CABLE REEL TRAILERS

TRUCO HYDRAULIC TRAILER

Contents

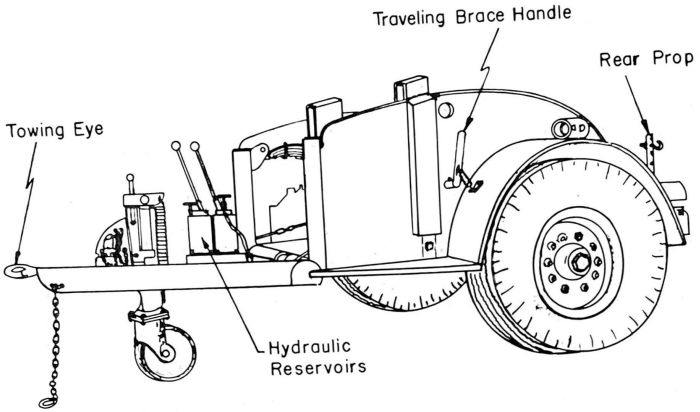
1. GENERAL

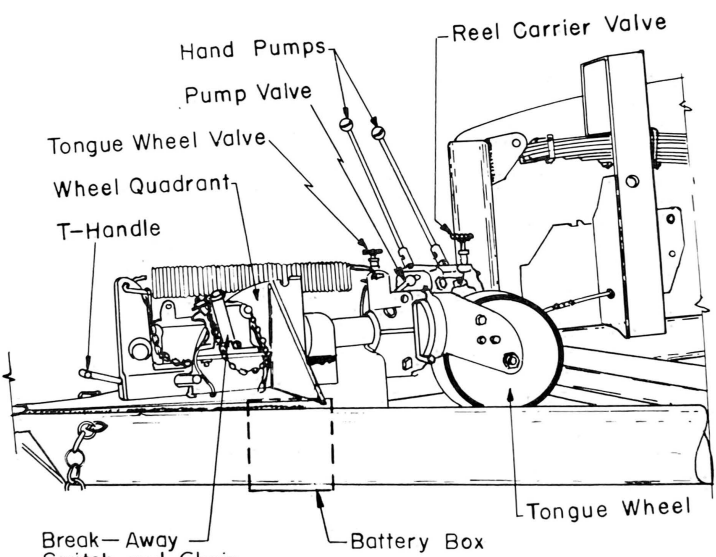
1.01 This section describes the Truco Hydraulic Cable Reel Trailer and outlines the operating procedures.

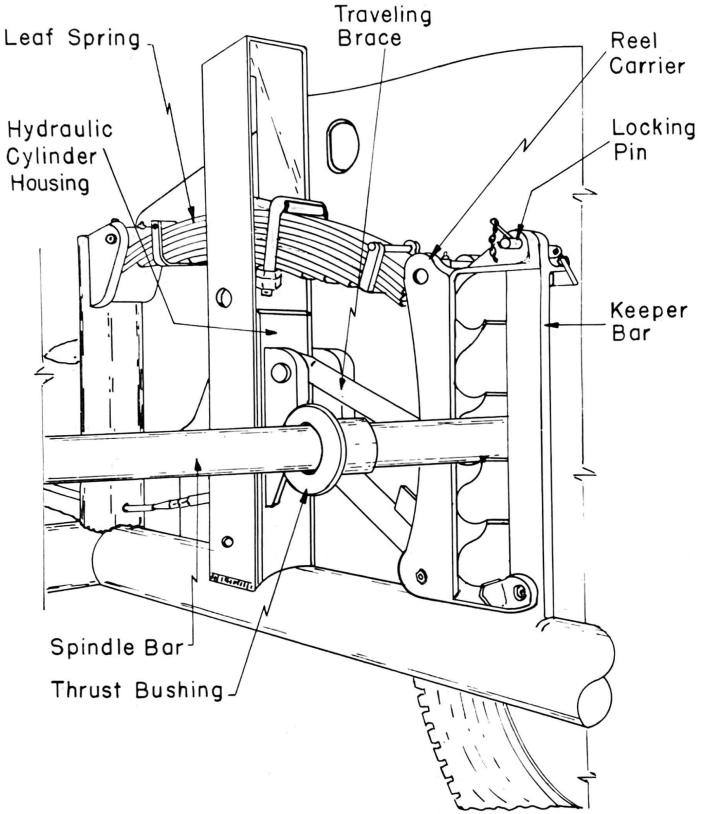
1.02 In addition to cable reels, the trailer can also be used to carry strand reels by using the two adapters provided for that purpose.

