

Eclipse #85 Below Grade Blow-Off Hydrant

- **Self-draining, non-freezing**
- **Easy to maintain!**



Kupferle | St. Louis, MO | 800.231.3990 | hydrants.com

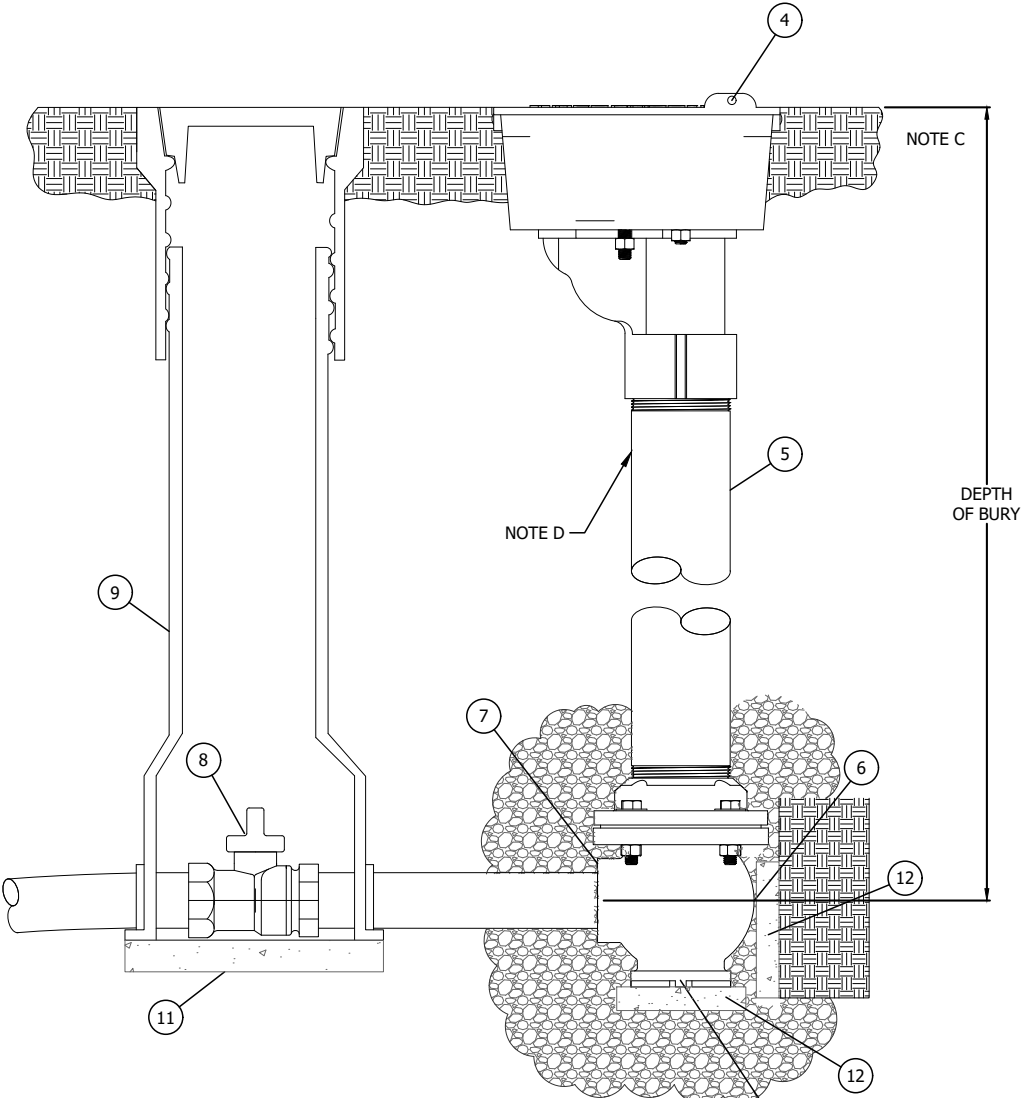
#85 BELOW-GRADE BLOW-OFF HYDRANT SPEC SHEET

GENERAL HYDRANT SPECIFICATIONS	
MAXIMUM OPERATING PRESSURE:	300 PSI
INLET MATERIALS:	CAST IRON, BUNA-N, C89833 BRASS
TOP STOCK MATERIAL:	CAST IRON
ENCLOSURE COLOR:	BLACK
WETTED MATERIALS:	BUNA-N, EPOXY COATED CAST IRON, & C89833 BRASS
DEPTH OF BURY:	3' STANDARD
WEIGHT:	65 LBS

