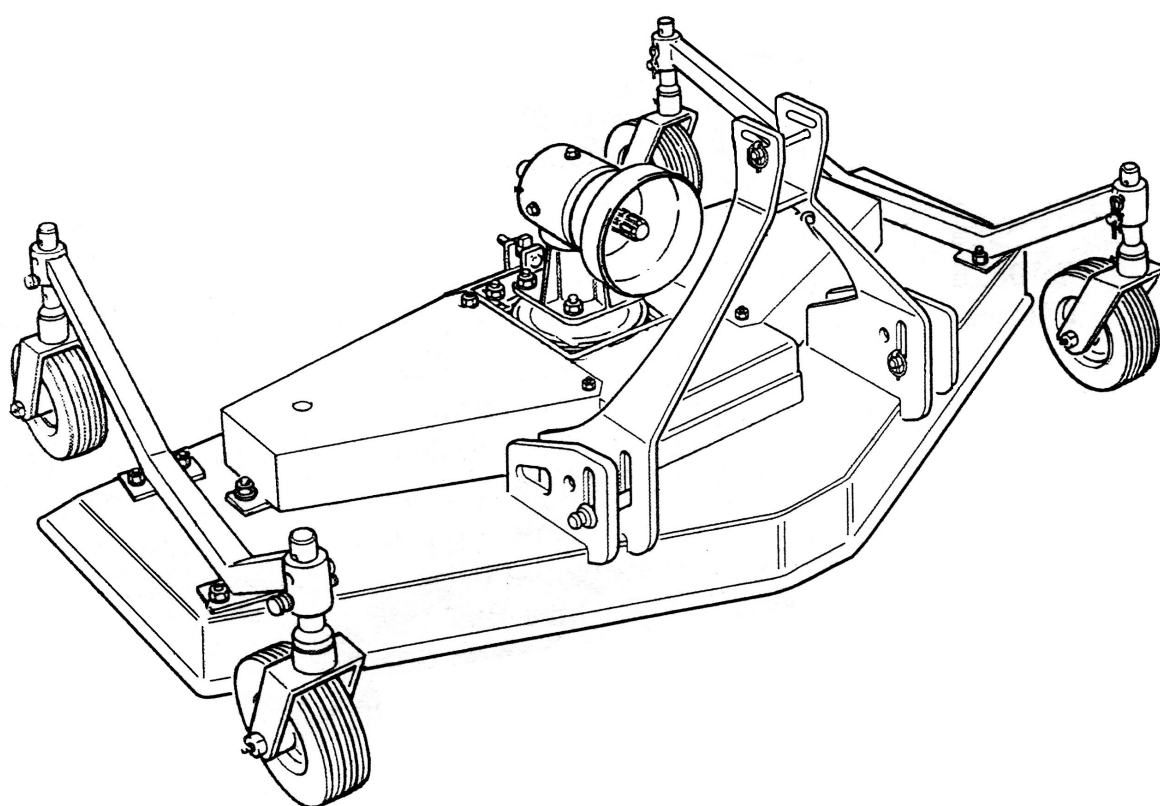




A Broadwood International Product

Operation Manual and Parts Book

Wessex ProLine CR24/2 and CR24/4 Finishing Mower



Product Code: L2008



Manufacturers and Distributors of Quality Equipment



Issue May 2011

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WELCOME TO YOUR NEW WESSEX PRODUCT

Thank you for purchasing a Wessex product. As a Broadwood customer, you now number among the most important people of our business and we will endeavour to give you the best service available through our dealer network.

Please read this Manual carefully and familiarise yourself and other persons that will be using the machine with its contents, to ensure the optimum performance and working life of your machine. It is advisable that a copy of this Manual is kept in the workshop and one copy with the machine. Further copies are available through your dealer.

On delivery, your dealer should go through the workings of the machine with you, explaining the setting up procedures, all of which are contained in this manual for further reference. The Warranty Registration Form must also be completed and returned to us **within 7 days of delivery** in order to validate the Warranty.

**PLEASE READ THE FOLLOWING PAGES CAREFULLY BEFORE USING YOUR MACHINE
AND KEEP THIS MANUAL IN A SAFE PLACE.**

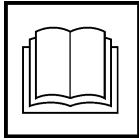


**THIS SAFETY SYMBOL IS TO ALERT OPERATORS OF A HAZARD
THAT MAY RESULT IN INJURY.
ALWAYS FOLLOW INSTRUCTIONS CAREFULLY**

SAFETY DECALS



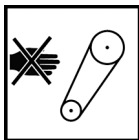
- GB **ATTENTION** Description of pictograms.
 F **ATTENTION** Description des pictogrammes.
 D **VORSICH** Beschreibung der Piktogramme.



- GB Read Operating manual before use.
 F Lisez Manual D'Opération avant l'utilisation.
 D Vor der Benutzung, Betriebshandbuch lesen.



- GB Protective eyewear, footwear, gloves and ear protectors must be worn.
 F Lunettes de protection, chaussures, gants, protégés-oreilles doivent être portés.
 D Schutzbrille, Schuhe, Handschuhe und Gehörschutz getragen werden muss.



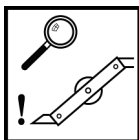
- GB Never remove guards or attempt adjustment until rotor has stopped.
 F Ne retirez jamais les gardes ou d'ajustement tentative jusqu'à ce que toutes les pièces mobiles ont été interrompus.
 D Schutzvorrichtung niemals abnehmen oder Einstellung versuchen, bevor der Rotor abgestellt.