2. DESCRIPTION

2.01 The following sketches illustrate the important trailer features:


Traveling Brace Handle
Rear Prop
Towing Eye
Hydraulic
Reservoirs


Reel Carrier Valve
Hand Pumps
Pump Valve
Tongue Wheel Valve
Wheel Quadrant
T-Handle
Tongue Wheel
Break—Away
Switch and Chain
Battery Box



2.02 This trailer uses manually operated hydraulic pumps for lifting reels from the ground into carrying position. Each side of the reel may be raised and lowered independently or together.

2.03 Each hydraulic cylinder supports a reel carrier containing five steps spaced 4 inches apart for lifting reels of different sizes. When a spindle is in place on the step, a vertical keeper bar is used to hold it in place.

2.04 Each reel carrier is mounted at one end of a heavy leaf spring. The other end of the spring is fixed to the trailer. The hydraulic cylinder lifts at the middle of the spring. Traveling braces are provided to take the load off the hydraulic cylinders when carrying a reel.

2.05 The tongue wheel, which supports the front of the trailer when uncoupled from the truck, has a hydraulic jack. The jack generally permits lineup of the trailer towing eye with the truck pintle hook without manually lifting the tongue. The jack is operated by the right-hand pump, and is controlled by valves on the pump housing.

2.06 There are two separate hydraulic systems, each with its own pump, valves and reservoir. The left hand (rear) pump operates the reel carrier on the pump side of the trailer. This pump has a two-position pump valve. When the valve handle is forward, the pump may be operated. When the handle is to the rear, the pressure is released. The right-hand (front) pump operates the opposite reel carrier and also the tongue wheel. This pump is controlled by three valves. The two-position pump valve operates the same as on the other pump. The reel carrier valve controls the pressure to the reel carrier cylinder. The tongue wheel valve controls the pressure to the tongue wheel.

2.07 The trailers are equipped with electric brakes and a break-away safety system.

2.08 The trailer break-away safety system consists of a 6 volt dry cell battery, a switch chain and a plunger type switch.

2.09 Other trailer features are as follows:

(a) Maximum reel size: 96 inches diameter x 48 inches wide.

(b) Maximum net load, including reel: 11,300 pounds.

NOTE: Heavier loads up to 14,000 pounds may be carried at speeds under 30 M.P.H.

(c) Trailer weight, unloaded: 3,500 pounds.

(d) Tire size: 12.00 x 20-14 ply.

(e) Tire pressure: 75 pounds, measured with tire tool.

(f) Oil for hydraulic system: Calol Multi-Machine ICH #15.

NOTE: SAE #10 oil may be used in an emergency.

3. SAFETY PRECAUTIONS

3.01 When traveling with a loaded trailer, the reel carrier springs must always be supported on the traveling braces - not on the hydraulic cylinders.

3.02 Whenever possible, use a truck to maneuver the trailer into position for loading, unloading or moving the trailer, even for short distances.

3.03 Always block the trailer wheels with the wheel chocks before uncoupling the trailer from the tow truck.

3.04 Before detaching the trailer from the tow truck, the tongue wheel must be down and locked. Be sure that the "T" handle on the wheel shaft is in the vertical position and is snapped into the notch at the top of the wheel quadrant.

