

A proposal for
NEW ENGLAND FIRE EQUIPMENT APPARATUS
FIROVAC DEMO 2

Freightliner 114SD Plus



Components shown may not reflect all spec'd options and are not to scale

SPECIFICATION PROPOSAL

Description

Price Level

SD PRL-28D (EFF:MY25 ORDERS)

Data Version

SPECPRO21 DATA RELEASE VER 016

Vehicle Configuration

114SD PLUS CONVENTIONAL CHASSIS
2025 MODEL YEAR SPECIFIED
SET BACK AXLE - TRUCK
STRAIGHT TRUCK PROVISION, NON-TOWING
LH PRIMARY STEERING LOCATION

General Service

TRUCK CONFIGURATION
DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)
2008 CARB EMISSION CERTIFICATION - EXEMPTED VEHICLE; NO CLEAN IDLE LABEL REQUIRED
NO STATE/PROVINCE INITIAL REGISTRATION SELECTED
FIRE SERVICE
EMERGENCY VEHICLES BUSINESS SEGMENT
LIQUID BULK COMMODITY
TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS
MAXIMUM 8% EXPECTED GRADE
SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE
FREIGHTLINER LEVEL I WARRANTY
EXPECTED FRONT AXLE(S) LOAD : 16000.0 lbs
EXPECTED REAR DRIVE AXLE(S) LOAD : 40000.0 lbs



Description

EXPECTED GROSS VEHICLE WEIGHT CAPACITY
: 56000.0 lbs

Truck Service

TANK BODY
DEALER STOCK TRUCK - UPFIT
UNDETERMINED

Engine

CUM X12 500EV HP @ 1900 RPM, 1700 LB-FT @
1000 RPM, 2000 GOV RPM, R/F/E

Electronic Parameters

60 MPH ROAD SPEED LIMIT
CRUISE CONTROL SPEED LIMIT SAME AS ROAD
SPEED LIMIT
PTO MODE ENGINE RPM LIMIT - 1600 RPM
PTO MODE BRAKE OVERRIDE - SERVICE
BRAKE APPLIED
PTO RPM WITH CRUISE SET SWITCH - 1100
RPM
PTO RPM WITH CRUISE RESUME SWITCH - 1300
RPM
PTO MODE CANCEL VEHICLE SPEED - 5 MPH
PTO GOVERNOR RAMP RATE - 250 RPM PER
SECOND
FUEL DOSING OF AFTERTREATMENT ENABLED
IN PTO MODE-CLEANS HYDROCARBONS AT
HIGH TEMPERATURES ONLY
TWO REMOTE PTO SPEEDS
PTO SPEED 1 SETTING - 1100 RPM
PTO SPEED 2 SETTING - 1300 RPM
NO FLEET SPEC FOR PARAMETERIZATION
PTO MINIMUM RPM - 700
REGEN INHIBIT SPEED THRESHOLD - 5 MPH
PTO 1, DASH SWITCH, STATIONARY
OPERATION
PTO 2, DASH SWITCH, STATIONARY
OPERATION

Engine Equipment

2010 EPA/CARB/GHG21 CONFIGURATION
STANDARD OIL PAN
ENGINE MOUNTED OIL CHECK AND FILL



Description

SIDE OF HOOD AIR INTAKE WITH NFPA COMPLIANT EMBER SCREEN AND FIRE RETARDANT DONALDSON AIR CLEANER

DR 12V 275 AMP 40-SI BRUSHLESS PAD ALTERNATOR WITH REMOTE BATTERY VOLTAGE SENSE

(3) DTNA GENUINE, FLOODED STARTING, MIN 3000CCA, 555RC, THREADED STUD BATTERIES

BATTERY BOX FRAME MOUNTED

STANDARD BATTERY JUMPERS

SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB

WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN

NON-POLISHED BATTERY BOX COVER

POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH MOUNTED OUTBOARD DRIVER SEAT

PROGRESSIVE LOW VOLTAGE DISCONNECT AT 12.3 VOLTS FOR DESIGNATED CIRCUITS

CUMMINS NATURALLY ASPIRATED 25.9 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE

GVG, FIRE AND EMERGENCY SERVICE VEHICLES ENGINE WARNING

CUMMINS INTEBRAKE BRAKE WITH HIGH MED LOW BRAKE

RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE

ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND VIRTUAL REGENERATION REQUEST SWITCH IN CLUSTER

STANDARD EXHAUST SYSTEM LENGTH

RH STANDARD HORIZONTAL TAILPIPE

6 GALLON DIESEL EXHAUST FLUID TANK

100 PERCENT DIESEL EXHAUST FLUID FILL

STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING

LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION

STANDARD DIESEL EXHAUST FLUID TANK CAP

AIR POWERED ON/OFF ENGINE FAN CLUTCH

Description

AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON ENGINE MOUNTED
CUMMINS SPIN ON FUEL FILTER
COMBINATION FULL FLOW/BYPASS OIL FILTER
1500 SQUARE INCH ALUMINUM RADIATOR
ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT
GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT
CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES
AUXILIARY ENGINE COOLING USING WATER FROM FIRE PUMP
DELCO 12V 39MT HD/OCP STARTER WITH THERMAL PROTECTION AND INTEGRATED MAGNETIC SWITCH

Transmission

ALLISON 4500 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION

Transmission Equipment

ALLISON VOCATIONAL PACKAGE 198 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL EVS
ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES
PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY
SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY
PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE
SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE
PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE
SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE

Description

2ND GEAR ENGINE BRAKE ALTERNATE
PRESELECT WITH MODERATE DOWNSHIFT
STRATEGY

FUEL SENSE 2.0 DISABLED - PERFORMANCE -
TABLE BASED

DRIVER SWITCH INPUT - DEFAULT - NO
SWITCHES

DIRECTION CHANGE ENABLED WITH
MULTIPLEXED SERVICE BRAKES - ALLISON 5TH
GEN TRANSMISSIONS

QUICKFIT BODY LIGHTING CONNECTOR UNDER
CAB, WITH BLUNTCUTS

ELECTRONIC TRANSMISSION WIRING TO
CUSTOMER INTERFACE CONNECTOR

(2) CUSTOMER INSTALLED MUNCIE CS10
SERIES PTO'S

PTO MOUNTING, LH SIDE AND TOP RH SIDE OF
MAIN TRANSMISSION ALLISON

MAGNETIC PLUGS, ENGINE DRAIN,
TRANSMISSION DRAIN, AXLE(S) FILL AND
DRAIN

PUSH BUTTON ELECTRONIC SHIFT CONTROL,
DASH MOUNTED

TRANSMISSION PROGNOSTICS - ENABLED 2013

WATER TO OIL TRANSMISSION COOLER,
FRAME MOUNTED

TRANSMISSION OIL CHECK AND FILL WITH
ELECTRONIC OIL LEVEL CHECK

SYNTHETIC TRANSMISSION FLUID (TES-295
COMPLIANT)

Front Axle and Equipment

MFS-16-143A 16,000# FL1 71.5 INCH KPI/3.74
INCH DROP SINGLE FRONT AXLE

MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT
BRAKES, DOUBLE ANCHOR, FABRICATED
SHOES

FIRE AND EMERGENCY SEVERE SERVICE,
NON-ASBESTOS FRONT LINING

CAST IRON OUTBOARD FRONT BRAKE DRUMS

FRONT OIL SEALS

VENTED FRONT HUB CAPS WITH WINDOW,
CENTER AND SIDE PLUGS - OIL

STANDARD SPINDLE NUTS FOR ALL AXLES

MERITOR AUTOMATIC FRONT SLACK
ADJUSTERS

Description

STANDARD KING PIN BUSHINGS
TRW THP-60 POWER STEERING WITH RCH45
AUXILIARY GEAR
POWER STEERING PUMP
4 QUART POWER STEERING RESERVOIR
OIL/AIR POWER STEERING COOLER
CURRENT AVAILABLE SYNTHETIC 75W-90
FRONT AXLE LUBE