- GB Bystanders must be at least 20 metres from machine range of action.
 F Des spectateurs doivent s'écarter au moins 20 mètres du rayon d'action de la machine.
 D Umstehenden müssen sich mindestens 20 Meter vom Maschinenbetriebsraum entfernen.



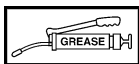
- GB Stand clear. Flying objects possible.
 F S'écarter! Possibilité d'objets volants.
 D Zurückbleiben! Herumfliegende Objekte möglich.



- GB Examine blades regularly. The operator is responsible for machine damage caused by unbalanced rotors.
 F Examinez des lames régulièrement. L'opérateur est responsable des dommages à la machine provoqués par des rotors mal équilibrés.
 D Klingen regelmäßig kontrollieren. Der Arbeiter ist an den durch unausgewogene Rotoren Maschinenschäden verantwortlich.



- GB Keep hands and feet clear
 F Garder les mains et les pieds.
 D Halten Sie Ihre Hände und Füße.



- GB Grease points
 F Les points de graissage
 D Grease Punkte.

IMPORTANT SAFETY WARNINGS



Wessex machines are guarded for your protection, but you must always observe certain elementary precautions. Machines are potentially **dangerous** and should be used with the greatest respect and **ALL OPERATORS MUST** read this manual and be aware of all safety precautions.

1. **NEVER** attempt any adjustment whatsoever, unless the machine is **COMPLETELY** at a standstill.
2. **NEVER** attempt to clear any obstructions around the mower unless the machine is **COMPLETELY** at a standstill.
3. **NEVER** remove belt guards unless the machine is **COMPLETELY** at a standstill.
4. **NEVER** remove safety guards which are provided for your protection.
5. **NEVER** operate the mower with people behind, keep everybody (especially children and animals) at a safe distance, **minimum 20 metres**.
6. Stand well back from the machine when cutters are spinning.
7. Regularly inspect the **BLADES AND FIXING BOLTS** to ensure that they are in tip-top condition. Replace blades **IMMEDIATELY** if any signs of fracture or excess wear becomes apparent. Serious damage, which is excluded from our warranty conditions, may result from using your mower with an unbalanced rotor. When replacing blades, always fit new mounting bolts and nuts to ensure that the rotor is balanced and running smoothly.

HEALTH AND SAFETY - Noise at Work Regulations

READING AT THE OPERATORS EAR CR seriesmowers : 94 D.B.A

Depending on conditions and material being cut, this reading may alter, it is therefore advisable for users to do their own assessment.



In compliance with the above regulations, Ear Protectors must be worn when operating machinery.

WARRANTY

Your Broadwood product or equipment is warranted free from defect in workmanship or manufacture for one year from date of purchase. Any parts which appear to us to be defective, either in material or workmanship shall be replaced or repaired at no cost to the purchaser, subject to the following conditions:

1. The registration card enclosed with this booklet must be returned to us within seven days of purchase.
2. Any failure in the machine should be reported in the first instance immediately to your dealer, who will act on your behalf to resolve the matter to your satisfaction.
3. The defective parts will be returned by your dealer to us, accompanied by a full statement describing the failure and the circumstances and conditions in which the failure occurred.
4. The following are specifically excluded from our terms of warranty:
 - a) Fair wear and tear, especially to belts, brushes, blades and spinners.
 - b) Damage to blades or brushes caused through incorrect positioning of the rotor (see instructions).
 - c) Damage caused by neglect or lack of lubrication.
 - d) Damage caused by misuse or abuse.
 - e) Damage caused whilst the machine is in transit.
 - f) Damage caused to the frame of the machine by running the machine with unbalanced rotors, blades or spinners.
 - g) Damage caused to the machine by use with loose nuts, bolts, screws or any other type of fittings.
5. The warranty is for the benefit of the first user only.
6. Broadwood International decisions will be final and binding.

Note:

It is recommended that every machine is inspected after one hour of operation to check that all nuts, bolts, screws or any other types of fixings are tight and any loose fixings or components should be rectified as appropriate.

Further inspections should be carried out at regular intervals thereafter.

SETTING UP YOUR MOWER

1. Stand your machine on level ground and ensure that the height adjustment stems above each wheel are held in the same position by pins and clips provided.
2. Reverse your tractor up to your mower, and connect the bottom link arms into the clevis provided. On 4 wheel mowers, ensure that the bushes are located in the slots.
3. Adjust the right hand link arm so that both bottom link pins are at the same position in the slots.
4. Connect the top link.
5. Connect the PTO shaft, ensuring that the shaft is not too long for your tractor. If necessary, the shaft, which is of tubular section, may be easily cut with a hacksaw, taking care to cut each tube to the same amount (see PTO shaft Operation & Maintenance).

SPECIAL ADJUSTMENT FOR FINE GRASS CUTTING

1. After having set up the machine as above, one pivoting jaw pin may be removed, to allow the pivoting jaw to pivot. Adjust the top link so that the pivoting jaw is in the upright position.
2. If the mower scalps the ground, it is most likely that the mower is set too low for the conditions. Raise the cutting height by one increment on each of the wheel adjustment bars.
3. If set up carefully in accordance with these instructions, your mower will give good service, leaving a fine finish and following ground contours accurately.
4. Replace the pin in the pivoting jaw for road transport.

