



NORTH CAROLINA SHERIFFS' ASSOCIATION

| Name of Dealership | Type of Vehicle | Zone | Base Unit Price |
|---|------------------------|----------------|------------------------|
| <u>VOLVO - VHD84F200 – (6X4 W/ PUSHER – REAR LOADER, SIDE LOADER, ROLL-OFF, KNUCKLEBOOM, HOOK LIFT) (Specification #61)</u> | | | |
| Transource, Inc. | 2017 Volvo VHD84F200 | ★Appalachia | \$97,929.15 |
| Transource, Inc. | 2017 Volvo VHD84F200 | ★Dogwood | \$97,929.15 |
| Transource, Inc. | 2017 Volvo VHD84F200 | ★Cardinal | \$97,929.15 |
| Transource, Inc. | 2017 Volvo VHD84F200 | ★Longleaf Pine | \$97,929.15 |



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VOLVO - VHD84F200 – (6X4 W/ PUSHER – REAR LOADER, SIDE LOADER, ROLL-OFF, KNUCKLEBOOM, HOOK LIFT) **SPECIFICATION #61**

2017 Volvo VHD84F200

ALL ITEMS FACTORY INSTALLED UNLESS OTHERWISE INDICATED

INSTRUCTIONS: Listed above, you will find the model numbers of the vehicles that will be included in this year's contract.

1. VEHICLE ADAPTATION

- a. Gross Combination Weight - No gross combination weight provided
- b. Vehicle GHG Certification - Green house gas vocational application
- c. Vehicle Warranty Qualification - Standard heavy duty warranty qualified
- d. Vehicle Width - 102" (2590 mm) vehicle width

2. PASSIVE AND ACTIVE SAFETY

- a. Cab Type - High-strength steel (HSS) day cab with B-Pillar mounted exhaust
- b. Steering Wheel - Volvo safety 18" sport steering wheel and adjustable steering column
- c. SRS Air Bag - Volvo SRS air bag-driver side only
- d. Safety Belt Reminder - Safety belt indicator and audible reminder
- e. Auxiliary Down View Mirror - Down view mirror over passenger door
- f. Antilock Brake System Manufacturer - Bendix ABS

3. ENGINE

- a. Engine Package - Volvo D11-355 HP 2100RPM 1250 LB-FT-EPA'14 emission level

4. ENGINE EQUIPMENT

- a. Air Cleaner - Single stage air cleaner
- b. Air intake - Hood mounted air intake
- c. Radiator - 930 sq in. 2 row core radiator
- d. Coolant - Extended life antifreeze -34 F (-37 C)
- e. Coolant Manufacturer - Chevron Texaco
- f. Fan Clutch Package - Electronic viscous fan clutch
- g. Starter - Delco remy 12V 39MTHD starter
- h. Alternator - 135 AMP delco remy 35SI pad mount alternator (12V)
- i. Battery Package - 2 Volvo 1000 CCA maintenance free 12V batteries, 2000 CCA
- j. Battery Box Mounting - Battery box, left hand side, behind front fender
- k. Battery Box Configuration - Battery box - 3 capacity
 - l. Battery Box Cover - Basic battery box cover
- m. Battery Disconnect Switch - Manual battery disconnect main switch
- n. Diesel Exhaust Fluid Tank - 18.5 gallon LH 26", frame mounted (168 lbs of def when filled to maximum level) included in base model weight
- o. Exhaust System - Compact DPF mounted right hand side under cab, frame mounted SCR, with cab mounted vertical pipe
- p. Exhaust Outlet Package - 10' 0" aluminized stainless steel single stack
- q. Exhaust Features - Straight stack, side outlet diffuser box
- r. Lower Exhaust Piping - Aluminized stainless steel exhaust pipe

- s. Exhaust Piping Flex Section - Stainless steel exhaust flex section
- t. Exhaust shield - Aluminum exhaust shield
- u. Primary Fuel Filter - Volvo dual engine mounted fuel filters with water separator
- v. Primary Fuel Filter Location - Standard fuel filter location
- w. Compressor - WABCO 31.8 CFM compressor
- x. Clutchable Air Compressor - No clutchable air compressor provided
- y. Engine Brake - Volvo engine brake (I-VEB) for D11 engine
- a`. Engine Oil Pan - Stamped steel oil pan (Standard oil change intervals)

