



**North Carolina
Sheriffs' Association**
Proudly Serving the Sheriffs and Citizens of North Carolina since 1922

ADVANTAGE
Truck Center



DATE

4/9/2021

QUOTE INFORMATION

AVTG20210004155788D

VNR42300 Daycab

Qty: 1

PREPARED BY

YOUNGS TRUCK CENTER,
INC.

3880 JEFF ADAMS DR

CHARLOTTE

NC 282061259

PREPARED FOR

Thank you for the opportunity to provide you this quote on your Volvo truck.

This proposal outlines the complete vehicle specification and performance details that have been customized to provide solutions that will help you meet your transportation goals and drive greater business success. The enclosed spec aligns the core values of Volvo Trucks with your business needs by helping you design a solution that drives greater fuel efficiency, driver productivity, safety and uptime.

By partnering with Volvo Trucks, you will benefit from innovative technologies that are incorporated in all we do - from our powertrain components to ensuring your drivers have the ultimate in comfort and convenience - all the while protecting your drivers with our proven safety features.

We also stand by our commitment to uptime with Volvo Remote Diagnostics as a standard on all Volvo trucks. With this fully integrated diagnostic package, no additional hardware or software purchase is required to manage your vehicles. By saving your company diagnostic time, your business will reap the benefits of more time spent on the road and less in the shop. With specialized bays for expedited service, Volvo dealerships are dedicated to taking care of your needs quickly and efficiently.

As you review this proposal, please note any questions you may have so that we may discuss them. I look forward to meeting with you soon.

Sincerely,

BRUCE STADLER

YOUNGS TRUCK CENTER, INC.



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TECHNICAL SPECIFICATION

VNR42300 Daycab

MODEL PACKAGE		DESCRIPTION
S	MARKETING MODEL	VNR42300
S	ASSEMBLY PLANT	VOLVO TRUCKS - ASSEMBLED IN THE USA

VEHICLE ADAPTATION		DESCRIPTION
S	MARKET ADAPTATION	USA / USA TERRITORY MARKET ADAPTATION
S	LANGUAGE ON DECALS	ENGLISH/SPANISH LANGUAGE ON DECALS
S	FIRST PUBLICATION LANGUAGE	ENGLISH
S	VEHICLE APPLICATION	TRUCK / DRY VAN BODY
S	TRAILER TYPE	WITHOUT TRAILER TYPE
S	VEHICLE GHG CERTIFICATION	GREEN HOUSE GAS COMPLETE VEHICLE CERTIFICATION
S	GHG APPLICATION, VEHICLE	GREEN HOUSE GAS VOCATIONAL APPLICATION
S	VEHICLE WARRANTY QUALIFICATION	STANDARD NORMAL DUTY WARRANTY QUALIFIED
S	VEHICLE VOCATION	PICKUP AND DELIVERY / SHORT HAUL SERVICE
S	LOAD HANDLING EQ. CRANE	WITHOUT LOAD HANDLING EQUIPMENT, CRANE
S	LOAD HANDLING AND MISC. EQUIPM	WITHOUT MISCELLANEOUS LOAD HANDLING EQUIPMENT
S	OPERATING TERRAIN GRADE CONDITIONS	ON HIGHWAY, STARTING GRADES <16%
S	TOPOGRAPHY	MOSTLY FLAT, MOST GRADES <3% (EX. OHIO)
S	AMBIENT TEMPERATURE UPPER LIMIT	SUMMER AMBIENT TEMPERATURES DO NOT REGULARLY EXCEED 104 DEGREE F (40 DEGREE C)
S	LOADING SURFACE FACTOR	CONCRETE LOADING AND / OR UNLOADING SURFACE
S	ROAD CONDITION	OPERATING CLASS ONE (ON HIGHWAY)
S	CUSTOMER FLEET SIZE	REGIONAL FLEET 25 OR MORE VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND

PASSIVE AND ACTIVE SAFETY		DESCRIPTION
S	CAB VERSION	DAY CAB
S	AIRBAG	VOLVO SRS AIR BAG-DRIVER SIDE ONLY
S	CLOSE VIEW MIRROR, SIDE OF CAB	DOWN VIEW MIRROR OVER PASSENGER DOOR
S	ESP PACKAGE	VOLVO ENHANCED STABILITY TECHNOLOGY (VEST)

PASSIVE AND ACTIVE SAFETY		DESCRIPTION
S	TRACTION CONTROL	TRACTION CONTROL WITH LIMITED DISABLE
S	DATA CAPTURE	WITHOUT DATA CAPTURE
S	PARK BRAKE ALARM IMMOBILIZER	PARK BRAKE ALARM, SOUNDS IF BRAKE OFF AND DRIVER'S DOOR OPENED SECURITY SYSTEM

ENGINE	DESCRIPTION
S	ENGINE PACKAGE VOLVO D11 325HP 2100RPM 1250 LBFT - EPA'17 EMISSION LEVEL

ENGINE EQUIPMENT	DESCRIPTION
S	RADIATOR COOLANT EXTENDED LIFE ETHYLENE GLYCOL ANTI-FREEZE (RED), -34 F (-37 C)
S	FAN CLUTCH PACKAGE ELECTRONIC VISCOUS CSI FAN CLUTCH
S	STARTER MOTOR DELCO REMY 12V 39MTHD STARTER
S	ALTERNATOR CAPACITY 165 AMP HIGH EFFICIENCY DELCO REMY 36SI PAD MOUNT ALTERNATOR (12V)
S	BATTERY PACKAGE 2 VOLVO 1000 CCA MAINTENANCE FREE 12V BATTERIES, 2000 CCA
S	BATTERY BOX MOUNTING BATTERY BOX, LEFT HAND SIDE, BEHIND FRONT FENDER
S	BATTERY BOX CONFIGURATION BATTERY BOX - 4 CAPACITY
S	BATTERY BOX COVER BASIC BATTERY BOX COVER
S	MAIN SWITCH MANUAL BATTERY DISCONNECT MAIN SWITCH
S	DIESEL EXHAUST FLUID TANK 18.5 GALLON LEFT HAND 26", FRAME MOUNTED (FILLED WITH 10 GALLONS OF DEF, WEIGHING 91 LBS)
S	EXHAUST SYSTEM INTEGRATED DPF AND SCR MOUNTED RIGHT HAND SIDE UNDER CAB WITH SINGLE HORIZONTAL TAILPIPE
S	EXHAUST OUTLET PACKAGE HORIZONTAL ALUMINIZED STAINLESS STEEL TAIL PIPE
S	EXHAUST HEAT SHIELD ALUMINUM EXHAUST SHIELD
S	PRIMARY FUEL FILTER VOLVO DUAL ENGINE MOUNTED FUEL FILTERS WITH WATER SEPARATOR
S	AUX. FUEL SYSTEM EQUIPMENT RETURN FUEL RECIRCULATION VALVE
S	COMPRESSOR CAPACITY WABCO 31.8 CFM COMPRESSOR
S	ENGINE BRAKE ACTIVATION ENGINE BRAKE ACTIVATION, BASIC
S	OIL SUMP STAMPED STEEL OIL PAN (STANDARD OIL CHANGE INTERVALS)

TRANSMISSION	DESCRIPTION
S	TRANSMISSION PACKAGE VOLVO 12 SPEED I-SHIFT AT2612F DIRECT DRIVE
S	TRANSMISSION ELECTRONICS PACKAGE ECONOMY I-SHIFT TRANSMISSION ELECTRONICS
S	GEAR SHIFT CONTROL GEAR SHIFT, DASH MOUNTED, BASIC, VOLVO I-SHIFT
S	TRANSMISSION AUTO NEUTRAL ON P-BRAKE VOLVO I-SHIFT TRANSMISSION AUTO NEUTRAL ON PARK BRAKE
S	HILL START ASSIST HILL START ASSIST
S	ALLISON INPUT AND OUTPUT PACKAGE NO ALLISON INPUT AND OUTPUT PACKAGE
S	FUEL SENSE PACKAGE NO FUEL SENSE PACKAGE
S	TRANSMISSION/RETARDER COOLER WATER TO OIL TRANS COOLER MOUNTED ON TRANSMISSION
S	AMT/AUTOMATIC TRANS PTO FUNCT. TRANSMISSION PTO FUNCTIONS BASIC
S	DRIVELINE - MAIN MERITOR RPL25 W/ PERMALUBE U-JOINTS (PROPS-M)
S	CLUTCH VOLVO SACHS 17" SINGLE PLATE DAMPENED ORGANIC FOR I-SHIFT

