

TARP SYSTEMS, PARTS & TARPS

P/N 1809453 Rev. A





Electric Side-Flip Tarp System

READ BEFORE INSTALLING

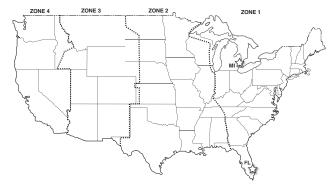
3353 GRAN PARK WAY • STUART, FL 34997 PHONE: 1-800-327-8287 • FAX: 1-772-287-0431

www.DONOVAN-TARPS.com

PREPAID FREIGHT POLICY. Shur-Co®, LLC will prepay freight on eligible orders* of Florida-manufactured Donovan® products and tarp items shipped from our Florida branch that meet the dollar requirements for the shipping destinations specified below.

*Valid within the continental 48 states only. Applies to products purchased at standard pricing; any special pricing will void standard prepaid freight policy and will be addressed on a case-by-case basis. Does NOT apply to complete Waste systems or ShurTite™ flatbed products. To see a list of eligible products consult the Index of the Donovan® Tarp Systems catalog.

INTO FL: Freight prepaid on orders of \$2,500 or more or tarp-only orders of \$1,500 or more. INTO ZONES 1 & 2: Freight prepaid on orders of \$3,000 or more or tarp-only orders of \$2,500 or more. INTO ZONES 3 & 4: Freight prepaid on orders of \$6,000 or more or tarp-only orders of \$3,000 or more.



WARRANTY. We warrant all new products are free of defects in materials and workmanship.* This warranty is effective if products are properly installed and used for the purpose for which they were intended and applies to the original buyer only. Except as set forth above or in any product-specific warranty documentation, we make no other warranties, express or implied, including but not limited to warranties of merchantability of fitness for a particular use.

Returns of a product for warranty must be accompanied by a Return Merchandise Authorization number (RMA#), obtained by by calling Customer Service at 800-327-8287, and sent, freight paid by us, to Donovan, 3353 SE Gran Park Way, Stuart, FL 34997. All products returned without an RMA# will be refused. When we issue the RMA#, we will also issue a call tag to have U.P.S. (or other freight company) pick up the product. C.O.D. returns not accepted.

We will pay no storage fees for a warranty product return prior to pick by us or the freight company. If a warranty product return is scheduled to be picked up by us, we will pick up the product at our earliest convenience. If a product returned is found, in our judgement, to be defective in material or workmanship, our obligation under this warranty is limited to the repair or replacement of the product, which will be made by us. Repair or replacement will be at our discretion, with replacements being made using current products performing in the equivalent function. Labor charges, other than those incurred at our factory, including, but not limited to, any labor to install a repaired or replacement product, are not covered under this warranty. All expenses associated with delivering defective products to our factory and delivering repaired or replacement products from our factory to the owner will be paid by us.

If the product returned is found, in our judgement, to be non-warrantable, the owner will be contacted to authorize repair work, purchase of a replacement product or return of the product, all of which will be at the owner's expense. Payment authorization must be received by us before any non-warrantable product is repaired, replaced or returned. All expenses associated with delivering the repaired non-warrantable product, a replacement product or the non-warrantable product from our factory to the owner will be paid by the owner.

In no event will we be liable for any damages of any kind to person, product or property, including but not limited to indirect, incidental, special, consequential or punitive damages, or damages for loss of profits or revenue, even if we have been advised of the possibility of such damages. There are no warranties for used products or products that have been repaired, altered, modified or subjected to misuse, negligence or accident. We will not repair or replace products that fail or malfunction due to ordinary wear and tear, except as expressly noted in a product-specific warranty. Use of non-Shur-Co®, LLC parts in conjuction with Shur-Co®, LLC products will void this product warranty.

*Certain products have specific warranties that differ from this warranty, for example motors and electronics. Product-specific warranty documentation is available for these items. In the event of a conflict between this warranty and a product-specific warranty, the product-specific warranty will govern.

RETURN POLICY. All sales final. See WARRANTY above for return details.

OTHER. All prices, product listings, sizes, weights and manufacturing details are subject to change without notice. No person is authorized to modify the foregoing conditions of sale whatsoever.

