REESE AGRI

DRUM MOWER
HL MODELS

Operating and Maintenance Instructions

REESE AGRI	2070HL	2400HL
technical specifications		
CUTTING WIDTH	2.70 metres (6'9")	2.4 metres (8')
NUMBER OF DRUMS	2	2
NUMBER OF DOUBLE EDGED BLADES	6	8
POWER REQUIREMENT (AT 540 RP M)	from 45 HP	from 65 HP
DRUM R.P.M	1650	1200
TRACTOR LINKAGE	Cat II	Cat II
HEIGHT ADJUSTMENT	25-100mm (1"- 4")	25-100mm (1"- 4")
WEIGHT	556kg (1220lbs)	690kg (1520lbs)
WINDROW SPREADER	Optional for both models	
ROTOR STONE GUARDS	Optional in NZ - standard elsewhere	
TOPPING SKIRT	Optional for both models	

ASSEMBLY

This mower has been factory tested and partially disassembled for packaging. Adjustments other than those associated with initial assembly as listed below will not be necessary.

1. Ensure that the machine serial number printed on each of the crates is the same. Double check that the serial numbers on the two parts of mower frame are matched.
2. Connect each half of the frame together using the pivot pin/intermediate pulley shaft assembly. Ensure the pin head lines up with the stop to prevent pin from turning. The thick washer should be fitted with the convex surface facing the nyloc nut and tightened sufficiently to clamp the pivot clevis plates yet enable the machine to be lifted into transport position.
3. With reference to the parts drawing, fit the hydraulic lift arms and the belt adjustment mechanism.
4. Fit the white skid at the height required. The upper hold of the pair in the skid when aligned with the lowest hole in the skid leg, gives a cutting height of 100 mm (4"). In this position only it is possible to fit a second bolt to ensure skid rigidity.
5. Fit the two vee belts as outlined in maintenance. Turn the vee pulley by hand for _ turn (top of pulley towards far end of the mower), and ensure drums counter rotate so as to feed the crop through the centre. Belts should run freely and not rub on any part of the machine.

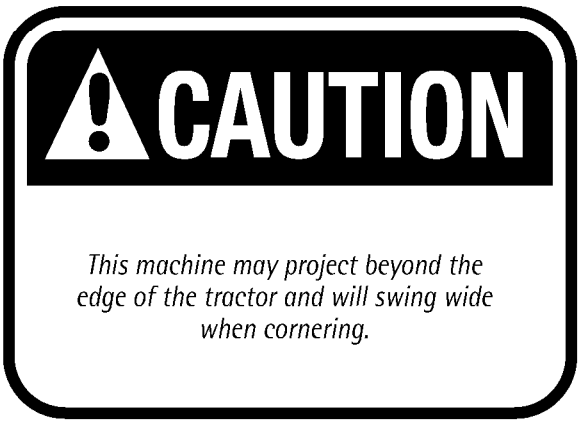
   Note: Each time the secondary belt tension is adjusted by the adjustment idler pulley, it will be necessary to reposition the white cover to ensure the pinch point cannot be accessed with fingers.

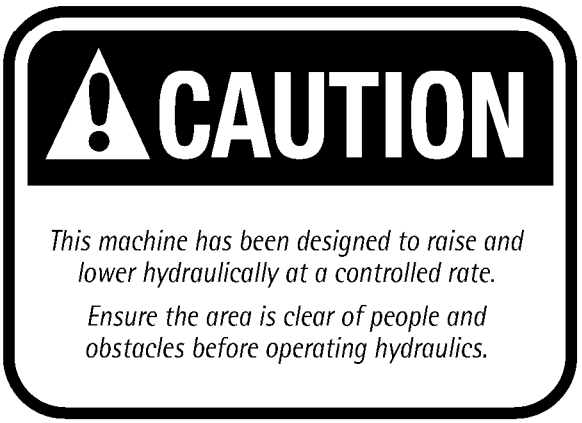
6. Fit the white idler pulley cover and rear belt cover with bolts provided.

7. Reposition the LH lower hitch plate as shown on the parts diagram.
8. Where supplied, fit the wheel assembly and safety bar bracket with the four (4) bolts provided. (Bracket bolts to the lower bolt holes and utilise the two longer bolts).

IN NEW ZEALAND THE MACHINE MAY BE SUPPLIED ASSEMBLED.

