

**CITY OF SPRINGFIELD ELECTRIC DEPARTMENT  
1000 CENTRAL AVENUE WEST  
SPRINGFIELD, TENNESSEE 37172**

**BID 1068**

**PROPOSAL CONTRACT**

**NEW 50' DIGGER DERRICK UNIT MOUNTED ON A NEW 2019 FREIGHTLINER  
M2-106 4X2 33,000 GVWR TRUCK**

**BID OPENING DATE: August 6<sup>th</sup>, 2018**

**TIME: 2:00 p.m.**

**Contents:**

- I. Proposal/Bid Preparation
- II. Base Bid
- III. Specifications
- IV. Non-Collusion Affidavit
- V. Business Relationships Affidavit
- VI. Iran Divestment Form

**I. PROPOSAL**

**A. Preparation**

BIDDER shall submit two (2) copies of bid proposal in a sealed envelope addressed to:

Lisa Crockett, City Recorder  
City of Springfield  
405 North Main Street  
Springfield, TN 37172

Bids will open August 6<sup>th</sup>, 2018 at 2:00 p.m. No telephone, faxed, or e-mailed bids will be considered.

**B. Pricing**

The BIDDER declares that this proposal is made without connection with any other person or persons bidding for the same work. Bids shall not contain any unbalanced prices, unauthorized additions, alterations, limitations, conditions, or provisions. Non-Collusion Affidavit and Business Relationships Affidavit must be returned with bid.

***BIDDER shall use Page 5 of this document to list all prices, terms, conditions, exceptions, and warranties.***

Springfield Electric reserves the right to reject any or all bids.

**C. Inspections and Tests**

Unless otherwise specified in the contract or purchase order, BIDDER shall be responsible for the performance of all inspection and test requirements necessary to insure compliance with this specification. This action does not preclude subsequent inspection and testing by OWNER to further determine conformance to specification requirements of quality standards of workmanship, material, and construction techniques.

**D. Questions**

Any questions concerning these specifications should be directed to:

Nicky Pinson  
Electrical Operations Superintendent  
Springfield Electric Department  
1000 Central Avenue West  
Springfield, Tennessee 37172  
(615) 384-6770 ext. 121  
(615) 382-1642 (Fax)  
npinson@springfield-tn.org

**E. Decal**

No decals or markings of any type pertaining to advertisement shall be placed on vehicles delivered to the City of Springfield, except trademarks or model designation normally installed by the manufacturer on the vehicle.

**F. Preparation for Delivery**

Pre-delivery servicing and adjustments: Prior to acceptance by the City of Springfield, the dealer shall service and adjust vehicle for operational use as a minimum the following:

1. Focusing of lights
2. Tuning of engine
3. Adjustment of accessories
4. Checking of electrical, braking, and suspension system
5. Charging of battery
6. Alignment of front end
7. Inflation of tires
8. Balancing of all wheels
9. Complete lubrication of engine, chassis, and operating mechanisms with recommended grades of lubricants for the ambient air temperature at the time of delivery
10. Servicing of cooling system with permanent type anti-freeze and summer coolant for -20 degree F.

**G. Trade -In**

The City of Springfield offers no trade-in for this unit.

## II. BASE BID

Proposal of \_\_\_\_\_, herein called "BIDDER", to the City of Springfield Electric Department, herein called "OWNER":

That for and in consideration of the mutual agreements and covenants herein contained, the parties agree and bind themselves as set out below:

The BIDDER, in compliance with the invitation to bid for a **NEW 50' DIGGER DERRICK UNIT MOUNTED ON A NEW 2019 FREIGHTLINER M2-106 4X2 33,000 GVWR TRUCK**, having examined the plans and specifications with the related documents, and being familiar with all the conditions surrounding the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to install the equipment in accordance with the contract documents, within the time set forth therein, at the price stated therein.

Bidder agrees to perform work in compliance with all codes applicable to this project. All work is to be performed in a neat and professional manner.

**This project is to be bid by BIDDER as a LUMP SUM BID for all work described in this specification.**

BIDDER hereby agrees to complete work under this contract within two-hundred ten (210) calendar days after receipt of order.

Prior to commencement of work, the successful bidder shall be required to provide OWNER the following:

- a. All executed documents related to this project returned to OWNER, and;
- b. Written guarantee of material and workmanship for all work to be performed under this contract including any terms and conditions of guarantee.
- c. Complete specifications, pictures, and literature describing and illustrating the proposed equipment submitted for OWNER'S approval.

**ANY EXCEPTIONS OR SUBSTITUTIONS FROM THESE SPECIFICATIONS ARE TO BE NOTED AND EXPLAINED WITH ALL DOCUMENTATION SUPPLIED.**



3. Sales tax is not to be included. We are a tax-exempt local government agency.
4. Final payment shall be made to successful BIDDER by OWNER within thirty (30) days after:
  - a. Delivery of product, and assembly if applicable, and;
  - b. The approval by the OWNER of all work performed under the proposal, and;
  - c. An affidavit has been submitted to OWNER by BIDDER stating that payment has been made for all labor, materials, and subcontractors under this proposal.
5. BIDDER agrees to be bound by the bid price in this proposal for a period of sixty (60) days from the date of the opening of the bid.
6. The OWNER reserves the right to reject any or all bids, to waive any informality in bids, and to accept in whole or part such bid or bids as may be deemed in the best interest of OWNER.

\_\_\_\_\_  
Signature – BIDDER

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone No.

\_\_\_\_\_  
Date

### **III. WARRANTY**

The manufacturer warrants vehicle to be good material and workmanship and agrees to promptly replace any part or parts that fail due to defective material and workmanship for a period of 36 months or 100,000 miles, whichever comes first, from the date vehicle is placed in service by the City of Springfield. Standard warranties for digger derrick, winch, and utility line body shall apply. Replacement shall be free of charge excluding any deductibles standards to such warranties. If such failure renders the vehicle incapable of being driven, the vendor will be responsible for transporting the vehicle to their place of business. If such failure takes place outside the dealer's services area, the dealer shall be responsible for reimbursing the nearest authorized dealer for services rendered under this warranty. Tires are exempted from this warranty, but must be covered by the tire manufacturer's standard warranty and services by the local authorized dealer of the tire manufacturer. Manufacturer's Warranty and any extended warranty options on all equipment shall be submitted with bid.

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**SPECIFICATIONS FOLLOW THIS PAGE**

