

**Prepared for:**  
GRANT AASEN  
ROSENBAUER HEIMAN INC  
25814 Rudolph Circle  
Sioux Falls, SD 57107  
Phone: 605-543-5098

**Prepared by:**  
Carolyn LeBeau  
ISTATE TRUCK CENTER  
2901 WEST 60TH STREET N.  
SIOUX FALLS, SD 57107  
Phone: 605-336-2995

## SPECIFICATION PROPOSAL

| Description   | Weight<br>Front | Weight<br>Rear |
|---|-----------------|----------------|
| <b>Price Level</b>  |                 |                |
| M2 PRL-26M (EFF:7/26/21)  |                 |                |
| <b>Data Version</b>   |                 |                |
| SPECPRO21 DATA RELEASE VER 043  |                 |                |
| <b>Vehicle Configuration</b>  |                 |                |
| M2 106 CONVENTIONAL CHASSIS   | 5,709           | 3,503          |
| 2023 MODEL YEAR SPECIFIED   |                 |                |
| SET BACK AXLE - TRUCK   |                 |                |
| STRAIGHT TRUCK PROVISION  |                 |                |
| LH PRIMARY STEERING LOCATION  |                 |                |
| <b>General Service</b>  |                 |                |
| TRUCK CONFIGURATION   |                 |                |
| DOMICILED, USA (EXCLUDING CALIFORNIA AND CARB OPT-IN STATES)                              |                 |                |
| FIRE SERVICE  |                 |                |
| EMERGENCY VEHICLES BUSINESS SEGMENT   |                 |                |
| LIQUID BULK COMMODITY   |                 |                |
| TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS                 |                 |                |
| MAXIMUM 8% EXPECTED GRADE   |                 |                |
| SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE |                 |                |
| MEDIUM TRUCK WARRANTY   |                 |                |
| EXPECTED FRONT AXLE(S) LOAD : 16000.0 lbs   |                 |                |
| EXPECTED REAR DRIVE AXLE(S) LOAD : 40000.0 lbs  |                 |                |
| EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 56000.0 lbs                                      |                 |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description   | Weight<br>Front | Weight<br>Rear |
|---|-----------------|----------------|
| <b>Truck Service</b>  |                 |                |
| FIRE TANK - NO MAIN DRIVELINE DRIVEN SPLIT-SHAFT PTO/PUMP   |                 |                |
| EXPECTED TRUCK BODY LENGTH : 0.0 ft   |                 |                |
| ROSENBAUER  |                 |                |
| EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME "XX" INCHES : 32.0 in                                 |                 |                |
| <b>Engine</b>   |                 |                |
| CUM L9 360EV HP @ 2200 RPM, 2200 GOV RPM, 1150 LB-FT @ 1200 RPM, R/F/E                            | 640             | 30             |
| <b>Electronic Parameters</b>  |                 |                |
| 60 MPH ROAD SPEED LIMIT   |                 |                |
| CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT   |                 |                |
| PTO MODE ENGINE RPM LIMIT - 1100 RPM  |                 |                |
| PTO MODE BRAKE OVERRIDE - SERVICE BRAKE APPLIED   |                 |                |
| PTO RPM WITH CRUISE SET SWITCH - 700 RPM  |                 |                |
| PTO RPM WITH CRUISE RESUME SWITCH - 800 RPM   |                 |                |
| PTO MODE CANCEL VEHICLE SPEED - 5 MPH   |                 |                |
| PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND   |                 |                |
| FUEL DOSING OF AFTERTREATMENT ENABLED IN PTO MODE-CLEANS HYDROCARBONS AT HIGH TEMPERATURES ONLY   |                 |                |
| PTO MINIMUM RPM - 700   |                 |                |
| REGEN INHIBIT SPEED THRESHOLD - 5 MPH   |                 |                |
| <b>Engine Equipment</b>   |                 |                |
| 2010 EPA/CARB/GHG21 CONFIGURATION   |                 |                |
| NO 2008 CARB EMISSION CERTIFICATION   |                 |                |
| STANDARD OIL PAN  |                 |                |
| ENGINE MOUNTED OIL CHECK AND FILL   |                 |                |
| SIDE OF HOOD AIR INTAKE WITH NFPA COMPLIANT EMBER SCREEN AND FIRE RETARDANT DONALDSON AIR CLEANER |                 |                |
| DR 12V 275 AMP 40-SI BRUSHLESS PAD ALTERNATOR WITH REMOTE BATTERY VOLTAGE SENSE                   | 10              |                |
| (2) DTNA GENUINE, FLOODED STARTING, MIN 2000CCA, 370RC, THREADED STUD BATTERIES                   | 10              |                |