TRANSPORT





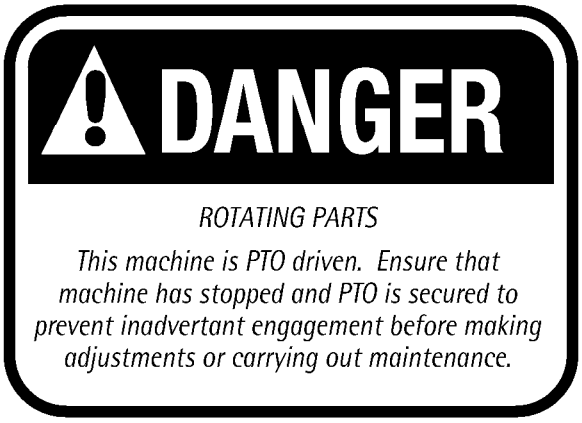
TO TRANSPORT POSITION:

Operate the tractor hydraulics and hold until mower drum frame is in the vertical position. Mower will automatically latch into this position.

TO WORK POSITION:

Lift the mower on tractor 3 pt linkage until the inner white skid is clear of the ground. Operate hydraulics to enable the latch to be disengaged. Pull latch cord then release hydraulic pressure. When mower has fully lowered, then lower 3pt linkage until inner white skid contacts the ground.

SERVICING



THE FOLLOWING SCHEDULE IS RECOMMENDED FOR AVERAGE FARM SITUATIONS. FOR LARGER HOLDINGS OR UNDER CONTRACTING CONDITIONS SERVICING MAY NEED TO BE CARRIED OUT MORE FREQUENTLY.

REFER TO LUBRICATION POINT CHART

PRIOR TO INITIAL USE:

1. Grease all points:
- Mower pivot shaft1 point
- Input bearing housing 1 point
- PTO universal joints 2 points
- PTO shaft cover bearing 2 points
- Hydraulic lift linkage and latch pivot points 5 points
2. Grease
(a) L.H. lower hitch plate
(b) PTO Shaft sliding member (after checking PTO length - see mounting instructions)

DAILY

1. Grease all points:
- Mower pivot shaft 1 point
- Input bearing housing 1 point
- PTO universal joints 2 points
2. Clear away any accumulated grass which may have built up around the transport latching mechanism.

Note: Failure to do this could cause the mechanism to become inoperative and create a dangerous situation.

3. Check blades for wear and sharpness.
4. Check belts for tension - see maintenance.
5. Check for early signs of drums bearing wear by simply lifting the edge of each drum and observing any movement.

WEEKLY

1. Grease:
- PTO cover bearings 2 points
- Wheel pivot 1 point
- PTO shaft sliding member
- L.H. lower hitch plate
2. Check tyre for correct inflation (50 PSI)
3. Check all nuts and adjustments for tightness, paying particular attention tot he 1" UNF nut attaching the main vee pulley. Mower pivot nut should be as tight as practical but still allow the machine to be lifted into transport position.

ANNUALLY

1. Perform all operations listed in "Prior to Initial Use" servicing.
2. Check all rotating components for smooth free rotation.
3. Check nuts and adjustment for tightness.
4. Check vee belts for obvious damage or wear.

