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Manufactures of Mini Liquid Manure Spreaders
1867 Kirkwood Pike Kirkwood, PA 17536

LIMITED WARRANTY

Conestoga Manufacturing, LLC of Kirkwood, PA warrants to the Original Purchaser a Guarantee that each product it manufactures is free from defects in both material and workmanship if properly serviced and operated under normal conditions, for 3 years from the date of purchase. Components installed in the unit which are not manufactured by Conestoga Mfg. will be covered under the terms spelled out by each manufacture, unless other wise stated.

There is a 10 year warranty on the box against rust and corrosion.

The Poly Floor have a Lifetime Warranty.

Conestoga Mfg. is committed to correct the defect(s), without charge only when the work is done at the place of manufacture, or at one of Conestoga's authorized dealers and/or service centers.

Transportation charges to and from the point of service will be the responsibility of the purchaser.

All warranty claims will be subject to examination by Conestoga Mfg. Replacement and/or repair of defect(s) will be considered by Conestoga Mfg. to have satisfied the obligation to the original purchaser.

Conestoga Mfg. shall not be made liable for any incidental or consequential damages, under any circumstances arising from loss or other damages or losses owing to the failure or use of Conestoga's products beyond the cost of repair or replacement of any defective parts.

Conestoga Mfg. will not recognize any warranties extending beyond 3 years. Any extended warranties created by dealers must here to fore be authorized in writing by an officer of Conestoga Mfg.

A Warranty Claim Form can be obtained by contacting Conestoga Mfg.
(Operators Manual for current models - older models subject to differences on warranty and minor details)



OWNER'S MANUAL AND REPLACEMENT PARTS MANUAL



FOR MODELS
C-50 PTO, C-80 PTO, C-125 PTO & C-175 PTO
MANURE SPREADER

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INTRODUCTION

GUIDE TO THIS MANUAL

This manual contains all the necessary information necessary to safely operate the Conestoga C-50 PTO, C-80 PTO, C-125 PTO & C-175 PTO Spreaders Refer to the Table of Contents for a list of topics covered in this manual. Should any questions arise, please contact Conestoga Mfg. or your Dealer before starting this equipment.

Regarding the information presented in this manual:

All safety, operating and service information reflect current production models (C-50 PTO thru C-175) at the time this manual was published.

References made to Left, Right, Front or Rear are directions given when you are facing the unit from the Rear.

Please read this entire manual carefully before operating this unit: doing so will ensure your safety and prolong the high performance of the equipment.

FOR YOUR SAFETY

This manual contains the following Safety Statements, they are also listed here to impress upon you their importance.

- **NOTE:** A clarification of information previously stated or additional pertinent information.
- **ATTENTION:** A Safety Statement indicating that potential damage to the equipment may occur if instructions are not followed.

 **CAUTION:** A Safety Statement which reminds you of a good safety practice and/or directs your attention to an unsafe practice which could result in Personal Injury.

 **WARNING:** A Strong Safety Statement; indicating that a Hazard exists which may result in Injury or Death if proper procedures are not followed.

 **DANGER:** The Utmost Level of Safety must be observed; an Extreme Hazard exists which will result in the high probability of Death or irreparable Serious Personal Injury if proper precautions are not taken.

The best equipment operator is a careful operator. By using common sense, observing the Safety Rules and adhering to the precautions specific to this spreader, you the operator can expect this unit to provide many hours of carefree service.

In addition to observing the specific precautions listed throughout this manual, the following general precautions apply and must be adhered to in order to ensure safe and proper operation of this equipment.

 **WARNING:** Keep hands and feet from under the spreader at all times. Be sure other persons are at a safe distance from the equipment before operating the unit.

 **WARNING:** DO NOT attempt to operate the spreader in areas with steep inclines, ditches, large rocks, stumps or holes which may endanger the operator by upsetting the tractor or cause damage to the spreader.

 **CAUTION:** To prevent injury and promote safe spreader operation, keep all shields in place during operation. Ensure that all mounting hardware is properly tightened.

 **WARNING:** Never clean, adjust or repair the spreader while the tractor is running.

 **WARNING:** Never get off the tractor while it is in motion and/or spreader is in operation.

 **WARNING:** Never wear loose clothing when operating the spreader as it may become caught in the moving parts of the machine.

 **WARNING:** Never allow children or any one else to ride on the spreader.

 **ATTENTION:** To ensure proper and safe operation of the spreader, periodically inspect all parts for excessive wear. Replace worn components with factory authorized parts.

The following Safety Decals have been placed on your spreader to remind you of the critical safety precautions which must be heeded to ensure the personal safety to you the operator, and any persons in the vicinity of the equipment while it is in operation. Be sure to keep the Safety Decals clean and readable. If the decals ever become damaged or illegible, contact your Conestoga dealer for replacements.

WARNING

NEVER turn on or engage the apparatus with someone standing in close proximity to any movable part of the apparatus.

NEVER ride this apparatus.

FAILURE TO FOLLOW ALL THE INSTRUCTIONS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH.

WARNING

DO NOT make adjustments, lubricate or unplug the apparatus with engine running.

Keep all body parts, including hands, feet & hair away from all operating parts of this apparatus.

Apparatus is not for passenger use or riding. Anyone coming in contact with beaters or other operating parts of this apparatus may result in serious injury or death.

DO NOT use the safety bar as a handrail.

NOTICE: DO lubricate appropriate parts of this apparatus every 10 hours of operation DO NOT lubricate with the engine running. FAILURE TO FOLLOW ALL THE INSTRUCTIONS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH.

