



Office of Training
and Certification

New Jersey Division of Fire Safety

BASIC PRACTICAL SKILLS EXAMINATION REPORT

Skill sheet #

**ARFF
10-2**

Certification title

**AIRPORT FIREFIGHTING & RESCUE 6TH
EDITION**

Applicant Information

Candidate name

DFS ID #

Course #

Evaluation

Standard:
NFPA 1002, 2015 Edition

Perform an engine compartment inspection and routine preventative maintenance of an ARFF apparatus. *[NFPA® 1002, 9.1.1]*

9.1.1

For this skills evaluation checklist, students will perform engine compartment inspection and routine preventive maintenance. This skill sheet assumes students are performing this inspection and routine maintenance following the in-cab inspection.

Number	Task Steps	First Test		Retest #1		Retest #2	
		Pass	Fail	Pass	Fail	Pass	Fail
	Prepare for Inspection						
1	Shut down the apparatus. Chock wheels, if necessary						
	Leaks						
2	Inspect the condition of all hoses and hydraulic lines for leaking fluids. These include antifreeze, water, windshield wiper fluid, oil, fuel, transmission fluid, hydraulic fluid, power steering fluid, and/or battery fluid.						
	Engine (Crankcase) Oil						
3	Determine the oil level by using the dipstick.						
4	Add oil through the fill port on the engine block, if necessary. Consult the operator's manual for the proper type of oil and fill parameters.						
	Engine Air Filter						
5	Inspect the air intake system for signs of damage or dirt buildup.						
6	Note any obvious body damage that has occurred since the previous inspection.						
	Change the air filter if the air filter restriction gauge indicates excessive resistance per the manufacturer's recommendations. Be sure to follow instructions in the operator's manual and fire department policy.						
	Exhaust System						
7	Inspect the exhaust system for damage, recording any damage found on inspection form.						
8	Test the rain cap on the exhaust system (if so equipped), ensuring that it operates freely.						
	Radiator Coolant						

9	Determine whether the antifreeze is at the proper level mark inside the reservoir. <ul style="list-style-type: none"> a. Remove the cap on the antifreeze fill port or look through the sight glass, if one is provided. b. Read the coolant level correctly. 						
10	Add coolant, using the type approved by apparatus manufacturer, until amount reaches proper level mark per operator's manual guidelines						
11	Check the radiator hoses, recording any leaks or undue wear in apparatus log or on maintenance form.						
12	Remove any debris, such as leaves or trash, resting against the radiator or air intake.						
	Cooling Fan						
13	Inspect the cooling fan, recording any cracks or missing blades in apparatus log or on maintenance form.						
	Windshield Washer Fluid						
14	Check the windshield washer fluid level.						
15	Add windshield washer fluid if tank is less than half full.						
	Battery Condition						
16	If the apparatus has unsealed batteries, carefully remove the caps and check the electrolyte (water) level.						
17	Add distilled water, or water recommended by the manufacturer, to cells if the electrolyte level is low.						
18	Check all battery connections. <ul style="list-style-type: none"> a. Tighten any loose connections. b. Clean away any corrosion around terminals with a mixture of baking soda and water poured on the connections, scrubbed with a wire brush, and rinsed with clear water. If batteries are washed, dry batteries to prevent parasitic current. c. Clean road debris, dirt, dust, moisture from the top of the batteries to prevent any 'bleed' of current from terminal to terminal that can result in electronics issues. 						
19	Check the battery tie-downs, ensuring that the battery is held firmly in place.						
20	Check the built-in battery charger if the apparatus is so equipped, ensuring proper operation.						
	Automatic Transmission Fluid Level						
21	Check the automatic transmission fluid level and condition on the dipstick, sight glass, and/or electronic						

	readout according to manufacturer instructions and fire department policy.						
22	Add fluid to the automatic transmission if the reading on the dipstick or readout indicates that the fluid is low. Be sure to add the proper type and amount per operator's manual.						
	Power Steering Fluid Level						
23	Check the manufacturer's indicator marks to determine the power steering fluid level according to manufacturer instructions and fire department policy. Report any drop in levels.						
24	Add fluid if the reading indicates that the fluid is low. Make sure to add the proper type and amount according to the operator's manual.						
	Brake Fluid (Hydraulic Brake Systems)						
25	Check the level of the brake fluid in the master brake cylinder, following the procedure outlined in the operator's manual.						
26	Add fluid if the fluid is low. Be sure to add the proper type and amount per operator's manual.						
	Air System						
27	<p>Check for leaks in the system.</p> <ul style="list-style-type: none"> a. With the air system at normal operating pressure and the engine shut off, walk around the apparatus and listen for leaks. b. On air tanks not equipped with automatic drains, any accumulated condensation should be drained. If the wet tank has excessive amounts of water the air dryer desiccant may need to be replaced and/or the system needs to be serviced by an AHJ approved Emergency Vehicle Technician. 						
	Belts						
28	Check all engine compartment belts for tightness and excessive wear. These belts include water pump, air compressor, fan, alternator, etc.						
	Electrical Wiring						
29	<p>Check the electrical wiring in the engine compartment.</p> <ul style="list-style-type: none"> a. Look for frayed, cracked, loose, or otherwise worn wiring. b. Record any wiring problems in the apparatus log or on maintenance forms. <p>Refer any wiring problems to a mechanic for correction</p>						
	Steering Linkage						
30	Check the general condition of the steering						