MAINTENANCE

⚠ DANGER

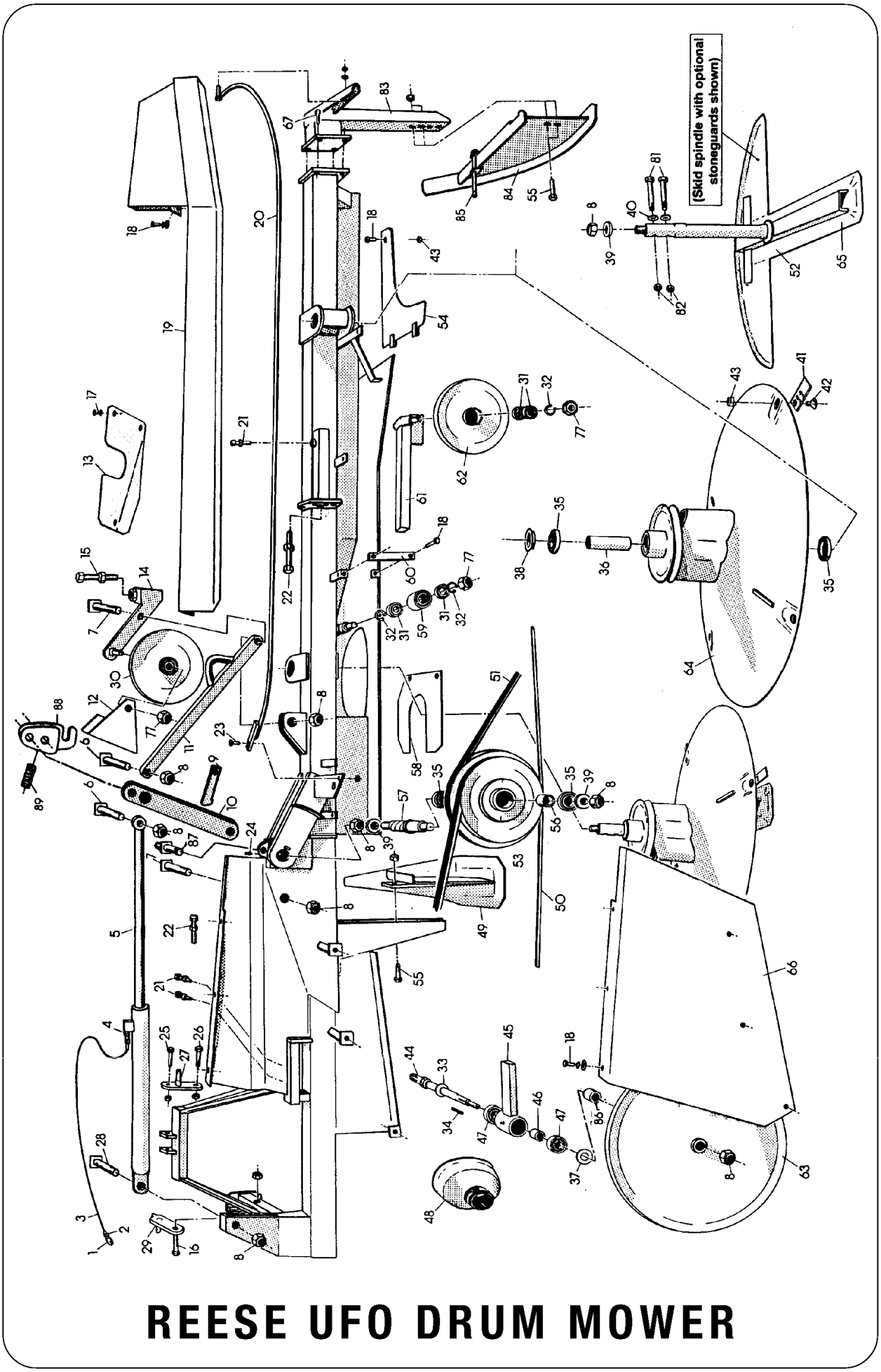
ROTATING PARTS

This machine is PTO driven. Ensure that machine has stopped and PTO is secured to prevent inadvertant engagement before making adjustments or carrying out maintenance.

⚠ CAUTION

All hydraulically elevated equipment must be supported or lowered to the ground when servicing to prevent accidental lowering which may result in personal injury

STORAGE IS THE KEY FACTOR IN THE MAINTENANCE REQUIREMENTS OF ALL MACHINERY.



REESE UFO DRUM MOWER

It is recommended that this machine:

1. Be stored under cover.
2. Be cleared of grass and dirt which will accelerate corrosion.
3. Have rubber based components (tyres and belts) protected from strong sunlight.

The UFO Mower is of simple construction and maintenance is in accordance with general engineering practices. The following hints are offered:

1.FITTING A SECONDARY DRIVE VEE BELT

(a) Remove the main drive pulley guard and primary drive belt (see a & b in 1 above).

(b) Remove inner and outer belt guards (items 54 & 58) and rear belt cover (item 19).

(c) Loosen lock screw (item 21) and tensioner bolts (items 15 & 22) on the secondary belt adjustment mechanisms.

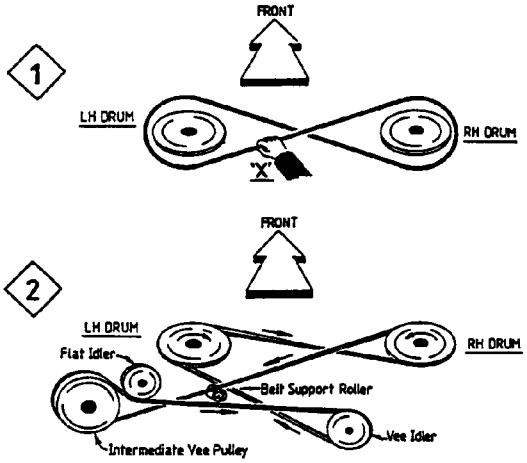
(d) With the mower supported just clear of the ground, fit the belt around the drum vee pulleys in a figure 8 style as shown <1> of the layout plan.

