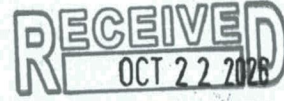




PO Box 3201, 401 Old Gate Lane (exit 40-195)
Milford, Connecticut 06460
Phone 203/877-3281 Fax 203/877-0614



10/20/2026

**Regional Refuse Disposal District #1
Request For Proposal (RFP)
New Roll-Off Truck
31 Hartford Road
Barkhamsted , CT. 06063**

Exceptions:

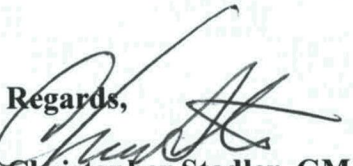
**Engine HP. 500 HP 1850 ft.lbs Torque
Transmission Volvo Severe Duty Automatic**

**Exceeds
11R24.5 16 Ply Tires Rear Axle Heavier Weight Carrying Capacity over 11R22.5 Tires
Aluminum Wheels all around (No Rust or Corrosion)
20,000 lbs Steerable Pusher Axle
Hoist 75,000 Lbs Capacity**

**Extended Warranties on all major components and can be tailored to your application.
Based on Mileage and Years.**

Standard Coverage is attached to the specifications. Page 10

Regards,


Christopher Stadler GM

Gabrielli Truck Sales

cstadler@gabriellitruck.com

Cell : 917-337-8832

Office : 203-877-3281 ext 5121



PO Box 3201, 401 Old Gate Lane (exit 40-195)
Milford, Connecticut 06460
Phone 203/877-3281 Fax 203/877-0614



10/20/2026

**Regional Refuse Disposal District #1
Request For Proposal (RFP)
New Roll-Off Truck
31 Hartford Road
Barkhamsted , CT. 06063**

To whom it may concern:

Our dealership is pleased to submit a proposal and specifications for a New 2027 Volvo VHD with 75,000lbs 24 Foot Roll-Off Hoist and equipment.

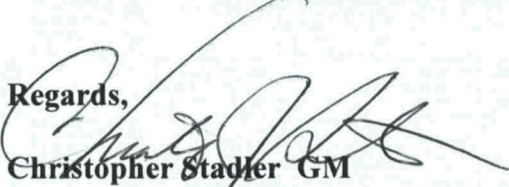
The unit we are proposing is a Chassis that is currently In Stock and would have the Roll – Off Hoist mounted and equipment for quick delivery.

Even though some of the chassis' components may be slightly different, the Truck Chassis is more than capable of performing a Heavy Roll-Off application. Please review the specifications on the Chassis, Roll-Off Hoist and Tarp Cover.

Pricing proposal for complete Unit New 2027 Volvo Model VHD \$ 233,000.00

Please feel free to contact me with any additional information you may need.

Regards,


**Christopher Stadler GM
Gabrielli Truck Sales
cstadler@gabriellitruck.com
Cell : 917-337-8832
Office : 203-877-3281 ext 5121**

General Header Information

Type: Formal - Request for Proposal (RFP)
Start Date: October 13, 2026 at 8:00:00 AM EDT
End Date: October 23, 2026 at 2:00:00 PM EDT
Vendor Q&A Start Date:
Vendor Q&A End Date:
Description: Regional Refuse Disposal District # 1, aka. RRDD1 the Municipal Transfer Station for the Towns of Barkhamsted, New Hartford and Winchester is seeking bids for a new Roll-off truck.
Delivery Terms: Free On Board Destination
Payment Terms: Vendor Specified
Contact Information: Regional Refuse Disposal District 1
Todd Arcelaschi
31 New Hartford Road Barkhamsted CT, 06063 United States
Tel: 860-379-1972 ext 111
Fax:
administration@rrdd1.com
Contact Details: If you have any questions, please contact:
Todd Arcelaschi
31 New Hartford Road Barkhamsted CT, 06063 United States
Tel: 860-379-1972 ext 111
Fax:
administration@rrdd1.com
Selected Categories: Motor vehicles (25100000)
Truck tractors (25102100)
Commercial and Military and Private Vehicles and their Accessories and Components (25000000)

The buying organization has no content in header custom fields of the solicitation.

The buying organization has no content in questions fields of the solicitation.

Documents Required Before Bidding

RRDD1 Roll Off Truck RFP.pdf (Not Accepted)

Note: Acceptance of the documents above must be acknowledged in order for your bid to be considered.

The buying organization has no content in requirements fields of the solicitation.

The buying organization has no content in line items fields of the solicitation.

REGIONAL REFUSE DISPOSAL DISTRICT #1

REQUEST FOR PROPOSALS (RFP)

NEW ROLL-OFF TRUCK

31 New Hartford Road • Barkhamsted, Connecticut

RFP Issue Date	Monday, October 12, 2026
Proposal Due Date and Time	Friday, October 23, 2026, at 2:00 p.m.
Submission Method / Address	Deliver proposals to: Regional Refuse Disposal District #1, 31 New Hartford Road, Barkhamsted, CT 06063.
Questions Due	Questions must be directed to administration@rrdd1.com .

1. Invitation and Purpose

Regional Refuse Disposal District #1 ("RRDD1" or "District"), located at 31 New Hartford Road in Barkhamsted, Connecticut, invites qualified truck dealers and manufacturers to submit proposals for the sale and delivery of one new roll-off truck. RRDD1 uses its trucks to transport recyclables, municipal solid waste, and bulky waste, generally within a 50-mile radius of Barkhamsted, Connecticut.

Proposals shall identify the truck and equipment offered, demonstrate compliance with the specifications below, and provide complete pricing and warranty information. The District may work with the selected vendor to finalize compatible details, provided the required specifications—including the 24-foot hoist—are met.

2. Required Truck Specifications

The proposed truck shall meet or exceed the following minimum requirements unless a specification expressly allows an alternate:

- **General configuration:** New roll-off truck capable of hauling containers up to 50 cubic yards. Overall length shall not exceed 37.5 feet, measured from the front bumper to the end of the hoist. A 2026 model-year truck is preferred.
- **Engine:** Six-cylinder diesel engine rated at a minimum of 525 horsepower, equipped with an engine brake.
- **Engine block heater:** Minimum 1,500-watt block heater.
- **Front axle:** 20,000-pound capacity.
- **Lift axle:** Factory-installed, steerable 20,000-pound lift axle located ahead of the rear axles. Vendors may also submit a separately priced alternate with a 13,500-pound steerable lift axle; the proposal must clearly identify it as an alternate.
- **Rear axle / suspension:** 46,000-pound axle capacity. Vendor shall identify the proposed rear suspension and axle configuration.
- **Front tires and wheels:** 315/22.50 front tires with unpolished aluminum rims.
- **Rear and tag-axle tires and wheels:** 11/22.50 rear and tag-axle tires with unpolished aluminum rims.
- **Transmission:** Allison automatic transmission.
- **Hoist — mandatory:** A minimum 60,000-pound-capacity, 24-foot hoist suitable for handling 50-cubic-yard roll-off containers. The proposal must expressly confirm the hoist is 24 feet long and provide the manufacturer, model, rated capacity, and relevant dimensional information. A proposal without a 24-

foot hoist will be considered nonresponsive unless RRDD1 expressly amends this requirement in writing.

- **Container handling:** Automatic box grabbers at the rear.
- **Tarp system:** Tarp system suitable for use with 50-cubic-yard containers.
- **Fuel tank:** Minimum 75-gallon fuel tank, left-mounted.
- **Driver seat:** High-back, air-suspension seat.
- **Instrumentation:** Full gauge panel.

3. Proposal Contents

1. Manufacturer, model, and complete description of the truck chassis and included equipment. A 2026 model-year truck is preferred; vendors must clearly identify the model year offered.
2. A specification sheet identifying compliance with every item in Section 2. Any deviation must be clearly disclosed; do not assume an unlisted substitution will be accepted.
3. Separate identification of the 24-foot hoist, including manufacturer, model, rated capacity, and confirmation of suitability for 50-cubic-yard containers.
4. Itemized purchase price, including chassis, hoist, tarp system, box grabbers, delivery, setup, and any other charges. Identify all taxes, fees, and optional equipment separately.
5. Delivery lead time from order/contract execution and the location from which the truck will be delivered.
6. Standard manufacturer and dealer warranties, available extended warranty options, duration and coverage of each, exclusions, and the price of each optional warranty.
7. Information on authorized service locations, parts availability, and the process for warranty service.
8. Proposal validity period and any assumptions or conditions affecting the quoted price.
9. Name and contact information of the vendor representative authorized to answer questions and negotiate final specifications.

4. Pricing

Provide a firm total price for the truck as proposed, with an itemized breakdown. Quote any permitted alternate configuration separately and do not combine alternate pricing with the base proposal. Clearly identify optional equipment and warranty pricing. Vendors may also submit an optional financing proposal that identifies the proposed financing terms, down payment (if any), interest rate, term, payment frequency, total cost of financing, and any fees or other conditions. Purchase and financing proposals must be shown separately. The District may request clarification of pricing but will not be responsible for costs omitted from the proposal.

5. Submission Requirements

Proposals must be received by Friday, October 23, 2026, at 2:00 p.m. at the following address: Regional Refuse Disposal District #1, 31 New Hartford Road, Barkhamsted, CT 06063. Proposals received after the deadline will not be considered.

6. Contact

Questions regarding this RFP should be directed to administration@rrdd1.com. The District will respond to all inquiries in a timely manner and may also issue addenda to the RFP as necessary.

Regional Refuse Disposal District #1

Todd Arcelaschi, Administrator

31 New Hartford Road, Barkhamsted, CT 06063

7. Review and Award

RRDD1 intends to evaluate proposals for responsiveness to the specifications, including the mandatory 24-foot hoist, total price, equipment suitability, delivery schedule, warranty coverage, service support, and overall value to the District. The District may seek clarification, verify information, negotiate final details with a vendor, reject any or all proposals, waive informalities where permitted, or cancel this solicitation if doing so is in the District's best interest. Issuance of this RFP does not obligate RRDD1 to purchase a truck or reimburse proposal costs.

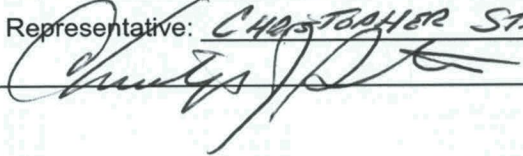
Any award is subject to applicable District approval requirements and completion of a written purchase agreement or purchase order. No vendor should begin work or incur costs on the District's behalf before receiving written authorization.

8. Final Specifications and Delivery

The specifications in this RFP are intended to describe the District's requirements. The successful vendor may work with RRDD1 to confirm final compatible details before order placement. No change may reduce or eliminate a mandatory requirement, including the minimum 24-foot hoist, without written approval by the District through an authorized amendment or written agreement. The vendor shall provide documentation showing the final truck and equipment configuration before delivery.

9. Vendor Acknowledgment

By submitting a proposal, the vendor acknowledges that it has reviewed this RFP and has disclosed all exceptions to the requested specifications.

Vendor / Company: GABRIELLI TRUCK SALES
Authorized Representative: CHRISTOPHER STAHLER Title: GM
Signature:  Date: 10/20/2026



HERITAGE TRUCK EQUIPMENT, INC.

661 POWELL AVE
HARTVILLE, OH 44632

(330) 699-4491 PHONE
(330) 564-0756 FAX

Date: October 19, 2026

Chris Stadler

Gabrielli Truck Sales, Milford

401 Old Gate Ln

Milford, CT 06460

203-877-3281

203-877-0614 - fax

917-337-8832 - cell

cstadler@gabriellitruck.com

Chassis Information

Make	Volvo	VIN		Cab-to-body	Approx.
Model	VHD	Trans #	Volvo I-shift	Hinge setting	TBD
Year	2027	C/A	208"		
Color		C-ROT	Approx. 257"		

Hoist	Model	HR-OR-24-75-T - outside rail hoist - telescopic lift cylinders
	Length	24 ft.
	Capacity	75,000 lbs.
Hoist Notes	Special Notes	Install rear air box locks (Hooker style)
	Special Notes	None
Hydraulics	PTO	Use factory mounted PTO on Volvo I-shift transmission
	Pump	Use factory mounted pump on Volvo I-shift transmission
	Controls	Inside/outside controls - feathering valve in tower
	Valve Body	Outside valve body mounted on driver's side
	Tower	Between seats - for hoist controls
	Hydraulic Controls	Installed on driver's side
	Hydraulic Tank	Steel - mounted on passenger's side
	Misc. Notes	Hoist up light in dash w/ alarm
	Misc. Notes	Shut-off ball valves installed on tank
Chassis	Rear Chassis Lights	Standard rear light bars w/ two s/t/t & one back up each side - ID cluster on hinge
	Mid-Turn Signals	Installed
	Fenders	Install tri-axle diamondplate steel fenders
	Front Mud Flaps	None
	Rear Mud Flaps	Heritage flaps - 14" flaps - installed on bottom of rear light bars
	Toolbox	Aluminum 18" x 18" x 36" toolbox mounted on driver's side
	Work Lights	None
	Pintle Hitch Assembly	Built-in to rear of hinge assembly - no hitch installed
	Body Prop	Installed
	Back-up Alarm	Installed
Paint	Hoist Paint	Black
	Chassis Paint	Black
Tarp	Manufacturer	Roll-Rite DC402 w/ stationary center pivots & bent tarp arms
	Operation	Hydraulic/electric tarp system
	Material Type	Heavy duty mesh
	Tarp Notes	Telescopic gantry - system set up for 96" wide containers
	Tarp Notes	Use work lights on Roll-Rite tarping system
Lift Axle	Manufacturer	None Quoted
	# of Lift Axles	
	Axle Type	Serial #
	Axle Spacing	
	Controls	
	Additional Air Tanks	
	Wheels/Tires	None Quoted

Quoted Amount - per unit

Federal Excise Tax

dealer collect NOT included

State Sales Tax

dealer collect NOT included

TOTAL QUOTED AMOUNT

Above pricing reflects the current pricing based on the latest material surcharges. Changes to material pricing will change the above pricing. At this time, all pricing is valid for 20 days. Terms are standard Gabrielli payment terms.

