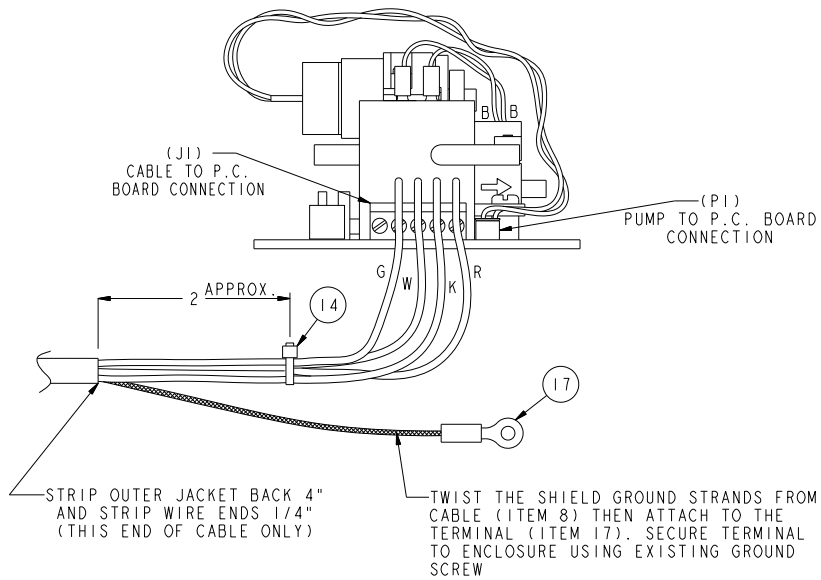
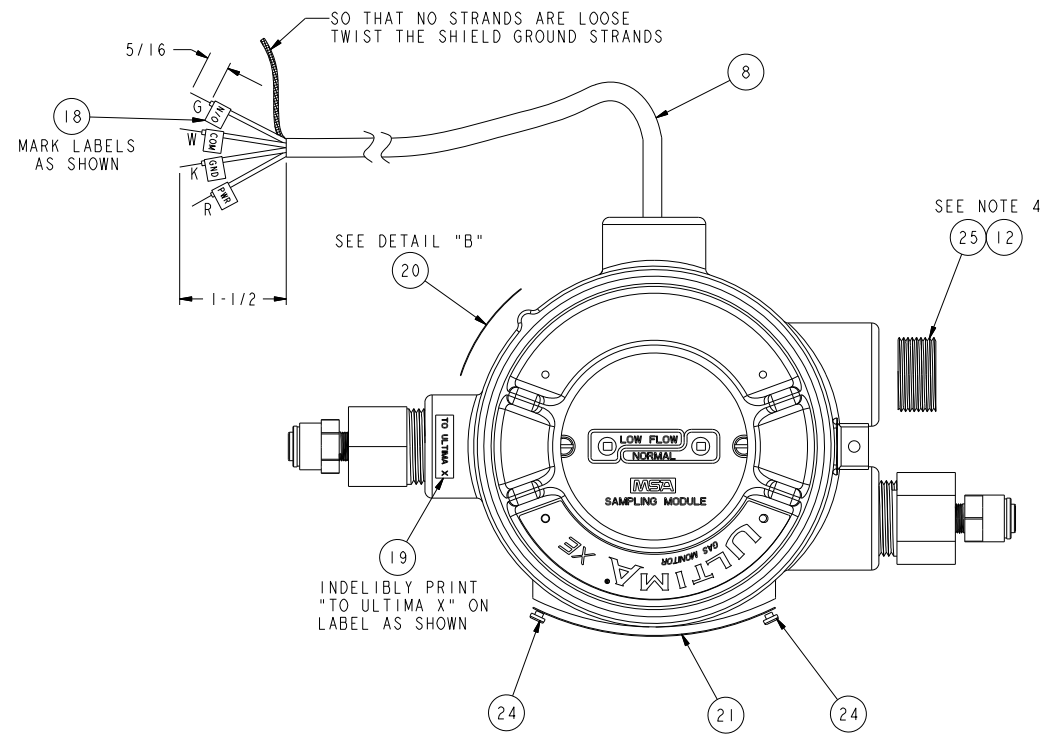