PROGRAMMABLE FEATURES	DESCRIPTION
S	IDLE EMISSION CERTIFICATION IDLE EMISSION CERTIFICATION, CARB 08

PROGRAMMABLE FEATURES		DESCRIPTION
S	IDLE EMISSION LABEL LOCATION	CAB MOUNTED CARB 08 DECAL LOCATION
S	IDLE SHUTDOWN	ENGINE IDLE SHUTDOWN, ENABLE
S	ENGINE IDLE SHUTDOWN TIME	IDLE SHUTDOWN TIME 5 MINUTES
S	ENGINE IDLE CONTROL	BASIC ENGINE IDLE CONTROL
S	AMBIENT TEMP MAX TRESHOLD	MAXIMUM AMBIENT AIR TEMPERATURE OVER-RIDE, 80 DEG F (27 DEG C)
S	AMBIENT TEMP MIN TRESHOLD	MINIMUM AMBIENT AIR TEMPERATURE OVER-RIDE, 45 DEG F (7 DEG C)
S	CRUISE CONTROL	WITH ECO CRUISE CONTROL
S	CRUISE CONTROL, MAX SPEED	MAXIMUM CRUISE, 68 MPH (110 KM/H)
S	PEDAL RSL SETTING	PEDAL ROAD SPEED LIMIT, 65 MPH (105 KM/H)
S	ROAD SPEED LIMITER SETTING	ROAD SPEED LIMIT, 68 MPH (110 KM/H)
S	LOW GEAR LIMITING FEATURE	GEAR DOWN VEHICLE SPEED LIMITER ENABLED
S	LOW GEAR LIMITING SPEED	GEAR DOWN VEHICLE SPEED, 63 MPH (101 KM/H)
S	CRUISE CONTROL MIN SPEED	MIN CRUISE, 35 MPH (56 KM/H)
S	ENG BRK ENGAGE IN CRUISE	ENGAGE ENGINE BRAKE 5 MPH (8.0 KM/H) ABOVE SET CRUISE SPEED
S	ROAD SPEED LIMIT CONTROL TYPE	WITH ECO RSL CONTROL
S	OPTIMIZED FUEL ECON INDICATOR	OPTIMIZED FUEL ECONOMY INDICATOR, SWEET SPOT
S	ENGINE LOAD IN PTO	30% MINIMUM ENGINE LOAD LIMIT IN PTO BEFORE ALLOW IDLE SHUTDOWN
S	MAXIMUM ENG SPEED AT 0 MPH	1000 MAXIMUM ENGINE RPM AT 0 MPH
S	COOLANT WARM HOLD TEMP	COOLANT WARM HOLD TEMP ENABLED
S	PRE-TRIP DIAGNOSTIC INSPECTION	PRE-TRIP ASSISTANT
S	REGENERATION CONTROLS, DPF	DPF REGEN CONTROL, AUTO REGEN IN MOTION, MANUAL PARKED REGEN, MANUAL INHIBIT
S	ENGINE PROTECTION SYSTEM	ENGINE PROTECTION (SHUTDOWN)
S	PTO MAX ENGINE SET SPEED	PTO ENGINE MAXIMUM 650 RPM
S	PTO RESUME ENGINE SET SPEED	PTO ENGINE RESUME 650 RPM

FRONT AXLE		DESCRIPTION
S	FRONT AXLE PACKAGE	VOLVO VF12 12,000 LB FRONT SPRINGS
S	FRONT STABILIZER	FRONT STABILIZER
S	BRAKE REGULATION	BRAKE REGULATION, STOPPING DISTANCE 310 FT (94M)
S	FRONT BRAKE PACKAGE	FRONT BRAKE BENDIX SPICER, NEXT GENERATION HEAVY DUTY, STANDARD LUBE
S	FRONT, BRAKE DIMENSION	16.5X5 FRONT BRAKE SIZE
S	BRAKE, FRONT	CAST IRON FRONT BRAKE DRUM OUTBOARD MOUNTED
S	BRAKE LINING MATERIAL FRONT	BRAKE LINING MATERIAL FRONT, BENDIX SPICER ES420
S	BRAKE SHOE COATING FRONT	BRAKE SHOE COATING FRONT, BASIC
S	HUB MATERIAL, FRONT	IRON PRESET PLUS FRONT AXLE HUBS WITH SKF HUBCAPS
S	LUBRICANTS, FRONT AXLE	SYNTHETIC FRONT AXLE LUBRICANT
S	STEERING GEAR RATIO	TRW THP60 INTEGRAL POWER STEERING GEAR
S	STEERING SHAFT TYPE	BASIC STEERING SHAFT
S	FRONT SUSPENSION PACKAGE	59" PARABOLIC LEAF FRONT SUSPENSION MATCHED TO FRONT AXLE CAPACITY
S	FRONT SUSP MAINTENANCE	LUBRICATED SPRING PINS AND BUSHINGS

REAR AXLE		DESCRIPTION
S	REAR AXLE PACKAGE	DANA SPICER S23-175 23,000 LB CAPACITY

REAR AXLE		DESCRIPTION
S	REAR AXLE RATIO	2.47 REAR AXLE RATIO
S	REAR SUSPENSION PACKAGE	20,000 LB VOLVO AIR SUSPENSION
S	REAR BRAKE PACKAGE	REAR BRAKE BENDIX SPICER, NEXT GENERATION LIGHTWEIGHT, STANDARD LUBE
S	REAR, BRAKE DIMENSION (DRIVE)	16.5X7 REAR BRAKE SIZE
S	BRAKE, DRIVE, REAR	CAST IRON DRIVE AXLE BRAKE DRUM OUTBOARD MOUNTED
S	BRAKE LINING MATERIAL DRIVE	BRAKE LINING MATERIAL DRIVE, BENDIX SPICER ES-600
S	BRAKE SHOE COATING DRIVE	BRAKE SHOE COATING DRIVE, BASIC
S	HUB MATERIAL, DRIVE	IRON PRESET PLUS DRIVE AXLE HUB WITH INTEGRATED SPINDLE NUT
S	LUBRICANTS, REAR AXLE	CHEVRON DELO GEAR LUBRICANT ESI SAE 80W-90 (APPROVED FOR MERITOR EXTENDED COMPONENT WARRANTY)
S	PARKING BRAKE CHAMBER PACKAGE	TWO CAM TYPE HALDEX
S	REAR BRAKE CHAMBER SIZE	REAR BRAKE CHAMBER 30 / 30 SQ INCHES (SERVICE / EMERGENCY)
S	BRAKE CYLINDER STROKE LENGTH	BASIC LENGTH BRAKE CHAMBER STROKE
S	FRONT AND REAR SLACK ADJUSTERS	HALDEX BRAKE ADJUSTER FRONT AND REAR
S	FRONT BRAKE CHAMBER SIZE	FRONT BRAKE CHAMBER 20 SQUARE INCHES (SERVICE)

