*A proposal for*

***State of Ohio Department of Transportation***

***023-21***

***Bid Item 3- Single axle chassis -omit Set Forward axle Requirement***

*Prepared by*

***FYDA FREIGHTLINER CINCINNATI***

*Mike Bailey*

*Aug 12, 2020*

**Western Star 4700SB**



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

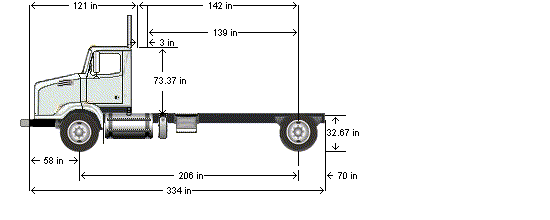
## SPECIFICATION PROPOSAL

|  | |  | | **Description** | |  | |  | |  | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Price Level** | | | | | | | | | | |
|  |  | | WESTERN STAR 4700 PRL-23T (EFF:01/21/20) | |  | |  | |  | | |
| **Data Version** | | | | | | | | | | |
|  |  | | SPECPRO21 DATA RELEASE VER 027 | |  | |  | |  | | |
| **Vehicle Configuration** | | | | | | | | | | |
|  |  | | WESTERN STAR 4700 SET-BACK FRONT AXLE CHASSIS | |  | |  | |  | | |
|  |  | | 2021 MODEL YEAR SPECIFIED | |  | |  | |  | | |
|  |  | | SET BACK AXLE - TRUCK | |  | |  | |  | | |
|  |  | | TRAILER TOWING PROVISION AT END OF FRAME WITH SAE J560 | |  | |  | |  | | |
|  |  | | LH PRIMARY STEERING LOCATION | |  | |  | |  | | |
| **General Service** | | | | | | | | | | |
|  |  | | TRUCK/TRAILER CONFIGURATION | |  | |  | |  | | |
|  |  | | DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES) | |  | |  | |  | | |
|  |  | | CONSTRUCTION SERVICE | |  | |  | |  | | |
|  |  | | GOVERNMENT BUSINESS SEGMENT | |  | |  | |  | | |
|  |  | | DIRT/SAND/ROCK 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 | |  | |  | |  | | |
|  |  | | WESTERN STAR VOCATIONAL WARRANTY | |  | |  | |  | | |
|  |  | | EXPECTED FRONT AXLE(S) LOAD : 20000.0 lbs | |  | |  | |  | | |
|  |  | | EXPECTED REAR DRIVE AXLE(S) LOAD : 26000.0 lbs | |  | |  | |  | | |
|  |  | | EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 46000.0 lbs | |  | |  | |  | | |
|  |  | | EXPECTED GROSS COMBINATION WEIGHT : 60000.0 lbs | |  | |  | |  | | |
| **Truck Service** | | | | | | | | | | |
|  |  | | FRONT PLOW/END DUMP BODY | |  | |  | |  | | |
|  |  | | EXPECTED TRUCK BODY LENGTH : 14.0 ft | |  | |  | |  | | |
| **Engine** | | | | | | | | | | |
|  |  | | CUM L9 370 HP @ 2000 RPM, 2100 GOV RPM, 1250 LB/FT @ 1400 RPM | |  | |  | |  | | |
| **Electronic Parameters** | | | | | | | | | | |
|  |  | | 75 MPH ROAD SPEED LIMIT | |  | |  | |  | | |
|  |  | | CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT | |  | |  | |  | | |
|  |  | | 20 MINUTE IDLE SHUTDOWN - CONTINUOUS OVERRIDE WITH CLUTCH AND SERVICE BRAKE | |  | |  | |  | | |
|  |  | | PTO MODE ENGINE RPM LIMIT - 700 RPM | |  | |  | |  | | |
|  |  | | PTO MODE BRAKE OVERRIDE - SERVICE BRAKE APPLIED | |  | |  | |  | | |
|  |  | | PTO RPM WITH CRUISE SET SWITCH - 700 RPM | |  | |  | |  | | |
|  |  | | PTO RPM WITH CRUISE RESUME SWITCH - 700 RPM | |  | |  | |  | | |
|  |  | | PTO MODE CANCEL VEHICLE SPEED - 5 MPH | |  | |  | |  | | |
|  |  | | PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND | |  | |  | |  | | |
|  |  | | PTO MINIMUM RPM - 700 | |  | |  | |  | | |
|  |  | | REGEN INHIBIT SPEED THRESHOLD - 5 MPH | |  | |  | |  | | |
|  |  | | TEMPERATURE OVERRIDE BELOW 20 DEGREES AND ABOVE 70 DEGREES AMBIENT TEMPERATURE | |  | |  | |  | | |
| **Engine Equipment** | | | | | | | | | | |
|  |  | | 2016-2019 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL GHG17 CONFIGURATION | |  | |  | |  | | |
|  |  | | 2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR) | |  | |  | |  | | |
|  |  | | STANDARD OIL PAN | |  | |  | |  | | |
|  |  | | ENGINE MOUNTED OIL CHECK AND FILL | |  | |  | |  | | |
|  |  | | SIDE OF HOOD AIR INTAKE WITH FIREWALL MOUNTED DONALDSON AIR CLEANER WITH SAFETY ELEMENT AND INSIDE/OUTSIDE AIR WITH SNOW DOOR | |  | |  | |  | | |
