CHAPMAN

FR150



Instructions EN

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Introduction

THIS MANUAL MUST BE HANDED TO THE OPERATOR BEFORE USE. THE OPERATOR MUST UNDERSTAND FULLY THE CONTENT OF THIS HANDBOOK BEFORE USING THE MACHINE FOR THE FIRST TIME. OF THE IMPLEMENT IS RESOLD, THIS MANUAL MUST ACCOMPANY THE MACHINE.

NOTE: The information contained in this manual is correct at the time of going to press. However, in the course of development, changes in specification are inevitable. Should you find the information given differs from your machine, please contact Chapman Machinery Ltd direct for advice. Use only Chapman Genuine Service Parts on Chapman Machinery and Machines.

HSE Information

The safe use of all-terrain vehicles (ATVs) & Side by Sides (UTVs) in agriculture and forestry must be adhered to at all times with machinery attached or not. The HSE information, AIS Sheet 33, gives advice on the safe use of ATVs/UTVs. It covers the two main types used in off-road working in agriculture and forestry. The Full HSE information sheet can be found here or using the QR Code to the right https://www.hse.gov.uk/pubns/ais33.pdf and must be read prior to any ATV/UTV use.





Important Safety Information

Always read this manual before fitting or operating the machine – whenever any doubt exists contact your dealer or the Chapman Machinery Service Department for advice and assistance.

- Do not operate this equipment unless you have studied this manual in full
- Only use this machine for its designated task improper use is both highly dangerous and damaging to machine components
- Both operators & maintenance fitters should be familiar with the machine and fully aware of dangers surrounding improper use or incorrect repairs
- · Before starting, carry out a visual check on both machine & towing vehicle regards functionality, road safety & accident prevention rules
- Even when using the machine correctly, foreign objects such as stones may be thrown a considerable distance. It is imperative that only
 the operator is within the 50m working envelope, wearing suitable PPE. If working near roads, buildings, children or animals provision
 must be made for containment of ejected material or alternatively sufficient warning signs / notices placed around the working area.
- The condition of blades and of machine guards must be checked before beginning the day's work. Worn or damaged blades must be replaced before you use the machine.
- During checks or repairs, ensure the machine cannot be started by other persons by mistake
- Never wear loose clothing which could get caught in rotating equipment
- Never carry passengers on the towing vehicle
- Never approach the machine until the rotor has stopped rotating
- Do not stand near the machine when operating
- Damaged or missing safety decals must be replaced immediately
- Before leaving the machine unattended, remove the starting key (if applicable)

Transportation Safety

- When transporting, especially over rough ground, reduce speed to prevent damage to machine.
- Ensure ignition keys are removed
- This machine is not road legal. DO NOT tow on public highways
- Never transport the machine with the rotor running, even for small distances.

Operating Safety

- If wires, ropes or chains should become entangled in one of the bearings stop immediately to prevent damage or dangerous situations; stop the machine, take out the starting key or safety cut-out. Put working gloves on; clear the bearing with the aid of pliers or shears.
- Pay special attention when working with the machine not to touch fixed objects such as road-drain, walls, shafts, kerbs, guard rails, tracks etc. This could cause damage to the roller or bearings.
- Do not tow on public highways. Avoid towing on paved surfaces if possible.



Description

The FR150 Field Roller is a towed mowing attachment designed for rolling fields, paddocks & other such surfaces to flatten bumps and imperfections. The FR150 features a 1.5m working width, robust steel frame, integrated scraper bar and heavy duty bearings. A swivel coupling is fitted as standard for 50mm ball hitch, and a pin hitch attachment can be specified as an option.

The roller drum can be filled with water to increase the weight of the roller. Filling the roller with water will add approximately 300kg to the weight of the roller. Bungs are provided at either end of the drum to allow filling & emptying.

This machine should only be used to perform the task for which it has been designed - use of the machine for any other function may be both dangerous to persons, and potentially damaging to components. Use of the machine beyond the stated usage may invalidate any applicable warranty, as well as being in breach of applicable safety regulations.

