

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

0 - 300 PSI GAUGE
 1 - 600 PSI GAUGE

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

6507041470

0 - 1-1/2" VALVE
 1 - 2" VALVE
 2 - 2-1/2" VALVE
 3 - 3" VALVE
 4 - 4" VALVE
 5 - 6" VALVE
 6 - 8" VALVE
 7 - 165MM VALVE
 8 - 8" VALVE

REVISIONS			
LTR	DESCRIPTION	DATE	DRAWN BY
	SEE PAGE 1		

MODEL DDV DRY PILOT DELUGE TRIM ASSEMBLY P/N 6507041470 REV. M

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	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				
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	6103076509	6103076502				
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			77037002
6" FLG/FLG CLASS 150	6103060508	6103060501				
6" FLG/FLG CLASS 300	6103060509	6103060502				
6" FLG/FLG PN16	610306050A	6103060503	N/A	9884011D	95206106	
6" FLG/FLG BS-E	610306050B	6103060504				
165MM GR/GR	6103065507	6103065500	N/A			
8" GRV/GRV	6103080507	6103080500	77000308			
8" FLG/FLG CLASS 150	6103080508	6103080501				
8" FLG/FLG CLASS 300	6103080509	6103080502				
8" FLG/FLG PN16	610308050A	6103080503	N/A			77037012
8" FLG/FLG BS-E	610308050B	6103080504				

31	89097903	THREAD SEALANT		A/R
30	98768010	COPPER TUBE, 1/2"	24 IN	A/R
29	95306255	CLAMP, HOSE, 1/2" CONSTANT TENSION, ZINC		6
28	96686756	TUBING, PVC, 3/8" I.D. X 6 FT.		A/R
27	77000280	ALARM TEST KIT		A/R
26	98248005	GAUGE, WATER PRESSURE (0-600 PSI)		2
	98248001	GAUGE, WATER PRESSURE (0-300 PSI)		
25	98543210	NIPPLE, 1/2X2-1/2, GALVANIZED STEEL		1
24	98761651	TEE, 1/2X1/2X1/2, GALVANIZED		1
23	98580016	ORIFICE, DRAIN, BARBED		1
22	6990019313	SWITCH, POTTER PRESSURE (PS25-2)		1
21	94616955	NAMEPLATE		1
20	71030010	MODEL LP PILOT LINE ACTUATOR		1
19	92056704	CONNECTOR, ELBOW, 3/8" ID TUBE x 1/2" NPT		1
18	98248000	GAUGE, AIR PRESSURE (0-80 PSI)		1
17	98174404	ELBOW, 1/4", MALL IRON, GALV.		1
16	98174400	ELBOW, STREET, 1/2", GALV.		1
15	98840237	VALVE, BALL, 1/4" NPTF x 1/4" NPTM		1
14	98840228	VALVE, RELIEF, 1/2", 50 PSI		1
13	98751007	FITTING, MULTIPORT, 3/4X1/2X1/2X1/2X1/2X1/4		1
12	98604406	PIPE, PLUG, IRON, SQUARE HEAD, 1/2		3
11	98543225	NIPPLE, 1/4X2-1/2, GALVANIZED STEEL		1
10	98543223	NIPPLE, 1/2X1-1/2, GALVANIZED STEEL		1
9	98543219	NIPPLE, 1/2X5, GALVANIZED STEEL		1
8	94617015	PLATE		1
7	94616999	ADHESIVE, BACKING PAD		1
6	77037022	BASIC TRIM, DELUGE		1
5		TRIM, SUB-ASSY, DRAIN		1
4	SEE PART NUMBER TABLE	PLUG (DRAIN)	SEE NOTES FOR QTY.	A/R
3		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				

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DO NOT SCALE DRAWING. REMOVE BURRS, BREAK SHARP EDGES

TOLERANCE UNLESS OTHERWISE SPECIFIED

ANGLE ± 1/2°
 MACH. FINISH 63 ✓

FRACT. ± 1/32 [0.79]
 DEC. XX ± .010 [0.25]
 DEC. XXX ± .005 [0.13]

THE RELIABLE AUTOMATIC SPRINKLER CO., INC.
 LIBERTY, S.C.

