

**SPECIFICATION, JEA CLASS 226: TRUCK 5 T DERRICK / UNDER DECK WINCH 50'**  
**UPDATED JULY, 2020**

**1. SCOPE**

It is the intent of the JEA to purchase multiple 5 Ton 6X4 Conventional Cab Derrick Truck with EZ Trac Hydraulic Front Wheel Drive System. All units must be tested and delivered to the JEA Fleet Facility (5717 New Kings Road Jacksonville, Florida 32209) in complete operational condition, with all required equipment and documentation by the date specified per awarded contract.

**2. MODEL**

New current model year production Class-8 Tandem Axle Cab/Chassis (Freightliner M2 112 or Equal) with Attached 50'' Sheave Height Derrick / Winch (Altec DH50, Terex Commander 5050 or Equal without Auger/Pole Claw Options). Reference: JEA Unit # 51303 for layout and dimensions.

UTILIZE THE STRONGEST, MOST ROBUST, MAINTENANCE FREE FASTENERS/CONNECTIONS WHERE APPLICABLE TO MINIMIZE MAINTENANCE REQUIREMENTS AND MITIGATE POTENTIAL FAILURES. CONFIRM ALL FASTENERS/CONNECTIONS ARE RATED FOR THE CAPACITIES PER OUR APPLICATION.



**3. CAB / CHASSIS (CLASS-8)**

- 3.1 Class-8 Tandem Axle Cab/Chassis (66,000 lbs GVWR)
- 3.2 Cab to Axle: Not to exceed 178"
- 3.3 Wheel Base: Not to exceed 245"
- 3.4 Overall Height: From level ground to highest point on vehicle not to exceed 162"
- 3.5 Overall Length: Not to exceed 435"

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3.6 Overall Width: Not to exceed 102"

