

INGERSOLL

Ingersoll Equipment Co., Inc.

Exclusive Manufacturer of
J/Case Outdoor Power Equipment

SERVICE BULLETIN

May 3, 1985

85-1

DIRECTED TO: All Ingersoll/Case Lawn & Garden Tractor Dealers

ATTENTION: Dealer Principal, Service Manager, Parts Manager

SUBJECT: Traction Drive System: Model 108, 110, 116 Lawn Tractors

ACTION TO BE TAKEN:

Check all affected 108, 110, and 116 tractors during predelivery inspection or during regular service for:

1. Main drive belt to cotter pin clearance during declutching and clutch engaging process.
2. Proper clutching and shifting characteristics.

PURPOSE:

1. To insure proper belt life by preventing contact between the main drive belt and cotter pin (5) as described in "1" above.
2. To insure that proper clutching and shifting characteristics are maintained.
3. To relocate backside idler pulley (15) if necessary to achieve 1 and 2 above.

MACHINES INVOLVED:

All Model 108, 110, 116 tractors with 5 speed transmissions prior to the following Product Identification Numbers.

<u>MODEL</u>	<u>PRIOR TO P.I.N.</u>
108	14065326
110	14066062
116	14066856

Except for those listed below which have been changed at the Ingersoll factory.

<u>108</u>		<u>110</u>		<u>116</u>		
14050519	14066036	14066043	14066054	14052164	14052243	14052343
14050520	14066037	14066044	14066056	14052165	14052244	14052344
14050546	14066038	14066045	14066057	14052166	14052265	14052361
14050547	14066039	14066049	14066058	14052176	14052332	14052364
14050563	14066041	14066051	14066059	14052177	14052333	14052385
	14066042	14066053	14066060	14052178	14052334	14052388
				14052184	14052338	

PARTS INFORMATION:

No new parts are required.

INSTALLATION INSTRUCTIONS:

1. Remove the mower deck if installed
2. Remove backside idler pulley (15) and bolt (17).
 - a. Loosen the two left hand engine mounting bolts.
 - b. Remove the two right hand engine mounting bolts.
 - c. Remove nut (18) and pulley (15).
 - d. Tilt the engine and remove bolt (17).
 - e. Replace and retighten the engine mounting bolts.
3. Apply the template provided with these instructions to the front pulley support bracket.
4. Center punch and drill a new 13/32" dia. hole where indicated on the template.
5. Install pulley (15) with bolt (17) in the new hole. INSERT THE BOLT FROM THE BOTTOM UP.
6. Install the belt. Check for proper clutching action and traction. Adjust the belt, by moving the rear idler pulley, if required, as described in the operator's manual.

ACCOUNTING:

Normal warranty will apply.

Labor: Up to 0.5 hours per machine.

At your registered shop rate.

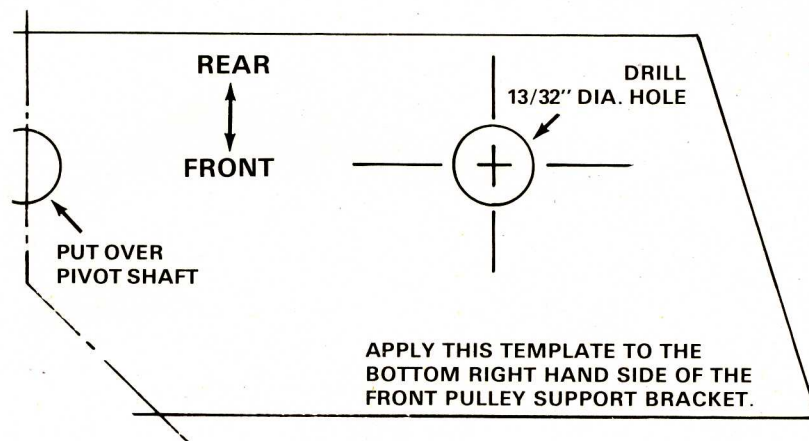
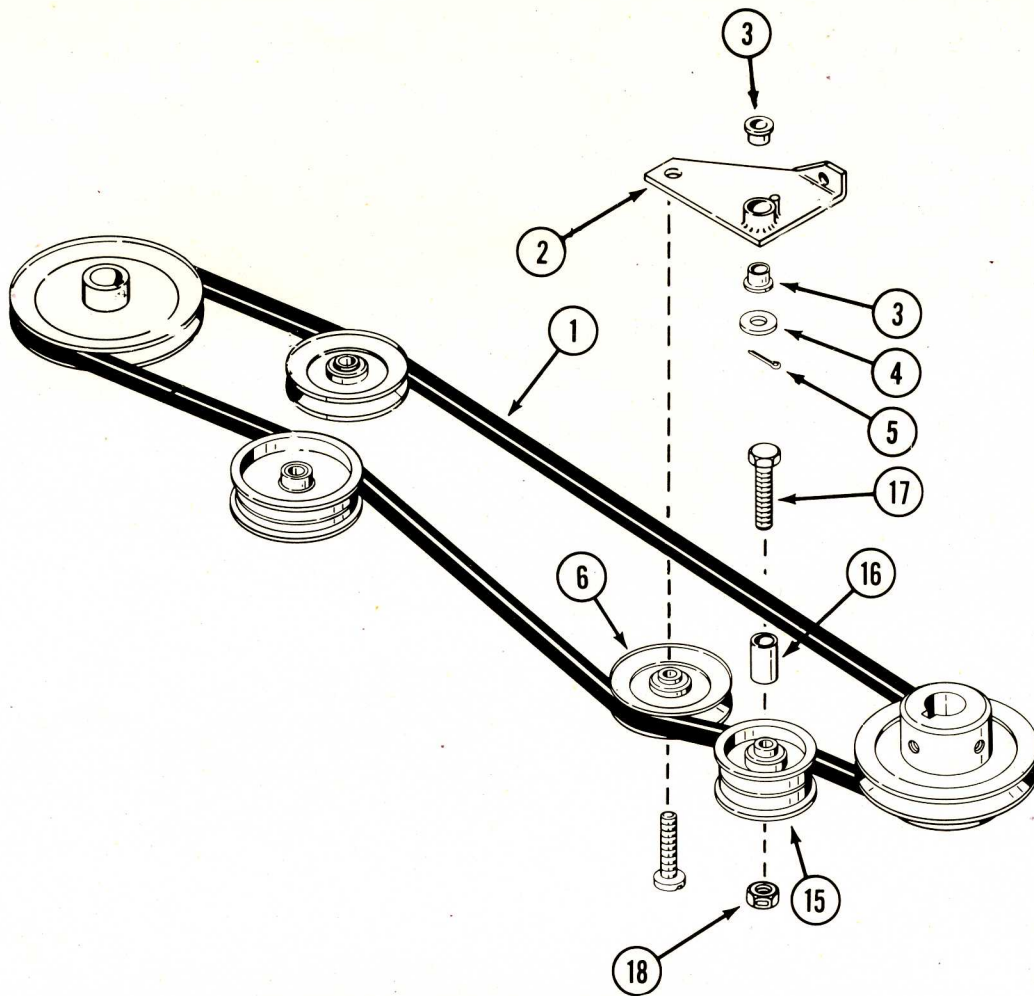
REIMBURSEMENT:

The cost of labor can be recovered by submitting a Service Adjustment Request.

1. Use Prime Part: C21622.
2. Use Service Code: 275.
3. Use Job Code: 61351C 0.5 hours.

Enter the following in the dealer comment section:

"Per Ingersoll Service Bulletin 85-1"



INGERSOLL

Ingersoll Equipment Co., Inc.

Exclusive Manufacturer of
JCase Outdoor Power Equipment

SERVICE BULLETIN

DIRECTED TO: ALL INGERSOLL/CASE LAWN & GARDEN TRACTOR DEALERS

ATTENTION: DEALER PRINCIPAL
SERVICE MANAGER
PARTS MANAGER

SUBJECT: Vapor Lock Symptoms - Models 226, 446, 448 with Onan Engines

ACTION TO BE TAKEN

1. Insure that the engine stalling symptom is fuel related. A "quick check" would be to close the choke as the engine stalls. If the engine recovers momentarily, the symptom is confirmed to be fuel related.
2. Insure that the fuel line connection at the fuel pump inlet is tight.
3. Insure that there is free flowing fuel available at the fuel pump inlet. (This will eliminate a kinked or blocked fuel line, blocked fuel strainer and plugged fuel cap vent).
4. Insure that the vacuum line to the fuel pump is securely connected and that the vent hole in the fuel pump cover is open.
5. Insure that the fuel pump is correctly assembled.
6. Insure that there are no leaks in the intake manifold.

The purpose of the Modification Kit, Part Number C28031, is to:

- a. Assure proper fuel level in the carburetor float bowl by turning over the float helper spring in the carburetor.
- b. Reduce heat at the carburetor by installing 2 baffle extensions on the rear cylinder baffles.
- c. Keep the fuel supply cooler by installing insulation on the fuel line.

MACHINES INVOLVED

All inventory units within the following P.I.N. ranges. All retail units within warranty which display a vapor lock symptom within the following P.I.N. ranges.

226 Prior to P.I.N. 14058175
446 P.I.N. 14060239 through P.I.N. 14060930
448 P.I.N. 14062249 through P.I.N. 14062726

Issued By
INGERSOLL EQUIPMENT
SERVICE DEPARTMENT

Date Issued
10/1/84

Bulletin No
84-1
Supersedes

File Under
Binder: Master Service Man.
Tab: Bulletins

MACHINES INVOLVED (CONTINUED)

Also any inventory 226, 446, and 448 tractors which have been fitted with the P/N C27506 brass float kit or which display a vapor lock symptom.

PARTS INFORMATION

Part Number C28031 kit is available at no charge from Ingersoll Equipment Co., Inc., or your Ingersoll Field Service Representative. The required number of kits P/N C28031 will be provided upon receipt of dealer's order or request.

INSTALLATION INSTRUCTIONS

A copy of the installation instructions is attached.

ACCOUNTING

Labor: Up to 0.6 hours per machine in dealer inventory

Up to 1.6 hours per machine if delivered at retail

At your registered shop rate

REIMBURSEMENT

The cost of labor can be recovered by submitting a Service Adjustment Request. See attached samples.

1. Use Account 7491 if sold at retail.
Use Account 7479 if in dealer inventory.
2. Use Prime Part C27506.
3. Use Service Code 275.
4. Use Machine Location 38237.
5. Use Job Code 38237C.
6. In Remarks Section Enter: "Kit, P/N C28031 installed per instructions issued in Ingersoll Service Bulletin No. 84-1".

NOTE: Do not enter any other warranty requests on this Service Adjustment Request.

Attachment

INGERSOLL EQUIPMENT CO., INC.
SERVICE DEPARTMENT

ONAN VAPOR LOCK REWORK KIT - P/N C28031 - INSTALLATION INSTRUCTIONS

The purpose of this modification kit is to:

- a. Raise the fuel level in the carburetor float bowl by turning over the float helper spring in the carburetor.
- b. Reduce heat at the carburetor by installing 2 baffle extensions on the rear cylinder baffles.
- c. Keep the fuel supply cooler by installing insulation on the fuel line.

USE THE FOLLOWING PROCEDURE:

1. Remove the air cleaner assembly.

IMPORTANT: Close the choke plate to prevent accidentally dropped screws or dirt from falling into the intake manifold.

2. Loosen (Do Not remove) the screws which secure the rear cylinder baffles to the pump mounting bracket.
3. Slip the rear cylinder baffle extensions in position. Make certain the corners are closed off. See Figure 1. Tighten the screws.
4. Drill through the rear cylinder baffles and baffle extensions and pop rivet together.