|  |  | | DR 12V 200 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE | |  | |  | |  | | |
|  |  | | (3) DTNA GENUINE, FLOODED STARTING, MIN 2250CCA, 510RC, THREADED STUD BATTERIES | |  | |  | |  | | |
|  |  | | BATTERY BOX FRAME MOUNTED | |  | |  | |  | | |
|  |  | | SINGLE BATTERY BOX FRAME MOUNTED LH SIDE BACK OF CAB | |  | |  | |  | | |
|  |  | | WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN | |  | |  | |  | | |
|  |  | | NON-POLISHED BATTERY BOX COVER | |  | |  | |  | | |
|  |  | | LOW VOLTAGE BATTERY DISCONNECT AT 12.3 VOLTS FOR ISOLATED CIRCUITS WITH LOCAL ALARM | |  | |  | |  | | |
|  |  | | CUMMINS TURBOCHARGED 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE | |  | |  | |  | | |
|  |  | | AIR COMPRESSOR DISCHARGE LINE | |  | |  | |  | | |
|  |  | | ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM | |  | |  | |  | | |
|  |  | | C-BRAKE BY JACOBS WITH HIGH MED LOW BRAKE | |  | |  | |  | | |
|  |  | | RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE | |  | |  | |  | | |
|  |  | | ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD REGENERATION AND DASH MOUNTED REGENERATION REQUEST SWITCH | |  | |  | |  | | |
|  |  | | 10 FOOT 06 INCH (126 INCH+0/-5.9 INCH) EXHAUST SYSTEM HEIGHT | |  | |  | |  | | |
|  |  | | RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP | |  | |  | |  | | |
|  |  | | 6 GALLON DIESEL EXHAUST FLUID TANK | |  | |  | |  | | |
|  |  | | 100 PERCENT DIESEL EXHAUST FLUID FILL | |  | |  | |  | | |
|  |  | | STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING | |  | |  | |  | | |
|  |  | | LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION | |  | |  | |  | | |
|  |  | | STAINLESS STEEL AFTERTREATMENT DEVICE/MUFFLER/TAILPIPE SHIELD | |  | |  | |  | | |
|  |  | | HORTON DRIVEMASTER ADVANTAGE ON/OFF FAN DRIVE | |  | |  | |  | | |
|  |  | | AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON ENGINE MOUNTED | |  | |  | |  | | |
|  |  | | CUMMINS SPIN ON FUEL FILTER | |  | |  | |  | | |
|  |  | | COMBINATION FULL FLOW/BYPASS OIL FILTER | |  | |  | |  | | |
|  |  | | 1300 SQUARE INCH ALUMINUM RADIATOR | |  | |  | |  | | |
|  |  | | MOUNTING FOR FIREWALL MOUNTED SURGE TANK | |  | |  | |  | | |
|  |  | | ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT | |  | |  | |  | | |
|  |  | | GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT | |  | |  | |  | | |
|  |  | | CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES | |  | |  | |  | | |
|  |  | | RADIATOR DRAIN VALVE | |  | |  | |  | | |
|  |  | | NO RADIATOR/OIL PAN GUARD | |  | |  | |  | | |
|  |  | | 1310 ADAPTER FLANGE FOR FRONT PTO PROVISION | |  | |  | |  | | |
|  |  | | PHILLIPS-TEMRO 1000 WATT/115 VOLT BLOCK HEATER | |  | |  | |  | | |
|  |  | | PHILLIPS-TEMRO 150 WATT/115 VOLT OIL PREHEATER | |  | |  | |  | | |
|  |  | | CHROME ENGINE HEATER RECEPTACLE MOUNTED UNDER LH DOOR | |  | |  | |  | | |
|  |  | | ALUMINUM FLYWHEEL HOUSING | |  | |  | |  | | |
|  |  | | ELECTRIC GRID AIR INTAKE WARMER | |  | |  | |  | | |
|  |  | | DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH | |  | |  | |  | | |
| **Transmission** | | | | | | | | | | |
|  |  | | ALLISON 3000 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION | |  | |  | |  | | |
| **Transmission Equipment** | | | | | | | | | | |
|  |  | | ALLISON VOCATIONAL PACKAGE 223 - AVAILABLE ON 3000/4000 PRODUCT FAMILIES WITH VOCATIONAL MODELS RDS, HS, MH AND TRV | |  | |  | |  | | |
|  |  | | ALLISON VOCATIONAL RATING FOR ON/OFF HIGHWAY 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 | |  | |  | |  | | |
|  |  | | FUEL SENSE 2.0 DISABLED - PERFORMANCE - TABLE BASED | |  | |  | |  | | |
