

# OPERATOR'S MANUAL

## GRINDER MIXER

GX1117



HSMFG0409

5HPOMGX1

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**WARRANTY:**

Warranty coverage is provided by John Deere according to the terms of the Agricultural/Commercial & Consumer Equipment Warranty Statement. Carefully read the warranty statement on the back of your original purchase order for details on coverage and limitations of this warranty.

**NOTES**

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**AFTER COMPLETION, DEALER SHOULD REMOVE AND RETAIN FOR RECORDS**

**FRONTIER  
DEALER PRE-DELIVERY CHECK LIST**

After the Grinder Mixer has been completely set-up, check to be certain it is in correct running order before delivering to the customer . The following is a list of points to inspect. Check off each item as you have made the proper adjustments and found the item operating satisfactorily .

- Grinder Mixer was not damaged in shipment. Check for dents and loose or missing parts.
- Report damage immediately to H&S Manufacturing Co. Inc.
- All bolts and fasteners are tight.
- Mixer has been correctly assembled according to instructions in this manual. Wheel nuts and all other fasteners are tightly secured.
- All grease fittings have been lubricated. The transmission and cyclonic reservoir are filled to proper levels. See Lubrication Chapter of this manual for details.
- Hydraulic pump, motors, hoses and fittings are properly attached.
- Guards and shields are secure.
- Screens fit properly into mill and the mill cover closes and latches tightly .
- Wheels are properly mounted.
- Tires are inflated to 80 PSI (563 kpa s).
- Belts are properly adjusted.
- Rear Drive Chain tension is properly adjusted. See Adjustment Chapter of this manual.
- Discharge auger door operates smoothly .
- Decals are in place and legible.
- Lights and wiring functioning properly if applicable.

**Connect the Mixer onto a proper horsepower 540 RPM or 1000 RPM (if so equipped) tractor and attach the PTO. Connect the scale (if so equipped) Plug transport light cord into tractor. Run the Grinder Mixer and make sure all components operate properly.**

- PTO guard turns freely .
- Hydraulic system does not leak under pressure.
- Electronic Scale (if equipped) operates properly
- Implement and all components are functioning properly .

**AFTER COMPLETION, DEALER SHOULD REMOVE AND RETAIN FOR RECORDS**  
**FRONTIER**  
**DEALER PRE-DELIVERY CHECK LIST (Continued)**

**Swinging Intake Auger (SIA) (If so Equipped)**

- Guards, shields and attaching hardware are in place and properly secured.
- SIA lifing, locking and supporting mechanisms function correctly . Counter balance spring and brake are properly adjusted. See Adjustment Chapter of this manual.
- Transport lock mechanism engages and disengages correctly . Safety locking clip is attached to the transport bracket.
- Hydraulic motor and speed control levers operate properly during operation.
- Decals are in place and legible.

Serial Number	
Model Number	
(Dealer's Name)	(Inspection Date)
(Signature of Pre-Delivery Inspector)	

**DEALER DELIVERY CHECK LIST**

This check list that follows is an important reminder of valuable information that should be passed on to the customer at the time this Grinder Mixer is delivered.

Check off each item as you explain it to the customer .

This delivery check list, when properly filled out and signed assures the customer that the Pre-delivery service was satisfactorily performed.

- Explain to the customer that the pre-delivery inspection was made.
- Explain to the customer all the safety precautions they must exercise when operating this unit.
- Explain recommended loads for different types of materials.
- Explain to customer that regular lubrication is required for proper operation and long life of machine. Show customer the lubrication section of Operators Manual.
- Give the customer Operators Manual and make sure he reads and understands all operating and service instructions.

Record Serial Number on page 23 of this Manual.

Date Delivered \_\_\_\_\_ Dealer's Name \_\_\_\_\_

Signature of Original Buyer \_\_\_\_\_ By \_\_\_\_\_

# FRONTIER MODEL GX1117 GRINDER MIXER

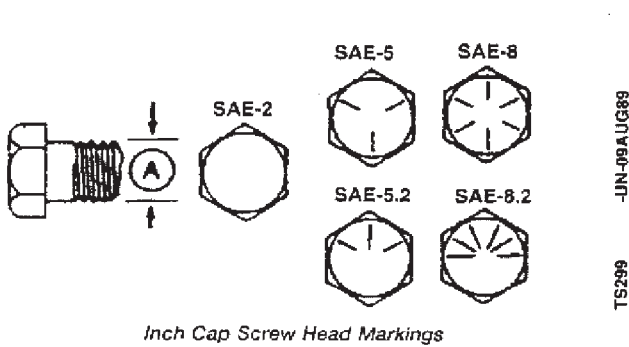
Your Frontier Grinder Mixer has been manufactured of the finest quality materials and components. The performance you get from your machine is largely dependent upon how well you read and understand this manual and apply this knowledge. There is a right and a wrong way to do everything. Please do not assume that you know how to operate and maintain your spreader before reading this manual carefully. Keep this manual available for ready reference.

