

2959 ROW UNIT MOUNTED FERTILIZER COULTER OPERATOR'S / INSTRUCTION MANUAL

W/ PARTS IDENTIFICATION

MANUAL PART# 2565-482_REV_C - 08/2024

YETTER MANUFACTURING CO. FOUNDED 1930

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FOREWORD

You've just joined an exclusive but rapidly growing club. For our part, we want to welcome you to the group and thank you for buying a Yetter product.

We hope your new Yetter products will help you achieve both goals-increase your productivity and increase your efficiency so that you may generate more profit.

This operator's manual has been designed into four major sections: Foreword, Safety Precautions, Installation Instructions and Parts Breakdown.

This SAFETY ALERT SYMBOL indicates important safety messages in the manual,...When you see this symbol, be alert to the possibility of PERSONAL INJURY and carefully read the message that follows.

DANGER: Indicates an imminently hazardous situation which, if not avoided "will" result in death or serious injury. This signal word is to be limited to the most extreme situations



WARNING: Indicates a potentially hazardous situation which, if not avoided, "could" result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation, which if not avoided, "may" result in minor or moderate injury. It may also be used to alert against unsafe practices.



<u>NOTICE</u>: Indicates information considered important, but not hazard related (e.g., messages relating to property damage).

It is the responsibility of the user to read the operator's manual and comply with the safe and correct operating procedure and to lubricate and maintain the product according to the maintenance schedule in the operator's manual.

The user is responsible for inspecting his machine and for having parts repaired or replaced when continued use of the product would cause damage or excessive wear to the other parts.

It is the user's responsibility to deliver his machine to the Yetter dealer who sold him the product for service or replacement of defective parts, which are covered by the warranty policy.

If you are unable to understand or follow the instructions provided in this publication, consult your local Yetter dealer or contact:

YETTER MANUFACTURING CO. 309/776-4111 800/447-5777 309/776-3222 (FAX) Website: www.yetterco.com E-mail: info@yetterco.com

WARRANTY POLICY

Yetter Manufacturing warrants all products manufactured and sold by it against defects in material. This warranty being expressly limited to replacement at the factory of such parts or products as will appear to be defective after inspection. This warranty does not obligate the Company to bear cost of labor in replacement of parts. It is the policy of the company to make improvements without incurring obligations to add them to any unit already sold. No warranty is made or authorized to be made, other than herein set forth. This warranty is in effect for one year after purchase.

Dealer :_____

Yetter Manufacturing warrants its own products only and cannot be responsible for damage to equipment on which mounted.



A brief description of signal words that may be used in this manual:

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<u>CAUTION</u>: Indicates a potentially hazardous situation, which if not avoided, "may" result in minor or moderate injury. It may also be used to alert against unsafe practices.

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Consult your implement and tractor operator's manual for correct and safe operating practices, _Be aware of towed implement width and allow safe clearance.

Safety decals are placed on the implement to alert the operator and others to the risk of personal injury or unsafe operation during normal operations and servicing.

1. The safety decals must be kept clean and in good condition to ensure that they are legible.

- 2. Safety decals must be replaced if they are missing or illegible.
- When components are replaced during repair or servicing, check that the new components include the necessary safety signs.
- Replacement safety decals may be obtained from your local dealer.



Read these instructions carefully to acquaint yourself with the Equipment. Working with unfamiliar equipment can lead to accidents.

Never park the equipment on a steep incline or leave the equipment running unattended.

Never clean, lubricate or adjust a machine that is in motion.

Always check that straps are secure.

Make sure latches are in pinned position when moving equipment.

Do not allow children to operate this equipment.

Do not allow riders on the equipment, trailer and/or pick-up.

Use speed and caution dictated by the terrain being traversed. Do not operate on any slope steep enough to cause tipping or loss of control.

Read and understand the operator's manual and require all other persons who will operate the equipment to do the same.

If operating on public roadways, where legal, be certain all lighting is operating properly and observe all traffic laws.

Beware of increased stopping distances and control effort when operating with implements attached.

Be familiar with all controls and be prepared to stop equipment quickly in an emergency.

FAILURE TO HEED MAY RESULT IN PERSONAL INJURY OR DEATH.

