

L I N D E M A N M A N U F A C T U R I N G , I N C .
Y A K I M A , W A S H I N G T O N

November 10, 1941

Lindeman-John Deere "30" Crawler Tractor
• Dealer's List Price and Discounts

List Price	Tractor, Standard Tread, 10" Tracks.	\$ 1425.00
"	" Power Take-Off 1	22.50
"	" Extra for 12" Track Plates in lieu of 10"	15.00
"	" Extra for 14" Track Plates in lieu of 10"	30.00
"	" Extra for 72" Cross Bars in lieu of Standard	10.00

F. O. B. Yakima

Dealer's Discount 20% on Tractor and Extras.

2% Cash Discount for Payment in Full Upon Receipt of Invoice

Discounts on Repair Parts 25% Net Cash

This Supercedes All Previous Prices.

All Prices Subject to Change without Notice.

LINDEMAN POWER EQUIPMENT CO.
Yakima, Washington

DEALER'S PRICE LIST

(Provisional Prices, Approval Requested From O. P. A.)

HYDRAULIC TOOL BAR AND CONTROL
FOR THE
LINDEMAN-JOHN DEERE CRAWLER TRACTOR

November 15, 1945

	List	Dealers Net
Control Assembly, Including Pump and Reservoir	\$141.50	\$113.20
Tool Bar Assembly Less Gauge Wheel	205.00	164.00
Gauge Wheel Assembly Complete With Steel Wheel	<u>28.50</u>	<u>22.80</u>
Price of Complete Tool Bar Including Pump and Control Unit	375.00	300.00
Extra for Pneumatic Tired Ball Bearing Equipped Wheel in Lieu of Steel Gauge Wheel	14.50	11.60
6 Ft. Dozer Blade	62.50	50.00
Depth Adjustment Shoe	35.25	28.20

This Supercedes ALL Previous Prices

All Prices Subject to Change Without Notice.

February 6, 1946

LINDEMAN POWER EQUIPMENT COMPANY
Yakima, Washington

PRICE LIST
Lindeman Integral Brush Buck Rake
for
Lindeman Hydraulic Tool Bar

Catalog	Provisional Prices, Approval Requested from O.P.A.	List	Dealers Net
R1005	Standard Rake with 5 - 2" Standard Pipe Teeth	\$85.00	\$68.00
R1006	Rake with 6 - 2" Standard Pipe Teeth	92.00	73.60
R1015	Rake with 5 - 2" Extra Heavy Pipe Teeth	90.00	72.00
R1016	Rake with 6 - 2" Extra Heavy Pipe Teeth	97.50	78.00

Prices are Net

F.o.b. Yakima, Washington

Prices Subject to Change Without Notice.

LINDEMAN POWER EQUIPMENT CO.

Manufacturers of: LINDEMAN TRACTOR TOOLS
Disc Ditchers, Harvest Trailers, Offset
Disc Harrows, Mobile Sprayers,
Tractor Brush Rakes



POST OFFICE BOX 526
YAKIMA, WASHINGTON

February 14, 1946

TO: All Lindeman-John Deere Crawler Tractor Dealers.

We are enclosing two cuts showing the Lindeman Brush Rake which is an additional attachment for the Lindeman-John Deere crawler tractor equipped with hydraulic tool bar. This photograph shows the rake in the raised position.

Most of you dealers who are located in the orchard sections remember the mechanical lift brush rakes which we have manufactured in the past. The design of the tooth of this rake is very similar to that used on our mechanical lift rakes, but the fact that this rake is attached to the hydraulic tool bar makes it a far easier and faster operating tool than any brush rake heretofore offered to the trade. The rake assembly includes the $2\frac{1}{4}$ " square bar so that it is only necessary to remove 4 cap screws to attach or detach this rake.

We have been having some trouble on account of the steel strike in lining up materials for this project but we feel that we will be in position to make shipment of a limited quantity of these rakes within two weeks.

There are, of course a number of purposes to which this rake can be put besides the removal of brush from orchards and groves. Some owners have used a rake of this design in clearing land and gathering brush for burning. The rake also may be used in a case of an emergency as a buck rake for handling of hay.

You will note from the dealer's price list enclosed that there are several models of this rake. The main difference being the weight of the pipe used in the teeth and the number of teeth on the bar. All of the rakes we have built in the past have been equipped with 5 teeth only but we have had a number of requests for closer spacing of the teeth in order to gather up the smaller brush. As a result of these requests we are now furnishing the rake with 5 or 6 teeth and with standard weight or extra heavy pipe in the teeth. Accordingly when placing your orders for these rakes we ask that you use the catalog number as shown on the dealer's price list.

February 14, 1946

X

Because of the lateness of the season our manufacturing program on these rakes will be somewhat limited. We ask, therefore, that you place your orders immediately for your spring requirements. We feel sure that if there is any call for a tool of this type in your territory, you will make no mistake in ordering several of these for stock, the limiting factor, of course, being the number of tool bars which you now have and the number which will be shipped to you in the immediate future.

Very truly yours,

LINDEMAN POWER EQUIPMENT COMPANY

P. H. Austin
General Manager

PHA/emp

POST OFFICE BOX 526
YAKIMA, WASHINGTON

April 11, 1946

To: All Lindeman-John Deere Crawler Tractor Dealers

We recently mailed you two (2) copies of Lindeman-John Deere Crawler Tractor Parts List No. B in which a typographical error has been noted.

On Page 1 you will note that Part No. TE25 carries a list price of \$0.40; the correct price for this item is \$0.85.

In a few days we will mail you a corrected Page 1 of Parts List B to be used in place of the Page 1 you have in your possession now.

Yours truly,

LINDEMAN MANUFACTURING CO.

Paul E. Kirker, Jr.
Paul E. Kirker, Jr.,
Advertising Department

Lindeman-John Deere Crawler Tractor
PARTS LIST

List "B"

Page 1

Part No.	Description of Part	Used on Tractor Serial Nos. (Inc)		Qty. Per Tractor	Price
TE1	Throttle Rod Adjustment End (J.D.#D2887R)	326109	And Up	1	.25
TE8	Track Link, RH	"	331692	56	1.05
TE9	Track Link, LH	"	"	56	1.05
TE10	Front Idler	Order TE19			
TE12	Front Idler Bracket, RH	326109	335481	2	3.65
TE13	Front Idler Bracket, LH	"	"	2	3.65
TE15	Front Idler Tension Spring	"	"	4	1.10
TE16	Front Idler Tension Nut	"	And Up	4	.12
TE17	Front Idler Dust Shield	"	"	4	.35
TE18	Front Idler Shaft	"	"	2	.80
TE19	Front Idler (Without TE20 Bearings)	Order TE1019			
TE20	Front Idler Bearing	"	"		
TE22	Track Frame Tie Strap	326109	And Up	2	.20
TE23	Track Frame Spacer	"	"	8	.09
TE24	Track Bolt (Without Nut & Lock Washer)	"	"	112	.06
TE25	Track Frame Clamp	"	"	8	.85
TE28	Track Link, RH	332394	And Up	55	1.05
TE29	Track Link, LH	"	"	55	1.05
TE30	Track Link Lock, RH	"	"	1	1.15
TE31	Track Link Lock, LH	"	"	1	1.15

POST OFFICE BOX 526
YAKIMA, WASHINGTON

April 26, 1946

TO: LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

You, your part of the country, plus the equipment we make and you distribute, we feel, should be represented in various booklets, folders and bulletins we are developing for sales promotion purposes.

We are particularly interested in photographs of the equipment in action, showing the type of product being worked, background native to your section of the country, and enough detail of the equipment for identification purposes.

Camera negatives are entirely satisfactory or the prints themselves or if you should have any color transparencies they will be very desirable. Of course any negatives or pictures you may send us will be returned if you desire.

Since it is our intention to do this work on a rather comprehensive scale we will greatly appreciate your sending us pictures and other material from which we may select items that will include you and your area in these sales stimulators we are preparing.

Thank you.

Very truly yours,

LINDEMAN POWER EQUIPMENT CO.



Paul E. Kirker, Jr.,
Advertising Department

PEK:mmmb

Lindeman Manufacturing Co.
TELEPHONE 9111
NOT INCORPORATED

POST OFFICE BOX 526
YAKIMA, WASHINGTON

April 26, 1946

TO: LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

The flow of information to you from this office pertaining to equipment service, spare parts, and sales promotion is scheduled to increase both as to amount and its effectiveness.

But to assure your receiving all you need where you need it; and to avoid mailing more than you want and involving those in your organization not effected, will you please fill in the attached form and return to us for our files. A nominal quantity of the material for customer distribution will be sent to the person you indicate. He in turn should inform us of the quantity of this particular item needed.

For those of you with branches we are attaching several copies of the above form.

Very truly yours,

LINDEMAN MANUFACTURING CO.

Paul E. Kirker, Jr.

Paul E. Kirker, Jr.,
Advertising Department

PEK:mmmb

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SERVICE BULLETINS, SPARE PARTS LISTS, CATALOGS TO DEALER

Name of Firm _____

Address _____

Attention of _____

Quantity Needed _____

SALES PROMOTION BULLETINS TO DEALER

Name of Firm _____

Address _____

Attention of _____

Quantity Needed _____

MATERIAL FOR CUSTOMER DISTRIBUTION

Name of Firm _____

Address _____

Attention of _____

COMMENTS

LINDEMAN MANUFACTURING COMPANY
Yakima, Washington

April 29, 1946

Lindeman-John Deere "BO" Crawler Tractor
Dealer's List Price and Discounts

List Price Tractor, Standard Tread, 10" Tracks	\$1567.50
List Price Power Takeoff	24.75
List Price Extra for 12" Track Plates in lieu of 10"	16.50
List Price Extra for 14" Track Plates in lieu of 10"	33.00
List Price Extra for 72" Cross Bars in lieu of Standard	11.00

Prices f.o.b. Yakima

Dealer's Discount 20% on Tractor and Extras

2% Cash Discount 10 days from date of invoice

Discounts on Repair Parts 25% Net Cash

This supercedes ALL Previous Prices

All Prices subject to change without notice.