OTHER SPECIFICATIONS AVAILABLE UPON REQUEST

Eclipse Product Ordering Guide												
MODEL#	85	-	X.X	-	A	-	A	-	A	-	X	-
SUBSECTION	1		2		3		4		5		6	
SUBSECTION DESCRIPTION	MODEL # SUBSECTION	OPTIONS		DESCRIPTIONS								
MODEL	1	85		BELOW-GRADE BLOW-OFF HYDRANT								
DEPTH OF BURY	2	0.0		X.X = FEET DEPTH OF BURY. ENTER # IN FEET AND INCLUDE INCHES. ROUND TO NEAREST 0.5 FEET.								
INLET	3	A		2" FNPT								
		B		2-1/2" FNPT								
		C		3" FNPT								
		D		2" MJ								
		E		3" MJ								
		F		4" MJ								
OUTLET	4	A		2-1/2" MNPT BRASS NOZZLE								
		B		1-1/2" MNPS BRASS NOZZLE								
		C		1-1/2" MNPT BRASS NOZZLE								
		D		2" MNPS BRASS NOZZLE								
		E		2" MNPT BRASS NOZZLE								
		F		2-1/2" MNPS BRASS NOZZLE								
		G		2-1/2" FNPT IRON NOZZLE								
OPERATING ROD MATERIAL	5	H		CALL FOR CUSTOM								
		A		1-1/16" SOLID STEEL ROD								
		B		1-1/16" SOLID S.S. ROD								
		C		3/4" STEEL PIPE								
		D		3/4" S.S. PIPE								
		E		3/4" BRASS PIPE								
OPERATING WRENCH	6	F		3/4" GALV PIPE								
		X		NONE								
		A		SHORT HANDLE "T" WRENCH								
		B		LONG HANDLE "T" WRENCH								

ITEM	DESCRIPTION	NOTES
1	OPERATING SCREW	
2	2-1/2" NST OUTLET	
3	LID WORM LOCK	
4	PADLOCK HOLE	
5	3-1/2" FBE COATED STEEL PIPE	
6	INLET VALVE BODY	
7	DRAIN HOLE	
8	HYDRANT SHUT-OFF VALVE	BY OTHERS
9	VALVE BOX	BY OTHERS
10	CRUSHED ROCK	BY OTHERS
11	CONCRETE BLOCK	BY OTHERS
12	THRUST BLOCKS	BY OTHERS



1 #85 TYPICAL INSTALL VIEW
Scale: 1-1/2"=1'

Below-grade Blow-off Hydrant shall be installed in the following location(s): _____

Hydrant shall be self-draining, non-freezing with a 3' standard depth of bury. Hydrant shall be furnished with a 2" FIP horizontal inlet connection standard. A non-turning operating rod shall open to the left with 4-6 turns to fully open. Outlet shall be 2-1/2" NPS standard with optional cap. Hydrant shall be housed in a lockable cast iron box. All water flow shall pass through a 3-1/2" FBE internally and externally coated steel pipe and waterway. The operating drive mechanism shall raise and lower a plunger to control the flow of water. Drive mechanism shall be serviceable from above ground with no digging. All working parts shall be brass, galvanized steel or FBE coated steel. Said operating parts shall operate with a "T" handle valve wrench. When open the flow of water shall be unobstructed and the drain hole shall be covered. Hydrant shall be set in 4 cubic feet of crushed stone to allow for proper drainage of hydrant. Recommendation of the AWWA should be followed when installing the hydrant.