| BATTERY BOX FRAME MOUNTED   |                 |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| STANDARD BATTERY JUMPERS   |                 |                |
| SINGLE BATTERY BOX FRAME MOUNTED LH<br>SIDE UNDER CAB  |                 |                |
| WIRE GROUND RETURN FOR BATTERY CABLES<br>WITH ADDITIONAL FRAME GROUND RETURN   |                 |                |
| NON-POLISHED BATTERY BOX COVER   |                 |                |
| POSITIVE LOAD DISCONNECT WITH CAB<br>MOUNTED CONTROL SWITCH MOUNTED<br>OUTBOARD DRIVER SEAT  | 10              |                |
| CUMMINS TURBOCHARGED 18.7 CFM AIR<br>COMPRESSOR WITH INTERNAL SAFETY VALVE   |                 |                |
| STANDARD MECHANICAL AIR COMPRESSOR<br>GOVERNOR   |                 |                |
| AIR COMPRESSOR DISCHARGE LINE  |                 |                |
| GVG, FIRE AND EMERGENCY SERVICE<br>VEHICLES ENGINE WARNING   |                 |                |
| CUMMINS ENGINE INTEGRAL BRAKE WITH<br>VARIABLE GEOMETRY TURBO ON/OFF WITH<br>BRAKE LAMPS   | 20              |                |
| RH OUTBOARD UNDER STEP MOUNTED<br>HORIZONTAL AFTERTREATMENT SYSTEM<br>ASSEMBLY WITH RH HORIZONTAL TAILPIPE<br>EXITING FORWARD OF REAR TIRES    | 10              | 5              |
| ENGINE AFTERTREATMENT DEVICE,<br>AUTOMATIC OVER THE ROAD ACTIVE<br>REGENERATION AND DASH MOUNTED SINGLE<br>REGENERATION REQUEST/INHIBIT SWITCH |                 |                |
| STANDARD EXHAUST SYSTEM LENGTH   |                 |                |
| RH HORIZONTAL TAILPIPE, EXIT FORWARD OF<br>REAR TIRES  | 20              | 20             |
| 6 GALLON DIESEL EXHAUST FLUID TANK   |                 |                |
| 100 PERCENT DIESEL EXHAUST FLUID FILL  |                 |                |
| LH MEDIUM DUTY STANDARD DIESEL EXHAUST<br>FLUID TANK LOCATION  |                 |                |
| STANDARD DIESEL EXHAUST FLUID PUMP<br>MOUNTING   |                 |                |
| STANDARD DIESEL EXHAUST FLUID TANK CAP   |                 |                |
| HORTON DRIVEMASTER ADVANTAGE ON/OFF<br>FAN DRIVE   |                 |                |
| AUTOMATIC FAN CONTROL WITH DASH<br>SWITCH AND INDICATOR LIGHT, NON ENGINE<br>MOUNTED   |                 |                |
| CUMMINS SPIN ON FUEL FILTER  |                 |                |
| COMBINATION FULL FLOW/BYPASS OIL FILTER  |                 |                |
| 1100 SQUARE INCH ALUMINUM RADIATOR   | 70              |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| ANTIFREEZE TO -60F, ETHYLENE GLYCOL PRE-CHARGED SCA HEAVY DUTY COOLANT   |                 |                |
| GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT  |                 |                |
| CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES   |                 |                |
| AUXILIARY ENGINE COOLING USING WATER FROM FIRE PUMP  | 10              |                |
| LOWER RADIATOR GUARD   |                 |                |
| ALUMINUM FLYWHEEL HOUSING  |                 |                |
| ELECTRIC GRID AIR INTAKE WARMER  |                 |                |
| DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH  |                 |                |
| <b>Transmission</b>  |                 |                |
| ALLISON 3000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION   | 200             | 60             |
| <b>Transmission Equipment</b>  |                 |                |
| ALLISON VOCATIONAL PACKAGE 198 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL EVS               |                 |                |
| ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES      |                 |                |
| PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY   |                 |                |
| SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 3000/4000 PRODUCT FAMILIES ONLY |                 |                |
| PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE              |                 |                |
| SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE            |                 |                |
| PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE                 |                 |                |
| SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE               |                 |                |
| ENGINE BRAKE RANGE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE        |                 |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| ENGINE BRAKE RANGE ALTERNATE<br>PRESELECT RECOMMENDED BY DTNA AND<br>ALLISON, THIS DEFINED BY ENGINE AND<br>VOCATIONAL USAGE |                 |                |