Note: This machine is for off-road use only and is not designed or approved for highway travel

Required Personal Protective Equipment (PPE)

When using the FR150 the operator must be wearing safety footwear, gloves and either;

- A. A full face helmet with visor or safety glasses [if using on an open cab vehicle such as an ATV]
- B. Safety glasses [if using on a closed-cab vehicle such as a UTV with the doors / windows shut]



SUITABLE PPE (AS SPECIFIED ABOVE) MUST BE WORN AT ALL TIMES WHEN OPERATING THIS EQUIPMENT!

Technical Information

Component Identification

- 1) Coupling
- 2) Frame
- 3) Scraper Bar (Fitted to underside)
- 4) Roller

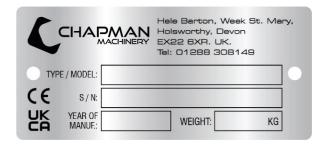


Identification

Each machine is fitted with a serial plate (shown below) which details the following:

- 1. Model
- 2. Date of Manufacture (DOM)
- 3. Serial Number
- 4. Mass

When enquiring regarding spares or additional equipment, ensure you have this information to hand.





Implement Decals

If your implement does not contain all of the decals shown below, please contact your equipment supplier for replacement decals before use.

Note: All decals must be present and visible. It is imperative that these are replaced if damaged to prevent potential harm to users.

CAUTION - Read operators manual before handling this machine. Observe in structions and safety rules when operating





Attachment

Before attachment, ALWAYS ensure the following:

- All safety guards & decals are in good working order and correctly fitted
- Lubrication points have been lubricated as per scheduled maintenance period
- The drum bungs are fitted correctly and sealed (if roller is water filled)

Attaching the Machine

NOTE: This machine is designed to attach to the towing vehicle through a 50mm diameter ball hitch or pin hitch.

- 1. Reverse the towing vehicle up to the machine.
- 2. Attach the machine onto the towing vehicle's coupling using either the auto-lock coupling or suitable pin hitch. Ensure the hitch is securely attached to the towing vehicle
- 3. If required adjust the scraper bar such that it passes closely to the drum without contacting the drum itself.

Operation

Ensure that the operator is suitably qualified to use a machine of this nature and that they have fully read and understood this manual - they should be aware of all safety aspects relating to the safe use of the machine.

Prior to starting work the area to be cut should be checked for dangerous objects such as large stones, wood, wire, glass etc. – hazardous objects should be removed from the area prior to operation with the machine. The location of unmovable or natural hazards such as drain covers should be noted, or if necessary 'marked', to indicate to the operator that the area should either be avoided or additional caution adopted whilst working around the hazard.

Operating Limits

Minimum / Maximum Ambient Temperature -15°C / +40°C
Minimum / Maximum Altitude 0 meters / 1500 meters *

Maximum Inclination 20° in any direction

Maximum Speed 8km/h (5mph)



DO NOT OPERATE BEYOND OPERATING LIMITS, DAMAGE TO MACHINERY OR INJURY TO OPERATOR MAY OCCUR.



Daily Checks

Before use each day, and with the engine switched off and keys removed, the following checks should be undertaken;

- Bearings Ensure bearings are in good order and greased as per the maintenance schedule.
- **Drum** Check drum condition is good and free from leaks (if water ballasted)
- Scraper Bar Ensure scraper bar is passing close to the roller drum without contacting the drum itself. Adjust if necessary.
- Hitch Check condition of swivel hitch, and ensure this is attached securely to towing vehicle.

Storage

For extended periods of storage, or for storage over the winter it is advisable that the machine be first cleaned thoroughly and fully lubricated, and that the drum be drained of water (if water filled).



DRAIN WATER DURING WINTER MONTHS TO PREVENT DAMAGE TO DRUM DUE TO FREEZING

Washing

Regular washing with water and mild detergent will prolong the life of the machine and components. This is particularly important if the machine is used on salt-treated roads, in coastal areas, is heavily soiled or is used in the vicinity of corrosive substances such as fertiliser. In these cases the machine should be thoroughly washed down after use and allowed to dry naturally.

If heavy soiling is experienced, washing intervals should be reduced accordingly. Likewise if salts or aggressive chemicals are encountered, the washing interval should re reduced accordingly to a maximum interval of 3 months.

