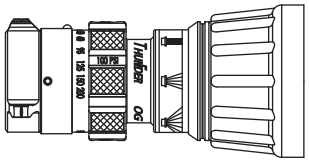
TASK FORCE TIPS®
FIRE FIGHTING EQUIPMENT

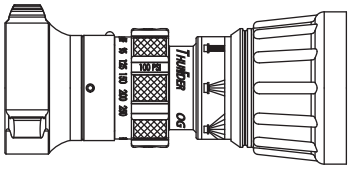
THUNDERFOG SERIES & JT PLAYPIPE

SERVICE PROCEDURE

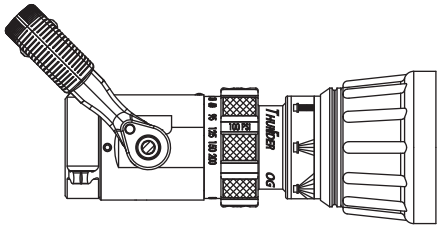
For Nozzles Manufactured After 01/01/95



FT200 SERIES



JT250 SERIES



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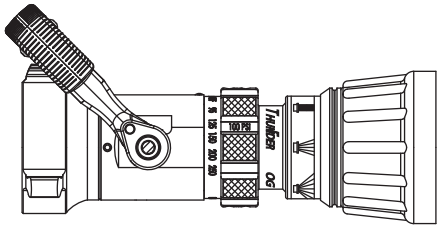

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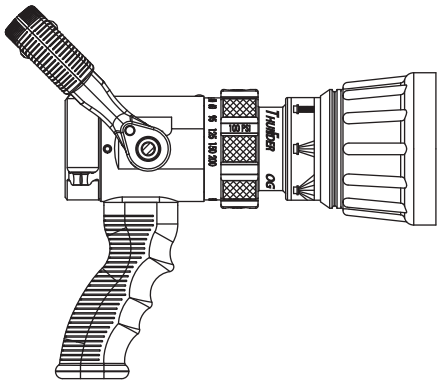

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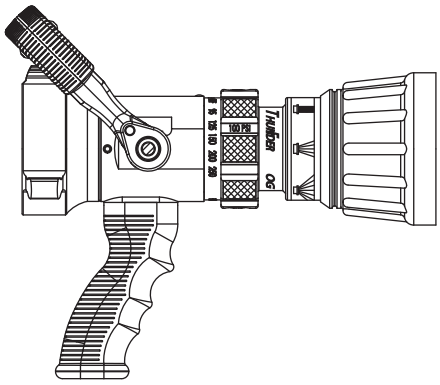

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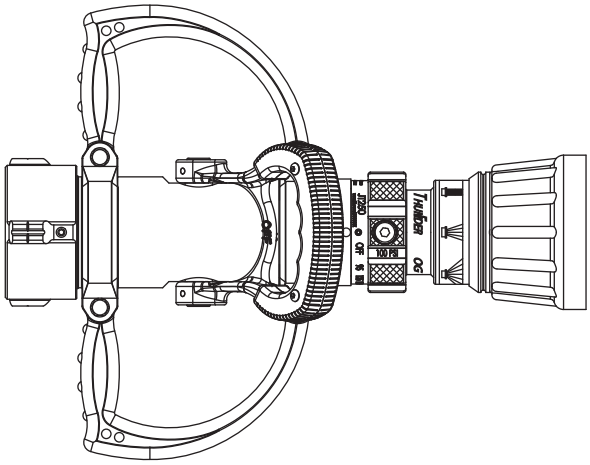

JTS250PP SERIES

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

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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 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 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 [22]. 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

3.0 COUPLING AND PISTOL GRIP SERVICE PROCEDURE:

Tools Required: 1/8” Allen (hex) Wrench
5/16” Hex Ball Driver
Loctite #271 Thread Locking Adhesive

GENERAL: Occasional replacement of the COUPLING GASKET [47 or 54] and REAR SEAT [50 or 51] is recommended.

