

# CUSTOMER PROPOSAL



**PREPARED FOR**

VIRGINIA SHERIFFS' ASSOCIATION  
901 E BYRD ST STE 1301  
RICHMOND  
VA 232194054

**DATE**

7/6/2023

**PREPARED BY**

VIRGINIA TRUCK CENTER INC  
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VA 24019-8568

**QUOTE INFORMATION**

ELLE2023000091C660  
LR 64R BE  
Qty: 1



# TECHNICAL SPECIFICATION

## LR 64R BE



APPLICATION PACKAGES	DESCRIPTION
CHASSIS CONFIGURATION PACKAGE	BODY BUILDER PREP PACKAGE (REQUIRES MBP SELECTION)
BODY BUILDER PACKAGE	LABRIE AUTOMIZER 27YD to 33YD ASL 8*4 PREP, 210" WB

CUSTOMER/VEHICLE INFO	DESCRIPTION
S CA CHASSIS (BASE MODEL)	LR 64R BE DAYCAB
S CUSTOMER FLEET SIZE	DEALER FLEET WITH LESS THAN 25 VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND
S TYPE OF SERVICE	COMMERCIAL
S WARRANTY REGISTRATION LOCATION	USA - WARRANTY REGISTRATION LOCATION
EMISSION WARRANTY CERTIFICATION	Battery Electric
S INITIAL REGISTRATION LOCATION	USA REGISTRATION
S VEHICLE APPLICATION CLASS	CLASS B HIGHWAY-INNER CITY
VEHICLE USE & BODY/TRAILER TYPE	REFUSE AUTOMATIC SIDE LOADER TRUCK
S OPERATING TERRAIN GRADE CONDITIONS	NORMAL HIGHWAY, STARTING GRADES<12%
S LOADING SURFACE FACTOR	CONCRETE LOADING AND / OR UNLOADING SURFACE
VEHICLE VOCATION	REFUSE / LANDFILL OPERATION

ENGINE/TRANSMISSIONS	DESCRIPTION
S ENGINE PACKAGE, COMBUSTION	MACK BE - 448 HP / 536 HP (PEAK), 4051LB-FT, ELECTRIC MOTOR, ZERO EMISSION
S TRANSMISSION	MACK ELECTRIC PROPULSION TRANSMISSION 800 NM 2SPEED
S ENERGY STORAGE SYSTEM	ESS TOTAL ENERGY 375 KWH (BOL)

ENGINE EQUIPMENT	DESCRIPTION
S AIR COMPRESSOR/DRYER	WABCO HEATED SS TWIN W/ 2 SCROLL (10.6 CFM) AIR COMPRESSORS
S BATTERIES	(2) MACK 12V 170/340 AH WET CHARGE
ENGINE BRAKE	MACK BE MOTOR BRAKE WITH REGENERATION
S COOLANT PROTECTION	ETHYLENE GLYCOL EXTENDED LIFE COOLANT (50/50 MIX DYED ORANGE) TO -34DEG
S HOSES - RADIATOR/HEATER	SILICONE W/ SPRING LOADED CLAMPS FOR BOTH RADIATOR & HEATER HOSE
S CHARGING POWER	CHARGING POWER, 150 KW MAX
S COOLING ENERGY STORAGE SYSTEM	COOLING ENERGY STORAGE SYSTEM, PASSIVE USING THE AMBIENT AIR

CLUTCH/TRANS EQUIPMENT	DESCRIPTION
S DRIVELINE - MAIN	SPICER COMPACT SERIES
S DRIVELINE - INTERAXLE	SPICER COMPACT SERIES - LARGE
S LUBRICANTS, TRANSMISSION	TRANSYND SYNTHETIC LUBE FOR ALLISON TRANS

FRONT AXLE EQUIPMENT	DESCRIPTION
S FRONT AXLE	20000# (9100 KG) MACK FXL20 TAPERED SPINDLE / TAPERED BEARINGS
S SPRINGS - FRONT	MACK TAPERLEAF 20000# (9100 KG) GROUND LOAD RATING, EQUAL BIAS
S FRONT AXLE BRAKES	MERITOR EX+ AIR DISC BRAKES 430MM (17") H-TYPE
S FRONT BRAKE ADJ. MANUFACTURE	AUTOMATIC FOR AIR DISC BRAKES
S FRONT BRAKE CHAMBER MFG.	FRONT BRAKE CHAMBER MANUFACTURER, WABCO
S HUB MATERIAL, FRONT	IRON CONMET PRESET-PLUS W/PREMIUM SEAL
S SHOCK ABSORBER, FRONT	DOUBLE ACTING TYPE