Lindeman Manufacturing Co.

TELEPHONE 9111
NOT INCORPORATED

POST OFFICE BOX 526
YAKIMA, WASHINGTON

April 30, 1946

TO: LINDEMAN JOHN DEERE CRAWLER TRACTOR DEALERS

Recently you received the following material from this office:

1. Lindeman-John Deere Crawler Tractor Parts List No. "B."
2. Recommended Repair Parts Stocks for Dealers Servicing up to 5 Tractors.
3. Recommended Repair Parts Stocks for Dealers Servicing 10 Tractors or more.

Subsequently you were notified of a typographical error effecting the list price of Part No. TE-25, which should be as follows--

Part No.	Description of Part	Unit List Price
TE-25	Track Frame Clamp	\$.85

Attached are three (3) corrected sheets to adjust the above parts lists.

Very truly yours,

LINDEMAN MANUFACTURING CO.


Paul E. Kirker, Jr.,
Advertising Department

PEK:mmb
Encl. 3
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Lindeman-John Deere Crawler Tractor
PARTS LIST

List "B"

Page 1

Part No.	Description of Part	Used on Tractor Serial Nos.(Inc)	Qty.Per Tractor	Price
TE4	Throttle Rod Adjustment End (J.D.#D2887R)	326109 And Up	1	.25
TE8	Track Link, RH	" 331692	56	1.05
TE9	Track Link, LH	" "	56	1.05
TE10	Front Idler	Order TE19		
TE12	Front Idler Bracket, RH	326109 335481	2	3.65
TE13	Front Idler Bracket, LH	" "	2	3.65
TE15	Front Idler Tension Spring	" "	4	1.10
TE16	Front Idler Tension Nut	" And Up	4	.12
TE17	Front Idler Dust Shield	" "	4	.35
TE18	Front Idler Shaft	" "	2	.80
TE19	Front Idler (Without TE20 Bearings)	Order TE1019		
TE20	Front Idler Bearing	" "		
TE22	Track Frame Tie Strap	326109 And Up	2	.20
TE23	Track Frame Spacer	" "	8	.09
TE24	Track Bolt (Without Nut & Lock Washer)	" "	112	.06
TE25	Track Frame Clamp	" "	8	.85
TE28	Track Link, RH	332394 And Up	55	1.05
TE29	Track Link, LH	" "	55	1.05
TE30	Track Link Lock, RH	" "	1	1.15
TE31	Track Link Lock, LH	" "	1	1.15

Recommended Repair Part Stocks

for

LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

Servicing up to 5 Tractors

<u>Suggested Quantity</u>	<u>Part No.</u>	<u>Description of Part</u>	<u>Unit List Price</u>
2	TE25	Track Frame Clamp	.85
1	TE34A	Track Locking Pin	.60
2	TE35	Track Pin, Plain	.24
1	TE45	Track Roller Brg. Sleeve, Outbd(Less Grease Fitting)	.90
1	TE46	Track Roller Brg. Sleeve Inboard	.90
1	TE448	Brake Adjusting Screw (Without TE562 Handle)	.60
1	TE464	Steering Lever Sleeve Pin	.25
1	TE465	Steering Lever Sleeve	.50
1	TE538	Connecting Link Head	.45
1	TE539	Connecting Link Screw	.95
1	TE541	Brake Band (Less Lining)	1.80
2	TE542	Brake Band Lining	1.20
1	TE543	Brake Band Pin, Long	.10
2	TE544	Brake Band Strap, Fwd.	.10
2	TE545	Brake Band Strap, Aft.	.13
1	TE547	Clutch Plate, Driving	.50
1	TE550	Connecting Strap Pin, Fwd.	.10
1	TE566	Clutch Throwout Arm, RH	1.60
1	TE567	Clutch Throwout Arm, LH	1.60
2	TE718	Gasket for TE717	.09
1	TE731	Final Drive Pinion, 17-Teeth	8.20
6	TE1024	Track Bolt w/Nut & Lock Washer (TE24 (1) 3908 (1), 5118 (1))	.11
1	TE1028	Trk Link Assy (TE28 (1), TE29 (1), TE38 (1) TE35 (1))	3.00

Recommended Repair Part Stocks

for

LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

Servicing 10 Tractors or over

<u>Suggested Quantity</u>	<u>Part No.</u>	<u>Description of Part</u>	<u>Unit List Price</u>
2	TE25	Track Frame Clamp	.85
6	TE34A	Track Locking Pin	.60
6	TE35	Track Pin, Plain	.24
3	TE45	Track Roller Brg Sleeve, (Outbd) (Less Grease Fitting)	.90
3	TE46	Track Roller Brg Sleeve, Inboard	.90
2	TE407	Gasket for TE767	.08
2	TE448	Brake Adjusting Screw (Without TE562 Hdle)	.60
2	TE464	Steering Lever Sleeve Pin	.25
2	TE465	Steering Lever Sleeve	.50
1	TE466	Steering Lever, RH	2.50
1	TE467	Steering Lever, LH	2.50
1	TE504	Driving Gear Shaft, RH	4.00
1	TE505	Driving Gear Shaft, LH	3.85
1	TE512	Final Drive Pinion Shaft	2.95
6	TE513	Clutch Driving Hub Key	.24
6	TE514	Driven Brake Drum Key	.25
6	TE523	Clutch Spring	.20
1	TE538	Connecting Link Head	.45
2	TE539	Connecting Link Screw	.95
1	TE542	Brake Band Lining	1.20
2	TE543	Brake Band Pin, Long	.10
2	TE544	Brake Band Strap, Fwd.	.10
2	TE545	Brake Band Strap, Aft.	.13

POST OFFICE BOX 526
YAKIMA, WASHINGTON

May 3, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

April 4, 1946 all Crawler Tractor dealers were sent two
(2) copies of the

LINDEMAN-JOHN DEERE CRAWLER TRACTOR
PARTS LIST - "B"

with information on how to order from this parts list,
how the items ordered will be priced, and why it was im-
portant to use the Parts List "B" when developing your
order.

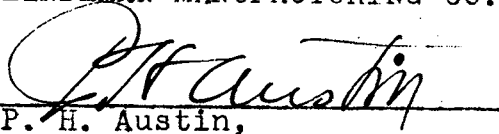
Nevertheless many of you are still using obsolete parts
lists or no parts list at all. This practice can only
result in----

1. Delay in preparing your order for shipment.
2. Inaccuracies in sending you the parts you
need.

To save both time and money, you are again EMPHATICALLY
URGED to use your Parts "B" when making your order for
service parts.

Very truly yours,

LINDEMAN MANUFACTURING CO.


P. H. Austin,
General Manager

PHA:mmb

LINDEMAN POWER EQUIPMENT CO.

Manufacturers of LINDEMAN TRACTOR TOOLS
Disc Ditchers, Harvest Trailers, Offset
Disc Harrows, Mobile Sprayers,
Tractor Brush Rakes



POST OFFICE BOX 526
YAKIMA, WASHINGTON

May 7, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

HYDRAULIC TOOL BAR MAINTENANCE

It is recognized that the maintenance of the Lindeman Hydraulic Tool Bar falls in two categories----

First: The normal care, simple adjustments, and part replacements necessary as a result of ordinary and expected wear, which should be accomplished by the user.

Second: The more intricate adjustments and replacements which require mechanical training and possibly special tools, which should be done by the dealer.

The first category was discussed and illustrated in the Lindeman Hydraulic Tool Bar Assembly and Operation Manual. In that issue care was used not to give encouragement to the user to try to do anything of an intricate and technical nature but rather he was encouraged to consult his dealer.

The second category is developed in this manual and deals entirely with the Hydraulic Control System. This directive is designed expressly for dealers and is not distributed by the Company to the user; hence in those cases where it is desirable from the stand point of the dealer to instruct his users on any matter discussed herein it will be necessary for him to instruct the user directly.

LINDEMAN POWER EQUIPMENT CO.

HYDRAULIC CONTROL SYSTEM

The directed flow of the oil in the Hydraulic Control System is the working force which makes the Hydraulic Tool Bar operate, and the directed flow is controlled through the operation of the control stem. The relation of the cams on the control stem to the check valve poppet stem and the by-pass valve poppet stem determines whether the oil pressure created by the pump is directed into the cylinders in the side arms to raise the tool bar, or whether the oil pressure is idle and oil merely flows back into the sump.

Oil Flow with Control System in Neutral

In neutral the check valve is closed, the pressure control valve is closed and the oil flows from the pump through the by-pass valve back to the sump.

Oil Flow during Tool Bar Raising Operation

During the tool bar raising operation the by-pass valve is closed, the pressure control valve is closed, the check valve is open and the oil flows from the pump to the cylinders in the side arms. When the tool bar has reached its maximum height and no more oil can flow into the cylinders the oil pressure is exerted against the pressure control valve, (see Figure No. 7). This valve opens when the pressure reaches the point for which the valve is adjusted. The oil then flows to the chamber between the forward cam on the control stem and the control stem plug. The oil pressure against this forward cam forces the control stem back into neutral position. Any excess oil pressure is automatically released by the stem control valve and the oil flows back to the sump. When the raising operation is stopped before the tool bar reaches its maximum height, and the control stem is put into neutral position manually, the pressure control valve and control stem valve are not disturbed.

Oil Flow during Tool Bar Lowering Operation

When the tool bar is lowered the pressure control valve

is closed, the by-pass valve is open. When the valve is open and the oil flows from the cylinders in the side arms, and from the pump, back to the tank.

The operating forces exerted on the control stem are the force of the operator through the Hydraulic Control lever and the pressure of the oil against the forward cam when the control stem is automatically returned to neutral from the raising position.

