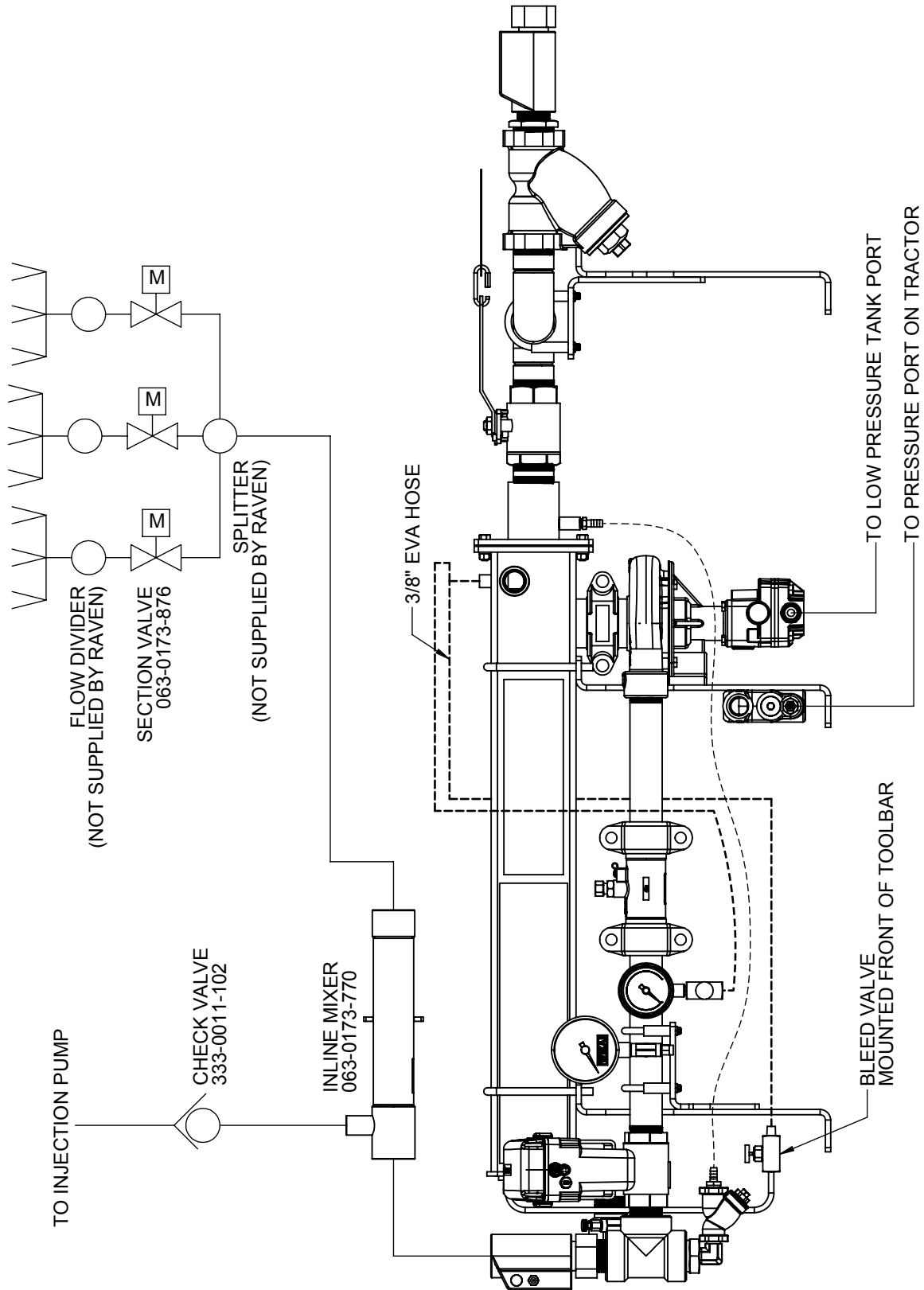


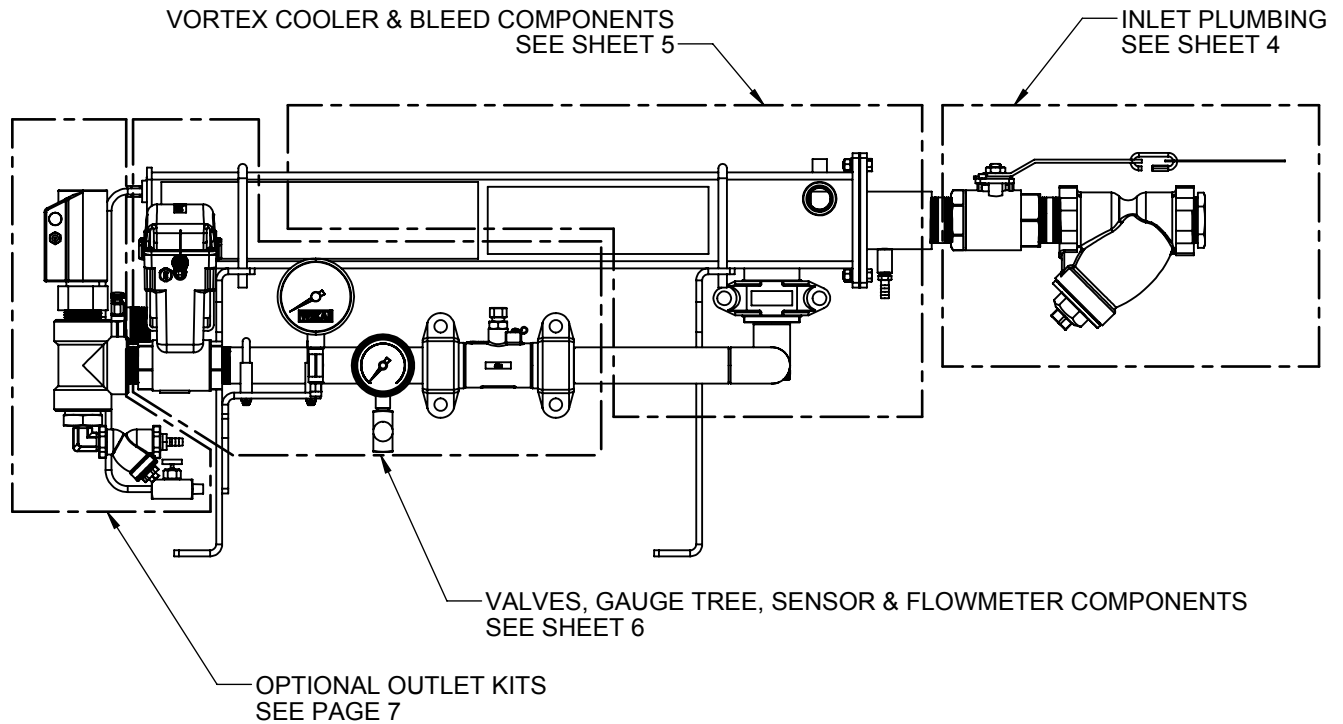
ACCUFLOW VORTEX AND HP+ SYSTEM DIAGRAM

REF PRODUCT SPECIFICATIONS 003-0159-293, 003-0159-294



DATE	ECO	REV	DRAWING NO.
11/6/17	30345	B	054-1201-001

ACCUFLOW VORTEX KIT OPTIONS



*117-0171-612 KIT SHOWN ABOVE

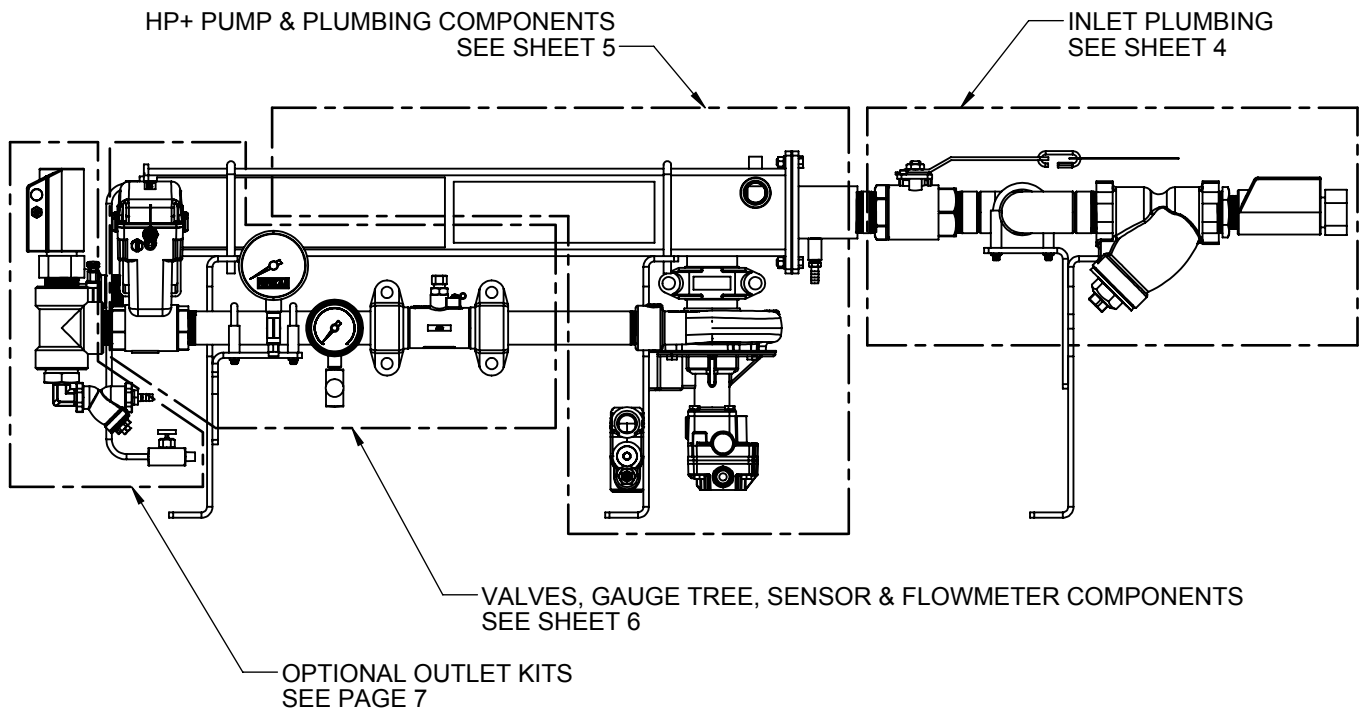
ASSEMBLED KITS:

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
117-0171-573	VORTEX FAST VALVE, DUAL INLET
117-0171-574	VORTEX DUAL VALVE, DUAL INLET
117-0171-612	VORTEX FAST VALVE, SINGLE INLET
117-0171-613	VORTEX DUAL VALVE, SINGLE INLET
117-0171-687	VORTEX FAST VALVE, DUAL INLET, REVERSE MANIFOLD
117-0171-688	VORTEX DUAL VALVE, DUAL INLET, REVERSE MANIFOLD

UNASSEMBLED KITS:

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
117-0171-622	VORTEX FAST VALVE, DUAL INLET
117-0171-623	VORTEX DUAL VALVE, DUAL INLET
117-0171-625	VORTEX FAST VALVE, DUAL INLET, REVERSE MANIFOLD
117-0171-626	VORTEX DUAL VALVE, DUAL INLET, REVERSE MANIFOLD
117-0171-627	VORTEX FAST VALVE, SINGLE INLET
117-0171-628	VORTEX DUAL VALVE, SINGLE INLET
117-0171-575	UPGRADE KIT, HP+ PUMP
117-0171-501	ORIFICE KIT, NH3
117-0171-697	REFRIGERANT LINE STRAINER KIT
117-0171-633	MULTI SECTION CHECK VALVE KIT

ACCUFLOW HP+ KIT OPTIONS



*117-0171-571 KIT SHOWN ABOVE

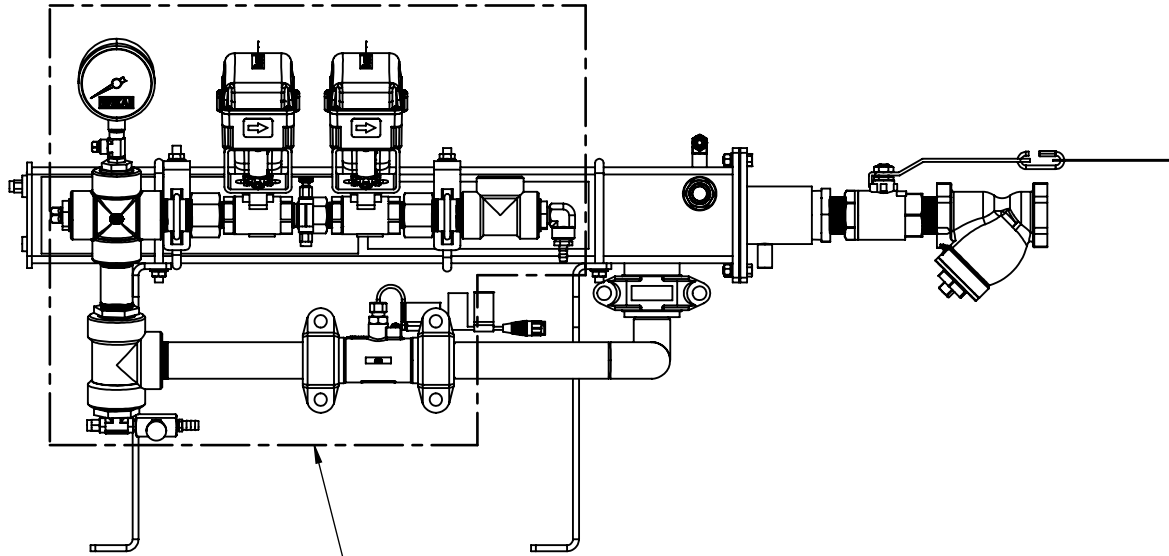
ASSEMBLED KITS:

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
117-0171-571	HP+, FAST VALVE, DUAL INLET
117-0171-695	HP+, FAST VALVE, DUAL INLET, REVERSE MANIFOLD

UNASSEMBLED KITS:

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
117-0171-621	HP+, FAST VALVE, DUAL INLET
117-0171-624	HP+, FAST VALVE, DUAL INLET, REVERSE MANIFOLD
117-0171-501	ORIFICE KIT, NH3
117-0171-697	REFRIGERANT LINE STRAINER KIT
117-0171-633	MULTI SECTION CHECK VALVE KIT

