

Rochester Hills Fire Dept Rochester Hills, MI.

QUOTE

Proposal for Refurbishment:

**One (1) – 2008 Pierce Impel 75' HD Ladder
20887TR**

08 January 2021 – Prepared by: Alan Boushley



PIERCE MANUFACTURING, INC.

MIDWEST REGIONAL SERVICE CENTER

816 COMMERCIAL AVENUE * WEYAUWEGA, WI 54983 * (920) 867-2142

Pierce Manufacturing, Inc. is pleased to submit to the **Rochester Hills Fire Dept** a proposal for the refurbishment of your **2008 Pierce Impel 75' HD Ladder aerial unit 20887TR, VIN#4P1CJ01A09A009233**. The following paragraphs will describe in detail the apparatus additions and modifications proposed.

QUALIFICATIONS

Pierce Manufacturing, Inc., located in Appleton, Wisconsin, is truly a leader and innovator in the fire apparatus industry. The Pierce Refurbishment Center has achieved the very same reputation for fire apparatus repair and refurbishing. Located 30 miles west of Appleton in Weyauwega, Wisconsin, the Pierce Refurbishment Center facility is dedicated exclusively to the refurbishing and repair of all makes and models of fire apparatus. Pierce Manufacturing has produced fire apparatus for over 70 years and has been refurbishing apparatus for more than 35 years.

The 37,000 square foot Refurbishment Center has 16 well-equipped bays staffed by 52 certified, highly skilled mechanics. Fabrication and refinishing is done at the main manufacturing facilities to assure our customers the same fine quality that new Pierce apparatus is famous for.

WELDING REQUIREMENTS

Pierce Manufacturing follows American Welding Society D1.1-96 standards for structural steel welding. All aluminum welding will be done to American Welding Society and ANSI D1.2-96 requirements for structural welding of aluminum. Flux core arc welding will use alloy rods, type 7000, American Welding Society standards A5.20-E70T1.

ISO COMPLIANCE

The manufacturer will operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that will be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance will be included with the bid.

SINGLE SOURCE MANUFACTURER

Pierce Manufacturing is a single source apparatus manufacturer. The definition of single source is a manufacturer that designs and manufactures their products using an integrated approach, including the chassis, cab and body being fabricated and assembled on the bidders premises. The warranties relative to the chassis and body design (excluding component warranties such as engine, transmission, axles, pump, etc.) will be from a single source manufacturer and not split between manufacturer (i.e. body and chassis).

WARRANTY

A separate warranty page detailing the warranty coverage will be provided with the proposal.

TERMS

Payment is to be made, in full, within 30 days after completion and final acceptance at Pierce Manufacturing, Inc.

SHIPPING PRECAUTIONS

The following shipping precautions must be completed before transportation of the fire department's apparatus to Pierce Manufacturing for refurbishment or repair. *Failure to complete the listed items below may result in additional costs to the fire department.*

All water tanks, foam tanks, pumps, all inlets and discharge plumbing, all drains, and any other plumbing are to be completely drained prior to being driven or flat-bedded.

Strip down all loose equipment unless arranged with Pierce prior to shipping in order to make the repair process easier and to eliminate the potential for lost equipment while the unit is being refurbished or repaired.

All loose or potentially loose items should be taped or strapped to ensure they do not come loose during transit.

INCOMING VEHICLE INSPECTION

The following inspections will be performed by a qualified Pierce technician(s) before any work begins. Inspections are to verify working components before disassembly, and to determine the overall condition of the truck.

- Chassis inspection and road test
- Cab inspection
- Body inspection
- Electrical inspection and test
- Aerial third party U.L. test and inspection
- Generator test

Should any defects be found that are not already addressed in the proposed work, a list of the defects along with an estimate for any additional the costs will be provided to the fire department for review. *Repair of any defects will be "open", pending approval from the fire department. No additional work will be performed without prior approval from the fire department.*

FRAME and TORQUE BOX CORROSION REPAIR

Disassemble the body/pump house components, unstring electrical harness and remove the body/pump house.

Unbolt the torque box and remove from chassis frame to repair corrosion on frame rails, crossmembers and torque box. The sides, bottom and top of the torque box will be inspected for any metal missing. A detailed inspection report will be forward to the customer for disposition. **Additional repairs will be open: subject to inspection.**

Remove the rear axle assembly to include suspension and wheels to gain access to frame and torque box area.

Inspect brake system, suspensions for corrosion. **Additional repairs will be open: subject to inspection.**

Remove all bolts, crossmembers, air tanks from the cab back.

Sandblast/needle all areas of corrosion on the torque box bottom, sides,

top, rear wall, interior and outrigger housings.

