

**PRODUCT NUMBER SCHEME**

0 - RED, GROOVE/GROOVE  
 1 - RED, FLANGE/FLANGE CLASS 150  
 2 - RED, FLANGE/FLANGE CLASS 300  
 3 - RED, FLANGE/FLANGE PN16  
 4 - RED, FLANGE/FLANGE BS-E  
 5 - RED, THREAD/THREAD NPT  
 6 - RED, THREAD/THREAD ISO 7/1  
 7 - BLACK, GROOVE/GROOVE  
 8 - BLACK, FLANGE/FLANGE CLASS 150  
 9 - BLACK, FLANGE/FLANGE CLASS 300  
 A - BLACK, FLANGE/FLANGE PN16  
 B - BLACK, FLANGE/FLANGE BS-E  
 C - BLACK, THREAD/THREAD NPT  
 D - BLACK, THREAD/THREAD ISO 7/1

0 - W/O CONTROL VALVE, VERTICAL  
 1 - W/ CONTROL VALVE, VERTICAL  
 2 - -----  
 3 - W/ 2 CONTROL VALVES, VERTICAL  
 4 - -----  
 5 - W/O CONTROL VALVE, HORIZONTAL  
 6 - W/ CONTROL VALVE, HORIZONTAL  
 7 - -----  
 8 - W/ 2 CONTROL VALVES, HORIZONTAL  
 9 - -----

**6507047470**

0 - 1-1/2" VALVE  
 1 - 2" VALVE  
 2 - 2-1/2" VALVE  
 3 - 3" VALVE  
 4 - 4" VALVE  
 5 - 6" VALVE  
 6 - 165MM VALVE

0 - 300 PSI GAUGE, 300 PSI BURKERT, (FM APPROVED), 6871020250  
 1 - 600 PSI GAUGE, 300 PSI BURKERT, (FM APPROVED), 6871020250  
 2 - 300 PSI GAUGE, 175 PSI SKINNER, (UL LISTED), 6871020000  
 3 - 600 PSI GAUGE, 175 PSI SKINNER, (UL LISTED), 6871020000  
 4 - 300 PSI GAUGE, 300 PSI SKINNER, (UL LISTED), 6871020020  
 5 - 600 PSI GAUGE, 300 PSI SKINNER, (UL LISTED), 6871020020

0 - W/ DRAIN PLUGS, W/O ALARM TEST  
 1 - W/ 1 DRAIN VALVE, W/O ALARM TEST  
 2 - W/ 2 DRAIN VALVES, W/O ALARM TEST  
 3 - W/ FULL DRAIN, W/O ALARM TEST  
 4 - W/ DRAIN PLUGS, W/ ALARM TEST  
 5 - W/ 1 DRAIN VALVE, W/ ALARM TEST  
 6 - W/ 2 DRAIN VALVES, W/ ALARM TEST  
 7 - W/ FULL DRAIN, W/ ALARM TEST

