

STATE OF MINNESOTA
EQUIPMENT SPECIFICATION 2015

1.0 SCOPE

SINGLE AXLE CAB & CHASSIS

This unit shall be a currently advertised production model as modified per specifications and approved by MnDOT furnished with all standard equipment advertised whether or not specifically called for here except where the item is replaced by optional over standard equipment or conflicting equipment is specified. The unit shall be complete with all equipment required and ready for immediate operation to function as listed below and the unit must meet applicable codes and standards.

CAB & CHASSIS REQUIREMENTS

2.0 FRAME

- 2.1 Frame shall be single channel only, 632,000 RBM minimum.
- 2.2 Responder shall offer heavier and longer frames in Section 2.0 of pricing pages if available, list single channel frames that are as heavy as available for snow plow application.
- 2.3 Rear of frame shall be open end, square.
- 2.4 Center line of rear axle to rear of frame shall be 30" minimum.
- 2.5 Frame shall include front bumper.

3.0 AXLE/SUSPENSION/BRAKES

- 3.1 Gross vehicle weight rating shall be determined by axle and suspension components as ordered by customer.
- 3.2 Front axle shall be 8,000 lb. capacity, minimum.
- 3.3 Front axle bearings shall be fluid lubricated, with synthetic lubrication.
- 3.4 Front suspension shall be 8,000 lb. Minimum.
- 3.5 Front axle shall have power steering.
- 3.6 Front suspension assist air bag systems must be O.E.M. systems only, offer them as an option in Section 3.0 of pricing page.
- 3.7 Front brakes shall be air, s-cam or air disc. Each optional front axle shall meet this specification also.
- 3.8 Rear axle shall be single, 16,500 lb. capacity minimum, ratio as requested by customer, with synthetic lubrication. Vendor is to indicate top speed to customer when selecting rear end ratio. Tandem axle options must be offered as a separate model using tandem axle specification and pricing pages. Award will still be per model, combining tandem and singles of the same model.
- 3.9 Rear springs shall be 16,500 lb. capacity minimum.
- 3.10 Rear brakes shall be air s-cam or air disc. Each optional rear axle shall meet this specification also.

4.0 TIRES/RIMS HUBS

- 4.1 Front tires shall be deep tread rib type 22.5" 14 ply.
- 4.2 Front and rear hub to be 10 hole piloted ISO steel disc, 8 hole may be used if 10 hole is not an option.
- 4.3 Front and rear wheel rims shall be 22.5" tubeless type.
- 4.4 Rear tires shall be deep tread traction type 22.5" 14 ply.

5.0 BRAKE SYSTEM

- 5.1 Air compressor shall be liquid cooled not less than 13.2 CFM capacity.
- 5.2 Unit shall have a heated air dryer.

6.0 ENGINE/RELATED EQUIPMENT

- 6.1 Engine shall be electronic, diesel, with SAE gross horsepower not less than 195 and 520 pound foot torque. Offer hybrid options in appropriate engine, transmission or electrical section.
- 6.2 Alternator shall be 100 amps minimum.
- 6.3 Batteries shall be 12 volt, 1850 CCA at 0 F, fully enclosed battery box, sealed battery connections.
- 6.4 Exhaust system shall be horizontal with horizontal muffler, if available.
- 6.5 Exhaust system options shall be offered in conjunction with engines, list exhaust options with engine options in Section 8.0 of pricing pages.
- 6.6 Unit shall have fuel tank, 40 gallon minimum.
- 6.7 Engines must be meet or exceed the EPA standards in effect at time of order.

7.0 TRANSMISSION

- 7.1 Transmission shall be manual, 6 speed, with 14" or better ceramic clutch minimum.

8.0 ELECTRICAL

- 8.1 Electrical protection shall be provided by fuses or equal.