The retarding forces are the control stem check spring and the control stem pawl.

The control stem pawl indicates the raising, lowering or neutral position of the control stem, and tends to hold the stem in any of these respective positions until it is desired to shift the position of the control stem.

DISMANTLING-ASSEMBLYING-ADJUSTING HYDRAULIC CONTROL SYSTEM

(See Figure No. 01)

Control Stem Check Spring

1. Unscrew the control stem oil seal nut (E1235) from the Hydraulic Control Case.
2. Punch out control lever pin (E217).
3. Draw the control stem out of the control case until the spring (E247) is exposed.
4. Take off control stem lever by removing control stem link (E333).
5. Slip off the control stem seal nut and the control stem check spring.
6. When reassembling the control stem, care must be used when replacing the control

oil seal nut so that the seal will not be damaged by the end of the control stem. A gild of .003 shim stock should be formed over which the seal nut can be pushed. The shim is then withdrawn when the seal is over the machined portion of the control stem.

Control Stem Plug

1. The function of the control stem plug (E234) is merely to lend accessibility to the control stem channel. This plug must be kept tight at all times to avoid oil leakage between the control case, the gasket (E236) and the plug.

Control Stem Pawl

1. The control stem pawl (E232) and pawl spring (E246) are retained by the hydraulic Control Case Cover (E1209), hence for making any adjustment to the pawl the Control Case Cover must be removed.
2. Lift out the pawl spring.
3. For access to the pawl remove the control stem from the case.
4. Remove control stem plug (E234); insert a screw driver until it touches the tip of the pawl, then flip the pawl out.
5. The control stem must be replaced before the pawl may be placed back in position.

Stem Control Valve

1. Since the stem control valve is retained by the control case cover, the cover must be removed to gain access to the valve.

2. Lift the stem control valve spring (E248) from the valve head (E231).
3. The control valve head (E231) is free on its seat for adjustment or replacement.

Pressure Control Valve

1. Remove the outer pressure control valve plug (E234).
2. Inside the outer plug will be seen the pressure control valve plug (E233).

Remove this plug.

Caution: The tension on the pressure control valve spring exerted by the pressure control valve plug has been carefully regulated by instrument at the factory. No attempt should be in the field to adjust it. If this spring is not functioning properly it should be replaced with a new one. Hence it is important that the exact number of turns required to remove the plug be recorded so that the same number of turns can be made when the plug is replaced.

3. In most cases there will be enough oil pressure against the pressure control valve head (E230) to push out the head and the spring. If necessary disconnect the oil line hose from a side arm. Put the control lever in a raising position, and blow air under pressure into the control case through the oil line. The force of the air will blow the spring and valve head free from the control case.

By-Pass Valve

1. To gain access to the by-pass valve take off the control case cover and remove the control stem.
2. Using valve tool No. 398 screw out the by-pass valve seat.
3. The valve poppet (E2228) can then be lifted out with the fingers.
4. With a bent wire the gasket (E239) and spring (E243) can be removed.
5. On reassembly, first put the gasket in position on the gasket seat in the valve cavity. Whenever a gasket is removed it should be replaced with a new one.
6. Drop the valve spring into the valve cavity.
7. Rub a little pressure gun grease on the poppet and stick the stem of the poppet into its channel in the valve seat. The grease will keep the poppet in place while the valve seat is being screwed into position.
8. Using the valve tool No. 398 screw the valve head down into the valve cavity until the top of the head is even with the bottom of the control stem channel. This allows $3/32$ " of the poppet stem to extend above the valve seat to contact the cam on the control stem but does not allow the valve seat to interfere with the action of the control stem.

Check Valve

(Same as By-Pass Valve)

HYDRAULIC OIL PUMP

(See Figure No. 3)

The following outline is for the complete disassembly of the Hydraulic Control System Oil Pump and should be followed for replacement of any of its parts to the extent necessary to reach the part in question.

1. Drain the Hydraulic Control Case. Save the oil if it is in good condition for subsequent replacement.
2. Remove the control case from the tractor.

Gear Engaging Shaft Assembly

3. Take out the gear engaging shaft pawl plug (E222) and with a bent wire lift out the engaging shaft pawl spring (E248).
4. Unscrew the gear engaging shaft (E221) from the gear engaging yoke (E220). The yoke will then be free to be taken out through the bottom of the pump drive gear housing.
5. Loosen the engaging shaft oil seal nut (E1235). Do not remove the oil seal nut from the engaging shaft unless it is necessary. Damage to the seal may occur on replacing unless it is protected from the notches or grooves in the shaft. A guide may be formed out of .003 shim stock over which the seal nut can be slipped into position on the machined portion on the shaft. The shim stock is then pulled out.
6. Pull out the gear engaging shaft and the gear engaging shaft pawl (9025) is free to be removed.

Pump Drive Shaft Assembly

7. Remove pump case cover (E1240) and pump

case (E210).

8. The pump follower gear (E212), which is directly forward of the pump driven gear, can be lifted out.
9. The pump follower gear with its bushing can be driven from the pump follower gear shaft (E214).
10. The pump driven gear (E213) which is keyed to the pump drive shaft (E201) by Woodruff keys may be pulled from the shaft with a gear puller.
11. To remove the pump drive shaft it is necessary to use a puller.
12. For replacement of the pump drive gear (E202) the drive shaft should be taken out entirely but only far enough to allow removing clearance for the drive gear.
13. To replace drive shaft bearing (6850) in the housing or the drive shaft oil seals (5840) or (5838) it is necessary to completely withdraw the drive shaft.
14. When replacing drive shaft bearings (6850) in the pump cap use driving tool No. E391. When the bearing (6850) is being reseated in the driving gear housing use driving tool No. E395.
15. To assure proper functioning of new drive shaft oil seal (5840) and (5838) they should be snugly tapped into position with driving tool No. E392 for seal No. 5840 and driving tool No. E393 for seal No. 5838.
16. After placing the seals care must be used to protect them from the splines on the pump drive shaft when reseating the drive shaft. A guide for the shaft

bring the greater the pressure.

CAUTION

After working on the Hydraulic Control Case and before operation the oil should be checked and enough added to bring the oil level to the correct operating position.

SERVICE CHART

COMPLAINT

CAUSE

REMEDY

1. Tool Bar will not raise.

1. Hydraulic System not engaged.

2. Overload

3. Not enough oil in Hydraulic Control Case.

4. Oil may be too light or too heavy.

5. Dirt or gravel in side arm.

6. By-Pass Valve Leaking

7. Relief Valve leaking or not holding required pressure.

1. Engaged Hydraulic System.

2. Lighten the load or place load closer to center of tool bar as the tool is designed to lift 2500 lbs. at the center of the tool bar.

3. Fill Hydraulic Control Case to correct operating level.

4. Change to proper weight of oil. Refer to Page 8 in Hydraulic Tool Bar Assembly and Operation Manual.

5. Wash out side arm.

6. Clean poppet and valve seat and grind valve.

7. If spring is weakened or broken, replace with new spring.

Clean and grind valve or replace with new valve.

SERVICE CHART

COMPLAINT

CAUSE

REMEDY

8. Piston cup damaged.
9. Damaged piston assembly.
10. Too much space between pump gears and pump cover or between gear and side of control case.

8. Replace with new piston cup.
9. Install new piston assembly.
10. Replace worn parts if gears or pump cover is scored; or---

Take out gasket between pump case and pump cover or between pump case and Hydraulic control case.

2. Tool bar will not stay in raised position.

1. Damaged piston cup.
2. Check valve leaking.

1. Replace piston cup.
2. Clean and grind valve or replace damaged part of valve.

3. Oil overheats in Hydraulic Control Case.

1. Oil is too light.
2. Overloading tool bar.
3. Scored faces of pump gears, pump cover or control case.
4. Control lever not returning to neutral when tool bar is raised to maximum height.

1. Change to proper grade of oil.
2. Refer to Paragraph 2 of Complaint 1.
3. Refer to Paragraph 3 of Complaint 1.
4. Refer to Complaint 4.

SERVICE CHART

<u>COMPLAINT</u>	<u>CAUSE</u>	<u>REMEDY</u>
4. Oil leaks into crank case.	1. Damaged seals on pump drive shaft.	1. Replace seals.
5. Oil leaks at cylinder.	1. Damaged piston cup. 2. Leaking oil fittings.	1. Replace piston cup. 2. Tighten, repair or replace fittings.
6. Control does not return to neutral.	1. Not enough oil in Hydraulic Control Case. 2. Stem control valve spring is weakened or broken. 3. Control stem sticks in channel. 4. Control stem pawl sticks. 5. Pressure control valve sticks.	1. Fill to correct operating level. 2. Replace spring. 3. Clean stem and channel. 4. Clean pawl or replace with new part if necessary. 5. Clean and grind pressure control valve.

LINDEMAN HYDRAULIC TOOL BAR

SPECIAL TOOLS

To efficiently and quickly make correct replacements or adjustments to the Lindeman Hydraulic Tool Bar Hydraulic Control System it is recommended that the following special tools be secured:

TOOL NO.	TOOL DESCRIPTION	OFFER to DEALERS
E-391	Bearing Driving Tool (For pump drive shaft bearing in pump cap)	A complete set of Hydraulic Control System Special Tools consisting of 1 each of the six tools listed is offered to Dealers for <u>\$15.70 Net</u>
E-392	Seal Driving Tool (For large pump drive shaft seal No. 5840)	
E-393	Seal Driving Tool (For small pump drive shaft seal No. 5838)	
E-396	Gear Driving Tool (For pump driven gear)	
E-398	Valve Seat Tool (For check valve and by-pass valve)	
E-1394	Bearing Driving Tool (For pump drive shaft bearing in housing)	

LINDEMAN HYDRAULIC TOOL BAR
SERVICE PARTS LIST

I: PARTS LIST Page 15 through 18.

This section lists, in chronological order by part number, those individual items designed and manufactured as units, especially for the Lindeman Hydraulic Tool Bar.