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For more information, log on to our website:

www.donovan-tarps.com

MESSAGE TO OWNERS

Thank you for buying this tarping system from Donovan® Tarps. We appreciate your confidence in our products. Please read and thoroughly understand this manual before installing and/or operating this system.

Pay particular attention to important safety and operating instructions, as well as warnings and cautions. The hazard symbol \triangle is used to alert users to potentially hazardous conditions and is followed by caution, warning or danger messages.

Failure to READ AND FOLLOW INSTRUCTIONS could result in failure of your tarping system and/or personal injury. Your trailer requirements may, however, call for minor variations to these instructions.

Please inspect your tarping system periodically. Repair or replace worn or damaged parts to your system.

QUESTIONS? CALL OUR HELP LINE:

1-866-748-7435

MON-FRI 8 AM-5 PM CENTRAL TIME

SAFETY

We at Donovan® Tarps are concerned with your safety and the safety of all those operating this system. Therefore, we have provided safety decals at various locations on your tarping system. Keep decals as clean as possible at all times. Replace any decal that has become worn or damaged, painted over or otherwise difficult to read. Replacement decals are available through Donovan® Tarps dealers.

SAFETY INSTRUCTIONS

- 1. Always wear safety glasses during installation and operation.
- 2. Stay clear of moving parts.
- 3. No other use of this system is authorized, except as designed.

RUST PREVENTION

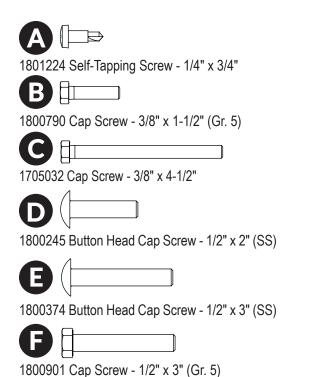
To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.

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TOOLS REQUIRED

- Wrench Set
- 2. Ratcheting Socket Wrench
- Socket Set
- 4. Hammer
- 5. Tape Measure
- 6. Flat Head or Phillips Screwdriver
- 7. Grinder
- 8. Pliers
- 9. Metal Saw
- 10. Steel Welder
- 11. Drill Driver with 5/16" Hex Driver
- 12. Allen Wrench
- 13. Square





1800993 Nylock Lock Nut - 3/8"



1800995 Nylock Lock Nut - 1/2" (Gr. 5)



1800994 Flat Washer - 3/8"



1800996 Flat Washer - 1/2"

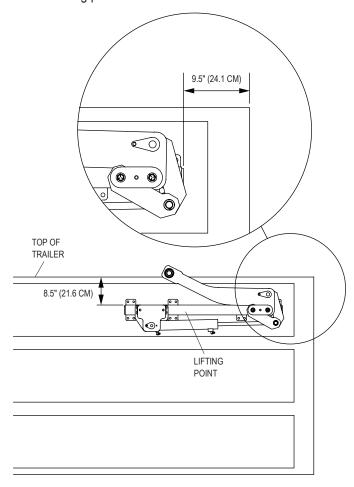


1800246 Stainless Steel Flat Washer 1/2"



1809282 Spacer - 5/8" OD x .385" ID x 3.562" LG

STEP 1: Locate actuator unit on front of trailer. Stationary rectangular tube should be 8.5" from top of trailer and 9.5" in from drivers side of trailer. Mark mounting holes locations on each of four mounting plates.



NOTE: Actuator unit weighs 134 lbs (64kg). Use over-head lifting device and sling to lift unit. Sling should be wrapped around rectangular mounting bracket. Do not lift from hydraulic cylinder.

Actuator unit may be welded in place to steel trailer, use extreme caution to protect chrome cylinder rod from weld splatter. Will cause permanent damage to cylinder and void systems warranty.

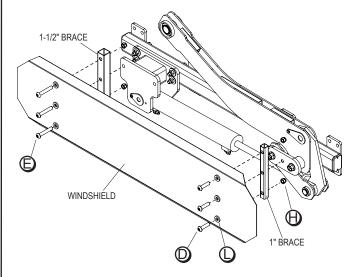
STEP 2: Remove actuator unit and drill 17/32" holes in marked locations.