USING YOUR WESSEX MOWER

1. The *correct* PTO speed for your mower is 540 rpm. **NEVER** use the mower at a PTO speed in excess of this.
2. Having set the mower up in accordance with the instructions above, engage the PTO, and, selecting a low forward speed, gently release the clutch.
3. You will establish by experience what is the optimum forward speed for your conditions, but on regularly maintained grass, you should achieve a good finish at 5-6 mph.
4. Long wet grass will have to be cut more slowly. In very difficult conditions better results are obtained by making two passes, in opposite directions - lowering the cutting height for the second pass.

BELT ADJUSTMENT

The drive belts are adjusted by moving the gearbox on its mounting bracket in relation to the mower deck.

First slacken the four holding bolts on the base of the gearbox-mounting bracket. To tighten belts, turn the rear adjusting nut anti clockwise, and to slacken the belts, turn clockwise.

The belts should be free to move about 12 mm under finger pressure. If they are too tight, there will be undue stress on the driven parts.

When belts are adjusted correctly, lock the adjusting nut in place, and tighten the gearbox holding bolts. Both drive belts are tightened equally.

LUBRICATION

IMPORTANT Only use Wessex **XP ProMotive** high performance grease. Specially formulated for high speed, high temperature and moisture resistance.
Order through your dealer (Part Number WX-9884).

DAILY Grease the spindle bearings through the grease nipple above the spindle belt pulleys.
Grease both cross bearings on the PTO shaft.
Grease the tubes of the PTO shaft.

REGULARLY Grease the wheel bearings.
Grease the castor assembly.
Check the gearbox oil level. The level plug is on the side of the gear box. Top up with a 90 grade gear oil.

MAINTENANCE

Check ALL FASTENING SETS after first 8 hours of work.

BELTS

These should be checked periodically, and replaced if found to be fraying, cut, or damaged in any other way.

BLADES

These should be regularly checked for condition. Damaged blades cause imbalance in the rotor, and in turn can cause serious damage to the mower, which is specifically excluded from our warranty conditions.

If the mower begins to vibrate, stop work immediately and investigate. Almost certainly the cause will be damaged blades.

SPARE PARTS

Spare parts for your Wessex Mower can be obtained through our extensive dealer network. For details of your nearest supplier or technical information, please email parts@broadwoodintl.co.uk or telephone 01420 478111.

