



DAN JOHNSON
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

January 23, 2025

BCC Agenda Date/Item: _____

Board of County Commissioners
Clackamas County

Approval of a Board Order to authorize purchase of four Volvo dump trucks for the Transportation Maintenance Division. Total Purchase Value is \$1,140,352. Funding is through the County Road Fund. No County General Funds are involved.

Previous Board Action/Review	None		
Performance Clackamas	- Build a strong infrastructure		
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Warren Gadberry	Contact Phone	503-650-3988

EXECUTIVE SUMMARY:

The Department of Transportation and Development, Transportation Maintenance Program has requested that Clackamas County Fleet Services purchase four (4) new 2025 Volvo VHD83B3000 trucks with Columbia dump bodies installed utilizing using a direct contract based on LCRB efficient utilization clause C-047-0288 (15) with Tec Equipment Incorporated. These trucks are part of our HB 2007 replacement plan and will replace four Freightliner dump trucks that have reached the end of their useful life.

PROCUREMENT PROCESS:

Approval of the purchase is being requested under the Local Contract Review Board Rule C-047-0288 (15), efficient utilization clause. The purchase will be made using a direct contract with Tec Equipment Incorporated.

RECOMMENDATION: Staff respectfully recommends the Board approve this purchase and authorizes Procurement staff to issue the PO on behalf of the County.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director of Transportation & Development

For Filing Use Only

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF CLACKAMAS COUNTY, STATE OF OREGON**

In the Matter of Approving Issuance of
Purchase Order for Purchase of (4)
2025 VOLVO VHD84B300 TRUCKS



Board Order No. _____

Page 1 of 2

Whereas, the Clackamas County Board of County Commissioners (the “Board”) has authority to sign all contracts and any amendments or renewals of the same;

Whereas, Clackamas County (“County”) Local Contract Review Board (“LCRB”) Rule C-047-0288 (15) Class Special Procurements; by Rule, allows for County to procurement items without competitive Bid for the efficient utilization of County owned equipment;

Whereas, the Clackamas County Department of Finance, Procurement Division posted notice per LCRB Rule C-047-0288 (15)(B) from October 31, 2024 – November 7,2024 and received no protests;

Whereas, the Department of Transportation and Development (“DTD”) is seeking to buy (4) 2025 VOLVO VHD84B300 trucks;

Whereas, DTD has identified these trucks to be the only equipment able to work with County’s Columbia Body designed and existing built dump bodies;

Whereas, DTD sought quotes from multiple vendors for trucks, and only TEC Equipment, Inc. exists as the local Volvo truck vendor;

Whereas, TEC Equipment Inc. provided a quote in the amount of \$1,140,352 to DTD for the trucks with our bodies installed;

Whereas, the Clackamas County Department of Finance requests authority to purchase the aforementioned goods and services by issuance of a purchase order (“PO”); and

Whereas, a PO is issued directly through the Clackamas County Department of Finance’s management software with no signature required or available;

NOW THEREFORE, the Clackamas County Board of County Commissioners orders as follows:

1. The requested purchase of the aforementioned goods and services from TEC Equipment Inc. in the amount of \$1,140,352, is hereby approved;
2. The Clackamas County Department of Finance and/or DTD are delegated limited authority to sign the TEC, Equipment, Inc. quote and issue a PO to purchase the aforementioned equipment and services.

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF CLACKAMAS COUNTY, STATE OF OREGON**

In the Matter of Approving Issuance of
Purchase Order for Purchase of (4)
2025 VOLVO VHD84B300 TRUCKS



Board Order No. _____
Page 2 of 2

DATED this ____ day of _____, 2025

BOARD OF COUNTY COMMISSIONERS

Chair

Recording Secretary



750 NE Columbia Blvd
Portland OR 97211
503-285-7667



Clackamas County		
PURCHASERS NAME		
PURCHASERS NAME		
2051 Kaen Road		
STREET ADDRESS		
Oregon City	OR	97045
CITY	STATE	ZIP CODE
503-650-3795	kstott@clackamas.us	
PHONE	EMAIL	
John Barnes		
SALES REPRESENTATIVE		

TEC EQUIPMENT SALES ORDER

Date 9/18/2024

QUANTITY	4	YEAR	2025	MAKE	Volvo	MODEL	VHD64F300	MILEAGE	TBD	STOCK #	TBD
VIN #	TBD	VEHICLE TYPE	Truck	ESTIMATED DELIVERY	3/15/2025						

Delivery Location: Oregon City, OR 97045

USED VEHICLE TRADE-IN

NOTES & INSTRUCTIONS
Price includes parts and installation of a Columbia Body per Quote #311

YEAR	MAKE	MODEL
VIN #	BODY TYPE	
TOTAL TRADE VALUE	-	
TOTAL PAYOFF	-	
BANK		
ADDRESS		
GOOD UNTIL		

PURCHASED EXTENDED COVERAGE(S)

TRADE SCHEDULE SUMMARY

Months	Miles	Coverage Description

TOTAL TRADE VALUE	-
TOTAL PAYOFF	-
BANK	
ADDRESS	
GOOD UNTIL	

Comments:

SCHEDULE A Included as part of this Sales Order Initial _____

TRADE VALUE	-
BALANCE OWED ON TRADE	-
CASH REFUND TO CUSTOMER	-
NET TRADE IN ALLOWANCE	-
CASH DOWN PAYMENT	-

BINDING ARBITRATION: Dealer has opted to use binding arbitration, in lieu of litigation, to resolve disputes arising under this Sales Order and the relationship between Dealer and its customers/purchasers. To that end, it has agreed to be bound to the terms and conditions of the arbitration agreement that is attached to this sales order, which by this reference is incorporated herein as if set forth in the Sales Order in full. By executing this Sales Order, the customer/purchaser acknowledges receipt of the arbitration agreement and agrees to be bound by its terms and conditions.
Initial Accept _____ or Initial Decline TC _____

REBATES	-
LIENHOLDER	

DISCLAIMER OF CONSEQUENTIAL DAMAGES: To the fullest extent permitted by law, Purchaser shall not be entitled to recover from Dealer any damages for loss to property or persons or damages for loss of use, loss of time, loss of profits, loss of income, or any other consequential or incidental damages. Initial TC _____

PRICING SUMMARY		PER UNIT	EXTENDED
SALE PRICE		284,007	1,136,028
FET		FET Exempt	FET Exempt
ADMINISTRATION FEE		-	-
DOCUMENTATION FEE		-	-
ELT FEE		-	-
MISCELLANEOUS		-	-
DELIVERY		-	-
VEHICLE SALES TAX	0.000%	-	-
NON VEHICLE SALES TAX	0.000%	-	-
TIRE TAX		-	-
LOCAL TAX		1,081	4,324
SALES TAX EXEMPT ITEMS		-	-
LICENSE/TITLE FEES		-	-
EXTENDED WARRANTIES		-	-
TOTAL CASH DELIVERED PRICE		285,088	1,140,352
TOTAL DOWN PAYMENT		-	-
UNPAID CASH BALANCE DUE ON DELIVERY		285,088	1,140,352

DISCLAIMER OF WARRANTIES: Unless Dealer furnishes Purchaser with a separate written warranty or service contract made by Dealer on its own behalf, Dealer hereby disclaims all warranties, express or implied, including any implied warranties of quality, workmanship, design, merchantability, suitability and fitness for any particular purpose on all goods and services sold by Dealer. All used vehicles are sold on an "AS-IS, WHERE-IS" basis. Any warranty on any new vehicle or used vehicle still subject to a Manufacturer's warranty is that made by the Manufacturer only. All warranties, if any, by Manufacturers and suppliers are theirs, not Dealer's, and only the Manufacturers and suppliers shall be liable for performance under such warranties.
Initial TC _____

THIS CONTRACT IS SUBJECT TO ADDITIONAL PROVISIONS SET FORTH ON THE NEXT TWO PAGES HEREOF, THE SAME BEING INCORPORATED HEREIN BY REFERENCE. Purchaser agrees that this Order includes all of the terms and conditions. This order cancels and supercedes any prior agreement and as of the date hereof comprises the complete and exclusive statement of the terms of the agreement relating to the subject matters covered hereby, and that **THIS ORDER SHALL NOT BECOME BINDING UNTIL ACCEPTED BY THE DEALER OR HIS AUTHORIZED REPRESENTATIVE. THIS SALES ORDER CAN BE TERMINATED BY DEALER AT ANY TIME AT ITS SOLE DISCRETION.** Purchaser by his execution of this Order acknowledges that he has read the terms and conditions and has received a true copy of this Order.
Initial TC _____

PURCHASER	DATE
SALESPERSON	DATE
ACCEPTED BY SALES MANAGER	DATE

**** SALES ORDER NOT VALID UNLESS SIGNED BY AN AUTHORIZED SALES MANAGER ****

ADDITIONAL TERMS AND CONDITIONS

GENERAL TERMS: The following terms are included in this Sales order and are considered an essential part of the agreement.

PARTIES: In this Order, PURCHASER shall be referred to as "Purchaser", **TEC Equipment, Inc.** as "Dealer".

DELAYS: Dealer will at all times use its best efforts to make shipments on or before the dates specified in orders accepted from the Purchaser, but Dealer will not be responsible for failure to deliver goods on time or to fill orders where prevented by fire or other elements, or by war, riot, strike, or labor disturbance, or by the decree or order of any court or government or for any cause beyond Dealer's reasonable control.

PURCHASER AUTHORITY: Purchaser hereby warrants that he has the authority to enter into this Agreement.

~~**SECURITY INTEREST:** This Order shall constitute a Security Agreement under which Dealer shall have all rights of a secured party under law, including the right to repossess the equipment upon any default or breach by Purchaser.~~

ASSIGNMENT: Any assignment or transfer of Purchaser's rights under this agreement in whole or part, made without Dealer's prior written consent shall be void.

BINDING BY ACCEPTANCE: This Order shall only become binding upon Dealer when signed by a person authorized to accept the same on behalf of the Dealer.

MODIFICATION: This order contains the complete and final agreement between the Purchaser and the Dealer and no modification of the terms and conditions stated herein shall be binding unless made in writing and signed by an authorized representative of the party to be bound thereby.