| FUEL SENSE 2.0 DISABLED - PERFORMANCE -<br>TABLE BASED   |                 |                |
| DRIVER SWITCH INPUT - DEFAULT - NO<br>SWITCHES   |                 |                |
| VEHICLE INTERFACE WIRING CONNECTOR<br>WITHOUT BLUNT CUTS, AT END OF FRAME  |                 |                |
| ELECTRONIC TRANSMISSION CUSTOMER<br>ACCESS CONNECTOR FIREWALL MOUNTED  |                 |                |
| CUSTOMER INSTALLED MUNCIE CS10 SERIES<br>PTO   |                 |                |
| PTO MOUNTING, LH SIDE OF MAIN<br>TRANSMISSION ALLISON  |                 |                |
| MAGNETIC PLUGS, ENGINE DRAIN,<br>TRANSMISSION DRAIN, AXLE(S) FILL AND<br>DRAIN   |                 |                |
| PUSH BUTTON ELECTRONIC SHIFT CONTROL,<br>DASH MOUNTED  |                 |                |
| TRANSMISSION PROGNOSTICS - ENABLED 2013  |                 |                |
| WATER TO OIL TRANSMISSION COOLER, IN<br>RADIATOR END TANK  |                 |                |
| TRANSMISSION OIL CHECK AND FILL WITH<br>ELECTRONIC OIL LEVEL CHECK   |                 |                |
| SYNTHETIC TRANSMISSION FLUID (TES-295<br>COMPLIANT)  |                 |                |
| <b>Front Axle and Equipment</b>  |                 |                |
| DETROIT DA-F-16.0-5 16,000# FL1 71.0 KPI/3.74<br>DROP SINGLE FRONT AXLE  | 190             |                |
| MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT<br>BRAKES, DOUBLE ANCHOR, FABRICATED<br>SHOES  | 10              |                |
| FIRE AND EMERGENCY SEVERE SERVICE,<br>NON-ASBESTOS FRONT LINING  |                 |                |
| CAST IRON OUTBOARD FRONT BRAKE DRUMS   |                 |                |
| FRONT OIL SEALS  |                 |                |
| VENTED FRONT HUB CAPS WITH WINDOW,<br>CENTER AND SIDE PLUGS - OIL  |                 |                |
| STANDARD SPINDLE NUTS FOR ALL AXLES  |                 |                |
| MERITOR AUTOMATIC FRONT SLACK<br>ADJUSTERS   |                 |                |
| TRW TAS-85 POWER STEERING  | 40              |                |
| POWER STEERING PUMP  |                 |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description   | Weight<br>Front | Weight<br>Rear |
|---|-----------------|----------------|
| 2 QUART SEE THROUGH POWER STEERING RESERVOIR  |                 |                |
| CURRENT AVAILABLE SYNTHETIC 75W-90 FRONT AXLE LUBE  |                 |                |
| <b>Front Suspension</b>   |                 |                |
| 16,000# TAPERLEAF FRONT SUSPENSION  | 200             |                |
| MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION   |                 |                |
| FRONT SHOCK ABSORBERS   |                 |                |
| <b>Rear Axle and Equipment</b>  |                 |                |
| MT-40-14X 40,000# R-SERIES TANDEM REAR AXLE   |                 | 2,500          |
| 5.29 REAR AXLE RATIO  |                 |                |
| IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING   |                 |                |
| MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES                                      |                 |                |
| MXL 17T MERITOR EXTENDED LUBE INTERAXLE DRIVELINE WITH HALF ROUND YOKES                                 |                 |                |
| DRIVER CONTROLLED TRACTION DIFFERENTIAL - BOTH TANDEM REAR AXLES  |                 | 30             |
| (1) INTERAXLE LOCK VALVE, (1) DRIVER CONTROLLED DIFFERENTIAL LOCK FORWARD-REAR AND REAR-REAR AXLE VALVE |                 |                |
| BLINKING LAMP WITH EACH INTERAXLE LOCK SWITCH, INTERAXLE UNLOCK DEFAULT WITH IGNITION OFF               |                 |                |
| BLINKING LAMP WITH EACH MODE SWITCH, DIFFERENTIAL UNLOCK WITH IGNITION OFF, ACTIVE <5 MPH               |                 |                |
| MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FABRICATED SHOES                          |                 |                |
| FIRE AND EMERGENCY SEVERE SERVICE NON-ASBESTOS REAR BRAKE LINING  |                 |                |
| STANDARD BRAKE CHAMBER LOCATION   |                 |                |
| CAST IRON OUTBOARD REAR BRAKE DRUMS   |                 | -20            |
| REAR OIL SEALS  |                 |                |
| HALDEX GOLDSEAL LONGSTROKE 2-DRIVE AXLES SPRING PARKING CHAMBERS  |                 | 20             |
| HALDEX AUTOMATIC REAR SLACK ADJUSTERS   |                 |                |
| CURRENT AVAILABLE SYNTHETIC 75W-90 REAR AXLE LUBE   |                 |                |
| <b>Rear Suspension</b>  |                 |                |