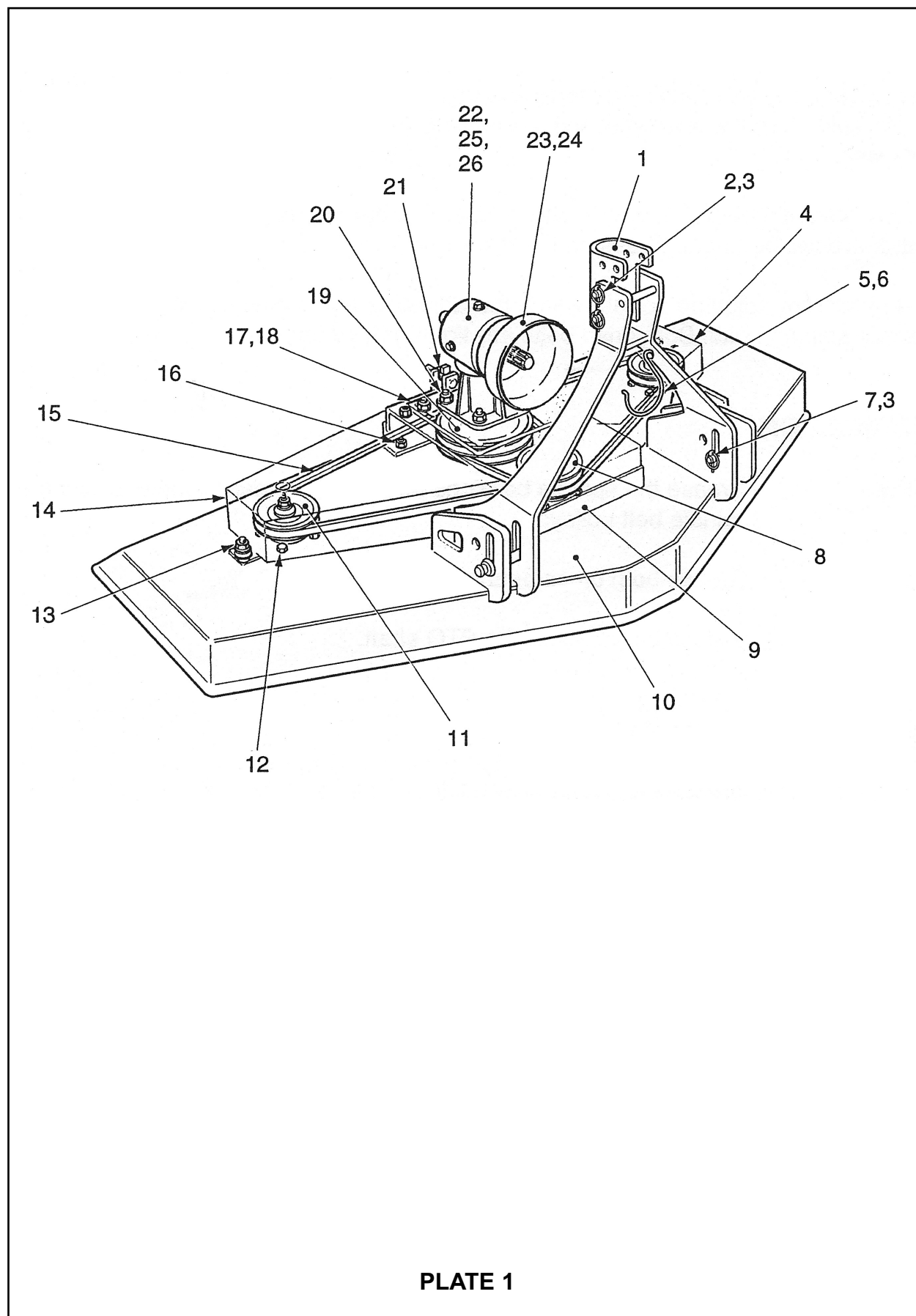
SAFETY TRAINING INDUCTION

The undersigned personnel have been trained in the safe use of this Wessex machine and have understood the contents of the Operator's Manual.

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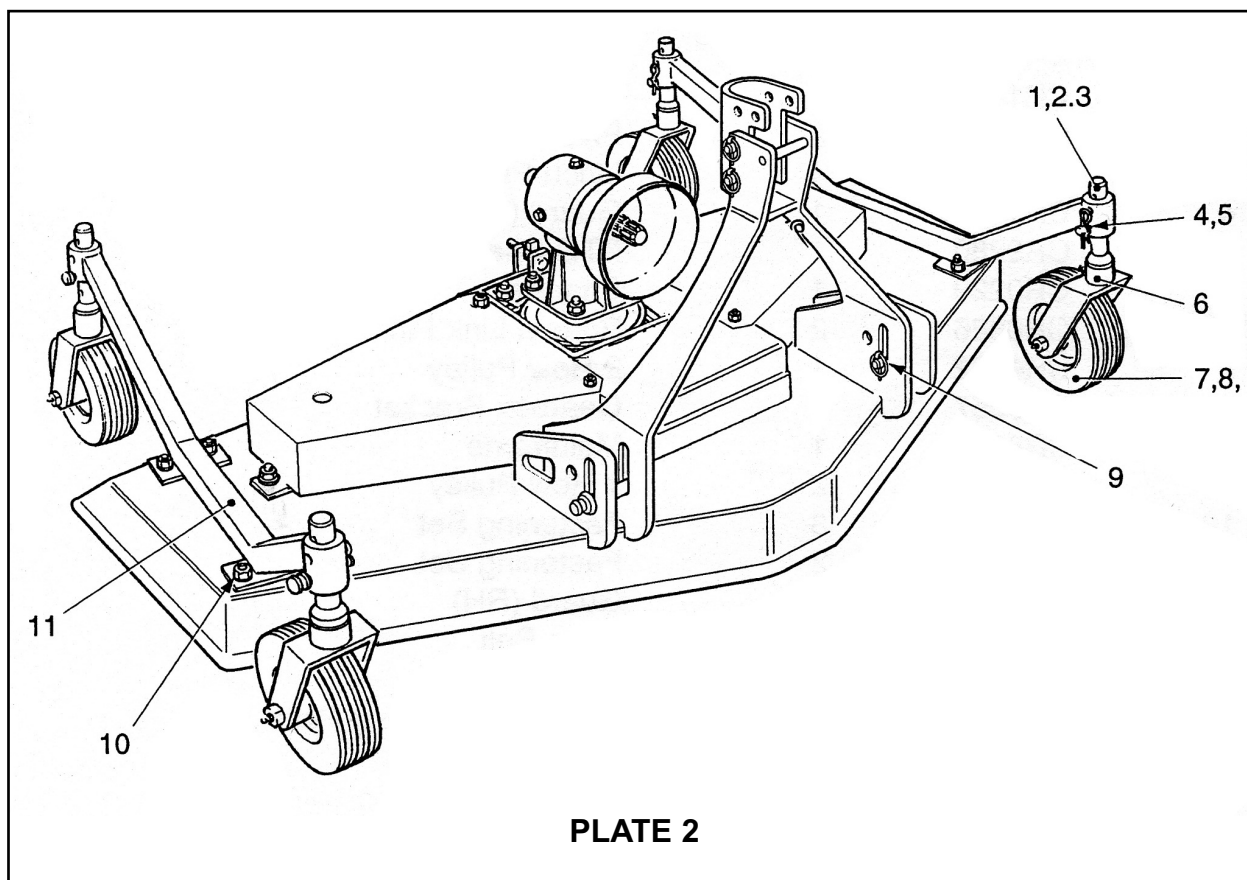
PARTS ILLUSTRATION - CR MAINFRAME ASSEMBLY - PLATE 1