WARNING

DO NOT attempt to use this apparatus unless you are trained in its proper use or are under competent supervision. For your own safety, practice the Safety & Operating Instructions every time you use the apparatus. Deviating from these procedures may result in operator injury. All operations must conform to the applicable Federal, State, County or City regulations for installation, operation, ventilation, fire prevention & protection of personnel. If at any time the apparatus you are using does not perform in its usual manner, or you have a difficulty in the use of the apparatus, stop using it immediately, DO NOT use the apparatus until the problem is corrected.

WARNING

NEVER leave operating position without turning off the engine & removing the key.

Apparatus is not designed for use at speeds greater than 8 mph while engaged.

DO NOT back up while apparatus is engaged.

FAILURE TO FOLLOW ALL THE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

DANGER



**ROTATING DRIVELINE
CONTACT CAN CAUSE DEATH
KEEP AWAY!**

DO NOT OPERATE WITHOUT -

- ALL DRIVELINE GUARDS, TRACTOR AND EQUIPMENT SHIELDS IN PLACE.
- DRIVELINES SECURELY ATTACHED AT BOTH ENDS.
- DRIVELINE GUARDS THAT TURN FREELY ON DRIVELINE.

WARNING

READ & UNDERSTAND ALL THE SAFETY & OPERATING INSTRUCTIONS BEFORE OPERATING THIS APPARATUS. IF YOU DO NOT UNDERSTAND THESE INSTRUCTIONS OR HAVE ANY QUESTIONS, CONTACT YOUR SUPERVISOR OR DEALER BEFORE ATTEMPTING TO USE THE APPARATUS. FAILURE TO FOLLOW ALL THE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH TO THE OPERATOR.

The various labels shown here have been placed on the equipment for your safety. Please read each one carefully and be sure to heed each label's **WARNING**

OPERATION

UNDERSTANDING THE SPREADER'S OPERATION

Proper and safe operation of the Conestoga C-50 PTO thru C-175 PTO spreaders require being familiar with the Drive Lines and following all of the safety precautions listed here

LOADING THE SPREADER

Conestoga Mfg. recommends; Loading the spreader from Front to Rear, this procedure will make the unloading process easier.

NEVER store manure in the spreader between times of unloading during the cold winter months. A frozen load could result in severe equipment damage (a torn apron chain might be the result).

DO NOT store wet manure in the spreader or keep it out doors when loaded, doing so will speed up rust and corrosion.

Before proceeding with the operation of the spreader, review all of the Safety Statements.



ATTENTION: In order to obtain proper and aggressive spreading action, *the spreader must reach a ground speed of three miles per hour, (this amounts to a comfortable walking pace). Spreading at speeds of eight miles per hour, (this amounts to a very brisk walking pace) can cause excessive wear and/or damage to the equipment.*

Be sure the unit is not in motion before executing the following steps.

1. If your unit is equipped with an End Gate option...lift the End Gate before engaging the spreader.
2. Allow the Apron Chain to continue running until the remaining manure exits the spreader.

OPERATION (CONT'D)

On Conestoga Equipment, Left and Right are determined by standing behind the Spreader and looking in the direction of travel.

 **CAUTION:** Never use too small a vehicle to tow your Spreader. A small unit may be able to pull the Unit but it would not be heavy enough to create proper traction, braking would also be a problem on hills and steering would be more difficult.

 **CAUTION: TRACTOR HITCH-**The Hitch on the Spreader is designed to fit a standard tractor hitch. Adjust the tractor's draw bar to be 13" to 15" above the ground. Secure the draw bar with the hitch pin directly below the power drive line.

ATTACHING THE SPREADER TO THE TRACTOR

1. Fasten the Spreader Hitch to the draw bar with a 3/4" diameter Hitch Pin which has a locking device.

 **CAUTION:** Failure to use the correct Hitch Pin may result in damage to the spreader and/or tow vehicle and could also result in injury to the operator.

2. Remove the weight from the Jack. Swing the Jack into the horizontal position and lock it into place.
3. On the PTO Shaft, pull back on the Collar and slide the PTO onto the Tractor Shaft until the balls engage in the groove in the Tractor Shaft. Then release the Collar. Check to make sure the PTO is locked on the Shaft.

To remove the PTO, pull back on the Collar to unlock the balls and slide the PTO off the Tractor Shaft.

Note: The Yoke which contains the Collar and Balls must be kept free of Paint and/or Rust, it must also be kept lubricated to insure proper operation.

4. Make sure the PTO is Disengaged before unhooking it from the Spreader.

MAINTENANCE & ADJUSTMENT

TIRE REPLACEMENT

Replace tires with Rib Implement tires on the drive wheels.

CHECK AND ADJUST THE FLOOR APRON CHAIN

Periodically check the Floor Apron chain tension, (See Fig. 1).

Procedure for Checking and Adjusting the Floor Apron chain follows:

1. Pull up on the Center Cross Member of the Floor Apron Chain.
2. If you can lift the Cross Member higher than 5 inches, the Chain is too loose.
3. If you can lift the Cross Member no higher than 3 inches the Chain is too tight.

4. If the Chain needs adjustment, use a 3/4" wrench to loosen the Slide Nuts (4) located at the bottom front corners on the side of the spreader, (See Fig. 1).