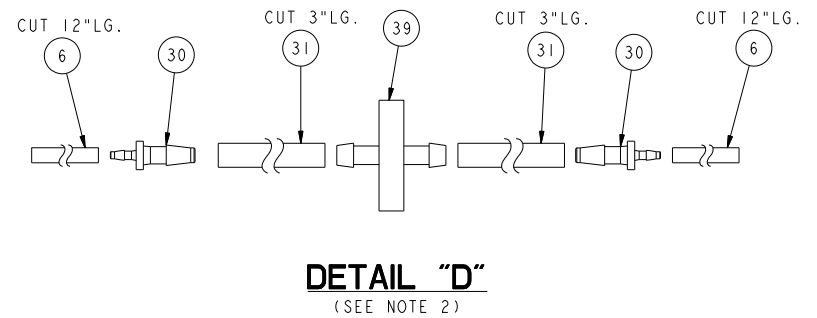
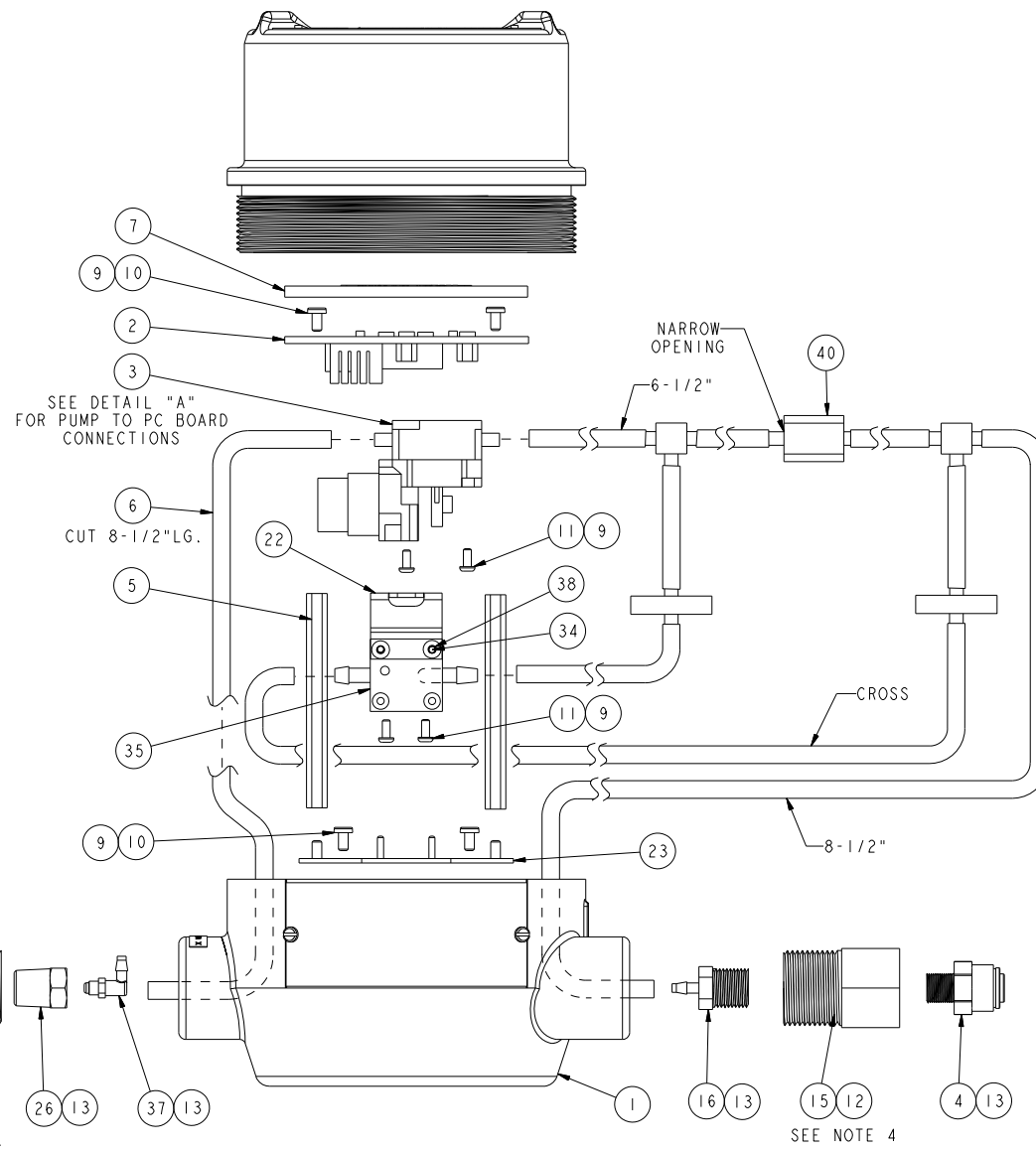