|  |  | | ELECTRONIC TRANSMISSION WIRING TO CUSTOMER INTERFACE CONNECTOR | |  | |  | |  | | |
|  |  | | CUSTOMER INSTALLED CHELSEA 280 SERIES PTO | |  | |  | |  | | |
|  |  | | PTO MOUNTING, RH SIDE OF MAIN TRANSMISSION | |  | |  | |  | | |
|  |  | | MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN | |  | |  | |  | | |
|  |  | | ELECTRONIC CONTROL SHIFT LEVER, TUNNEL/FLOOR MOUNTED | |  | |  | |  | | |
|  |  | | TRANSMISSION PROGNOSTICS - ENABLED 2013 | |  | |  | |  | | |
|  |  | | WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK | |  | |  | |  | | |
|  |  | | TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK | |  | |  | |  | | |
|  |  | | SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT) | |  | |  | |  | | |
| **Front Axle and Equipment** | | | | | | | | | | |
|  |  | | DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE | |  | |  | |  | | |
|  |  | | BENDIX ADB22X-V AIR DISC FRONT BRAKES | |  | |  | |  | | |
|  |  | | NON-ASBESTOS FRONT BRAKE LINING | |  | |  | |  | | |
|  |  | | FRONT DISC BRAKE ROTORS | |  | |  | |  | | |
|  |  | | FRONT BRAKE DUST SHIELDS | |  | |  | |  | | |
|  |  | | FRONT OIL SEALS | |  | |  | |  | | |
|  |  | | VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL | |  | |  | |  | | |
|  |  | | STANDARD SPINDLE NUTS FOR ALL AXLES | |  | |  | |  | | |
|  |  | | FRONT AIR DISC BRAKE INTERNAL ADJUSTERS | |  | |  | |  | | |
|  |  | | STANDARD KING PIN BUSHINGS | |  | |  | |  | | |
|  |  | | TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR | |  | |  | |  | | |
|  |  | | POWER STEERING PUMP | |  | |  | |  | | |
|  |  | | 4 QUART POWER STEERING RESERVOIR | |  | |  | |  | | |
|  |  | | OIL/AIR POWER STEERING COOLER | |  | |  | |  | | |
|  |  | | MINERAL SAE 80/90 FRONT AXLE LUBE | |  | |  | |  | | |
| **Front Suspension** | | | | | | | | | | |
|  |  | | 20,000# FLAT LEAF FRONT SUSPENSION | |  | |  | |  | | |
|  |  | | GRAPHITE BRONZE BUSHINGS WITH SEALS - FRONT SUSPENSION | |  | |  | |  | | |
| **Rear Axle and Equipment** | | | | | | | | | | |
|  |  | | RS-26-185 26,000# T-SERIES SINGLE REAR AXLE | |  | |  | |  | | |
|  |  | | 6.14 REAR AXLE RATIO | |  | |  | |  | | |
|  |  | | IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING | |  | |  | |  | | |
|  |  | | MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES | |  | |  | |  | | |
|  |  | | DRIVER CONTROLLED TRACTION DIFFERENTIAL - SINGLE REAR AXLE | |  | |  | |  | | |
|  |  | | (1) DRIVER CONTROLLED DIFFERENTIAL LOCK REAR VALVE FOR SINGLE DRIVE AXLE | |  | |  | |  | | |
|  |  | | INDICATOR LIGHT FOR EACH DRIVER CONTROLLED TRACTION DEVICE SWITCH | |  | |  | |  | | |
|  |  | | BENDIX ADB22X AIR DISC REAR BRAKES | |  | |  | |  | | |
|  |  | | NON-ASBESTOS REAR BRAKE LINING | |  | |  | |  | | |
|  |  | | STANDARD BRAKE CHAMBER LOCATION | |  | |  | |  | | |
|  |  | | REAR DISC BRAKE ROTORS | |  | |  | |  | | |
|  |  | | REAR OIL SEALS | |  | |  | |  | | |
|  |  | | AIR DISC LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS | |  | |  | |  | | |
|  |  | | REAR AIR DISC BRAKE INTERNAL ADJUSTERS | |  | |  | |  | | |
|  |  | | MINERAL SAE 80/90 REAR AXLE LUBE | |  | |  | |  | | |
| **Rear Suspension** | | | | | | | | | | |
|  |  | | HENDRICKSON RT463 @46,000# REAR SUSPENSION | |  | |  | |  | | |
|  |  | | HENDRICKSON RT/RTE - 7.19" SADDLE | |  | |  | |  | | |
|  |  | | STANDARD AXLE SEATS IN AXLE CLAMP GROUP | |  | |  | |  | | |
|  |  | | 52 INCH AXLE SPACING | |  | |  | |  | | |
|  |  | | STEEL BEAMS AND BRONZE CENTER BUSHINGS WITH BAR PIN ADJUSTABLE END CONNECTIONS | |  | |  | |  | | |
|  |  | | FORE/AFT CONTROL RODS | |  | |  | |  | | |
| **Brake System** | | | | | | | | | | |