Turning the Front Nut clockwise will tighten the Apron Chain, turning it counterclockwise will loosen it. **Make sure the Chains on each side of the Apron are adjusted to like tension.**

5. Re-tighten the Side Nuts.

BACK UP PUSH PAWL ADJUSTMENT

The back up push pawl mounting bracket is slotted, which allows for adjustment.

When the front push pawl is at full stroke the back push pawl should drop over the notch and have 1/16" clearance between the back up push pawl and the notch (see Fig. 1A).

IMPORTANT

If using an end gate either hydraulic or manual always raise it completely before starting the Apron Chain.

MAINTENANCE & ADJUSTMENT (CONT'D)

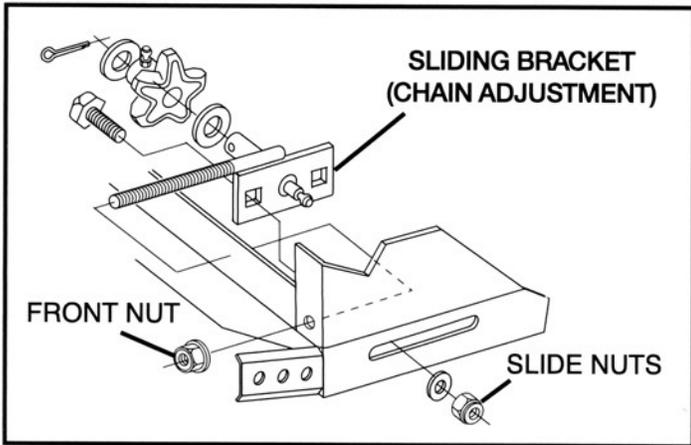


FIG. 1 - APRON CHAIN ADJUSTMENT (ALL PTO MODELS)

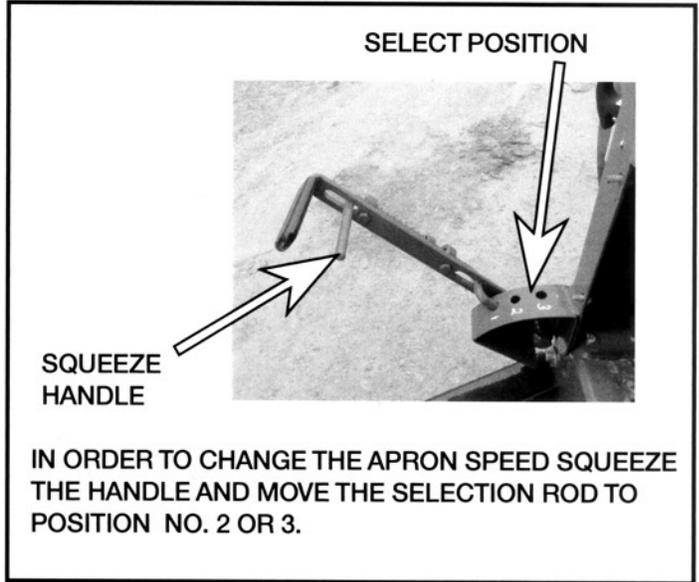


FIG. 2 - APRON CHAIN FEED CONTROL POSITIONS (ALL PTO MODELS)

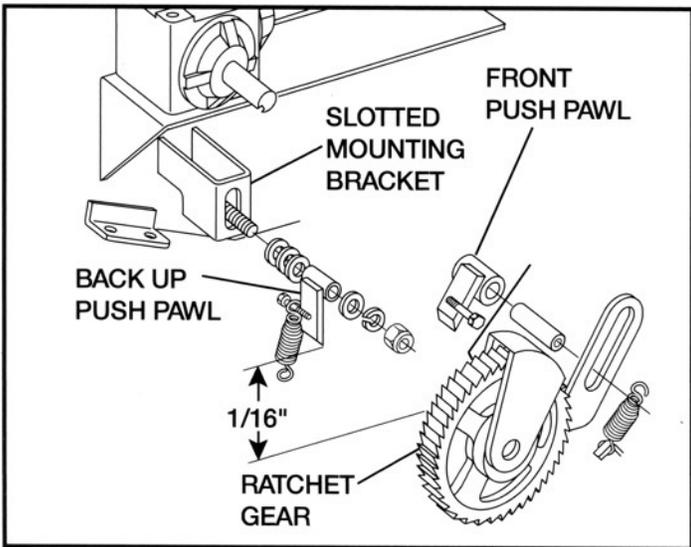


FIG. 1A - APRON SPEED - BACK UP PUSH PAWL ADJUSTMENT (ALL MODELS)

REGULAR MAINTENANCE

WARNING: All Shields must be replaced after maintenance or adjustments are performed.

By performing regular maintenance you will ensure high performance from your Conestoga Spreader.

- Clean the spreader after each use.
- Check the spreader before use for loose, bent, or broken parts.

ATTENTION: During operation, listen for abnormal sounds which might indicate loose parts or equipment damage. Correct any problems immediately. Refer to the **Parts Break-Down** drawings on pages 10 & 11 of this manual.

ATTENTION: All lube fittings are SAE standard. Lubricate all non-sealed fittings until grease begins to seep from the fitting. Also lubricate

- (A) CHECK THE BELT TENSION AFTER THE FIRST FIFTEEN LOADS. THEN CHECK TENSION AFTER EVERY THREE HUNDRED LOADS.

PROCEDURE FOR TIGHTENING BELTS

- (B) LOOSEN THE TWO RETAINING NUTS AND APPLY "DOWN-WARD" ON THE BELT TENSIONING PULLEY UNTIL THE DESIRED TIGHTNESS IS ACHIEVED.
- (C) TIGHTEN THE FIRST RETAINING NUT TO HOLD THE TENSION BAR INTO ITS NEW POSITION. THEN ADJUST THE SECOND NUT SO AS TO LOCK THE FIRST NUT IN PLACE.

