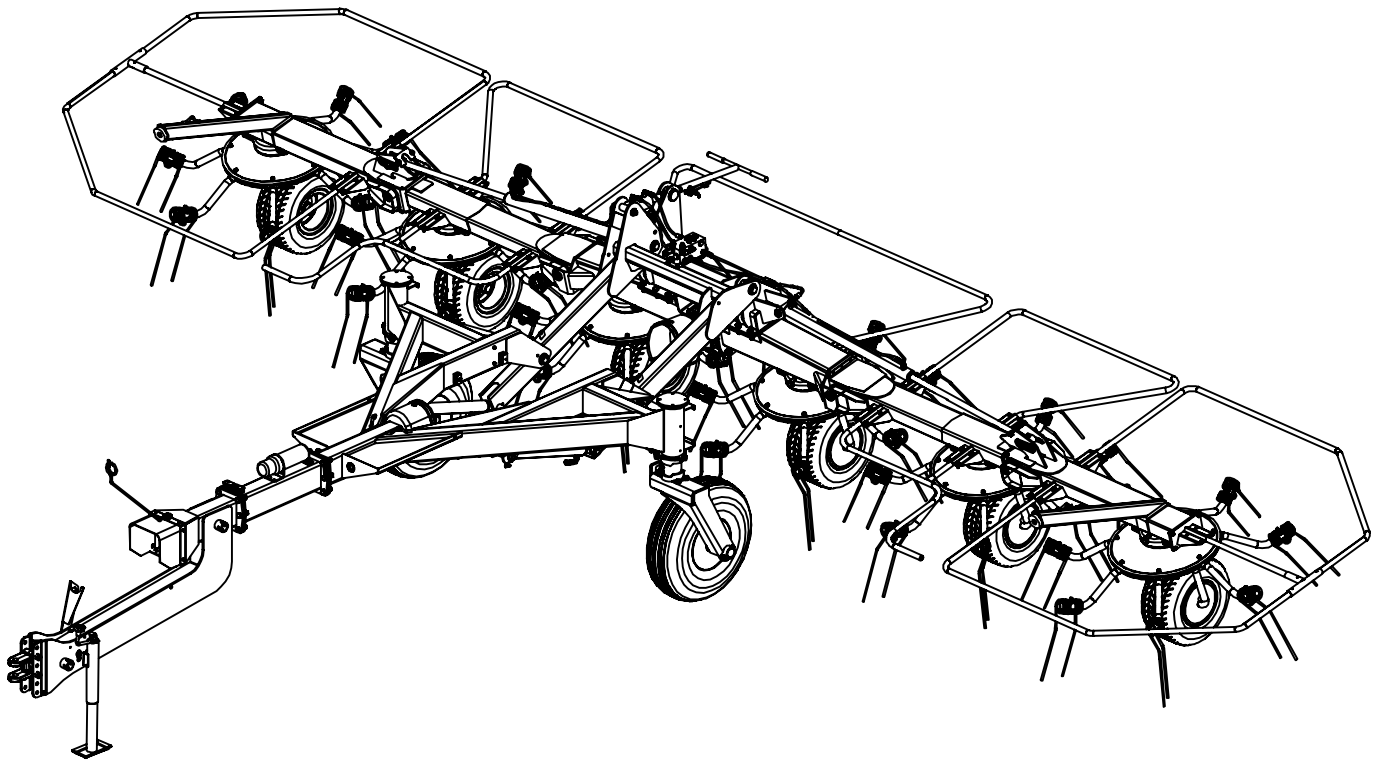


OPERATOR'S MANUAL

TEDDER

TD3427



FRONTIER[™]

TABLE OF CONTENTS

Introduction	2
Intended Use	2
Serial Number	2
Specifications	2
Safety	3
Power Source Safety	3
Driveline Safety	4
Safety Decals and Reflectors	5
Hitching	6
Attaching to the Tractor	6
Transporting	7
Field Transport	7
Road Transport	7
Field Set-up	8
Tine Height Adjustment	8
Adjustments	9
Tine Pitch Adjustment	9
Axle Adjustments	10
General Operation	10
Folding for Transport	11
Lubrication and Maintenance	12
Gearbox Lubrication	12
General Lubrication	13
PTO Lubrication	14
General Maintenance	15
Wheel Bearings	15
Technical	16
Replacing the Flotation Springs	16
Electrical	17
Timing the Rotors	18
Torque Specifications	21
Standard Torque Chart	21
Metric Torque Chart	22
Warranty	23
Illustrated Parts Breakdown	24
Chassis Assembly	25
Transport Axle Assembly S/N -800424	26
Transport Lock Assembly	27
Lift Frame Assembly	28
Center Tunnel Assembly	29
Wing Tunnel Assembly	30
Rotor and Tine Arm	31
Axle Assembly	32
Input Gearbox Assembly	33
Rotor Gearbox Assembly	34
PTO Shaft Assembly	35
Hydraulics	36
Decals	37
Notes	38

INTRODUCTION

Intended Use

Frontier Tedders are designed for evenly distributing and drying hay crops only. Frontier will not cover under warranty a tedder that has been used outside of these crops.