# TECHNICAL SPECIFICATION *(cont.)*



FRONT AXLE EQUIPMENT		DESCRIPTION
	STEERING	M100P PLUS RIGHT SIDE ASSIST CYLINDER
S	BUMP STOP, FRONT SUSPENSION	STATIC LOAD CUSHIONS

REAR AXLE EQUIPMENT		DESCRIPTION
S	REAR AXLE	46000# (20900kg) MACK S462R CAST DUCTILE IRON HOUSING
S	DRIVE AXLE LUBRICANT	DRIVE AXLE LUBE, SHELL 80W90 MINERAL OIL
S	CARRIER - REAR AXLE	CRDP150/151 AVAILABLE WITH OPTIONAL DRIVER CONTROLLED INTERWHEEL DIFFERENTIAL LOCKS, SEE 254 SYMBOL
	REAR AXLE RATIO	4.80 RATIO
S	REAR SUSPENSION	MACK mRIDE 46 PARABOLIC 3-LEAF, 46,000 lb, STANDARD DUTY
S	BOGIE SPREAD, REAR	54" AXLE SPACING (BOGIE WHEELBASE)
S	REAR SHOCK ABSORBER	REAR SHOCK ABSORBER
S	BRAKES - REAR	MERITOR EX+ AIR DISC BRAKES, 430MM (17") - H TYPE (Total for QTY = 2)
S	BRAKE, DRIVE, REAR	BRAKE DRIVE, REAR, DISC LIGHTWEIGHT
S	REAR BRAKE ADJ MANUFACTURE	AUTOMATIC SLACK ADJUSTERS FOR REAR AIR DISC BRAKES
	REAR BRAKE CHAMBER SIZE	REAR SPRING BRAKE CHAMBERS 24/24 TYPE
	BRAKE ORI REAR-MOST DRIVE AXLE	DISC BRAKE CHAMBER ORIENTATION: Middle Mount - Forward of Axle - Chamber Inward
S	PARKING BRAKE CHAMBER	WABCO BRAKE CHAMBERS VENDOR (Total for QTY = 2)
S	HUB MATERIAL, DRIVE	CONMET IRON HUBS W/PRESET BEARINGS & SEALS
S	POWER DIVIDER LOCKOUT	INTERAXLE POWER DIVIDER LOCKOUT, W/BUZZER & LIGHT
S	ANTILOCK BRAKE SYSTEM	BENDIX WITH TRACTION CONTROL 6S6M

FRAME EQUIPMENT/FUEL TANKS		DESCRIPTION
	WHEELBASE	210"
	AF (OVERHANG)	91"
S	FRAME RAILS & LINERS	9.5 x 82 x 340mm - (0.375" x 3.25" x 13.38")W/ Full Liner; RBM 3,122,400 LB-IN
S	CROSSMEMBERS	STEEL 1/2" PL BOLTED BOC & INTERMDT 1/8" BELOW TOP OF RAIL
S	AUX CROSSM. IN REAR OVERH TYPE	SINGLE CHANNEL WELDED AUXILIARY CROSSMEMBER TYPE
S	REAR CROSSMEMBER OPTIONS	STEEL CLOSING REAR CROSSMEMBER
S	FRONT BUMPER	FLUSH-PAINTED STEEL
S	GUARD	SKID PLATE UNDER BUMPER AND RADIATOR
S	TOWING DEVICE, FRONT	CENTER TOW CAPABILITY BASED ON BUMPER SELECTION

AIR/BRAKE		DESCRIPTION
S	AIRTANK DRAIN VALVE	AUTO DRAIN VALVE, HEATED ON SUPPLY TANK, MANUAL (PETCOCK) ON ALL OTHER TANKS
S	AIRTANK MATERIAL	STEEL AIR TANK PAINTED CHASSIS COLOR
S	PARKING BRAKE VALVE	SINGLE VALVE SYSTEM
S	AUXILIARY BRAKE CONTROL	AUXILIARY WORK BRAKE HAND CONTROL, ACCESSIBLE FROM RIGHT SIDE ONLY