PARTS LIST - CR MAINFRAME ASSEMBLY - PLATE 1

Item No.	Part No.	Description	Qty. per Machine
1	WX-14280	Pivoting Jaw	1
2	WX-0426	Pivoting Jaw Pin	2
3	WX-0127	Linch Pin	4
4	WX-10777	Guard (LH)	1
5	WX-9280	PTO Shaft Holder	1
6	WX-0229	Shackle	1
7	WX-0826	Bottom Link Pin	2
8	WX-7862	2 Row Pulley	1
9	WX-5057	Gearbox Bracket	1
10	WX-8679	Mainframe	1
11	WX-7962	1 Row Pulley	2
12	WX-3503	Pulley Hub Fastening Set	3
13	WX-6103	Belt Guard Fastening Set	2
14	WX-10877	Guard (RH)	1
15	WX-4034	Drive Belt	2
16	WX-5003	Gearbox Bracket Fastening Set	1
17	WX-5157	Gearbox Mounting Plate	1
18	WX-4603	Gearbox Mounting Fastening Set	1
19	WX-3962	Drive Pulley	1
20	WX-4703	Gearbox Fastening Set	1
21	WX-0210	Adjusting Nut	2
22	WX-5257	Gearbox Assembly	1
23	WX-5177	Gearbox Cone Guard	1
24	WX-5103	Gearbox Cone Guard Fastening Set	1
25	WX-2025	Disc Spring	1
26	WX-0547	Key	1

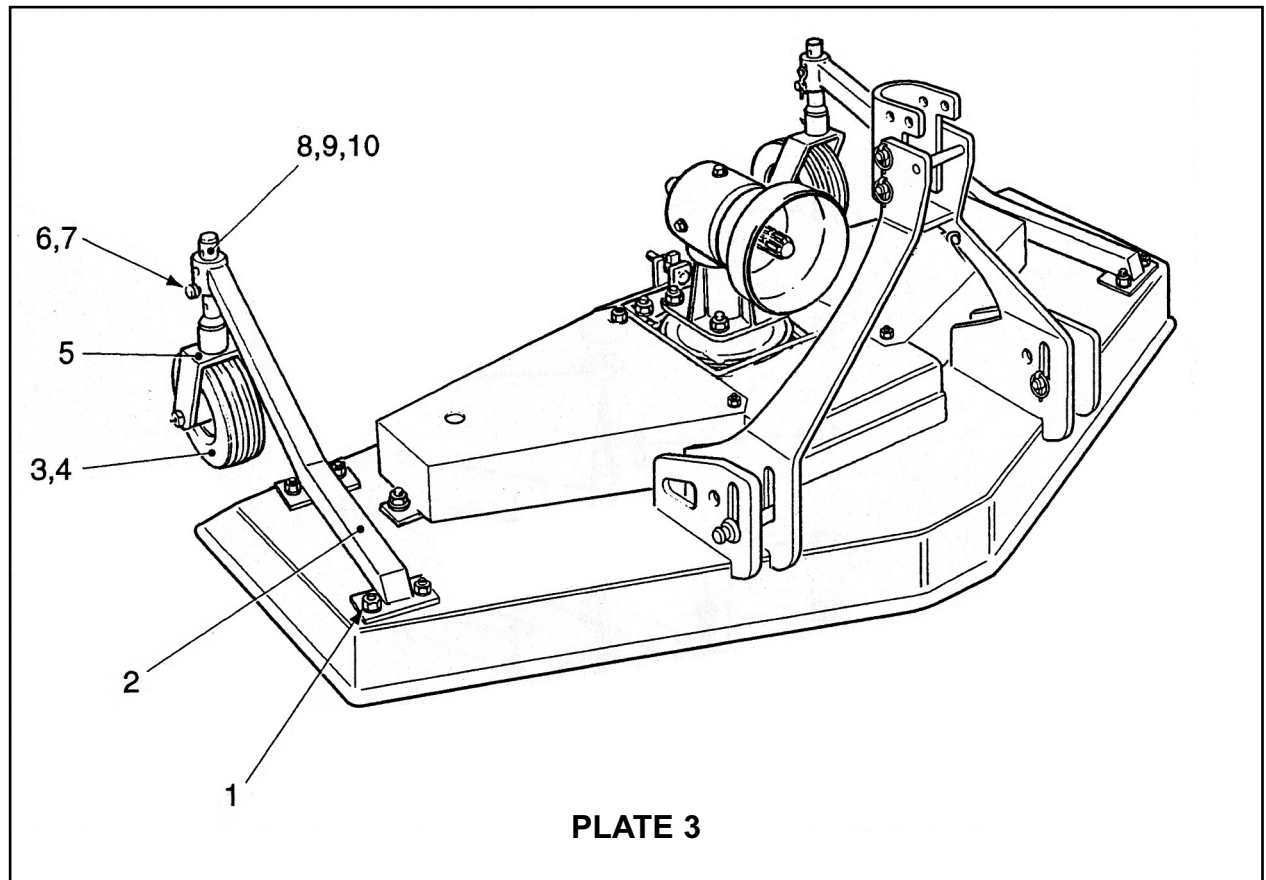
PARTS ILLUSTRATION - CR 4 WHEEL ASSEMBLY



PARTS LIST - CR 4 WHEEL ASSEMBLY - PLATE 2

Item No.	Part No.	Description	Qty. per Machine
1	WX-4351	Height Adjustment Stem	4
2	WX-6303	Wheel Fork Fastening Set	4
3	WX-1520	Special Washer	4
4	WX-0628	Height Adjustment Pin	4
5	WX-0121	'R' Clip	4
6	WX-4251	Wheel Fork	4
7	WX-1552	Wheel	4
8	WX-6003	Axle	4
9	WX-1328	Lower Link 'Top-Hat' Bush	4
10	WX-5903	Wheel Arm Fastening Set	2
11	WX-12151	Wheel Arm	2