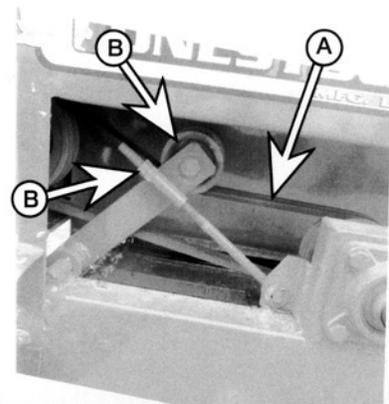
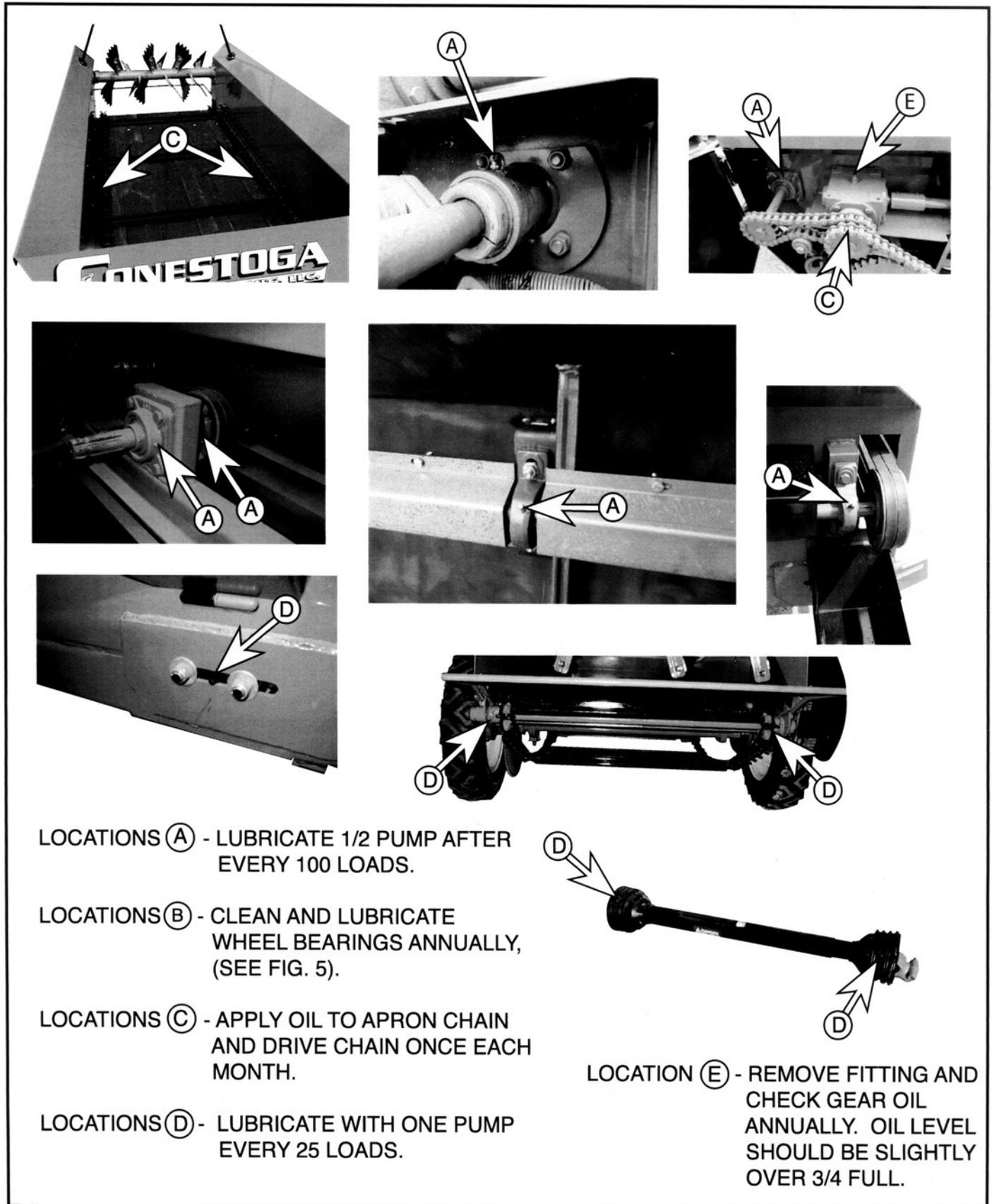


FIG. 3 - BELT TENSION ADJUSTMENT (PTO MODELS)

LUBRICATION



LOCATIONS (A) - LUBRICATE 1/2 PUMP AFTER EVERY 100 LOADS.

LOCATIONS (B) - CLEAN AND LUBRICATE WHEEL BEARINGS ANNUALLY, (SEE FIG. 5).

LOCATIONS (C) - APPLY OIL TO APRON CHAIN AND DRIVE CHAIN ONCE EACH MONTH.

LOCATIONS (D) - LUBRICATE WITH ONE PUMP EVERY 25 LOADS.

LOCATION (E) - REMOVE FITTING AND CHECK GEAR OIL ANNUALLY. OIL LEVEL SHOULD BE SLIGHTLY OVER 3/4 FULL.