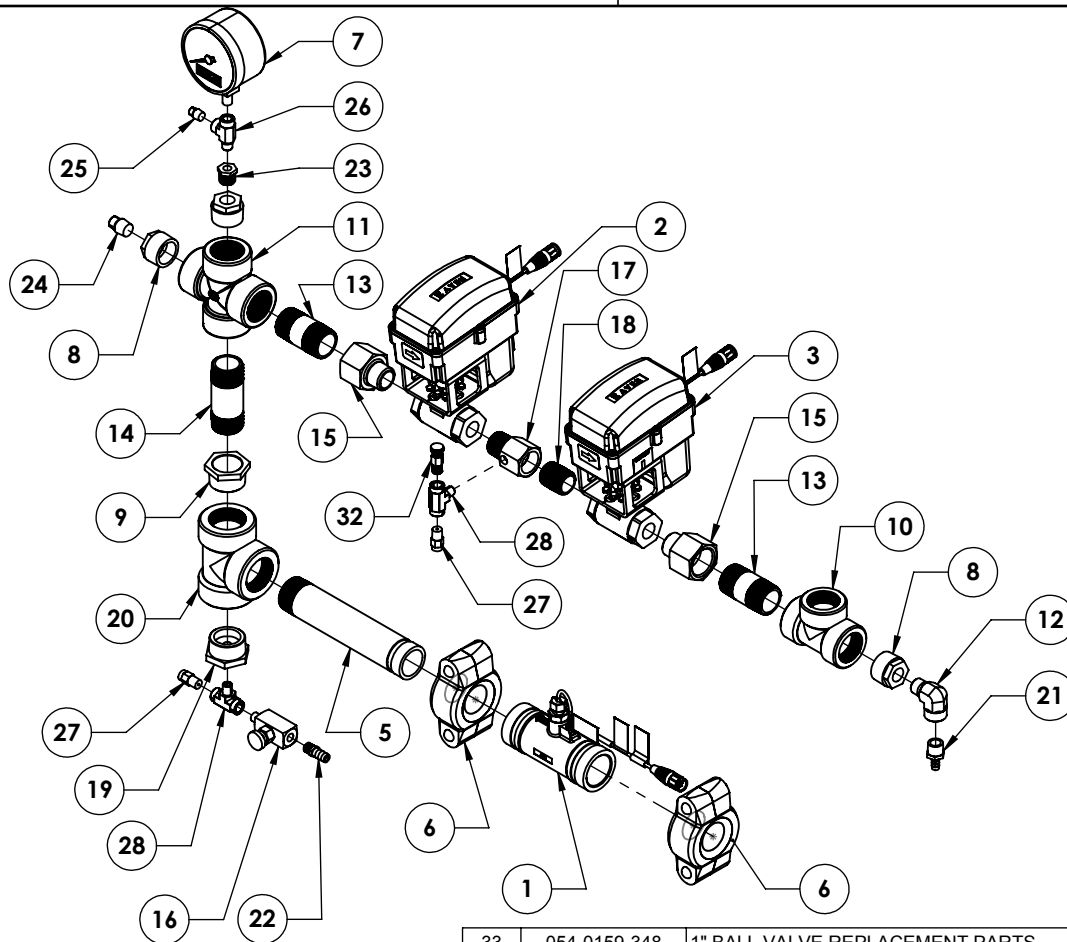
ACCUFLOW VORTEX, 1" VALVE KIT OPTIONS



VALVES, GAUGE TREE, SENSOR & FLOWMETER COMPONENTS
SEE SHEET 5

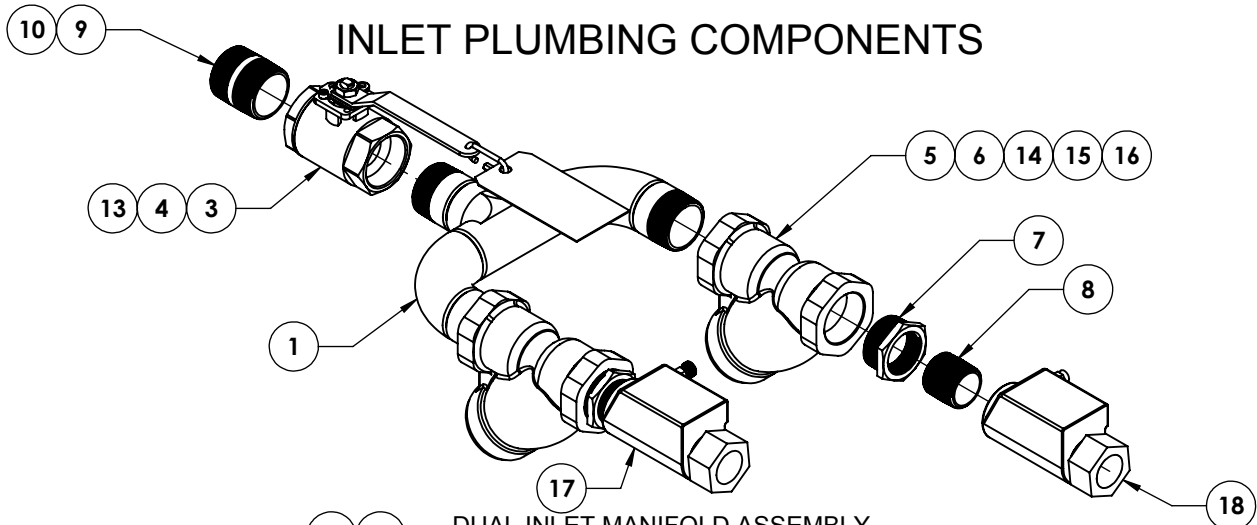
AVAILABLE KITS:

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
117-0171-711	KIT, NH3 VORTEX, 1" DUAL VALVE
117-0171-712	KIT, NH3 VORTEX, 1" FAST VALVE
117-0171-501	ORIFICE KIT
117-0171-697	REFRIGERANT LINE STRAINER KIT
117-0171-713	VORTEX BRACKET AND PIPE ADAPTER KIT
117-0171-705	KIT, ON/OFF VALVE, 1" NPT WITH PIPE ADAPTERS
117-0171-706	KIT, CONTROL VALVE, 1" NPT WITH PIPE ADAPTERS
117-0171-707	KIT, FAST VALVE, 1" NPT WITH PIPE ADAPTERS