ELECTRICAL		DESCRIPTION
S	BACK-UP ALARM	PRECO, MODEL 1059
S	ROOF & SIDE MARKER LIGHTS	TRUCKLIGHT TYPE ROOF MARKER for LR
S	HEADLAMP BULB TYPE	HEADLAMP BULB TYPE, LED
S	HEADLAMP PROTECTION	HEADLAMP PROTECTION
S	DAYTIME RUNNING LIGHTS	ENGINE RUNNING ACTIVATED

# TECHNICAL SPECIFICATION *(cont.)*



ELECTRICAL		DESCRIPTION
S	AUX. POWER OUTLET, INTERIOR (CA in PC28 only)	COMPUTER AND 2-WAY RADIO DEDICATED CIRCUIT
S	FRONT & SIDE INDICATOR LMP TYP	FRONT AND SIDE DIRECTION IND & MARKER, LED TYPE

PTO		DESCRIPTION
S	BODY BUILDER MODULE	ControlLink III BODY BUILDER EL PREP KIT, REFUSE, RP170 ELECT. INTERFACE (3 CON 54 PINS)
S	ELECTRIC PTO POSITION	ELECTRIC PTO POSITION, LEFT HAND SIDE

SPECIALTY EQUIPMENT		DESCRIPTION
S	PASSIVE SAFETY SYSTEM	WITHOUT PASSIVE SAFETY SYSTEM

CAB INTERIOR (A THRU G)		DESCRIPTION
S	AIR CONDITIONING/HEATER	(LR) AUXILLARY COOLER W/ STANDARD HEATER
S	SURVEILLANCE CAMERA OPTIONS (CA)	WITHOUT CAMERA
S	DOME LAMP, INTERIOR	DOME LIGHTS (2) W/SELF-CONTAINED SWITCHES (ONE EACH SIDE)
S	FLOOR MATS	FLOOR MAT, RUBBER
S	SPEEDOMETER -&- GAUGES - UNIT(s) OF MEASURE	U.S. UNITS (PREDOMINANT)

CAB INTERIOR (H THRU R)		DESCRIPTION
S	KEY TYPES FOR DOORS	BASIC UNIQUE KEY
S	IGNITION TYPE	KEY TYPE
S	AUDIO ACCOMMODATION	PREMIUM STEREO, AM/FM, MP3, WEATHER BAND, BLUETOOTH
S	ANTENNA - RADIO	RADIO ANTENNA, CH STYLE COWL MOUNTED ON LH SIDE
S	AUDIO SHUTOFF	AUTO SHUTOFF FOR RADIO ENTERTAINMENT SYSTEM WHEN VEHICLE IS ENGAGED IN REVERSE
S	POWER LEADS	POWER LEADS (5-WAY BINDING POSTS FOR CB RADIO) MOUNTED ON TOP OF DASH

CAB INTERIOR (S THRU Z)		DESCRIPTION
S	SEAT - DRIVER'S	AIR-SEARS MID-BACK SEAT C-2 W/FABRIFORM CUSHIONS
S	SEAT - PASSENGER'S	FOLD-UP SEARS SEATING, LOW BACK PASSENGER SEAT
S	SEAT COVERING	DRIVER- FABRIFORM CLOTH, BLACK RIDER- CLOTH, BLACK
S	SEAT BELT(S)	SEAT BELTS (ORANGE)/RETRACTORS, LAP AND SHOULDER FOR DRIVER AND LAP BELT FOR FOLD-UP RIDER SEAT
S	STEERING WHEEL	DIAMETER 450MM STEERING WHEEL, RUBBER GRIP V1
S	STEERING WHEEL ADJUSTMENT	ADJUSTABLE LH STEERING WHEEL RH FIXED
S	TURN SIGNALS	SELF CANCELLING TURN SIGNALS
S	WASHER RESERVOIR POSITION	W/O WINDSHIELD WASHER OPTION
S	WINDSHIELD PROTECTOR	FURNISH WINDSHIELD PROTECTOR