|  |  | | WABCO 4S/4M ABS | |  | |  | |  | | |
|  |  | | REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES | |  | |  | |  | | |
|  |  | | FIBER BRAID PARKING BRAKE HOSE | |  | |  | |  | | |
|  |  | | STANDARD BRAKE SYSTEM VALVES | |  | |  | |  | | |
|  |  | | RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE | |  | |  | |  | | |
|  |  | | BW AD-9 BRAKE LINE AIR DRYER WITH HEATER | |  | |  | |  | | |
|  |  | | BENDIX OIL COALESCING FILTER FOR AIR DRYER | |  | |  | |  | | |
|  |  | | AIR DRYER MOUNTED INBOARD ON LH RAIL | |  | |  | |  | | |
|  |  | | ALUMINUM AIR BRAKE RESERVOIRS | |  | |  | |  | | |
|  |  | | BW DV-2 AUTO DRAIN VALVE WITH HEATER TO WET TANK; DRAIN VALVE CABLES ON ALL OTHER TANKS | |  | |  | |  | | |
| **Trailer Connections** | | | | | | | | | | |
|  |  | | AIR CONNECTIONS TO END OF FRAME WITH GLAD HANDS FOR TRUCK AND NO DUST COVERS | |  | |  | |  | | |
|  |  | | PRIMARY CONNECTOR/RECEPTACLE WIRED FOR SEPARATE STOP/TURN, ABS CENTER PIN POWERED THROUGH IGNITION | |  | |  | |  | | |
|  |  | | SAE J560 7-WAY PRIMARY TRAILER CABLE RECEPTACLE MOUNTED END OF FRAME | |  | |  | |  | | |
| **Wheelbase & Frame** | | | | | | | | | | |
|  |  | | 5225MM (206 INCH) WHEELBASE | |  | |  | |  | | |
|  |  | | 7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI | |  | |  | |  | | |
|  |  | | PARTIAL INNER FRAME REINFORCEMENT AT FRONT SUSPENSION | |  | |  | |  | | |
|  |  | | BODY COMPANY INSTALLED ADDITIONAL FRONT FRAME REINFORCEMENT FOR SNOW PLOW | |  | |  | |  | | |
|  |  | | 1775MM (70 INCH) REAR FRAME OVERHANG | |  | |  | |  | | |
|  |  | | FRAME OVERHANG RANGE: 61 INCH TO 70 INCH | |  | |  | |  | | |
|  |  | | 12 INCH INTEGRAL FRONT FRAME EXTENSION | |  | |  | |  | | |
|  |  | | CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 142.4 in | |  | |  | |  | | |
|  |  | | CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 139.4 in | |  | |  | |  | | |
|  |  | | CALC'D FRAME LENGTH - OVERALL : 333.21 | |  | |  | |  | | |
|  |  | | FRAME HEIGHT TOP FRONT UNLADEN : 43.03 in | |  | |  | |  | | |
|  |  | | FRAME HEIGHT TOP FRONT LADEN : 39.19 in | |  | |  | |  | | |
|  |  | | FRAME HEIGHT TOP REAR UNLADEN : 32.67 in | |  | |  | |  | | |
|  |  | | FRAME HEIGHT TOP REAR LADEN : 42.39 in | |  | |  | |  | | |
|  |  | | CALCULATED FRAME SPACE LH SIDE : 54.84 in | |  | |  | |  | | |
|  |  | | CALCULATED FRAME SPACE RH SIDE : 194.9 in | |  | |  | |  | | |
|  |  | | CALC'D SPACE AVAILABLE FOR DECKPLATE : 142.69 in | |  | |  | |  | | |
|  |  | | SQUARE END OF FRAME | |  | |  | |  | | |
|  |  | | STANDARD WEIGHT ENGINE CROSSMEMBER | |  | |  | |  | | |
|  |  | | STANDARD CROSSMEMBER BACK OF TRANSMISSION | |  | |  | |  | | |
|  |  | | STANDARD MIDSHIP #1 CROSSMEMBER(S) | |  | |  | |  | | |
|  |  | | STANDARD REARMOST CROSSMEMBER | |  | |  | |  | | |
|  |  | | HEAVY DUTY SUSPENSION CROSSMEMBER | |  | |  | |  | | |
|  |  | | STANDARD WEIGHT REAR SUSPENSION CROSSMEMBER | |  | |  | |  | | |
| **Chassis Equipment** | | | | | | | | | | |
|  |  | | OMIT FRONT BUMPER, CUSTOMER INSTALLED SPECIAL BUMPER, DOES NOT COMPLY WITH FMCSR 393.203 | |  | |  | |  | | |
|  |  | | FRONT ANTI-SPRAY CAB MOUNTED MUDFLAPS | |  | |  | |  | | |
|  |  | | GRADE 8 THREADED HEX HEADED FRAME FASTENERS | |  | |  | |  | | |
|  |  | | EXTERIOR HARNESSES WRAPPED IN ABRASION TAPE | |  | |  | |  | | |
| **Fuel Tanks** | | | | | | | | | | |
|  |  | | 80 GALLON/302 LITER ALUMINUM FUEL TANK - LH | |  | |  | |  | | |
|  |  | | 25 INCH DIAMETER FUEL TANK(S) | |  | |  | |  | | |
|  |  | | PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH POLISHED STAINLESS STEEL BANDS | |  | |  | |  | | |
|  |  | | FUEL TANK(S) FORWARD | |  | |  | |  | | |