Prepared for:  
GRANT AASEN  
ROSENBAUER HEIMAN INC  
25814 Rudolph Circle  
Sioux Falls, SD 57107  
Phone: 605-543-5098

Prepared by:  
Carolyn LeBeau  
ISTATE TRUCK CENTER  
2901 WEST 60TH STREET N.  
SIOUX FALLS, SD 57107  
Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| 40,000# 4-SPRING FLAT LEAF REAR<br>SUSPENSION  |                 | 670            |
| SPRING SUSPENSION - NO AXLE SPACERS  |                 |                |
| STANDARD AXLE SEATS IN AXLE CLAMP<br>GROUP   |                 |                |
| 52 INCH AXLE SPACING   |                 |                |
| <b>Brake System</b>  |                 |                |
| AIR BRAKE PACKAGE  |                 |                |
| WABCO 4S/4M ABS WITH TRACTION CONTROL,<br>WITH ATC OFF-ROAD SWITCH   |                 |                |
| REINFORCED NYLON, FABRIC BRAID AND WIRE<br>BRAID CHASSIS AIR LINES   |                 |                |
| FIBER BRAID PARKING BRAKE HOSE   |                 |                |
| STANDARD BRAKE SYSTEM VALVES   |                 |                |
| STANDARD AIR SYSTEM PRESSURE<br>PROTECTION SYSTEM  |                 |                |
| STD U.S. FRONT BRAKE VALVE   |                 |                |
| RELAY VALVE WITH 5-8 PSI CRACK PRESSURE,<br>NO REAR PROPORTIONING VALVE  |                 |                |
| BW AD-9 BRAKE LINE AIR DRYER WITH HEATER   | 20              |                |
| AIR DRYER MOUNTED INBOARD ON LH RAIL   |                 |                |
| STEEL AIR TANKS MOUNTED AFT INSIDE<br>AND/OR BELOW FRAME JUST FORWARD OF<br>REAR SUSPENSION, NO TRIPLE OR TORPEDO<br>TANKS |                 |                |
| CLEAR FRAME RAILS FROM BACK OF CAB TO<br>FRONT REAR SUSPENSION BRACKET, BOTH<br>RAILS OUTBOARD                             |                 |                |
| BW DV-2 AUTO DRAIN VALVE WITHOUT HEATER<br>ON ALL TANK(S)  |                 |                |
| <b>Trailer Connections</b>   |                 |                |
| UPGRADED CHASSIS MULTIPLEXING UNIT   |                 |                |
| UPGRADED BULKHEAD MULTIPLEXING UNIT  |                 |                |
| <b>Wheelbase &amp; Frame</b>   |                 |                |
| 5100MM (201 INCH) WHEELBASE  |                 |                |
| 11/32X3-1/2X10-15/16 INCH STEEL FRAME<br>(8.73MMX277.8MM/0.344X10.94 INCH) 120KSI  | 170             | 110            |
| 1/4 INCH (6.35MM) C-CHANNEL INNER FRAME<br>REINFORCEMENT   | 150             | 370            |
| 1900MM (75 INCH) REAR FRAME OVERHANG   |                 |                |
| FRAME OVERHANG RANGE: 71 INCH TO 80<br>INCH  | -30             | 120            |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| CALC'D BACK OF CAB TO REAR SUSP C/L (CA) :<br>135.24 in                      |                 |                |
| CALCULATED EFFECTIVE BACK OF CAB TO<br>REAR SUSPENSION C/L (CA) : 132.24 in  |                 |                |
| CALC'D FRAME LENGTH - OVERALL : 304.98 in                                    |                 |                |
| CALCULATED FRAME SPACE LH SIDE : 79.14 in                                    |                 |                |
| CALCULATED FRAME SPACE RH SIDE : 47.14 in                                    |                 |                |
| SQUARE END OF FRAME  |                 |                |
| FRONT CLOSING CROSSMEMBER  |                 |                |
| LIGHTWEIGHT HEAVY DUTY ALUMINUM ENGINE<br>CROSSMEMBER                        | -12             |                |
| STANDARD CROSSMEMBER BACK OF<br>TRANSMISSION                                 |                 |                |
| STANDARD MIDSHIP #1 CROSSMEMBER(S)   |                 |                |
| STANDARD REARMOST CROSSMEMBER  |                 |                |
| STANDARD SUSPENSION CROSSMEMBER  |                 |                |
| <b>Chassis Equipment</b>   |                 |                |
| THREE-PIECE 14 INCH CHROMED STEEL<br>BUMPER WITH COLLAPSIBLE ENDS            | 30              |                |
| FRONT TOW HOOKS - FRAME MOUNTED  | 15              |                |
| BUMPER MOUNTING FOR SINGLE LICENSE<br>PLATE                                  |                 |                |
| FENDER AND FRONT OF HOOD MOUNTED<br>FRONT MUDFLAPS                           |                 |                |
| GRADE 8 THREADED HEX HEADED FRAME<br>FASTENERS                               |                 |                |
| 3D STEP VEHICLE MODEL  |                 |                |
| TANK BODY 1501 TO 3000 GALLONS   |                 |                |
| <b>Fuel Tanks</b>  |                 |                |
| 50 GALLON/189 LITER SHORT RECTANGULAR<br>ALUMINUM FUEL TANK - LH             | 20              |                |
| RECTANGULAR FUEL TANK(S)   |                 |                |
| PLAIN ALUMINUM/PAINTED STEEL<br>FUEL/HYDRAULIC TANK(S) WITH PAINTED<br>BANDS |                 |                |
| FUEL TANK(S) FORWARD   |                 |                |
| PLAIN STEP FINISH  |                 |                |
| FUEL TANK CAP(S)   |                 |                |
| DETROIT FUEL/WATER SEPARATOR WITH<br>WATER IN FUEL SENSOR                    | -5              |                |
| EQUIFLO INBOARD FUEL SYSTEM  |                 |                |
| HIGH TEMPERATURE REINFORCED NYLON<br>FUEL LINE                               |                 |                |