II: PARTS ASSEMBLIES LIST Page 19 through 22.

This section lists, in chronological order by assembly numbers, those groups of items used together as integral units and are delivered as assembled units.

III: STANDARD PARTS LIST Page 23 through 24.

This section lists, in chronological order by part number, those individual items used in the assembly of the Lindeman Hydraulic Tool Bar but are not especially designed and manufactured for this piece of equipment.

LINDEMAN HYDRAULIC TOOL BAR

PARTS LIST

PART NO.	DESCRIPTION OF PART	QUANTITY PER TOOL BAR	LIST PRICE EACH
	Parts indicated as Right Hand or Left Hand which may be used on either side of the tractor, depending on whether the Tool Bar is in a front or rear position, are listed for <u>right</u> or <u>left</u> hand assembly with the tool bar in the <u>rear</u> <u>position</u> .		
E-107	Pulley, lifting cable	2	1.50
E-108	Pin, lifting cable pulley	2	1.10
E-109	Roller, cable guide	2	1.00
E-112	Hanger, Cable, R. H.	1	5.20
E-113	Hanger, Cable, L. H.	1	5.20
E-117	Cap, Side arm pivot bracket, L. H.	1	2.75
E-118	Cap, Side arm pivot bracket, R. H.	1	2.75
E-121	Pin, Cable guide roller	2	.15
E-122	Bar, Cable guide	2	4.50
E-123	Standard, Oil line fitting	2	1.25
E-128	Clamp, Oil hose hold down	2	1.00
E-130	Head, gauge wheel adjustment	1	1.10
E-132	Handle, Gauge wheel adjustment head	1	.75
E-134	Block, Gauge wheel adjustment head bearing	2	.50
E-135	Fork, gauge wheel	1	4.55
E-139	Pin, gauge wheel adjustment screw	1	.15
E-140	Clamp, bottom, gauge wheel	1	3.10
E-141	Clamp, top, gauge wheel, L. H.	1	1.95
E-142	Clamp, top, gauge wheel, R. H.	1	1.95
E-147	Pin, front vertical clevis	1	.45
E-150	Trunnion, Oil hose hold down clamp	2	.15
E-151	Hose, Oil line	2	4.80
E-154	Chain, stop	2	1.75
E-155	Casting, stop chain	1	1.10
E-157	Cover, dust, lifting cable housing	2	1.15

LINDEMAN HYDRAULIC TOOL BAR

PARTS LIST

PART NO.	DESCRIPTION OF PART	QUANTITY PER		LIST PRICE
		TOOL	BAR	
E-158	Cover, lifting cable hanger _____	—	2	.70
E-163	Screw Cap, mounting bracket _____	—	4	.40
E-164	Rod, piston _____	—	2	.35
E-165	Piston _____	—	2	1.35
E-168	Leather, piston cup _____	—	2	.65
E-169	Cap, cylinder _____	—	2	1.65
E-173	Cap, piston _____	—	2	.65
E-175	Lock, cable hanger _____	—	2	.25
E-176	Spring, cable hanger cover _____	—	2	.10
E-177	Nipple, Underpipe, 7 $\frac{1}{2}$ " _____	—	2	.20
E-191	Rim, Pneu. gauge wheel (half) _____	—	2	3.75
E-196	Shaft, Pneu. gauge wheel _____	—	2	.60
E-200	Case Hydraulic control _____	—	1	47.50
E-201	Shaft, Pump drive _____	—	1	3.15
E-202	Gear, Pump drive _____	—	1	7.60
E-203	Baffle, Filler neck _____	—	1	.50
E-204	Bushing, Pump drive shaft seal _____	—	1	1.20
E-206	Cap, oil filler neck _____	—	1	.60
E-207	Neck, oil filler _____	—	1	.35
E-208	Cover, Hydraulic control case _____	—	1	6.70
E-210	Case, pump _____	—	1	2.90
E-211	Pin, pump case dowel _____	—	2	.10
E-212	Gear, pump follower _____	—	1	5.15
E-213	Gear, pump driven _____	—	1	4.00
E-214	Shaft, follower gear _____	—	1	.85
E-215	Screen, oil filler neck _____	—	1	.15
E-217	Pin, control lever _____	—	1	.10
E-220	Yoke, Gear engaging _____	—	1	.65
E-221	Shaft, gear engaging _____	—	1	.55
E-222	Plug, gear engaging shaft pawl _____	—	1	.25
E-225	Stem, control _____	—	1	5.85

PAR TS LIST

Page 17

LINDEMAN HYDRAULIC TOOL BAR

PARTS LIST

PART NO.	DESCRIPTION OF PART	QUANTITY PER TOOL BAR	LIST PRICE EACH
E-327	Decal, control lever operating instructions _____	1	.15
E-328	Decal, gear engaging instructions _____	1	.15
E-333	Link, control stem _____	1	.15

* Handles of these wrenches are used
as side arm locking pins.

LINDEMAN HYDRAULIC TOOL BAR

PARTS ASSEMBLIES LIST

PART NO.	DESCRIPTION OF PART	QUANTITY PER TOOL BAR	LIST PRICE EACH
	Parts indicated as Right Hand or Left Hand which may be used on either side of the tractor, depend- ing on whether the Tool Bar is in a front or rear position, are listed for <u>right</u> or <u>left</u> hand as- sembly with the Tool Bar in the <u>rear</u> position.		
E-1102	Side Arm Complete, R. H., with oil hose connection plug._____	1	78.00
	Composed of: E-108 (1) E-317 (1) E-2145 (1) 7051 (1) E-118 (1) E-1107 (1) 4424 (1) 7082 (2) E-123 (1) E-1120 (1) 4450 (1) 7255 (1) E-157 (1) E-2102 (1) 5317 (1) 9111 (1)		
E-1103	Side Arm Complete, L. H., with oil hose connection plug._____	1	78.00
	Composed of: E-108 (1) E-317 (1) E-2145 (1) 7051 (1) E-117 (1) E-1107 (1) 4424 (1) 7082 (2) E-123 (1) E-1120 (1) 4450 (1) 7255 (1) E-157 (1) E-2103 (1) 5317 (1) 9111 (1)		
E-1107	Cable Pulley, with bearings._____	2	3.80
	Composed of: E-107 (1) 6851 (2)		
E-1112	Cable Hanger Assembly, R. H._____	1	6.55
	Composed of: E-112 (1) E-175 (1) 7420 (1) E-158 (1) E-176 (1) 7422 (1)		

LINDEMAN HYDRAULIC TOOL BAR

PARTS ASSEMBLIES LIST

PART NO.	DESCRIPTION OF PART	QUANTITY PER TOOL BAR	LIST PRICE EACH
E-1113	Cable Hanger Assembly, L. H. _____ Composed of: E-113 (1) E-175 (1) 7420 (1) E-158 (1) E-176 (1) 7422 (1)	1	6.55
E-1120	Cylinder Assembly, Complete with piston assembly _____ Composed of: E-109 (1) E-122 (1) E-1165 (1) 5273 (1) E-121 (1) E-169 (1) E-2120 (1) 5296 (1)	2	17.75
E-1131	Gauge Wheel Adjustment Assembly _____ Composed of: E-130 (1) E-132 (1) 7470 (1)	1	1.39
E-1135	Gauge Wheel Fork Assby, Complete with Adjustment Assby & Clamps _____ Composed of: E-134 (2) E-140 (1) E-1131 (1) 5009 (2) E-135 (1) E-141 (1) E-2144 (1) 5179 (2) E-139 (1) E-142 (1) 3642 (2) 5273 (2)	1	15.90
E-1151	Cylinder Oil Line Hose Assembly, Complete with Fittings _____ Composed of: E-151 (1) 9101 (1)	2	12.00
E-1155	Stop Chain Assembly _____ Composed of: E-154 (2) E-155 (1) 9050 (2)	1	5.10

PARTS ASSEMBLIES LIST

Page 21

LINDEMAN HYDRAULIC TOOL BAR

PARTS ASSEMBLIES LIST

PART NO.	DESCRIPTION OF PART	QUANTITY PER TOOL BAR	LIST PRICE EACH
E-2111	Mounting Bracket Assembly, L. H. _____	1	10.00
E-2120	Cylinder _____	2	7.00
E-2126	Lift Chain Assembly _____	2	1.40
E-2144	Depth Adjustment Screw Assembly _____	1	.50
E-2145	Lift Cable Assembly _____	2	2.00
E-2152	Under pipe Assembly _____	1	2.70
E-2153	Pressure Tube Assembly _____	1	2.00
E-2160	Tool Bar Assembly, 72" _____	1	19.00
E-2178	Tool Bar Assembly, 96" _____	1	22.00
E-2209	Control Lever Assembly _____	1	1.75
E-2228	Poppet for By-pass Valve _____	1	.50
E-2229	Poppet for Check Valve _____	1	.55
E-2319	Tool Bar Assembly, 78" _____	1	20.00
E-2320	Tool Bar Assembly, 84" _____	1	20.50