Front Suspension

16,000# TAPERLEAF FRONT SUSPENSION
MAINTENANCE FREE RUBBER BUSHINGS -
FRONT SUSPENSION
FRONT SHOCK ABSORBERS

Rear Axle and Equipment

RT-40-160 40,000# R-SERIES TANDEM REAR
AXLE
4.89 REAR AXLE RATIO
IRON REAR AXLE CARRIER WITH STANDARD
AXLE HOUSING
SPL170 XL DANA SPICER MAIN DRIVELINE WITH
HALF ROUND YOKES
SPL170 XL DANA SPICER INTERAXLE
DRIVELINE WITH HALF ROUND YOKES
DRIVER CONTROLLED TRACTION
DIFFERENTIAL - BOTH TANDEM REAR AXLES
(1) INTERAXLE LOCK VALVE, (1) DRIVER
CONTROLLED DIFFERENTIAL LOCK FORWARD-
REAR AND REAR-REAR AXLE VALVE
INDICATOR LIGHT FOR EACH INTERAXLE
LOCKOUT SWITCH, DISENGAGE INTERAXLE
LOCK WITH IGNITION OFF
INDICATOR LIGHT FOR EACH DIFFERENTIAL
LOCKOUT SWITCH, ENGAGE AT SPEEDS 5 MPH
OR LESS, DISENGAGE W/IGN OFF OR SPEEDS
EXCEEDING 25 MPH
MERITOR 16.5X8.62 Q+ CAST SPIDER HEAVY
DUTY CAM REAR BRAKES, DOUBLE ANCHOR,
FABRICATED SHOES
FIRE AND EMERGENCY SEVERE SERVICE NON-
ASBESTOS REAR BRAKE LINING
BRAKE CAMS AND CHAMBERS ON FORWARD
SIDE OF DRIVE AXLE(S)
CAST IRON OUTBOARD REAR BRAKE DRUMS
REAR OIL SEALS

Description

WABCO TRISTOP D LONGSTROKE 2-DRIVE
AXLE SPRING PARKING CHAMBERS
HALDEX AUTOMATIC REAR SLACK ADJUSTERS
CURRENT AVAILABLE SYNTHETIC 75W-90 REAR
AXLE LUBE
STANDARD REAR AXLE BREATHER(S)

Rear Suspension

TUFTRAC GEN2 40,000# REAR SPRING
SUSPENSION
9.5 INCH NOMINAL RIDE HEIGHT (460MM
GLOBAL REFERENCE HEIGHT)
AXLE CLAMPING GROUP
55 INCH AXLE SPACING
FORE/AFT AND TRANSVERSE CONTROL RODS
REAR SHOCK ABSORBERS - ONE AXLE

Pusher / Tag Equipment

NO PUSHER/TAG BRAKE DUST SHIELDS

Brake System

WABCO 4S/4M ABS WITH TRACTION CONTROL
WITH ATC SHUT OFF SWITCH
REINFORCED NYLON, FABRIC BRAID AND WIRE
BRAID CHASSIS AIR LINES
FIBER BRAID PARKING BRAKE HOSE
STANDARD BRAKE SYSTEM VALVES
STANDARD AIR SYSTEM PRESSURE
PROTECTION SYSTEM
STD U.S. FRONT BRAKE VALVE
RELAY VALVE WITH 5-8 PSI CRACK PRESSURE,
NO REAR PROPORTIONING VALVE
WABCO SYSTEM SAVER HP WITH INTEGRAL
AIR GOVERNOR AND HEATER
AIR DRYER MOUNTED OUTBOARD ON LH RAIL
STEEL AIR TANKS MOUNTED AFT INSIDE
AND/OR BELOW FRAME JUST FORWARD OF
REAR SUSPENSION, NO TRIPLE OR TORPEDO
TANKS
PULL CABLES ON ALL AIR RESERVOIR(S)

Trailer Connections

NO TRAILER AIR HOSE
NO AIR HOSE HANGER
NO TRAILER ELECTRICAL CABLE

Description

Wheelbase & Frame

6425MM (253 INCH) WHEELBASE
7/16X3-9/16X11-1/8 INCH STEEL FRAME
(11.11MMX282.6MM/0.437X11.13 INCH) 120KSI
1900MM (75 INCH) REAR FRAME OVERHANG
FRAME OVERHANG RANGE: 71 INCH TO 80 INCH
CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 187.4 in
CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 184.4 in
CALC'D FRAME LENGTH - OVERALL : 357.87 in
CALCULATED FRAME SPACE LH SIDE : 117.18 in
CALCULATED FRAME SPACE RH SIDE : 133.05 in
SQUARE END OF FRAME
FRONT CLOSING CROSSMEMBER
STANDARD WEIGHT ENGINE CROSSMEMBER
STANDARD MIDSHIP #1 CROSSMEMBER(S); FIRST MIDSHIP MOUNTED 36.0 INCHES BACK OF CAB
STANDARD REARMOST CROSSMEMBER
HEAVY DUTY SUSPENSION CROSSMEMBER

