



INSTRUCTIONS FOR USING "QUALCAST" LAWN MOWERS.

1. Upon unpacking the machine from its box, examine it carefully to see that it has not been damaged in any way during transit. Spin the cutting cylinder round and see that it is free. You should just hear it touch the bottom blade.

2. TO ASSEMBLE MACHINE.

First remove split pins from each sideplate handle arm location bosses (No. C), spring handle into position taking care to replace split pins before use.

3. OILING.

(a) To oil the driving wheel bearings there are two holes (one in each wheel) underneath the spigot covers which can easily be removed by insertion of a screw-driver in recesses provided. (b) To oil free wheel and small drive pinion, place machine on side and bring oil hole opposite arrow on side plate. (c) If the cutting edges of the blades are smeared with a well soaked oily rag during use, the labour of mowing is considerably reduced. (d) Although the bearings are of self-lubricating type, it may be necessary, after a lengthy period, to oil same. An oil hole is provided in each bearing housing on side plates.

N.B.—These are the only places where it is necessary to lubricate.

4. The machine is now ready for use, but must be adjusted for height of user and height of cut.

(a) **Height of User.**—The handle may be adjusted to a convenient height for the user by means of the adjusting bolts (No. 31).

(b) **Height of Cut.**—Place the machine on a flat surface (such as kitchen table) not on the grass itself, loosen the bolts on the brackets supporting the wooden roller, and raise or lower roller until cutting edge of bottom blade is $\frac{1}{2}$ in. higher than is desired to cut the grass, as the driving wheels sink into the turf slightly. If the grass is long, it is more satisfactory to set for high cut and not strain the machine. The bracket bolt (No. 10) should be in the bottom hole of sideplate for high cut, and it is necessary to transfer this bolt to the top hole to obtain the minimum low cut.

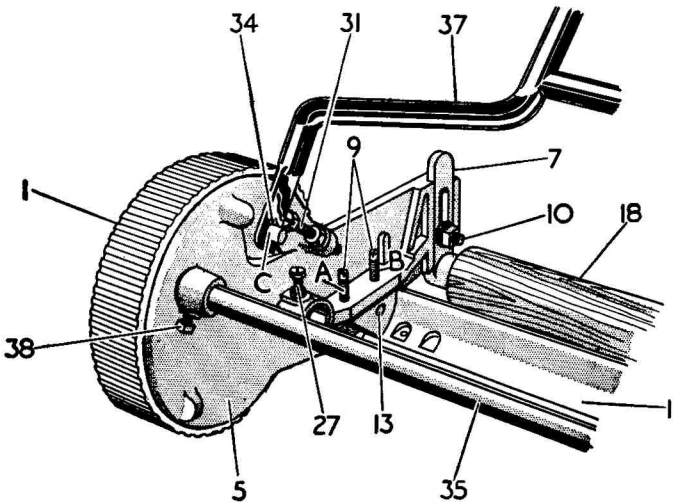
5. **To adjust for keen cutting.**—Every Mower is adjusted before leaving the factory to cut paper $1/250$ in. thick, and no adjustment should be necessary for some time. If the grass seems bruised and not clipped, reset the bottom blade carefully. The revolving cylinder is fixed and the bottom blade is adjustable. To bring the bottom blade up closer to the cylinder: (a) Release (No. 13) one quarter of a turn on both sides, (b) Slack (No. 9) "A" very slightly, (c) Screw down (No. 9) "B" hard, (d) Tighten up (No. 13) on both sides. When adjusted correctly the cylinder should spin freely and the machine cut thin brown paper on any part of the blades.

N.B.—DO NOT tighten Adjusting Screw (No. 9) "A" without loosening Adjusting Screw (No. 9) "B" or vice versa, otherwise the Side Plate or Sole Plate is rendered liable to breakage.

A remarkably fine sharp cut can be regained on a Mower blunted through hard use at the end of the season by lapping in the blades with 90 emery powder and oil. To do this, remove the outer wheels and change the small right-hand pinion over to the left-hand side, replacing the left-hand wheel. Make a paste of 90 emery and oil, and smear the edges of the cutting blades with it. Insert the projection on the end of the spanner in the oil hole of the outer wheel and revolve the wheel in the reverse direction, so that the blades run backwards. Perfect contact with the bottom blade at all points can be obtained by this method. Carefully remove all emery prior to re-use, and do not omit to change the pinion back to its correct side, or the machine will not drive.

TO TAKE UP WEAR AND ADJUST CYLINDER BEARING.

