

FIX-N-FAX #42

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Number 42

Equipment Standard

Mandatory Compliance
Date: October 2005

ENGINE AIR FILTER BURNING EMBER PROTECTION FIRE ENGINES & CREW CARRIER VEHICLES / EMERGENCY CREW TRANSPORTS (CCV / ECT)

This Fix-N-Fax Describes a minimum standard for engine air filter protection from burning embers. This protection is mandatory on all fire apparatus and CCV/ ECT. The air inlet shall be equipped with a means of separating burning embers from the air intake system such that particulate matter larger than 0.039 inch (1.0 millimeter) in diameter cannot reach the air filter element. Protection shall be provided by installing a wire cloth screen over the air intake opening of the air filter housing or air inlet at the hood or other remote locations. A wire cloth specification of 304 stainless steel 20 meshes per lineal inch, .014 inch wire will meet the minimum standard and is a normally stocked item. This wire cloth specification will equal .036 opening and provide 51.8% open area. Other meshes and wire diameters are allowable provided the opening does not exceed 0.039 inch. Be careful if deviating very much from this specification that the percent of open area does not decrease to the point of restricting air flow to the engine.

Reference: www.mcnichols.com