Chassis Equipment

14 INCH CHROMED STEEL SEVERE DUTY BUMPER WITH CENTER TOW DEVICE
HEAVY DUTY CENTER MOUNTED TOW PIN
BUMPER MOUNTING FOR SINGLE LICENSE PLATE
NO MUDFLAP BRACKETS
NO REAR MUDFLAPS
GRADE 8 THREADED HEX HEADED FRAME FASTENERS
EXTERIOR HARNESES WRAPPED IN ABRASION TAPE
FACTORY INSTALLED BENDIX NEXT GEN SMARTIRE TIRE PRESSURE MONITORING SYSTEM WITH WHEEL RIM MOUNTED NEXT GEN SENSORS AND INTEGRATED IN DASH
TANK BODY 3001 TO 4500 GALLONS

Description

CLEAR FRAME RAILS (EXCEPT AIR DRYER)
OUTBOARD BOTH RAILS BACK OF CAB TO
REAR SUSPENSION

Fifth Wheel

NO FIFTH WHEEL

Fuel Tanks

50 GALLON/189 LITER SHORT RECTANGULAR
ALUMINUM FUEL TANK - LH
RECTANGULAR FUEL TANK(S)
POLISHING OF FUEL/HYDRAULIC TANK(S) WITH
PAINTED BANDS
FUEL TANK(S) FORWARD
POLISHED STEP FINISH
CHROME FUEL TANK CAP(S)
DETROIT FUEL/WATER SEPARATOR WITH
WATER IN FUEL SENSOR AND 12 VOLT
PREHEATER
EQUIFLO INBOARD FUEL SYSTEM
HIGH TEMPERATURE REINFORCED NYLON
FUEL LINE

Tires

MICHELIN XZU-S2 315/80R22.5 20 PLY RADIAL
FRONT TIRES
MICHELIN XDN2 11R22.5 14 PLY RADIAL REAR
TIRES

Hubs

CONMET PRESET PLUS PREMIUM IRON FRONT
HUBS
CONMET PRESET PLUS PREMIUM IRON REAR
HUBS

Wheels

ALCOA ULTRA ONE 89U63X 22.5X9.00 10-HUB
PILOT 3.12 INSET 10-HD ALUMINUM FRONT
WHEELS
ALCOA ULA18X 22.5X8.25 10-HUB PILOT
ALUMINUM DISC REAR WHEELS
POLISHED FRONT WHEELS; OUTSIDE ONLY
POLISHED REAR WHEELS; OUTSIDE OF OUTER
WHEELS ONLY
BENDIX SMARTIRE TIRE PRESSURE
MONITORING SYSTEM WHEEL/RIM MOUNTED
SENSORS, ALL AXLES

Description

FRONT WHEEL MOUNTING NUTS
REAR WHEEL MOUNTING NUTS
NYLON WHEEL GUARDS FRONT AND REAR ALL
INTERFACES

Cab Exterior

114 INCH BBC FLAT ROOF ALUMINUM
CONVENTIONAL CAB
AIR CAB MOUNTING
CAB ROOF REINFORCEMENTS FOR ROOF
MOUNTED COMPONENTS
NONREMOVABLE BUGSCREEN MOUNTED
BEHIND GRILLE
FRONT FENDERS SET-BACK AXLE
BOLT-ON MOLDED FLEXIBLE FENDER
EXTENSIONS
SAFETY YELLOW LH AND RH INTERIOR GRAB
HANDLES AND LH AND RH EXTERIOR GRAB
HANDLES WITH SINGLE RUBBER INSERT
BRIGHT FINISH RADIATOR SHELL/HOOD BEZEL
STATIONARY BLACK GRILLE WITH BRIGHT
ACCENTS
CHROME HOOD MOUNTED AIR INTAKE GRILLE
FIBERGLASS HOOD
HOOD LINER, ADDED FIREWALL AND FLOOR
HEAT INSULATION
FACTORY PREP DUAL 25 INCH ROUND
STUTTER TONE HOOD MOUNTED AIR HORNS
SHIPPED LOOSE FOR PDI INSTALL
SINGLE ELECTRIC HORN
DUAL HORN SHIELDS
HALOGEN COMPOSITE HEADLAMPS WITH
BRIGHT BEZELS
LED AERODYNAMIC MARKER LIGHTS
DAYTIME RUNNING LIGHTS
INTEGRAL STOP/TAIL/BACKUP LIGHTS
STANDARD FRONT TURN SIGNAL LAMPS
AUTOMATIC ON/OFF, ENGINE COMPARTMENT,
HOOD ACTIVATED WORK LIGHT WITH MANUAL
OVERRIDE
DUAL WEST COAST BRIGHT FINISH HEATED
MIRRORS WITH LH AND RH REMOTE
DOOR MOUNTED MIRRORS
102 INCH EQUIPMENT WIDTH