GENERAL INFORMATION

The 2959 Fertilizer Coulter can be used as a R.H. opener or a L.H. opener, it is recommended that half of the planter is R.H. assemblies and the other half is L.H. assemblies.

NOTICE: The 2959 Fertilizer Coulter is NOT recommended for use in rocky conditions as the coulter arm and fertilizer tube are susceptible to bending.

For proper operation of the 2959 coulter, a ¼" NPT "Straight Stream" nozzle or a ¼" NPT Female "Nozzle Body" with orifice plates will be required. Yetter Manufacturing Co. does not supply these parts.

See tip application chart.

BOLT TORQUE

READ THESE INSTRUCTIONS FIRST:

- 1. Improperly tightened bolts will result in damage, breakage, expense, and down time.
- 2. Always replace bolts with the specified grade and type.
- 3. Torque properly before first use of the machine and every 2-4 hours of use until you are sure bolts are staying tight.
- 4. The chart below is a guide for proper torque. Use it unless a specified torque is called out elsewhere in the manual.
- 5. Torque is the force you apply to the wrench handle or the cheater bar, times the length of the handle or bar.
- 6. Use a torque wrench whenever possible.

The following table shows torque in ft. lbs.

BOLT DIA. AND THREADS PER INCH	GRADE 2	GRADE 5 A-325	GRADE 8	
1/4	6	10	14	
5/16	12	20	30	
3/8 -16	25	35	50	
7/16 - 14	35	55	80	
1/2 - 13	55	85	125	
9/16 - 12	75	125	175	
5/8 - 11	105	170	235	
3/4 - 10	185	305	425	
7/8 – 9	170	445	690	
1-8	260	670	1030	
1 1/8 – 7	365	900	1460	
1 1/4 - 7	515	1275	2060	
1 3/8 -6	675	1675	2700	
1 1/2 - 6	900	2150	3500	
1 3/4 – 5	1410	3500	5600	

ASSEMBLY INSTRUCTIONS

STEP 1. Attach the 2959-203 fert. coulter faceplate w.a. to the planter unit using 3) $\frac{1}{2}$ -13 x 1 $\frac{1}{2}$ " bolts, flat washers and locknuts. Use the 1 $\frac{3}{4}$ " OD x $\frac{1}{4}$ " thick washer on the lower large slot. On some planter units, this washer may need to be trimmed enough not to interfere with a gusset. Center the bracket on the row unit and tighten the bolts to specification listed on the table on page 4.



STEP 2. Attach the coulter arm 2959-201 to the faceplate using 2) $\frac{1}{2}$ -13 x 2 $\frac{3}{4}$ " bolts, flat washers and lock nuts.



NOTICE: The unit-mounted coulter can be assembled as a right hand or left hand coulter assembly.

ASSEMBLY INSTRUCTIONS

STEP 3. Depth settings are in reference to the planter frame being level (front to back) when in planting position. Depth settings are in relationship to the planter disc opener blades being 15" in diameter and the fertilizer coulter blade being 16" in diameter. The coulter blade has 6 adjustment settings in a 2" range, with a maximum operating depth of 4" below the surface.



EXAMPLE: Planting depth is set at 1 $\frac{1}{2}$ " then the coulter placement may be adjusted to 1 $\frac{1}{2}$ " to 3 $\frac{1}{2}$ " below the surface of the ground.

STEP 4. Attach the 2959-200 Injection tube holder to the coulter arm on the same side that the coulter hub is assembled using 2) $3/8-16 \times 1 \frac{1}{2}$ " bolts and lock nuts. Insert the 8" pipe nipple and coupler into the tube holder and attach a hose to the fertilizer tube and tighten hose clamps (NOT SUPPLIED).



ASSEMBLY INSTRUCTIONS

STEP 5. At the pipe coupler install the appropriate nozzle (not supplied) according to the liquid fertilizer application rate. Nozzles can be ordered through your nearest implement dealer or fertilizer equipment dealer. See the tip application chart in this manual.



STEP 6. Attach the coulter blade to the arm/hub assembly using 4) $\frac{1}{2}$ -13 x 1 $\frac{1}{2}$ " carriage bolts, lock washers and hex nuts.



