



## NORTH CAROLINA SHERIFFS' ASSOCIATION

<b>Name of Dealership</b>	<b>Type of Vehicle</b>	<b>Zone</b>	<b>Base Unit Price</b>
<a href="#"><u>G-S - 5735D (Specification #05)</u></a>			
GSP Marketing	2016 G-S 5735D	★Appalachia	\$62,871.86
GSP Marketing	2016 G-S 5735D	★Dogwood	\$62,871.86
GSP Marketing	2016 G-S 5735D	★Cardinal	\$62,871.86
GSP Marketing	2016 G-S 5735D	★Longleaf Pine	\$62,871.86



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## G-S - 5735D SPECIFICATION #5

2016 G-S 5735D

Over-top loading, dual bin recyclables collection body - This specification describes a "Top-loading" style recyclables collection body designed for installation on a minimum 33,000 G.V.W.R. truck chassis. This machine is to be used in a "two-flow" collection operation. In order to achieve the most effective load distribution and to comply with both state and federal weight regulations paper products will be loaded toward the front of the body and co-mingled products toward the rear. A mid-body-mounted, hydraulically actuated materials compression panel will be provided. This panel must be capable of moving both fore and aft in the body and compressing both the paper products and the co-mingled products. The compression force of this panel must be independently adjustable so that both location and density of each material can be customized to the users best advantage

### **ALL ITEMS FACTORY INSTALLED UNLESS OTHERWISE INDICATED**

**INSTRUCTIONS:** Listed above, you will find the model numbers of the vehicles that will be included in this year's contract.

#### 1. BODY CAPACITY

- a. The body shall have a usable capacity of thirty-five (35) cubic yards exclusive of the loading bins
- b. The loading bins shall have a minimum usable capacity of fifty one and one half (51-1/2) cubic feet each

#### 2. BODY DIMENSIONS

- a. Body length at floor - 220" - (not including bustle tailgate)
- b. Overall height above chassis - 99" (bin in "down" position)
- c. Overall height above chassis - 131" - (bin in full "up" position).
- d. Inside body width at floor - 51"
- e. Inside body width at roof - 82-1/2"
- f. Overall body width when positioned for travel - 102"
- g. Bin loading height - 40" - (39" frame height)

#### 3. BODY CONSTRUCTION

- a. The body floor shall be constructed of 3/16" 80,000 P.S.I. steel plate
- b. The body floor cross-members shall be 1/4" x 2" x 3" formed steel channels interlaced with 6" x 10.5 lbs/ft structural channel longitudinals. Floor subassembly shall have nine (9) cross-members minimum
- c. Body sides shall be formed from twelve (12) gauge steel sheet with full length expanded steel windows located near the top
- d. Body top doors shall be fourteen (14) gauge formed steel sheet bolt mounted directly to the main top door lifting arms
- e. Body vertical bolsters shall be 2" x 3" x 3/16" wall structural steel tubing continuously welded to the body side sheets
- f. The upper body longitudinal channels shall be 8 3/4" x 1/4" formed steel channel. These channels must have 3" x 1/4" abrasion resistant wear strips on both the inside top and inside bottom surfaces. This abrasion resistant material must have a minimum hardness of 400 BHN. These channel assemblies shall act as guide tracks for the materials compression panel

#### 4. TAILGATE CAPACITY

- a. The tailgate shall have a usable capacity of four (4) cubic yards minimum

#### 5. TAILGATE CONSTRUCTION

- a. Body tailgate shall be bustle type, top hinged, with heavy-duty hinges and locks. Pivots must have grease fittings
- b. Tailgate shall be equipped with a flow control device to assure smooth, even operation

#### 6. TAILGATE OPERATION

- a. For greater operational stability and safety the tailgate shall be unlocked, raised, lowered, and re-locked with two 2 1/2" bore x 28" stroke double acting hydraulic cylinders
- b. All tailgate controls shall be located inside the truck cab within easy reach of the operator's position. I.E. tailgate operation shall not require exit of the cab by the driver. Controls shall be electric/air/hydraulic and spring returned to the "neutral" position

#### 7. HYDRAULICS PUMP

- a. All body and lift functions shall be powered by a single-section gear type pump. This pump shall be powered by a transmission mounted "hot shift" power take off

#### 8. HYDRAULICS CONTROL VALVE

- a. The body and lift functions shall be controlled by a single stack type air activated directional hydraulic valve. All controls for the body and lift shall be air/hydraulic. This directional control valve shall be equipped with a reliable system pressure protection device. The maximum system operating pressure shall be 2000 P.S.I.