COUPLING REMOVAL: Remove SET SCREW [38] from side of BASE [26 or 39] using a 1/8” Allen wrench. Turn coupling so that hole faces down, and rotate coupling back and forth to allow 3/16 STAINLESS STEEL BALLS [37] 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 36/38 STAINLESS STEEL BALLS [37] into the ball groove through the hole in the BASE [26 or 39]. Insertion of the balls is easier if the coupling is rotated slightly back and forth as the balls are loaded. Apply Loctite to SET SCREW [38] and thread into hole on side of BASE [26 or 39].

BOLT-ON PISTOL GRIP REMOVAL / INSTALLATION: The PISTOL GRIP [33] is held on by a SOCKET HEAD CAP SCREW [32] and WASHER [35]. Remove screw with a 5/16” Hex Ball Driver. To reinstall, clean thread and apply Loctite #271. Tighten screw to 95 in-lbs.

PLAYPIPE HANDLE REMOVAL / INSTALLATION: To remove the Playpipe Handles [34] remove Acorn Nuts [33] then Washers [32] from one end of each Stud [36]. The Studs [36] can then be pulled out of the Blitz Brackets [35] freeing the Playpipe Handles [34]. To reinstall, clean the thread on the Studs [36], slide the Stud [36] through the aligned holes of the Blitz Brackets [35] and the Playpipe Handle [34], apply Loctite #271 to the end of the Studs [36] and reinstall the Washers [32] and Acorn Nuts [33]. Note the flat side of the Playpipe Handle [34] goes nearest the Coupling [46].

4.0 VALVE and HANDLE SERVICE PROCEDURE

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

5.0 FRONT END SERVICE PROCEDURE

Tools Required:

5/64” Allen (Hex) Wrench	Torch, oxyacetylene or propane
5/32” Allen (Hex) Wrench	Loctite #271 Thread Locking Adhesive
7/32” Allen (Hex) Wrench	Flow Meter
3/16” Two Prong Face Spanner Wrench	Pressure Gage
Razor Blade Knife	Loctite #242 Thread Locking Adhesive
Dow #112 High Performance Silicone Grease	

5.1 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 [10] using a 5/32” Allen wrench. Slide BUMPER [9] and O.D. WEAR RING [8] off of HEAD [10]. Remove SPINNING TEETH [11], I.D. WEAR RING [12] and “V” FOLLOWERS [6] from HEAD [10]. The HEAD [10] will now slide off the GALLONAGE SLEEVE [16].

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 [5] and remove the CUPS [5] using a 7/32” Allen wrench. Now the “V” FOLLOWERS [6] can be removed from the HEAD [4] and the HEAD [4] can be slid off the GALLONAGE SLEEVE [16].

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 [21] from INDEX RING [22] using a 7/32" Allen wrench. Be careful not to heat/damage NAME LABEL [18] (a wet rag wrapped around this area will help). Now that the CUPS [21] are removed the "V" FOLLOWERS [6], SPRINGS [19], and TORLON BALLS [20] can be removed from the INDEX RING [22]. The **GALLONAGE SLEEVE** [16] can now be removed from the INDEX RING [22]. Heat and remove SET SCREW [24] using a 5/64" Allen wrench. This will allow the ACETAL BALLS [23] to drop out of the INDEX RING [22]. Rock the INDEX RING [22] back and forth to help all of the ACETAL BALLS [23] drop out. Slide INDEX RING [22] off of the BASE [26 or 39]. Remove KEY PINS [17] from GALLONAGE SLEEVE [16]. The O-RINGS [15 and 25] should be removed and replaced after disassembly.

5.2 FRONT END ASSEMBLY SEQUENCE

GALLONAGE SLEEVE AND INDEX RING INSTALLATION: Slide BASE [26 or 39] into the INDEX RING [22]. Load 54 ACETAL BALLS [23] into INDEX RING [22] 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 [24] and thread into INDEX RING [22] using a 5/64" Allen wrench. Grease the inside of the GALLONAGE SLEEVE [16] and the slots in the BASE [26 or 39]. Install O-RING [25] on the BASE [26 or 39]. Slide GALLONAGE SLEEVE [16] into INDEX RING [22]. Assemble TORLON BALL [20], DETENT SPRING [19], "V" FOLLOWER [6], and CUP [21] into subassemblies. Grease detent grooves and cam grooves in GALLONAGE SLEEVE [16]. Thread the cup subassemblies into INDEX RING [22] (do not apply Loctite and tighten completely) making sure that cup assemblies line up with the detent grooves. INDEX RING [22] should feel snug when indexed / rotated. Also make sure that the word "FLUSH" on the INDEX RING [22] lines up with arrow on the NAME LABEL [18]. Apply Loctite 271 to KEY PINS [17] and insert into GALLONAGE SLEEVE [16]. Go back and apply Loctite 271 to cup assemblies then thread flush to surface of INDEX RING [22]. Install O-RING [15] on GALLONAGE SLEEVE [16].