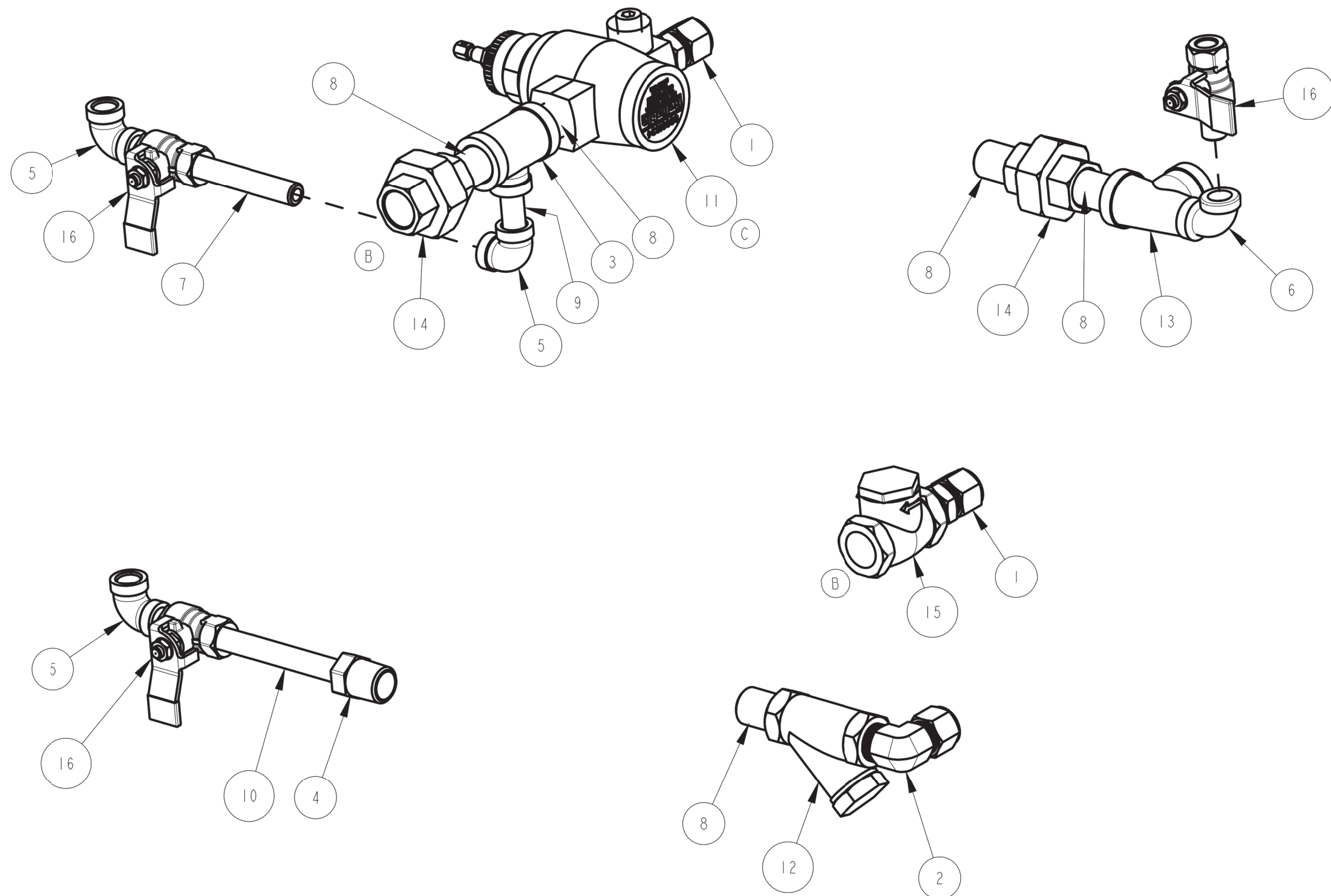
PART NUMBER TABLE						
SIZE	VALVE ASSEMBLY BLACK (ITEM 1)	VALVE ASSEMBLY RED (ITEM 1)	CONTROL VALVE S/A (ITEM 2)	BALL VALVE (DRAIN) (ITEM 3)	PLUG (DRAIN) (ITEM 4)	TRIM, DRAIN (ITEM 5)
1-1/2" GR/GR	6103015507	6103015500	7700030A			
1-1/2" FLG/FLG CLASS 150	6103015508	6103015501				
1-1/2" FLG/FLG CLASS 300	6103015509	6103015502				
1-1/2" FLG/FLG PN16	610301550A	6103015503				
1-1/2" FLG/FLG BS-E	610301550B	6103015504	N/A			
1-1/2" THD/THD NPT	610301550C	6103015505				
1-1/2" THD/THD ISO 7/1	610301550D	6103015506				
2" GR/GR	6103020507	6103020500	77000301	77000300	98614401	77037003
2" FLG/FLG CLASS 150	6103020508	6103020501				
2" FLG/FLG CLASS 300	6103020509	6103020502				
2" FLG/FLG PN16	610302050A	6103020503				
2" FLG/FLG BS-E	610302050B	6103020504	N/A			
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				
2-1/2" FLG/FLG BS-E	610302550B	6103025504	N/A			
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				
3" FLG/FLG BS-E	610303050B	6103030504	N/A			
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  
 REMOTE RESET-PRESSURE REGULATING DELUGE TRIM**