#### 9. HYDRAULIC RESERVOIR

- a. The body shall be equipped with a hydraulic reservoir with a minimum capacity of forty (40) gallons. This reservoir shall be equipped with a fill cap, breather, fluid level indicator and temperature gauge

#### 10. HYDRAULIC FILTRATION AND SERVICE (SYSTEM CLEANLINESS AND PROTECTION AGAINST CONTAMINATION SHALL BE ACCOMPLISHED THROUGH THE USE OF THE FOLLOWING DEVICES)

- a. Return Line Filter - All oil shall be routed through a 10 micron filter. This filter shall be properly sized so that 100% of the flow is filtered under normal operating conditions without bypass.
- b. In-Line Shutoff - For ease of service the suction line shall be equipped with a shutoff valve plumbed adjacent to the reservoir
- c. Suction Strainer - A 100-mesh oil strainer must be installed in the hydraulic system suction line. This strainer must be serviceable without draining the system reservoir

#### 11. HYDRAULICS PLUMBING

- a. All body and lift plumbing not requiring flexibility to complete its function must be constructed of seamless steel hydraulic tubing correctly sized for each operation. Plumbing requiring hoses shall be routed in such a way as to prevent rubbing, chaffing and undue bending

#### 12. BODY UNLOADING BODY HOIST

- a. The body dump hoist shall be powered by one 6" front mounted dead lift type, telescopic cylinder with a capacity of 56,540 lbs. This cylinder must be mounted at the body front for easy service access. The dump hoist shall be configured so that the body is lifted to a dump angle of 40 degrees minimum

#### 13. BODY UNLOADING MATERIALS COMPRESSION PANEL

- a. The mid-body hydraulic panel must be top hinged with air operated, in cab locking controls. When unlocked this panel must swing free leaving no part of the panel either along the body sides or floor to block movement of material from the front body compartment. When reconfigured for route operation the hinged panel must be locked into place by spring-loaded two inch (2") steel pins. This panel must be equipped with a status indicator, visible from ground level outside the body that shows the lock pins are either "unlocked" for unloading or "locked" for loading. The operator must NOT be required to enter the body or climb up onto the body to check the panel lock status

#### 14. LOADING DEVICE FUNCTION

- a. The loading device must provide over the top loading of materials into the body
- b. The loading height of the bin shall be approximately 40"
- c. Each lifting mechanism and automatic top door must be operated by two (2), 4 1/2" bore x 16" stroke, hydraulic

cylinders

- d. Lift cycle time shall be approximately 14-17 seconds
- e. When in the full dump position, the bin dump angle must be 52 degrees minimum, measured from a horizontal line parallel to the ground
- f. The loading bins shall tilt 5 degrees during the lift cycle to control spillage
- g. The loading bins must have flat back panels without any bends or breaks in the steel for easy bin cleanout during the dump cycle
- h. The body to bin top gap, (space between the loading bin and body sides and top) shall not exceed two (2) inches during the dump cycle. This prevents overhead spillage and reduces the need for cleanup
- i. Bins shall be track guided by roller bearing type steel rollers and stabilized by two lift arms, one on each end
- j. Loading bin lifting mechanism operation must be smooth and non-binding, regardless of uneven bin loading

#### 15. LOADING DEVICE CONSTRUCTION

- a. Loading bin lifting arms and top door activating arms must be constructed of solid, high tensile steel plate, minimum allowable section modulus for loading bin lift arms shall be 3.0 cubic inches. Tubular load lifting components are not acceptable
- b. All loading bin lift arm connecting pins shall be 1.25" minimum diameter with spring steel bushings and grease fittings
- c. Loading bins shall be constructed of 12 Gauge sheet supported by a tubular steel frame

#### 16. LOADING DEVICE CONTROLS

- a. Controls for each lifting mechanism shall be located immediately behind the chassis cab and convenient for operator access
- b. The lift control valve shall be a three - position air directional valve

#### 17. MATERIALS COMPRESSION LEVEL FUNCTION

- a. The compression panel must be hydraulically actuated by two (2) 4" bore x 69" stroke double acting high duty cycle hydraulic cylinders. These cylinders must have self-aligning bushings at the base and rod connection points to allow for non-stress operation. All panel hydraulic cylinders, hoses and fittings must be mounted at the top of the recycling body to prevent damage and undue wear during operation
- b. Compaction force in each direction must be independently adjustable to assure optimum unit productivity. Factor pressure settings shall be 1500 P.S.I. (28,200 lbs force) for the front paper compartment and 1850 P.S.I. (46,500 lbs force) for the rear co-mingled compartment

