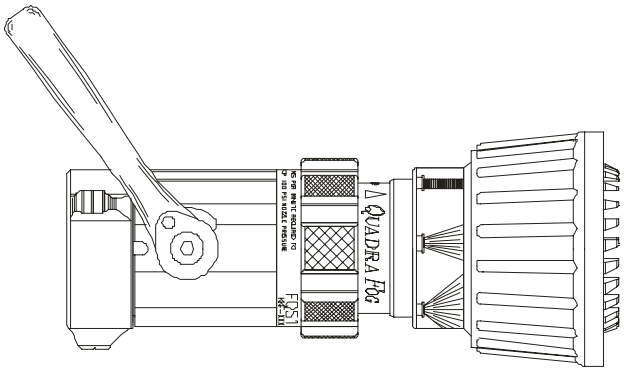
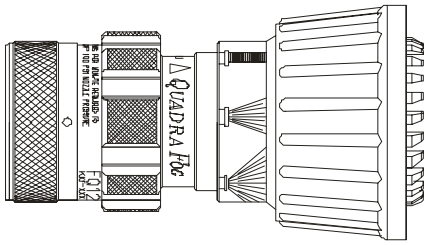
TASK FORCE TIPS
FIRE FIGHTING EQUIPMENT

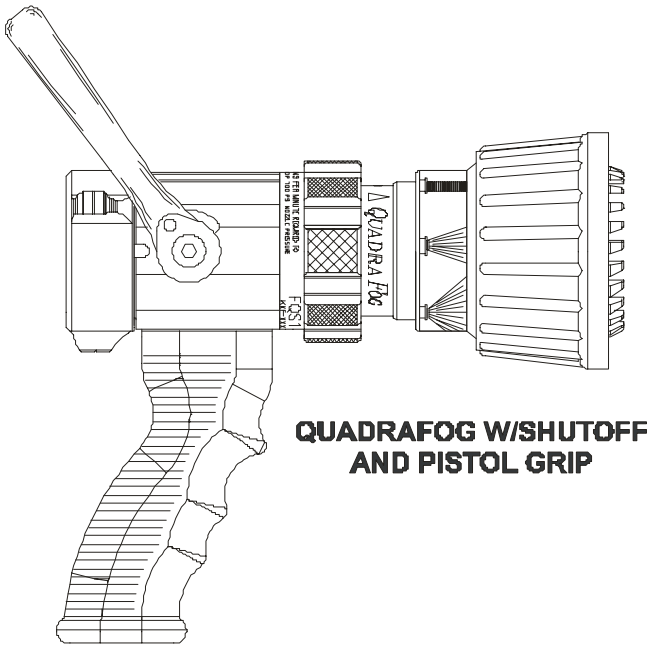
1.5” QUADRAFOG® SERIES SERVICE PROCEDURE



QUADRAFOG W/SHUTOFF



QUADRAFOG TIP ONLY



QUADRAFOG W/SHUTOFF AND PISTOL GRIP

TASK FORCE TIPS • 800-348-2686 • www.tft.com

1.5” QuadraFog® Series - Service Procedure

INTRODUCTION

The nozzle you have purchased is your primary tool in the battle against fire. It has been manufactured with great care to give you the finest performance possible. All components are top quality and extremely rugged. With occasional inspection and attention, it will serve you for many years. This publication is intended for those who prefer to perform service on their own equipment. Factory service is available, and repair time seldom exceeds one day in our facility. Factory serviced nozzles are repaired by experienced professionals, fully tested and promptly returned functioning to original specifications. Repair charges for non-warranty items are minimal. Task Force Tips assumes no liability for damage to equipment or injury to personnel that is a result of user service.

GENERAL INFORMATION

THREADED JOINTS have been secured using Loctite brand thread locking adhesive #271. Disassembly requires a minimal application of heat with a propane or oxyacetylene torch to break the bond. The threads should be heated to approximately 450 degrees F. Excessive heat application will cause damage to adjacent seals and labels. Replacement parts must be reinstalled using Loctite #271, or equivalent. Small vials of Loctite for field service are available; order part # V5010, LOCTITE MINI DISPENSER.