STEP 3: Reposition actuator unit and mount using 1/2" Grade 5 bolts or better (bolts not supplied).

NOTE: If front wall of trailer is thin aluminum or steel. Reinforce area with backer plate for adequate support.

STEP 4: Connect two provided 37.5" hydraulic hoses to cylinder. If using wet kit, refer to page 10 for two longer hoses provided.

STEP 5: Install windshield using braces, bolts **⊙** and **⊙**, washer **⊙** and nuts **⊕**.



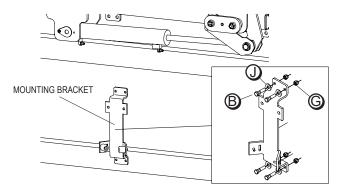
NOTE: Skip to page 10 if using wet kit.

STEP 1: Using pump mount bracket as template, locate and mark where hydraulic unit will mount - approximately 1' below actuator unit.

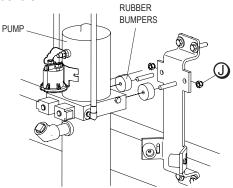
NOTE: Included hydraulic hoses are roughly 3' long.

STEP 2: Remove pump mount bracket and drill 13/32" holes in marked locations.

STEP 3: Install pump mount bracket using 3/8" bolts **3**, washers **9** and lock nuts **6**.



STEP 4: Install two rubber bumpers to pump mounts bent tabs and mount pump itself using included 3/8" studs, lock nuts **●** and washers **⑥**.

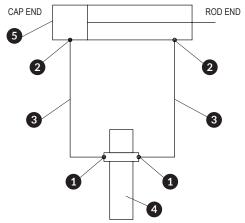


STEP 5: Secure bottom of reservoir to mount bracket with included 5-7" adjustable hose clamp.

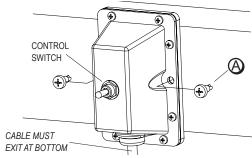
STEP 6: Connect two hydraulic hoses between pump and cylinder. Port C2 to cap end of cylinder and Port C1 to rod end of cylinder. Use hose clips and self-drilling screws **1** to organize and secure hoses to trailer.

Item Part # Description

- 1. 1800925 Elbow 90° #4 JIC M x #6 ORB M 2. 1800112 Elbow 90° - #4 JIC M x 1/4" NPT M
- 3. 1801235 Hydraulic Hose 37-1/2" OAL
- 4. 1800850 Hydraulic Pump 12V
- 5. 1800205 Hydraulic Cylinder 15-1/2" Stroke



STEP 7: Mount control switch using two self-drilling screws **①**. Connect control switch to pump solenoid wiring harness. Secure quick disconnect power cable near control switch. Use hose clips and self-drilling screws **②** to organize and secure cables to trailer.



STEP 8: Install all provided safety stickers next to control switch. Stickers detailed on page 11.

STEP 9: Remove red cap from filler neck on reservoir and fill with approximately three quarts (2.83 Liters) of Dextron Automatic Transmission fluid. Replace red cap with black breather cap.

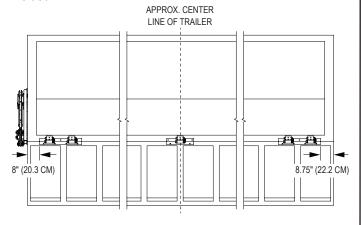
NOTE: Under normal operating conditions fluid will last life of pump. In extreme dirty or wet conditions, check fluid every four to six months and change as needed.

STEP 10: Connect a 12V power supply to quick disconnect power cable and cycle cylinder ten times to remove any air in system. Failure to do this may result in personal injury and/or damage to Sidewinder™ system.

HINGE INSTALLATION

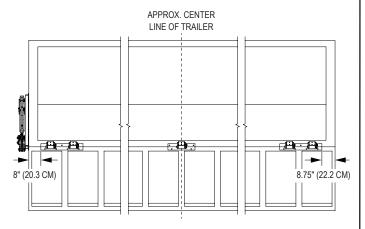
STEP 1: Lid hinges may be mounted either by welding or by bolts. If welding, move to Step 2. If bolting, skip to Step 3.

