INSTALLATION NOTES FOR MONARCH VEHICLE PAINT SPRAY BOOTH FIRE SUPPRESSION SYSTEMS.

1) PIPE AND NOZZLE INSTALLATION

GENERAL PIPING REQUIREMENTS

1) USE SCHEDULE 40 BLACK IRON (IF USED IN A RELATIVELY NON-CORROSIVE ATMOSPHERE), GALVANIZED, CHROME-PLATED, OR STAINLESS STEEL PIPE CONFORMING TO ASTM A120, A53, OR A106. DISTRIBUTION PIPE SIZES ARE 3/4 in. OR 1 in. DEPENDING ON NUMBER OF NOZZLES.

2) PIPE UNIONS ARE ACCEPTABLE.

3) USE REDUCING TEES FOR ALL PIPE SPLITS.

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 CLEAR OF CHIPS AND SCALE. INSIDE OF PIPE AND FITTINGS MUST BE FREE OF OIL AND DIRT.

8) ALL SYSTEM PIPING MUST COMPLY WITH SECTION A3-9.1 OF NFPA-17.

CAUTION

DO NOT APPLY TEFLON TAPE TO COVER OR OVERLAP THE PIPE OPENING, 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 SPACING REQUIREMENTS FOR HANGERS/SUPPORTS DEPEND ON THE PIPE SIZE BEING UTILIZED; REFER TO THE SPACING GUIDELINES CHART.

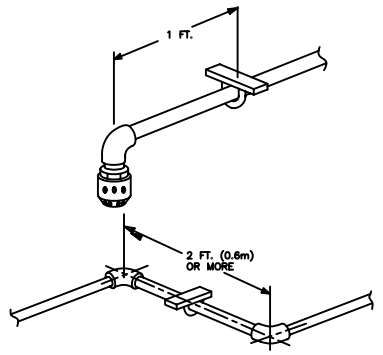
PIPE HANGER SPACING GUIDELINES

DISTRIBUTION PIPE SIZE IN.	MAXIMUM SPACING DISTANCE HANGER TO HANGER FT.
3/4	8
1	12

OTHER FACTORS THAT INFLUENCE HANGER/SUPPORT SPACING ARE:

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

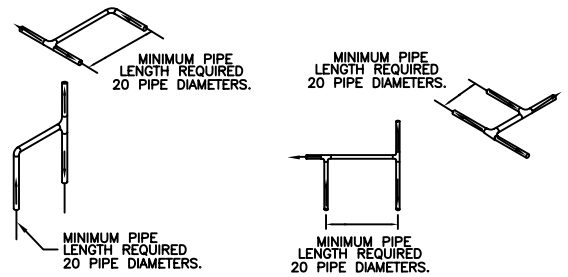
HANGER/SUPPORT MUST BE PLACED BETWEEN ELBOWS WHEN DISTANCE IS GREATER THAN 2 FT. (0.6 m).



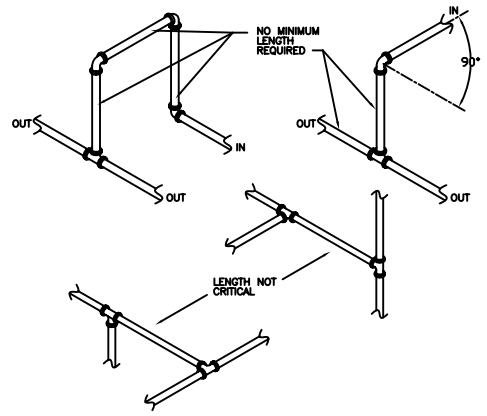
HANGER/SUPPORT DETAIL

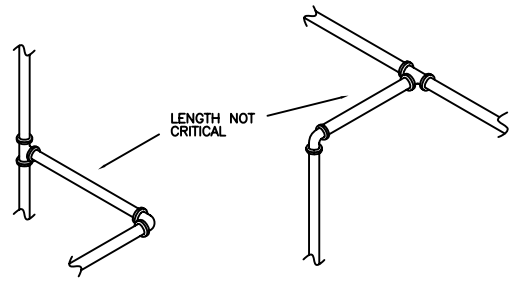
3) NOTE: DIMENSIONS GIVEN ARE FROM CENTER TO CENTER OF FITTINGS. ALL DIMENSIONS ARE TO BE CONSIDERED APPROXIMATE AND MUST BE VARIFIED BY FIELD CHECK.

