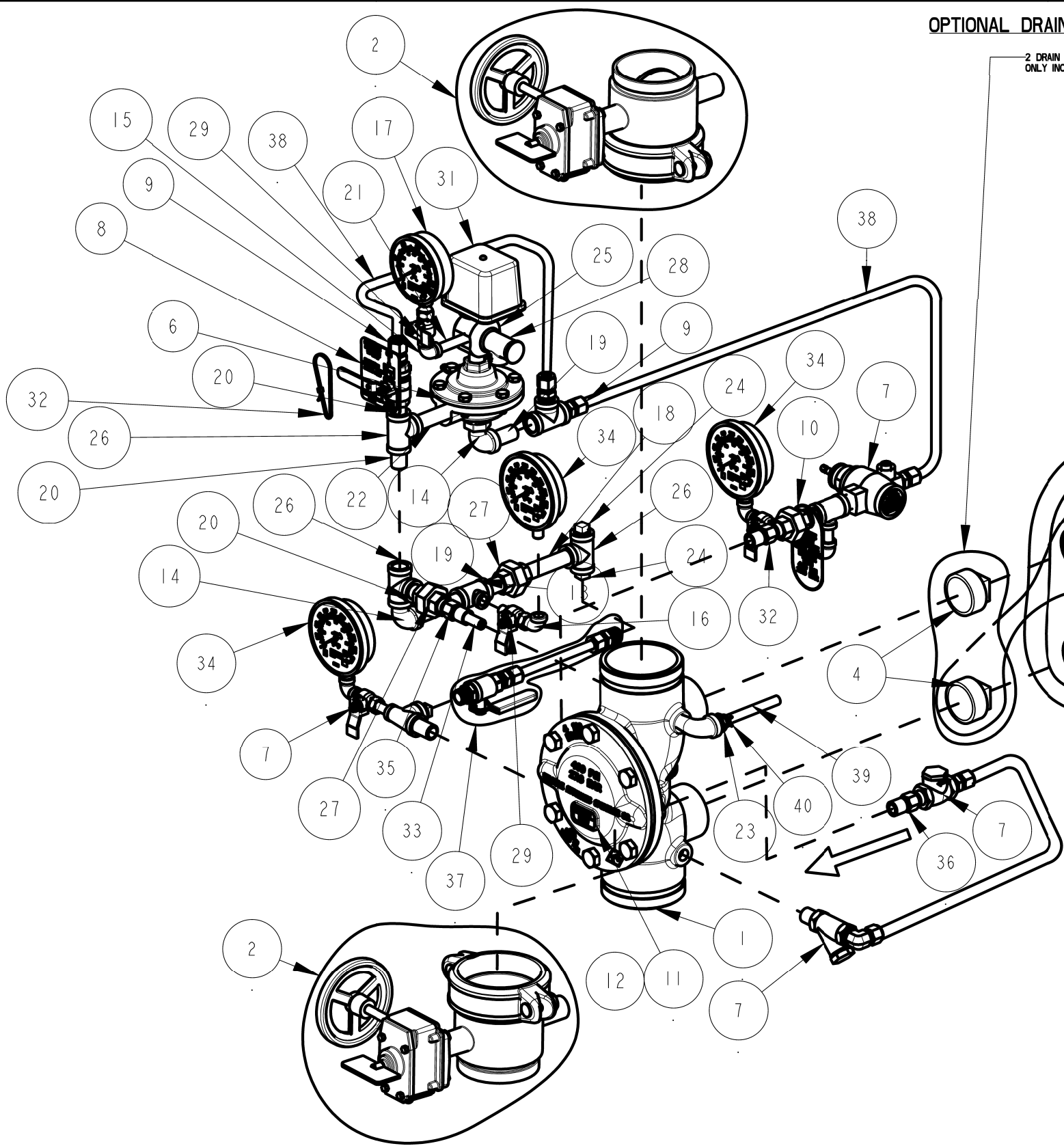


OPTIONAL DRAIN TRIM, FOR 4", 6" & 165MM VERSIONS



2 DRAIN PLUGS INCLUDES EVERYTHING INSIDE THIS BALLOON. ONLY INCLUDED IN P/N'S WITH A "0" OR "4" IN THE 9TH DIGIT.

ONE DRAIN VALVE INCLUDES EVERYTHING INSIDE THIS BALLOON. ONLY INCLUDED IN P/N'S WITH A "1" OR "5" IN THE 9TH DIGIT.

TWO DRAIN VALVES INCLUDES EVERYTHING INSIDE THIS BALLOON. ONLY INCLUDED IN P/N'S WITH A "2" OR "6" IN THE 9TH DIGIT.