STEP 2: Locate front, center and rear hinge positions. Weld hinges in place to steel trailer. Use caution to protect chrome cylinder rod from weld splatter. Skip Steps 3-5 if hinges are welded.



NOTE: For trailers with center support above top rail, offset center hinge to either side of support.

STEP 3: Locate front, center and rear hinge positions. Mark hinge hole positions.



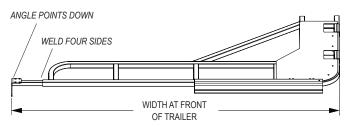
STEP 4: Remove hinges and drill 17/32" (13.5mm) holes in marked locations on side of top rail. Drill and tap marked locations on top of top rail for 1/2" bolts.

STEP 5: Reposition hinges and mount using 1/2" Grade 5 bolts or better (bolts not supplied).

LID EXTENSION ASSEMBLY

STEP 1: Starting with front lid, noted by having a C-channel and additional gussets, measure outside-to-outside width at front of trailer at top rail. Slide extension tube into front lid matching this measurement then weld in place.

NOTE: Orientation of angle will be pointing toward ground when lid is mounted to trailer.



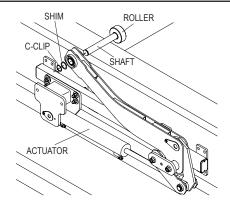
STEP 2: Repeat process measuring outside-to-outside width at center and rear of trailer. Adjust extension tubes for center and rear lids respectively.

NOTE: Center lid extension will not have a cable attached, but will get two turn-buckles at a later step. The rear lid has no C-channel or additional gussets as compared to front lid.

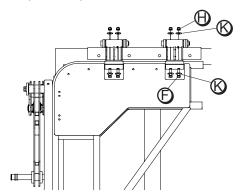
Lid Installation P/N 1809453 Rev. A

STEP 1: Install roller and shaft onto actuator arm using c-clip and shim.

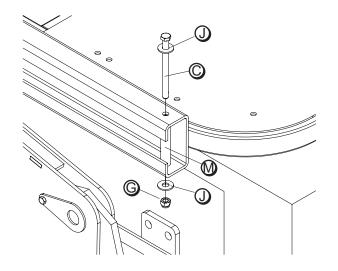
NOTE: This may slide as needed through actuator arm in order to line up with front lid roller track.



STEP 2: With actuator arm near fully open position, slide front lid roller track over roller and pivot into alignment. Attach to hinges with bolts **③**, washers, **③** and lock nuts **④**.

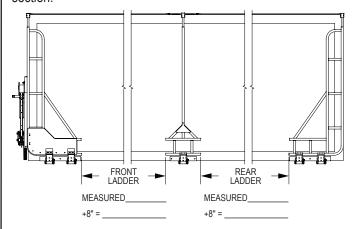


STEP 3: Install spacer ♥ into roller track using bolt ♠, washers ♠ and lock nut ♠.

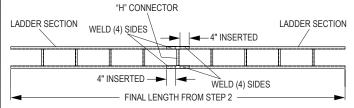


STEP 4: Repeat Step 2 for center and rear lids using two and four bolts respectively to connect to their hinges.

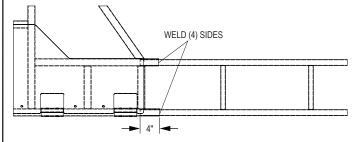
STEP 5: With all three lids in closed position, measure distance between lids and add 8" to get the final length of each ladder section.



STEP 6: Assemble two to three ladder sections and "H" connectors to obtain final length of front lid from previous step. If needed, cut ladder to length. Ensure cut is at least 4" (101.6mm) away from nearest rung so there is enough remaining to insert into lids.

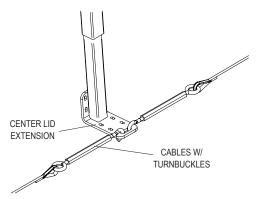


STEP 7: Mark ladder 4" (101.6mm) in on each end. Lift and slide front ladder section into front and center lids until each has been inserted a minimum of 4". Weld all four sides of each ladder to front and center lids. Note underside will be welded in Step 8.

