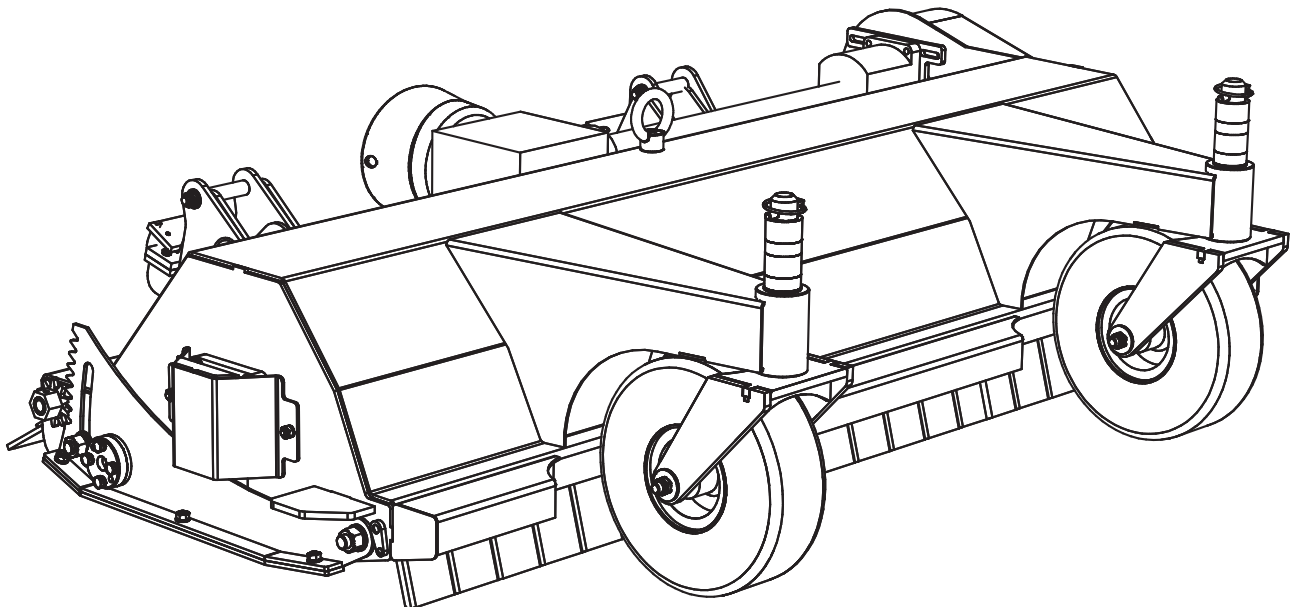




Operation Manual and Parts Book

Wessex ProLine FRX 150

Outfront Flail Mower



Product Code: L2049



Issue November 2014

CONTENTS

Welcome to your new Wessex Proline FRX 150	2
Safety Decals	3
Important Safety Warnings	4
Warranty	5
Setting up your Mower	6
Connecting the P.T.O. Shaft	6
Starting up the Mower	6
Setting the cutting height	7
Adjusting the Front Wheels	7
Adjusting the Roller	7
Maintenance	8
Belt Adjustment	8
Lubrication	8
Flail Blades - Changing	8
Winter Storage	9
Troubleshooting	9
Parts Illustration - FRX 150 Body Assembly	10
Parts List - FRX 150 Body Assembly	11
Parts Illustration - FRX 150 Drive Assembly	12
Parts List - FRX 150 Drive Assembly	13
Parts Illustration / Parts List FRX 150 Roller Assembly	14
Specification	15
PTO Shaft - Operation and Maintenance	16, 17
Safety Training Induction	18
Daily Inspection Record	19
CE Certificate	20
Notes	21

WELCOME TO YOUR NEW WESSEX PROLINE FRX 150

Thank you for purchasing a Wessex Proline FRX 150. As a Wessex 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.

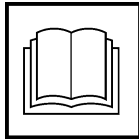


**THIS SAFETY SYMBOL IS TO ALERT OPERATORS OF A HAZARD
THAT MAY RESULT IN INJURY.
ALWAYS FOLLOW INSTRUCTIONS CAREFULLY**

SAFETY DECALS



- GB **ATTENTION** Description of pictograms.
 F **ATTENTION** Description des pictogrammes.
 D **VORSICH** Beschreibung von Piktogrammen.



- GB Read Operating manual before use.
 F Lire le Manuel d'utilisation avant l'utilisation.
 D Vor Benutzung Betriebsanleitung lesen.



- GB Ear defenders must be worn.
 F Porter des protections d'oreilles.
 D Gehörschutz muss getragen werden.



- GB Never remove guards or attempt adjustment until rotor has stopped.
 F Ne jamais retirer les protections ni tenter des ajustements si les rotors sont en mouvement.
 D Niemals Schutzvorrichtungen abnehmen oder eine Einstellung versuchen, bevor der Rotor stillsteht.



