

SIDEWINDER 350™ SPECIFICATIONS

Hydraulic, fully automatic trailer covering system to be Donovan Enterprises' **SIDEWINDER II™** model for use with all open top trailers.

- Part # 2450 (Drivers Side Mount) or Part # 2450C (Curb Side Mount) – Self Contained Hyd/Elec Pump
- Part # 2450W (Drivers Side Mount) or Part# 2450CW (Curb Side Mount) – Wet Kit

INSTALLATION AND OPERATION

- Fits on trailers from 15' to 53' long and 91" to 104" wide.
- All hinges mount on the same side of trailer, leaving other side clear for unobstructed loading.
- Actuator assembly hydraulically rotates arm 270° moving tarp from top of trailer to flush against side of trailer without the use of springs or chains.
- Two **SIDEWINDER 350™** configurations are available. When ordering, customer specifies which side of the trailer unit will mount on (**SIDEWINDER 350™** tarp rotates to hinge side of trailer).

HINGE ASSEMBLIES

There are two hinge assemblies located on two separate mounting brackets (there are 2 hinges per hinge assembly).

Each hinge assembly contains the following parts:

- (1) 1/2" – 14 gage X 12" CRS hinge pin.
- (2) 1/2" split shaft collars.
- (6) 1/2" inside diameter oil impregnated bronze bushings.
- (3) 1/2" schedule 80 hinge sleeves (2 attached to bracket and 1 attached to lid hinge).

DOUBLE CABLE

Two separate sections of 3/16" galvanized steel cable connect to the adjustable extensions on the front and rear arms. The top cable connects between two forged eye bolts. Each forged eye bolt is bolted to the front and rear extensions. The bottom cable connects to the drop section on of each arm extension. Tension to these cables is set and adjusted with turnbuckles.

Double cable arm connection components include:

- (2) 55' x 3/16" Galvanized steel cable 7x19.
- (2) Forged eye bolts
- (2) Forged turnbuckles
- (8) 3/16" forged cable nuts
- (4) 3/16" cable thimbles

TARP INSTALL CABLE

One section of 3/16" cable attaches to the hinge side of the trailer for tarp connection. This cable is fasten to the front and rear hinge assemblies and is supported the length of the trailer by steel loop straps every 4'. Tarp attaches to cable with nylon zip-ties for hinge side seal.

Tarp install cable components include:

- (1) 55' x 3/16" Galvanized steel cable 7x19.
- (1) Aluminum turnbuckle
- (4) 3/16" Forged cable nuts
- (2) 3/16" Cable thimbles
- (18) 1/2" Steel loop straps
- Zip-ties

MOUNTING BRACKETS

Tarp mechanism is attached to top rail of trailer by two mounting brackets (Front bracket, rear bracket) located at two places along the length of the trailer.

- Front mounting bracket
 - (1) 3/8" 3 X 3 angle 36" long
 - Mounts on the top rail of the trailer in the corner where the front and side meet.
 - (4) Hinge sleeves attached on top of the 3 X 3 angle. This allows for two hinge assemblies to be installed to the front bracket.
- Rear mounting bracket
 - (1) 3/8" 3 X 3 angle 36" long.
 - Mounts on the top rail of the trailer at the rear of the trailer length.
 - (4) Hinge sleeves attached to the top section of the 3 X 3 angle. This allows for two hinge assemblies to be installed to the rear bracket.

SELF-CONTAINED HYDRO-ELECTRIC POWER UNIT

12-volt (DC) hydro-electric power unit mounts to front of trailer. Power unit characteristics are:

- .75 gallon per minute flow rate.
- 1950 psi maximum operating pressure. 1750 psi minimum operating pressure.

Also includes:

- Pre-fabricated mounting bracket.
- (3) 1/2" hydraulic fittings.
- (2) 1/2" diameter hydraulic hoses (5000 psi) with hose fittings (one 30" section and one 26" section).
- (2) 12' long section of double strand 6 gage electrical wire with crimp on lugs and a quick disconnect.
- (2) .75 gpm pressure compensating flow control fitting (allows smooth, even operation in both directions).
- (1) Waterproof bi-directional remote operating switch with 12' of cord.

WET KIT HYDRALIC (OPTIONAL)

Wet Kit allows front actuator assembly to operate off of the trailers existing hydraulic system. Wet kit characteristics are:

- 1 gallon per minute flow rate.
- 1950 psi maximum operating pressure. 1750 psi minimum operating pressure.

Kit includes:

- (1) Priority flow control – 1 gallon per minute. Includes adjustment valve.
- (1) Single spool control valve
- (1) 1" Male branch tee fitting
- (2) 5' Hydraulic hose with #4 JICF end fittings
- (1) 8' Hydraulic hose with #4 JICF end fittings
- (1) 9' Hydraulic hose with #4 JICF end fittings

ACTUATOR

- (1) Actuator assembly – backhoe design
- (1) 2" x 15" Hydraulic cylinder
- (3) 3/8" Steel linkages - Provide increase in mechanical advantage of linear motion from hydraulic cylinder
- (7) Oil impregnated brass bushings
- (1) UHMW Roller on 1" zinc plated steel shaft - connects actuator arm and roller track on front lid
- (1) Black powder coated wind deflector

LIDS

There are two lid arms (front lid arm and rear lid arm) with adjustable lid extensions that are bolted in place to accommodate trailers from 91" to 104" wide.

- Front lid
 - (1) 94.83" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 91.88" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 15.38" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 28.25" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) Extruded aluminum roller track with square reinforcement tube
 - (1) 3/8" HMW Plastic hinge seal
 - (6) Aluminum assembly plates
 - (2) Steel hinge weldments
 - (44) Aluminum spacers for assembly plates
 - (1) Aluminum lid extension with 4" drop (minimum)
 - Adjustable length to fit trailers between 91" to 104" wide.

- Rear lid
 - (1) 94.83" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 91.88" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 15.38" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 28.25" x 1.72" x 1.72" Extruded aluminum I-beam
 - (1) 3/8" HMW Plastic hinge seal
 - (6) Aluminum assembly plates
 - (2) Steel hinge weldments
 - (44) Aluminum spacers for assembly plates
 - (1) Aluminum lid extension with 4" drop (minimum)
 - (1) 3/16" HMW Plastic rear lid seal
 - Adjustable length to fit trailers between 91" to 104" wide.

REAR HOLD DOWN ASSEMBLY

A rear lid hold down assembly is attached to sidewall at rear of trailer. This rear hold down allows the operator to secure the rear lid by hooking onto the rear of the cable or to the rear extension.

TARP

#1906

One 115" wide length of tarp material used to accommodate trailers 15' to 53' long and 91" to 104" wide.

- (1) Roll of polyester knit tarp fabric 115" X 53' with 1/4" X 1/4" mesh.
 - Material is UV protected.
 - Finished straight edge along full length of tarp.

FINISH

All steel components must be finished with a two part alkyd enamel primer and two part alkyd enamel finish.

HARDWARE

Covering system is to be supplied with all of the nuts, washers, mounting brackets, installation instructions, warning stickers/labels, and miscellaneous hardware necessary to install the mechanism onto trailer. Due to the various trailer configurations, it will be necessary to purchase approximately 2 dozen 1/2-13 bolts (length of bolts will vary by width of trailer's side wall and side wall's top lip).