5. TRANSMISSION

- a. Transmission Package - Fuller 10 speed manual
- b. Transmission Cooler - Water to oil trans cooler mounted on transmission
- c. Driveline Manufacturer - Spicer life driveline with greaseable XLU-Joints
- d. Driveline - Calculated to torque requirements

6. PROGRAMMABLE FEATURES

- a. Idle Emission Certification - Idle emission certification, carb 08
- b. Idle Emission Label Location - Cab mounted card '08 decal location
- c. Emission on Board Diag Control - Emission on board diagnostic, display only, USA 2016
- d. Engine Idle Automatic Shutdown (AL) - Engine idle shutdown, enable
- e. Engine Idle Shutdown Time (AM) - Idle shutdown time 5 minutes
- f. Engine Idle Control (CMQ) - Basic engine idle control
- g. Ambient Temp Max Threshold (CMO) - Max ambient air temp over-ride, 80 deg F (27 deg C)
- h. Ambient Temp Min Threshold (CMO) - Min ambient air temp over-ride, 45 deg F (7 deg C)
- i. Cruise Control (AG) - with eco cruise control
- j. Cruise Control, Max Speed (AI) - Maximum cruise, 65 MPH (105 km/h)
- k. Pedal Road Speed Limit Setting (P1/16) - Pedal road speed limit, 65 mph (105km/h)
- l. Road Speed Limit Setting (P1AOC) - Road speed limit, 65 mph (105 km/h)
- m. Gear Down Vehicle Speed Limiter (P1AL0) - Gear down vehicle speed limiter enabled
- n. Gear Down Vehicle Speed Limiter (P1AOC) - Gear down vehicle speed, 58 mph (93km/h)
- o. Cruise Control Min Speed (BK) - Min cruise, 30 mph (48 km/h)
- p. Road Speed Limit Control Type (P1I01) - With eco RSL control
- q. Optimized Fuel Econ Indicator (P1LXM) - Optimized fuel economy indicator, sweet spot
- r. Engine Load in PTO (CMM) - 30% minimum engine load limit in PTO before allow idle shutdown
- s. Maximum Engine Speed at 0 MPH (P1ANA) - 1400 maximum engine RPM at 0 MPH
- t. Engine Protection System (P1FGT) - Engine protection (shutdown)
- u. Coolant Warm Hold Temp (KBS) - Coolant warm hold temp enabled
- v. Fault Code Display Filter - Fault code display filter
- w. DPF Regeneration Controls - DPF regen control, auto regen in motion, manual parked regen, manual inhibit
- x. PTO Max Engine Set Speed (AND) - PTO engine maximum 700 RPM
- y. PTO Resume Engine Set Speed (ANE) - PTO Engine resume 700 RPM

7. FRONT AXLE

- a. Front Axle Package - Volvo VF14 14,600 LB Front Springs
- b. Brake Regulation - Brake regulation, stopping distance 310 FT (94M)
- c. Front Brake Package - Front brake bendix spicer, cast S-Cam, standard lube
- d. Front Brake Dimension - 16.5 x 5 front brake size
- e. Brake Drum, Front Axle - Cast iron front brake drum outboard mounted
- f. Front Brake Lining Material - Brake lining material front, bendix spicer EES-600
- g. Front Axle Brake Dust Shield - Front brake dust shields
- h. Hubs, Front axle - Iron preset plus front axle hub with integrated spindle nut
- i. Front Oil Seal Cap - Stemco visible cap with drain
- j. Front Axle Lubricant - Synthetic front axle lubricant
- k. Power Steering Gear - TRW THP60 integral power steering gear
- l. Front Suspension Package - Parabolic leaf front suspension
- m. Spring Maintenance Type - Lubricated spring pins and bushings

8. REAR AXLE

- a. Rear Axle Package - Meritor MT-40-14x4D hypoid (heavy duty housing) 40,000 lb capacity
- b. Rear Axle Ratio - 2.64 rear axle ratio