- GB Bystanders must be at least 20 metres from machine range of action.
 F Les personnes présentes doivent s'écarter d'au moins 20 mètres du rayon d'action de la machine.
 D Umstehende müssen mindestens 20 m vom Wirkungsbereich der Maschine entfernt sein.



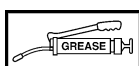
- GB Stand clear. Flying objects possible.
 F S'éloigner ! Possibilité d'objets volants.
 D Zurückbleiben! Herumfliegende Objekte möglich.



- GB Examine blades regularly. The operator is responsible for machine damage caused by unbalanced rotors.
 F Examiner les lames régulièrement. L'opérateur est responsable des dommages à la machine provoqués par des rotors mal équilibrés.
 D Die Messer regelmäßig untersuchen. Der Bediener ist für Maschinenschäden verantwortlich, die durch unwuchtige Spindeln entstehen.



- GB Keep hands and feet clear
 F Ne pas approcher les mains et les pieds.
 D Hände und Füße fernhalten.



- GB Grease points
 F Points de graissage.
 D Schmierpunkte.

IMPORTANT SAFETY WARNINGS



Wessex flail mowers are guarded for your protection, but you must always observe certain elementary precautions. Flail Mowers 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 near, 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

FRX 150 Series Out Front Flail Mowers: 94 D.B.A.

Depending on conditions and material being swept, this 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 Wessex 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. Alternatively if you prefer, you may register your product via our Website.
<http://www.wessexintl.com/warranty-registration>
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. Wessex 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.

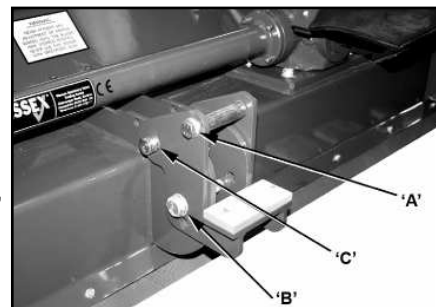
Further inspections should be carried out at regular intervals thereafter.

SETTING UP YOUR MOWER

On the Kubota 3680 power unit the link arms that carry the mower deck are part of the power unit. On the John Deere 45 Series, New Holland MC Series, ISEKI SF300, and the Shibaura units, the link arms are not part of the power unit, they are included as part of the mower deck. These are loose brackets supplied ready to slot into the socket on the front of the power unit and secured with a pin and lynch pin.

Having secured the link arms into the power unit, ensure that the FRX 150 is level when on its wheels and the rear roller, with the mower deck on level ground, drive the power unit up to the mower deck.

1. Remove Bolt 'A' from the coupling.
2. Remove Bolt 'B' from the coupling, the coupling bracket pivots around Pin 'C'.
3. Remove the lynch pin from Pin 'C', partially withdraw Pin 'C' and couple power unit with Pin 'C' and replace lynch pin.
4. This must be carried out on both sides of the mower deck.
5. Replace Bolt 'A', which is above the arm.
6. Pivot the coupling bracket and place Bolt 'B' in the most suitable hole so that the link arm is midway between Bolt 'A' and the nylon plate.
7. Do not over tighten Bolt 'B', as this is a pivoting part.
8. To uncouple the machine you only need to remove Pin 'C'.



CONNECTING THE P.T.O. SHAFT

Connect the P.T.O. shaft **ensuring that the shaft is not too long for the power unit.** If necessary, the shaft may be easily shortened using a hacksaw, taking care to cut off each tube to the same amount. (See P.T.O. Shaft Operation and Maintenance, pages 12 and 13).

STARTING UP THE MOWER

Make sure that there is no debris or objects underneath the mower deck and that the blades are clear of the ground before engaging the P.T.O. Set the engine speed to about 1/3 of its normal speed and slowly engage the P.T.O. and increase the engine speed until it reaches its normal speed.

NEVER LIFT THE MACHINE WITH THE P.T.O. ROTATING.

In order to stop the P.T.O., first reduce the engine speed to about 1/3 of its normal speed then disengage the P.T.O. Stopping or engaging the P.T.O. suddenly risks damage to the power unit.

SETTING THE CUTTING HEIGHT

Cut for approximately one metre and then adjust cutting height if required.

This should be done simultaneously via the front wheels and the rear roller to ensure the machine is kept level.

ADJUSTING THE FRONT WHEELS

- Raise the machine using the hydraulics on the power unit.
- Remove the lynch pin on the top of the wheel stem.
- Select the desired wheel setting by use of the nylon spacers.
- Replace the lynch pin.