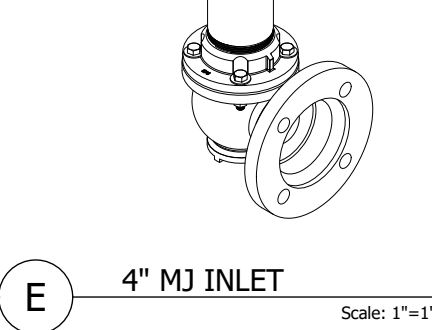
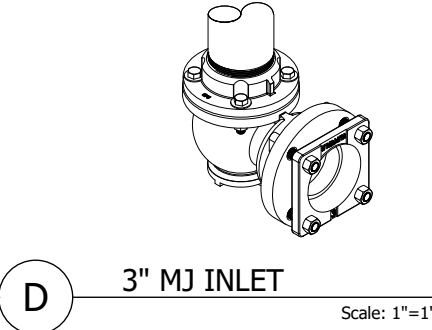
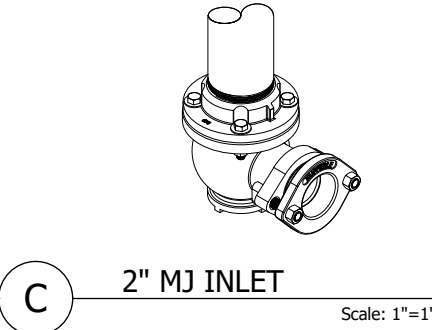
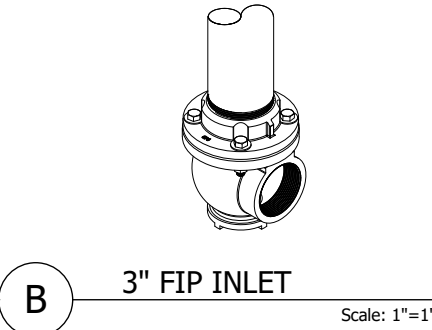
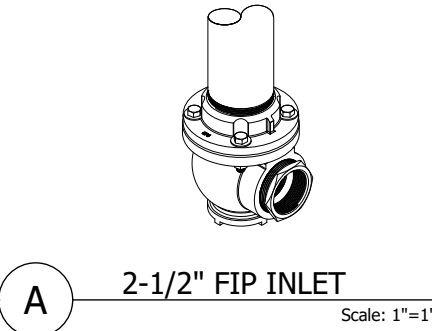
Unit model # shall be 85-X.X-X-X-X as specified in the product ordering guide as manufactured by Kupferle Foundry Company, St. Louis MO, or approved equal.

NOTES	
A	PIPING BY OTHERS
B	FLUSH LINE BEFORE INSTALLATION OF THE HYDRANT
C	GROUND LINE MAY VARY
D	IN CORROSIVE SOLIDS THE BURIED PIPE SHOULD BE PREPPED FOR ADDITIONAL RESISTANCE TO CORROSION. KUPFERLE RECOMMENDS SPRAYING ALL UNDERGROUND PIPING AND FITTINGS WITH BITUMINOUS SPRAY TAR, ALLOWING PROPER TIME TO DRY AND WRAPPING THE PARTS.

	INITIALS	DATE
DRAWN	SMS	10/15/18
APPROVED	XXX	XXX
MODIFIED		
SHEET SIZE B (11x17)		SCALE VARIES



2511 NORTH 9TH STREET
ST. LOUIS, MO 63102
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DD/MM/YY	ISSUED FOR ...
DATE	STATUS / REVISION