BREACH: Venue of any action by Purchaser against Dealer shall be in the County in which this Sales Order is accepted by Dealer.

TRADE-IN: If a used vehicle is to be traded in as part payment for the vehicle(s) being purchased herein, the following provisions shall be applicable thereto:

A: Purchaser warrants that he is the legal owner of the trade-in(s) and that he has clear title, free of all encumbrances (except as revealed by him in writing to Dealer) and agrees to deliver the title papers, including but not limited to: State and Federal tax clearances, title and registration, duly transferred to Dealer upon surrender of the trade-in.

B: If Purchaser is permitted to retain the trade-in during the period between the placing of this order and delivery of the new vehicle being purchased hereunder, he agrees to deliver trade-in, in the same condition (including all equipment and accessories) as when appraised. In the event the condition of the trade-in has changed, the trade-in shall be subject to reappraisal as of the time of delivery and Dealer shall be entitled to adjust the allowance given herein accordingly.

ENTIRE AGREEMENT: This order and Purchaser's purchase order contains the entire agreement between the parties and is a complete and exclusive statement of the terms of this order. Any and all representations, promises, warranties or statements by Dealer's representative that differ in any way from the terms of this order shall be given no force or effect.

DISCLAIMER OF WARRANTY: Unless Dealer furnishes Purchaser with a separate written warranty or service contract made by the Dealer on its own behalf, Dealer hereby disclaims all warranties, express or implied, including any implied warranties of quality, workmanship, design, merchantability, suitability and fitness for any particular purpose on all goods and services sold by Dealer. All used vehicles are sold on an "AS-IS, WHERE-IS" basis. Any warranty on any new vehicle or used vehicle still subject to a Manufacturer's warranty is that made by the Manufacturer only. All warranties, if any, by Manufacturers and suppliers are theirs, not Dealer's, and only the Manufacturers and suppliers shall be liable for performance under such warranties.

CANCELLATION AGREEMENT: If the Purchaser cancels an order for factory ordered equipment, the Purchaser agrees to pay liquidated damages to Dealer, representing loss of profit, loss of volume and incidental damages in the amounts specified as follows:

(1) if the cancellation occurs after the tractor/truck has been assigned a factory order identification number the Purchaser will be liable for \$1000 per unit less any deposited monies; or (2) if the tractor/truck has been issued a production date and Dealer is unable to cancel the factory production, the Purchaser will be liable for 5% of the total purchase price less any deposited monies; or (3) if the truck has been modified or has had a body added to it, the Purchaser will be liable for 10% of the total purchase price including the body less any deposited monies.

Initials

TC

ADDITIONAL TERMS AND CONDITIONS

BINDING ARBITRATION AGREEMENT

ARBITRATION CLAUSE

PLEASE REVIEW - IMPORTANT - AFFECTS YOUR LEGAL RIGHTS

1. EITHER YOU OR WE MAY CHOOSE TO HAVE ANY DISPUTE BETWEEN US DECIDED BY ARBITRATION AND NOT IN COURT OR BY JURY TRIAL.
2. IF A DISPUTE IS ARBITRATED, YOU WILL GIVE UP YOUR RIGHT TO PARTICIPATE AS A CLASS REPRESENTATIVE OR CLASS MEMBER ON ANY CLASS CLAIM YOU MAY HAVE AGAINST US INCLUDING ANY RIGHT TO CLASS ARBITRATION OR ANY CONSOLIDATION OF INDIVIDUAL ARBITRATIONS.
3. DISCOVERY AND RIGHTS TO APPEAL IN ARBITRATION ARE GENERALLY MORE LIMITED THAN IN A LAWSUIT, AND OTHER RIGHTS THAT YOU AND WE WOULD HAVE IN COURT MAY NOT BE AVAILABLE IN ARBITRATION.

Any claim or dispute, whether in contract, tort, statute, or otherwise (including the interpretation and scope of this clause, and the arbitrability of the claim or dispute), between you and us or our employees, agents, successors or assigns, which arise out of or relate to your credit application, purchase, or condition of this vehicle, this contract or any resulting transaction or relationship (including any such relationship with third parties who do not sign this contract) shall, at your or our election be resolved by neutral, binding arbitration and not be a court action. Any claim or dispute is to be arbitrated by a single arbitrator on an individual basis and not as a class action. You expressly waive any right you may have to arbitrate a class action. You may choose one of the following arbitration organizations and its applicable rules: the National Arbitration Forum, Box 50191, Minneapolis, MN 55405-0191(www.arb-forum.com), the American Arbitration Association, 335 Madison Ave., Floor 10, New York, NY 10017-4605 (www.adr.org), or any other organization that you may choose subject to our approval. You may get a copy of the rules of these organizations by contacting the arbitration organization or visiting its website.

Arbitrators shall be attorneys or retired judges and shall be selected pursuant to the applicable rules. The arbitrator shall apply governing substantive law in making an award. The arbitration hearing shall be conducted in the federal district in which you reside unless the Creditor-Seller is a party to the claim or dispute, in which case the hearing will be held in the federal district where this contract was executed. We will advance your filing, administration, service or case management fee and your arbitrator or hearing fee all up to a maximum of \$1500, which may be reimbursed by decision of the arbitrator at the arbitrator's discretion. Each party shall be responsible for its own attorney, expert, and other fees, unless awarded by the arbitrator under applicable law. If the chosen arbitration organization's rules conflict with this clause, then the provisions of this clause shall control. The arbitrator's award shall be final and binding on all parties, except that in the event the arbitrator's award for a party is \$0 or against a party is in excess of \$100,000, or includes an award or injunctive relief against a party, that party may request a new arbitration under the rules of the arbitration organization by a three-arbitrator panel. The appealing party requesting new arbitration shall be responsible for the filing fee and other arbitration costs subject to a final determination by the arbitrators of a fair apportionment of costs. Any arbitration under this Arbitration Clause shall be governed by the Federal Arbitration Act (9 U.S.C.&1 et.seq.) and not by any state law concerning arbitration.

You and we retain any rights to self-help remedies, such as repossession. You and we retain the right to seek remedies in small claims court for disputes or claims within that court's jurisdiction, unless such action is transferred, removed or appealed to a different court. Neither you nor we waive the right to arbitrate by using self-help remedies or filing suit. Any court having jurisdiction may enter judgment on the arbitrator's award. This clause shall survive any termination, payoff or transfer of this contract. If any part of this Arbitration Clause, other than waivers of class action rights, is deemed or found to be unenforceable for any reason, the remainder shall remain enforceable.

Initials

DECLINED



On behalf of Volvo Trucks and your partnering dealer, thank you for the opportunity to provide you with a quote!

PREPARED FOR
COUNTY OF CLACKAMAS
902 ABERNETHY RD
OREGON CITY
OR 970451165

DATE

9/16/2024

PREPARED BY
TEC EQUIPMENT, INC.
750 NE COLUMBIA BLVD
PORTLAND
OR 972111406

QUOTE INFORMATION

TEC20240009505880D
VHD84B300 Daycab - 113.6" BBC
Qty: 4

This proposal outlines the complete vehicle specification and performance details that have been customized to drive greater success for you and your business operations. The enclosed spec represents a solution that optimizes fuel efficiency, enhances driver productivity, provides peace of mind through our industry-leading active and passive safety features – all while ensuring your uptime to ultimately support your customers.

By partnering with your dealer and Volvo Trucks, you will benefit from innovative technologies that are incorporated in everything we do – from our powertrain components to connectivity solutions. We take our role as your business partner very seriously and appreciate the opportunity to support you with products and services that we hope will exceed your expectations. Our mission is to provide you with trucks and solutions that you can count on to help you be more successful and that you will be proud to own and operate.

Our responsibility doesn't stop when we hand over the keys. In fact, this is just the beginning of a great and close partnership. Just as you work hard to deliver to your customers, we will work hard to deliver on our promises to you.

As you review this proposal, please note any questions you may have so we can discuss them together. We hope you feel comfortable placing your trust in us, and look forward to doing business with you!

Sincerely,

JOHN BARNES

TEC EQUIPMENT, INC.

TECHNICAL SPECIFICATION

VHD84B300 Daycab - 113.6" BBC

				WEIGHT (LB)	
MODEL PACKAGE		DESCRIPTION		FRONT	REAR
S	AAX04X	PRODUCT GENERATION	LEGACY HEAVY TRUCKS	0	0
S	012157	MARKETING MODEL	VHD84B300	0	0
S	99X76X	MANUFACTURING LOCATION	VOLVO TRUCKS - ASSEMBLED IN THE USA	0	0
S	007157	00 MODEL	VHD84B300	8,605	4,747
	DDX15X	CHASSIS TYPE	TRUCK	0	0
	CDX23X	MODEL SERIES	VHD / VAH Models - 113.6" BBC	0	0
	M84037	INTENDED REGISTRATION LOCATION	OREGON	0	0
	MBT09T	VEHICLE CERTIFICATION	EPA (ONLY) FOR VOLVO 11L / 13L DIESEL	0	0

				WEIGHT (LB)	
VEHICLE ADAPTATION		DESCRIPTION		FRONT	REAR
	M46005	DEALERSHIP REGION	WESTERN REGION	0	0
S	36XF1X	LANGUAGE ON DECALS	ENGLISH/SPANISH LANGUAGE ON DECALS	0	0
S	38XCNX	OPERATOR'S MANUAL LANGUAGE	ENGLISH	0	0
S	125001	AREA/DOMICILE (EXHAUST)	49 STATE + CANADA / NON CALIFORNIA	0	0
S	263206	VEHICLE APPLICATION	TRUCK / ASPHALT OR DUMP BODY	0	0
	DKXG7X	GROSS COMBINATION WEIGHT	80,000 LBS/36,000 KG (36 TONNES) GROSS COMBINATION WEIGHT	0	0
	2KEA1X	TRAILER TYPE	DRAWBAR TRAILER WITH STEERED FRONT AXLES	0	0
S	898003	VEHICLE WARRANTY QUALIFICATION	STANDARD HEAVY DUTY WARRANTY QUALIFIED	0	0
S	259003	VEHICLE VOCATION	CONSTRUCTION SERVICE	0	0
S	260006	OPERATING CONDITIONS	ON HIGHWAY, STARTING GRADES <16%	0	0
S	QCXA1X	TOPOGRAPHY	MOSTLY FLAT, MOST GRADES <3%, MAX GRADE 8% (EX. OHIO)	0	0
S	E1BD1X	AMBIENT TEMPERATURE UPPER LIMIT	SUMMER AMBIENT TEMPERATURES DO NOT REGULARLY EXCEED 104 DEGREE F (40 DEGREE C)	0	0
S	264001	LOADING SURFACE FACTOR	CONCRETE LOADING AND / OR UNLOADING SURFACE	0	0
S	DHX20X	OPERATING CLASS	OPERATING CLASS TWO (ON/OFF HIGHWAY)	0	0
	938002	CUSTOMER FLEET SIZE	REGIONAL FLEET 25 OR MORE VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND	0	0