|  |  | | POLISHED STEP FINISH | |  | |  | |  | | |
|  |  | | FUEL TANK CAP(S) | |  | |  | |  | | |
|  |  | | DAVCO 245 FUEL/WATER SEPARATOR WITH 12 VOLT HEAT AND WATER IN FUEL SENSOR | |  | |  | |  | | |
|  |  | | EQUIFLO INBOARD FUEL SYSTEM | |  | |  | |  | | |
|  |  | | HIGH TEMPERATURE REINFORCED NYLON FUEL LINE | |  | |  | |  | | |
|  |  | | FUEL COOLER | |  | |  | |  | | |
| **Tires** | | | | | | | | | | |
|  |  | | MICHELIN XZU-S2 315/80R22.5 20 PLY RADIAL FRONT TIRES | |  | |  | |  | | |
|  |  | | MICHELIN XZE 12R22.5 16 PLY RADIAL REAR TIRES | |  | |  | |  | | |
| **Hubs** | | | | | | | | | | |
|  |  | | CONMET PRESET PLUS PREMIUM IRON FRONT HUBS | |  | |  | |  | | |
|  |  | | CONMET PRESET PLUS PREMIUM IRON REAR HUBS | |  | |  | |  | | |
| **Wheels** | | | | | | | | | | |
|  |  | | ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM FRONT WHEELS | |  | |  | |  | | |
|  |  | | ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM REAR WHEELS | |  | |  | |  | | |
|  |  | | FRONT WHEEL MOUNTING NUTS | |  | |  | |  | | |
|  |  | | REAR WHEEL MOUNTING NUTS | |  | |  | |  | | |
| **Cab Exterior** | | | | | | | | | | |
|  |  | | 110 INCH BBC STEEL CONVENTIONAL CAB | |  | |  | |  | | |
|  |  | | WESTERN STAR PAINTED ALUMINUM CAB SKIRT | |  | |  | |  | | |
|  |  | | AIR CAB MOUNTS WITH CHECK VALVE | |  | |  | |  | | |
|  |  | | NONREMOVABLE BUGSCREEN MOUNTED BEHIND GRILLE | |  | |  | |  | | |
|  |  | | FRONT FENDERS | |  | |  | |  | | |
|  |  | | 2 INCH FENDER EXTENSIONS | |  | |  | |  | | |
|  |  | | LH AND RH EXTERIOR GRAB HANDLES WITH RUBBER INSERTS AND RH INTERIOR GRAB HANDLE MOUNTED TO A POST | |  | |  | |  | | |
|  |  | | STATIONARY BRIGHT FINISH GRILLE | |  | |  | |  | | |
|  |  | | CHROME HOOD MOUNTED AIR INTAKE GRILLE | |  | |  | |  | | |
|  |  | | GALVANEALED STEEL SEVERE SERVICE CAB | |  | |  | |  | | |
|  |  | | FIBERGLASS HOOD | |  | |  | |  | | |
|  |  | | SINGLE HADLEY SD-978 26 INCH RECTANGULAR AIR HORN | |  | |  | |  | | |
|  |  | | SINGLE ELECTRIC HORN | |  | |  | |  | | |
|  |  | | SINGLE HORN SHIELD | |  | |  | |  | | |
|  |  | | ALL VEHICLES AND COMPONENTS TO BE KEYED ALIKE | |  | |  | |  | | |
|  |  | | REAR LICENSE PLATE MOUNT END OF FRAME | |  | |  | |  | | |
|  |  | | SINGLE RECTANGULAR H4 HALOGEN HEADLIGHTS WITH BRIGHT BEZELS | |  | |  | |  | | |
|  |  | | LED MARKER LAMPS | |  | |  | |  | | |
|  |  | | WIRING AND SWITCH FOR CUSTOMER FURNISHED SNOW PLOW LAMPS WITH DUAL CONNECTIONS AT BUMPER | |  | |  | |  | | |
|  |  | | INTEGRAL STOP/TAIL/BACKUP LIGHTS | |  | |  | |  | | |
|  |  | | STANDARD FRONT TURN SIGNAL LAMPS | |  | |  | |  | | |
|  |  | | DUAL WEST COAST STAINLESS STEEL HEATED MIRRORS WITH LH AND RH REMOTE | |  | |  | |  | | |
|  |  | | DOOR MOUNTED MIRRORS | |  | |  | |  | | |
|  |  | | 102 INCH EQUIPMENT WIDTH | |  | |  | |  | | |
|  |  | | LH AND RH 8 INCH STAINLESS STEEL CONVEX MIRRORS MOUNTED BELOW PRIMARY MIRRORS | |  | |  | |  | | |
|  |  | | NO AUXILIARY MIRROR | |  | |  | |  | | |
|  |  | | STANDARD SIDE/REAR REFLECTORS | |  | |  | |  | | |
|  |  | | ELECTRIC DOOR LOCKS, MECHANICAL KEY TUMBLER | |  | |  | |  | | |
|  |  | | RH AFTERTREATMENT SYSTEM CAB ACCESS WITH POLISHED DIAMOND PLATE COVER | |  | |  | |  | | |
|  |  | | 17.5X35 INCH TINTED REAR WINDOW | |  | |  | |  | | |
|  |  | | TINTED DOOR GLASS | |  | |  | |  | | |
|  |  | | RH AND LH ELECTRIC POWERED WINDOWS | |  | |  | |  | | |
|  |  | | 2-PIECE ROPED-IN HEATED WIPER PARK SOLAR GREEN GLASS WINDSHIELD | |  | |  | |  | | |
|  |  | | 2 GALLON WINDSHIELD WASHER RESERVOIR WITH FLUID LEVEL INDICATOR, MOUNTED UNDER CAB, WITH REMOTE FILL | |  | |  | |  | | |
| **Cab Interior** | | | | | | | | | | |