#85 CUT SHEET

(2" FIP INLET & 2-1/2" NST OUTLET SHOWN)
NOTE J

PARTS LIST

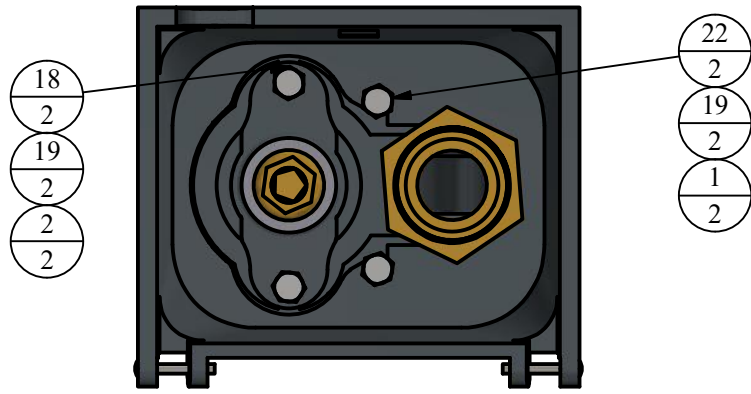
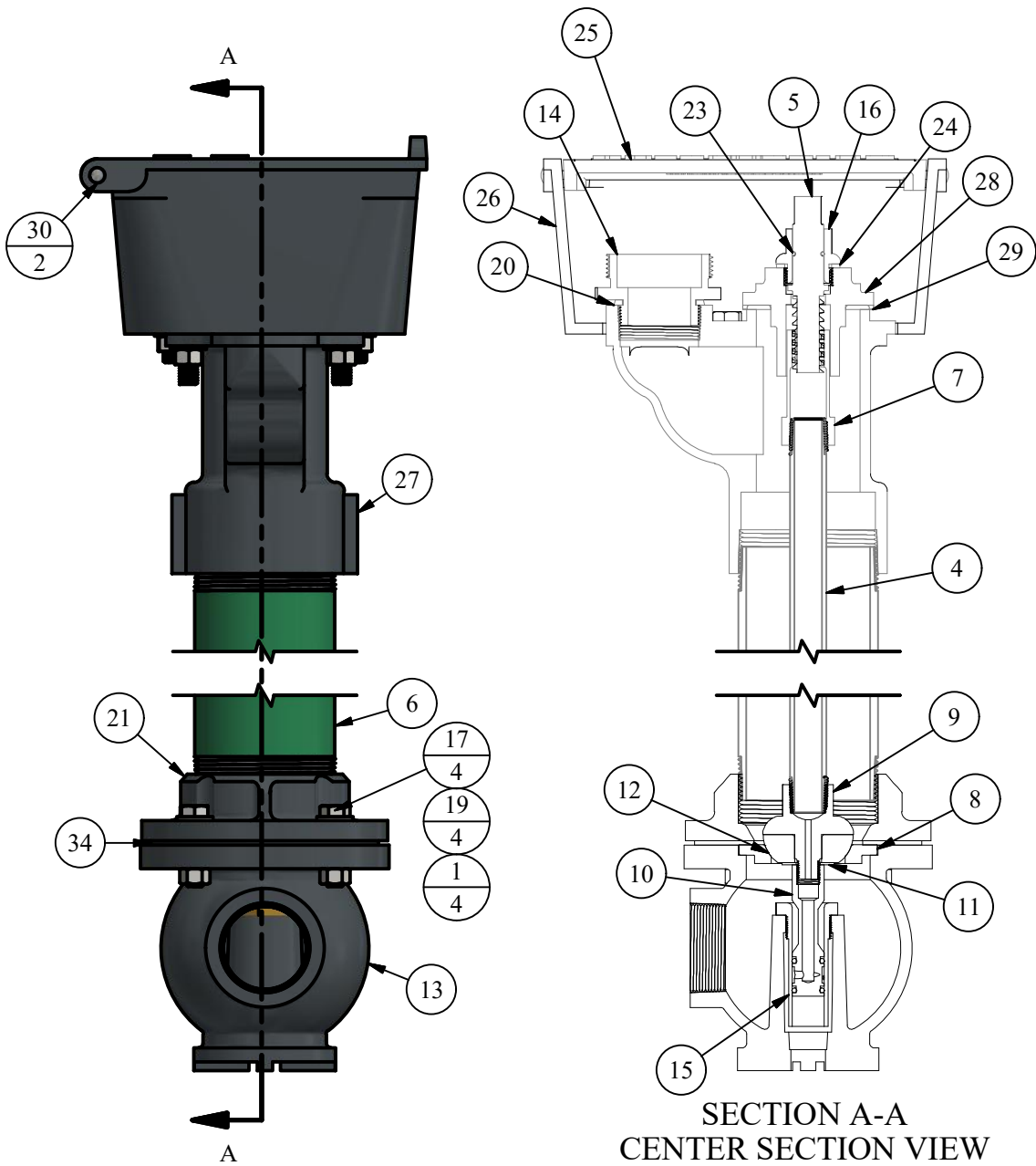
ITEM	QTY	PART NUMBER	DESCRIPTION	NOTES
1	6	1/2W	STEEL WASHER FOR BOTTOM	C
2	2	1/2W-C	STEEL CLIPPED WASHER	C
3	2	2OR	O-RING FROM PLUNGER STEM	C
4	24.000 in	3/4GAL	3/4" GALVANIZED PIPE	B,C
5	1	4	LOW LEAD BRASS SCREW	C
6	20.000 in	4FBE	3-1/2" FBE COATED STEEL PIPE	B,C,M
7	1	510	CONNECTING NUT	C
8	1	521	SEAT RING	C
9	1	537-P	"NEW STYLE" PLUNGER TOP	
10	1	539L2	"NEW STYLE" PLUNGER STEM	
11	1	539W	S.S. WASHER FOR PLUNGER STEM	
12	1	541	SEAT RUBBER	C
13	1	571-A	IRON BOTTOM 2" IP	C,J
14	1	601A	NOZZLE 2-1/2" NST	C,J
15	1	611	WASTE TUBE	
16	1	620	PACKING NUT	
17	4	628A-B	HEX BOLT FOR BOTTOM	C
18	2	629A-B	HEX BOLT FOR TOP CAP	
19	8	629A-N	1/2" STEEL HEX NUT	
20	1	669	PACKING NUT GASKET	C,J
21	1	678	FLANGE COUPLING FOR DUCTILE	C
22	2	77K	HEX BOLT FOR NEW STYLE 85 BOX	C
23	1	77N	O-RING FOR TOP SCREW	C
24	1	77O	PACKING NUT GASKET	C
25	1	851	LID FOR 85 BOX	C
26	1	852-N	NEW STYLE BOX FOR 85	C
27	1	853B-N	"NEW STYLE" YOKE	C
28	1	854	TOP CAP FOR 85	
29	1	857	TOP CAP GASKET	C
30	2	858	BOX RIVETS S.S.	C
31	1	85WL-GEAR	WORM LOCK GEAR	
32	1	85WL-INSERT	WORM LOCK	
33	1	A19	O-RING FOR WASTE TUBE	C
34	1	A8	"NEW STYLE" BOTTOM GASKET	C
35	1	COTTER PIN	PIN FOR WORM LOCK	

