

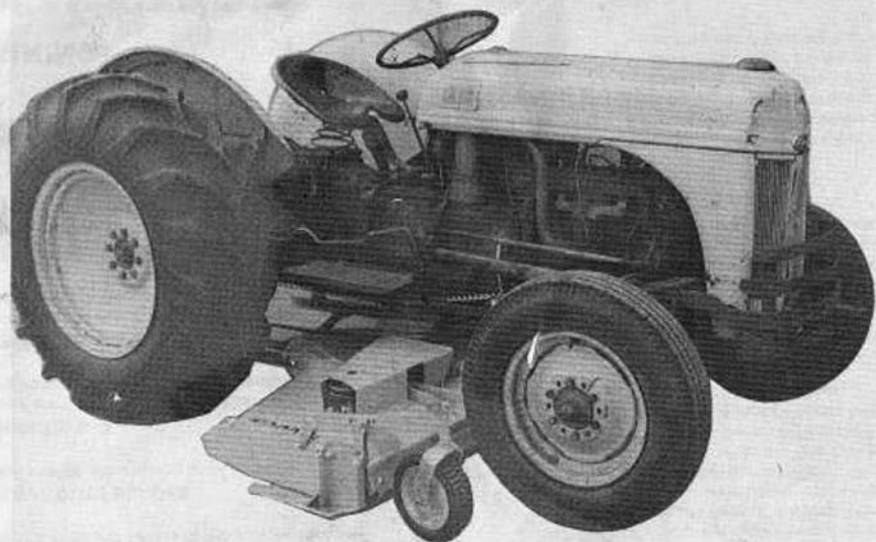
WOODS

Division of Hesston Corporation
OREGON, ILLINOIS 61061

636 349 0200

JAY 29749

OWNERS MANUAL and PARTS LIST with ASSEMBLY INSTRUCTIONS



L59F8N-1 & L306F8N-1

For Use On:
Ford 2N, 8N, 9N, NAA, 600,
800, 601, 801, Utility 3400
Series; Fordson Dexta; Ferguson
TE20, TO20, TE30 & TO30

LATEST MANUAL
REVISION 9-82

WOODS rotary mower

F-6588 (11-78)

★ **RUGGED CONSTRUCTION**

Main frame is 8 gauge plate, reinforced by heavy angles, bar & pipe.

★ **SHIELDS FOR SAFETY**

Mowing parts and blades completely surrounded.

★ **HEAVY DUTY BLADES**

Heat treated, alloy spring steel blades.

★ **V-BELT DRIVE**

Gives smoother operation and absorbs shock, preventing damage to machine and tractor. One belt used to drive all three blades.

★ **SIMPLE BELT ADJUSTMENT**

Stretch in belt easily taken up with one adjustment. Moving idlers down tightens belt for all spindles.

★ **HEIGHT ADJUSTMENT**

Has range to suit all jobs. Tractor hydraulic control carries mower and is used to adjust mowing height when casters aren't used.

59, L59 & L306 SAFETY INSTRUCTIONS

THIS MOWER CONFORMS TO THAT PORTION OF ANSI B71.1 SAFETY STANDARDS WHICH PERTAIN TO TRACTOR MOUNTED MOWERS.

TRAINING

1. Read your operator's manual before using mower.
2. Never allow children to operate a power mower.
3. Learn how to stop the mower quickly in the event of an emergency.
4. Instruct children to stay away from the mower while it is in operation.
5. Always remove key when leaving tractor unattended.

PREPARATION

1. Before mowing, clear area of debris.
2. Set mower at highest cutting height when mowing in rough ground or tall weeds.
3. Mow only in daylight or in good artificial light.
4. Keep all shields and guards in place. Stay clear of all drives and belts.
5. Fill fuel tank outdoors, but never while engine is running. Avoid spilling.

SAFE OPERATION

1. Give complete and undivided attention to the job at hand.
2. Do not operate mower in the vicinity of other persons. NO RIDERS.
3. Stop the engine whenever you dismount from tractor.
4. Stand clear of the front of mower.
5. Use caution when operating the mower on uneven terrain and if very uneven, use rear wheel weights. Decrease speed when making turns.
6. Do not let others ride with you on the tractor.
7. It is recommended that the machine be stopped and inspected for damage after striking a foreign object and that any damage be repaired before starting and operating the machine.

59, L59 & L306 OPERATING & SERVICING INSTRUCTIONS

MOWING GRASS: Woods Model 59, L59 & L306 series mowers are equipped with suction type blades which make them ideal for finish mowing large areas of lawn. The machine should be run level when mowing, and the uncut area kept to the left side (right side on left-hand machine) to prevent small windrow that otherwise might occur.

Striking: With certain types of grass and under certain seasonal conditions, the front caster wheels may roll the grass down, enough that it will not come all the way back up and it will not be cut as short as the surrounding area. This may appear to be a streak left by the spindle, but it is not. The only solution, under these conditions, is to carry the weight of the machine on the lift chains with the caster wheels adjusted up so they carry the weight when riding a high ridge or high spot.

TRACTOR OPERATING INSTRUCTIONS: Operate the tractor at full governed rpm when doing normal mowing. If the forward speed is too high, a lower gear can be used.

HEIGHT ADJUSTMENT (without casters): The mower is raised, lowered, and mowing height maintained by the tractor hydraulic system. Set the hydraulic control lever stop for the mowing level desired; then adjust the side skids so that they just clear the ground. The side skids will then prevent scalping by lifting the mower over bumps.

CUTTING HEIGHT ADJUSTMENT (With Casters)

Adjustment for 59 and L59 casters is made by placing axle in upper or lower hole in yoke, or by moving spacers to top or bottom of pivot shaft. On L306, adjust by using various holes in caster arm. Adjust side skids 1/2" above ground.

Raise mower off of ground when backing and turning at same time.

MOWER ATTITUDE Position front of mower level with or slightly below the rear to provide closer cutting. Mowing with the front end high will produce ragged cuts and a sloped look, excessive shredding, and will require extra power.

ATTITUDE ADJUSTMENT (figure 1) For best mowing results, dimension "A" should not be more than 1/2" higher and never lower than dimension "B".

Dimension "B" is set by adjusting casters, gauge wheels or lift chains.

Dimension "A" is set by raising or lowering push channel arms in idler bracket.

IMPORTANT Any adjustment to either dimension "A" or "B" will require adjustment to the other.

Check cutting height and attitude by placing a straight edge along the outside edge of the mower frame as shown.

Measure from the bottom edge of the straight edge at the front and rear at least 32" apart. The front measurement should be approximately 1/2" lower than the rear.

To determine cutting height, it is necessary to subtract the distance the blade is below mower frame from the front measurement.

On the L59 the blade is 4-5/8" below the mower frame. On the L306 it is 4-7/8" below.

When checking cutting height, be sure to take measurements on both sides of the mower. Be sure the mower is level from side to side using these measurements.

When changes are made to cutting height or attitude, be sure to check belt alignment and tension.

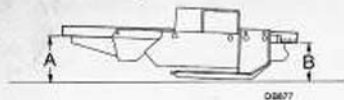


Figure 1. Attitude Adjustment

IMPORTANT Improper belt alignment or tension can cause premature belt failure.

LUBRICATION Grease caster pivot and wheel every 8 hours of operation.

There are grease fittings on each of the three blade spindles which are accessible without shield removal. Grease every 24 hours of operation with a good grade light to medium gun grease.

IMPORTANT Do not over grease spindles. Excess grease could be transferred to the belt and cause slippage or premature failure.

BELT TENSION (figure 2) Set belt tension using a spring scale or other force measuring device. Remove left belt shield. Attach scale between the center and left pulley. Apply between three and four pounds of force. Belt deflection should measure 5/16" for normal conditions.