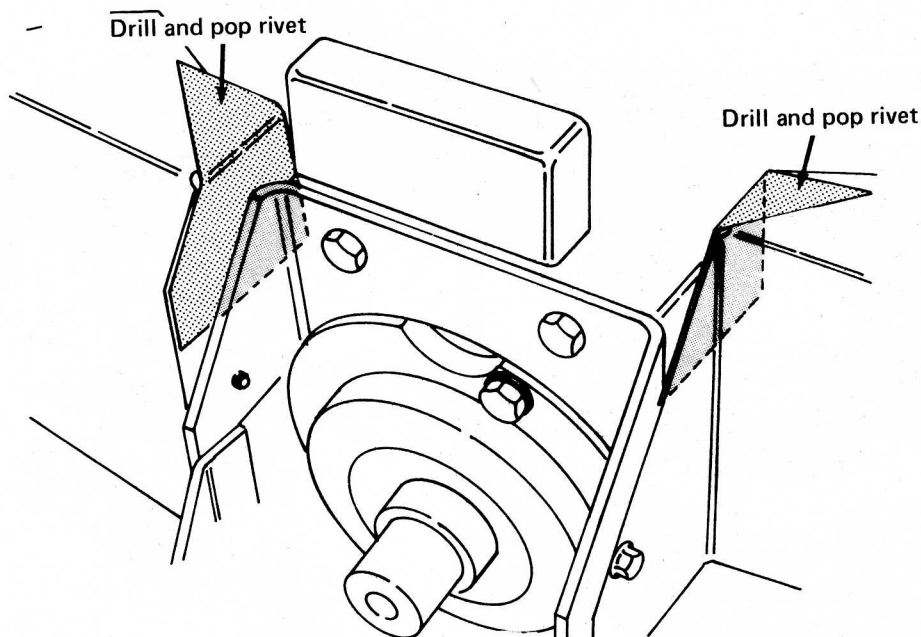


FIGURE 1

5. Make a wire to pull the fuel line through the insulation. Select a piece of heavy mechanics wire 30" long and form 3 loops of a coil 1/2" diameter.
6. Remove the fuel line from the fuel pump inlet. Move the fuel line end to the right side of the carburetor.
7. Insert the tip of the fuel line into the 3 loops of the wire and insure that they grip.

8. Insert the wire up into the insulation and pull the fuel line through. Allow 2" of the fuel line to protrude from the insulation.

It is necessary to free the insulating sleeve from any "hang ups" or restrictions at the base of the instrument tower area in order to achieve 2" of fuel line protrusion at the top end.

9. Connect the fuel line to the fuel pump inlet.
Make sure the fuel line and clamp are secure on the fuel pump inlet.
10. Remove the carburetor upper body and lay it upside down on a clean work area.
11. Remove the hinge pin and helper spring.
12. Reinstall the helper spring with the long free end pointing away from the float and on the side closest to the fuel inlet passage. See Figure 2.
13. Set the float level at 1/8" with the gasket installed.
14. Assemble the upper carburetor body to the lower body insuring that the long free end of the helper spring is inserted inside the lower body. See Figure 3.
15. Tighten the carburetor screws to a torque of 25 inch pounds.

IMPORTANT: Close the choke plate to prevent accidentally dropped screws or dirt from falling into the intake manifold.

16. Install air cleaner assembly. Insure that the choke cable is installed correctly.

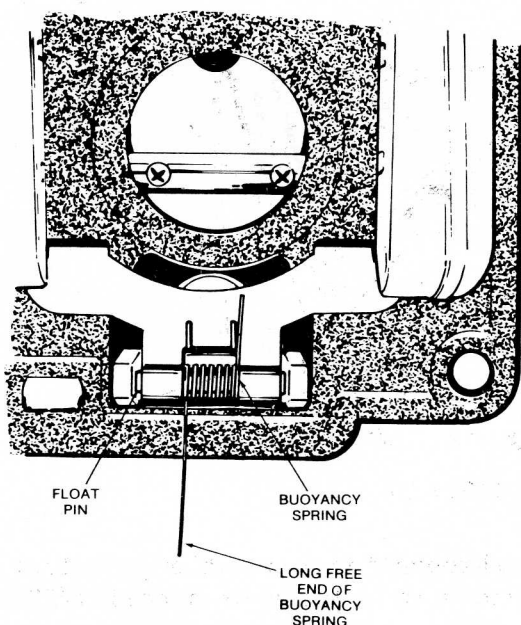


FIGURE 2

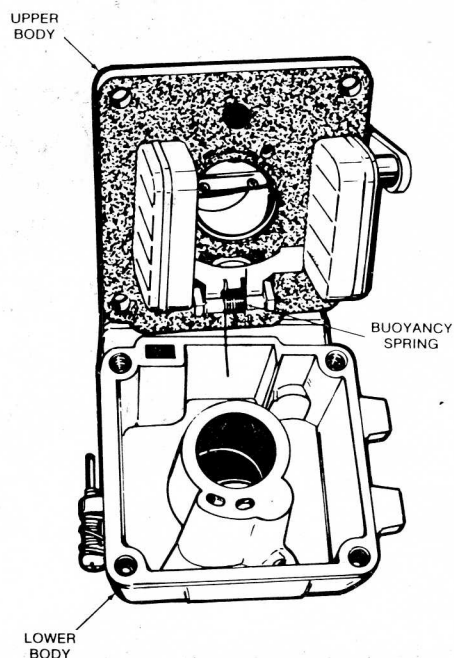


FIGURE 3



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL AGRICULTURAL DEALERS

ATTENTION: Dealer Principal
Service Manager
Parts Manager

SUBJECT: STEERING SHAFT -- 100, 200, 400 SERIES COMPACT TRACTORS

ACTION TO BE TAKEN:

- A. For 100 Series Tractors: Replace P/N C26633 Steering Shaft with P/N C26328 Steering Shaft
- B. For 200 - 400 Series Tractors: Replace P/N C26632 Steering Shaft with P/N C26326 Steering Shaft.

Replace steering shafts on affected tractors in accordance with the modification program follow-up report to be mailed individually to each affected dealer.

MACHINES INVOLVED:

See attached listing of models and Product Identification Numbers.

PARTS INFORMATION:

The steering shafts necessary to complete this modification program will be shipped automatically to the dealer on record where affected units are located. Do not order parts!

If a unit has transferred from your dealership to another dealer, or is no longer in your area of responsibility, please contact your field service representative. He will request your assistance with the transfer of steering shafts to the responsible dealer.

PARTS TERMS:

Shipped freight prepaid. 90 day terms. Normal stock order discount to apply. Net cost applied to dealer stock order volume.

Issued By	Date Issued	Bulletin No.	File Under:
Parts, Service & Training Agricultural Equipment Division	5/22/84	A38-84 Supersedes	Binder: SERVICE INFORMATION Tab: Compact Tractors



J I Case
A Tenneco Company

Form 3191 Rev. 1
Printed in U.S.A.

PARTS DISPOSITION:

The replaced steering shafts must be inspected by your field service representative and rendered unuseable.

INSTALLATION INSTRUCTIONS:

A copy of the Installation Instructions for Modification Program "MEAE" is attached.

ACCOUNTING:

Labor:

- A. For 100 Series Tractors: Up to 0.3 hours per machine in dealer inventory and 1.3 hours per machine if delivered at retail, at your registered shop rate.
- B. For 200-400 Series Tractors: Up to 0.5 hours per machine in dealer inventory and 1.5 hours per machine if delivered at retail, at your registered shop rate.

Reimbursement:

The cost of parts and labor can be recovered by submitting a Service Adjustment Request.

1. Use Account Number 7492.
2. Use Modification Program Number (CODE) "MEAE".
3. Use PRIME PART:
 - a. For 100 Series Tractors P/N C26633.
 - b. For 200-400 Series Tractors P/N C26632.
4. Use Service Code 275.
5. Use Machine Location Code 50110.
6. Use Job Code:
 - a. For 100 Series Tractors in dealer stock: 50110BM 0.3.
 - b. For 100 Series Tractors already delivered at retail: 50110BM 1.3.
 - c. For 200-400 Series Tractors in dealer stock: 50110BM 0.5.
 - d. For 200-400 Series Tractors already delivered at retail: 50110BM 1.5.
7. Parts Replaced:
 - a. For 100 Series Tractors list: C26328 Shaft Net \$7.74.
 - b. For 200-400 Series Tractors list: C26326 Shaft Net \$8.28.

Note: You will be invoiced at the prices listed above. These prices are different from the prices shown in your March 5th Price List Bulletin.
8. Deadline Date:

All steering shafts must be changed and SAR's submitted by September 30, 1984.

STEERING SHAFT INSTALLATION INSTRUCTIONS

The steering shafts can be changed with the tractor either in or out of the crate. It is recommended that the tractors be left in the crate when this is to your advantage. Disregard references to the crate in these instructions if you are changing the shaft on a tractor that is already set up.

Note: The words "Right", "Left", "Front" and "Rear" as used in these instructions indicate directions when you are in the operator's seat in the normal operating position.

FOR ALL MODELS:

1. Identify the front end of the crate (tractor).
2. Use a suitable lifting device to raise the front of the crate 34". Securely block the front of the crate in the raised position. This height will allow the steering shaft to pass through the bottom of the crate.
3. If the tractor is set up, remove the steering wheel and raise the front of the tractor. Securely block the rear wheels and under the front of the tractor.

FOR MODELS 108, 110, 116:

1. Cut a small hole in the top of the carton to permit access to the steering area.
2. Remove the cotter pin from the roll pin hole in the top of the steering shaft.
3. Pull the steering shaft down and remove it from the tractor.
4. Transfer the washer and bushing from the old shaft to the new shaft.
5. Insert the new shaft from the bottom. Make sure that the gear teeth mesh and that the top bushing remains in place.
6. Insert the cotter pin into the roll pin hole.
7. Staple the top of the carton closed.

FOR MODEL 210 THROUGH 448:

1. Cut a small hole in the top of the carton to permit access to the steering area.
2. Remove the inspection tags from the roll pin hole in the top of the steering shaft.
3. Cut a 12" square window in the lower left (right for Model 210 only) side of the carton just to the rear of the center wooden slat. This is necessary to gain access to the foot rest.
4. Remove the bolts that secure the left foot rest (right foot rest for Model 210 only).
5. Remove the bolts that secure the saddle clamps for the attachment lift rockshaft.
6. Cut the band for the drag link (also tie rod on Model 210 only) and move them out of the way.
7. Carefully pry the attachment lift rockshaft down and forward to permit the steering shaft to pass and remove the old steering shaft.
8. Transfer the two washers from the old steering shaft to the new steering shaft.
9. Insert the new shaft from the bottom. Make sure the top bushing remains in place.
10. Reinstall the rockshaft and foot rest. Make sure the steering gear teeth mesh properly.
11. Resecure the tie rod and drag link.
12. Staple the carton closed.

100 SERIES AFFECTED TRACTOR P.I.N.'S FOR STEERING SHAFT
MODIFICATION PROGRAM - MEAE - P/N C26328

108

Start - 14031949 thru 14031986
plus 14031988 thru 14031989
14031992
14031995 thru 14031999
14032002 thru 14032004
14050423
14050428 thru 14050430
14050441 thru 14050448

110

Start - 14032850 thru 14032940
plus 14032942 thru 14032944
14032946 thru 14032969
14032971 thru 14032990
14051150 thru 14051155
14051157
14051182
14051184

116

Start - 14047523 thru 14047884
plus 14047887 thru 14047891
14047895 thru 14047898
14047902 thru 14047906
14052096 thru 14052100
14052103 thru 14052104
14052106 thru 14052125
14052127
14052133 thru 14052135
14052138
14052142 thru 14052144
14052147 thru 14052150
14052152 thru 14052154
14052161 thru 14052163
14052183
14052191
14052195

210

Start - 14033980 thru 14034034
plus 14034036 thru 14034042
14034044
14034046 thru 14034052
14034054 thru 14034058
14034060 thru 14034071
14034075 thru 14034077
14034079
14034082 thru 14034084
14034086
14034088 thru 14034089
14053458
14053475 thru 14053476

200 SERIES AFFECTED TRACTOR P.I.N.'S FOR STEERING SHAFT
MODIFICATION PROGRAM - MEAE - P/N C26323

220

Start - 14035015 thru 14035063
plus 14035065 thru 14035097
14035099 thru 14035108
14035110 thru 14035111
14035118 thru 14035119
14035123
14035126 thru 14035142
14035144 thru 14035161
14035164 thru 14035166
14035168
14035171 thru 14035172
14035174
14035176
14035178 thru 14035181
14035184
14035186 thru 14035197
14035212 thru 14035213
14035215 thru 14035216
14035218
14035220 thru 14035221
14035227 thru 14035230
14035232 thru 14035236
14035239
14035245
14035250 thru 14035252
14054306 thru 14054310
14054323 thru 14054328
14054330 thru 14054335
14054337 thru 14054338
14054340
14054343
14054345

222

Start - 14036644 thru 14036826
plus 14036830
14036832
14036834 thru 14036889
14036892 thru 14036895
14036897
14036900 thru 14036942
14055508 thru 14055514
14055518 thru 14055519
14055521 thru 14055527
14055530 thru 14055533
14055537 thru 14055549