9.0 CAB EXTERIOR

- 9.1 Cab shall be two or three person size, including crew cabs, extended cabs, and cab-over design.
- 9.2 Hood shall be fiberglass or equivalent.
- 9.3 Outside mirrors shall be western, dual, with auxiliary 7.44" or larger convex mirrors mounted offset, all stainless steel or rust free material including brackets.

10.0 CAB INTERIOR

- 10.1 Unit shall have power steering. Steering wheel adjustment capabilities shall be offered as options.
- 10.2 Unit shall have electronic cruise control.
- 10.3 Flooring shall be rubber or vinyl rather than carpet.

11.0 OTHER REQUIREMENTS

- 11.1 Manufacturer's standard base color acceptable, lead free paint, customer to indicate color at time of order.
- 11.2 Responder to ensure equipment meets all current Federal and Minnesota safety codes.
- 11.3 The Contract Vendor shall furnish a standard manufacturer's warranty. The Contract Vendor shall be responsible for the cost of any inspections, adjustments, parts and labor that are a result of equipment failure(s) during the warranty period. This shall be performed without any delay period. This warranty shall commence when the unit is put into service. The Contract Vendor shall state warranty for all items requested on the pricing page.

12.0 PRICING FOR OPTIONAL ITEMS

- 12.1 Firewall mounted Donaldson Single Stage Air Cleaner with door(s) capable of either 100% under hood or 100% outside air intake, air restriction gauge dash mounted or approved equal.
- 12.2 Coolant hoses (radiator, heater, engine by pass or draw down) which are silicone or EPDM Kevlar reinforced with Breeze constant torque clamps and or shrink band clamps on all coolant hoses.
- 12.3 Pricing for both right hand and left hand, vertical, frame mounted exhaust and DPF, if available.
- 12.4 Fender mirrors shall be 8" minimum, one on each side, convex, stainless steel, or rust free including bracket, customer to approve mounting.
- 12.5 Heated West Coast mirrors actuated by separate dash or door mounted switches.
- 12.6 Signal Stat 935 non-canceling (with brake overriding the flasher) turn signal switch.
- 12.7 Fuel tank shall be LH or RH mount not less than 75 gallon capacity, rectangular, aluminum, installed such that bottom of fuel tank assembly (including bracket) is no more than 8" lower than bottom of frame rail. Installation must be complete and meet ICC requirements. Customer to approve mounting.
- 12.8 Tilting hood which does not interfere with front mounted P.T.O. and plow equipment. Grill shall be fixed, full length, and grill shall not tip forward when hood is opened.
- 12.9 Regarding the warranty statement (spec 11.3), price shall be provided for: "Contract Vendor shall be responsible for payment of any travel, pickup and/or delivery charges (towing) as a consequence of a warranty claim". (List price for this on pricing page 14.1.)

- 12.10 State agencies and CPV Members that anticipate ordering 10 or more units on one purchase order may request a pre-build meeting. Responders should provide a cost for a pre-build specifications meeting. A price shall be provided on the price sheets for having the manufacturer's representative meet within the State of Minnesota at a location agreed to by the purchaser and the Contract Vendor.
- 12.11 The Responder must provide a price per person for all expenses incurred to participate in a pilot inspection of the cab & chassis. The pilot inspection shall occur at the assembly plant or, if it is at a different location, sufficient factory personnel must be present to accomplish an effective pilot inspection. The responder must provide a price per person for a State employee(s) to attend that will cover all allowable expenses as dictated by the State employee's labor agreement. This includes, but is not limited to, air fare, transportation, lodging and meals. The Contract Vendor must ensure the compliance of all laws including, but not limited to Minn. Stat. § 434.38, (Code of Ethics for Employees in Executive Branch) and Minn. Stat. § 151.43 (Penalty for Acceptance of Advantage by State Employees).
- 12.12 Price shall include ICC tractor/trailer lighting system with socket mounted at rear of frame approved by MnDOT, socket to be standard Plus TCP77F or metal Berg Connector or equal (any substitute must be compatible with existing male connectors). Wiring shall include 12" extra loop of wire. Trailer tow package shall also include air brake package plumbed to rear of frame complete with glad hands and dust caps, which includes 12 in. extra loop.