#### 18. MATERIALS COMPRESSION LEVEL CONSTRUCTION

- a. The panel upper main frame shall be constructed of 4" x 4" x 1/4" structural steel tubing
- b. The lower panel frame shall be 4" x 2" x 1/4" structural steel tubing
- c. The panel guides shall be 7" x 5" x 3/16" structural steel tubes. These tubes shall be 94 1/2" long and serve as both hydraulic cylinder enclosures and panel guides. These guide tubes must have 3" x 1/4" abrasion resistant wear strips along the top, bottom and outside surfaces. This abrasion resistant material must have a minimum hardness of 400 BHN
- d. The compression panel must be covered on both front and rear surface with 10 gauge steel sheet
- e. A hinged service access door must be provided
- f. The compression panel shall be locked into the "loading" mode by two (2) 2" diameter steel pins. These pins must be supported by and must lock into 1" steel plates. These lock pins must be spring loaded into the "lock" position with status indicators visible from ground level outside the recycling body
- g. The compression panel must be equipped with a location indicator that is visible from the operator's behind cab location
- h. The compression panel must have adjustable poly wipers along each side to prevent material migration

#### 19. MATERIALS COMPRESSION LEVEL CONTROLS

- a. Panel movement controls shall be located at or near the rear of the chassis cab. These controls are to be three (3) position air directional valves
- b. Controls for unlocking the compression panel must be mounted inside the truck cab for convenient and safe operation

#### 20. IN-CAB CONTROLS (THE FOLLOWING CONTROLS MUST BE MOUNTED INSIDE THE TRUCK CAB FOR SAFE AND CONVENIENT OPERATION)

- a. Hydraulic system on/off switch
- b. Body tailgate control
- c. Body hoist control
- d. Partition lock/unlock control

21. LIGHTS

- a. Standard lights shall be supplied in accordance with FMVSS#108

22. ACCESSORIES

- a. Federal under-ride bumper shall be installed
- b. Tailgate safety prop shall be provided
- c. Body safety prop shall be provided
- d. Body "up" and tailgate "unlock" alarm shall be provided
- e. Back up alarm shall be provided

23. PAINTING PROCEDURES

- a. The body and lift shall be free of all weld slag, dirt and grease and be prepared prior to painting in accordance with the paint manufacturers specifications
- b. Body and loading mechanism shall receive at least one coat of primer and one finish coat of polyurethane enamel. Primer shall be approved for use with the finish coat material

24. WARRANTY

- a. A minimum two-year warranty against manufacturing defects shall be provided by the manufacturer

25. CART ATTACHMENT

- a. Dumping attachment for up to five (5) 90 gallon containers/side. Semi-automated container attachments must be equipped with positive lock, automatic container latches. These latches must be linkage actuated by the lower bin lift arm and must require no action by the operator other than bin control lever operation. In order to prevent possible container damage, the container latches must automatically engage the container lower bar after the container is well clear of the ground or curb on the bin "up" cycle and automatically release well before the container reaches the ground or curb on the bin "down" cycle. Attachment of semi-automated carts to the container attachment shall not require tipping of the container or opening of the container lid for proper engagement



## **NORTH CAROLINA SHERIFFS' ASSOCIATION**

### **G-S - 5735D SPECIFICATION #5**

#### **2016 G-S 5735D**

The G-S 5735D purchased through this contract comes with all the standard equipment as specified by the manufacturer for this model and NCSA's base vehicle specification(s) requirements which are included and made a part of this contract's vehicle base price as awarded by specification by zone.

ZONE:	★Appalachia	★Dogwood	★Cardinal	★Longleaf Pine
BASE PRICE:	\$62,871.86	\$62,871.86	\$62,871.86	\$62,871.86

While the North Carolina Sheriffs' Association has attempted to identify and include those equipment items most often requested by participating agencies for full size vehicles, we realize equipment needs and preferences are going to vary from agency to agency. In an effort to incorporate flexibility into our program, we have created specific add/delete options which allow the purchaser to tailor the vehicle to their particular wants or needs.

The following equipment delete and add options and their related cost are provided here to assist you in approximating the total cost of the type vehicle(s) you wish to order through this program. Simply deduct the cost of any of the following equipment items you wish deleted from the base unit cost and/or add the cost of any equipment items you wish added to the base unit cost to determine the approximate cost of the type vehicle(s) you wish to order.

NOTE: An official listing of all add/delete options and their prices should be obtained from the appropriate dealer in your zone when preparing your order. Additional add/delete options other than those listed here may be available through the dealers, however, those listed here must be honored by the dealers in your zone at the stated prices.

<b>VEHICLE:</b>	5735D			
<b>DEALER:</b>	GSP Marketing	GSP Marketing	GSP Marketing	GSP Marketing
<b>ZONE:</b>	★Appalachia	★Dogwood	★Cardinal	★Longleaf Pine
<b>BASE PRICE:</b>	\$62,871.86	\$62,871.86	\$62,871.86	\$62,871.86