				WEIGHT (LB)	
PASSIVE AND ACTIVE SAFETY		DESCRIPTION		FRONT	REAR
S	2CXD3X	CAB TYPE	300 - DAY CAB WITH B-PILLAR EXHAUST	25	20
S	DUXA1X	SRS AIR BAG	AIR BAG, BASIC CONFIGURATION	0	0
S	43X40X	AUXILIARY DOWN VIEW MIRROR	DOWN VIEW MIRROR OVER PASSENGER DOOR	0	0
S	ZMXA1X	ELECTRONIC STABILITY CONTROL (ESP)	VOLVO ENHANCED STABILITY TECHNOLOGY (VEST)	0	0
S	WPXB1X	ABS TRACTION CONTROL	6 CHANNEL TRACTION CONTROL WITH LIMITED DISABLE	0	0
S	3MBA1X	PARK BRAKE ALARM	PARK BRAKE ALARM, SOUNDS IF BRAKE OFF AND DRIVER'S DOOR OPENED	0	0

				WEIGHT (LB)	
ENGINE		DESCRIPTION		FRONT	REAR
	1018H5	ENGINE PACKAGE	VOLVO D13 500HP 2100RPM 1850 LBFT - EPA'21 EMISSION LEVEL	347	0

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
ENGINE EQUIPMENT		DESCRIPTION		FRONT	REAR
	KWXA3X	AIR CLEANER	SINGLE STAGE CLEANER WITH SAFETY ELEMENT	3	0
	JWXE1X	AIR INTAKE	HOOD MOUNTED AIR INTAKE WITH INSIDE/ OUTSIDE AIR	0	0
	H9XK1X	RADIATOR	1240 SQ IN, 2 ROW CORE RADIATOR	18	0
S	209012	RADIATOR COOLANT	EXTENDED LIFE ETHYLENE GLYCOL ANTI-FREEZE (RED-ORANGE), -34 F (-37 C)	0	0
CA	208028	FAN CLUTCH PACKAGE	HORTON FAN CLUTCH, DM ADVANTAGE, 2 SPEED	3	0
S	NCXA5X	STARTER MOTOR	DELCO REMY 12V 39MTHD STARTER	0	0
S	PJXMNX	ALTERNATOR	160 AMP DELCO REMY 28SI ALTERNATOR (12V)	0	0
	810114	BATTERY PACKAGE	3 VOLVO 1000 CCA MAINTENANCE FREE 12V BATTERIES, 3000 CCA	45	14
S	L4X16X	BATTERY BOX MOUNTING	BATTERY BOX, LEFT HAND SIDE, BEHIND FRONT FENDER	0	0
S	NQXB1X	BATTERY BOX CONFIGURATION	BATTERY BOX - 3 CAPACITY	0	0
S	L5XA1X	BATTERY BOX COVER	BASIC BATTERY BOX COVER	0	0
S	NFXA0X	BATTERY DISCONNECT SWITCH	MANUAL BATTERY DISCONNECT MAIN SWITCH	0	0
	MOXAAX	BATTERY ISOLATION	RUBBER ISOLATION PAD UNDER BATTERIES	0	0
S	428001	DIESEL EXHAUST FLUID TANK	18.5 GALLON LEFT HAND 26", FRAME MOUNTED (FILLED WITH 10 GALLONS OF DEF, WEIGHING 91 LBS)	159	86
S	230049	EXHAUST SYSTEM	INTEGRATED DPF AND SCR MOUNTED RIGHT HAND SIDE UNDER CAB WITH CAB-MOUNTED VERTICAL PIPE	0	0
S	232088	EXHAUST OUTLET PACKAGE	10' 0" ALUMINIZED STAINLESS STEEL SINGLE STACK	0	0
S	K0XC4X	EXHAUST FEATURES	STRAIGHT STACK, SIDE OUTLET DIFFUSER BOX	0	0
S	KNXC1X	EXHAUST SHIELD	ALUMINUM EXHAUST SHIELD	0	0
S	JVXH1X	PRIMARY FUEL FILTER	VOLVO DUAL ENGINE MOUNTED FUEL FILTERS WITH WATER SEPARATOR	0	0
S	MBXA1X	PRIMARY FUEL FILTER LOCATION	STANDARD FUEL FILTER LOCATION	0	0
S	4SFB1X	OIL LIFE MONITORING SYSTEM	OIL LIFE MONITORING SYSTEM, PASSIVE	0	0
S	VWXCAx	COMPRESSOR	WABCO 31.8 CFM COMPRESSOR	0	0
	5NXA1X	ENGINE BLOCK HEATER	PHILLIPS 120V 1500W LEFT HAND RECEPTACLE BLOCK HEATER	5	0
S	J2EAAX	ENGINE BRAKE ACTIVATION	ENGINE BRAKE ACTIVATION, BASIC	0	0
	NDXA1X	ENGINE STARTING AID	WITH STARTING AID	7	0
S	QHXC1X	ENGINE OIL PAN	STAMPED STEEL OIL PAN (STANDARD OIL CHANGE INTERVALS)	0	0
CA	T1XK1X	PTO & PUMP, ENGINE MOUNTED REAR	REAR ENGINE MOUNTED PTO WITH SPLINED SHAFT GROOVE (FEMALE) DIN 5462	18	3

				WEIGHT (LB)	
TRANSMISSION		DESCRIPTION		FRONT	REAR
	270714	TRANSMISSION PACKAGE	VOLVO 14 SPEED I-SHIFT SEVERE DUTY, ULTRA-LOW CRAWLER / ULTRA-LOW REVERSE, OVERDRIVE	73	25
S	295009	TRANSMISSION ELECTRONICS PACKAGE	PERFORMANCE (VOCATIONAL) I-SHIFT TRANSMISSION ELECTRONICS	0	0
S	RVXH5X	GEAR SHIFT CONTROL	GEAR SHIFT LEVER, SEAT MOUNTED, PREMIUM, I-SHIFT	0	0
S	B1EA1X	TRANSMISSION AUTO NEUTRAL ON P-BRAKE	VOLVO I-SHIFT TRANSMISSION AUTO NEUTRAL ON PARK BRAKE	0	0
S	3IAA2X	HILL START ASSIST	HILL START ASSIST	0	0
S	6SAA1X	TRANSMISSION KICK-DOWN MODE	VOLVO I-SHIFT TRANSMISSION KICK-DOWN MODE, ENABLED IN ECONOMY AND PERFORMANCE MODES	0	0
S	4LDA1X	TRANSMISSION OUTPUT TORQUE	STANDARD OUTPUT TORQUE	0	0
S	779998	ALLISON INPUT AND OUTPUT PACKAGE	NO ALLISON INPUT AND OUTPUT PACKAGE	0	0
S	778998	FUEL SENSE PACKAGE	NO FUEL SENSE PACKAGE	0	0
S	T2XB1X	TRANSMISSION COOLER	WATER TO OIL TRANS COOLER MOUNTED ON TRANSMISSION	0	0

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
TRANSMISSION		DESCRIPTION		FRONT	REAR
S	D4AB1X	AMT/AUTOMATIC TRANS PTO FUNCT.	TRANSMISSION PTO FUNCTIONS ENHANCED	0	0
S	195213	PROPSHAFT - MAIN	DANA/SPICER SPL250 LITE (PROPS-L)	0	0
	THXC5X	DRIVELINE MANUFACTURER MINIMUM REQUIRED	PROP. SHAFT MANUF. BY SPICER SPL LIGHT SERIES	122	122
S	MRP003	PROPSHAFT SIZE (KAX)	MINIMUM REQUIRED PROPSHAFT (KAX), PROPS-L	0	0
S	204201	PROPSHAFT - INTERAXLE	DANA-SPICER SPL170XL EXTENDED LUBE SERIES	0	0
S	250111	CLUTCH	VOLVO SACHS 17" SINGLE PLATE DAMPENED ORGANIC FOR I-SHIFT	0	0

