

TRAINS AND FIRE TRUCKS



Daniel Mack

**THEY JUST GO
TOGETHER!!!**

TYPES OF TRUCKS - MAIN CATEGORIES

- Engines (also called Pumpers)
- Ladders
- Tenders (formerly called Tankers)
- Rescue / HazMat
- Brush / Wildland
- Specialty
- Staff Cars
- Airport
- Ambulances / EMS

CHASSIS

Custom Cab



CHASSIS

Commercial Cab – Engine Forward



CHASSIS

Commercial Cab - Cabover



ENGINES – SIDE CONTROL PUMP



ENGINES – TOP CONTROL PUMP



ENGINES – FRONT MOUNT PUMP



ENGINES – REAR MOUNT PUMP



ENGINES

Elevated Master Stream



LADDERS (AERIAL APPARATUS)

- Ladder Versus Platform
- Straight Versus Articulated
- Turntable Location
- Ladder Height
- Number of Rear Axles
- Pump???

“STRAIGHT STICK”

Rear Mount or Mid Mount



AERIAL PLATFORM

Rear Mount or Mid Mount



"ARTICULATED" AERIAL PLATFORM "Snorkel"



PLATFORM COMPARISON



TRACTOR DRAWN – "TILLER"



TRACTOR DRAWN – “TILLER QUINT”



“QUINT”

Ladder Height
Rear Axles



TENDERS (FORMERLY TANKERS)

Custom or Commercial Chassis
Number of Axles



TENDERS

Square or Elliptical Tank



TENDERS



Tractor Trailer



RESCUES AND HAZ-MAT

Custom or Commercial Chassis

Light – Medium - Heavy



HAZARDOUS MATERIALS UNITS – “HAZ-MAT”



BRUSH



WILDLAND



AIRPORT – “ARFF”



ERA CONSIDERATIONS

FIRE TRUCK LIFE SPANS

- Engine: 15 Years
- Ladder: 20 Years
- Rescue: 20+
- Tender: 20+
- Call Volume
- Care and Maintenance

“MAN POWER”



“HORSEPOWER”



“STEAM POWER”

The “Engineer” – Then and Now



AHRENS FOX – CINCINNATI’S OWN!



1917



1937



1939

WHEN IS A FOX NOT A "FOX"

1910-1956



1931

2017-Present



2022

AMERICAN LA FRANCE



1953



1957

WHEN IS AN ALF NOT AN "ALF"

1927-1994



1981

1995-2014



2003

CAB STYLE – OPEN ("TOPLESS")

Reasons for the Concept



CAB STYLE – “SEDAN”



1951



1965

CAB STYLE

Has a Roof but
Open Jump Seats



4-Door Cabs Mandated
Starting in 1991

CAB STYLE

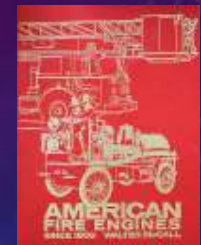
What Killed Open Jump Seats



*4-Door Cabs
Mandated
Starting
in 1991*

REFERENCES

- AMERICAN FIRE TRUCKS 1900-1975
 - Walt McCall
- FIRE APPARATUS JOURNAL
 - Modern and Historical



**FIREHOUSE
FIRE STATION
FIRE HALL
FIRE BARN**

DESIGN FACTORS

- Footprint
- Budget
- Number of Vehicles
- Number of Bays
- Depth of Bays
- Staffing

FOOTPRINT



MULTI-STORY



SINGLE-STORY



STEEL



DOORS



DOORS



MODELING CONSIDERATIONS

- Old Can Work On Modern Layouts, But Not Vice Versa
- Selective Compression
- Older European Can Work, But NOT Newer

MODEL STATIONS



MODEL STATIONS



MODEL STATIONS



DPM



Busch

MODEL STATIONS



Faller



"KITBASH"



TRAINING FACILITIES



FIRE TRAINS
PROTOTYPES
AND MODELS

LOCOMOTIVES

"Honorary" Fire Trucks



HO: BLI, ScaleTrains

LOCOMOTIVES

"Honorary" Fire Trucks



HO: Genesis
N: Atlas



HO: Atlas, Athearn Roundhouse

U.S. VERSION

Logging and Timber



U.S. VERSION

Early Class 1



U.S. VERSION Early



U.S. VERSION – BNSF FIRE TRAIN 2019 9,750 Gallons Per Car Plus Foam



MicroTrains "N"

HAVE TANK CAR – HAVE FIRE TRUCK



HAVE TANK CAR – HAVE FIRE TRUCK



HAVE TENDER – HAVE FIRE TRUCK



HAVE CABOOSE – HAVE FIRE TRUCK



EUROPEAN VERSION



IS IT A FIRE TRUCK OR A TRAIN?



1915 to 1930s



Jordan 1915 Ford



1920s



1920s – 1930s



Jordan 1927 Ahrens Fox



Jordan 1924 ALF



1940s



CMW 1941-46 Chevrolet

1968 ALF



1980s

The Iconic Ford C...



WHEN MODEL = PROTOTYPE...



1980s+



1980s+



MODERN VEHICLES



RiverPoint Station

MODERN VEHICLES



Walthers

MODERN VEHICLES



Boley

MODERN VEHICLES



Boley

"N" SCALE



Athearn



ShowCase Miniatures

"N" SCALE



GHQ Models

LARGER SCALES - O Corgi, Conrad 1:48 & 1:50



LARGER SCALES - S

AmerCom, Code-3,
DelPrado 1:64



FIRE TRUCK MODELING IDEAS

FIRE TRUCKS AS SCENERY

Structure Fire Dioramas



FIRE TRUCKS AS SCENERY

Car Crash Dioramas



FIRE TRUCKS AS SCENERY

Steam Fan Trips



TRUCKS AS LOADS



TRUCKS AS LOADS



MIXING MODELS AND ERAS

- Fire Departments Own Antiques
- Fire Departments Train Together
- Stations Visit Each Other
- Just Driving on the Road

COLLECTING AND KITBASHING

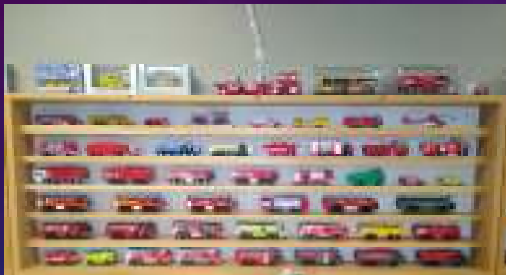


1:87 Vehicle Clubs
3-D Printing

COLLECTING



COLLECTING



***BUT I WANT THAT
MODEL ON MY
LAYOUT!!!***

PARADES



MUSTERS



BUT ULTIMATELY...IT'S YOUR LAYOUT

If You Can Do It With Trains, You Can Do It With Fire Trucks



HAVE A "SUPER" REST OF THE DAY

