Body Configurations



- Standard Quint
- Texas Chute Out/Side Stacked Hose Bed
- PUC
- No Pump/No Tank

Standard Quint





Texas Chute Out



GROUND LADDERS



STORAGE

PUC









No Pump/No Tank









Torque Box





AERIAL TORQUE BOX/PEDESTAL

The pedestal assembly will be a welded assembly made of high strength 0.25" plate. The vertical member will be a .375" reinforced wall cylinder with a 28" outside diameter and will connect the rotation bearing mounting plate to the lower substructure.

The pedestal assembly will be bolted to the chassis frame with .88" diameter Grade 8 bolts, and will be utilized to mount the outrigger jacks and reservoir for the aerial hydraulic system.



Torque Box

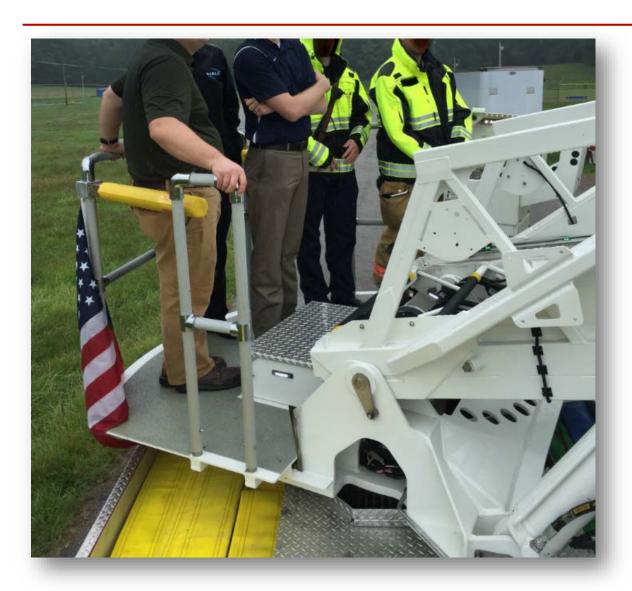




Torque box is mounted to the chassis frame rails in 4 locations (one each side under outriggers and one each side behind rear axle.

Turntable







The turntable is pretty large and the first step incorporates a storage compartment for ladder belts, etc.

Turntable Access





The turntable is accessed from the side of the truck (driver's side only or both sides).



Fold-out step assembly – Was rather difficult to pull out and is very sensitive to be stowed perfectly or triggers sensor in cab.

Turntable Access





There's not much room to step down onto when dismounting the turntable

Turntable Access - Step Height



The bottom step will have a step height not exceeding 24.00" from the ground to the top surface of the step at any time.



If the unit is set up on an incline, step height can become compromised. That bottom step looks much higher than 24".

It appears they need a dedicated storage compartment the chair.....

Operational Limitations





GREEN AREA – GOOD RED AREA – "DEAD ZONES"

These red areas located at the 10 o'clock and 2 o'clock positions when working off the front of the rig are "dead zones". If using the aerial at full extension, the truck will not let you fly the aerial device into this zone without first retracting it to approximately 93 feet.

Operational Limitations



If you are unable to level your apparatus within the green range, you may set up within the yellow range, but only with reduced load chart capacity. If either the Grade or Slope apparatus angle indicators are outside the green range but still within the yellow range, then the device can be operated at 50% (half) capacity. This means that you must cut each of the load values in the load chart in half. For example, if the load chart indicates an acceptable load with 500 lbs at the mid and 250 lbs on the base, then the half-capacity values when operating in the yellow range would be 250 lbs at the mid and 125 lbs on the base. This 50% capacity condition is only safe if the apparatus is leveled within the limits shown in *Load Chart and Level Chart Information* of this manual.

If you are unable to set up your apparatus with the apparatus angle indicators within either the green or yellow safe limits, then the apparatus must be repositioned until it can be.