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Date

**Ship To:**

Springfield Department of Electricity  
1000 Central Ave  
Springfield, TN 37172

**Bill To:**

Springfield Department of Electricity  
1000 Central Ave  
Springfield, TN 37172

Attn: Nicky Pinson

Phone: 615-946-1914

Email: npinson@springfield-tn.org

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
1.	a) Maximum Sheave Height: 50.6 ft	1	
	b) Maximum Horizontal Reach: 41.0 ft	1	
	c) Maximum Digging Radius: 29.0 ft	1	
	d) <b>Rating Classification: Working capacity at 10 ft radius 14,200 lb</b>	1	
	e) Articulation: 80 degrees above horizontal to 20 degrees below horizontal	1	
	f) Articulation: From 80 degrees above horizontal to 20 degrees below horizontal	1	
	g) Winch: 15,000 pound bare drum capacity turntable winch with 8.625" diameter drum to comply with ANSI 10.31 Section 4.10.4 for synthetic rope or 15,000 pound bare drum capacity boom tip winch. High torque hydraulic motor drives a self-locking worm gear winch. Counterbalance valves on motor provide reliable load holding	1	
	h) Insulated: 46 kV and below	1	
	i) Hydraulic Overload Protection System: activates when unit is exposed to overload condition. System prevents actuation of all functions that could add to the overload condition including: - Boom Lower - Intermediate Boom Extend - Third Stage Boom Extend - Winch Raise - Auger Dig System automatically resets when overload condition is relieved.	1	
	j) Hydraulic Side Load Protection: relieves overload conditions by allowing rotation system to back drive.	1	
	k) System pressure gauges mounted on main control stations.	1	
	l) Passive zone rating system with visual light indicators to show instability of unit (only when mounted on single axle chassis)	1	
	m) Transferable Boom Flares include adjustable alignment guides.	1	
	n) Pole Guides: proportionally controlled hydraulic cylinders drive open/close and tilt functions and include double pilot operated check valves to support poles in both tilt directions. Also includes two function pole guide interlock preventing any collisions between the pole guide and upper boom when the transferable flares are attached to the intermediate boom.	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
o)	Fiberglass Boom Tip with provisions for platform attachment.	1	
p)	Two-part load line attachment point on intermediate boom.	1	
q)	Full capacity fiberglass upper boom is round and is fabricated using a Centrifically Cast process that provides a smooth surface finish inside and out that is easy to clean and is highly resistant to damage.	1	
r)	Proportional Fully-Hydraulic Control System: The pilot operated hydraulic system provides easy to operate controls with superior metering. Hydraulic control valves for Rotation, Boom Elevation, Boom Extension, Digger and Winch are fully hydraulic and controlled by a proportional pilot system which provides full metering and feathering characteristics.	1	
s)	Hydraulic Dump Valve installed in pedestal: Provides extra protection by diverting hydraulic flow away from the main control valve when unit is idle. Dump valve solenoid is electronically activated when a function is operated.	1	
t)	Boom Storage Protection System: switch on main boom activates hydraulic overload protection system to prevent operator from inadvertently placing excessive down force on boom stow bracket.	1	
u)	Continuous rotation including planetary drive rotation gearbox. With booms horizontal and fully extended, unit is able to rotate a 500 lbs load on winch line at boom tip up a 5 degree slope.	1	
v)	Manual Override of Hydraulic Functions at main control valve.	1	
w)	Outrigger/Boom Interlock System: Prevents boom from being unstowed until outriggers have been at least partially deployed.	1	
x)	Outrigger/Unit Selector Control: Located near the outrigger controls, allows operator to divert hydraulic oil from machine circuit for outrigger operation. This reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped.	1	
y)	Outrigger Control Valves, located at tailshelf	1	
z)	Outrigger Motion Alarm: Provides audible alarm when any of the outriggers are in motion.	1	
aa)	Back-up Alarm, installed	1	
bb)	Tool outlets at tailshelf - tool control valve is integral to the outrigger control valve on the vehicle curbside.	1	
cc)	Two (2) Operator's and Maintenance/Parts Manuals containing instructional markings indicating hazards inherent in the operation of an aerial device	1	
dd)	Painted white with Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the inside as well as outside of all fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection.	1	
ee)	Unit meets or exceeds ANSI 10.31-2006. Unit serial number placard clearly states compliance.	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	ff) Unit is designed and manufactured in facilities that are certified to meet ISO 9001 requirements.	1	
2.	Rear Mount Over Rear Axle	1	
3.	Pilot Control System	1	
4.	Piston Pump, Pressure Compensated, provides 43 gpm max system flow at 3000 psi max system pressure	1	
5.	Reservoir Assembly - includes 60 gallon reservoir, filter, and magnetic suction separator, Mount under riding seat next to pedestal Temperature Sight Gauge Hydraulic components needed when locating reservoir more than 86" from pump.	1	
6.	Outriggers, A-frame, folding shoe, 153 maximum spread, for use as auxiliary outriggers on all units or primary outriggers on select units	1	
7.	Outriggers, A-frame, folding shoe, 153 maximum spread, for use as auxiliary outriggers on all units or primary outriggers on select units, includes: <ul style="list-style-type: none"> <li>a) Maximum Spread: 153 inches measured from centerline of shoe pins</li> <li>b) Penetration at maximum extension: 6.5 inches (for standard installation on a 40 inch frame height)</li> <li>c) Standard Shoe Dimensions: 14 x 15.25 inches</li> <li>d) Hydraulic Outrigger Control Valves</li> <li>e) Outrigger/Unit Selector Control: Reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped.</li> <li>f) Outrigger motion alarms</li> <li>g) Outrigger Interlocks: Will not allow the unit to be operated until the outriggers have been at least partially deployed.</li> </ul>	1	
8.	Primary 18" X 18" Oversized Shoe Primary 4" Outrigger Extension	1	
9.	Auxiliary 18" X 18" Oversized Outrigger Shoe Auxiliary 4" Outrigger Extension	1	
10.	RotaFloat™ System. Activating this switch while digging frees the booms to rotate, thus eliminating one of the many functions needed to install screw anchors. Includes alarm and visual indicator	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
11.	Hydraulic Side Load Protection: relieves overload conditions by allowing rotation system to back drive.	1	
12.	ANSI use criteria, Digger Derrick use and Personnel Handling	1	
13.	Foot Throttle	1	
14.	Derrick Tong Protectors	1	
15.	Optiview Control Station, Rear Mount	1	
16.	Turntable Winch	1	
17.	Normal winch speed (15,000 lbs) Digger, Two-Speed Mechanical Shift, 12,000 ft-lbs, includes all of the components necessary to operate digger, installed	1	
18.	2.63 in Hex Output Shaft With 2.63 in Hex Extension Shaft	1	
19.	Pole Guides for 24.00 in Dia Pole Maximum	1	
20.	Power Distribution Module Is A Compact Self-Contained Electronic System That Provides A Standardized Interface With The Chassis Electrical System.	1	
21.	Warranty: One (1) year parts warranty, one (1) year labor warranty, ninety (90) days warranty for travel charges, limited lifetime structural warranty	1	
22.	Flow Divider Variable - for installation of tools at tailself	1	
<b>UNIT &amp; HYDRAULIC ACCESSORIES</b>			
23.	Unit Installation Components.	1	
24.	Winch Recovery Option, Winch Operates in Neutral, First and Reverse (Automatic Transmissions Only) PTO is allowed to engage in Neutral, First, and Reverse (Winch Recovery). When Park Brake is applied, chassis is forced to Neutral (normal machine operation). PTO will disengage when RPM limits are exceeded (chassis speed of approximately 5mph)	1	
25.	DP30U Hydraulic Front Winch Bumper Package, Two-speed Winch with Tool Box and RH Extended Shaft. One 2-speed switch in the cab, and One 2-speed switch next to the remote mounted control.	1	