|  |  | | GRAY VINYL BASE INTERIOR | |  | |  | |  | | |
|  |  | | BLACK HARD TRIM | |  | |  | |  | | |
|  |  | | BASE LEFT HAND DOOR TRIM | |  | |  | |  | | |
|  |  | | BASE RIGHT HAND DOOR TRIM | |  | |  | |  | | |
|  |  | | BLACK MATS WITH DOUBLE INSULATION | |  | |  | |  | | |
|  |  | | DASH MOUNTED ASH TRAY AND (1) POWER OUTLET | |  | |  | |  | | |
|  |  | | FORWARD ROOF MOUNTED CONSOLE | |  | |  | |  | | |
|  |  | | 14"X7.75" DOCUMENT POUCH MOUNTED ON BACK WALL BETWEEN SEATS | |  | |  | |  | | |
|  |  | | LH AND RH DOOR MAP POCKETS | |  | |  | |  | | |
|  |  | | (2) COAT HOOKS ON BACKWALL OF CAB | |  | |  | |  | | |
|  |  | | NO CUP/THERMOS HOLDER | |  | |  | |  | | |
|  |  | | TWO-TONE CHARCOAL UPPER/COOL GRAY LOWER SOFT TOUCH WING DASH WITH BLACK DRIVER SIDE COSMETIC UNDER DASH COVER | |  | |  | |  | | |
|  |  | | HEATER, DEFROSTER AND AIR CONDITIONER WITH CONSTANT OUTLET TEMPERATURE CONTROL | |  | |  | |  | | |
|  |  | | HVAC DUCTING WITH FOAM MAIN FRESH AIR FILTER | |  | |  | |  | | |
|  |  | | MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH | |  | |  | |  | | |
|  |  | | STANDARD HEATER PLUMBING | |  | |  | |  | | |
|  |  | | VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR | |  | |  | |  | | |
|  |  | | RADIATOR MOUNTED AIR CONDITIONER CONDENSER | |  | |  | |  | | |
|  |  | | BINARY CONTROL, R-134A | |  | |  | |  | | |
|  |  | | CAB INSULATION | |  | |  | |  | | |
|  |  | | AUTOMATIC SELF-RESET CIRCUIT BREAKERS/FUSES IN DASH POWER DISTRIBUTION BOXES AND FUSES IN AUXILIARY POWER DISTRIBUTION BOXES | |  | |  | |  | | |
|  |  | | DOOR ACTIVATED DOME LIGHT, UNDER DASH LIGHT AND LH AND RH DOOR MOUNTED COURTESY LIGHTS | |  | |  | |  | | |
|  |  | | LH AND RH ELECTRIC DOOR LOCKS | |  | |  | |  | | |
|  |  | | BASIC HIGH BACK AIR SUSPENSION DRIVER SEAT WITH 1 CHAMBER AIR LUMBAR, INTEGRATED CUSHION EXTENSION AND REAR CUSHION TILT | |  | |  | |  | | |
|  |  | | BASIC HIGH BACK AIR SUSPENSION PASSENGER SEAT WITH 1 CHAMBER AIR LUMBAR, INTEGRATED CUSHION EXTENSION AND REAR CUSHION TILT | |  | |  | |  | | |
|  |  | | INBOARD DRIVER AND PASSENGER SEAT ARMRESTS | |  | |  | |  | | |
|  |  | | GRAY VINYL DRIVER SEAT COVER | |  | |  | |  | | |
|  |  | | GRAY VINYL PASSENGER SEAT COVER | |  | |  | |  | | |
|  |  | | 3 POINT HIGH VISIBILITY ORANGE RETRACTOR DRIVER AND PASSENGER SEAT BELTS | |  | |  | |  | | |
|  |  | | ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN | |  | |  | |  | | |
|  |  | | 4-SPOKE 18 INCH (450MM) LEATHER WRAPPED STEERING WHEEL WITH SWITCHES | |  | |  | |  | | |
|  |  | | DRIVER AND PASSENGER INTERIOR SUN VISORS | |  | |  | |  | | |
| **Instruments & Controls** | | | | | | | | | | |
|  |  | | NON-ADJUSTABLE SUSPENDED PEDALS | |  | |  | |  | | |
|  |  | | ELECTRONIC ACCELERATOR CONTROL | |  | |  | |  | | |
|  |  | | BRIGHT ARGENT FINISH GAUGE BEZELS | |  | |  | |  | | |
|  |  | | BLACK VINYL DRIVER INSTRUMENT PANEL | |  | |  | |  | | |
|  |  | | BLACK VINYL CENTER INSTRUMENT PANEL | |  | |  | |  | | |
|  |  | | LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM | |  | |  | |  | | |
|  |  | | (1) SINGLE BRAKE APPLICATION AIR GAUGE | |  | |  | |  | | |
|  |  | | 2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES | |  | |  | |  | | |
|  |  | | FILTERMINDER DASH MOUNTED AIR RESTRICTION GAUGE | |  | |  | |  | | |
|  |  | | 87 DB TO 112 DB SELF-ADJUSTING BACKUP ALARM | |  | |  | |  | | |
|  |  | | ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES | |  | |  | |  | | |
|  |  | | KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY | |  | |  | |  | | |
|  |  | | ICU4ME DRIVER MESSAGE CENTER WITH GRAPHICAL DISPLAY, BLACK FACE GAUGES, DIAGNOSTICS AND DATA LINKED | |  | |  | |  | | |