224

Start - 14038316 thru 14038395
plus 14038397 thru 14038406
14038408 thru 14038455
14038457
14038461 thru 14038472
14038475
14038477 thru 14038480
14038485 thru 14038486
14038494
14038498 thru 14038499
14038501 thru 14038502
14038504 thru 14038506
14038508
14038510
14038514
14038516 thru 14038520
14038522 thru 14038523
14038527 thru 14038529
14038531 thru 14038532
14038542 thru 14038554
14056522 thru 14056526
14056528 thru 14056531
14056534 thru 14056535
14056537 thru 14056539
14056541
14056549 thru 14056561
14056583

226

Start - 14048511 thru 14048956
plus 14048960 thru 14048961
14048963
14048970 thru 14048975
14048984 thru 14048986
14048990
14048994 thru 14048999
14049000
14049004
14049008 thru 14049035
14049038 thru 14049051
14049058 thru 14049067
14057740 thru 14057747
14057751 thru 14057753
14057757 thru 14057759
14057761
14057766 thru 14057770
14057772 thru 14057776
14057779
14057783 thru 14057792
14057795 thru 14057799
14057800 thru 14057801
14057803 thru 14057805
14057807

400 SERIES AFFECTED TRACTOR P.I.N.'S FOR STEERING SHAFT
MODIFICATION PROGRAM - MEAE - P/N C26326

444

Start - 14039760 thru 14039834
plus 14039837 thru 14039930
14039935
14039940 thru 14039966
14058937
14058940
14058947 thru 14058960
14058962 thru 14058966
14058968 thru 14058969
14058974 thru 14058976
14058985 thru 14058986
14058989

446

Start - 14041727 thru 14042093
plus 14042096 thru 14042098
14042100
14042102 thru 14042111
14042114
14042116 thru 14042121
14042124 thru 14042132
14042135 thru 14042137
14042140
14042146 thru 14042150
14042152
14042154 thru 14042161
14042163 thru 14042170
14042173 thru 14042179
14042191 thru 14042196
14042200 thru 14042212
14042214 thru 14042215
14042220 thru 14042226
14042228
14042230 thru 14042233
14042236 thru 14042239
14042244
14060086 thru 14060090
14060092 thru 14060186
14060192
14060194 thru 14060195
14060198 thru 14060199
14060206
14060224
14060227 thru 14060229
14060234 thru 14060237

448

Start - 14044260 thru 14044618
plus 14044621
14044623
14044626 thru 14044641
14044643 thru 14044644
14044646 thru 14044647
14044650 thru 14044652
14044658 thru 14044667
14044670 thru 14044685
14044687 thru 14044689
14044698 thru 14044704
14044707 thru 14044709
14044711 thru 14044714
14044719 thru 14044720
14044722 thru 14044749
14044751
14044755 thru 14044763
14062146 thru 14062164
14062166 thru 14062167
14062169 thru 14062171
14062173 thru 14062224
14062226
14062236
14062242 thru 14062244
14062252
14062255 thru 14062256
14062258 thru 14062261



Service Adjustment Request



☐ AE Division
☐ CE Division

☐ International
☐ OPE Division

☐ Other
☐

INDICATE APPROPRIATE DIVISION FOR MAILING

FACTORY USE ONLY

REFERENCE 807158				UNIT OUT OF SERVICE 5 / 1 / 84 MONTH DAY YEAR				DATE PARTS REPLACED 5 / 1 / 84 MONTH DAY YEAR				PAGE OF	
CUSTOMER NAME				DEALER IMPRINT NAME				HOURS					
CITY *STOCK				Lawn & Garden Tractor Sales				ACCT. NUMBER 7492					
COUNTRY				ADDRESS				MOD PROGRAM NUMBER					
POSTAL CODE				CITY				STATE				COUNTRY	
PRODUCT I.D.				Anytown, USA				MEAE					
ENG. S/N				DEALER CODE				<input type="checkbox"/> REPLACEMENT PARTS ADJ.					
TRANS S/N				05-0004-000400									
MODEL													
WARR. ST.													
WARR. END													
TYPE													
CATEGORY													
A	REPLACED	YES		JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS. on PART		
			C26632	275	50110	0.5**			0.5				
B	REPLACED	YES		JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS. on PART		
C	REPLACED	YES		JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS. on PART		

DEALER COMMENTS TO VALIDATE REQUEST:

SAMPLE FOR 200-400 SERIES TRACTOR

- * Use customer's name if sold at retail
- ** Use 1.5 if sold at retail

DEALER SIGNATURE John Doe

5 / 1 / 84
MONTH DAY YEAR

PRIME	QTY	PART NUMBER INSTALLED	DESCRIPTION	NET	TOTAL	RET	TOTAL PARTS EXPENSE REQUESTED	
A	1	C26326		8.28	8.28		TOTAL PARTS EXPENSE APPROVED	
							HANDLING ALLOWANCE OR SWA	
							FREIGHT	
							OUTSIDE LABOR AND MATERIAL	A B C
							TOTAL HOURS APPROVED SERVICE RATE	SERVICE EXP. REQUESTED
							$\text{---} \times \text{---} = \text{---}$	
							TOTAL OTHER EXPENSE REQUESTED	
							TOTAL OTHER EXPENSE APPROVED	
							TAX OR MISC.	
							PARTS ICA %	TOTAL ICA
							$\text{---} \times \text{---} = \text{---}$	
							<input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> SUSPENDED	CODE
PARTS EXPENSE OTHER PAGES							AUTHORIZED SIGNATURE	
PARTS EXPENSE THIS PAGE							MONTH DAY YEAR	

PRINTED IN USA

FORM 2951 REV. 3/82



Service Adjustment Request



☐ AE Division ☐ International ☐ Other
☐ CE Division ☐ OPE Division
INDICATE APPROPRIATE DIVISION FOR MAILING

FACTORY USE ONLY

REFERENCE 807159				UNIT OUT OF SERVICE 5 / 1 / 84 MONTH DAY YEAR				DATE PARTS REPLACED 5 / 1 / 84 MONTH DAY YEAR				PAGE OF	
CUSTOMER NAME				DEALER IMPRINT NAME				HOURS					
CITY *STOCK STATE/PROV.				Lawn & Garden Tractor Sales				ACCT. NUMBER					
COUNTRY POSTAL CODE				Address				7492					
PRODUCT LB. 14031949				CITY STATE COUNTRY				MOD PROGRAM NUMBER					
ENG. S/N TRANS S/N MODEL 108				Anytown, USA				MEAE					
WARR. ST. WARR. END TYPE CATEGORY				DEALER CODE 05-0004-000400				<input type="checkbox"/> REPLACEMENT PARTS ADJ.					
A	REPLACED	YES		JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N				
	NO	PRIME PART C26633	SERVICE CODE 275	MACHINE LOCATION 50110	HOURS 0.3**	HOURS	HOURS	HOURS	TOTAL HOURS 0.3	REMOVED PART S/N	HRS. on PART		
B	REPLACED	YES		JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS. on PART		
C	REPLACED	YES		JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS. on PART		
DEALER COMMENTS TO VALIDATE REQUEST:													
SAMPLE FOR 100 SERIES TRACTOR													
* Use customer's name if sold at retail ** Use 1.3 if sold at retail													
DEALER SIGNATURE John Doe										5 / 1 / 84 MONTH DAY YEAR			
PRIME	QTY	PART NUMBER INSTALLED	DESCRIPTION	NET	TOTAL	RET	TOTAL PARTS EXPENSE REQUESTED						
A	1	C26328		7.74	7.74		TOTAL PARTS EXPENSE APPROVED						
							HANDLING ALLOWANCE OR SWA						
							FREIGHT						
							OUTSIDE LABOR AND MATERIAL		A B C				
							TOTAL HOURS APPROVED SERVICE RATE		SERVICE EXP. REQUESTED				
							x						
							TOTAL OTHER EXPENSE REQUESTED						
							TOTAL OTHER EXPENSE APPROVED						
							TAX OR MISC.						
							PARTS ICA %		TOTAL ICA				
							x						
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								MONTH DAY YEAR					

PRINTED IN USA

1

DIVISION — SERVICE

FORM 2951 REV. 3/82



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL COMPACT TRACTOR DEALERS

ATTENTION: DEALER PRINCIPAL
SERVICE MANAGER
PARTS MANAGER

This Bulletin Supersedes
Ag Service Bulletin A71-83.

SUBJECT: MODEL 80 RER MOWER BLADE BOLT

Several reports from the field have been received indicating that the mower blade bolt has loosened or broken.

The cause for the bolt loosening and/or breaking has been attributed to the spindle bearing spacer (C24916) deforming and not providing the required compression load for the blade bolt. A thicker wall spacer is used effective with Model 80 RER PIN 14030722. The new spacer C24916 (same part number) has an OD of 1" (25.4mm). The old spacer's OD was 7/8" (22.2mm). SPS stock has been purged and any recently ordered spacers will be the new style.

Replace the spacer on all Model 80 RER mowers beginning with PIN 9759168 and prior to PIN 14030722 when the blade becomes loose, the unit is in for service, or when setting up and pre-delivering a new unit.

LABOR ALLOWANCE

One (1.0) hour will be allowed at the current registered dealer rate.

REIMBURSEMENT

Dealers can recover the cost of the spacer (C24916), 10% handling, and one hour labor by submitting a Service Adjustment Request indicating work done per Service Bulletin No. A71-83. Any additional parts worn and replaced due to normal use are not to be submitted for reimbursement.

Enter: Account Number 7479 for units in dealer inventory.
Account Number 7491 for units in retail and within regular warranty coverage.
Account Number 7493 for retailed units out of regular warranty coverage.

A sample Service Adjustment Request is attached. Please note the proper job code and prime part numbers.

Issued By	Date Issued	Bulletin No.	File Under:
Parts Service & Training Agricultural Equipment Division	12/22/83	A72-83	Binder: SERVICE INFORMATION
		Supersedes A71-83	Tab: COMPACT TRACTORS



J I Case
A Tenneco Company

Form 3191 Rev. 1
Printed in U.S.A.



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL AGRICULTURAL AND OPE DEALERS

ATTENTION: Dealer Principal
Service Manager
Parts Manager

SUBJECT: TWO SPEED TRANSAXLE GEAR ENGAGEMENT ADJUSTMENT MODELS 220, 222, 224

Action To Be Taken:

Each dealer must elongate the mounting holes in the front seat support on affected units. Only partial high range gear engagement is possible on affected units. This causes premature wear and failure of the gear teeth. Moving the front seat support slightly to the left will allow the shift lever to hold full engagement.

Machines Involved:

Model 220 PIN 14019184 to PIN 14019405
Model 222 PIN 14020869 to PIN 14021092
Model 224 PIN 14022622 to PIN 14022818

Parts Procurement:

No parts are required.

ACCOUNTING:

Labor:

Up to .5 hours per tractor.

Reimbursement:

The cost of labor can be recovered by submitting a Service Adjustment Request.

1. Use Account 7491 if sold at Retail. Use Account 7479 if in Dealer Stock.
2. Use Prime Part: C14644 Gear
3. Use Service Code: 205 Misalignment
4. Use Machine Location: 90111
5. Use Job Code: 90111 HM 0.5 hours

Issued By	Date Issued	Bulletin No.	File Under:
		A90-82	Binder: SERVICE INFORMATION
Customer & Product Service Agricultural Equipment Division	11/29/82	Supersedes	Tab: Compact Tractors



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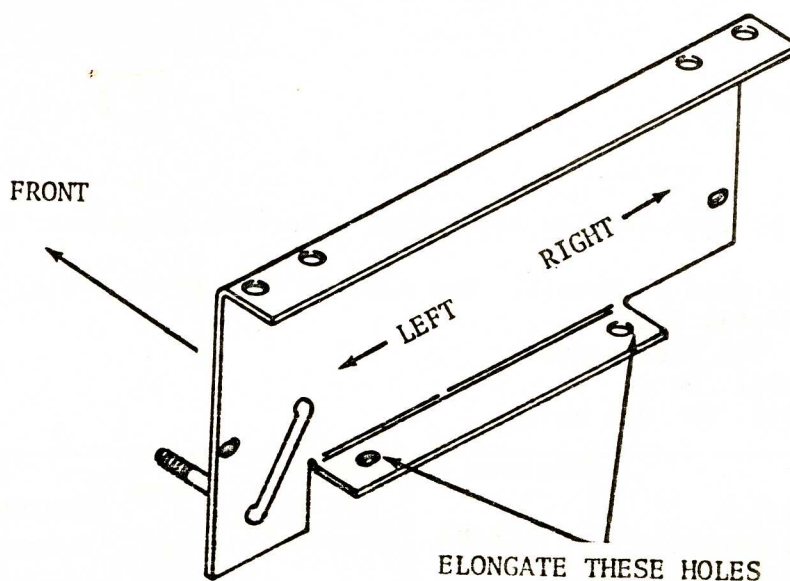
Form 3191 Rev. 1
Printed in U.S.A.