If using a pressure washer, care should be taken to avoid panel edges and electrical components at close range or for extended periods. Any damage that may result from the use of high pressure water should be immediately rectified to ensure continued serviceability.

Additives intended to brighten aluminium, generally containing phosphoric acid, should not be used as they will damage the zinc plated components. Traffic film remover should not be used.

Paint Maintenance

The steelwork and chassis on the FR150 is manufactured from various grades of steel, which is fully shot blasted to SA2.5 surface roughness, prior to application of polyester powder applied paint to a minimum DFT (Dry Film Thickness) of 100 microns.

In order to maintain the coating design life of 10 years it is imperative that;

- The machine is stored in the recommended manner
- The machine is washed as per the schedule (or more frequently if heavily soiled)
- Any damage is inspected and repaired on at least an annual basis.

Any scratches or damage which breaks the protective paint barrier and exposes the underlying base material need to be repaired.

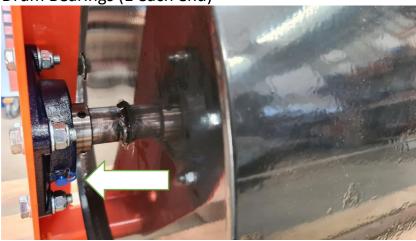
Repair Procedure

- 1. Thoroughly clean the affected area by washing with a mild detergent. Allow to dry fully.
- 2. If solvents are required to be used to remove marks, ensure only isopropyl alcohol is used. Solvents containing esters, ketones or chlorinated solvents will damage the paint.
- 3. If required abrading may be done using a 400 grit rubbing down paper over the affected area. If paint has been chipped edges need to be feathered to ensure consistent paint adhesion.
- 4. Remove any dust from rubbing down, applying a light single pack aerosol applied primer paint (cellulose based) if the affected area is more than 50mm across.
- 5. Once prepared and primed (if necessary), apply 3 lights coats of single pack aerosol applied paint (cellulose based) in colour RAL2004 (Pure Orange) or RAL9005 (Jet Black) allowing to dry naturally between coats. Isocynate-based two pack polyurethane paint can be used although this is generally not practical unless for large areas for most minor repairs single pack cellulose paint is preferable.

Grease Point Location

Lubricate the following grease points using an NLGI 2 viscosity grease suitable for the expected temperature range in line with the maintenance schedule.

Drum Bearings (1 each end)



Water Ballasting

The roller drum can be filled with water to increase the weight of the roller and subsequent rolling effect. Each end of the drum has a bung, as shown below, located at 180° to each other. To fill with water remove one bung when it is at the 12 0'clock position and fill with water. Antifreeze can be added to prevent frost damage, or alternatively the roller should be drained prior to the winter months. When re-fitting the bund ensure the sealing washer is present and that the drum is sealed properly before starting work.





DRAIN WATER DURING WINTER MONTHS TO PREVENT DAMAGE TO DRUM DUE TO FREEZING

Forward Speed

The forward working speed will depend greatly on the working conditions, but generally the slower you can go, the better the rolling effect. Optimal speed will be in the region of 3-8 km/h (2-5 mph).



Maintenance

All maintenance, cleaning and repair operations must be performed with the machine suitably supported. **NOTE: For commercial use, log hours of operation in a maintenance booklet to ensure proper maintenance intervals and continued service.**

Maintenance Schedule

After 1 hour of work

 Physically check all nuts and bolt for tightness – retighten if required.

Every 8 hours or daily

- Visually inspect nuts and bolt for tightness retighten if required.
- Apply grease to the two main drum bearings

After every 100 hours (or annually, whichever occurs first), in addition to the above

 Check condition & correct operation of hitch coupling, and apply grease to the hitch mechanism

Troubleshooting

| Problem | Possible Causes | Remedies |
|----------------------------------|-------------------------|----------------------------------|
| Coupling not attaching correctly | Worn coupling | Inspect and replace as necessary |
| Excessive noise | Worn drum bearing(s) | Inspect and replace as necessary |
| | Scraper contacting drum | Inspect and adjust as necessary |
| Vibration | Worn drum bearing(s) | Inspect and replace as necessary |



Warranty

The Chapman Warranty

Chapman Machinery Ltd (herein 'Chapman' or 'Chapman Machinery') warrants that the machine referred to in the Warranty Registration Form will be free from manufacturing defects for a period of 24 months from the date of sale. This warranty does not affect your statutory rights, but merely adds to them. Should you have a problem within 24 months from the date of sale please contact your original dealer, or Chapman Machinery's Service Department.