(e) Grasp the belt at a point X and pull back to remove the slack. The belt must seat firmly into the drum vee pulleys.

(f) Feed the belt from point X under the front vee of the intermediate pulley then around under the flat adjustment idler to the top of the vee idler pulley. Ensure the belt runs on top of the belt support idler roller. Refer to <2> of the layout plan.

(g) Adjust the belt tension for both belts as described below.

SECONDARY DRIVE BELT LAYOUT



MAINTENANCE

BELT TENSION

There are two belt adjusters for the secondary belt.

With the belt tensioner slide (item 61) released, adjust the flat idler tension crank (item 14) so that the vee belt is approximately parallel to the mower frame. Final tensioning is done with the adjustment slide. Belt should be sufficiently tight so that slipping does not occur in operation.

2. FITTING

(a) Remove the main drive pulley guard (item 66).

(b) Loosen lock screws (item 21) and tensioner bolt (item 22).

(c) The belt can now be fitted and tensioned as described below.

(d) Reassemble the machine in reverse order.

BELT TENSION

This is a short belt and must be kept very tight to avoid slipping. Adjust tension with tensioner.

3. REPLACEMENT OF DRUM BEARINGS

(a) Remove the belt shield fitted above the drum to be removed.

(b) Remove the secondary vee belt from the intermediate pulley and pull it clear of the drum vee pulley.

(c) Remove the 1" Nyloc Spindle Nut and thick washer.

(d) Remove the two 3 $^1/_2$" x $^1/_2$" spindle bolts.

(e) Lift the mower and support both ends.

(f) Drive the drum spindle down through the spindle clevis plates using a piece of tube as a thread protector. The drum and spindle will drop clear of the machine body.

(g) Support the drum in 2 or 3 places approximately 500 mm (20") above the ground.

(h) Drive the spindle through the drum using the thread protector as in (f) above.

(i) Remove the bearings from the drum tube by using a suitable drift (500 mm (20") of 25 mm (1") rod).

(j) Fit new bearings after ascertaining that the bearing surfaces and spacer tube are undamaged.

(k) Reassemble the machine in the reverse order.

Note Carefully: Ensure the drum skid is fitted the correct way i.e. skid projects further beyond the drum edge at the rear of the machine. Tighten the 1" spindle nut (using a 750 mm (30") extension tube on the wrench) before tightening the two spindle lock bolts.

Hint: If at any time both drums are removed, refit them in opposite position (inner drum into outer position etc.) Drums will each rotate in opposite directions and double their life.

BALANCE

Drums have been dynamically balanced and drum repair which involves welding must be done with care to preserve this situation. An unbalanced drum may cause excessive damage to the mower.

4. SKIDS

The wear plate fitted to the white skid may be replaced. It is a high tensile abrasion resistant steel and should be welded with high tensile mig wire or low hydrogen rods.

MOUNTING INSTRUCTIONS

⚠ CAUTION

All hydraulically elevated equipment must be supported or lowered to the ground when servicing to prevent accidental lowering which may result in personal injury

IMPORTANT: TO ACHIEVE OPTIMUM RESULTS IT IS NECESSARY THAT MOUNTING INSTRUCTIONS ARE COMPLIED WITH:

1. Attach the tractor linkage to the mower.
2. Transport the mower to a level area and lower it into operating position. Ensure the mower is in the fully lowered position by observing that the end of each beam, beneath the intermediate vee pulley, meet.
3. Adjust the linkage arms so that L.H. hitch plate is parallel to the ground, this gives maximum ground contour following either up or down.
4. Adjust the white skids to the cutting height required.
5. Adjust the top link so the "under drum skid" on the inner drum is the same height from the ground, front and rear.
6. Where fitted, adjust the wheel height so that the front edge of each drum is the same height from the ground.
7. Fit the PTO shaft to the 540 RPM output, free wheel device at the implement end. Remove the tractor draw bar if it is likely to foul the PTO shaft cover.

Note: It is important that the PTO shaft is of correct length and does not bottom out or separate when in use. An additional 50 mm (2") extension will occur in the event of the shear bolt break-away system being activated.

8. Adjust the R.H. sway bar, chains or guide block so that the mower top hitch is in line with the centre of the tractor. Adjust the L.H. side sufficiently to control excessive movement when the machine is being transported.

OPERATION

⚠ CAUTION

This machine has been designed to raise and lower hydraulically at a controlled rate. Ensure the area is clear of people and obstacles before operating hydraulics.

⚠ DANGER

ROTATING PARTS

Personal injury may be caused - ensure the area close to this machine is clear of people and obstacles before setting into operation.