Table 3-3: Apparatus Leveling Safe Operating Limits for Full Load Chart Capacity Operating Conditions

Level Limits for Full Load Chart Capacity Operating Conditions					
Direction Maximum Safe Operating Angle (degrees) Color					
Slope (Side-to-Side)	3.5°	GREEN			
Grade (Front-to-Back)	5.5°	GREEN			

Table 3-4: Apparatus Leveling Safe Operating Limits for 50% Load Chart Capacity Operating Conditions

Level Limits for 50% Load Chart Capacity Operating Conditions						
Direction Maximum Safe Operating Angle (degrees) Color						
Slope (Side-to-Side)	5.5°	YELLOW				
Grade (Front-to-Back)	6.5°	YELLOW				

Aerial Pedestal Display







This is the aerial display during an overcast rainy day. It was very difficult to read the display.

Aerial Pedestal Display





This is the aerial display during an overcast rainy day. It was very difficult to read the display.

Ladder Dimensions



	Width	NFPA Min.	Height	NFPA Min.	
Base Section	41.87"	18" (excluding equip.)	25.69"		
2 nd Section	34.88"		22.06"	12"	
3 rd Section	27.87"		19.44"	12	
Fly Section	21.63"		16.70"		

Ladder Stability



This video is of Jim Garver at the tip. Notice how much it moves with very little effort.

Is this their definition of Heavy

Duty?????



Ladder Finish



FOUR (4) YEAR PRO-RATED PAINT AND CORROSION

A Pierce aerial device limited pro-rated paint warranty certificate, WA0047, is included with this proposal.



Pierce Aerial Paint Warranty





Fire and Rescue Apparatus

Four (4) Year Pro-Rated Paint and Corrosion Aerial Device

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Aerial device chall be free from billidering, peeling, corrocion or any other adhecion defect caused by defective manufacturing methods or paint material selection for exterior surfaces.
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Warranty Begins: The date of the original purchase (issued when the product ships tropy or 1).

Varranty Period Inde

This limited warranty is applicable to the vehicle in t

Topocat Durability & Appearance: Gloss, Color Retention Cracking

0-24 months 100% 26-48 months 60%

Integrity of Coating System: Adhesion, Bilstering/Bubblir 0-24 months 100%

onditions and

colusions: C

Corrocion: Dissimilar Metal and Crevio 0-24 months 100% 26-48 months 60%

Corrosion Perforation 0-24 months 100% 26-48 months 50%

This limited warranty applies only to exterior pain

Items not covered by this warranty include:

(a) Damage from look of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).

This break markers with Process markers and the product is properly maintained in accordance with Pierce's markers and manuals and used in service which is normal to the particular modes to a gradual to stress genice which does not subject the product to stresses or impacts greater than now.

In the product is of the product of the pr

2/8/2010 WA0047

arranty

(a) any integral parts, components, attachments or trade accessories product that are not manufactured by Pierce, including but not limited and accessories of administration of divisions, and of the production of the production

) any vehicle, che proposent, part, attachment or accessory damaged by suse proposers to severe environmental or chemical conditions, acidic improper maintenance, accident, crash, or force majeure such as natural scaler. Johning. earthquake, windstorm, hall, flood, way or not:

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or numbers for which it was manufactured or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, then, fulds, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the submorration of Pierce may void this warrante.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 18 THE SOLE AND EXCLUSIVE WARRANTY ONLY BY PERCE, PERCE PERCE YELLOW SOLAMS AND EXCLUDES ALL OTHER WARRANTES, WHETHER EXPRESS, IMPLED OR STATUTORY, ON THE PERCENT OF THE SOLAM SOLA

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity in our fee to missue, register, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product shallable for inspection by Pierce or to designated application and shall make the product shallable for inspection by Pierce or to designated specified between the product shall be returned to Pierce by Sulger for examination and/or region. Bigger from a less reproduct shall be returned to Pierce by Sulger for sextending the product during transportation, and for risk of loss of or damage to the product during transportation. Which is associated into Pierce that it produces or register, it preferred option and expenses to still proported in advance in writing by Pierce. This REMEDY 6HALL BET THE SOLUCIONEY AND SOUR REMEDY FORMAY SERVANCE OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notationaring anything to the contrary herein or in any agreement between Pierce and Buyer, in NO EVENT HIGH. PERIOR SEE LIABLE FOR RNY CONSIGNATION. INCIDENTAL, SPECIAL, BORRECT, OR FUNDITUS EMANGES WHATDGEVER, WHETERER ARISING OUT OF BERACH OF CONTRACT, WARRANTY, TOTH LIAW WHETERER ARISING OUT OF BERACH OF CONTRACT, WARRANTY, TOTH LIAW CONTRACT, WARRANTY, AND THE CONTRACT LIAW CONTRACT, OF ANY DEFECTS THEREIN, OR ANY UNDERTANDING, ACTS OR COMMISSIONS RELATED THEREIO, TO ANY SUCH DAMAGES. WHOLL WHO AS SEEN PROPERTY OF THE PROPERTY OF ANY SUCH DAMAGES. WHOLL WE SEEN PROPERTY OF THE PROPERTY OF