SPINNING TEETH

BUMPER and HEAD WITH SPINNING TEETH INSTALLATION: Apply grease to cam grooves in GALLONAGE SLEEVE [16] and to the I.D. of the HEAD [14]. Install O-RING [15] onto GALLONAGE SLEEVE [16]. Slide HEAD [14] over end of GALLONAGE SLEEVE [16] and push "V" FOLLOWERS [6] through holes in HEAD [14] into cam groove. Straight stream icon on PATTERN LABEL [7] should line up with arrow on NAME LABEL [18]. Install O-RING [13] onto HEAD [14]. Apply grease to I.D. WEAR RING [12] then slide over end of HEAD [14]. Slide SPINNING TEETH [11] over I.D. WEAR RING [12]. Apply grease to wear ring groove in BUMPER [9] and O.D WEAR RING [8]. With notch facing down install O.D. WEAR RING [8] into BUMPER [9]. Apply grease to outside of HEAD [14] and inside of BUMPER [9]. Slide BUMPER [9] over HEAD [14] making sure that the holes in the BUMPER [9] line up with tapped holes in HEAD [14]. Apply Loctite 271 to BUTTON HEAD SCREWS [10] and thread through BUMPER [9] into HEAD [14].

FIXED TEETH

BUMPER and HEAD ONLY INSTALLATION: Apply grease to cam grooves in GALLONAGE SLEEVE [16] and to the I.D. of the HEAD [4]. Apply grease to "V" FOLLOWERS [6] and place each one into a CUP [5]. Slide HEAD [4] over end of GALLONAGE SLEEVE [16] making sure that the holes in HEAD [4] are lined up with cam grooves in the GALLONAGE SLEEVE [16]. Straight stream icon on PATTERN LABEL [7] should line up with arrow on NAME LABEL [18]. Apply Loctite 271 to cup subassemblies and thread through HEAD [4] and into cam groove in GALLONAGE SLEEVE [16]. 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 242 to threads on end of BASE [26 or 39]. 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 [16] 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
31.5 GPM	100 PSI	0.045"
119 l/min	7 BAR	1.14 mm
100 GPM	100 PSI	0.045"
378 l/min	7 BAR	1.14 mm