LINDEMAN HYDRAULIC TOOL BAR

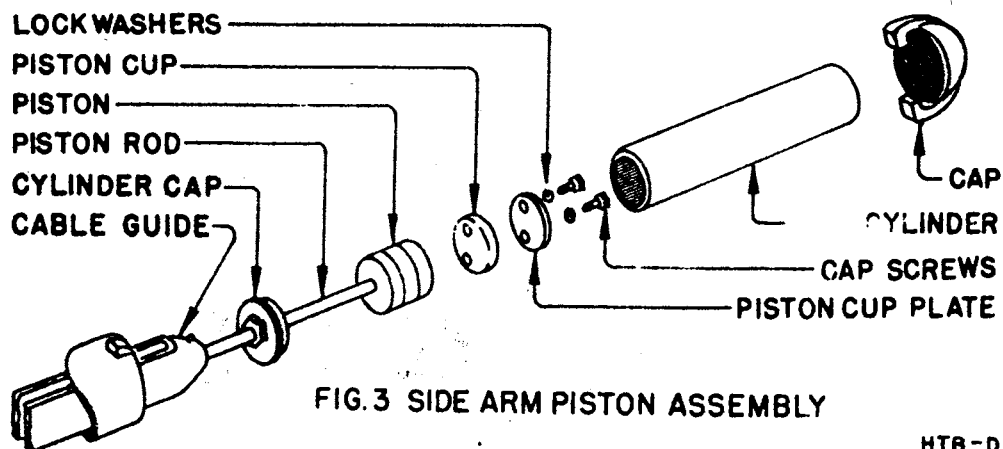
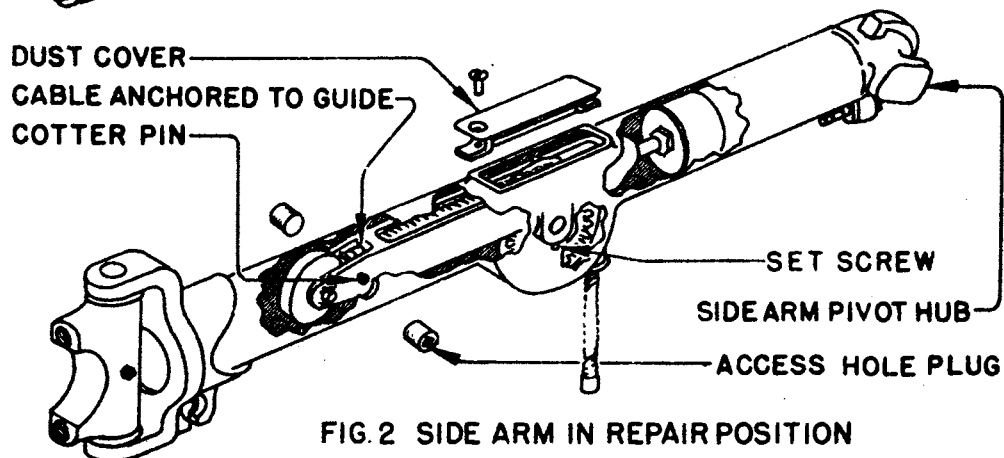
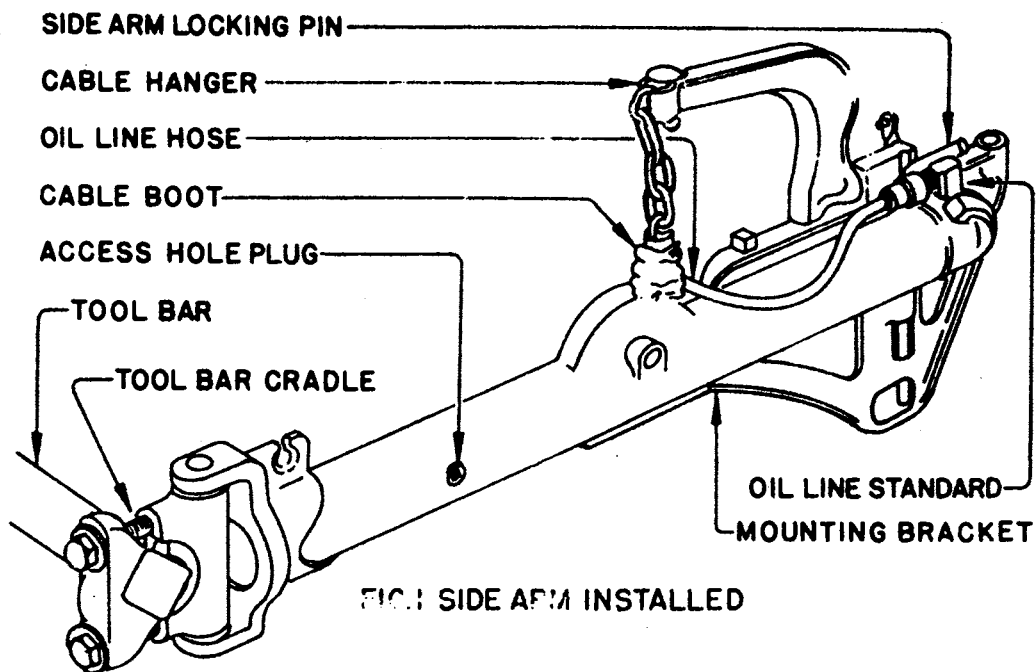
STANDARD PARTS LIST

PART NO.	DESCRIPTION OF PART	WHERE USED	QUANTITY USED	UNIT LIST PRICE
3060	Bolt, Machine, 5/16"x3 1/2", N. C.	Vertical Clevis Pin_____	— 1	Current
3089	Bolt, Machine, 3/8"x4 1/2", NC	Hold down clamps_____	— 2	"
3642	Bolt, Carriage, 3/4" x 6", NC	Gauge wheel clamp_____	— 2	"
4024	Screw, Hex Head Cap, 5/16"x1", NC	Piston cup leather_____	— 4	"
4029	Screw, Hex Head Cap, 5/16"x2 1/4", NC	Control Case Cover_____	— 6	"
4065	Screw, Hex Head Cap, 7/16"x1 1/4", NC	Control case to Tractor_____	— 4	"
4068	Screw, Hex Head Cap, 7/16"x2", NC	Pump cover_____	— 10	"
4084	Screw, Hex Head Cap, 1/2" x 1", NC	Gauge wheel shaft_____	— 2	"
4168	Screw, Cap (Special) 7/8"x2", NC	Mounting brackets_____	— 4	"
4356	Screw, Hex Head Cap, 7/8"x4", NF	Cradle_____	— 4	"
4424	Screw, Flat head machine, 3/8"x1", NC	Cable housing dust covers _____	— 2	"
4550	Screw, Sq. Hd. set, 1/4" x 1/2", NC	Cable pulleys_____	— 2	"
4735	Screw, Allen Set, 5/16"x1 1/2", NC	Pump drive shaft bushing_____	— 2	"
5002	Nut, Hex Head, 1/4", NC	Gauge wheel rim_____	— 5	"
5004	Nut, Hex Head, 3/8", NC	Hold down clamp_____	— 2	"
5009	Nut, Hex Head, 3/4", NC	Gauge wheel clamp_____	— 2	"
5123	Nut, Sq. Head 5/16", NC	Vertical clevis pin_____	— 1	"
5172	Washer, split lock medium, 1/4"	Gauge wheel rim_____	— 5	"
5173	Washer, split lock medium, 5/16"	Piston cup leather_____	— 4	"
5175	Washer, split lock medium, 7/16"	Control cast to tractor_____	— 4	"
5176	Washer, split lock medium, 1/2"	Gauge wheel bushing_____	— 2	"
5179	Washer, split lock medium, 3/4"	Gauge wheel clamp_____	— 2	"
5273	Key, cotter, hammer lock 1/8"x1-1/4"	a: Cable guide roller_____	— 2	"
		b: Gauge wheel assembly_____	— 2	"
5296	Key, cotter, hammer lock 3/16"x2"	Piston assembly_____	— 2	"
5317	Key, cotter, hammer lock 1/4" x 2 1/4"	Cable guide_____	— 2	"
5808	Seal, oil	a: Control stem oil seal nut_____	— 1	"
		b: Engaging shaft oil seal nut_____	— 1	"
5838	Seal, Grease	Pump drive shaft_____	— 1	"
5840	Seal, Grease	Pump drive shaft_____	— 1	"
5850	Bearing, ball	Pump drive shaft_____	— 2	"

LINDEMAN HYDRAULIC TOOL BAR

STANDARD PARTS LIST

PART NO.	DESCRIPTION OF PART	WHERE USED	QUANTITY USED	UNIT LIST PRICE
6801	Bearing, ball	Cable pulley_____	— 4	Current
6853	Bearing, ball	Gauge wheel _____	— 2	"
7031	Plug, Pipe, external Sq. Hd, 1/4"	Oil drain plug _____	— 1	"
7051	Plug, Pipe, external Sq. Hd, 3/8"	Oil standard _____	— 2	"
7082	Plug, Pipe, External Sq. Hd, 1/2"	Side arm access hole _____	— 4	"
7255	Fitting, Zerk Grease, 1/8"	Tool Bar Cradle _____	— 2	"
7343	Fitting, Tube, 90° Union elbow, 1/2"	Pressure tube _____	— 1	"
7420	Rivet, Round head, 3/16" x 2-1/2"	Cable hanger _____	— 2	"
7442	Rivet, Round head, 1/4" x 1-1/2"	Cable hanger _____	— 2	"
7470	Rivet, Round head, 5/16" x 1-1/4"	Gauge wheel adjustment assby. _____	— 1	"
8010	Washer, Cut, 7/8"	a: Tool Bar Cradle _____	— 4	"
		b: Mounting Bracket _____	— 4	"
9001	Knob, lever	a: Control Lever _____	— 1	"
		b: Gear engaging shaft _____	— 1	"
9025	Pawl, steel, 5/16"	Gear engaging shaft pawl _____	— 1	"
9050	Cold shut, 3/8"	Stop chain _____	— 2	"
9101	Socket, hose connection	Oil line hose _____	— 2	"
9111	Plug, hose connection	Oil line standard _____	— 2	"
	Tire, 2 ply, 400 x 8	Gauge wheel _____	— 1	"
	Tube, special stem, 400 x 8	Gauge wheel _____	— 1	"



