





ProDig Attachments Fork User Manual. Safety, Maintenance & Operating Instructions for:

Folding Grass Fork - Mammoth - Taurus 3600/ 4200/ 4900/ 5500 Push Off Grass Fork - 2500/ 2750/ 3000/ 3300/ 3600/ 4000

> This manual should always stay with the machine. Read carefully before operating any attachment.



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Dear user,

We thank you for placing your trust in our product and hope you will find your attachment satisfactory in every way.

Taking a few minutes to read this manual will enable you to use the capabilities of your attachment to the full, while prolong its service life and ensure safe operation. This user manual is an important document, please retain it, in order to be referred to if required. Make it available to any other users and hand it over to any new owner in the event of your attachment being sold on.

The illustrations and technical data shown in this document might not match your attachment model exactly, operating conditions will nevertheless remain the same.

The user must read and understand this manual before first use.



Safety

IMPORTANT: Read this before operating any attachment

Most farm accidents can be avoided by observing simple precautions. You should read through the following precautions before operating the equipment, and at intervals afterwards to refresh your memory. **BE ALERT** to the following dangers:

- For your complete safety and that of others, strict compliance with the hitching and unhitching procedure for the attachment is required (see page 6 of this manual).
- ALWAYS store the attachment securely and safely when removed from the parent machine taking special care of the hydraulic hoses and connections
- Check periodically to ensure that safety pins and bolts are in place. Do not replace them with any other items such as: nails, wire, etc.
- Only one operator when attachment is in use.
- Before fitting the equipment to a machine, check the combined weight of the attachment and the load does not exceed the safe working load of the front axle and tyres of the tractor/loader. It is important to ensure that the hydraulic capacity of the machine is adequate.
- Before starting the machine to use the equipment, check that all the bolts and connections are tight and that the lift mechanisms are in good working order. Check for oil leaks, and ensure all guards are securely in position.
- Check hoses for length by routing in all configurations (fully crowded, fully dumped, etc.) before first use.
- Before using the equipment for the first time, practice using the controls a number of times, well away from any buildings or persons and on solid level ground.
- Check tines for length by routing in all configurations (fully crowded, fully dumped, etc.) before first use. Ensure tines do not come in contact with tires on crowd out and frame does not come in contact Z-linkage on crowd back
- Before carrying out any maintenance to the attachment, ensure the machine engine is switched off, the parking brake is on, the ignition key removed, and the attachment is supported. <u>Never place your arms, hands, legs or head in the machine</u>.
- Hydraulic oil at normal working pressure is dangerous. Stop the machine, remove the key, before connecting hydraulic hoses, and operate the controls to release the pressure in the system. Never start the machines engine when hoses are open.
- Check hoses regularly for signs of leakage or damage. Use a piece of card when checking for leaks. Fine jets of hydraulic fluid can penetrate the skin. Never use your fingers or face to check for leaks. If affected by Hydraulic fluid seek medical help immediately. <u>Replace any worn or damaged hoses immediately.</u>
- When travelling on the road it is imperative that the regulations governing use on the public road be observed (size, implement markings, etc.) Protruding items such as tines must be protected or stowed (tine guard).
- When moving the machine fitted with an attachment, allow for the ground conditions. Drive slowly on wet slippery or bumpy ground. Never make fast starts, stops or turns when carrying a load, Remember your traction is greatly reduced when the machine is loaded at the front.



Safety

- When moving a machine fitted with an attachment, lower and close the attachment to shield the blades/ tines. Always carry loads as near to the ground as possible.
- Whenever the drive unit is stopped momentarily or for an extended period, the engine must be shut down and the attachment lowered.
- Take great care when operating at height in order to avoid catching any items (electric power or telephone lines, guttering, roof trusses, etc.).
- Never pass under a raised attachment (full or empty)
- Carrying or lifting personnel using any attachment is forbidden. Never stand or pass under the load.
- When operating the equipment, make sure there are no spectators, especially children, anywhere near the machines.
- Ensure any attachment is closed when not in use and is supported so that it can not fall over.
- Any work involving fault tracing (diagnostics) and/or disassembly of parts may only be undertaken by a skilled technician who will start with an assurance that the work will be carried out in complete safety for himself and his surroundings.
- Any modification to any part of an attachment supplied (rams, grab, tines, attachment itself, etc.) or use of a component installed on an attachment which has not originated from ProDig will void ProDig warranty on the entire attachment.
- Warranty cover will cease immediately in the event of failure to observe the standards and instructions for use and maintenance of an attachment as stipulated in the user manual.
- Youths under the age of 16 must not operate an attachment.
- The operator must be fully trained before using an attachment.
- A safe distance of at least 10m must be observed by anyone within the vicinity of an attachment.
- The manufacturer will not be responsible for any damages or injuries caused by unauthorised repair, alterations or mishandling of the product.
- Regularly check all bolts and tighten if necessary.
- NEVER attempt to move an implement manually.
- NEVER attempt to clear a blockage without stopping the machine and removing the key from the prime mover.

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Pre Check for all Attachments

Hitching and unhitching

Ensure hooks and pins are in-self working conditions on the attachment and the machine before hitching to the attachment. See fitting instructions of bolt on brackets on page 14,15 & 31 to ensure hitch is fitted correctly. Approach the attachment with the headstock of your machine tilted forward and at a controllable speed. Ensure the attachment is centred on the headstock and its entire weight is supported. Ensure locking pins are fully through brackets and locked securely before use. Before use, check the attachment is locked securely by routing in all configurations (fully crowded, fully dumped, etc.) and is not coming in contact with the loader or the loader tires.

Check periodically to ensure that locking / safety pins and bolts are in place. **Do not** replace locking/ safety pins with any other items such as: nails, wire, etc

Machine Hydraulic Connection

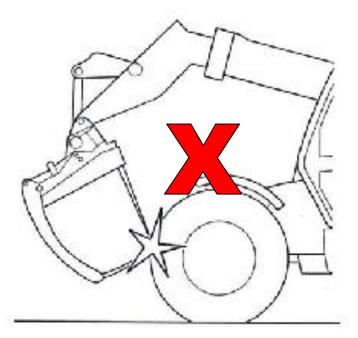
Hydraulic pressure should <u>never exceed 200 BAR</u>. Check the hydraulic specification of the machine onto which the attachment will be fitted to find out its maximum hydraulic pressure for attached implements. If the attachment is to be used on a machine capable of generating over 200 BAR which is mainly confined to telescopic loaders and other industrial spec machines a pressure relief valve is required. Contact your Prodig dealer in this event. Push Off Grass Forks are fitted with a pressure relief valve as standard.

