

005-21 Appendix A - Technical Specification  
JEA Class 425: Trailer Mounted 6" Centrifugal Pump

**1. SCOPE**

It is the intent of the JEA to purchase multiple TRAILER MOUNTED, SOUND ATTENUATED, 6" CENTRIFUGAL PUMPS ((BBA BA150E D285 Sound Attenuated or Equal). 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 trailer mounted 6" high volume, medium head, large solids handling bypass pump with integrated fuel tank and retractable hose racks (72 HOUR CONTINUOUS RUN TIME). Reference JEA Unit # 70276 (BBA BA150E D285 Sound Attenuated) for Layout/Function/Design Details.



005-21 Appendix A - Technical Specification  
JEA Class 425: Trailer Mounted 6" Centrifugal Pump

**NOTE:** PRIMARY APPLICATION FOR THE PUMPS IS WASTE WATER / SEWER BYPASS

**3. ENGINE (DIESEL)**

- 3.1 Horse Power: Between 70 HP and 78 HP at 2000 RPM (JCB TCAE-55 FT4 DIESEL or Equal) rated for pump capacities
- 3.2 Meters: Tachometer, hour meter, engine temperature, engine oil pressure, charging system, fuel level, and diesel exhaust fluid level.

**4. PUMP (CENTRIFUGAL DRI-PRIME)**

- 4.1 Max Capacity: 2290 GPM or Greater
- 4.2 Solids Handling: 3" or Greater
- 4.3 Max Pressure: 70 PSI or Greater
- 4.4 Max Suction Pressure: 58 PSI
- 4.5 Max Casing Pressure: 104 PSI
- 4.6 Max Operating Speed: Between 2000 RPM and 2200 RPM
- 4.7 Connections (Suction and Discharge): 6" 150# ANSI B16.5. Suction and Discharge Connections are required to be located in the rear of the unit to allow dual hose racks.
- 4.8 Sound Attenuated/Weatherproof/Lockable Canopy: 69 dBA at 30' or less. Use stainless steel door hinges
- 4.9 Priming System: Continuously operated air injector priming device that requires NO periodic adjustment or control. An Alternate Priming System may be considered on a case-by-case basis. Must provide technical documentation for review and approval.
- 4.10 Pumps are required to be Dry Suction Self Priming with a minimum of 25' of Static Suction Lift without the need for a Foot Valve or Add-On Priming Device.
- 4.11 Suction Lift Capacity Minimum Requirements

SUCTION HEAD (FEET)	TOTAL DELIVERY HEAD (FEET)				
	30	46	62	81	121
	OUTPUT (GPM)				
10	2179	2131	2083	1889	1356
15	2058	1937	1816	1574	1162

005-21 Appendix A - Technical Specification  
JEA Class 425: Trailer Mounted 6" Centrifugal Pump

20	1453	1453	1453	1332	848
25	1259	1211	1114	969	484

**5. Gross Vehicle Weight Rating (GVWR), (PUMP/TRAILER COMBINED)**

- 5.1 Rated to accommodate all attachments (Pump, Racks, Hoses, Accessories, etc.)
- 5.2 GVWR: Not to exceed 10,000 LBS.

**6. FUEL CAPACITY AND CONTAINMENT**

- 6.1 Run Time: 72 hours continuous run time at full capacity on one tank of fuel
- 6.2 Fluid Containment System: Mitigate fuel/oil spillage

**7. DIMENSIONS**

- 7.1 Overall Width: Not to exceed 7'6"
- 7.2 Overall Length: Not to exceed 16'
- 7.3 Overall Height: Not to exceed 8'

**NOTE:** Build Trailers to allow the Pump Discharge and Suction Ports to be as low / accessible to operators as possible (ergonomics)

**8. AXLES/BRAKES/TIRES**

- 8.1 Axles (Wet Bearing): Must meet GVWR / Full of Fuel
- 8.2 Brakes: Hydraulic Surge Brakes Rated for GVWR. Must allow backing without locking up brakes.
- 8.3 Tires: sized / rated to accommodate required trailer GVWR

**9. COUPLING**

- 9.1 Adjustable Lunette Eye / Pintle Hitch (rated for trailer GVWR) adjustable from 20 Inch Height to 26 Inch Height to accommodate medium & heavy-duty JEA trucks.

**10. JACKS (3 COUNT)**

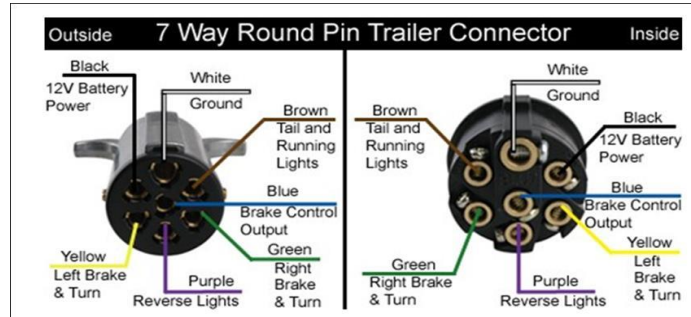
- 10.1 Tong Jack with LED Light: Electric Tong Jack with spring loaded drop leg, minimum 4" X 4" base rated for tong weight
- 10.2 Rear Jacks (2 Count, RH and LH): Manual with spring loaded drop legs, minimum 4" X 4" base rated for weight

**11. LIGHTING / WIRING**

- 11.1 Light Emitting Diode (LED), all lights

005-21 Appendix A - Technical Specification  
JEA Class 425: Trailer Mounted 6" Centrifugal Pump

- 11.2 All wiring must be loomed & run through weatherproof conduit (No Scotch Lock Connections)
- 11.3 Trailer Plug must be 7 Pin Round (JEA Standard)



- 11.4 Junction Box (All Wiring): Mounted inside trailer tong
- 11.5 LED Engine Compartment Light: Mount inside Sound Attenuated Canopy to illuminate engine and pump components.