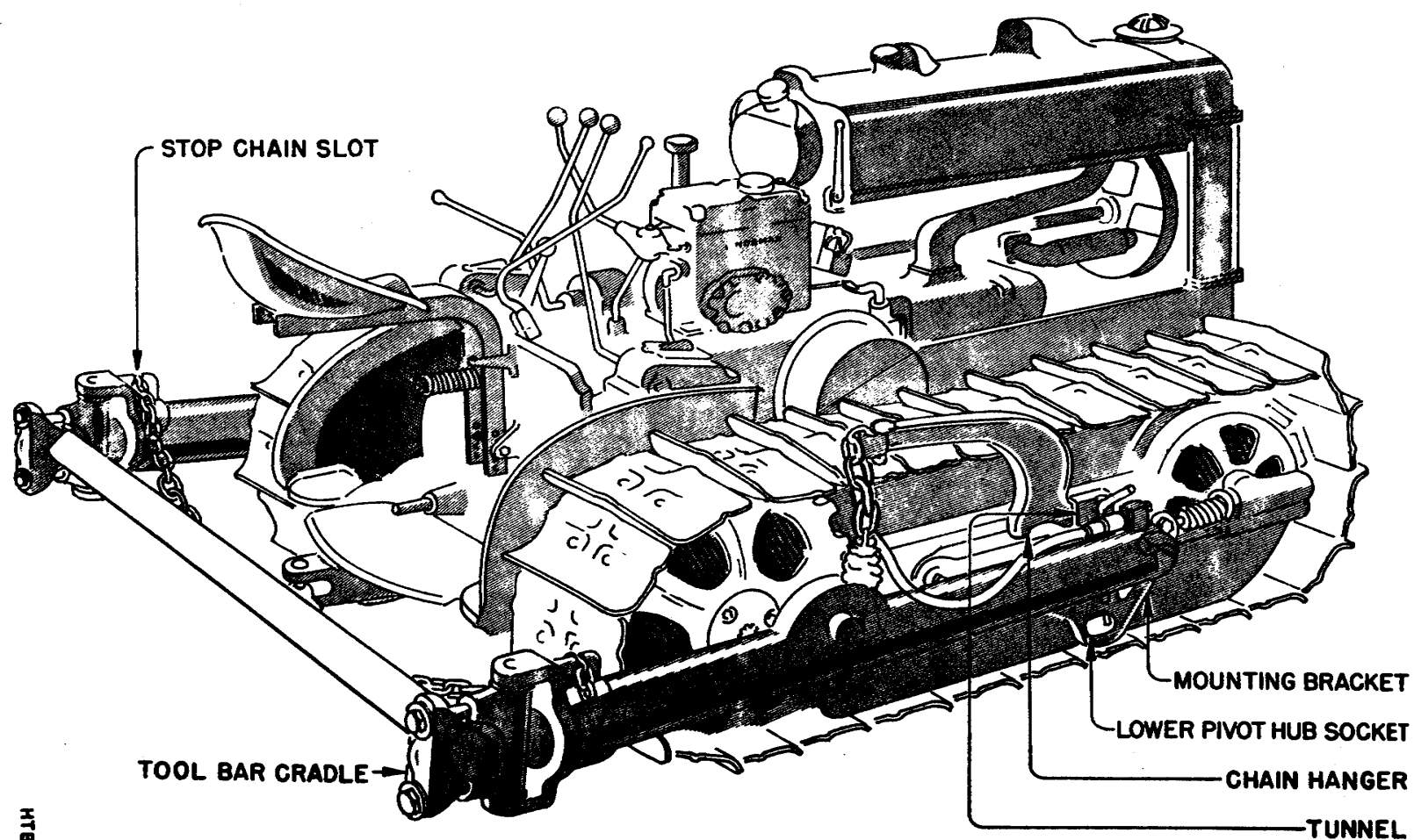


FIG. 5 ASSEMBLED TOOL BAR

HTB-D-5

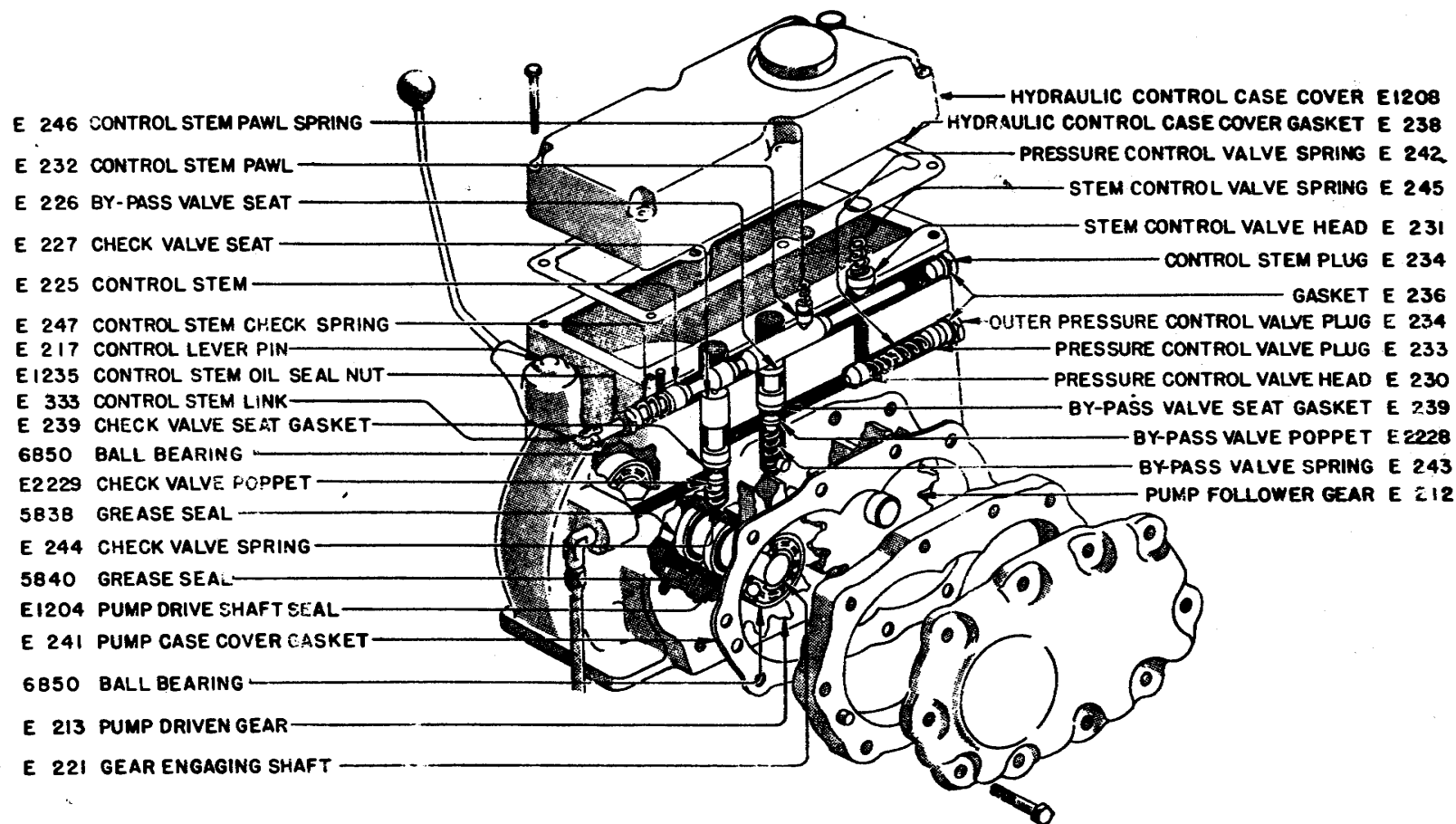


FIG.6 HYDRAULIC CONTROL SYSTEM ADJUSTMENTS

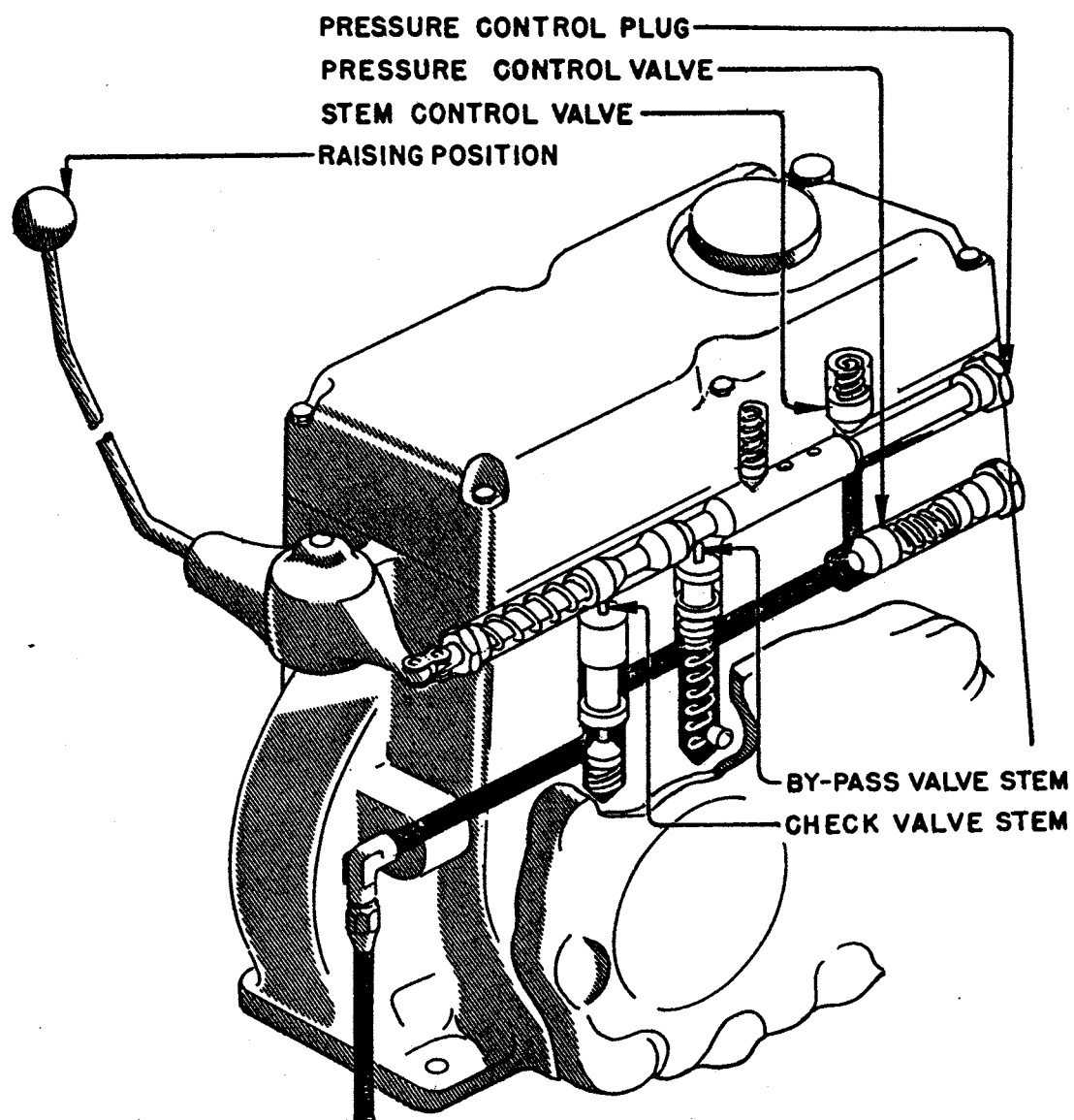


FIG. 7 OIL FLOW DURING TOOL BAR RAISING OPERATION

HTB-D-7

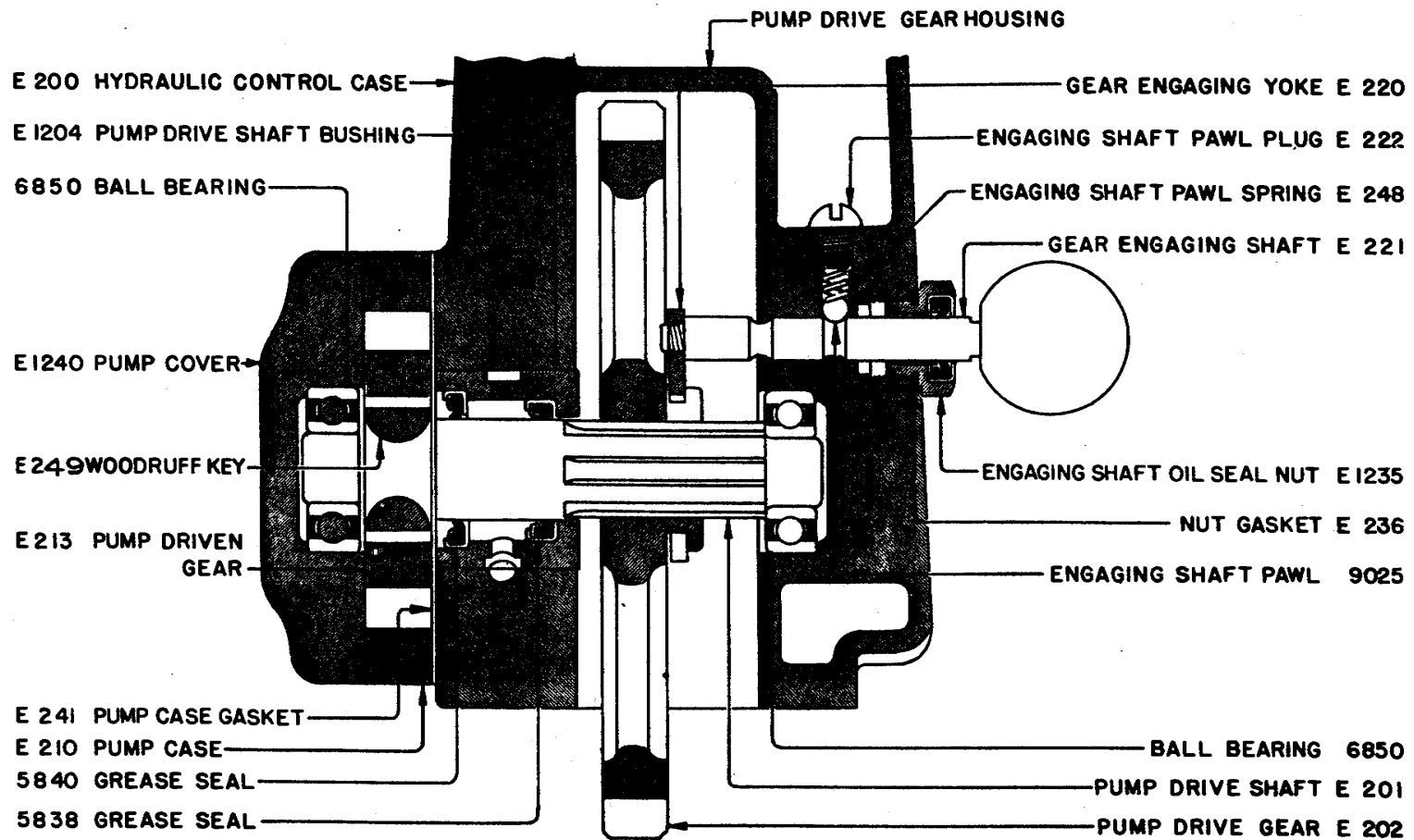


FIG. 8 HYDRAULIC CONTROL PUMP ASSEMBLY

HTB-0-8

LINDEMAN POWER EQUIPMENT CO.

Manufacturers of: LINDEMAN TRACTOR TOOLS
Disc Ditchers, Harvest Trailers,
Offset Disc Harrows, Mobile
Sprayers, Tractor Brush Rakes



POST OFFICE BOX 526
YAKIMA, WASHINGTON

May 18, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

Is our face red!!!!

We tried so hard to make all of our comments and illustrations in the Lindeman Hydraulic Tool Bar Assembly and Operation Manual absolutely correct but we were the victims of circumstances. In spite of proof reading a bug did crawl in.

Accidently the illustrator used as a model a machine which was intentionally assembled incorrectly so that the effect of improper assembly could be observed by our testing department.

The text on Page 5, under the subject "Cable Hookup to Cable Hangers" is correct but that portion of Figure 3 and Figure 5 showing the cable hook up is incorrect when the side arm is in the upper pivot socket in the mounting bracket.

Please insert the corrected illustrations in your Lindeman Hydraulic Tool Bar Assembly and Operation Manual.

Thank you!

LINDEMAN POWER EQUIPMENT CO.

LINDEMAN POWER EQUIPMENT COMPANY
Yakima, Washington

August 1, 1946

DEALERS PRICE LIST

LINDEMAN HYDRAULIC TOOL BAR

for the

LINDEMAN-JOHN DEERE CRAWLER TRACTOR

----- List Price
HYDRAULIC TOOL BAR ASSEMBLY, Standard

Consisting of: a: Hydraulic Control System
b: Side Arms and Mounting Brackets
c: 72" Tool Bar
d: Gauge Wheel Assembly with
Steel Wheel

\$412.50

Extra for Special Assembly Items in lieu
of Standard

78" Tool Bar	1.10
84" Tool Bar	1.65
96" Tool Bar	3.30
Gauge Wheel with Pneumatic Tired Ball Bearing Equipped Wheel	15.95
Rubber Tired Gauge Wheel as extra	47.30

SPECIAL ATTACHMENTS

<u>DOZER BLADE</u> , 6 Feet	68.75
<u>DEPTH ADJUSTMENT SHOE</u> for Dozer Blade	38.78
<u>BRUSH RAKE</u> , Model R-1016, 7½ Feet Wide with 6 Teeth	107.25