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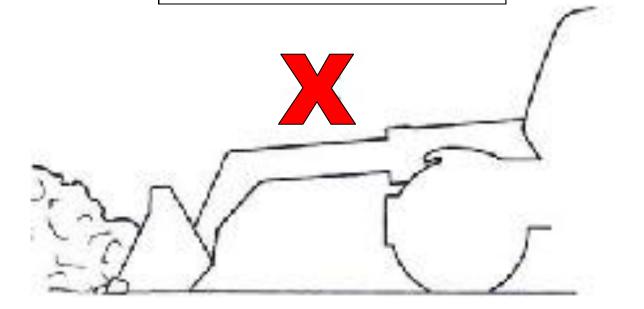
CAUTION

Some attachments (e.g. buckets, manure forks, etc) can cause damage to the front tyres of a loader or tractor when lowered and the carriage is tilted forward. Exercise caution when lowering the boom.



CAUTION

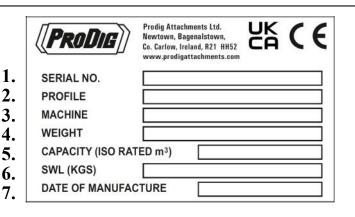
Do not extend the boom when an attachment is connected to the high flow auxiliary connectors.





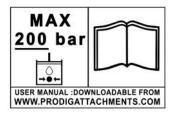
Safety warning signs

- 1. Part number: ST 09 (Serial Number Plate)
- Name plate/ identification. Always quote the serial number when obtaining replacement parts Serial Number 1.
- 2.
- Profile/Product Code 3. Machine/ Hitch Type
- 4. Weight (kg)
- 5. Capacity (m3)
- Safe Working Load 6.
- 7. Date Of Manufacture (mm/yyyy)



Description of safety warnings

It is important that all safety warnings and instructions are understood and followed. If any of the decals become damaged, or are missing, they are available from Prodig Attachments.



Part number: ST 06

Read user manual before use. Hydraulic pressure should never exceed 200 bar. See hydraulic section for further details (page 5). User manual downloadable from WWW.PRODIGATTACHMENTS.COM



Part number: ST 07 Grease daily to keep the attachment in optimum condition.



Part number: 817/70003 Pinch Point—keep hands and body parts clear of moving parts. Do not place arms, hands or any body part between the door system.

Folding Grass Fork:

Models: Mammoth 3600/ 4200/ 4900/ 5500 & Taurus 3600/ 4200/ 4900/ 5500

This machine has been specifically designed to move loose free flowing grass, silage, maize and other feeding/ crop material being stored in a pit. The folding function allow the fork to reduce in size for transport reasons and unfold to handle the increased output from a new generation of high capacity silage harvesters/ trailer in conjunction with large wheeled loaders.

Our fork is designed in two model types: Mammoth and Taurus.

- The Mammoth range is designed as an all-round fork with standard fork spacing to suit wetter grass conditions. Mammoth tine spacing 227mm (277mm centres).
- The Taurus range is specified designed with increased tine spacing for continental conditions with longer drier grass and large quantities of maize silage. The wide tine spacing helps longer, dryer grass silage to flow through the fork, making it easier to disperse on the pit. During maize season, the fork can then be fitted with a bolt on maize blade and tine infills which allows the fork to carry, disperse and level maize silage with ease (Taurus range only). Taurus tine spacing 328mm (378mm centres).

Both models types are available in widths of 3600mm, 4200mm, 4900mm and 5500mm with 50mm Hardox tines used in bottom bar, available in 1524mm, 1828mm or 2100mm tine lengths (1828mm as standard).

As standard the fork is fitted with:

- Bolt on hitch system to suit all machines.
- Three part bolt on / removable top frame.
- Removable double side tines.
- Profiled wear tips on 50mm tines.
- Adjustable top wing locking system for added strength and support during use.
- Check valve on hydraulic cylinder for increased safety to prevent the wing accidently lowering during transport or in the event of hose failure. This also prevents the wings from folding up when back grading the pit and ensure pressure remains holding the wings open.
- Hydraulic cushioning on both ends of the hydraulic cylinder for increased operator comfort.
- Rubber buffers on closed position.

Optional extras:

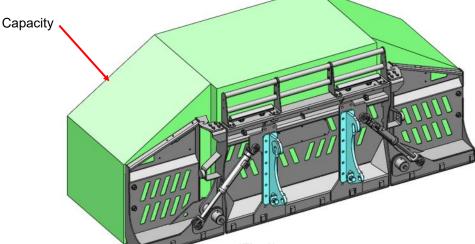
- Work lighting kit (no:2 LED work lights) (suits both Mammoth & Taurus models).
- Transport tine guard (suits both Mammoth & Taurus models).
- Flow divider valve to ensure wing move simultaneously (suits both Mammoth & Taurus models).
- Pressure relief valve for loaders over 200 BAR (suits both Mammoth & Taurus models).
- Maize blade to reduce tine spacing from 328mm to 124mm (Taurus models only).
- Full maize blade to infill tine spacing (Taurus models only).

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Capacity of Folding Grass Forks

The capacity of the folding grass forks is calculated from the length x depth x height block that is determined by the fork width and tine length (fig 1, capacity in green). Ensure that the loader is suitably sized by checking the loaders lifting capacity before fitting the folding grass fork. Check the weight of the folding grass fork and additional options and the KG per m³ of material density (kg/m3) being loaded multiplied by the volume of the fork and ensure this is under the loaders lifting capacity. The below table shows the weight of each fork and payload / gross weigh calculated by the weight of direct cut grass at 800kg/m3. This information depends on the type of silage/ grass / material and serves as guidance only (density of material may vary). If required, fit the loader with counterbalance weight.



(Fig 1).