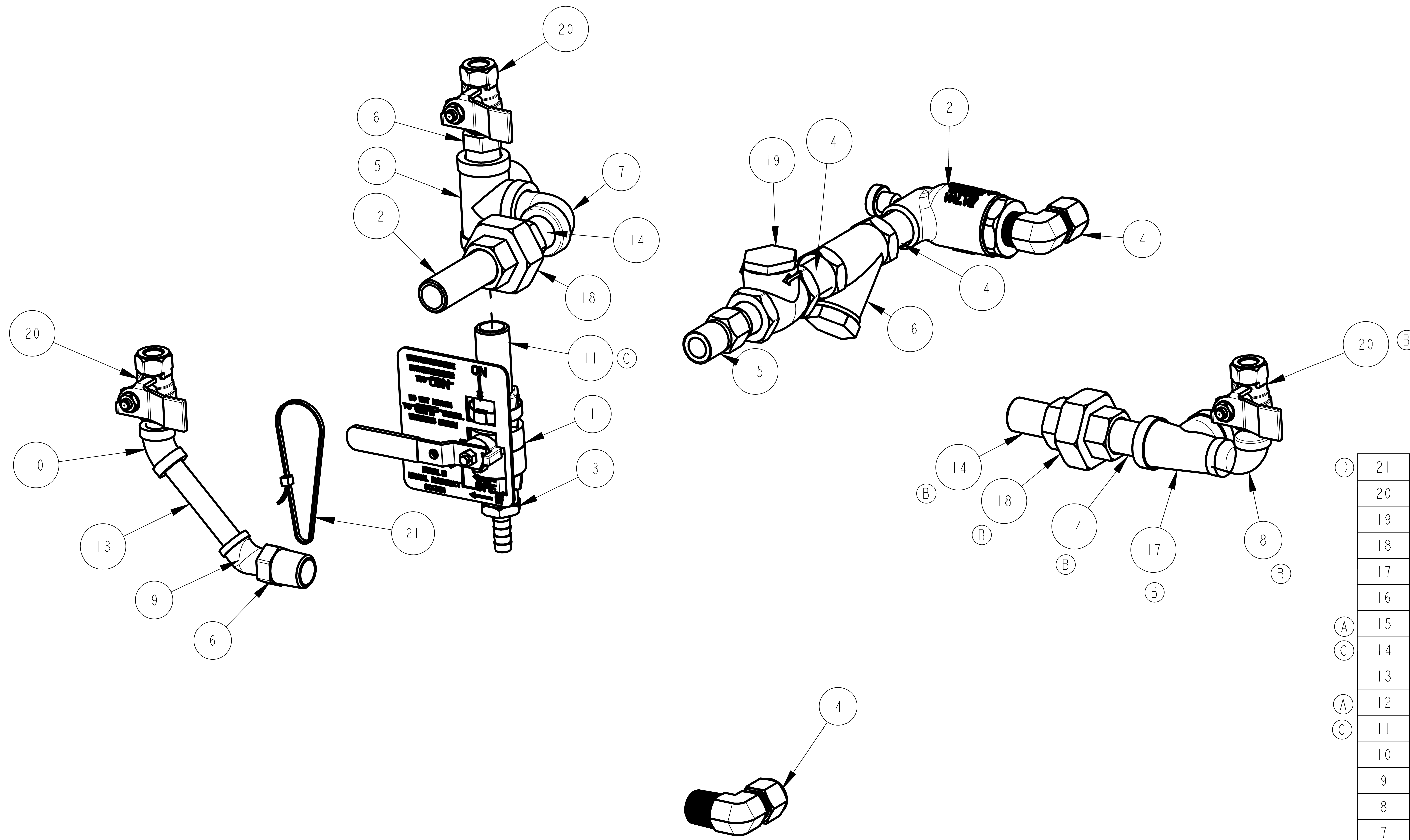
PART NO: 6507041470 DWG.SIZE: C

PART: ASSEMBLY, TRIM, DELUGE, DRY PILOT

PRODUCT: MODEL DDV, DIAPHRAGM VALVE TRIM

FILE NO: 6507041470 ENG: DD DRW BY: JB DATE: 01/17/17 SHEET 2 of 2

REVISIONS			
LTR	DESCRIPTION	DATE	DRAWN BY
~	RELEASE FOR PROD. ERN #12901	08/25/17	JB
A	ECN #15043	12/13/17	JB
B	ECN #15643	06/07/18	JB
C	ECN #24679	10/25/21	MK
D	ECN #26461	07/06/22	FP

