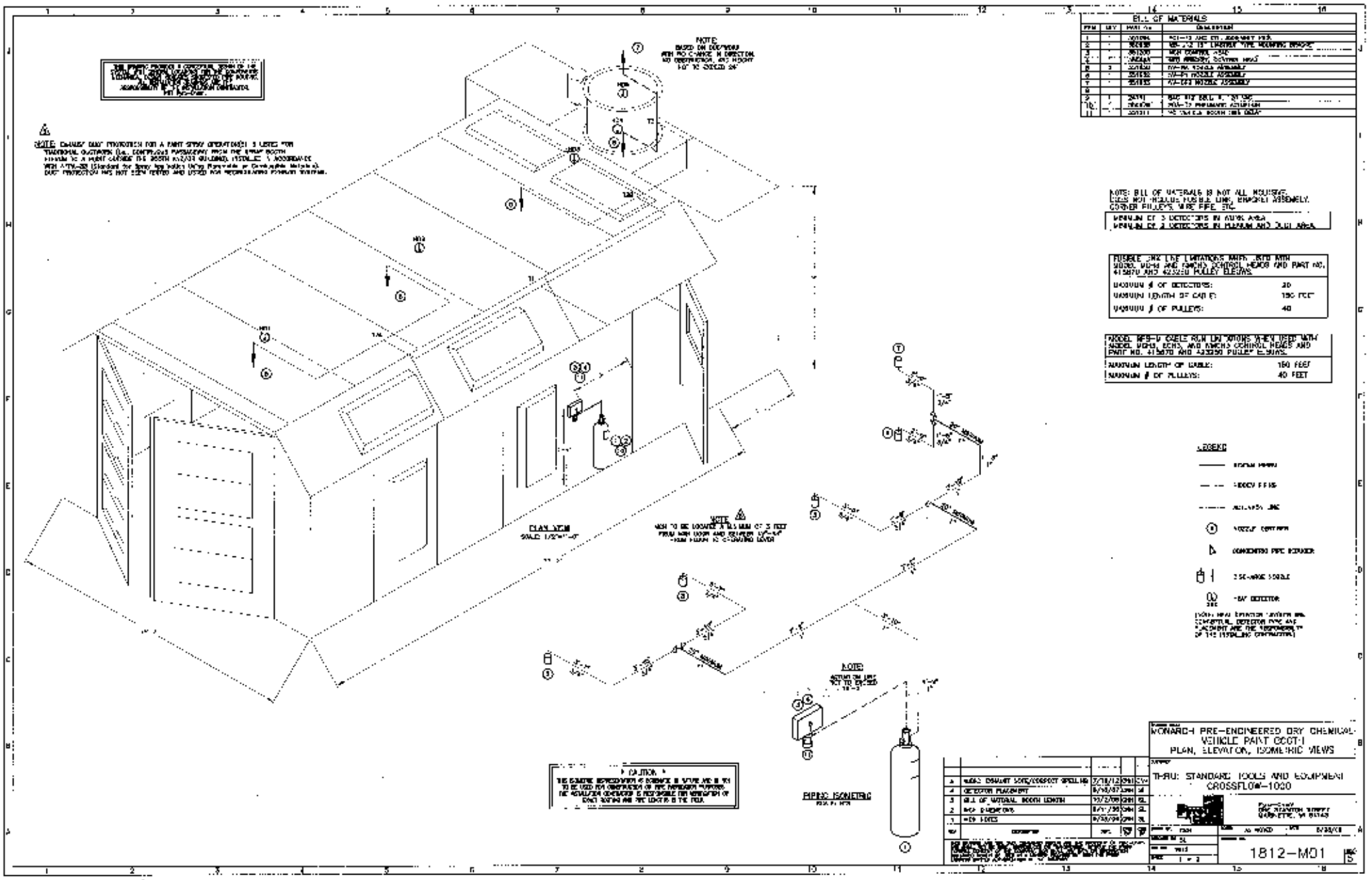

BILL OF MATERIALS
NOTE: BILL OF MATERIALS IS NOT ALL INCLUSIVE. DOES NOT INCLUDE FUSIBLE LINK, BRACKET ASSEMBLY, CORNER PULLEYS, WIRE PIPE, ETC.
MINIMUM OF 3 DETECTORS IN WORK AREA
MINIMUM OF 2 DETECTORS IN PLENUM AND DUCT AREA
FUSIBLE LINK LINE LIMITATIONS WHEN USED WITH MODEL WCHS AND WMCHS CONTROL HEADS AND PART NO. 415870 AND 423250 PULLEY ELBOWS.
MAXIMUM # OF DETECTORS: 20
MAXIMUM LENGTH OF CABLE: 150 FEET
MAXIMUM # OF PULLEYS: 40
MODEL WFS-U CABLE RUN LIMITATIONS WHEN USED WITH MODEL WCHS, ECHS, AND WMCHS CONTROL HEADS AND PART NO. 415870 AND 423250 PULLEY ELBOWS.
MAXIMUM LENGTH OF CABLE: 150 FEET
MAXIMUM # OF PULLEYS: 40 FEET
LEGEND
NOZZLE CENTERLINE
CONCENTRIC PIPE REDUCER
DISCHARGE NOZZLE
FIRE DETECTOR
PLAN VIEW
SCALE: 1/2"=1'-0"
NOTE
WCH TO BE LOCATED A MIN OF 3 FEET FROM MAN DOOR AND REMOVE 1/2"-14" FROM HEAD TO CLEARING LEVER
NOTE
PIPING ISOMETRIC
CAUTION
MONARCH PRE-ENGINEERED DRY CHEMICAL VEHICLE PAINT BOOTH
PLAN, ELEVATION, ISOMETRIC VIEWS
THRU: STANDARD TOOLS AND EQUIPMENT CROSSFLOW-1020
1812-M01

INSTALLATION NOTES FOR MONARCH VEHICLE PAINT SPRAY BOOTH FIRE SUPPRESSION SYSTEMS

1) PIPE AND FITTING INSTALLATION

GENERAL PIPING REQUIREMENTS

1) USE SCHEDULE 40 BLACK BARE OR GALVANIZED PIPE EXPOSED ATMOSPHERE, GALVANIZED, CHROME-PLATED, OR STAINLESS STEEL PIPE COMPATIBLE TO ASTM A106. USE OF ALICE EXTINGUISHER PIPE SIZES ARE 3/4 IN. OR 1 IN. CONDUIT.