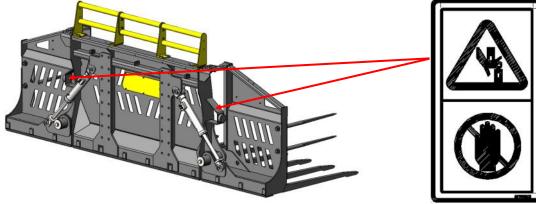
Code	Unfolded Width (mm)	Tine Length (mm)	Capacity (m3)	Weight Ex- cluding Hitch (kg)	Weight Including standard angled euro 50 Hitch (kg)	weight of di- rect cut grass kg/m3	**Payload @ 800kg/m3 material	**Gross weight of fork C/W Hitch & 800kg/m3 material x Capacity (kg)
MAMMOTH-36-S-BOS	3656	1524	7.6	1589.68	1709.68	800	6080	7670
MAMMOTH-36-BOS	3656	1829	9.4	1706	1826	800	7520	9226
MAMMOTH-36-XL-BOS	3656	2090	10.9	1788.46	1908.46	800	8720	10508
TAURUS-36-S-BOS	3656	1524	7.6	1465.2	1585.2	800	6080	7545
TAURUS-36-BOS	3656	1829	9.4	1554	1674	800	7520	9074
TAURUS-36-XL-BOS	3656	2090	10.9	1612.9	1732.9	800	8720	10333
MAMMOTH-42-S-BOS	4266	1524	8.63	1735.92	1855.92	800	6904	8640
MAMMOTH-42-BOS	4266	1829	10.7	1866	1986	800	8560	10426
MAMMOTH-42-XL-BOS	4266	2090	12.4	1960.24	2080.24	800	9920	11880
TAURUS-42-S-BOS	4266	1524	8.63	1615.44	1735.44	800	6904	8519
TAURUS-42-BOS	4266	1829	10.7	1718	1838	800	8560	10278
TAURUS-42-XL-BOS	4266	2090	12.4	1788.68	1908.68	800	9920	11709
MAMMOTH-49-S-BOS	4876	1524	9.68	1880.16	2000.16	800	7744	9744
MAMMOTH-49-BOS	4876	1829	12	2024	2144	800	9600	11744
MAMMOTH-49-XL-BOS	4876	2090	13.9	2130.02	2250.02	800	11120	13370
TAURUS-49-S-BOS	4876	1524	9.68	1759.68	1879.68	800	7744	9624
TAURUS-49-BOS	4876	1829	12	1876	1996	800	9600	11596
TAURUS-49-XL-BOS	4876	2090	13.9	1958.46	2078.46	800	11120	13198
MAMMOTH-55-S-BOS	5484	1524	10.72	2032.4	2152.4	800	8576	10608
MAMMOTH-55-BOS	5484	1829	13.3	2190	2310	800	10640	12830
MAMMOTH-55-XL-BOS	5484	2090	15.45	2307.8	2427.8	800	12360	14668
TAURUS-55-S-BOS	5484	1524	10.72	1915.92	2035.92	800	8576	10492
TAURUS-55-BOS	5484	1829	13.3	2046	2166	800	10640	12686
TAURUS-55-XL-BOS	5484	2090	15.45	2140.24	2260.24	800	12360	14500

**This information depends on the type of silage and serves as guidance only.



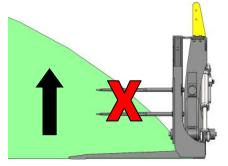
Operating Safety

Before fitting the folding grass fork ensure that the loader is suitably sized and is fitted with counterbalance weights if required. Check the hydraulic capability of the machine and ensure it is suited to the attachment. **Do not** stand directly under the folding grass fork at anytime. Single person operation only. **Do not** place arms, hands or any body part between wings at anytime (fig 2). **Not to be used** as a lifting device or for lifting objects other than loose free flowing grass, silage, maize and other feeding/ crop material being stored in a pit. **Do not** crown back the fork so that the contents can fall towards the operator.

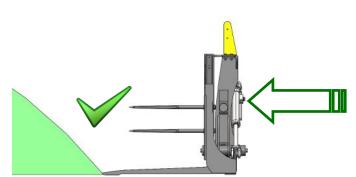


(Fig 2).

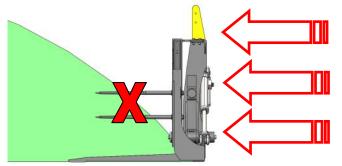
The folding grass forks are designed for handling grass, silage, maize and other feeding/ crop material being stored in a pit. **Not to be used** with lift/ breakout force from the loader to loosen material - **loose free flowing material only** (fig 3). This attachment is **not designed** to withstand coming into contact with the material at speed (fig 4). The folding grass fork is to be driven into the material at a controlled speed (fig 5). It is recommended to approach the material until the tines are almost in contact with the material and come to a stop before proceeding to drive into the material. Ensure the tine tips and heel plate are parallel to the ground when approaching material. Avoid over crowning forward when approaching the material, this will lead to uneven wear on the tines and additional strain on the folding grass fork and loader arms (fig 6).



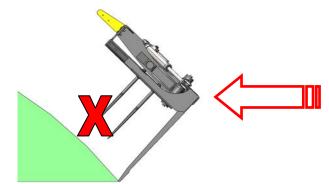
(Fig 3) <u>Not to be used</u> with lift/ breakout force to loosen material - <u>loose free flowing material only</u>



(Fig 5) Ensure the tines and heel plate are parallel to the ground when approaching material.



(Fig 4) Not to be driven into the material at speed



(Fig 6) <u>Avoid</u> over crowning forward when approaching the material

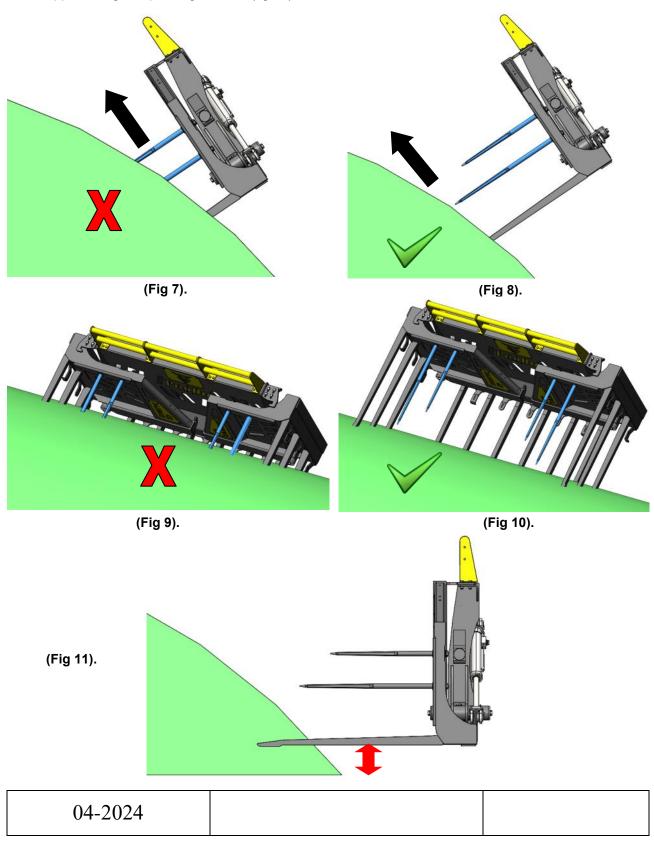
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Operating Safety

The side tines main function is to hold the material in the fork when being used to carry material. These are not intended to be used to push or flick material as this will cause additional strain on the wings (fig 7, side tines in blue). Where possible, ensure the force is mainly applied to the bottom Hardox tines (fig 8, side tines in blue). This also applies when the fork is used in the folded up position (fig 9 & 10, side tines in blue). To avoid additional and premature wear, try to limit the amount of contact between the tines / bottom wear plates against concrete. Where possible, keep the tines/ bottom wear plates raised off the ground when approaching and pushing material (fig 11).