- c. Differential Lock - Interaxle differential lock
- d. Rear Suspension Package - 40,000 lb Volvo T-Ride (2-leaf firm ride) 54" spacing
- e. Rear Shock Absorber - Rear shock absorbers
- f. Rear Brake Package - Rear brake bendix spicer, cast S-Cam, standard lube
- g. Drive Axle Brake Dimension - 16.5 x 7 rear brake size
- h. Brake Drum, Drive Axle - Cast iron drive axle brake drum outboard mounted
- i. Drive Axle Brake Dust Shield - Rear brake dust shields
- j. Drive Axle Brake Lining Material - Brake lining material drive, bendix spicer ES-600
- k. Hubs, Drive Axle - Iron preset plus drive axle hub with integrated spindle nut
- l. Rear Axle Lubricant - Chevron delco gear lubricant esi sae 80W-90 (approved for meritor extended component warranty only)
- m. Parking Brake Chamber Package - Four cam type haldex
- n. Rear Brake Chamber Size - Rear brake chamber 30/30 sq inches (service/emergency)
- o. Chamber Stroke Length, Drive Axle - Basic length brake chamber stroke
- p. Front and Rear Slack Adjusters - Haldex brake adjuster front and rear
- q. Front Brake Chamber Size - Front brake chamber 24 square inches (service)

9. AUXILIARY AXLE

- a. Auxiliary Axle Package - 1 Hendrickson composilite SC 13K steerable pusher axle - auxiliary wheel and tire selection subject to hendrickson guidelines for tire to ground clearance
- b. First Pusher Axle Spacing - 48" (1220mm) ahead of FWD drive axle
- c. Auxiliary Axle Brake Dimension - 15 x 4 auxiliary axle brake size
- d. Auxiliary Axle Brake Drum - Cast iron auxiliary axle brake drum outboard mounted
- e. Pusher and Tag Axle Brake Package - Pusher brake bendix spicer, cast s-cam, standard lube
- f. Pusher and Tag Axle Brake Chamber Package - Pusher with haldex chambers
- g. Pusher Brake Chamber Size - Pusher brake chamber 20SQ inches
- h. Auxiliary Axle Control Location - Inside cab auxiliary axle control location. Up/down switch only inside, air regulator and gauge outside of cab
- i. Hubs, Auxiliary Axle - Iron preset plus auxiliary axle hub with integrated spindle nut

10. CHASSIS

- a. Driver Side Front Chassis Configuration - Left hand battery box - 3 capacity, def tank mounted behind battery box (VHDF)
- b. Passenger Side Front Chassis Configuration - Frame mounted SCR (VNM/VNL/VHD)
- c. Wheelbase - 232" wheelbase
- d. Overhang - 55" overhang
- e. Fuel Tank Shape-Diesel - 26" DIA cylindrical fuel tank
- f. Fuel Tank, Left Hand Side-Diesel - 75 gallon left hand fuel tank
- g. Fuel Tank, Right Hand Side-Diesel - No right hand diesel tank provided
- h. Fuel Tank Material-Diesel - Aluminum fuel tank material
- i. Fuel Tank Position - Fuel tank position 1
- j. DPF Cover - DPF cover, painted steel
- k. Diesel Exhaust Fluid Tank Cover - Painted diesel exhaust fluid tank cover
- l. Fuel Lines - Nylon fuel lines
- m. Fuel Tank Straps - Painted steel fuel tank straps
- n. Fuel Tank Cap/Def Tank Cap - Non-locking fuel tank cap
- o. Air Tank Arrangement - Air tank arrangement, basic
- p. Air Tanks - Steel air tanks
- q. Air Dryer - Meritor wabco air dryer, 1200UP without turbo cut off valve, with heater and coalescing oil filter
- r. Air Tank Drain Valve - Manual pull cord on brake system tanks
- s. Front Frame Extension - No front frame extension provided
- t. Intermediate Crossmember Material - Steel crossmember material
- u. Intermediate Crossmember Configuration - Basic intermediate crossmember
- v. Forward Rear Susp Crossmember Material - Steel crossmember material
- w. Bogie Crossmember Material - Steel crossmember material
- x. Rear Frame Treatment - Straight cut-off rear crossmember
- y. Front Bumper - Steel construction bumper-three piece
- a`. Bumper Position - Bumper mounted standard position
- aa. Front Fender Extension - No front fender extension provided
- ab. Main Chassis Wiring Harness Covering - Basic main chassis wiring harness covering
- ac. LH Fuel Tank Face Location - LH fuel tank front face @ XM=4325