28	89097903	THREAD SEALANT	NOT SHOWN	A/R
27	95306255	CLAMP, HOSE, 1/2" CONSTANT TENSION, ZINC		4
26	96686756	TUBING, PVC, 3/8" I.D. X 6 FT.		A/R
25	98768010	COPPER TUBE, 1/2"	40 IN	A/R
24	77000280	ALARM TEST KIT		A/R
23	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"	
	98580017	ORIFICE, RESTRICTING, 1/2" NPT, .062 ORIF.	1-1/2"	
22	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"	
21	98248005	GAUGE, WATER PRESSURE (0-600 PSI)		3
	98248001	GAUGE, WATER PRESSURE (0-300 PSI)		
20	6871020250	SOLENOID VALVE, IMPULSE ASSY	FM ONLY	1
	6871020000	SOLENOID VALVE, PARKER, 175 PSI	UL ONLY	
	6871020020	SOLENOID VALVE, PARKER, 300 PSI	UL ONLY	
19	98580016	ORIFICE, DRAIN, BARBED		1
18	VARIOUS	ASSEMBLY, TRIM, TYPE PL, DOUBLE INTERLOCK		1
17	94616959	NAMEPLATE		1
16	99050906	END CAP, PVC, 1/2"		2
15	92056816	ADAPTER, STRAIGHT, 1/2 O.D. TUBE X 1/2 NPT, BRASS		3
14	78653000	ASSEMBLY, MANUAL EMERGENCY STATION		1
13	98604406	PIPE, PLUG, IRON, SQUARE HEAD, 1/2		1
12	98815200	UNION, 1/2, IRON, G. J., GALV.		1
11	98761651	TEE, 1/2X1/2X1/2, GALVANIZED		2
10	98174700	ELBOW, SIDE OUTLET, 1/2", 90°, GALV.		1
9	98543223	NIPPLE, 1/2X1-1/2, GALVANIZED STEEL		5
8	94617015	PLATE		1
7	94616999	ADHESIVE, BACKING PAD		1
6	77037021	BASE TRIM, PRESSURE REGULATING		1
5		TRIM, SUB-ASSY, DRAIN		1
4	SEE PART NUMBER TABLE	PLUG (DRAIN)		A/R
3		BALL VALVE (DRAIN)		A/R
2		SUBASSEMBLY, CONTROL VALVE		A/R
1		ASSEMBLY, VALVE, DDV		1
<b>ITEM NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>REMARKS</b>	<b>QTY.</b>

**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



16	98840237	VALVE, BALL, 1/4" NPTF x 1/4" NPTM		3
15	98840181	HORIZ. SWING CHECK VALVE, 1/2" NPT		1
14	98815200	UNION, 1/2, IRON, G. J., GALV.		2
13	98761649	TEE, 1/2X1/4X1/2, GALVANIZED		1
12	98727615	STRAINER, TRIM		1
11	98681634	ASSEMBLY, REGULATOR, MODIFIED		1
10	98543243	NIPPLE, 1/4X4, GALVANIZED STEEL		1
9	98543226	NIPPLE, 1/4X1-1/2, GALVANIZED STEEL		1
8	98543223	NIPPLE, 1/2X1-1/2, GALVANIZED STEEL		5
7	98543220	NIPPLE, 1/4X3, GALVANIZED STEEL		1
6	98174408	ELBOW, STREET, 1/4", GALV.		1
5	98174404	ELBOW, 1/4", MALL IRON, GALV.		3
4	98048000	BUSHING, REDUCER, 1/2X1/4, GALVANIZED		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

