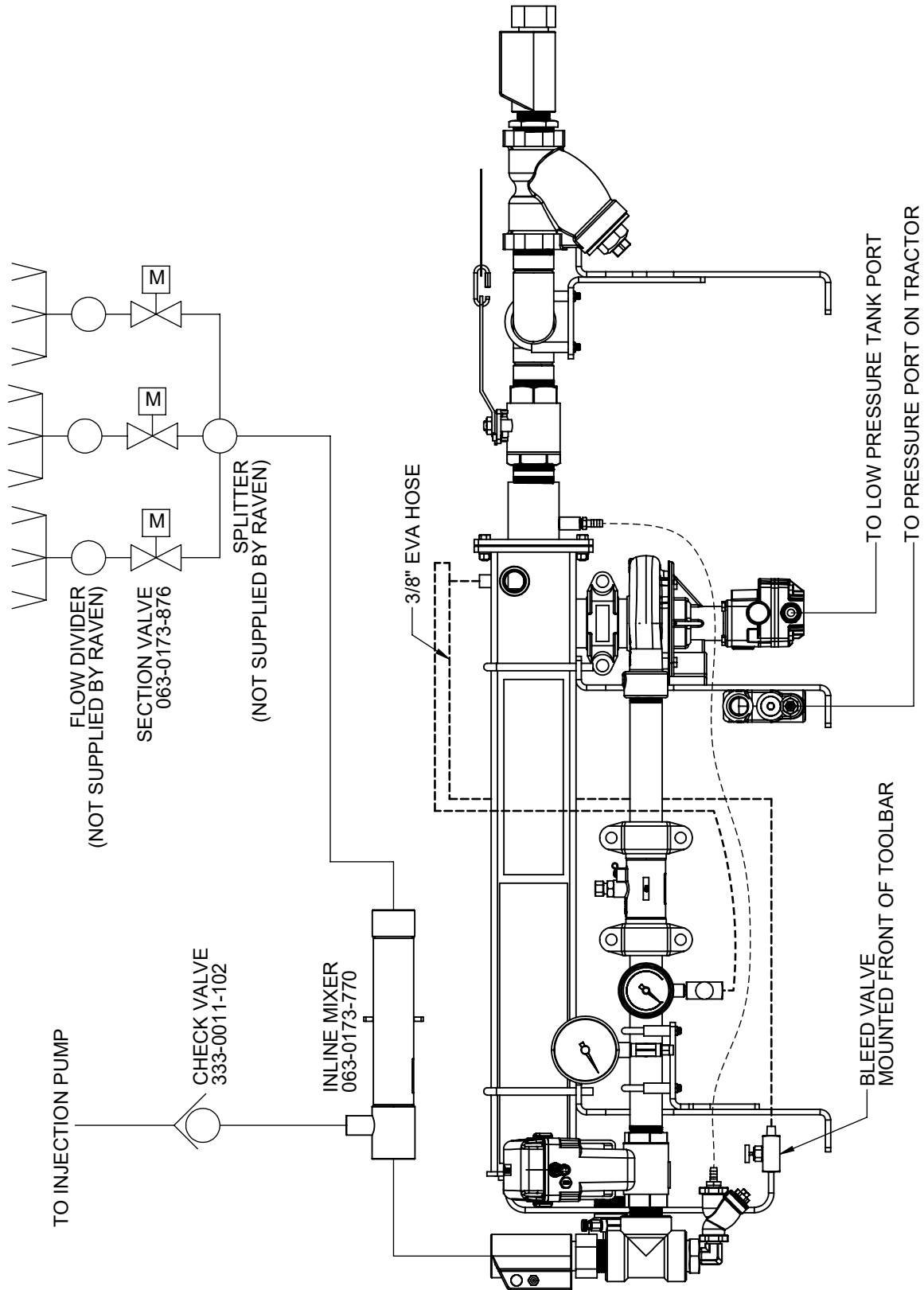