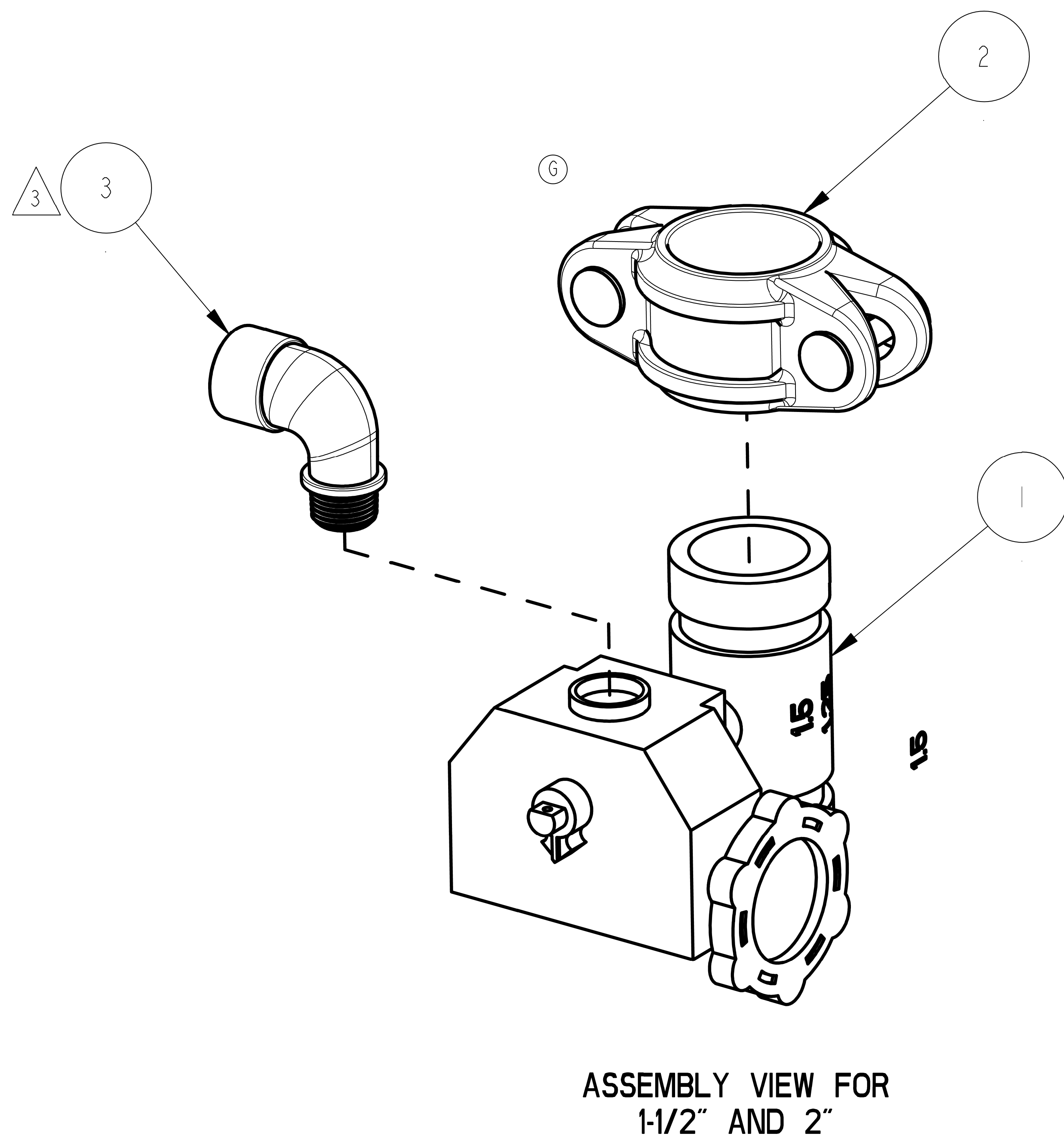


21	89141112	TIE, RETAINING		9
20	98840237	VALVE, BALL, 1/4" NPTF x 1/4" NPTM		3
19	98840181	HORIZ. SWING CHECK VALVE, 1/2" NPT		1
18	98815200	UNION, 1/2, IRON, G.J., GALV.		2
17	98761649	TEE, 1/2X1/4X1/2, GALVANIZED		1
16	98727615	STRAINER, TRIM		1
15	98580015	ORIFICE, RESTRICTING, 1/2 NPT, .125 ORIF.		1
14	98543223	NIPPLE, 1/2X1-1/2, GALVANIZED STEEL		5
13	98543220	NIPPLE, 1/4X3, GALVANIZED STEEL		1
12	98543210	NIPPLE, 1/2X2-1/2, GALVANIZED STEEL		1
11	98543209	NIPPLE, 1/2X2, GALVANIZED STEEL		1
10	98174420	ELBOW, 45°, 1/4", GALV.		1
9	98174419	ELBOW, 1/4, 45°, STREET		1
8	98174408	ELBOW, STREET, 1/4", GALV.		1
7	98174400	ELBOW, STREET, 1/2", GALV.		1
6	98048000	BUSHING, REDUCER, 1/2X1/4, GALVANIZED		2
5	96626902	TEE, SIDE OUTLET, 1/2", 90°, GALV.		1
4	92606707	ADAPTER, ELBOW, 90°, 1/2 OD TUBE, 1/2 NPT, BRASS		2
3	92056810	CONNECTOR, 3/8" ID TUBE x 1/2" NPT		1
2	78653200	VALVE, CHECK, VELOCITY 1/2 NPT, MODEL A, BRASS		1
1	78653000	ASSEMBLY, MANUAL EMERGENCY STATION		1