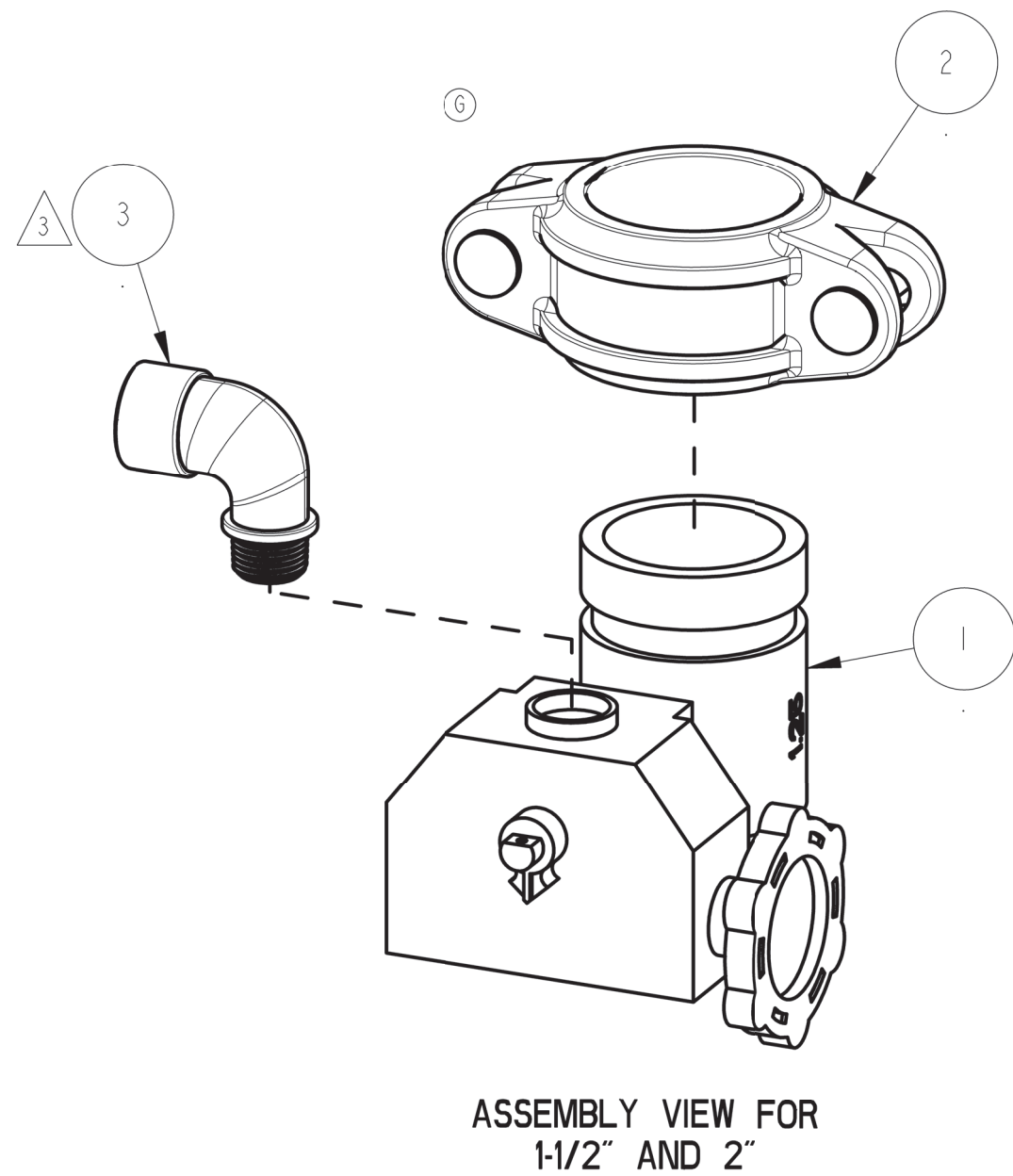
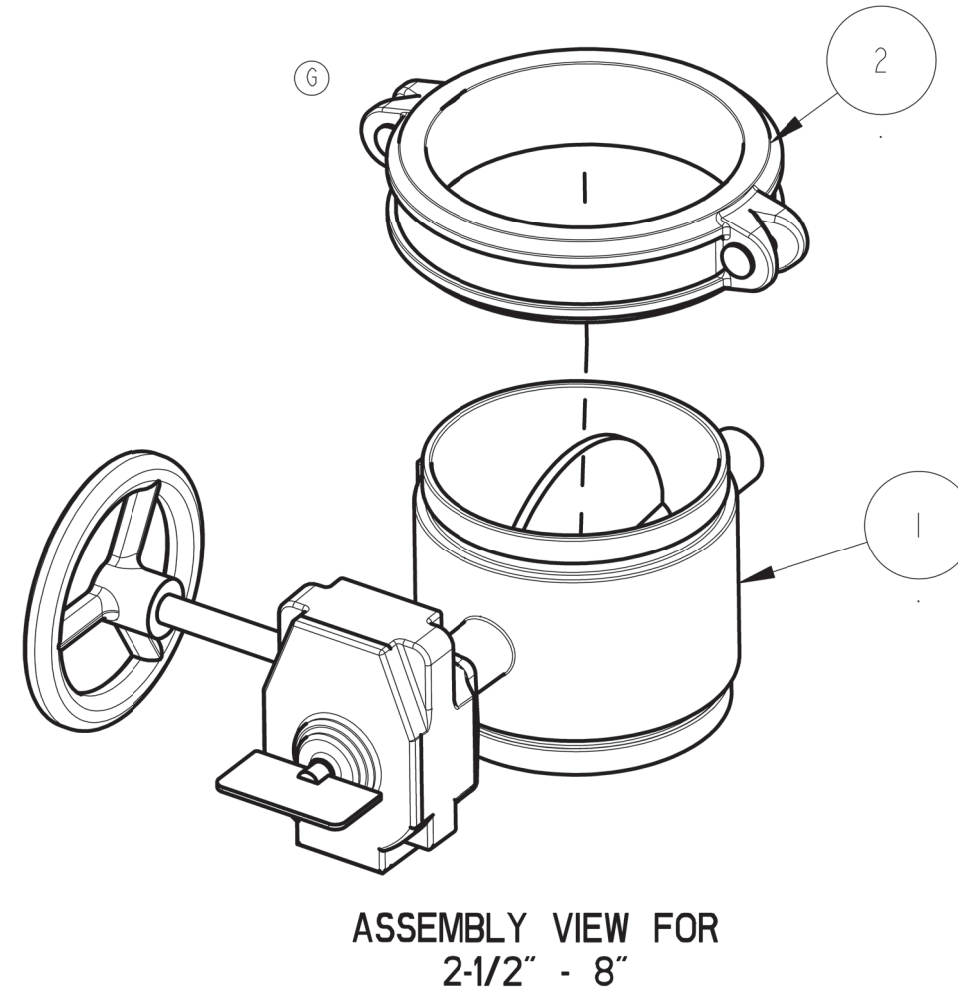
ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.
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**BILL OF MATERIALS**