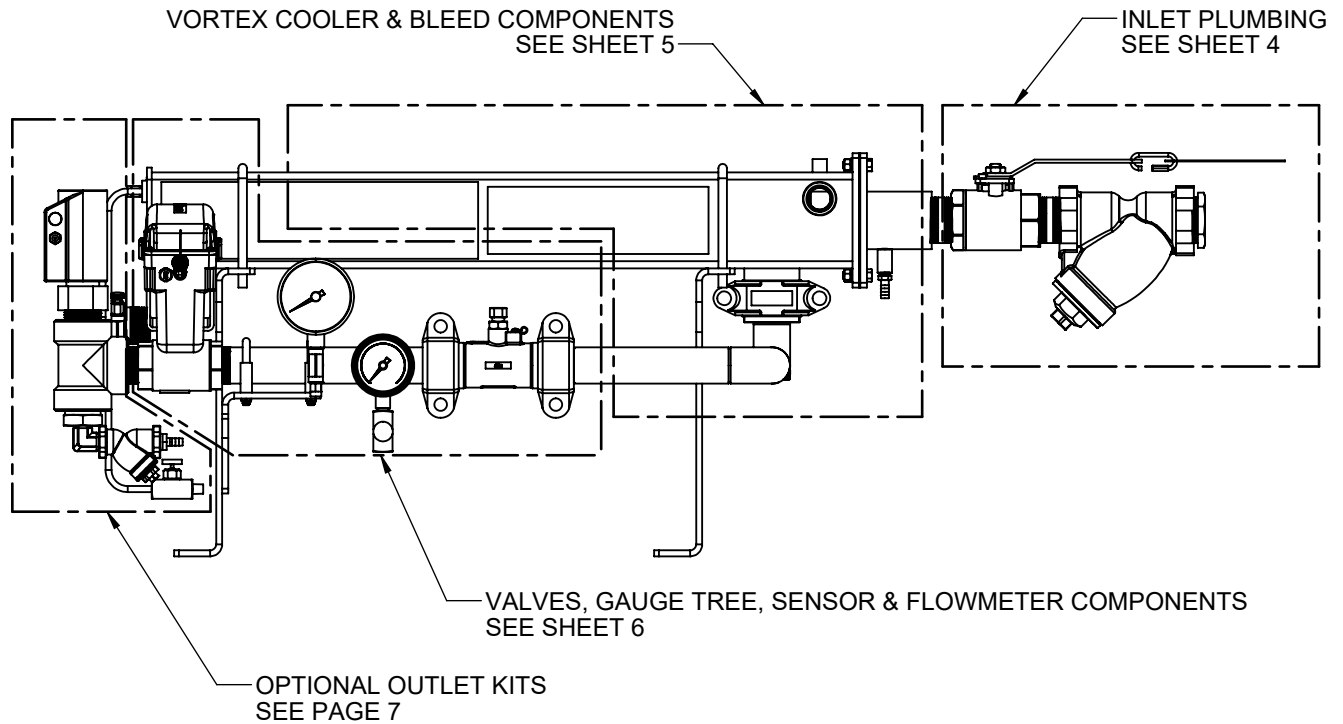
# ACCUFLOW VORTEX AND HP+ SYSTEM DIAGRAM