INSTRUCTIONS:

1. Remove the fenders and rear seat support.
2. Carefully push the fuel tank aside and remove the front seat support with the seat attached.
3. Clamp the front seat support in a vice.
4. Elongate the front seat support mounting holes 5/16" (8 mm) to the RIGHT. This will allow the seat support to be shifted to the left. (Right and left are determined as seated in the tractor seat facing forward.)
5. Install the front seat support (with seat) and shift it as far to the left as the elongated holes will allow.
6. Tighten the bolts.
7. Check for full high range gear engagement.

Push the lever "down" into high range as far as it will go and release it. The distance between the top edge of the lever and the bottom edge of the pin must not be more than .12 inch (3.2 mm). If the distance exceeds .12 inch (3.2 mm), remove the seat support and increase the slot size.

8. Install the rear seat support and shift it as far to the left as the slotted holes allow.
9. Install the fenders. Push the fenders inward as far as the fender mounting bolts will allow to obtain as much clearance for the tire chains as possible. Tighten the fender mounting bolts.





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Service Adjustment Request

☐ AE Division ☐ LE Division ☐ International
☐ CE Division ☐ OPE Division ☐



FACTORY USE ONLY

REFERENCE 545586				UNIT OUT OF SERVICE XX / XX / XX MONTH DAY YEAR				DATE PARTS REPLACED XX / XX / XX MONTH DAY YEAR				PAGE OF	
CUSTOMER NAME John Smith (Or Stock)				DEALER IMPRINT NAME OPE Dealer				HOURS					
CITY Oshkosh, STATE/PROV. WI				ADDRESS				ACCT. NUMBER 7491 or 7479					
COUNTRY				PRODUCT I.D. 140XXXXX				MOD PROGRAM NUMBER					
POSTAL CODE				CITY Anytown, STATE USA									
ENG S/N				MODEL GT200XXX									
TRANS S/N				DEALER CODE OX-00XX-XXXXXX									
WARR. ST.				WARR. END									
TYPE													
CATEGORY													
XX/XX/XX XX/XX/XX													
A	YES			JOB CODE 90111 H _M	JOB CODE	JOB CODE	JOB CODE	JOB CODE	NEW PART S/N				
	NO	PRIME PART C14644	SERVICE CODE 205	MACHINE LOCATION 90111	HOURS 0.5	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS ON PART		
B	YES			JOB CODE	JOB CODE	JOB CODE	JOB CODE	JOB CODE	NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS ON PART		
C	YES			JOB CODE	JOB CODE	JOB CODE	JOB CODE	JOB CODE	NEW PART S/N				
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS ON PART		

DEALER COMMENTS TO VALIDATE REQUEST:

DEALER SIGNATURE Signature

XX / XX / XX
MONTH DAY YEAR

PRIME	QTY	PART NUMBER INSTALLED	DESCRIPTION	NET	TOTAL	RET	TOTAL PARTS EXPENSE REQUESTED	
							TOTAL PARTS EXPENSE APPROVED	-0-
							HANDLING ALLOWANCE OR SWA	
							FREIGHT	
							OUTSIDE LABOR AND MATERIAL	A B C
							TOTAL HOURS APPROVED SERVICE RATE	SERVICE EXP. REQUESTED
							0.5 x XX.XX	XX.XX
							TOTAL OTHER EXPENSE REQUESTED	
							TOTAL OTHER EXPENSE APPROVED	
							TAX OR MISC.	
							PARTS ICA %	TOTAL ICA
							x	
							<input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> SUSPENDED	CODE
PARTS EXPENSE OTHER PAGES							RETURN AUTHORIZATION	
PARTS EXPENSE THIS PAGE							AUTHORIZED SIGNATURE	
							/ / MONTH DAY YEAR	

PRINTED IN USA

FORM 2951 REV. 3-67

1 DIVISION — SERVICE



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL AGRICULTURAL AND OPE DEALERS

ATTENTION: Dealer Principal
Service Manager
Parts Manager

SUBJECT: MODEL J-22, J-24, K-22, K-24 SLEEVE HITCH REINFORCEMENT WHEN USED WITH
MODEL J-74 END DRIVE TILLER

Action To Be Taken:

Each dealer must reinforce the sleeve hitch in accordance with the attached instructions if installing a Model J-74 End Drive Tiller.

Machines Involved:

All 200 and 400 Series tractors if equipped with a sleeve hitch and Model J-74 End Drive Tiller.

Parts Procurement:

Obtain the following parts from SPS through your normal parts order channels:

<u>Quantity</u>	<u>Part Number</u>	<u>Sleeve Hitch Model</u>
One kit per hitch	C26589	J-22, K-22
One kit per hitch	C26592	J-24, K-24

Installation Instructions:

One copy of sleeve hitch reinforcement instruction Form No. 9-51820 is attached to this bulletin. Additional copies can be obtained from Outdoor Power Equipment Division, 119 South First Street, Winneconne, WI 54986.

Accounting:

Labor

Up to 0.8 hours per hitch.

Issued By Customer & Product Service Agricultural Equipment Division	Date Issued 9/3/82	Bulletin No. A61-82	File Under: Binder: SERVICE INFORMATION Tab: COMPACT TRACTORS
		Supersedes	



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Form 3191 Rev. 1
Printed in U.S.A.

Reimbursement

The cost of parts and labor can be recovered by submitting a Service Adjustment Request:

1. Use Account No. 7491 if sold at retail. Use Account No. 7479 if in dealer stock.
2. Use GT PARTS in place of Product ID.

NOTE: Any number of sleeve hitches in dealer stock can be listed on each SAR. Only one sleeve hitch sold at retail can be listed on each SAR.

3. Use Prime Part: C23707 for J-22 or K-22 hitch.
Use Prime Part: C22218 for J-24 or K-24 hitch.
4. Use Service Code 275 (enter Service Bulletin Number in "Comments" section).
5. Use Machine Location: 96131.
6. Use Job Code: (a) 96131 BW 0.5 hours
if done before hitch is mounted

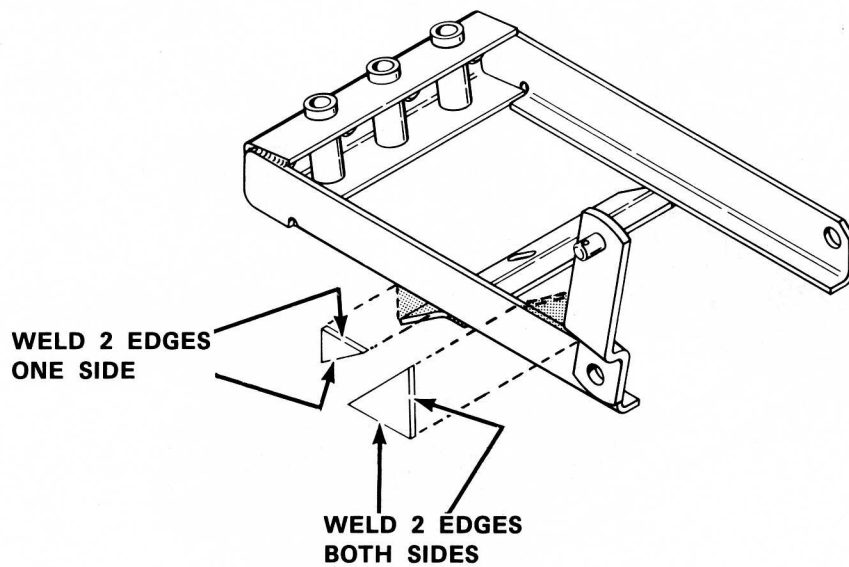
(b) 96131 B 0.3 hours

and

96131 BW 0.5 hours
if hitch is already mounted and must be removed from
the tractor

INSTALLATION INSTRUCTIONS
P/N C26589 REINFORCEMENT KIT FOR J-22/K-22 SLEEVE HITCH
(SEE OTHER SIDE FOR C26592 KIT)

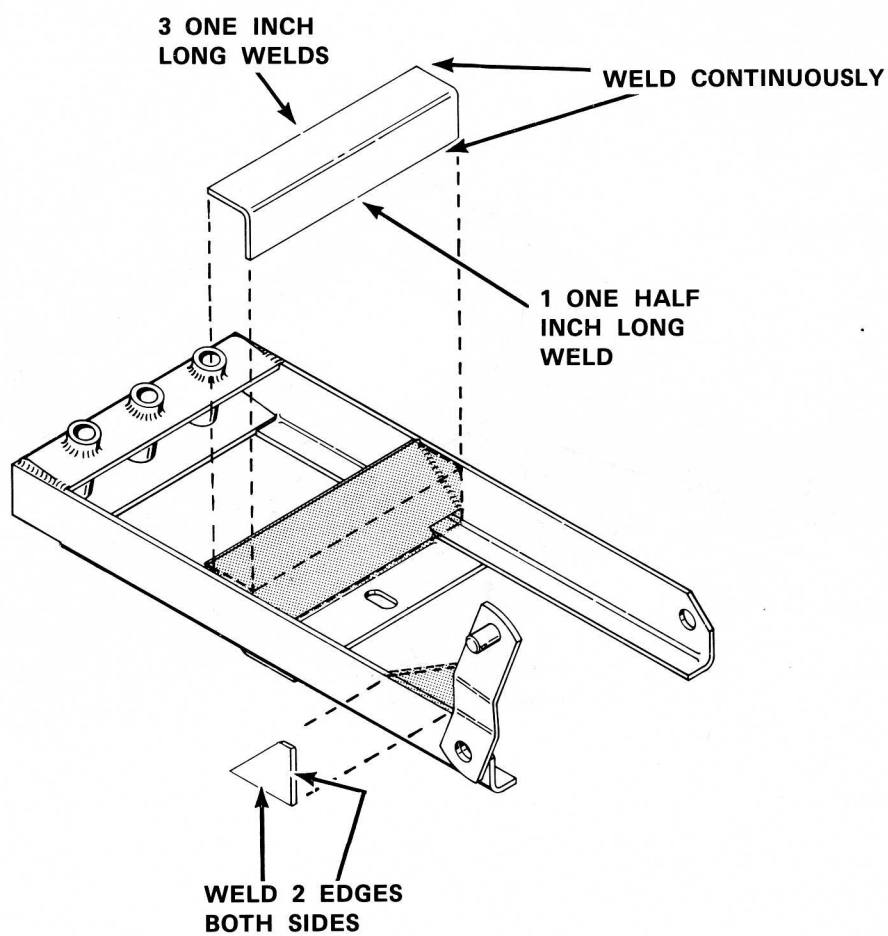
Weld reinforcements to the sleeve hitch frame as shown in the illustration.



Form No. 9-51820

INSTALLATION INSTRUCTIONS
P/N C26592 REINFORCEMENT KIT FOR J-24/K-24 SLEEVE HITCH
(SEE OTHER SIDE FOR C26589 KIT)

Weld reinforcements to the sleeve hitch frame as shown in the illustration.