13.0 RESPONDER INSTRUCTIONS

- 13.1 Responders will find items on pricing pages which the manufacturer does not offer such as front stabilizer bar, cab extensions, etc. If this is the case, leave these items blank. It is not required to price every item on pricing pages.
- 13.2 Responders may add items to the bid that are known to be requested by government customers. Add these items at the end of each section of the pricing pages. To add lines, go to last line in section and insert line, this should copy the line formatting. **It is the Responders responsibility to make sure the formulas work correctly and the formatting is correct.** Be complete, especially when offering options. If responders do not list an option they can not legally sell it on this contract. Areas where items will not be allowed to be added are smaller front and rear axles/suspension, smaller engine sizes than base specification, hydraulic brakes and lighter single channel frames.
- 13.3 Responders should make a pricing page for each model of cab and chassis they are offering. Base unit cab and chassis offered in Section 1.0 of Pricing Page must meet specifications and cannot be equipped with upgrades and options. Do not put two or more models on one pricing page. Do not put single and tandem cab and chassis on the same pricing page even if they are the same model. Make a separate pricing page for each one.
- 13.4 A sample pricing page is included. To ensure consistency for purchasers, responders must follow the format of the sample pricing page(s) - including order of options. This includes the base unit product information requested at the beginning of the pricing page. Deviating from the structure and order of pricing page is reason for rejecting a bid.
- 13.5 For optional items offered in lieu of standard items, such as but not limited to larger tires, air seats, etc., price shall be the difference paid to achieve the upgrade rather than full purchase price.
- 13.6 When offering options, such as but not limited to trailer tow package, etc., price must include everything needed to ensure unit is complete, installed, and ready to use by the operator from the cab.
- 13.7 If offering extended warranty a copy of all terms and conditions pertaining to the agreement must be submitted as part of bid package.
- 13.8 For the purposes of this contract, first drop is considered from the manufacture to a manufacture authorized dealer location. If the first drop is free of charge then delivery costs are to be for loaded miles only from the dealer location to the buyers requested location. Responder must state starting location on price pages. Mileage distances will be determined from the website: <http://maps.yahoo.com>.
- 13.9 Responder must state company name, address, contact, phone number, fax number and toll free number (if available) at the beginning of each pricing page submitted for each model submitted.
- 13.10 Trade-ins. If requested by the purchaser, the Contract Vendor will allow equipment to be used as trade-in against new equipment purchases. This will be allowed on a case by case basis, and the purchaser has the right to refuse any offer made by the Contract Vendor. In all cases, State agencies must obtain approval from the Department of Administration and must follow the requirements for liquidation of surplus goods. CPV members are solely responsible for compliance with their local government's requirements for liquidation of surplus goods.

Trade-in will occur when the new cab and chassis is completed, delivered and accepted unless otherwise agreed by the Contract Vendor and the purchaser. The time of the transfer of the vehicle will be mutually arranged between the purchaser and the Contract Vendor. The purchaser assumes all costs associated with the transfer of the trade-in equipment unless otherwise agreed by the Contract Vendor and the purchaser. Title of the trade-in equipment shall be provided to the Contract Vendor by the purchaser in accordance with Minn. Stat. § 168A.11. All equipment will be traded "as is, where is," with no guarantee expressed or implied.

If a trade-in is agreed to by the Contract Vendor and the purchaser, the Contract Vendor may charge interest on the unpaid balance of the new vehicle purchased, delivered and accepted, prior to the delivery of the trade-in vehicle. Responders should provide on the price sheet a percent (%) per month interest rate, on an annualized basis, calculated on a simple interest basis that would be charged to the purchaser for unpaid balances due to the trade-in being delivered after receipt of the new cab and chassis.