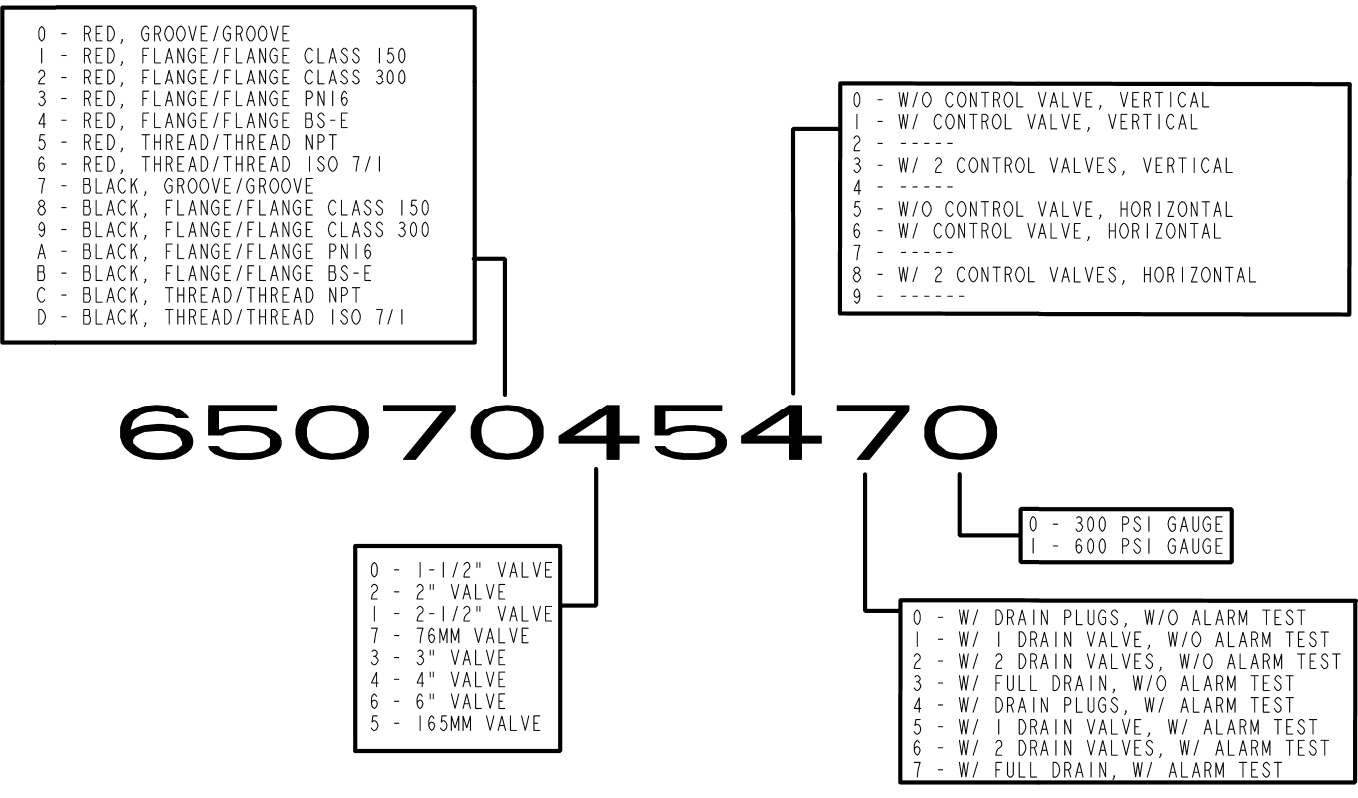
FULL DRAIN INCLUDES EVERYTHING INSIDE THIS BALLOON. ONLY INCLUDED IN P/N'S WITH A "3" OR "7" IN THE 9TH DIGIT.

OPTIONAL DRAIN TRIM, FOR 1-1/2", 2", 2-1/2", 76MM & 3" VERSIONS
(ALL DRAIN PLUG & BALL VALVE OPTIONS APPLY)

SIZE	VALVE ASSEMBLY BLACK (ITEM 1)	VALVE ASSEMBLY RED (ITEM 1)	CONTROL VALVE S/A (ITEM 2)	BALL VALVE (DRAIN) (ITEM 3)	PLUG (DRAIN) (ITEM 4)	TRIM, DRAIN (ITEM 5)
1-1/2" GR/GR	6103015507	6103015500	7700030A			
1-1/2" FLG/FLG CLASS 150	6103015508	6103015501				
1-1/2" FLG/FLG CLASS 300	6103015509	6103015502				
1-1/2" FLG/FLG PN16	610301550A	6103015503	N/A			
1-1/2" FLG/FLG BS-E	610301550B	6103015504				
1-1/2" THD/THD NPT	610301550C	6103015505				
1-1/2" THD/THD ISO 7/1	610301550D	6103015506		77000300	98614401	77037003
2" GR/GR	6103020507	6103020500	77000301			
2" FLG/FLG CLASS 150	6103020508	6103020501				
2" FLG/FLG CLASS 300	6103020509	6103020502				
2" FLG/FLG PN16	610302050A	6103020503	N/A			
2" FLG/FLG BS-E	610302050B	6103020504				
2" THD/THD NPT	610302050C	6103020505				
2" THD/THD ISO 7/1	610302050D	6103020506				
2-1/2" GR/GR	6103025507	6103025500	77000302			
2-1/2" FLG/FLG CLASS 150	6103025508	6103025501				
2-1/2" FLG/FLG CLASS 300	6103025509	6103025502				
2-1/2" FLG/FLG PN16	610302550A	6103025503	N/A			
2-1/2" FLG/FLG BS-E	610302550B	6103025504				
2-1/2" THD/THD NPT	610302550C	6103025505				
2-1/2" THD/THD ISO 7/1	610302550D	6103025506				
76MM GR/GR	6103076507	6103076500	N/A	77000299	95200126	77037004
3" GR/GR	6103030507	6103030500	77000303			
3" FLG/FLG CLASS 150	6103030508	6103030501				
3" FLG/FLG CLASS 300	6103030509	6103030502				
3" FLG/FLG PN16	610303050A	6103030503	N/A			
3" FLG/FLG BS-E	610303050B	6103030504				
3" THD/THD NPT	610303050C	6103030505				
3" THD/THD ISO 7/1	610303050D	6103030506				
4" GR/GR	6103040507	6103040500	77000304			
4" FLG/FLG CLASS 150	6103040508	6103040501				
4" FLG/FLG CLASS 300	6103040509	6103040502				
4" FLG/FLG PN16	610304050A	6103040503	N/A			
4" FLG/FLG BS-E	610304050B	6103040504				
6" GR/GR	6103060507	6103060500	77000306	9884011D	95206106	77037002
6" FLG/FLG CLASS 150	6103060508	6103060501				
6" FLG/FLG CLASS 300	6103060509	6103060502				
6" FLG/FLG PN16	610306050A	6103060503	N/A			
6" FLG/FLG BS-E	610306050B	6103060504				
165MM GR/GR	6103065507	6103065500	N/A			

