

Grass Seed Deflector Kit

ORIGINAL OPERATING MANUAL & PARTS LIST



Read carefully before installation and operation

This document must not be copied duplicated or distributed without prior consent.

All intellectual property and patent rights apply.



Stocks Ag Limited.

Cromwell Road, Wisbech, Cambridgeshires, PE14 0SD, UK 01945 464909 sales@stocks-ag.co.uk www.stocks-ag.co.uk





Index

Section		Page
	E.C. DECLARATION OF CONFORMITY	3
	UKCA. DECLARATION OF CONFORMITY	4
1.0	General Information	5
1.1	Technical Data	5
1.2	Intended Use	5
1.3	Unintended Use	5
1.4	Warranty	6
2.0	Safety	7
3.0	Storage	7
4.0	Fitting Instructions	8
5.0	Grass Seed Agitator	9
6.0	Grass Seed Calibration Guide	10
7.0	Parts Diagram	11
8.0	Parts List	12



E.C. DECLARATION OF CONFORMITY

Machine Type:	Mounted Agricultural Implement	 Pellet and Seed application broadcas 	ters
---------------	--------------------------------	--	------

Model(s): Fan Jet Pro All Variants and Versions Fan Jet Pro Plus All Variants and Versions

Fan Jet Twin **All Variants and Versions** Fan Jet Mini **All Variants and Versions** Fan Jet Duo **All Variants and Versions All Variants and Versions** Turbo Jet **Rotor Meter All Variants and Versions Rotor Meter Air Force All Variants and Versions** Micro Meter **All Variants and Versions Maxi Meter All Variants and Versions**

Serial No.

Manufacturer: Stocks Ag Ltd

Cromwell Road Wisbech

Cambridgeshire PE14 OSD

United Kingdom

This is to declare that the above machine conforms to the relevant Essential Health and Safety Requirements of the Machinery Directive 2006/42/EC, implemented in the United Kingdom by Statutory Instrument 2008 No. 1597 – The Supply of Machinery (Safety) Regulations 2008 as amended.

The following standards have been applied in the design and construction of this machine:

BS EN ISO 12100: 2010 Safety of machinery – General principles for design – Risk

assessment and Risk reduction.

BS EN ISO 4254-1: 2015 Agricultural machinery – Safety - General requirements.

BS EN ISO 4254-8: 2018 Agricultural machinery. Safety - Solid fertilizer distributors

BS EN ISO 13854: 2019 Safety of machinery – Minimum gaps to avoid crushing of

parts of the human body.

BS EN ISO 13857: 2019 Safety of machinery – Safety distances to prevent hazard

zones being reached by the upper and lower limbs.

The manufacturer stated above holds the technical file for this machine.

Signed on behalf of Stocks Ag Ltd

Name: J Woolway

Date: 06th August 2020

Position: Managing Director

t. +44 (0) 1945 464909 f. +44 (0) 1945 464985 e. sales@stocks-ag.co.uk



UKCA. DECLARATION OF CONFORMITY

Machine Type: Mounted Agricultural Implement - Pellet and Seed application broadcasters

Model(s): Fan Jet Pro All Variants and Versions Fan Jet Pro Plus All Variants and Versions

All Variants and Versions Fan Jet Twin **All Variants and Versions** Fan Jet Mini **All Variants and Versions All Variants and Versions** Fan Jet Duo **All Variants and Versions** Turbo Jet **Rotor Meter All Variants and Versions Rotor Meter Air Force All Variants and Versions** Micro Meter **All Variants and Versions Maxi Meter All Variants and Versions**

Serial No.

Manufacturer: Stocks Ag Ltd

Cromwell Road Wisbech

Cambridgeshire PE14 OSD

United Kingdom

This is to declare that the above machine conforms to the relevant Essential Health and Safety Requirements of the Machinery Directive 2006/42/EC, implemented in the United Kingdom by Statutory Instrument 2008 No. 1597 – The Supply of Machinery (Safety) Regulations 2008 as amended.

The following standards have been applied in the design and construction of this machine:

BS EN ISO 12100: 2010 Safety of machinery – General principles for design – Risk

assessment and Risk reduction.

BS EN ISO 4254-1: 2015 Agricultural machinery – Safety - General requirements.

BS EN ISO 4254-8: 2018 Agricultural machinery. Safety - Solid fertilizer distributors

BS EN ISO 13854: 2019 Safety of machinery – Minimum gaps to avoid crushing of

parts of the human body.

BS EN ISO 13857: 2019 Safety of machinery – Safety distances to prevent hazard

zones being reached by the upper and lower limbs.

The manufacturer stated above holds the technical file for this machine.