Tension may be increased if necessary to prevent belt from slipping in heavy mowing conditions.

When checking tension without a force measuring device, the belt, when properly set, should feel very tight.

Cycle belt through at least two revolutions after any adjustment before checking tension. These belts are very strong and need to be adjusted very tight. Belts are more likely to be damaged by excessive slippage than from being overtightened.

IMPORTANT Belt must not rub deck or crosswise support.

Tension adjustments may be made by moving the idler pulleys up or down.

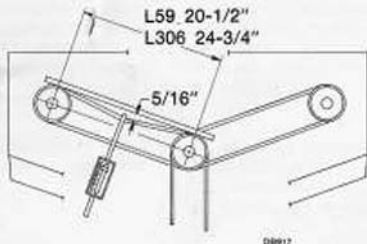


Figure 2. Proper Belt Tension

IMPORTANT Alignment must be rechecked if it is necessary to move idler pulleys to get proper belt tension.

IMPORTANT Tension on a new belt should be readjusted every half hour for the first two hours and then checked every eight hours of operation.

SIDE SHIELD & DISCHARGE CHUTE are provided for discharge end of mower (left end on white frames and right end on yellow frames). Use side shield for normal mowing and in areas where other persons may be present. Use discharge chute for very heavy mowing conditions.

IMPORTANT Always use either side shield or discharge chute.

OPTIONAL EQUIPMENT available includes casters for cutting height control, front roller to minimize scalping, low and extra suction blades and a leaf mulcher. Low suction blades are for sandy areas where abrasive action could cause excessive blade wear. Extra suction blades are designed to lift up fragile downed grasses for better cutting results and are also recommended for use with Woods lawn vacuum and leaf mulcher attachments.

Mower spindle assemblies are equipped with two tapered roller bearings. Bearing adjustment is held by a roll pin. Adjustment should not be necessary. Repair requires special skills and tools. You may save time and money by using a new spindle assembly.

BLADE SERVICING Keep blades sharp for a good mowing job. Sharpen both ends of the blade the same amount to maintain balance. Do not sharpen blade to a razor edge, but leave a 1/16 blunt edge. Do not sharpen back side of blade. When replacing blades do not substitute any bolt for the special Nylok blade bolt. The Nylok bolt is self-locking, meeting the non-loosening requirements for this application.

IMPORTANT On mowers with white frames the blade bolts have LEFT-HAND threads.

Both 59 and 306 mowers use cup washers under blades. These washers will burn and loose their clamping force if excess slippage occurs. Inspect and replace as necessary. The L306 mower incorporates a friction clutch disc which is designed to slip only when striking a solid object. Should blade slip during mowing, tighten by adding thin shim washers over bushing, between top cup washer and blade, until blades will hold desired load. Blade bolts should be torqued to 170 ft./lbs.

MODEL 59, L59 & L306 MOWER FRAME ASSEMBLY INSTRUCTIONS

(For mower frame assembly drawing & parts list, see subassembly page #9700, pgs. 1 & 2.)

Page 4

59, L59
L306

1. Open box and lay parts out in an orderly manner.

2. **SIDE SHIELDS:** Attach side shields (2 & 3) to mower with 3/8 x 1" bolts and flange nuts. A side discharge chute (5) may be installed on discharge end of mower in place of that side shield.

CENTER SHIELD: To allow more lift on tractors with minimum ground clearance, such as Fords, IH LoBoy, Kubotas, Satohs, etc., a center belt shield is not offered. If the box of parts has a center belt shield, bolt center belt shield bracket (34) to deck with 3/8 x 1" bolt. Bolt center shield (10) to bolts welded in deck and bracket (34).

To provide clearance between tractor muffler and left belt shield on L306, see page #9700 assembly drawing.

3. **SIDE SKIDS:** Bolt skids in such a position that they will be carried close to the ground, but so they do not ride continually on the ground when mower is operated at desired mowing height.

On 59's, use 3/8 x 1" heat-treated bolts (torque to 35 foot pounds), lock washer and nuts. On 306's, use 1/2 x 1-1/4" heat-treated bolts, lock washer and nuts.

4. **FRONT TOE GUARDS:** Front toe guards (6) are furnished for some mowers. When provided, bolt them to the front of the mower, using 3/8 NC x 3/4" carriage bolts and 3/8" flange lock nuts. (NOTE: On 59 & L59 where casters are installed on outer deck rails, bolt toe guards to mower so outer ends are about 2" in from end of deck. Otherwise, end of toe guard will be about 1/2" in from end of deck.) End of L306 toe guard will be 3/4" in from end of deck.

5. **CROSSWISE REAR SUPPORT:** Install bushing (16) into center hole in crosswise rear support and bolt it to back of mower deck with short bar forward and offset up using 1/2 x 2" hex head cap screw and 1/2" flange lock nut. NOTE: On L59, L306 F10-2, "S", JD85, JD95 & GM4 mountings, a special crosswise rear support is provided. If tractor is equipped with turf tires, use upper center hole in crosswise support, and for Ag tires, use lower hole. See mounting frame drawing in those manuals.

6. **CHANNEL ARMS:** Slide mower under tractor. Attach channel arms (12) to mower frame using 5/8 x 1-1/2" clevis pin and safety pins. Pin crosswise rear support bar (15) between channel arms and bolt center to frame angle bracket as shown in the main assembly drawing.

7. **CASTERS:** If casters are used, see page #6760, except for the L59 mower on Ford 1000, 1600, 1700, 1900 and Satoh S650. (See mounting frame drawing in manual.) L306 caster assembly will not fit on IH424, 2424, 444, 2444, 454 and 2400; John Deere 1010 & 1020; Deutz 2506, 3006 and other tractors with swept-back front axle as they will hit front tires. Caster wheels cannot be used on GM4 mounting.

L306 CASTERS: On Ford 8N, Massey 135, Deutz 4006, IH354 and 2300 with straight front axle, etc., the right caster should be put on side angle, bolting it over side shield and between side angle and right skid. Left caster should attach to short bar on deck so casters will be inside of left front tire. Left front tractor tire should be moved out to clear caster wheel. On Ford 1000, Kubota tractors, etc., both arms will bolt to the outer deck rails. Caster wheels cannot be used on GM4 mounting.

8. **FRONT ROLLER ASSEMBLY INSTRUCTIONS:** On 59 mowers, put item (28) on left side and item (27) on right side of mower using 3/8" carriage bolts and nuts.

On L306 mowers, item (28) goes on right side and item (27) on left. This will put the highest hole in brackets rearward on 59 and the next to the highest hole rearward on L306.

Assemble roller and roller rod (26) in rear holes in brackets (27 & 28). Secure with 3/16" cotter pins. Turn roller by hand to see that it turns freely.

See following pages for mounting frame assembly instructions.

1. **IDLER BRACKET ASSEMBLY:** Remove tractor drawbar and lift arms from back of tractor. Also, remove the four 7/16 x 1-1/2 cap screws from around the PTO. These are the four cap screws that hold the swinging drawbar bracket on the new Fords or the anti-sway chains on the older ones.

Place the idler bracket assembly (18) and belt shield mounting brackets (19) over PTO shaft and bolt to tractor with 7/16 x 1-1/2 bolts and lock washers, previously removed. If optional drawbar (25) is used, lower belt shield bracket (19) will not be used. Bolt drawbar (26) to tractor through bottom two holes in idler bracket mounting plate.

Attach V-groove idlers (12) to outer side of vertical slots with four 5/8" flat washers installed between V-groove idlers and idler bracket. Bolt together using 5/8 x 2-1/2 carriage bolts, lock washers and nuts.