Serial Number

The tedder's serial number can be found on the right side tongue directly under the driveline. Please use this number when requesting service, seeking information, or ordering parts. For the operator's convenience, space to record the serial number, model number, purchase date, and dealer has been provided inside the front cover of this manual.





Specifications





Specifications	TD3418	TD3427
Working Width	18' 2"	26' 6"
Transport Width	9' 2"	11' 6"
Gearboxes	Grease/Oil Bath	Grease/Oil Bath
Rotors	4	6
Arms Per Rotor	7	7
Arm Construction	Round Tubular	Round Tubular
PTO/HP Recommended	35+	55+
Spindle Size	1-3/8"	1-3/8"
Hub	4-Bolt w/ Tapered Bearings	4-Bolt w/ Tapered Bearings
Wheels	4-Bolt Heavy Duty, Painted	4-Bolt Heavy Duty, Painted
Transport Wheels	N/A	7.5-10 LR E Tires
Tires	18.5 x 8	18.5 x 8
Hydraulic Requirement	1000psi	1200psi


!!SAFETY FIRST!!


 ***This symbol precedes specific safety instructions throughout this manual. When reading the manual, pay close attention to the information that follows this symbol.***


 FAILURE TO FOLLOW INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PERSONAL INJURY OR DEATH. READ ENTIRE MANUAL BEFORE OPERATING THE TEDDER.

 Keep hands, feet and clothing away from the machine's power take-off (PTO) shaft and any other moving parts until the machine has been shut down and the power source has been locked out.


 Do not adjust, unclog, lubricate, or service the tedder until it has been shut down.


 Support the tedder securely while working under it.


 Be certain all bystanders and animals are a safe distance away before folding or unfolding the tedder.


 Never allow anyone to ride on the tractor or the tedder.

 Before transporting, make sure hands-free transport lock is latched in place.


 When transporting, never exceed a speed of 20 MPH and avoid sudden turns.

 Be constantly aware of the ends of the machine to avoid collision with other objects.


 Be sure to check all fasteners before and after every use, this is especially important when the tedder is new but is a good practice on any machinery with high vibration levels.

 Be careful around hydraulic hoses and fittings. Never go near hydraulic leaks. High pressure leaks can puncture skin and cause serious injury or death!

Power Source Safety

 Do not use a PTO shaft without a rotating shield in good working order. Make sure drive system safety shields are in place on both the tractor and the tedder.

 Do not overextend the PTO shaft

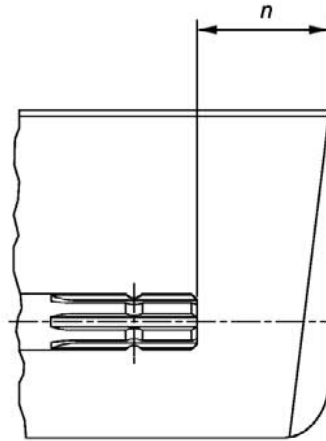
 PTO shield chains must be attached to the tractor and/or the tedder to keep the shield from rotating.

SAFETY

Stay Clear of Rotating Drivelines



TS1644-UN-22AUG95



H96219-UN-29APR10

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

Do not install any adapter device between the tractor and the primary implement PTO drive shaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

PTO Type	Diameter	Splines	$n \pm 5 \text{ mm (0.20 in.)}$
1	35 mm (1.378 in.)	6	85 mm (3.35 in.)
2	35 mm (1.378 in.)	21	85 mm (3.35 in.)
3	45 mm (1.772 in.)	20	100 mm (4.00 in.)

SAFETY

Safety Decals and Reflectors

Safety decals and reflectors are for the safety of yourself and others, and must be heeded at all times. If any decals are missing, faded, or damaged in any way, please contact your dealer for replacements immediately. Shown below are some of the decals used on your tedder.

	<p>⚠ WARNING</p> <p>Do not exceed this Implement's maximum transport speed of 32km/h (20mph). Exceeding this speed may result in loss of control during transport or braking and serious injury or death.</p> <p>Transport only with a properly ballasted tractor and a properly attached safety tow chain. Do not transport with a motor vehicle. Reduce speed and use additional caution when on inclines, towing under adverse surface conditions, and turning.</p>
--	---

IMPORTANT

To avoid machine damage, tilt cylinder must be extended before raising or lowering tedder. Always clean hose ends prior to attaching to tractor.