<b>Item</b>	<b>Description</b>	<b>Qty</b>	<b>Price</b>
26.	Flow Divider for winch to be installed close to the remote mounted control, with the control lever accessible from the top of the front winch.	1	
27.	150' of 3/4 Winch Cable	1	
28.	Shackle Screw Pin 17 Ton	1	
29.	Winch Controls, Dual Location (In-Cab and Remote Mounted), Air, Single Axis Control Levers (Semi-Meterable). Remote Mounted control to be on the CS with a guard around it.	1	
30.	Dirt Auger, 24" Dia., With 2-5/8" Hex X 104" Long	1	
31.	Winch Rope For Turntable Winch	1	
32.	Load Line Swivel Hook, 5 Ton (Crosby)	1	
33.	Standard 1" Space between Subbase and frame for hose routing and ease of maintenance.	1	
34.	Derrick Subbase (Rigid)	1	
35.	Subbase Storage With Drop Down Door (Paddle Latch) At Rear, Install Stop at 10'.	1	
36.	HVI-22 Hydraulic Oil (Standard).	65	
37.	Hot shift PTO for automatic transmission	1	
38.	Muncie PTO	1	
39.	Standard PTO/Transmission Functionality for Automatic Transmissions - If chassis is in gear, and PTO switch is activated, PTO will not engage. Chassis will remain in gear. Once the chassis is shifted back into gear the PTO will disengage. For some truck configurations the PTO switch must be turned off to allow the transmission to shift into gear.	1	
40.	Spring Loaded Hose Reel, 50 FT Hose Capacity Install CS with payout to rear.	1	
41.	50' Conductive Hose Kit, Black, Includes Quick Disconnects and Dust Caps (Male Pressure, Female Return)	1	
	<b>Body</b>		
42.	Body	1	
43.	Steel Body	1	
44.	T-Box Flatbed	1	
45.	142" Estimated Body Length (Engineering To Determine Final Length)	1	
46.	94 Inch Body Width	1	
47.	46 Inch Body Compartment Height	1	
48.	18 Inch Body Compartment Depth	1	
49.	Finish Paint Body White	1	
50.	Undercoat Body	1	
51.	2 Inch x 4 Inch Drop-In Composite Retaining Board At Rear Of Body	1	
52.	2 Inch x 4 Inch Drop-In Composite Retaining Board At Top Of Side Access	1	
53.	Gripstrut On Curbside Compartment Tops	1	
45.	Stainless Steel Rotary Paddle Latches With Keyed Locks	7	
54.	All Locks Keyed Alike Including Accessories (Preferred Option)	1	
55.	Gas Shock (Gas Spring) Rigid Door Holders On All Vertical Doors	1	
56.	Chains On All Horizontal Doors	1	
57.	Standard Master Body Locking System (Standard Placement Is At Rear.	7	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	Sidepacks With A Throughshelf/Hotstick Door At Rear, Standard Placement Is At The Front)		
58.	One Chock Holder On Each Side of Body With Retaining Lip In Fender Panel (Rear Of Wheel Or Opposite Fuel Fill)	1	
59.	1st Vertical (SS) - Locking Swivel Hooks On An Adjustable Rail - Left Wall	2	
60.	1st Vertical (SS) - Locking Swivel Hooks On An Adjustable Rail - Rear Wall	4	
61.	1st Vertical (SS) - Locking Swivel Hooks On An Adjustable Rail - Right Wall	2	
61.	2 <sup>nd</sup> Vertical (SS) – Adjustable Shelves with removable dividers on 4 inch centers	3	
63.	1st Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Left Wall	2	
64.	1st Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Rear Wall	4	
65.	1st Vertical (CS) - Locking Swivel Hooks On An Adjustable Rail - Right Wall	2	
66.	2nd Vertical (CS) – Adjustable Shelves, with removable dividers on 4" centers	3	
67.	30" L Steel Tailshelf, Width To Match Body	1	
68.	3" Fixed Steel Retaining Rail On Sides And Rear Of Tailshelf With Corner Wash-Out	1	
<b><u>Body and Chassis Accessories</u></b>			
69.	Pole Rack, Two Pole Capacity, installed on SS. To have Pole tensioner style ratchets, accessible from the ground. The rear section is to be adjustable and removable.	1	
70.	T-Style Wire Rack to hold Copper and Aluminum. To hold One reel per side. Mount on SS of tail shelf, payout to rear.	1	
71.	Cone Holder installed on SS Outrigger	1	
72.	5gal Water Cask and Bracket, installed on CS First Vertical	1	
73.	ICC (Underride Protection) Bumper Installed At Rear	1	
74.	T-125 Style Pintle Hitch (30,000 LB MGTW with 6,000 LB MVL)	1	
75.	Set Of Eye Bolts for Trailer Safety Chain, installed one each side of towing device mount.	1	
76.	Rigid Step Mounted Beneath Side Access Steps (Installed To Extend Approx. 2" Outward)	1	
77.	Riding Seat Access Step from Cargo Floor	1	
78.	Mounting Brackets for Lights, Located on Lower Boom Rest	1	
79.	Outrigger Pad Holder, 25" L x 25" W x 5" H, Fits 24.5" x 24.5" x 4" And Smaller Pads, Bolt-On, Bottom Washout Holes, 3/4" Lip Retainer	4	
80.	Pendulum Retainers For Outrigger Pad Holders	4	
81.	Mud Flaps With Logo (Pair)	1	
82.	Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H (Pair)	1	
83.	Wheel Chock Holders (Pair), For Installation Under Flatbed Or Dump Body	1	
84.	Dock Bumpers (Pair), Fixed Mounting (Rectangular Bumper), Installed At Rear Frame Rails So They Are The Furthest Point Back	1	
85.	Slope Indicator Assembly For Machine With Outriggers	1	
86.	Plastic Outrigger Pad, 24" x 24" x 1", with Rope Handle	4	
87.	Triangular Reflector Kit, Installed	1	
88.	5 LB Fire Extinguisher With Light Duty Bracket, Installed Per DEPS 042 (In Cab .	1	

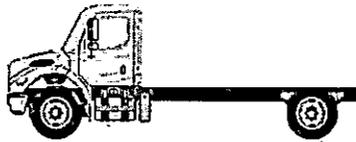
<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
	or Inside Compartment Only)		
89.	Vinyl manual pouch for storage of all operator and parts manuals	1	
	<b><u>Electrical Accessories</u></b>		
90.	Scanreco Remote Control System, to be used for upper and lower controls	1	
91.	Lights and reflectors in accordance with FMVSS #108 lighting package. (Complete LED, including LED reverse lights)	1	
92.	RED LED Strobe Light with Brush Guard Installed one each side of boom stow.	2	
93.	Two (2) LED Remote Control Go-Light, Magnetic, Installed on center of hood, and one mounted on side of boom, in front of riding seat	2	
94.	Four (4) LED Flood Lights, One mounted under top center of boom rest for cargo lighting, One mounted on rear outriggers for tail shelf, and two mounted under tail shelf. Master switch in cab. The two mounted under tail shelf will be wired into the reverse lights,	4	
95.	Two (2) LED Whelen# PELCB, fender style flood lights	2	
96.	Dual Tone Back-Up With Outrigger Motion Alarm	1	
97.	Standard Multi-Point Grounding System	5	
98.	Copper U Shaped Grounding Lug (Threaded) Install on CS front and rear bumper.	2	
99.	Spring-loaded Grounding Reel, with 35' of 1/0 Grounding cable, include clamps and jaws. Mount on CS of tail shelf next to Hose Reel	1	
100.	7-Way Trailer Receptacle (Pin Type) Installed At Rear	1	
101.	Electric Trailer Brake Controller (Kelsey Hayes #81741) Controls installed in the cab.	1	
102.	Backup Camera System, 7" Color LCD Monitor, Heated Infrared Camera with Day/Night Sensor and Audio	1	
103.	Power Distribution Module Is A Compact Self-Contained Electronic System That Provides A Standardized Interface With The Chassis Electrical System. (Includes Operator's Manual)	1	
104.	Install Outrigger Interlock System	1	
105.	Modular Panel System - Includes Mounting Panel and Accessory Switches	1	
	<b><u>Finishing Details</u></b>		
106.	Powder Coat Unit White	1	
107.	Finish Paint Body Accessories Above Body Floor White	1	
108.	Additional Black Undercoating	1	
109.	Components mounted below frame rail shall be coated black. i.e. step bumpers, steps, frame extension, pintle hook mount, dock bumper mounts, D-rings, receiver tubes, accessory mounts, light brackets, under-ride protection, etc. Components mounted to under side of body shall be coated black. i.e. Wheel chock holders, mud flap brackets, pad carriers, boxes, lighting brackets, steps, and ladders.	1	
110.	Apply Non-Skid Coating to all walking surfaces , including front winch and top of all compartments.	1	
111.	Apply Additional Undercoating from behind chassis cab to rear of truck.	1	
112.	English Safety And Instructional Decals	1	