OPERATION PRECAUTIONS

STOP

Read this before using the Yetter product.

- MACHINE OPERATION

NOTICE: failure to properly set the planter frame height and levelness can result in less than successful operation of the planter and the Yetter product and may result in <u>damaged equipment</u>. All operators should read and thoroughly understand the instructions given prior to using the Yetter product.

DO NOT use this product if the planter is not adjusted properly!

Leveling the planter:

With the planter lowered to proper operating height (Usually 20"-22"). Read the planter operator's manual for recommended setting. Check to be sure the toolbar and row unit parallel arms are level fore and aft. <u>Re-</u> <u>check</u> when the planter is in the <u>field</u> and has been <u>fully loaded</u> with seed, fertilizer, granular chemicals, etc. Also, a field check with a bubble level on the frame should be made of the hitch height to ensure level operation front to back.

It is important for the planter to operate level laterally. Tire pressure must be maintained at pressures specified by the manufacturer.

Field and actual planting conditions change and will dictate planter frame heights. You must ensure that the row unit parallel arms are approximately parallel with the ground.

NOTICE: For proper operation of the planter attachments and row units, it is imperative that the planter toolbars and row unit parallel arms be level side-to-side and front-to-rear. The toolbar frame should operate at a 20"-22" height from the *planting surface*. Check the manufacturer's operator's manual for instructions on how to adjust the frame height and levelness.

PLANTER ADJUSTMENT



PARTS IDENTIFICATION



TROUBLESHOOTING

Cause

Insufficient down pressure

Planter frame not level for and aft

Soil too hard/compacted

2959 fertilizer coulter blade adjusted too deep

Planter pulls to one side

Problem

Row unit floats out of soil

Damage/Breakage of blade shaft, coulter arm and or blade

Bending or breakage of fertilizer tube

Fertilizer splatter

Not an equal number of RH and LH coulter assemblies

Turning with blades in ground

Extreme soil conditions such as very tight soil or heavy rocks, especially combined with: A: speed is too fast

B: blades too deep C: turning with blades in ground

Tube/nozzle adjusted too low

Heavy rock conditions

Nozzle not aligned with furrow

Liquid pressure is too high (PSI) pounds per square inch

Increase the tension of the planter unit down force springs

Level the frame at 20" frame height while in planting position

May have to use a tillage implement to loosen soil

Raise the coulters. Coulters could hold planter out of ground if set too deep

Assemble equal number of RH and LH coulter assemblies

Avoid this

Avoid whenever possible otherwise: A: reduce speed B: run blades only deep enough to place fertilizer C: do not turn with blades in ground

Raise nozzle to a minimum 1/2" above soil

Install 2959-104 spring loaded injection kit

Ensure each nozzle is directly behind and centered on the coulter blade furrow

Recommended PSI is 20 to 30. Adjust and recalibrate system for different pressure setting.