LUBRICANTS: If parts are disassembled in an area where o-rings are present, re-assemble using DOW #112 High Performance Silicone Grease on all o-rings and surfaces that the o-rings contact.

LABEL REPLACEMENT: If labels become damaged, remove old labels with a razor knife. Remove adhesive with acetone or methyl ethyl ketone. Surface must be clean, dry and free from grease.Carefully apply new label.

ORDERING PARTS: Always specify the serial number of the nozzle when ordering parts. The number is found on the raised rim of the INDEX RING [16]. Be sure to use complete DESCRIPTION and ORDER # as printed on parts list. All requests for couplings must specify thread size. Pricing information will be given at time of order.

OPERATING INSTRUCTIONS: See LKF-100 for instructions on Safe Operation and Maintenance

COUPLING AND PISTOL GRIP SERVICE PROCEDURE:

Tools Required:

5/16” Allen (hex) Wrench

Loctite #271 Thread Locking Adhesive

GENERAL: Occasional replacement of the COUPLING GASKET [39] and REAR SEAT [38] is recommended.

COUPLING REMOVAL: Remove PORT PLUG [25] from side of BASE [21]. Turn coupling so that hole faces down, and rotate coupling back and forth to allow 3/16 STAINLESS STEEL BALLS [26] to drop out. When all balls are out of the groove, the coupling can be removed.

COUPLING INSTALLATION: Put the coupling onto the mating part and load 34 STAINLESS STEEL BALLS [26] into the ball groove through the port in the valve. Insertion of the balls is easier if the coupling is rotated slightly back and forth as the balls are loaded. Insert PORT PLUG [25] into port on side of BASE [21].

BOLT-ON PISTOL GRIP REMOVAL / INSTALLATION: The PISTOL GRIP [22] is held on by a SOCKET HEAD CAP SCREW [23]. Remove screw with a 5/16” Allen wrench. To reinstall, clean thread and apply Loctite #271. Tighten screw to 95 in-lbs.

VALVE and HANDLE SERVICE PROCEDURE

See Ball Valve Handle Repair Kit Instructions – (LKR-200)

FRONT END SERVICE PROCEDURE

Tools Required:

5/64” Allen (Hex) Wrench
5/32” Allen (Hex) Wrench
7/32” Allen (Hex) Wrench
3/16” Two Prong Face Spanner Wrench
Razor Blade Knife
Dow #112 High Performance Silicone Grease
Torch, oxyacetylene or propane
Loctite #271 Thread Locking Adhesive
Flow Meter
Pressure Gage

FRONT END DISASSEMBLY SEQUENCE

Note: Instructions for the Spinning Teeth model are different from the Fixed Teeth model

-SPINNING TEETH-

BUMPER and HEAD WITH SPINNING TEETH REMOVAL: Remove BUTTON HEAD SCREWS [42] using a 5/32” Allen wrench. Slide BUMPER [41] and O.D. WEAR RING [40] off of HEAD [46]. Remove SPINNING TEETH [43], I.D. WEAR RING [44] and “V” FOLLOWERS [5] from HEAD [46]. The HEAD [46] will now slide off the GALLONAGE SLEEVE [9].

-FIXED TEETH-

BUMPER and HEAD ONLY REMOVAL: Using a razor blade knife, cut through one side of the BUMPER [3] from top to bottom then remove BUMPER [3] from HEAD [4]. Once the BUMPER [3] is removed, heat the CUPS [6] and remove the CUPS [6] using a 7/32” Allen wrench. Now the “V” FOLLOWERS [5] can be removed from the HEAD [4] and the HEAD [4] can be slid off the GALLONAGE SLEEVE [9].

DEFLECTOR REMOVAL: Cut DEFLECTOR LABEL [1] off DEFLECTOR [2] to expose spanner wrench holes. Remove DEFLECTOR [2] using a spanner wrench.