<u>Item</u>	<u>Description</u>	<u>Qty</u>	<u>Price</u>
113.	Vehicle Height Placard - Installed In Cab	1	
114.	Placard, HVI-22 Hydraulic Oil	1	
115.	Dielectric test unit according to ANSI requirements.	1	
116.	Stability test unit according to ANSI requirements.	1	
117.	DOT Certification Required place sticker in window, and form inside manual pouch	1	
118.	Delivery Of Completed Unit with at least ¼ tank of fuel to the following address: 1000 Central Ave Springfield, TN 37172 Contact: Nicky Pinson 615-946-1914	1	
	<b><u>Chassis</u></b>		
119.	See Attached FL Chassis Spec	1	
120.	Warranty: One (1) year parts warranty, one (1) year labor warranty, ninety (90) days warranty for travel charges, limited lifetime structural warranty	1	
	<b>Unit / Body / Chassis Total</b>		
	<b>Total</b>		

BY \_\_\_\_\_

Notes:

**2019 Freightliner M2 106  
4X2 @ 33,000 GVWR  
13.2K FAWR 21K RAWR 33K GVWR LIMIT**



Components shown may not reflect all spec'd options and are not to scale

# S P E C I F I C A T I O N   P R O P O S A L

Data Code	Description	Weight Front	Weight Rear
<b>Price Level</b>			
PRL-15M	M2 PRL-15M (EFF:10/25/16)		
<b>Data Version</b>			
DRL-012	SPECPRO21 DATA RELEASE VER 012		
<b>Interior Convenience/Driver Retention Package</b>			
055-998	NO INTERIOR CONVENIENCE PACKAGE		
<b>Vehicle Configuration</b>			
001-172	M2 106 CONVENTIONAL CHASSIS	5,759	3,503
004-219	2019 MODEL YEAR SPECIFIED		
002-004	SET BACK AXLE - TRUCK		
019-001	TRAILER TOWING PROVISION AT END OF FRAME FOR TRUCK	10	10
003-001	LH PRIMARY STEERING LOCATION		
<b>General Service</b>			
AA1-003	TRUCK/TRAILER CONFIGURATION		
AA6-001	DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
A85-010	UTILITY/REPAIR/MAINTENANCE SERVICE		
A84-1UT	UTILITY BUSINESS SEGMENT		
AA4-011	FIXED LOAD COMMODITY		
AA5-002	TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
AB1-008	MAXIMUM 8% EXPECTED GRADE		
AB5-001	SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE		
995-091	MEDIUM TRUCK WARRANTY		
A66-99D	EXPECTED FRONT AXLE(S) LOAD : 13000.0 lbs		
A68-99D	EXPECTED REAR DRIVE AXLE(S) LOAD : 20000.0 lbs		
A63-99D	EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 33000.0 lbs		

Data Code	Description	Weight Front	Weight Rear
A70-99D	EXPECTED GROSS COMBINATION WEIGHT : 50000.0 lbs		

#### Truck Service

AA3-006	UTILITY BODY		
A88-99D	EXPECTED TRUCK BODY LENGTH : 1.0 ft		
AE2-99D	EXPECTED TRUCK BODY WIDTH : 96.0 in		
A89-99D	BRAKING-EXPECTED CAB TO BODY CLEARANCE : 3.0 in		
AF3-1EN	ALTEC		
AF7-99D	EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME "XX" INCHES : 32.0 in		

#### Engine

101-21U	CUM B6.7 250 HP @ 2400 RPM, 2600 GOV, 660 LB/FT @ 1600 RPM		
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#### Electronic Parameters

79A-075	75 MPH ROAD SPEED LIMIT		
79B-000	CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT		
79K-007	PTO MODE ENGINE RPM LIMIT - 1100 RPM		
79M-001	PTO MODE BRAKE OVERRIDE - SERVICE BRAKE APPLIED		
79P-002	PTO RPM WITH CRUISE SET SWITCH - 700 RPM		
79Q-003	PTO RPM WITH CRUISE RESUME SWITCH - 800 RPM		
79S-001	PTO MODE CANCEL VEHICLE SPEED - 5 MPH		
79U-007	PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND		
80G-002	PTO MINIMUM RPM - 700		
80J-002	REGEN INHIBIT SPEED THRESHOLD - 5 MPH		

#### Engine Equipment

99C-017	2016 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL GHG17 CONFIGURATION		
99D-009	2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LEFT SIDE OF HOOD)		
13E-001	STANDARD OIL PAN		
105-001	ENGINE MOUNTED OIL CHECK AND FILL		
133-004	ONE PIECE VALVE COVER		
014-099	SIDE OF HOOD AIR INTAKE WITH FIREWALL MOUNTED DONALDSON AIR CLEANER		

Data Code	Description	Weight Front	Weight Rear
124-1D7	DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE		
292-1D8	(2) ALLIANCE MODEL 1131, GROUP 31, 12 VOLT MAINTENANCE FREE 1900 CCA THREADED STUD BATTERIES, NON FCCC ONLY		
290-017	BATTERY BOX FRAME MOUNTED		
281-001	STANDARD BATTERY JUMPERS		
	281-005 WITH 2/0 CAB TO RAIL GROUND CABLE		
282-001	SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB		
291-017	WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
289-001	NON-POLISHED BATTERY BOX COVER		
295-029	POSITIVE AND NEGATIVE POSTS FOR JUMPSTART LOCATED ON FRAME NEXT TO STARTER	2	
107-032	CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
108-002	STANDARD MECHANICAL AIR COMPRESSOR GOVERNOR		
131-013	AIR COMPRESSOR DISCHARGE LINE		
152-041	ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM		
128-076	CUMMINS EXHAUST BRAKE INTEGRAL WITH VARIABLE GEOMETRY TURBO WITH ON/OFF DASH SWITCH	20	
016-1C3	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE		
28F-002	ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND DASH MOUNTED REGENERATION REQUEST SWITCH		
239-001	STANDARD EXHAUST SYSTEM LENGTH		
237-052	RH STANDARD HORIZONTAL TAILPIPE		
23U-001	6 GALLON DIESEL EXHAUST FLUID TANK		
30N-003	100 PERCENT DIESEL EXHAUST FLUID FILL		
43X-002	LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
23Y-001	STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING		
43Y-001	STANDARD DIESEL EXHAUST FLUID TANK CAP		
273-035	HORTON HT650 FRONTAL AIR ON/OFF ENGINE FAN CLUTCH		

Data Code	Description	Weight Front	Weight Rear
276-001	AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON ENGINE MOUNTED		
110-003	CUMMINS SPIN ON FUEL FILTER		
118-001	FULL FLOW OIL FILTER		
266-078	950 SQUARE INCH ALUMINUM RADIATOR		
103-039	ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT		
171-007	GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
172-001	CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES		
270-016	RADIATOR DRAIN VALVE		
168-002	LOWER RADIATOR GUARD		
138-010	PHILLIPS-TEMRO 750 WATT/115 VOLT BLOCK HEATER	4	
140-053	BLACK PLASTIC ENGINE HEATER RECEPTACLE MOUNTED UNDER LH DOOR		
134-001	ALUMINUM FLYWHEEL HOUSING		
132-004	ELECTRIC GRID AIR INTAKE WARMER		
155-058	DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH		

### Transmission

342-584	ALLISON 3500 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION	200	60
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### Transmission Equipment

343-339	ALLISON VOCATIONAL PACKAGE 223 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODELS RDS, HS, MH AND TRV		
84B-012	ALLISON VOCATIONAL RATING FOR ON/OFF HIGHWAY APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES		
84C-023	PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
84D-023	SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
84E-013	S1 PERFORMANCE PRIMARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		
84F-012	S1 PERFORMANCE SECONDARY SHIFT SCHEDULE, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY		

