NITROGEN N_2 PAC
SPRINKLER CORROSION INHIBITING SYSTEM

ANNUAL MAINTENANCE CHECKLIST
NITROGEN-PAC SC SERIES SYSTEM
UFS-604 REVISION 1.04 – PAGE 1 OF 3

UNITED FIRE SYSTEMS

DATE	

LOCATION INFORMATION	
User	
Address 1	
Address 2	
City, State, Zip	
System	

NITROGEN-PAC™ SC UNIT SERIAL NUMBER	

STEP	**PROCEDURE**	OK	NOT OK
1	Is the **GREEN** visual indicator for SYSTEM NORMAL on?		
2	Has the message on the front panel of the Refrigerated Dryer been checked? NOTE: NORMAL indications are  ,  ,  ,  , or  . Any other message indicates the need for further maintenance and / or repair. See UFS manual 30-NPSICM-000 Appendix A.		
3	Has the refrigerated dryer condenser been examined through the slots on the rear, and has the condenser been carefully cleaned with compressed air if dirty?		
4	Are the refrigerated dryer inlet and outlet connections properly affixed and tight?		
5	Is the SC nitrogen outlet hose present, secure and in good condition?		
6	Are all valves at the SC in the NORMAL position per the Quick Reference Valve Position Table?		
7	Has Valve **1** been opened, and Valves **2** and **3** closed, and is the **GREEN** visual indicator off and the **RED** visual indicator on? When the valves are returned to NORMAL, do the visual indicators return to normal?		
8	Is the condensate drain connected to a hose or piping leading to a proper drain?		
9	If present, is the condensate pump properly connected and in good working order?		
10	Has drain valve **7** been opened long enough to permit condensate to drain, and then closed?		
11	Have the compressor intake filters been replaced?		
12	Have the float drains at the coalescing and particulate filters been examined and cleaned if necessary?		
13	Have the filter elements in the coalescing and particulate filters been replaced?		
14	Is all nitrogen piping secure and tight?		

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UNITED FIRE SYSTEMS

STEP	PROCEDURE	OK	NOT OK
15	Are all the valves at all AMDs in their proper position?		
16	Are the inlet valves at all PVAs in their proper position?		
17	Has residual water (if present) been drained from each PVA? (CAUTION: Close inlet valve at PVA before attempting water drainage, to prevent inadvertent sprinkler valve operation.)		
18	If owned by customer, is the NA-1 Nitrogen Analyzer located in its proper storage location, is the location still clean and dry, have the batteries been replaced, and has the device been tested?		
19	Have all nitrogen purity values, pressures on all system gauges, and the time on the Runtime Monitor been recorded below?		

NITROGEN PURITY VALUES

SC Cabinet Test Port	%	PVA or TAP #1	%	PVA or TAP #2	%
PVA or TAP #3	%	PVA or TAP #4	%	PVA or TAP #5	%

PRESSURES ON SYSTEM GAUGES

		Proper Gauge Reading				Proper Gauge Reading	
Model No.	Gauge	Minimum	Maximum	Model No.	Gauge	Minimum	Maximum
SC-1	A	0	100	SC-2	A	0	100
	B	75	95		B	55	75

Have the values on all system gauges been recorded?		Gauge A	PSIG	Gauge B	PSIG	AMD Gauge #1	PSIG
AMD Gauge #2	PSIG	AMD Gauge #3	PSIG	AMD Gauge #4	PSIG	AMD Gauge #5	PSIG

18	Have all valves been left in NORMAL position?		

REPLACEMENT PARTS REQUIRED AT ANNUAL MAINTENANCE

Quantity	UFS P/N	Description
2	30-500002-101	Element, Particulate and Coalescing Filter
2	00-100005-555	Intake Filter, Compressor
2	N / A	(If owned by customer) Battery, AA Alkaline, for NA-1 Nitrogen Analyzer