If optional skirts are not fitted, mowers should be used in combination with tractor fitted with cab for your protection.

1. Ensure the machine has been serviced and mounted as per the instructions.
2. Lower the machine into operating position.
3. Lift the mower on the hydraulics just sufficient to clear the cutting blades from dense crop.
4. Engage tractor PTO gradually and accelerate to 540 RPM.

   Note: It is important to maintain a minimum of 540 PTO RPM at all times when mowing. Below this will give a ragged cut and consume additional power.
5. Lower the mower into operating position.

   Note: To ensure the mower lowers to the full extent, it may be necessary to raise the 3pt linkage momentarily.
6. Mow around the field in a clockwise direction at a speed which is comfortable to operate. Use the tractor hand throttle to maintain constant revs.

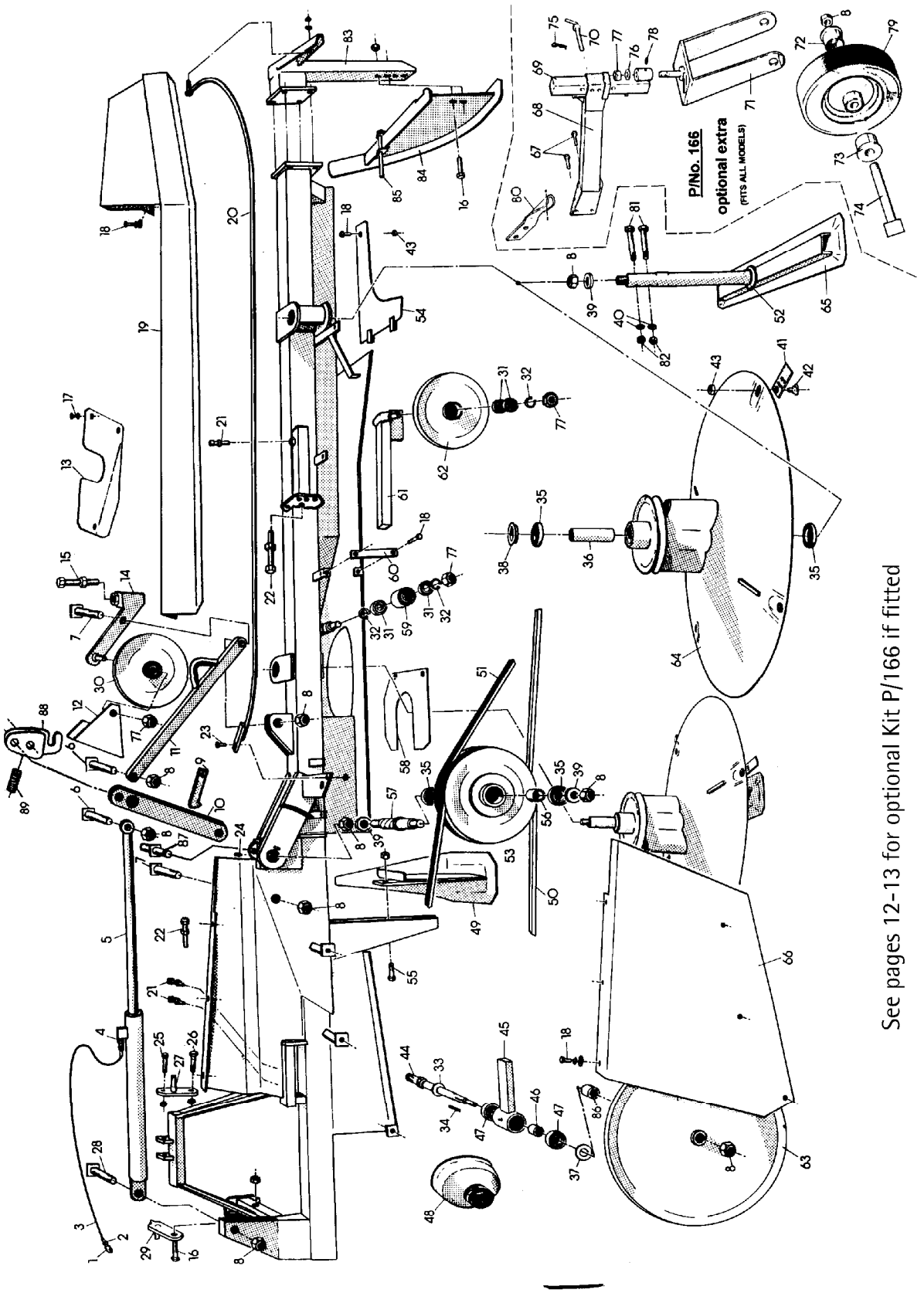
It is preferable not to lift the mower at corners. Round out corners then mow the uncut sections prior to doing the perimeter back cut.