ADJUSTING THE ROLLER

- Raise the machine using the hydraulics on the power unit.
- Slacken off the clamp bolts on either side of the roller carrier arm. The roller then drops to its bottom position.
- Lower the machine onto its front wheels until the roller adjusts itself automatically when the machine is horizontal.
- For fine adjustment, use a spanner on the sprocket nut.
- Tighten the clamp bolts on slots.
- Check that the cutting height is right.
- Make sure there is no one facing the machine, that there is no risk of blades expelling any debris and then engage the mower's power take-off with the engine at low revs. Gradually increase the engine speed until you reach nominal speed.
- If the machine vibrates, stop the P.T.O. and find out the reason. Having solved this, then start working, adjusting the speed of forward movement according to the density of the vegetation that is being cut.

MAINTENANCE

- **IMPORTANT!** Check that all fastening sets (bolts and nuts) are tight after the first hour of operation.

BELT ADJUSTMENT

- The belts are tensioned in the factory but they will stretch after two or three hours work. It is important to check and re-tension after three hours work.
- Remove the belt cover from the mower deck by removing the central fastening nut.
- To tighten the belts, remove the belt cover, slacken off the 4 bolts over the slots in the gearbox mounting plate.
- Loosen off the nuts on the two adjusting threads and adjust belts by turning the adjusters, always adjust both ends the same amount and check pulley alignment before re-tightening the bolts.
- **NOTE!** Correct belt tension is approximately 12-15mm of deflection under the thumb pressure halfway between the pulleys.
- If belts are cut, frayed or damaged in any way they should be replaced immediately.
- Refit the belt cover and tighten the fastening nut.

LUBRICATION

DAILY (8-10 Working Hours)

- Grease main rotor bearings (x2).
- Grease Roller bearings (x2).
- Grease wheel bearings (x2).

GEARBOX

Check the oil level periodically, the level plug is situated halfway down the gearbox, close to the cross shaft.

Top up the gearbox with 90 grade gear oil.

FLAIL BLADES

- The condition of the flail blades should be inspected daily. Damaged flail blades cause imbalance in the rotor and in turn, will 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 flail blades, or foreign objects around the flail rotor.

FLAIL BLADES - CHANGING

- When fitting new flail blades, unhitch the mower from the tractor and turn the mower over (preferably with a hoist or mechanical lifting equipment). Remove the damaged flail blades and replace.
- It is important that the rotor remains balanced. Always fit new bolts and nuts when replacing the flails and preferably fit a full set. If only one or two flails are being replaced, they should be fitted opposite to each other on the rotor, to keep the rotor balanced.

WINTER STORAGE

- Before winter storage, the FRX 150 should be thoroughly inspected.
- Repair or replace any worn or broken parts.
- Take special care to look at the flail blades, rotor and the bearings.
- Remove the belts and ensure that the rotor is free-spinning.
- Make sure tht the belts are in good condition before re-fitting.
- Thoroughly wash the machine to remove all oil, grease, debris and materials.
- Grease up all grease points before storage to avoid any corrosion.

TROUBLESHOOTING

FAULT	CAUSE	REMEDY
Leaving wheel track uncut	<ol style="list-style-type: none"> 1. Forward speed too fast 2. Cutting height too high 	<ol style="list-style-type: none"> 1. Reduce forward speed 2. Lower cutting height
Bad quality of cut	<ol style="list-style-type: none"> 1. Forward speed too fast 2. Excessive blade wear 3. Belts slipping 	<ol style="list-style-type: none"> 1. Reduce forward speed 2. Replace blades 3. Tighten belts
Narrow strip uncut	<ol style="list-style-type: none"> 1. Possibly missing or broken blade 	<ol style="list-style-type: none"> 1. Inspect blades and replace as necessary
Excessive vibration	<ol style="list-style-type: none"> 1. Damaged or missing blades 2. Bent flail rotor 3. Main rotor bearing failed 4. Loose part 5. Worn or bent P.T.O. shaft 	<ol style="list-style-type: none"> 1. Inspect and replace blades 2. Inspect rotor 3. Inspect bearing, replace if damaged 4. Check all nuts and bolts are tight
Excessive scalping	<ol style="list-style-type: none"> 1. Cutting height too low 	<ol style="list-style-type: none"> 1. Raise cutting height