Data Code	Description	Weight Front	Weight Rear
84G-017	2500 RPM PRIMARY MODE SHIFT SPEED		
84H-017	2500 RPM SECONDARY MODE SHIFT SPEED		
84L-010	DISABLE - LOAD BASED SHIFT SCHEDULE, DISABLE - VEHICLE ACCELERATION CONTROL		
84N-000	NEUTRAL AT STOP - DISABLED, FUELSENSE - DISABLED		
84U-000	DRIVER SWITCH INPUT - DEFAULT - NO SWITCHES		
34C-002	ELECTRONIC TRANSMISSION CUSTOMER ACCESS CONNECTOR MOUNTED BACK OF CAB		
362-1Y0	(2) CUSTOMER INSTALLED CHELSEA 277 SERIES PTO'S		
363-011	PTO MOUNTING, LH AND RH SIDES OF MAIN TRANSMISSION		
341-018	MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
345-003	PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED		
97G-004	TRANSMISSION PROGNOSTICS - ENABLED 2013		
370-015	WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK		
346-013	TRANSMISSION OIL CHECK AND FILL WITH CROSSOVER TO CLEAR LH PTO AND DIRECT MOUNT PUMP		
35T-001	SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)		

### Front Axle and Equipment

400-1A7	DETROIT DA-F-13.3-3 13,300# FF1 71.5 KPI/3.74 DROP SINGLE FRONT AXLE
402-020	MERITOR 15X4 Q+ CAM FRONT BRAKES
403-002	NON-ASBESTOS FRONT BRAKE LINING
419-023	CONMET CAST IRON FRONT BRAKE DRUMS
409-006	FRONT OIL SEALS
408-001	VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL
416-022	STANDARD SPINDLE NUTS FOR ALL AXLES
405-002	MERITOR AUTOMATIC FRONT SLACK ADJUSTERS
536-050	TRW THP-60 POWER STEERING
539-003	POWER STEERING PUMP
534-015	2 QUART SEE THROUGH POWER STEERING RESERVOIR

Data Code	Description	Weight Front	Weight Rear
40T-002	SYNTHETIC 75W-90 FRONT AXLE LUBE		
<b>Front Suspension</b>			
620-003	14,600# FLAT LEAF FRONT SUSPENSION	250	
619-004	GRAPHITE BRONZE BUSHINGS WITH SEALS - FRONT SUSPENSION		
62G-007	355MM FRONT SUSPENSION WHEEL HEIGHT		
62H-014	LEFT AND RIGHT FRONT SHACKLE PINS WITH ZERK FITTINGS OUTBOARD		
410-001	FRONT SHOCK ABSORBERS		
<b>Rear Axle and Equipment</b>			
420-1C8	DETROIT DA-RS-21.0-4 21,000# R-SERIES SINGLE REAR AXLE		
421-614	6.14 REAR AXLE RATIO		
424-001	IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
386-073	MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES		
452-001	DRIVER CONTROLLED TRACTION DIFFERENTIAL - SINGLE REAR AXLE		20
878-018	(1) DRIVER CONTROLLED DIFFERENTIAL LOCK REAR VALVE FOR SINGLE DRIVE AXLE		
87B-004	BLINKING LAMP WITH EACH MODE SWITCH, DIFFERENTIAL UNLOCK WITH IGNITION OFF, ACTIVE <5 MPH		
423-020	MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES		
433-002	NON-ASBESTOS REAR BRAKE LINING		
434-011	BRAKE CAMS AND CHAMBERS ON FORWARD SIDE OF DRIVE AXLE(S)		
451-023	CONMET CAST IRON REAR BRAKE DRUMS		
440-006	REAR OIL SEALS		
426-100	WABCO TRISTOP D LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS		
428-002	MERITOR AUTOMATIC REAR SLACK ADJUSTERS		
41T-002	SYNTHETIC 75W-90 REAR AXLE LUBE		
<b>Rear Suspension</b>			
622-1MJ	23,000# 52 INCH VARIABLE RATE MULTI-LEAF SPRING REAR SUSPENSION WITH LEAF SPRING HELPER		110
621-001	SPRING SUSPENSION - NO AXLE SPACERS		

Data Code	Description	Weight Front	Weight Rear
431-001	STANDARD AXLE SEATS IN AXLE CLAMP GROUP		
<b>Brake System</b>			
018-002	AIR BRAKE PACKAGE		
490-100	WABCO 4S/4M ABS WITHOUT TRACTION CONTROL		
871-001	REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES		
904-001	FIBER BRAID PARKING BRAKE HOSE		
412-001	STANDARD BRAKE SYSTEM VALVES		
46D-002	STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM		
413-002	STD U.S. FRONT BRAKE VALVE		
432-003	RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE		
480-083	WABCO SS-1200 PLUS AIR DRYER WITH INTEGRAL AIR GOVERNOR AND HEATER		
479-015	AIR DRYER FRAME MOUNTED		
460-001	STEEL AIR BRAKE RESERVOIRS		
607-001	CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD		
477-011	PETCOCK DRAIN VALVES ON ALL AIR TANK(S)		
<b>Trailer Connections</b>			
914-001	AIR CONNECTIONS TO END OF FRAME WITH GLAD HANDS FOR TRUCK AND NO DUST COVERS		
296-027	PRIMARY CONNECTOR/RECEPTACLE WIRED FOR COMBINATION STOP/TURN, CENTER PIN POWERED THROUGH IGNITION WITH STOP SIGNAL PREWIRE PACKAGE		
297-001	SAE J560 7-WAY PRIMARY TRAILER CABLE RECEPTACLE MOUNTED END OF FRAME		
335-004	UPGRADED CHASSIS MULTIPLEXING UNIT		
32A-002	UPGRADED BULKHEAD MULTIPLEXING UNIT		
30L-998	NO HIGH CURRENT TRAILER/BODY CABLE		
<b>Wheelbase &amp; Frame</b>			
545-482	4825MM (190 INCH) WHEELBASE		
546-100	11/32X3-1/2X10-3/16 INCH STEEL FRAME (8.73MMX258.8MM/0.344X10.19 INCH) 120KSI	50	100
552-053	2250MM (89 INCH) REAR FRAME OVERHANG		
55W-008	FRAME OVERHANG RANGE: 81 INCH TO 90 INCH	-30	130

Data Code	Description	Weight Front	Weight Rear
AC8-99D	CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 124.45 in		
AE8-99D	CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 121.45 in		
AE4-99D	CALC'D FRAME LENGTH - OVERALL : 308.39		
AM6-99D	CALC'D SPACE AVAILABLE FOR DECKPLATE : 124.45 in		
FSS-0LH	CALCULATED FRAME SPACE LH SIDE : 129.85 in		
FSS-0RH	CALCULATED FRAME SPACE RH SIDE : 109.82 in		
553-001	SQUARE END OF FRAME		
550-001	FRONT CLOSING CROSSMEMBER		
559-001	STANDARD WEIGHT ENGINE CROSSMEMBER		
561-010	CROSSMEMBER FLUSH WITH BACK OF CAB		
562-001	STANDARD MIDSHIP #1 CROSSMEMBER(S)		
572-063	STANDARD REARMOST CROSSMEMBER WITH DOUBLE STANDARD CROSMEMBER SPACING		
565-001	STANDARD SUSPENSION CROSSMEMBER		

### Chassis Equipment

556-1AP	THREE-PIECE 14 INCH PAINTED STEEL BUMPER WITH COLLAPSIBLE ENDS	30	
558-001	FRONT TOW HOOKS - FRAME MOUNTED	15	
574-001	BUMPER MOUNTING FOR SINGLE LICENSE PLATE		
586-024	FENDER AND FRONT OF HOOD MOUNTED FRONT MUDFLAPS		
551-017	GRADE 8 THREADED HEX HEADED FRAME FASTENERS INSTALLED WITH BOLT HEADS ON OUTSIDE OF FRAME		
605-103	D15-28195-000 CENTER PUNCH TO MARK CENTERLINE OF REAR SUSPENSION ON TOP FLANGE OF FRAME		
924-006	UPPER TRUCK EQUIPMENT MANUFACTURER AND LOWER WRAPPED LEFTHAND MID- CHASSIS ROUTING & CLIPPING BRACKETS FOR A 10 INCH RAIL		
606-151	ALTEC DRAWING # 990057138 ADVANCE TO NEXT REV		