Dealer to collect all applicable taxes including Federal Excise Tax and state sales tax.

A purchase order is required before the above body is ordered. Please return a signed copy of these spec's with the purchase order.

Quote Prepared By: **Eric Bontrager**



HERITAGE ROLL OFF

[HOME](#) / HERITAGE ROLL OFF

HERITAGE ROLL OFF (CABLE HOIST)

Introducing the Heritage rolloff cable hoist. Our new line of rolloff cable hoists are completely designed, manufactured, and installed at our state-of-the-art facility in Hartville, OH. Available in both 60,000 lbs. and 75,000 lbs. capacity, our rolloff cable hoist are ready for any of your hauling needs including scrap metal, waste, or bulk materials. While Heritage may be new to the rolloff cable hoist business, those that have experienced the quality of a Heritage manufactured dump truck along with our reliable on-time delivery schedule, will find Heritage to be their best source for a rolloff cable hoist as well. Give our sales team a call today to find out how we can help you!



STANDARD SPECIFICATIONS

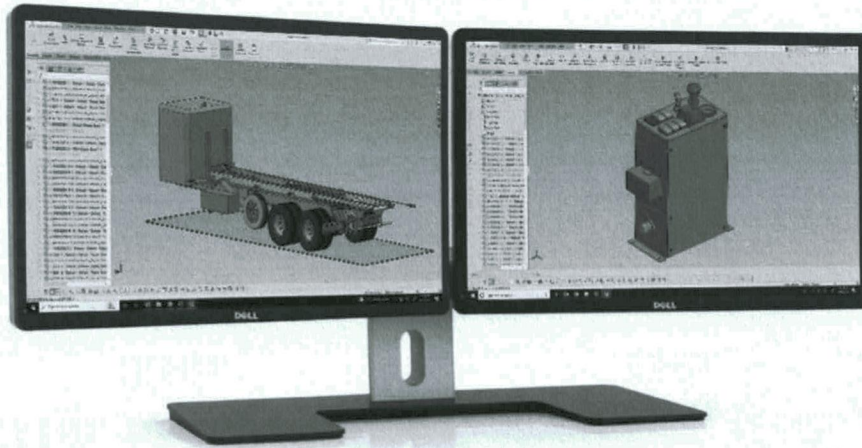
- ✓ Outside rail
- ✓ 22' and 24' length hoist (60,000 LBS. and 75,000 LBS. capacities)
- ✓ Inside and outside controls
- ✓ Fenders
- ✓ Toolbox
- ✓ Hydraulic tank
- ✓ Rear roller with side assist rollers
- ✓ DOT tape
- ✓ Mid-mount turn signals
- ✓ Pintle ready
- ✓ Grease points
- ✓ ICC bumper
- ✓ Rear lights
- ✓ Safety straps
- ✓ PTO engage light in dash
- ✓ Hoist up light in dash
- ✓ PTO / Pump installation
- ✓ Sealed wiring harness with LED lighting
- ✓ 3 – line hydraulic systems with air shift PTO, direct mount pump

HERITAGE ROLL OFF MODELS:

HR-OR-24-75-T	HR-OR-22-75-T	HR-OR-22-75-F
HR-OR-22-75-R	HR-OR-22-60-F	HR-OR-22-60-R

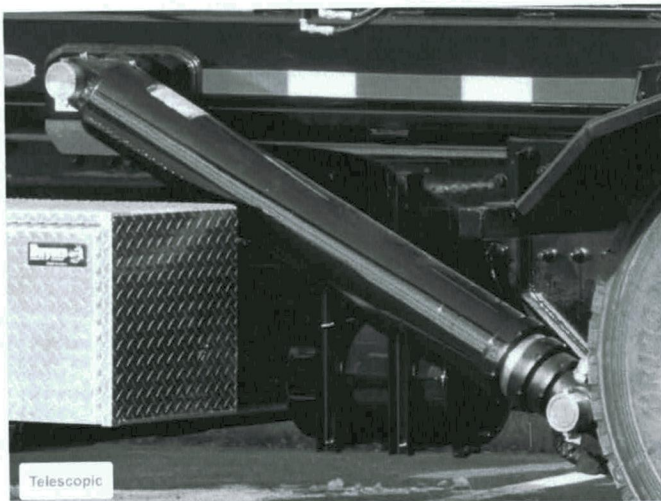
IN-HOUSE ENGINEERING

- ✓ Solidworks 3D software
- ✓ Finite Element Analysis (FEA) and Simulation used to create virtual real-world environments
- ✓ ASME Y14 standards followed for drafting, dimensioning, and tolerances
- ✓ Offline CNC programming in ProNest CAD/CAM nesting software to fully utilize Hi-Def, Scribing, and TrueHole cutting technologies



PRODUCT OPTIONS

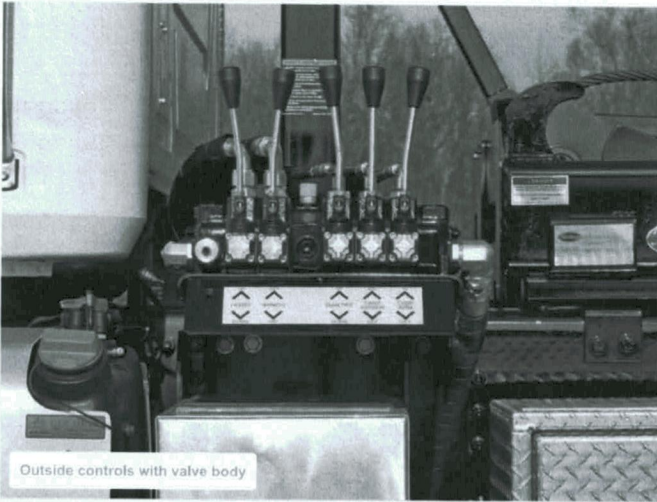
CYLINDER





Forward Mount

> CONTROLS

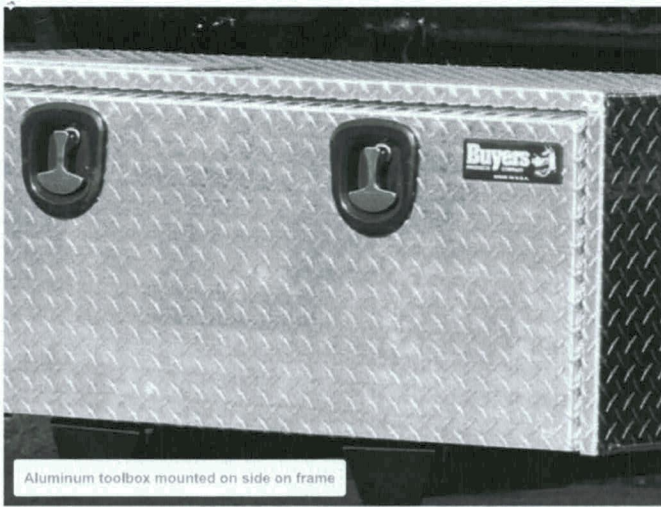


Outside controls with valve body



Inside controls with feathering valve

> TOOLBOX



Aluminum toolbox mounted on side on frame

> FENDERS



> TARPING SYSTEMS

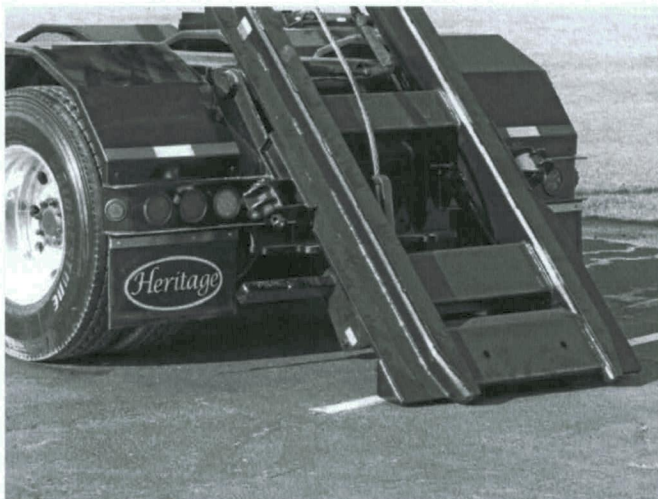




› LIFT AXLES

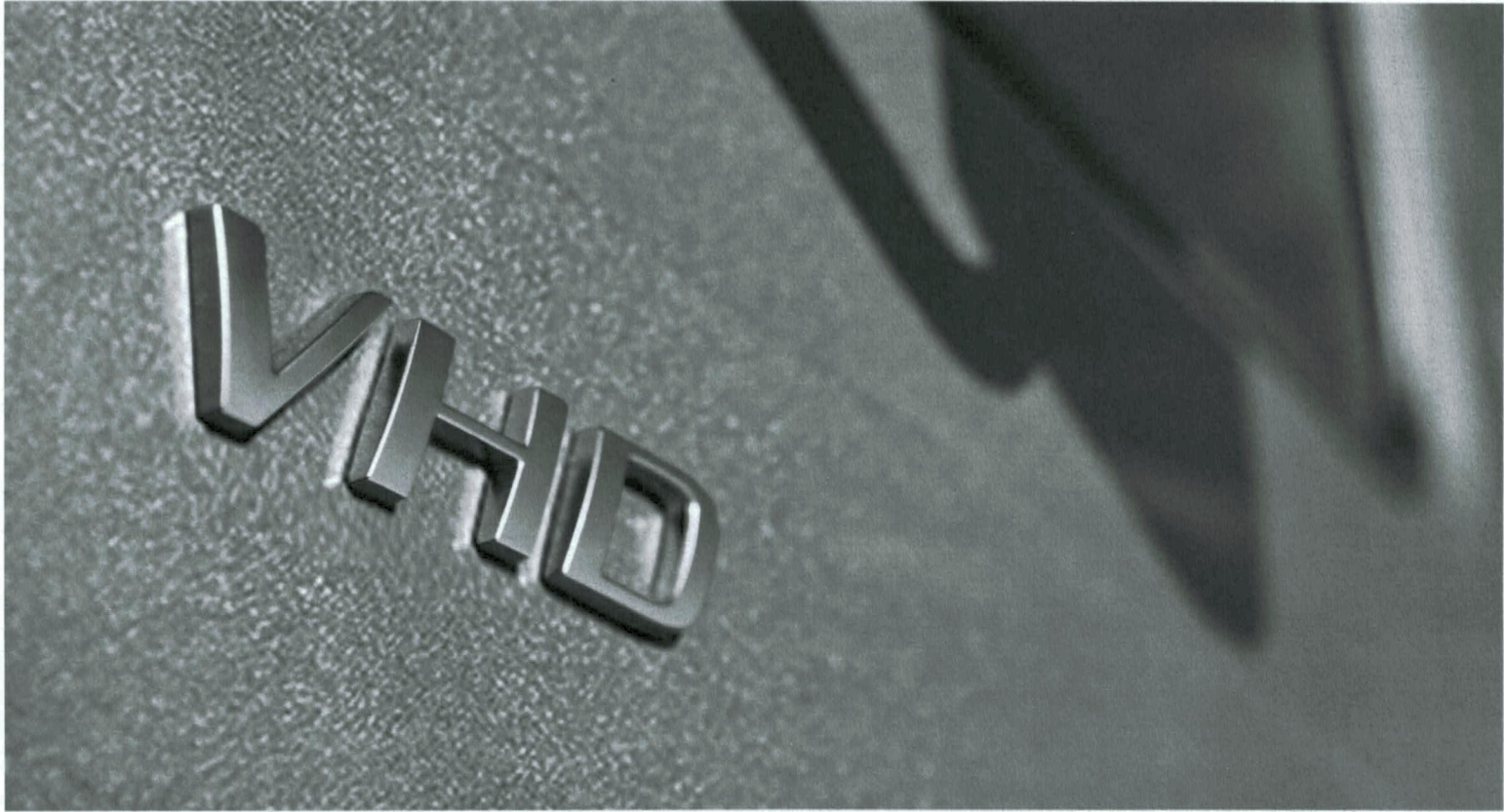


› SUB FRAME



V O L V O

CUSTOMER PROPOSAL





PREPARED FOR
REGIONAL REFUSE DISPOSAL DISTRICT ONE
31 NEW HARTFORD RD
BARKHAMSTED
CT 060633348

DATE
10/20/2026

PREPARED BY
GABRIELLI TRUCK SALES OF CONNECTICUT,
LL
277 NEW PARK AVE
HARTFORD
CT 06106-2949

QUOTE INFORMATION
GABR20260002755798D
VHD84F300 Daycab - 113.6" BBC
Qty: 1

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

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,

CHRIS STADLER

GABRIELLI TRUCK SALES OF CONNECTICUT, LL

TECHNICAL SPECIFICATION

VHD84F300 Daycab - 113.6" BBC

MODEL PACKAGE			DESCRIPTION
S	04-TLV	PRODUCT GENERATION	LEGACY HEAVY TRUCKS
S	012-147	MARKETING MODEL	VHD84F300
S	FACT-USA	MANUFACTURING LOCATION	VOLVO TRUCKS - ASSEMBLED IN THE USA
	A192027	MODEL YEAR	2027 MODEL YEAR
	RIGID	CHASSIS TYPE	TRUCK
	CONSTRUC	MODEL SERIES	VHD / VAH Models - 113.6" BBC
	M840007	INTENDED REGISTRATION LOCATION	CONNECTICUT
	MBT0501	VEHICLE CERTIFICATION	CARB + EPA FOR VOLVO 11L / 13L DIESEL