Prepared for:  
GRANT AASEN  
ROSENBAUER HEIMAN INC  
25814 Rudolph Circle  
Sioux Falls, SD 57107  
Phone: 605-543-5098

Prepared by:  
Carolyn LeBeau  
ISTATE TRUCK CENTER  
2901 WEST 60TH STREET N.  
SIOUX FALLS, SD 57107  
Phone: 605-336-2995

|                     | Description   | Weight<br>Front | Weight<br>Rear |
|---------------------|---|-----------------|----------------|
|                     | FUEL COOLER MOUNTED LEFT HAND IN RAIL   | 10              |                |
| <b>Tires</b>        |   |                 |                |
|                     | MICHELIN X WORKS Z 315/80R22.5 20 PLY<br>RADIAL FRONT TIRES   | 100             |                |
|                     | MICHELIN XDN2 11R22.5 14 PLY RADIAL REAR<br>TIRES   |                 | 152            |
| <b>Hubs</b>         |   |                 |                |
|                     | CONMET PRESET PLUS PREMIUM IRON FRONT<br>HUBS   |                 |                |
|                     | CONMET PRESET PLUS PREMIUM IRON REAR<br>HUBS  |                 |                |
| <b>Wheels</b>       |   |                 |                |
|                     | ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB<br>PILOT 5.99 INSET ALUMINUM FRONT WHEELS                                 | -28             |                |
|                     | ALCOA LVL ONE 88267X 22.5X8.25 10-HUB<br>PILOT ALUMINUM DISC REAR WHEELS  |                 | -224           |
|                     | POLISHED FRONT WHEELS; OUTSIDE ONLY   |                 |                |
|                     | POLISHED REAR WHEELS; OUTSIDE OF OUTER<br>WHEELS ONLY   |                 |                |
|                     | FRONT WHEEL MOUNTING NUTS   |                 |                |
|                     | REAR WHEEL MOUNTING NUTS  |                 |                |
| <b>Cab Exterior</b> |   |                 |                |
|                     | 106 INCH BBC FLAT ROOF ALUMINUM<br>CONVENTIONAL CAB   |                 |                |
|                     | AIR CAB MOUNTING  |                 |                |
|                     | LH AND RH EXTERIOR GRAB HANDLES WITH<br>SINGLE RUBBER INSERT  |                 |                |
|                     | HOOD MOUNTED CHROMED PLASTIC GRILLE   |                 |                |
|                     | CHROME HOOD MOUNTED AIR INTAKE GRILLE   |                 |                |
|                     | FIBERGLASS HOOD   |                 |                |
|                     | HOOD LINER, ADDED FIREWALL AND FLOOR<br>HEAT INSULATION   | 5               |                |
|                     | SINGLE ELECTRIC HORN  |                 |                |
|                     | REAR LICENSE PLATE MOUNT END OF FRAME   |                 |                |
|                     | INTEGRAL HEADLIGHT/MARKER ASSEMBLY<br>WITH CHROME BEZEL   |                 |                |
|                     | LED AERODYNAMIC MARKER LIGHTS   |                 |                |
|                     | DAYTIME RUNNING LIGHTS  |                 |                |
|                     | OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE<br>WIRING WITH SEPARATE STOP/TURN WIRES<br>TO 4 FEET BEYOND END OF FRAME |                 | -5             |
|                     | STANDARD FRONT TURN SIGNAL LAMPS  |                 |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| AUTOMATIC ON/OFF, ENGINE COMPARTMENT,<br>HOOD ACTIVATED WORK LIGHT WITH MANUAL<br>OVERRIDE | 1               |                |
| DUAL WEST COAST BRIGHT FINISH HEATED<br>MIRRORS WITH LH AND RH REMOTE                      |                 |                |
| DOOR MOUNTED MIRRORS   |                 |                |
| 102 INCH EQUIPMENT WIDTH   |                 |                |
| LH AND RH 8 INCH BRIGHT FINISH CONVEX<br>MIRRORS MOUNTED UNDER PRIMARY<br>MIRRORS          |                 |                |
| STANDARD SIDE/REAR REFLECTORS  |                 |                |
| 63X14 INCH TINTED REAR WINDOW  |                 |                |
| TINTED DOOR GLASS LH AND RH WITH TINTED<br>NON-OPERATING WING WINDOWS                      |                 |                |
| RH AND LH ELECTRIC POWERED WINDOWS,<br>PASSENGER SWITCHES ON DOOR(S)                       | 4               |                |
| 1-PIECE ROPED-IN SOLAR GREEN GLASS<br>WINDSHIELD   |                 |                |
| 2 GALLON WINDSHIELD WASHER RESERVOIR<br>WITHOUT FLUID LEVEL INDICATOR, FRAME<br>MOUNTED    |                 |                |