On Ford 8N install five 1" flat washers on tractor left lift arm pivot bolt. Install bracket (23) over end of pivot bolt and install three more 1" flat washers and secure with nut removed from pivot bolt.

Attach other end of bracket (23) to inside of upper hole in left push arm using 5/8 x 2" bolt, flat washer, lock washer and nut. Torque this bolt to 150 foot lbs. If drawbar is used, attach upper end of drawbar brace (27) to inside of bracket (23). Bolt bottom of brace to left rear hole in drawbar (26)

2. **DRIVE PULLEY:** Note that there are two splined bushings included in the box of parts. Select the one to fit your PTO shaft and install it into the large drive pulley. Slide drive

pulley and bushing onto the PTO shaft with the webs of the sheave pointing inward toward the tractor. Position for best alignment to V-idlers. Normally, the PTO shaft will not extend through the bushing. Tighten splined bushing bolts evenly to 12 foot lbs of torque.

3. **RIGHT MOUNTING BRACKET:** Bolt right mounting bracket (11) to holes on bottom side of right axle using the set of holes which will put this bracket in line with bar on idler bracket. **NOTE:** If fender bolts are long and come all the way through bolt holes on bottom of axle, use these bolts to bolt on the mounting bracket. Otherwise, use 5/8 x 1-3/4 bolts, lock washers and nuts that are provided.
4. **BELT ASSEMBLY AND ADJUSTMENT:** Slide mower under tractor. Position and pin push arms to the mounting brackets using 5/8 x 1-3/4 clevis pin and safety pins. Put belt on drive according to pictures and instructions on the following pages.

NOTE: Make major belt adjustments by sliding mower fore and aft using the five holes in channel arms as required. Make minor adjustments with idlers but keep left V-idler about 1" above being in line with groove in which belt runs in center mower sheave and right V-idler about 1" below.

5. **BELT SHIELD:** Attach belt shield (22) to belt shield attachment brackets (19) using 5/16 x 3/4 bolts. If drawbar is used, put pipe spacers (80) between bottom of shield and drawbar and secure with 5/16 x 1-3/4 bolt and flange nut.

6. HEIGHT ADJUSTMENT :

8N FORD: On tractors with rounded transmission housings remove two 7/16" bolts on right side of transmission housing and bolt lift bracket (6) to back side of transmission housing flange with clevis pointing rearward under the center of the tractor. Bolt to housing with 7/16 x 1-3/4 bolt and lock washer.

Install chain idler (7) in clevis, and pin with 1/2 x 2" clevis pin and cotter pin. Install eye bolt (16) into clevis (17) using a 3/8" hex nut on each side of clevis. Pin clevis assembly to right lift arm using pin previously removed from lift arm.

Install chain idler (7) into clevis on right side of idler bracket using 1/2 x 2" clevis pin. On L59 attach lift lug (28) to center slot in front of mower. Attach long chain (3) to lift lug (28). On L306, attach long chain (3) into center lift lug on deck and secure with plastic caplug (2). Bring chain up over chain idler installed into lift bracket (6), then back down under chain idler installed into idler bracket assembly and install lift lug (24) over chain. Hook lift lug (24) over eye bolt and clevis assembly. Adjust chain so mower does not hit underside of tractor with lift arms fully raised.

FORD N800 ETC: On tractors with the square type transmission housing, such as series N800 Ford, etc., bolt lift bracket (8) to bottom side of transmission housing using 5/8 x 1-1/2 bolt and lock washer. Install clevises (9) to arms of lift bracket using 3/8 x 1" carriage bolt, lock washers and nut.

Install chain idlers (7) in clevis using 1/2 x 2" clevis pin and cotter pin. Attach lift chain attachment bracket (1) to frame angle as shown in main assembly drawing, using 3/8 x 1-1/2

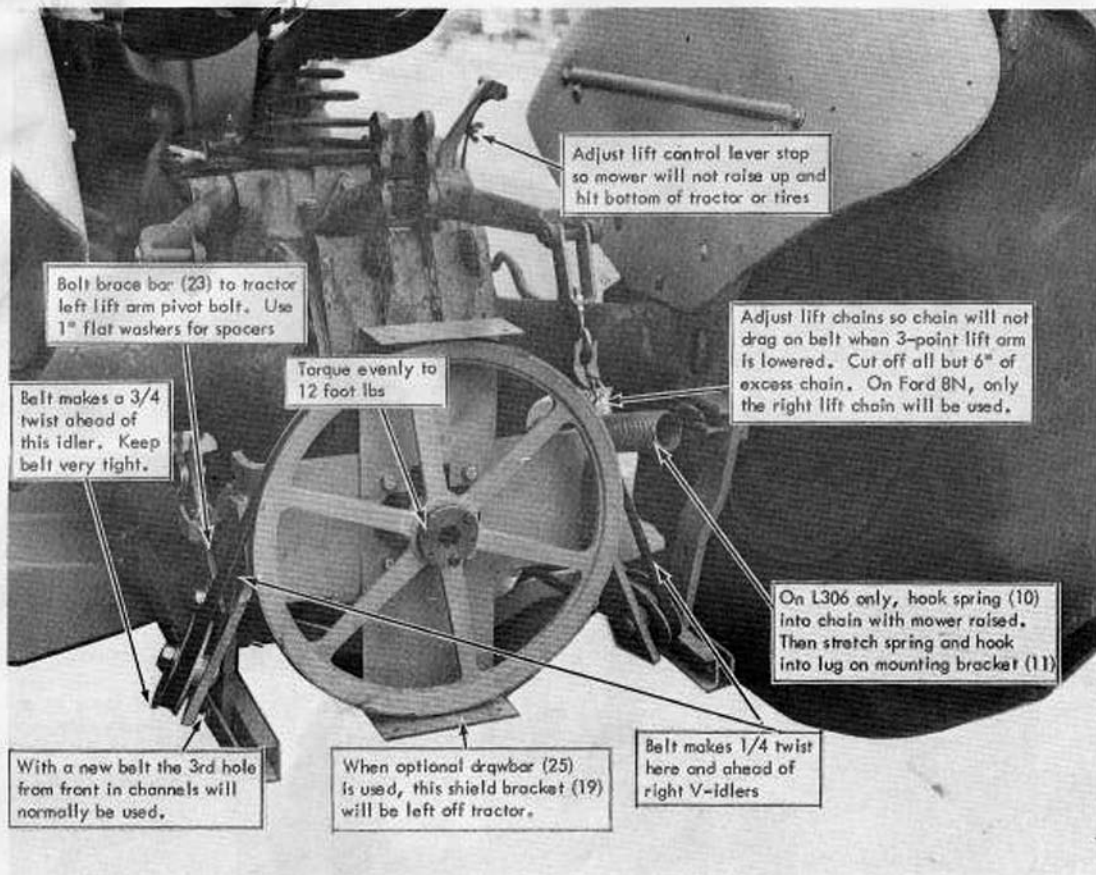
bolts, lock washers and nuts. **NOTE:** Bracket (1) is not used on L306. Install chain idlers in clevises on idler bracket and clevis and eye bolts to rear rockshaft on tractor on both sides.