|  |  | | HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH | |  | |  | |  | | |
|  |  | | 2 INCH ELECTRIC FUEL GAUGE | |  | |  | |  | | |
|  |  | | PROGRAMMABLE RPM CONTROL - ELECTRONIC ENGINE | |  | |  | |  | | |
|  |  | | ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE | |  | |  | |  | | |
|  |  | | 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE | |  | |  | |  | | |
|  |  | | ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER | |  | |  | |  | | |
|  |  | | ELECTRIC ENGINE OIL PRESSURE GAUGE | |  | |  | |  | | |
|  |  | | AM/FM/WB WORLD TUNER RADIO WITH BLUETOOTH AND USB AND AUXILIARY INPUTS, J1939 | |  | |  | |  | | |
|  |  | | ROOF/OVERHEAD CONSOLE MOUNTED RADIO | |  | |  | |  | | |
|  |  | | (4) RADIO SPEAKERS IN CAB | |  | |  | |  | | |
|  |  | | POWER AND GROUND WIRING FOR CB RADIO IN OVERHEAD CONSOLE AND TOP OF DASH WITH CB TRAY | |  | |  | |  | | |
|  |  | | TOP OF DASH MOUNT CB RADIO PROVISION WITH PLATE AND STRAPS | |  | |  | |  | | |
|  |  | | MULTI-BAND AM/FM/WB/CB LH MIRROR MOUNTED ANTENNA SYSTEM | |  | |  | |  | | |
|  |  | | ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITH ODOMETER | |  | |  | |  | | |
|  |  | | STANDARD VEHICLE SPEED SENSOR WITH ADDITIONAL SIGNAL FOR CUSTOMER USE LOCATED BETWEEN DRIVER AND PASSENGER SEATS | |  | |  | |  | | |
|  |  | | ELECTRONIC 3000 RPM TACHOMETER | |  | |  | |  | | |
|  |  | | NO VEHICLE PERFORMANCE MONITOR | |  | |  | |  | | |
|  |  | | IGNITION SWITCH CONTROLLED ENGINE STOP | |  | |  | |  | | |
|  |  | | BW TRACTOR PROTECTION VALVE | |  | |  | |  | | |
|  |  | | TRAILER HAND CONTROL BRAKE VALVE | |  | |  | |  | | |
|  |  | | DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY | |  | |  | |  | | |
|  |  | | SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY AND ARCTIC TYPE BLADES | |  | |  | |  | | |
|  |  | | CAB/TRAILER MARKER LIGHT SWITCH WITH SEPERATE HEADLIGHT SWITCH WITH HDLP/MRKR INTERRUPT SWITCH ON STEERING WHEEL & DASH SW FOR CUSTOMER FURNISHED SNOWPLOW LTS | |  | |  | |  | | |
|  |  | | TWO VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR | |  | |  | |  | | |
|  |  | | SELF CANCELING TURN SIGNAL SWITCH, HEADLAMP HIGH/LOW AND FLASH, WASH/WIPE/INTERMITTENT | |  | |  | |  | | |
|  |  | | PACIFIC INSIGHT ELECTRONIC FLASHER | |  | |  | |  | | |
| **Design** | | | | | | | | | | |
|  |  | | PAINT: ONE SOLID COLOR | |  | |  | |  | | |
| **Color** | | | | | | | | | | |
|  |  | | CAB COLOR A: L0006EY WHITE ELITE EY | |  | |  | |  | | |
|  |  | | CAB INTERIOR PAINTED SAME AS CAB COLOR | |  | |  | |  | | |
|  |  | | BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT | |  | |  | |  | | |
| **Certification / Compliance** | | | | | | | | | | |
|  |  | | U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS | |  | |  | |  | | |
| **Secondary Factory Options** | | | | | | | | | | |
|  |  | | DEALER HAS BEEN ADVISED OF AND ACCEPTED RESPONSIBILITY FOR MODIFICATIONS DUE TO POSSIBLE PTO/CHASSIS INTERFERENCE | |  | |  | |  | | |
| **Raw Performance Data** | | | | | | | | | | |
|  |  | | CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 139.4 in | |  | |  | |  | | |
|  |  | | CALC'D SPACE AVAILABLE FOR DECKPLATE : 142.69 in | |  | |  | |  | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Extended Warranty** | | | | |
|  |  | CUM 2017 L9: HD1 MD DTY 5 YEARS / 100,000 MILES / 161,000 KM EXTENDED WARRANTY. FEX APPLIES |  |
|  |  | TC4: HD MODERATE 5 YEARS/100,000 MILES / 161,000 KM EXTENDED TRUCK COVERAGE. FEX APPLIES |  |
|  |  | AXLE: FRONT/SINGLE REAR HD MODERATE 5 YEAR/100,000 MILE/161,000 KM EXTENDED AXLE COVERAGE. |  |
|  | | | |  | | |
|  | | | |  | | |
|  | | | |  | | |