	<p>⚠ WARNING</p> <p>PINCH POINT HAZARD</p> <p>Keep Clear</p>
--	--

	<p>⚠ DANGER</p> <p>Entanglement in rotating objects can cause serious injury or death. Keep all shields in place. Avoid contact with rotating parts.</p>
--	---

	<p>⚠ WARNING</p> <p>Cover is under extreme spring pressure. See Operator's Manual for removal instructions.</p>
--	--

	<p>⚠ WARNING</p> <p>To help prevent entanglement, stand clear of tines. Disengage and shut off all engine power before adjusting tine height.</p>
--	--

	<p>⚠ WARNING</p> <p>THROWN OBJECTS</p> <p>Do not operate near people. Debris can be thrown a long distance.</p>
--	---

	<p>⚠ WARNING</p> <p>Avoid serious injury from falling wings during service or transport. Install lock chains or cylinder locks before transporting or parking implement with wings raised. Do not service or adjust with wings raised. Make sure bystanders are clear before lowering wings.</p>
--	---

<p>⚠ CAUTION</p> <p>To avoid serious injury:</p> <ul style="list-style-type: none"> ■ Read Operator's Manual before operating, servicing or repairing equipment. Follow all safety rules and instructions. (Manuals are available from your selling dealer.) ■ Never allow riders. ■ Keep bystanders away from equipment during operation. ■ Operate from tractor seat only. ■ Keep all shields in place and good condition. ■ Lower equipment to ground, stop engine, remove key and set brake before dismounting tractor. ■ Never allow children or untrained persons to operate equipment. 	
---	--

	<p>⚠ WARNING</p> <p>High-Pressure hydraulic oil leaks can penetrate skin resulting in serious injury, gangrene, or death.</p> <ul style="list-style-type: none"> ■ Check for leaks with cardboard; never use hand. ■ Before loosening fittings: lower load, release pressure, and be sure oil is cool. ■ Consult physician immediately if skin penetration occurs.
--	--

	<p>⚠ WARNING</p> <p>Avoid serious injury from hitch whipping up. Tedder must be attached to tractor when operating hydraulics.</p>
--	---

<p>⚠ CAUTION</p> <p>Operate only with 540 rpm PTO</p>	
--	--

HITCHING

Attaching to the Tractor



Figure 1

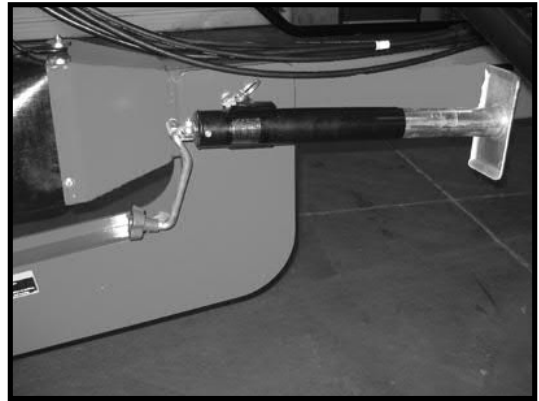


Figure 2

Crank the jack up or down to align the tractor draw bar with the hitch.

The tedder hitch is bolted on and can be adjusted up or down to accommodate various drawbar heights (Figure 1). Select a height that keeps the tedder chassis level when it is connected to the tractor.

When attaching to the draw bar always use a draw bar pin with a safety clip to ensure that the tedder doesn't bounce off of the tractor. Attach the safety chain to the tractor drawbar.

After attaching the tedder, crank the jack down until all the weight rests on the tractor drawbar, then remove the jack and place it in the transport position. (Figure 2)

Attach the PTO shaft to the tractor. Make sure the locking balls in the splined coupling are operational and that the PTO shaft locks securely on the tractor output shaft. NOTE: Be sure to push the PTO stand down against the tongue to avoid damage to the PTO shaft shielding.

The TD3427 is equipped with hydraulic cylinders to fold the machine for transport. The slotted holes on the side of the tongue (Figure 1) are storage holes for the hoses

Connect the wiring plug from the tedder into the female plug end on the tractor. If your tractor is not equipped with this plug you will need to have it installed by your dealer. Never travel on public roads without proper lighting.

TRANSPORTING

Field Transport

Never allow any riders on the tractor or the tedder.

Remain fully aware of the width of the tedder in relation to objects you are passing.

Never travel at speeds of more than 12 MPH in the field.

Road Transport

Never allow any riders on the tractor or the tedder.

Remain fully aware of the width of the tedder in relation to objects you are passing.

ALWAYS FOLLOW LOCAL TRAFFIC LAWS IN REGARDS TO THE TRANSPORTING OF FARM EQUIPMENT. FRONTIER WILL NOT BE HELD LIABLE FOR FINES INCURRED DUE TO TRAFFIC VIOLATIONS.

Do not exceed 20 MPH on any public road. Excessive speeds combined with common road obstructions can cause failures.

Be sure the SMV (slow moving vehicle) Symbol is visible from the rear of the machine as shown in Figure 3.

Before transporting, make sure the wings are completely down against the frame and the safety chains are in place. Figure 4 shows the wings supported properly for transport and the safety chains attached. These chains are an additional precaution to make sure the wings will not be able to leave the frame during transport.



Figure 3



Figure 4

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com