3.7 Max Speed: 70 MPH

**4. ENGINE (REQUIRE DETROIT OR CUMMINS DUE TO RELIABILITY / DURABILITY)**

4.1 Horse Power: Minimum 450 HP @ 1800 RPM

4.2 Torque Range: Between 1650 lbs to 1850 lbs

4.3 No Automatic Idle Shutdown

4.4 Block Heater

4.5 Engine warning and shut down system

4.6 B20 Biodiesel Capable, if available

4.7 Idle Up / Remote Throttle Option

**5. TRANSMISSION**

5.1 Allison RDS 4500

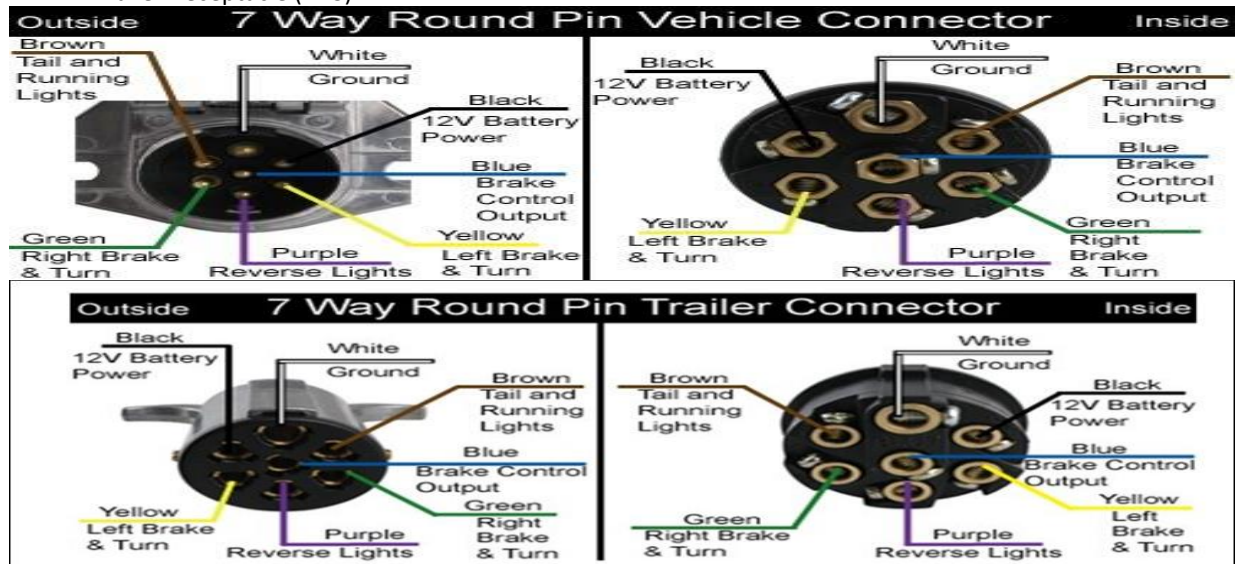
5.2 PTO Provision

**6. TOWING**

6.1 Tow Package / Pintle Hook: Heavy Duty 25 Ton Swivel Off Road and Safety Chain D-Rings. D-Rings even with hitch.

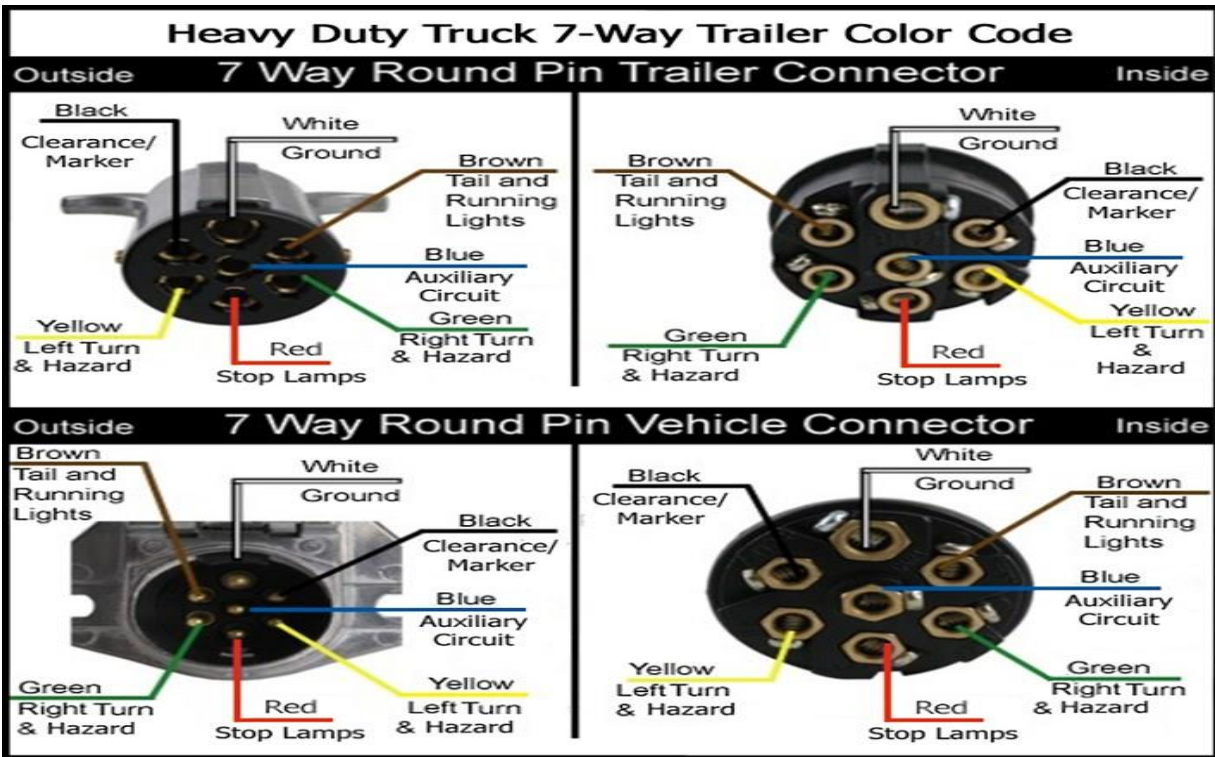
6.2 Tractor Protection Valve along with all air lines/plumbing, collapsible glad hands and trailer hand valve