MODEL DDV
DRY PILOT-PRESSURE REGULATING DELUGE TRIM
CA-320 P/N 89241290
ASSEMBLY P/N 6507045470 REV. J

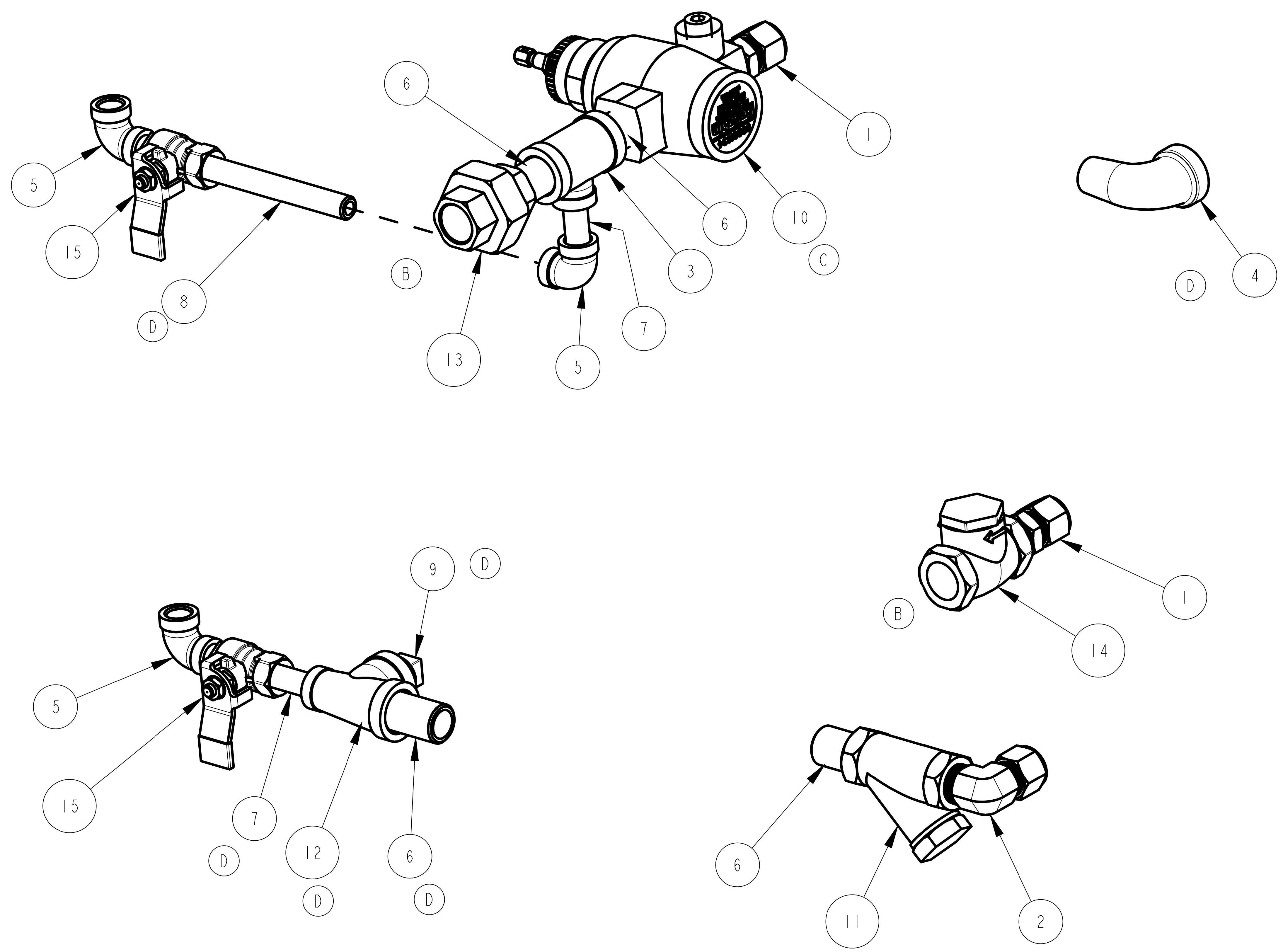
PRODUCT NUMBER SCHEME



42	95516918	LOCTITE 271, THREAD LOCKER	NOT SHOWN	A/R
41	89097903	THREAD SEALANT	NOT SHOWN	A/R
40	95306255	CLAMP, HOSE, 1/2" CONSTANT TENSION, ZINC		4
39	96686756	TUBING, PVC, 3/8" I.D. X 6 FT.		A/R
38	98768010	COPPER TUBE, 1/2"	50 IN	A/R
37	77000283	ALARM TEST KIT		A/R
36	98580015	ORIFICE, RESTRICTING, 1/2" NPT, .125 ORIF.	6"	2
	98580023	ORIFICE, RESTRICTING, 1/2" NPT, .093 ORIF.	4"	
	98580022	ORIFICE, RESTRICTING, 1/2" NPT, .078 ORIF.	3"	
	98580022	ORIFICE, RESTRICTING, 1/2" NPT, .078 ORIF.	2-1/2"	
	98580017	ORIFICE, RESTRICTING, 1/2" NPT, .062 ORIF.	2"	
35	98580018	ORIFICE, RESTRICTING, 1/2" NPT, .188 ORIF.	6"	1
	98580015	ORIFICE, RESTRICTING, 1/2" NPT, .125 ORIF.	4"	
	98580024	ORIFICE, RESTRICTING, 1/2" NPT, .109 ORIF.	3"	
	98580024	ORIFICE, RESTRICTING, 1/2" NPT, .109 ORIF.	2-1/2"	
	98580023	ORIFICE, RESTRICTING, 1/2" NPT, .093 ORIF.	2"	
34	98248005	GAUGE, WATER PRESSURE (0-600 PSI)		3
	98248001	GAUGE, WATER PRESSURE (0-300 PSI)		
33	98768201	PICKUP TUBE, 3-1/2"	6" ONLY	1
	98768200	PICKUP TUBE, 1-1/2"	4" ONLY	
32	89141112	TIE, RETAINING		1
31	6990019313	SWITCH, POTTER PRESSURE (PS25-2)		1
30	99050906	END CAP, PVC, 1/2"		2
29	98840237	VALVE, BALL, 1/4" NPT x 1/4" NPTM		2
28	98840228	VALVE, RELIEF, 1/2", 50 PSI		1
27	98815200	UNION, 1/2, IRON, G.J., GALV.		2
26	98761651	TEE, 1/2X1/2X1/2, GALVANIZED		4
25	98751007	FITTING, MULTIPORT, 3/4X1/2X1/2X1/2X1/4		1
24	98604406	PIPE, PLUG, IRON, SQUARE HEAD, 1/2		2
23	98580016	ORIFICE, DRAIN, BARBED		1
22	98543230	NIPPLE, 1/2X3, GALVANIZED STEEL		1
21	98543225	NIPPLE, 1/4X2-1/2, GALVANIZED STEEL		1
20	98543223	NIPPLE, 1/2X1-1/2, GALVANIZED STEEL		4
19	98543209	NIPPLE, 1/2X2, GALVANIZED STEEL		2
18	98543207	NIPPLE, 1/2X4, GALVANIZED STEEL		2
17	98248000	GAUGE, AIR PRESSURE (0-80 PSI)		1
16	98174408	ELBOW, STREET, 1/4", GALV.		1
15	98174404	ELBOW, 1/4", MALL IRON, GALV.		1
14	98174400	ELBOW, STREET, 1/2", GALV.		2
13	96606607	TEE, 1/2X1/2X1/4, GALVANIZED		1
12	94617015	PLATE		1
11	94616999	ADHESIVE, BACKING PAD		1
10	94616959	NAMEPLATE		1
9	92056816	ADAPTER, STRAIGHT, 1/2 O.D. TUBE X 1/2 NPT, BRASS		3
8	78653000	ASSEMBLY, MANUAL EMERGENCY STATION		1
7	77037021	BASE TRIM, PRESSURE REGULATING		1
6	71030010	MODEL LP PILOT LINE ACTUATOR		1
5		TRIM, SUB-ASSY, DRAIN		1
4		PLUG (DRAIN)	SEE NOTES FOR QTY.	A/R
3	SEE PART NUMBER TABLE	BALL VALVE (DRAIN)	SEE NOTES FOR QTY.	A/R
2		SUBASSEMBLY, CONTROL VALVE	SEE NOTES FOR QTY.	A/R
1		ASSEMBLY, VALVE, DDV		1
ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.

BILL OF MATERIALS

REVISIONS			
LTR	DESCRIPTION	DATE	DRAWN BY
~	RELEASED FOR PROD. ERN#12625	02/13/17	MK
A	ECN #13759	05/08/17	JB
B	ECN #13919	08/24/17	JB
C	ECN #25837	02/22/22	MK
D	ECN #27330	10/21/22	MK