FIG. 5 - LUBRICATION REQUIREMENTS (ALL PTO MODELS)

LUBRICATION CONT'D.

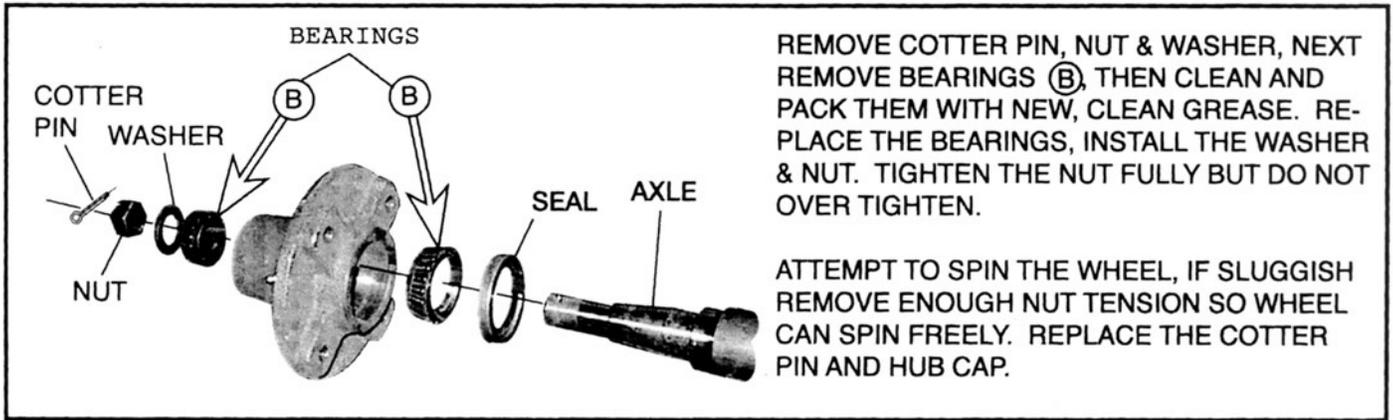
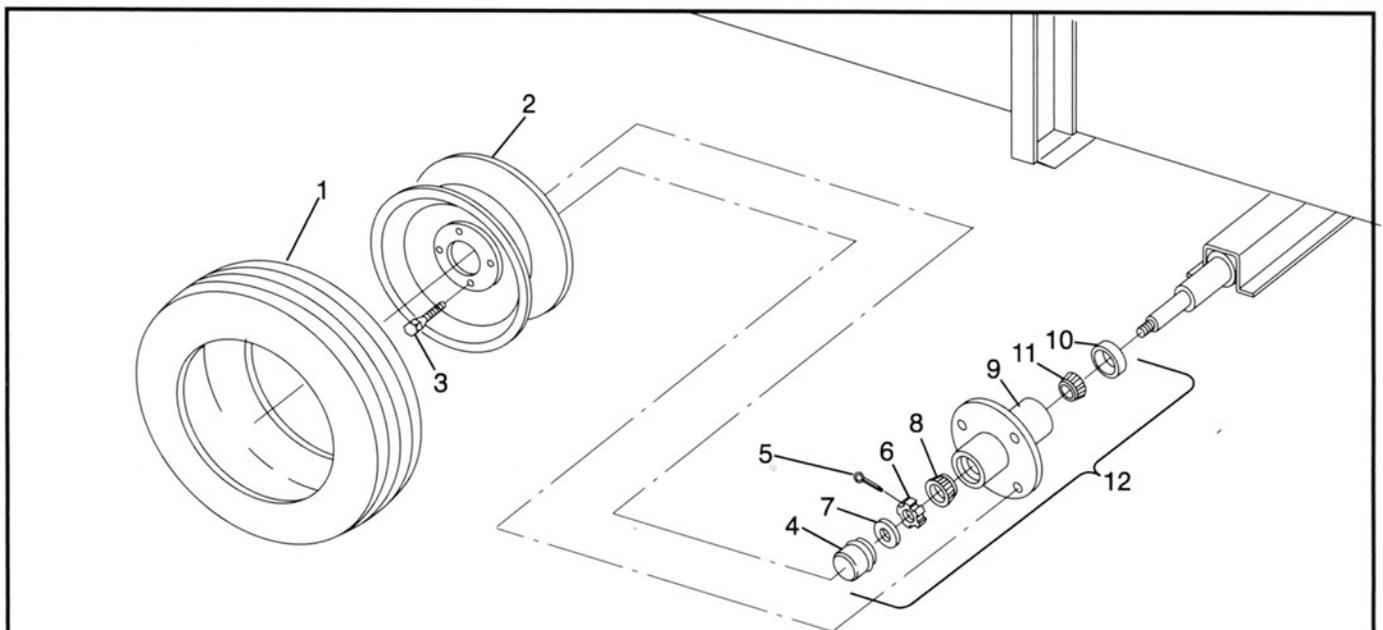


FIG. 6 WHEEL BEARING LUBRICATION



ITEM NO.	DESCRIPTION	QTY.
1	TIRE	2
2	RIM	2
3	LUG BOLT	8-12
4	HUB CAP	2
5	COTTER PIN	2
6	SPINDEL NUT	2
7	SPINDEL WASHER	2
8	OUTER BEARING CONE	2
9	HUB	2
10	OIL SEAL	2
11	INNER BEARING CONE	2
12	WHEEL BEARING ASSEMBLY	2

