
AERIAL REPLACEMENT

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CURRENT LADDER TRUCK



- Ladder 2
 - 2006 Sutphen SP70
 - Single Axle
 - 70' Platform Mini Tower
 - 1500 GPM
 - Pre-piped waterway
 - Exterior ground ladders
 - Replacement Date: March 2026
- Location: Fire Station #2



APPARATUS COMMITTEE



- Formed in January 2024
- Committee
 - Chairman
 - Co-Chairman
 - Eight (8) Personnel
- Goals of the Committee
 - Effective Selection
 - Maintenance
 - Utilization
- Key Factors for Effective Selection, Maintenance, and Utilization
 - Fire Department Needs
 - Aerial Device Type
 - Reach and Height Requirements
 - Maneuverability and Load Capacity
 - Apparatus Size and Weight
 - Operational Versatility
 - Technology Integration
 - Training and Familiarization

SELECTION OF APPARATUS



- **Peirce Ascendant 107' Heavy Duty Aerial**
 - **Manufacturer: Pierce**
 - Currently the only manufacturer that makes a 107' 107' aerial ladder on a single-axle.
 - **Dealer: Siddons-Martin Emergency Group**
 - **Cost of Vehicle: \$1,985,746.00**
 - **Build Time: 48-49mth**
 - **HGAC FS12-23**



SIDDONS-MARTIN EMERGENCY GROUP



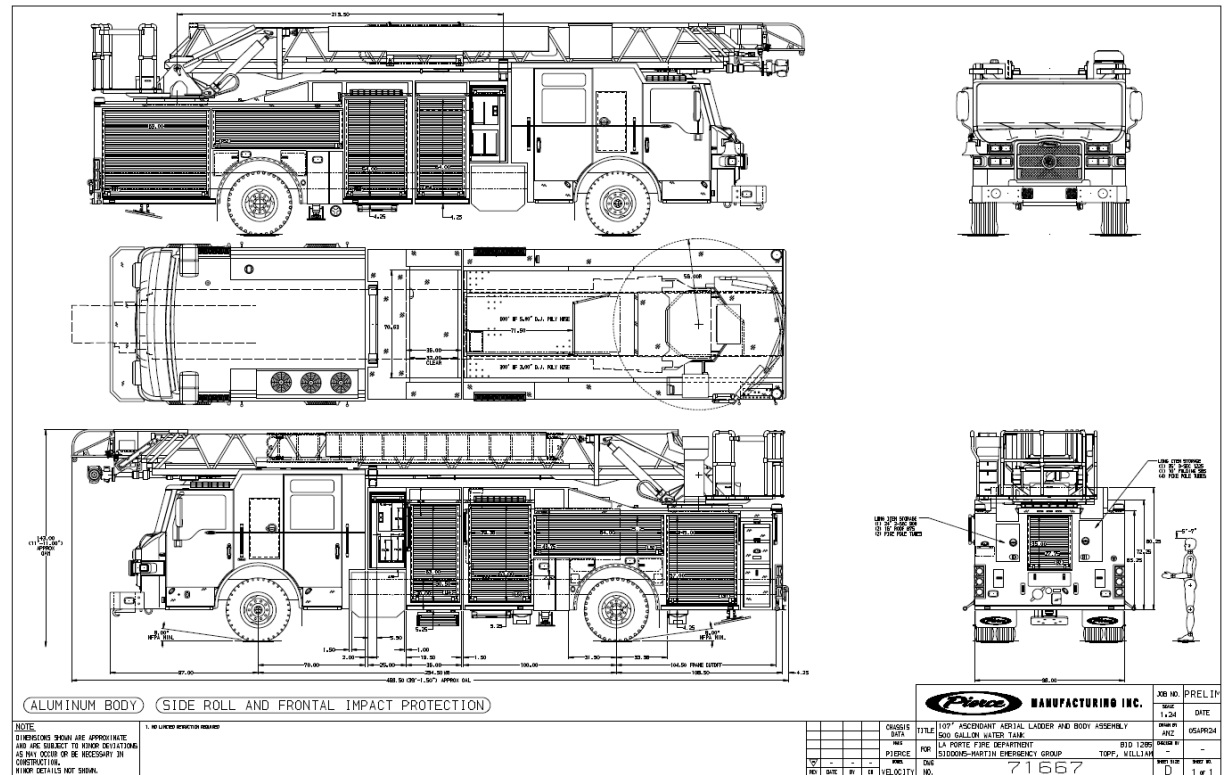
- Only Authorized Peirce Dealer in the State of Texas
- Pierce authorized warranty service center.
- Service Centers
 - Twenty locations across the State of Texas
 - Three locations in the Houston Area
 - Houston, Friendswood, and Katy
 - Provides complete service capabilities 24/7
 - Provides Annual Pump and Aerial Testing
 - Will provide training to the department when the apparatus is delivered
 - Neighboring departments with Peirce Apparatus:
 - Baytown, Seabrook, Pasadena, Deer Park, Kemah, Pearland, Beach City, along with Industrial Facilities.