				WEIGHT (LB)	
PROGRAMMABLE FEATURES		DESCRIPTION		FRONT	REAR
S	Y7BB1X	IDLE EMISSION LABEL LOCATION	CAB MOUNTED CLEAN IDLE DECAL LOCATION	0	0
S	A3AAAX	ENGINE IDLE AUTOMATIC SHUTDOWN (AL)	ENGINE IDLE SHUTDOWN, ENABLE	0	0
	E0XGAX	ENGINE IDLE SHUTDOWN TIME (AM)	IDLE SHUTDOWN TIME 10 MINUTES	0	0
S	K7XA1X	ENGINE IDLE CONTROL (CMQ)	BASIC ENGINE IDLE CONTROL	0	0
S	D3AAEX	AMBIENT TEMP MAX THRESHOLD (CMO)	MAXIMUM AMBIENT AIR TEMPERATURE OVER-RIDE, 80 DEG F (27 DEG C)	0	0
S	D2AACX	AMBIENT TEMP MIN	MINIMUM AMBIENT AIR TEMPERATURE OVER-RIDE, 45 DEG F (7	0	0
	JDXA1X	CRUISE CONTROL (AG)	WITH BASIC CRUISE CONTROL	0	0
	JFXLLX	CRUISE CONTROL, MAXIMUM	MAXIMUM CRUISE, 65 MPH (105 KM/H)	0	0
S	Y3CC5X	PEDAL ROAD SPEED LIMIT SETTING (P1I16)	PEDAL ROAD SPEED LIMIT, 65 MPH (105 KM/H)	0	0
	JCXE6X	ROAD SPEED LIMIT SETTING	ROAD SPEED LIMIT, 65 MPH (105 KM/H)	0	0
	E3AACX	CRUISE CONTROL MIN SPEED (BK)	MIN CRUISE, 20 MPH (32 KM/H)	0	0
S	E5AAEX	ENG BRAKE ENGAGE IN CRUISE (AF)	ENGAGE ENGINE BRAKE 5 MPH (8.0 KM/H) ABOVE SET CRUISE SPEED	0	0
	X2BB1X	ROAD SPEED LIMIT CONTROL TYPE (P1I01)	WITH BASIC RSL CONTROL	0	0
S	X1BA1X	ENGINE LOAD IN PTO (CMM)	30% MINIMUM ENGINE LOAD LIMIT IN PTO BEFORE ALLOW	0	0
S	W5BE1X	MAXIMUM ENGINE SPEED AT 0 MPH (P1ANA)	MAXIMUM ENGINE SPEED AT 0 MPH, 1400 RPM	0	0
S	X4BA1X	COOLANT WARM HOLD TEMP	COOLANT WARM HOLD TEMP ENABLED	0	0
S	R4BA1X	PRE-TRIP DIAGNOSTIC INSPECTION (JZU)	PRE-TRIP DIAGNOSTICS INSPECTION	0	0
S	K5XA2X	ENGINE PROTECTION SYSTEM	ENGINE PROTECTION (SHUTDOWN)	0	0
	EXXSAX	PTO MAXIMUM ENGINE SET SPEED (AND)	PTO ENGINE MAXIMUM 1400 RPM	0	0
	EYXJCX	PTO RESUME ENGINE SET	PTO ENGINE RESUME 950 RPM	0	0

				WEIGHT (LB)	
FRONT AXLE		DESCRIPTION		FRONT	REAR
	370407	FRONT AXLE PACKAGE	VOLVO VF20 20,800 LB FRONT SPRINGS - VHD ONLY	161	0
S	70BB1X	BRAKE REGULATION	BRAKE REGULATION, STOPPING DISTANCE 310 FT (94M)	0	0
S	782005	FRONT BRAKE & HUB PACKAGE	FRONT BRAKE MERITOR, Q+ CAST, STANDARD LUBE	45	0
	U5XB1X	FRONT BRAKE DIMENSION	16.5X6 FRONT BRAKE SIZE	12	0
S	U3XA1X	BRAKE TYPE, FRONT AXLE	CAST IRON FRONT BRAKE DRUM OUTBOARD MOUNTED	0	0
S	LQXAWX	FRONT BRAKE LINING MATERIAL	BRAKE LINING MATERIAL FRONT, MERITOR MA 2301	0	0
S	K2EA1X	BRAKE SHOE COATING FRONT	BRAKE SHOE COATING FRONT, BASIC	0	0

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
FRONT AXLE		DESCRIPTION		FRONT	REAR
S	UDXA1X	FRONT AXLE BRAKE DUST SHIELD	FRONT BRAKE DUST SHIELDS	0	0
	0KXG1X	HUBS, FRONT AXLE	IRON UNITIZED FRONT AXLE HUBS	0	0
	162001	FRONT AXLE LUBRICANT	GREASE, FAG NLGI2 FRONT AXLE LUBRICANT	0	0
S	XAXBFX	POWER STEERING GEAR	TRW THP60 INTEGRAL POWER STEERING GEAR	0	0
	XEXA1X	POWER STEERING ASSIST	RIGHT HAND RAM ASSIST	0	0
S	M0XA1X	STEERING SHAFT TYPE	BASIC STEERING SHAFT	0	0
S	371071	FRONT SUSPENSION PACKAGE	PARABOLIC LEAF FRONT SUSPENSION	78	0
S	IRXA1X	FRONT SUSP MAINTENANCE	LUBRICATED SPRING PINS AND BUSHINGS	0	0

				WEIGHT (LB)	
REAR AXLE		DESCRIPTION		FRONT	REAR
	330444	REAR AXLE PACKAGE	MERITOR RT46-160 46,000 LB CAPACITY	0	441
	TAXFRX	REAR AXLE RATIO	3.73 REAR AXLE RATIO	0	0
S	TUXB1X	DIFFERENTIAL LOCK	INTERAXLE DIFFERENTIAL LOCK	0	0
	350380	REAR SUSPENSION PACKAGE	46,000 LB VOLVO T-RIDE (3-LEAF) 54" SPACING	0	499
S	YVXA1X	REAR SHOCK ABSORBER	SHOCK ABSORBERS, DRIVE AXLES	0	102
S	783006	REAR BRAKE & HUB PACKAGE	REAR BRAKES MERITOR Q+, CAST, STANDARD LUBE	0	0
S	U8XA1X	DRIVE AXLE BRAKE DIMENSION	16.5X7 REAR BRAKE SIZE	0	0
S	U4XA1X	BRAKE TYPE, DRIVE AXLE	CAST IRON DRIVE AXLE BRAKE DRUM OUTBOARD MOUNTED	0	0
S	UEXA1X	DRIVE AXLE BRAKE DUST SHIELD	REAR BRAKE DUST SHIELDS	0	0
S	MAXAKX	DRIVE AXLE BRAKE LINING MATERIAL	BRAKE LINING MATERIAL DRIVE, MERITOR MA 2301	0	0
S	J8EA1X	BRAKE SHOE COATING DRIVE	BRAKE SHOE COATING DRIVE, BASIC	0	0
S	0LXI5X	HUBS, DRIVE AXLE	IRON PRESET PLUS DRIVE AXLE HUB WITH INTEGRATED SPINDLE NUT	0	0
S	163002	DRIVE AXLE LUBRICANT	SYNTHETIC OIL, SHELL 75W90 DRIVE AXLE LUBRICANT	0	0
S	781116	PARKING BRAKE CHAMBER PACKAGE	FOUR CAM TYPE HALDEX GOLD SEAL PLUS	0	14
S	V1AB1X	REAR BRAKE CHAMBER SIZE	REAR BRAKE CHAMBER 30 / 30 SQ INCHES (SERVICE / EMERGENCY)	0	0
S	UKXA1X	CHAMBER STROKE LENGTH, DRIVE AXLE	BASIC LENGTH BRAKE CHAMBER STROKE	0	0
S	784010	BRAKE ADJUSTERS	HALDEX BRAKE ADJUSTER FRONT, REAR, AND PUSHER	0	0
S	O5BD1X	FRONT BRAKE CHAMBER SIZE	FRONT BRAKE CHAMBER 24 SQUARE INCHES (SERVICE)	0	0

				WEIGHT (LB)	
AUXILIARY AXLE		DESCRIPTION		FRONT	REAR
S	335076	AUXILIARY AXLE PACKAGE	1 HENDRICKSON COMPOSITITE EX 13K STEERABLE PUSHER, AUX WHL & TIRES SUBJECT TO HEN TIRE TO GRND GUIDE	0	0
S	164002	PUSHER AXLE LUBRICANT	MINERAL OIL, CHEVRON DELO 80W90 PUSHER AXLE LUBRICANT	0	0
	GYXGPX	FIRST PUSHER AXLE SPACING	52" (1320MM) AHEAD OF FWD DRIVE AXLE	27	-26
S	U9XB3X	AUXILIARY AXLE BRAKE DIMENSION	15X5 AUXILIARY AXLE BRAKE SIZE	0	0
S	U6XA1X	BRAKE TYPE AUXILIARY AXLE	CAST IRON AUXILIARY AXLE BRAKE DRUM OUTBOARD MOUNTED	0	0
S	785026	PUSHER AND TAG AXLE BRAKE	PUSHER BRAKE MERITOR, CAST S-CAM, STANDARD LUBE	0	0
	UFXA1X	AUXILIARY AXLE BRAKE DUST SHIELDS	AUXILIARY AXLE BRAKE DUST SHIELDS	0	5
S	Q2BJ1X	BRAKE LINING MATERIAL,	BRAKE LINING MATERIAL PUSHER, TMD T5000	0	0

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
AUXILIARY AXLE		DESCRIPTION		FRONT	REAR
S	786005	PUSHER AND TAG AXLE BRAKE CHAMBER PACKAGE	PUSHER WITH HALDEX CHAMBERS	0	0
S	Q6BC1X	PUSHER BRAKE CHAMBER SIZE	PUSHER BRAKE CHAMBER 20SQ INCHES	0	0
S	8CXB1X	AUXILIARY AXLE CONTROL LOCATION	INSIDE CAB AUXILIARY AXLE CONTROL, UP/DOWN SWITCH ONLY INSIDE, AIR REGULATOR & GAUGE OUTSIDE OF CAB	0	0
S	0NXD1X	HUBS, AUXILIARY AXLE	ALUMINUM PRESET PLUS AUXILIARY AXLE HUB WITH INTEGRATED SPINDLE NUT	0	-30