**12. OTHER REQUIREMENTS**

- 12.1 Apply nonskid coating to steps and walking surfaces (if applicable)
- 12.2 Single Point Lifting Eye
- 12.3 4" D-Rings (4 Count) Permanent/Welded to Trailer Frame: RF, LF, RR and LR
- 12.4 Fuel Gauges: Mechanical (Dial Type) and Digital
- 12.5 Aluminum Lockable Tong Mounted Tool Bin, weather tight with LED light
- 12.6 Solar Battery Tender
- 12.7 5 AMP Commercial Grade Battery Charger: Mount charger inside canopy and mount the weatherproof plug on the outside/rear of canopy
- 12.8 Galvanized Coating: Trailer, Pump & All Attachments (resist weather and caustic environments)
- 12.9 6" MCG x 150#FL and 6" FCG x 150#FL Mounting Kits: 10 Count of Each
- 12.10 Retractable Hose Racks (2 Count, Each Unit): 98" Long X 24" High X 13" Deep (9" Internal Depth). One Mounted RH and one mounted LH and hinged on the rear
- 12.11 Pumps must be equipped with Telematics to allow remote access to systems and control (SSO Prevention). Must be capable to do the following:
- Determine location of pump
  - Receive alarms via text or phone calls when pump shuts down.
  - Remote start, stop & change pump speeds (preferred, not required, please specify)
  - Service/Maintenance parameters

005-21 Appendix A - Technical Specification  
JEA Class 425: Trailer Mounted 6" Centrifugal Pump

- Manage pumps remotely
- Sump level monitoring
- Flow meter readings
- Warning and Error codes
- Fuel level reporting

**13. COLOR / GRAPHICS / MANUFACTURER ID PLATE**

- 13.1 Galvanized Coating throughout with White where possible.
- 13.2 Delete all vendor and manufacturer identification decals except suction and discharge Labels, required safety & reference identification tags, decals, data plates & placards.
- 13.3 Install Height Warning Placard with Maximum Height (feet / inches)
- 13.4 Aluminum DOT Compliant I.D. Plate: Must be permanently attached to Left Side / Outside of Tong of Trailer & include model number, serial number, GVWR, dry / empty weight, tire size & manufacturer's name, address & contact number.
- 13.5 Permanently stamp model number & serial number inside / right side of tong frame

**14. MANUALS, VIDEOS, KEYS & OPERATOR ORIENTATION**

- 14.1 (1) set of operator manuals per unit (HARD COPY). (1) Electronic Copy maintenance, repair & parts manuals
- 14.2 Keys: Key all units alike and include (3) complete sets of keys. Key all lockable compartments, bins etc. alike.
- 14.3 (1) On-Site JEA Operator Orientation Class (Complete Unit: Chassis & Attachments)
- 14.4 (1) On-Site JEA Maintenance Orientation Class (Complete Unit: Chassis & Attachments)
- 14.5 Include a complete paper copy Specification / Build Sheet including Drawings with all units

**15. DRAWINGS**

- 15.1 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 maybe used at JEA's discretion for solicitations, request for information, reference for repairs, etc.

**16. WARRANTY / PARTS AVAILABILITY**

- 16.1 Minimum 2 Year Warranty (Include Parts, Labor and Travel). Must include all standard manufacturer warranties.
- 16.2 Warranty period starts when units are received at JEA's fleet facility and are inspected and accepted.
- 16.3 Parts Availability: Parts must be available within 48 hours from order.

005-21 Appendix A - Technical Specification  
JEA Class 425: Trailer Mounted 6" Centrifugal Pump

- 16.4 The Manufacturer or Manufacturer Dealer must have a local presence to supply parts, complete warranty work and complete repair work on the units.

**17. ADDITIONAL REQUIREMENTS**

- 17.1 Mount Round, Weather Proof Registration Canister (Transparent Lid) to Drivers Side/Front of trailer (Easily Accessible)



- 17.2 Weatherproof Operator Manual Compartment with Hardcopy Manual
- 17.3 Purchase and Install Yellow City License Plates
- 17.4 Install JEA provided decals (You may use JEA's current vendor at your expense)
- 17.5 Current DOT Inspection / Certification with decal installed RF out-side tong of trailer
- 17.6 Must include/document the VIN number, make, model, description, JEA PO # and JEA provided 5 digit unit # on all invoices
- 17.7 Awarded vendor must complete and submit the JEA provided Vehicle and Equipment Attribute Data Spreadsheet

**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.