Description

LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS
RH DOWN VIEW MIRROR
STANDARD SIDE/REAR REFLECTORS
RH AFTERTREATMENT SYSTEM CAB ACCESS WITH POLISHED DIAMOND PLATE COVER
PARK BRAKE REMINDER WARNING SYSTEM
63X14 INCH TINTED REAR WINDOW
TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS
RH AND LH ELECTRIC POWERED WINDOWS
1-PIECE SOLAR GREEN GLASS WINDSHIELD
8 LITER (2 GAL) WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITHOUT FLUID LEVEL INDICATOR

Cab Interior

RUGGED TRIM PACKAGE
GRAY & CARBON VINYL INTERIOR "RUGGED"
CARBON WITH PREMIUM GUNMETAL ACCENT (RUGGED)
MOLDED PLASTIC DOOR PANEL
MOLDED PLASTIC DOOR PANEL
BLACK MATS WITH SINGLE INSULATION
(1)DASH MOUNTED 12V POWER OUTLET,
(1)DASH MOUNTED DUAL USB-C OUTLET
FORWARD ROOF MOUNTED CONSOLE
LH AND RH DOOR STORAGE POCKETS INTEGRATED INTO MOLDED DOOR PANELS
DIGITAL ALARM CLOCK IN DRIVER DISPLAY
(2) CUP HOLDERS LH AND RH DASH
M2/SD DASH
5 LB. FIRE EXTINGUISHER
FIRST AID KIT
HEATER, DEFROSTER AND AIR CONDITIONER
STANDARD HVAC DUCTING
MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH
STANDARD HEATER PLUMBING
VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR
BINARY CONTROL, R-134A

Description

STANDARD INSULATION
SOLID-STATE CIRCUIT PROTECTION AND FUSES
12V NEGATIVE GROUND ELECTRICAL SYSTEM
STANDARD LED CAB LIGHTING
NO SECURITY DEVICE
DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME
KEY QUANTITY OF 5
LH AND RH ELECTRIC DOOR LOCKS
TRIANGULAR REFLECTORS WITHOUT FLARES
SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR
SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR
LH AND RH INTEGRAL DOOR PANEL ARMRESTS
BLACK VINYL DRIVER SEAT COVER
BLACK VINYL PASSENGER SEAT COVER
NFPA 1901-2009 HIGH VISIBILITY ORANGE SEAT BELTS
ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN
4-SPOKE 18 INCH (450MM) BLACK STEERING WHEEL WITH SWITCHES
DRIVER AND PASSENGER INTERIOR SUN VISORS

Instruments & Controls

ELECTRONIC ACCELERATOR CONTROL
NO INSTRUMENT PANEL-DRIVER
FULLY CONFIGURABLE CENTER INSTRUMENT PANELS
ENGINE REMOTE INTERFACE WITH PARK BRAKE INTERLOCK
BRIGHT ARGENT FINISH GAUGE BEZELS
LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM
DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE
INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS

Description

87 DECIBELS TO 112 DECIBELS AUTOMATIC SELF-ADJUSTING BACKUP ALARM

ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES

KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY

PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY

DIGITAL PANEL LAMP DIMMER SWITCH IN DRIVER DISPLAY

HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH

2 INCH ELECTRIC FUEL GAUGE

ENGINE REMOTE INTERFACE FOR REMOTE THROTTLE

QUICKFIT POWERTRAIN INTERFACE CONNECTOR UNDER CAB WITH CAPS

4 EXTRA PROGRAMMABLE SWITCHES/INDICATORS

QUICKFIT PROGRAMMABLE INTERFACE CONNECTOR(S) UNDER CAB WITH BLUNTCUTS

ENGINE REMOTE INTERFACE CONNECTOR AT POWERTRAIN INTERFACE CONNECTOR

ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE

DIGITAL ENGINE OIL TEMPERATURE IN DRIVER DISPLAY

ELECTRIC ENGINE OIL PRESSURE GAUGE

2 INCH TRANSMISSION OIL TEMPERATURE GAUGE

ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER

ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY

PTO CONTROLS FOR ENHANCED VEHICLE ELECTRIC/ELECTRONIC ARCHITECTURE

NO OBSTACLE DETECTION SYSTEM

NO DR ASSIST SYSTEM

ELECTRONIC STABILITY CONTROL

NO LANE DEPARTURE WARNING SYSTEM

LEFTHAND/RIGHTHAND OVERHEAD INSTRUMENT PANEL BLANK

Description

QUICKFIT PROGRAMMABLE INTERFACE
MODULE + (4) 20 AMP FUSED RELAYS

NFPA VEHICLE DATA RECORDER AND
SEATBELT DISPLAY

AM/FM/WB WORLD TUNER RADIO WITH
SIRIUSXM, BLUETOOTH, IPOD INTERFACE, USB
AND AUXILIARY INPUTS, J1939

DASH MOUNTED RADIO

(2) RADIO SPEAKERS IN CAB

NO AM/FM RADIO ANTENNA

NO CB RADIO MOUNTING PROVISION

SHARKFIN MULTI-BAND ANTENNA:
AM/FM/WEATHERBAND, WIFI/BLUETOOTH,
SDAR/SIRIUSXM, GNSS/GPS

INTEROPERABLE SDAR ANTENNA

STANDARD RADIO WIRING WITH STEERING
WHEEL CONTROLS

ELECTRONIC MPH SPEEDOMETER WITH
SECONDARY KPH SCALE, WITHOUT
ODOMETER

STANDARD VEHICLE SPEED SENSOR

ELECTRONIC 3000 RPM TACHOMETER

DETROIT CONNECT PLATFORM HARDWARE

3 YEARS DAIMLER CONNECTIVITY BASE
PACKAGE (FEATURES VARY BY MODEL)
POWERED BY DETROIT CONNECT

TMC RP1226 ACCESSORY CONNECTOR
LOCATED BEHIND PASSENGER SIDE
REMOVEABLE DASH PANEL

IGNITION SWITCH CONTROLLED ENGINE STOP

TWO EXTRA HARDWIRED SWITCHES IN DASH,
ROUTE TO BETWEEN SEATS, CAPPED

HARDWIRE SWITCH #1, ON/OFF/ON LATCHING,
20 AMPS IGNITION POWER

HARDWIRE SWITCH #2, ON/OFF/ON LATCHING,
20 AMPS IGNITION POWER

12 SWITCH SLOTS, 8 DRIVER 4 CENTER
OVERHEAD CONSOLE

NO PRE-DEFINED SMARTPLEX INDICATOR
LAMPS

(2) FOOT SWITCHES: (1) OFFICER AIR HORN
AND (1) DRIVER AIR HORN

NO TRAILER HAND CONTROL BRAKE VALVE

DIGITAL VOLTAGE DISPLAY INTEGRAL WITH
DRIVER DISPLAY

Description

SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY
ROTARY HEADLAMP SWITCH, MARKER LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT FOR OPTIONAL FOG/ROAD LAMPS
ONE VALVE PARKING BRAKE SYSTEM WITH DASH VALVE CONTROL AUTONEUTRAL AND WARNING INDICATOR
SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, HEADLAMP FLASH, WASH/WIPE/INTERMITTENT
INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH 40 AMP (20 AMP PER SIDE) TRAILER LAMP CAPACITY
NO WRG/SW-OPTL #2, CHAS, AIR

Design

PAINT: ONE SOLID COLOR

Color

CAB COLOR A: L0762EY MED RED ELITE EY
BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT
STANDARD E COAT/UNDERCOATING

Certification / Compliance

U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS

Secondary Factory Options

CORPORATE PDI CENTER OPTION
INSTALLATION/MODIFICATION ONLY
PRODUCTION YEAR 2023 SOFTWARE PACKAGE (GARNET)
ENG BRK PRESLECT - DTNA STANDARD
ENGINE BRAKE RANGE
FENDER & FRONT OF HOOD MOUNTED FRONT MUD FLAPS
STND ELECTL PRTCT COAT, GRS ON BATT TERM & RED ENML PNT IN ENG COMP ON CHASS CONN

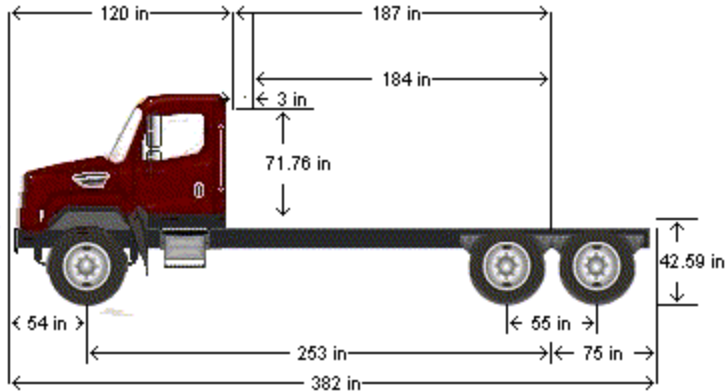
Extended Warranty

TOWING: 1 YEAR/UNLIMITED MILES/KM EXTENDED TOWING
COVERAGE \$750 CAP FEX APPLIES

(***) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.