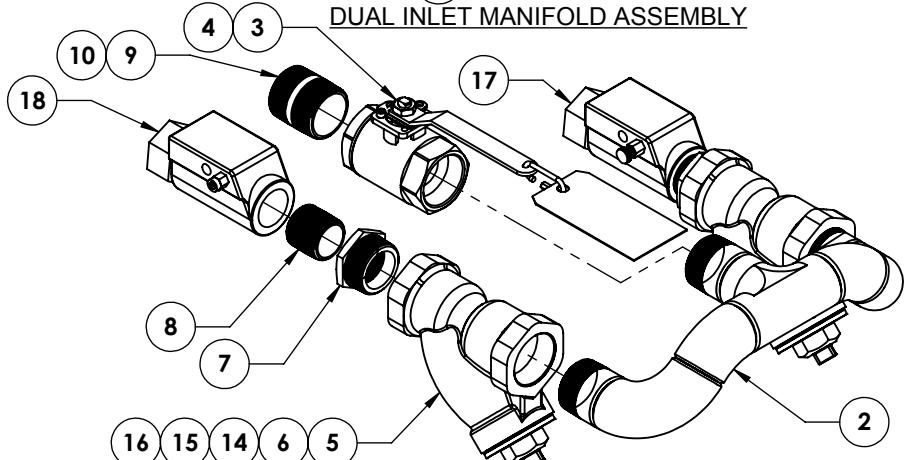


33	054-0159-348	1" BALL VALVE REPLACEMENT PARTS
32	334-0001-012	BLEED VALVE
31	333-0002-905	FITTING, COUPLING, REDUCING 1/2" X 1/4" NPT, 304 SS CLASS 3000
30	312-1001-169	NUT, FLANGED LOCK 5/16"-18 UNC ZINC PLATED
29	333-0002-214	FITTING, ADAPTER, 1-1/2" NPT WITH 1/4" NPT RELIEF PORT
28	333-0004-039	FITTING, MALE BRANCH PIPE TEE, 1/4-18 NPTF
27	334-0002-005	VALVE, HYDROSTATIC RELIEF
26	333-0004-062	FITTING, MALE RUN PIPE TEE, 1/4" NPT
25	333-0009-082	FITTING, PIPE PLUG, SQUARE HEAD, 1/4" NPT, GALVANIZED
24	333-0009-004	FITTING, PIPE PLUG STEEL, SQUARE HEAD
23	333-0003-005	FITTING, PIPE BUSHING, 1/2" NPT X 1/4" NPT
22	333-0002-004	FITTING, HOSE BARB, 1/4" NPT x 3/8" I.D. HOSE
21	333-0002-006	FITTING, HOSE BARB
20	333-0004-063	FITTING, TEE, 1-1/2" NPT, CLASS 2000
19	333-0003-030	FITTING, PIPE BUSHING, 1-1/2" NPT x 1/4" NPT
18	333-0008-503	FITTING, NIPPLE, 1" NPT X CLOSE, SCH 80, SEAMLESS
17	333-0002-342	FITTING, ADAPTER, 1" NPT WITH 1/4" NPT RELIEF PORT
16	334-0001-064	NEEDLE VALVE, 1/4"NPT MALE/FEMALE
15	333-0002-343	FITTING, PIPE ADAPTER, 1" NPTM X 1 1/4" NPTF
14	333-0008-041	FITTINGS, PIPE NIPPLES, BLACK IRON SCHEDULE 80, 1-1/4" NPT X 4" L
13	333-0008-040	FITTINGS, PIPE NIPPLES, BLACK IRON SCHEDULE 80, 1-1/4" NPT X 3" L
12	333-0005-076	FITTING, 90 DEG. STREET ELBOW, 1/2" NPT
11	333-0004-065	FITTING, PIPE CROSS, 1-1/4" NPT, FORGED STEEL, 2000#
10	333-0004-064	FITTING, TEE, 1-1/4" NPT, CLASS 2000
9	333-0003-019	FITTING, PIPE BUSHING, 1-1/2" NPT x 1-1/4" NPT, FORGED STEEL
8	333-0003-017	FITTING, PIPE BUSHING, 1-1/4" NPT x 1/2" NPT, FORGED STEEL
7	417-0001-034	GAUGE, PRESSURE, 0-400 PSI
6	333-0006-032	COUPLING, 2" X 1.5", GROOVED, EPDM GASKET
5	019-0159-591	MODIFICATION, GRUV-LOK, PIPE NIPPLE
4	063-0173-878	VALVE, FAST, 1" NPT, NH3 **NOT SHOWN**
3	063-0173-876	VALVE, ON/OFF, 1" NPT, NH3
2	063-0173-877	VALVE, CONTROL, 1" NPT, NH3
1	063-0173-869	FLOWMETER, RFM 60SG, HP
ITM	PART NUMBER	DESCRIPTION