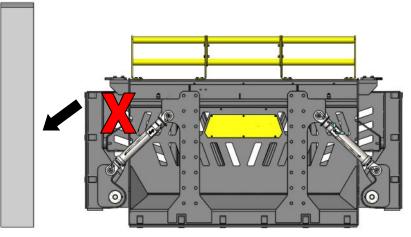




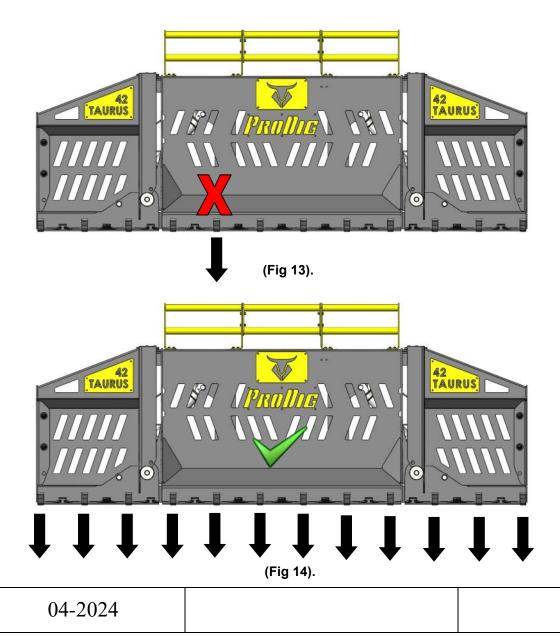
Operating Safety

Do not open the wing so that it comes in contact with obstacles such as pit walls (fig 12).

Do not place large force on one single tine (fig 13), try to spread the load as evenly as possible across the full bottom tines (fig 14).



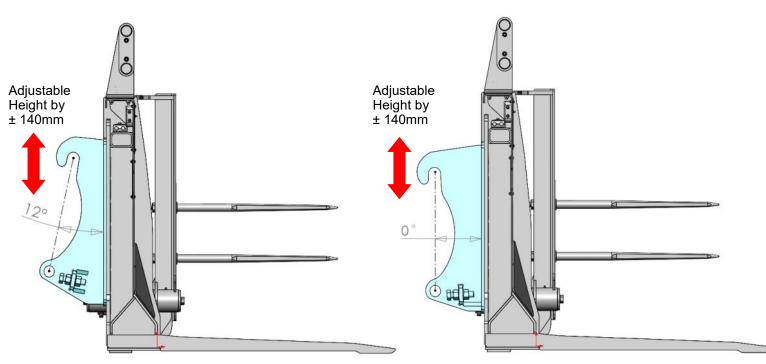






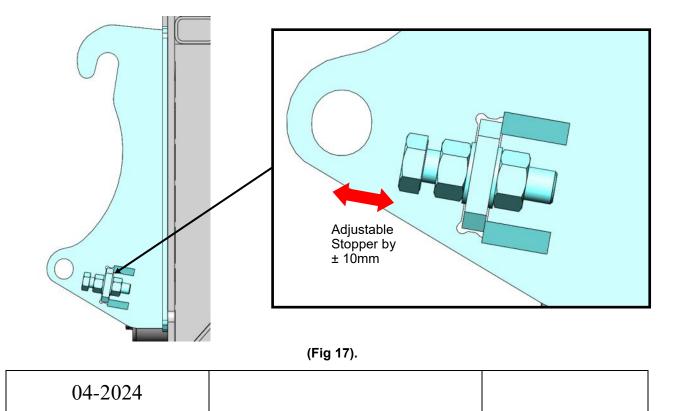
Folding Grass Fork - Bolt on brackets

The Folding Grass Forks are made with a bolt on hitch system where different hitch can be attached to suit any loader, headstock or headstock angle. Standard hitches (Euro 50, JCB Q-Fit, Manitou, etc) can be fitted raised up or down 140mm to suit loader requirements (Fig 15 & 16). The Euro 50 hitch comes in different angle options which allows for more or less crowd back depending on loader requirements (Fig 15 (angled at 12 degrees) & Fig 16(straight)). The Euro 50 hitch also come with an adjustable stopper which can be used to reduce the tolerance between the headstock and hitch to prevent excessive movement and noise during use (Fig 17).This also reduces wear between the stopper and the headstock. Tools Required: 46mm Spanner.











Folding Grass Fork - Fitting bolt on brackets

Requirements:

- 2 x brackets (Specified by machine head stock)
- M24 bolts x 75mm (M24 Locknuts, M24 Nord lock washers, M24 plain washers)

Tools Required:

• 36mm Spanner

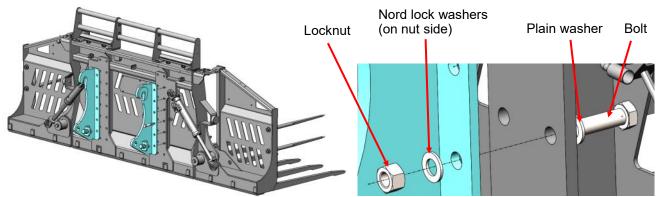
Attaching the brackets to the attachment;

- 1. Place the brackets onto the back of the attachment aligned with bolt on plate (Fig 18).
- 2. Use the nord lock washers, plain washers and locknuts supplied to fasten the brackets.
- 3. All M24 bolts are to be torqued (590Nm), follow the torque fastening procedure (Fig 19).
- 4. Before use, after fitting bolt on brackets check the attachment is locked securely by routing in all configurations (fully crowded, fully dumped, etc.)
- 5. Check torque after a period of time after first tightening but before thread lock has cured.
- 6. Re-check torqued bolts after 15hrs of use.

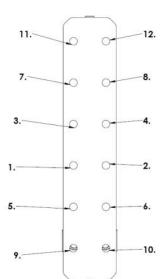
Periodically check bolt on hitches are fastened correctly and are not showing any sign of damage. If a bolt is broken or missing a nut do not use until fixed correctly as this will result on extra force being place on the remaining bolts.

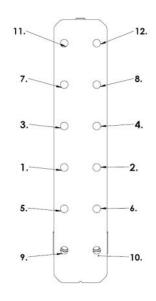
For bolt back out prevention ensure the following methods should be used:

Torque control, lock nuts are used, thread lock glue (243 or equivalent) is used and allowed to cure before first use, Nord lock washers are used on nut side.



(Fig 18).





(Fig 19).