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		FILE NO: 77037021	ENG: DD	DRW BY: JB
CONC. T.I.R.		SCALE: 2:5	DATE: 01/16/17	C'K'D: ~
SQUARENESS - PARALLELISM				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	XX	FP



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		7M99004569							
	BUTTERFLY VALVE, 2-1/2"	1			7M99004938						
	BUTTERFLY VALVE, 3"	1				7M99004939					
	BUTTERFLY VALVE, 4"	1					7M99004940				
	BUTTERFLY VALVE, 6"	1						7M99004941			
	BUTTERFLY VALVE, 8"	1							7M99004942		
	BUTTERFLY VALVE, 76MM	1								7U99002805	
	BUTTERFLY VALVE, 165MM	1									7U99002806
	2	COUPLING, RIGID, 1-1/2"	1	7G05060600							
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						

NOTES:

1. USE NIBCO BUTTERFLY VALVES AS ALTERNATIVE:

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

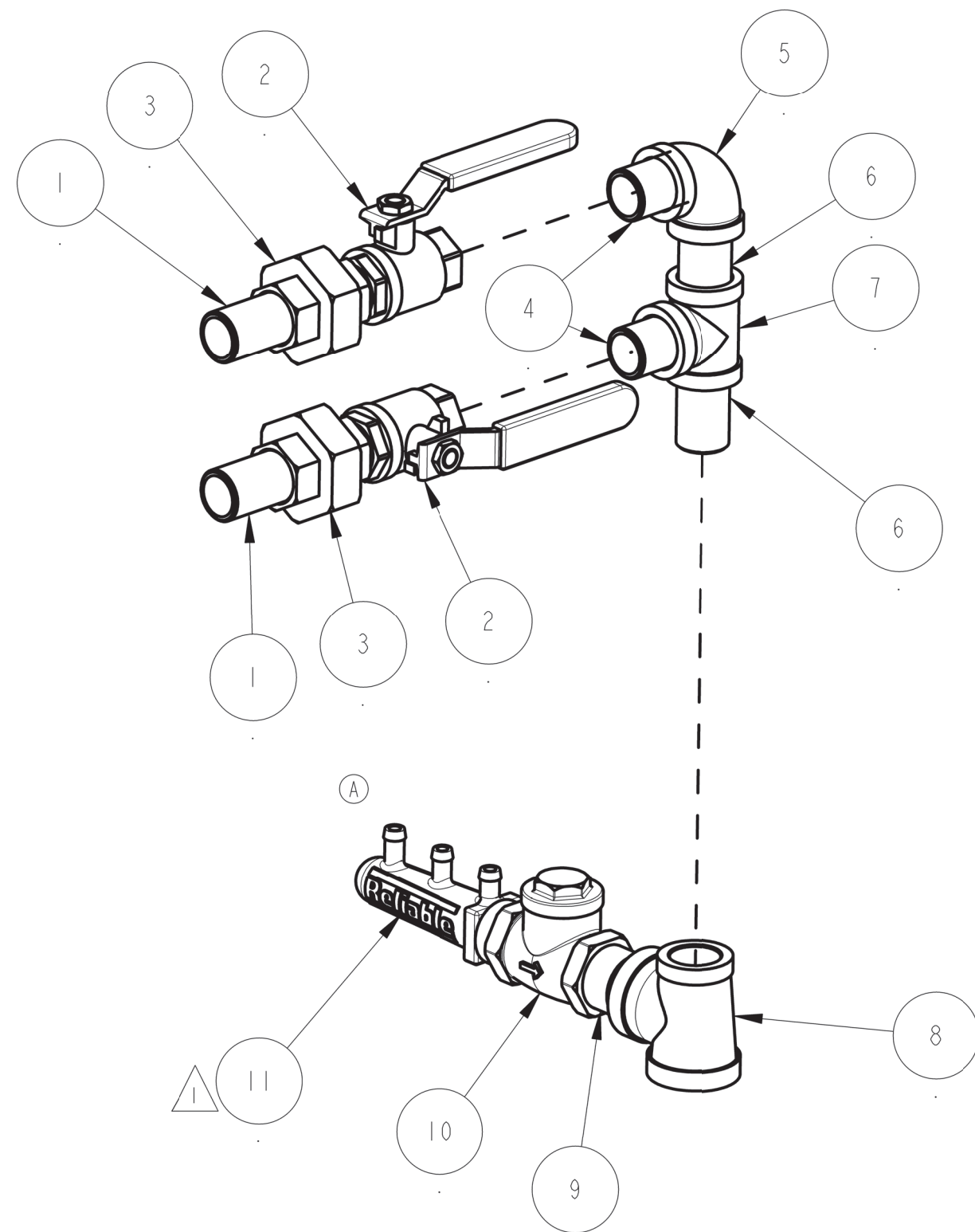
2. IF 2" ANVILSTAR BUTTERFLY VALVE P/N 6990003549 IS USED AS ALTERNATIVE, THE HANDLE SHOULD BE POSITIONED ON THE LEFT SIDE.