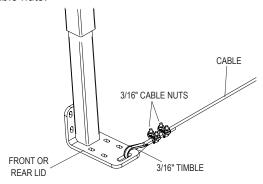


STEP 8: Repeat process for rear ladder using final length for the rear ladder from Step 5. Open system to access underside of ladder to finish welding.

STEP 1: Open lid to lay flat on side of trailer. Locate two 30' cables with turnbuckles. Fully extend turnbuckles. Hook each turnbuckle into center lid extension.



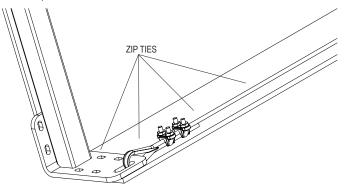
STEP 2: One cable will attach to front lid, second cable will attach to rear lid. These are attached using 3/16" timble and two 3/16" cable nuts.



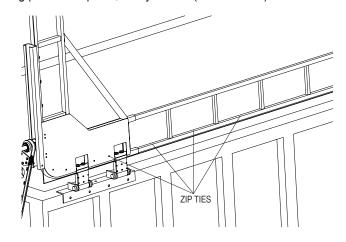
STEP 3: Tighten both turnbuckles evenly until cable are taught. Do not over tighten turnbuckles as this may cause excess stress on lids and hinges. Apply small amount of liquid thread locker to turnbuckle jam nuts and tighten to prevent loosening.

STEP 4: Lay out mesh tarp in a clear open area to verify dimensions and tarp condition.

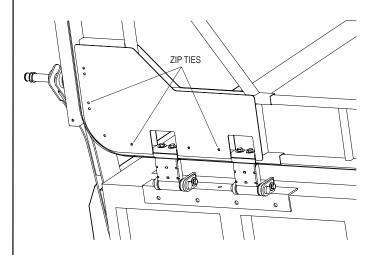
STEP 5: With lid still in fully open position, start attaching tarp to cable only. Start at front lid using zip ties every 12-18" (30.5-45.7cm).



STEP 6: Carefully actuate lid to vertical position, ensuring mesh does not snag or catch anything. In vertical position, tarp should hang from cable down to lid's ladders. Attach tarp to ladder using provided zip ties, every 12-18" (30.5-45.7cm).



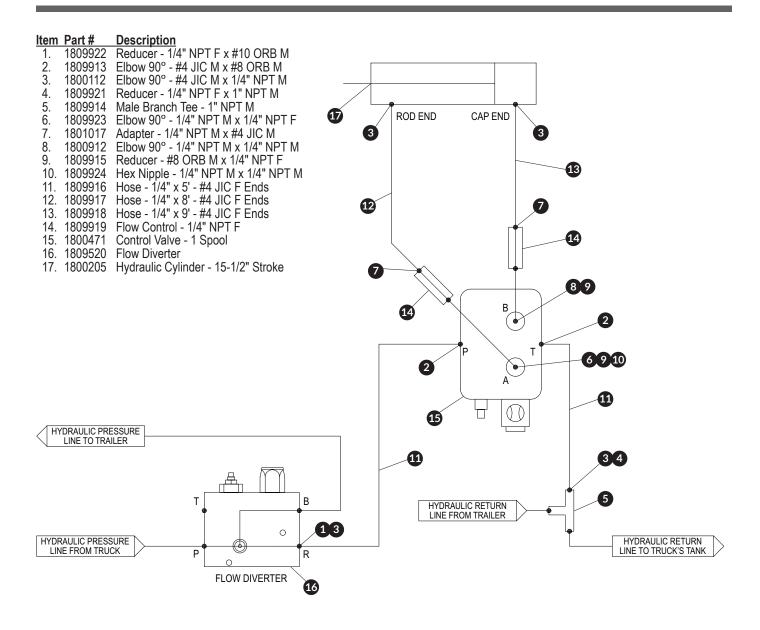
STEP 7: Attach tarp along front lid with provided zip ties. Use holes and D-ring on front lid.



STEP 8: For trailers shorter than tarp length, cut tarp at back of trailer with approximately 6-8" (15.2-20.3cm) of extra material to be folded over and zip tied along rear lid.