VEHICLE ADAPTATION			DESCRIPTION
	M460004	DEALERSHIP REGION	NORTH-EAST REGION
S	LANG-ES	LANGUAGE ON DECALS	ENGLISH/SPANISH LANGUAGE ON DECALS
S	PUBL-GBR	OPERATOR'S MANUAL LANGUAGE	ENGLISH
S	125-001	AREA/DOMICILE (EXHAUST)	49 STATE + CANADA / NON CALIFORNIA
S	263-206	VEHICLE APPLICATION	TRUCK / ASPHALT OR DUMP BODY
S	898-003	VEHICLE WARRANTY QUALIFICATION	STANDARD HEAVY DUTY WARRANTY QUALIFIED
S	259-003	VEHICLE VOCATION	CONSTRUCTION SERVICE
S	260-006	OPERATING CONDITIONS	ON HIGHWAY, STARTING GRADES <16%
S	T-FLAT	TOPOGRAPHY	GRADES <3% DURING >98% OF DRIVING DISTANCE
S	ATU40	AMBIENT TEMPERATURE UPPER LIMIT	SUMMER AMBIENT TEMPERATURES DO NOT REGULARLY EXCEED 104 DEGREE F (40 DEGREE C)
S	264-001	LOADING SURFACE FACTOR	CONCRETE LOADING AND / OR UNLOADING SURFACE
S	RC-ROUGH	OPERATING CLASS	OPERATING CLASS TWO (ON/OFF HIGHWAY)
	938-001	CUSTOMER FLEET SIZE	DEALER FLEET WITH LESS THAN 25 VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND

PASSIVE AND ACTIVE SAFETY			DESCRIPTION
S	L1H1-BDE	CAB TYPE	300 - DAY CAB WITH B-PILLAR EXHAUST
S	AIRBAG	SRS AIR BAG	AIR BAG, BASIC CONFIGURATION
S	AMIR-CLO	DOWN VIEW MIRROR	DOWN VIEW MIRROR OVER PASSENGER DOOR
S	ESP-BAS1	ELECTRONIC STABILITY CONTROL (ESP)	VOLVO ENHANCED STABILITY TECHNOLOGY (VEST)
S	TRAC-CH6	ABS TRACTION CONTROL	ENHANCED TRACTION CONTROL, 6 CHANNEL
	BUPALARM	BACKUP ALARM	ELECTRIC BACKUP ALARM
S	PARKAL	PARK BRAKE ALARM	PARK BRAKE ALARM, SOUNDS IF BRAKE OFF AND DRIVER'S DOOR OPENED

ENGINE		DESCRIPTION
	101-8N2	ENGINE PACKAGE
		VOLVO D13 455HP 2100RPM 1850 LBFT - EPA'21 EMISSION LEVEL

ENGINE EQUIPMENT			DESCRIPTION
S	ACL1ST	AIR CLEANER	SINGLE STAGE AIR CLEANER
S	AIRIN-HO	AIR INTAKE	HOOD MOUNTED AIR INTAKE
	RADI-NL3	RADIATOR	1240 SQ IN, 2 ROW CORE RADIATOR
S	209-012	RADIATOR COOLANT	EXTENDED LIFE ETHYLENE GLYCOL ANTI-FREEZE (RED-ORANGE), -34 F (-37 C)
S	208-029	FAN CLUTCH PACKAGE	ELECTRONIC VISCOUS CSI FAN CLUTCH

TECHNICAL SPECIFICATION *(cont.)*

ENGINE EQUIPMENT			DESCRIPTION
S	12STR-S2	STARTER MOTOR	DELCO REMY 12V 39MTHD STARTER
S	12AL160B	ALTERNATOR	160 AMP DELCO REMY 28SI ALTERNATOR (12V)
	810-114	BATTERY PACKAGE	3 VOLVO 1000 CCA MAINTENANCE FREE 12V BATTERIES, 3000 CCA
S	BBOX-LF	BATTERY BOX MOUNTING	BATTERY BOX, LEFT HAND SIDE, BEHIND FRONT FENDER
S	BATTB-S	BATTERY BOX CONFIGURATION	BATTERY BOX - 3 CAPACITY
	BBOXC-AP	BATTERY BOX COVER	POLISHED ALUMINUM BATTERY BOX COVER
	MAINSWBG	BATTERY DISCONNECT SWITCH	BATTERY DISCONNECT MAIN SWITCH MOUNTED INSIDE DRIVER DOOR, GROUND ACCESSIBLE
	ESS-ABP	EMERGENCY START SYSTEM	EMERGENCY START STUDS, HEX JUMP STUDS ON ALL BATTERY POST
	BISO-RUB	BATTERY ISOLATION	RUBBER ISOLATION PAD UNDER BATTERIES
S	428-001	DIESEL EXHAUST FLUID TANK	18.5 GALLON LEFT HAND 26", FRAME MOUNTED (FILLED WITH 10 GALLONS OF DEF, WEIGHING 91 LBS)
S	230-049	EXHAUST SYSTEM	INTEGRATED DPF AND SCR MOUNTED RIGHT HAND SIDE UNDER CAB WITH CAB-MOUNTED VERTICAL PIPE
S	232-088	EXHAUST OUTLET PACKAGE	10' 0" ALUMINIZED STAINLESS STEEL SINGLE STACK
S	EXS-SDIF	EXHAUST FEATURES	STRAIGHT STACK, SIDE OUTLET DIFFUSER BOX
	EXSH-SS	EXHAUST SHIELD	STAINLESS STEEL EXHAUST SHIELD
	FP-387F	PRIMARY FUEL FILTER	DAVCO FUEL PRO 387, COOLANT HEAT, 12V HEAT, 120V PREHEAT, WATER-IN-FUEL (WIF) SENSOR
S	FPP-STD	PRIMARY FUEL FILTER LOCATION	STANDARD FUEL FILTER LOCATION
S	OLMS-P	OIL LIFE MONITORING SYSTEM	OIL LIFE MONITORING SYSTEM, PASSIVE
S	2COMP900	COMPRESSOR	WABCO 636 cc TWIN-CYLINDER COMPRESSOR
	110EBH10	ENGINE BLOCK HEATER	PHILLIPS 120V 1000W LEFT HAND RECEPTACLE BLOCK HEATER
S	ENBA-BAS	ENGINE BRAKE ACTIVATION	ENGINE BRAKE ACTIVATION, BASIC
	OILS-ST2	ENGINE OIL PAN	CORROSION RESISTANT STAMPED STEEL OIL PAN

TRANSMISSION			DESCRIPTION
	270-708	TRANSMISSION PACKAGE	VOLVO 12 SPEED I-SHIFT SEVERE DUTY, ATO2612F OVERDRIVE
S	295-009	TRANSMISSION SOFTWARE	PERFORMANCE (VOCATIONAL) I-SHIFT SOFTWARE
	GSL-IMID	GEAR SHIFT CONTROL	GEAR SHIFT, DASH MOUNTED, PREMIUM, VOLVO I-SHIFT
S	TANP	AUTO NEUTRAL ON PARK BRAKE	VOLVO I-SHIFT TRANSMISSION AUTO NEUTRAL ON PARK BRAKE
S	HILLSTA2	HILL START ASSIST	HILL START ASSIST
S	TKDM-BAS	TRANSMISSION KICK-DOWN MODE	VOLVO I-SHIFT TRANSMISSION KICK-DOWN MODE, ENABLED IN ECONOMY AND PERFORMANCE MODES
S	TTOR-B	TRANSMISSION OUTPUT TORQUE	STANDARD OUTPUT TORQUE
S	779-998	ALLISON INPUT AND OUTPUT PACKAGE	NO ALLISON INPUT AND OUTPUT PACKAGE
S	778-998	FUEL SENSE PACKAGE	NO FUEL SENSE PACKAGE
S	TC-MWOH2	TRANSMISSION COOLER	WATER TO OIL TRANS COOLER MOUNTED ON TRANSMISSION
S	APF-ENH	TRANSMISSION PTO FUNCTION	TRANSMISSION PTO FUNCTIONS ENHANCED
S	195-213	PROPSHAFT - MAIN	DANA/SPICER SPL250 LITE (PROPS-L)
S	MRP0003	MIN REQUIRED PROPSHAFT SIZE (KAX)	MINIMUM REQUIRED PROPSHAFT (KAX), PROPS-L
S	204-201	PROPSHAFT - INTERAXLE	DANA-SPICER SPL170XL EXTENDED LUBE SERIES
S	250-111	CLUTCH	VOLVO SACHS 17" SINGLE PLATE DAMPENED ORGANIC FOR I-SHIFT

PROGRAMMABLE FEATURES			DESCRIPTION
S	IELL-CAB	IDLE EMISSION LABEL LOCATION	CAB MOUNTED CLEAN IDLE DECAL LOCATION
S	EIDLESD	ENGINE IDLE AUTOMATIC SHUTDOWN (AL)	ENGINE IDLE SHUTDOWN, ENABLE
S	ISD05	ENGINE IDLE SHUTDOWN TIME (AM)	IDLE SHUTDOWN TIME 5 MINUTES

TECHNICAL SPECIFICATION (cont.)

PROGRAMMABLE FEATURES			DESCRIPTION
S	IDLE-BAS	ENGINE IDLE CONTROL (CMQ)	BASIC ENGINE IDLE CONTROL
S	ATMAXT27	AMBIENT TEMP MAX THRESHOLD (CMO)	AMBIENT TEMPERATURE MAX: 80F (27C)
S	ATMINT7	AMBIENT TEMP MIN THRESHOLD (CMN)	AMBIENT TEMP MIN: 45F (7C)
S	CRUIS-S	CRUISE CONTROL (AG)	WITH ECO CRUISE CONTROL
S	CCM110	CRUISE CONTROL, MAXIMUM SPEED (AI)	MAXIMUM CRUISE, 68 MPH (110 KM/H)
	PRSL110	PEDAL ROAD SPEED LIMIT SETTING (P1I16)	PEDAL ROAD SPEED LIMIT, 68 MPH (110 KM/H)
S	SPEED110	ROAD SPEED LIMIT SETTING (P1AOC)	ROAD SPEED LIMIT, 68 MPH (110 KM/H)
S	LGVLF	GEAR DOWN VEHICLE SPEED LIMITER (P1ALO)	GEAR DOWN VEHICLE SPEED LIMITER ENABLED
S	LGVLS101	GEAR DOWN VEHICLE SPEED LIMIT (P1AOD)	GEAR DOWN VEHICLE SPEED, 63 MPH (101 KM/H)
S	CCMI48	CRUISE CONTROL MIN SPEED (BK)	MIN CRUISE, 30 MPH (48 KM/H)
S	EBREC5A	ENG BRAKE ENGAGE IN CRUISE (AF)	ENGAGE ENGINE BRAKE 5 MPH (8.0 KM/H) ABOVE SET CRUISE SPEED
S	RSL-SOFT	ROAD SPEED LIMIT CONTROL TYPE (P1I01)	WITH ECO RSL CONTROL
S	ELL-30	ENGINE LOAD IN PTO (CMM)	30% MINIMUM ENGINE LOAD LIMIT IN PTO BEFORE ALLOW IDLE SHUTDOWN
S	MESZ1400	MAXIMUM ENGINE SPEED AT 0 MPH (P1ANA)	MAXIMUM ENGINE SPEED AT 0 MPH, 1400 RPM
S	CWHE	COOLANT WARM HOLD TEMP (KBS)	COOLANT WARM HOLD TEMP ENABLED
S	PTRIP-DI	PRE-TRIP DIAGNOSTIC INSPECTION (JZU)	PRE-TRIP DIAGNOSTICS INSPECTION
S	ENGPROT	ENGINE PROTECTION SYSTEM (P1FQT)	ENGINE PROTECTION (SHUTDOWN)
S	PTOM0670	PTO MAXIMUM ENGINE SET SPEED (AND)	PTO ENGINE MAXIMUM 700 RPM
S	PTOR0670	PTO RESUME ENGINE SET SPEED (ANE)	PTO ENGINE RESUME 700 RPM