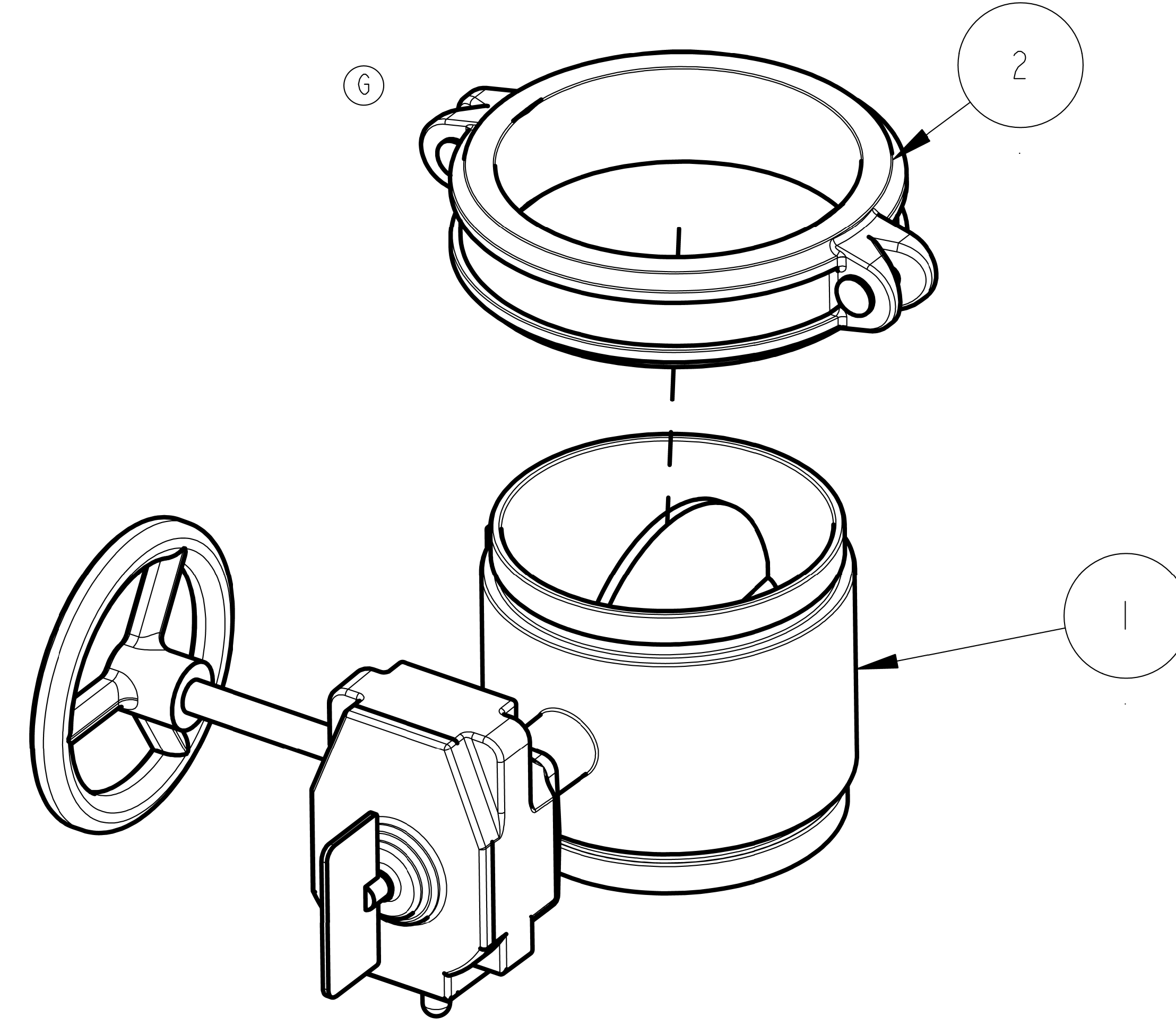
ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.
BILL OF MATERIALS				
MTL. N/A		THE RELIABLE AUTOMATIC SPRINKLER CO., INC. LIBERTY, S.C.		
FINISH:		REV. VER.	PART NO: 77037022 DWG.SI: C	
DO NOT SCALE DRAWING REMOVE BURRS, BREAK SHARP EDGES TOLERANCE UNLESS OTHERWISE SPECIFIED:		PART: BASIC TRIM, DELUGE		
ANGLE ± 1/2 63/		PRODUCT: MODEL DDV DIAPHRAGM TRIM		
MACH. FINISH		FRACT. ± 1/32 [0.79]	FILE NO: 77037022	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: 02/07/17	C'K'D:
			SHEET 1 of 1	

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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"

(E)(F)(G)

		P/N TABLE AND BOM									
ITEM NO.	DESCRIPTION	QTY	1-1/2" (40MM) P/N 7700030A	2" (100MM) P/N 77000301	2-1/2" (100MM) P/N 77000302	3" (100MM) P/N 77000303	4" (100MM) P/N 77000304	6" (150MM) P/N 77000306	8" (200MM) P/N 77000308	76MM P/N 77000305	165MM 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	
2	BUTTERFLY VALVE, 165MM	1									7U99002806
	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		
3	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:

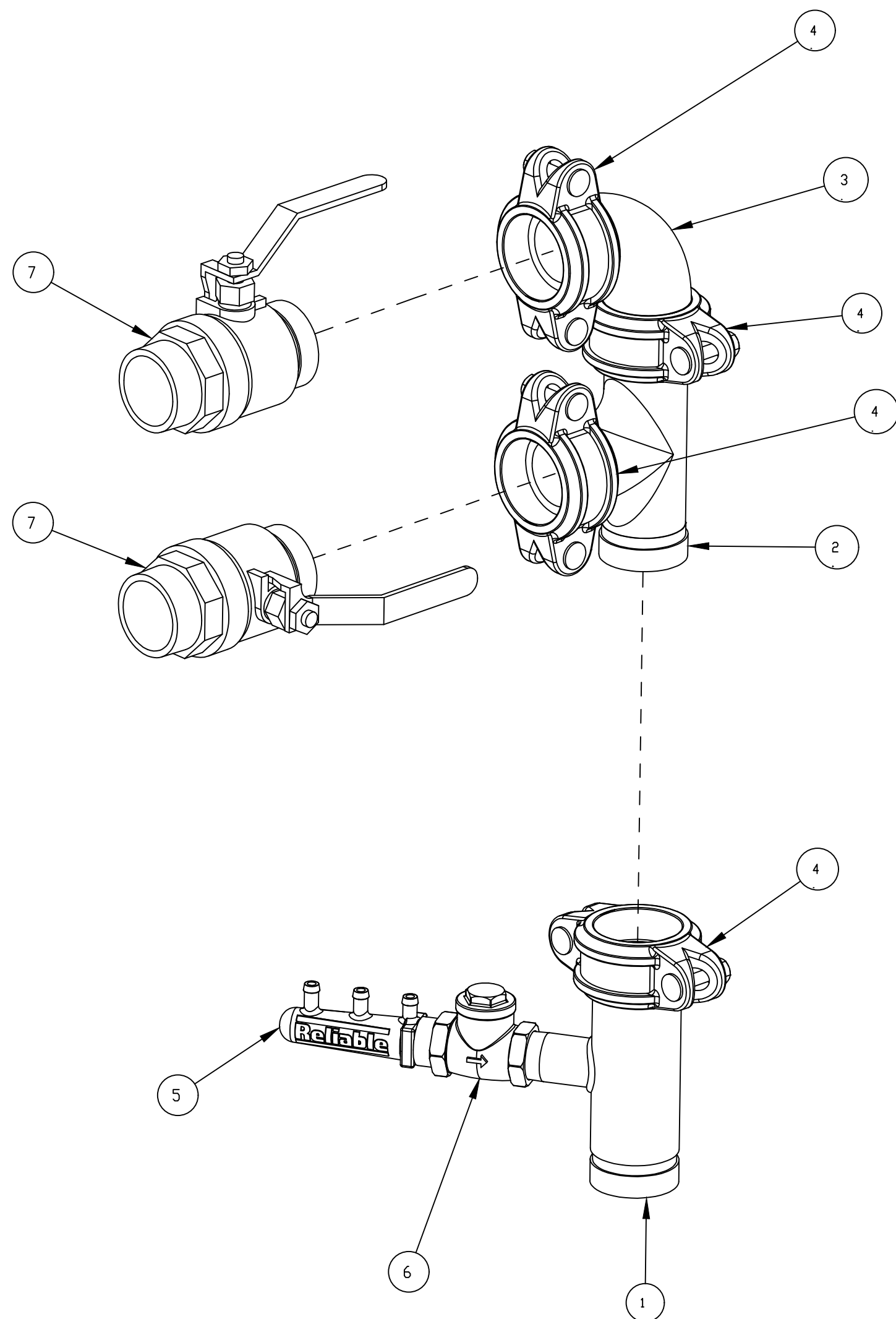
- 2" - P/N 7M99004569
- 2-1/2" - P/N 6215051000
- 3" - P/N 6215051200
- 4" - P/N 6215051600
- 6" - P/N 6215052400
- 8" - P/N 6215053200

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

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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 P/N 77037002	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	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				

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.