PARTS ILLUSTRATION - FRX150 BODY ASSEMBLY - PLATE 1

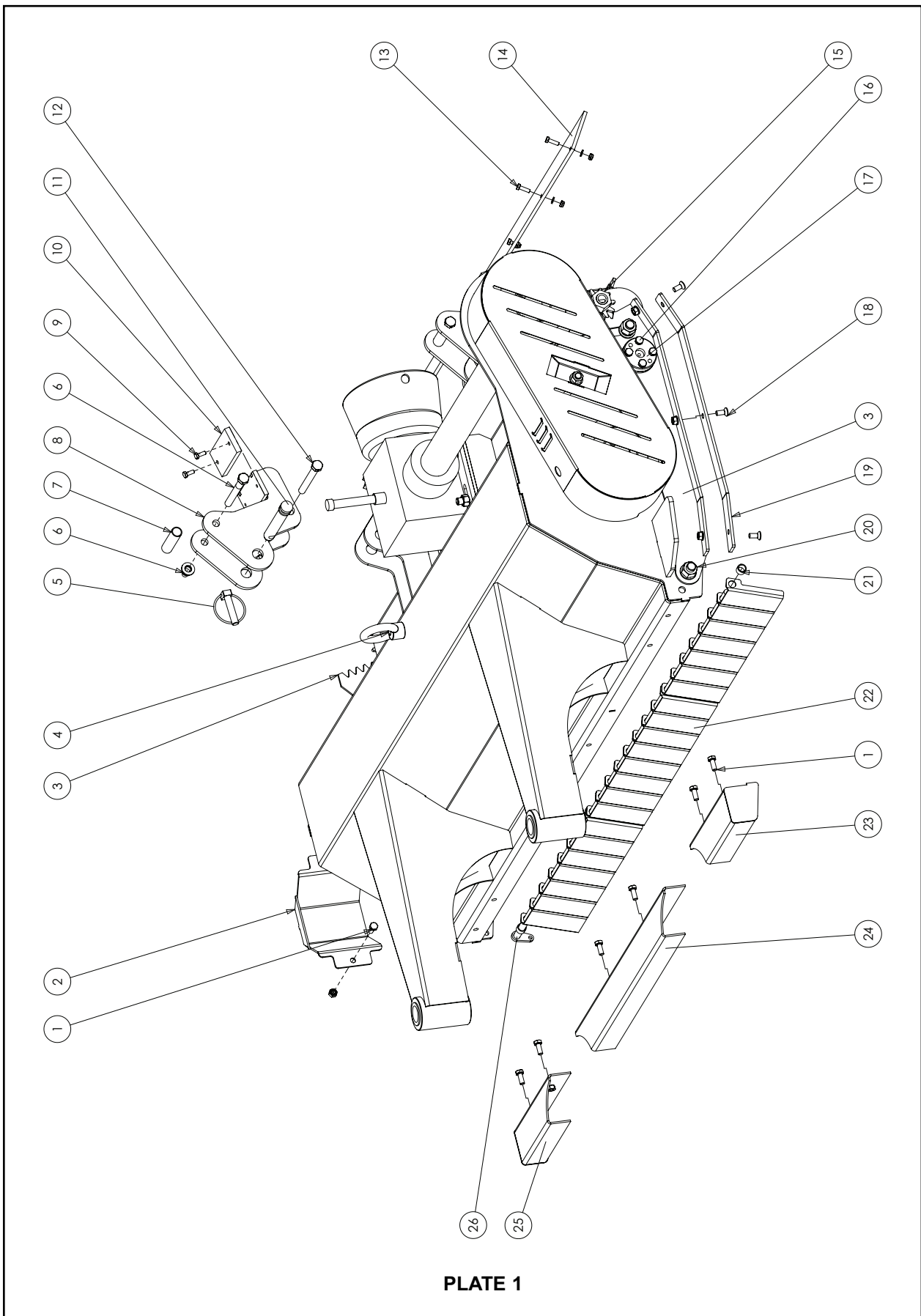


PLATE 1

PARTS LIST - FRX150 BODY ASSEMBLY - PLATE 1

Item No.	Part No.	Description	Qty. per Machine
1	WX-30801	Bearing Guard Fixing Set	1
2	WX-16877	Bearing Guard	1
3	WX-5174	LH Side Skid	1
3	WX-5274	RH Side Skid	1
4	WX-1039	Eye Nut	1
5	WX-0227	Lynch Pin	2
6	WX-11703	Top Link Bolt	2
7	WX-33680	Linkage Spacer	2
8	WX-12458	Tractor Bracket	2
9	WX-31901	Nylon Pad Fastening Set	2
10	WX-8758	Nylon Pad	1
11	WX-0426	Top Link Pin	2
12	WX-30901	Botton Link Bolt	2
13	WX-31201	Skirt Fastening Set	1
14	WX-13978	Skirt	1
15	WX-15056	Adjuster Shaft Assembly	1
16	WX-31101	Roller Spigot Fastening Set	2
17	WX-3555	Roller Spigot	2
18	WX-850	Skid Shoe Fastening Set	2
19	WX-4874	Skid Shoe	2
20	WX-8103	Skid Fastening Set	2
21	WX-24476	Front Flap - End Spacer	2
22	WX-24676	Front Flap	22
23	WX-16477	Guard - Left Hand	1
24	WX-16177	Guard - Centre	1
25	WX-16377	Guard - Right Hand	1
26	WX-32680	Flap Bar	1
N/S	WX-8858	John Deere Link Arm R/H	1
N/S	WX-8958	John Deere Link Arm L/H	1