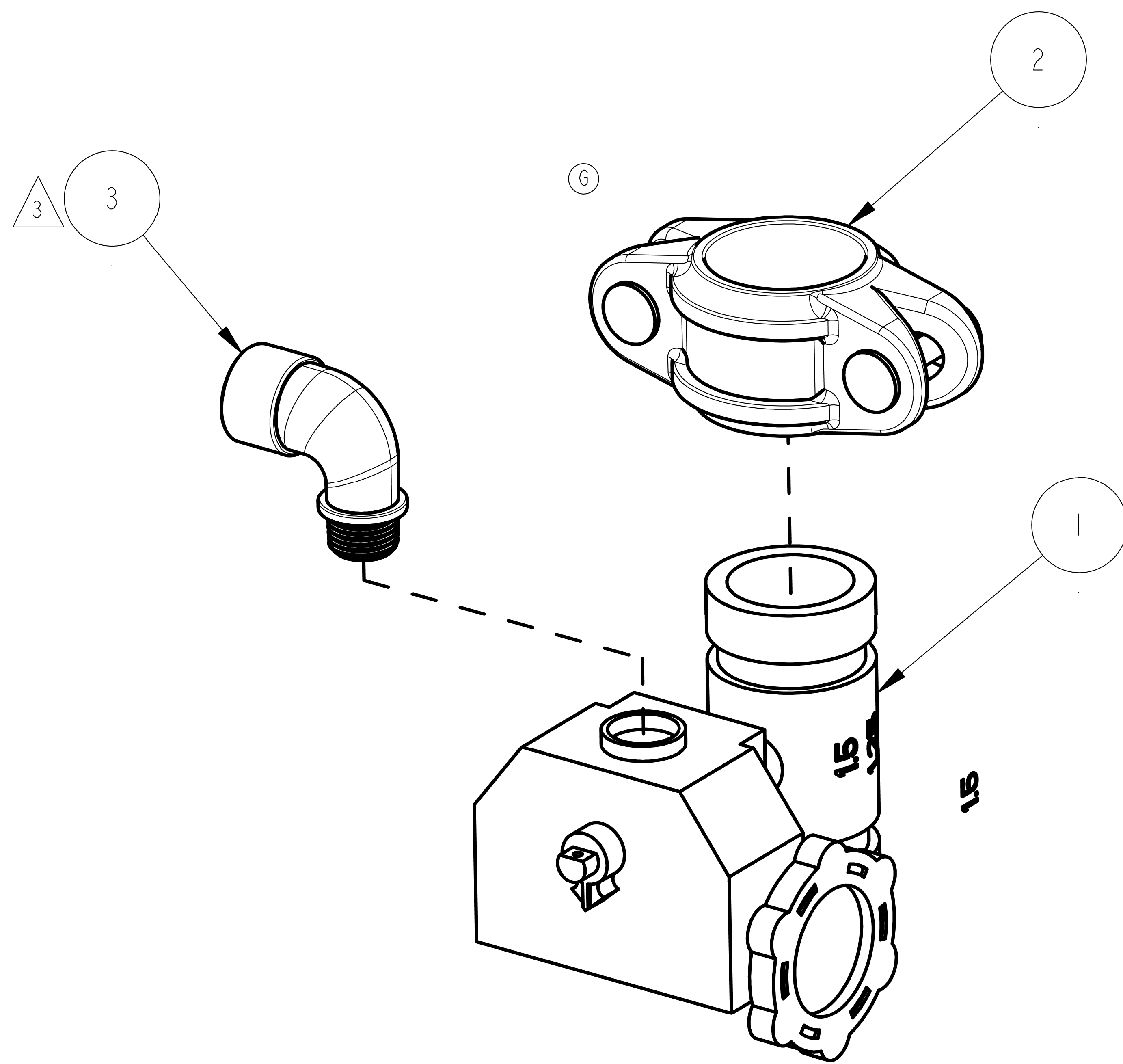


15	98840237	VALVE, BALL, 1/4" NPTF x 1/4" NPTM		2
14	98840181	HORIZ. SWING CHECK VALVE, 1/2" NPT		1
13	98815200	UNION, 1/2, IRON, G. J., GALV.		1
12	98761649	TEE, 1/2X1/4X1/2, GALVANIZED		1
11	98727615	STRAINER, TRIM		1
10	98681634	ASSEMBLY, REGULATOR, MODIFIED		1
9	98604406	PIPE, PLUG, IRON, SQUARE HEAD, 1/2		1
8	98543243	NIPPLE, 1/4X4, GALVANIZED STEEL		1
7	98543226	NIPPLE, 1/4X1-1/2, GALVANIZED STEEL		2
6	98543223	NIPPLE, 1/2X1-1/2, GALVANIZED STEEL		4
5	98174404	ELBOW, 1/4", MALL IRON, GALV.		3
4	98174400	ELBOW, STREET, 1/2", GALV.		1
3	96606607	TEE, 1/2X1/2X1/4, GALVANIZED		1
2	92606707	ADAPTER, ELBOW, 90°, 1/2 OD TUBE, 1/2 NPT, BRASS		1
1	92056816	ADAPTER, STRAIGHT, 1/2 O.D. TUBE X 1/2 NPT, BRASS		2

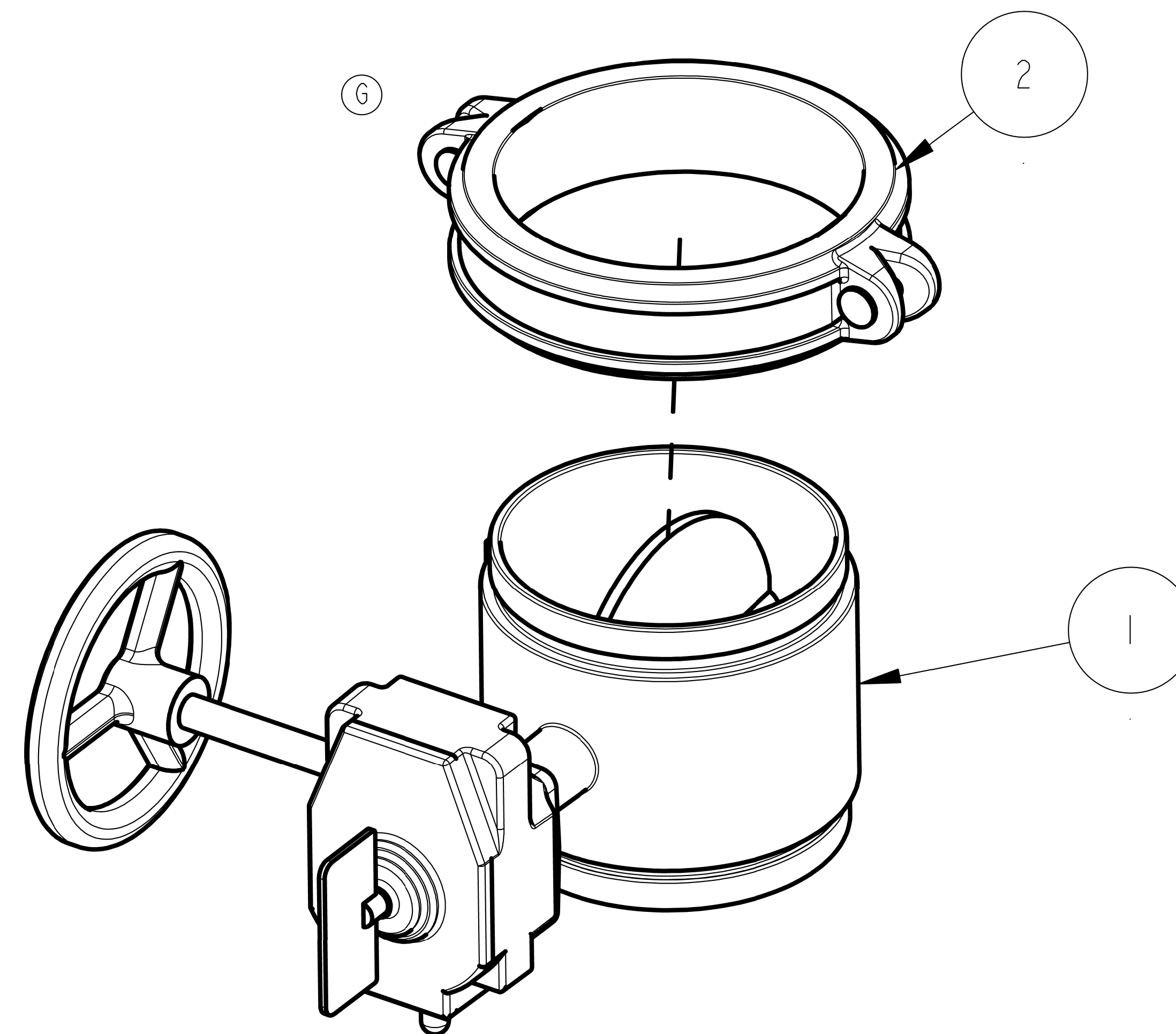
ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.
BILL OF MATERIALS				
MTL. N/A		REV. 0	THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.	
FINISH:		VER. 0	PART NO: 77037021	DWG. SIZE: C
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED:		PART: BASE TRIM, PRESSURE REGULATING		
ANGLE ± 1/2 63/		PRODUCT: MODEL DDV DIAPHRAGM TRIM		
MACH. FINISH		FRACT. ± 1/32 [0.79]	FILE NO: 77037021	ENG: DD
CONC. T.I.R.		DEC. XX ± .010 [0.25]	SCALE: 2:5	DRW BY: JB
SQUARENESS - PARALLELISM		DEC. XXX ± .005 [0.13]	DATE: 01/16/17	C'K'D: -
			SHEET 1 of 1	

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO THE RELIABLE AUTOMATIC SPRINKLER CORP. IT MAY NOT BE REPRODUCED NOR MAY ANY INFORMATION HEREON BE DISCLOSED TO OTHERS WITHOUT THE SPECIFIC WRITTEN PERMISSION OF RELIABLE.