Any part found to be defective during this period will be replaced or repaired, at our discretion, by the dealer or a authorised Service Engineer.

Warranty Conditions

- 1. The Warranty Registration Form must be completed and returned to Chapman Machinery Ltd within 30 days of the date of sale
- 2. This warranty does not cover defects arising from fair wear and tear, wilful damage, negligence, misuse, abnormal working conditions, use in competition, failure to follow Chapman Machinery's instructions (oral or written, including all instructions and recommendation made in the Operator's Manual) or alteration or repair of the machinery without prior approval.
- 3. The machinery must have been serviced in accordance with the Operator's Manual and the Service Log must have been kept up to date and made available to the dealer should service, repair or warranty work be undertaken.
- 4. This warranty does not cover claims in respect of wearing parts such as blades, flails, paintwork, tyres, belts, hydraulic hoses, bearings, bushes, linkage pins, top links, ball ends unless there is a manufacturing or material defect or the cost of normal servicing items such as oils and lubricants.
- 5. This warranty does not cover any expenses or losses incurred whilst the machinery is out of use for warranty repairs or parts replacement.
- 6. This warranty does not extend to parts, materials or equipment not manufactured by Chapman Machinery, for which the Buyer shall only be entitled to the benefit of any such warranty or guarantee given by themanufacturer to Chapman Machinery. Only genuine replacement parts will be allowable for warranty claims.
- 7. All parts replaced by Chapman Machinery under warranty become the property of Chapman Machinery and must be returned to Chapman Machinery if so requested. Such parts may only be disposed of after a warranty claim has been accepted and processed by Chapman Machinery.
- 8. Chapman Machinery is not liable under this warranty for any repairs carried out without Chapman Machinery's written consent or without Chapman Machinery being afforded a reasonable opportunity toinspect the machinery the subject of the warranty claim. Chapman Machinery's written consent must, therefore, be obtained before any repairs are carried out or parts replaced. Use of non-Chapman Machinery parts automatically invalidates the Chapman Warranty. Failed components must not be dismantled except as specifically authorised by Chapman Machinery and dismantling of any components without authorisation from Chapman Machinery will invalidate this warranty.
- 9. All warranty claims must be submitted to Chapman Machinery on Chapman Machinery Warranty Claim Forms within 30 days of completion of warranty work.
- 10. Using the machine implies the knowledge and acceptance of these instructions and the limitations contained in this Manual.

Transfer of Warranty

The Chapman warranty be transferred to a subsequent owner of the machinery (for use within the UK only) for the balance of the warranty period subject to all of the stated warranty conditions and provided that the Change of Owner form is completed and sent to Chapman Machinery within 14 days of change of owner-ship.

Chapman Machinery Ltd retain the right to refuse transfer of warranty.

Chapman Machinery reserves the right to make alterations and improvements to any machinery without notification and without obligation to do so.



DECLARATION OF CONFORMITY

EU: Machinery Directive 2006/42/EC
UK: Supply of Machinery (Safety) Regulations 2008

Manufacturer: Chapman Machinery Ltd, Hele Barton, Week St Mary, Holsworthy, Devon, EX22 6XR, UK

Product(s) covered: FR150 Field Roller

Serial Number: Stated on Accompanying Invoice

Standards and Regulations Used: Machinery Directive 2006/42/EC

Supply of Machinery (Safety) Regulations 2008

Place of Issue: United Kingdom

Name of Representative: James Chapman

Position of Representative: Director

Basis of Conformity Declaration: Self Declaration by Manufacturer

Declaration:

I declare that as the authorised representative, the above information in relation to the supply / manufacture of this product, is in conformity with the stated standards and other related documents following the provisions of Machinery Directive 2006/42/EC directives [EU] and Supply of Machinery (Safety) Regulations 2008 [UK]

The products described above comply with the essential requirements of the directives specified.

Signed:

Date: 15/11/2021