PARTS ILLUSTRATION - CR 2 WHEEL ASSEMBLY



PARTS LIST - CR 2 WHEEL ASSEMBLY - PLATE 3

Item No.	Part No.	Description	Qty. per Machine
1	WX-5903	Wheel Arm Fastening Set	2
2	WX-12251	Wheel Arm	2
3	WX-1552	Wheel	2
4	WX-6003	Axle	2
5	WX-4251	Wheel Fork	2
6	WX-0628	Height Adjustment Pin	2
7	WX-0121	'R' Clip	2
8	WX-4351	Height Adjustment Stem	2
9	WX-6303	Height Adjustment Stem Fastening Set	2
10	WX-1520	Special Washer	2

PARTS ILLUSTRATION - SPINDLE & BLADE ASSEMBLY (4 Wheel Mower)

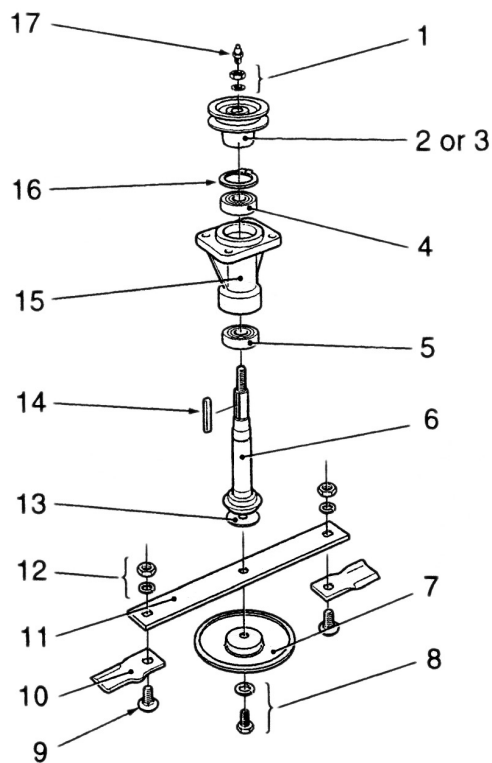


PLATE 4

PARTS LIST - SPINDLE & BLADE ASSEMBLY (4 Wheel Mower)

Item No.	Part No.	Description	Qty. per Spindle
1	WX-5303	Pulley Fastening Set	1
2	WX-7962	1 Row Pulley	1
3	WX-7862	2 Row Pulley	1
4	WX-0838	Upper Spindle Bearing	1
5	WX-0938	Lower Spindle Bearing	1
6	WX-6066	Cutter Spindle	1
7	WX-7470	Anti-Scalp Boss	1
8	WX-2339	Blade Bar Fastening Set	1
9	WX-1739	Blade Bolt	2
10	WX-9070	Blade Tip	2
11	WX-9170	Blade Bar	1
12	WX-6403	Blade Bolt Fastening Set	2
13	WX-0220	Fibre Washer	1
14	WX-0147	Key	1
15	WX-5966	Spindle Bearing Housing	1
16	WX-1722	Circlip	1
17	WX-0246	Grease Nipple	1

PARTS ILLUSTRATION - SPINDLE & BLADE ASSEMBLY (2 Wheel Mower)

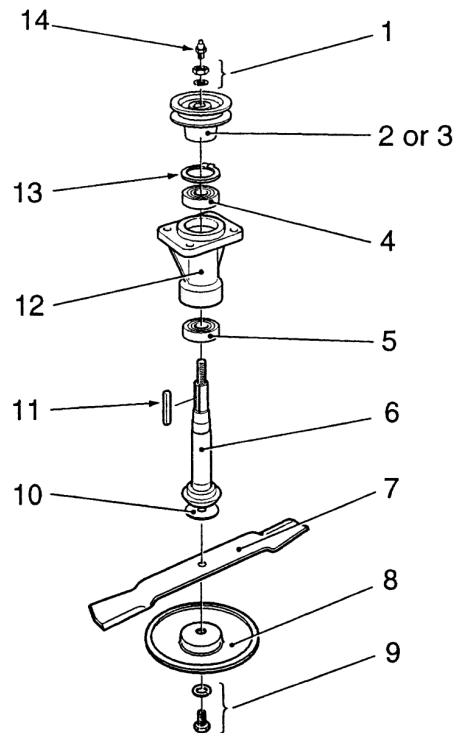


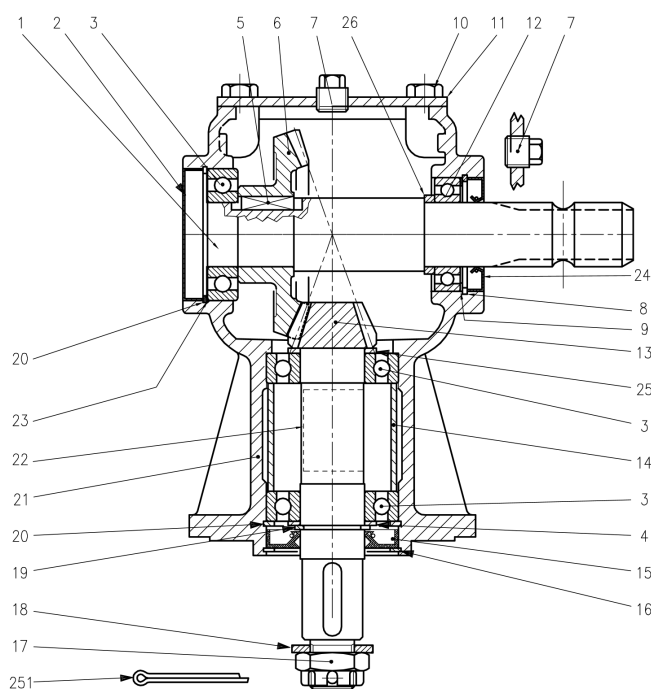
PLATE 5

PARTS LIST - SPINDLE & BLADE ASSEMBLY (2 Wheel Mower)