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Service Adjustment Request

☐ AE Division ☐ LE Division ☐ International
☐ CE Division ☐ OPE Division ☐ _____
INDICATE APPROPRIATE DIVISION FOR MAILING



FACTORY USE ONLY

REFERENCE 545503				UNIT OUT OF SERVICE X / XX / XX MONTH DAY YEAR				DATE PARTS REPLACED X / XX / XX MONTH DAY YEAR				PAGE OF	
CUSTOMER NAME John Smith (Or Stock)				DEALER IMPRINT NAME OPE DEALER				HOURS					
CITY Oshkosh, STATE/PROV. WI ZIP 54963				ADDRESS				ACCT. NUMBER 7491 or 7479					
COUNTRY POSTAL CODE				CITY Anytown, STATE USA COUNTRY				MOD PROGRAM NUMBER					
PRODUCT I.D. GT Parts				DEALER CODE OX-00XX-XXXXXX				<input type="checkbox"/> REPLACEMENT PARTS ADJ.					
ENG S/N TRANS. MODEL J22 or K22 or J24 or K24													
WARR. ST. WARR. END TYPE CATEGORY													
A	REPLACED	YES	C22218			JOB CODE SEE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N		
	NO	PRIME PART	SERVICE CODE 275	MACHINE LOCATION 96131	HOURS INSTRUCTIONS	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS on PART	
B	REPLACED	YES				JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N		
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS on PART	
C	REPLACED	YES				JOB CODE	JOB CODE	JOB CODE	JOB CODE		NEW PART S/N		
	NO	PRIME PART	SERVICE CODE	MACHINE LOCATION	HOURS	HOURS	HOURS	HOURS	HOURS	TOTAL HOURS	REMOVED PART S/N	HRS on PART	
DEALER COMMENTS TO VALIDATE REQUEST:													
DEALER SIGNATURE _____ Signature _____ X / XX / XX MONTH DAY YEAR													
PRIME	QTY	PART NUMBER INSTALLED	DESCRIPTION	NET	TOTAL	RETRY	TOTAL PARTS EXPENSE REQUESTED						
A	1	C26592		4.65			TOTAL PARTS EXPENSE APPROVED						
		OR C26589					HANDLING ALLOWANCE OR SWA						
							FREIGHT						
							OUTSIDE LABOR AND MATERIAL			A			
										B			
										C			
							TOTAL HOURS SEE			APPROVED SERVICE RATE XX	SERVICE EXP. REQUESTED XXXXX		
							INSTRUCTIONS						
							TOTAL OTHER EXPENSE REQUESTED						
							TOTAL OTHER EXPENSE APPROVED						
							TAX OR MISC.						
							PARTS ICA %			TOTAL ICA			
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PRINTED IN USA

FORM 2951 REV. 3-6/81

1 DIVISION — SERVICE



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL COMPACT TRACTOR AND AGRICULTURAL DEALERS
ATTENTION: DEALER PRINCIPAL
SERVICE MANAGER
PARTS MANAGER
SUBJECT: COMPACT TRACTOR MODEL 210: JACKSHAFT INPUT PULLEY BOLT INSPECTION:
MODIFICATION PROGRAM NO. M9-Y-80

Initial production of 1980 model year Model 210 Tractors can have a loose jackshaft input pulley bolt.

The proper tightening procedure began at the Plant with Product Identification Number 9779012.

The following action is required:

All affected Model 210 Tractors must have the jackshaft input pulley bolt tightened to a torque of 31 ft.lbs. (42 Nm). Be sure the spring washer does not collapse.

To prevent jackshaft from turning when tightening this bolt:

- A. Place front wheels against shop wall or securely block front side of rear wheels.
- B. Place transmission in 4th gear.
- C. Release clutch-brake pedal.

It is permitted to estimate this torque using a box end wrench, since a standard torque wrench and socket will not fit this application.

The following tractors are affected:

P.I.N. 9760975 through 9779012

(Continued next page)

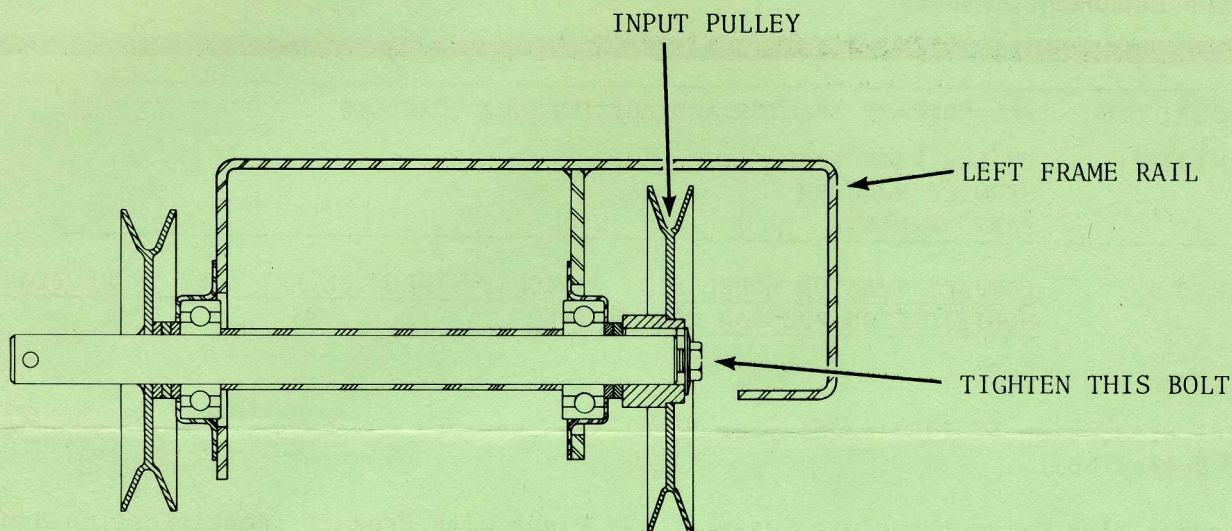
Issued By CUSTOMER AND PRODUCT SERVICE AGRICULTURAL EQUIPMENT DIVISION	Date Issued 5/28/80	Bulletin No. G1-80 A22-80	File Under: Binder: SERVICE INFORMATION
		Supersedes	Tab: 1045



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Form 3191 Rev. 1
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Refer to the following illustration:



ACCOUNTING:

PARTS

No parts are required.

LABOR

A. Units in Dealer Inventory:

Check this bolt for tightness during pre-delivery. This check requires a minimal amount of time. No labor allowance is granted for units in dealer inventory.

B. Units Sold at Retail:

Check or have the customer check this bolt for tightness immediately. Up to one (1) hour labor is allowed for retail units.

NOTE: Whether in stock or retailed, it is most important that this bolt be checked for proper tightness before the affected tractors are further operated.

REIMBURSEMENT

The cost of labor for retailed units can be recovered by submitting a Service Adjustment Request using Account 7492, Machine Area Code 10-11, and Modification Program No. M9-Y-80.

DEADLINE DATE

Service Adjustment Request must be submitted and postmarked no later than July 15, 1980, for retailed units.

NOTE: Failure to accomplish this inspection may result in denial of Service Adjustment Requests, resulting from failures in this area.

CUSTOMER AND PRODUCT SERVICE
AGRICULTURAL EQUIPMENT DIVISION

ROUTING				
DEALER PRINCIPAL	SERVICE MANAGER	PARTS MANAGER	MECHANICS	REFERENCE FILE

INGERSOLL

Ingersoll Equipment Co., Inc.

Exclusive Manufacturer of
JICase Outdoor Power Equipment

SERVICE BULLETIN

April 25, 1986

#86-1

DIRECTED TO: ALL INGERSOLL/CASE LAWN & GARDEN TRACTOR DEALERS

ATTENTION: DEALER PRINCIPAL
SERVICE MANAGER
PARTS MANAGER

SUBJECT: Front Wheel Snap-Rings - Model 80XM, 80XE, 80XC
RIDING LAWN MOWERS

ACTION TO BE TAKEN:

Install the correct snap-rings (P/N C28232) on the front wheel spindles during set-up and pre-delivery inspection. You may elect to send snap-rings to a customer to install if an affected unit is already delivered.

The incorrect snap-rings (P/N C28808) were put in the hardware bags of the affected units. The P/N C28808 snap-ring is to be used to secure the rear wheels only.

PURPOSE:

To insure proper retention of the front wheels on the machines involved.

The incorrect snap-ring (P/N C28808) is too thin for the groove and can be unseated during operation.

MACHINES INVOLVED:

<u>MODEL</u>	<u>P.I.N.</u>	<u>THRU</u>	<u>P.I.N.</u>
80XC	14078019		14081282
80XE	14078877		14082271
80XM	14079639		14083789

PARTS INFORMATION:

Order P/N C28232, snap-rings, from: Ingersoll Service Parts
3600 Moser Street
Oshkosh, WI 54903

Two snap-rings per affected unit are required.

INSTALLATION INSTRUCTIONS:

Use appropriate snap-ring pliers and install the snap-rings with the sharp edge facing outward.

REIMBURSEMENT:

Normal warranty will apply.

PARTS: All snap-rings for all affected units at your dealership can be listed on one Service Adjustment Request.

(List the P.I.N.'s in the comment section of the SAR).

LABOR: No labor is allowed since the operation is normally included in set-up.

Use Prime Part C28808 on the Service Adjustment Request.



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL COMPACT TRACTOR DEALERS

ATTENTION: DEALER PRINCIPAL
SERVICE MANAGER
PARTS MANAGER

This Bulletin Supersedes
Ag Service Bulletin A71-83.

SUBJECT: MODEL 80 RER MOWER BLADE BOLT

Several reports from the field have been received indicating that the mower blade bolt has loosened or broken.

The cause for the bolt loosening and/or breaking has been attributed to the spindle bearing spacer (C24916) deforming and not providing the required compression load for the blade bolt. A thicker wall spacer is used effective with Model 80 RER PIN 14030722. The new spacer C24916 (same part number) has an OD of 1" (25.4mm). The old spacer's OD was 7/8" (22.2mm). SPS stock has been purged and any recently ordered spacers will be the new style.

Replace the spacer on all Model 80 RER mowers beginning with PIN 9759168 and prior to PIN 14030722 when the blade becomes loose, the unit is in for service, or when setting up and pre-delivering a new unit.

LABOR ALLOWANCE

One (1.0) hour will be allowed at the current registered dealer rate.

REIMBURSEMENT

Dealers can recover the cost of the spacer (C24916), 10% handling, and one hour labor by submitting a Service Adjustment Request indicating work done per Service Bulletin No. A71-83. Any additional parts worn and replaced due to normal use are not to be submitted for reimbursement.

Enter: Account Number 7479 for units in dealer inventory.
Account Number 7491 for units in retail and within regular warranty coverage.
Account Number 7493 for retailed units out of regular warranty coverage.

A sample Service Adjustment Request is attached. Please note the proper job code and prime part numbers.

Issued By	Date Issued	Bulletin No.	File Under:
Parts Service & Training Agricultural Equipment Division	12/22/83	A72-83	Binder: SERVICE INFORMATION Tab: COMPACT TRACTORS
		Supersedes A71-83	



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ROUTING				
DEALER PRINCIPAL	SERVICE MANAGER	PARTS MANAGER	MECHANICS	REFERENCE FILE

INGERSOLL

Ingersoll Equipment Co., Inc.

Exclusive Manufacturer of
JCase Outdoor Power Equipment

SERVICE BULLETIN

April 30, 1986

#86-2

DIRECTED TO: ALL INGERSOLL/CASE LAWN & GARDEN TRACTOR DEALERS

ATTENTION: DEALER PRINCIPAL
SERVICE MANAGER
PARTS MANAGER

SUBJECT: MODIFICATION PROGRAM

VAPOR LOCK SYMPTOMS - MODEL 114YT AND 116YT YARD TRACTORS

ACTION TO BE TAKEN:

IMPORTANT: All affected 114YT and 116YT yard tractors must be modified.

1. Provide a ventilation slot in the front of the hood.
2. Add a muffler baffle.
3. Reroute and insulate the fuel line.

PURPOSE:

1. To permit additional cooling air to the engine and carburetor.
2. To reduce fuel pump temperature.
3. To keep fuel cooler and prevent vapor lock.

MACHINES INVOLVED:

114YT Prior to P.I.N. 14087915

116YT Prior to P.I.N. 14089641

PARTS INFORMATION:

Order P/N C30060 Kit, one per affected tractor at your dealership.

Order From: INGERSOLL SERVICE PARTS
3600 Moser Street
Oshkosh, WI 54903

INSTALLATION INSTRUCTIONS:

See Installation Instructions - Form #8-55280 attached.