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

1 800-348-2686 • 1 219-462-6161
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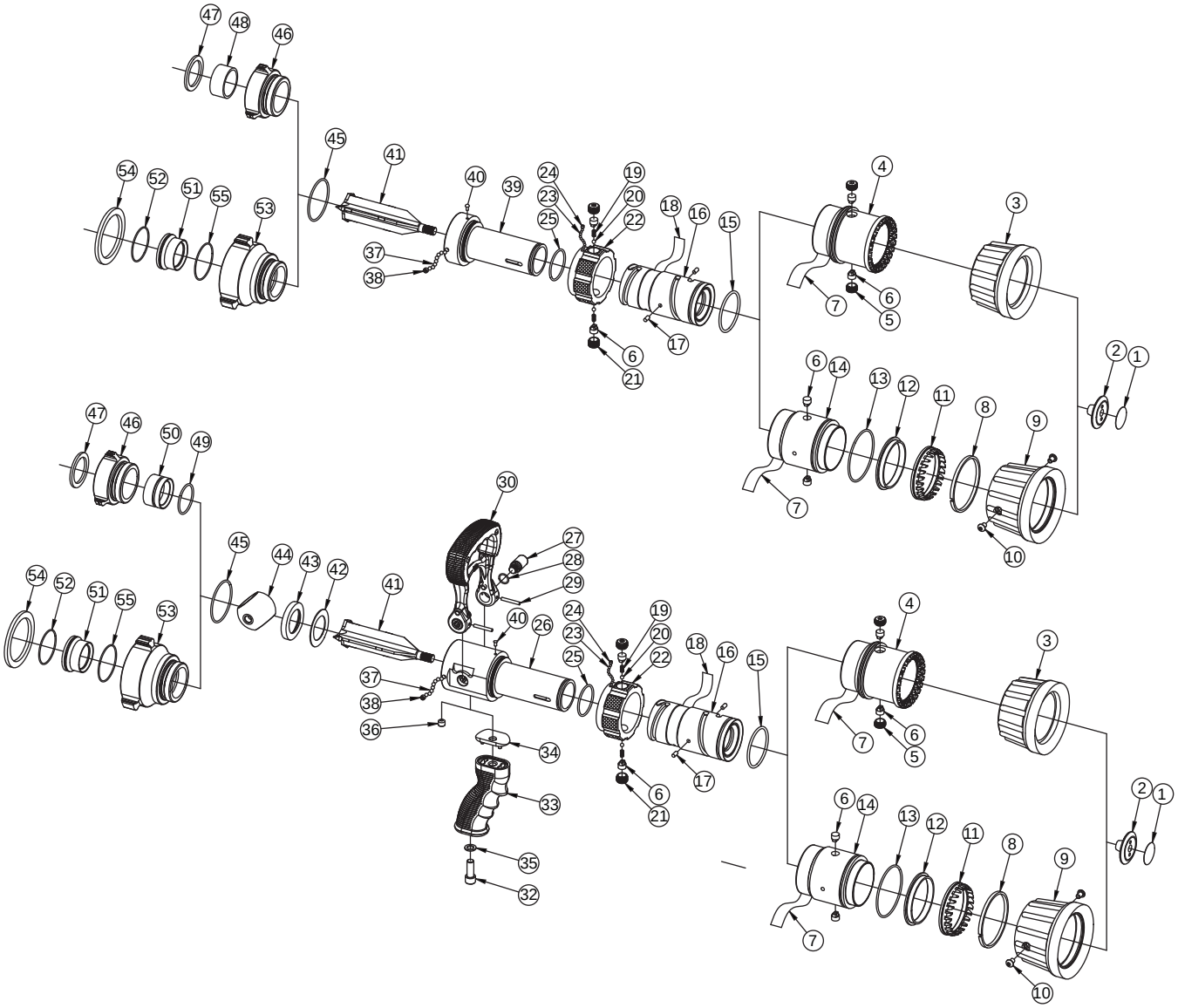
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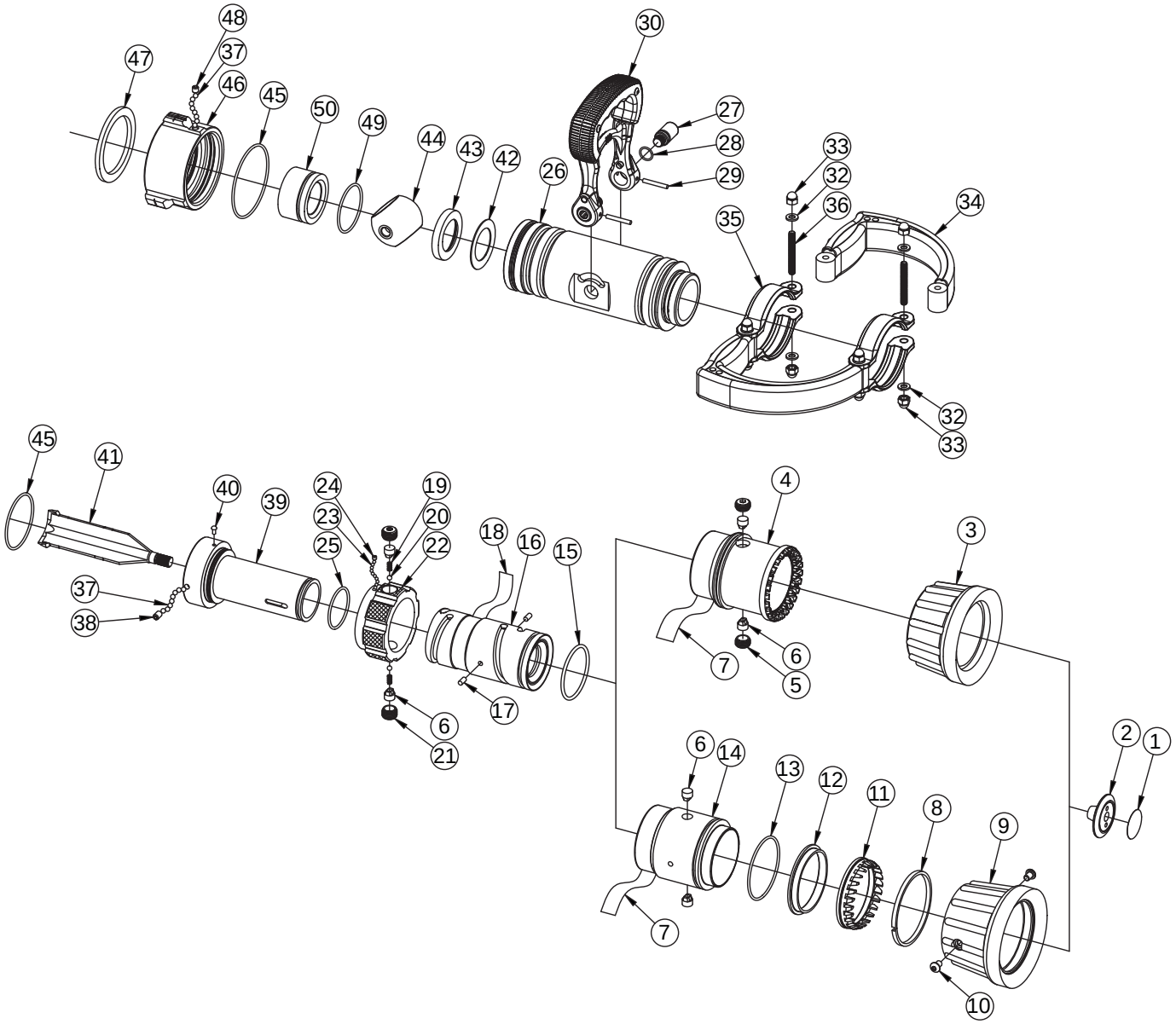
THUNDERFOG PART LIST

