

APC/RANGE GUARD SYSTEM CHECK SHEET

FOR: USS _____

DATE: _____

REF: (A) PMS 5556/003
(B) NSTM 555

	IAW	SAT/ UNSAT	SAT/ UNSAT	SAT/ UNSAT	SAT/ UNSAT
COMPARTMENT NUMBER					
A. APC: INSPECT APC EQUIPMENT	M-1				
1. inspect dual cylinder systems to ensure connecting link is connected to both control head levers and that fasteners are tight.					
2. Inspect APC cylinder; if extensive surface rust is present, then accomplish repairs IAW PMS card.	M-1				
3. Inspect APC cylinder foundation and or bracket (s) for loose, broken or missing brackets and fasteners.	M-1				
4. Inspect physical appearance of APC cylinder pressure gage for damage, such as fogged, scratched or broken lens, bent or broken pointer, missing parts, and other damage. If gage is defective, accomplish PMS MRC (R-2).	M-1				
5. Inspect cylinder pressure gage. Pointer should be in green color safety range area (approximately 175+-25psig for a, aa, b, and bb systems and 100 +-25psig for "modified b" systems). If cylinder is not within range accomplish PMS MRC (R-2).	M-1				
6. Observe APC cylinder release pin at APC cylinder lever control head. Pin must be positioned through control head and lever with antipilferage seal attached.	M-1				
7. Inspect APC cylinder(s) for hydrostatic test date. If hydrostatic test date exceeds 12 years, accomplish PMS MRC (R-2). Note: hydrostatic test date for type "a" cylinder is stamped on the side of the bottom base plate and the date is concealed by the cylinder foundation. Hydrostatic test date for type "b" or modified "b" cylinders is stamped on the top (domed area) of the cylinder. Current hydrostatic test date must be recorded on a record tag used on CO2 / halon fire extinguishers. A record book is also necessary for back-up in case tag is removed or damaged.	M-1				
8. Inspect (brass) vent plug assembly located in APC distribution tubing tee fitting. (1) Observe position of vent plug tee; plug tee should be positioned so vent plug is either in upright (preferred) position or horizontally. Note: any other orientation will not permit proper operation. (2) Remove and inspect vent plug from vent plug tee, inspect for damage. (3) Inspect inside vent plug tee for APC solution leakage.	M-1				
9. Inspect physical appearance of nitrogen cartridge pressure gage for damage, such as fogged, scratched, or broken lens, bent or broken pointer, missing parts, and other damage or indications of a faulty gage. If gage is defective, accomplish PMS MRC (R-3).	M-1				
10. Inspect nitrogen cartridge pressure gage; pointer should be at 300 +-50 psig (disregard the green safety range; it is off center to the low pressure side). If nitrogen cartridge pressure is not within range, accomplish PMS MRC (R-3).	M-1				
11. Remove antipilferage seal, open cover, inspect the following pressure release control box components and inspect: (1) Release pull pin is securely positioned through the turnbuckle clevis and small hole of operating lever. (2) Antipilferage seal is attached and seal trimmed of excess plastic / wire. (3) Push operating lever towards turnbuckle and ensure operating lever is held against stop. (4) Release cable is tight. (5) Nitrogen cartridge mounting bracket is installed. (6) Box cover is free of any damage and hinge (s) operate freely. (7) Operating lever mechanism locknut is tight. (8) Extension spring is attached to large hole of operating lever mechanism and anchor eye.	M-1				
12. Inspect the following remote manual control box components and observe: (1) Release pull pin is securely positioned through cover plate. (2) Antipilferage seal is attached and trimmed of excess wire / plastic. (3) Four cres 6-32 x 1/2" machine screws are not loose or missing.	M-1				
13. Inspect cable conduit path from remote manual control box o pressure release control box, and ensure that: (1) Conduit is not loose, sagging or damaged. (2) Conduit is supported with brackets or hangers. (3) Conduit locknut connections are tight at remote manual control box and pressure release control box. (4) Conduit locknut connections are tight at appliance detector(s) and, if installed, duct detector(s). (5) Conduit penetrating the greases interceptor hood (gaylord) and / or duct is drip	M-1				