Item No.	Part No.	Description	Qty. per Spindle
1	WX-5303	Pulley Fastening Set	1
2	WX-7962	1 Row Pulley	1
3	WX-7862	2 Row Pulley	1
4	WX-0838	Upper Spindle Bearing	1
5	WX-0938	Lower Spindle Bearing	1
6	WX-6066	Cutter Spindle	1
7	WX-9270	Blade	1
8	WX-4470	Anti-Scalp Boss	1
9	WX-3603	Blade Fastening Set	1
10	WX-0220	Fibre Washer	1
11	WX-0147	Key	1
12	WX-5966	Spindle Bearing Housing	1
13	WX-1722	Circlip	1
14	WX-0246	Grease Nipple	1

PARTS ILLUSTRATION / PARTS LIST - CR GEARBOX - PART No. WX-5257

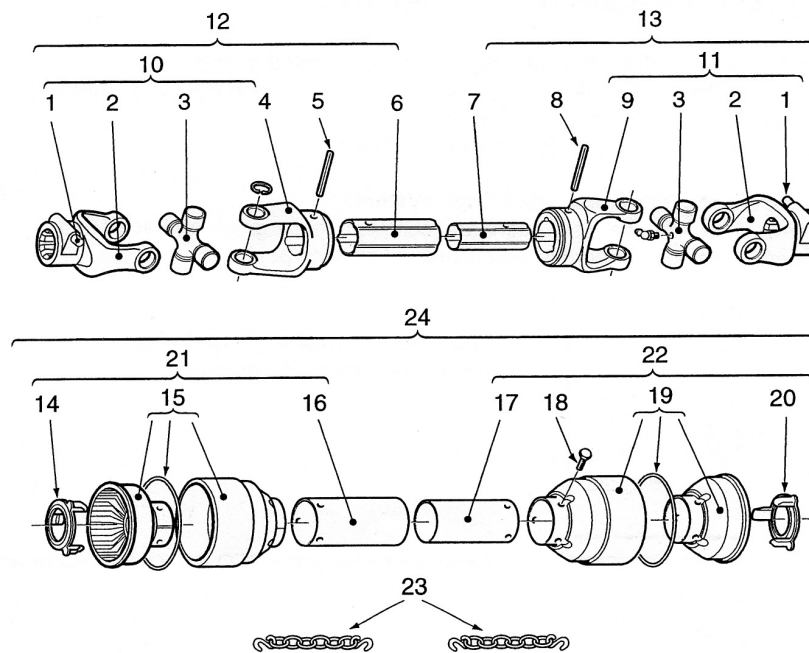
PLATE 6



Item No.	Part No.	Description	Qty. per Machine
1	0.141.2100.00	Input Shaft	1
2	8.7.0.00744	Oil Cap	1
3	8.0.1.00870	Bearing	3
4	0.259.7500.00	Shim Kit	1
5	8.4.1.00993	Key	1
6	0.133.5000.00	Crown Gear Z34	1
7	8.6.5.00006	Plug	2
8	8.5.2.00648	Snap Ring	1
9	0.113.7500.00	Shim Kit	1
10	8.1.1.00054	Bolt	4
11	0.205.1300.00	Cover	1
12	8.0.1.00000	Ball Bearing	1
13	0.141.6002.00	Output Shaft	1
14	0.141.7100.00	Spacer	1
15	8.7.1.00152	Double Lip Seal	1
16	8.5.3.00915	Snap Ring	1
17	8.2.2.01144	Castle Nut	1
18	8.3.2.00409	Flat Washer	1
19	8.5.1.00005	Snap Ring (For Shaft)	1
20	8.5.2.00131	Snap Ring (For Holes)	2
21	0.211.0300.00	Casing	1
22	0.124.7135.00	Plate	1
23	0.248.7500.00	Shim Kit	1
24	8.7.3.01259	Oil Seal	1
25	0.259.7500.00	Shim Kit	1
26	0.211.7100.00	Spacer	1

PARTS ILLUSTRATION / PARTS LIST - PTO SHAFT - PART No. WX-2481

PLATE 7



Item No.	Part No.	Description	Qty. per Machine
1	1.08.25	Push Pin Set	2
2	2.05.07	Push Pin Yoke	2
3	2.41	Cross Journal Set	2
4	2.06	Outer Yoke	1
5	1.12	Pin-Outer Tube	1
6	2.03.10	Outer Tube	1
7	2.04.10	Inner Tube	1
8	4.13	Pin-Inner Tube	1
9	2.07	Inner Yoke	1
10	2.01	U Joint-Outer	1
11	2.02	U Joint-Inner	1
12	022.501	Half Female Shaft	1
13	022.500	Half Male Shaft	1
14	012.007	Collar (Female Shield)	1
15	012.013	Cone (Female Shield)	1
16	121.108	Outer Shield	1
17	121.208	Inner Shield	1
18	000.019	Bolt	6
19	016.025	Cone (Male Shield)	1
20	012.006	Collar (Male Shield)	1
21	2.08.1F	Half Female Shield	1
22	2.08.1M	Half Male Shield	1
23	1.76.01	Safety Chain	2
24	2.08.F	Complete Shield	1

PTO SHAFT OPERATION AND MAINTENANCE

IMPORTANT!