CHASSIS		DESCRIPTION
S	DRIVER SIDE FRONT CHASSIS CONFIGURATION	LEFT HAND BATTERY BOX - 4 CAPACITY, DEF TANK MOUNTED BEHIND BATTERY BOX (VNL / VNR)
S	PASSENGER SIDE FRONT CHASSIS CONFIGURATION	INTEGRATED DPF & SCR (VNR / VNL / VHDB)
S	WHEELBASE	152" WHEELBASE
S	OVERHANG	33" OVERHANG
S	FUEL TANK SHAPE, LIQUID	26" DIA CYLINDRICAL FUEL TANK
S	LIQUID FUEL TANK, LEFTHAND SIDE	75 GALLON LEFT HAND FUEL TANK
S	FUEL TANK MATERIAL, LIQUID	ALUMINUM FUEL TANK MATERIAL
S	FUEL TANK POSITION - DIESEL	FUEL TANK POSITION 1
S	DPF COVER	DPF COVER, PAINTED STEEL
S	DEF TANK COVER	PAINTED DIESEL EXHAUST FLUID TANK COVER
S	FUEL HOSES, LIQUID	NYLON FUEL LINES
S	FUEL TANK STRAPS MTRL	PAINTED STEEL FUEL TANK STRAPS
S	FUEL TANK CAP	NON-LOCKING FUEL TANK CAP
S	AIR TANK ARRANGEMENT	AIR TANK ARRANGEMENT, BASIC
S	AIRTANK MATERIAL	STEEL AIR TANKS
S	AIR DRYER - MANUFACTURER	WABCO AIR DRYER SS - HP WITHOUT TURBO CUT OFF VALVE WITH COALESCING FILTER
S	AIRTANK DRAIN VALVE	MANUAL DRAIN VALVES, LANYARD ON WET TANK
S	FRAME RAIL PACKAGE	10.47"X3.54"X.28" STRAIGHT STEEL RAILS
S	INTERMEDIATE X-MEMBER MATRL	STEEL CROSSMEMBER MATERIAL
S	FORW REAR SUSP. X-MEMBER MTRL	STEEL CROSSMEMBER MATERIAL
S	REAR FRAME TREATMENT	STRAIGHT CUT-OFF REAR CROSSMEMBER
S	FRONT BUMPER	STEEL AERO BUMPER W/END CAPS & AIR DAM
S	FRONT MUDGUARD EXTENSION	NO FRONT FENDER EXTENSION PROVIDED
S	TOWING DEVICE, FRONT	TWO FRONT TOWING DEVICES
S	CHASSIS WIRING HARNESS CASING	HEAVY DUTY MAIN CHASSIS WIRING HARNESS COVERING
S	LH FUEL TANK FACE LOCATION	LH FUEL TANK FRONT FACE @ XM=4957

TRANSPORT ADAPTATION		DESCRIPTION
S	ELECTRICAL CONNECTIONS BOC	BODY BUILDER CONNECTIONS BACK OF CAB
S	TRAILER BRAKE CONTROL	DELETE TRAILER BRAKE HAND CONTROL

CALCULATED CODES - KAX		DESCRIPTION
S	PROPCALC SELECTION	YES, THE ORDER MUST BE CALCULATED

CAB EXTERIOR		DESCRIPTION
S	CAB SUSPENSION REAR	MECHANICAL CAB SUSPENSION WITH SHOCKS
S	AUXILIARY REAR WINDOW	STANDARD REAR WINDOW
S	WIPER BLADE STYLE	WIPER BLADES
S	FRONT GRILLE	BLACK GRILLE
S	AIR INTAKE GRILLE, FINISH	AIR INTAKE GRILLE, BLACK
S	AUX. HORN	DUAL TRUMPET MOUNTED UNDER CAB
S	EXTERIOR MIRROR	BLACK AERODYNAMIC MIRRORS
S	EXTERIOR MIRROR FEATURES	HEATED, POWER AXIS MIRROR, BOTH SIDES
S	SUNVISOR, EXTERIOR	EXTERIOR SUN VISOR WITH CLEAR LENS LED MARKER LAMPS
S	EXTERIOR BRAND BADGING (CA)	EXTERIOR BADGES & EMBLEMS

CAB INTERIOR		DESCRIPTION
S	INTERIOR TRIM PACKAGE	FLEET - VINYL PANELS WITH METAL HEX TRIM
S	SEAT MFG. AND SERIES, DRIVER	NATIONAL DRIVER SEAT
S	SEAT PROFILE, DRIVER	STANDARD WIDTH DRIVER SEAT
S	DRIVER SEAT	X1 WREN VINYL
S	DRIVER SEAT SUPPORT	DRIVER SEAT - AIR SUSPENDED
S	SEAT COMFORT, DRIVER	DRIVER SEAT - ONE AIR ADJUSTABLE LUMBAR CHAMBER
S	SEAT SUPPORT, DUST COVER	SEAT BASE DUST COVER, DRIVER SIDE
S	SEAT BELT SIZE	STANDARD SAFETY BELT LENGTH
S	SAFETY BELT DRIVER SEAT	SEAT BELT DRIVER SEAT BLAC
S	CLIMATE UNIT	INTEGRAL AIR CONDITIONER WITH HEATER - MANUAL CONTROLS
S	FLOOR MATS	FRONT FLOOR INSERTS, RUBBER
S	RADIO SHELF	NETTED OVERHEAD STORAGE (DRIVER / PASSENGER SIDES) WITH CB MOUNTING AND AUXILIARY SWITCHES
S	STEERING WHEEL ADJUSTMENT	STANDARD STEERING WHEEL ADJUSTMENT
S	STEERING WHEEL MATERIAL	STANDARD STEERING WHEEL COVERING
S	GAUGE PACKAGE	EIGHT GAUGE INSTRUMENT CLUSTER
S	TRIP METER	TRIP METER, TWO TRIPS
S	AIR RESTRICTION INDICATOR	GRADUATED ARI ON FILTER
S	SPEEDOM. GRADUATION	MPH SPEEDOMETER GRADUATION

LIGHTING		DESCRIPTION
S	HEADLAMPS	LED HEADLAMPS WITH BASIC DRL
S	LOW BEAM	EQUIPPED WITH DAYTIME RUNNING LIGHTS
S	TAIL LAMPS	DUAL WITH INTEGRAL BACKUP LIGHTS
S	TURN SIGNALS	SELF CANCELLING TURN SIGNAL SWITCH

AUDIO SYSTEM		DESCRIPTION
S	RADIO PACKAGE	AM / FM / MP3 / USB / BLUETOOTH RADIO
S	RADIO ANTENNA	SINGLE RIGHT HAND 48 INCH MIRROR MOUNTED RADIO ANTENNA
S	INTERRUPTER SWITCH, ROOFLAMPS	MARKER INTERRUPTER SWITCH
S	SPEAKER LOCATION	SPEAKERS IN DASH ONLY
S	COM.RADIO PREP KIT (CB)	OVERHEAD MOUNTED CB HOLD DOWN
S	ANTENNA, CB RADIO	SINGLE LEFT HAND 48 INCH MIRROR MOUNTED CB ANTENNA

MISC CAB EQUIPMENT		DESCRIPTION
S	DOOR LOCK CAB	MANUAL CAB DOOR LOCKS
S	KEY TYPES FOR DOORS	BASIC UNIQUE KEY
S	KEY QUANTITY PER TRUCK	4 KEYS PROVIDED PER UNIT
S	AUXILIARY SWITCH WIRING	ONE (1) AUXILIARY SWITCH WITH WIRING, 15 AMP

TIRES AND WHEELS FRONT		DESCRIPTION
S	TIRE PACKAGE FRONT	295/75R22.5G BRIDGESTONE R284 ECOPIA (12350 LBS. GAWR) LONG / REGIONAL HAUL (Total for QTY = 2)
S	TIRE CLASSIFICATION FRONT (CA)	GHG FRONT TIRE CLASSIFICATION, LOW ROLLING RESISTANCE
S	RIM/WHEEL PACKAGE FRONT	22.5X8.25 ACCURIDE STEEL POWDER COAT WHITE 286BC 5 HAND HOLES HUB PILOTED (Total for QTY = 2)
S	FRONT WHEEL AND TIRE QUANTITY	TWO FRONT WHEELS AND TIRES

TIRES AND WHEELS REAR		DESCRIPTION
S	TIRE PACKAGE REAR	295/75R22.5G BRIDGESTONE M713 ECOPIA (22700 LBS. GAWR) LONG / REGIONAL HAUL (Total for QTY = 4)
S	TIRE CLASSIFICATION REAR (CA)	GHG REAR TIRE CLASSIFICATION, ADVANCED LOW ROLLING RESISTANCE
S	RIM/WHEEL PACKAGE REAR	22.5X8.25 ACCURIDE STEEL POWDER COAT WHITE 286BC 5 HAND HOLES HUB PILOTED (Total for QTY = 4)
S	DRIVE WHEEL AND TIRE QUANTITY	FOUR DRIVE WHEELS AND TIRES