Signed on behalf of Stocks Ag Ltd

Name: J Woolway

Date: 01st December 2020

Position: Managing Director

t. +44 (0) 1945 464909 f. +44 (0) 1945 464985 e. sales@stocks-ag.co.uk



1.0 General Information

Congratulations on your Grass Seed Deflector Kit purchase:

Please check the machine for any transport damage upon receipt and advise your supplier of any problems immediately. Late claims regarding any damage may be rejected.

IMPORTANT: This Operating Manual forms part of the machine and must be readily available for the operator who must read and follow the points covered before use.

1.1 Technical Data

Model: Grass Seed Deflector Kit

Fan Jet Pro Part No FJ-004-DEFLECTOR or Fan Jet Plus Part No FJ-004-DEFLECTOR

Max spreading width: 6m

Net weight: 13kg

Dimensions: Assembled 1350mm x 650mm

1.2 Intended Use

This kit has been designed to enhance the performance of a Fan Jet Pro and Fan Jet Plus machine when applying grass seed and fitted to a grass harrow or similar parent machine.

This unit is fully adjustable to allow the seed to be directed as required across the width of the parent machine.

For example, when fitted to a Fan Jet mounted onto a grass harrow, the seed deflector can be adjusted so the seed is distributed in a line behind the front row of tines, this enables the remaining tines to rake in and cover the seed, improving germination.

The adjustable vanes supplied with the seed deflector can be used to limit the spread when working at narrow widths.

Any other use is considered to be non-intended and the manufacturer will not be liable for any resulting damage.

The manufacturer is not liable for any resulting damage if the machine is used for any other purpose than the intended use and also includes compliance with the conditions for operation, maintenance, and repairs prescribed within this instruction manual.

The applicable accident prevention regulations as well as the other generally safety-related, occupational health and road traffic regulations must also be observed.

NOTE: Do not operate this machine during adverse weather conditions.

1.3 Unintended Use

This kit has not been designed for use when applying small or large hard seeds as seed striking the seed deflector flap will be subject it to damage.

This kit is not suitable for spreading slug pellets of any kind or size.

The operator alone bears the associated risk if used for non-intended use.



1.4 Warranty

We provide a 12 month warranty from the date of invoice (the invoice for the machine will serve as a warranty certificate).

This warranty is applicable for cases of material or construction faults and does not include parts that are damaged by normal or excessive wear.

Warranty expires if damage is caused by external forces, operator error, modifications, jet washing or if the machine has been used for unintended use.

In the event of any problems, or before attempting any repair please contact the company from where the machine was purchased. If the base machine or the controls system are modified in any way this will void any warranty claim.

Please see our conditions of sale for full details, a copy of which is available upon request.								
Please record the machine serial number here:	S/N							
Purchase date:	Dealer							



2.0 Safety

Ensure care is taken when lifting the machine. Safe lifting practice to be observed when handling as the net weight is over 25kg



- We advise safety shoes and protective gloves are worn when handling the machine.
- Assistance will be required when lifting or lowering the machine.
- Care to be taken to avoid crushing due to the weight of the machine.
- When lifting or fitting the machine on to a parent vehicle or implement ensure work is performed on level ground or flat surface to avoid slipping, stumbling or falling.

PERSONAL PROTECTION EQUIPMENT

It is the responsibility of the operator or maintenance engineer to ensure safe handling of the machine and the appropriate personal protection equipment must be worn for the material being applied and to prevent contamination to the machine or the environment.

3.0 Storage

It is the responsibility of the operator to ensure the Deflector Kit is cleaned thoroughly before storage.

Store in dry conditions, always clean and spray perishable components with a moisture repellent spray when not in use for long periods.



4.0 Fitting Instructions

Please refer to the parts diagram before assembly

Ensure the rubber buffers as shown (D) are fitted to both side mounting plates (8 & 9)

Supplied with a two side arms (items 8 & 9) which enable the deflector kit to be fitted onto the existing Fan Jet Pro chassis or frame.

Fix the mounting arms to each side of your Fan Jet by holding the arms in position and sliding the tipping pin (4) through both mounting each arm and the corresponding hole in the back frame of the machine as shown

Then fix the base of both side arms using the fixings supplied (inset B)

NOTE: Position of the white nylon spacers (3) which fit between each mounting arm and side of the machine.

Fix the main body onto the side arms using the fixings provided (inset H)

Once the Fan Jet fitted with the seed deflector has been mounted into position on the parent machine the angle of the deflector flap can be adjusted by positioning the securing bolt (item 25. inset C) into the appropriate hole in the adjuster segment and holding into position by tightening the M8 knobs provided (item 1. inset C).