PTO drive shafts must only be used for their intended purpose.

PTO drive shafts are designed for specific machine types and power requirements.

They must not be replaced by other models.

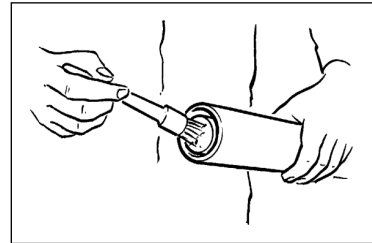
Ensure that the PTO drive shaft is securely connected.

Only use a completely protected drive system:

PTO drive shaft with complete guard and complementary guard on tractor and implement. A complete guard is essential in all working positions.

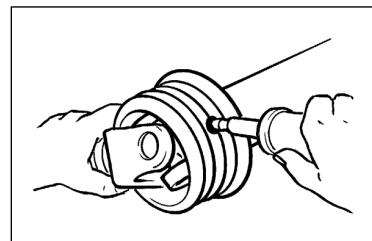
LUBRICATION

Lubricate with quality grease before starting work and every 8 operating hours.



Clean and grease the PTO drive shaft before each prolonged period of non-use.

Grease the guard tubes in winter to prevent freezing.

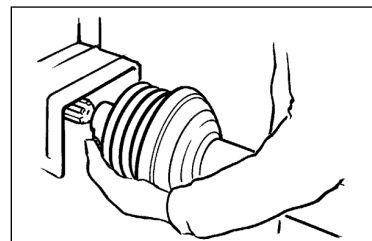


COUPLING THE PTO SHAFT

Clean and grease the PTO and PIN

Q.-d pin

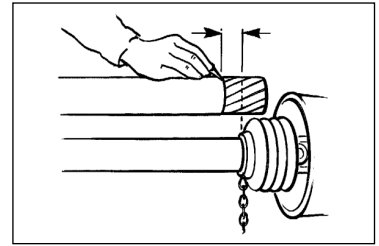
Press q.-d. pin and simultaneously push PTO drive shaft onto PTO until pin engages.



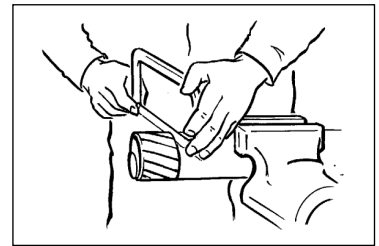
PTO SHAFT OPERATION AND MAINTENANCE

LENGTH ADJUSTMENT

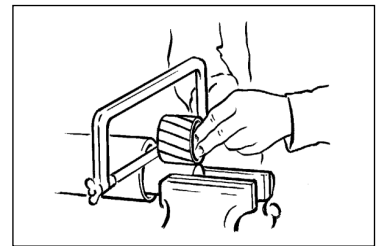
To adjust the length, hold the half-shafts next to each other in the shortest working position and mark them.



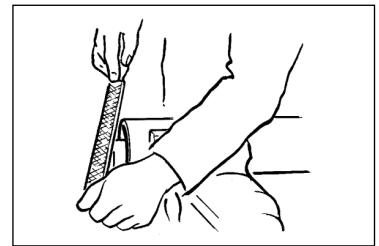
Shorten inner and outer guard tubes equally.



Shorten inner and outer sliding profiles by the same length as the guard tubes.



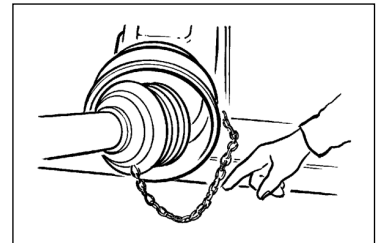
Round off all sharp edges and remove burrs.
Grease sliding profiles.



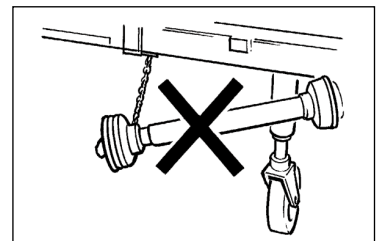
No other changes may be made to the PTO drive shaft and guard.

CHAINS

Chains must be fitted so as to allow sufficient articulation of the shaft in all working positions.



The PTO drive shaft must not be suspended from the chains!



NOTES



Certificate of CE Conformity

Machine Model:

CR24/2 & CR24/4

Description:

FINISHING MOWER

*I hereby certify that the machine detailed hereon
conforms to:*

**European Directives 2008/42/EC
Supply of Machinery Regulations 2008
As amended 91/368EEC – 93/44EEC – 93/68EEC
HSE AIS 33**

Signed:

.....
Quality Manager

Date:

June 2008



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e-mail: sales@broadwoodintl.co.uk

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