D I M E N S I O N S



VEHICLE SPECIFICATIONS SUMMARY - DIMENSIONS

Model	114SD
Wheelbase (545)	6425MM (253 INCH) WHEELBASE
Rear Frame Overhang (552)	1900MM (75 INCH) REAR FRAME OVERHANG
Fifth Wheel (578)	NO FIFTH WHEEL
Mounting Location (577)	NO FIFTH WHEEL LOCATION
Maximum Forward Position (in)	0
Maximum Rearward Position (in)	0
Amount of Slide Travel (in)	0
Slide Increment (in)	0
Desired Slide Position (in)	0.0
Cab Size (829)	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Sleeper (682)	NO SLEEPER BOX/SLEEPER CAB
Exhaust System (016)	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE

TABLE SUMMARY - DIMENSIONS

Dimensions	Inches
Bumper to Back of Cab (BBC)	119.8
Bumper to Centerline of Front Axle (BA)	54.3
Front Axle to Back of Cab (AC)	65.6
Min. Cab to Body Clearance (CB)	3.0
Back of Cab to Centerline of Rear Axle(s) (CA)	187.4
Effective Back of Cab to Centerline of Rear Axle(s) (Effective CA)	184.4
Back of Cab Protrusions (Exhaust/Intake) (CP)	2.0
Back of Cab Protrusions (Side Extenders/Trim Tab) (CP)	0.0
Back of Cab Protrusions (CNG Tank)	0.0
Back of Cab Clearance (CL)	3.0
Back of Cab to End of Frame	262.2
Cab Height (CH)	71.8
Wheelbase (WB)	253.0
Frame Overhang (OH)	74.8
Overall Frame Length	357.9
Overall Length (OAL)	382.0
Rear Axle Spacing	55.0
Unladen Frame Height at Centerline of Rear Axle	42.6

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

GVWR

VEHICLE SPECIFICATIONS SUMMARY - GVWR

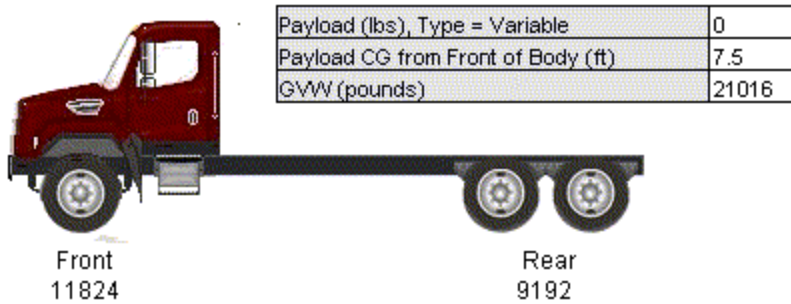
Model	114SD
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Expected Front Axle(s) Load (lbs).....	16000.0
Expected Pusher Axle(s) Load (lbs).....	0.0
Expected Rear Axle(s) Load (lbs).....	40000.0
Expected Tag Axle(s) Load (lbs).....	0.0
Expected GVW (lbs).....	56000
Expected GCW (lbs).....	0.0
Front Axle (400).....	MFS-16-143A 16,000# FL1 71.5 INCH KPI/3.74 INCH DROP SINGLE FRONT AXLE
Front Suspension (620).....	16,000# TAPERLEAF FRONT SUSPENSION
Front Hubs (418).....	CONMET PRESET PLUS PREMIUM IRON FRONT HUBS
Front Disc Wheels (502).....	ALCOA ULTRA ONE 89U63X 22.5X9.00 10-HUB PILOT 3.12 INSET 10-HD ALUMINUM FRONT WHEELS
Front Tires (093).....	MICHELIN XZU-S2 315/80R22.5 20 PLY RADIAL FRONT TIRES
Front Brakes (402).....	MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES
Steering Gear (536).....	TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR
Rear Axle (420).....	RT-40-160 40,000# R-SERIES TANDEM REAR AXLE
Rear Suspension (622).....	TUFTRAC GEN2 40,000# REAR SPRING SUSPENSION
Rear Hubs (450).....	CONMET PRESET PLUS PREMIUM IRON REAR HUBS
Rear Disc Wheels (505).....	ALCOA ULA18X 22.5X8.25 10-HUB PILOT ALUMINUM DISC REAR WHEELS
Rear Tires (094).....	MICHELIN XDN2 11R22.5 14 PLY RADIAL REAR TIRES
Rear Brakes (423).....	MERITOR 16.5X8.62 Q+ CAST SPIDER HEAVY DUTY CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES
Pusher / Tag Axle (443).....	NO PUSHER OR TAG AXLE
Pusher / Tag Suspension (626).....	NO PUSHER OR TAG SUSPENSION
Pusher / Tag Hubs (449).....	NO PUSHER OR TAG HUBS
Dead/Pusher/Tag Disc Wheels (509).....	NO PUSHER/TAG DISC WHEELS
Pusher / Tag Tires (095).....	NO PUSHER/TAG TIRES
Pusher / Tag Brakes (456).....	NO PUSHER/TAG BRAKES