3.05 The tongue wheel must always be raised and locked into horizontal position when towing the trailer.

3.06 Reel spindle must be level before pulling cable (or strand) from the reel.

3.07 Maintain the electric brakes and their controls in good operating condition. To test, first apply

the brakes by means of the hand controller in the cab, (if there is one) and attempt to tow the trailer. The trailer wheels should lock. Then, if the trailer brakes are operated by truck brake pedal, release the brakes, tow the trailer at a speed of about 5 M.P.H. and apply the brakes. Both trailer wheel brakes should operate.

3.08 To test a break-away safety system, pull the break-away safety switch chain. It should be possible to pull the switch plunger out before the chain disengages from the plunger. With the safety switch plunger pulled out, attempt to tow the trailer. The brakes should lock the trailer wheels. Be sure to push the break-away switch plunger back, in order to release the brakes after completing the tests.

3.09 Never leave the break-away safety switch on more than about 30 seconds, as there is a heavy drain on the battery.

3.10 The break-away switch should never be used to apply the brakes for parking the trailer.

3.11 Connect the break-away safety switch chain so that should the trailer become accidentally disconnected from the towing hook of the towing truck while traveling, the chain will operate the safety switch before the slack of the safety rope is taken up. Maintain sufficient slack to permit making turns without operating the switch.

4. OPERATION

4.01 To load a reel of cable, maneuver the trailer into position in front of the reel and proceed as follows:

(a) Release the pressure in the reel carrier cylinders by opening both pump valves (rear position), and opening the reel carrier valve. The tongue wheel valve must be closed.

(b) Remove the locking pins and lower the keeper bars.

(c) Remove the spindle bar from the reel carriers; remove one of the side thrust bushings; place the bar through the cable reel and replace the bushing.

(d) The reel may be moved to the trailer or the trailer moved to the reel. In either case, each end of the spindle bar must rest evenly on a lift step. Close the keeper bars and secure the locking pins.

(e) Close both pump valves (forward position), and operate both hydraulic pumps to lift the reel. Continue lifting until the reel carrier springs are high enough to allow the traveling braces to be moved into place.

(f) To engage the traveling braces, move the handles, located on the outside of the trailer fully forward. The "T" head of the brace must pass the spring bolts on both sides. When the braces are both in place, release the hydraulic pressure as in (a) above.

4.02 To unload a reel of cable, reverse the procedure just described.

4.03 To operate the tongue wheel, the following procedure should be used:

(a) To lower the wheel from the traveling position, pull the "T" handle out and raise it to the vertical position, being sure it snaps into the notch at the top of the wheel quadrant. Close the reel carrier valve and open the tongue wheel valve. Close the pump valve on the right-hand pump (forward position). Operate the right-hand pump to lower the wheel to the proper position.

(b) To adjust the length of the tongue wheel shaft, operate the pump to extend and open the pump valve to retract.

(c) To raise the tongue wheel to the traveling position, open the pump valve on the right-hand pump and allow the wheel to retract fully. Pull out the "T" handle and lower it to the horizontal position, being sure that it snaps into the notch at the bottom of the wheel quadrant.

4.04 The procedure for loading strand reels is the same as for cable reels, except that the two adapters are used for lifting the small diameter strand reels.

4.05 The procedure for placing cable or strand from the Truco Trailer is the same as that for other trailers described in other sections of the Practices.

5. MAINTENANCE

5.01 The tires should be checked for proper inflation every 30 days or whenever visual inspection indicates that the tires may be improperly inflated. Check pressure before tires become heated.

5.02 The level of oil in both hydraulic reservoirs should be measured frequently, and the proper oil added if necessary, (see Par. 2.09). The level should be within one inch of the filler cap when the cylinder pressure is released.

5.03 The battery should be replaced about once a year. The Eveready Hot Shot 6 Volt battery, No. 1461 should be used for replacement.

5.04 The battery should be tested under load, switch on - about every three months, and at any other time when it is known that its condition is doubtful. If the voltage reads below 4.5 volts, replace the battery. This battery supplies a safety device.