GALLONAGE SLEEVE AND INDEX RING REMOVAL: Heat and remove CUPS [6] from INDEX RING [16] using a 7/32” Allen wrench. Be careful not to heat/damage NAME LABEL [11] (a wet rag wrapped around this area will help). Now that the CUPS [6] are removed the “V” FOLLOWERS [5], SPRINGS [12], and TORLON BALLS [13] can be removed from the INDEX RING [16]. The GALLONAGE SLEEVE [9] can now be removed from the INDEX RING [16]. Heat and remove SET SCREW [17] using a 5/64” Allen wrench. This will allow the ACETAL BALLS [18] to drop out of the INDEX RING [16]. Rock the INDEX RING [16] back and forth to help all of the ACETAL BALLS [18] drop out. Slide INDEX RING [16] off of the BASE [21 or 47]. Remove KEY PINS [10] from GALLONAGE SLEEVE [9]. The QUAD RING [8] and O-RING [19] should be removed and replaced after disassembly.

FRONT END ASSEMBLY SEQUENCE

GALLONAGE SLEEVE AND INDEX RING INSTALLATION: Slide BASE [21 or 47] into the INDEX RING [16]. Load 50 ACETAL BALLS [18] into INDEX RING [16] through small tapped hole. Insertion of the balls is easier if the coupling is rotated slightly back and forth as the balls are loaded. Apply Loctite 271 to SET SCREW [17] and thread into INDEX RING [16] using a 5/64” Allen wrench.Grease the inside of the GALLONAGE SLEEVE [9] and the slots in the BASE [21 or 47]. Install O-RING [19] on the BASE [21 or 47]. Slide GALLONAGE SLEEVE [9] into INDEX RING [16]. Assemble TORLON BALL [13], HELICAL SPRING [12], “V” FOLLOWER [5], and CUP [6] into subassemblies. Grease detent grooves and cam grooves in GALLONAGE SLEEVE [9]. Thread the cup subassemblies into INDEX RING [16] (do not apply Loctite and tighten completely) making sure that cup

assemblies line up with the detent grooves. INDEX RING [16] should feel snug when indexed / rotated. Also make sure that the word “FLUSH” on the INDEX RING [16] lines up with arrow on the NAME LABEL [11]. Apply Loctite 271 to KEY PINS [10] and insert into GALLONAGE SLEEVE [9]. Go back and apply Loctite 271 to cup assemblies then thread flush to surface of INDEX RING [16]. Install QUAD RING [8] on GALLONAGE SLEEVE [9].

-SPINNING TEETH-

BUMPER and HEAD WITH SPINNING TEETH INSTALLATION: Apply grease to cam grooves in GALLONAGE SLEEVE [9] and to the I.D. of the HEAD [46]. Install QUAD RING [8] onto GALLONAGE SLEEVE [9]. Slide HEAD [46] over end of GALLONAGE SLEEVE [9] and push “V” FOLLOWERS [5] through holes in HEAD [46] into cam groove. Straight stream icon on PATTERN LABEL [7] should line up with arrow on NAME LABEL [11]. Install O-RING [45] onto HEAD [46]. Apply grease to I.D. WEAR RING [44] then slide over end of HEAD [46]. Slide SPINNING TEETH [43] over I.D. WEAR RING [44]. Apply grease to wear ring groove in BUMPER [41] and O.D WEAR RING [40]. With notch facing down install O.D. WEAR RING [40] into BUMPER [41]. Apply grease to outside of HEAD [46] and inside of BUMPER [41]. Slide BUMPER [41] over HEAD [46] making sure that the holes in the BUMPER [41] line up with tapped holes in HEAD [46]. Apply Loctite 271 to BUTTON HEAD SCREWS [42] and thread through BUMPER [41] into HEAD [46].