6. To take up play between the cylinder spindle and bearing, first slacken locknut on bearing adjusting screw (No. 27) situated on above bearing housing on side plates. Turn screw in a clockwise direction until there is no play between the cylinder spindle and bearing, and at the same time see that the spindle spins freely. Tighten up locknut.



7. After your Mower has been in use some time, it will, like all new machinery, bed down slightly, so look it over and see if it needs tightening anywhere.

8. Do not run with your Mower, walk steadily at about two miles per hour.

9. Should the grass not be delivered squarely into the grassbox, bend the grass delivery plate until it suits your speed.

10. Cut grass absorbs oil freely, so oil your Mower about every twenty minutes when in use, and when you have finished mowing for the day, clean it well and wipe all six knives with an oily rag.

11. Take off the driving wheels occasionally and clean out the gearing and free-wheel in the pinion.

GUARANTEE.

THIS IS TO CERTIFY that this "QUALCAST" Mower has been made throughout by QUALCAST LTD., at their Factory in Derby, England, and is guaranteed for ten years from the date of retail purchase, against breakage due to faulty material or workmanship, provided that it shall remain the property of the first retail purchaser. The full terms and conditions of this guarantee are hereunder.

1. THE guarantee does not apply to defects due to wear and tear, misuse or neglect, nor to faulty adjustment by the user.
2. If a defective part should be found in this machine, it must be returned to us carriage paid, accompanied by an intimation that it is desired to have the part dealt with under our guarantee, and at the same time we must be furnished with the name of the Agent from whom purchased, date of purchase and size of machine.
3. WE guarantee only new machines purchased through a recognised retail store.
4. UNDER no circumstances do we guarantee any part from which our trade mark or identity numbers have been removed, and the fitting of any spare part or accessory not of our manufacture cancels our guarantee.

INSIST ON "QUALCAST" SPARES.

Failing compliance with the above, the guarantee is not enforceable, and any goods received will lie at our works at the sole risk of the sender.

SOLE MANUFACTURERS: **QUALCAST LTD.** DERBY, ENGLAND.

INSTRUCTIONS FOR USING THE "QUALCAST" MODEL 'E.1' LAWN MOWER

SPARE PARTS.

Part No.	Description.	No. off	Plate Ref.	Part No.	Description.	No. off	Plate Ref.
E.1/1	Wheel, Outer	2	1	B.34	Spanner	1	20
E.2	Pinion, R.H.	1	2	*B.35	Delivery Plate	1	21
E.3	Pinion, L.H.	1	3	*B.35A	Delivery Plate Assembly	1	—
G.4	Pawl	2	4	*B.36	Delivery Bar	1	22
E.1/5	Side Plate Assembly, R.H. (Bronze Bearing)	1	5	*B.39	Grassbox, without Delivery Plate	1	23
E.1/6	Side Plate Assembly, L.H. (Bronze Bearing)	1	6	B.42	Screw, Delivery Plate	2	24
B.9	Roller Carrier	2	7	I 52	Spider, Centre	1	25
Q.10	Pin, Split Cotter	2	8	Y.58A	Grips, Handle	2	26
G.11	Screw, Sole Plate Adjustment	4	9	D.59	Screw, Bronze Bearing Ad- justing	2	27
J.12	Bolt, Roller Carrier	2	10	J.60	Bearing Bush, Bronze	2	28
*B.15	Sole Plate	1	11	S.67A	Rivet, Cylinder	15	29
*B.15A	Sole Plate Assembly	—	—	L.75	Spider, L.H.	1	30
E.16	Screw, Bottom Blade	5	12	HD.83	Bolt and Nut, Handle Ad- justing	2	31
B.17	Screw End, Sole Plate	2	13	E.88	Washer, Roller Carrier	2	32
*B.18	Spiral Blade	5	14	L.88	Washer, Sole Plate	2	33
*B.18A	Cylinder Assembly	—	—	K.91	Pin, Split Cotter (Handle Arm Lug)	2	34
*B.19A	Cylinder Spindle	1	15	*B.103	Tube, Front	1	35
L.20	Spider, R.H.	1	16	B.106A	Spigot Cover Assembly	2	36
*GA.23	Bottom Blade	1	17	*B.316	Arm, Handle	1	37
*B.32	Roller, Wood	1	18	Y.329	Screw, Front Tube	2	38
Q.33	Pin, Wood Roller	2	19				

IMPORTANT NOTE.—In ordering parts which are made right and left hand, please specify which hand is needed as you push the machine, and always give the number and name of part, with letter which is marked on part.

EVERY PART OF THIS MOWER IS MADE IN ENGLAND.

* WHEN ORDERING PARTS MARKED THUS, WIDTH OF CUTTING CYLINDER MUST BE GIVEN.