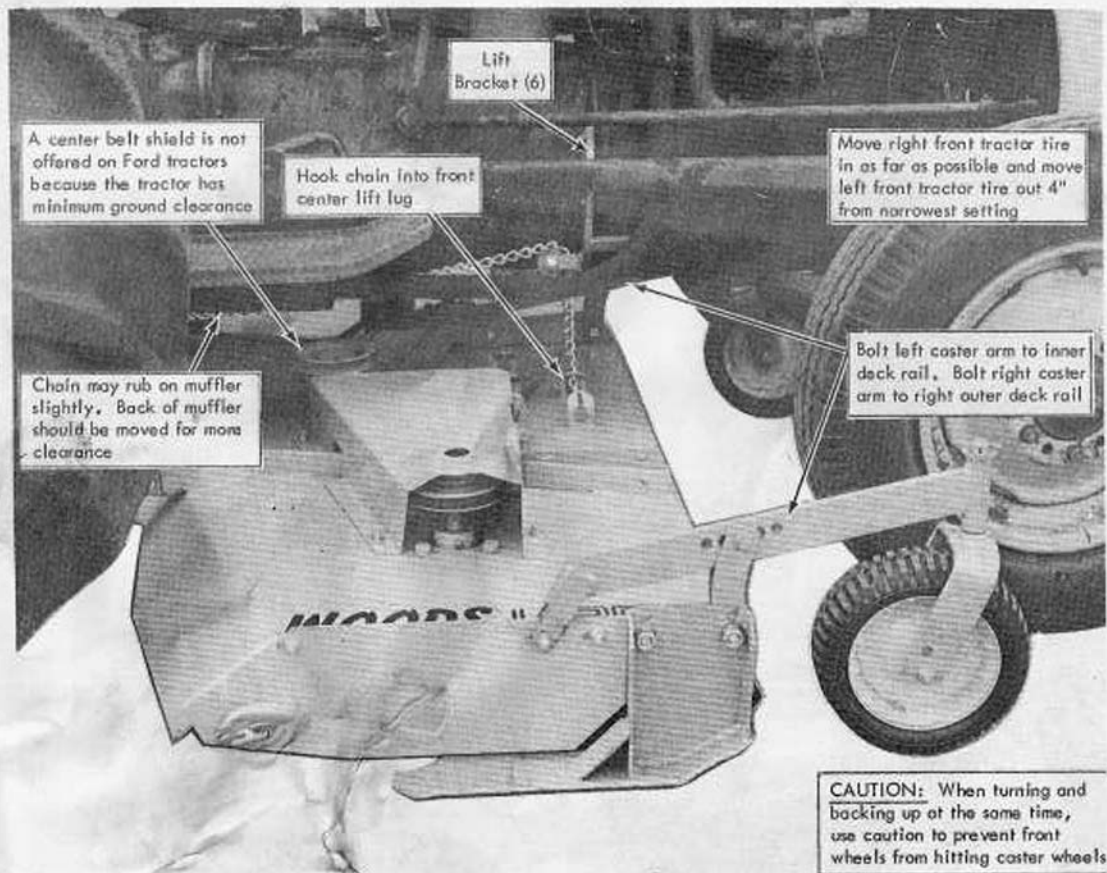
Install long chain (3) into keyhole of lift lug (28) and bolt lift lug to chain attachment bracket (1) using 3/8 x 1-1/2 bolt, flat washer, lock washer and nut.

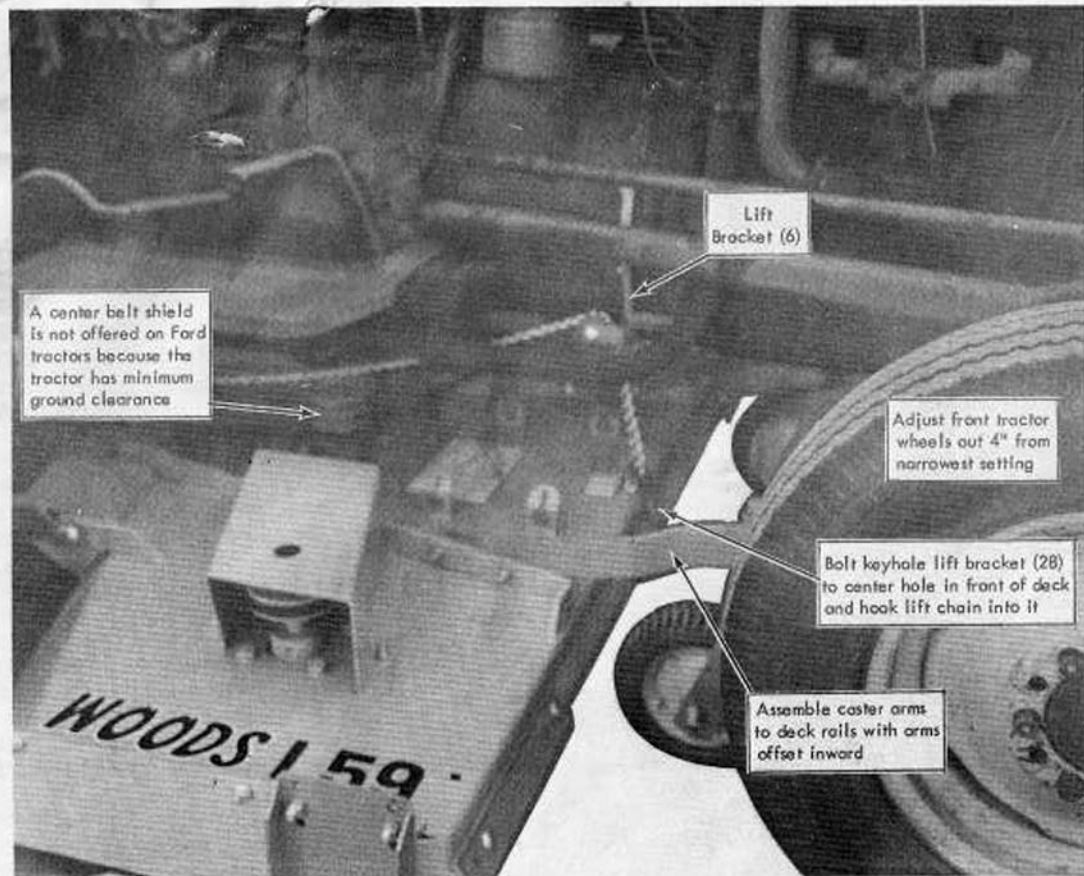
NOTE: On L306, attach chain to front lift lugs welded on mower deck. Bring back over chain idlers previously attached to lift bracket (8), then back under chain idlers attached to idler bracket, and hook through another lift lug (24). Hook this lift lug over eye bolts in clevis assembly previously attached to rockshaft.

NOTE: Chain idler bracket (8) may need to be reversed as mower is moved fore and aft for belt adjustment. In all cases, adjust chain so that the mower will not hit the bottom of the tractor with lift arms fully raised. It is advisable to remove the center shield from the mower.

7. **LIFT HELPER SPRING:** (L306F on Ford 8N Only) Hook spring (10) into lug welded on mounting bracket (11). With mower raised, hook opposite end of spring into chain (3). **NOTE:** Spring will lie horizontally. Spring should carry most of the weight of the mower.