STATE OF MINNESOTA
EQUIPMENT SPECIFICATION 2015

1.0 SCOPE

TANDEM AXLE CAB & CHASSIS

This unit shall be a currently advertised production model as modified per specifications and approved by MnDOT furnished with all standard equipment advertised whether or not specifically called for here except where the item is replaced by optional over standard equipment or conflicting equipment is specified. The unit shall be complete with all equipment required and ready for immediate operation to function as listed below and the unit must meet applicable codes and standards.

2.0 CAB & CHASSIS REQUIREMENTS

FRAME

- 2.1 Frame shall be single channel 1,700,000 RBM minimum.
- 2.2 Responder shall offer heavier and longer frames in section 2.0 of pricing pages if available, list frames that are as heavy as available for snow plow application.
- 2.3 Rear of frame shall be open end, square.
- 2.4 Center line of rear axle to rear of frame shall be 65" minimum.
- 2.5 Frame shall include front bumper.

3.0 AXLE/SUSPENSION/BRAKES

- 3.1 Gross vehicle weight rating shall be determined by axle and suspension components as ordered by customer.
- 3.2 Front axle shall be 12,000 lb. capacity, minimum.
- 3.3 Front axle bearings shall be fluid lubricated, with synthetic lubrication.
- 3.4 Front suspension shall be 12,000 lb. minimum.
- 3.5 Front axle shall have power steering.
- 3.6 Twin Steer axles must be O.E.M items only, offer them as options in section 3.0
- 3.7 Front suspension assist air bag systems must be O.E.M. systems only, offer them as an option in section 3.0 of pricing pages.
- 3.8 Front brakes shall be air, s-cam or air disc. Each optional front axle shall meet this specification also.
- 3.9 Rear axle shall be tandem, 40,000 lb. capacity minimum, ratio as requested by customer, with synthetic lubrication. **Contract Vendor shall indicate top speed to customer when selecting rear end ratio.** Single axle options must be offered as a separate model using single axle specification and pricing pages. Award will still be per model, combining tandem and singles of the same model.
- 3.10 Rear springs shall be 40,000 lb. capacity minimum.
- 3.11 Tag axles and Pusher axles must be O.E.M. systems only, offer them as an option in section 4.0
- 3.12 Rear brakes shall be air s-cam or air disc. Each optional rear axle shall meet this specification also.

4.0 TIRES/RIMS HUBS

- 4.1 Front tires shall be deep tread rib type 11R, 22.5" 14 ply.
- 4.2 Front & rear hub to be 10 hole piloted ISO steel disc, 8 hole may be used if 10 hole is not an option.
- 4.3 Front and rear wheel rims shall be 8.25"x 22.5", 7300 lb. minimum capacity, tubeless type.
- 4.4 Rear tires shall be deep tread traction type 11R, 22.5" 14 ply.

5.0 BRAKE SYSTEM

- 5.1 Air compressor shall be liquid cooled not less than 13.2 CFM capacity.
- 5.2 Unit shall have a heated air dryer.

6.0 ENGINE/RELATED EQUIPMENT

- 6.1 Engine shall be electronic, diesel, with SAE gross horsepower not less than 250 and 660 pound foot torque. Offer hybrid options in appropriate engine, transmission or electrical section.
- 6.2 Alternator shall be 100 amps minimum.
- 6.3 Batteries shall be 12 volt, 1850 CCA at 0 F, fully enclosed battery box, sealed battery cable connections.
- 6.4 Exhaust system shall be horizontal with horizontal muffler, if available.
- 6.5 Exhaust system options shall be offered in conjunction with engines, list exhaust options with engine options in section 8.0 of pricing pages.
- 6.6 Unit shall have fuel tank, 40 gallon minimum.
- 6.7 Engines must be meet or exceed the current EPA standards in effect at time of ordering.

7.0 TRANSMISSION

- 7.1 Transmission shall be manual, 9 speed with 14" or better ceramic clutch minimum.

8.0 ELECTRICAL

- 8.1 Electrical protection shall be provided by fuses or greater.