PARTS ILLUSTRATION - FRX150 DRIVE ASSEMBLY - PLATE 2

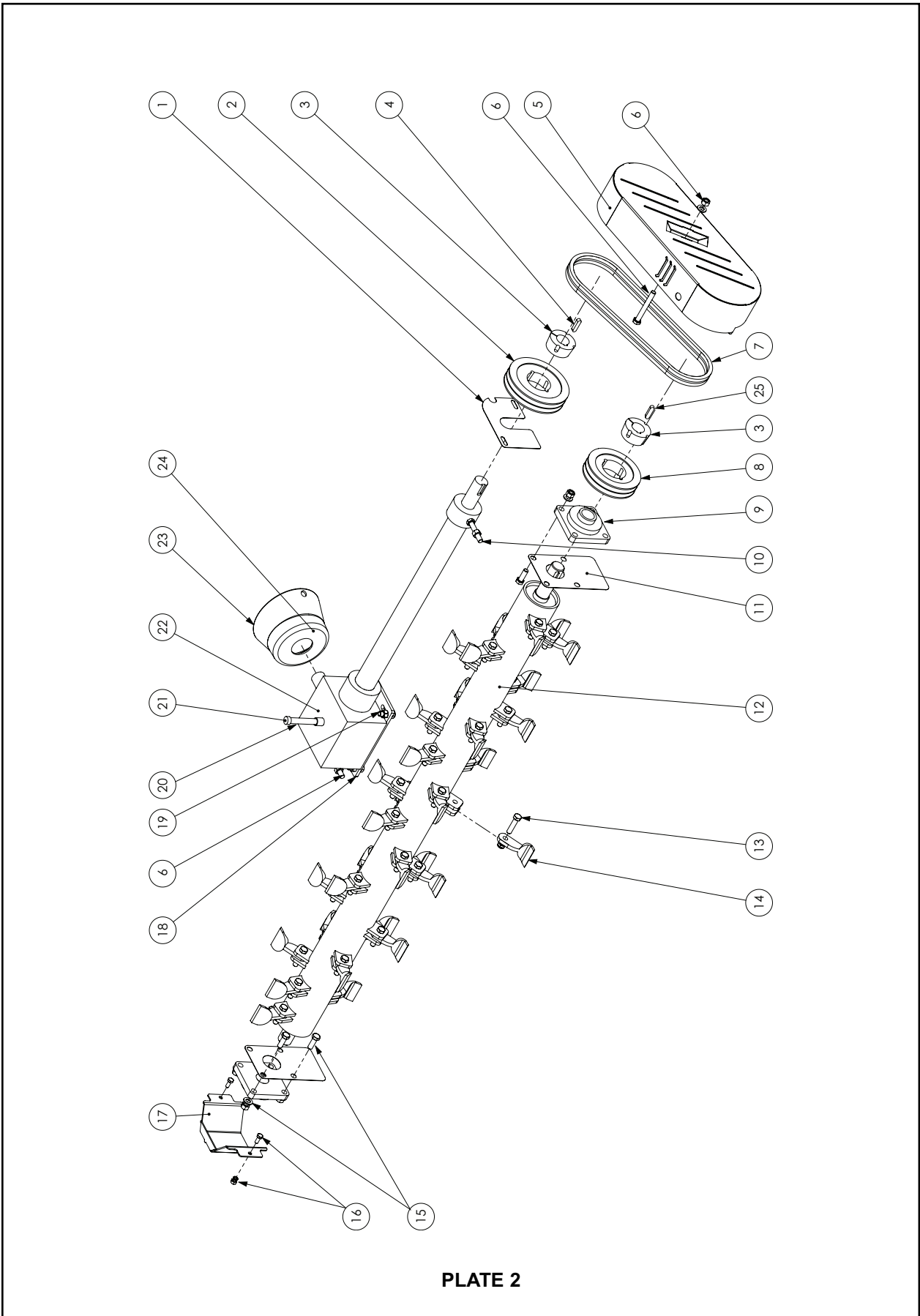


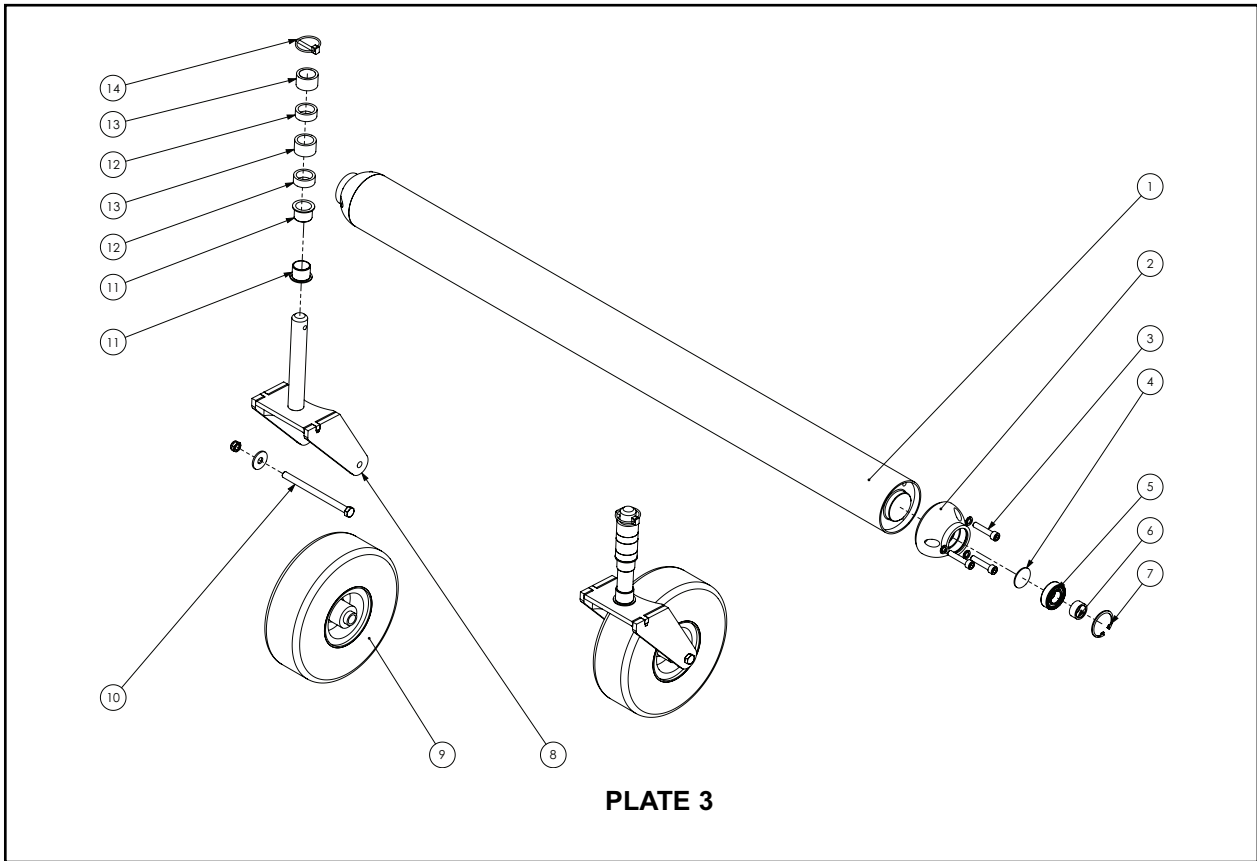


PLATE 2

PARTS LIST - FRX150 DRIVE ASSEMBLY - PLATE 2

Item No.	Part No.	Description	Qty. per Machine
1	WX-17076	Finger Guard	1
2	WX-10962	Pulley	1
3	WX-11062	Taper Lock	2
4	WX-0647	Key	1
5	WX-17877	Drive Cover	1
6	WX-16203	Adjuster and Fixing Set	2
7	WX-6034	Belt	2
8	WX-10862	Pulley	1
9	WX-7438	Rotor Bear 	2
10	WX-16303	Adjuster	1
11	WX-13977	Bearing Shield	2
12	WX-14466	Flail Rotor (with Flails)	1
13	CYS-18593	Flail Bolt and Nut	32
14	WX-10170	Flail	32
15	WX-31601	Bearing Fixing Set	2
16	WX-30801	Bearing Guard Fixing Set	1
17	WX-16577	Bearing Guard 	1
18	WX-22576	Adjuster Plate	1
19	WX-3503	Adjuster Plate Fastening Set	1
20	WX-2357	Breather Tube	1
21	WX-12257	Breather	1
22	WX-12757	Gearbox (John Deere)	1
22	WX-12857	Gearbox (Kubota)	1
23	WX-15877	Cone Guard	1
24	WX-5103	Cone Guard Fastening Set	1
25	WX-0547	Key	1

PARTS ILLUSTRATION - FRX150 ROLLER ASSEMBLY - PLATE 3



PARTS LIST - FRX150 ROLLER ASSEMBLY - PLATE 3

Item No.	Part No.	Description	Qty. per Machine
1	WX-3355	Roller	1
2	WX-3655	Roller End	2
3	WX-15703	Roller End Fastening Set	2
4	WX-3355A	Roller Blanking Plug	2
5	WX-0838	Bearing	2
6	WX-3755	Roller Spacer	2
7	WX-1722	Circlip	2
8	WX-1450	Wheel Fork	2
9	WX-4652	Wheel	2
10	WX-16103	Wheel Fastening Set	2
11	WX-31880	Top Hat Bush	4
12	WX-16751	15mm Spacer	4
13	WX-16651	25mm Spacer	4
14	WX-0127	Linch Pin	2