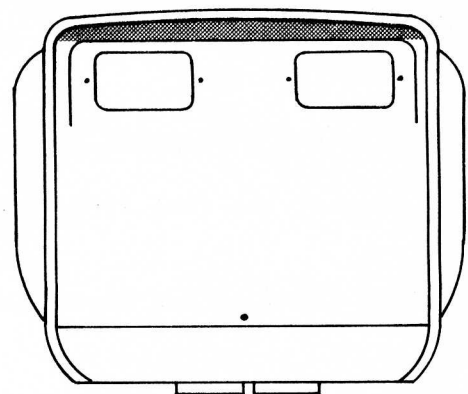
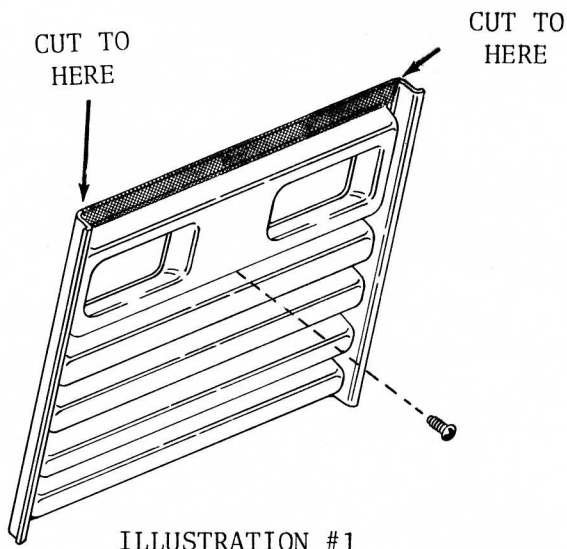
REIMBURSEMENT:

1. Normal warranty will apply.
2. Submit one Service Adjustment Request per tractor.
3. Use Prime Part: C30060 Dealer Net Price \$5.10
4. Service Code not required.
5. Use No Job Code: Enter 1 hour if in dealer stock
Use No Job Code: Enter 2 hours if retailed

INSTALLATION INSTRUCTIONS
MODEL 114YT AND 116YT HEAT REDUCTION KIT - FORM #8-55280

A. HOOD

1. Remove the hood.
2. Remove the headlights from the hood.
3. Remove the plastic grille insert.
 - a. Remove the 2 screws which secure the insert.
 - b. Use a small screwdriver to pry the upper left edge of the insert from the hood and then pop it out.
4. Cut the plastic insert.
 - a. Place the insert face up on a solid cutting surface.
 - b. Use a sharp utility knife.
 - c. Cut along the mold line as shown in illustration #1.
 - d. Remove and discard the cut piece.
5. Cut the hood:
 - a. Place the hood front end down on a piece of carpet or other suitable material to prevent the hood from being scratched.
 - b. Use a mini grinder or die grinder with a suitable cut off wheel.
 - c. Cut along the first bend line from the top as show in illustration #2.
 - d. Remove and discard the cut piece. (Shaded area).



6. Reassemble the hood:

- a. Install the plastic insert.
- b. Drill a .1285 hole (No. 30 Drill Bit) through the first horizontal rib under the headlights and secure with the screw previously used in the portion cut away.
- c. Install the headlights.

B. Install the Muffler Baffle

1. Remove the two front bolts which secure the existing muffler baffle to the cylinder head baffles.
2. Install the new muffler baffle so the curved portion is down and will direct air rearward.

C. REPLACE THE FUEL LINE

1. Disconnect the fuel line and drain the fuel into an approved container.

CAUTION: Handle gasoline with care - it is highly flammable.

- a. Use approved gasoline container.
 - b. Never remove the cap of the fuel tank or add gasoline to a running or hot engine, or fill the fuel tank indoors. Allow engine to cool for several minutes before refueling. Clean up spilled gasoline.
 - c. Open doors if the engine is run in the garage - exhaust fumes are dangerous. Do not run the engine (motor) indoors.
 - d. Do not smoke when working near fuel.
2. Remove and discard the fuel line between the fuel pump and fuel filter.
 3. Connect the new fuel line to the fuel filter.
 4. Route the new fuel line across the rear of the engine and through the right hand lift tab.
 5. Slip the insulating sleeve over the remaining fuel line.
 6. Connect the fuel line to the fuel pump inlet.

D. Install the Hood and Reconnect the Headlight Wires.

INGERSOLL

Ingersoll Equipment Co., Inc.

Service Adjustment Request

Refer to your IRES manual for complete instructions.

Factory Use Only

REFERENCE 1212984		DATE PARTS REPLACED <u>5 / 10 / 86</u> MONTH DAY YEAR		PAGE OF
Customer Name John Smith		Dealer Name Lawn & Garden Tractor Sales		HOURS
City State		Address		ACCT. NUMBER
Country Postal Code		City State Country		MOD PROGRAM NUMBER
Product Identification Number 140XXXXX		Engine Serial No.		<input type="checkbox"/> REPLACEMENT PARTS ADJ.
Model 114		Warranty Start Date 10/30/85		
		Dealer Code 0415XXX		

A			Job Code - - - -	Job Code	Job Code	Job Code	TOTAL HOURS
	Prime Part C30060	Service Code ---	Hours 2.0	Hours	Hours	Hours	
B			Job Code	Job Code	Job Code	Job Code	TOTAL HOURS
	Prime Part	Service Code	Hours	Hours	Hours	Hours	
C			Job Code	Job Code	Job Code	Job Code	TOTAL HOURS
	Prime Part	Service Code	Hours	Hours	Hours	Hours	

DEALER MUST COMMENT TO VALIDATE REQUEST:

SAMPLE - SOLD AT RETAIL

John Doe
DEALER SIGNATURE 5 / 11 / 86
MONTH DAY YEAR

PRIME	QTY	PART NUMBER INSTALLED	DESCRIPTION	NET	TOTAL	RET	TOTAL PARTS EXPENSE REQUESTED	
A	1	C30060	Kit				TOTAL PARTS EXPENSE APPROVED	
							HANDLING ALLOWANCE	
							FREIGHT	
							OUTSIDE LABOR AND MATERIAL	A B C
							TOTAL HOURS	
							APPROVED SERVICE RATE	
							<u>2</u> x <u>XX.XX</u> =	SERVICE EXP. REQUESTED <u>XX.XX</u>
							TOTAL OTHER EXPENSE REQUESTED	
							TOTAL OTHER EXPENSE APPROVED	
							MISC.	
							<input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> SUSPENDED	
							RETURN AUTHORIZATION	
PARTS EXPENSE OTHER PAGES			PARTS EXPENSE THIS PAGE			AUTHORIZED SIGNATURE / / MONTH DAY YEAR		

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SERVICE

FORM NO. 01078
1-85-MBF-10000

INGERSOLL

Service Adjustment Request

Ingersoll Equipment Co., Inc.

Refer to your IRES manual for complete instructions.

Factory Use Only

REFERENCE 1212984	DATE PARTS REPLACED <u>5 / 10 / 86</u> MONTH DAY YEAR	PAGE OF
Customer Name	Dealer Name LAWN & GARDEN TRACTOR SALES	HOURS
City STOCK	Address	ACCT. NUMBER
Country	City State Country	MOD PROGRAM NUMBER
Product Identification Number 140XXXXX	Engine Serial No.	<input type="checkbox"/> REPLACEMENT PARTS ADJ.
Model 114	Warranty Start Date	
Dealer Code 0415XXX		

			Job Code	Job Code	Job Code	Job Code	TOTAL HOURS
A	Prime Part C30060	Service Code ---	Hours 1.0	Hours	Hours	Hours	
B	Prime Part	Service Code	Hours	Hours	Hours	Hours	TOTAL HOURS
C	Prime Part	Service Code	Hours	Hours	Hours	Hours	TOTAL HOURS

DEALER MUST COMMENT TO VALIDATE REQUEST:

SAMPLE - DEALER STOCK

John Doe
DEALER SIGNATURE

5 / 11 / 86
MONTH DAY YEAR

PRIME	QTY	PART NUMBER INSTALLED	DESCRIPTION	NET	TOTAL	RET	TOTAL PARTS EXPENSE REQUESTED	
A	1	C30060	Kit				TOTAL PARTS EXPENSE APPROVED	
							HANDLING ALLOWANCE	
							FREIGHT	
							OUTSIDE LABOR AND MATERIAL	A
								B
								C
							TOTAL HOURS 1	APPROVED SERVICE RATE XX.XX
								= XX.XX
							TOTAL OTHER EXPENSE REQUESTED	
							TOTAL OTHER EXPENSE APPROVED	
							MISC.	
							<input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> SUSPENDED	
							RETURN AUTHORIZATION	
PARTS EXPENSE OTHER PAGES			PARTS EXPENSE THIS PAGE			AUTHORIZED SIGNATURE		

PRINTED IN USA

DEALER

MONTH DAY YEAR

FORM NO. 01078
1-85-MBF-10000



Service Bulletin

Directed To ALL COMPACT TRACTOR & AGRICULTURAL DEALER

File Code 1045

Date December 4, 1978

No. G 1-78
A30-78

Agricultural Division

Subject MODEL 80 RIDING MOWER, KIT #C25124 - MODIFICATION PROGRAM #9-G-78

ATTENTION: SERVICE MANAGER
PARTS MANAGER

This Service Bulletin announces a Modification Program for all Model 80 Riding Mowers produced during 1977 and 1978.

Kit No. C25124 contains the necessary parts and detailed instructions to complete the modification, which involves several different areas of the machine.

ACTION TO BE TAKEN

Each dealer must check his sales records and make contact with each Model 80 retail customer/owner and request that each machine be returned to the dealership for modification during this coming winter season.

Additionally, any 1977/1978 Model 80 Riding Mowers in dealer inventory will also need to be modified under this program.

MACHINES INVOLVED

All 1977/1978 Model 80 Riding Mowers Serial No. 9745295 through 9759203 inclusive.

PARTS PROCUREMENT

Kit No. C25124 can be obtained from SPS through your normal parts ordering channels.

ACCOUNTING

Labor:

Up to six (6) hours per machine will be allowed to carry out the modifications detailed in the Kit Part No. C25124.

Reimbursement:

The cost of the parts and labor can be recovered by submitting a standard Warranty Adjustment Request, using Account 7492, Machine Area Code 7-3, and Program #9-G-78.

DEADLINE DATE

Termination date for Program #9-G-78 is June 30, 1979.

CUSTOMER AND PRODUCT SERVICE
AGRICULTURAL EQUIPMENT DIVISION



J I Case
A Tenneco Company

Printed in U.S.A.



SERVICE BULLETIN

Agricultural Equipment Division

DIRECTED TO: ALL AGRICULTURAL AND OPE DEALERS

ATTENTION: Dealer Principal
Service Manager
Parts Manager

SUBJECT: MODEL J-22, J-24, K-22, K-24 SLEEVE HITCH REINFORCEMENT WHEN USED WITH
MODEL J-74 END DRIVE TILLER

Action To Be Taken:

Each dealer must reinforce the sleeve hitch in accordance with the attached instructions if installing a Model J-74 End Drive Tiller.

Machines Involved:

All 200 and 400 Series tractors if equipped with a sleeve hitch and Model J-74 End Drive Tiller.

Parts Procurement:

Obtain the following parts from SPS through your normal parts order channels:

<u>Quantity</u>	<u>Part Number</u>	<u>Sleeve Hitch Model</u>
One kit per hitch	C26589	J-22, K-22
One kit per hitch	C26592	J-24, K-24

Installation Instructions:

One copy of sleeve hitch reinforcement instruction Form No. 9-51820 is attached to this bulletin. Additional copies can be obtained from Outdoor Power Equipment Division, 119 South First Street, Winneconne, WI 54986.

Accounting:

Labor

Up to 0.8 hours per hitch.

Issued By Customer & Product Service Agricultural Equipment Division	Date Issued 9/3/82	Bulletin No. A61-82	File Under: Binder: SERVICE INFORMATION Tab: COMPACT TRACTORS
		Supersedes	



J I Case
A Tenneco Company

Form 3191 Rev. 1
Printed in U.S.A.

Reimbursement

The cost of parts and labor can be recovered by submitting a Service Adjustment Request:

1. Use Account No. 7491 if sold at retail. Use Account No. 7479 if in dealer stock.
2. Use GT PARTS in place of Product ID.

NOTE: Any number of sleeve hitches in dealer stock can be listed on each SAR. Only one sleeve hitch sold at retail can be listed on each SAR.