11. TRANSPORT ADAPTATION

- a. Electrical Connections Back of Cab - Body builder connections back of cab
- b. Trailer Brake Hand Control - Delete trailer brake hand control
- c. Center Console For Body Controls - Mounting plate only for body controls
- d. Body Builder Electrical Prep - Electrical complete kit for body builder and/or I-Shift PTO's, ECU dash to chassis

12. CAB EXTERIOR

- a. Cab Suspension - Mechanical cab suspension with shocks
- b. Auxiliary Rear Window - Standard rear window
- c. Wiper Blade - Basic wiper blade
- d. Front Grille - Black molded front grille
- e. Bug Screen - Bug screen behind grille
- f. Air Intake Grille Finish - Air intake grille, black
- g. Air Horn - Dual trumpet mounted under cab
- h. Exterior Side View Mirrors - Black vocational mirrors with long arms
- i. Exterior Sunvisor - Exterior Sunvisor with clear lens LED marker lamps

13. CAB INTERIOR

- a. Interior Trim Package - Choice vinyl with espresso brown trim package
- b. Seat Manufacturer - National seat
- c. Driver Seat Type - Comfort air suspension high back
- d. Passenger Seat Type - Stationary tool box high back
- e. Driver Seat Upholstery - Driver seat espresso brown vinyl
- f. Safety Belt Length - Standard safety belt length
- g. Safety Belt Driver Seat - Safety belt driver seat, black
- h. Safety Belt Passenger Seat - Safety belt passenger seat, black
- i. Climate Unit - Integral air conditioner with heater-manual controls
- j. Parking Heater - Without parking heater
- k. Dog House - Dog house two piece
- l. Storage Overhead Driver - Netted overhead storage (Drive/passenger sides) with CB mounting and auxiliary switches
- m. Gauge Package - Eight gauge instrument cluster with base driver information display (DID)
- n. Diagnostics Display in Cluster - Basic diagnostics display in cluster
- o. Air Restriction Indicator - Graduated ARI on filter
- p. Speedometer Graduation - MPH Speedometer Graduation

14. LIGHTING

- a. Auxiliary Lamps - Snow plow lamp prep
- b. Headlamps - Halogen headlamps
- c. Daytime Running Lamps - Equipped with daytime running lights
- d. Stop and Tail Lights - Dual with integral backup lights
- e. Turn Signal Switch - Self cancelling turn signal switch

15. AUDIO SYSTEM

- a. Radio Package - AM/FM/CD/MP3/Bluetooth Radio
- b. Radio Antenna - Single RH 48 inch mirror MTD radio antenna
- c. Steering Wheel Controls - Marker interrupt, headlamp interrupt, radio, phone controls in steering wheel
- d. Radio Speakers - Speakers in dash only
- e. CB Radio Mounting - Overhead mounted CB hold down
- f. CB Antenna - Single left hand 48 inch mirror mounted CB antenna

16. MISC CAB EQUIPMENT

- a. Window Lift - Manual window lift
- b. Door Locks Cab - Manual cab door locks
- c. Key Type - Basic unique key
- d. Key Quantity Per Unit - 4 keys provided per unit
- e. Electrical Dash Outlet - One 12 volt dash outlet

17. TIRES AND WHEELS FRONT

- a. Tire Package Front - 315/80R22.5L Bridgestone M860A (20000 lbs. gawr) on/off road usage
- b. Tire Classification Front - GHG front tire classification, low rolling resistance
- c. Rim/Wheel Package Front - 22.5 x 9.00 maxion steel powder coat white 286BC 5 hand holes hub piloted
- d. Front Wheel and Tire Quantity - Two front wheels and tires