6.3 Tow Package trailer receptacles (2 Receptacles): 7 Pin Round Trailer Receptacle and 7 Pin Round Heavy Duty Truck Trailer Receptacle (ABS)



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**7. REAR AXLES AND TIRES**

- 7.1 Air Ride / 46,000 lbs with manual dump valve (Requiring Hendrickson Air Ride Suspension Systems rated for the capacity and application)
- 7.2 Inter Axle Differential Lock
- 7.3 Side-to-Side Differential Locks on both drive axles
- 7.4 Rear: 11R 22.5 to accommodate GVWR, All Terrain Tread
- 7.5 Aluminum Rims: Weight reduction
- 7.6 Include 1 additional matching aluminum front wheel (Rim & Tire Mounted / Balanced) for EZ TRAC Front End

**8. FRONT AXLE & TIRES (EZ TRAC HYD DRIVE FRONT AXLE)**

- 8.1 20,000 lbs with Oil Bathed Bearing/Hubs
- 8.2 Front: Floater 425 / 65 R22.5 to accommodate GVWR
- 8.3 Aluminum Rims: Weight reduction
- 8.4 EZ TRAC Hydraulic Drive Front End

**9. BRAKES (AIR DISC BRAKES)**

- 9.1 Air Disc Brakes with Shields: Front and rear axles
- 9.2 Anti-lock Braking System

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- 9.3 Automatic Drain Valves
- 9.4 Air Dryer
- 9.5 Low Air Pressure Warning System

**10. COOLING SYSTEM**

- 10.1 Heavy duty extra cooling capacity, largest available from manufacturer

**11. FUEL TANK AND DEF TANK**

- 11.1 Capacity: 100 Gallons, Dual tanks are acceptable
- 11.2 Capacity: Minimum 10 gallon diesel exhaust fluid capacity

**12. CHASSIS ELECTRICAL AND LIGHTING (NO SCOTCH LOCK CONNECTIONS)**

**NOTE:** WIRE ALL LED STROBE LIGHTS TO ONE OEM UP-FITTER SWITCH IN CAB WITH LABEL. WIRE TOOL BIN LED ROPE LIGHTING TO ONE OEM UP-FITTER SWITCH IN CAB WITH LABEL. WIRE ALL AREA LIGHTS TO ONE UP-FITTER SWITCH.

- 12.1 Meters: Engine hour meter, PTO hour meter, transmission temperature, engine oil pressure, engine temperature, charging system, fuel level, air pressure and diesel exhaust fluid level (In Cab / Dash Mounted).
- 12.2 OEM Up-Fitter Switches/Upper Console: For wiring strobe lights, area lights & etc.
- 12.3 Auxiliary Accessory Fuse Block: Purpose is to wire GPS, fuel rings, JEA Radio, DC accessory power outlets etc. Wire to waterproof resettable breaker so we can isolate from the vehicle OEM system if needed. An acceptable example is listed below including picture.

Blue Sea Systems ST Blade ATO/ATC Fuse Blocks  
Style Name: 12-Circ Split w/Cover & Neg



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- 12.4 Master Switch With Lockout/Tagout: In Cab, (Mitigate Dead Batteries Due To GPS & Etc.) Example: TR Series Dual Pole Master Disconnect Switch (500A • DPST • IP67/IP69k • Integrated Lockout Tagout)



- 12.5 All Cab / Chassis Lights: LED only
- 12.6 LED Strobe Lights (6 COUNT): 4 Corner Mounted LED Strobe lights & 2 Recessed Amber LED Strobe Lights (3" or 4" Round) One on each side of the Body/Centered
- 12.7 Auxiliary Battery Jump Ports: Insulated remote posts protected and mounted driver's side underneath cab body / behind steps. (Do not mount over fuel tank!)