-FIXED TEETH-

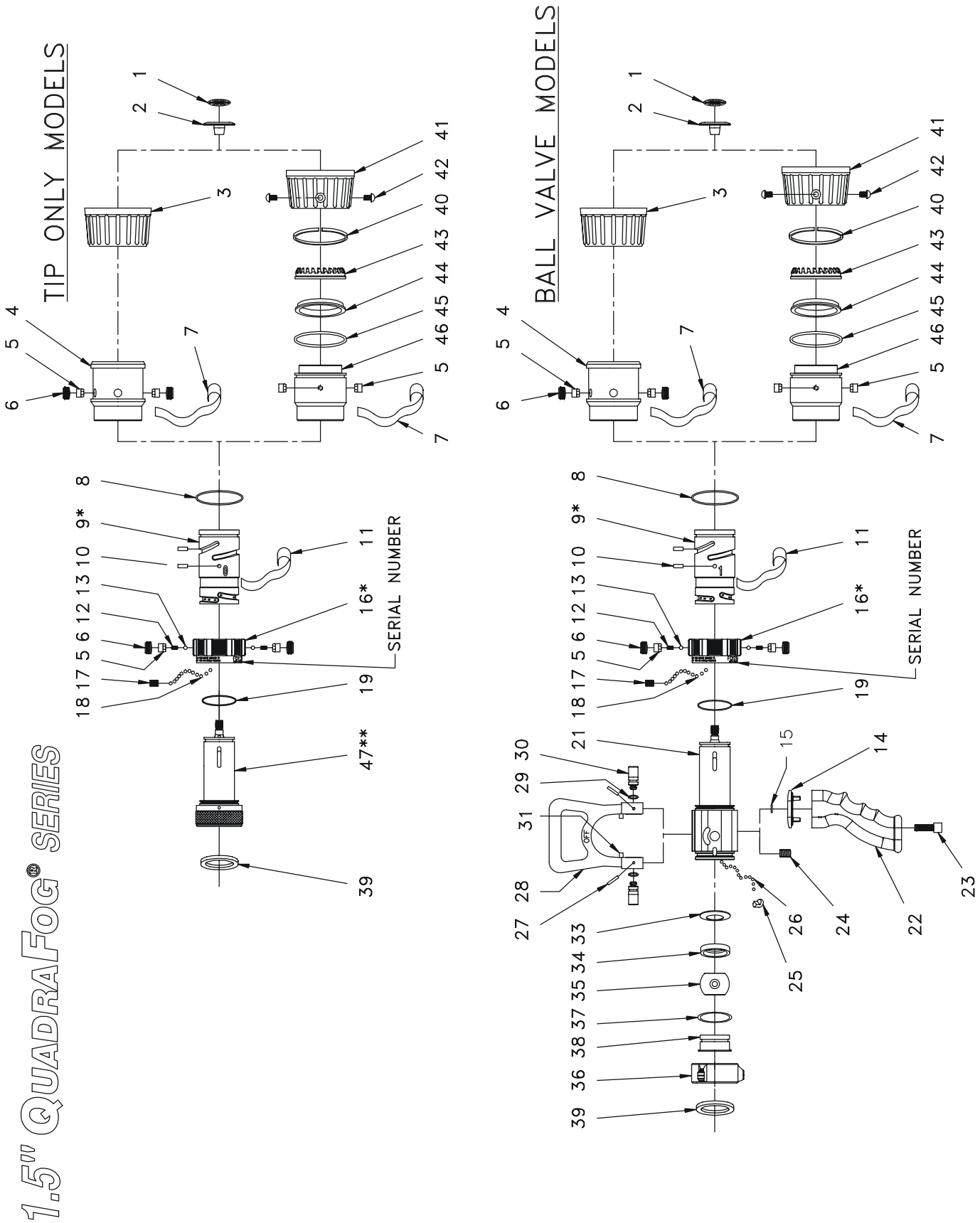
BUMPER and HEAD ONLY INSTALLATION: Apply grease to cam grooves in GALLONAGE SLEEVE [9] and to the I.D. of the HEAD [4]. Apply grease to “V” FOLLOWERS [5] and place each one into a CUP [6]. Slide HEAD [4] over end of GALLONAGE SLEEVE [9] making sure that the holes in HEAD [4] are lined up with cam grooves in the GALLONAGE SLEEVE [9]. Straight stream icon on PATTERN LABEL [7] should line up with arrow on NAME LABEL [11]. Apply Loctite 271 to cup subassemblies and thread through HEAD [4] and into cam groove in GALLONAGE SLEEVE [9]. Make sure cup subassemblies are not threaded too tight into barrel. Slide BUMPER [3] over the HEAD [4] with nubs on the I.D. of the bumper lining up with the empty holes in the HEAD [4].