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

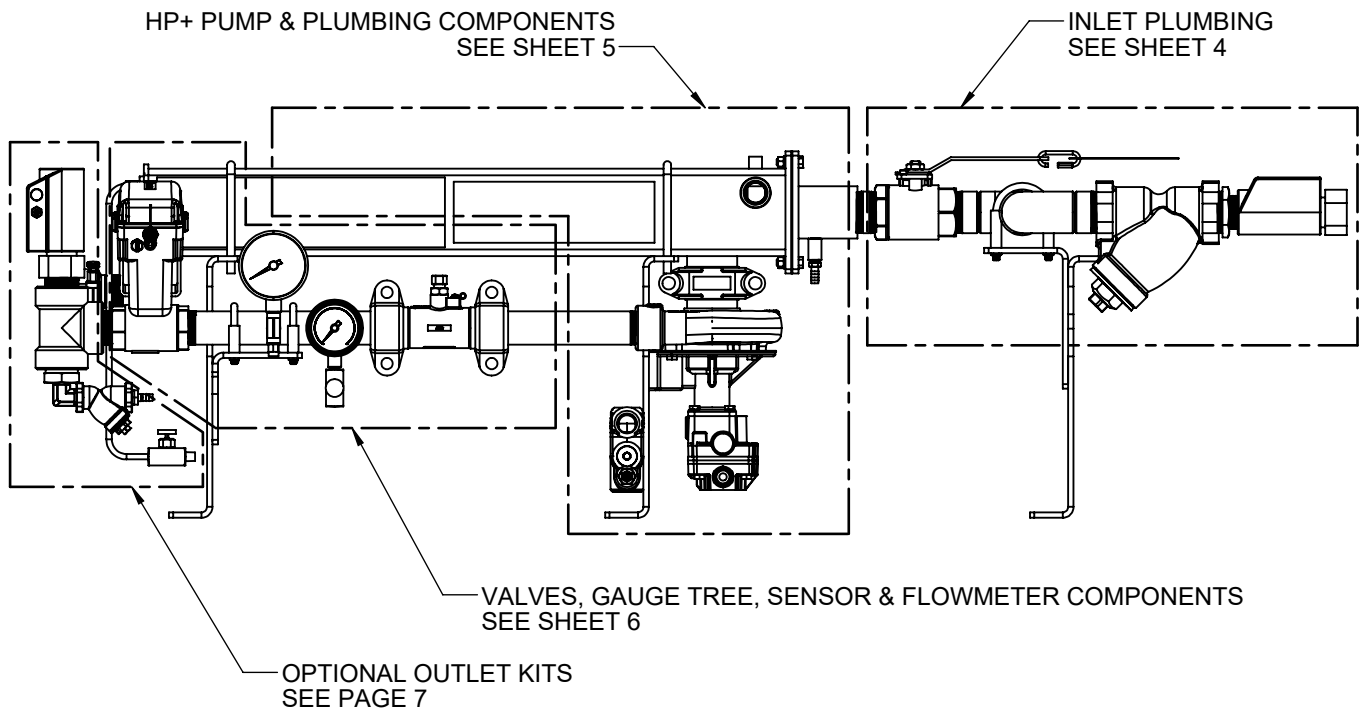
## ASSEMBLED KITS:

| <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

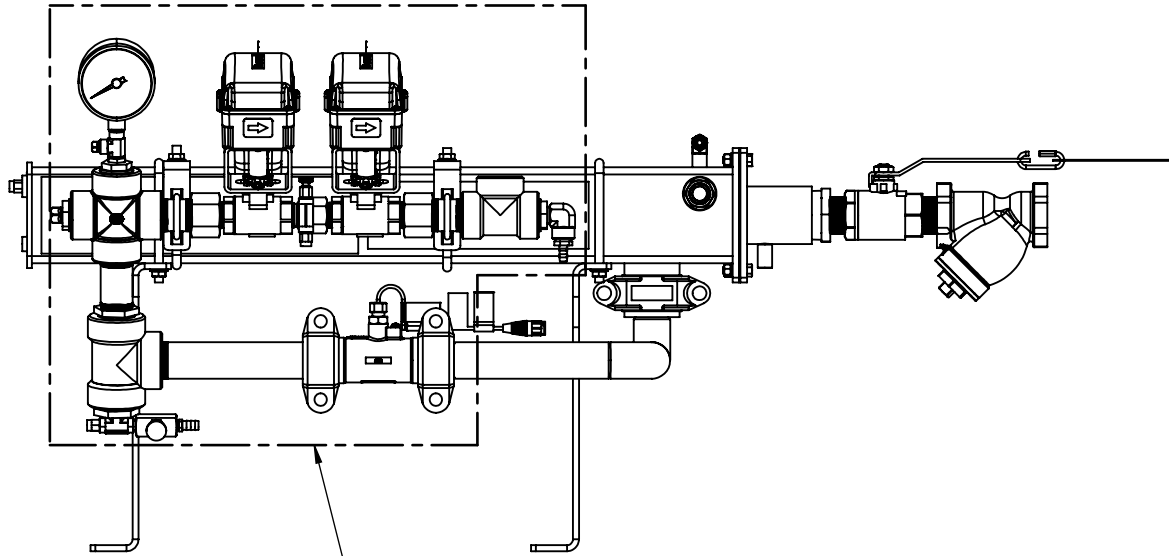
## ASSEMBLED KITS:

| <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                 |

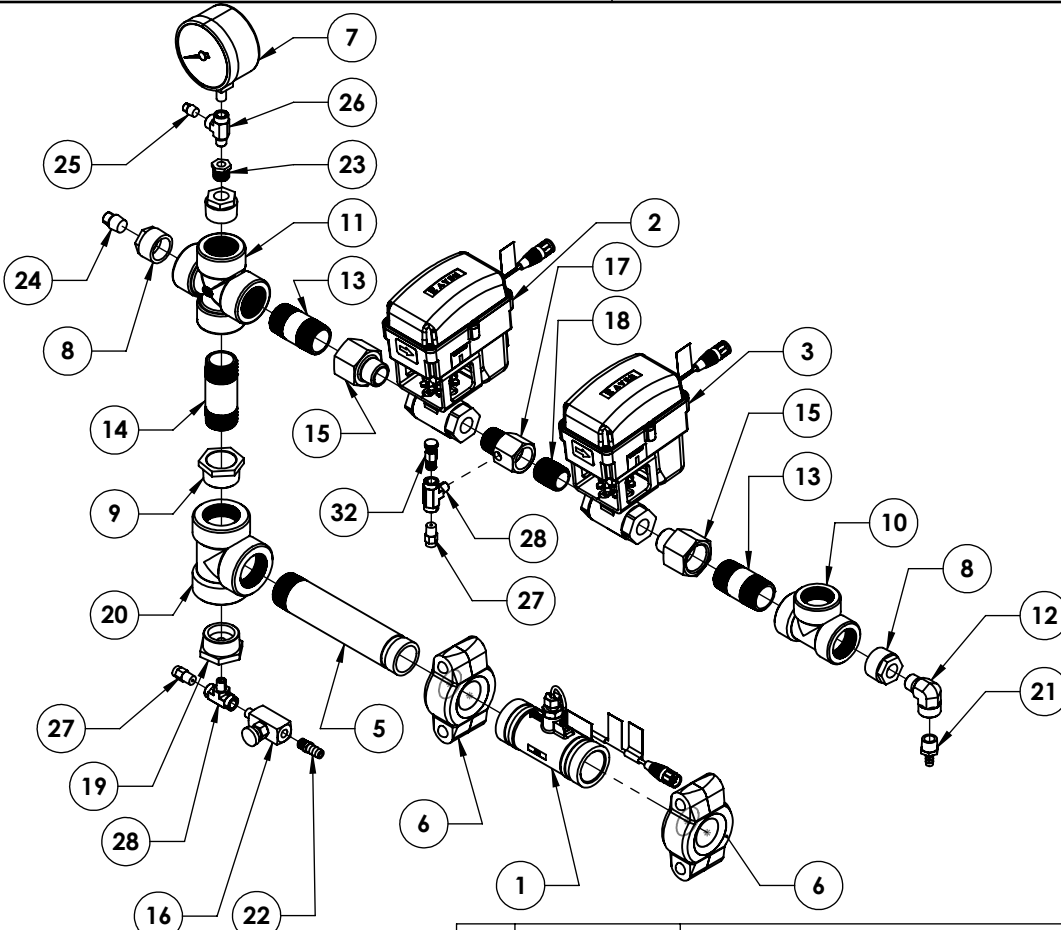
# ACCUFLOW VORTEX, 1" VALVE KIT OPTIONS



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

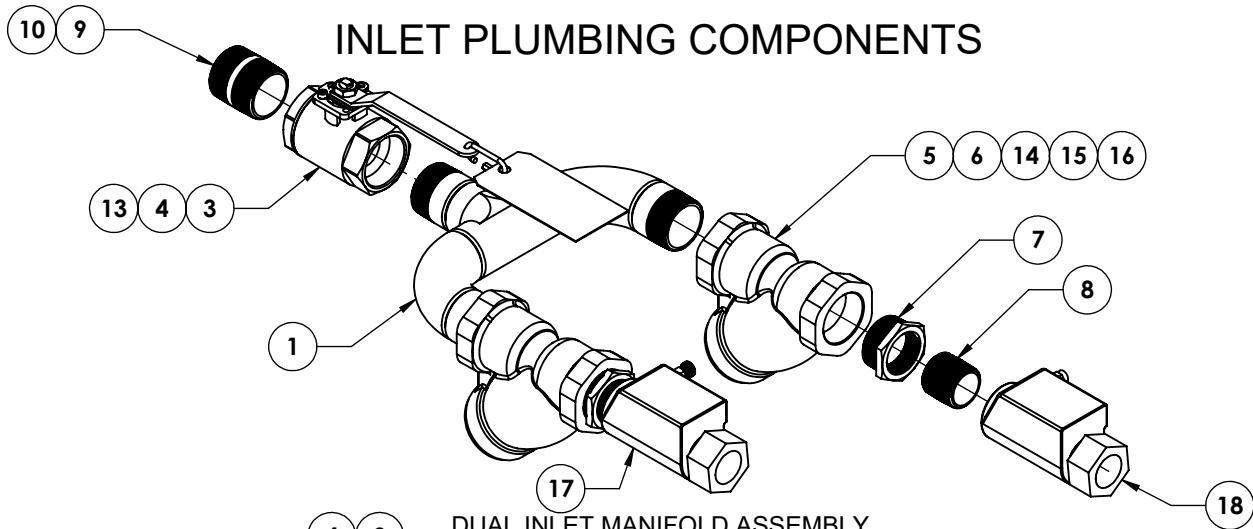
## AVAILABLE KITS:

| <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 WTH PIPE ADAPTERS   |
| 117-0171-706       | KIT, CONTROL VALVE, 1" NPT WITH PIPE ADAPTERS |
| 117-0171-707       | KIT, FAST VALVE, 1" NPT WITH PIPE ADAPTERS    |

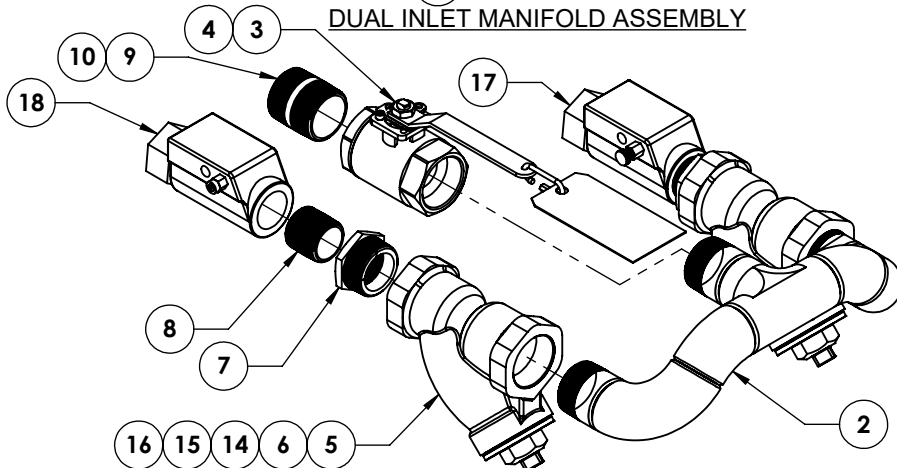


|    |              |   |
|----|--------------|---|
| 33 | 054-0159-348 | 1" BALL VALVE REPLACEMENT PARTS                                   |
| 32 | 334-0001-012 | BLEED VALVE   |
| 31 | 333-0002-905 | FITTING, COUPLING, REDUCING 1/2" X 1/4" NPT, 304 SS CLASS 3000    |
| 30 | 312-1001-169 | NUT, FLANGED 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   |