- 12.8 DC Accessory Power Outlets: One additional DC power outlets in cab for accessories with spring loaded cover. See example below: NAPA Part # BK 7821773 or equal. Wire to the Auxiliary Accessory Fuse BLOCK.



- 12.9 LED Post Mounted Spot Light, Driver Side
- 12.10 Power Package: Power Windows, Locks, Mirrors (Heated), Cruise Control & Tilt Wheel
- 12.11 Factory installed air conditioner and heater
- 12.12 Collision mitigation/warning system with active braking (engage service brakes), lane departure warning system, back up sensors and backup alarm. System must not affect the safety or operation of the vehicle while staging or operating attachments.
- 12.13 OEM AM / FM Stereo with auxiliary input, backup camera (7" or 8" color monitor) and Bluetooth hands free
- 12.14 2400 Power Watt Inverter (Pure Sine Wave Inverter or Equivalent): Ignition key hot. Mounted location TBD. Add a weatherproof GFI 120V Dual Power Outlet mounted to right rear of utility body.
- 12.15 LED Ground Lighting / Area Lights (Driver Side, Passenger Side & Rear of Vehicle)



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**13. ADDITIONAL REQUIRED EQUIPMENT**

- 13.1 Front Bumper
- 13.2 Air Ride Drivers Seats with Collapsible Armrest and 2 Place Passenger Seat (70/30 Seat)
- 13.3 Seat Belts: Fluorescent Green



- 13.4 Tow/Recovery Hooks: Front and rear
- 13.5 (2) Two fender/hood mounted mirrors (Passenger & Drivers Side for Blind Spots)
- 13.6 Window Tint: driver, passenger & rear windows (Max Legal in FL).
- 13.7 Cup Holders: Minimum 2
- 13.8 Interior / Forward / Roof Mounted Console with storage compartments
- 13.9 Doc Bumpers: fixed mounted to rear frame rails
- 13.10 Slope Indicator Assembly
- 13.11 Lanyard & Lanyard Storage Pouch
- 13.12 Operator Manual Storage Pouch: Mounted in cab

**14. FLATBED BODY**

- 14.1 Dimensions: Between 16' & 18' Long and Bed Space / Clearance & Weight Capacity to haul a Pad Mount Transformer 100"L X 86"W X 72"H with boom in stowed position
- 14.2 Integrated Entry Steps: Right front/behind bed mounted winch. Right rear steps & left rear steps.
- 14.3 Bed Load Area (Require Free & Clear Area with Boom in Stowed Position) to transport Pad Mount Transformers (Weights 9,600 lbs):
  - 100" from Bed Mounted Winch Cover to Boom Pedestal (Free & Clear)
  - 86" from Inside Right Removable Side Rail to Inside Left Removable Side Rail (Free & Clear)
  - 72" from Lowest Point on Boom (Lift Cylinders or other) to Flat Bed Deck (Free & Clear)
- 14.4 Lockable Storage Bins (Reference JEA Unit # 51303 for dimensions):
  1. Mounted RR/Top of Flatbed (Hinged Top Side with Gas Assisted Openers)
  2. Mounted RF/Below Flatbed (Hinged Right Side with Gas Assisted Openers)
  3. Mounted LF/Below Flatbed (Dual Doors/Hinged Right Side & Left Side with Gas Assisted Openers)
  4. Mounted LR/Top of Flatbed (Top Door / Hinged Rear Towards Turret with Gas Assisted Openers)
- 14.5 LED Compartment Rope Lighting: All utility bins

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- 14.6 4 Polymer Outrigger Pads with Storage Compartments (Compartments mounted under utility body (2 on driver side & 2 on passenger side)
- 14.7 (2) 4" Recessed LED Flood Lights mounted rear / tail shelf beside tail lights
- 14.8 (4) Ratchet Strap Tie Down Straps with sliding track mounted street side
- 14.9 Nonskid Coating: All steps & walking surfaces
- 14.10 Collapsible Cone Holder (JEA Standard). Front bumper mounted