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

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MTL. N/A	THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.		
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 FRACT. ± 1/32 [0.79] MACH. FINISH ✓ DEC. XX ± .010 [0.25] CONC. T.I.R. DEC. XXX ± .005 [0.13] SQUARENESS - PARALLELISM 0041P	PRODUCT: VARIOUS TRIMS		
FILE NO: 77000306	ENG: DD	DRW BY: MK	C'K'D:
SCALE: 1:4	DATE: 02/08/16	SHEET 1 of 1	

REVISIONS			
LTR	DESCRIPTION	DATE	DRAWN BY
~	RELEASED FOR PROD. ERN #12901	08/25/17	JB
A	ECN #15643	06/07/18	JB
B	ECN #26461	XX	FP



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

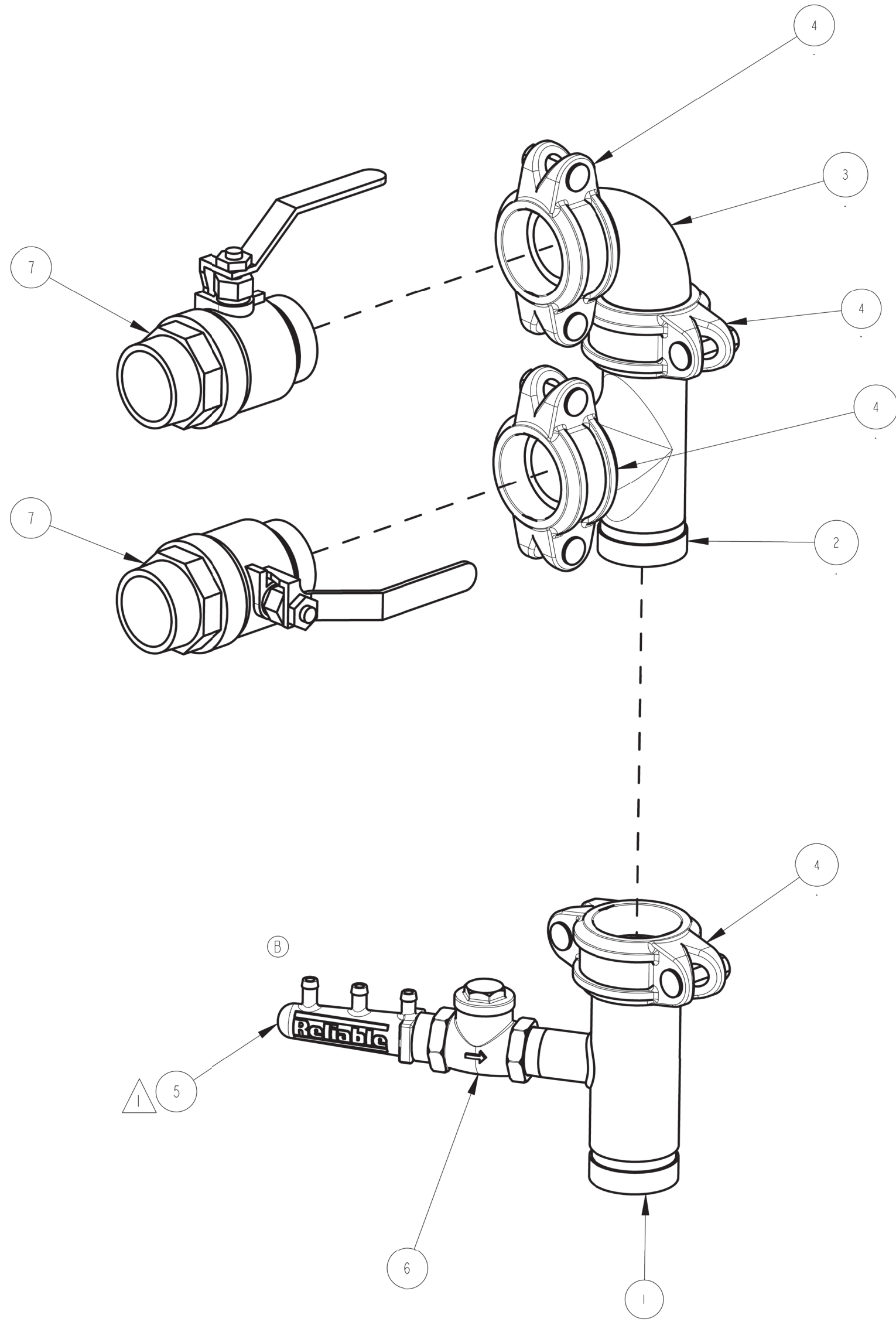
11	91004298	MANIFOLD, DRAIN, BARBED	1	1
10	98840145	VALVE, CHECK, 1"	1	1
9	98543213	NIPPLE, STEEL, GALV., 1" X 1-1/2"	1	1
8	96606630	TEE, GLVN., 1-1/4" X 1-1/4" X 1"	-	1
	96606602	TEE, GLVN., 3/4" X 1" X 1"	1	-
7	96606634	TEE, GLVN., 1-1/4" X 1-1/4" X 1-1/4"	-	1
	96606601	TEE, GLVN., 3/4"	1	-
6	98543296	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.
<b>BILL OF MATERIALS</b>			
MTL. N/A	REV. VER.	THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.	
FINISH:		PART NO: VARIOUS	DWG.SI:Z E C
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED:			
ANGLE ± 1/2	63	FRACT. ± 1/32 [0.79]	
MACH. FINISH		DEC. XX ± .010 [0.25]	
CONC. T.I.R.		DEC. XXX ± .005 [0.13]	
SQUARENESS - PARALLELISM			
FILE NO:	ENG: DD	DRW BY: JB	C'K'D:
77037003	SCALE: 1:3	DATE: 02/10/17	SHEET 1 of 1