Avoid very sharp cornering as this causes the outer end of the mower to go backwards and can in some very matted type crops cause wrapping around the drum.

The cleanest cut will always be when cutting closest to the ground. Use sharp blades for a clean cut - interchange blades between drums to use both edges or sharpen regularly with a grinder.

7. Check and adjust belts after initial stretch - approximately 2 hours.

   Note: If belts are too loose, slip will occur and cause excessive belt heating.
8. Check all bolts and nuts for tightness after the initial bedding in period. In particular, the 1" UNF nut securing the main drive pulley and drum spindles - at the end of the first days work is an ideal time.

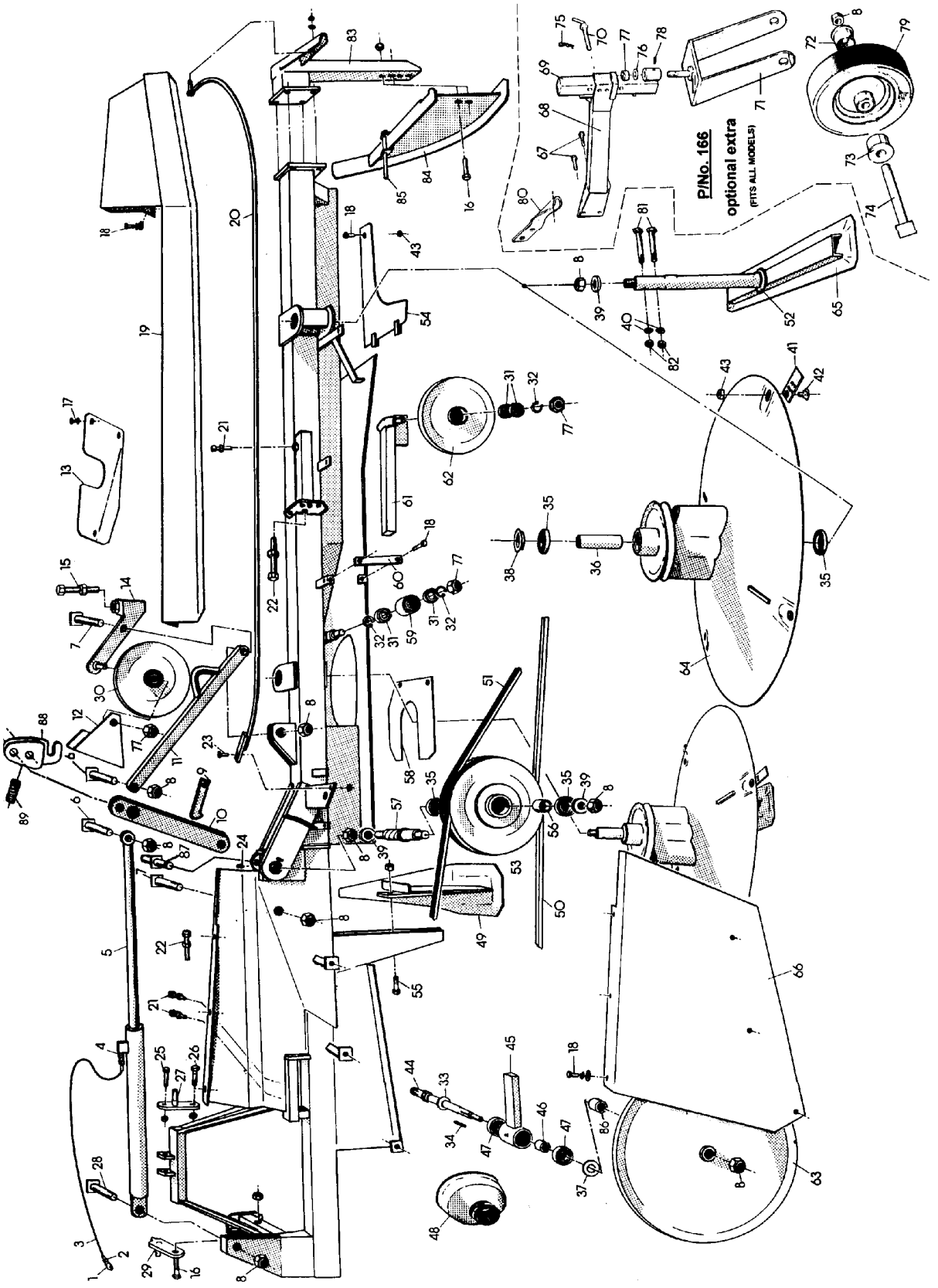


See pages 12-13 for optional Kit P/166 if fitted

REESE 2070 HL

REESE DRUM MOWER - 2070HL

ITEM NO	PART NO	DESCRIPTION
1	H3101	Tractor Q/R Ball coupling
2	H3102	Adaptor 1/4" F to 1/2" M
3	H3001	Hose 1/4" M/F x 2.74 m
4	H3103	1/4" M/M Hose fitting
5	10708	Hydraulic ram - single acting
6	10739	Pin c/w grease nipple 100 mm lg
7	10740	Pin c/w grease nipple 145 mm lg
8	8	Nyloc nut 1' UNF 12 tpi
9	10777A	Locking Latch
10	10710	Link arm
11	10711	Lift bar
12	10724	Pulley guard - tension idler
13	10713	Access cover - 2070W HL
14	10748	Belt tensioner idler crank
15	105A	Belt tensioner bolt 120 mm lg c/w nut
16	3	Bolt M20 x 130 lg c/w nyloc nut
17	8201	Screw M6 x 12
	9021	Spring washer M6
18	8401	Set screw M10 x 20 lg
	9041	Spring washer M10
	9042	Flat washer M10
19	10757	Rear belt cover - 2070W HL
20	10755	Safety bar 2070W HL
21	18A	Belt tension lock screw & nut
22	5A	Belt tensioner bolt 150 mm lg c/w nut
23	8505	Bolt M12 x 35
	9052	Spring washer M12
	9152	Plain nut M12
24	9320	Grease nipple M10 straight
25	47	Shear bolt - M10 x 50 HT c/w nut
26	8603	Bolt M16 x 55 lg
	16A	Nyloc nut M16
27	146A	Shear Plate Cat 2 - 16 mm
28	10738	Pin c/w grease nipple - 80 mm lg
29	102	Floating link - Cat 2
30	130	Flat idler pulley c/w Brgs & circlip
31	31	Bearing 6304-2RS
32	32	Circlip internal - J51
33	9207	Nilos ring 6307 ZAV
34	27	Key 5/16" square x 1 3/4" lg
35	35	Bearing 6210-2RS (C3)