REVISIONS			
LTR	DESCRIPTION	DATE	DRAWN BY
~	RELEASED FOR PROD. ERN #12035	03/11/16	MK
A	ECN #14444	09/22/17	AW
B	ECN #21576	11/27/19	AW
C	ECN #22823	05/19/20	MK
D	ECN #23756	11/05/20	AW
E	ECN #24331	09/24/21	AW
F	ECN #26059	01/14/22	FP
G	ECN #26461	07/06/22	FP
H	ECN #27005	07/20/22	AW
J	ECN #28019	03/21/23	MK



ASSEMBLY VIEW FOR
1-1/2" AND 2"



ASSEMBLY VIEW FOR
2-1/2" - 8"

P/N TABLE AND BOM

ITEM NO.	DESCRIPTION	QTY	1-1/2" (40MM)	2" (100MM)	2-1/2" (100MM)	3" (100MM)	4" (100MM)	6" (150MM)	8" (200MM)	76MM	165MM	
			P/N 7700030A	P/N 77000301	P/N 77000302	P/N 77000303	P/N 77000304	P/N 77000306	P/N 77000308	P/N 77000305	P/N 77000307	
1	BUTTERFLY VALVE, 1-1/2"	1	7M99004568									
	BUTTERFLY VALVE, 2"	1		7M99004960								
	BUTTERFLY VALVE, 2-1/2"	1			7M99004905							
	BUTTERFLY VALVE, 3"	1				7M99004906						
	BUTTERFLY VALVE, 4"	1					7M99004907					
	BUTTERFLY VALVE, 6"	1						7M99004908				
	BUTTERFLY VALVE, 8"	1							7M99004909			
	BUTTERFLY VALVE, 76MM	1								7U99002805		
	BUTTERFLY VALVE, 165MM	1									7U99002806	
	COUPLING, RIGID, 1-1/2"	1	7G05060600									
2	COUPLING, RIGID, 2"	1		7G05080800								
	COUPLING, RIGID, 2-1/2"	1			7G05101000							
	COUPLING, RIGID, 3"	1				7G05121200						
	COUPLING, RIGID, 4"	1					7G05161600					
	COUPLING, RIGID, 6"	1						7G05242400				
	COUPLING, RIGID, 8"	1							7G05323200			
	COUPLING, RIGID, 76MM	1								7T15101009		
	COUPLING, RIGID, 165MM	1									7T15242409	
	3	ELBOW, RIGID, STREET, CONDUIT	1	98174451								98174451

NOTES:

① USE NIBCO BUTTERFLY VALVES AS ALTERNATIVE:

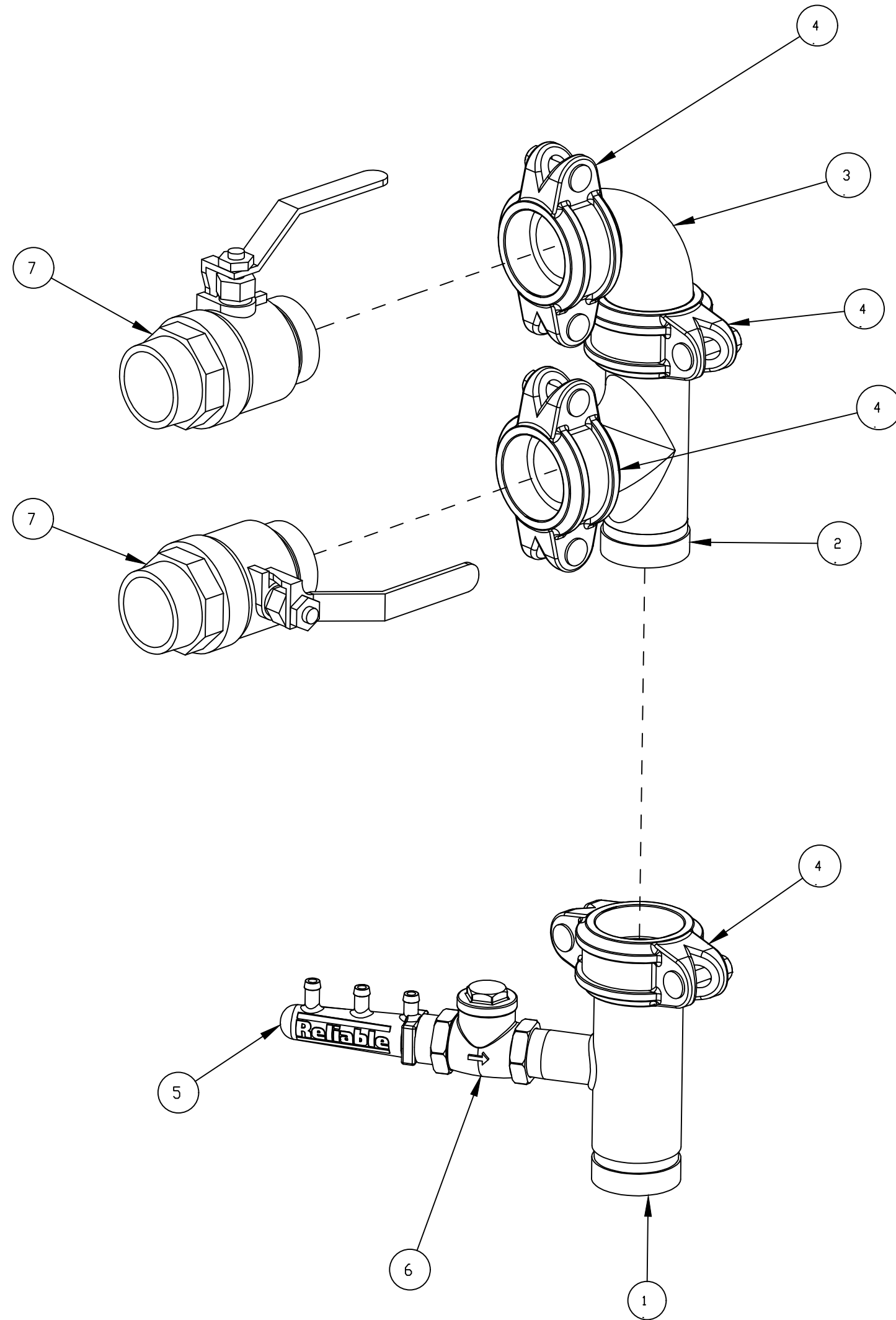
- 2" - P/N 7M99004569
- 2-1/2" - P/N 6215051000
- 3" - P/N 6215051200
- 4" - P/N 6215051600
- 6" - P/N 6215052400
- 8" - P/N 6215053200