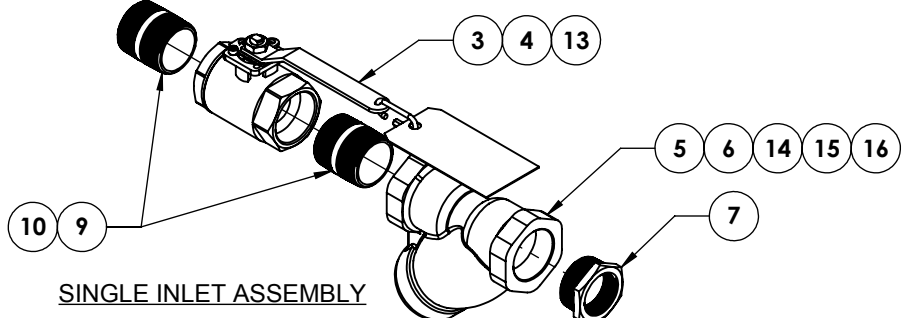
INLET PLUMBING COMPONENTS



DUAL INLET MANIFOLD ASSEMBLY



DUAL INLET REVERSED MANIFOLD ASSEMBLY

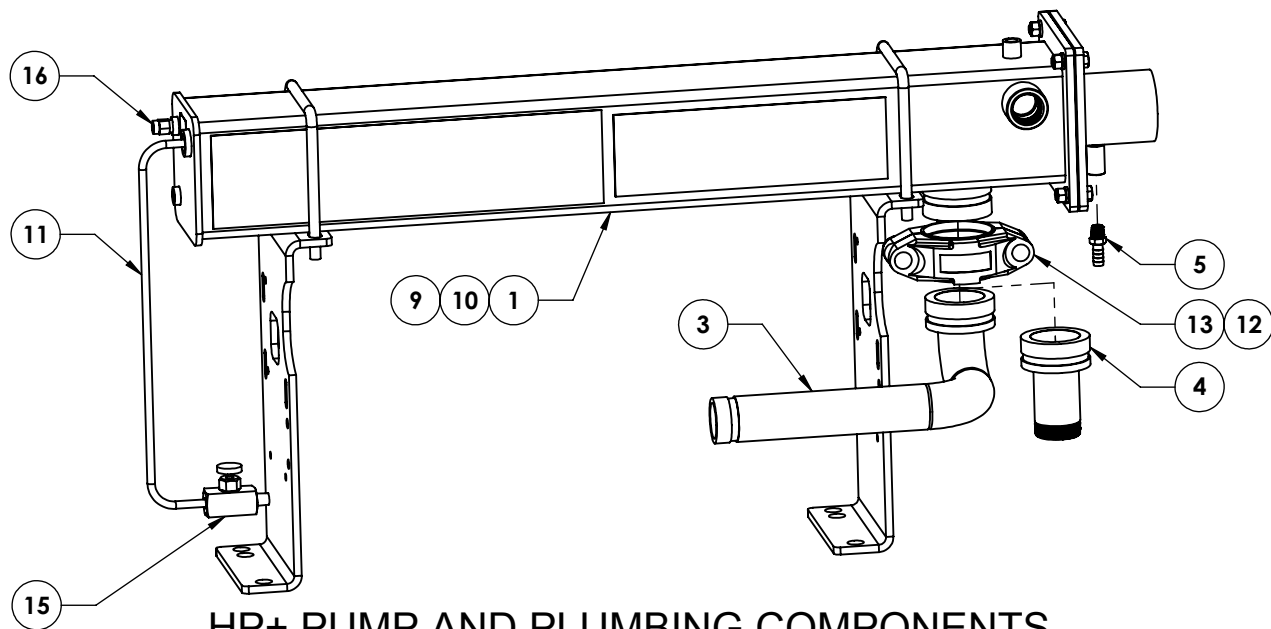


SINGLE INLET ASSEMBLY

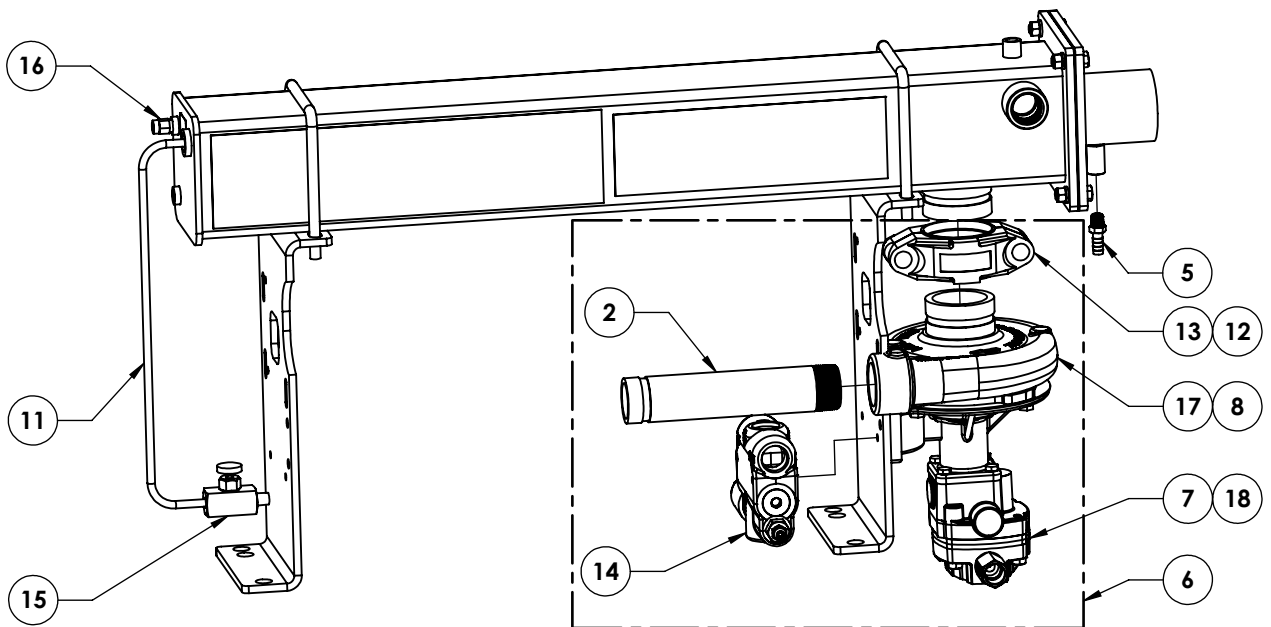
18	063-0173-691	BACK CHECK VALVE WITH HYDROSTAT	
17	063-0173-692	BACK CHECK VALVE WITH BLEED VALVE	
16	418-0000-001	STRAINER MAGNET	
15	333-9000-067	FITTING, 20 MESH SCREEN, 1-1/2" Y-STRAINER	
14	333-9000-071	STRAINER SCREEN, 40 MESH	
13	321-0000-359	ROPE, BRAIDED POLY, 1/4" (INCLUDED IN KIT 117-0171-597)	
12	219-0000-154	GASKET TEFLON WASHER 1 1/2" STRAINER, NH3	
11	219-0000-161	GASKET, TEFLON WASHER, 2" STRAINER, NH3	
10	333-0008-047	FITTINGS, PIPE NIPPLES, BLACK IRON SCHEDULE 80, 1-1/2" NPT X 2" L	
9	333-0008-493	FITTING, NIPPLE, 2" NPT X CLOSE, SCH 80, SEAMLESS, MAGNI 565	
8	333-0008-491	FITTING, NIPPLE, 1-1/2" NPT X CLOSE, SCH 80, SEAMLESS, MAGNI 565	
7	333-0003-097	FITTING, REDUCING BUSHING, 2" X 1-1/2" NPT, CLASS 3000, MAGNI 565	
6	063-0173-312	ASSEMBLY, NH3 STRAINER, Y-TYPE, 1 1/2" WITH MAGNETS	
5	063-0173-655	STRAINER, Y-TYPE, 2" W/MAGNETS	
4	063-0173-933	ASSEMBLY, 1-1/2" NH3 VALVE	
3	063-0173-627	ASSEMBLY, 2" VALVE	
2	116-0159-755	WELDMENT, INLET MANIFOLD, REVERSED	
1	116-0159-742	WELDMENT, INLET MANIFOLD	

ITM	PART NUMBER	DESCRIPTION	SPECIAL NOTE
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VORTEX COOLER AND BLEED COMPONENTS