FIG. 7 - WHEEL AND HUB ASSEMBLY ALL PTO MODELS

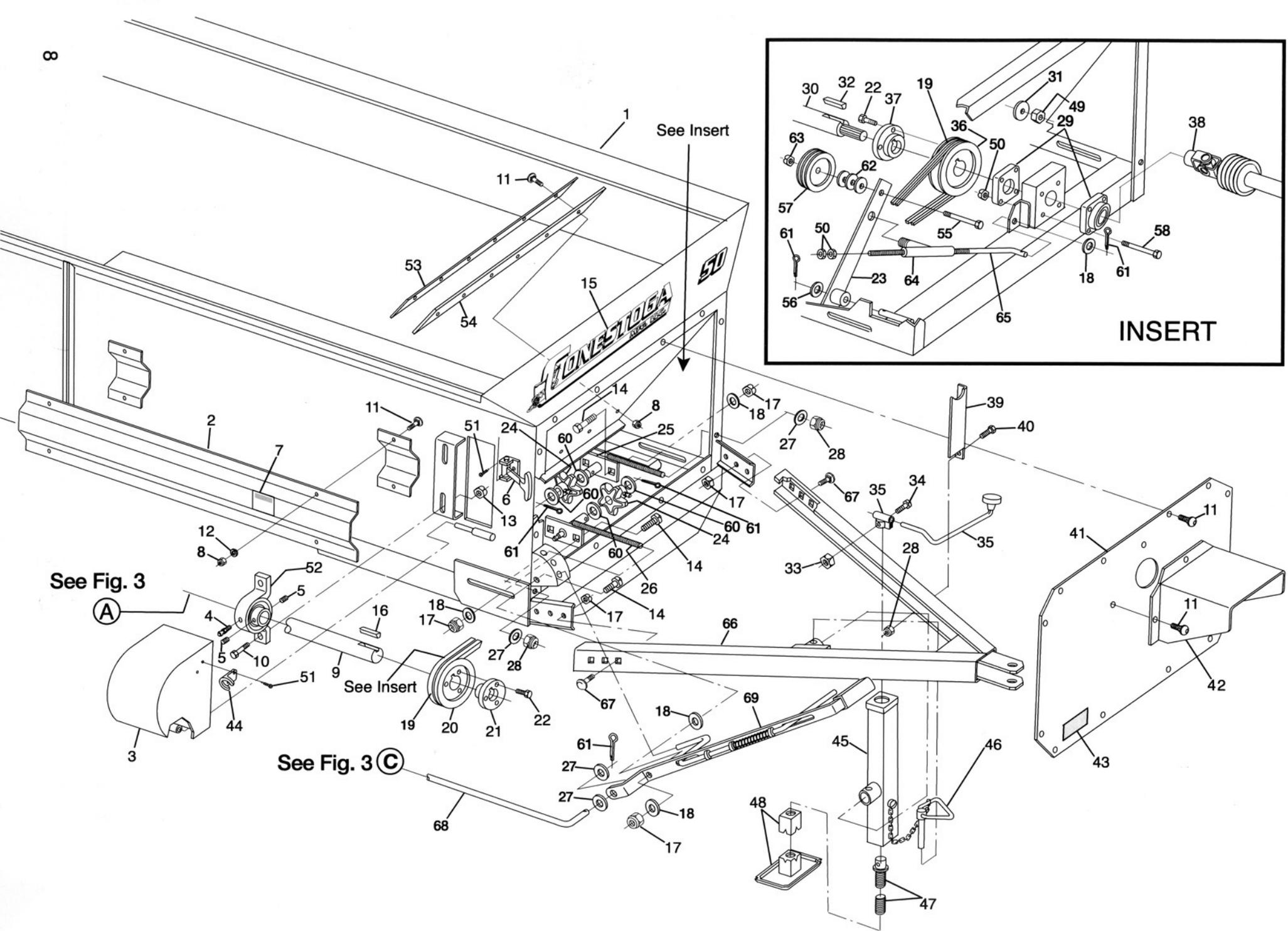
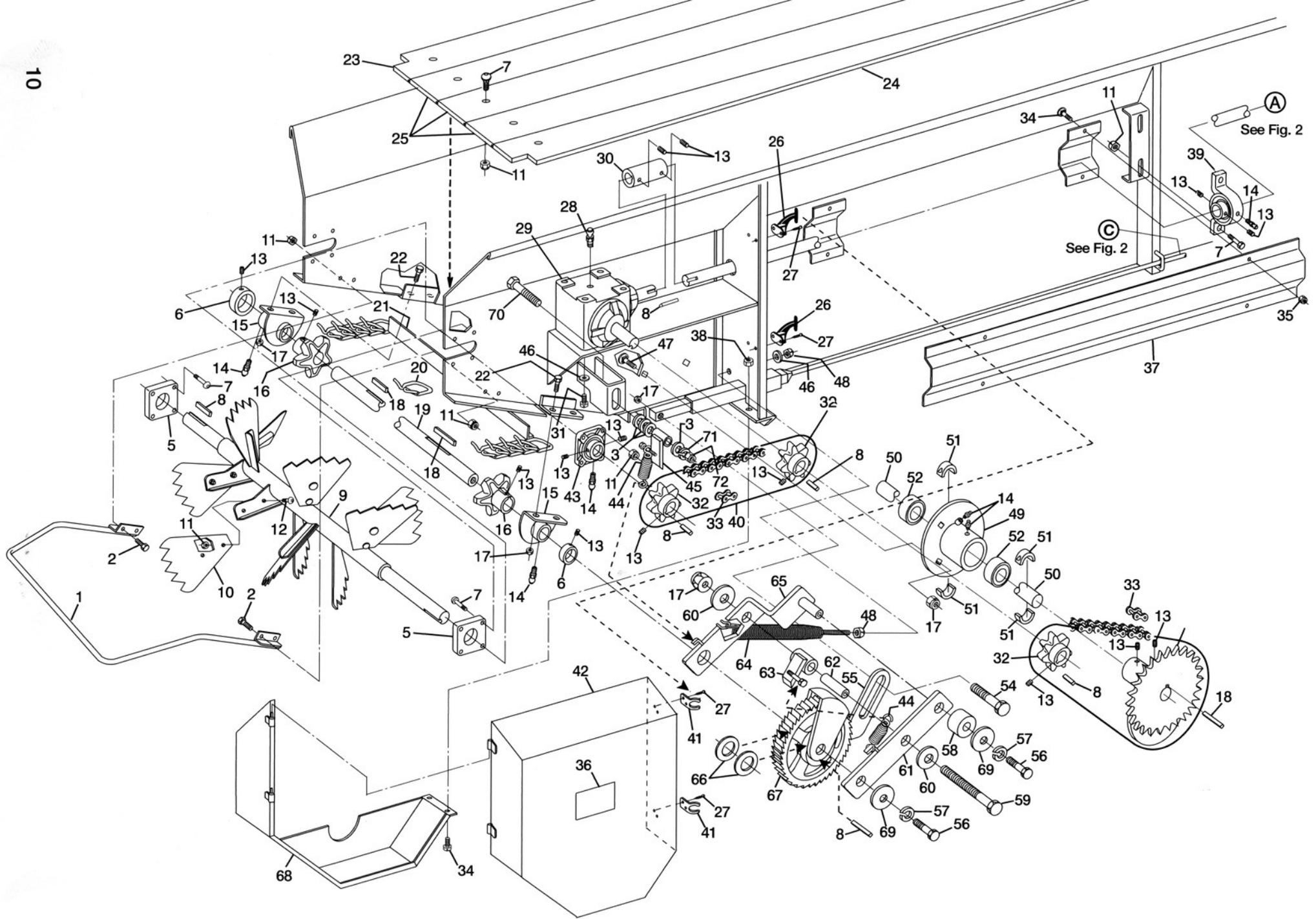