MISC TIRE EQUIPMENT		DESCRIPTION
S	TIRE INFLATION VALVE	TIRE INFLATION VALVE, STANDARD

PAINT		DESCRIPTION
S	CAB PAINT SCHEME	SINGLE COLOR PAINT
S	FIRST TRUCK COLOR	GLACIER WHITE; P3029
S	CAB COLOR	CAB SAME AS FIRST COLOR
S	HOOD COLOR	HOOD SAME AS FIRST COLOR
S	COWL COLOR	COWL SAME AS FIRST COLOR
S	BUMPER COLOR	BUMPER SAME AS FIRST COLOR
S	ROOF FAIRING COLOR	NO ROOF FAIRING COLOR PROVIDED
S	SUN VISOR COLOR	SUN VISOR SAME AS FIRST COLOR
S	CHASSIS COLOR	BLACK P3036
S	DISC WHEEL OR RIM COLOR	STEEL DISC WHEELS - PREPAINTED WHITE, POWDER - COAT, ALUMINUM OR STYLIZED DISC - UNPAINTED

BUSINESS SERVICES		DESCRIPTION
S	PRE-DELIVERY INSPECTION	PRE-DELIVERY INSPECTION, BASIC

OUTSIDE MODIFICATION PLANNING		DESCRIPTION
S	FONTAINE CNG TANK INSTALLATION PLANNING CODE	NO FONTAINE CNG TANK INSTALLATION PLANNING CODE
S	FONTAINE IN-SERVICE PLANNING CODE	NO FONTAINE IN-SERVICE PLANNING CODE
S	FONTAINE BODY INSTALL CODE	NO FONTAINE BODY INSTALL
S	FONTAINE AUXILIARY AXLE INSTALL CODE	NO FONTAINE AUXILIARY INSTALL
S	FONTAINE LEAD TIME CODE	NO FONTAINE LEAD TIME

BASE WARRANTY AND PURCHASED COVERAGES		DESCRIPTION
S	CHASSIS COVERAGE	NORMAL_DUTY_STANDARD_BASE_COVERAGE 12_MONTHS / 100,000_MILES
S	VOLVO D11/D13 ENGINE EXTENDED COVERAGE	VOLVO D11/D13 BASE ENGINE COVERAGE - 24MTHS/250K MILES
S	CUSTOM/BUNDLED PURCHASE COVERAGE OPTIONS	NO CUSTOM/BUNDLED PURCHASE COVERAGE OPTIONS PROVIDED
S	VEHICLE EMISSIONS COMPONENTS COVERAGE	US & CANADA VOLVO ENGINE EQUIPPED VEHICLE EMISSIONS COMPONENTS COVERAGE_60 MONTHS/100K_MILES
S	CUMMINS ENGINE EXTENDED COVERAGE	NO CUMMINS ENGINE PROTECTION PLAN INCLUDED
S	TRANSMISSION COVERAGE	60 MO/750K MI: STANDARD I-SHIFT WARRANTY, NORMAL DUTY VEHICLE
S	CLUTCH COVERAGE	NO CLUTCH COVERAGE PROVIDED
S	ADDITIONAL EXTENDED CHASSIS TOWING COVERAGE	BASE CHASSIS TOWING COVERAGE, 90 DAY/5000 MILE/8050 KILOMETER
S	ADDITIONAL EXTENDED ENGINE TOWING COVERAGE	BASE VOLVO ENGINE TOWING COVERAGE, 24 MO/250K MILE
S	NEW PAINT DEVELOPMENT FEE	NO NEW PAINT DEVELOPMENT FEE
S	REMOTE DIAGNOSTICS BUNDLE	REMOTE DIAGNOSTICS WITH REMOTE PROGRAMMING - 24 MONTHS
S	REMOTE PROGRAMMING DRIVER DISPLAY ACTIVATION NOTIFICATION	REMOTE PROGRAMMING NOTIFICATION TO DRIVER, START UP SCREEN & ICON
S	UPTIME CENTER BUNDLE	ASIST AND VOLVO ACTION SERVICE - 24 MONTHS
S	PREPAID API	WITHOUT PREPAID API

Inputs Required	Inputs	UOM
Vehicle Type	Aero Muscle Hood - Roof Fairing (0.60)	MPH
Performance Level	>67 MPH / >108KPH	MPH
Frontal Area	110.0	FEET ²
Accessory Power Loss	11.0	HP

VEHICLE SPECIFICATION SUMMARY

Model	VNR42300	
Gross Combination Weight	NO GROSS COMBINATION WEIGHT PROVIDED	
Vehicle Application	ON HIGHWAY, STARTING GRADES <16%	
Body/Trailer Type	TRUCK / DRY VAN BODY	
Loading/Unloading Surface Type	CONCRETE LOADING AND / OR UNLOADING SURFACE	
Engine	VOLVO D11 325HP 2100RPM 1250 LBFT - EPA'17 EMISSION LEVEL	
Peak Power	HP	332.0 @ 1400 - 1900
Peak Torque	Newton Meters	1695 @ 1000
Transmission	VOLVO 12 SPEED I-SHIFT AT2612F DIRECT DRIVE	
Rear Axle	DANA SPICER S23-175 23,000 LB CAPACITY	
Rear Axle Ratio	2.47	
Rear Tire	295/75R22.5G BRIDGESTONE M713 ECOPIA (22700 LBS. GAWR) LONG / REGIONAL HAUL	
Tire Revolutions per Mile	Mile	513
Total Reduction	2.47	

CALCULATED PERFORMANCE SUMMARY

	Speed	UOM	RPM	Desired / Recommended Value	Status
Engine RPM @ 65 MPH	65.2	MPH	1378		
Engine RPM @ Desired Cruise Speed	68.4	MPH	1443	1200 - 1500 rpm	OK
Engine RPM @ Road Speed Limit (RSL)	68.4	MPH	1443	< 2100 rpm	OK
Sweet Spot Cruise Speed Range in Top Gear	56.8 - 71.0	MPH	1200 - 1500		
Top Gear Speed Range	47.4 - 99.5	MPH	1000 - 2100	74.6 MPH	OK
Minimum Practical Speed In Reverse	1.6	MPH	600		
Maximum Practical Speed in Reverse	5.7	MPH	2100		
Minimum Practical Speed In Lowest Forward Gear	1.9	MPH	600		
Maximum Practical Speed In Lowest Forward Gear	6.7	MPH	2100		

	Concrete / Asphalt	UOM
Wheel HP Required at (65 MPH) Cruise Speed	189.8 / 200.9	HP
Wheel HP Required at (75 MPH) Road Speed Limit	189.8 / 200.9	HP
Wheel HP Required at (92 MPH) Top Speed	510.4 / 529.7	HP

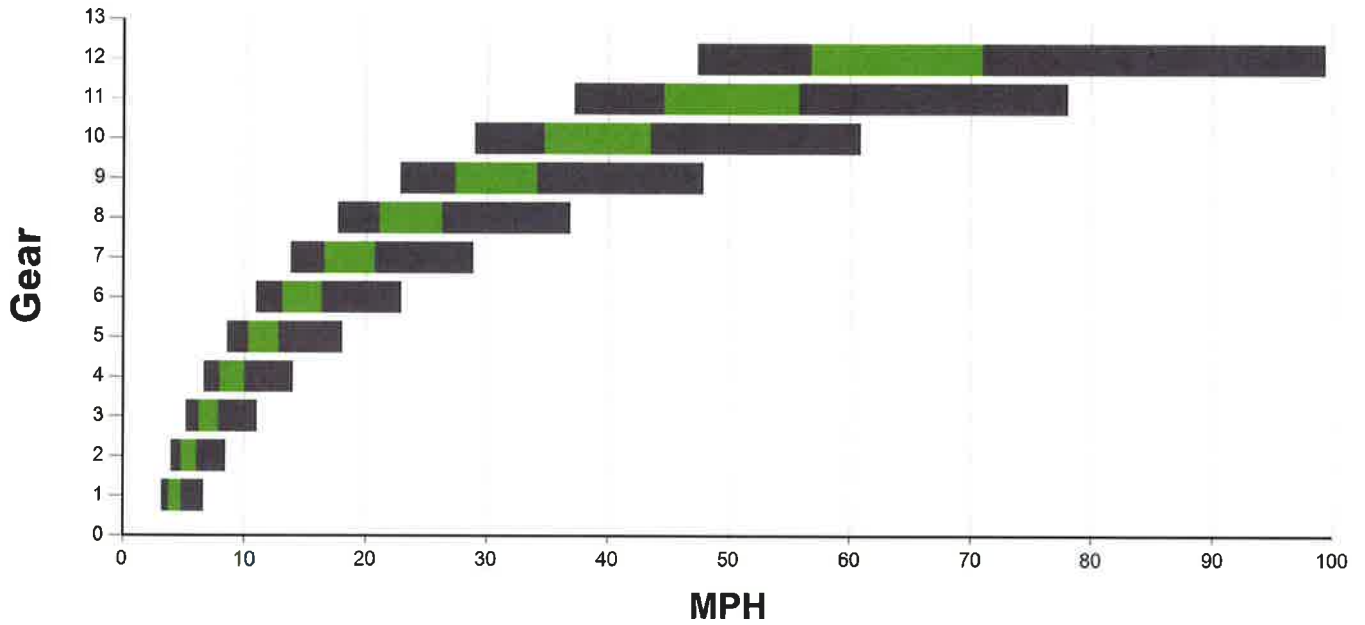
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VOLVO

