



USDA Forest Service Fire and Aviation Management Briefing Paper



Date January 18, 2009

Topic: FS Fire Engine Standardization Project

Issue: Specification Development of Adopted Engine Standards

Background: The Fire Vehicle Standardization Committee was established to develop recommendations for fire vehicle standardization policy and develop a series of common models to be used nationally. Efforts to date have included collecting engine and tender data from each region, cleaning the data, collecting any standards a region may have already in-place, collecting training and other policies. The Committee prepared a draft set of recommendations which were circulated amongst the regions for comment. Additional changes were made and final standards were presented to the Regional Foresters. The standards were accepted and approved by leadership.

New Engine Standards Specification Development Timeline

- Engine Type 3 (Models 3X6 and 3X8) Specification and drawings to be completed by January 31, 2009
- Engine Type 4 (Model 4X8) Specification and drawings to be completed by March 31, 2009
- Engine Type 6 (Model 643) Specification and drawings to be completed by February 27, 2009
- Engine Type 7 – Slip on unit specification to be completed by April 30, 2009
- Ordering Guide will be developed in a progressive manner based on the engine specification timeline
- Specifications, drawings, and ordering guide will be posted to the Fire and Aviation Management Web site

Engine Requirements

General Requirements:

Certification: NFPA 1906 (with limited exceptions – separate attachment)
Striping: per draft FS handbook supplement (based on R-5 requirements)
Color: Green
Transmission: Automatic
Panel location: Rear
Hose reel: One
Foam capacity: 20 gallons
Foam proportioner: Automatic-regulating injection on discharge side of pump
Options: RLS: per 5120 and NFPA 1906
Amber lighting: per NFPA 1906

Specific Requirements by Engine Type:

Type 3 (Model 3X6)

Chassis: 33,000 lb GVWR
Body: Crew cab utility body
Tank: 600 gallons
Pump: PTO, single stage, 200 gpm @ 300 psi
Options: 4x2 (model 326) or 4x4 (model 346) drive

Type 3 (Model 3X8)

Chassis: 33,000 lb GVWR
Body: Single cab utility body
Tank: 800 gallons
Pump: PTO, single stage, 200 gpm @ 300 psi
Options: 4x2 (model 328) or 4x4 (model 348) drive

Type 4 (Model 4X8)

Chassis: 33,000 lb GVWR
Body: Single cab, platform body with storage boxes
Tank: 800 gallons
Pump: Auxiliary engine, 50 gpm at 250 psi
Options: 4x2 (model 428) or 4x4 (model 448) drive

Type 6 (Model 643)

Chassis: 17,950 lb GVWR
Drive: 4x4
Body: Extended cab utility body
Tank: 300 gallons
Pump: Auxiliary engine, 50 gpm at 250 psi
Options: Crew cab
Platform body

Type 7 – Slip-on unit only

Tank: 50 or 125 gallons
Pump: Auxiliary gas engine, 10 gpm at 100 psi
Hose reel or basket: One
Options: 50 or 125 gallons
Foam proportioner

Installation requirements: 50 gal: 9,700 lb GVWR min
125 gal: 12,000 lb GVWR min

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