- 14.11 Integrated Wheel Chock Bins with Wheel Chocks
  - 14.12 Aluminum Hand Wash Tank with ball valve mounted curbside on top of tail shelf
  - 14.13 5 Ton capacity overhaul ball with safety hook & swivel
  - 14.14 Sprayed in bed liner (LINE X or Equal). Inside Bed, inside bed sides & top of winch compartment
  - 14.15 All Bins: Paint interior white
  - 14.16 Gas Shock Door Holders in Body Compartments & Bins
- 15. BOOM ATTACHMENT (ALTEC DH50, TEREX COMMANDER 5050 OR EQUAL). NO UPPER CONTROLS**
- 15.1 Boom Sheave Height: Between 50' and 52'
  - 15.2 Maximum Lifting Capacity (Rear Mounted Winch): Between 29,500 lbs and 32,000 lbs
  - 15.3 Lifting Capacity at 10' Radius: Between 15,000 lbs and 16,000 lbs
  - 15.4 Outriggers (Enclosed to mitigate debris from entering cylinders): Main & Auxiliary, full hydraulic rated for boom capacity with alarms. Outrigger controls must be located at driver side and passenger side rear of flatbed.
  - 15.5 Outrigger Boom Interlock
  - 15.6 Hydraulic Oil Cooler
  - 15.7 Engine Start/Stop Switch: Located at Full View Platform Console
  - 15.8 Emergency Stop Button: Located at passenger side and driver side close to outrigger controls & full view operator platform console
  - 15.9 Foot Operated Throttle Option: Located at full view platform console. Must be featherable.

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- 15.10 360 Degree Continuous Boom Rotation (Reversible) with no back drive while under pressure. Must include side load protection, boom stow protection / hydraulic overload protection.
- 15.11 Blue Coated Whip Line / Rope: 1-1/8" X 115'. Gunnebo Johnson Swivel Hook or Equal.
- 15.12 Hydraulic System: Open Center
- 15.13 Platform Console: Full View (See Example Below) and must include foot operated throttle, start / stop switch, emergency stop switch, horn & control levers. All controls must be mounted for easy access (Ergonomic) & Labeled per function (Durable/High Quality Weatherproof Labels).



- 15.14 Slope Indicator Assembly
  - 15.15 LED Spotlight: Mounted at operator platform/console
  - 15.16 Must meet SAEJ765 stability requirements and comply with applicable ANSD 14 and SAEF-1063
  - 15.17 In transport position, unit shall not utilize more than 4' of bed space
  - 15.18 Require Holding Valves (All Cylinders). Prevent retraction while not operating.
  - 15.19 Elevation: 80 Degrees to -20 Degrees
  - 15.20 LED Cargo Light: Mounted to the rear of the boom pedestal above the outriggers
  - 15.21 Removable Aluminum Expanded Metal Covers: Mount to the voids in the boom pedestal to mitigate trash and other accumulation
- 16. BEHIND CAB MOUNTED WINCH with INTEGRATED CAPSTAN WINCH (2 Speed / Featherable)**
- 16.1 General Machine Product Model CD3 with Hydraulic Brake or BradenBP200B with Hydraulic Brake or Equal mounted to front of Header with weatherproof aluminum cover. Include bed liner coating (LINE-X or Equal) and a 1.5" rail around the top perimeter of the aluminum winch cover.
  - 16.2 1,400' of 1/2" rotation resistant 1/2" cable to be included (Bare Drum 24,000 lbs / Full Drum 13,000 lbs)  
NOTE: Cable, Winch Drum & Level Wind must be engineered to work safely/properly with no kinking cable or etc.
  - 16.3 Level Wind / Non Spin