REF #	DESCRIPTION	QTY	ORDER #
1	Deflector Label	1	JL10
2	Deflector	1	JT210
3	Bumper	1	JT270
4	Fixed Head	1	JT220
5	Cup	2	FT260
6	V Follower	4	JT263
7*	Pattern Label	1	*
8	O.D. Wear Ring	1	JT267
9	Bumper (Spinning Teeth)	1	JT265
10	¼-20 x 3/8 Button Head Screw	2	VT25B20BH375
11	JT Spinning Teeth	1	JT222
12	ID Wear Ring	1	JT227
13	O-Ring 149	1	VO-149
14	Head (Spinning Teeth)	1	JT225
15	O-Ring 227	1	VO-227
16*	Gallonage Sleeve	1	*
17	Key Pins	2	JT250
18*	Name Label	1	*
19	Spring #C0180-032-0310	2	VM4195
20	3/16" Torlon Ball	2	V2120-TORLON
21	Cup	2	JT260
22*	Index Ring	1	*
23	1/8" Acetal Ball	54	VB125AC
24	#8-32 x 5/32 Socket Set Screw	1	VT08-32SS156
25	O-Ring 130	1	VO-130
26	JTS 250 Base	1	JT204
27	140 Trunnion	2	F14040
28	O-Ring 014	2	VO-014
29	5/32 x 1 1/8 HDP Spirol Pin	2	V1920
30	140 Handle	1	F14060
31	140 Stop Pin	2	F14050
32	3/8-16 X 1 Socket Head Cap Screw	1	VT37-16SH1.0
33	Pistol Grip	1	HM692-BLK
34	F140 Grip Spacer	1	HM693-J
35	3/8" Flat Washer	1	VM4901
36	3/8-16 X 5/16 Socket Head Cap Screw	1	VT37-16SS312
37	3/16" SS Ball	36/38	V2120
38	1/4-28 Socket Set Screw	1	VT25-28SS187** VT25-28SS250**
39	Universal JT Base	1	JT205
40	1/8X1/4 SS Button Head	1	VT12E00RI250
41	Stem	1	JT280
42	Belleville Washer	1	J14090
43	140 Front Seat	1	F14070
44	140 Ball	1	F14030
45	O-Ring - 140	1	VO-140
46**	1.5" Coupling	1	F14097***
47	1.5" Coupling Gasket	1	V3130
48	Backup Plate	1	JT275
49	O-Ring 129	1	VO-129
50	140 Rear Seat	1	F14080
51	140 2 ½" Rear Seat	1	J14080
52	O-Ring 032	1	VO-032
53**	2.5" Coupling	1	J14097***
54	2.5" Gasket	1	V3190