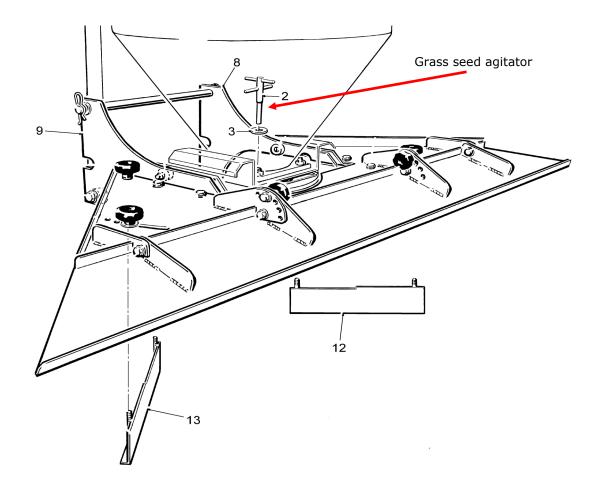
The pair of adjustable vanes (12 and 13) provided can then be fitted using the fixings supplied (inset A) if required to limit the spread width.

NOTE: The grass seed agitator (item 2) must be fitted when applying grass seed, **Fan Jet Pro machines only** (Not applicable to Fan Jet Plus machines).

Ensure the standard agitator fitted to the machine is replaced with the Grass Seed Agitator supplied in the kit.

NOTE: A good 6m spread width should be obtainable if applying grass seed and the Fan Jet has been mounted a minimum of 1m above the ground.

NOTE: If applying grass seed to 6m the vanes are not required.





5.0 Grass Seed Agitator

NOTE: Not available for the Fan Jet Plus.

The Grass Seed Agitator is included in the Grass Seed Deflector Kit (Fan Jet Pro only) or can be supplied separately.

Available as a separate item: Part No. FJ035G

To remove the original standard agitator - use the 3mm Allen key provided and loosen the upper grub screw on the central hub of the fan disc - once loosened the agitator will pull out from within the hopper.





Grass Seed Agitator

The grass seed agitator can now be fitted, ensure the replacement white nylon washer has been fitted onto the shaft before fitting and re-tightening the retaining grub screw.



The Grass Seed Agitator kit includes:

- 1 x Grass Seed Agitator
- 1 x White Nylon Washer
- 1 x 3mm Allen Key
- 1 x M6 x 6 Grub screw

20mm

40mm

NOTE: The grass seed agitator must be fitted when applying grass seed to help prevent bridging of seed in the hopper.



6.0 Grass Seed Calibration Guide

These settings are to be used as guides only, it is important you always test the product through the machine to establish the spread width pattern and rate are accurate.

Grass Seed - 6 meters

			FORWARD SPEED km/h															
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1																	
	2	14.2	11.4	9.5	8.1	7.1	6.3	5.7	5.1	7.4	4.3	4.0	3.8	3.5	3.3	3.2	3.0	2.8
<u>g</u>	3	30.0	24.0	20.0	17.1	15.0	13.3	12.0	10.8	10.0	9.2	8.5	8.0	7.5	7.1	6.7	6.3	6.0
Setting	4	46.8	37.5	31.3	26.7	23.4	20.8	18.7	17.0	15.6	14.3	13.3	12.5	11.7	11.1	10.5	9.8	9.3
	5		50.0	41.6	35.6	31.2	27.7	25.0	22.6	20.8	19.1	17.8	16.6	15.6	14.8	14.0	13.1	12.5
Opening	6			45.4	38.9	34.0	30.2	27.2	24.7	22.7	20.9	19.4	18.1	17.0	16.1	15.2	14.3	13.6
Feed C	7				42.8	37.5	33.3	30.0	27.2	25.0	23.0	21.4	20.0	18.8	17.8	16.8	15.8	15.0
F	8					41.6	37.0	33.3	30.3	27.7	25.5	23.7	22.2	20.8	19.7	18.6	17.5	16.6
	9					·	39.1	35.2	32.0	29.4	27.0	25.1	23.5	22.1	20.9	19.7	18.5	17.6
	10							37.5	34.0	31.2	28.7	26.7	25.0	23.5	22.2	21.0	19.7	18.7

NOTE: For guidance only, above figure relate to kg/ha

These settings are to be used as guides only, it is important you always test the product through the machine to establish the spread width pattern and rate are accurate.

CALCULATING APPLICATION RATE

To establish the correct flow rate of product for your bout width, forward speed and application rate use the below formula:

Method

Use the following formula to establish the flow rate – this is a 1 minute catch test universal for all machines, products, widths and speeds.