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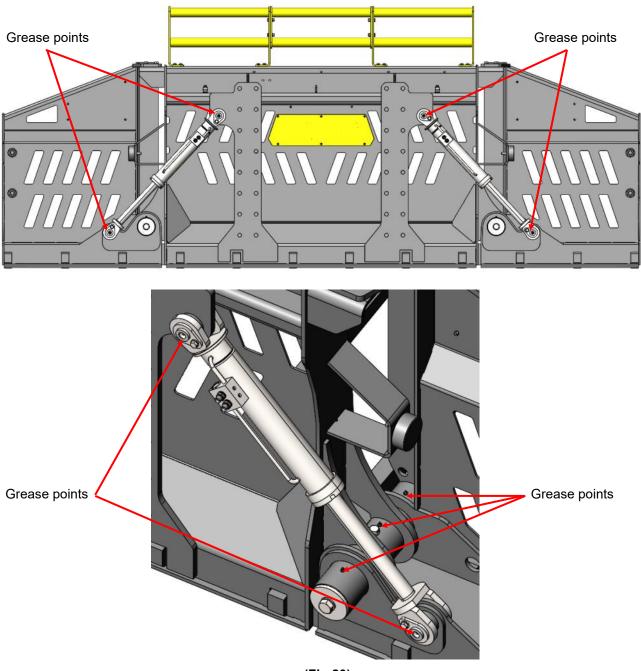


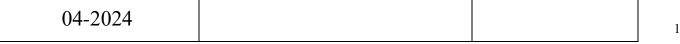
Storage

Place the Folding Grass Fork on a level surface in its closed position, this ensure the chrome on the hydraulic cylinder is retracted and not exposed to the elements. Disconnect the implement from the loader after turning off the engine and applying the brake. Clean the machine thoroughly and remove any excess material that may be lodged in the pivot points, on the wings, etc.. Apply grease to the any portion of the ram left showing and all grease points. Cover the fork with a waterproof cover or store indoors.

Grease Points

The diagram below shows the machines grease points that should be greased daily (fig 20). These include the two main pivot points and also the pins at both ends of all hydraulic rams.

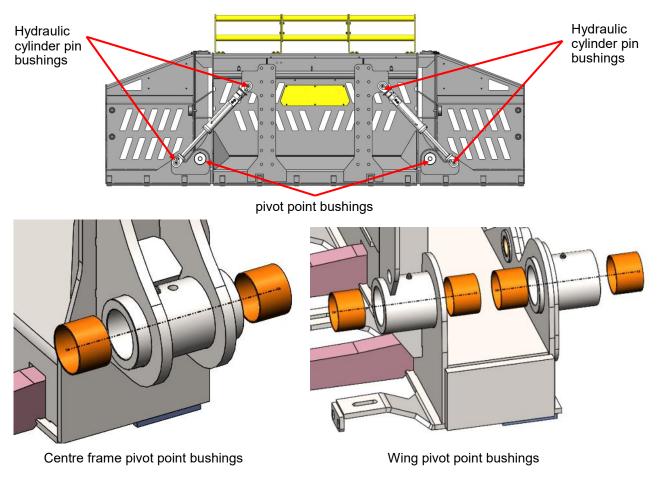


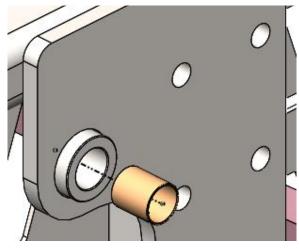




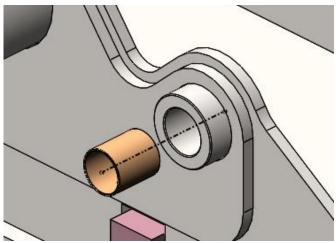
Bushings

The units pivot points & ram pins are fitted with bushings, over time the pins and bushings may wear and need replacing (fig 21). There are no:6 x 80mm bushings on each pivot point (no:12 total) and no:1 x 40mm bushing on each hydraulic cylinder pin (no:4 total). It is recommended to replace pins and bushings at the same time as a worn pin may cause premature wear on new bushings. Contact your dealer for replacement bushings, pins, etc.. See parts documents for replaceable pins, bushings and any other spare part.





Top hydraulic cylinder pin bushings



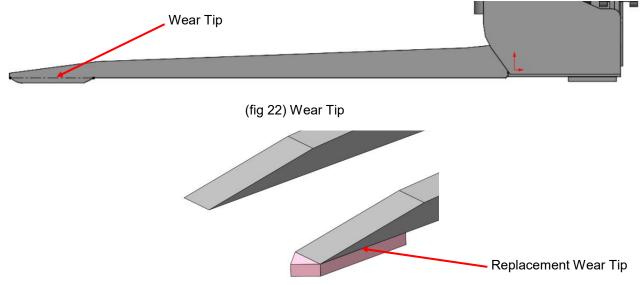
Bottom hydraulic cylinder pin bushings

(Fig 21).



Tines

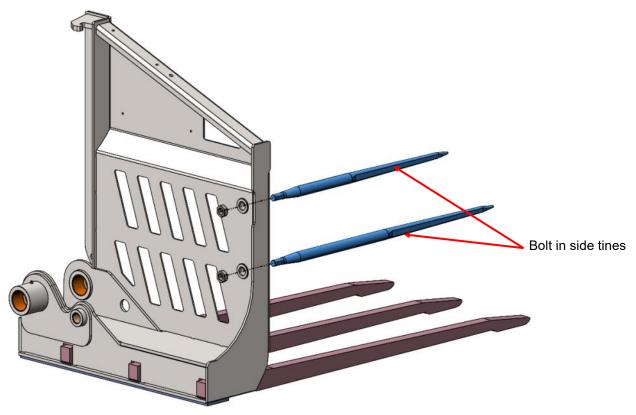
Over time the tines will wear back (fig 22), all fork tines are manufactured with the wear tip, once the wear tip is worn away it is recommended that these are replaced with weld on Hardox wear tips (fig 23). Contact your Prodig dealer in this event for replacement tips.

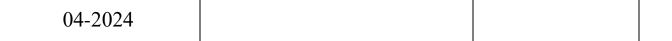


(fig 23) Replacement Wear Tip

Side Tines

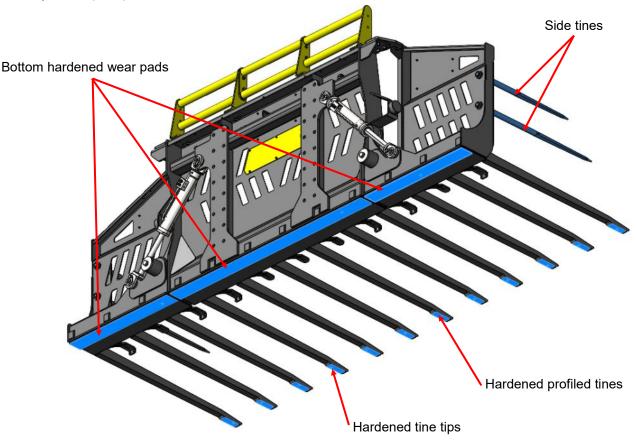
Over time the side tines may wear back or become damaged. All forks are manufactured with bolt in side tines that can be replaced in the event of damage (fig 24,side tines shown in blue), Contact your Prodig dealer in this event for replacement tines.





Maintenance **Replaceable Wear components**

Due to the working nature of the implement, it is required to periodically check the unit for excessive wear of the wear pads and tines (fig 25). It is important that wear components are examined on a regular basis and replaced before the structural integrity of the fork is compromised. Structural failure due to excessive wear does not fall under warranty conditions. To check the wear pads, crowd out the fork so that the underneath of the fork is visible. Do not stand under the attachment at any time. Examine the under side of the fork for wear. The bottom wear pads, tine tips and bolt in tines can be replaced by a qualified person. Consult your local Prodig dealer for replacement wear components. See parts documents for replaceable pins, bushings and any other spare part.