DEFLECTOR INSTALLATION: Apply a small amount of Loctite 271 to threads on end of BASE [21 or 47]. Start screwing on the DEFLECTOR [2] by hand, to make sure it is going on straight. Continue to screw the DEFLECTOR [2] in using a spanner wrench. Set the nozzle to the lowest operating flowrate. Adjust gap between DEFLECTOR [2] and face of GALLONAGE SLEEVE [9] per chart below. Make sure the DEFLECTOR [2] is not loose before testing. Test nozzle to ensure that nozzle generates the proper pressure at the correct flow rate – adjust DEFLECTOR [2] if needed. Once the DEFLECTOR [2] is set, clean and dry it; then apply DEFLECTOR LABEL [1].

Flow Rate	Pressure	Gap Size
30 GPM	100 PSI	.040”
110 L/min.	7 BAR	1.0 mm
100 L/min.	6 BAR	1.0 mm

PROBLEMS: If you have any questions or problems, please feel free to call for assistance.

TASK FORCE TIPS INC.
2800 EAST EVANS AVENUE
VALPARAISO, INDIANA 46383-6940
(800)-348-2686 • (219)-462-6161



Ref #	Description	Qty	Order #
1	Deflector Label	1	FL10
2	Deflector	1	FT210
3	Bumper	1	FT270
4	Head	1	FT220
5	‘V’ Follower	2	JT263
6	Cup	2	FT260
7	Pattern Label	1	FL200
8	Quad Ring	1	VOQ-4225
***9**	Gallonage Sleeve	1	FT240* FT241*
10	Key Pins	2	FT252
***11**	Name Label	1	FL241*
12	Helical Spring	2	VM4195
13	3/16” Torlon Ball	2	V2120-TORLON
14	Pistol Grip Spacer	1	HM693-F
15	3/8” Flat Washer	1	VM4901
***16**	Index Ring	1	FT230* FT231*
17	8-32 x 1/8” Set Screw	1	VT08-32SS125
18	1/8” Acetal Ball	50	VB125AC
19	O-Ring	1	VO-127
21	Quadrafog Base	1	FT202
22	Pistol Grip	1	HM692-BLK
23	Socket Head Screw	1	VT37-16SH1.0
24	Set Screw	1	VT37-16SS312
25	Port Plug	1	B770
26	Stainless Steel Balls	34	V2120
27	Spirol Pin	2	V1900
28	Shutoff Handle	1	F10060
29	O-Ring	2	VO-012
30	Trunnion	2	F10040
31	Stop Pin	2	F10050
33	Bellville Washer	1	F10090
34	Front Seat	1	F10070
35	Ball	1	F10030
****36**	Coupling	1	F10097**
37	O-Ring	1	VO-126
38	Rear Seat	1	F10080
39	Gasket	1	V3130
40	O.D. Wear Ring	1	FT267
41	Spinning Tooth Bumper	1	FT265
42	¼-20 x 3/8 Button Head Screw	2	VT25B20BH375
43	Spinning Teeth	1	FT222
44	I.D. Wear Ring	1	FT227
45	O-Ring	1	VO-145
46	Spinning Teeth Head	1	FT225
****47**	FQ Base Kit	1	FQ805**

* - CONSULT FACTORY FOR SPECIFIC PART NUMBERS CORRESPONDING TO THE FLOW SETTINGS ON NOZZLE

** - STATE DESIRED THREAD WHEN ORDERING

