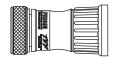
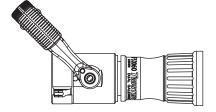


# 1.5" TWISTER & BUBBLECUP SERIES

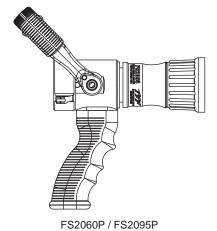
# **SERVICE PROCEDURE**



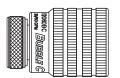
F2060 / F2095



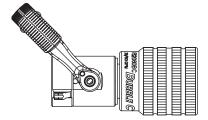
FS2060 / FS2095



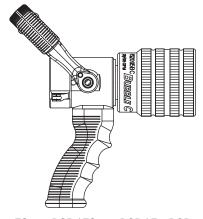
TWISTER SERIES



F2060BC / F2095BC / F95BC



FS2060BC / FS2095BC / FS95BC



FS2060BCP / FS2095BCP / F95BCP

**BUBBLECUP SERIES** 

#### 1.0 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 of 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.

#### 2.0 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 Temperature 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 base of the HEAD [5, 7, 8, 15]. 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 LKB-100 for instructions on Safe Operation and Maintenance

#### 3.0 COUPLING AND PISTOL GRIP SERVICE PROCEDURE:

Tools Required: 5/16" Ball Driver

Loctite #271 Thread Locking Adhesive

GENERAL: Occasional replacement of the COUPLING GASKET [37] and REAR SEAT [36] is recommended.

**COUPLING REMOVAL:** Remove PORT PLUG [29] from side of BODY [23]. Turn coupling so that hole faces down, and rotate coupling back and forth to allow 3/16 STAINLESS STEEL BALLS [30] 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 26 STAINLESS STEEL BALLS [30] 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 [29] into port on side of BODY [23].

**BOLT-ON PISTOL GRIP REMOVAL / INSTALLATION:** The PISTOL GRIP [26] is held on by a SOCKET HEAD CAP SCREW [27] and WASHER [24]. Remove screw with a 5/16" Ball Driver. To reinstall, clean thread and apply Loctite #271. Tighten screw to 95 in-lbs.

#### 4.0 VALVE and HANDLE SERVICE PROCEDURE

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

#### 5.0 FRONT END SERVICE PROCEDURE

Tools Required: 1/8" Allen (Hex) Wrench

5/32" Allen (Hex) Wrench

Razor Blade Knife

Dow #112 High Temperature Silicone Grease

Acetone or methyl ethyl ketone

Loctite #271 Thread Locking Adhesive Loctite #241 Thread Locking Adhesive

### 5.1 FRONT END DISASSEMBLY SEQUENCE

Note: Instructions for the Twister model are different from the BubbleCup model

#### **TWISTER MODEL**

BUMPER and HEAD REMOVAL: Remove FLAT HEAD SCREW [1] using a 3/16" Allen wrench. Then remove BAFFLE [2] and SEAT [3]. This will allow the HEAD [5, 7] and BUMPER [4] subassembly to be unscrewed from the BODY [23] or BASE [38]. To remove the BUMPER [4] from the HEAD [5, 7], use a razor blade knife and cut through one side of the BUMPER [4] from top to bottom. Remove and replace O-RING [16] after disassembly.

#### **BUBBLECUP MODEL**

CUP and HEAD REMOVAL: Remove LABEL [14] using a razor blade knife. Unscrew DETENT SCREWS [10] using a 1/8" Allen wrench. The SPRINGS [11] and TORLON BALLS [12] can now be removed from the CUP [13]. Remove FLAT HEAD SCREW [1] using a 3/16" Allen wrench. Then remove BAFFLE [2] and SEAT [3]. Slide the CUP [13] off the HEAD [8, 15] and remove the QUAD RING [9] from the HEAD [8, 15]. Unscrew the HEAD [8, 15] from the BODY [23] or BASE [38]. Remove and replace O-RING [16] after disassembly.

#### **5.2 FRONT END ASSEMBLY SEQUENCE**

Note: Instructions for the Twister model are different from the BubbleCup model

#### TWISTER MODEL

**BUMPER and HEAD INSTALLATION:** Apply grease to internal threads of HEAD [5, 7]. Screw HEAD [5, 7] onto BODY [23] or BASE [38]. Slide SEAT [3] onto boss, on back of BAFFLE [2]. Using Loctite #241 on FLAT HEAD SCREW [1], tighten BAFFLE [2] subassembly to end on BODY [23] or BASE [38]. Apply grease to the outside of HEAD [5, 7] and press BUMPER [4] onto HEAD [5, 7] making sure that nubs on the inside of the BUMPER [4] line up with the recesses in the HEAD [5, 7].