3. Use Prime Part: C23707 for J-22 or K-22 hitch.
Use Prime Part: C22218 for J-24 or K-24 hitch.
4. Use Service Code 275 (enter Service Bulletin Number in "Comments" section).
5. Use Machine Location: 96131.
6. Use Job Code: (a) 96131 BW 0.5 hours
if done before hitch is mounted

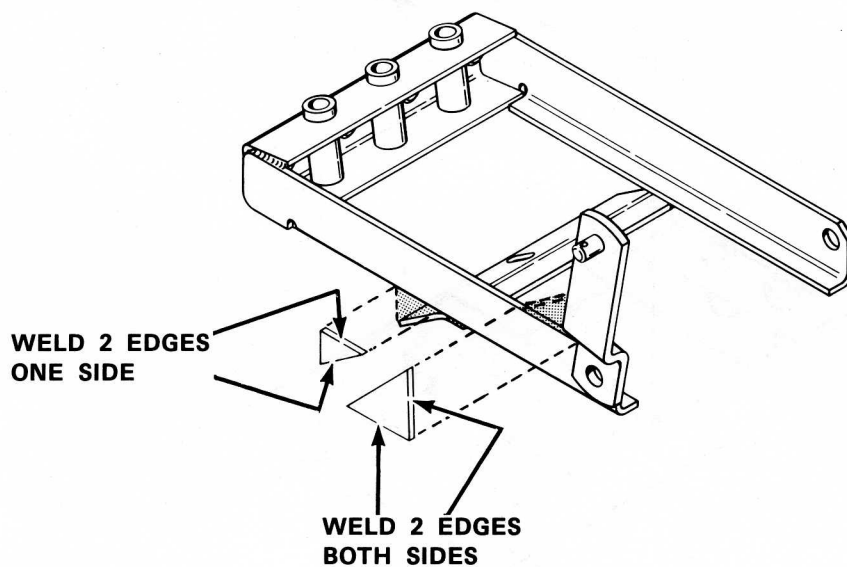
(b) 96131 B 0.3 hours

and

96131 BW 0.5 hours
if hitch is already mounted and must be removed from
the tractor

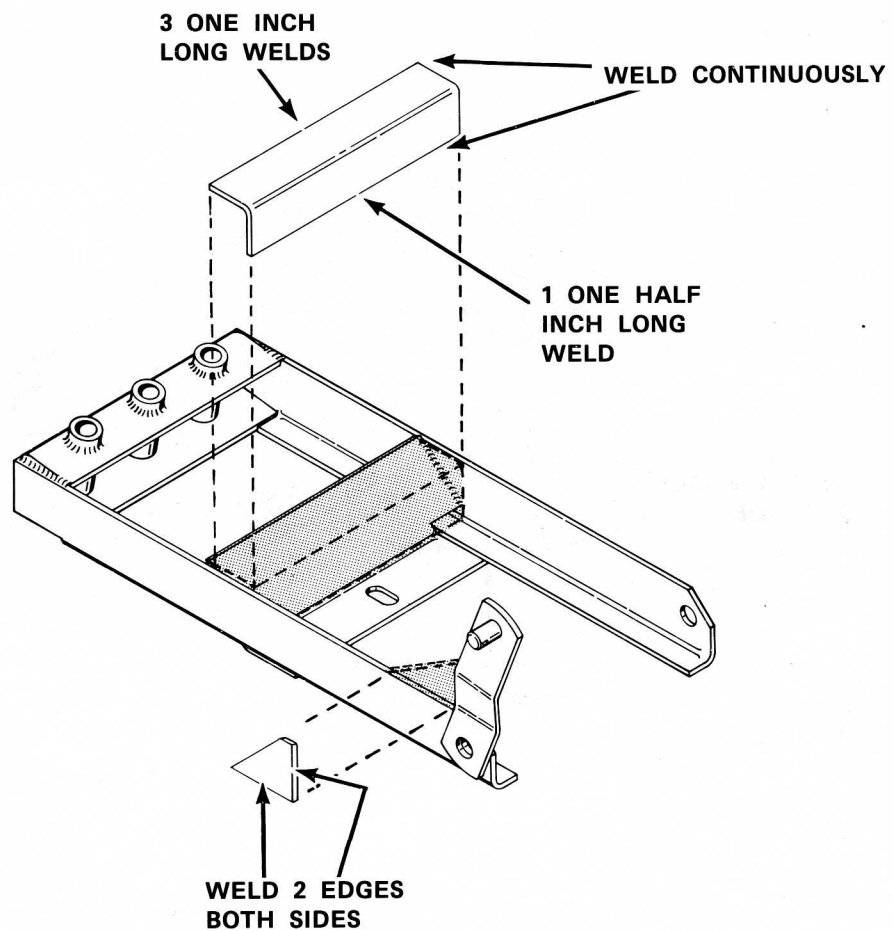
INSTALLATION INSTRUCTIONS
P/N C26589 REINFORCEMENT KIT FOR J-22/K-22 SLEEVE HITCH
(SEE OTHER SIDE FOR C26592 KIT)

Weld reinforcements to the sleeve hitch frame as shown in the illustration.



INSTALLATION INSTRUCTIONS
P/N C26592 REINFORCEMENT KIT FOR J-24/K-24 SLEEVE HITCH
(SEE OTHER SIDE FOR C26589 KIT)

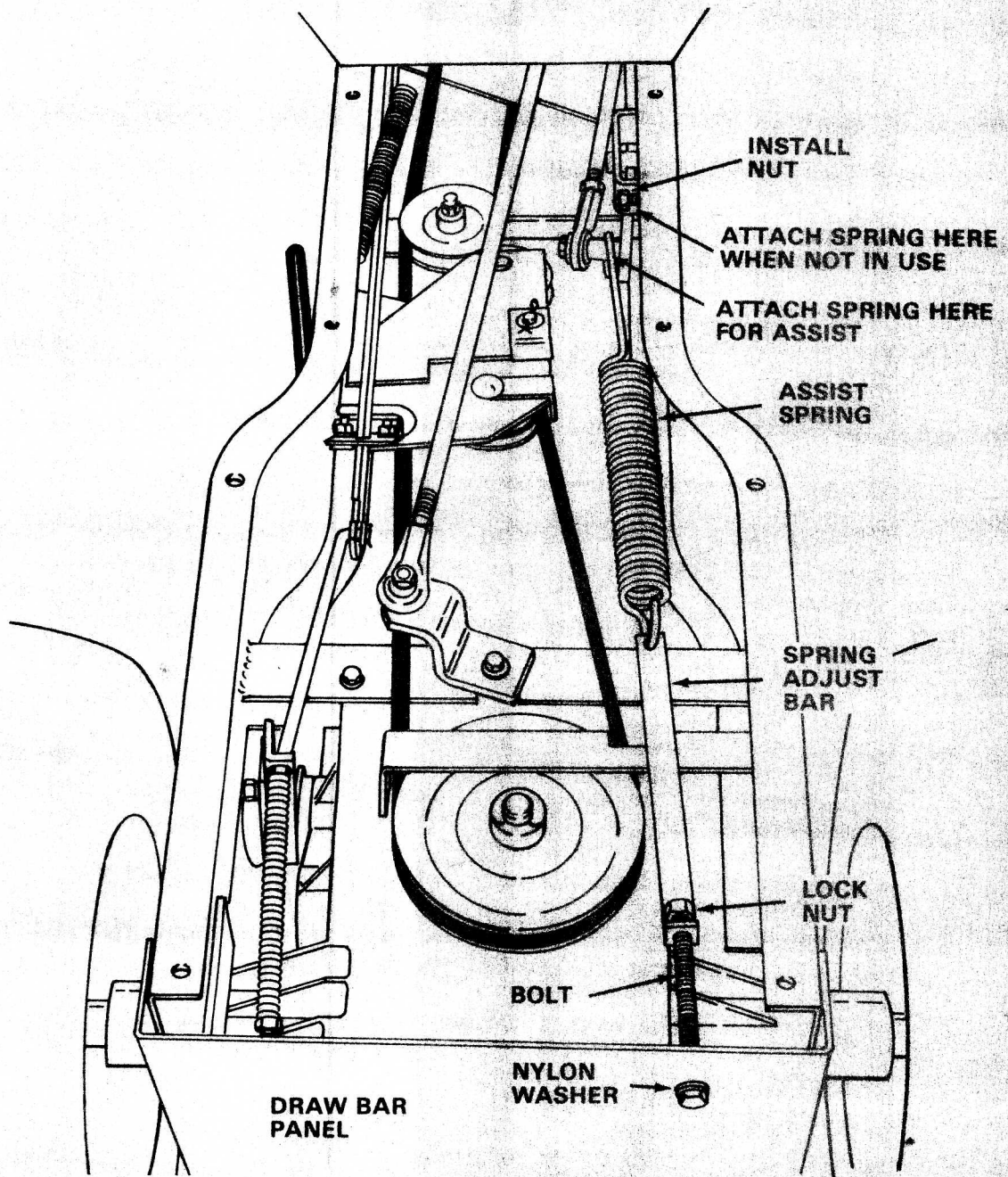
Weld reinforcements to the sleeve hitch frame as shown in the illustration.



INSTALLATION INSTRUCTIONS
FOR ATTACHMENT LIFT ASSIST SPRING
ON 100 SERIES YARD TRACTORS
C30162KIT

1. Remove center tray and rear fenders from the tractor frame.
2. Insert the bolt with nylon washer through the rear drawbar panel.
3. Install the spring adjust bar on the bolt. Secure with the lock nut.
4. Put the attachment lift lever into the transport position. Attach the spring, as shown, from the spring adjust bar to the bellcrank.
5. Install a lock nut on the rear bolt of the mounting bracket for the bellcrank. Leave a 1/8 inch space between the two nuts. This will provide an anchoring point for the assist spring when it is not needed.
6. Adjust the lift assist spring according to the operator's manual.
7. Install the rear fenders and center tray.
8. When you use the lift for the 34", 38" and 42" mowers, the assist spring is not needed. The lift assist spring must be removed to prevent these mowers from spontaneously raising into the transport position. To disconnect the lift assist spring, use the following procedure:
 - a. Remove center tray.
 - b. Put the attachment lift lever into the transport position.
 - c. Release the tension on the lift assist spring by turning the bolt counterclockwise.
 - d. Disconnect the assist spring from the bellcrank end only.
 - e. Hook the assist spring to the rear bolt of the mounting bracket for the bellcrank. Put it between the two nuts.
 - f. Put tension on the assist spring to keep it in place.
 - g. Install the center tray.

SEE OTHER SIDE FOR ILLUSTRATION





119 South First Street
Winneconne, Wisconsin 54986
Phone 414 582-4455

November 14, 1980

TO: All Compact Tractor Dealers *Att. Kyle*

Effective with the units listed below the unit crate will contain a crating check list signed by the individual responsible for the final crating.

If a parts shortage should occur on any of these units, the name of the individual must be included with the model and serial number when making the request for parts shipment.

The starting serial numbers are as follows:

Mod 80	9776173
108	9777233
110	9778137
210	9779220
220	9780482
222	9782187
224	9783698
444	9785120
446	9787815
448	9790052
646 All	9791174
648 All	First Unit

Sincerely,

J. J. Balza
J. J. Balza
Distribution & Plans Manager

JJB/ht

cc: District Managers
Service Reps



INSTALLATION INSTRUCTIONS P/N C27271
TRAVEL CONTROL LINKAGE AND DETENT KIT

To install this kit:

- A. The travel control neutral start switch must be changed.
 - B. A new end cap with detent must be installed on the travel circuit spool of the travel control valve.
 - C. The old hole welded closed and a new hole drilled in the travel control lever tab.
-
- A. Install the new travel control neutral start switch.
 - 1. Drain the hydraulic oil into a clean container. The oil should be saved and reused.
 - 2. Remove the battery.
 - 3. Remove the tower access panel and disconnect the rectifier.
 - 4. Remove the pump suction hose clamp at the pump.
 - 5. Remove the heat shield and necessary wiring from in front of the reservoir.
 - 6. For Kohler equipped tractors, remove the rear engine baffle and exhaust pipe. For Onan equipped tractors, remove the air cleaner and left hand (#2) rear baffle.
 - 7. Move the reservoir aside.
 - 8. Replace the travel control neutral start switch.
 - B. Install new end cap and detent.
 - 1. Remove the link from the attachment lift control lever tab and travel control lever tab.
 - 2. Remove the tubes and hoses from the control valve.
 - 3. Remove the travel control valve.
 - 4. Place the valve in a soft jawed vice with the rear end facing upward.
 - 5. Remove and discard (from the travel control spool), the end cap (27), the screw (26), retainer (25), and centering spring (24).
 - 6. Leave the first flat washer (23) in place. Put a second flat washer (6), provided, on top of the first.
 - 7. Put Loctite #242 on detent screw (9) install, and tighten to a torque of 24 to 36 inch lbs.
 - 8. Install the detent cap (10), balls (11), springs (12), and screws (13).
 - 9. Install the travel control valve. (Do not connect linkage at this time.)