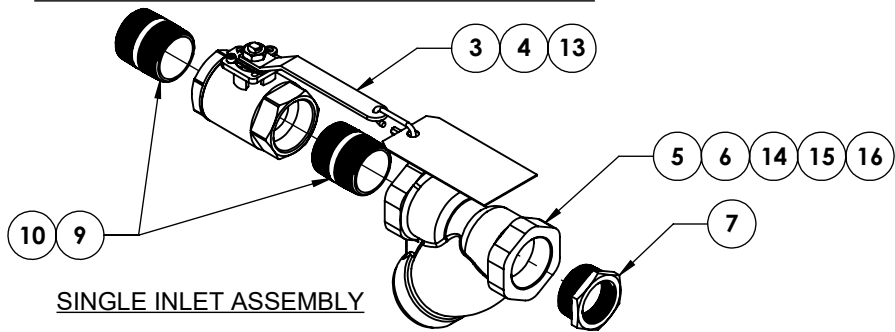
# INLET PLUMBING COMPONENTS



DUAL INLET MANIFOLD ASSEMBLY



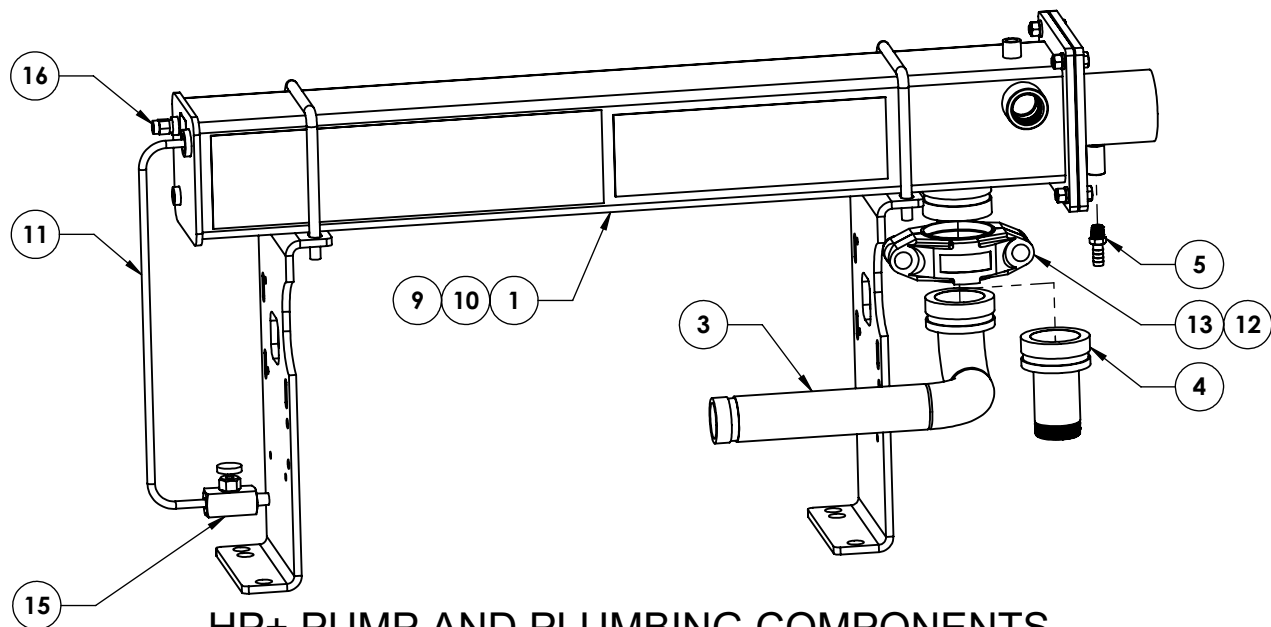
DUAL INLET REVERSED MANIFOLD ASSEMBLY



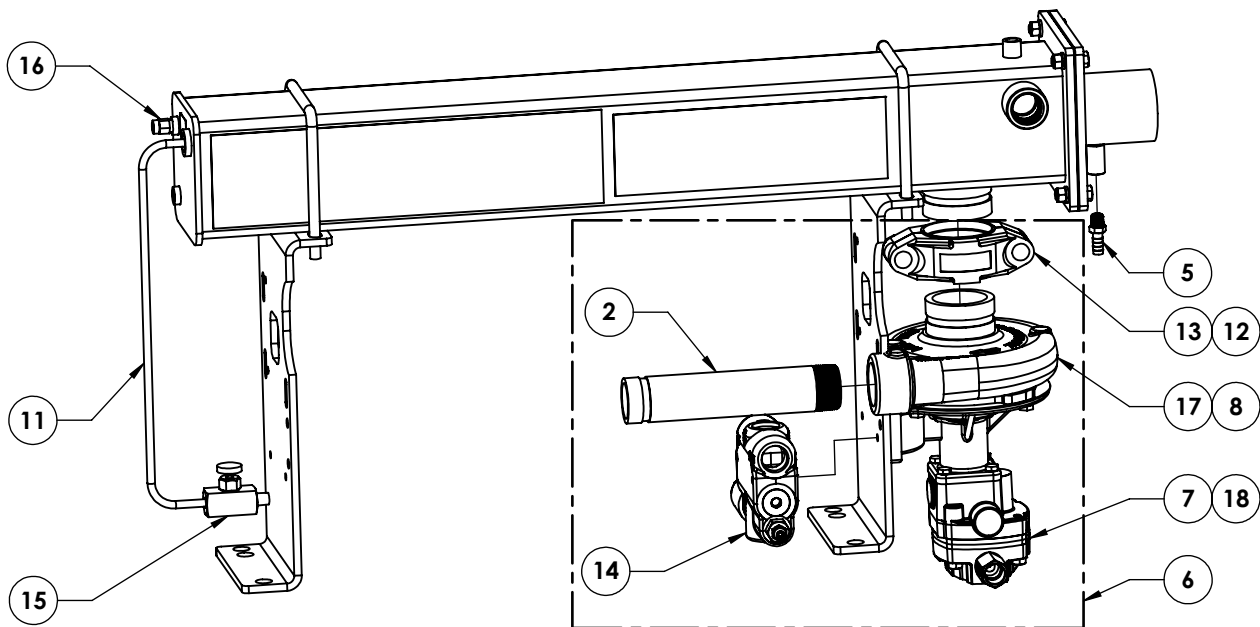
SINGLE INLET ASSEMBLY

|    |              |   |  |
|----|--------------|---|--|
| 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  |  |