(\*\*\*) 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.

|  |
| --- |
| DIMENSIONS |



|  |
| --- |
| **VEHICLE SPECIFICATIONS SUMMARY - DIMENSIONS** |

Model 4700SB

Wheelbase (545) 5225MM (206 INCH) WHEELBASE

Rear Frame Overhang (552) 1775MM (70 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

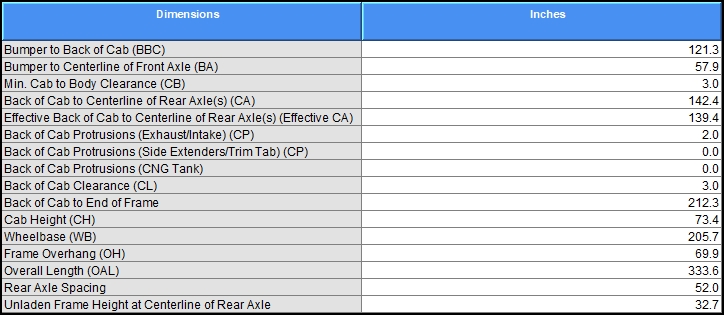
Desired Slide Position (in) 0.0

Cab Size (829) 110 INCH BBC STEEL CONVENTIONAL CAB

Sleeper (682) NO SLEEPER BOX/SLEEPERCAB

Exhaust System (016) RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE

|  |
| --- |
| **TABLE SUMMARY - DIMENSIONS** |



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

|  |
| --- |
| GVWR |

|  |
| --- |
| **VEHICLE SPECIFICATIONS SUMMARY - GVWR** |

Model 4700SB

Cab Size (829) 110 INCH BBC STEEL CONVENTIONAL CAB

Expected Front Axle(s) Load (lbs) 20000.0

Expected Pusher Axle(s) Load (lbs) 0.0

Expected Rear Axle(s) Load (lbs) 26000.0

Expected Tag Axle(s) Load (lbs) 0.0

Expected GVW (lbs) 46000

Expected GCW (lbs) 60000.0

Front Axle (400) DETROIT DA-F-20.0-5 20,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE

Front Suspension (620) 20,000# FLAT LEAF FRONT SUSPENSION

Front Hubs (418) CONMET PRESET PLUS PREMIUM IRON FRONT HUBS

Front Disc Wheels (502) ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM FRONT WHEELS

Front Tires (093) MICHELIN XZU-S2 315/80R22.5 20 PLY RADIAL FRONT TIRES

Front Brakes (402) BENDIX ADB22X-V AIR DISC FRONT BRAKES

Steering Gear (536) TRW THP-60 POWER STEERING WITH RCH45 AUXILIARY GEAR

Rear Axle (420) RS-26-185 26,000# T-SERIES SINGLE REAR AXLE

Rear Suspension (622) HENDRICKSON RT463 @46,000# REAR SUSPENSION

Rear Hubs (450) CONMET PRESET PLUS PREMIUM IRON REAR HUBS

Rear Disc Wheels (505) ALCOA ULTRA ONE 89U64X 22.5X9.00 10-HUB PILOT 5.99 INSET ALUMINUM REAR WHEELS

Rear Tires (094) MICHELIN XZE 12R22.5 16 PLY RADIAL REAR TIRES

Rear Brakes (423) BENDIX ADB22X AIR DISC REAR BRAKES

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** |



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

|  |
| --- |
| FRAME RBM |

|  |
| --- |
| **VEHICLE SPECIFICATIONS SUMMARY - FRAME RBM** |

Wheelbase (545) 5225MM (206 INCH) WHEELBASE

Frame Rails (546) 7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI(546)

Yield Strength (psi) 120000

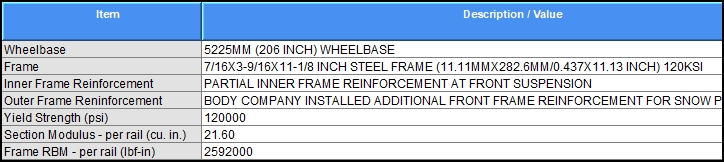
Section Modulus (per rail) (cu in) 21.6

RBM (per rail) (lbf-in) 2592000

Inner Frame Reinforcement (547) PARTIAL INNER FRAME REINFORCEMENT AT FRONT SUSPENSION

Outer Frame Reinforcement (548) BODY COMPANY INSTALLED ADDITIONAL FRONT FRAME REINFORCEMENT FOR SNOW PLOW

|  |
| --- |
| **TABLE SUMMARY - FRAME RBM** |



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