* CONSULT FACTORY FOR SPECIFIC PART NUMBERS CORRESPONDING TO THE FLOW SETTINGS ON NOZZLE
** TIP ONLY: VT37-28SS250 BALL VALVE: VT25-2855187
*** STATE DESIRED THREAD WHEN ORDERING



JT PLAYPIPE PARTS LIST

REF #	DESCRIPTION	QTY	ORDER #
1	DEFLECTOR LABEL	1	JL10
2	DEFLECTOR	1	JT210
3	BUMPER	1	JT270
4	FIXED HEAD	1	JT220
5	CUP	2	FT260
6	V FOLLOWER	4	JT263
7	PATTERN LABEL	1	JL200
8	OD WEAR RING	1	JT267
9	SPINNING TEETH BUMPER	1	JT265
10	1/4-20 X 3/8 BUTTON HEAD SCREW	2	VT25B20BH375
11	JT SPINNING TEETH	1	JT222
12	ID WEAR RING	1	JT227
13	O-RING-149	1	VO-149
14	SPINNING TEETH HEAD	1	JT225
15	VO-RING-227	1	VO-227
16	GALLONAGE SLEEVE	1	JT241
17	KEY PINS	2	JT250
18	NAME LABEL	1	JL241
19	SPRING HELICAL COMPRESSION	2	VM4195
20	3/16" TORLON BALL	2	V2120-TORLON
21	CUP	2	JT260
22	JTS250 INDEX RING	1	JT231-JTS
23	1/8" ACETAL BALL	54	VB125AC
24	8-32 X 5/32 SET SCREW	1	VT08-32SS156
25	O-RING-130	1	VO-130
26	140 VPP VALVE BODY	1	J14030
27	140 TRUNNION	2	F14040
28	O-RING-014	2	VO-014
29	SPIROL PIN	2	V1920
30	FT HANDLE SUBASSEMBLY	1	FT860
	140 SHUTOFF HANDLE	1	F14060
	BLACK HANDLE COVER	2	HM625-BLK
	8-32 X 3/8 BUTTON HEAD SCREW	4	VT08-32BH375
	140 STOP PIN	2	F14050
32	WASHER	8	VW500X265-63
33	1/4-20 SS ACORN NUT	8	VT25E20AC
34	PLAYPIPE HANDLE	2	P220
35	BLITZ BRACKET	4	H676
36	1/4-20 X 2 STUD FULL THREAD	4	VT25-20ST2.0
37	3/16" SS BALL	72	V2120
38	1/4-28 X 3/8 SET SCREW	1	VT25-28SS375
39	UNIVERSAL JT BASE	1	JT205
40	1/8 X 1/4 SS BUTTON HEAD	1	VT12E00RI250
41	STEM	1	JT280
42	BELLEVILLE WASHER	1	J14090
43	140 FRONT SEAT	1	F14070
44	140 BALL	1	F14030
45	O-RING-140	1	VO-140
46**	140 COUPLING 2.5"	1	J14097
47	GASKET - 2.5"	1	V3190
48	1/4-28 X 3/16 SET SCREW	1	VT25-28SS187
49	O-RING-135	1	VO-135
50	REAR SEAT	1	J14085
** STATE DESIRED THREAD WHEN ORDERING			

⚠ DANGER

PERSONAL RESPONSIBILITY CODE

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

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. 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.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.

FEMSA

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

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