FRONT AXLE			DESCRIPTION
	370-407	FRONT AXLE PACKAGE	VOLVO VF20 20,800 LB FRONT SPRINGS - VHD ONLY
S	BREG94	BRAKE REGULATION	BRAKE REGULATION, STOPPING DISTANCE 310 FT (94M)
S	782-005	FRONT BRAKE & HUB PACKAGE	FRONT BRAKE MERITOR, Q+ CAST, STANDARD LUBE
	FBRA150	FRONT BRAKE DIMENSION	16.5X6 FRONT BRAKE SIZE
S	BF-DRTRU	BRAKE TYPE, FRONT AXLE	BRAKE, FRONT, DRUM LIGHT WEIGHT TRUTURN
S	BLMF-M13	FRONT BRAKE LINING MATERIAL	BRAKE LINING MATERIAL FRONT, MERITOR MA 2301
S	BSCF-BAS	BRAKE SHOE COATING FRONT	BRAKE SHOE COATING FRONT, BASIC
S	FBRDUST	FRONT AXLE BRAKE DUST SHIELD	FRONT BRAKE DUST SHIELDS
	HUBF-BUN	HUBS, FRONT AXLE	IRON UNITIZED FRONT AXLE HUBS
	162-001	FRONT AXLE LUBRICANT	GREASE, FAG NLGI2 FRONT AXLE LUBRICANT
S	STG18.2	POWER STEERING GEAR	TRW THP60 INTEGRAL POWER STEERING GEAR
	PSSA-ROT	POWER STEERING ASSIST	DUAL STEERING GEARS
S	STSH-GRS	STEERING SHAFT TYPE	GREASEABLE STEERING SHAFT
	371-072	FRONT SUSPENSION PACKAGE	MULTILEAF FRONT SUSPENSION
S	FSM-LUB	FRONT SUSP MAINTENANCE	LUBRICATED SPRING PINS AND BUSHINGS

REAR AXLE			DESCRIPTION
	330-444	REAR AXLE PACKAGE	MERITOR RT46-160 46,000 LB CAPACITY
	RAT4.10	REAR AXLE RATIO	4.10 REAR AXLE RATIO
	DL-FULL	DIFFERENTIAL LOCK	FULL LOCKING WHEEL DIFFERENTIAL

TECHNICAL SPECIFICATION *(cont.)*

REAR AXLE		DESCRIPTION	
	350-509	REAR SUSPENSION PACKAGE	46,000 LB VOLVO T-RIDE (3-LEAF EXTRA FIRM RIDE) 54" SPACING
S	RSHABS	REAR SHOCK ABSORBER	SHOCK ABSORBERS, DRIVE AXLES
S	783-006	REAR BRAKE & HUB PACKAGE	REAR BRAKES MERITOR Q+, CAST, STANDARD LUBE
S	RBRA175	DRIVE AXLE BRAKE DIMENSION	16.5X7 REAR BRAKE SIZE
S	BR-DRTRU	BRAKE TYPE, DRIVE AXLE	BRAKE, DRIVE REAR, DRUM LIGHT WEIGHT TRUTURN
S	DBRDUST	DRIVE AXLE BRAKE DUST SHIELD	REAR BRAKE DUST SHIELDS
S	BLMD-M13	DRIVE AXLE BRAKE LINING MATERIAL	BRAKE LINING MATERIAL DRIVE, MERITOR MA 2301
S	BSCD-BAS	BRAKE SHOE COATING DRIVE	BRAKE SHOE COATING DRIVE, BASIC
S	HUBD-PIS	HUBS, DRIVE AXLE	IRON PRESET PLUS DRIVE AXLE HUB WITH INTEGRATED SPINDLE NUT
S	163-002	DRIVE AXLE LUBRICANT	SYNTHETIC OIL, SHELL 75W90 DRIVE AXLE LUBRICANT
S	781-116	PARK BRAKE CHAMBERS	FOUR CAM TYPE HALDEX GOLD SEAL PLUS
S	RBCS3030	REAR BRAKE CHAMBER SIZE	REAR BRAKE CHAMBER 30 / 30 SQ INCHES (SERVICE / EMERGENCY)
S	BRCH-BAS	CHAMBER STROKE LENGTH, DRIVE AXLE	BASIC LENGTH BRAKE CHAMBER STROKE
S	784-010	BRAKE ADJUSTERS	HALDEX BRAKE ADJUSTER FRONT, REAR, AND PUSHER
S	FBCS24	FRONT BRAKE CHAMBER SIZE	FRONT BRAKE CHAMBER 24 SQUARE INCHES (SERVICE)

AUXILIARY AXLE		DESCRIPTION	
	335-077	AUXILIARY AXLE PACKAGE	1 HENDRICKSON COMPOSITITE EX 20K STEERABLE PUSHER,AUX WHL & TIRES SUBJECT TO HEND TIRE TO GRND GUIDE
S	164-002	PUSHER AXLE LUBRICANT	MINERAL OIL, CHEVRON DELO 80W90 PUSHER AXLE LUBRICANT
	1PAS1320	FIRST PUSHER AXLE SPACING	52" (1320MM) AHEAD OF FWD DRIVE AXLE
	TBRA150	AUXILIARY AXLE BRAKE DIMENSION	16.5X6 AUXILIARY AXLE BRAKE SIZE
S	BT-DRcen	BRAKE TYPE, AUXILIARY AXLE	CENTRIFUSE TRAILING AXLE BRAKE DRUM OUTBOARD MOUNTED
S	785-026	PUSHER AND TAG AXLE BRAKE PACKAGE	PUSHER BRAKE MERITOR, CAST S-CAM, STANDARD LUBE
	BLMP-M13	BRAKE LINING MATERIAL, PUSHER (KAX)	BRAKE LINING MATERIAL PUSHER, MERITOR MA 2301
S	786-005	PUSHER AND TAG AXLE BRAKE CHAMBER PACKAGE	PUSHER WITH HALDEX CHAMBERS
	PUSBC24	PUSHER BRAKE CHAMBER SIZE	PUSHER BRAKE CHAMBER 24SQ INCHES
S	AXLCON-I	AUXILIARY AXLE CONTROL LOCATION	INSIDE CAB AUXILIARY AXLE CONTROL, UP/DOWN SWITCH ONLY INSIDE, AIR REGULATOR & GAUGE OUTSIDE OF CAB
	HUBT-PIS	HUBS, AUXILIARY AXLE	IRON PRESET PLUS AUXILIARY AXLE HUB WITH INTEGRATED SPINDLE NUT

CHASSIS		DESCRIPTION	
S	ZPLF4360	DRIVER SIDE FRONT CHASSIS CONFIGURATION	LEFT HAND BATTERY BOX - 3 CAPACITY, DEF TANK MOUNTED BEHIND BATTERY BOX (VHDF)
S	ZPRF4700	PASSENGER SIDE FRONT CHASSIS CONFIGURATION	INTEGRATED DPF & SCR WITH B-PILLAR EXHAUST (VHDF / VAH)
	400-291	WHEELBASE	291" WHEELBASE
	402-113	OVERHANG	113" OVERHANG
S	FUELTD66	FUEL TANK SHAPE, LIQUID	26" DIA CYLINDRICAL FUEL TANK
	LFUEL380	LIQUID FUEL TANK, LEFTHAND SIDE	100 GALLON LEFT HAND FUEL TANK
S	FTANK-AL	FUEL TANK MATERIAL, LIQUID	ALUMINUM FUEL TANK MATERIAL
S	FTP-1	FUEL TANK POSITION - DIESEL	FUEL TANK POSITION 1
S	DPFC-PS	DPF COVER	DPF COVER, PAINTED STEEL
S	ADTC-P	DEF TANK COVER	PAINTED DIESEL EXHAUST FLUID TANK COVER
S	FHOS-BAS	FUEL LINES	NYLON FUEL LINES
S	STRAP-P	FUEL TANK STRAPS	PAINTED STEEL FUEL TANK STRAPS
S	FCAP-UL	FUEL TANK CAP	NON-LOCKING FUEL TANK CAP

TECHNICAL SPECIFICATION *(cont.)*

CHASSIS			DESCRIPTION
S	ATA-BAS	AIR TANK ARRANGEMENT	AIR TANK ARRANGEMENT, BASIC
S	ATANK-ST	AIR TANKS	STEEL AIR TANK
S	AIRM-W18	AIR DRYER	WABCO AIR DRYER SS - HP WITHOUT TURBO CUT OFF VALVE WITH COALESCING FILTER
	DRVA-AH	AIR TANK DRAIN VALVE	AUTOMATIC AIR TANK DRAIN VALVE, HEATED, ON PRIMARY (WET) TANK ONLY
	403-011	FRAME RAIL PACKAGE	11.81"X4.13"X.44" STRAIGHT STEEL RAILS
	LINER-F	FRAME INNER LINER	5MM FULL FRAME LINER
S	XMBI-ST	INTERMEDIATE CROSSMEMBER MATERIAL	STEEL CROSSMEMBER MATERIAL
S	XMI-BAS	INTERMEDIATE CROSSMEMBER CONFIGURATION	BASIC INTERMEDIATE CROSSMEMBER
S	RF-STRAI	REAR FRAME TREATMENT	STRAIGHT CUT-OFF REAR CROSSMEMBER
	BUMP-BC	FRONT BUMPER	BRIGHT CONSTRUCTION BUMPER-THREE PIECE
	BUMPO50	BUMPER POSITION	BUMPER EXTENDED 2" AHEAD OF STANDARD POSITION
S	FMUDE-B	FRONT FENDER EXTENSION	NO FRONT FENDER EXTENSION PROVIDED
S	TOWF-NO2	FRONT TOWING DEVICE	TWO FRONT TOWING DEVICES
S	CWC-HD	CHASSIS WIRING HARNESS CASING	HEAVY DUTY MAIN CHASSIS WIRING HARNESS COVERING
S	LFFP4325	LH FUEL TANK FACE LOCATION	LH FUEL TANK FRONT FACE @ XM=4325

TRANSPORT ADAPTATION			DESCRIPTION
	ELCONFRA	ELECTRICAL CONNECTIONS END OF FRAME	BODY BUILDER CONNECTIONS END OF FRAME
	ELREC-F1	ELECTRICAL RECEPTACLE END OF FRAME	ELECTRICAL RECEPTACLE END OF FRAME
S	UTRBRHC	TRAILER BRAKE HAND CONTROL	DELETE TRAILER BRAKE HAND CONTROL
S	CENCO-B	CENTER CONSOLE FOR BODY CONTROLS	MOUNTING PLATE ONLY FOR BODY CONTROLS
S	ELCE-CK	BODY BUILDER ELECTRICAL PREP	ELECTRICAL COMPLETE KIT FOR BODY BUILDER AND/OR I-SHIFT PTO'S

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

CAB EXTERIOR			DESCRIPTION
S	CABS-REA	CAB SUSPENSION	AIR RIDE CAB SUSPENSION WITH LATERAL DAMPENERS
S	AWIND-RF	AUXILIARY REAR WINDOW	STANDARD REAR WINDOW
S	WIPB-BAS	WIPER BLADES	WIPER BLADES, BASIC
	GR-STAT4	FRONT GRILLE	BLACK STATIONARY FRONT GRILLE WITH SILVER PAINTED BEZEL
	GUARD-GB	CAB GUARD, FRONT	HEAVY DUTY BRIGHT FINISH GRILLE GUARD
S	AIRG-BL	AIR INTAKE GRILLE, FINISH	AIR INTAKE GRILLE, BLACK
	AMIR-HB	AUXILIARY MIRROR, HOOD	TRIPOD HOOD MOUNTED MIRROR, BOTH SIDES, STANDARD CONVEX, BRIGHT FINISH
	MIR-FLC2	EXTERIOR SIDE VIEW MIRRORS	CHROME AERODYNAMIC MIRRORS
S	MIR-ELOP	EXTERIOR MIRROR FEATURES	HEATED, POWER AXIS MIRROR, BOTH SIDES
	HORN-R2D	AIR HORN	DUAL ROOF MOUNTED BRIGHT AIR HORNS, DUAL TONE
S	SUNV-RL	EXTERIOR SUN VISOR	EXTERIOR SUN VISOR WITH CLEAR LENS LED MARKER LAMPS

CAB INTERIOR			DESCRIPTION
	540-089	INTERIOR TRIM LEVEL	EXPRESS - CLOTH PANELS WITH METAL HEX TRIM
S	DSM-NAT	SEAT MFG. AND SERIES, DRIVER	NATIONAL DRIVER SEAT
S	DSPRO-1	SEAT PROFILE, DRIVER	STANDARD WIDTH DRIVER SEAT