9.0 CAB EXTERIOR

- 9.1 Cab shall be two or three person size.
- 9.2 Hood shall be fiberglass or equivalent.
- 9.3 Outside mirrors shall be western, dual, with auxiliary 7.44" or larger convex mirrors mounted offset, all stainless steel or rust free material including brackets.

10.0 CAB INTERIOR

- 10.1 Unit shall have power steering. Steering wheel adjustment capabilities shall be offered as options.
- 10.2 Unit shall have electronic cruise control.
- 10.3 Flooring shall be rubber or vinyl rather than carpet.

11.0 OTHER REQUIREMENTS

- 11.1 Manufacturer's standard base color acceptable, lead free paint, customer to indicate color at time of order.
- 11.2 Responder to ensure equipment meets all current Federal and Minnesota safety codes.
- 11.3 The Contract Vendor shall furnish a standard manufacturer's warranty. The Contract Vendor shall be responsible for the cost of any inspections, adjustments, parts and labor that are a result of equipment failure(s) during the warranty period. This shall be performed without any delay period. This warranty shall commence when the unit is put into service. The Contract Vendor shall state warranty for all items requested on the pricing page.

12.0 PRICING FOR OPTIONAL ITEMS

- 12.1 Firewall mounted Donaldson Single Stage Air Cleaner with door(s) capable of either 100% under hood or 100% outside air intake, air restriction gauge dash mounted or approved equal
- 12.2 Coolant hoses (radiator, heater, engine by pass or draw down) which are silicone or EPDM Kevlar reinforced with Breeze constant torque clamps and or shrink band clamps on all coolant hoses.
- 12.3 Pricing for both right hand and left hand, vertical, frame mounted exhaust and DPF, if available.
- 12.4 Fender mirrors shall be 8" minimum, one on each side, convex, stainless steel or rust free, including bracket, customer to approve mounting.
- 12.5 Heated West Coast mirrors actuated by separate dash or door mounted switch.
- 12.6 Signal Stat 935 non-canceling (with brake overriding the flasher) turn signal switch.
- 12.7 Fuel tank shall be LH or RH mount not less than 75 gallon capacity, rectangular, aluminum, installed such that bottom of fuel tank assembly (including bracket) is no more than 8" lower than bottom of frame rail. Installation must be complete and meet ICC requirements. Customer to approve mounting.
- 12.8 Tilting hood which does not interfere with front mounted P.T.O. and plow equipment. Grill shall be fixed, full length, and grill shall not tip forward when hood is opened.
- 12.9 Regarding the warranty statement (spec 11.3), price shall be provided for. The Contract Vendor shall be responsible for payment of any travel, pickup and/or delivery charges (towing) as a consequence of a warranty claim". (List price for this on pricing page 14.1.)
- 12.10 State agencies and CPV Members that anticipate ordering 10 or more units on one purchase order may request a pre-build meeting. Responders should provide a cost for a pre-build specifications meeting. A price shall be provided on the price sheets for having the manufacturer's representative meet within the State of Minnesota at a location agreed to by the purchaser and the Contract Vendor.

- 12.11 The responder must provide a price per person for all expenses incurred to participate in a pilot inspection of the cab & chassis. The pilot inspection shall occur at the assembly plant or, if it is at a different location, sufficient factory personnel must be present to accomplish an effective pilot inspection. The responder must provide a price per person for a State employee(s) to attend that will cover all allowable expenses as dictated by the State employee's labor agreement. This includes, but is not limited to, air fare, transportation, lodging and meals. The Contract Vendor must ensure the compliance of all laws including, but not limited to Minn. Stat. § 434.38, (Code of Ethics for Employees in Executive Branch) and Minn. Stat. § 151.43 (Penalty for Acceptance of Advantage by State Employees).
- 12.12 Price shall include ICC tractor/trailer lighting system with socket mounted at rear of frame approved by MnDOT, socket to be standard Plus TCP77F or metal Berg Connector or equal (any substitute must be compatible with existing male connectors). Wiring shall include 12" extra loop of wire. Trailer tow package shall also include air brake package plumbed to rear of frame complete with glad hands and dust caps, which includes 12 in. extra loop.