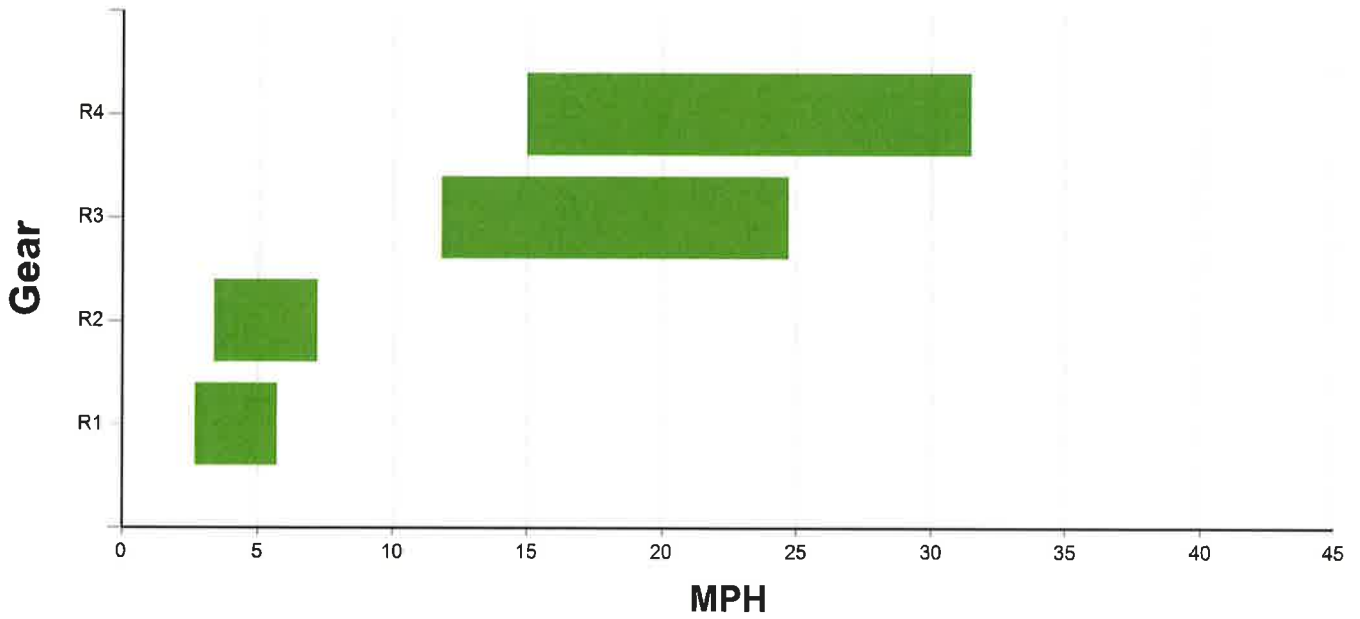
VEHICLE SPECIFICATION SUMMARY

Gradeability		Recommended Min. Gradeability in Top Gear	
Maximum in Top Gear (Concrete)	3.4%	0.0%	OK
Maximum in Top Gear (Asphalt)	3.2%	0.0%	OK
Startability		Recommended Min. Startability	
In Lowest Gear	50.0%	16.0%	OK
Loading/Unloading Surface Type	CONCRETE LOADING AND / OR UNLOADING SURFACE		
		Recommended Speed on 1.5% Grade	
Speed on a 1.5% Grade (Concrete)	71.0 MPH	>67 MPH	OK
	@1500 rpm in 12th gear	PL5	
Suggested Value for Gear Down Vehicle Speed	RSL - 10		
Driveability Rating	Status		
100% Max Power available after shift	CAUTION!		
>95% Very Good >90% Acceptable			
Performance Level	Recommended Speed on 1.5% Grade	Min. Gradeability in Top Gear	
PL5 - High Performance	>67 MPH	1.9%	
PL4 - Performance	61 - 67 MPH	1.7%	
PL3 - Economy	54 - 60 MPH	1.5%	
PL2 - Fleet / Construction	47 - 53 MPH	1.3%	
PL1 - Heavy Haul	40 - 46 MPH	1.1%	

