



A Division of Transportation Equipment Inc.

## **Pulltarps Universal Super Shield**

(With Four Spring Electric Arm System for Applications to 22 Feet in Length  
(Part numbers 210-0215 & 501-0782))

9/12/12

OPERATING DESIGN: Tarpaulin shall deploy by means of an electrically driven roller spool using spring-loaded pivots connected to arms attached to the side of the dump body. Complete tarping function to be performed from ground level or truck cab. Tarp system shall come with all required mounting hardware, electric wire, switch, breakers, and indicator light. Nuts, bolts, brackets, hardware, and arm pivots shall be zinc plated to prevent rust.

- A. TARPAULIN ROLLER SPOOL: Tarp spool shall consist of the following:
  - A.1 Tarp spool shall be driven by means of a direct gear drive motor
    - A.1.1 Motor to be 12 or 24 volt as required and produce 1.1 hp. minimum.
    - A.1.2 Motor to be lubricated and sealed from the factory.
    - A.1.3 Motor controlled by sealed reversing solenoid with remote low voltage rocker switch. Switch panel, terminal ends and terminal covers are provided.
    - A.1.4 six-gauge duplex service wire and supply breaker to be provided.
  - A.2 Tarpaulin roller spool shall be a minimum 3", 6063 aluminum or 3" galvanized steel tube and shall be sealed from weather.
    - A.2.1 Roller tube shall have a groove for full width insertion and retention of the tarpaulin, by means of a nylon hem tube.
  - A.3 Tarpaulin roller spool shall pivot on heavy-duty nylon bushings.
    - A.3.1 Bushings shall pivot on a minimum ½ inch diameter, zinc plated steel roller stub shaft.
  - A.4 Tarpaulin roller spool shall be designed so that the tarp shall roll off the top or bottom of the spool.
  - A.5 The roller spool shall be protected by a ridged unitized welded Universal Super Shield housing. Universal Super Shield housing shall be constructed of a minimum 12 gauge steel enclosure.

- A.5.1 Universal Super Shield housing enclosure shall be supplied with steel or aluminum weld on mounting brackets; which utilize bolts of sufficient strength to safely secure the enclosure to the vehicle bed.
- A.5.2 Universal Super Shield housing enclosure shall be designed so that air is deflected over the deployed tarpaulin, and radiused so that strength is maximized to deflect falling debris over the retracted tarpaulin.
- A.5.3 Universal Super Shield housing enclosure shall be painted with a manufacture's standard lead-free baked on polyester powder coating black color.

B. SPRING PIVOT ASSEMBLY: Spring arm assemblies shall consist of the following:

- B.1 Spring arm pivot to be manufactured out of heavy gauge powdered coated steel and contain four springs per side.
  - B.1.1 Pivot shaft is designed for compact side mounting.
  - B.1.2 Springs are to be spiral wound.
  - B.1.3 Each spring provides no less than 59 foot-pounds of torque.
- B.2 Arm sections are to be of heavy duty standard size galvanized steel or tubing that is easily replaceable.
  - B.2.1 Upper arm sections and pull bar to be made of common galvanized tubing 1.66 inches in diameter and have .083 wall thickness.
  - B.2.2 Upper arm sections attach to Teardrop extruded pullbar by means of solid cast aluminum connecting elbows.
- B.3 Pullbar to be of Teardrop design.
  - B3.1 Teardrop pullbar to have a groove the full width of the bar to accomodate the hem tube of the tarp to slide into the bar. The design is to allow the tarp to be double wrapped to eliminate bunching and stress on the stitching.
  - B3.2 Urethane bumpers and hardware are provided to keep the tarp centered on the pullbar and reduce noise.

C. TARPAULIN FABRIC: Tarpaulin fabric shall consist of one of the following:

- C.1 Asphalt tarpaulin fabric shall be 14 ounce nylon vinyl fabric coated on both sides (A-2) with urethane. Tarpaulin fabric shall be impermeable to water or moisture, and shall be resistant to mildew and ultra violet light. Tarpaulin fabric shall withstand normal handling and placement at temperatures from -35 degrees Fahrenheit to 400 degrees Fahrenheit without endangering the structural integrity and serviceability of the fabric.

- C.2 Heavy duty open weave black or red PVC coated polyester mesh.
- C.3 18 ounce vinyl coated nylon fabric. Tarpaulin fabric shall be impermeable to water or moisture, and shall be resistant to mildew and ultra violet light. Tarpaulin fabric shall withstand normal handling and placement at temperatures from -35 degrees Fahrenheit to 375 degrees Fahrenheit without endangering the structural integrity and serviceability of the fabric.
- D. TARPAULIN CONSTRUCTION: Double-lock stitching.
- E. SIDE FLAPS: Ground operated integrated system.
  - E.1 Side flaps to be integral part of tarp and retract fully into the housing enclosure. Side flaps to be secured by flap rope passing through large #4 brass grommets attached to the edge of the flap. Side flaps to extend a minimum of 17" from edge of tarp.
- F. WARRANTY:
  - F.1 The Automatic Arm System carries a one year guarantee on all moving parts.
  - F.2 Electric motor carries a three year manufacturer=s prorated warranty.