				WEIGHT (LB)	
CHASSIS		DESCRIPTION		FRONT	REAR
S	3XBDAX	DRIVER SIDE FRONT CHASSIS CONFIGURATION	LEFT HAND BATTERY BOX - 3 CAPACITY, DEF TANK MOUNTED BEHIND BATTERY BOX (VHDB)	0	0
S	3YBAHX	PASSENGER SIDE FRONT CHASSIS CONFIGURATION	INTEGRATED DPF & SCR WITH B-PILLAR EXHAUST (VHDB)	0	0
	400206	WHEELBASE	206" WHEELBASE	474	474
S	402055	OVERHANG	55" OVERHANG	0	254
S	KBXB1X	FUEL TANK SHAPE, LIQUID	26" DIA CYLINDRICAL FUEL TANK	0	0
S	J8XB1X	LIQUID FUEL TANK, LEFTHAND SIDE	75 GALLON LEFT HAND FUEL TANK	0	0
S	KEXA1X	FUEL TANK MATERIAL, LIQUID	ALUMINUM FUEL TANK MATERIAL	0	0
S	HBXB1X	FUEL TANK POSITION - DIESEL	FUEL TANK POSITION 1	0	0
S	427998	HYDRAULIC OIL TANK PACKAGE	NO HYDRAULIC OIL TANK PROVIDED	0	0
S	8NAA1X	DPF COVER	DPF COVER, PAINTED STEEL	0	0
S	U6BA1X	DEF TANK COVER	PAINTED DIESEL EXHAUST FLUID TANK COVER	0	0
S	JHXA1X	FUEL LINES	NYLON FUEL LINES	0	0
S	KHXA1X	FUEL TANK STRAPS	PAINTED STEEL FUEL TANK STRAPS	0	0
S	KFXA1X	FUEL TANK CAP	NON-LOCKING FUEL TANK CAP	0	0
S	8HAA1X	AIR TANK ARRANGEMENT	AIR TANK ARRANGEMENT, BASIC	0	0
S	U2XB1X	AIR TANKS	STEEL AIR TANK	0	0
S	VHXE5X	AIR DRYER	WABCO AIR DRYER SS - HP WITHOUT TURBO CUT OFF VALVE WITH COALESCING FILTER	0	0
S	UWXB1X	AIR TANK DRAIN VALVE	MANUAL PULL CORD ON BRAKE SYSTEM TANKS	0	0
	403011	FRAME RAIL PACKAGE	11.81"X4.13"X.44" STRAIGHT STEEL RAILS	0	0
	Z9XA1X	FRAME INNER LINER	5MM PARTIAL FRAME LINER	161	329
	X4XA1X	FRONT FRAME EXTENSION	18" FRONT FRAME EXTENSION	146	-35
S	8EXB1X	INTERMEDIATE CROSSMEMBER MATERIAL	STEEL CROSSMEMBER MATERIAL	20	23
S	OAXA1X	INTERMEDIATE CROSSMEMBER CONFIGURATION	BASIC INTERMEDIATE CROSSMEMBER	0	0
S	X6XA1X	REAR FRAME TREATMENT	STRAIGHT CUT-OFF REAR CROSSMEMBER	0	38
	4DXH1X	FRONT BUMPER	STEEL SNOW PLOW BUMPER	-19	0
S	FRXA1X	BUMPER POSITION	BUMPER MOUNTED STANDARD POSITION	0	0
	65XA1X	FRONT FENDER EXTENSION	WITH FRONT FENDER EXTENSION	5	0
S	4EXB1X	FRONT TOWING DEVICE	TWO FRONT TOWING DEVICES	0	0
S	Q8CH1X	CHASSIS WIRING HARNESS CASING	HEAVY DUTY MAIN CHASSIS WIRING HARNESS COVERING	0	0
S	U7CFFX	LH FUEL TANK FACE LOCATION	LH FUEL TANK FRONT FACE @ XM=4525	0	0

				WEIGHT (LB)	
TRANSPORT ADAPTATION		DESCRIPTION		FRONT	REAR
	WHXC1X	TRAILER BRAKE CONNECTION POSITION	TRAILER CONNECTIONS MTD END OF FRAME	7	12

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
TRANSPORT ADAPTATION		DESCRIPTION		FRONT	REAR
	WGXBKX	TRAILER BRAKE VALVE	TWO TRAILER BRAKE VALVES	0	0
S	L0XB1X	ELECTRICAL CONNECTIONS BACK OF CAB	BODY BUILDER CONNECTIONS BACK OF CAB	3	0
	L2XA1X	ELECTRICAL RECEPTACLE END OF FRAME	ELECTRICAL RECEPTACLE END OF FRAME	0	5
	WLXA1X	TRAILER BRAKE HAND CONTROL	FULL PRESSURE TRAILER BRAKE HAND CONTROL	3	0
S	6WXA1X	CENTER CONSOLE FOR BODY CONTROLS	MOUNTING PLATE ONLY FOR BODY CONTROLS	0	0
S	L3XC1X	BODY BUILDER ELECTRICAL PREP	ELECTRICAL COMPLETE KIT FOR BODY BUILDER AND/OR 1-SHIFT PTO'S	0	0

				WEIGHT (LB)	
CALCULATED CODES - KAX		DESCRIPTION		FRONT	REAR
S	9JXA1X	PROPCALC SELECTION	YES, THE ORDER MUST BE CALCULATED	0	0

				WEIGHT (LB)	
CAB EXTERIOR		DESCRIPTION		FRONT	REAR
	2DX20X	CAB SUSPENSION	AIR RIDE CAB SUSPENSION WITH CLEARANCE FOR REPTO SHAFT	3	0
S	21XA1X	AUXILIARY REAR WINDOW	STANDARD REAR WINDOW	0	0
	WTXA1X	WINDSHIELD	HEATED WINDSHIELD	0	0
S	D2XA1X	WIPER BLADES	WIPER BLADES, BASIC	0	0
S	28XC3X	FRONT GRILLE	BLACK STATIONARY FRONT GRILLE	0	0
S	0EAC1X	AIR INTAKE GRILLE, FINISH	AIR INTAKE GRILLE, BLACK	0	0
S	3FX49X	EXTERIOR SIDE VIEW MIRRORS	BLACK AERODYNAMIC MIRRORS	0	0
S	3GXC1X	EXTERIOR MIRROR FEATURES	HEATED, POWER AXIS MIRROR, BOTH SIDES	3	0
S	LZXD1X	AIR HORN	DUAL TRUMPET MOUNTED UNDER CAB	0	0
	4NXZ1X	EXTERIOR SUNVISOR	NO EXTERIOR SUN VISOR PROVIDED	-13	0

				WEIGHT (LB)	
CAB INTERIOR		DESCRIPTION		FRONT	REAR
S	540088	INTERIOR TRIM LEVEL	FLEET - VINYL PANELS WITH METAL HEX TRIM	0	0
S	1DAF1X	SEAT MFG. AND SERIES, DRIVER	NATIONAL DRIVER SEAT	0	0
S	I5DA1X	SEAT PROFILE, DRIVER	STANDARD WIDTH DRIVER SEAT	0	0
	520104	DRIVER SEAT	X4 RAVEN MORDURA CLOTH	12	0
S	3ZXG2X	DRIVER SEAT SUPPORT	DRIVER SEAT - AIR SUSPENDED	0	0
	T7DB3X	SEAT COMFORT, DRIVER	DRIVER SEAT - TWO AIR ADJUSTABLE LUMBAR CHAMBERS, BACK CYCLER MASSAGE	0	0
	I9DA1X	SEAT CLIMATE, DRIVER	HEATED DRIVER SEAT	0	0
S	1GAF1X	SEAT MFG. & SERIES, PASSENGER	NATIONAL PASSENGER SEAT	0	0
S	I6DA1X	SEAT PROFILE, PASSENGER	STANDARD WIDTH PASSENGER SEAT	0	0
	521104	PASSENGER SEAT	X4 RAVEN MORDURA CLOTH	49	0
	34XK2X	PASSENGER SEAT SUPPORT	PASSENGER SEAT - AIR SUSPENDED, ADJUSTABLE SHOCK	0	0
	I8DB3X	SEAT COMFORT, PASSENGER	PASSENGER SEAT - TWO AIR ADJUSTABLE LUMBAR CHAMBERS, BACK CYCLER MASSAGE	0	0
	3PXC1X	SEAT ARMREST	INBOARD DRIVER AND PASS SEAT ARMREST	7	0
	0HAB1X	SEAT SUPPORT, DUST COVER	SEAT BASE DUST COVER, BOTH SIDES	0	0
S	K7AA1X	SAFETY BELT LENGTH	STANDARD SAFETY BELT LENGTH	0	0

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
CAB INTERIOR		DESCRIPTION		FRONT	REAR
	OUXC1X	SAFETY BELT DRIVER SEAT	SAFETY BELT DRIVER SEAT, ORANGE	0	0
	OXXA2X	SAFETY BELT PASSENGER SEAT	SAFETY BELT PASSENGER SEAT, ORANGE	0	0
S	4AXB1X	CLIMATE UNIT	INTEGRAL AIR CONDITIONER WITH HEATER - MANUAL CONTROLS	0	0
S	31XK2X	FLOOR MATS	FRONT FLOOR INSERTS, RUBBER	0	0
S	4JXD1X	STORAGE OVERHEAD DRIVER	NETTED OVERHEAD STORAGE (DRIVER / PASSENGER SIDES) WITH CB MOUNTING AND AUXILIARY SWITCHES	0	0
S	XRXB1X	STEERING WHEEL ADJUSTMENT	STANDARD STEERING WHEEL ADJUSTMENT	0	0
S	7BAA3X	STEERING WHEEL MATERIAL	STANDARD STEERING WHEEL COVERING	0	0
S	571020	GAUGE PACKAGE	EIGHT GAUGE INSTRUMENT CLUSTER	0	0
	PVXC7X	AIR RESTRICTION INDICATOR	GRADUATED ARI ON FILTER WITH GRAPHIC SYMBOL IN DRIVER MESSAGE CENTER	0	0
S	N8XD1X	SPEEDOMETER GRADUATION	MPH SPEEDOMETER GRADUATION	0	0

				WEIGHT (LB)	
LIGHTING		DESCRIPTION		FRONT	REAR
S	P8XB9X	HEADLAMPS	LED HEADLAMPS WITH SIGNATURE DRL	0	0
	R7FA1X	HEADLAMP HEATER	HEADLAMP HEATER (VHD / VAH ONLY)	0	0
S	LSXG1X	DAYTIME RUNNING LAMPS (DRL)	EQUIPPED WITH DAYTIME RUNNING LIGHTS	0	0
S	NEXC1X	STOP AND TAIL LIGHTS	DUAL WITH INTEGRAL BACKUP LIGHTS	0	0
S	NPXB1X	TURN SIGNAL SWITCH	SELF CANCELLING TURN SIGNAL	0	0