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proof.					
14. Note: if system is not equipped with duct detector (s), omit step 14-16. Inspect duct detector (s) cable clamping set screws, on end of scissor arms are tight.	M-1				
15. Inspect fusible link (s) installation id tag (s) in the duct detector assemblies: (1) Inspect fusible link installation id tag (s) for metal-stamped month and year of installation date. Ensure fusible link installation id tag (s) is / are attached to scissor arms mounting bracket with cres wire. (2) If id tag is not installed or more than 6 months have elapsed since installation date, complete this procedure and immediately accomplish PMS MRC (S-1R). (3) Inspect fusible link (s) for damage. If cracked or distorted, accomplish PMS MRC (S-1R).	M-1				
16. Measure duct detector assembly (ies) to ensure a minimum of 3" of free cable travel exists towards the pressure release control box.	M-1				
17. Inspect fusible link (s) and fusible link installation id tag (s) in appliance detector assembly (ies), (1) Inspect fusible link installation cres id tag (s) for metal-stamped month and year of installation date. Ensure fusible link installation cres id tag (s) is / are attached with cres wire to cable loop (s) located between the cable clamp or crimp and the snap or "s" hook. (2) If cres id tag is not installed or more than 6 months has elapsed since installation date, accomplish PMS MRC (S-1R). (3) Inspect fusible link (s) for damage. If cracked or distorted, accomplish PMS MRC (S-1R).	M-1 S-1R				
18. Measure appliance detector assembly (ies) to ensure minimum of 3" of free cable travel exists toward pressure release control box.	M-1				
19. Inspect path of APC distribution piping by starting at APC cylinder to locate all discharge nozzles. (1) Ensure each nozzle has a nozzle discharge cap. (2) Inspect foil seal disc by shining a flashlight through the disc to ascertain if foil seal disc is damaged. (3) Inspect nozzle and nozzle rim for foreign matter. (4) Inspect nozzle for proper spring tension on self-closing caps. Place hook / clip of scales under lip of cap 180 degrees opposite centerline of spring. Pull on scales until cap just starts to open. Note reading on scale; for duct nozzle part nr. 14815 it should be 3 ounces, plenum nozzle part nr. 25032 it should be 1 ounce, and for cooking appliance nozzle part nr. 15347 it should be ounce. (5) Inspect cap for broken or distorted holding clips and for dents that may prevent sealing of nozzle face. (6) Ensure proper nozzle is installed by inspecting nozzle (s) for vendor metal stamped id nr. As follows: (A) Appliance nozzle: cres (stainless steel, id nr. 12078, size 3/8" fpt. (B) Plenum nozzle: cres (stainless steel), id nr. 12082, size 3/8" mpt. (C) Duct nozzle: cres (stainless steel), id nr. 12080, size 1/4" mpt.	M-1 S-1R				
20. Inspect that pressure release control box and remote manual control box are painted red.	M-1				
21. Inspect path of APC distribution tubing to inspect and verify that connections are tight and that tubing is secured in the supporting hangers.	M-1				
22. Ensure operating instructions are provided at pressure release control box, remote manual control box, and APC cylinder.	M-1				
23. Ensure pressure release control box, remote manual control box, and APC cylinder are labeled as to system they serve when more that one system is installed in the same space.	M-1				
24. Ensure a caution plate is installed near the exhaust fan switch and on the gaylord hood stating that the vent fan must be energized prior to turning appliances on and after appliances are shut off for a cool down period or an inadvertent discharge of the APC system may occur.	M-1				
25. Inspect lever control head female swivel nut, located on top of the APC cylinder valve is tight.	M-1				
26. Inspect that the 1/4" copper tubing fitting is connected to the APC cylinder lever control head and the fitting is tight.	M-1				
27. Inspect the APC cylinder gage (s) and fitting connection (s), the cylinder pressure switch (es) fittings connection (s), tubing and joints are not leaking APC solution. If APC solution leakage is discovered, accomplish PMS MRC (R-2).	M-1				
B. TEST APC CABLE RELEASE SYSTEM	S-1R				
1. Note: remove tubing from nitrogen cartridge valve and remove nitrogen cylinder. Inspect interior of pressure release control box and ensure: (1) Cable is tight. (2) Operating lever mechanism is held tightly against stop (pin). (3) Release pull pin is securely positioned through turnbuckle clevis and small hole of operating mechanism lever. (4) Antipilferage seal is attached through release pull pin eye and between	S-1R				

