

MGF350 Mounted Game Feeder



Original Instructions

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Contents

HSE Information	3
Important Safety Information	4
DEFINITIONS	4
Safety Information	4
Transportation Safety	4
Operating Safety	4
Description	4
Identification	5
Implement Decals	5
Attachment	6
Before Attaching the Machine	6
Attaching the Machine	7
Initial Calibration	9
Control Box	10
Operating Limits & Recommendations	11
Forward Speed	11
Storage	11
Troubleshooting	12
Warranty	13
The Chapman Warranty	13
Warranty Conditions	13
Transfer of Warranty	13

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 Machines**

HSE Information

Safe use of all-terrain vehicles (ATVs) in agriculture and forestry – AIS Sheet 33

Introduction

This information sheet gives advice on the safe use of ATVs. It covers the two main types used in off-road working in agriculture and forestry, which are:

- sit-astride ATV / sit-in machines
- side-by-side mini-utility vehicles,

The Full HSE information sheet can be found here or using the QR Code at the bottom of the article:

https://www.hse.gov.uk/pubns/ais33.pdf and must be read prior to any ATV/UTV use. Below are related extracts to trailed machinery.

REMEMBER - GET PROPERLY TRAINED AND ALWAYS WEAR HEAD PROTECTION

Training

Under the Provision and Use of Work Equipment Regulations 1998 (PUWER), there is a legal requirement for employers to provide adequate training, and to ensure that only employees who have received appropriate training in their safe use, including the use of any towed equipment or attachments, are permitted to ride ATVs. The same requirements apply to the self- employed. HSE regards training provided by recognised training providers as being adequate for the purposes of PUWER.

Protective clothing

More than half of all ATV riders have been thrown off at some time. As these machines are not fitted with either a cab or roll bar, your only protection is what you wear.

- Head protection is vital. The majority of ATV fatalities in the UK in the last ten years have been caused by head injuries. Nobody who died from head injuries was wearing a helmet. Helmets would certainly have prevented most, if not all, the deaths. You should always wear a helmet when riding an ATV. All helmets should have a chinstrap and be capable of being used with suitable eye protection. The type of helmet chosen should be based on an assessment of the circumstances in which the ATV will be used, eg the types of surface travelled over and anticipated speeds. The harder the surface and higher the speed the greater the degree of protection needed. NB: Forestry helmets and industrial hard hats are not acceptable for any ATV operations.
- Wear clothing that is strong and covers your arms and legs. Gloves are useful for protection and to keep hands warm in cold weather for good control of the ATV. Wear sturdy, anklecovering footwear, eg boots or wellingtons that are strong, supportive and have good wet grip.
- Protect your eyes from insects and branches with either a visor or goggles.

Trailed equipment and loads

Ensure all riders know the manufacturers recommended towing capacity and drawbar loading limit. Always operate within these requirements. Remember that your ability to control the ATV by your body movements will be considerably reduced when carrying a load or towing a trailer.

- When selecting trailed equipment look for:
 - over-run brakes;
 - a swivel hitch drawbar;
 - bead lock rims on wheels;
 - a low centre of gravity and a wide wheel track;
 - a long drawbar; and
 - attachment points for securing a load.
- Check the weight ratio between your ATV and its trailed load. This needs to be assessed for each operation. As a general guide, on level ground, braked trailed equipment can be a maximum of four times the unladen weight of the ATV. For unbraked trailed equipment the maximum should be twice the unladen weight. These loads should be reduced when working on slopes, uneven ground or poor surface conditions. Follow the manufacturers advice for your particular machine.
- Weight transfer is also important. Stability and resistance to jack-knifing is improved if some load is transferred onto the ATV's drawbar. Approximately 10% of the gross weight of the loaded trailer is recommended, but this should not exceed the manufacturers drawbar loading limit. Remember that weight transfer can change dramatically when you start going up or down hill.
- When selecting mounted equipment, make sure it is within the manufacturers approved weight limit, with a low centre of gravity, and controls which are easy to operate but do not create a hazard. Where equipment is added to one end of the machine, add ballast at the other end to maintain stability.
- Loads carried on racks must be well secured, e.g. with ratchet straps, and be evenly balanced between the front and rear, except where they are deliberately altered to aid stability when going up or down a slope.
- Only tow a load from the hitch point. Loads towed from other points such as the rear rack have caused sudden rear overturning even on slight slopes or with slight acceleration. Ropes or chains should not be used to drag a load where they can become caught on a wheel. This may lead to entanglement with the brake cable, causing unexpected braking.