18. TIRES AND WHEELS REAR

- a. Tire Package Rear - 11R22.5G Bridgestone R268(23360 lbs. gawr) regional haul
- b. Rim/Wheel Package Front - 22.5 x 8.25 maxion steel powder coat white 286BC 5 hand holes hub piloted
- c. Drive Wheel and Tire Quantity - Eight drive wheels and tires

19. TIRES AND WHEELS AUXILIARY

- a. Tire Package Auxiliary Axle - 11R22.5G Bridgestone R268 (12350 lbs. gawr) regional haul
- b. Rim/Wheel Package Auxiliary Axle - 22.5 x 8.25 maxion steel powder coat white 286BC 5 hand holes hub piloted
- c. Wheel and Tire Mounting-Auxiliary Axle - Single wheel/tire mount-auxiliary axle
- d. Auxiliary axle wheel and tire quantity - Two auxiliary axle wheels and tires

20. MISC TIRE EQUIPMENT

- a. Tire Inflation Valve - Tire Inflation Valve, Standard

21. PAINT

- a. Cab Paint Scheme - Single Color Paint
- b. First Cab Color - Glacier White P3029
- c. Cab Paint Type - BC/CC-Solid
- d. Chassis Color - Black P3036
- e. Bumper Color - Same as first cab color
- f. Disc Wheel or Rim Color - Steel disc wheels-prepainted white, powder-coat, aluminum or stylized disc-unpainted
- g. Spoke Wheel/Hub Color - Spoke WHL?HUB same as chassis-al unptd

22. BUSINESS SERVICES

- a. Pre-Delivery Inspection - Pre-Delivery inspection, basic

23. BASE WARRANTY AND PURCHASED COVERAGES

- a. Warranty Type - Heavy duty standard base coverage, 12 months/100,000 miles
- b. Volvo D11/D13 Engine Extended Coverage - Volvo D11/D13 base engine coverage - 24mths/250K miles or 6250 hrs
- c. Warranty Type - Heavy duty standard base coverage, 12 months/100,000 miles
- d. Volvo D11/D13 Engine Extended Coverage - Volvo D11/D13 base engine coverage - 24mths/250K miles or 6250 hrs
- e. Vehicle Emissions Components Coverage - US & Canada Volvo engine equipped vehicle emissions components coverage, 60 months/100K miles
- f. Transmission Coverage - Standard I-Shift SD trans, heavy duty vehicle, 36 mths/250K miles
- g. Additional Extended Chassis Towing Coverage - Base chassis towing coverage, 90 day/5000 mile/8050 kilometer
- h. Additional Extended Engine Towing Coverage - Base Volvo engine coverage, 24mo/250K mile
- i. Remote Diagnostics Bundle - Remote diagnostics: includes assist and Volvo action service - 24 months
- j. Uptime Center Bundle - Assist and Volvo action service - 24 months

24. SUBTOTALS

- a. Base Weight - Front Weight - 9,335
- b. Base Weight - Rear Weight - 8,431

25. MODEL PACKAGE

- a. Manufacturing Location - Volvo Trucks - Assembled in the USA



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2017 Volvo VHD84F200

The Volvo VHD84F200 purchased through this contract comes with all the standard equipment as specified by the manufacturer for this model and NCSA's base vehicle specification(s) requirements which are included and made a part of this contract's vehicle base price as awarded by specification by zone.

| | | | | |
|-------------|-------------|-------------|-------------|----------------|
| ZONE: | ★Appalachia | ★Dogwood | ★Cardinal | ★Longleaf Pine |
| BASE PRICE: | \$97,929.15 | \$97,929.15 | \$97,929.15 | \$97,929.15 |

While the North Carolina Sheriffs' Association has attempted to identify and include those equipment items most often requested by participating agencies for full size vehicles, we realize equipment needs and preferences are going to vary from agency to agency. In an effort to incorporate flexibility into our program, we have created specific add/delete options which allow the purchaser to tailor the vehicle to their particular wants or needs.

The following equipment delete and add options and their related cost are provided here to assist you in approximating the total cost of the type vehicle(s) you wish to order through this program. Simply deduct the cost of any of the following equipment items you wish deleted from the base unit cost and/or add the cost of any equipment items you wish added to the base unit cost to determine the approximate cost of the type vehicle(s) you wish to order.