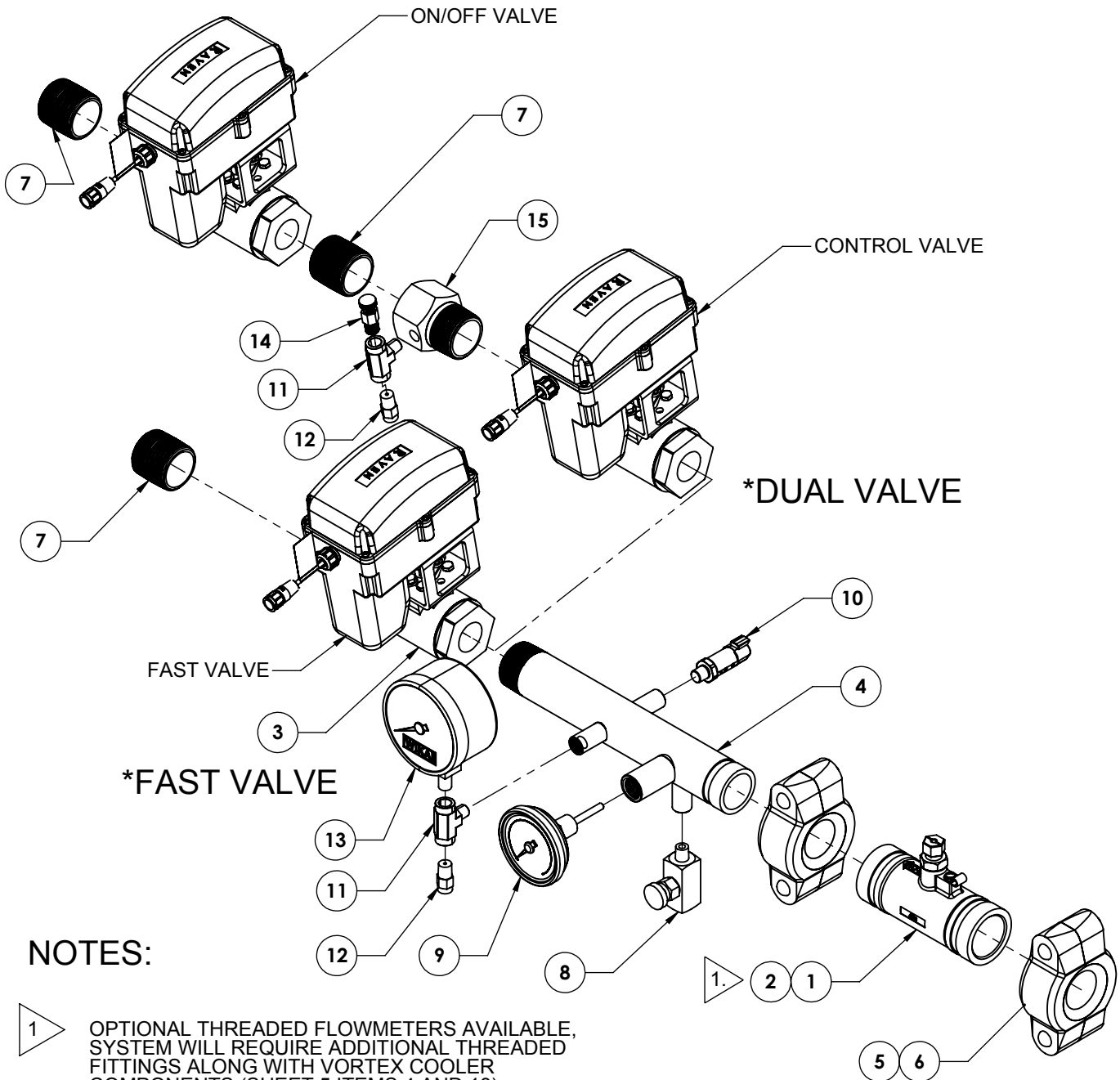


HP+ PUMP AND PLUMBING COMPONENTS



18	416-8000-005	HYDRAULIC MOTOR REPLACEMENT, NH3 HP+ PUMP (FOR 416-1001-010)	
17	416-1001-010	NH3 PUMP, HP+	
16	334-0002-005	VALVE, HYDROSTATIC RELIEF	
15	334-0001-064	NEEDLE VALVE, 1/4"NPT MALE/FEMALE	PRIMARY BLEED
14	334-0001-042	VALVE, BRAND, PULSE WIDTH MODULATION	
13	333-0006-031	COUPLING, 2-1/2", GROOVED, EPDM GASKET	
12	219-0003-266	GASKET, REPLACEMENT, 2-1/2", 7001 COUPLING	
11	214-0001-046	HOSE, NH3 1/2" x 72" BLEED CIRCUIT, HIGH PRESSURE	
10	117-0171-592	KIT, ACCUFLOW DECALS	
9	117-0171-591	KIT, ACCUFLOW, SEAL & HARDWARE	
8	117-0171-577	KIT, HP+ BOOST PUMP SEAL	
7	117-0171-576	KIT, HP+ HYDRAULIC MOTOR SEAL	
6	117-0171-575	KIT, HP+ PUMP UPGRADE	
5	117-0171-501	KIT, ORIFICE, NH3	
4	116-0159-776	WELDMENT, 2-1/2" GRUVLOK TO 1-1/2" NPT ADAPTER	OPTIONAL
3	116-0159-752	WELDMENT, OUTLET MANIFOLD	
2	019-0159-591	MODIFICATION, GRUV-LOK, PIPE NIPPLE	
1	063-0173-663	ASSEMBLY, VORTEX COOLER (BOXED)	