Application rate (kgs/ha) x forward speed (kph) x spread width (metres) = Flow rate in kgs per min 600

Example 1.

The required application rate is 25 kilograms per hectare. The target forward speed is 10 kilometres per hour. The bout width is 6 metres wide.

 $25 \text{ kgs/ha} \times 10 \text{ kph} \times 6 \text{ metres} = 2.5 \text{kgs per minute flow rate}$ 600

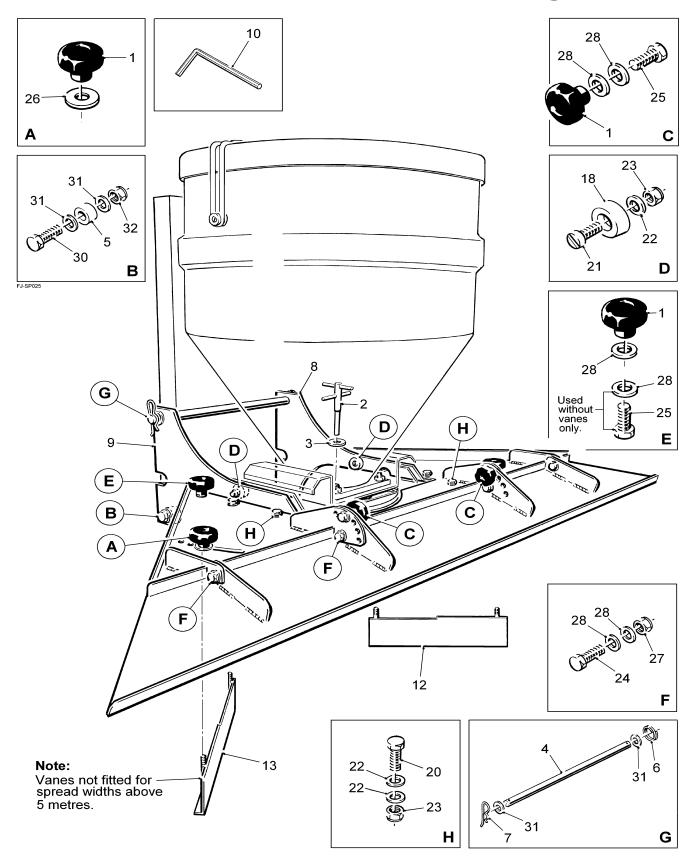
Example 2.

The required application rate is 5.5 kilograms per hectare. The target forward speed is 12 kilometres per hour. The bout width is 4.25 metres wide.

 $5.5 \text{ kgs/ha} \times 12 \text{ kph} \times 4.25 \text{ metres} = 467 \text{ grams per minute flow rate}$ 600



7.0 Grass Seed Deflector Parts Diagram





8.0 Grass Seed Deflector Parts List

Item	Part #	Description	Qty	Remarks
1	FJ033A	M8 Fem Knob	6	
2	FJ035G	Grass Seed Agitator	1	Not supplied in Fan Jet Plus kits
		(FJ035G supplied with 1 x FJ036A)		
3	FJ036A	Nylon Washer	1	Not supplied in Fan Jet Plus kits
4	FJ415A	Tipping Bracket Pin	1	
5	FJ417A	Nylon Spacer	2	
6	FJ418A	Split Ring	1	
7	FJ419A	3mm 'R' Pin	1	
8	FJ331A	Mounting Arm LH - Fan Jet Pro	1	
8a	FJ331B	Mounting Arm LH - Fan Jet Plus		(not shown)
9	FJ332A	Mounting Arm RH - Fan Jet Pro	1	
9a	FJ332B	Mounting Arm RH - Fan Jet Plus	1	(not shown)
10	FJ028A	3mm Allen Key	1	Not supplied in Fan Jet Plus kits
11				
12	*FJ335	Vane LH (see remarks)	1	*Items 12 & 13
13	*FJ335	Vane RH (see remarks)	1	supplied as a pair Part# FJ335
14				
15				
16				
17				
18	MM569	Rubber Buffer	2	
19				
20	M6-004	M6x16 Screw	6	
21	M6-007	M6 Screw	2	
22	M6-015	M6 Flat Washer	14	
23	M6-023	M6 Nyloc Nut	8	
24	M8-003	M8x20 Screw	4	
25	M8-009	M8 x25 Screw	2	
26	M8-012	M8 Repair Washer	2	
27	M8-019	M8 Nyloc Nut	4	
28	M8-010	M8 Flat Washer	16	
29				
30	M12-006	M12x40 Screw	2	
31	M12-008	M12 Flat Washer	6	
32	M12-014	M12 Nyloc Nut	2	