Any Surety Bond, if a part of the sale of the vehicle as to which this limited field, applies only to this flerer Basic One Year Limited Warranty for such vehicle—

such vehicle—

or to the warrantes of any—

component, data-order or accessory—

component, data-order or accessory—

order to red the vehicle of the vehicle. This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:

Topcoat Durability & Appearance: Gloss, Color Retention & Cracking

0-24 months 100% 25-48 months 50%

Integrity of Coating System: Adhesion, Blistering/Bubbling

0-24 months 100% 25-48 months 50%

Conditions and Exclusions:

See Also Paragraphs 2 thru 4 Corrosion: Dissimilar Metal and Crevice

0-24 months 100% 25-48 months 50%

Corrosion Perforation 0-24 months 100%

25-48 months 50%

This limited warranty applies only to exterior paint.

Items not covered by this warranty include:

- (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).
- (b) UV paint fade.

Egress Tip







The ladder will be designed to provide continuous egress for firefighters and civilians from an elevated position to the ground. The end of the fly section will be constructed in a manner that aids personnel in climbing off the ladder.

Sutphen egress tip is angled 20 degrees, making it easier to access a window and making it easier for personnel to climb on and off the ladder.

Tip Load









WATERWAY DRY 35 MPH Wind Condition										
		Aerial Elevation								
	-10° to 9°	-10° to 9° 10° to 19° 20° to 29° 30° to 39° 40° to 49° 50° to 59° 60° to 69° 70° to 77°								
Egress	750#	750#	750#	750#	750#	750#	750#	750#		
Fly	-	-	-	-	250#	250#	500#	750#		
Upper Mid	-	-	-	-	250#	500#	1000#	1000#		
Lower Mid	-	-	-	500#	500#	750#	1000#	1000#		
Base	-	-	500#	500#	500#	1000#	1000#	1000#		

WATERWAY CHARGED 35 MPH Wind Condition									
EGRESS CAPACITY IS ZERO WHEN FLOWING WATER WITH THE NOZZLE ABOVE WATERWAY CENTER LINE									
Aerial Elevation									
	-10° to 9°	10° to 19°	20° to 29°	30° to 39°	40° to 49°	50° to 59°	60° to 69°	70° to 77°	
Egress	500#	500#	500#	500#	500#	500#	500#	500#	
Fly	250# 500# 500#							500#	
Upper Mid	id 250# 500# 500# 750# 1000#							1000#	
Lower Mid	-	_	_	250#	500#	750#	1000#	1000#	
Base	-	-	250#	500#	750#	1000#	1000#	1000#	

Reduced Loads at the tip can be redistributed in 250# increments to the fly section, upper mid section, lower mid section or base section as needed.

Tip Load - Flowing Water





ZERO tip load capacity when flowing nozzle above horizontal.