SPECIFICATIONS



- Custom Chassis: Velocity
- Vertical Height: 107'
- Horizontal Reach: 100'
- Operating Range: -10 degree to 77 degree
- Payload Capacity: 750lb dry / 500lb wet
- Wind & Ice Ratings: Up to 50mph winds & 0.25" of ice
- Stabilizers: 1 set of H-style & 1 down-jack
- Stabilizers Spread: 18'
- Ladder Warranty: 20-yr structural



TARGETED USAGE



- Heavy Duty Aerial would be used to meet the following needs of the community
 - Aerial work above 2 stories such as Apartment complex's, ETJ south of Fairmont, LPISD School Buildings, commercial strip centers, Hotels, etc.
 - Horizontal Reach. Being able to park on the street without having to park in the parking lot for businesses that are closer to the street.
 - Life Safety. This aerial provides a rescue mode that could be utilized to make rescues from tall building, without having to compromise fire suppression efforts.
 - Below grade. This unit would be designed to operate at a 9 percent downhill slope, which allows for below grade rescues or store front fire suppression efforts.

MAINTENANCE PLAN



- 20 Year Maintenance Plan (*Life of the Apparatus*)
- Completed by Service Technicians that are factory trained and ASE / EVT certified per NEPA 1071
- Supported by Public Works
- Cost of Plan: **\$301,769.00**

1285 La Porte Aerial 20 Year Maintenance

Two (2) Svc per year – 500 Hour/6 Month	Changing engine oil, oil filter(s), air filter, crank case (element only), def filter, air dryer service (element only), transmission fluid and filters, coolant filter as needed, pump oil and filter, differential fluid inspection, complete chassis lubrication, 104-point visual inspection with written report and estimates for need repairs. Recommended Minimum of 2 – 500 hour services per year.	\$166,278
SMEG Aerial Preventative Maintenance	OEM Primary and 25-hour inspection, cleaning and lubricating all ladder points, minor cable adjustments, if necessary, top off hydraulic fluids and perform drift test on all cylinders. Operate and inspect all ladder appliances. Replacement of hydraulic filters, if necessary, will be an additional cost and estimate provided to customer prior to completion.	\$55,374
A/C System Maintenance	Evacuate system and weigh refrigerant level. Replace OEM drier(s), replace service port valves/caps, clean compressor screen, clean evaporator screens, vacuum test system, recharge with refrigerant and perform system leak test.	\$27,649
TAK-4 Maintenance	Inspection and check on all TAK-4 components including proper ride height and adjustments required	\$22,103
Wheels off Brake Inspection	Remove wheels/tires for complete brake system evaluations. Fees will be credited should additional brake repairs be approved while disassembled.	\$13,788
Annual Pump Test	Perform annual certification pump testing with written report	\$16,577

MAINTENANCE PLAN BENEFITS



■ **Enhanced Safety**

- Ensures equipment is always in optimal condition, reducing the risk of risk of failure during emergencies.
- Meets safety regulations and standards, minimizing accidents.

■ **Cost Savings**

- Identifies and fixes minor issues before they become major repairs.
- Prolongs the useful life of the apparatus.

■ **Operational Efficiency**

- Ensures equipment is always ready for deployment.
- Maintained apparatus perform better, providing reliable service and service and reducing downtime.

■ **Budget Management**

- Helps forecast and budget for regular service costs.
- Maintained apparatus retain their value better, which is beneficial for potential future resale or trade-in.

■ **Compliance with Standards**

- Adhering to a maintenance schedule helps comply with national and local regulations, such as those set by the National Fire Protection Association (NFPA).

■ **Enhanced Morale**

- Firefighters can trust their equipment.
- A well-maintained fleet reflects the professionalism and dedication of the department to its community.

LOOSE EQUIPMENT BUDGET



- **NFPA 1901 – Standard for Automotive Fire Apparatus**
 - Chapter 8 of this standards provides a list of equipment that is required for Aerial fire apparatus.
 - Loose Equipment Budget of **\$142,646.51** exceeds that standard, which enhances the department’s response to response to emergencies effectively and efficiently.
- **Insurance Service Office (ISO)**
 - ISO also provides a list of equipment that is required for Aerial fire apparatus.
 - Loose Equipment listed in proposal exceeds the requirements, which will assist with maintaining a lower rating and rating and keeping home insurance rates for the those who live in our community.
- When apparatus is delivered to the department, and after training is complete, it will be fully functional and functional and ready for response.

TOTAL COST BREAKDOWN



Peirce Ascendant 107' Heavy-Duty Aerial

Vehicle Price	\$1,985,746.00
20-yr Maintenance Agreement	\$301,769.00
Loose Equipment Budget	\$142,646.51
HGAC FS12-23	\$2,000.00
TOTAL	\$2,432,161.51

QUESTIONS/SUMMARY