The frame rails and frame liners will be removed and replaced with new frame rails and liners that are **E-Coated** for additional corrosion protection. The frame rails will be constructed of 120,000 psi yield strength heat-treated .38" thick steel, with 3.50" wide flanges

Remove outrigger beams and all outrigger cylinders, sandblast the interior of the outrigger housings.

Sandblast all outrigger horizontal tubes, vertical tubes and planting feet. The outrigger tubes and feet will be painted #101 black.

Crossmembers, body mounting supports, running boards that are removed will be replaced with E-coated supports.

Sandblasted area will be primed, finish paint exterior of torque box.

Replace cross members and body mounting substructures with E-coated material and new mounting hardware.

Replace the following brake system components and air tank PPV valves.

- Double check valve
- Relay valve R-14
- Relay valve R-12
- Parking brake valve
- Rubber hoses to the brake cans

Re-bolt torque box to chassis frame with new mounting hardware, UL to verify torque values.

Rear axle assembly will be steam cleaned and painted matching the original color.

Reinstall rear axle assembly and wheels with new hardware.

Reinstall drive shaft assemblies with new universal joints.

Remount body panels, front cross divider, rear wall assembly, install electrical harnesses and mount all miscellaneous body components.

Remove and replace fuel tank and stainless-steel straps

Check alignment and road test apparatus.

TAK 4

TAK-4 cradle and suspension components will be scraped/needled to remove corrosion.

The TAK-4 will be steam cleaned and painted matching the original color.

AERIAL DEVICE PRE-CHECK

The aerial device once received will be cleaned and inspected by a qualified Pierce aerial technician to assure the device is serviceable and/or repairable.

Aerial certification

After all repairs and modifications are completed, the aerial device will be reassembled. The complete device will be lubricated, adjusted and tested for proper operation. The unit will then be fully tested by a 3rd party testing company, UL Underwriters Laboratory to the current standards of the NFPA 1911. All timings will be tested to NFPA 1911 table A.19.8.8.2.

\$ 134,994.00

REAR SPRING SUSPENSION REPLACEMENT

Rear suspension will be replaced to include the following:

- Install rear spring assemblies
- Install new pins and bushings rear hangers.
- Install new U-bolts, washers, and lock nuts

\$ 3,833.00

BODY REPAIR

Repair body damage to lower front P3 compartment.

Repaired area will be blend painted.

\$ 1.140.00

CUSTOM CHASSIS RUST PROOF / UNDERCOAT

The rust proof/undercoat option will provide additional paint to the chassis frame rails and a protective coating that will help fight corrosion.

Rust proof / Undercoat Process

A coating will be applied to the custom chassis once the cab, pump and body mounting angles have been installed. The coating texture will be waxy and pliable after drying so it will not chip, crack, or peel off during normal vehicle operations.

The rust proofing material will be the color black, and is a coating of a corrosion inhibitor for long-term protection against corrosion.

The material will be applied to the following areas:

- Outside of the chassis frame rails (top & side)

- Top of the frame rails

- Top of crossmembers

- Inside of the frame rails - in and around harnesses keeping coating off harnesses as best as possible

- Between the frame and liner - coating will be applied after frame and liner are assembled using a wand to apply material between as best as possible

- Top of the body mounting angles (including rear platform)

- Top of air tanks

- Top of fuel tank

TORQUE BOX RUST PROOFING

The apparatus torque box will be properly treated by an authorized Ziebart dealer.

Coating texture will be waxy and pliable after drying so it will not chip, crack, or peel off during normal vehicle operations. Minimum dry film thickness will be in the range of 3.00 to 4.00 mils.

The material will be applied to the torque box. Some areas of the torque box considered mounting surfaces will not have rust proofing applied.

RUST PROOFING WARRANTY

There will be a ten (10) year warranty provided on the areas of the apparatus that have been properly rust proof treated by an authorized Ziebart dealer. The warranty will remain effective only if the apparatus is inspected annually by an authorized Ziebart dealer. There may be an additional fee for this annual inspection. Failure to follow the annual inspection will void the warranty.

\$ 4,830.00

STEP, PULLOUT

Remove and replace the driver side pullout step and mounting brackets matching the original design and material.

\$ 1,098.00

WASH AND FUEL

The truck will be washed and fueled in preparation for inspection/delivery.

\$ 1,431.00

OPTIONS

TRANSPORTING UNIT

Transport the unit to and from the Pierce Midwest Refurbishment Center by a certified and licensed drive away company.

\$2,500.00 each way

FINAL INSPECTION TRIP

Halt Fire to provide A ONE-DAY inspect trip after completion. Transportation shall be via private air carrier out of Oakland County Airport.

\$ 2,700.00 / one day trip

END.