

QUICK FLIP SPECIFICATIONS

Hydraulic and electric automatic roll-off truck covering system to be Donovan Enterprises' Quick Flip model for use with 10 yard to 40 yard roll-off containers.

INSTALLATION AND OPERATION

- Base assembly hydraulically raises tarp 8 feet above truck frame.
- Tarp is automatically deployed using a direct drive motor and the use of pivot arms and external springs.
- System delivered in four parts:
 - Fully assembled base assembly.
 - Fully assembled tarp housing and roller bar assembly.
 - Self-contained 12-volt hydro-electric pump.
 - Unassembled pivot arms and torsion spring assemblies.

BASE ASSEMBLY

2-Stage telescoping design capable of raising tarp 8 feet above truck frame utilizing one 2000-psi hydraulic cylinder.

- Base assembly legs are 3" and 2 1/2" square steel tubing with 7-gauge walls.
- Single hydraulic cylinder with 1 1/2" bore and 42" stroke, welded construction with integral mounting flange. Cylinder maximum operating pressure is 2000-psi.

TARP HOUSING AND ROLLER BAR ASSEMBLY

- Tarp housing is 102" long and deflects wind by covering front, top, and ends of roller bar.
- 12-volt direct drive motor mounted to driver's side of housing and supporting the tarp roller bar.
- 1 1/2" flange bearing mounted on passenger's side of housing.
- Roller bar characteristics:
 - Extruded aluminum allowing tarp to be attached using spline, through bolts, or 1/2"-20 threaded bolt.
 - Length; 96".
 - Internal diameter of extrusion; 1 1/2".
- Electric drive system characteristics:
 - 12-volt electric direct drive motor.
 - 1 1/2" diameter drive shaft that supports the tarp roller bar.
 - 1 roll of double strand electrical wire.
 - Solenoid operated Quick Switch with automatic voltage protection and a marine grade toggle switch to allow forward and reverse operation of the roller bar.
 - Chrome covered plastic cover to prevent damage to motor from weather.

SELF-CONTAINED HYDRO-ELECTRIC POWER UNIT

- 12-volt (DC) hydroelectric power unit mounts to the bottom (fixed) stage of base assembly on driver's side of truck. Hydraulic hoses are connected from the pump to the hydraulic cylinder. Power unit characteristics are:
 - One gallon per minute flow rate.
 - 1750-psi maximum operating pressure.
 - Pre-fabricated mounting bracket.
 - Internal check valve to hold unit in the "extended" position.
 - Two $\frac{1}{2}$ " diameter hydraulic hoses with hose fittings.
 - One roll of double strand electrical wire with crimp on lugs.
 - One bi-directional local operating switch.

UNASSEMBLED PIVOT ARM AND TORSION SPRING ASSEMBLY

- Pivot arms are constructed in a two-piece straight-arm telescopic configuration with the following characteristics:
 - Lower arm is constructed of 1 $\frac{1}{2}$ " square, 14 gauge steel tubing reinforced on the outside with $\frac{1}{2}$ " x $\frac{1}{2}$ " steel plate.
 - Upper arm is constructed of 1 $\frac{1}{2}$ " square, 14 gauge steel tubing with a 90 degree bend 12" from one end.
- Rear crosspiece is constructed of 1" square, 14-gauge tubing, 88" long.
- Torsion springs specifications:
 - $\frac{5}{8}$ " wire diameter.
 - Material, chrome silicone.
 - Wound with a 4 $\frac{1}{2}$ " diameter.
 - End of spring must slide freely up inside pivot arms without permanent attachment.
- Pivot arm mounting bracket specifications:
 - 3 $\frac{1}{2}$ " outside diameter steel drum.
 - 1" diameter solid steel center shaft.
 - Base of pivot arms ride on self-lubricating bushing and attach to center shaft with a 1" washer and $\frac{1}{2}$ " cotter pin.

FINISH

- All steel components must be finished with a primer and a gloss enamel finish (black).

HARDWARE

- Covering system is to be supplied with all of the nuts, washers, bolts, mounting brackets, installation instructions and miscellaneous hardware necessary to install the mechanism onto the truck frame. Bracing that may be necessary for accommodations around tires or to reinforce tire guards are not supplied.