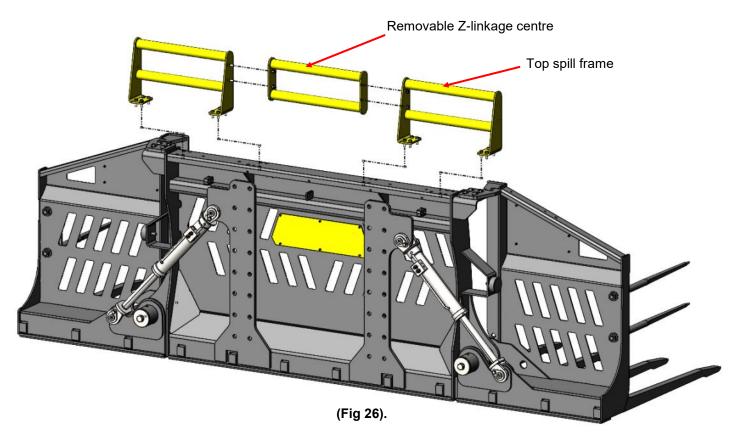
(Fig 25).

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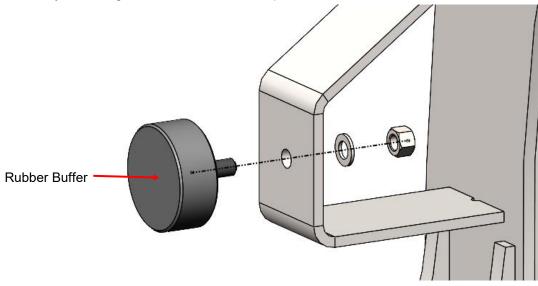
Top Spill Frame

As standard the fork is fitted with a three part bolt on/ removable top spill frame that can be removed when loading in a confined space, such as a indoors where there is a low roof, to allow for additional clearance (fig 26). The centre section of the three part top frame can be removed to allow room for a Z-linkage on an industrial loader. In the event of damage, Contact your Prodig dealer for replacement top frame.

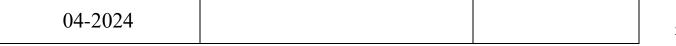


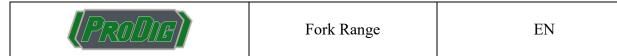
Buffer

As standard, all forks are manufactured with rubber buffers to cushion the closing of the fork wings. Over time these may become worn or damaged. These buffers can be replaced in the event of damage (fig 27). Contact your Prodig dealer in this event for replacement buffers.



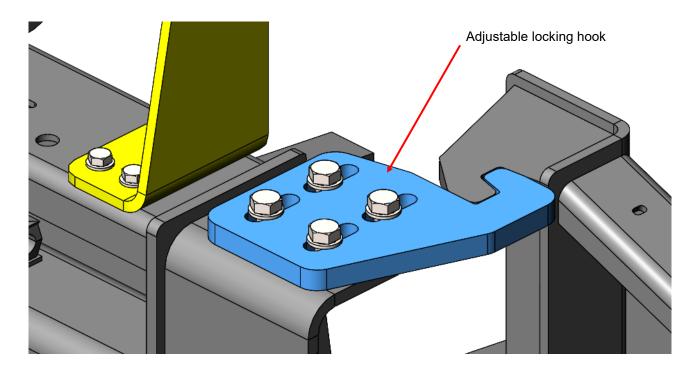


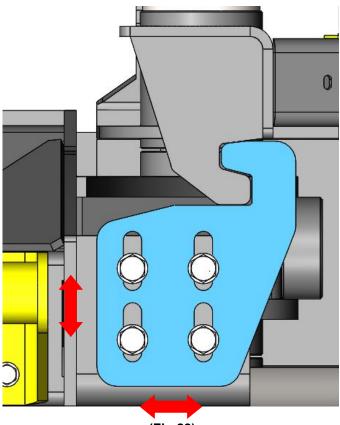




Top Locking Hook Adjustment

As standard the fork is fitted with an adjustable top wing locking system for added strength and support during use (fig 28,shown in blue). Periodically check the clearance between the locking hooks, minimum gap of 1mm, adjust as necessary to meet this tolerance. In the event of damage, Contact your Prodig dealer for replacement hook.





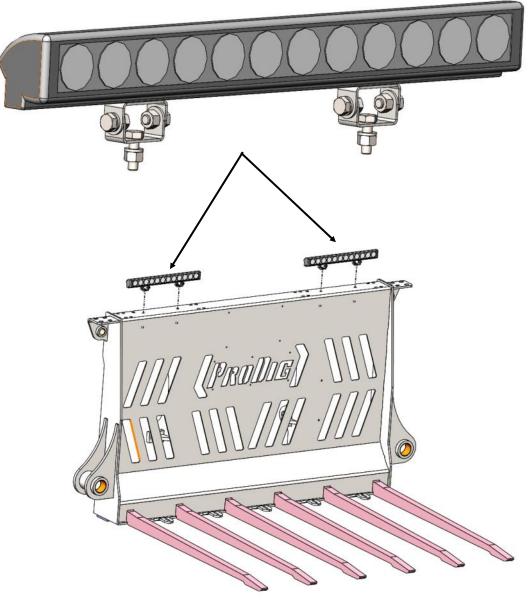
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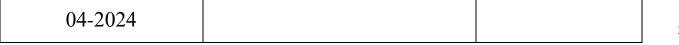
Light Kit

The light kit is fitted inside the spill frame on the centre of the fork (fig 29). The lights are wired to the left hand side of the hitch bracket. These are 12 - 28 volts LED working lights supplied in kit form and can be added to both Mammoth & Taurus models as an optional extra. Part No: FGF2-LK-01

ITEM CODE:	FGF2-LK-01
ITEM DESCRIPTION	Folding Grass Fork Light Kit – No.2 Work Light Bars
NOTE:	(21" Adventure Work Lamp Bar 4050 Lumens) X 2, Junction box X 1, 3 Pin Agri Plug X 1
VOLTS	12-28 Volts
WATTS	54 WATTS
BEAM TYPE	Flood Beam - 60m Beam Distance









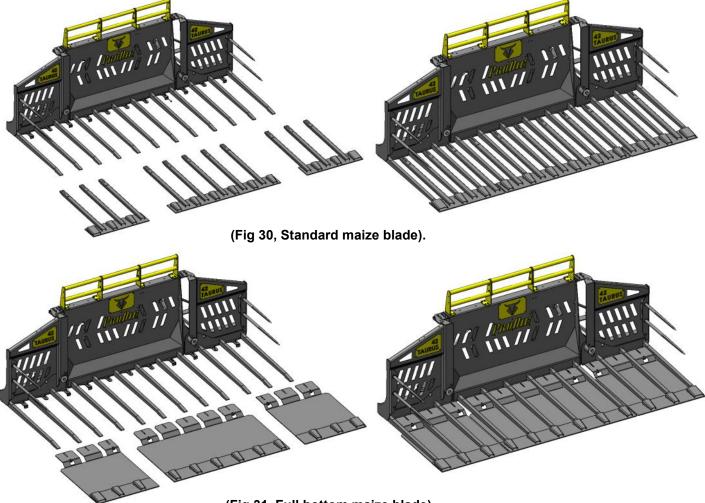
Maize Blades (Taurus models only)