LIQUID FERTILIZER APPLICATION RATE AND PRESSURE CHART

							Y	
	LIQUID	CAPACITY 1	4 MPH 5 MPH 5.5 MPH 6 MPH 7 MPH					
	PRESSURE IN	NOZZLE IN	H2O	H2O	H20	H2O	H20	H20
TIP #	PSI	GPM						
111 11	20	0.11	5.45	4.36	3,96	3.63	3.11	2.72
	25	0.12	5.94	4.75	4.32	3.96	3.39	2.97
00015	30	0.13	6.44	5.15	4.68	4.29	3.68	3.22
100000000000000000000000000000000000000	40	0.15	7.43	5.94	5.40	4.95	4.24	3.71
	50	0.17	8.42	6.73	6.12	5.61	4.81	4.21
	60	0.18	8.91	7.13	6.48	5.94	5.09	4.46
	20	0.14	6.93	5.54	5.04	4.62	3.96	3.47
	25	0.16	7.92	6.34	5.76	5.28	4.53	3.96
40002	30	0.17	8.42	6.73	6.12	5.61	4.81	4.21
	40	0.20	9.90	7.92	7.20	6.60	5.66	4.95
	50	0.23	11.39	9.11	8.28	7.59	6.51	5.69
	60	0.25	12.38	9.90	9.00	8.25	7.07	6.19
	20	0.21	10.40	8.32	7.56	6.93	5.94	5.20
	25	0.24	11.88	9.50	8.64	7.92	6.79	5.94
0003	30	0.26	12.87	10.30	9.36	8.58	7.35	6.44
	40	0.30	14.85	11.88	10.80	9.90	8.49	7.43
	50	0.34	16.83	13.46	12.24	11.22	9.62	8.42
	60	0.37	18.32	14.00	13.32	12.21	10.4/	9.16
	20	0.26	15.00	10.67	11.00	9.24	7.92	0.93
0004	25	0.32	17.84	12.07	11.52	10.50	9.05	7.92
F0004	30	0.35	17.33	15.00	12.00	13.20	9.90	0.00
	40	0.40	19.00	10.04	14.40	14.95	10.72	9.90
	50	0.45	22.20	10.02	17.64	16.17	13.86	10.14
	20	0.45	17.33	13.86	12.60	11.55	9.00	8.66
	25	0.40	19.80	15.84	14.40	13.20	11 31	9.00
10005	30	0.43	21.29	17.03	15.48	14.19	12.16	10.64
10000	40	0.50	24.75	19.80	18.00	16.50	14.14	12.38
	50	0.56	27.72	22.18	20.16	18.48	15.84	13.86
	60	0.61	30.20	24.16	21.96	20.13	17.25	15.10
#0006	20	0.42	20.79	16.63	15.12	13.86	11.88	10.40
	25	0.47	23.27	18.61	16.92	15.51	13.29	11.63
	30	0.52	25.74	20.59	18.72	17.16	14.71	12.87
	40	0.60	29.70	23.76	21.60	19.80	16.97	14.85
1.0	50	0.67	33.17	26.53	24.12	22.11	18.95	16.58
	60	0.74	36.63	29.30	26.64	24.42	20.93	18.32
	20	0.57	28.22	22.57	20.52	18.81	16.12	14.11
	25	0.63	31.19	24.95	22.68	20.79	17.82	15.59
¥0008	30	0.69	34.16	27.32	24.84	22.77	19.52	17.08
	40	0.80	39.60	31.68	28.80	26.40	22.63	19.80
	50	0.89	44.06	35.24	32.04	29.37	25.17	22.03
	60	0.98	48.51	38.81	35.28	32.34	27.72	24.26
	20	0.71	35.15	28.12	25.56	23.43	20.08	17.57
	25	0.79	39.11	31.28	28.44	26.07	22.35	19.55
#0010	30	0.87	43.07	34.45	31.32	28.71	24.61	21.53
	40	1.00	49.50	39.60	36.00	33.00	28.29	24.75
	50	1.12	55.44	44.35	40.32	36.96	31.68	27.72
	60	1.23	60.89	48./1	44.28	40.59	34.79	30.44
#0015	20	1.06	52.47	41.98	38.16	34.98	29.98	26.24
	25	1.19	56,91	47.12	42.84	39.27	33.66	29.45
	30	1.30	04.35	51.48	40.80	42.90	30.//	32.18
	40	1.50	74.20	59.40	54.00	49.50	42.43	37.13
	60	1.81	89.60	71.68	65.16	59.73	51.20	41.58
ROW SP/	ACING	10" X 3.3	15" X 2.0	18" X 1.66	20" X 1.5	36" X .83	38" X .79	40" X 7
MULTIPLIER		Car: 64545445	0.00 (0.0000)		and the second	0.000	50 0131 0	

TABLES ARE BASED ON 30" NOZZLE SPACING

GPA (Per Nozzle) GPM = GALLON PER MINUTES MPH = MILES PER HOUR W = WIDTH

R 3 32% = H20/1.15

This table is a reference only. Please calibrate your equipment to insure proper rate of application. The information contained in this issue is offered in good faith by Yetter Mfg. Co. to further the understanding of liquid fertilizer application.

However, the use of the information provided is beyond the control of Yetter Mfg. Co. and in no case shall Yetter Mfg. Co. or any seller of its products be responsible for any damages that may occur from the use of this information.

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