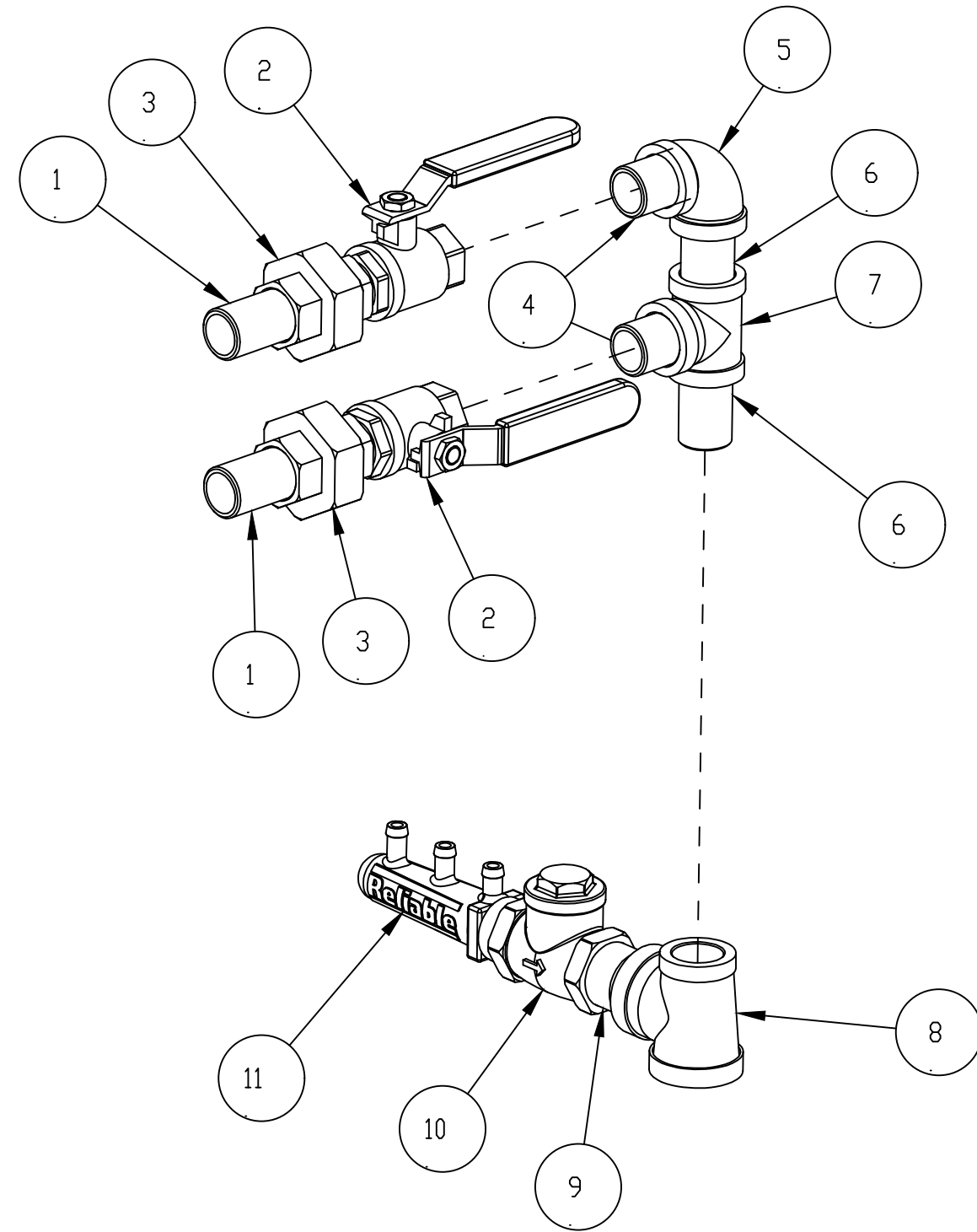
PART NO: SEE TABLE DWG. SIZE: C

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	

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

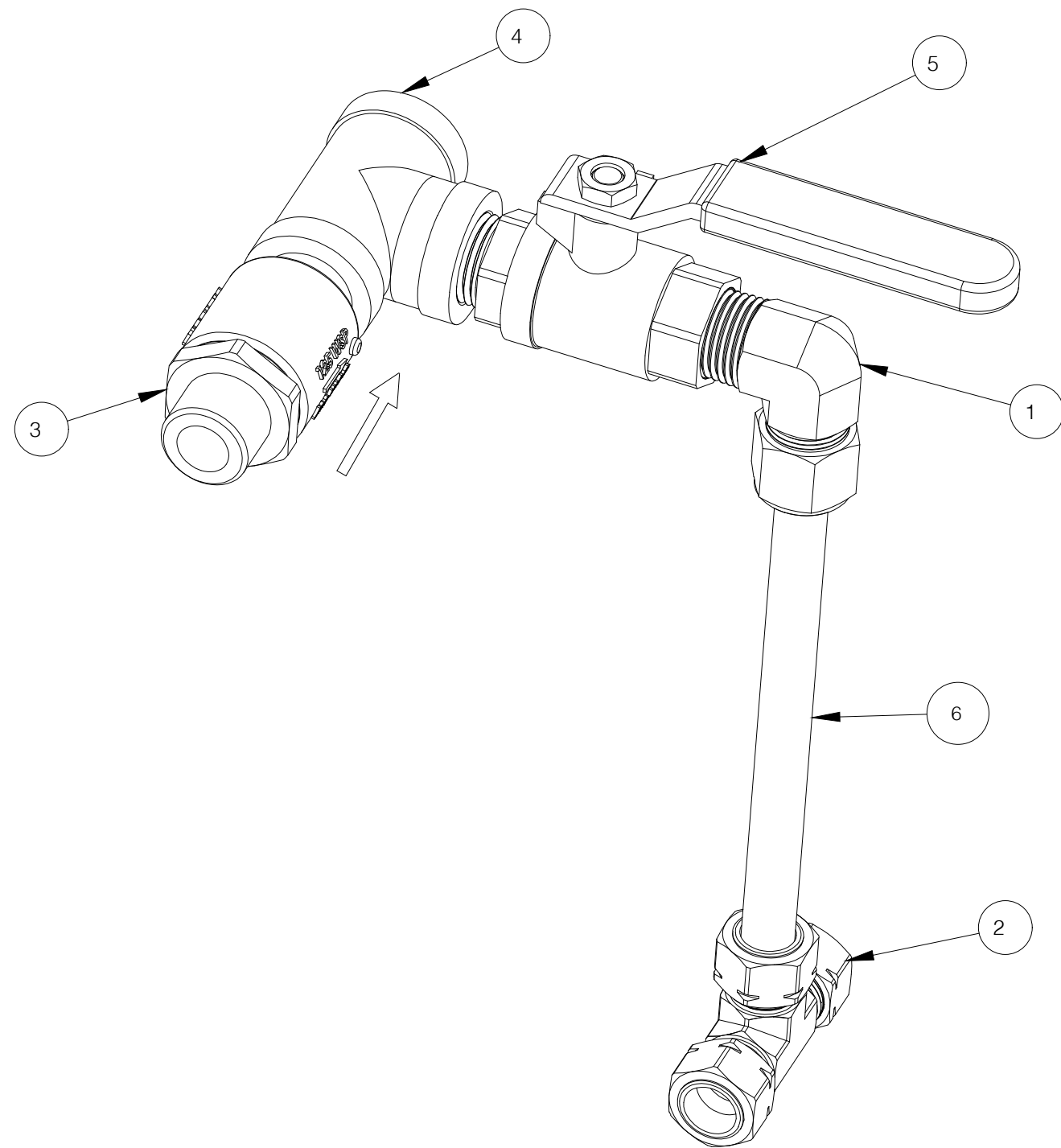
11	91004298	MANIFOLD, DRAIN, BARBED	1	1
10	98840145	VALVE, CHECK, 1"	1	1
9	98543213	NIPPLE, STEEL, GALV., 1" X 1-1/2"	1	1
8	96606630	TEE, GLVN., 1-1/4" X 1-1/4" X 1"	—	1
	96606602	TEE, GLVN., 3/4" X 1" X 1"	1	—
7	96606634	TEE, GLVN., 1-1/4" X 1-1/4" X 1-1/4"	—	1
	96606601	TEE, GLVN., 3/4"	1	—
6	98543296	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	—
X	77037004	TRIM, DRAIN SUB-ASSY, 2-1/2" - 3"	—	X
X	77037003	TRIM, DRAIN SUB-ASSY, 1-1/2" - 2"	—	X

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	

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ALARM TEST CONNECTION
DDV DELUGE (NON-PRESSURE REGULATING)

6	98768010	COPPER TUBE, 1/2"	18 IN	A/R
5	9884011A	VALVE, BALL, 1/2 NPTF X 1/2 NPTM		1
4	98761651	TEE, 1/2X1/2X1/2, GALVANIZED		1
3	96816906	VALVE, CHECK, MALE 1/2, MALE 1/2		1
2	96606705	ADAPTER, TEE, 1/2" O.D. TUBE		1
1	92606707	ADAPTER, ELBOW, 90°, 1/2 OD TUBE, 1/2 NPT, BRASS		1
ITEM NO.	PART NO.	DESCRIPTION	REMARKS	QTY.
BILL OF MATERIALS				