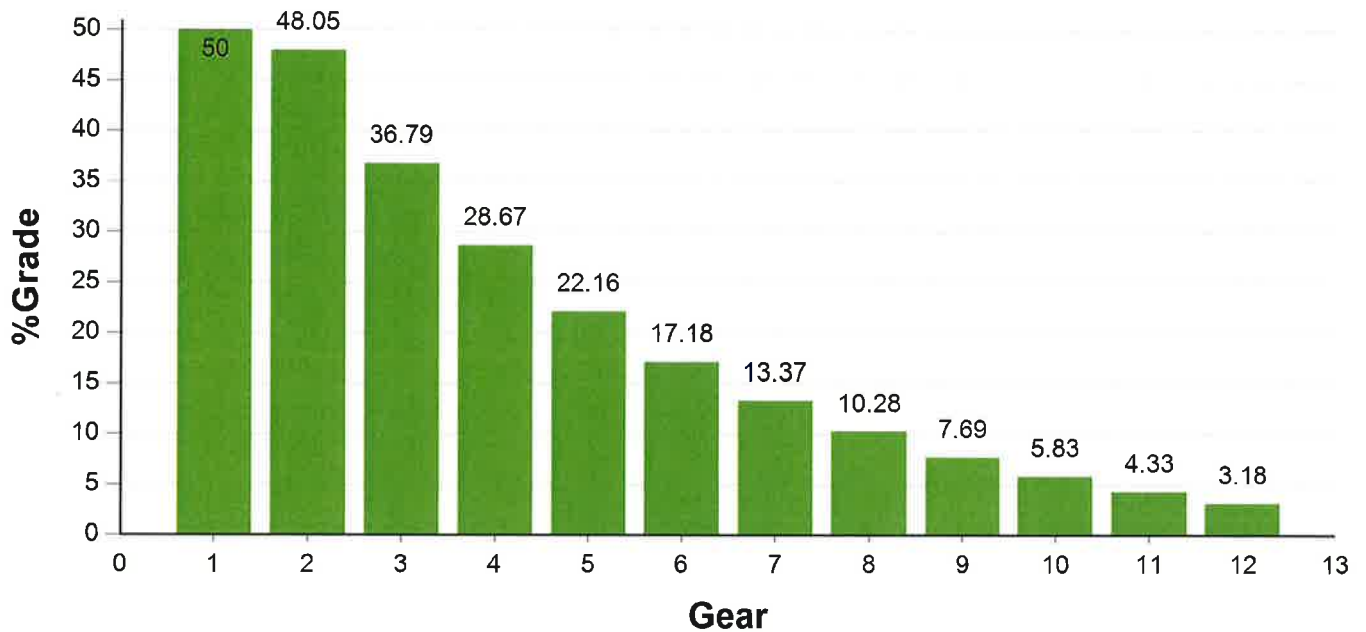
Forward Geared Speed



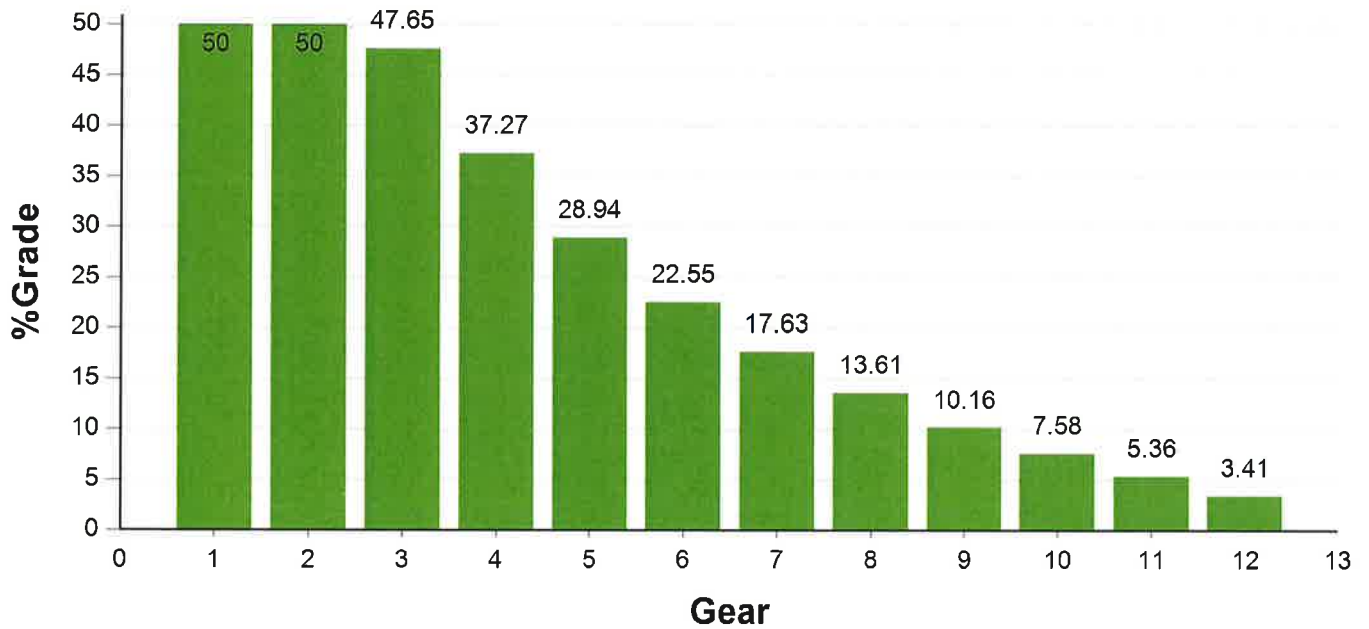
Reverse Geared Speed



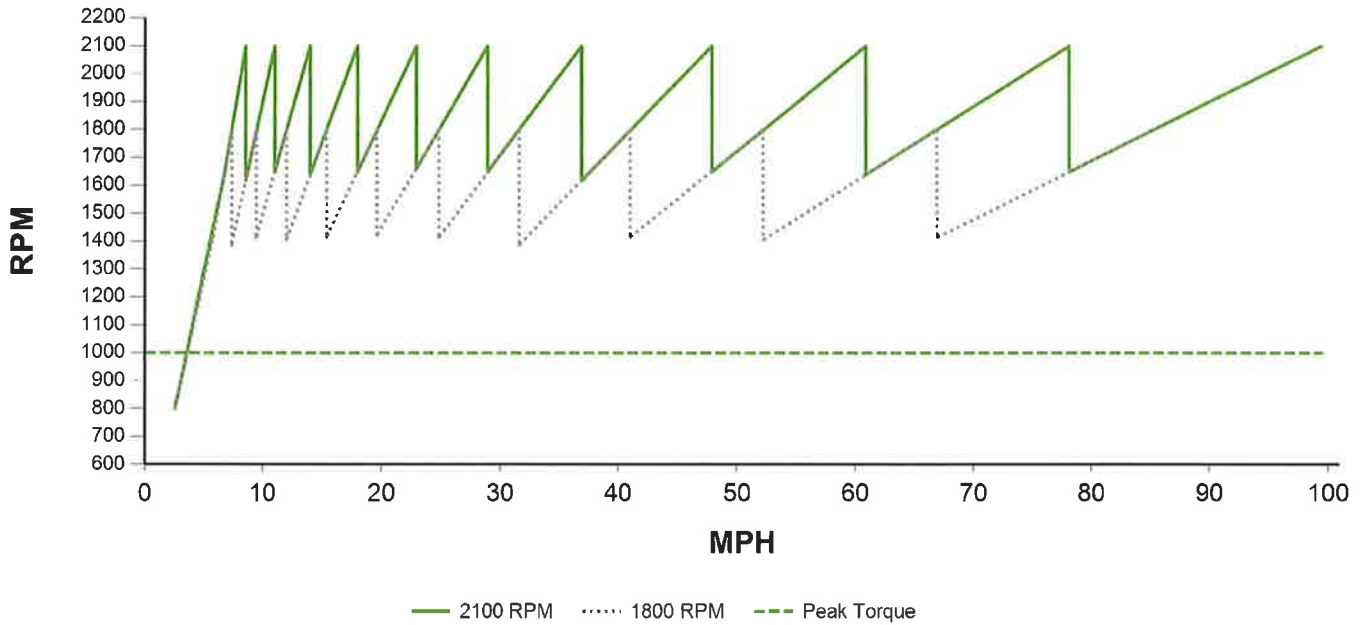
Startability



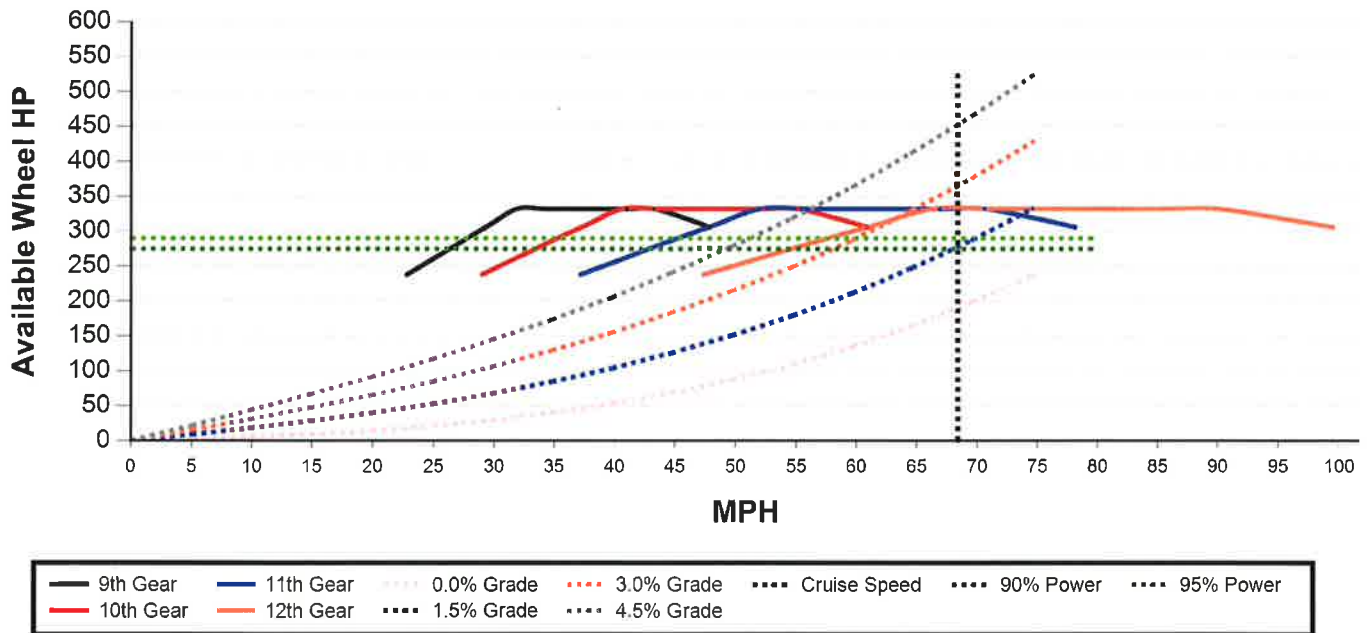
Gradeability at Max Torque



Shift Chart



Horsepower VS. Speed



RPM at 65 MPH



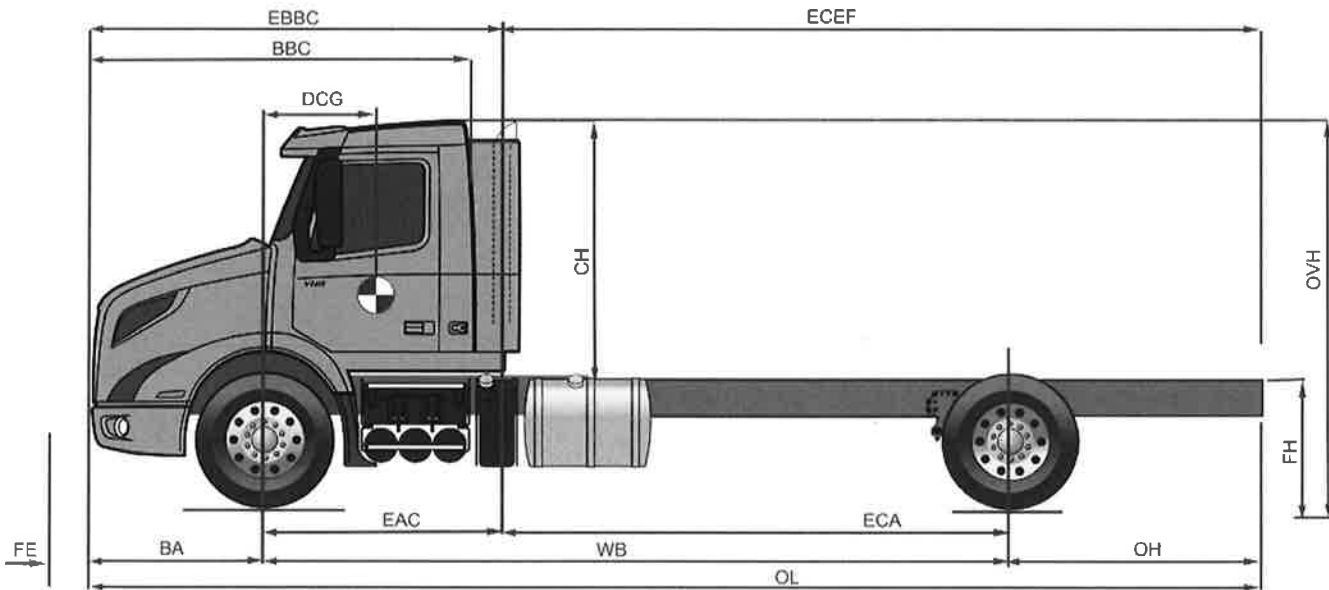
RPM at Cruise Speed



	MPH	RPM
Minimum of Engine Range	47.4	1000.00
Minimum of Economy Range	56.8	1200.00
Cruise Speed	68.4	1443.18
Maximum of Economy Range	71.0	1500.00
Road Speed Limit	68.4	1443.18
Maximum of Engine Range	99.5	2100.00

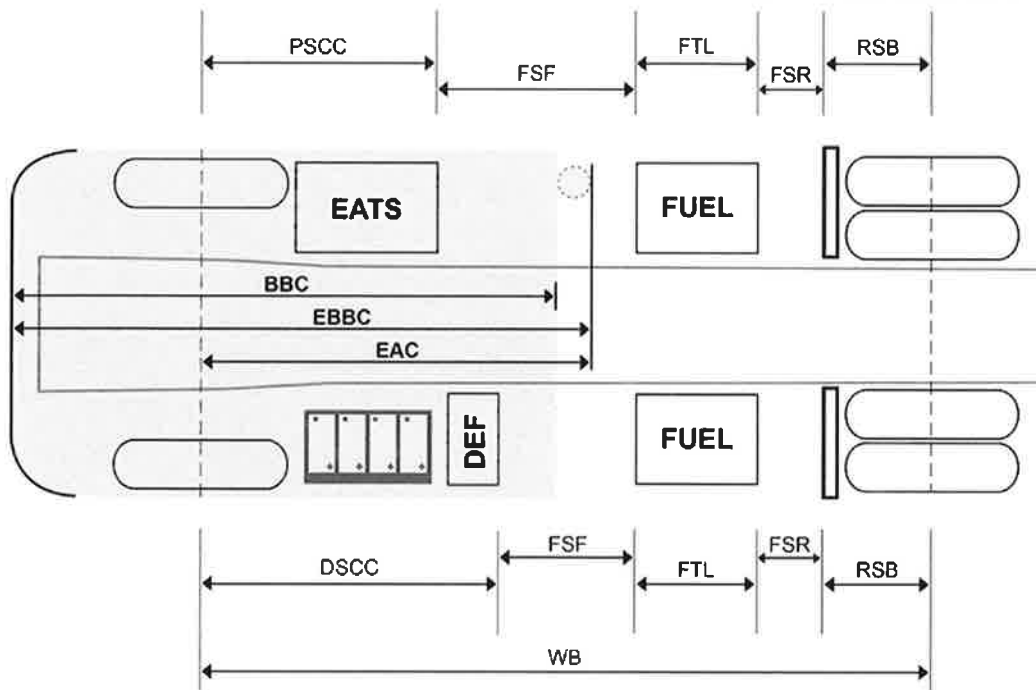
VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Length	UOM
Front Frame Extension	N/A	FE	0.0	INCHES
Bumper to Front Axle	N/A	BA	51.1	INCHES
Wheelbase	N/A	WB	151.6	INCHES
Rear Overhang	N/A	OH	33.3	INCHES
Overall Length	N/A	OL	235.9	INCHES
Bumper to Back of Cab	N/A	BBC	113.5	INCHES
Eff. Bumper to Back of Cab	N/A	EBBC	113.5	INCHES
Eff. Cab to Rear Axle	N/A	ECA	89.2	INCHES
Eff. Front Axle to Back of Cab	N/A	EAC	62.4	INCHES
Eff. Cab to End of Frame	N/A	ECEF	122.4	INCHES
Unladen 5th Wheel Height	E5BZ1X	5W	0.0	INCHES
Unladen Frame Height	N/A	FH	39.0	INCHES
Cab Height	N/A	CH	75.0	INCHES
Overall Height	N/A	OVH	114.0	INCHES
Driver CG	N/A	DCG	42.0	INCHES
Second Front Axle Spacing		SFAS	0.0	INCHES



VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

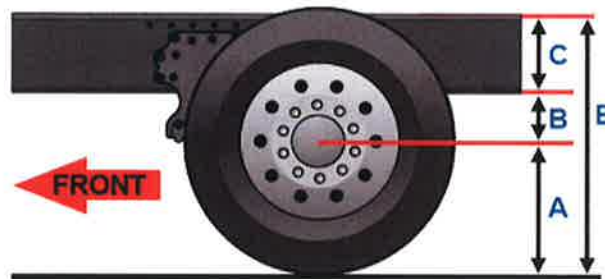