② IF 2" ANVILSTAR BUTTERFLY VALVE P/N 6990003549 IS USED AS ALTERNATIVE. THE HANDLE SHOULD BE POSITIONED ON THE LEFT SIDE.

③ REMOVE PLASTIC NIPPLE AND REPLACE WITH CONDUIT ELBOW, ITEM #3

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO THE RELIABLE AUTOMATIC SPRINKLER CORP. IT MAY NOT BE REPRODUCED NOR MAY ANY INFORMATION HEREON BE DISCLOSED TO OTHERS WITHOUT THE SPECIFIC WRITTEN PERMISSION OF RELIABLE.

MTL. N/A	THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, SC.		
FINISH:	PART NO: 77000306	DWG.SIZE: C ⑥	
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED:	PART: SUBASSEMBLY, CONTROL VALVE		
ANGLE ± 1/2 63/	PRODUCT: VARIOUS TRIMS		
MACH. FINISH	FILE NO: 77000306	ENG: DD	DRW BY: MK
CONC. T.I.R.	SCALE: 1:4	DATE: 02/08/16	C'K'D:
SQUARENESS - PARALLELISM			SHEET 1 of 1



ITEM NO.	PART NO.	DESCRIPTION	PAINTED	GALVANIZED
			SUB-ASSY	SUB-ASSY
			P/N	P/N
			77037002	77037005
1	96610014	TEE, WELDED, 2" GRV x 2" GRV x 1" THRD, PTD	1	-
	96610021	TEE, WELDED, 2" GRV x 2" GRV x 1" THRD, GALV	-	1
2	96613020	TEE, 2" x 2" x 2", GRV, PTD	1	-
	96613021	TEE, 2" x 2" x 2", GRV, GALV	-	1
3	98174500	EL. BOW, 2", GRV, PTD	1	-
	98174501	EL. BOW, 2", GRV, GALV	-	1
4	7G05080800	COUPLING, RIGID, 2", PTD	4	-
	7G05080801	COUPLING, RIGID, 2", GALV	-	4

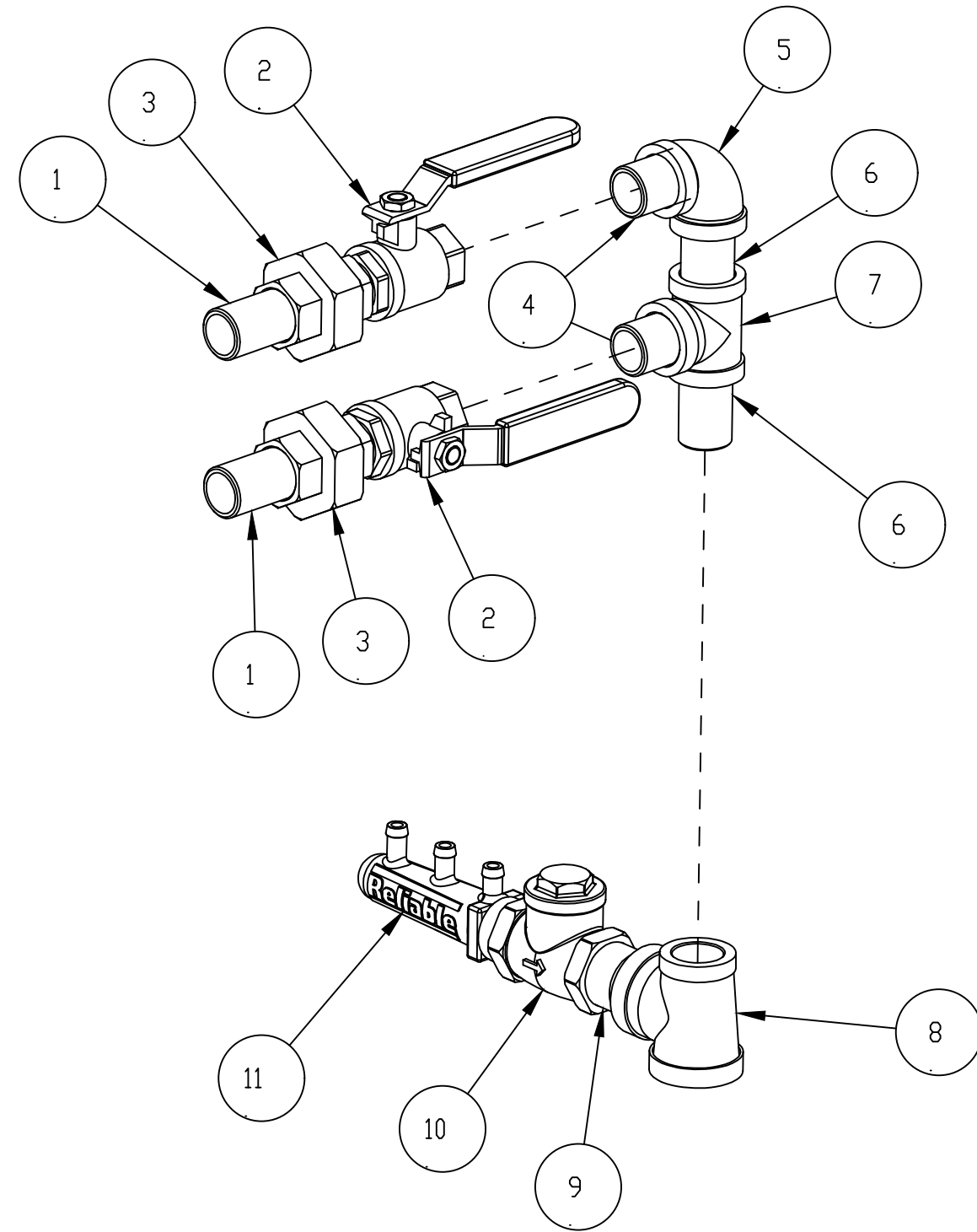
7	9884011D	VALVE, BALL 2 GROOVED X THREADED, TRIM		2
6	98840145	SWING CHECK VALVE, 1" NPT		1
5	91004298	MANIFOLD, DRAIN, BARBED, 4-7/8		1
4	SEE TABLE	COUPLING, RIGID, 2"		4
3		TEE, 2 x 2 x 2, GRV/GRV		1
2		TEE, 2 x 2 x 2, GRV/GRV		1
1		TEE, WELDED, 2" GRV X 2" GRV X 1" THRD		1

ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.
BILL OF MATERIALS				

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO THE RELIABLE AUTOMATIC SPRINKLER CORP. IT MAY NOT BE REPRODUCED NOR MAY ANY INFORMATION HEREON BE DISCLOSED TO OTHERS WITHOUT THE SPECIFIC WRITTEN PERMISSION OF RELIABLE.

MTL. N/A	
FINISH:	
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED: ANGLE ± 1/2° FRACT. ± 1/32 [0.79] MACH. FINISH DEC. XX ± .010 [0.25] CONC. T.I.R. DEC. XXX ± .005 [0.13] SQUARENESS - PARALLELISM	

THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.			
PART NO: SEE TABLE		DWG. SIZE: C	
PART: TRIM, DRAIN SUB-ASSY			
PRODUCT: MODEL DDV 4" - 10"			
FILE NO: 77037002	ENG: DD	DRW BY: MK	C'K'D:
SCALE: 1:3	DATE: 05/20/16	SHEET 1 of 1	



DRAIN SUB-ASSY P/N 0266P 1-1/2" - 2" SHOWN

11	91004298	MANIFOLD, DRAIN, BARBED	1	1
10	98840145	VALVE, CHECK, 1"	1	1
9	98543213	NIPPLE, STEEL, GALV., 1" X 1-1/2"	1	1
8	96606630	TEE, GLVN., 1-1/4" X 1-1/4" X 1"	—	1
	96606602	TEE, GLVN., 3/4" X 1" X 1"	1	—
7	96606634	TEE, GLVN., 1-1/4" X 1-1/4" X 1-1/4"	—	1
	96606601	TEE, GLVN., 3/4"	1	—
6	98543296	NIPPLE, STEEL, GALV., 1-1/4" X 2-1/2"	—	2
	98543232	NIPPLE, STEEL, GALV., 3/4" X 2"	2	—
5	98174414	ELL, 1-1/4", MALL IRON, GALV.	—	1
	98174402	ELL, 3/4", MALL IRON, GALV.	1	—
4	98543285	NIPPLE, STEEL, GALV., 1-1/4" X CLOSE"	—	2
	98543215	NIPPLE, STEEL, GALV., 3/4" X 1-1/2"	2	—
3	98815208	UNION, 1-1/4", IRON, G.J., GALV.	—	2
	98815202	UNION, 3/4", IRON, G.J., GALV.	2	—
2	9884011C	VALVE, BALL, 1-1/4" NPTM X 1-1/4" NPTF	—	2
	9884011B	VALVE, BALL, 3/4" NPTM X 3/4" NPTF	2	—
1	98543297	NIPPLE, STEEL, GAL., 1-1/4" X 2"	—	2
	98543232	NIPPLE, STEEL, GALV., 3/4" X 2"	2	—
77037004	TRIM, DRAIN SUB-ASSY, 2-1/2" - 3"	—	—	
77037003	TRIM, DRAIN SUB-ASSY, 1-1/2" - 2"	—	—	

ITEM NO.	PART NO.	DESCRIPTION	QTY.	
BILL OF MATERIALS				

MTL. N/A	REV. VER.
FINISH:	
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED: ANGLE ± 1/2° FRACT. ± 1/32 [0.75] MACH. FINISH DEC. XX ± .010 [0.25] CONC. T.I.R. 63/ DEC. XXX ± .005 [0.13] SQUARENESS - PARALLELISM	

THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.			
PART NO: VARIOUS		DWG.SIZE: C	
PART: TRIM, DRAIN SUB-ASSY			
PRODUCT: MODEL DDV 1-1/2" - 3"			
FILE NO: 77037003	ENG: DD	DRW BY: JB	C'K'D:
SCALE: 1:3	DATE: 02/10/17	SHEET 1of1	

THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO THE RELIABLE AUTOMATIC SPRINKLER CORP. IT MAY NOT BE REPRODUCED NOR MAY ANY INFORMATION HEREON BE DISCLOSED TO OTHERS WITHOUT THE SPECIFIC WRITTEN PERMISSION OF RELIABLE.