MSA PART NO. 10043264  
ULTIMA X SAMPLING MODULE  
ASSEMBLY  
D.C. PUMPED VERSION  
EXPLOSION PROOF

**DETAIL "B"**  
(SCALE: 2.00)  
INDELIBLY PRINT INFORMATION  
AS SHOWN



**DETAIL "A"**  
(PUMP AND CABLE WIRING)



| PARTS LIST |                     |             |   |
|------------|---------------------|-------------|---|
| ITEM NO.   | MATERIAL MASTER NO. | QTY. REQ'D. | DESCRIPTION                                       |
| 1          | 10045237            | 1           | ENCLOSURE ASSEMBLY, ULTIMA XE                     |
| 2          | 10052349            | 1           | P.C. BOARD ASSEMBLY                               |
| 3          | 815395              | 1           | PUMP AND DRIVE                                    |
| 4          | 633740              | 2           | CONNECTOR, MALE, 1/8 NPT TO 1/4 O.D. TUBE         |
| 5          | 10034278            | 2           | STANDOFF, #6-32 X 3" LG.                          |
| 6          | 600771              | 32.5 in.    | TUBING, POLYURETHANE, 1/4" O.D.                   |
| 7          | 10051804            | 1           | LABEL, SAMPLING MODULE, ULTIMA                    |
| 8          | 600341              | 24 in.      | CABLE, 4 CONDUCTOR                                |
| 9          | 29787               | -           | SEALANT, LOCTITE 222                              |
| 10         | 67053               | 6           | SCREW, MACHINE, SLOTTED PAN HEAD, #6-32 X 1/4" LG |
| 11         | 627601              | 4           | SCREW, MACHINE, #4-40 X 1/4                       |
| 12         | 602873              | -           | LUBRICANT THREAD                                  |
| 13         | 28907               | -           | TAPE TEFLON, PIPE THREAD SEALING, 1/4"            |
| 14         | 69501               | 1           | WIRE TIE, NYLON, WHITE, 3-7/8 X 3/32              |
| 15         | 813159              | 2           | FLASHBACK ARRESTOR ASSEMBLY ULTIMA SENSOR         |
| 16         | 10018616            | 1           | FITTING, 1/8 I.D. BARBED TO 1/4 NPT, NYLON        |
| 17         | 58287               | 1           | TERMINAL, RING TYPE                               |
| 18         | 633528              | 4           | LABEL, BLANK                                      |
| 19         | 633579              | 1           | LABEL, (.90" X .250")                             |
| 20         | 482522              | 1           | LABEL, BLANK, (1-1/2" X 3/4")                     |
| 21         | 10062539            | 1           | LABEL, APPROVALS, DOMESTIC                        |
| 22         | 10050380            | 1           | BRACKET, ALUMINUM, ULTIMA PUMP SWITCH             |
| 23         | 10043265            | 1           | PLATE, MOUNTING, PUMP, ULTIMA XE                  |
| 24         | 65519               | 2           | SCREW, #4-40 X 1/8" LG.                           |
| 25         | 638179              | 1           | PLUG, PIPE, 3/4 NPT, RECESSED HEAD                |
| 26         | 638084              | 1           | REDUCER, 1/4-18NPT EXT. TO #10-32 INT.            |
| 27         | 637920              | 1           | FILTER, END-OF-LINE                               |
| 28         | 10039479            | 1           | CARTON, ULTIMA X                                  |
| 30         | 655075              | 2           | CONNECTOR, TUBING, REDUCER                        |
| 31         | 604067              | 6 in.       | TUBING, POLYURETHANE, NALGE                       |
| 34         | 10049442            | 2           | SCREW, MACHINE, CROSS RECESSED, #2-56 X 5/8       |
| 35         | 10050076            | 1           | SWITCH, PRESSURE                                  |
| 37         | 631330              | 1           | FITTING, ELBOW, #10-32 TO 1/8" I.D. TUBE          |
| 38         | 633747              | 2           | WASHER, FLAT, NYLON #2 SCREW                      |
| 39         | 10051406            | 1           | FILTER, IN-LINE, WATER BARRIER, 1 MICRON          |
| 40         | 10050865            | 1           | TUBING ASSEMBLY: ULTIMA SAMPLING MODULE           |
| 41         | 10103804            | 1           | MANUAL: INSTRCTN, DC PUMP SMLPG MDLE, ULT X       |