Description	Sales Code	Dwg Ref	Left Value(in)	Right Value(in)
Wheelbase	N/A	WB	151.6	151.6
Bumper to Back of Cab	N/A	BBC	113.5	113.5
Eff. Bumper to Back of Cab	N/A	EBBC	113.5	113.5
Eff. Front Axle to Back of Cab	N/A	EAC	62.4	62.4
LEFT HAND BATTERY BOX - 4 CAPACITY, DEF TANK MOUNTED BEHIND BATTERY BOX (VNL / VNR)	3XBHAX	DSCC	78.5	N/A
INTEGRATED DPF & SCR (VNR / VNL / VHDB)	3YBAFX	PSCC	N/A	75.2
Frame Space Front	N/A	FSF	0.9	0.0
75 GALLON LEFT HAND FUEL TANK / NO RIGHT HAND DIESEL TANK PROVIDED	J8XB1X / J9XK1X	FTL	36.0	0.0
Frame Space Rear	N/A	FSR	8.7	48.9
20,000 LB VOLVO AIR SUSPENSION	350407	RSB	27.5	27.5



Top View image is intended for illustration purposes only and is not presented to scale. Wheelbase, Axle Spacing and After frame are not shown as specified, but are a representation. Customer Adaptation (CA) options and relocated components are not represented in these images. Most CA options impact the variation of the image, thus an image may not populate. Calculations are approximate to a tolerance of ± 4 inches due to component mounting variation. Certain chassis component options are NOT represented in the Top View image, such as, but not exclusive to, Front Frame Extensions, Fuel Water Separators, Air Dryers, PTOs, Fifth Wheels, Chassis Fairings, Toolboxes, Trailer Connections. For further information on these items and their respective locations on your specification, please refer to the data sheets associated with those items in the configurator.