Further information

For information about health and safety go to https://www.hse.gov.uk/

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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.

DEFINITIONS

The following definitions apply throughout this manual:

WARNING - An operating procedure, technique etc., which can result in personal injury or loss of life if not observed carefully.

CAUTION - An operating procedure, technique etc., which can result in damage to either machine or equipment if not observed carefully.

NOTE - An operating procedure, technique etc, which is considered essential to emphasis.

LEFT & RIGHT HAND - This term is applicable to the machine when attached to the towing vehicle and is viewed from the rear – this also applies to tractor references.

Safety Information

- 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 as regards functionality, road safety & accident prevention rules
- Even when using the machine correctly, accidents can occur. It is imperative that nobody stand within the danger area. If working near roads, buildings or animals, special attention must be taken to ensure safety.
- Never wear loose clothing which could get caught in rotating equipment
- Never carry passengers on the towing vehicle
- Do not stand near the machine when operating
- Damaged or missing safety decals must be replaced immediately

Transportation Safety

• When transporting, especially over rough ground, reduce speed to prevent damage to machine.

Operating Safety

- Pay special attention when working not to harm livestock if crowding around the machine occurs.
- If anything should become entangled in the mechanism, or blocked in the chute, stop the machine and disconnect the power before attempting to clear the blockage. DO NOT REACH INTO THE MECHANISM WHEN RUNNING AS INJURY MAY RESULT.
- Ensure carrying vehicle has sufficient bed load rating to carry the weight of the feeder + feed when full.

Description

The MGF350 Mounted Game Feeder is designed for feeding a variety of feedstuffs to game birds such as pheasants, partridges and guinea fowl. Operating with an electric spinner motor and electric shutter, ensuring accurate disposition. The rotor and wiring mechanism are all IP67 rated, to ensure trouble-free usage in even the toughest winter conditions.

The MGF350 has approximately 300kg carrying capacity (feed material dependant), a galvanised metal hopper and PVC cover. An electronic control box controls the motors and spinner by simple switches and relays. Fuses are located both inside the control box and on the machine itself.

These machines should however only be used to perform tasks for which they were 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 potential in breach of applicable safety regulations.

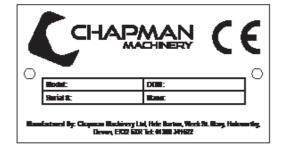
Identification

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 Chapman Machinery 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.

* Carefully read operators manual before handling this machine. Observe instructions and safety rules when operating.



*Caution - Entanglement Hazard. Keep hands away from moving parts



Component Identification



Attachment

Before Attaching the Machine

Before attachment, ALWAYS ensure the following:

- The carrying vehicle has sufficient capacity for the fully laden unit (Machine weight circa 90kg + Max feed capacity (varies with feed used, this must be checked!) = total laden weight

- All safety guards & decals are in good working order and correctly fitted
- Electrical connections are free of dirt and moisture

Attaching the Machine

NOTE: This machine is designed to attach to the carrying vehicle using 4 x ratchet straps. Never use less than 4 straps to secure the load as movement may result!

1. Remove tailgate from carrying vehicle.



2. Load MF350 into bed using forklift slots or suitable lifting strops rated to carry plated unladen weight. If fitting for the first time and the hopper has been shipped 'upside down' then it can be carefully rolled into the pickup bed by 2 people, as shown below. Ensure that the control box and cabling do not get trapped or damaged during this procedure!



3. Centralise hopper in bed and attach using 4 x supplied ratchet straps, 2 straps per side. Ratchet straps must be fitted in a crossing manner as shown below! It is the user's responsibility to ensure the unit is securely fitted in the bed.



4. Fit the cover support bar to prevent the cover sagging as shown below. Fit tarpaulin cover on top of hopper.



- 5. Route control module cabling through the chassis so that the control box is within easy reach of the operator when driving the vehicle. A mounting bracket is supplied for easy fitment, along with plenty of cable to route around obstructions. The unit is designed to be hard-wired direct to the battery of the vehicle with a dedicated feed. It is recommended that the control unit be hard-wired into the vehicle to ensure cables do not get snagged and damaged by tools, equipment, dogs etc; should the hopper need to be removed at a later stage, the plug can be disconnected from the hopper and the control module can remain in the vehicle when not in use.
- 6. Calibrate the drop size for the feed being used. This should be completed every time different feed is used to ensure accurate feed rates. Instructions for calibration are included on the following page.