A center belt shield is not offered on Ford tractors because the tractor has minimum ground clearance

Lift Bracket (6)

Adjust front tractor wheels out 4" from narrowest setting

Bolt keyhole lift bracket (28) to center hole in front of deck and hook lift chain into it

Assemble caster arms to deck rails with arms offset inward

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File # L59 & L306F8N-1

Ref No	Part No	No Used	Description
1	12030	2	Lift chain attachment bracket
2	18336	2	Plastic K plug
3	6673	1 or 2	Chain (Approx. 78" long) (Use on L59)
	-or-		
4	17477	1 or 2	Chain (Approx. 84" long) (Use on L306)
	1256	2 or 4	3/16 x 1" cotter pin
5	409	2 or 4	1/2 x 2" clevis pin
6	10970	1	Lift bracket
7	6696	2 or 4	Chain idler
8	12027	1	Lift bracket
9	6674	2	Clevis
10	13006	1	Lift helper spring (used on L306 only)
11	10966	1	Right mounting bracket
12	4336	2	Idler with bearing
13	4335	2	Idler without bearing
14	6095	2	Bearing for #4336
15	3652	1	V belt, special for L59
	-or-		
16	10859*	1	V belt, special for L306
	5762	1 or 2	3/8 NC eye bolt
17	6672	1 or 2	Clevis
18	10960	1	Idler bracket assembly
19	24310	2	Shield attaching bracket
20	18257	1	Sheave (18.4 P.D.)
21	12743	1	P2 bushing with bolts (1-3/8 6B spline)
	-or-		
22	23125	1	P2 bushing with bolts (1-1/8 6B spline)
	10975	1	V belt shield
23	10965	1	Idler bracket attachment bar
24	18335	2	Lift lug
25	24267	1	Drawbar Complete (optional)
26	24265	1	Drawbar weldment
27	24266	1	Drawbar brace
28	24803	2	Front keyhole lift lug

HARDWARE		
Ref No	Part No	Description
60	6096	5/16 NC x 3/4 HHCS
61	5295	5/16 NC x 1" HHCS
62	4529	5/16 NC Hex nut
63	2472	5/16 Lock washer
64	6697	3/8 NC x 1" Carriage bolt
65	976	3/8 NC x 1-1/2 HHCS
66	565	3/8 Flat washer
67	838	3/8 Lock washer
68	835	3/8 NC Hex nut
69	10978	7/16 NC x 1-3/4 HHCS
70	5664	7/16 Lock washer
71	6268	5/8 NC x 1-1/4 HHCS
72	902	5/8 NC x 2 HHCS HT
73	5836	5/8 NC x 2-1/2 Carriage bolt
74	692	5/8 Flat washer
75	1286	5/8 Lock washer
76	230	5/8 NC Hex nut
77	1863	1" SAE Flat washer
78	4528	5/16 NC x 1-3/4 HHCS
79	14139	5/16 NC Flange hex nut
80	23218	3/8 Scdl 40 x 5/8 Pipe
81	3379	1/2 NC x 1-1/2 HHCS
82	1093	1/2 NC Hex nut
83	855	1/2 Lockwasher

*For L306 on tractors with rear tires smaller than 10-28, order 8" shorter belt #5711 and return #10859 for credit.

BELT ASSEMBLY AND ADJUSTMENT INSTRUCTIONS

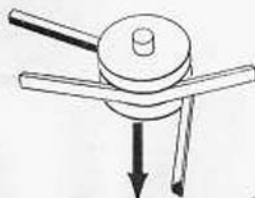
Models Used On: 59C; L59 & L306 Model AC52, AC54, BMC, B-25, D, D10-D12, F, F10, H3, GM2, GM4
JD85, JD95, JM, K17, K22, K28, KD, KL, K210, K260, MF, M25, S, S55, VC, U, Etc

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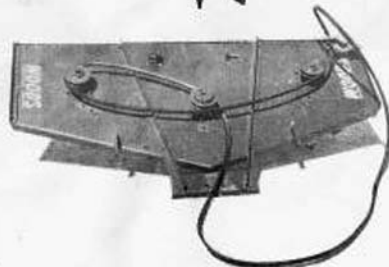
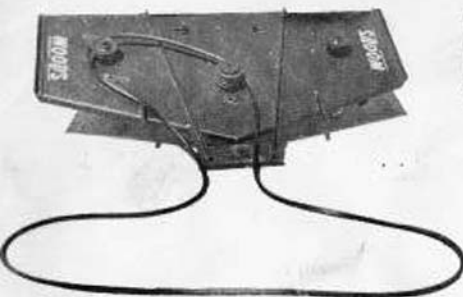
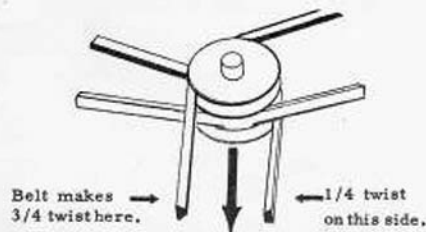
1. First put belt on the bottom groove, right hand side of the center sheave. Then thread it to the left, around the left hand sheave.



2. Bring the belt back across the center sheave in the center groove over to the right outside groove.



3. Then thread it back across the front of the center sheave in the top groove.



4. Proper Twist: The belt then follows with a 3/4 twist back under the left V-idler, up over the drive sheave and back down under the right idler pulley. This will leave a 1/4 twist in the section of belt extending from the right V-idler to lower groove of the center mower sheave.

5. Adjust the mower to proper cutting height. The front of the mower should be slightly lower than the rear for the best cutting and least power requirement.
6. Idler Adjustment: Make minor belt adjustment with idlers but keep left idler about 1" above being in line with the groove in which the belt runs on the center sheave of the mower and right idler about 1" below. Move mower fore and aft for major adjustments. On L306K210, K260, S & F10, use belt take-up idlers on mower deck for major adjustment.

1. Assemble as shown on mower decal. If not installed correctly, more twist will result than is allowable.

2. Belt whip is caused by belt misalignment unless mower is driven by a rough-running or 2-cylinder engine.

On certain models, such as Model 42, a belt guide is provided to dampen out the whip on the loose side. The guide should be set to just clear the belt in normal position.

3. Proper position of 59 and L306: Adjust mower forward and back to such a position that the rear take-up idlers are near the bottom of their slots when the belt lines up with the proper groove in the center pulley and is tight. Never run the idlers high in the slots as this will cause misalignment.

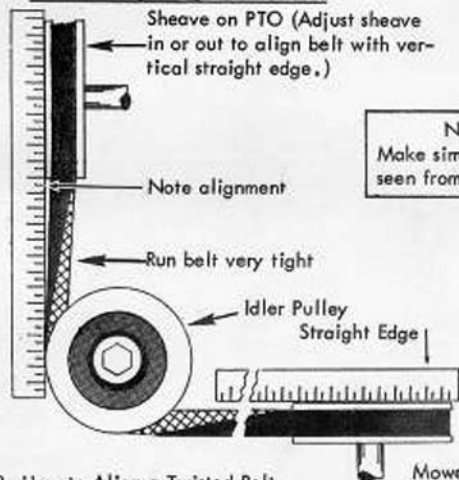
It is assumed that the mower is adjusted to run approximately level. If the front of the mower is down, the idlers will have to be raised. If the back of the mower is down, the idlers will have to be down further. Belts must be in proper alignment with sheave grooves as shown in the drawings at the right.

4. Special spacer shim on Model 42: This shim which has a formed edge, is used between the idler and the idler slot to tip the idler so that it lines up properly with the sheave on the mower. This washer must be used to cause proper belt alignment and to prevent whip.

5. PTO pulleys must be moved in or out to cause the belt to be in alignment with the idlers.

6. Belt Tension: Run belts very tight, especially on Model 42 where belt slacks off when mower is raised. Present belt designs are much stronger than we are accustomed to and will stand more tension. Slipping will heat and ruin a belt but tension is not harmful. On Model 42, adjust so belt is snug even with mower raised. You can minimize the amount of change in belt length as mower is raised and lowered by keeping the rear idlers adjusted to a low position.

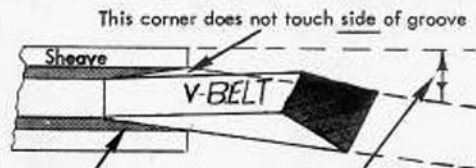
7. Use of Straight Edge (Side View)



NOTE:
Make similar checks as seen from rear and top.