				WEIGHT (LB)	
AUDIO SYSTEM		DESCRIPTION		FRONT	REAR
S	590031	AUDIO PACKAGE	AM / FM / MP3 / USB / BLUETOOTH RADIO	0	0
S	73AJ1X	RADIO ANTENNA	SINGLE RIGHT HAND 48 INCH MIRROR MOUNTED RADIO ANTENNA	3	0
S	LYXF1X	STEERING WHEEL CONTROLS	WITH STEERING WHEEL SWITCHES	3	0
S	N0XA1X	MARKER INTERRUPTER SWITCH	MARKER INTERRUPTER SWITCH	0	0
S	5CXA1X	RADIO SPEAKERS	SPEAKERS IN DASH ONLY	0	0
S	5JXB1X	CB RADIO MOUNTING	OVERHEAD MOUNTED CB HOLD DOWN	0	0
S	5BXB5X	CB ANTENNA	SINGLE LEFT HAND 48 INCH MIRROR MOUNTED CB ANTENNA	0	0

				WEIGHT (LB)	
MISC CAB EQUIPMENT		DESCRIPTION		FRONT	REAR
S	2XX35X	WINDOW LIFT	POWER WINDOW LIFT BOTH DOORS	7	5
S	3AXB1X	DOOR LOCKS CAB	MANUAL CAB DOOR LOCKS	0	0
S	20XA1X	KEY TYPE	BASIC UNIQUE KEY	0	0
S	8BXB1X	KEY QUANTITY PER UNIT	4 KEYS PROVIDED PER UNIT	0	0
S	W7DA5X	AUXILIARY DASH SWITCH PANEL	AUXILIARY DASH SWITCH PANEL, 10	0	0
	40XL2X	FIRE EXTINGUISHER	5 POUND ABC DRY TYPE, RECHARGEABLE, MOUNTED IN CAB	5	3
	4VX31X	AUXILIARY SAFETY EQUIPMENT	TRIANGLE REFLECTOR KIT	3	0

TECHNICAL SPECIFICATION *(cont.)*

			WEIGHT (LB)		
TIRES AND WHEELS		DESCRIPTION	FRONT	REAR	
	093852	TIRE PACKAGE FRONT	425/65R22.5L BRIDGESTONE M864 (22800 LBS. GAWR) LIGHT CONSTRUCTION (Total for QTY = 2)	380	0
	094688	TIRE PACKAGE DRIVE	11R22.5H BRIDGESTONE M799 (24020 LBS. GAWR) ON/OFF ROAD USAGE (Total for QTY = 8)	0	988
S	095620	TIRE PACKAGE AUXILIARY AXLE	275/70R22.5J BRIDGESTONE R250ED (14000 LBS. GAWR) REGIONAL / URBAN USAGE (Total for QTY = 2)	0	221
	084535	WHEEL PACKAGE FRONT	22.5X12.25 ALCOA HIGH POLISH ALUMINUM 3.9" OFFSET (Total for QTY = 2)	124	0
S	085069	WHEEL PACKAGE DRIVE	22.5X8.25 ACCURIDE STEEL POWDER COAT WHITE 5 HAND HOLE (Total for QTY = 8)	0	547
S	086069	WHEEL PACKAGE AUXILIARY AXLE	22.5X8.25 ACCURIDE STEEL POWDER COAT WHITE 5 HAND HOLE (Total for QTY = 2)	0	137
S	4WCC1X	TIRE CLASSIFICATION FRONT (CA)	GHG FRONT TIRE CLASSIFICATION, LOW ROLLING RESISTANCE	0	0
	4XCE1X	TIRE CLASSIFICATION REAR (CA)	GHG REAR TIRE CLASSIFICATION, BASIC	0	0
	4YCA1X	TIRE CLASSIFICATION AUXILIARY (CA)	GHG AUXILIARY TIRE CLASSIFICATION, ADVANCED LOW ROLLING RESISTANCE	0	0
S	0EXA1X	WHEEL & TIRE MOUNTING-	SINGLE WHEEL/TIRE MOUNT-AUXILIARY AXLE	0	0
S	907002	FRONT WHEEL AND TIRE QUANTITY	TWO WHEELS AND TIRES FRONT	0	0
S	908008	DRIVE WHEEL AND TIRE	EIGHT WHEELS AND TIRES DRIVE	0	0
S	909002	AUXILIARY AXLE WHEEL AND TIRE QUANTITY	TWO WHEELS AND TIRES AUXILIARY AXLE	0	0
S	15XABX	TIRE INFLATION VALVE	TIRE INFLATION VALVE, STANDARD	0	0

			WEIGHT (LB)		
PAINT		DESCRIPTION	FRONT	REAR	
S	950800	CAB PAINT SCHEME	1 COLOR	0	0
S	9801T4	FIRST TRUCK COLOR	GLACIER WHITE; P3029	0	0
S	959998	NEW PAINT DEVELOPMENT FEE	NO NEW PAINT DEVELOPMENT FEE	0	0
	BG2012	PAINT BUG CODE	BUG CODE EY	0	0
S	MPB980	CAB COLOR	CAB SAME AS FIRST COLOR	0	0
S	MPD980	HOOD COLOR	HOOD SAME AS FIRST COLOR	0	0
S	MPE980	COWL COLOR	COWL SAME AS FIRST COLOR	0	0
S	987980	BUMPER COLOR	BUMPER SAME AS FIRST COLOR	0	0
	996998	SUN VISOR COLOR	NO SUN VISOR COLOR PROVIDED	0	0
S	9861U1	CHASSIS COLOR	BLACK; P3036	0	0
S	988401	DISC WHEEL OR RIM COLOR	STEEL DISC WHEELS - PREPAINTED WHITE, POWDER - COAT, ALUMINUM OR STYLIZED DISC - UNPAINTED	0	0

			WEIGHT (LB)		
BUSINESS SERVICES		DESCRIPTION	FRONT	REAR	
S	9LAA1X	PRE-DELIVERY INSPECT LOCATION	PRE-DELIVERY INSPECTION, OUTSIDE FACTORY	0	0

			WEIGHT (LB)		
OUTSIDE MODIFICATION PLANNING		DESCRIPTION	FRONT	REAR	
S	615998	OUTSIDE MODIFICATION IN-SERVICE PLANNING CODE	NO FONTAINE IN-SERVICE PLANNING CODE	0	0
S	617998	OUTSIDE MODIFICATION BODY INSTALL CODE	NO FONTAINE BODY INSTALL	0	0
S	618998	OUTSIDE MODIFICATION AUXILIARY AXLE INSTALL CODE	NO FONTAINE AUXILIARY INSTALL	0	0
S	609998	OUTSIDE MODIFICATION LEAD TIME CODE	NO FONTAINE LEAD TIME	0	0

TECHNICAL SPECIFICATION *(cont.)*

				WEIGHT (LB)	
BASE WARRANTY AND PURCHASED COVERAGES			DESCRIPTION	FRONT	REAR
S	899302	WARRANTY TYPE	HEAVY_DUTY_STANDARD_BASE_COVERAGE 12_MONTHS / 100,000_MILES	0	0
S	896900	VOLVO D11/D13 ENGINE EXTENDED COVERAGE	VOLVO D11/D13 BASE ENGINE COVERAGE - 24MTHS/250K MILES	0	0
	M8309T	EMISSION - SURCHARGE	EPA (ONLY) FOR VOLVO 11L / 13L DIESEL	0	0
S	M99998	CUSTOM/BUNDLED COVERAGE OPTIONS	NO CUSTOM/BUNDLED PURCHASE COVERAGE OPTIONS PROVIDED	0	0
S	875001	VEHICLE EMISSIONS COMPONENTS COVERAGE	US & CANADA VOLVO ENGINE EQUIPPED VEHICLE EMISSIONS COMPONENTS COVERAGE_60 MONTHS/100K_MILES	0	0
S	880301	TRANSMISSION COVERAGE	36 MO: STANDARD I-SHIFT FOR SEVERE DUTY AND I-SHIFT WITH CRAWLER GEARS TRANS,HEAVY DUTY VEHICLE	0	0
S	685998	CLUTCH COVERAGE	NO CLUTCH COVERAGE PROVIDED	0	0
S	888900	ADDITIONAL EXTENDED CHASSIS TOWING COVERAGE	BASE CHASSIS TOWING COVERAGE, 90 DAY/5000 MILE/8050 KILOMETER	0	0
S	874900	ADDITIONAL EXTENDED ENGINE TOWING COVERAGE	BASE VOLVO ENGINE TOWING COVERAGE, 24 MO/250K MILE	0	0

				WEIGHT (LB)	
CONNECTED SERVICES			DESCRIPTION	FRONT	REAR
S	S03001	VOLVO UPTIME CARE	VOLVO UPTIME CARE - 24 MONTHS	0	0
S	S04001	VOLVO CONNECT LOCATION & REPORTING	VOLVO CONNECT LOCATION & REPORTING - 24 MONTHS	0	0
S	S05998	FLEET INTEGRATION	WITHOUT FLEET INTEGRATION	0	0

				WEIGHT (LB)	
ADDITIONAL ENGINEERING (Included)			DESCRIPTION	FRONT	REAR
	CA	24N22110		0	0

FRONT / REAR AXLE WEIGHTS (LB)