### Fuel Tanks

204-215	50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH	20	
218-005	RECTANGULAR FUEL TANK(S)		

Data Code	Description	Weight Front	Weight Rear
215-005	PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS		
212-063	FUEL TANK(S) FORWARD; -544MM FUEL TANK BRACKET ELEVATION MOUNTING		
664-001	PLAIN STEP FINISH		
205-001	FUEL TANK CAP(S)		
122-1J2	DETROIT FUEL/WATER SEPARATOR WITH WATER IN FUEL SENSOR AND HAND PRIMER	-5	
216-020	EQUIFLO INBOARD FUEL SYSTEM		
202-016	HIGH TEMPERATURE REINFORCED NYLON FUEL LINE		
<b>Tires</b>			
093-1AX	MICHELIN XZE2 11R22.5 16 PLY RADIAL FRONT TIRES	24	
094-1UX	MICHELIN X MULTI D 11R22.5 14 PLY RADIAL REAR TIRES		96
<b>Hubs</b>			
418-060	CONMET PRESET PLUS PREMIUM IRON FRONT HUBS	20	
450-060	CONMET PRESET PLUS PREMIUM IRON REAR HUBS		
<b>Wheels</b>			
502-717	ACCURIDE 50408 ACCU-LITE 22.5X8.25 10-HUB PILOT 6.16 INSET 2-HAND STEEL DISC FRONT WHEELS		
505-717	ACCURIDE 50408 ACCU-LITE 22.5X8.25 10-HUB PILOT 2-HAND STEEL DISC REAR WHEELS		
496-011	FRONT WHEEL MOUNTING NUTS		
497-011	REAR WHEEL MOUNTING NUTS		
<b>Cab Exterior</b>			
829-071	106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB		
650-009	RUBBER CAB MOUNTS		
678-998	NO GRAB HANDLES		
646-009	PAINTED PLASTIC GRILLE		
65X-001	ARGENT SILVER HOOD MOUNTED AIR INTAKE GRILLE		
644-004	FIBERGLASS HOOD		
727-1AF	SINGLE 14 INCH ROUND HADLEY AIR HORN UNDER LH DECK	4	
726-002	DUAL ELECTRIC HORNS		

Data Code	Description	Weight Front	Weight Rear
728-001	SINGLE HORN SHIELD		
657-001	DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME		
575-001	REAR LICENSE PLATE MOUNT END OF FRAME		
312-043	INTEGRAL HEADLIGHT/MARKER ASSEMBLY		
302-001	(5) AMBER MARKER LIGHTS		
311-019	HEADLIGHTS ON WITH WIPERS, WITH DAYTIME RUNNING LIGHTS		
294-001	INTEGRAL STOP/TAIL/BACKUP LIGHTS		
300-015	STANDARD FRONT TURN SIGNAL LAMPS		
744-1BH	DUAL WEST COAST MOLDED-IN COLOR MIRRORS		
797-001	DOOR MOUNTED MIRRORS		
796-001	102 INCH EQUIPMENT WIDTH		
743-1AP	LH AND RH 8 INCH MOLDED-IN COLOR CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS		
729-001	STANDARD SIDE/REAR REFLECTORS		
275-063	2-STAGE ELECTRIC HORN AND HAZARD LAMP ALERT CONTROLLED BY PARTICULATE FILTER REGENERATION REQUIRED STATUS		
768-043	63X14 INCH TINTED REAR WINDOW		
661-003	TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS		
654-003	MANUAL DOOR WINDOW REGULATORS		
663-013	TINTED WINDSHIELD		
659-019	2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED		

### Cab Interior

707-1AK	OPAL GRAY VINYL INTERIOR		
706-013	MOLDED PLASTIC DOOR PANEL		
708-013	MOLDED PLASTIC DOOR PANEL		
772-006	BLACK MATS WITH SINGLE INSULATION		
785-001	DASH MOUNTED ASH TRAYS AND LIGHTER		
691-008	FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING		
694-010	IN DASH STORAGE BIN		
693-003	PLASTIC MANIFEST BOX - LH DOOR		
742-007	(2) CUP HOLDERS LH AND RH DASH		
680-006	GRAY/CHARCOAL FLAT DASH		

Data Code	Description	Weight Front	Weight Rear
700-002	HEATER, DEFROSTER AND AIR CONDITIONER		
701-001	STANDARD HVAC DUCTING		
703-005	MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH		
170-015	STANDARD HEATER PLUMBING		
130-033	DENSO HEAVY DUTY AIR CONDITIONER COMPRESSOR		
702-002	BINARY CONTROL, R-134A		
739-033	STANDARD INSULATION		
285-013	SOLID-STATE CIRCUIT PROTECTION AND FUSES		
280-007	12V NEGATIVE GROUND ELECTRICAL SYSTEM		
324-011	DOMED DOOR ACTIVATED LH AND RH, DUAL READING LIGHTS, FORWARD CAB ROOF		
655-001	CAB DOOR LATCHES WITH MANUAL DOOR LOCKS		
284-023	(1) 12 VOLT POWER SUPPLY IN DASH		
756-1J1	BASIC HIGH BACK NON SUSPENSION DRIVER SEAT WITH FORE AND AFT ADJUSTMENT		
760-1ED	2 MAN TOLL BOX MID BACK NON SUSP FRONT PASSENGER SEAT WITH 3.0" X4.75" CUT OUT IN TOOL BOX BACK PANEL FOR HARNESS		
711-004	LH AND RH INTEGRAL DOOR PANEL ARMRESTS		
758-036	VINYL WITH VINYL INSERT DRIVER SEAT		
761-036	VINYL WITH VINYL INSERT PASSENGER SEAT		
763-101	BLACK SEAT BELTS		
532-002	ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN	10	
540-015	4-SPOKE 18 INCH (450MM) STEERING WHEEL		
765-002	DRIVER AND PASSENGER INTERIOR SUN VISORS		

<b>Instruments &amp; Controls</b>
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732-004	GRAY DRIVER INSTRUMENT PANEL
734-004	GRAY CENTER INSTRUMENT PANEL
87L-003	ENGINE REMOTE INTERFACE WITH PARK BRAKE AND NEUTRAL INTERLOCKS
870-001	BLACK GAUGE BEZELS
486-001	LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM
840-002	2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES
198-025	INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS

Data Code	Description	Weight Front	Weight Rear
149-013	ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL		
156-007	KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY		
811-042	ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED WARNING LAMPS AND DATA LINKED		
160-039	(1) HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH AND (1) SAE J1939 DIAGNOSTIC INTERFACE CONNECTOR LOCATED CENTER OF DASH		
844-001	2 INCH ELECTRIC FUEL GAUGE		
148-074	ENGINE REMOTE INTERFACE NOT CONFIGURED		
163-001	ENGINE REMOTE INTERFACE CONNECTOR AT BACK OF CAB		
33U-001	PREWIRE PACKAGE FOR ALTEC CONTROL MODULE AND CHASSIS INTERFACE W/ BW CUTOUT		
856-001	ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE		
864-001	2 INCH TRANSMISSION OIL TEMPERATURE GAUGE		
830-017	ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY		
372-051	CUSTOMER FURNISHED AND INSTALLED PTO CONTROLS		
73B-998	NO LANE DEPARTURE WARNING SYSTEM		
852-002	ELECTRIC ENGINE OIL PRESSURE GAUGE		
679-001	OVERHEAD INSTRUMENT PANEL		
746-115	AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH AND USB AND AUXILIARY INPUTS, J1939	10	
747-001	DASH MOUNTED RADIO		
750-002	(2) RADIO SPEAKERS IN CAB		
753-040	24 INCH AM/FM ANTENNA MOUNTED ON LH SIDE MIRROR, RG-62		
810-027	ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
817-001	STANDARD VEHICLE SPEED SENSOR		
812-001	ELECTRONIC 3000 RPM TACHOMETER		
8D1-998	NO DETROIT CONNECT SERVICES SELECTED		
8Z1-998	NO ZONAR SERVICES SELECTED		