NOTE: If there is a large gap between rear lid and trailer rear door, do not cut any of excess tarp materials. Roll up the excess and zip tie to rear lid to help cover gap.

NOTE: 2" wide splicing tape can be used to protect tarp by wrapping a small length around any sharp points on system of truck.



A CAUTION

Before operating this or any tarper, check your surroundings for any overhead power lines tree limbs or other obstruction in path of tarper travel from open to close and back.

A CAUTION

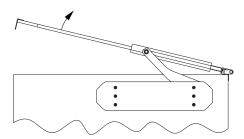
Before servicing or repairing Sidewinder™ system, disconnect power to components from vehicles battery or other power source.

NOTE: Noise level is less than 72 dB(A).

To Open Tarp

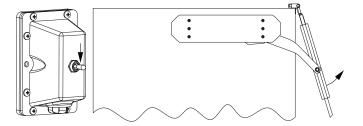
Press UP on switch lever to open lid.





To Close Tarp

Press DOWN on switch lever to open lid.

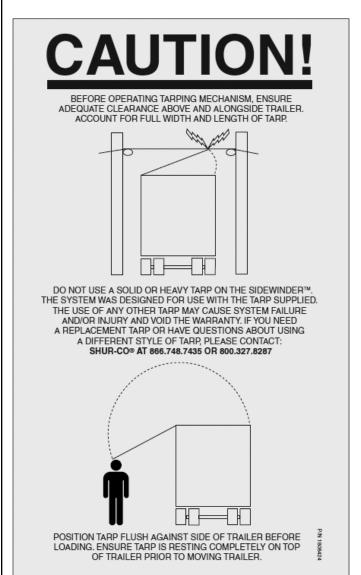


Periodic Maintenance and Inspections

- 1) Check actuator for any damage or cracks
- 2) Check tarp for excessive wear and tear
- 3) If equipped check electrical cables for insulation damage
- 4) Check hydraulic hoses and fittings for damage or leaks
- 5) Check tarp cables and adjust if loose

Weekly

- 1) Check hydraulic cylinder for leaks or wear
- 2) Check tightness of fasteners
- 3) Check hinges for excessive wear/looseness
- 4) If equipped check hydraulic fluid level in hydraulic reservoir