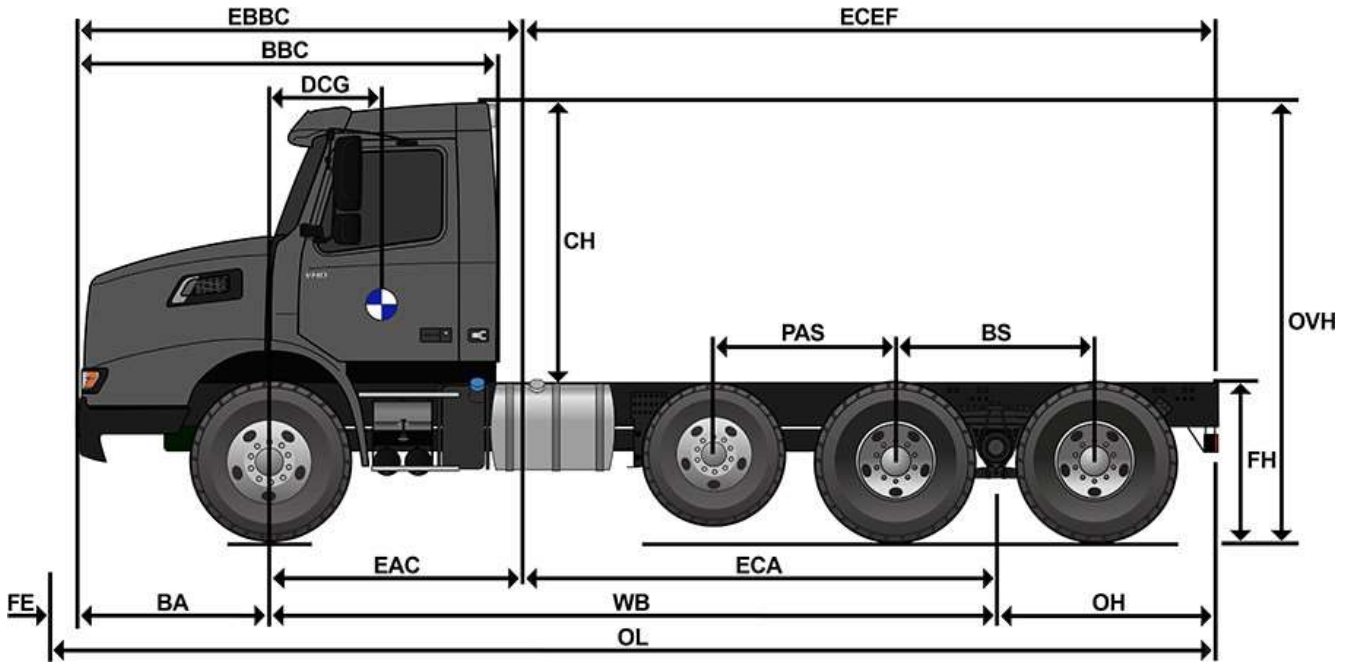
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TOTAL WEIGHT (LB)

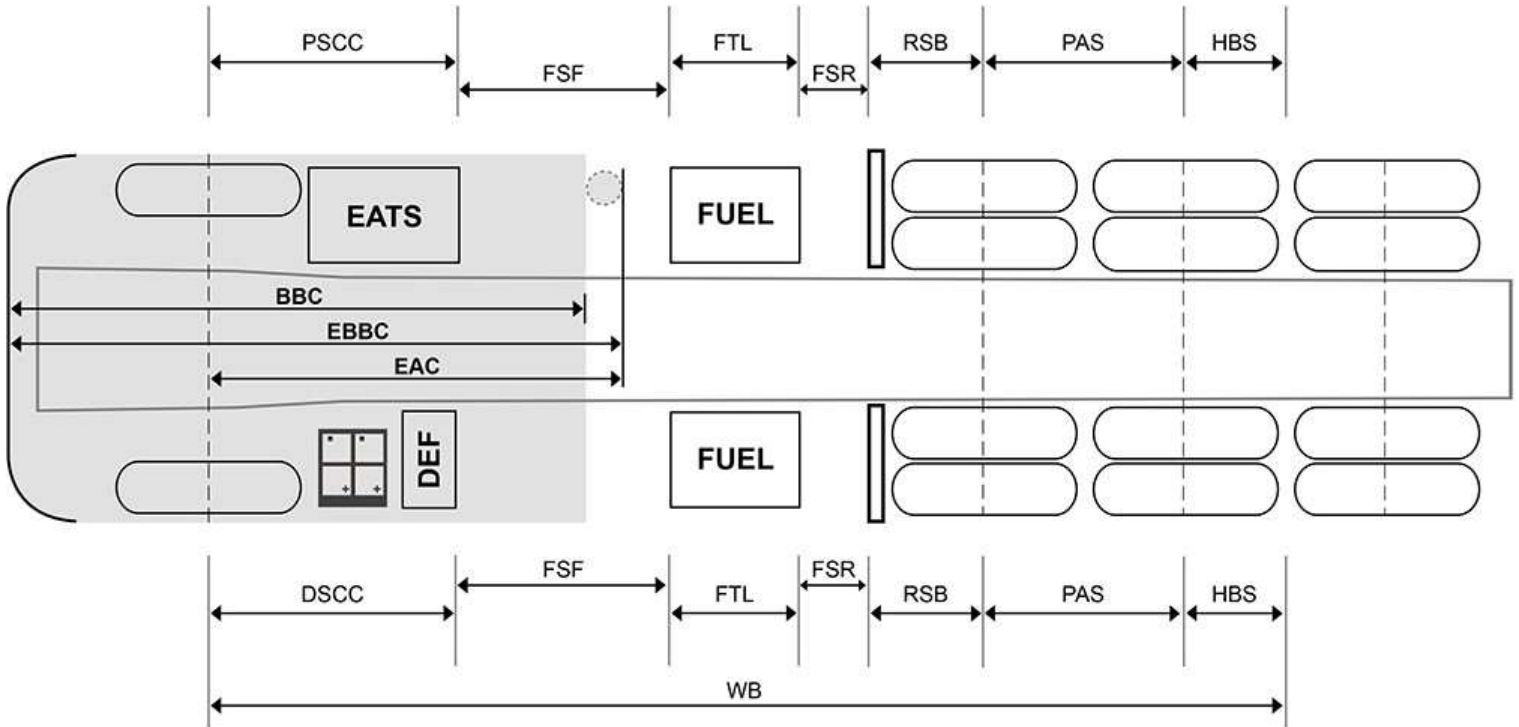
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VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Length	UOM
Front Frame Extension	N/A	FE	18.0	INCHES
Bumper to Front Axle	N/A	BA	51.2	INCHES
Eff. Bumper to Front Axle	N/A	N/A	51.2	INCHES
Wheelbase	N/A	WB	206.1	INCHES
Rear Overhang	N/A	OH	55.5	INCHES
Overall Length	N/A	OL	330.8	INCHES
Bumper to Back of Cab	N/A	BBC	113.6	INCHES
Eff. Bumper to Back of Cab	N/A	EBBC	113.6	INCHES
Eff. Cab to Rear Axle	N/A	ECA	143.7	INCHES
Eff. Front Axle to Back of Cab	N/A	EAC	62.4	INCHES
Eff. Cab to End of Frame	N/A	ECEF	199.2	INCHES
Unladen Frame Height	N/A	FH	42.6	INCHES
Cab Height	N/A	CH	74.3	INCHES
Overall Height	N/A	OVH	120.0	INCHES
Driver CG	N/A	DCG	42.0	INCHES
52" (1320MM) AHEAD OF FWD DRIVE AXLE	GYXGPX	PAS	52.0	INCHES
54" BOGIE SPREAD (1370MM)	GWXDGX	BS	54.0	INCHES



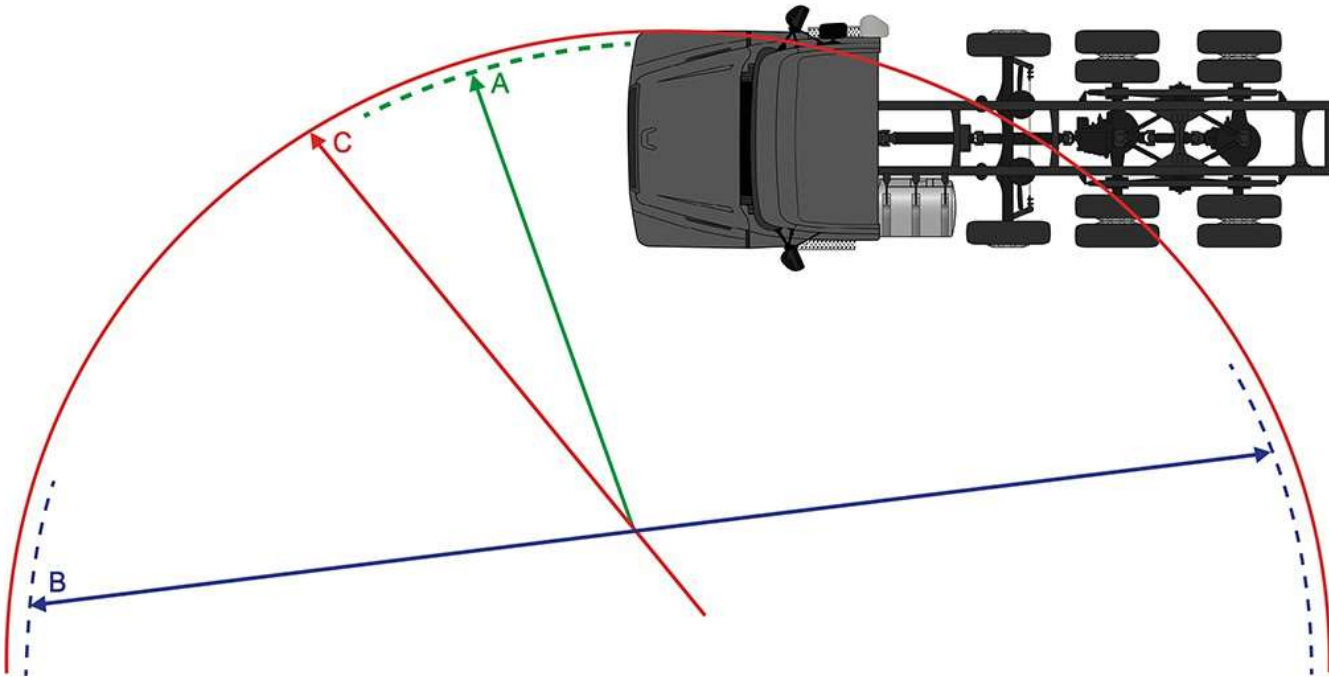
VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Description	Sales Code	Dwg Ref	Left Value(in)	Right Value(in)
Wheelbase	N/A	WB	206.1	206.1
Eff. Front Axle to Back of Cab	N/A	EAC	62.4	62.4
75 GALLON LEFT HAND FUEL TANK / NO RIGHT HAND DIESEL TANK PROVIDED	J8XB1X / J9XK1X	FTL	36.0	0.0
Bumper to Back of Cab	N/A	BBC	113.6	113.6
Eff. Bumper to Back of Cab	N/A	EBBC	113.6	113.6
LEFT HAND BATTERY BOX - 3 CAPACITY, DEF TANK MOUNTED BEHIND BATTERY BOX (VHDB)	3XBDAX	DSCC	63.8	N/A
INTEGRATED DPF & SCR WITH B-PILLAR EXHAUST (VHDB)	3YBAHX	PSCC	N/A	83.1
Frame Space Front	N/A	FSF	-1.4	0.0
Frame Space Rear	N/A	FSR	2.8	18.1
1 HENDRICKSON COMPOSITITE EX 13K STEERABLE PUSHER, AUX WHL & TIRES SUBJECT TO HEN TIRE TO GRND GUIDE	335076	RSB	26.0	26.0
PAS	GYXGPX	PAS	52.0	52.0
HBS	GWXDGX	HBS	27.0	27.0