Data Code	Description	Weight Front	Weight Rear
162-011	IDLE LIMITER, ELECTRONIC ENGINE		
81Y-001	PRE-TRIP LAMP INSPECTION, ALL OUTPUTS FLASH, WITH SMART SWITCH		
87P-001	CAB AUXILIARY POWER CABLE		
482-001	BW TRACTOR PROTECTION VALVE		
883-001	TRAILER HAND CONTROL BRAKE VALVE		
836-015	DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY		
660-008	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY		
304-001	MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH		
882-004	TWO VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR		
299-013	SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE		
298-039	INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS		
869-998	NO MISCELLANEOUS GAUGES		

#### Design

065-000	PAIN: ONE SOLID COLOR
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#### Color

980-5F6	CAB COLOR A: L0006EB WHITE ELITE BC
986-020	BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT
98K-998	NO FUEL TANK CABINET PAINT
962-972	POWDER WHITE (N0006EA) FRONT WHEELS/RIMS (PKWHT21, TKWHT21, W, TW)
966-972	POWDER WHITE (N0006EA) REAR WHEELS/RIMS (PKWHT21, TKWHT21, W, TW)
964-6Z7	BUMPER PAINT: FP24812 ARGENT SILVER DUPONT FLEX
969-099	17 DIGIT BAR CODE INSIDE LH DOOR
963-003	STANDARD E COAT/UNDERCOATING

#### Certification / Compliance

996-001	U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS
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#### Secondary Factory Options

998-001	CORPORATE PDI CENTER IN-SERVICE ONLY
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**TOTAL VEHICLE SUMMARY**

**Weight Summary**

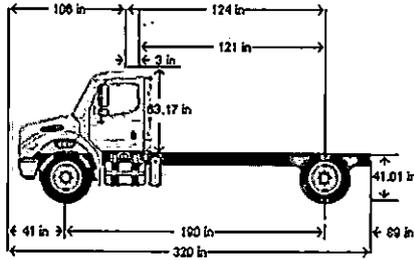
	<b>Weight Front</b>	<b>Weight Rear</b>	<b>Total Weight</b>
Factory Weight <sup>+</sup>	6393 lbs	4029 lbs	10422 lbs
<b>Total Weight<sup>+</sup></b>	<b>6393 lbs</b>	<b>4029 lbs</b>	<b>10422 lbs</b>

**Extended Warranty**

WAG-009 TOWING: 6 MONTHS/UNLIMITED MILES/KM EXTENDED TOWING  
COVERAGE \$550 CAP FEX APPLIES

(+) Weights shown are estimates only.  
If weight is critical, contact Customer Application Engineering.

## D I M E N S I O N S



### VEHICLE SPECIFICATIONS SUMMARY - DIMENSIONS

Model .....	M2106
Wheelbase (545) .....	4825MM (190 INCH) WHEELBASE
Rear Frame Overhang (552) .....	2250MM (89 INCH) REAR FRAME OVERHANG
Fifth Wheel (578) .....	NO FIFTH WHEEL
Mounting Location (577) .....	NO FIFTH WHEEL LOCATION
Maximum Forward Position (in) .....	0
Maximum Rearward Position (in) .....	0
Amount of Slide Travel (in) .....	0
Slide Increment (in) .....	0
Desired Slide Position (in) .....	0.0
Cab Size (829) .....	106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Sleeper (682) .....	NO SLEEPER BOX/SLEEPERCAB
Exhaust System (016) .....	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE

### TABLE SUMMARY - DIMENSIONS

Dimensions	Inches
Bumper to Back of Cab (BBC)	106.3
Bumper to Centerline of Front Axle (BA)	40.7
Min. Cab to Body Clearance (CB)	3.0
Back of Cab to Centerline of Rear Axle(s) (CA)	124.4
Effective Back of Cab to Centerline of Rear Axle(s) (Effective CA)	121.4
Back of Cab Protrusions (Exhaust/Inake) (CP)	0.0
Back of Cab Protrusions (Side Extenders/Trim Tab) (CP)	0.0
Back of Cab Protrusions (CNG Tank)	0.0
Back of Cab Clearance (CL)	3.0
Back of Cab to End of Frame	213.4
Cab Height (CH)	63.2
Wheelbase (WB)	190.0
Frame Overhang (OH)	89.0
Overall Length (OAL)	319.7
Rear Axle Spacing	0.0
Unladen Frame Height at Centerline of Rear Axle	41.0

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

# GVWR

## VEHICLE SPECIFICATIONS SUMMARY - GVWR

Model.....M2106  
Cab Size (829)..... 106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB  
Expected Front Axle(s) Load (lbs)..... 13000.0  
Expected Pusher Axle(s) Load (lbs)..... 0.0  
Expected Rear Axle(s) Load (lbs).....20000.0  
Expected Tag Axle(s) Load (lbs)..... 0.0  
Expected GVW (lbs).....33000  
Expected GCW (lbs).....50000.0  
Front Axle (400)..... DETROIT DA-F-13.3-3 13,300# FF1 71.5 KPI/3.74 DROP SINGLE FRONT AXLE  
Front Suspension (620)..... 14,600# FLAT LEAF FRONT SUSPENSION  
Front Hubs (418)..... CONMET PRESET PLUS PREMIUM IRON FRONT HUBS  
Front Disc Wheels (502)..... ACCURIDE 50408 ACCU-LITE 22.5X8.25 10-HUB PILOT 6.16 INSET 2-HAND STEEL DISC FRONT WHEELS  
Front Tires (093)..... MICHELIN XZE2 11R22.5 16 PLY RADIAL FRONT TIRES  
Front Brakes (402)..... MERITOR 15X4 Q+ CAM FRONT BRAKES  
Steering Gear (536)..... TRW THP-60 POWER STEERING  
Rear Axle (420)..... DETROIT DA-RS-21.0-4 21,000# R-SERIES SINGLE REAR AXLE  
Rear Suspension (622)..... 23,000# 52 INCH VARIABLE RATE MULTI-LEAF SPRING REAR SUSPENSION WITH LEAF SPRING HELPER  
Rear Hubs (450)..... CONMET PRESET PLUS PREMIUM IRON REAR HUBS  
Rear Disc Wheels (505)..... ACCURIDE 50408 ACCU-LITE 22.5X8.25 10-HUB PILOT 2-HAND STEEL DISC REAR WHEELS  
Rear Tires (094)..... MICHELIN X MULTI D 11R22.5 14 PLY RADIAL REAR TIRES  
Rear Brakes (423)..... MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES  
Pusher / Tag Axle (443)..... NO PUSHER OR TAG AXLE  
Pusher / Tag Suspension (626)..... NO PUSHER OR TAG SUSPENSION  
Pusher / Tag Hubs (449)..... NO PUSHER OR TAG HUBS  
Pusher/Tag Disc Wheels (509)..... NO PUSHER/TAG DISC WHEELS  
Pusher / Tag Tires (095)..... NO PUSHER/TAG TIRES  
Pusher / Tag Brakes (456)..... NO PUSHER/TAG BRAKES

## TABLE SUMMARY - GVWR

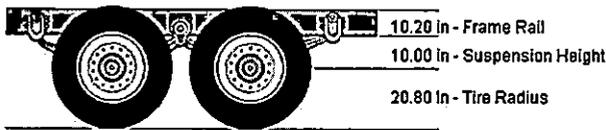
	Front	Rear
<b>Axle Component Weight Ratings</b>		
Axles	13300	21000
Suspension	14600	23000
Hubs	14000	26000
Brakes	13300	20000
Wheels	14780	29560
Tires	13220	23360
Power Steering	13300	N/A
GAWR (per axle)	13220	20000
GAWR (per axle system)	13220	20000
Expected Load (per axle system)	13000	20000
<b>Vehicle GVWR Summary</b>		
Calculated GVWR	33220	
Expected GVWR	33000	
All weights displayed in pounds		

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.