WATERWAY DRY 35 MPH Wind Condition								
	Aerial Elevation							
	-10° to 9°	-10° to 9° 10° to 19° 20° to 29° 30° to 39° 40° to 49° 50° to 59° 60° to 69° 70° to 77°						
Egress	750#	750#	750#	750#	750#	750#	750#	750#
Fly	250# 250# 500# 750#						750#	
Upper Mid	-	-	-	-	250#	500#	1000#	1000#
Lower Mid	-	-	_	500#	500#	750#	1000#	1000#
Base	ı	-	500#	500#	500#	1000#	1000#	1000#

WATERWAY CHARGED 35 MPH Wind Condition

EGRESS CAPACITY IS ZERO WHEN FLOWING WATER WITH THE NOZZLE ABOVE WATERWAY CENTER LINE

		Aerial Elevation						
	-10° to 9°	10° to 19°	20° to 29°	30° to 39°	40° to 49°	50° to 59°	60° to 69°	70° to 77°
Egress	500#	500#	500#	500#	500#	500#	500#	500#
Fly	-	-	-	-	-	250#	500#	500#
Upper Mid	-	-	_	250#	500#	500#	750#	1000#
Lower Mid	-	-	_	250#	500#	750#	1000#	1000#
Base	-	-	250#	500#	750#	1000#	1000#	1000#

Reduced Loads at the tip can be redistributed in 250# increments to the fly section, upper mid section, lower mid section or base section as needed.

Waterway



The integral telescopic water system will consist of a 4.50" diameter tube in the base section, a 4.00" diameter tube in the mid-section and a 3.50" diameter tube in the fly section. The telescopic waterway will be constructed of anodized aluminum pipe.

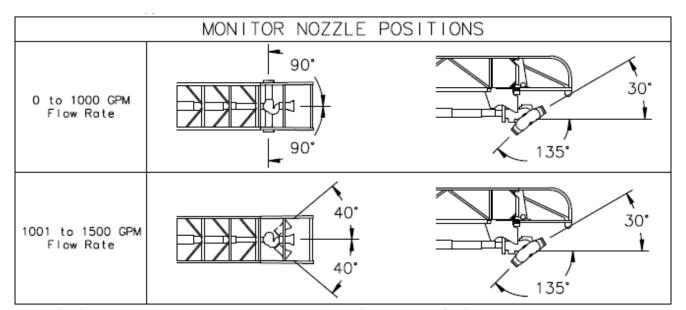




Nozzle Capabilities



Monitor reach is reduced to 40 degrees each side when flowing 1001+ GPM.



Capacities are based on the following conditions:

- * Apparatus is set up according to the operator's manual and leveled to within safe operating limits.
- * The ladder is fully extended and unsupported, 360 continuous rotation.
- * For icing conditions, refer to the operator's manual.

Electrical Distribution Box





Electrical distribution box is underneath the apparatus behind the fuel tank.



Hydraulic Tank



The hydraulic tank is located just above the fuel tank up inside the torque box/pedestal. Notice the interesting shape.



Ascendant Coatings



What about the rest of their major steel components (turntable, ladder, etc.)? Are they not important enough to have this coating?



E-Coat Corrosion Protection

As standard, the torque box, frame rails, and pedestal are e-coated for corrosion protection.

Since this is a dipping process, how are the parts touched up during production or after the unit is in service?

Sutphen Coatings

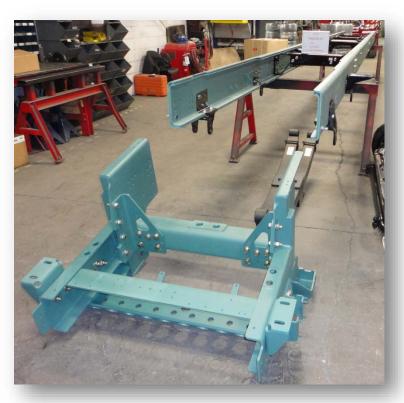


All of the steel components are treated with Cathacoat prior to priming and painting, including:

- Chassis Frame Rails (Including Front Clip Assembly)
- Torque Box
- Outrigger Assemblies
- Turntable
- Ladder Side Plates
- All Steel Ladder Brackets
- Etc.





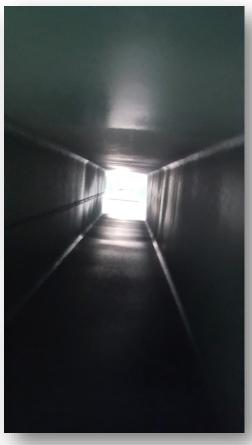


Sutphen Coatings











Ascendant 107' Single Axle



It sure seems like they made a lot of comprises in creating the Ascendant....





QUESTIONS OR COMMENTS???