### Cab Interior

|  |    |
|--|----|
| OPAL GRAY VINYL INTERIOR   |    |
| MOLDED PLASTIC DOOR PANEL  |    |
| MOLDED PLASTIC DOOR PANEL  |    |
| BLACK MATS WITH SINGLE INSULATION  |    |
| FORWARD ROOF MOUNTED CONSOLE WITH<br>UPPER STORAGE COMPARTMENTS WITHOUT<br>NETTING |    |
| IN DASH STORAGE BIN  |    |
| (2) CUP HOLDERS LH AND RH DASH   |    |
| GRAY/CHARCOAL FLAT DASH  |    |
| SMART SWITCH EXPANSION MODULE  |    |
| 5 LB. FIRE EXTINGUISHER  | 10 |
| HEATER, DEFROSTER AND AIR CONDITIONER  |    |
| STANDARD HVAC DUCTING  |    |
| MAIN HVAC CONTROLS WITH RECIRCULATION<br>SWITCH                                    |    |
| STANDARD HEATER PLUMBING   |    |
| VALEO HEAVY DUTY A/C REFRIGERANT<br>COMPRESSOR                                     |    |
| BINARY CONTROL, R-134A   |    |
| PREMIUM INSULATION   |    |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description   | Weight<br>Front | Weight<br>Rear |
|---|-----------------|----------------|
| SOLID-STATE CIRCUIT PROTECTION AND FUSES  |                 |                |
| 12V NEGATIVE GROUND ELECTRICAL SYSTEM   |                 |                |
| DOMED DOOR ACTIVATED LH AND RH, DUAL READING LIGHTS, FORWARD CAB ROOF   |                 |                |
| ALL UNIT(S) KEYED ALIKE WITH CUSTOMER SPECIFIED KEY NUMBER FT1031   |                 |                |
| KEY QUANTITY OF 2   |                 |                |
| LH AND RH ELECTRIC DOOR LOCKS   |                 |                |
| (1) 12V POWER SUPPLY (1) DUAL 2.1 AMP USB CHARGER IN DASH   |                 |                |
| TRIANGULAR REFLECTORS KIT WITHOUT FLARES SHIPPED LOOSE IN CAB   | 10              |                |
| SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR                          | 50              |                |
| SEATS INC 911 UNIVERSAL SERIES HIGH BACK NON SUSPENSION PASSENGER SEAT WITH UNDERSEAT STORAGE AND NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR | 25              | 10             |
| LH AND RH INTEGRAL DOOR PANEL ARMRESTS  |                 |                |
| BLACK CORDURA PLUS CLOTH DRIVER SEAT COVER  |                 |                |
| BLACK CORDURA PLUS CLOTH PASSENGER SEAT COVER   |                 |                |
| NFPA 1901-2009 HIGH VISIBILITY ORANGE SEAT BELTS  |                 |                |
| FIXED STEERING COLUMN   |                 |                |
| 4-SPOKE 18 INCH (450MM) STEERING WHEEL  |                 |                |
| DRIVER AND PASSENGER INTERIOR SUN VISORS  |                 |                |

### Instruments & Controls

GRAY DRIVER INSTRUMENT PANEL  
 GRAY CENTER INSTRUMENT PANEL  
 ENGINE REMOTE INTERFACE WITH PARK BRAKE AND NEUTRAL INTERLOCKS  
 BLACK GAUGE BEZELS  
 LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM  
 2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES  
 ENGINE COMPARTMENT MOUNTED AIR RESTRICTION INDICATOR WITH GRADUATIONS, WITH WARNING LIGHT IN DASH