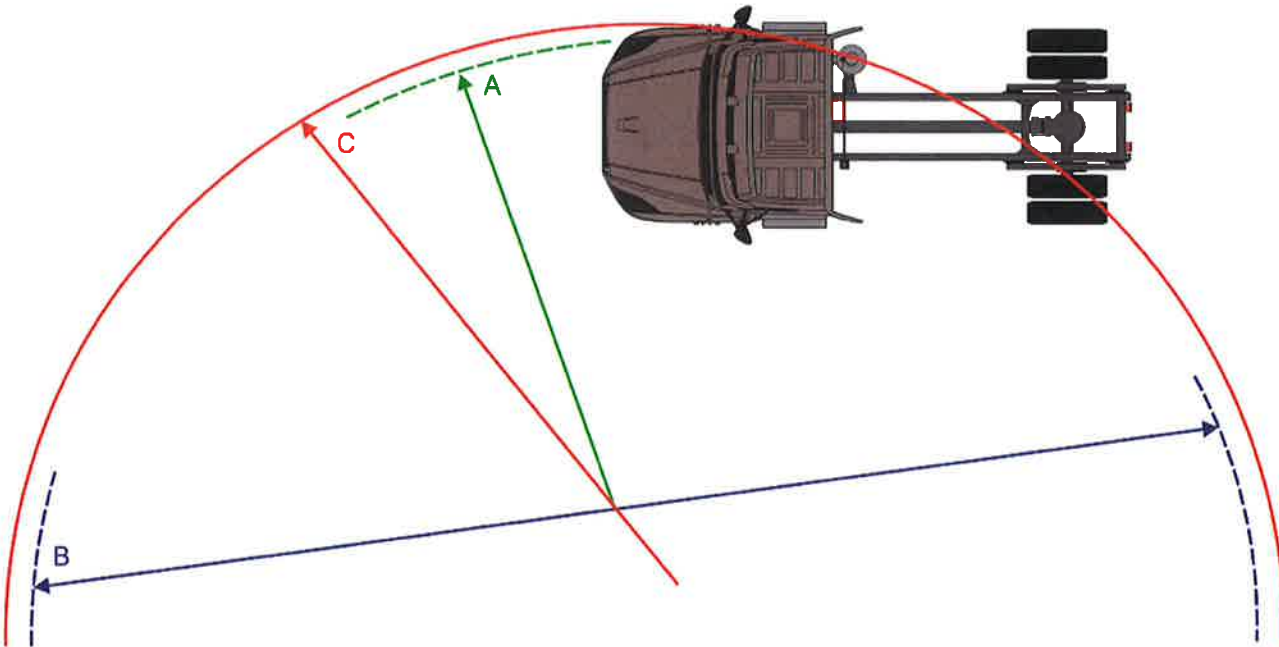
VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Rear		
			Unladen	Laden	UOM
Requested Fifth Wheel Height	E5BZ1X		0.0	0.0	INCHES
Tire Radius	0940A1	A	20.2	18.9	INCHES
Suspension Height	350407	B	8.3	8.0	INCHES
Frame Depth	403002	C	10.5	10.5	INCHES
Closest Available Fifth Wheel Leg Height	N/A	D	0.0	0.0	INCHES
Total Height	N/A	E	39.0	37.4	INCHES



VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Length	UOM
SAE Turning Radius	N/A	A*	21.5	FEET
Adjusted Turning Radius	N/A	A	21.8	FEET
Curb-to-Curb Diameter	N/A	B	44.6	FEET
Wall-to-Wall Diameter	N/A	C	48.5	FEET



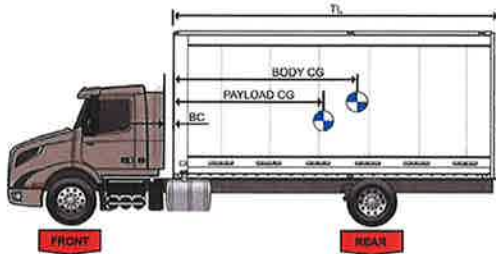
Tests have shown that the true location of the turning center is further to the rear than midway between drive axle sets (where applicable)

The actual location of the turning center depends on:

- Whether the drive tire equipment is single or dual.
- The overall load distribution for the vehicle (front/rear, between drive axles) in a loaded condition
- Manufacturing tolerances within the steering components

Inputs Required	Inputs	UOM
Driver Weight	201	LB
Total Body Length	16.4	FEET
Body Tare Weight	3501	LB
Front of Body to Body CG	96.0	INCHES
Additional Clearance from Back of Exhaust to Front of Body	6.0	INCHES

VEHICLE SPECIFICATION SUMMARY				
Description	Description	Dwg Ref	Length	UOM
Bumper to Front Axle	N/A	BA	51.1	INCHES
Wheelbase	N/A	WB	151.6	INCHES
Rear Overhang	N/A	OH	33.3	INCHES
Bumper to Back of Cab	N/A	BBC	113.5	INCHES
BOC Exhaust Space	230048	N/A	0.0	INCHES
Driver CG from Front Axle	N/A	DCG	42.0	INCHES
First Pusher Axle Spacing			0.0	INCHES



CALCULATED PERFORMANCE SUMMARY				
Tare Weights	Front Axle	Rear Axle (s)	Total	UOM
Chassis	8305	3687	11991	LB
Driver	146	56	201	LB
Fuel	184	330	513	LB
Body/Trailer	-297	3799	3501	LB
Total Tare	8336	7870	16206	LB
Payloads				
First Body Payload	-1341	17136	15795	LB
Total - Lift Axles Down	6995	25006	32000	LB
GAWR	12000	20000	32000	LB

VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Sub-Category	Sales Code	Sales Code Description	Value	UOM
Front Axle	370400	VOLVO VF12 12,000 LB FRONT SPRINGS	12500	LB
Front Suspension	370400	VOLVO VF12 12,000 LB FRONT SPRINGS	12000	LB
Front Tires	093879	295/75R22.5G BRIDGESTONE R284 ECOPIA (12350 LBS. GAWR) LONG / REGIONAL HAUL	12350	LB
Front Wheels	084069	22.5X8.25 ACCURIDE STEEL POWDER COAT WHITE 286BC 5 HAND HOLES HUB PILOTED	14800	LB
		Front GAWR	12000	LB
Rear Axle	330723	DANA SPICER S23-175 23,000 LB CAPACITY	23000	LB
Rear Suspension	350407	20,000 LB VOLVO AIR SUSPENSION	20000	LB
Rear Tires	0940A1	295/75R22.5G BRIDGESTONE M713 ECOPIA (22700 LBS. GAWR) LONG / REGIONAL HAUL	22700	LB
Rear Wheels	085069	22.5X8.25 ACCURIDE STEEL POWDER COAT WHITE 286BC 5 HAND HOLES HUB PILOTED	29600	LB
		Rear GAWR	20000	LB
		Truck GVWR	32000	LB
		Gross Combination Weight Rating	0	LB
		Tax Value GVWR (USA FET Only)	32000	LB



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