NOTE:  
1. USE P/N: 91004293 AS ALTERNATIVE.

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REVISIONS			
LTR	DESCRIPTION	DATE	DRAWN BY
~	RELEASED FOR PROD. ERN #12625	02/13/17	MK
A	ECN #14063	08/25/17	JB
B	ECN #15643	06/07/18	JB
C	ECN #22529	04/29/20	MK
D	ECN #26461	XX	FP



ITEM NO.	PART NO.	DESCRIPTION	PAINTED SUB-ASSY P/N 77037002	GALVANIZED SUB-ASSY P/N 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	ELBOW, 2", GRV, PTD	1	-
	98174501	ELBOW, 2", GRV, GALV	-	1
4	7605080800	COUPLING, RIGID, 2", PTD	4	-
	7605080801	COUPLING, RIGID, 2", GALV	-	4

ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.
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	SEE TABLE	TEE, 2 x 2 x 2, GRV/GRV		1
2	SEE TABLE	TEE, 2 x 2 x 2, GRV/GRV		1
1	SEE TABLE	TEE, WELDED, 2" GRV X 2" GRV X 1" THRD		1

**BILL OF MATERIALS**

MTL. N/A	THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.		
FINISH:	PART NO: SEE TABLE	DWG. SIZE: C	
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED:			
ANGLE ± 1/2	63	FRACT. ± 1/32 [0.79]	
MACH. FINISH		DEC. XX ± .010 [0.25]	
CONC. T.I.R.		DEC. XXX ± .005 [0.13]	
SQUARENESS - PARALLELISM			
FILE NO: 77037002	ENG: DD	DRW BY: MK	C'K'D:
SCALE: 1:3	DATE: 05/20/16	SHEET 1 of 1	

NOTE:  
 1. USE P/N: 91004293 AS ALTERNATIVE.

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