SPECIFICATION

MODEL FRX 150

Working Width: 1.5m

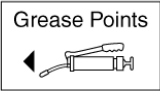
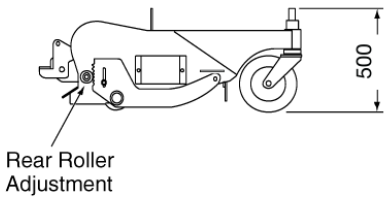
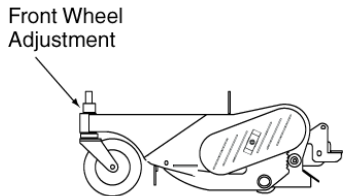
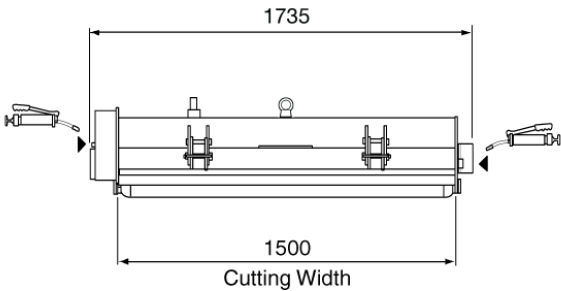
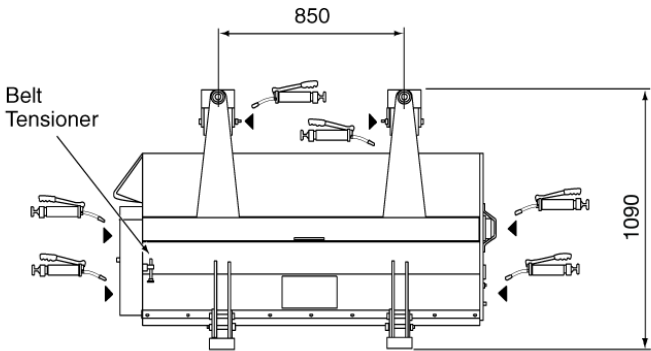
Overall Width: 1735

Overall Height: 500

Overall Length: 1090

Tyre Pressures: Solid Tyres

Weight Approximately: 230kg



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.

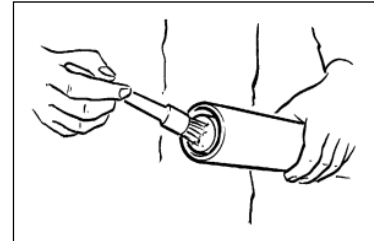
Only use a completely protected drive system:

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

LUBRICATION

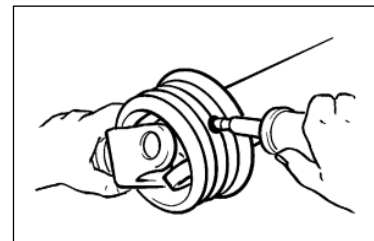
Lubricate with quality grease before starting work and every 8 operating hours.

Ensure the P.T.O. guard bearings are lubricated, the end ball shaped covers need retracting to expose all grease nipples.



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

Grease the guard tubes in winter to prevent freezing.

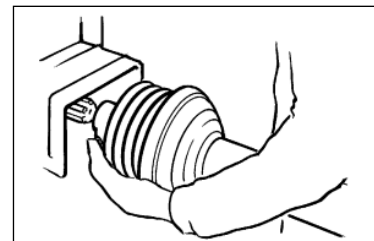


COUPLING THE PTO SHAFT

Clean and grease the PTO and PIN

Q.-d pin

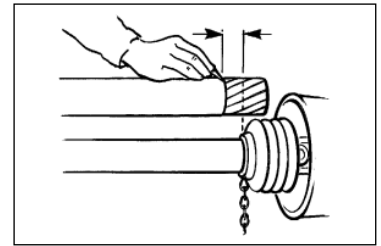
Press q.-d. pin and simultaneously push PTO drive shaft onto PTO until pin engages.



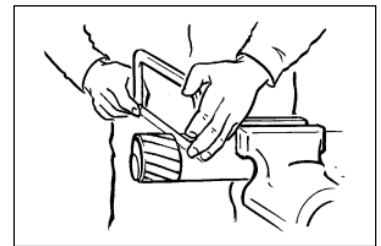
PTO SHAFT OPERATION AND MAINTENANCE

LENGTH ADJUSTMENT

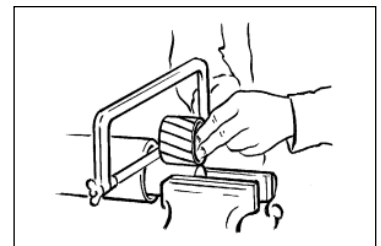
To adjust the length, hold the half-shafts next to each other in the shortest working position and mark them.



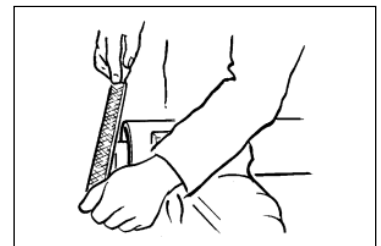
Shorten inner and outer guard tubes equally.



