





# DUMP TRAILER OWNER'S MANUAL

Congratulations on purchasing a Sure-Trac dump trailer. We pride ourselves on manufacturing a quality engineered and dependable dump trailer. Please read this manual carefully before operating your new trailer. Your safety and satisfaction are very important to us.





## SAFETY FEATURES

**Safety Chains** are located on the front of the trailer. These chains should be securely hooked to the tow vehicle before attempting to move the trailer.

**Prop Rod** is located under the trailer bed on the passenger side. ALWAYS put the prop rod in place before putting any part of your body under a raised bed.

**Breakaway Switch** will activate the trailer brakes in the event of a breakaway. The pull cable must be connected to the tow vehicle before attempting to move the trailer.

**Wheels and Lug Nuts** routinely check lug nut torque and tire pressure (about every 100 miles) to prevent accidents. Also, check tire wear and suspension component hardware.

Body Hold Down Used to hold body down when ramp loading gravity down scissor lift trailers.

#### HYDRAULIC PUMP

Use a good grade of non-foaming hydraulic fluid with anti-corrosion and anti-wear additives such as Napa AW-68 hydraulic fluid. With the bed fully lowered and all air bled from the system the tank should be filled to within 1.5 inches of the top. DO NOT attempt to adjust or repair the pump. Return to your dealer for service as improper adjustments can be hazardous.

## **COUPLING VEHICLE TO TRAILER**

- 1. Always match the ball size to the coupler size.
- 2. Use only hitch gear in good condition and of the appropriate weight ratings.
- 3. Chock trailer tires to prevent rolling of trailer.
- 4. Back up vehicle until ball is directly under trailer coupler
- 5. Lower trailer jack onto ball and latch coupler.
- 6. Check coupler to make sure it is latched onto ball.
- 7. Fully retract jack
- 8. Attach safety chains and Breakaway cable to tow vehicle
- 9. Plug trailer wiring connector into tow vehicle and check light and brake operation.

#### LOADING

Load trailer as evenly as possible. Balance the load over the axles so that the trailer applies about 10% of the total weight to the tow vehicle. Do not exceed the GVWR of the trailer or tow vehicle. Sand, gravel and other heavy items weigh 2800 pounds per cubic yard or more and may not fill the volume of your trailer before it is overloaded in weight. Keep this in mind when loading your trailer.

Approximate Dump Capacity
Trailer Rating—Dump Capacity
5k=3200lbs.
7k=4300lbs.
10k=7000lbs.
12k=8200lbs.

14k=10000lbs.





## **TROUBLESHOOTING**

1. Bed fails to rise: Overloaded Low battery voltage

Low fluid level

Loose or faulty wiring

Faulty pump or solenoid switch

2. Bed fails to lower: Low battery voltage

Loose or faulty wiring

Faulty pump or valve

3. Bed operation is jerky:

Air in hydraulic system

Faulty switch or solenoid

## **MAINTENANCE**

Dump trailers are more complex than ordinary utility trailers and require periodic care and maintenance. Always use the prop rod provided before placing any part of your body under the dump trailer body! Regularly check and service the following items:

- 1. Hydraulic fluid level
- 2. Hose and cylinder condition
- 3. Moving parts for damage and wear
- 4. Battery water level and connections
- 5. Trailer axles (see manual)

Grease fittings are provided on the top and bottom of the lift cylinders (or hoist) and at the pivot of the frame and the body. Regularly grease these fittings and check for wear at these points.

If you find that your dump trailer needs repair, contact your dealer. Repairs by unqualified persons can lead to damage to the trailer and injuries to those nearby

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## **DUMP HOIST TYPE COMPARISON**

#### **Dual Ram Hydraulic Lift**

#### Pros:

Dual Ram is Simple and Cost Effective

#### Cons:

Less than 40% of the Cylinders Force to lift the load. The other 60% of the hydraulic force is absorbed by the frame and pivot points in the horizontal directions because of the "flat" cylinder angle when fully retracted. Increase wear on Hydraulic Cylinders, Hydraulic Pumps, Hydraulic Hoses, Battery and Pivot Points.

#### **Scissor Hydraulic Lift**

#### Pros:

Scissor lifts vary the speed with which they open; Move slow in the beginning when extra force is needed and quickly later when the force is not needed.

Scissor lift over other lift mechanisms pack a lot of travel in to a small space – Ideal for longer trailers Scissor lifts extend and retract with a quicker cycle time.

The scissor acts as another frame or stabilizer to help increase the rigidity between the dump bed and the dump frame.

Gravity Down does not drain any battery power when lowering bed – more cycles per day without recharging the battery.

#### Cons:

More steel and complexity in the Hydraulic Scissor Frame adds cost.

## **Telescopic Hydraulic Lift**

#### Pros:

The great advantage telescopic cylinders have over any other type of cylinders is their ability to provide an exceptionally long stroke from a compact initial package.

Most force is in the initial stage when extra capacity is needed. Each stage will have less force, but raise faster allowing for quicker cycle time.

Best Mechanical Angle when fully collapsed. Ensures 100% of the Hydraulic Force is being applied to lifting the load and not causing extra stress in the frame or moving components of the dump.

Gravity Down does not drain any battery power when lowering bed – more cycles per day without recharging the battery.

#### Cons:

With the cylinder being so large in the initial stages, there is increased time for the bed to raise to the full upright position.

The Telescopic Cylinder itself is more complex to manufacture, causing it to be more expensive.