| REVISIONS          |  |
|--------------------|--|
| ①                  | 6-11-2009<br><del>INITIAL RELEASE</del><br>EXTENSIVELY REVISED.<br>REVISED DETAILS "A" & "D".<br>REMOVED DETAILS "C", "E"<br>& "F" |
| ②                  | 11-30-2009<br>INITIAL RELEASE<br>600771 was 24 in. REQ'D<br>GJT ST   |
| <b>DEC 15 2009</b> |  |

- NOTES:
- TEST PER ENGINEERING SPECIFICATION #1209.
  - PACK THE PRE-ASSEMBLED IN-LINE FILTER ASSEMBLY (ITEMS 6, 30, 31 & 39) ALONG WITH END-OF-LINE FILTER (ITEM 27) WITH THE PUMP MODULE ASSEMBLY.
  - REMOVE THE "MET" LABEL FROM THE ENCLOSURE ASSEMBLY (ITEM 1).
  - MINIMUM 5 FULL THREADS ENGAGEMENT.
  - REFERENCE INSTALLATION OUTLINE DRAWING 10000015617

|   |   |   |                   |
|---|---|---|-------------------|
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| MSA STANDARD SHOP PRACTICES APPLY                           |   | APPROVAL AGENCY CODE: NO NIOSH ATTR. DOC.:  |                   |
| CODE SYMBOLS  | JOB NO. 30002141 PH0730   | SAMPLING MODULE ASSEMBLY, DC PUMPED, EXPLOSION PROOF, ULTIMA XE   |                   |
| CRITICAL Δ  | DRAWN BY GT DATE 11-20-2002                                     | CADD REF: 10043264  |                   |
| MAJOR A Δ   | CHECKED BY J. DiLEO 12-15-09                                    | SCALE: 0.750  |                   |
| MAJOR B Δ   | PROJ. ENGR. S. TURNER 12-2-09                                   | SHEET 1 OF 1  |                   |
| 100% INSPECTION Δ   | QUALITY ASSURANCE J. DANNHARDT 12-14-09                         | 10043264  |                   |
| TOLERANCES UNLESS OTHERWISE SPECIFIED                       | MANUFACTURING D. BRUNI 12-2-09                                  |   |                   |
| FRACTIONAL ± 1/64   |   |   |                   |
| 2 PL DEC. ± 0.01  |   |   |                   |
| 3 PL DEC. ± 0.005   |   |   |                   |
| ANGULAR ± 1 deg.  |   |   |                   |
| SEE MSA STANDARD SHOP PRACTICES FOR DRILLED HOLE TOLERANCES | <b>D.</b>   |   |                   |