CAB EXTERIOR		DESCRIPTION
S	FRONT GRILLE	BLACK GRILLE WITH GREY SURROUND
S	CAB	LH DRIVE WITH RH STAND UP OPERATING POSITION, EXTENDED CAB VERSION
S	CAB DOOR OPTIONS	LH FRONT HINGED DOOR W/PWR WINDOW: RH FOLD-UP DOOR W/ SLIDABLE WINDOW
S	CAB TILT PUMP	LOCATED IN STD LOCATION
S	CAB INSTEP VERSION	Cab Low Entry Step
S	PASSENGER SIDE VISIBILITY OPTIONS	WITHOUT AUXILIARY WINDOW IN RH DOOR WITHOUT SIDE CLOSE VIEW MIRROR

# TECHNICAL SPECIFICATION *(cont.)*



CAB EXTERIOR		DESCRIPTION
S	HORN - AIR	(1) TWIN-UNDER CAB TRUMPET W/DUAL LANYARD CONTROL
S	HORN - ELECTRICAL	DUAL TONE
S	MIRRORS - LEFT SIDE EXTERIOR	LH BLACK AERO MIRROR ELECTRICAL OPERATED & HEATED, W/ HEATED SQUARE BLACK CLOSE VIEW
S	MIRRORS - RIGHT SIDE EXTERIOR	RH BLACK AERO MIRROR ELECTRICAL OPERATED & HEATED, W/ HEATED SQUARE BLACK CLOSE VIEW

WHEELS & TIRES		DESCRIPTION
	TIRES BRAND/TYPE - FRONT	315/80R22.5 L CONTINENTAL HSC 3 (20400 lbs) (Total for QTY = 2)
	WHEELS - FRONT	22.5x9.00 ACCURIDE 29039x GRAY POWDER COATED STEEL, 5.75" OFFSET, 5 HAND HOLE (Total for QTY = 2)
S	FRONT AXLE TIRE & WHEEL QUANTITY	TWO FRONT TIRES & WHEELS
	TIRES BRAND/TYPE - REAR	11R22.5 H BRIDGESTONE M863 (24020 lbs) (Total for QTY = 8)
	WHEELS - REAR	22.5x8.25 ACCURIDE ACCU-LITE 51487x GRAY POWDER COAT STEEL, 6.60" OFFSET, 5 HAND HOLE (Total for QTY = 8)
S	REAR AXLE TIRE & WHEEL QUANTITY	EIGHT REAR AXLE TIRES & WHEELS
S	DRIVE WHEEL STUDS	DRIVE WHEEL STUDS LONGER LENGTH
S	TIRE INFLATION VALVE	STANDARD VALVE STEMS AND CAPS

COMMUNICATION SYSTEMS		DESCRIPTION
S	DIAGNOSTICS DISPLAY IN CLUSTER	DIAGNOSTICS DISPLAY IN CLUSTER, BASIC
S	TELEMATIC GATEWAY	TELEMATICS GATEWAY, 4G/LTE AND WLAN SYSTEM WITHOUT DIAGNOSTIC SERVICES

ENGINE ELECTRONICS		DESCRIPTION
S	EL HD THROTTLE,MAX ROAD SPEED	ELECTRONIC HAND THROTTLE, MAX ROAD SPEED, 16 KMH (10 MPH)

TRANSMISSION ELECTRONICS		DESCRIPTION
S	HILL START ASSIST	HILL START ASSIST
S	TRANSM AUTO NEUTRAL ON P-BRAKE	ALLISON PARK BRAKE AUTO NEUTRAL-REQUIRES PARK BRAKE TO BE DISENGAGED PRIOR TO SELECTING A GEAR TO DR