-OVER-

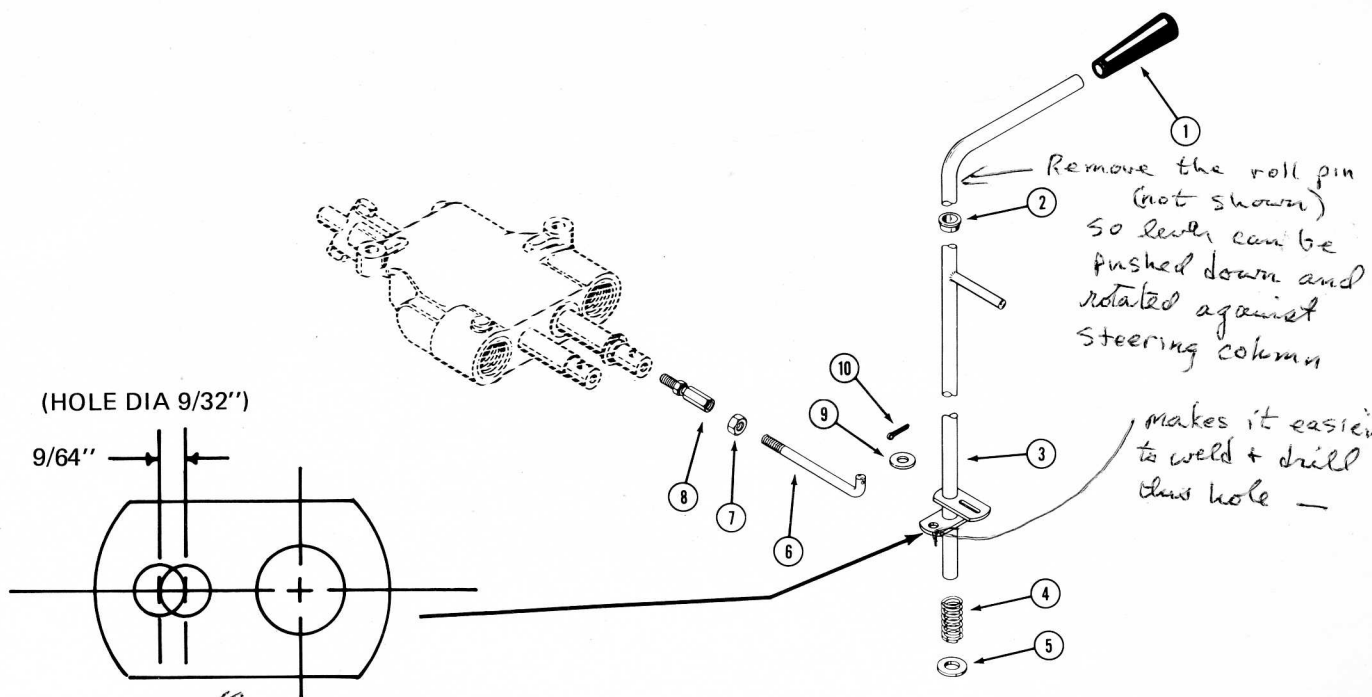
C. Drill hole in travel control lever.

The old hole must be filled with weld and a new hole, 9/32" (7.14mm) diameter, must be drilled 9/64" (3.57mm) closer to the lever shaft.

1. Position the travel control lever in full forward to permit access to the tab.
2. Scribe a centerline on the tab from the shaft through the existing hole. (See diagram)
3. Measure, along that centerline, from the right hand edge of the tab to the left hand edge of the existing hole. Record this measurement... it will be the center of the new hole.
4. Close the old hole.
5. Center punch and drill the new 9/32" hole.
6. Grind smooth one side of washer (9) to prevent interference with lever shaft.
7. Connect travel control and implement lift linkage. Adjust travel control linkage so that detents for neutral and retard agree between the travel control neutral start switch and valve.
8. Install reservoir.
9. Fill reservoir, reinstall rectifier, access panel, battery, and other items removed.

Carefully operate tractor. Check for leaks and readjust the travel control valve link if necessary.

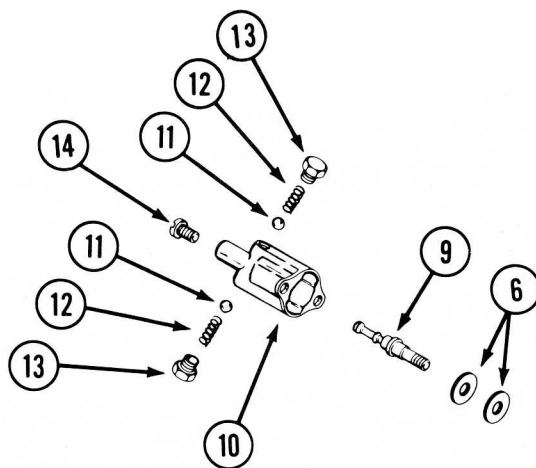
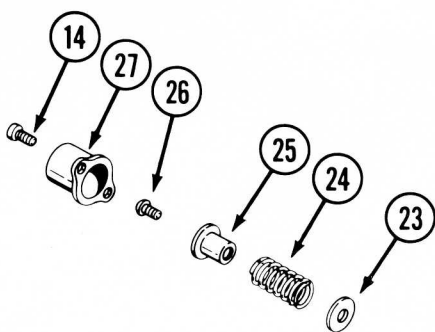
Recheck the hydraulic oil level and add if necessary.



- ① Do this first - it may be enough -
- ② Replace nylon locator 2nd - (may not be needed)

REMOVE

INSTALL



SET UP INSTRUCTIONS FOR
TRACTOR MODELS 3010, 3012, 3014, 3016, 3018, 4014, 4016, 4018, 4020

1. Remove the steel straps which secure the tractor to the shipping skid.
2. Carefully raise and block the front of the tractor to provide clearance for installing the king pin assemblies and the front wheels.
3. Clean the king pins. Remove one heat treated washer from each king pin. Assemble the king pins to the front axle.

Place the two heat treated washers, previously removed, over the top of the king pins and install the retaining rings provided.

4. Attach the drag link to the right hand king pin.
5. Place one thick shim washer over each front spindle. Install the front wheels with the valve stems to the OUTSIDE. Add shim washers as required to reduce end play to a minimum.
6.
 - a. Install retaining rings if equipped. Make sure they are fully seated in the grooves with the square cut edge to the outside.
 - b. Or install cotter pins if equipped. Bend over completely, flatten head and squeeze ends tight against spindles with a large pair of pliers.
7. Grease the wheels. Install the dust caps.
8. Remove the blocking from the front of the tractor.
9. Carefully raise and block the rear of the tractor to provide clearance for installing the rear wheels.
10. Use the following procedure to install the fenders:
 - a. Position the fenders on the seat support.
 - b. Loosely install the front, rear, and top fender bolts and the screw and nut between the fender and foot support.
 - c. Tighten all bolts.
11. Install the rear wheels with the valve stems to the INSIDE. Tighten lug bolts:

3000 Series Tractors - 65-70 lb. ft. (90-95 Nm)
4000 Series Tractors - 80-85 lb. ft. (110-115 Nm)

12. Remove blocking from rear of tractor.

(OVER)

13. Pull the steering shaft up as far as it will go. Keep the steering shaft in this position while performing the following steps.
14. Clean the exposed end of the shaft and apply a coating of anti-seize compound.
15. Temporarily install the steering wheel and insert a punch (or similar tool) through the roll pin hole.
16. Select shim washers from the hardware bag.
17. Use the shim washers as a gauge to determine how many washers are required to shim between the bottom of the steering wheel and the steering support. Use enough shim washers to reduce end play to a minimum.
18. Remove the steering wheel and place the shim washers over the shaft.
19. Install the steering wheel with one spoke pointing forward.
20. Install the roll pin.
21. 4000 Series tractors only: Install the seat in the desired position. (Install the seat in the center holes, if for display purposes).

Put one rubber cushion between the seat and seat hinge and the other rubber cushion under the seat hinge with the flat washer under the bolt head.

NOTE: Before operating or delivering the tractor to a customer, perform the checks outlined on the "PREDELIVERY CHECK SHEET".

NOTE: Tractor engine will not run unless a functional battery is installed.

SET UP INSTRUCTIONS FOR
TRACTOR MODELS 3010, 3012, 3014, 3016, 3018, 4014, 4016, 4018, 4020

1. Remove the steel straps which secure the tractor to the shipping skid.
2. Carefully raise and block the front of the tractor to provide clearance for installing the king pin assemblies and the front wheels.
3. Clean the king pins. Remove one heat treated washer from each king pin. Assemble the king pins to the front axle.

Place the two heat treated washers, previously removed, over the top of the king pins and install the retaining rings provided.

4. Attach the drag link to the right hand king pin.
5. Place one thick shim washer over each front spindle. Install the front wheels with the valve stems to the OUTSIDE. Add shim washers as required to reduce end play to a minimum.
6.
 - a. Install retaining rings if equipped. Make sure they are fully seated in the grooves with the square cut edge to the outside.
 - b. Or install cotter pins if equipped. Bend over completely, flatten head and squeeze ends tight against spindles with a large pair of pliers.
7. Grease the wheels. Install the dust caps.
8. Remove the blocking from the front of the tractor.
9. Carefully raise and block the rear of the tractor to provide clearance for installing the rear wheels.
10. Use the following procedure to install the fenders:
 - a. Position the fenders on the seat support.
 - b. Loosely install the front, rear, and top fender bolts and the screw and nut between the fender and foot support.
 - c. Tighten all bolts.
11. Install the rear wheels with the valve stems to the INSIDE. Tighten lug bolts:

3000 Series Tractors	- 65-70 lb. ft.	(90-95 Nm)
4000 Series Tractors	- 80-85 lb. ft.	(110-115 Nm)
12. Remove blocking from rear of tractor.

(OVER)

SET UP INSTRUCTIONS FOR RIDING LAWNMOWER

1. Install Steering Wheel:
 - a. Using a large screwdriver, pry up on the pinion gear on the lower end of the steering shaft.
 - b. Install shims provided under steering wheel to reduce steering shaft end play to between .002" and .120" (.05 and 3 mm).
 - c. Clean the exposed end of the shaft and apply a coating of anti-seize compound.
 - d. Position steering wheel on shaft and sight dowel pin hole to insure alignment. If hole in steering wheel and shaft are not in perfect alignment, rotate steering wheel 180° in relation to the shaft.
 - e. Carefully drive dowel pin through steering wheel hub and shaft.
2. Install Front Wheels and Tires:
 - a. Oil front wheel spindles lightly.
 - b. Position one thrust washer on each side of wheel and install wheels on spindles with valve stems out.
 - c. Secure with snap rings.
 - d. Grease front wheels. Install plastic dust caps.
 - e. Adjust front tire pressures to 8 PSI.
3. Adjust rear tire pressures to 8 PSI.
4. Check the mower deck level adjustment:

For Best Results:

 - a. If unit is sold with a bagger attachment, the front tip of blade should be 3/8" to 1/2" (9 mm to 12 mm) lower than rear tip.
 - b. If unit is sold without a bagger attachment, the front tip of blade should be 1/4" to 3/8" (6 mm to 9 mm) lower than rear tip.
 - c. Deck level measurements should be made with operator's seat unoccupied and bagger (if so equipped) empty.
 - d. If deck level is incorrect, refer to the leveling procedure in the operator's manual provided with this machine.
5. Install Discharge Chute:
 - a. Discharge chute must be installed before operating.
 - b. Install to two holes using carriage bolts provided.
6. Activate and charge battery.
7. Check engine oil level.
8. Fill fuel tank with clean, fresh gasoline.

NOTE: Before operating or delivering the tractor to a customer, perform the check outlined on the "Predelivery Check Sheet".

UNIT INFORMATION

Model: 4116 Product Identification Number: 14171694
Warranty Start Date: / /

CUSTOMER INFORMATION

Name: Glean Wells
Address:

Phone: 701-265-4133

SELLING DEALER

Name: Anderson Sales Inc
Address:

Phone: 701-265-4977
Dealer Code:

DEALER INSTRUCTIONS

When the unit is sold:

- Complete the unit, customer and selling dealer information sections above.
- Review the information contained on this annual service check-up form with the purchaser.
- At the time of delivery, be sure this check-up form is given to the purchaser along with the equipment Operator's Manuals.

When performing the annual check-up:

- Check that PIN number identified above matches PIN number on unit.
- Verify that this annual check-up is being performed within 12 months of the last annual check-up validated on the following check list pages. If last annual check-up was more than 12 months ago, refer to your Dealer IRES Warranty manual or contact the Ingersoll warranty department regarding how to proceed.
- The checklist identifies services the dealer must perform to maintain TOP Lifetime Warranty qualification. NOTE: Since engine warranty is limited to 24 months from date of purchase, customer is not required to have dealer perform engine related services after that warranty expires.
- Ensure that customer understands that responsibility for costs associated with this check-up and services are as follows:

Customer's responsibility —

- 1.) Transportation to and from dealer.
- 2.) Cost of parts & labor associated with performing routine check-up services.
- 3.) Additional services arranged between dealer and customer.

Ingersoll's responsibility —

- 1.) Cost of parts and labor associated with repair of any defective item covered by the TOP Lifetime Warranty

After service check-up is completed, be sure all items on the checklist have been performed and checked. Complete top and bottom portions of checklist with date, engine hours, dealer name, dealer code and work order number. Make a copy of the validated checklist and file with your owner registration information. To prevent confusion, keep only the latest validated checklist on file.