# VORTEX COOLER AND BLEED COMPONENTS

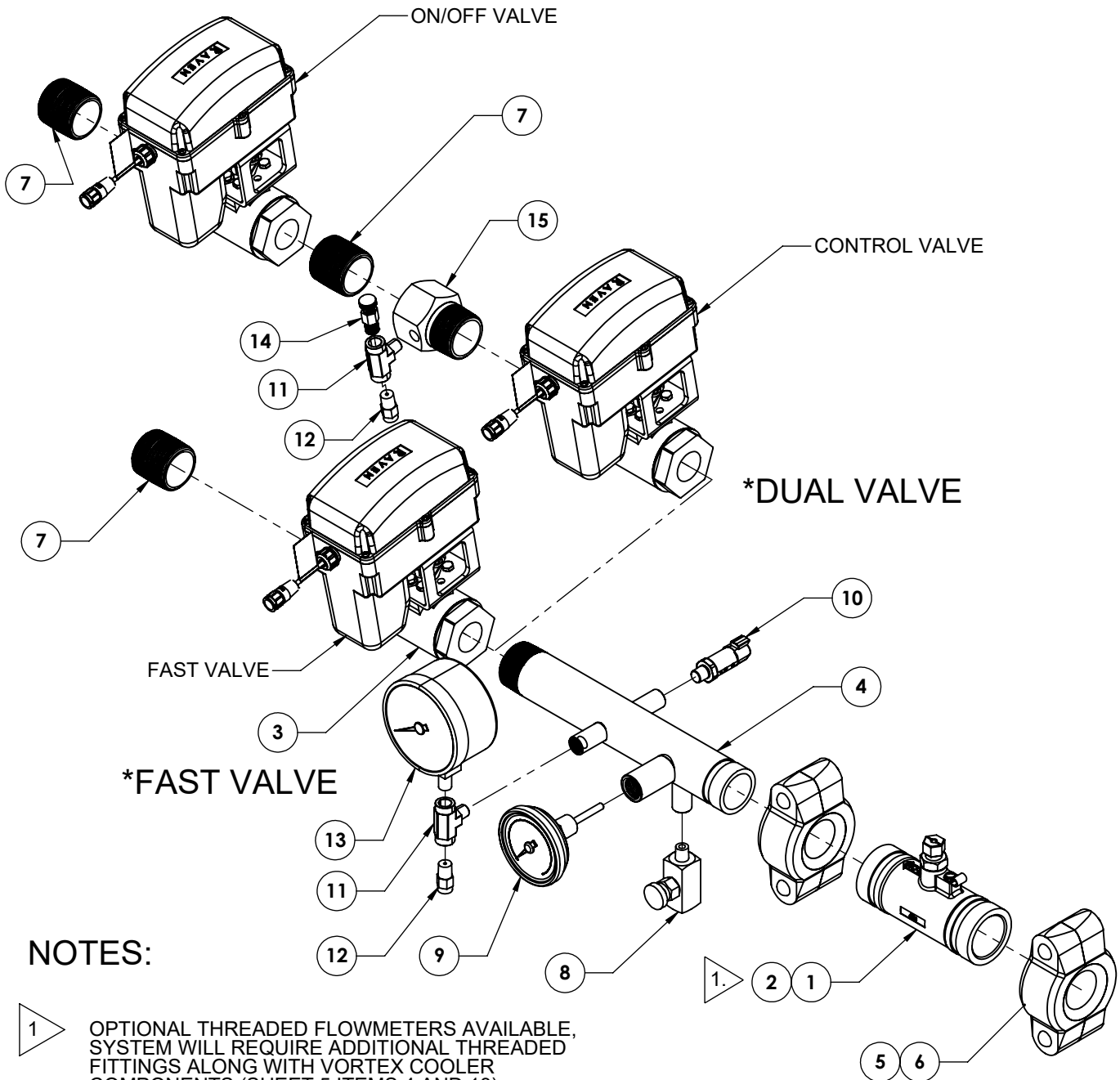


# HP+ PUMP AND PLUMBING COMPONENTS



|    |              |  |               |
|----|--------------|--|---------------|
| 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