ENSURE CONTROL EQUIPMENT IS SECURELY ATTACHED TO THE TOWING VEHICLE BEFORE USE

Initial Calibration

On the RH Side at the rear of the machine you will find two black handwheels and an indicator plate as shown below. Initially set the Feed adjustment plate to setting 2, as indicated by the arrow on the drop adjustment plate. To adjust, loosen BOTH hand wheels, and slide the unit forwards or backwards to the desired value. Tighten securely.



Setting 1: Minimum drop size

Setting 8: Maximum drop size

Fill the hopper 50% full of the feed to be distributed. Close the two deflector plates at the side of the spinner and use a 25kg feedbag or similar so that the feed out the back of the spinner can be collected or weighed. With the machine securely attached to the fitted vehicle and on level ground, run the feeder for 1 minute, Measure the weight of the deposited feed – this is the amount of feed deposited per minute.

Adjust the feed adjustment plate as required to increase or decrease the feedrate.

The feed rate setting will differ between different feed, due to the different particulate size. It is strongly recommended to re-calibrate if you change feed make-up or consistency.

Once you have set the machine to the desired feed rate, securely tighten the two retaining handwheels to ensure this does not change during use. Once happy with the feedrate is advisable to make a mark in indelible ink on the machine so that the rate can be easily recalled if needed.

Control Box

The control box on the MGF350 is a simple switched system with relays, as shown below. The LH switch opens and closes the shutter, and the RH switch turns the main spinner on and off.



Specification

Supply Voltage: 12V DC nominal, 16V MAXIMUM Power Consumption: OFF: Nominal ON: Up to 25A *MUST BE WIRED DIRECT TO BATTERY!* Operating Temperature: -10°C to +40°C Fuse: Control Box: 10A Blade (inside box) Main Motor: 30A Maxi (on machine) Protection rating: IP67

Operation

- 1. Start the spinner motor by switching ON.
- 2. Once motor is up to speed (approx. 2 seconds), open shutter to allow feed onto spinner. When stopping feeding, use procedure in reverse.

Operating Limits & Recommendations

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.

It is advisable that all 'first time' operators practice using the machine in a clear safe area prior to work in order to familiarise themselves with its operation.

AFTER APPROXIMATELY ONE HOUR OF WORK WITH A NEW MACHINE, ALL NUTS, BOLTS AND DRIVE BELTS SHOULD BE CHECKED FOR TIGHTNESS AND ADJUSTED AS NECESSARY!

Operating Limits

Minimum / Maximum Temperature: -10°C / +40°C



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

Forward Speed

The forward working speed will affect the distance between drops of feed - to increase the distance between drops use a faster forward speed, to reduce the distance, use a slower forward speed.

Storage

For extended periods of storage, it is advisable that the machine be kept in a clean dry environment protected from the elements to avoid risk of corrosion.

The machine should be thoroughly cleaned and lubricated prior to storage. At this point it is good practice to check the machine for worn or damaged components - any parts that require replacing should be ordered and fitted at the earliest opportunity so the machine is fully prepared for the next seasons work.

Troubleshooting

Problem	Possible Causes	Remedies
	Low Supply Power	Charge Battery
	Incorrect Polarity/poor connection	Check connection
Unit will not operate	Fuse Blown	Check fuse in control box
	Control Box Fault	Contact distributor / Chapman
Spinner Motor does not operate even though	Main Fuse Blown	Replace main motor fuse
shutter is working	Shortage in wiring	Check wiring for damage
	Motor Fault	Replace motor, contact distributor
Shutter does not operate	Poor connection	Check plug is clean and moisture free
	Obstruction	Check for blockage
	Fuse blown	Check fuse inside control box
	Actuator damaged	Replace
No material is fed	Jammed actuator plate or spinner	Check for blockages and remove
	Hopper bridging	Agitate hopper contents
Feed-rate varies	Blockage or hopper bridging	Check and clear
Feed leaking out	Jammed shutter plate	Check for blockages and remove
	Other obstruction	Clear and check
	Spinner switched off before shutter	Follow procedure – close shutter before stopping spinner motor

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.

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.

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EC DECLARATION OF CONFORMITY Machinery Directive 2006/42/EC

Chapman Machinery Ltd

Hele Barton Week St. Mary Holsworthy Devon EX22 6XR

The Products Covered by this Declaration

Product:	MGF350 Trailed Game Feeder & Options (Off-Highway)
Standards and Regulations used:	Machinery Directive 2006/42/EC
Place of Issue:	United Kingdom
Name of Representative:	James Chapman
Position of representative:	Director

The Basis on which Conformity is being Declared

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

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

DChipun Signed:

Date:01/09/2020.....