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



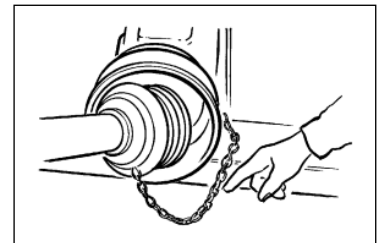
Round off all sharp edges and remove burrs.
Grease sliding profiles.



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

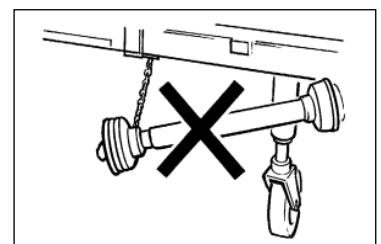
CHAINS

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



Do not let the chains encircle the P.T.O. guard in use as this will shorten the life of the P.T.O. guard.

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



DAILY INSPECTION RECORD

													OPERATOR'S NAME
													DATE OF INSPECTION
													HOURS
													Flail Rotor, remove tangled objects
													Inspect condition of Flail Blades/Brushes
													All bolts and nuts, re-tighten if req'd.
													Grease Rotor Bearings
													Grease Roller Bearings
													Grease Wheel Castors
													Grease Wheel Bearings
													Inspect Tyres
													Check Gearbox Oil Level
													Inspect condition of Belts
													Inspect tension of Belts



Certificate of CE Conformity

Machine Model:

FRX 150

Description:

FLAIL 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**

Signed:

A handwritten signature in black ink, appearing to be 'R. J. ...', written over a dotted line.

.....
Quality Manager

Date:

MAY 2013

Wessex International

Charlton House, Caxton Place, East Portway Industrial Estate, Andover, Hampshire SP10 3QN
Telephone: 01264 345870 Fax: 01264 345 880

www.wessexintl.com

NOTES



Wessex International
Charlton House, Caxton Close, East Portway Industrial Estate, Andover Hampshire. SP10 3QN
Telephone: 01264 345870 Fax 01264 345880
e-mail: sales@wessexintl.com

www.wessexintl.com



WESSEX PROLINE RMX, CR & FRX INSTALLATION RECORD

Upon installation of this machine, it is the Dealers responsibility to fill out the Installation Record below and return to Wessex International either by Fax to 01264 345880 or Email warranty@wessexintl.com.

IF THIS FORM IS NOT RETURNED, WE CANNOT ISSUE THE CUSTOMER THE APPLICATION FORM TO REGISTER FOR THE EXTENDED WARRANTY ON THEIR MACHINE.

END USER DETAILS

NAME : _____

ORGANISATION : _____

ADDRESS : _____

TELEPHONE : _____ MOBILE : _____

EMAIL : _____

DEALER: _____ BRANCH : _____

MACHINE MODEL : _____ SERIAL NO: _____

INSTALLATION DATE : _____

THE MACHINE DETAILED ABOVE HAS BEEN CORRECTLY INSTALLED AND THE FOLLOWING POINTS HAVE BEEN DISCUSSED WITH THE CUSTOMER :

- | | |
|------------------------------------------------------------------------------------------|--------------------------|
| 1 Correct Machine Operation | <input type="checkbox"/> |
| 2 Operational Health & Safety | <input type="checkbox"/> |
| 3 Machine Setting and Adjustments | <input type="checkbox"/> |
| 4 Maintenance | <input type="checkbox"/> |
| 5 Importance of tensioning belts after initial 2 - 3 hours work and routinely thereafter | <input type="checkbox"/> |

Delivery Checklist

- | | |
|--------------------------------------------------------------|--------------------------|
| Oil in gearboxes | <input type="checkbox"/> |
| All PTO Shafts properly attached with Safety Chains attached | <input type="checkbox"/> |
| All PTO Shafts greased | <input type="checkbox"/> |
| All shields, guards and deflectors in place | <input type="checkbox"/> |
| Check wheel nuts are tight | <input type="checkbox"/> |
| All fixings tight | <input type="checkbox"/> |

Inspected by : _____

IMPORTANT INFORMATION TO PREVENT DAMAGE - RELEVANT TO ALL TRAILED MACHINES

Ensure that the tractor link arms are removed or at least dropped to prevent contact with the PTO shaft when turning. Avoid sharp turns where the rear wheel of the tractor comes into contact with the drawbar or PTO shaft. Turning too sharp can also cause damage to the PTO shaft, it's universal joints and tractor tyres.

DEALER SIGNATURE : _____ NAME : _____

DATE : _____

Upon receipt of this form, we will forward the Extended Warranty Application Form to the End User.

THANK YOU FOR FACILITATING THE SALE OF ANOTHER WESSEX PROLINE MACHINE!

WESSEX INTERNATIONAL

Charlton House, Caxton Close, East Portway Industrial Estate, Andover, Hampshire SP10 3QN

T : 01264 345870 F : 01264 345880 E : sales@wessexintl.com