8. How to Align a Twisted Belt

RIGHT: Inside edges of belt are approximately lined up with the sheave



Belt slides in slightly on this side

Outer edge of belt does not appear to be exactly in line with pulley

WRONG: Outer edge of belt appears to be in line.



Edge rubs as it lays into or out of groove and causes corner wear, whip scuffing, jumping, and cover failure

SPINDLE & BLADES
For Models: CCW Rotation FM48, RM48, L59, L306, Etc.

Ref No	Part No	No Used	Description
1	3761	1	Spindle assembly (for left hand rotation)
2	5089	2	Seal
3	4114	1	Sleeve
4	4115	1	Sel-lock pin
5	4107	2	Bearing cone M12649
6	4117	1	Housing with cups
7	4106	2	Bearing cup M12610
8	1972	1	Grease fitting
9	28897	1	Spindle shaft with left hand thread
10	4110	1	Shoulder washer 2-1/4 diameter (for L59 & FM48)
	-or-		-or-
	13409	1	Shoulder washer 3 diameter (for L306)
	5081	1	16-13/16 medium suction blade (std on RM48 & FM48)
	-or-		-or-
	26875	1**	16-13/16 Low suction blade (optional on RM48)
	-or-		-or-
	23825	1	20-1/4 Medium suction blade (standard on L59)
	-or-		-or-
11	12091	1*	20-1/4 Welded fin blade (optional on L59)
	-or-		-or-
	25997	1**	20-1/4 Low suction blade (optional on L59)
	-or-		-or-
	13404	1	24-1/2 Blade (Std on L306)
	-or-		-or-
	28328	1**	24-1/2 Low suction blade (optional on L306)
	-or-		-or-
	18740	1*	24-1/2 Welded fin blade (optional on L306)
12	10951	1	Blade bolt & washer kit (For FM48 & L59)
13	692	1	5/8 Flat washer
14	10635	2	5/8 ID cup washer (for FM48 & L59)
	-or-		-or-
	13401	2	1" ID x 2-3/4 OD cup washer (For L306)
	10718	1	Special 1-1/2 Long bolt (For FM48 & L59)
15	-or-		-or-
	24184	1	Special 2-3/8 Long bolt (for L306)
16	13402	1	Clutch disk 3" diameter
17	13403	1	Blade stop
18	13405	1	Shim washer
19	12313	1	5/8 ID x 1" OD x 13/16 sleeve, heat treated

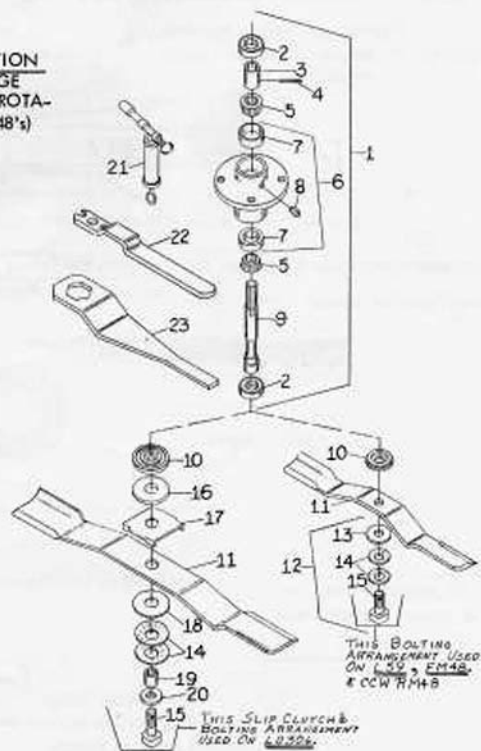
(continued upper right)

NOTE: Repair shaft #9 and repair sleeve #3 do not have a hole drilled in them for pin #4. After new parts have been assembled and proper bearing adjustment obtained, drill a 3/16" diameter hole through sleeve and shaft. Drive in Sel-lock pin to hold proper bearing adjustment.

LEFT HAND BLADE ROTATION
FOR "L" SERIES. (SEE PAGE #4116 FOR RIGHT HAND ROTATION 59's & YELLOW RM48's)

- * For maximum suction for difficult mowing.
- ** For use in sandy areas or where high abrasive wear occurs on fin of standard blade.
- *** Used on mower prior to 1964

Ref No	Part No	No Used	Description
20	13451	1	Special heat treated washer
21	7580	1	Oil K gun (optional equipment)
22	4902	1	Spindle lock wrench (used on FM48)
	-or-		-or-
	2974	1	Spindle lock wrench (used on L59 & L306)
23	3490	1***	Blade bolt wrench



THIS BOLTING ARRANGEMENT USED ON L59 & FM48 & CCW RM48

THIS SLIP CLUTCH & BOLTING ARRANGEMENT USED ON L306.

ASSEMBLY INSTRUCTIONS

For Model 59, bolt each caster to its respective rail on the mower frame with two 3/8 NC x 1-1/4 heat treated bolts, lock washers & nuts. Casters offered for most model mowers have right & left caster arm (4). Casters generally should be assembled to mower deck rail so wheel will be offset away from front tractor tires. One exception is 59CL, see manual. Both caster assemblies are identical, except arms being offset opposite. Adjust to cutting height desired by selectively placing the bushing above or below the pivot arm. On some tractors, caster may be attached to outer deck angles using front shield hole & skid hole. Rear of shield and front skid will have to be shimmed out with washers.

Special short side mount caster arms & assemblies are available for mounting between side skids & outer deck angles. This will put caster wheel in the same position as explained above for outer deck rails, but shimming is not necessary.

For Height Adjustment of 59 Casters: Five different adjustments are possible by moving the wheel in the caster yoke from one set of holes to the other and by moving spacers on pivot shaft.

For Model L306*, bolt rear of caster arms to center rails on mower frame using 3/8 NC x 1-1/2 bolts, lock washers & nuts. Attach adjustment brackets (23 & 24) to mower frame with short offset end of parts downward, offset of upper end outward from deck rail and inside of curvature toward front of mower using 1/2 x 1-3/4 bolts.

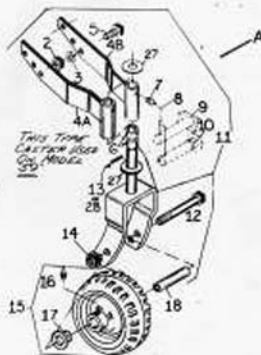
Bolt upper end to caster arm after adjusting mower to desired cutting height, using 1/2 x 1-3/4 bolt, lock washer & nut. NOTE: On Ford 8N, Massey 135, etc., right caster assembly may be attached to outer deck angle by shimming side skid outward, attaching rear hole of caster arm to side skid outward, attaching rear hole of caster arm to side shield bolt and attaching adjustment bracket to front skid holes. Left front tractor wheel should be moved out to clear left caster wheel. On Kubota L225, bolt both caster arms to outer deck angles.

Operator should use caution when raising mower to be sure top of caster assembly does not interfere with bottom side of tractor. If interference occurs, re-adjust mower suspension for sufficient clearance.

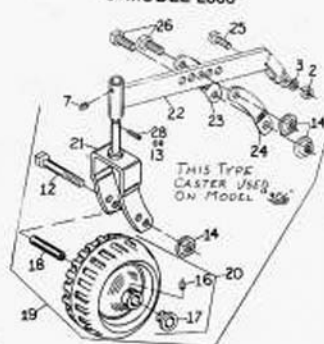
*Will not fit on BMC, IH424, 2424, 444, 2444, John Deere 1010, 1020 & other tractors with swept-back front axle, as caster will hit front tires.