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	Length	UOM
SAE Turning Radius	N/A	A*	32.8	FEET
Adjusted Turning Radius	N/A	A	36.9	FEET
Curb-to-Curb Diameter	N/A	B	75.3	FEET
Wall-to-Wall Diameter	N/A	C	81.4	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



Volvo Trucks

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COLUMBIA BODY MFG
 10037 SE MATHER RD
 CLACKAMS OR 97015
 USA

Phone: 503-656-3775

QUOTE

Quote Number: 311

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<p>Quote To:</p> <p>TEC EQUIPMENT INC. 750 NE COLUMBIA BLVD. PO BOX 11272 PORTLAND OR 97211-0272 USA</p>	<p>Date: 9/11/2024</p> <p>Expires: 10/26/2024</p> <p>Reference:</p> <p>Sales Person: Kirk Snead</p> <p>Fax: kirks@columbiabody.com</p>
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Tec Equipment John Barnes 503-209-5600 / Clackamas Co Kirk Stott 971-409-5099

USD

Line	Part Number/Description	Rev	Expected Qty	Unit Price	Ext. Price
1	CFG-Municipality Municipality Chassis	init	1.00 EA	66,171.00	66,171.00

Concave DoubleWall Configuration
 close to same as #3633

New Build Body Number----
 Reference Body Number----
 Body Length --- 186 Inches
 CA Chassis----146 Inches
 Back Of Cab To Front Of Box---- 16 Inches
 Body Over Hang --- 8 Inches
 Chassis Color----Axalta N0001 EZ Black
 Hoist Type and Size----A-frame
 Hydraulic Tank Mount Location --- Back Of Cab
 Hydraulic Tank Size--- frame mounted Tank
 Hydraulic Oil Type--- OIL HYDRAULIC
 Hydraulic Oil Filter--- 25 Micron (make sure filter points straight down)
 Ball Valve Befor And After Hydraulic Oil Filter--- Yes Locking
 Force America 6100 series System
 Quick Change Hooks On Hoist Plate --- No
 Body Tip Rail Height --- 8 X 4" Tiprail Height
 PUP Package--- yes
 Utility Package----no
 Transmission Make-----NA
 Extended Shaft PTO --- NA
 PTO Model --- FEPTO
 PTO Type--- FEPTO
 Pump Model----
 CBM Hitch Plate Assembly --- Yes
 Shear Pin Style--- CBM Grease Less 1 7/8" Pin Body Hinge Angle Assembly
 Pintle Hitch --- Yes
 Pintle Hitch Type--- Premier 370A
 Hitch Height --- standard
 Hitch Flap--- No
 End Of Hitch To Back Of Tire --- 5 Inch(Standard)
 Rear End D-Ring---- 1 Inch D-Ring = 2 (Standard)
 D-Ring Mount Location --- side bottom
 Custom D-Ring Mount Location --- Located on the side of the Z Plates
 License Plate Mounting Location---- ?
 Light Plate --- 2 Oval



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7 Way Location--- drivers Side
 Service Air Location--- Passanger Side
 Emergency Air Location----Passanger Side
 Service Emergensi Glad Hand Type --- Standard
 ICC Lighting--- (Standard)Trucklite 2-1/2" LED Lighting Mounted on Rear Hinge Angle
 Trailer Brake Controller----None
 RV Plug --- No
 Chip Bar----No
 Back Of Tire To Center Of Chip Bar Pin----NA
 Ground To Center Of Chip Bar Pin --- NA
 Rear End Work Light----No
 Rear End Commments----
 Safety Prop Pedestal --- Single CBM Standard Prop Pedestal
 Body Guide----Standard CBM Body Guides
 Back Up Alarm ---Factory Back Up Alarm
 Factory Back Alarm Disclaimer----IF THERE ISN'T A FACTORY INSTALLED BACKUP ALARM ON CHASSIS,
 THERE WILL BE AN UPCHARGE TO INSTALL ONE.
 Truck Body Up Light ---No
 Camera System --- No
 Body Beacon Light ---NO
 Chassis Mounted Chock Block Holder ---NO
 Cone Holder----No
 Chassis Highlift Setup --- NO
 Air Flaps ---No
 Tool Box ---None
 Truck Tarp Setup --- NO
 Chassis Mounted Spray Bottle --- No
 Spray Bottle Holder Location----
 Switch Style--- Round
 Cable Or Air Hoist --- Air
 Tower Selection --- Standard Cable/Air Tower
 Single Lever Tower Requirement --- No
 Tower Orintation --- Angled (as per pictures)
 Factory Dash PTO Switch --- Yes
 FACTORY PTO SWITCH DISCLAIMER----THE PTO WIRE HARNESSSES MUST BE PRESENT AND
 PROGRAMMING MUST BE DONE PRIOR TO ARRIVAL. IF THEY'RE NOT IT WILL BE THE
 RESPONSIBILITY OF THE CUSTOMER TO HAVE IT ACTIVATED AT THEIR EXPENSE.
 Factory Dash Strobe Beacon Switch----Yes

2	CONCAVE Concave Body	INIT	1.00EA	49,950.00	49,950.00
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Concave DoubleWall Configuration

Body Type: Truck
 Body Length: 186Inches
 Body Inside Width: 84 inch ID(Standard)Inches
 Side Height: 34Inches
 Floor Material: 1/4 AR450
 Side Material: 3/16 AR450
 Dash Material: 10 Gage
 Tailgate Material: 1/4 AR450
 Front Corner Post: Yes
 Rear Corner Post: Universal Straight
 TipRail Size: 4 x 8 x .188
 TipRail Rubber: 5/8" Vulcanized Neoprene
 Hoist Size and Type: 156 A-Frame
 Top Boards: 2 x 6 Douglous Fir
 Body Paint Code: Axalta N0006EZ White
 Cab Guard Style: Tarp Style Cab Guard
 Cabguard Beacon: None
 Insulated Dash: No
 Insulated Sides: No
 Front Step Options: Standard Rebar Front Steps(Complete)
 Front Step Locations: Both Sides
 Shovel Holder Driverside: Yes Spade Down Dash Driver Side
 Shovel Holder Passengerside: No
 Broom Holder: No
 Axe Holder: No
 Walk Rails: 7" Grip Strut Fold up Style Both Sides
 MudFlap Selection: Black No Logo Mudflaps
 Mid MudFlap: Yes
 Spray Guards: 6 inch Spray Guard(Standard)
 Body Vinyl Decal: No
 Vibrator: NoVibrator
 Poly Liner: None
 Camera Mount on Tarp Housing: No
 Misc. Comments:
 Tarp System: 96" Manual Manual Tarp System
 Tarp Type: Asphalt
 Tailgate Style: Double Wall Concave (Standard)
 Tailgate Frame: Tubing 4 x 4 x .120 (Standard)
 Tailgate License Plate Mount: Yes
 Batchgates: None
 Tailgate Options: High Lift tailgate(Complete)
 Waste Locks: No
 Spreader Chain: 3/8 Heavy Duty Chain
 Tailgate Spreader Chain Rubber Guard: No
 Spreader Apron: Piano Hinge Bolton Spreader Apron
 Rear Corner Post Keyhole Slotted Up Towards The Front at a 45 Degree Angle: No
 Rear Corner Post Keyhole Slotted Down Towards Tailgate at a 45 Degree Angle: No
 Tailgate/Rear Body Comments: See build 5878
 Rear Corner Post Marker Lights: 2-1/2" 8 Diode Red LED Marker Light (Standard)
 Red 6inch Oval LED: 4 Red 6" Oval LED 26 Diode Stop/Turn/Tail
 Rear Corner Post Side Lights: 2-1/2" RED LED CLEARANCE LIGHT
 Rear Corner Post 6inch Oval Strobe: No
 Clear 2inch Rear Corner Post Beacons: No
 MudFlap Selection: Black No Logo Mudflaps

Tax Description	Taxable Amount	Percent	Tax Amount
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Lines Total	116,121.00
Discount:	0.00
Less Discount:	116,121.00
Total Taxes	0.00
Line Miscellaneous Charges	0.00
Quote Miscellaneous Charges	0.00
Quote Total	116,121.00

A deposit of 25% is required for the amount of: \$29,030.25

Due to more frequent and unexpected increases in materials costs and volatility throughout the supply chain beyond the control of Columbia Body Manufacturing Co., and depending on the actual date of manufacturing based solely on the date of Customer acceptance of this quote when compared to actual date of delivery of chassis to Columbia Body Manufacturing Co., a materials costs surcharge may apply. Under no circumstances will a materials costs surcharge apply if delivery of chassis to Columbia Body Manufacturing Co. is within 90 days of date of Customer acceptance of his quote. The purpose of the materials costs surcharge would be to offset any unexpected and significant increases in costs of materials that are included in this quote. The materials costs surcharge would be additional charges that would be added to the base price and/or separately stated price options. Customer will be notified of any applicable materials costs surcharge in writing, prior to the start of the manufacturing process. If Customer cancels quote after signing acceptance or issuing a related purchase order, but prior to the beginning of the manufacturing process, a 10% restocking fee will be applied to materials costs included in this quote. Any custom materials or parts specific to this quote will require 100% prepayment at time of Customer quote acceptance, and will subsequently be considered owned by Customer if customer cancels quote.

****** Quote good for 45 days******

Customer Acceptance Signature

Date