f.o.b. Yakima, Washington-----Net 10th Prox.

Dealer Discount 20% on Tool Bar and Special Attachments.

Dealer Discount 25% on Service Parts for Tool Bar and Special At-
tachments.

Invoices will reflect prevailing prices at time of shipment.

The above prices and discounts are in accordance with MPR-246,
Amendment 19, dated July 31, 1946.

LINDEMAN POWER EQUIPMENT COMPANY
Yakima, Washington

September 23, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

Effective today, September 23, 1946, the List Prices on the Lindeman-John Deere Crawler Tractor and attachments have been increased approximately 3.18% in accordance with R. M. P. R. 136, Order 676.

The enclosed Price Lists reflect these changes.

In line with this same O. P. A. directive, the List Prices for Service Parts for the Lindeman-John Deere Crawler Tractor and its attachments are increased 13.5%. To correctly compute current List Prices on these Service Parts, add 13.5% to the prices listed in the Lindeman-John Deere Crawler Tractor Parts List No. B.

You are authorized by R. M. P. R. 136, Order 676 to increase your retail prices to the full extent of this advance.

Yours truly,

LINDEMAN POWER EQUIPMENT CO.



P. H. AUSTIN
General Manager

Enclosure

LINDEMAN MANUFACTURING COMPANY
Yakima, Washington

September 23, 1946

Lindeman-John Deere "B0" Crawler Tractor
Dealer's List Price and Discounts

List Price Tractor, Standard Tread, 10" Tracks	\$ 1617.38
List Price Power Takeoff	25.54
List Price Extra for 12" Track Plates in lieu of 10"	17.03
List Price Extra for 14" Track Plates in lieu of 10"	34.05
List Price Extra for 72" Cross Bars in lieu of Standard	11.35

Prices f.o.b. Yakima

Dealer's Discount 20% on Tractor and Extras

2% Cash Discount 10 days from date of invoice

Discounts on Repair Parts 25% Net Cash

This supercedes ALL previous prices

All prices subject to change without notice

Invoices will reflect prevailing prices at time of shipment.

LINDEMAN POWER EQUIPMENT CO.

Manufacturers of: LINDEMAN TRACTOR TOOLS
Disc Ditchers, Harvest Trailers, Offset
Disc Harrows, Mobile Sprayers,
Tractor Brush Rakes



POST OFFICE BOX 526
YAKIMA, WASHINGTON

November 19, 1945

TO: Lindeman-John Deere Crawler Tractor Dealers.