Ref No	Part No	Description	Ref No	Part No	Description	
A	18422	Standard right & left caster bundle	9	4212	Caster axle (for yoke w/2 round holes)	
	-or-	-or-	10	7147	Caster axle (for yoke w/1 square 5/8 hole)	
	29750	Special short sidemount right & left caster bundle	11	12243	59 Caster yoke, including bolt, nut & sleeve	
1	-or-	Standard right caster asy complete (a)	12	1399	1/2 NC x 5 Hex head cap screw	
	-or-	-or-	13	1285	1/4 x 1-1/2 Cotter pin	
	-or-	Standard left caster assembly complete (a)	14	785	1/2 NC Deformed thread nut	
	-or-	-or-	15	4213	Tire, rim & bearing (8-1/4" OD)(d)	
	-or-	Special short sidemount right caster asy complete (not sold as a unit)	16	2909	Drive grease fitting	
	-or-	-or-	17	2905	5/8 Bore flange bearing for 1-1/8 hole (b)	
-or-	Special short sidemount left caster asy complete (not sold as a unit)	29375		3/4 Bore flange bearing for 1-1/8 hole (b)		
2	835	3/8 NC Hex nut	-or-	4228	5/8 Bore flange bearing for 1-3/8 hole (b)	
3	838	3/8 Lock washer	-or-	29368	1/2 x 3/4 x 3-3/8 Sleeve HT (c)	
4A	6761	Standard right 59 caster arm	18	-or-	12242	17 GA x 5/8 OD x 3-3/8 Sleeve HT (c)
	29747	Special short sidemount left caster arm		19	13400	L306 Caster assembly complete
4B	18424	Standard left 59 caster arm	20	13446	Tire, rim & bearing (10-1/4 OD)(d)	
	-or-	-or-	21	23857	L306 Caster yoke	
5	29746	Special short sidemount right caster arm	22	13435	L306 Caster arm	
	12169	3/8 NC x 1-1/4 Hex head cap screw HT (torque to 35 ft lbs)	23	13444	Right adjustment bracket	
6	4181	Spacer	24	13445	Left adjustment bracket	
7	12296	Grease fitting	25	976	3/8 NC x 1-1/2 Hex head cap screw	
8	1266	3/16 x 1-1/2 Cotter pin	26	742	1/2 NC x 1-3/4 Hex head cap screw	
	-or-	-or-	27	22240	3/4 x 1-3/16 x 10 GA Washer	
-or-	-or-	28	21020	1/4 x 1-1/4 Spirol pin		

5' MODEL 59



6' MODEL L306



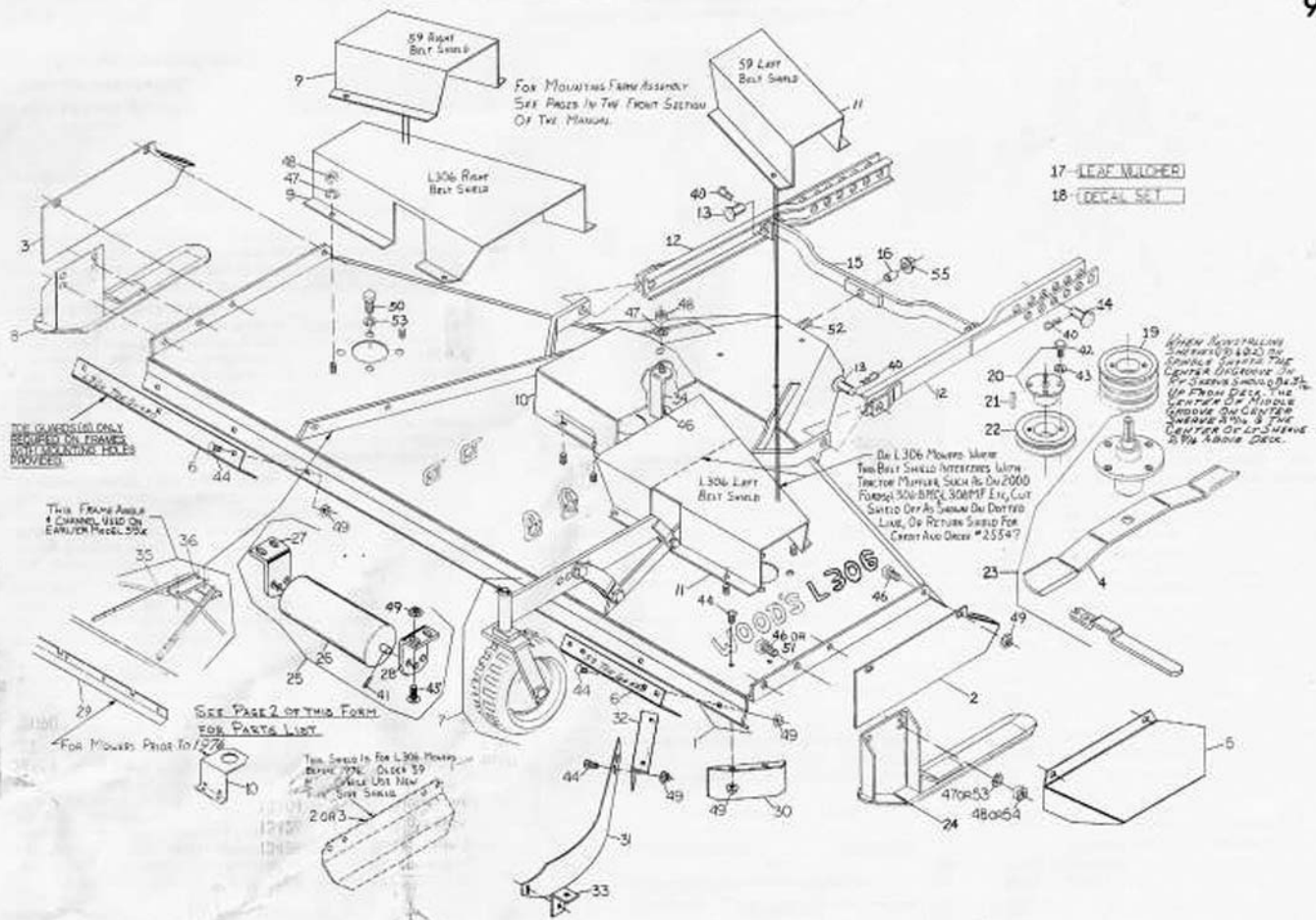
(a) May be used on either side to get best fit. (Not sold as a unit.)

(b) Measure old bearing.

(c) Measure outside of old sleeve.

59, L59, & L306 MOWER FRAME ASSEMBLY DRAWING

9700



FOR MOUNTING FRAME ASSEMBLY
SEE PAGES IN THE FRONT SECTION
OF THE MANUAL.

- 17 LEAF WILCHER
- 18 DECAL SET

THE CHASSIS ONLY
REQUIRED ON FRAMES
WITH MOUNTING HOLES
MOVED

THIS FRAME ASSEMBLY
4 CHANNEL, USE ON
EARLIER MODEL BOX

SEE PAGE 2 OF THIS FORM
FOR PARTS LIST

For Mowers Prior To 1278

THE SCREW IN THE L306 FRONT
WHEEL 1978 MODEL 59
WAS NOT NEW
TYPE SCREW

20R3

ON L306 MOWERS WHERE
THE BELT SHIELD INTERFERES WITH
TRACTOR MOWER, SUCH AS DEX2000
FURROW 300-BP/CK 300-PTF ETC, CUT
SWITCH OFF AS SHOWN ON DETAIL
PAGE, OR PICTURE SHOWN FOR
CUMMINS AXI DRIVE #25547

BEFORE INSTALLING
MOWER #423 IN
CHASSIS, CHECK THE
CENTER DRIVE SHAFT IN
FOR SURE SHOCKS ARE
UP FROM DATA. THE
CENTER OF MIDDLE
DRIVE SHAFT ON CENTER
SHOULD BE 1/8" & THE
CENTER OF L306
SHOULD BE 1/8" ABOVE DATA.