TECHNICAL SPECIFICATION *(cont.)*

CAB INTERIOR			DESCRIPTION
	520-105	DRIVER SEAT	X5 WREN VINYL / WREN CLOTH
	DSS-ASS2	DRIVER SEAT SUPPORT	DRIVER SEAT - AIR SUSPENDED, SWIVEL BASE, ADJUSTABLE SHOCK
	DSCOM-2C	SEAT COMFORT, DRIVER	DRIVER SEAT - TWO AIR ADJUSTABLE LUMBAR CHAMBERS, BACK CYCLER MASSAGE
S	PSM-NAT	SEAT MFG. & SERIES, PASSENGER	NATIONAL PASSENGER SEAT
S	PSPRO-1	SEAT PROFILE, PASSENGER	STANDARD WIDTH PASSENGER SEAT
	521-105	PASSENGER SEAT	X5 WREN VINYL / WREN CLOTH
	PSS-AS	PASSENGER SEAT SUPPORT	PASSENGER SEAT - AIR SUSPENDED
	PSCOM-2C	SEAT COMFORT, PASSENGER	PASSENGER SEAT - TWO AIR ADJUSTABLE LUMBAR CHAMBERS, BACK CYCLER MASSAGE
	ARMRE-BS	SEAT ARMREST	INBOARD DRIVER AND PASS SEAT ARMREST
	SSDC-BS	SEAT SUPPORT, DUST COVER	SEAT BASE DUST COVER, BOTH SIDES
S	SBS-BAS	SAFETY BELT LENGTH	STANDARD SAFETY BELT LENGTH
S	SBD-BLAC	SAFETY BELT DRIVER SEAT	SAFETY BELT DRIVER SEAT, BLACK
S	SBP-BLAC	SAFETY BELT PASSENGER SEAT	SAFETY BELT PASSENGER SEAT, BLACK
S	CU-MCC	CLIMATE UNIT	INTEGRAL AIR CONDITIONER WITH HEATER - MANUAL CONTROLS
S	FMAT-BBS	FLOOR MATS	FRONT FLOOR INSERTS, RUBBER
S	RSH-RAST	STORAGE OVERHEAD DRIVER	NETTED OVERHEAD STORAGE (DRIVER / PASSENGER SIDES) WITH CB MOUNTING AND AUXILIARY SWITCHES
S	STGW-ADJ	STEERING WHEEL ADJUSTMENT	STANDARD STEERING WHEEL ADJUSTMENT
	STWM-LE	STEERING WHEEL MATERIAL	LEATHER WRAPPED STEERING WHEEL WITH ACCENT STITCHING
S	571-020	GAUGE PACKAGE	EIGHT GAUGE INSTRUMENT CLUSTER
	2GAP-ETA	SECONDARY GAUGE PACKAGE	SECONDARY GAUGE PACKAGE W/ENGINE,TRANS. TEMP, REAR AXLE TEMP GAUGES
	TEMP-TRA	TRANSMISSION TEMPERATURE GAUGE	TRANSMISSION TEMPERATURE GAUGE
	GOTRA	GAUGE OIL TEMP-REAR AXLE	REAR AXLE OIL TEMP GAUGE
S	AIRRI-F	AIR RESTRICTION INDICATOR	GRADUATED ARI ON FILTER
S	SPG-MIKM	SPEEDOMETER GRADUATION	MPH SPEEDOMETER GRADUATION

LIGHTING			DESCRIPTION
	FOGL-WB	FOG LAMPS	TWO FOG LAMPS - WHITE
S	HL-LED2	HEADLAMPS	LED HEADLAMPS WITH SIGNATURE DRL
S	LOWB-DAY	DAYTIME RUNNING LAMPS (DRL)	EQUIPPED WITH DAYTIME RUNNING LIGHTS
S	TL-MULTI	STOP AND TAIL LIGHTS	DUAL WITH INTEGRAL BACKUP LIGHTS
S	TSIGN-SC	TURN SIGNAL SWITCH	SELF CANCELLING TURN SIGNAL

AUDIO SYSTEM			DESCRIPTION
S	590-031	AUDIO PACKAGE	AM / FM / MP3 / USB / BLUETOOTH RADIO
S	ANR-MR	RADIO ANTENNA	SINGLE RIGHT HAND 48 INCH MIRROR MOUNTED RADIO ANTENNA
S	IS-ROOFL	MARKER INTERRUPTER SWITCH	MARKER INTERRUPTER SWITCH
	SPK-DADO	RADIO SPEAKERS	SPEAKERS IN DASHBOARD AND DOOR
S	CBM-RSH	CB RADIO MOUNTING	OVERHEAD MOUNTED CB HOLD DOWN
S	ANT-CBML	CB ANTENNA	SINGLE LEFT HAND 48 INCH MIRROR MOUNTED CB ANTENNA

MISC CAB EQUIPMENT			DESCRIPTION
	LOCK-REM	DOOR LOCKS CAB	REMOTE CONTROL DOOR LOCK, BOTH DOORS
S	KEY-BAS	KEY TYPE	BASIC UNIQUE KEY

TECHNICAL SPECIFICATION (cont.)

MISC CAB EQUIPMENT			DESCRIPTION
S	KEYNO4	KEY QUANTITY PER UNIT	4 KEYS PROVIDED PER UNIT
	AUXSW-2	AUXILIARY SWITCH	TWO (2) AUXILIARY SWITCHES WITH WIRING, 15 AMP PER SWITCH
	ADASWP2	AUXILIARY DASH SWITCH PANEL	AUXILIARY DASH SWITCH PANEL, 2
	FIREXT3E	FIRE EXTINGUISHER	5 POUND ABC DRY TYPE, RECHARGEABLE, MOUNTED IN CAB
	WARNTRI3	AUXILIARY SAFETY EQUIPMENT	TRIANGLE REFLECTOR KIT

TIRES AND WHEELS			DESCRIPTION
	093-806	TIRE PACKAGE FRONT	315/80R22.5L MICHELIN X WORKS Z (18180 LBS. GAWR) ON/OFF ROAD USAGE (Total for QTY = 2)
	094-0J9	TIRE PACKAGE DRIVE	11R24.5H MICHELIN X MULTI D+ (26440 LBS. GAWR) REGIONAL HAUL (Total for QTY = 8)
	095-806	TIRE PACKAGE AUXILIARY AXLE	315/80R22.5L MICHELIN X WORKS Z (18180 LBS. GAWR) ON/OFF ROAD USAGE (Total for QTY = 2)
	084-031	WHEEL PACKAGE FRONT	22.5X9.00 ACCURIDE POLISHED ALUMINUM (Total for QTY = 2)
	085-004	WHEEL PACKAGE DRIVE	24.5X8.25 ACCURIDE POLISHED ALUMINUM OUTER & INNER (Total for QTY = 8)
	086-450	WHEEL PACKAGE AUXILIARY AXLE	22.5X9.00 ALCOA DURA-BRIGHT MIRROR POLISH ALUMINUM (Total for QTY = 2)
S	4WC-C1X	TIRE CLASSIFICATION FRONT (CA)	GHG FRONT TIRE CLASSIFICATION, LOW ROLLING RESISTANCE
	4XC-E1X	TIRE CLASSIFICATION REAR (CA)	GHG REAR TIRE CLASSIFICATION, BASIC
S	4YC-C1X	TIRE CLASSIFICATION AUXILIARY (CA)	GHG AUXILIARY TIRE CLASSIFICATION, LOW ROLLING RESISTANCE
	WTPF-HC	WHEEL TRIM PACKAGE FRONT AXLE	WHEEL TRIM PACKAGE FRONT HUB COVERS, 1-PIECE
	WTCF-CH	WHEEL TRIM COLOR FRONT	WHEEL TRIM COLOR FRONT, CHROME
	WTPD-AC	WHEEL TRIM PACKAGE DRIVE AXLE	WHEEL TRIM PACKAGE DRIVE AXLE COVERS
	WTCD-CH	WHEEL TRIM COLOR DRIVE	WHEEL TRIM COLOR DRIVE, CHROME
	WTPA-HC	WHEEL TRIM PACKAGE AUX. AXLE	WHEEL TRIM PACKAGE AUX AXLE HUB COVERS, 1-PIECE
	WTCA-CH	WHEEL TRIM COLOR AUX AXLE	WHEEL TRIM COLOR AUX AXLE, CHROME
S	WTT-SING	WHEEL & TIRE MOUNTING-AUXILIARY AXLE	SINGLE WHEEL/TIRE MOUNT-AUXILIARY AXLE
S	907-002	FRONT WHEEL AND TIRE QUANTITY	TWO WHEELS AND TIRES FRONT
S	908-008	DRIVE WHEEL AND TIRE QUANTITY	EIGHT WHEELS AND TIRES DRIVE
S	909-002	AUXILIARY AXLE WHEEL AND TIRE QUANTITY	TWO WHEELS AND TIRES AUXILIARY AXLE
S	VALVESTD	TIRE INFLATION VALVE	TIRE INFLATION VALVE, STANDARD

PAINT			DESCRIPTION
S	950-800	CAB PAINT SCHEME	1 COLOR
S	980-1T4	FIRST TRUCK COLOR	GLACIER WHITE; P3029
	BG2-012	PAINT BUG CODE	BUG CODE EY (BUG CODE IS THE SUPPLIER PRICING SYSTEM FOR PAINT COLORS)
S	MPB-980	CAB COLOR	CAB SAME AS FIRST COLOR
S	MPD-980	HOOD COLOR	HOOD SAME AS FIRST COLOR
S	MPE-980	COWL COLOR	COWL SAME AS FIRST COLOR
	987-998	BUMPER COLOR	UNPAINTED BUMPER / POWDER COAT / NO BUMPER COLOR PROVIDED
S	996-980	SUN VISOR COLOR	SUN VISOR SAME AS FIRST COLOR
S	986-9G5	CHASSIS COLOR	CHASSIS BLACK; 250-12370
S	988-401	DISC WHEEL OR RIM COLOR	STEEL DISC WHEELS - PREPAINTED WHITE, POWDER - COAT, ALUMINUM OR STYLIZED DISC - UNPAINTED

BUSINESS SERVICES			DESCRIPTION
	692-093	ADDITIONAL PROGRAM	REGIONAL HAUL AND VOCATIONAL SUPPORT CREDIT
S	PDI-BAS	PRE-DELIVERY INSPECT LOCATION	PRE-DELIVERY INSPECTION, OUTSIDE FACTORY

TECHNICAL SPECIFICATION (cont.)

BUSINESS SERVICES			DESCRIPTION
	695-101	SPECIAL TRUCK TRACKING	NO PAPER / PILOT REVIEWS REQUIRED
OUTSIDE MODIFICATION PLANNING			DESCRIPTION
S	615-998	OUTSIDE MODIFICATION IN-SERVICE PLANNING CODE	NO FONTAINE IN-SERVICE PLANNING CODE
S	617-998	OUTSIDE MODIFICATION BODY INSTALL CODE	NO FONTAINE BODY INSTALL
S	618-998	OUTSIDE MODIFICATION AUXILIARY AXLE INSTALL CODE	NO FONTAINE AUXILIARY INSTALL
S	609-998	OUTSIDE MODIFICATION LEAD TIME CODE	NO FONTAINE LEAD TIME
BASE WARRANTY AND PURCHASED COVERAGES			DESCRIPTION
S	899-302	CHASSIS COVERAGE	HEAVY_DUTY_STANDARD_BASE_COVERAGE 12_MONTHS / 100,000_MILES
	896-925	VOLVO D11/D13 ENGINE EXTENDED COVERAGE	VOLVO D11/D13 CARB BASE EMISSION COVERAGE 60 MO/350K MILE
	M830501	EMISSIONS WARRANTY	CARB + EPA FOR VOLVO 11L / 13L DIESEL
S	M99-998	CUSTOM/BUNDLED COVERAGE OPTIONS	NO CUSTOM/BUNDLED PURCHASE COVERAGE OPTIONS PROVIDED
	875-007	VEHICLE EMISSIONS COMPONENTS COVERAGE	US & CANADA VOLVO CARB ENGINE EQUIPPED VEHICLE EMISSIONS COMPONENTS COVERAGE_60 MONTHS/350K_MILES
S	880-301	TRANSMISSION COVERAGE	36 MO: STANDARD I-SHIFT FOR SEVERE DUTY AND I-SHIFT WITH CRAWLER GEARS TRANS,HEAVY DUTY VEHICLE
S	685-998	CLUTCH COVERAGE	NO CLUTCH COVERAGE PROVIDED
S	888-900	ADDITIONAL EXTENDED CHASSIS TOWING COVERAGE	BASE CHASSIS TOWING COVERAGE, 90 DAY/5000 MILE/8050 KILOMETER
S	874-900	ADDITIONAL EXTENDED ENGINE TOWING COVERAGE	BASE VOLVO ENGINE TOWING COVERAGE, 24 MO/250K MILE
CONNECTED SERVICES			DESCRIPTION
S	S03-001	VOLVO UPTIME CARE	VOLVO UPTIME CARE - 24 MONTHS
S	S04-001	VOLVO CONNECT LOCATION & REPORTING	VOLVO CONNECT LOCATION & REPORTING - 24 MONTHS
S	S050998	FLEET INTEGRATION	WITHOUT FLEET INTEGRATION



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Solicitation Number: 39390

Invitation to submit Bid for a new Roll-off Truck

Request for Proposal (RFP)

Regional Refuse Disposal District 1

AND

Bridgehaven Ford

October 13, 2026 - October 23, 2026

**350380****46K Volvo T-Ride Suspension (3-Leaf), 54" Spacing****Affects:**

VN, VHD

Related:

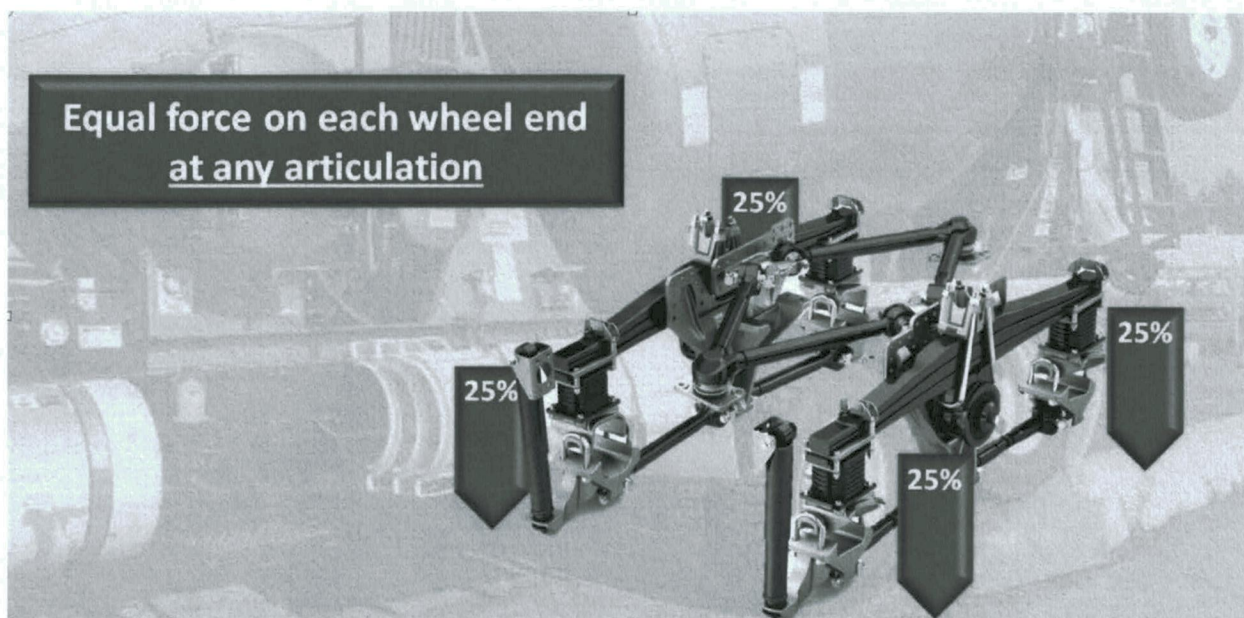
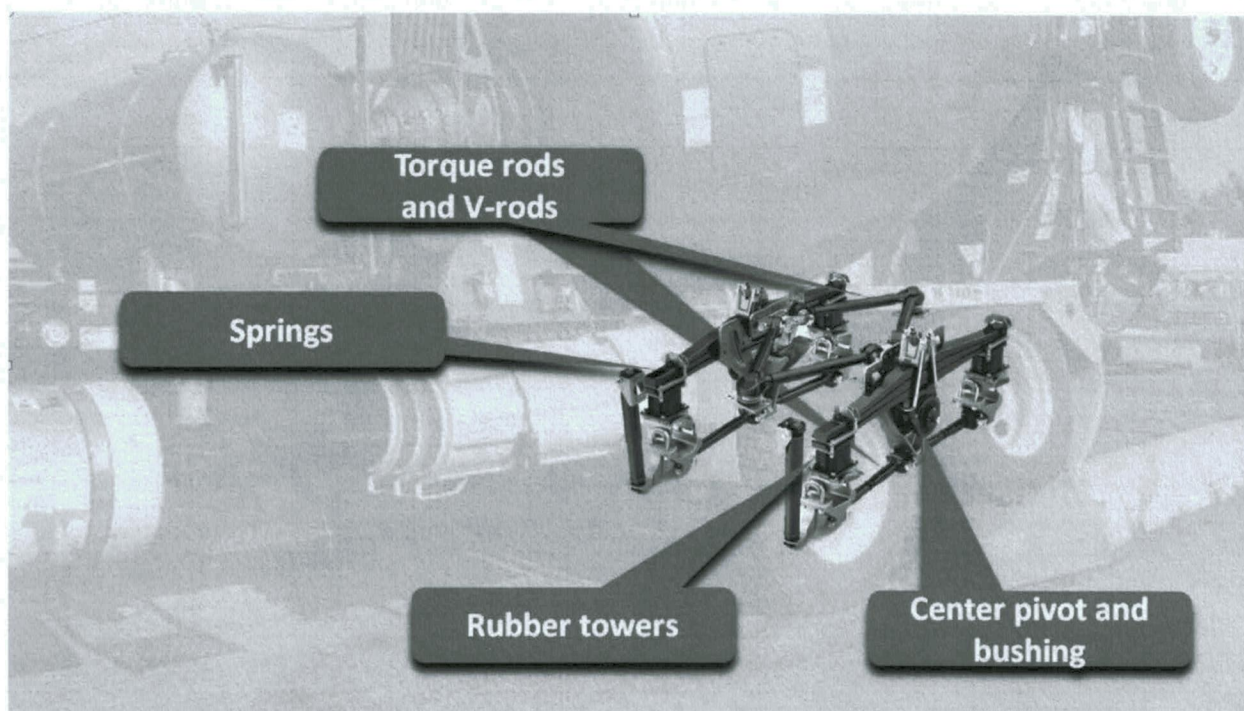
Wheelbase (400)

Rear Axle (330)

Updated:

May 8, 2015

The T-Ride suspension provides the best ride, superb traction, and up to 17" articulation in the most adverse conditions. By applying an equalized downward force to each wheel end, the T-Ride suspension provides uniform traction at any articulation.



PRODUCT INFORMATION

**350380****46K Volvo T-Ride Suspension (3-Leaf), 54" Spacing**

Updated:

May 8, 2015

Feature	Function
V-Rods and lower torque rods	Keeps axles aligned
Towers	Applies vertical force to springs – absorbs twisting
Springs	Only exposed to vertical forces – no twisting
Center pivot and bushing	Allows spring rotation and transmits forces to the frame

Model		Volvo	
		T-Ride	
Capacity (lb)		44,000	46,000
Load Distribution		50-50	
Spring Type		Parabolic	
Width of Leaf		2.95 in. (75 mm)	
Number of Leaves		3	
Leaf Thickness		2 @ 1.69 in. (43 mm) 1 @ 2.17 in. (55 mm)	
Capacity @ Pad, each (lb)		19,800	20,200
Deflection Rate (lb/in)		17,900	
Weight, Complete Suspension		1,317 ¹	
V Rod Tube (OD x Wall THK)		1.89 in. (48 mm) x 0.20 in. (5 mm)	
Lower Torque Rod Tube (OD x Wall THK)	Adjustable	1.89 in. (48 mm) x 0.20 in. (5 mm) – L	
	Fixed	1.89 in. (48 mm) x 0.20 in. (5 mm) – R	
Spring Height		5.79 in. (147 mm)	
Axle Spacing		54 in. (1370 mm)	
Creep Rating		(VHD only; see chart.)	
Suspension Jounce (Metal to Metal)		3.94 in. (100 mm)	
Rear Shock Absorbers		4, Optional	4, Standard ²
Vehicle Models		VHD	VN, VHD
Axle Models		Meritor: MT44-14X	Dana: D46-170, D46-170H; Meritor: RT46-160, RT46-164EH

¹ Includes torque rods, brackets, and crossmembers (bogie plus 1 forward of bogie).² Shocks: standard for tractor, optional for truck.

See also:

[Suspension Drawing and Dimensions](#)[Ride Height](#)

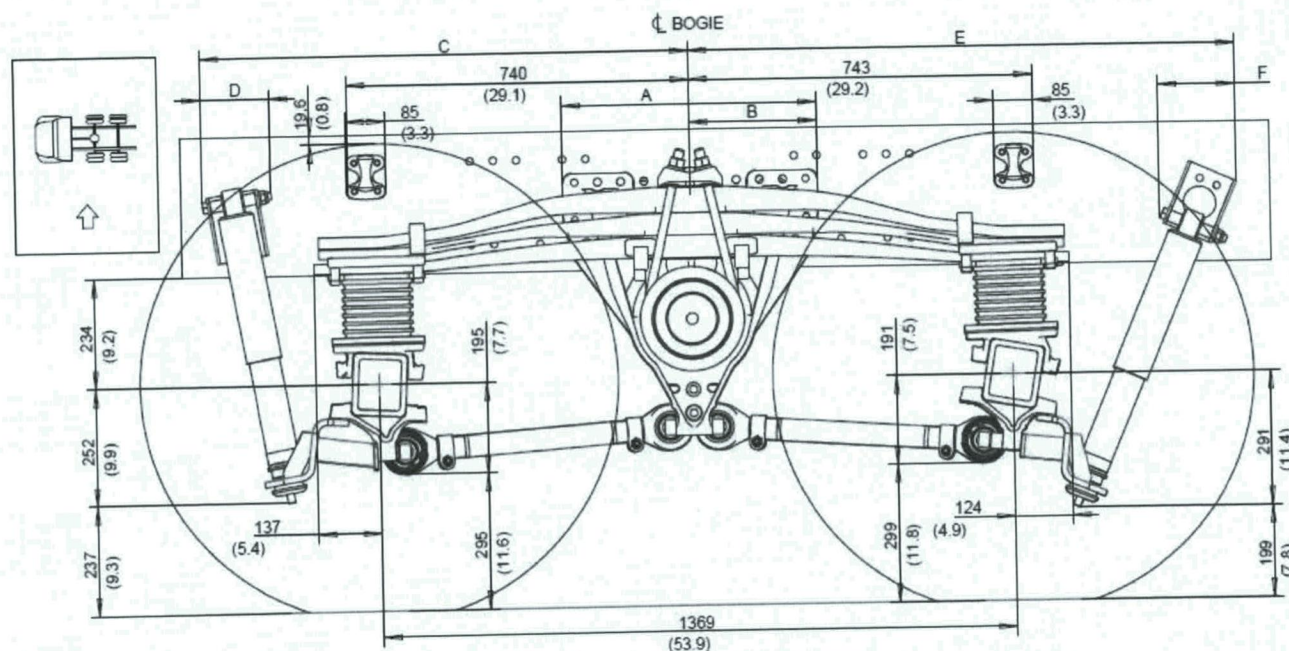


350380

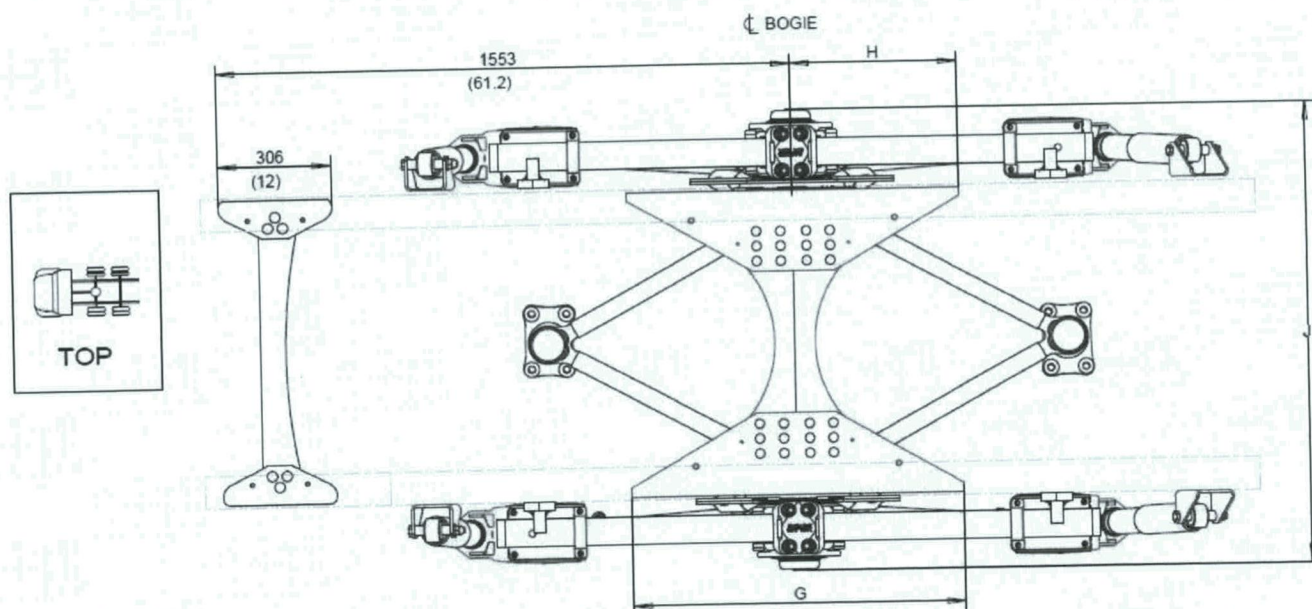
46K Volvo T-Ride Suspension (3-Leaf), 54" Spacing

Updated:

May 8, 2015



44,000 LB VOLVO T-RIDE (3-LEAF) 54" SPACING
11R22.5 TIRES



40K, 44K, AND 46K VOLVO T-RIDE 54" SPACING

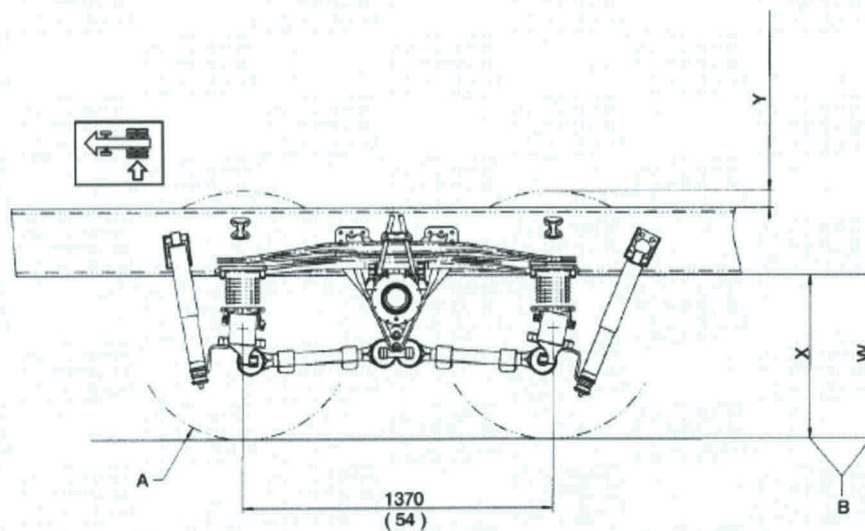
1: Based on 850 mm frame width



350380 46K Volvo T-Ride Suspension (3-Leaf), 54" Spacing

Updated: May 8, 2015

Bogie Spread, in. (mm)	40,000	44,000	46,000
Axle Type	ALL		
A	21.9 in. (555 mm)		
B	10.95 in. (277.5 mm)		
C	41.2 in. (1045 mm)		
D	5.2 in. (131 mm)		
E	46.6 in. (1183 mm)		
F	6.5 in. (165 mm)		
G	35.4 in. (900 mm)		
H	17.7 in. (450 mm)		
J	45.9 in. (1116 mm)		



- A:** See table, below
B: At centerline of rear axle (based on noted tires)
X: Loaded, ± 0.4 in. (10 mm)
W: Light, ± 0.4 in. (10 mm)
Y: Metal-to-metal tire jounce, ± 0.4 in. (10 mm)

	Tire Size	Loaded Radius		Light Radius		Overall Diameter	
		in.	mm	in.	mm	in.	mm
A	11R22.5*	19.2	488	20.4	517	41.3	1050

*Reference tire manufacturer's information for specific tires.