FIG. 8 - MODELS C-50PTO, C-80PTO, C-125PTO & C-175PTO SPREADER (FRONT VIEW)

PARTS LIST FOR FIG. 8

ITEM NO.	DESCRIPTION	QTY.
1	SPREADER FRAME	1
2	FRONT DRIVE LINE SHIELD	1
3	PULLEY SHIELD	1
4	1/4" NO. 28 GREASE ZIRK	4
5	SET SCREW	6
6	S. HOOD LARCH	1
7	SAFETY DECAL	1
8	1/4" HEX NUT	17
9	1" SIDE DRIVE LINE	1
10	3/8" X 1-1/2" HEX BOLT	2
11	1/4" X 1" STOVE BOLT	12
12	1/4" LOCK WASHER	17
13	3/8" FLANGE NUT	2
14	1/2" X 1-1/2"GR. 5 HEX BOLT	5
15	CONESTOGA LOGO DECAL	2
16	1/4" X 1-1/4" KEY WAY	1
17	1/2" LOCK NUT	11
18	1/2" FLAT WASHER	13
19	B - V BELT	2
20	SIDE PULLEY	1
21	1" PULLEY BUSHING	1
22	PULLEY BUSHING BOLT	6
23	TENSION ARM	1
24	5-TOOTH APRON CHAIN SPROCKET	2
25	APRON CHAIN TIGHTENER (LEFT)	1
26	APRON CHAIN TIGHTENER (RIGHT)	1
27	3/8" FLAT WASHER	6
28	3/8" LOCK NUT	2
29	4-BOLT BEARING	2
30	6-SPLINE SHAFT	1
31	5/8" WASHER	1
32	5/16" X 1-1/4" KEY WAY	1
33	1/4" LOCK NUT	1
34	1/4" X 1-1/4" HEX BOLT	1
35	JACK HANDLE	1

ITEM NO.	DESCRIPTION	QTY.
36	CENTER PULLEY	1
37	CENTER PULLEY BUSHING	1
38	PTO DRIVE LINE	1
39	PTO DRIVE LINE HOLDER	1
40	3/8" X 1" HEX BOLT	1
41	FRONT SHIELD	1
42	FRONT PTO SHIELD	1
43	SAFETY DECAL	1
44	HOOD LATCH CATCHER	1
45	JACK BODY	1
46	JACK PIN AND CHAIN	1
47	JACK THREADED ROD	1
48	JACK STAND	1
49	5/8" NUT	1
50	1/2" NUT	6
51	SELF TAPPING SCREW	3
52	1" BEARING	1
53	RUBBER BAFFLE HOLDER	1
54	RUBBER BAFFLE	1
55	5/8" X 3" BOLT	1
56	1" FLAT WASHER	1
57	BELT TENSIONING PULLEY	1
58	1/2" X 3" BOLT	4
59	_____	—
60	3/4" WASHER	4
61	5/32" COTTER PIN	5
62	5/8" FLAT WASHER	3
63	5/8" NUT	1
64	ROD ADJUSTER	1
65	ROD	1
66	HITCH	1
67	1/2" X 1" CARRIAGE BOLT	6
68	APRON CONTROL ROD	1
69	SETTING ADJUSTMENT LEVER	1