9700

59, L59 & L306 MOWER FRAME ASSEMBLY PARTS LIST

* Mower frame sold after 1976 will have the front of the mower formed down
Before this time, mower had a bolt-on front shield (Ref. #29)

Ref No	Model Red & Yellow Mwrs		Model L306 Mwrs		No Used	Description	Model 59 & L59		Model 306		No Used	Description
	White Mwrs	1976 Mwrs	1976 Mwrs	& later to 1976			3 Spdl 5" Swath	3 Spdl 6" Swath	3 Spdl 6" Swath	No Used		
1	6757	10721	13420	13420	1	Frame only	16	3504	3504	1	Bushing 1/2 x 5/8 x 1-1/16	
2	25513	25511	24189	13426	1	Left side shield	17	-----	-----	1	Leaf mulcher (optional, see og. #7080)	
3	25512	25510	24188	13426	1	Right side shield	18	5753	13421	1	Decal set	
4	6950	23825	13404	13404	3	Blade, med suction (std)	19	6126	13417	1	Sheave (3-groove)	
	26559	25997	28328	28328	3	Blade, low suction (opt)	20	4227	4227	3	Bushing with hex head bolts	
	12090	12091	18740	18740	3	Blade, welded fin (opt)	21	3885	3885	3	3/16 x 3/16 x 1-1/4 Key	
5	26520	26521	26522	-----	1	Side discharge chute	22	4226	12622	2	Sheave (single groove)	
6	59 & L59	306	No	No			23	-----	-----	3	Spindle, blade & wrench kit (white, left-hand blade rotation, see og #3761)	
	3 Spdl	3 Spdl	Used	Description			24	4142	13429	1	Spindle, blade & wrench kit (red or yellow right hand blade rotation, see og #4116)	
	26516	26523	2	Front toe guard			25	24650	24650	1	Left side skid	
	-----	-----	1 pr	Casters (optional, see page #6760)			26	24583	24583	1	Front roller complete (optional)	
	4141	13428	1	Right side skid			27	24587	24587	1	Front roller & rod	
	25506	25528	1	Right belt shield			28	24586	24586	1	Left front roller bracket	
	25555	25555	1	Center belt shield (use when front of mwr is bent down)			29	5818	13418	1	Right front roller bracket	
	4130	4130	1	Center belt shield (use when front shield is bolted on mower)			30	25508	-----	1	Front shield (for mowers prior to 1976)	
	25507	25529	1	Left belt shield			31	25509	25533	1	Front corner baffle	
	-----	25547	1	L306 Left belt shield short			32	25532	25532	1	Center baffle	
	13314	23942	2	Channel arms (see notes a & c)			33	25531	25530	1	Rear mounting angle	
	18241	23928	2	Channel arms (see notes b & c)			34	25557	25557	1	Front mounting lug	
4097	4097	4	5/8 x 1-1/2 Clevis pin			35	4095	-----	1	Center belt shield bracket		
410	410	2	5/8 x 1-3/4 Clevis pin			36	3491	-----	1	Frame angle		
3485	3485	1	Crosswise rear support (See notes a & c)							1	Channel brace	
18245	18245	1	Crosswise rear support (see notes b & c)									

HARDWARE

Ref No	Part No	Description	Ref No	Part No	Description
40	2688	1/8 Safety pin	48	835	3/8 NC Hex nut
41	1256	3/16 x 1 Cotter pin	49	14350	3/8 NC Flange lock nut
42	10378	1/4 NC x 1 HHCS	50	4119	1/2 NF x 1 HHCS
43	1985	1/4 Lock washer	51	745	1/2 NC x 1-1/4 HHCS, HT
44	24597	3/8 NC x 3/4 Crg bolt	52	3699	1/2 NC x 2 HHCS, HT
45	6697	3/8 NC x 1 Crg bolt	53	855	1/2 Lock washer
46	1263	3/8 NC x 1 HHCS HT	54	1093	1/2 NC Hex nut
47	838	3/8 Lock washer	55	11900	1/2 NC Flange lock nut

NOTES

- (a) For all 59, L59 models except: GM2, LB, F10, F13, F15, H284, JD85, JD95 R17, K18, K210, K260, S55, S-BL, TB, YM; for all L306 models except: AC54, GM2, GM4, H284, JD85, JD95, K22, K24, R210, R260, & S-BL.
- (b) For use on 59, L59 models: LB, K17, K18, K210, K260, S55, S-BL, TB, YM.
For use on L306 models: AC54, GM2, K22, K24, K210, K260, & S-BL
- (c) For F10, F13, F15, GM4, H284, JD85, JD95, S; See mounting frame assembly drawing for items 12 & 15.

F-6083 (Rev 6-80)

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Ref No	Part No	Description
	7080	Model 59 Leaf Mulcher
A	-or-	
	13482	Model L306 Leaf Mulcher
1	----	Lf mlchr wdment (If this part is worn out, order a compl new lfmlchr)
2	7076	Angle lug (For model 59)
3	13224	Right attachment bracket (For model L306)
4	13225	Left attachment bracket (For model L306)
5	23218	3/8 Scll 40 Pipe 5/8 long (For use only on 59 w/bent down frt frm)
6		
7	839	3/8 NC x 1 Hex head cap screw HT
8	979	3/8 NC x 1-1/2 Hex head cap screw
9	565	3/8 Flat washer
10	838	3/8 Lock washer
11	835	3/8 NC Hex nut

OPERATION: To do a satisfactory job of leaf mulching, the mower should be adjusted so blades are about 1-1/2" above ground and the back of the mower slightly lower than the front. The mower should be run at full RPM with tractor in first or second gear.

ASSEMBLY INSTRUCTIONS

- Turn mower upside down on saw horses. If mower has a bolt-on front shield, adjust shield all the way down in long slots. Remove side shields. Leave side skids on. If optional front roller has been installed, it must be removed.
- On mowers with bent-down front frame, remove center baffle and drill three 7/16 diameter holes (two on 59's) in front of mower at the dimensions shown on drawing.
- Attach slotted angles (2) or (3 & 4) to leaf mulcher as shown on drawing.
- Place leaf mulcher over blades on mower. Attach angles (2) or (3 & 4) and mower side shields to side frame angle on mower. All 59 mowers and L306 mower with bolt-on front shield will use front shield hole to attach angles (2) or (3 & 4). L306 mowers with bent-down front frame will use 2nd hole behind skid to attach angles 3 & 4. Bolt side shields to mower using 3/8 flat washers for spacers.
- On mowers with bolt-on front shield, bolt front of leaf mulcher to bottom of slots in front shield with 3/8 x 1" bolts and flat washers. On mowers with bent-down front frame, bolt leaf mulcher to inside of mower in holes drilled in front frame using 3/8 x 1" bolts on L306, and on L59's use 3/8 x 1-1/2 bolts and 5/8 long pipe spacers between leaf mulcher and mower. On some mowers where 5/8" pipe may be too long, substitute 3/8 flat washers.
- Drill 7/16 holes in rear of mower deck through holes in leaf mulcher rear plates and bolt rear of leaf mulcher to deck using 3/8 x 1" bolts.
- Tighten all bolts securely. Turn each blade individually inside the leaf mulcher to see that it clears the leaf mulcher rings. If necessary, the rings may be re-shaped with a hammer to clear the leaf mulcher rings.