4) THIS MINIMUM LENGTH IS CALLED "CRITICAL LENGTH" AND EXISTS ONLY WHEN THE 90° FITTING AND THE TEE FOLLOWING LIE IN THE SAME PLANE. THE ILLUSTRATIONS BELOW SHOW ACCEPTABLE AND NON-ACCEPTABLE METHODS OF SPLITTING TEES.



WHEN THE 90° FITTING AND THE TEE FOLLOWING LIE IN PLANES 90° OPPOSITE ONE ANOTHER, THE LENGTH OF PIPE BETWEEN IS NOT CRITICAL AND DOES NOT REQUIRE A MINIMUM LENGTH.





5) REFER TO MONARCH VEHICLE PAINT SPRAY BOOTH MANUAL FOR FULL DETAILS AND PIPE LIMITATIONS.

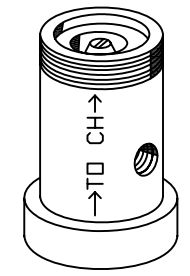
GENERAL NOTES

-WHEN PIPING FOR THE PS-SPDT-XP PRESSURE SWITCH MUST BE INCLUDED IN TOTAL CYLINDER TO T1 PIPING LIMITATIONS. THE FITTING USED TO CONNECT THE PRESSURE SWITCH TO THE DISTRIBUTION PIPING COUNTS AS ONE (1) ELBOW IN THAT SECTION.

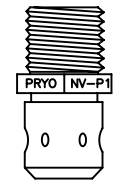
-NO ELECTRICAL CONNECTIONS SHALL BE MADE INSIDE THE CONTROL HEAD. ALL ELECTRICAL WIRING SHALL EXIT THE CONTROL HEAD THROUGH THE KNOCK-OUT IN THE UPPER RIGHT-HAND CORNER. ALL ELECTRICAL CONNECTIONS MUST BE MADE IN AN APPROVED ELECTRICAL BOX.

NOTE (ALARM WARNING) (WHEN AUDIBLE ALARM REQUIRED):
UPON ACTIVATION OF THE AUTOMATIC FIRE SUPPRESSION SYSTEM, THE MICRO-SWITCH ASSEMBLY (PN 551155) WILL INITIATE THE AUDIBLE ALARM (P/N 24751-BELL) PRIOR TO SYSTEM DISCHARGE. SYSTEM DISCHARGE IS DELAYED FOR 10-20 SECONDS BY THE TIME DELAY (PN 551511).

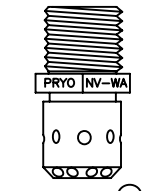
NOTE (SHUTDOWN PROCEDURES):
UPON ACTIVATION OF THE AUTOMATIC FIRE SUPPRESSION SYSTEM, AIR TO THE SPRAY GUNS MUST AUTOMATICALLY SHUT DOWN, THE FAN MUST AUTOMATICALLY SHUT DOWN AND THE FUEL TO THE BOOTH HEATING SYSTEM MUST AUTOMATICALLY SHUT DOWN.



(9) TD-10 TIME DELAY
SCALE: NTS



NV-P1 (11)