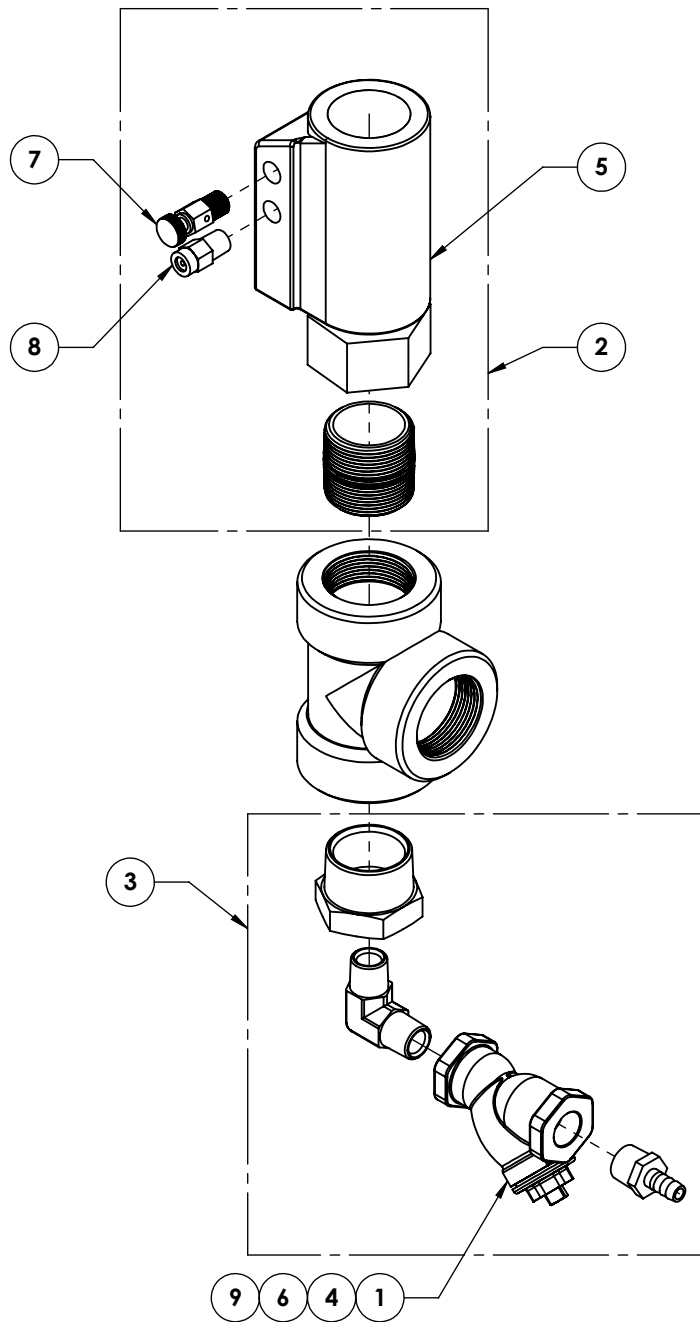
## NOTES:

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             |                     |
| <b>ITM</b> | <b>PART NUMBER</b> | <b>DESCRIPTION</b>                                | <b>SPECIAL NOTE</b> |