PRODUCT INFORMATION

**350380****46K Volvo T-Ride Suspension (3-Leaf), 54" Spacing**

Updated:

May 8, 2015

Frame Rail Height							
T-Ride		X (Loaded)		W (Light)		Y	
		in.	mm	in.	mm	in.	mm
10.47 in. (266 mm)							
40,000	5-Leaf	28.9	733	32.0	812	4.5	114
	2-Leaf	N/A	N/A	N/A	N/A	N/A	N/A
	3-Leaf	N/A	N/A	N/A	N/A	N/A	N/A
11.81 in. (300 mm)							
40,000	5-Leaf	28.2	716	31.3	795	3.8	97
	2-Leaf	28.4	722	30.3	769	3.6	91
	3-Leaf	28.4	722	30.3	769	3.6	91

			Rear Axle Type / Rear Axle Creep Rating (lb) / 40K – 46K Tandem Axles									
			40,000 lb				44,000 lb	46,000 lb				
Rear Suspension Type		Suspension Creep Rating (lb)	Meritor MT40-14X	Meritor RT40-160	Dana DS405	Dana D40-170	Meritor MT44-14X	Meritor RT46-160	Meritor RT46-164EH	Dana D46-170	Dana D46-170H	
			55,000	55,000	58,000	58,000	55,000	60,000	65,000	62,000	65,000	
Primaax 40K/46K		60,000	55,000 ¹	55,000 ¹	58,000 ¹	58,000 ¹		60,000 ¹	60,000 ¹	60,000 ¹	60,000 ¹	
Volvo T-Ride 40K	2-leaf spring	55,000	55,000 ¹	55,000 ¹	55,000 ¹	55,000 ¹						
			3P or 1P+1T ²	3P or 1P+1T ²	3P or 1P+1T ²	3P or 1P+1T ²						
	3-leaf spring	60,000	55,000 ¹	55,000 ¹	58,000 ¹	58,000 ¹						
			3P or 1P+1T ²	3P or 1P+1T ²	3P or 2P+1T ²	3P or 2P+1T ²						
Volvo T-Ride 44K	3-leaf spring	60,000					55,000 ¹					
							3P or 1P+1T ²					
Volvo T-Ride 46K	3-leaf spring	60,000						60,000 ¹	60,000 ¹	60,000 ¹	60,000 ¹	
								3P or 2P+1T ²	3P or 2P+1T ²	3P or 2P+1T ²	3P or 2P+1T ²	
Hendrickson RT403 (40K)		55,000	55,000 ¹	55,000 ¹	55,000 ¹	55,000 ¹						
			3P or 1P+1T ²	3P or 1P+1T ²	3P or 1P+1T ²	3P or 1P+1T ²						
Hendrickson RT463 (44K/46K)		55,000						55,000 ¹	55,000 ¹	55,000 ¹	55,000 ¹	55,000 ¹
Haulmaax (40K)		55,000	55,000 ¹	55,000 ¹	55,000 ¹	55,000 ¹						
Haulmaax (46K)		60,000							60,000 ¹	60,000 ¹	60,000 ¹	60,000 ¹
Hendrickson HAS (40K)		50,000	50,000 ¹	50,000 ¹	50,000 ¹	50,000 ¹						
			2P or 1T ²	2P or 1T ²	2P or 1T ²	2P or 1T ²						
Hendrickson HAS (44K)		50,000						50,000 ¹				
								2P or 1T ²				
Hendrickson HAS (46K)		50,000						50,000 ¹	50,000 ¹	50,000 ¹	50,000 ¹	
								2P or 1T ²	2P or 1T ²	2P or 1T ²	2P or 1T ²	
¹ Suspension/axle combination creep rating (lb). NOTE: Operators using vehicles equipped with liftable auxiliary axles must consider these creep ratings when any liftable auxiliary axle is unloaded. The auxiliary axle(s) are lifted only to improve vehicle maneuverability in off-road use or when the vehicle is unloaded.												
² <u>Maximum</u> number of auxiliary axles allowed: P = pushers; T = Tag. NOTE: Tractors are approved for use with only one (1) auxiliary axle, regardless of creep rating. Vehicles equipped with a liftable non-steer auxiliary axle are approved for use with only one (1) auxiliary axle, regardless of creep rating.												

¹ Suspension/axle combination creep rating (lb). NOTE: Operators using vehicles equipped with liftable auxiliary axles must consider these creep ratings when any liftable auxiliary axle is unloaded. The auxiliary axle(s) are lifted only to improve vehicle maneuverability in off-road use or when the vehicle is unloaded.

² Maximum number of auxiliary axles allowed: P = pushers; T = Tag. NOTE: Tractors are approved for use with only one (1) auxiliary axle, regardless of creep rating. Vehicles equipped with a liftable non-steer auxiliary axle are approved for use with only one (1) auxiliary axle, regardless of creep rating.

NOTE: CREEP RATINGS MAY NOT BE EXCEEDED!

Creep Rating – maximum load on the rear axle/rear suspension, given the following conditions:

- For off-highway (worksites) with auxiliary axles lifted at the MAX SPEED of 5 mph; this condition does not exceed 5% of total operating miles of the vehicle.
- For standard track rear axle housings only.
- For dual tire configuration only.

Creep ratings for the rear axle/rear suspension are from the respective supplier's data; rear axle and/or rear suspension supplier may have additional requirements.

Creep ratings are for rear axles/rear suspensions only and do not take into account other vehicle components (brakes, wheel equipment, frame, etc.)

NOTE: any deviations outside the above guidelines require approval on a per-vehicle order basis.

PRODUCT INFORMATION



330444 Meritor RT46-160 – Single Reduction, Tandem Axle, 46,000 lb Capacity

Affects: VN, VHD

Related: Engine Package (101)
Rear Axle Ratio (TAX)
Rear Suspension (350)

Updated: September 30, 2021

This tandem drive axle is designed for heavy-duty hauling or on-/off-road applications. It is especially suited for rugged applications, including heavy linehaul, logging, refuse, mining, and construction (dump trucks and concrete mixers). The wide range of available ratios allow customers to tailor the axle to specific load and terrain requirements.

Feature	Benefit
Large (18") hypoid-Generoid gearing	Higher torque-handling capacity; greater strength, longer life, quieter operation
Precision-forged differential gears	Maximum strength and greater resistance to shock impact
Rigid bolted ring gear attachment	Greater durability and serviceability
Rugged single-piece forward carrier design	Precise alignment, fewer leaks

Manufacturer	Meritor				
Model	RT-44-145(P)	RT-46-160	RT-46-169 ³	RT-46-164 ³	RT-46-16H ³
GAWR	44,000	46,000		46,000	
GCW – Turnpike ¹	--	185,000		185,000	
GCW – Highway ¹	--	160,000		160,000	
GCW – On/Off Highway ¹	--	140,000		140,000	
GVW – Truck Only ¹	68,000	--		--	
Ring Gear Size	15.31	18.0		18.0	
Single Reduction	YES				
Axle Shaft Body Diameter	2.00	2.25		2.25	
Axle Shaft Spline Diameter	2.10 (41 splines)	2.35 (46 splines)		2.35 (46 splines)	
Axle Housing Size	4.61 x 5.28				
Axle Wall Thickness	0.50	0.50	0.50	0.63	
Interaxle Differential Lock	Standard				
Wheel Differential Lock	Optional ²				
Ratios	See sales tool for current offering				
Weight, Front / Rear ² – lb (kg)	742 (337) / 608 (276)	944 (429) / 760 (345)		983 (447) / 799 (363)	

¹Maximum GCW (Gross Combination Weight) and GVW (Gross Vehicle Weight) ratings shown can be limited by vehicle operational application and overall vehicle component configuration. Refer to Spicer Application Guidelines (AXAG-0200) for detailed application information.

²Approximate axle weights less oil, brakes, hubs, drums or rotors, bearing cones, seals, wipers, suspension brackets, yokes, and options. For lubrication pump (P), add 30 lb (13.6 kg). For optional wheel differential lock, add the following: for 145 series, add 10 lb (4.5 kg) to front, 16 lb (7.3 kg) to rear; for 160/169/164/16H series, add 22 lb (10 kg) to front, 20 lb (9.1 kg) to rear.

³Light-weight aluminum carrier housing also available.

*Not available with aluminum carrier housing.

Additional Selling Information

Meritor® RT-46-160, RT-46-160A, RT-46-160P, RT-46-169

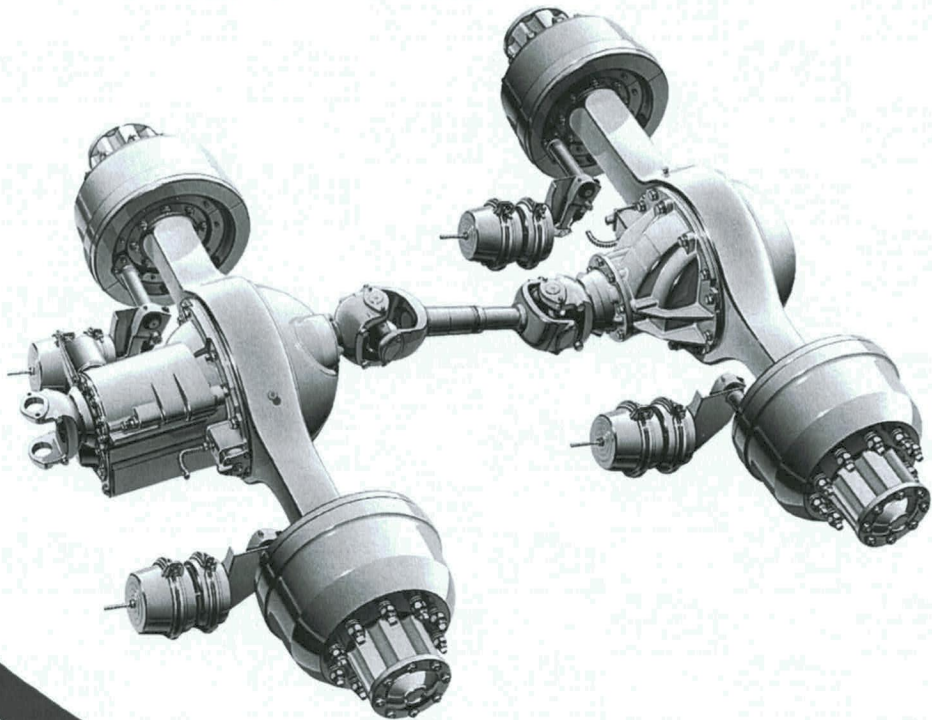
46,000 lbs. GAWR

Tandem Drive Axles - Hypoid Single Reduction



MERITOR®

an ArvinMeritor brand



Product Summary

The Meritor® RT-46 series tandem axle has the designed-in, high-performance capability to be used in heavy-duty highway hauling or on-/off-road applications. This tandem is designed to be highly durable in rugged applications. Equipped with a large, bolted-on, 18-inch ring gear that provides high torque handling capability and a heavy housing (0.50 inch) to give you greater pulling power and capacity.

The RT-46 series offers a broad range of gear ratios (sixteen, from 3.07 to 7.17), exclusive hypoid Generoid™ gearing, ArvinMeritor's extended-life triple-lip oil seals and full compatibility with OEM factory-fill of ArvinMeritor-approved, extended-drain lubricants.

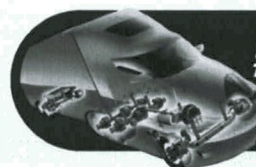
The RT-46 series is compatible with Cummins Smart Torque (STX) engines that limit torque output in start-up gears and retard mode without impacting vehicle performance.

Available as options for the RT-46-160 are the very popular driver-controlled differential lock (DCDL) in both the forward and rear carriers; a pressurized filtered lube system in the forward carrier (RT-46-160P); and an aluminum rear/rear carrier (RT-46-160A) to save 43 pounds.

Application Summary

The RT-46 series is an ideal and practical choice in many applications. The many available ratios allow you to precisely tailor the axle to your load and terrain needs.

Applications for these axles include: heavy linehaul, some logging vehicles, refuse trucks, mining vehicles and construction vehicles (dump trucks and concrete mixers). ArvinMeritor also offers the RT-46-164EH and the RT-50-160 for tougher vocational duties.