2) PIPE UNIONS ARE ACCEPTABLE

3) USE STANDARD 150 PSI ANSI FITTINGS

4) REDUCING BUSHINGS ARE NOT ACCEPTABLE.

5) CAST IRON PIPE AND FITTINGS ARE NOT ACCEPTABLE.

6) PIPE THREAD SEALANT OR PIPE JOINT COMPOUND IS NOT ALLOWED FOR DISTRIBUTION PIPING.

7) BEFORE ASSEMBLING THE PIPE AND FITTINGS, MAKE CERTAIN ALL ENDS ARE CAREFULLY REAMED AND BLOWN CLEAN OF CHIPS AND SCALE. INSIDE OF PIPE AND FITTINGS MUST BE FREE OF OIL AND GRIT.

8) ALL SYSTEM PIPING MUST COMPLY WITH SECTION 4.5.1.1 OF NFPA-13.

CAUTION

DO NOT APPLY SEALER PAINT TO COVER OR OBSCURE THE PIPE LABELING, AS THE PIPE AND NOZZLES COULD BECOME BLOCKED AND PREVENT THE PROPER FLOW OF AGENT.

2) HANGER/SUPPORT INSTALLATION

THE HANGER/SUPPORTS MUST BE INSTALLED IN CONJUNCTION WITH THE PIPE AND FITTINGS. THE PIPES ARE NOT SUPPORTED BY HANGERS/SUPPORTS DURING THE PIPE WELDING STUDIES. REFER TO THE SPECIFIC DIMENSIONS CHART

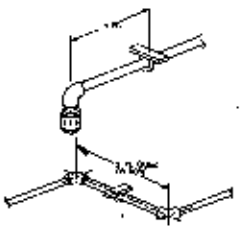
PIPE HANGER STRENGTH REQUIREMENTS

PIPE SIZE	HANGER STRENGTH REQUIREMENTS
1/2	100
3/4	125
1	150

OTHER FACTORS THAT INFLUENCE HANGER/SUPPORT SPACING ARE:

HANGER/SUPPORT MUST BE PLACED WITHIN 1 FT. OF THE DISCHARGE NOZZLE.

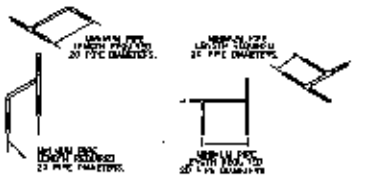
HANGER/SUPPORT MUST BE PLACED BETWEEN BEARING N-ON DISTANCE IS GREATER THAN 2 FT. (0.61 m).