13.0 RESPONDER INSTRUCTIONS

- 13.1 Responders will find items on pricing pages which the manufacturer does not offer such as front stabilizer bar, cab extensions, etc. If this is the case, leave these items blank. It is not required to price every item on pricing pages.
- 13.2 Responders may add items to the bid that are known to be requested by government customers. Add these items at the end of each section of the pricing pages. To add lines, go to last line in section and insert line, this should copy the line formatting. **It is the Responders responsibility to make sure the formulas work correctly and the formatting is correct.** Be complete, especially when offering options. If responders do not list an option they can not legally sell it on this contract. Areas where items will not be allowed to be added are smaller front and rear axles/suspension, smaller engine sizes than base specification, hydraulic brakes, and lighter single channel frames.
- 13.3 Responders should make a pricing page for each model of cab and chassis they are offering. Base unit cab and chassis offered in Section 1.0 of Pricing Page must meet specifications and can not be equipped with upgrades and options. Do not put two or more models on one pricing page. Do not put single and tandem cab and chassis on the same pricing page even if they are the same model. Make a separate pricing page for each one.
- 13.4 A sample pricing page is included. To ensure consistency for purchasers, responders must follow the format of the sample pricing page(s) - including order of options. This includes the base unit product information requested at the beginning of the pricing page. Deviating from the structure and order of pricing page is reason for rejecting a bid.
- 13.5 For optional items which end up being in lieu of standard items, such as but not limited to larger tires, air seats, etc., price shall be the difference paid to achieve the upgrade rather than full purchase price.
- 13.6 When offering options, such as but not limited to trailer tow package, etc., price must include everything needed to ensure unit is complete, installed and ready to use by the operator from the cab.
- 13.7 If offering extended warranty a copy of all terms and conditions pertaining to the agreement must be submitted as part of bid package.
- 13.8 For the purposes of this contract, first drop is considered from the manufacture to a manufacture authorized dealer location. If the first drop is free of charge then delivery costs are to be for loaded miles only, from the dealer location to the buyers requested location. Responder must state starting location on price pages. Mileage distances will be determined from the website: <http://maps.yahoo.com>.
- 13.9 Responder must state company name, address, contact, phone number, fax number and toll free number (if available) at the beginning of each pricing page submitted for each model submitted.
- 13.10 Trade-ins. If requested by the purchaser, the Contract Vendor will allow equipment to be used as trade-in against new equipment purchases. This will be allowed on a case by case basis, and the purchaser has the right to refuse any offer made by the Contract Vendor. In all cases, State agencies must obtain approval from the Department of Administration and must follow the requirements for liquidation of surplus goods. CPV members are solely responsible for compliance with their local government's requirements for liquidation of surplus goods.

Trade-in will occur when the new cab and chassis is completed, delivered and accepted unless otherwise agreed by the Contract Vendor and the purchaser. The time of the transfer of the vehicle will be mutually arranged between the purchaser and the Contract Vendor. The purchaser assumes all costs associated with the transfer of the trade-in equipment unless otherwise agreed by the Contract Vendor and the purchaser. Title of the trade-in equipment shall be provided to the Contract Vendor by the purchaser in accordance with Minn. Stat. § 168A.11. All equipment will be traded "as is, where is," with no guarantee expressed or implied.

If a trade-in is agreed to by the Contract Vendor and the purchaser, the Contract Vendor may charge interest on the unpaid balance of the new vehicle purchased, delivered and accepted, prior to the delivery of the trade-in vehicle. Responders should provide on the price sheet a percent (%) per month interest rate, on an annualized basis, calculated on a simple interest basis that would be charged to the purchaser for unpaid balances due to the trade-in being delivered after receipt of the new vehicle.