The Taurus range of forks are designed with increased tine spacing for continental conditions with longer drier grass and large quantities of maize silage. The wide tine spacing helps longer, dryer grass silage to flow through the fork, making it easier to disperse on the pit. During maize season, the forks can then be fitted with a bolt on maize blade or tine infills which allows the fork to carry, disperse and level maize silage with ease (Taurus range only). Taurus tine spacing 328mm (378mm centres). There are two types of maize blades on offer:

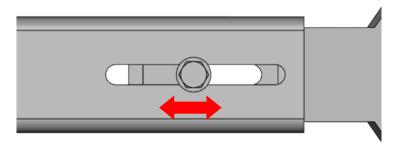
mere are two types of malze blades of offer.

- Standard maize blade to reduce tine spacing from 328mm to 124mm (Taurus models only) (fig 30).
- Full bottom maize blade to infill tine spacing (Taurus models only) (fig 31).

As the tines wear over time, to allow for this wear regarding fitment, both maize blades have a tolerance built in to allow the maize blades to be moved back accordingly (fig 32).



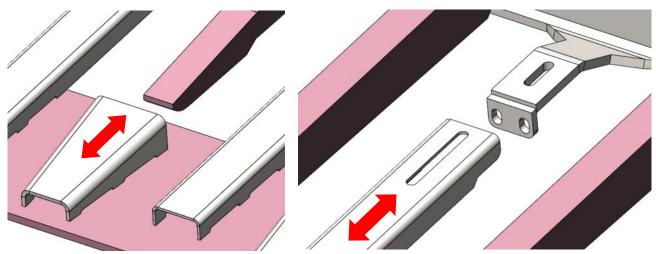
(Fig 31, Full bottom maize blade).



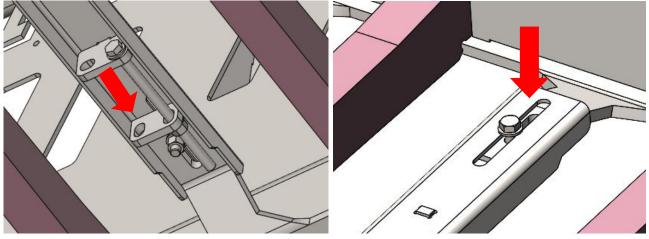


Maize Blades fitment

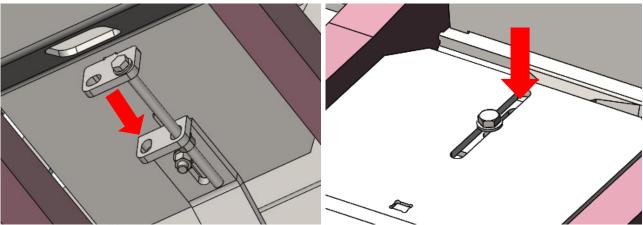
Both the standard and full bottom maize blade are fitted to the folding grass fork in the same manner. Align the front tine shoes with the its corresponding tines and align the rear channel/ slot so that it is centred on the corresponding slot on the fork frame (fig 33). Each section has no:2 tensioning bolts and depending on the model width, a number of holding down bolts. Fit all tensioning and holding down bolts loose before tensioning. The tensioning bolts are to remove play and ensure a tight fit between the tine and the tine shoe. Tighten the tensioning bolt first and then the holding down bolts (fig 34 & 35). Check bolts are tight on a regular basis. Reverse this process to remove maize blade.



(Fig 33, maize blade alignment).



(Fig 34, Standard maize blade).

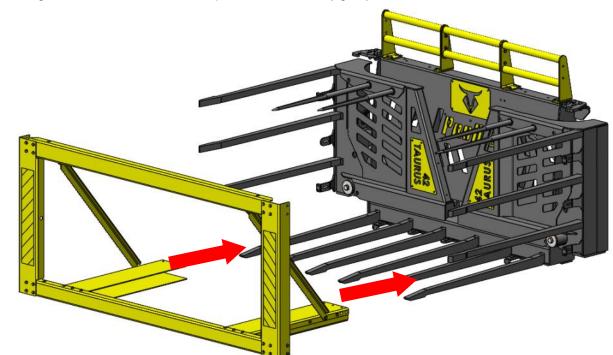


(Fig 35, Full bottom maize blade).

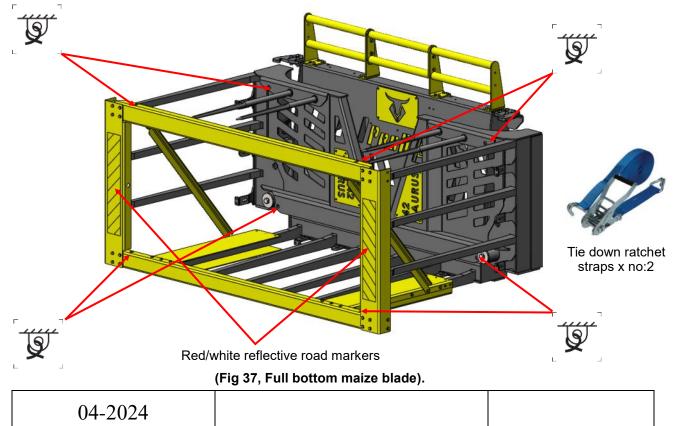


Transport tine guard

The transport tine guard is available to suits both Mammoth & Taurus models as an additional extra. The transport tine guard is compatible with all tine lengths and the Taurus models fitted with both maize blade options. The tine guard ensures the tines are shrouded during transport and prevent piercing of obstacles in the event of contact. The tine guard is for transport use only when the fork is in the closed position and not indented for use on pits or coming into contact with silage, maize and other feeding/ crop material. To fit the tine guard, place the tine guard on a flat even surface, centre the tine guard on the fork and slide the tines into the bottom folded channels (fig 36). Once fully inserted, use a ratchet strap either side to pull the tine guard against the tines. Use tie down point shown below (fig 37).

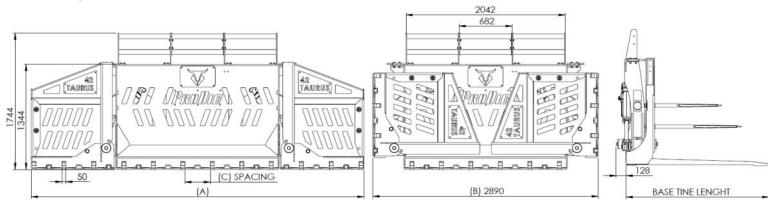


(Fig 36, Full bottom maize blade).