OPTIONS / REPAIR PARTS LIST

36	0	592-D	NOZZLE CAP	A,C,J
37	0	85LHW	LONG HANDLE WRENCH	A,C
38	0	85SHW	SHORT HANDLE WRENCH	A,C
39	0	A16	NOZZLE CAP GASKET	A,C,J

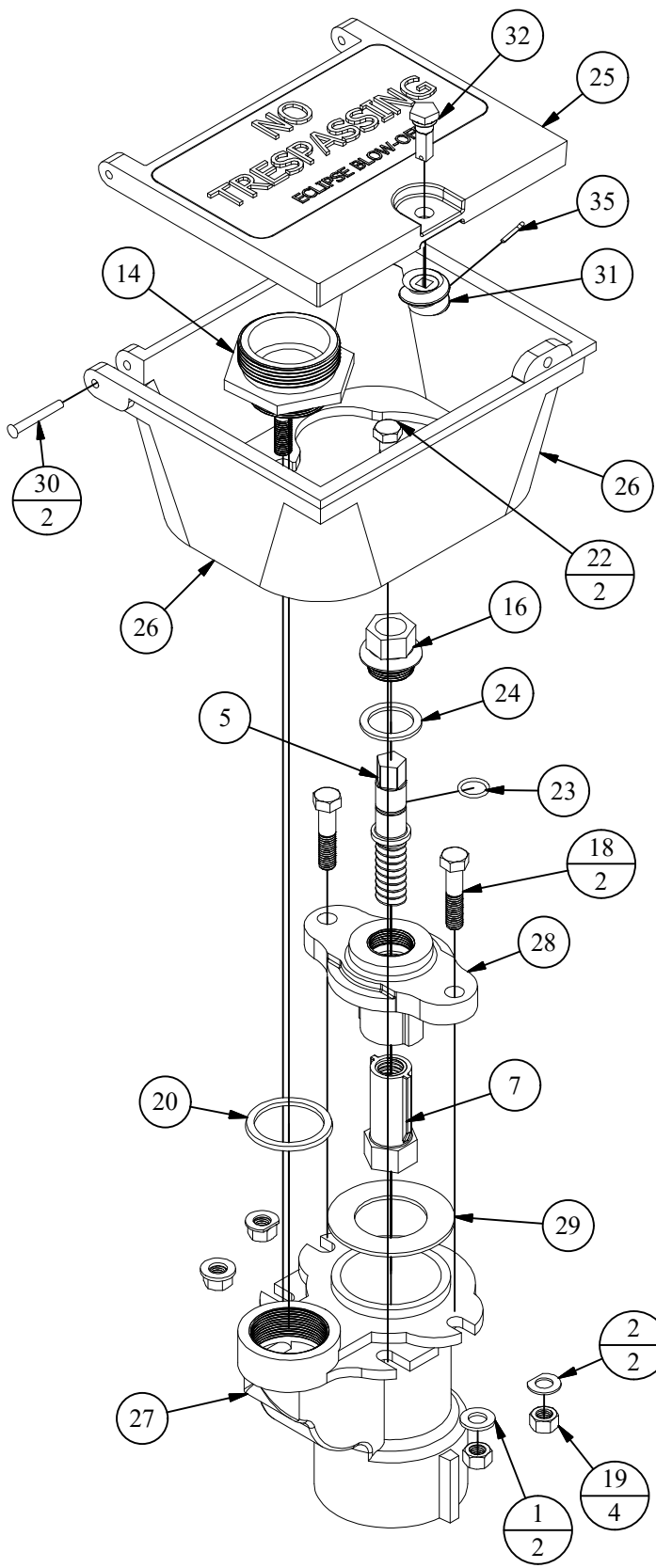
OLD STYLE PARTS LIST

40		851	"OLD STYLE" LID	A,C
41		852	"OLD STYLE" BOX	A,C
42		853-B	"OLD STYLE" IRON YOKE	A,C
43		PACKING	PACKING	A,C

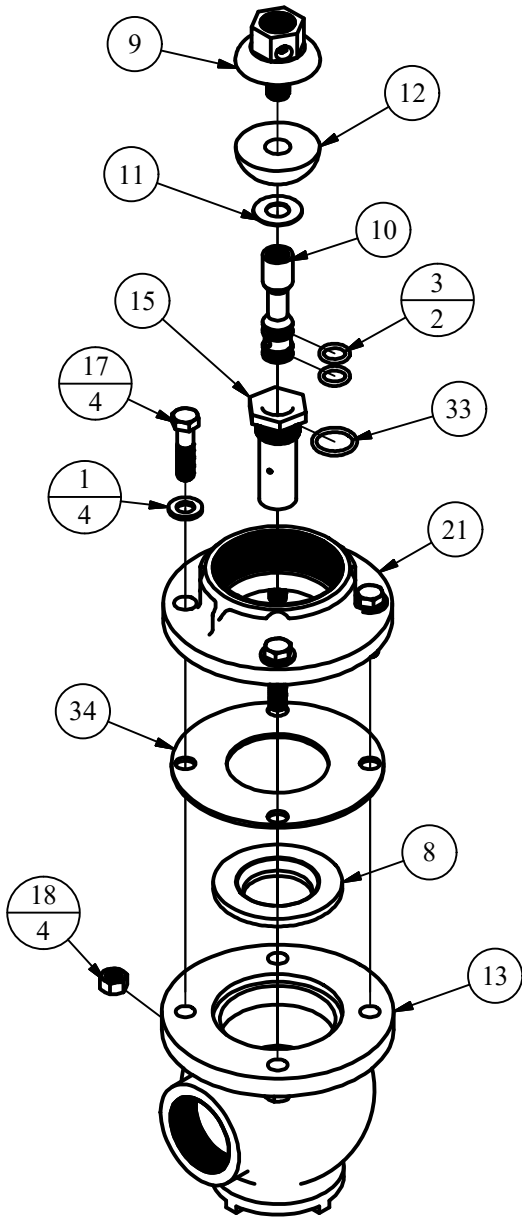


TOP VIEW WITH NO LID

BOX & TOP CAP ASSEMBLY



BOTTOM ASSEMBLY



NOTE	DESCRIPTION
A	NOT SHOWN
B	PIPE LENGTH DEPENDENT ON DEPTH OF BURY
C	SOLD AS REPLACEMENT PART
J	SEVERAL OTHER INLET/OUTLET CONFIGURATIONS ARE OFFERED. SEE NOTES K & L
K	SEE #2, #8, #85 GUIDE FOR INLET, NOZZLE, CAP OPTIONS, & PLUNGER HISTORY SHEET FOR ASSEMBLY VIEWS AND REPLACEMENT PART INFORMATION
M	BARREL PIPE FUSION BONDED EPOXY COATED, BOTH INTERNALLY AND EXTERNALLY

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LEGEND

- (X) → STANDARD TAG
(X/Y) → TAG WITH Y QUANTITY

DRAWN		9/18/2017		
SMS				
CHECKED		10/29/2017		
DCL				
MODIFIED		04/14/2021		
KJW				
SIZE	SCALE		2511 NORTH 9TH ST. ST. LOUIS, MO 63102 1-800-231-3990	
C	1 / 5			
DWG NO			SHEET	
#85 Cut_Rev1.1				
			1 OF 1	REV
				1