36	10736	Drum bearing spacer - 315 mm lg
37	9208	Nilos ring RMS 10 ZAV
38	38	Drum top bearing spacer
39	39	Heavy washer 25 mm ID x 10 mm thick
40	40	Flat washer - 1/2" heavy
41	141	Cutting blade UFO 141
42	42A	Blade bolt UFO
43	43A	Nyloc nut M10
44	621	Input shaft 320 mm lg x 35 mm dia
45	323	Input housing 115 mm dia x 90 od c/w bearings & spacer tube
46	325	Bearing spacer tube 66 mm lg x 48 od
47	9205	Bearing 6307 Z
48	W23	Safety shroud for input shaft
	9340	Hose clip for safety shroud
49	617	Inner skid
NS	617-4	"Weld on" wear plate for inner skid
50	10750	Vee belt D3330 - special construction
51	10751	Vee belt D6400 - special construction
52	52	Bottom spindle washer - special
53	10731	Step up vee pulley - intermediate drive
54	10754	Outer belt guard
55	16	Bolt M16 x 50 HT
	16A	Nyloc nut - M 16
56	10725	Bearing spacer - intermediate drive
57	10707	Combination pivot shaft & pulley spindle
58	10771	Inner drum belt guard
59	10772	Belt support roller
60	10716	Belt tray support
61	10723	Belt tensioner slide
62	10430	Vee idler pulley 245 dia c/w bearings & circlips
63	26	600 mm Vee pulley
64	10734	Drum c/w bearings & spacer tube
65	10737	Skid/spindle assy c/w nyloc nut & bottom spindle washer
	10737A	As above with stone guards fitted (illustrated)
66	10712	Main drive pulley guard
67	8510	Bolt M12 x 35 HT
	8513	Bolt M12 x 40 HT
	9052	Spring washer M12
	9152	Nut M12 plain
68	574	Wheel attachment arm
69	575	Wheel height adjustment slide
70	576	Height adjustment pin
71	577	Wheel forks
72	578	Anti wrap shield - 30 mm inner tube
73	579	Anti wrap shield - 48 mm inner tube
74	580	Wheel axle
75	9281	R clip 4 mm
76	9071	Washer M20 x 45 mm od
77	9172	Nyloc nut M20
78	24	Grease nipple 1/4" UNF straight
79	570	Wheel c/w tyre, tube & bearings
	571	Tyre only 425 x 8 6 ply
	572	Tube 400 x 8
	573	Wheel rim only c/w bearings
	9212	Wheel bearings 6205-2RS
80	585	Safety bar bracket
81	14	Spindle shear bolt 1/2" UNF x 3 1/2"
82	14A	Nyloc nut 1/2" UNF
83	10764	Outer skid leg 'bolt on'
84	115	Outer skid
85	158	Thistle deflector
86	501	Spacer - 52 mm
87	10778	Latch pin - 68 mm lg
NS	D1005	Decal set - 2070W HL
NS	W241	PTO Shaft 2400 Series 875 lg Lemon tube - c/w o/run clutch