33,000 GVWR LIMIT

## UNLADEN FRAME HEIGHT

Unladen Height	Requested	Calculated
Frame (in)	N/A	41.00



## VEHICLE SPECIFICATIONS SUMMARY - UNLADEN FRAME HEIGHT

Model.....	M2106
Cab Size (829).....	106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
Frame Rails (546).....	11/32X3-1/2X10-3/16 INCH STEEL FRAME (8.73MMX258.8MM/0.344X10.19 INCH) 120KSI(546)
Web Height (in).....	10.1875
Flange Thickness (in).....	0.34375
Rear Suspension (622).....	23,000# 52 INCH VARIABLE RATE MULTI-LEAF SPRING REAR SUSPENSION WITH LEAF SPRING HELPER
Rear Suspension Ride Height (621).....	SPRING SUSPENSION - NO AXLE SPACERS
Axle C/L to Bottom of Frame (in).....	10.018
Rear Tires (094).....	MICHELIN X MULTI D 11R22.5 14 PLY RADIAL REAR TIRES
Unladen Radius (in).....	20.8
Fifth Wheel (578).....	NO FIFTH WHEEL
Requested Min Height (in).....	0.0
Requested Max Height (in).....	1
Fifth Wheel Leg Height (582).....	NO FIFTH WHEEL LEG HEIGHT
Rear Tow Device (587).....	NO REAR TOWING DEVICE
Requested Min Height (in).....	0.0
Requested Max Height (in).....	0.0

Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.





# IRAN DIVESTMENT ACT NOTICE

Tenn. Code Ann. § 12-12-106 requires the chief procurement officer to publish, using credible information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105.

For these purposes, the State intends to use the attached list of “Entities Ineligible to Contract with the State of South Carolina or any Political Subdivision of the State per the Iran Divestment Act of 2014, S.C. Code Ann §§ 11-57-10, et. Seq.”

While in conclusion on the list would make a person ineligible to contract with the state of Tennessee, if a person ceases its engagement in investment activities in Iran, it may be removed from the list.

If you feel as though you have been erroneously included on this list, please contact the Central Procurement Office at [CPO.Website@tn.gov](mailto:CPO.Website@tn.gov).

HENRY McMASTER, CHAIR  
GOVERNOR  
CURTIS M. LOTTIS, JR.  
VICE GOVERNOR  
RICHARD ECKSTROM, CIA  
COMPTROLLER GENERAL



THE DIVISION OF PROCUREMENT SERVICES

HUGH K. LEATHERMAN, SR.  
CHIEF OF BUDGET AND FINANCIAL COMMITTEE  
W. BRIAN WHITE  
CHIEF OF INVESTMENT AND BUSINESS COMMITTEE  
GRANT GILLESPIE  
DIRECTOR OF PURCHASES

List Date: December 20, 2017

Inquiries/Questions: [irandivestment@mimo.sc.gov](mailto:irandivestment@mimo.sc.gov)

**Entities Ineligible to Contract with the State of South Carolina or any Political Subdivision of the State per the Iran Divestment Act of 2014, S.C. Code Ann. §§ 11-57-10, et seq.**

- |   |  |  |
|---|--|--|
| 1. Abadan Petrochemical Co.   | 27. Hindustan Petroleum Corporation Ltd.             | 53. Oil India Ltd                              |
| 2. Aban Offshore Ltd.   | 28. Hyundai Engineering                              | 54. Oil Industry Investment Co.                |
| 3. Anton Oilfield Services Group                                      | 29. Hyundai Heavy Industries                         | 55. ONGC Videsh Ltd (OVL)                      |
| 4. Arak Petrochemical   | 30. Idemitsu Kosan Co.Ltd                            | 56. Oriental Energy Co., Ltd.                  |
| 5. Arvandan Oil & Gas   | 31. Indian Oil Corporation Ltd.                      | 57. Pardis Petrochemical Co.                   |
| 6. Behran Oil Co.   | 32. Inpex Corporation                                | 58. Pars Oil Co.                               |
| 7. Bharat Petroleum Corporation Ltd.                                  | 33. Iran Power Plant Projects Managements Co.(MAPNA) | 59. Parsian Oil and Gas Development Co.        |
| 8. BP plc   | 34. Japan Drilling Co., Ltd.                         | 60. Petrochemical Industries Investment Co.    |
| 9. China International United Petroleum & Chemical So., Ltd. (Unipeç) | 35. Japan Petroleum Exploration Co.,Ltd.             | 61. Petrochemical Transport Co.                |
| 10. China National Offshore Oil Corp.                                 | 38. JXTG Holdings Inc                                | 62. PetroChina Co. Ltd.                        |
| 11. China National Petroleum Corp. (CNPC)                             | 37. Kharç Petrochemical Co                           | 63. PJSC Lukoil                                |
| 12. China National United Oil Corp.                                   | 38. Koc Holding A.S.                                 | 64. Polskie Gornictwo Naftowe i Gazownictwo SA |
| 13. China Petroleum & Chemical Corp                                   | 39. Korea Gas Corporation                            | 65. Royal Dutch Shell Plc                      |
| 14. Cosmo Energy Holdings Company Limited                             | 40. Linde AG   | 66. Sadid Pipe & Equipments Co.                |
| 15. Daelim Industrial   | 41. Maire Tecnimont S.p.A.                           | 67. Saras Raffinerie Sarde SPA                 |
| 16. Daewoo Engineering & Construction                                 | 42. Mangalore Refinery & Petrochemicals Ltd.         | 68. Sepehr Energy                              |
| 17. Enel Spa  | 43. Marubeni Corporation                             | 69. Shiraz Petrochemical Co.                   |
| 18. Eni Spa   | 44. Mitsubishi Materials Corporation                 | 70. Showa Shell Sekiyu KK                      |
| 19. Esfahan Oil Refining Co.  | 45. Mitsui & Co. Ltd                                 | 71. Sinopec Group                              |
| 20. Essar Oil Ltd.  | 46. Naffiran Intratrade Company                      | 72. Sk Holdings Co. Ltd                        |
| 21. Fanavaran Petrochemical Co  | 47. National Iranian Oil Co.                         | 73. SK Innovation                              |
| 22. Farabi Petrochemical Co.  | 48. National Iranian South Oil Co.                   | 74. Tabriz Oil Refining Company                |
| 23. Fomosa Petrochemical Corp.  | 49. National Iranian Tanker Co.                      | 75. Total S.A.                                 |
| 24. Gazprom OAO   | 50. National Shipping Co Of Saudi Arabia             | 76. Toyo Engineering Corporation               |
| 25. Gubre Fabrikaları T.A.S.  | 51. North Drilling                                   | 77. Türkiye Petrol Rafinerileri AS             |
| 26. Hellenic Petroleum S.A.   | 52. Oil & Natural Gas Corporation Ltd.               | 78. Vitol SA                                   |
|   |  | 79. Zhuhai Zhenrong Company                    |

# IRAN DIVESTMENT ACT

“By the submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each of a joint bid each party thereto certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not a person included within the list created pursuant to § 12-12-106.”

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_