DRIVETRAIN PLUS
THE COMPLETE SYSTEM



MERITOR

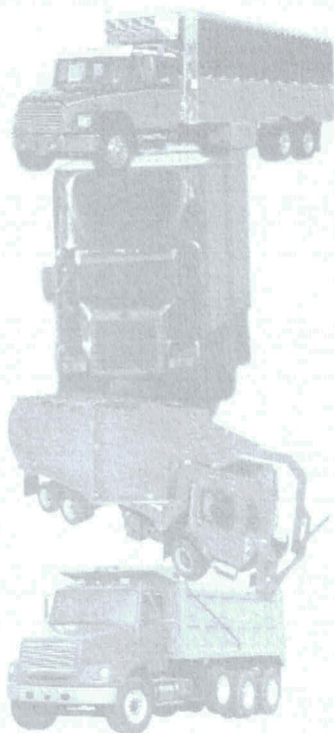
Gabriel

MERITOR

Parator

MERITOR

ArvinMeritor



Features

Large (18-inch) hypoid Generoid gearing

Bolted ring gear attachment

Ribbed differential case

Precision-forged differential gears

Rugged, single-piece carrier design

Unitized pinion seals

Compatibility with OEM factory-fill of extended-drain lubricants

No initial lubrication drop requirement

Meritor® "R" spindle design

Availability of driver-controlled differential lock

Backed by ArvinMeritor's comprehensive warranty; up to 5-Years/750,000-Miles in some vocations

Optional aluminum rear/rear carrier on RT-46-160/A

Availability of pressurized filtered-lube system (RT-46-160P) option

Benefits

High torque handling capacity, longer life, greater strength, quieter operation

Greater joint strength and integrity

Better gear rigidity

Durability, greater strength

Precise alignment, fewer joints

Seal lips are completely encased to keep lubricant in and help prevent installation and contamination damage

Reduces operating costs

Reduces operating costs

Industry-standard brake and wheel equipment compatibility; Central Tire Inflation (CTI) system compatibility

Maximum traction

Provides long-term protection from defective material or workmanship

Reduces standard weight by 43 pounds

Virtually eliminates spin-out potential

Specifications*: RT-46-160/A/P/169

AXLE MODEL	GAWR RATING POUNDS (KG)	GCW POUNDS (Kg)		STANDARD RATIOS	HOUSING SIZE/ WALL THICKNESS AT SPRING SEAT INCHES (MM)	WEIGHT ① POUNDS (KG)	OIL CAPACITY ② PINTS (LITERS)	BRAKE TYPES AND SIZES INCHES (MM)	HUB AND DRUM OR ROTOR, BOLT CIRCLE DIAMETER INCHES (MM)
		TURNPIKE	PAVED						
RT-46-160 RT-46-169				3.07, 3.21, 3.42, 3.58, 3.73, 3.91,		Forward Axle 944 (428.2) Rear Axle 760 (344.7)			
RT-46-160P	46,000 (20866)	185,000 (83916)	160,000 (72576)	4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 6.14, 6.43, 6.83, 7.17	5.28 x 4.61/0.50 or /0.63 Wide Track (134 x 117/12.7 or /16)	Forward Axle 974 (441.8) Rear Axle 760 (344.7)	Forward 39.1 (18.5) Rear 34.4 (16.3)	Cam-Master® Q Plus™ 16.5 x 7 (419 x 178) Dura-Master® Air Disc ADB-1560 Stopmaster® Wedge 15 x 7 (381 x 178)	10 Stud, 11.25 (285.75) 10 Stud, 13.19 (335) Cast Spoke Wheels
RT-46-160A						Forward Axle 944 (428.2) Rear Axle 717 (325.2)			

* Permitted use of axles and components, including capacity ratings where stated, vary with application and service. Applications should be approved by ArvinMeritor On-Highway Axle and Brake Engineering departments. Approved ratings may be higher or lower than indicated above, dependent upon engineering review. Refer to TP-9441 Axle Application Guidelines for specifics.

① Axle weights less oil, brakes, hubs, drums or rotors, bearing cones, seals, wipers, suspension brackets, yokes and options.

② Oil capacities for standard track axles measured at the various common drive pinion angles and include quantities for both wheel ends. Capacities will change if track or drive pinion angle is different.

Meritor® axles are covered by ArvinMeritor's industry-competitive warranty.

For complete details, refer to publication SP-95155 or contact your ArvinMeritor representative.

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Litho in USA

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Revised 11-01
TP-9391 (47865/11900)

ArvinMeritor



270708 Volvo 12 Speed I-Shift Severe Duty, ATO2612 F Overdrive

Affects: VNL, VNR, VHD
Related: Engine Package (101)
Engine Brake (HTX)
Volvo Transmission Electronics (295)
Gear Shift Lever (RVX)
Updated: March 19, 2020

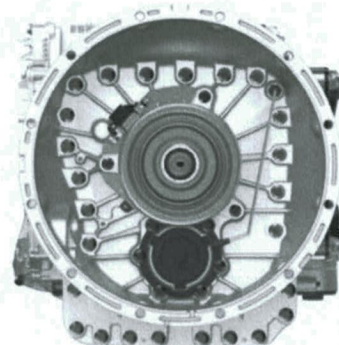
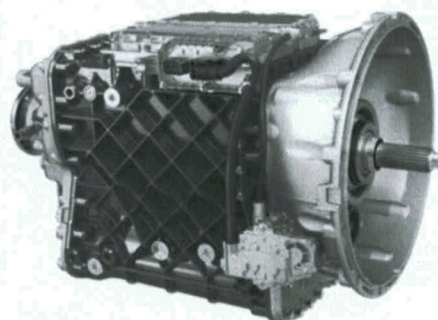
The Volvo I-Shift for Severe Duty is an enhancement to the Volvo Automated Manual Transmission (AMT). The I-Shift for Severe Duty has the advantages of the current I-Shift, while designed for heavy loads, uneven terrain, frequent shifting and frequent speed changes typical of heavy-duty vocational duty cycles. The I-Shift for Severe Duty is designed for rigorous on- and off-road work in construction and other applications with hardened components including the split synchronizer components, high range cone, and gears in the main box.

The Volvo I-Shift for Severe Duty F series transmission is the next generation of Volvo's proven Automated Manual Transmissions (AMT) technology. The F series includes an improved countershaft brake that increases upshifting speed for more efficiency. Improved torsional damping for the clutch reduces noise, vibration, and stresses on the driveline. The bending torque for the PTO has been increased by 20%, meaning heavier PTO's can be used. The I-Shift for Severe Duty has improved engaging sleeves for faster extreme accelerations.

Key Changes

The I-Shift for Severe Duty is now available in VNL, VNR, and VHD. The Heavy Duty warranty has become more competitive with an increase to 36 months/unlimited miles. The Severe Duty warranty has increased as well to 24 months/unlimited miles.

All I-Shift for Severe Duty models are factory filled with the high viscosity oil meeting Volvo oil specification 97319 (denoted by the silver fill plug fitting). 97319 has an oil drain interval in line-haul applications of 500,000 miles/5 years and 250,000 miles/3 years for more severe applications.



I-Shift for Severe Duty with Overdrive Sales Sheet



270708

Volvo 12 Speed I-Shift Severe Duty, ATO2612 F Overdrive

Updated:

March 19, 2020

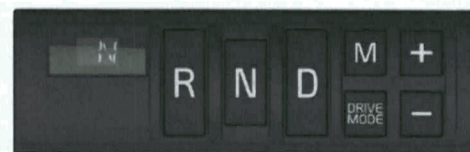
I-Shift for Severe Duty Features

All of the features available on the I-Shift today are available on the I-Shift for Severe Duty. This includes I-VEB integration, kick-down mode, and the optional hill start assist.

Performance Mode P+ – Performance Transmission Electronics Feature Package has P+ designed for Timber/Vocational/Construction application offering additional performance features (specifically the power launch) and requires the Premium Shifter.

Power Launch – This feature provides the ability to launch free when the vehicle is stuck with a burst of torque. This is only available on vehicles with the Performance Plus (P+) software. To use Power Launch:

- 1) Select the P+ mode on the shifter.
- 2) The driver information display will indicate P+ mode.
- 3) Release foot from service brakes.
- 4) Using the control buttons, select the D or M position and 1st gear.
- 5) Hold the minus (-) button.
- 6) Depress the accelerator pedal. Rev the engine up to at least 1300 rpm.
- 7) Release the minus (-) button. The clutch will engage, launching the vehicle free.



Rock Free – If the vehicle becomes stuck this provides the ability to rock the vehicle free in Performance Mode. To use Rock Free:

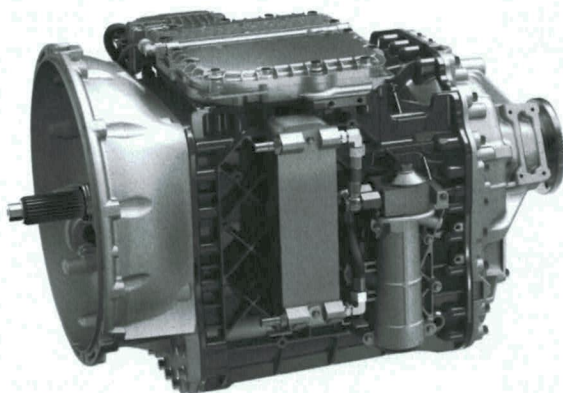
- 1) Make sure the differential locks are fully engaged (for more information on differential lock consult operator's manual).
- 2) Deactivate the Traction Control System (TCS) (for more information on TCS consult operator's manual).
- 3) Choose the driving mode P or P+.
- 4) Move the gear selector to the M, R, or D position and select 1st gear or R1.
- 5) Carefully press the accelerator and release with a smooth motion allowing the vehicle to perform in a rocking motion. The driver can toggle between D/R or just on/off the pedal.

Idle Drive Mode – When driving slowly in a work site, the engine operates at idle for best fuel economy and the driver selects the gear which best suits the pace needed. To engage, drive forward about a truck length, then the driver can let off the accelerator and idle drive mode engages. The idle governor will adjust torque to maintain constant vehicle speed. With the Premium gear selector, it is possible to down (-) and upshift (+) to adjust vehicle speed. With the Basic Shifter tap the brake or accelerator to downshift or upshift. To disengage idle drive mode hit the brake or accelerate.



I-SHIFT FOR SEVERE DUTY

OVERDRIVE



Designed for rigorous on- and off-road work, the Volvo I-Shift for Severe Duty is available as a two pedal, 12-speed automated manual transmission with overdrive. It combines the efficiency and productivity benefits of the Volvo I-Shift with hardened components for even greater uptime and component life.

Engine platforms	Volvo D11, Volvo D13
Configurations	Straight Truck and Tractor
Clutch	Volvo Sachs 17" single plate dampened organic clutch
Gear selector positions	R – Reverse, N – Neutral, D – Drive, M – Manual
Driving positions	EE – Extra Economy, E – Economy, P – Performance, P+ – Performance Plus, B – Braking, L – Limp Home
Power Take-Offs	Transmission Mounted PTO w/pump and shaft connection capabilities.

SPECIFICATIONS

Designation	ATO2612F
Engine compatibility	Volvo D11 & D13
Vehicle compatibility	VNL, VNR & VHD
Max input torque lb-ft (Nm)	1900 (2600)
Max GCW, lbs. (tonnes)	143,000 (65) <i>With application approval</i>
Dry weight with oil cooler, clutch, and housing, lbs. (kg)	720 (327)
Oil capacity, qts. (l)	Approx 16.2 (15.3)
Oil drain interval, years/ miles (km)	3/250,000 (400,000)*
Number of forward gears	12
Overall Ratio	15.04:1

Ratios, forward gears

1	11.73:1
2	9.21:1
3	7.09:1
4	5.57:1
5	4.35:1
6	3.41:1
7	2.70:1
8	2.12:1
9	1.63:1
10	1.28:1
11	1.00:1
12	0.78:1
Number of reverse gears	2 standard (up to 4 available)

Ratios, reverse gears

1	13.73:1
2	10.78:1
3	3.16:1
4	2.48:1

Approval may be limited by application.

Line-haul applications 5 years/500,000 miles

I-SHIFT FOR SEVERE DUTY

OVERDRIVE

An automated manual transmission with digital intelligence.

Every VHD comes standard with the new and improved I-Shift for Severe Duty transmission, built for rugged applications.

The latest edition of the I-Shift for Severe Duty includes upgrade hardware and software, improved engaging sleeves for better acceleration and a new countershaft brake for faster shifting performance. The electronic control unit can handle almost any load or any road. Improved torsional dampening reduces wear and tear on the clutch.

So I-Shift for Severe Duty not only keeps fuel costs down, it can help reduce noise, extend transmission life and lower maintenance costs.

FEATURE	BENEFIT
High Level of Intelligence (Continuously monitors numerous parameters to predict optimum operation for the next 30 seconds and chooses the appropriate gear)	Saves fuel and improves performance.
Performance Mode P+	Designed for Timber, Vocational, and Construction applications to maximize gradeability and power. Includes features like Power Launch and Rock Free. P+ requires a Premium Shifter.
Power Launch	Provides the ability to launch free with a burst of torque when the vehicle is stuck. Power Launch can be used in C or 1st gear. Only available with the P+ software package.
Rock Free	Provides the ability to rock the vehicle free in Performance Mode.
Idle Drive Mode	Provides excellent low speed operation, improved fuel economy and prolonged clutch life. Idle Drive Mode allows the engine to operate at idle when driving slowly on a work site. Idle governor adjusts torque to maintain constant vehicle speed.
Integration with the intelligent Volvo Engine Brake (VEB)	VEB features are controlled by I-Shift to optimize performance.

VOLVO

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