**FIG. 9 - MODELS C-50PTO, C-80PTO, C-125PTO & C-175PTO
REAR VIEW (C-50PTO UNIT SHOWN).**

PARTS LIST FOR FIG. 9

ITEM NO.	DESCRIPTION	QTY.
1	BACK BAR	1
2	3/8" X 1" HEX BOLT GR. 5	4
3	1/2" FLAT WASHER	1
4	5/32" COTTER PIN	1
5	4 - BOLT GUARD	2
6	WEB SHAFT COLLAR	2
7	3/8" X 1-1/2" CARRIAGE BOLT	14
8	1/4" X 1" KEY	6
9	BEATER SHAFT	1
10	BEATER PADDLE	12
11	3/8" FLANGE NUT	28
12	3/8" X 3/4" CARRIAGE BOLT	24
13	SET SCREW	8
14	GREASE ZIRK	6
15	WEB BRONZE BEARING	2
16	5 - TOOTH WEB SPROCKET	2
17	1/2" LOCK NUT	10
18	1/4" X 2-1/4" KEY	3
19	WEB SHAFT	1
20	T - ROD LINK	
21	WEB ANGLE	
22	1/2" X 1" HEX BOLT	4
23	POLY FLOOR (LEFT)	1
24	POLY FLOOR (RIGHT)	1
25	POLY FLOOR (CENTER)	
26	HOOD LATCH	2
27	SELF TAPPING SCREW	4
28	GEAR BOX PLUG (BREATHER)	1
29	GEAR BOX	1
30	SHAFT SLEEVE	1
31	3/8" X 1" BOLT	4
32	11- TOOTH SPROCKET	2
33	CONNECTOR LINK	2
34	1/4" X 1" SLOTTED BOLT	4
35	1/4" NUT	4
36	CAUTION DECAL	1
37	REAR DRIVE SHIELD	1
38	1/4" LOCK NUT	4

ITEM NO.	DESCRIPTION	QTY.
39	2 - BOLT BEARING	1
40	GEAR BOX DRIVE CHAIN	1
41	HOOD LATCH CATCHER	2
42	GEAR BOX HOOD	1
43	4 - BOLT BEATER BEARING	2
44	RATCHET SPRING	2
45	RATCHET PAW	1
46	3/8" FLAT WASHER	5
47	1/2" X 1" CARRIAGE BOLT	4
48	5/16" NUT	2
49	BEARING HOUSING	1
50	SHAFT	1
51	SHAFT COLLAR	2
52	BEARING	2
53	SPROCKET CAM	1
54	1/2" X 2" HEX BOLT	1
55	RATCHET BOOT	1
56	1/4" X 1" HEX BOLT	2
57	1/4" LOCK WASHER	2
58	CAM ROLLER	1
59	1/2" X 3" HEX BOLT	1
60	1/2" FLAT WASHER	1
61	OUTSIDE RATCHET BAR	2
62	1/2" BUSHING	1
63	PUSH PAW	1
64	SPRING	1
65	INSIDE RATCHET BAR	1
66	1-1/8" FLAT WASHER	2
67	RATCHET GEAR	1
68	SHIELD BACK	1
69	1/4" I. D. x 1-1/8 O. D. WASHER	2
70	BOLT	1
71	LOCK WASHER	1
72	NUT	1

SPECIFICATIONS

MODEL NUMBER	C-50 PTO	C-80 PTO	C-125 PTO	C-175-PTO
Capacity	38 cu. ft.	58 cu. ft.	85 cu. ft.	115 cu. ft.
Overall Length	12'	14"	16'-6"	212"
Overall Width	57"	65"	76"	80"
Loading Height	33"	36"	43"	45"
Flared Width	45"	48"	59"	59"
Box Width	35"	38"	46"	47"
Box Length	84"	101"	128"	144"
Box Height	18"	20"	24"	25"
Box Construction	Fully Welded 12-Ga Core-ten Steel		Fully Welded 10-Ga Core-ten Steel	
Floor Construction	High Density Poly Vinyl 3/4" T & G all models			
Beater Paddles	12 Replacable	12 Replacable	12 Replacable	12 Replacable
Beater Diameter	19"	21"	22"	22"
Drive	PTO W/Gear Box			
Apron Chain	3/8" Stainless steel T-Rod			
Apron Drive	4 Speed Ratchet Drive (except E-25)			
Spindle	1-5/8"	1-3/4"	2-1/8"	2-1/8"
Wheels	15 x 5 - 4 Bolt	15 x 6 - 6 Bolt	15 x 6 8 Bolt	15 x 6 8 Bolt
Tires	6.40 - 15 IMP	9.50 - 15 IMP	10 - 15 SL	11-22.5
Lug Bolts				
Inner Bearing Cone				
Outer Bearing Cone				
Spindle Nut				
Spindle Washer				
Oil Seal				
Hub Cap				
H. P. Required	15 hp. PTO	18 hp. PTO	18 hp. PTO	60 hp.
Weight (with tires)	825	1,150 lbs.	1,700 lbs.	1,900

CONESTOGA OPTIONS

<input type="checkbox"/> Fine Spread Pan	✓	—	✓	
Top Beater	✓	✓	✓	
Manual End Gate	—	—	—	
Hydraulic End Gate	✓	✓	✓	
Jack	Standard	Standard	Standard	
Adjustable Hitch	Standard	Standard	Standard	
Gator Hide Body Lining	✓	✓	✓	
Wheel Jack	—	—	—	