TABLE SUMMARY - GVWR

	Front	Rear 1	Rear 2
Axle Component Weight Ratings			
Axles	16000	20000	20000
Suspension	16000	20000	20000
Hubs	23000	26000	26000
Brakes	20000	24999	24999
Wheels	20000	29600	29600
Tires	20000	23360	23360
Power Steering	22000	N/A	N/A
GAWR (per axle)	16000	20000	20000
GAWR (per axle system)	16000		40000
Expected Load (per axle system)	16000		40000
GVWR due to Frame	90000		
GVWR due to Transmission	300000		
Vehicle GVWR Summary			
Calculated GVWR	56000		
Expected GVWR	56000		
All weights displayed in pounds			

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

TRUCK WEIGHT



VEHICLE SPECIFICATIONS SUMMARY - TRUCK WEIGHT

Model	114SD
Cab Size (829).....	114 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Expected Front Axle(s) Load (lbs).....	16000.0
Expected Pusher Axle(s) Load (lbs).....	0.0
Expected Rear Axle(s) Load (lbs)	40000.0
Expected Tag Axle(s) Load (lbs).....	0.0
Expected GVW (lbs)	56000
Expected GCW (lbs)	0.0
Wheelbase (545)	6425MM (253 INCH) WHEELBASE
Pusher / Tag Axle (443).....	NO PUSHER OR TAG AXLE
Front Axle to Back of Cab (in).....	65.551
Cab to Body Clearance (in).....	3.0
Front Axle to Body (in)	68.551
Truck Configuration (AA3)	TANK BODY
Body Length (ft)	15.0
Body Weight (lbs)	3200.0
Body Horiz CG from Body Front (ft)	7.5
Body Front to Rear Axle(s) CL (ft).....	15.37
Driver Weight (lbs).....	500.0
Driver Horizontal CG from Front Axle (in).....	32.778
Left-Hand Primary Fuel/Hydraulic Tank (204).....	50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH
Left Fuel Tank Horizontal CG (in).....	92.1655
Right-Hand Primary Fuel/Hydraulic Tank (206).....	NO RH FUEL TANK
Right Fuel Tank Horizontal CG (in)	0

TABLE SUMMARY - TRUCK WEIGHT

Item	Front(s)	Rear(s)	Total
Chassis Tare	9937	6965	16902
Fuel / Oil	258	156	414
Driver	435	65	500
Dealer Installed Options	0	0	0
Accessories Total	0	0	0
Body Tare	1194	2006	3200
Truck Tare Weight	11824	9192	21016
Payload Total	0	0	0
Calculated Axle Loads	11824	9192	21016
Expected Axle Loads / GVW	16000	40000	56000
GAWR / GVWR	16000	40000	56000
Payload CG From Front of Body		7.5 feet	
Payload CG From Front Axle		13.2 feet	
Payload Distribution		Variable	
All weights displayed in pounds			

Item	Front(s)	Rear(s)	Total
Chassis Tare	9937	6965	16902
Fuel / Oil	258	156	414
Driver	435	65	500
Dealer Installed Options	0	0	0
Accessories Total	0	0	0
Body Tare	1194	2006	3200
Truck Tare Weight	11824	9192	21016
Payload Total	0	0	0
Calculated Axle Loads	11824	9192	21016
Expected Axle Loads / GVW	16000	40000	56000
GAWR / GVWR	16000	40000	56000
Payload CG From Front of Body		7.5 feet	
Payload CG From Front Axle		13.2 feet	
Payload Distribution		Variable	
All weights displayed in pounds			

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