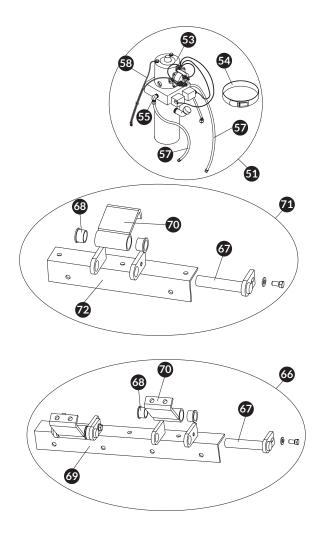
SIDEWINDER™ Item Part # Description -0.0//dc=000 1800286 Backhoe Actuator Assembly - Left Hinge 21 (includes items 4; 5; 6; 14; 16; 17; 22; 23; 24; 25; 2 of 3, 7, 8, 9, 10, 26, & 27; 4 of 21) 1801907 Backhoe Actuator Assembly - Right Hinge (includes items 4; 5; 6; 14; 16; 17; 22; 23; 24; 25; 2 of 3, 7, 8, 9, 10, 26, & 27; 4 of 21) 19 Gearlock Bearing 1800276* 990 0 0 Cylinder Mount Base Tube Weldment 1800282 1800287 **12**(9/q) 1800292 Cylinder Base Pin Assembly External Retaining Ring - 1-1/2" Dia. 1800880 1801707* External Retaining Ring - 1" Dia. Hydraulic Fitting - #4 JIC x 1/4" NPT 90° Short Link Assembly (includes 11; 12; 13) Bushing - 1" ID x 1-1/4" OD x 1" 9. 1800112 10. 1800180 11. 1800497 Bushing - 1-1/2" ID x 1-3/4" OD x 1" 12. 1800879 Short Link 13. 1800181 14. 1800190 Long Link w/Bushing (includes 11; 12; 15) 15. 1800191 26 16. 1800194 Pin Connector 17. 1800197 Rotating Arm Assembly (includes 19; 20; 2 of 7, 18 & 21) Bushing - 1-1/2" ID x 1-3/4" OD x 2" 18. 1800156 1800199 19. Rotating Arm Bushing - Turned Shim - 1-1/2" ID x .047" 1800203 20. 21. 1800204 22. 1800205 Hydraulic Cylinder - 2-1/2" x 15-1/4" 1800207* Short Link Spacer 23. 24. 1800208 Long Link Pin 25. 1800211 Long/Short Link Pin Hex Bolt w/Serrated Washer - 5/8" 1-1/2" 26. 1800232 Shim - 1" ID x 1-1/2" OD x .047 Front Lid Assembly 27. 1800250* 28. 1800289 29. 1800293 Wind Deflector 30. 1800294* Deflector Brace - 1-1/2' 31. 1800295* Deflector Brace - 1" 1800335 Roller Shaft Assembly - 10" (includes 33; 34; 35; 36; 54; 2 of 27) 33. 1800331 Roller Shaft 1800977* 34. Shim - 1-1/4" ID x .047" 35. 1800978* Retaining Ring - 1-1/4" 36. 1800177 Roller - ŬMHW 1800374* 37. Stainless Button Head Screw - 1/2" x 3" 1800872 Cable Nut - 3/16" 38. 1800923 Loop Strap 3/4" 1801379* Loctite™ - 5ML - Tube 39. 1801510* Bumper Stripes - UHMW 41. 1800897 Center Lid Extension 42. 43. 1801236 Rubber Bumper - 1-1/2" Round Cable w/Turnbuckle - 30' 44. 1801276 45. 1801342* Solenoid Cover - SL Clamp Hose - 4-1/16" x 5" 1801495* 46. Pump Mount Bracket 1800412 47. 48. 1800884 Rear Lid Assembly 1800885 Center Lid Assembly 49. Ladder Assembly 1800889 1800945 Pump Assembly - 12V (includes 52; 53; 54; 58; 2 of 43, 55, 56, & 57) 150-Amp Circuit Breaker 1800458* 1800850 Hydraulic Pump - 12V M3551 *These items are NOT shown in the drawing: numbered for future reference

Continued to Next Page. ->

SIDEWINDER™ (CONT.)

OIDENTINDER		(00111.)
<u>ltem</u>	Part #	Description
54.	1800906	
55.	1800925	Male Hydraulic Fitting - #6 x 90°
56.	1800926*	
57.	1801235	Hydraulic Hose - 37-1/2" OAL
58.	1801237	Wiring Harness - 9' (includes 59; 62; 2 of 60)
59.	1800149*	
	1800158*	
	1800221*	
62.	1801238	Wiring Harness - 16' (includes 59; 62; 2 of 60)
63.	1800220*	
	1801233*	,
65.	1800891	Connector - H
66.	1801599	Front & Rear Hinge Assembly - Low Profile
_		(includes 72; 2 of 67, 70; 4 of 68)
67.		Hinge Pin Assembly
	1800860	Flanged Bushing - 1-1/4" ID
	1801600	Rear Hinge - Low Profile
	1801603	Hinge Lid - Low Profile
71.	1801601	Center Hinge Assembly - Low Profile
	1001000	(includes 67; 69; 70; 2 of 68)
	1801602	Center Hinge - Low Profile
	1800315*	
	1800497	Bushing - 1" ID x 1-1/4" OD x 1/2"
	1808766	External Retaining Ring - 1"
76.	1801430*	Sidewinder™ Wet Kit

^{*}These items are NOT shown in the drawing: numbered for future reference



MORE QUALITY PRODUCTS FROM DONOVAN®

CONSTRUCTION PRODUCTS

- Arm-Matic[™]
- Flash™
- Bullet[™]
- Hammer™ II
- DuraPull™
- 5000X
- UT Tarp System[™]
- 2000SR

WASTE PRODUCTS

- SWAT®
- Quick-Flip™ III
- Sidewinder™
- Sidewinder™ 350
- Hy-Tower™ SL
- Hy-Tower™ DL
- Double-Flip™
- Donovan® Belt & Ratchet (DBR)

