in foam eductors; around-the-pump proportioners; foam injection systems; and batch mixing.
- 2) Use a suitable foam concentrate or training foam. Follow manufacturer's recommendations and applicable fire training practices, including safe handling techniques, and environmental concerns. Proper, consistent foam proportioning will allow the ultimate performance and comparison of foam aspirating attachments.
- 3) Assure the foam proportioning system is working properly and flow foam from the nozzle without the aspirating attachment. Observe the consistency and quantity of finished foam without the aspirating attachment.
- 4) Shut the nozzle slowly and attach the appropriate aspirating attachment for the nozzle being evaluated. (*Some aspirating attachments are to be used in the straight stream position only.*) Open the nozzle and observe the consistency and quantity of the finished foam. Observe the reach of the foam stream.
- 5) If the aspirating attachment can be used in positions other than straight stream, rotate the attachment and stream shaper to a wider pattern and observe the consistency and quantity of the finished foam. Observe the reach of the foam stream. Shut the nozzle off.
- 6) Remove the aspirating attachment or competitor's nozzle and replace with another aspirating attachment or competitor's nozzle or with the TFT Quadrafog® or Thunderfog® nozzle and open the nozzle.
- 7) Repeat Foam Aspirating Attachment Evaluation Procedure Steps 3-6 for each of the nozzles and foam aspirating attachments.
- 8) After evaluating all nozzles and aspirating attachments, flush the foam proportioner or system and the nozzles and attachments with plenty of clear water per manufacturer's instructions.

TASK FORCE TIPS, INC.

"Compare Apples to Apples, Make the Automatic Choice"

2800 East Evans Avenue, Valparaiso, IN 46383-6940
800-348-2686 • 219-462-6161 • Fax 219-464-7155
<http://www.tft.com> • E-mail: sales@tft.com

LTT-220 December 16, 1998 Rev 0

Quad/Thunderfog Score Sheet

Poor → Best Poor → Best Poor → Best

<p>Fog Teeth Material</p> <p>a) How durable are the fog teeth? b) Will they need regular maintenance and/or replacement?</p>	<p>TFT Quad/Thunderfog</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>	<p>Akron Turbojet</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>	<p>Elkhart Select-O-Flow</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>
<p>Shutoff Ball Material</p> <p>a) Is the ball resistant to wear and damage?</p>	<p>TFT Quad/Thunderfog</p> <p>a) 1 2 3 4 5</p>	<p>Akron Turbojet</p> <p>a) 1 2 3 4 5</p>	<p>Elkhart Select-O-Flow</p> <p>a) 1 2 3 4 5</p>
<p>Stream Pattern Adjustment</p> <p>a) How quickly can you change from straight stream to wide fog for protection? b) Compare straight stream and reach. c) Compare fog pattern quality.</p>	<p>TFT Quad/Thunderfog</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5 c) 1 2 3 4 5</p>	<p>Akron Turbojet</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5 c) 1 2 3 4 5</p>	<p>Elkhart Select-O-Flow</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5 c) 1 2 3 4 5</p>
<p>Valve Seat Design</p> <p>a) How quickly can the valve seat be replaced? b) Are any tools required to replace the rear valve seat?</p>	<p>TFT Quad/Thunderfog</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>	<p>Akron Turbojet</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>	<p>Elkhart Select-O-Flow</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>
<p>Overall Fit and Finish</p> <p>a) How would you rate the overall fit and finish of the nozzle?</p>	<p>TFT Quad/Thunderfog</p> <p>a) 1 2 3 4 5</p>	<p>Akron Turbojet</p> <p>a) 1 2 3 4 5</p>	<p>Elkhart Select-O-Flow</p> <p>a) 1 2 3 4 5</p>
<p>Factory Support</p> <p>a) Is the nozzle backed by a long-term warranty? b) If needed, how quickly will your nozzle be serviced, tested and returned?</p>	<p>TFT Quad/Thunderfog</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>	<p>Akron Turbojet</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>	<p>Elkhart Select-O-Flow</p> <p>a) 1 2 3 4 5 b) 1 2 3 4 5</p>
<p>Score Totals 11 (poor) 55 (best) (add the score in each column for overall rating)</p>	<p>TFT Quad/Thunderfog</p>	<p>Akron Turbojet</p>	<p>Elkhart Select-O-Flow</p>

TASK FORCE TIPS, INC.

"Compare Apples to Apples, Make the Automatic Choice"

2800 East Evans Avenue, Valparaiso, IN 46383-6940
800-348-2686 • 219-462-6161 • Fax 219-464-7155
<http://www.tft.com> • E-mail: sales@tft.com