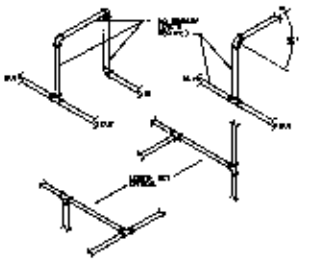


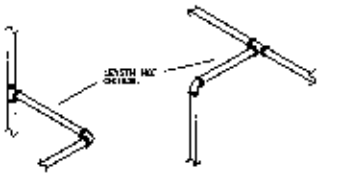
HANGER/SUPPORT DETAIL

3) PIPE DIMENSIONS HAVE BEEN CENTER TO CENTER OF FITTINGS. ALL DIMENSIONS ARE TO BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY FIELD CHECK.

4) THE MINIMUM LENGTH IS CALLED "VERTICAL LENGTH" AND EACH ONLY WHICH THE NOZZLE FITTING AND THE PIPE CONNECTING IN THE SAME PLANE THE INTERMEDIATE DROP SHOWN ACCEPTABLE AND NON-ACCEPTABLE METHODS OF SPLITTING TEES







A) REFER TO MONARCH VEHICLE PAINT BOOTH MANUAL FOR FULL DETAILS AND PARTS DIMENSIONS.

GENERAL NOTES

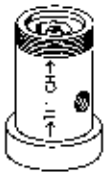
-WIRE RACES FOR THE PRE-SHIPMENT INSPECTION MUST BE TAKEN APART TO THE ACTUATOR TO ALLOW CLEARANCE. THE ACTUATOR LOCATED TO CONTROL THE PRESSURE SWITCH IS THE CONNECTION MUST BE ONE (1) CLOSER IN THE BOOTH.

-ALL ELECTRICAL CONNECTIONS SHALL BE MADE INSIDE THE CONTROL PANEL. ALL EXTERNAL WIRES SHALL PASS THE CONTROL PANEL THROUGH THE PRESSURE-TIGHT IN THE PANEL FOR INTERNAL WIRING. ALL ELECTRICAL CONNECTIONS MUST BE MADE IN AN APPROVED ELECTRICAL BOX.

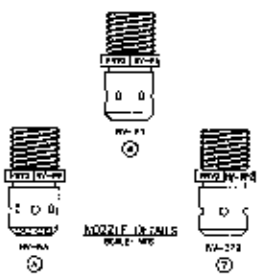
NOTE (WHEN APPLICABLE) CHECK AND RE-WIRE WIRING TO: THE ACTUATOR TO THE AUTOMATIC FIRE SUPPRESSION SYSTEM. THE MICRO-SWITCH ASSEMBLY (PN 881183) IN THE PRESSURE ACTUATOR (PN 24781-BOTH) PRIOR TO SYSTEM DISCHARGE. SYSTEM DISCHARGE IS DELAYED FOR 10-12 SECONDS BY THE TIME DELAY (PN 5515-11).

NOTE: OPERATIONAL PROCEDURES:

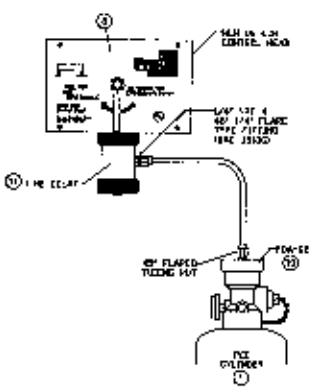
UPON ACTIVATION OF THE AUTOMATIC FIRE SUPPRESSION SYSTEM, AND TO THE SPRAY GUNS MUST AUTOMATICALLY SHUT DOWN. THE FAN MUST AUTOMATICALLY SHUT DOWN. AND THE FLOW TO THE BOOTH HEATING SYSTEM MUST AUTOMATICALLY SHUT DOWN.



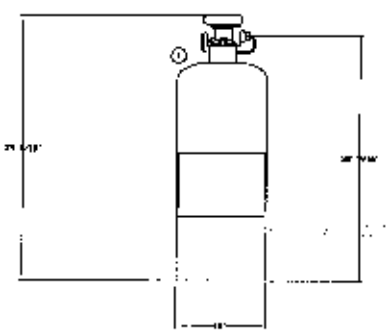
TD-0 (11)
TIME DELAY
SCALE: NTS



NOZZLE DETAILS
SCALE: NTS



CYLINDER ACTUATION USING MODEL VCH15 CONTROL HEAD



HQ-70 ABC
CYLINDER DETAIL
SCALE: NTS

MONARCH PRE-ENGINEERED DRY CHEMICAL VEHICLE PAINT BOOTH
DETAIL SHEET

"THRU: STANDARD TOOLS AND EQUIPMENT
CROSSFLOW-TOCD

812-M02