GAUGE TREE, SENSOR, FLOWMETER & VALVE COMPONENTS

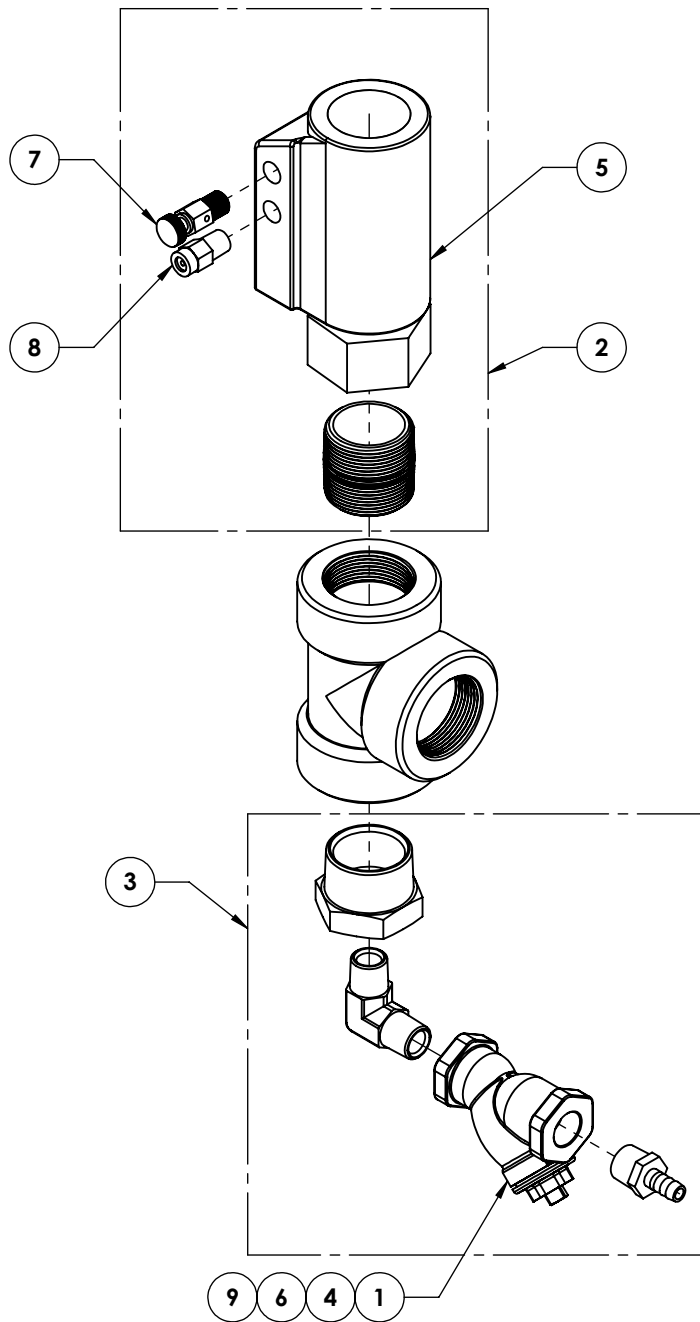


NOTES:

1. OPTIONAL THREADED FLOWMETERS AVAILABLE, SYSTEM WILL REQUIRE ADDITIONAL THREADED FITTINGS ALONG WITH VORTEX COOLER COMPONENTS (SHEET 5 ITEMS 4 AND 13)

15	333-0002-214	FITTING, ADAPTER, 1-1/2" NPT WITH 1/4" NPT RELIEF PORT	
14	334-0001-012	BLEED VALVE	
13	417-0001-034	GAUGE, PRESSURE, 0-400 PSI	
12	334-0002-005	VALVE, HYDROSTATIC RELIEF	
11	333-0004-039	FITTING, MALE BRANCH PIPE TEE, 1/4-18 NPTF	
10	422-0000-119	PRESSURE TRANSDUCER, 1-5V, 0-250 PSI, 1/4" NPT, STAINLESS STEEL	
9	417-0001-031	GAUGE, TEMPERATURE	
8	334-0001-064	NEEDLE VALVE, 1/4"NPT MALE/FEMALE	SECONDRY BLEED
7	333-0008-491	FITTING, NIPPLE, 1-1/2" NPT X CLOSE, SCH 80, SEAMLESS, MAGNI 565	
6	333-0006-032	COUPLING, 2" X 1.5", GROOVED, EPDM GASKET	
5	219-0003-267	GASKET, REPLACEMENT, 2" x 1-1/2"	
4	116-0159-743	WELDMENT, GAUGE MANIFOLD	
3	054-0159-342	1-1/2" BALL VALVE REPLACEMENT PARTS	
2	054-0159-334	FLOWMETER, RFM 15SG, REPLACEMENT PARTS	OPTIONAL
1	054-0159-144	FLOWMETER, RFM 60SG, REPLACEMENT PARTS	

OPTIONAL OUTLET KITS



9	418-0000-010	MAGNET, ROUND	
8	334-0002-005	VALVE, HYDROSTATIC RELIEF	
7	334-0001-012	BLEED VALVE	
6	333-9000-076	1/2" Y-STRAINER SCREEN, 40 MESH	
5	333-0011-103	CHECK VALVE, 1-1/2" FNPT X 1-1/2" FNPT, FULL PORT	
4	219-0000-167	GASKET, REPLACEMENT, 1/2" Y-STRAINER	
3	117-0171-697	KIT, STRAINER, REFRIGERANT LINE, NH3	
2	117-0171-633	KIT, CHECK VALVE, 1-1/2" MULTI SECTION, NH3	
1	063-0173-897	ASSEMBLY, 1/2" Y-STRAINER. W/ MAGNETS	
ITM	PART NUMBER	DESCRIPTION	SPECIAL NOTE