#### **BUBBLECUP MODEL**

**CUP and HEAD INSTALLATION:** Apply grease to internal threads of HEAD [8, 15]. Screw HEAD [8, 15] onto BODY [23] or BASE [38]. Place O-RING [9] around HEAD [8, 15] in o-ring groove. Apply grease to outside of HEAD [8, 15] then slide CUP [13] on HEAD [8, 15] making sure that holes in CUP [13] line up with slots in HEAD [8,15]. Drop a SPRING [11] and TORLON BALL [12] into each DETENT SCREW [10]. Start screwing the Detent subassemblies into the CUP [13]. Apply Loctite #271 to remaining thread and continue to tighten screw allowing the CUP [13] to move freely over the HEAD [8, 15]. Clean CUP [13] with acetone then apply LABEL [14] to CUP [13]. Using Loctite #241 attach SEAT [3] and BAFFLE [2] with FLAT HEAD SCREW [1].

FLOW RATE		PRESSURE		GAP SIZE
60 GPM	230 l/min	100 PSI	7 bar	0.024"
95 GPM	360 l/min	100 PSI	7 bar	0.62mm

#### **6.0 PROBLEMS**

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

TASK FORCE TIPS INC., 3701 Innovation Way, Valparaiso, IN 46383-9327 (219)-462-6161 • (800)-348-2686



#### PERSONAL RESPONSIBILITY CODE

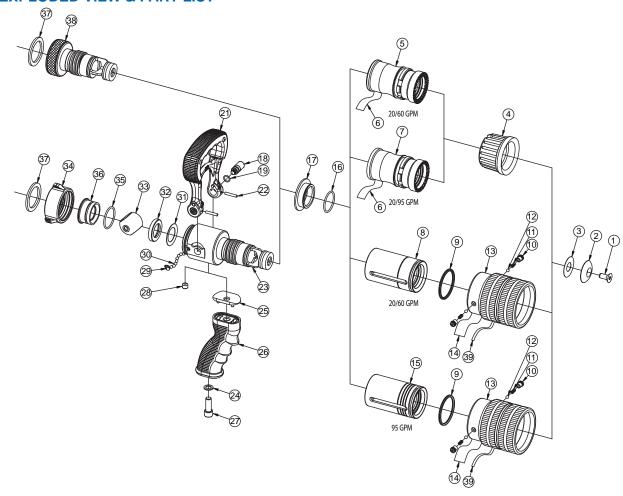
The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

- Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
- It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
- 3. It is your responsibility to know that you have been properly trained in Firefighting and /or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
- 4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
- It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions
- Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Service Association P.O. Box 147, Lynnfield, MA 01940 • www.FEMSA.org

# 7.0 EXPLODED VIEW & PART LIST



ITEM	DESCRIPTION	QTY	PART #
1	5/16-18 X 3/4 FLAT HEAD	1	VT31E18FH750
2	BAFFLE	1	F630
3	SEAT	1	F650
4	DQ BUMPER	1	DQ275
5	HEAD 20/60	1	F625
6	LABEL	1	FL70
	LADEL		FL75
7	HEAD 20/95	1	F925
8	FOAM HEAD 20/60	1	F623
9	QUAD RING-225	1	VOQ-4225
10	DETENT SCREW	2	D290
11	SPRING HELICAL COMPRESSION	2	VM4195
12	3/16" TORLON BALL	2	V2120-TORLON
13	CUP W/TEETH	1	F685
14	LABEL	1	FL80
	LADEL		FL82
15	FOAM HEAD 95	1	F923
16	O-RING-125	1	VO-125
17	Z-STRIP	1	F605
18	100 TRUNNION	2	F10040
19	O-RING-012	2	VO-012

ITEM	DESCRIPTION	QTY	PART #	
21	FQ HANDLE SUBASSEMBLY	1	FQ860	
	SHUT OFF HANDLE	1	F10060	
	BLACK HANDLE COVER	2	HM625-BLK	
	8-32 X 3/8 BUTTON HEAD SCREW	4	VT08-32BH375	
	100 STOP PIN	2	F10050	
22	SPIROL PIN	2	V1900	
23	100 TWISTER VALVE BODY	1	F10025	
24	FLAT WASHER	1	VM4901	
25	GRIP SPACER F100	1	HM693-F	
26	PISTOL GRIP - BLACK	1	HM692-BLK	
27	3/8-16 X 1 SOCKET HEAD SCREW	1	VT37-16SH1.0	
28	3/8-16 X 5/16 SET SCREW	1	VT37-16SS312	
29	PORT PLUG	1	B770	
30	3/16" SS BALL	34	V2120	
31	BELLEVILLE WASHER	1	F10090	
32	100 FRONT SEAT	1	F10070	
33	100 BALL	1	F10030	
34**	COUPLING 1.5"	1	F10097	
35	O-RING-126	1	VO-126	
36	100 REAR SEAT	1	F10080	
37	GASKET - 1.5"	1	V3130	
38**	BASE 1.5"	1	F610	
39	BUBBLE CUP STRIPE LABEL	1	FL685	
* - CONSULT FACTORY FOR SPECIFIC PART NUMBERS				

CONSULT FACTORY FOR SPECIFIC PART NUMBERS
 \*\* - STATE DESIRED THREAD WHEN ORDERING

# TASK FORCE TIPS, INC. MADE IN USA • www.tft.com

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