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Description  | Weight<br>Front | Weight<br>Rear |
|--|-----------------|----------------|
| ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL                                   |                 |                |
| KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY |                 |                |
| ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED WARNING LAMPS AND DATA LINKED                 |                 |                |
| HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH                     |                 |                |
| 2 INCH ELECTRIC FUEL GAUGE   |                 |                |
| ENGINE REMOTE INTERFACE NOT CONFIGURED   |                 |                |
| ENGINE REMOTE INTERFACE CONNECTOR IN ENGINE COMPARTMENT                                      |                 |                |
| ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE  |                 |                |
| 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE  |                 |                |
| ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY                                   |                 |                |
| CUSTOMER FURNISHED AND INSTALLED PTO CONTROLS  |                 |                |
| ELECTRONIC STABILITY CONTROL   |                 |                |
| ELECTRIC ENGINE OIL PRESSURE GAUGE   |                 |                |
| OVERHEAD INSTRUMENT PANEL  |                 |                |
| NFPA VEHICLE DATA RECORDER AND SEATBELT DISPLAY  |                 |                |
| AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH, USB AND AUXILIARY INPUTS, J1939                   | 10              |                |
| DASH MOUNTED RADIO   |                 |                |
| (2) RADIO SPEAKERS IN CAB  |                 |                |
| AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF   |                 |                |
| ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER                        |                 |                |
| STANDARD VEHICLE SPEED SENSOR  |                 |                |
| ELECTRONIC 3000 RPM TACHOMETER   |                 |                |
| IDLE LIMITER, ELECTRONIC ENGINE  |                 |                |
| DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY   |                 |                |
| SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY  |                 |                |

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

|  | Description  | Weight<br>Front | Weight<br>Rear |
|--|--|-----------------|----------------|
|  | MARKER LIGHT SWITCH INTEGRAL WITH<br>HEADLIGHT SWITCH  |                 |                |
|  | ONE VALVE PARKING BRAKE SYSTEM WITH<br>DASH VALVE CONTROL AUTONEUTRAL AND<br>WARNING INDICATOR |                 |                |
|  | SELF CANCELING TURN SIGNAL SWITCH WITH<br>DIMMER, WASHER/WIPER AND HAZARD IN<br>HANDLE         |                 |                |
|  | INTEGRAL ELECTRONIC TURN SIGNAL<br>FLASHER WITH HAZARD LAMPS OVERRIDING<br>STOP LAMPS          |                 |                |

## Design

PAINT: ONE SOLID COLOR

## Color

CAB COLOR A: L0762EY MED RED ELITE EY  
 BLACK, HIGH SOLIDS POLYURETHANE CHASSIS  
 PAINT  
 STANDARD E COAT/UNDERCOATING

## Certification / Compliance

U.S. FMVSS CERTIFICATION, EXCEPT SALES  
 CABS AND GLIDER KITS

## Raw Performance Data

CALCULATED EFFECTIVE BACK OF CAB TO  
 REAR SUSPENSION C/L (CA) : 132.24 in

## TOTAL VEHICLE SUMMARY

## Weight Summary

|                             | Weight<br>Front | Weight<br>Rear | Total<br>Weight |
|-----------------------------|-----------------|----------------|-----------------|
| Factory Weight <sup>+</sup> | 7704 lbs        | 7351 lbs       | 15055 lbs       |
| Total Weight <sup>+</sup>   | 7704 lbs        | 7351 lbs       | 15055 lbs       |

**Prepared for:**  
GRANT AASEN  
ROSENBAUER HEIMAN INC  
25814 Rudolph Circle  
Sioux Falls, SD 57107  
Phone: 605-543-5098

**Prepared by:**  
Carolyn LeBeau  
ISTATE TRUCK CENTER  
2901 WEST 60TH STREET N.  
SIOUX FALLS, SD 57107  
Phone: 605-336-2995

(+) Weights shown are estimates only.

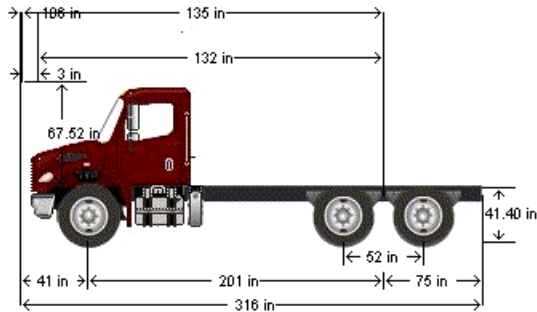
If weight is critical, contact Customer Application Engineering.

(\*\*\*) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.