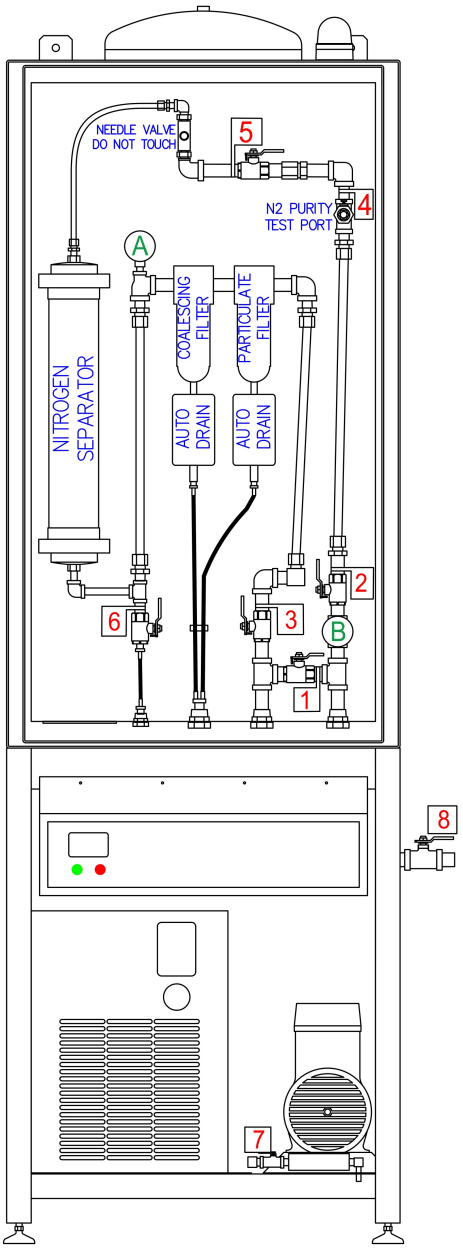
OPTIONAL REPLACEMENT PARTS FOR ANNUAL MAINTENANCE

UFS P/N	Description	Quantity Replaced	Quantity Not Replaced
30-500003-101	Screen, Float Drain		
30-500003-102	Float, Float Drain		
30-500003-301	Screen, Strainer, PVA		
30-500005-001	Element, Sensing, NA-1		

COMPLETION SIGNATURES

	PRINT NAME	SIGNATURE	DATE
INSPECTOR			
CUSTOMER			

QUICK REFERENCE VALVE POSITION TABLE							
	A	B	C	D	E	F	G
VALVE	NORMAL	BYPASS	PURGE	FILTER SERVICE	N_2 PURITY AT TEST PORT	N_2 PURITY AT PVAs	DRAIN
1	Closed	Open	Closed	Closed	Closed	Closed	Closed
2	Open	Closed	Open	Closed	Open	Open	Closed
3	Open	Closed	Open	Closed	Open	Open	Closed
4	Closed	Closed	Closed	Closed	Open	Closed	Closed
5	Open	Open	Open	Closed	Open	Open	Closed
6	Closed	Closed	Closed	Open	Closed	Closed	Open
7	Closed	Closed	Closed	Closed	Closed	Closed	Open
8	Open	Open	Open	Closed	Open	Open	Closed
AMD VALVES							
AMD-1 Inlet(s)	Open	Closed	Open	Open	Open	Open	Open
AMD-1 Outlet(s)	Open	Closed	Open	Open	Open	Open	Open
AMD-1 Bypass(es)	Closed	Open	Closed	Closed	Closed	Closed	Closed
PVA INLET VALVE(s)							
PVA-3 Inlet Valve(s) with NA-1	**Closed**	Closed	Open	Closed	Closed	**Open**	Closed
PVA-2 Inlet Valve(s) with **TAP**	**Open**	Open	Open	Open	Open	**Open**	Closed
TAP = True Advanced Purge device. Leave PVA inlet valve open unless draining water at PVA location. See manual 30-NPSICM-000 for more information.							



A = NORMAL – system is providing nitrogen into preaction sprinkler system(s).
B = BYPASS – compressed air is routed to preaction sprinkler system(s) for initial fill (max. 30 minutes) per NFPA 13, or to put sprinkler system on air if nitrogen is not available.
C = PURGE – system(s) are purging air out of sprinkler piping, replacing air with nitrogen.
D = FILTER SERVICE – filter elements in SC cabinet filters are to be replaced.
E = N_2 PURITY AT TEST PORT – nitrogen purity at SC cabinet is to be checked with NA-1 hand-held meter.
F = N_2 PURITY AT PVAs – nitrogen purity at PVAs is to be checked with NA-1 hand-held meter or TAP
G = DRAIN – draining accumulated moisture from SC and PVAs.