Most of you are aware that we have been engaged for sometime in "tooling up" for production of a Hydraulic Tool Bar designed for mounting on the Lindeman-John Deere Crawler Tractor. This new tool bar is now ready for distribution.

During the time we were "tooling up" there were several of these tool bars placed in different territories and in practically every one of these localities there has resulted a big demand for this equipment.

Enclosed are some reproductions of photographs showing the tool bar with some of the various tools mounted in front and rear positions on the crawler tractor. The tools mounted on the bar in rear position, as you will note in the illustrations, are manufactured by Killefer Manufacturing Company, Los Angeles, California, and are available through your nearest John Deere Plow Company warehouse. Our company manufactures the 6-foot dozer blade shown in two of the illustrations enclosed. A limited number of the blades are available for immediate shipment and more will be available as soon as we receive the moldboards and bits from the manufacturer who supplies them to us.

The dozer blade depth adjustment shoe shown in the illustrations is also available and we recommend its use with the blade. The entire dozer attachments including the depth shoe can be easily and quickly mounted or detached from the tractor.

Our experience in mounting the tool bar on tractors already in the field indicated that approximately four hours are required for the original installation. This includes mounting the entire control assembly as well as the tool bar. Once this complete assembly has been installed on the tractor, the tool bar itself can be mounted or dismounted to the tractor in less than five minutes time and may be changed from front to rear positions and vice versa in a like matter of time.



POST OFFICE BOX 526
YAKIMA, WASHINGTON

November 27, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

SUBJECT: LINDEMAN TURNING BAR - NO. TE1455

The Turning Bar for the Lindeman-John Deere Crawler Tractor, for use with off-set disc harrows, is ready for delivery.

This sturdy tractor accessory will be delivered completely assembled for quick attachment to any Lindeman-John Deere Crawler Tractor. Instructions for mounting are sent with each Turning Bar.

The List Price for this item is attached to this letter.

LINDEMAN POWER EQUIPMENT CO.

LINDEMAN POWER EQUIPMENT COMPANY
Yakima, Washington

November 27, 1946

LINDEMAN TURNING BAR - NO. TEL455

for

LINDEMAN-JOHN DEERE CRAWLER TRACTOR

List Price Lindeman Turning Bar -
No. TEL455

\$10.75

Prices f.o.b. Yakima, Washington

Dealer Discount 20%

Price subject to change without notice.

Invoices will reflect prevailing prices at time of shipment.

ATTACHMENT INSTRUCTIONS

LINDEMAN TURNING BAR - NO. TEL455

for the

LINDEMAN-JOHN DEERE CRAWLER TRACTOR

Procedure for attaching Turning Bar:

1. Take nut and washer off of the left hand cap screw in the draw bar clamp.
2. Place forward end of the Turning Bar on this cap screw and replace washer and nut.
3. Remove the two 5/8" carriage bolts that secure the left hand foot rest and the left end of the draw bar segment.
4. Insert the two longer 5/8" carriage bolts, that come with the Turning Bar, through the left foot rest, the draw bar segment, and then the Turning Bar.
5. Snuggly tighten the nuts on the two carriage bolts and on the cap screw.

Lindegram

From
LINDEMAN
in
Yakima, Washington

December 4, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

SUBJECT: OIL SEAL KIT NO. 5808

To facilitate the replacing of the oil seal (5808) used with the oil seal nut (E235) on the Engaging Shaft and Control Stem of the Hydraulic Control System of the Lindeman Hydraulic Tool-Bar, this oil seal is now supplied as

Oil Seal Kit No. 5808.

The reason for selling this particular item as a Kit is to have available the materials needed and to provide installing instructions necessary to assure the placing of the seal on the shaft or stem without damage.

The oil seal kit is composed of:

A. Packed in the envelope -

1 only Oil Seal No. 5808

1 piece Shim Stock

B. Printed on the envelope -

Illustrated instructions for seating the oil seal in the oil seal nut, and for slipping the oil seal and nut assembly on the Control Stem or Engaging Shaft.

Injury to the seal may occur if it is not protected from the notches or grooves in the end of the shaft or stem. A guide may be formed from the shim stock over which the assembled seal and oil seal nut may be slipped into position on the machined portion of the shaft. The shim stock is then pulled out.

The Service Parts List Supplement attached to this letter indicates a List Price calculated on the same basis as the List Prices on Lindeman Hydraulic Tool-Bar Service Parts List now in your possession. When determining your net price, 10% must be added to this List Price.

LINDEMAN POWER EQUIPMENT COMPANY

LINDEMAN HYDRAULIC TOOL BAR

STANDARD PARTS LIST

(Supplement - 12-4-46)

PART NO.	DESCRIPTION OF PART	WHERE USED	QUANTITY	LIST
			USED	LIST PRICE
5808	Oil Seal Kit	a. Control Stem Oil Seal Nut	1	.50
		b. Engaging Shaft Oil Seal Nut	1	

LINDEMAN HYDRAULIC TOOL BAR

PARTS LIST

(Supplement - 12-4-46)

PART NO.	DESCRIPTION OF PART	QUANTITY PER TOOL-BAR	LIST PRICE EACH
E-223	Pawl, Control Stem	1	.20
E-262	Spring, Control Stem Pawl	1	.20

Lindegram

From
LINDEMAN
in
Yakima, Washington

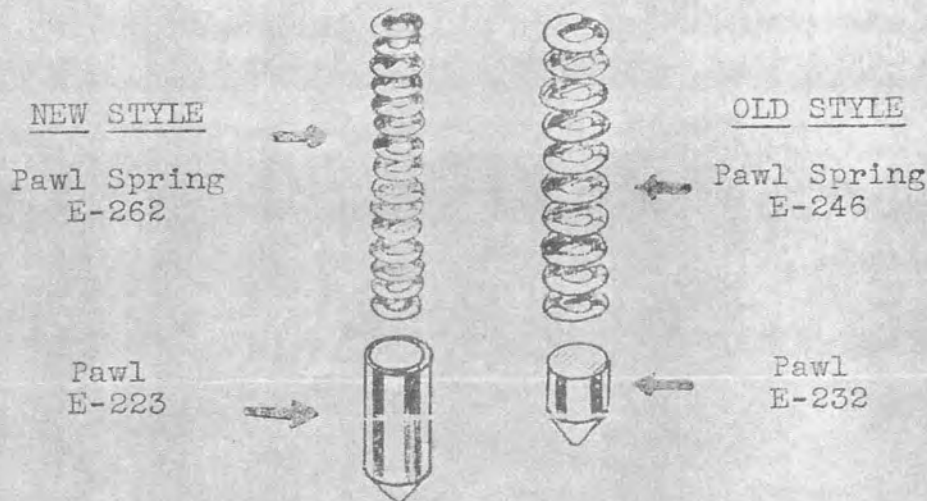
December 5, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS

SUBJECT: NEW HYDRAULIC CONTROL SYSTEM PAWL

A new style pawl and pawl spring are now being installed in the Hydraulic Control System of the Lindeman Hydraulic Tool-Bar.

The new pawl is longer, giving greater side bearing surface, and is more accessible for adjustment or replacement. It extends above the top edge of the Hydraulic Control Case and into the Control Case Cover. The top of the pawl is drilled and pawl spring is seated down into the pawl rather than on top of it. This holds the spring in place when the Control Case Cover is removed. To remove the new pawl and pawl spring, merely take off the Control Case Cover and pick them out with the fingers.



The new and old style pawls and pawl springs are interchangeable as long as both spring and pawl are changed together. The new pawl will not function with the old style spring or the new spring will not operate with the old pawl.

The Service Parts List Supplement attached to this letter indicates List Prices calculated on the same basis as the List Prices on Lindeman Hydraulic Tool-Bar Service Parts List now in your possession. When determining your net price, 10% must be added to this List Price.

LINDEMAN POWER EQUIPMENT COMPANY

Lindegram

From
LINDEMAN
in
Yakima, Washington

December 6, 1946

TO: ALL LINDEMAN-JOHN DEERE CRAWLER TRACTOR DEALERS
SUBJECT: LINDEMAN BUCK BRUSH RAKE

Sufficient material is now on hand to manufacture 75 Lindeman Buck Brush Rakes, Model R-1006, to be mounted on the Lindeman-John Deere Crawler Tractor with the Lindeman Hydraulic Tool-Bar.

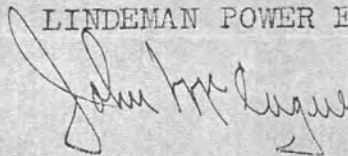
As the pipe that is used in the manufacture of this rake is a very critical item, only that number of rakes will be scheduled for production that is needed to fill confirmed orders.

If you will advise us of your requirements by December 23, 1946, we can have ready for shipment the rakes that you will need by approximately January 15, 1947.

An early commitment from you will be appreciated.

Very truly yours,

LINDEMAN POWER EQUIPMENT CO.



JOHN McCAGUE
Sales Manager

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LINDEMAN

POWER EQUIPMENT COMPANY

POST OFFICE BOX 526
YAKIMA, WASHINGTON

December 6, 1946

Lindeman Integral Buck Brush Rake

for

Lindeman Hydraulic Tool-Bar

PRICE LIST

CATALOGUE NO.		PRICE LIST
R-1005	Standard Rake with 5 - 2" Standard Pipe Teeth	\$ 93.50
R-1006	Rake with 6 - 2" Standard Pipe Teeth	101.20
R-1015	Rake with 5 - 2" Extra Heavy Pipe Teeth	99.00
R-1016	Rake with 6 - 2" Extra Heavy Pipe Teeth	107.25

f.o.b. Yakima, Washington

Subject to Change without Notice

Dealers Discount - 20%

Invoices will reflect prevailing prices in effect at time of
shipment.