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- 16.4 UV-25 Swivel mounted at rear of body for winch line travel (Powder Coated Orange)
- 16.5 Winch Cable Must Be Routed Under Flatbed Deck
- 16.6 2 sets of Featherable Hydraulic Winch Control Valves: (1) set on RR of Truck & (1) set at RR/Side of Truck with labels.
- 16.7 Capstan Winch Drive: Curbside access with steel capstan
- 16.8 Start/Stop Switch at Winch Controls with Emergency Stop Button
- 16.9 Wireless Remote Control with Emergency Stop Button
- 16.10 LED Compartment Light: Light up winch & level wind
- 16.11 Punched Metal Removable Cover: Mount to the rear side of the winch for safety and visibility. Operators must be able to see the winch cable and level wind while operating the unit.

### **17. COLOR / GRAPHICS**

- 17.1 White exterior
- 17.2 Delete all vendor and manufacturer identification decals except required safety & reference identification tags, decals, data plates & placards
- 17.3 Install Vehicle Height Warning Placard with maximum height (feet/inches) in cab on the dash (driver's view) and on driver's side door (outside of vehicle, close to door handle)
- 17.4 Install decal on hitch plate next to pintle hitch to include the MAX tow capacity and MAX tongue weight

### **18. MANUALS, VIDEOS, KEYS & OPERATOR ORIENTATION**

- 18.1 (1) set of operator manuals per unit (HARD COPY). (1) Electronic copy maintenance, repair & parts manuals
- 18.2 Provide five (5) complete sets of keys per unit (3 FOB keys and 2 standard keys for chassis) including attachments, bins and tool boxes. Key all bins and tool boxes alike. Stamp/engrave JEA provided 5 digit unit number on all keys.
- 18.3 (1) On-Site JEA Operator Orientation Class (complete unit overview: chassis & attachments)
- 18.4 (1) On-Site JEA Maintenance Orientation Class (complete unit: chassis & attachments)
- 18.5 Include a paper copy specification / build sheet / drawings in all units including key codes

### **19. DRAWINGS**


- 19.1 Scaled drawings will be provided to JEA upon receipt of order. Drawings will include all interior/exterior and equipment layout details & dimensions. Final drawings / layout will be approved by JEA before work is started. Include one electronic copy (flash drive). Drawings may be used at JEA's discretion for solicitations, request for information, reference for repairs, etc.
- 19.2 Provide weight study

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**20. WARRANTY**

- 20.1 Minimum (2) one year warranty on chassis & all attachments (include parts, travel & labor). Must include all standard manufacturer warranties.
- 20.2 Warranty period starts when units are received at JEA's fleet facility and are inspected and accepted.

**21. OTHER REQUIREMENTS**

- 21.1 Purchase and Install Yellow City License Plates
- 21.2 Install JEA Provided Decals (you may use JEA's current vendor at your expense)
- 21.3 Install JEA Provided Safety Equipment: Purple-K fire extinguisher (5 LB), first aid kit and key safe
- 21.4 Current DOT Inspection / Certification with decal installed lower left inside corner of windshield. Include current date, current hours, next service due date and next service due hours.
- 21.5 Include a paper copy specification / build sheet in all units including key codes
- 21.6 Must include/document the VIN number, make, model, description, JEA PO # and JEA provided 5 digit unit # on all invoices
- 21.7 Awarded vendor must complete and submit the JEA provided Vehicle and Equipment Attribute Data Spreadsheet
- 21.8 Reflective roadside triangle warning/hazard kit 

**NOTE:** All units, attachments, products and services must meet and comply with all applicable regulations and specifications including but not limited to Federal and State Laws, OSHA Regulations, ANSI Standards, DOT Regulations and ASTM Standards. All units must be delivered to the JEA Fleet Facility with a minimum  $\frac{3}{4}$  tank of fuel. Contact Thurman McGlothlin at 904-576-9382 48 hours prior to delivery. Delivery times are Monday through Friday 07:00 AM – 03:00 PM at 5717 New Kings Road Jacksonville Florida, 32209.