REESE 2400 HL

REESE DRUM MOWER - 2400HL

ITEM NO	PART NO	DESCRIPTION
1	H3101	Tractor Q/R Ball coupling
2	H3102	Adaptor 1/4" F to 1/2" M
3	H3001	Hose 1/4" M/F x 2.74 m
4	H3103	1/4" M/M Hose fitting c/w
	H3115	1.5 mm restrictor plug
5	10708	Hydraulic ram - single acting
6	10739	Pin c/w grease nipple 100 mm lg
7	10740	Pin c/w grease nipple 145 mm lg
8	8	Nyloc nut 1' UNF 12 tpi
9	10777A	Locking Latch
10	10710	Link arm
11	10711	Lift bar
12	10724	Pulley guard - tension idler
13	10813	Access cover - 2400 HL
14	10748	Belt tensioner idler crank
15	105A	Belt tensioner bolt 120 mm lg c/w nut
16	3	Bolt M20 x 130 lg c/w nyloc nut
17	8201	Screw M6 x 12
	9021	Spring washer M6
18	8401	Set screw M10 x 20 lg
	9041	Spring washer M10
	9042	Flat washer M10
19	10857	Rear belt cover - 2400 HL
20	10855	Safety bar 2400 HL
21	18A	Belt tensioner lock screw & nut
22	5A	Belt tensioner bolt 150 mm lg c/w nut
23	8505	Bolt M12 x 35
	9052	Spring washer M12
	9152	Plain nut M12
24	9320	Grease nipple M10 straight
25	47	Shear bolt - M10 x 50 HT c/w nut
26	8603	Bolt M16 x 55 lg
	16A	Nyloc nut M16
27	146B	Shear plate Cat 2 - 20 mm
28	10738	Pin c/w grease nipple - 80 mm lg
29	102	Floating link - Cat 2
30	130	Flat idler pulley c/w Brgs & circlip
31	31	Bearing 6304-2RS
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46	325	Bearing spacer tube 66 mm lg x 48 od
47	9205	Bearing 6307 Z
48	W23	Safety shroud for input shaft
	9340	Hose clip for safety shroud
49	617	Inner skid
NS	617-4	"Weld on" wear plate for inner skid
50	10850	Vee belt D132 - special construction
51	10851	Vee belt D292 - special contstruction
52	52	Bottom spindle washer - special
53	10831	Double vee pulley - intermediate drive
54	10854	Outer belt guard
55	16	Bolt M15 x 50 HT
	16A	Nyloc nut - M16
56	10725	Bearing spacer - intermediate pulley
57	10707	Combination pivot shaft & pulley spindle
58	10771	Inner drum belt guard
59	10772	Belt support roller
60	10716	Belt tray support
61	10823	Belt tensioner slide
62	10430	Vee idler pulley 245 dia c/w bearings & circlips
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73	579	Anti wrap shield - 48 mm inner tube
74	580	Wheel axle
75	9281	R clip 4 mm
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77	9172	Nyloc nut M20
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	573	Wheel rim only c/w bearings
	9212	Wheel bearings 6205-2RS
80	585	Safety bar bracket
81	14	Spindle shear bolt 1/2" UNF x 3 1/2"
82	14A	Nyloc nut 1/2" UNF
83	10764	Outer skid leg 'bolt on'
84	615	Outer skid
	615-5	Weld on wear plate for outer skid
85	158	Thistle deflector
86	501	Spacer - 52 mm
87	10778	Latch pin - 68 mm lg
NS	D1006	Decal set - 2400 HL
NS	W242	PTO shaft 2400 Series 875 lg Star profile tube - c/w o/run clutch

2070 HL/2400 HL SPREADER LAYOUT

Spreader No.s 10760 & 10860

(10860 spreader Part No.s shown in brackets)