## SPECIFICATIONS

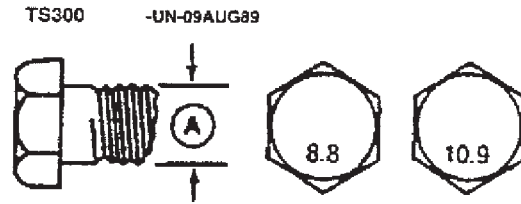
	<b>GM1117</b>
Mixing Tank Capacity - (Bushel).....	135
Mixing Tank Capacity - (Cubic Ft.).....	170
Mixing Tank Diameter.....	72"
Mixing Auger Diameter.....	14" w/30" Base
Mixing Tank Ladder.....	Standard - Front Mount Over Mill
Mixing Tank Windows.....	2 Full Length & 1 Port Hole Style
Overall Height.....	10' 7"
Overall Width.....	7' 9" w/o Auger Feeder
Overall Width.....	8' 8" w/Auger Feeder
Overall Length.....	15' 8"
Ground Clearance.....	11-1/2"
Supplement Hopper.....	23"W x 18"L - 35" Above Ground
Feeder.....	Gravity Hopper or Feed Auger
P.T.O. Drive.....	540 or 1000 RPM
H.P. Requirement.....	45 RPM up to 1 1/2 HP - 1000 RPM up to 145 HP
Tires.....	12.5I x 15 - 20 Ply
Jack.....	Standard
Weight w/o Auger Feeder.....	3,200 lbs.
Weight w/Auger Feeder.....	3,600 lbs.
<b><u>Auger Feeder</u></b>	
Auger Feeder Length.....	84"
Auger Feeder Auger Diameter.....	12"
Infeed Hopper.....	42" w/Fold-In-Flare - Adjustable As Low As 20"
Drive.....	Direct Drive Independent Hydraulic Motor
<b><u>Mill</u></b>	
Hammermill Width.....	21"
Cylinder Diameter.....	20"
Grinder Drive.....	8-"A" Section Banded V-Belt
Grinder Hammers.....	66 - 4 Way Reversible Steel Alloy
Grinder Screen Area.....	600 Sq. In.
Throat Magnets.....	2 - 4" x 18"
Speed.....	2700 RPM
<b><u>Discharge Conveyor</u></b>	
Unloading Auger Tube Diameter.....	8"
Unloading Auger Length.....	12'
Unloading Auger Rotation.....	300°
Unloading Auger Reach Standard.....	19' @ 53°
<b><u>Hydraulic Drive System</u></b>	
Pump Pressure.....	3,200 PSI
Oil Flow.....	10-1/2 GPM
Hydraulic Reservoir.....	Cyclonic Reservoir
Oil Filter.....	10 Micron

\*Determine right and left side of grinder mixer by viewing it from the rear. If instructions or parts lists call for hardened bolts see page 6 to identify.

# CAP SCREW TORQUE VALUES



Inch Cap Screw Head Markings



Metric Cap Screw Head Markings

## INCH CAP SCREW TORQUE VALUES

Bolt Diameter (A)	Wrench Size	Cap Screw Grade					
		SAE 2		SAE 5		SAE 8	
		N-m	lb.-ft	N-m	lb.-ft	N-m	lb.-ft
1/4"	7/16"	7	(5)	11	(8)	16	(12)
5/16"	1/2"	14	(10)	23	(17)	33	(24)
3/8"	9/16"	24	(18)	41	(30)	54	(40)
7/16"	5/8"	41	(30)	68	(50)	95	(70)
1/2"	3/4"	61	(45)	102	(75)	142	(105)
9/16"	13/16"	88	(65)	142	(105)	203	(150)
5/8"	15/16"	122	(90)	197	(145)	278	(205)
3/4"	1-1/8"	217	(160)	353	(260)	495	(365)
7/8"	1-5/16"	224	(165)	563	(415)	800	(590)
1"	1-1/2"	332	(245)	848	(625)	1193	(880)
1-1/4"	1-7/8"	665	(490)	1492	(1100)	2393	(1765)

## METRIC CAP SCREW TORQUE VALUES

Bolt Diameter (A)	Wrench Size	Markings on Cap Screw Heads			
		8.8		10.9	
		N-m	lb.-ft	N-m	lb.-ft
5 mm	8 mm	6	(4.5)	9	(6.5)
6 mm	10 mm	10	(7.5)	15	(11)
8 mm	13 mm	25	(18)	35	(26)
10 mm	16 mm	50	(37)	75	(55)
12 mm	18 mm	85	(63)	130	(97)
16 mm	24 mm	215	(159)	315	(232)
20 mm	30 mm	435	(321)	620	(457)
24 mm	36 mm	750	(553)	1070	(789)
30 mm	46 mm	1495	(1103)	2130	(1571)



**CAUTION:** Use only metric tools on metric hardware. Other tools may not fit properly. They may slip and cause injury.

DO NOT use these values if a different torque value tightening procedure is listed for a specific application. Torque values listed are for general use only. Check tightness of cap screws periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade. Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

Make sure fastener threads are clean and you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of amount shown in chart. Tighten toothed or serrated-type lock nuts to full torque value.



**BE  
ALERT!**

**YOUR SAFETY  
IS INVOLVED.**

**THIS SYMBOL IS USED THROUGHOUT THIS BOOK WHENEVER YOUR PERSONAL SAFETY IS INVOLVED. TAKE TIME TO BE CAREFUL. REMEMBER: THE CAREFUL OPERATOR IS THE BEST OPERATOR. MOST ACCIDENTS ARE CAUSED BY HUMAN ERROR. CERTAIN PRECAUTIONS MUST BE OBSERVED TO PREVENT THE POSSIBILITY OF INJURY OR DAMAGE.**

**TRACTORS**

This operator's manual uses the term "Tractor" when identifying the power or the towing source.



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