**Prepared for:**  
GRANT AASEN  
ROSENBAUER HEIMAN INC  
25814 Rudolph Circle  
Sioux Falls, SD 57107  
Phone: 605-543-5098

**Prepared by:**  
Carolyn LeBeau  
ISTATE TRUCK CENTER  
2901 WEST 60TH STREET N.  
SIOUX FALLS, SD 57107  
Phone: 605-336-2995

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



## VEHICLE SPECIFICATIONS SUMMARY - DIMENSIONS

Model ..... M2106  
Wheelbase (545) ..... 5100MM (201 INCH) WHEELBASE  
Rear Frame Overhang (552) ..... 1900MM (75 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/SLEEPER CAB  
Exhaust System (016) ..... RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY  
WITH RH HORIZONTAL TAILPIPE EXITING FORWARD OF REAR TIRES

## TABLE SUMMARY - DIMENSIONS

**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

| Dimensions   | Inches |
|--|--------|
| Bumper to Back of Cab (BBC)  | 106.3  |
| Bumper to Centerline of Front Axle (BA)                            | 40.7   |
| Front Axle to Back of Cab (AC)                                     | 65.6   |
| Min. Cab to Body Clearance (CB)                                    | 3.0    |
| Back of Cab to Centerline of Rear Axle(s) (CA)                     | 135.2  |
| Effective Back of Cab to Centerline of Rear Axle(s) (Effective CA) | 132.2  |
| Back of Cab Protrusions (Exhaust/Intake) (CP)                      | 2.0    |
| 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  | 210.0  |
| Cab Height (CH)  | 67.5   |
| Wheelbase (WB)   | 200.8  |
| Frame Overhang (OH)  | 74.8   |
| Overall Frame Length   | 305.0  |
| Overall Length (OAL)   | 316.3  |
| Rear Axle Spacing  | 52.0   |
| Unladen Frame Height at Centerline of Rear Axle                    | 41.4   |

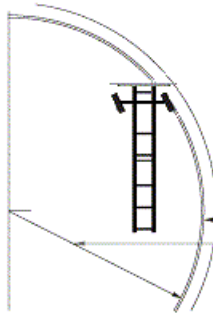
Performance calculations are estimates only. If performance calculations are critical, please contact Customer Application Engineering.



**Prepared for:**  
 GRANT AASEN  
 ROSENBAUER HEIMAN INC  
 25814 Rudolph Circle  
 Sioux Falls, SD 57107  
 Phone: 605-543-5098

**Prepared by:**  
 Carolyn LeBeau  
 ISTATE TRUCK CENTER  
 2901 WEST 60TH STREET N.  
 SIOUX FALLS, SD 57107  
 Phone: 605-336-2995

## TURNING RADIUS



Turning radius graphic and data provided strictly for comparisons between model configurations. Weather, road surfaces, and tire treads affect the results. It is strongly suggested that actual vehicles be measured before constructing any roads/driveways using this information. For specific figures regarding your configuration, please contact your CAE representative.

|                            | Dimensions | Tolerance |
|----------------------------|------------|-----------|
| Wall to Wall Diameter (ft) | 63.4       | +/- 3.0   |
| Curb to Curb Diameter (ft) | 61.9       | +/- 3.0   |
| Turning Radius (ft)        | 30.4       | +/- 1.5   |

### VEHICLE SPECIFICATIONS SUMMARY - TURNING RADIUS

Model ..... M2106  
 Cab Size (829)..... 106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB  
 Wheelbase (545) .....5100MM (201 INCH) WHEELBASE  
 Front Tires (093)..... MICHELIN X WORKS Z 315/80R22.5 20 PLY RADIAL FRONT TIRES  
     Width (in) ..... 12.5  
 Front Axle (400)..... DETROIT DA-F-16.0-5 16,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE  
     Kingpin Intersection (in) ..... 71  
 Bumper (556) ..... THREE-PIECE 14 INCH CHROMED STEEL BUMPER WITH COLLAPSIBLE ENDS  
     Width (in) ..... 93.5  
     Bumper Miter to Front Axle (in) ..... 21.458  
 Primary Steering Location (003) ..... LH PRIMARY STEERING LOCATION  
 Steering Gear (536)..... TRW TAS-85 POWER STEERING  
     Dual Steering Gear ..... NONE  
     Ram ..... NONE  
 Rear Axle (420) ..... MT-40-14X 40,000# R-SERIES TANDEM REAR AXLE  
 Axle Spacing (624) .....52 INCH AXLE SPACING

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

**Prepared for:**  
GRANT AASEN  
ROSENBAUER HEIMAN INC  
25814 Rudolph Circle  
Sioux Falls, SD 57107  
Phone: 605-543-5098

**Prepared by:**  
Carolyn LeBeau  
ISTATE TRUCK CENTER  
2901 WEST 60TH STREET N.  
SIOUX FALLS, SD 57107  
Phone: 605-336-2995