VEHICLE ELECTRONICS		DESCRIPTION
S	ROAD SPEED LIMITER SETTING	105 KM/H ROAD SPEED LIMITER (65MPH)
S	CRUISE CONTROL	CRUISE CONTROL
S	CRUISE CONTROL, MAX SPEED	MAX CRUISE, 105 KPH (65 MPH)
S	CRUISE CONTROL MIN SPEED	MIN CRUISE, 32 KPH (20 MPH)
	PDLO ENGAGED VLS	POWER DIVIDER LOCK OUT (PDLO) ROAD SPEED LIMIT 24KMH (15MPH)
	DIFF LOCK SPEED LIMIT	WITHOUT DIFFERENTIAL LOCK ROAD SPEED LIMIT
S	VEHICLE OVERSPEED,ALL COND,LOG	VEHICLE OVERSPEED,ALL COND, TIME LOG IF ABOVE 75MPH (121KMH)
S	VEHICLE OVERSPEED, FUELED, LOG	VEHICLE OVERSPEED, FUELED, TIME LOG IF ABOVE 70MPH (113KMH)
S	PERIODIC TRIP LOG DAY OF MONTH	PERIODIC TRIP LOG, DAY 1 OF THE MONTH
S	VEHICLE APP SERVICE INTERVALS	SERVICE INTERVALS, VOCATIONAL APPLICATION
S	SERVICE ALERT	WITH SERVICE ALERT
S	MAINTENANCE DUE ALERT %	ACTIVATE ALERT AT 90% OF THE TIME/DISTANCE SETTING

PTO ELECTRONICS		DESCRIPTION
S	PTO1 SINGLE SPEED CONTROL RPM.	PTO 1ST, SINGLE SPEED SETTING, 1000 RPM
S	PTO 1ST, MAX ROAD SPEED	1ST PTO, MAX ROAD SPEED, 10 MPH (16 KPH)

# TECHNICAL SPECIFICATION *(cont.)*



PTO ELECTRONICS		DESCRIPTION
S	PTO 1ST, SPEED RAMP RATE	PTO 1ST, SPEED RAMP RATE 100 RPM/SEC
S	PTO 1ST, ROAD SPEED LIMIT	PTO 1ST, ROAD SPEED LIMIT, 97 KMH (60 MPH)

PAINT		DESCRIPTION
S	PAINT DESIGN	LR ELECTRIC (MULTI-TONE)
S	PAINT TYPE	SOLID PAINT
S	PAINT COLOR - FIRST COLOR	MACK BLACK; P3036
S	PAINT COLOR - SECOND COLOR	MACK WHITE; P9188
S	PAINT COLOR - THIRD COLOR	NO THIRD TRUCK COLOR PROVIDED; NO COLOR
S	CAB COLOR	MULTI-TONE - CAB
S	PAINT - CAB PAINT SYSTEM	PAINT - CAB, URETHANE CLEAR COAT
S	CHASSIS RUNNING GEAR	MACK BLACK (URETHANE); P3036
S	BUMPER	PAINT BUMPER SAME COLOR AS CHASSIS RUNNING GEAR

BASE WARRANTY & PURCHASED COVERAGES		DESCRIPTION
S	BASIC CHASSIS COVERAGE	NORMAL DUTY STANDARD BASE COVERAGE 12 MONTHS/100,000 MILES (160,934 KM)
	EMISSION - SURCHARGE	Battery Electric
S	CHASSIS TOWING WARRANTY	BASE CHASSIS TOWING COVERAGE, ELECTRIC TRUCK, 12 MO/100K MILES
S	ENGINE TOWING WARRANTY	ELECTRIC CONTROL SYSTEM & ELECTRIC POWERTRAIN TOWING, 36 MO/150K MILES
S	ELECTRIC CONTROL SYSTEM	36 MO/150K MILES - BASE ELECTRIC CONTROL SYSTEM COVERAGE
S	ELECTRIC POWERTRAIN	36 MO/150K MILES - BASE ELECTRIC POWERTRAIN COVERAGE
S	BATTERY - ELECTRIC TRUCK	36 MO/150K MILES - BASE BATTERY COVERAGE
	MACK ULTRA SERVICE	60 MO/250K MILES/500K kWh - MACK ULTRA SERVICE AGREEMENT

Z - DO NOT USE - OBSOLETE		DESCRIPTION
S	HUBS & DRUMS-FRONT	SAME AS CHASSIS RUNNING GEAR
S	HUBS & DRUMS-REAR	SAME AS CHASSIS RUNNING GEAR

ADDITIONAL ENGINEERING (Non Approved)	DESCRIPTION
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