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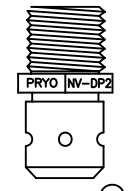
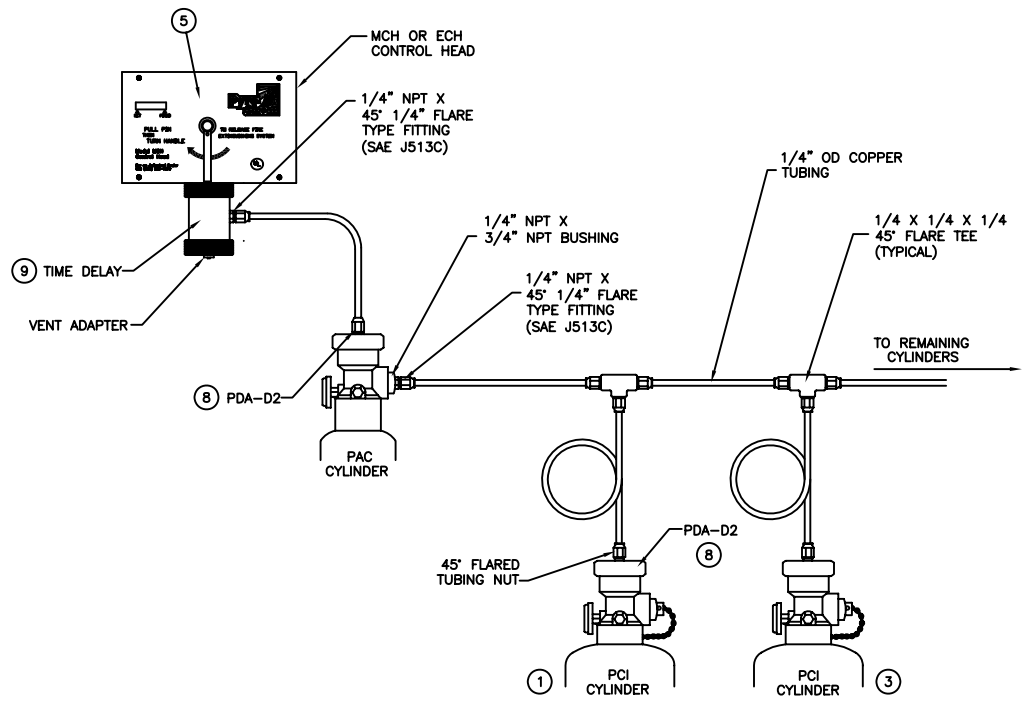
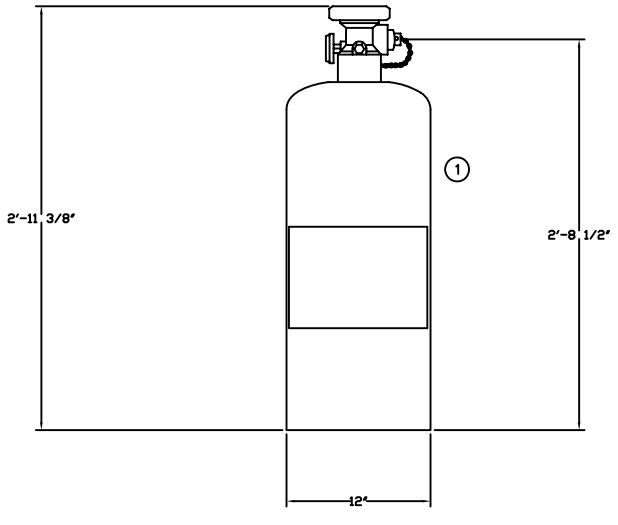


NV-DP2 (12)

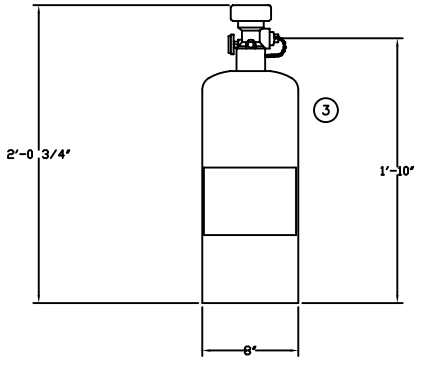
NOZZLE DETAILS
SCALE: NTS



MULTIPLE CYLINDER ACTUATION
USING MODEL PAC-10 OR PAC-200



PCI-70 ABC
CYLINDER DETAIL
SCALE: NTS



PCI-17 ABC
CYLINDER DETAIL
SCALE: NTS

REV	DESCRIPTION	DATE	DRN BY	CHK BY

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DRAWING TITLE:
MONARCH PRE-ENGINEERED DRY CHEMICAL VEHICLE PAINT BOOTH DETAIL SHEET

CUSTOMER:
THRU: STANDARD TOOLS AND EQUIPMENT
SINGLE DOWN DRAFT-1000
WITH OPTIONAL HEATER

Pyro-Chem
ONE STANTON STREET
MARINETTE, WI 54143

DRAWN BY:	SCALE:	DATE:
CNH	AS NOTED	11/02/06
CHECKED BY: SL	DRAWING NO.	REV.
JOB NO: 1874	1874-M03	0
SHEET: 3 OF 3		