NOTE: An official listing of all add/delete options and their prices should be obtained from the appropriate dealer in your zone when preparing your order. Additional add/delete options other than those listed here may be available through the dealers, however, those listed here must be honored by the dealers in your zone at the stated prices.

| | | | | |
|--------------------|------------------|------------------|------------------|------------------|
| VEHICLE: | VHD84F200 | | | |
| DEALER: | Transource, Inc. | Transource, Inc. | Transource, Inc. | Transource, Inc. |
| ZONE: | ★ Appalachia | ★ Dogwood | ★ Cardinal | ★ Longleaf Pine |
| BASE PRICE: | \$97,929.15 | \$97,929.15 | \$97,929.15 | \$97,929.15 |

| Order Code | Add Options | All Zones |
|---------------------|--|--------------------------|
| QB2E0X ¹ | Brake Lining Material, Pusher - Brake lining material pusher, bendix spicer EES-600 (Replaces Q2BE1X) | NC ¹ |
| 403006 ¹ | Frame Rail Package - 11.81" x 3.54" x .38" straight steel rails <i>REQUIRES ILO FRAME LINER¹</i> | Incl. ¹ |
| 2MCA1X ¹ | Tire Classification Auxiliary - GHG auxiliary tire classification, basic <i>REQUIRES LOW PROFILE TIRES¹</i> | Std ¹ |
| 1017R2 ¹ | D11 - 365HP | \$595.00 ¹ |
| 1017S6 ¹ | D13 - 475HP | \$6,728.00 ¹ |
| 7RXD1X ¹ | Transmission Lubricant - Synthetic 75W-90 trans lubricant <i>STANDSRD WITH I-SHIFT TRANSMISSION¹</i> | Incl. ¹ |
| 270743 ¹ | Eaton RTLO-16913A - 13 Speed | \$1,258.00 ¹ |
| | Allison 3000 5spd | NA |
| 270768 ¹ | Allison 4500 5spd <i>MAY REQUIRE ADDITIONAL OPTIONS¹</i> | \$18,948.00 ¹ |
| 270704 ¹ | Volvo Transmission Electronics - Performance Volvo I-Shift transmission electronics (with premium shifter) | \$3,159.00 ¹ |
| 270704 ¹ | Volvo Transmission Performance Mode - Volvo I-Shift Transmission performance mode, enabled with auto return to economy mode | \$3,159.00 ¹ |
| 6SAA1X ¹ | Volvo Transmission Kick-Down Mode - Volvo I-Shift transmission kick-down mode, enable in economy and performance modes <i>REQUIRES I-SHIFT TRANSMISSION¹</i> | \$25.00 ¹ |
| RVXH5X ¹ | Gear Shift Lever - Gear shift lever, premium, I-Shift <i>REQUIRES I-SHIFT TRANSMISSION¹</i> | \$27.00 ¹ |
| | Clutch - Eaton E2 Clutch 15" | NA |
| J8XG1X ¹ | 125 gallon single tank <i>MAY REQUIRE ADDITIONAL OPTION¹</i> | \$412.00 ¹ |
| J8XXXX ¹ | Dual 50 gallon tanks <i>MAY REQUIRE ADDITIONAL OPTION¹</i> | \$754.00 ¹ |
| 370408 ¹ | Volvo VF22 22,800 LB | \$1,214.00 ¹ |
| 371071 ¹ | 22,800 LB Leaf Spring <i>STANDARD WITH 22,800 FRONT AXLE¹</i> | Incl. ¹ |
| 330512 ¹ | Meritor - 40,000 LB with Aluminum Carrier | \$721.00 ¹ |
| 350378 ¹ | Volvo - 40,000 lb multileaf | \$146.00 ¹ |
| 400198 ¹ | 198" WB <i>NON STANDARD WHEELBASE, MAY REQUIRE ADDITIONAL OPTIONS¹</i> | NC ¹ |
| 400240 ¹ | 240" WB | NC ¹ |
| U4XC1X ¹ | Meritor Drum Outboard Mounted | \$431.00 ¹ |