Specification



Code	(A) Unfolded Width (mm)	(B) Folded Width (mm)	Capacity (m3)	Tine Length (mm)	Number Of Tines	(C) Tine Spacing (mm)	Weight Exclud- ing Hitch (kg)	Weight Including standard angled euro 50 Hitch (kg)
MAMMOTH-36-S-BOS	3656	2890	7.6	1524 x 50mm	14	227	1590	1710
MAMMOTH-36-BOS	3656	2890	9.4	1829 x 50mm	14	227	1706	1826
MAMMOTH-36-XL-BOS	3656	2890	10.9	2090 x 50mm	14	227	1788	1908
TAURUS-36-S-BOS	3656	2890	7.6	1524 x 50mm	10	328	1465	1585
TAURUS-36-BOS	3656	2890	9.4	1829 x 50mm	10	328	1554	1674
TAURUS-36-XL-BOS	3656	2890	10.9	2090 x 50mm	10	328	1613	1733
MAMMOTH-42-S-BOS	4266	2890	8.63	1524 x 50mm	16	227	1736	1856
MAMMOTH-42-BOS	4266	2890	10.7	1829 x 50mm	16	227	1866	1986
MAMMOTH-42-XL-BOS	4266	2890	12.4	2090 x 50mm	16	227	1960	2080
TAURUS-42-S-BOS	4266	2890	8.63	1524 x 50mm	12	328	1615	1735
TAURUS-42-BOS	4266	2890	10.7	1829 x 50mm	12	328	1718	1838
TAURUS-42-XL-BOS	4266	2890	12.4	2090 x 50mm	12	328	1789	1909
MAMMOTH-49-S-BOS	4876	2890	9.68	1524 x 50mm	18	227	1880	2000
MAMMOTH-49-BOS	4876	2890	12	1829 x 50mm	18	227	2024	2144
MAMMOTH-49-XL-BOS	4876	2890	13.9	2090 x 50mm	18	227	2130	2250
TAURUS-49-S-BOS	4876	2890	9.68	1524 x 50mm	14	328	1760	1880
TAURUS-49-BOS	4876	2890	12	1829 x 50mm	14	328	1876	1996
TAURUS-49-XL-BOS	4876	2890	13.9	2090 x 50mm	14	328	1958	2078
MAMMOTH-55-S-BOS	5484	2890	10.72	1524 x 50mm	20	227	2032	2152
MAMMOTH-55-BOS	5484	2890	13.3	1829 x 50mm	20	227	2190	2310
MAMMOTH-55-XL-BOS	5484	2890	15.45	2090 x 50mm	20	227	2308	2428
TAURUS-55-S-BOS	5484	2890	10.72	1829 x 50mm	16	328	1916	2036
TAURUS-55-BOS	5484	2890	13.3	1829 x 50mm	16	328	2046	2166
TAURUS-55-XL-BOS	5484	2890	15.45	2090 x 50mm	16	328	2140	2260
All measurements approx. (±5mm, ±5kg), Weight excludes brackets as these vary								
*Machines operating above 200 BAR will require a pressure relief valve.								

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[PRODIE]

Push Off Grass Fork: Models: POGF 2500/ 2750/ 3000/ 3300/ 3600/ 4000

This machine has been specifically designed to move loose free flowing grass, silage, maize and other feeding/ crop material being stored in a pit. The push off function allow forks to be used on machines without a tipping mechanism (front or rear of tractors) or to increase the efficiency of wheeled loaders to handle the increased output from a new generation of high capacity silage harvesters/ trailer.

The push off grass fork come in profiled 40mm Hardox tine or round forged tine options (Hardox tine as standard) in widths of 2500mm, 2750mm, 3000mm, 3300mm, 3600mm and 4000mm

As standard the fork is fitted with:

- Bolt on hitch system to suit all machines.
- Removable double side tines.
- Flow divider valve to ensure gate arms moves simultaneously.
- Pressure relief valve.
- Rubber buffers on closed position.
- Profiled 40mm Hardox tine as standard, round forged tine on request.

Optional extras:

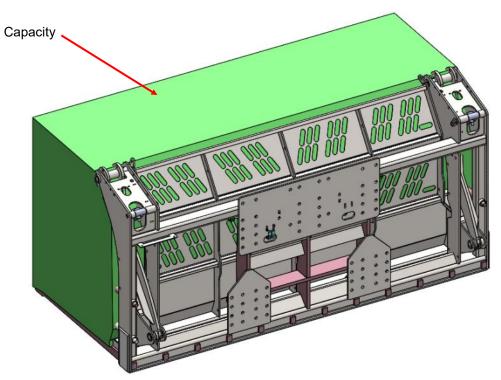
- Work lighting kit (no:2 LED work lights & side marker lights) (suits all models).
- Bolt on gate locking mechanism (suits all models).

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Capacity of the Push Of Grass Forks

The capacities of the push off grass forks are calculated from the length x depth x height block that is determined by the fork width (fig 38, capacity in green). Ensure that the tractor/ loader is suitably sized by checking the lifting capacity before fitting the push off grass fork. Check the weight of the push off grass fork and the KG per m³ of material density (kg/m3) being loaded multiplied by the volume of the fork and ensure this is under the tractors/ loaders lifting capacity. The below table shows the weight of each fork and payload / gross weigh calculated by the weight of direct cut grass at 800kg/m3. This information depends on the type of silage/ grass / material and serves as guidance only (density of material may vary). If required fit the tractor/ loader with counterbalance weight.



(Fig	38).
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Code	Width (mm)	Capacity (m3)	Weight Ex- cluding Hitch (kg)	Weight Includ- ing standard 3 Point Linkage Hitch (kg)	weight of Direct cut grass kg/ m3	**Payload @ 800kg/ m3 materi- al	**Gross weight of unit C/W Hitch 800kg/m3 materi- al x Capacity (kg)
POGF-2500	2500	3.7	1150	1217	800	2960	4177
POGF-2750	2750	4.1	1222	1289	800	3280	4569
POGF-3000	3000	4.5	1285	1352	800	3600	4952
POGF-3300	3300	4.95	1358	1425	800	3960	5385
POGF-3600	3600	5.4	1420	1487	800	4320	5807
POGF-4000	4000	6	1526	1593	800	4800	6393

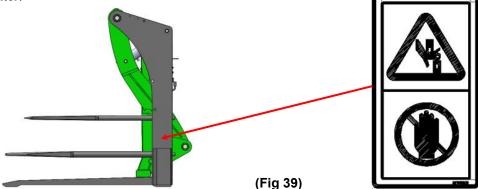
**This information depends on the type of silage and serves as guidance only.

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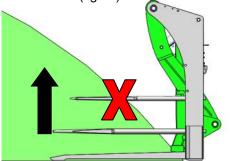


Operating Safety

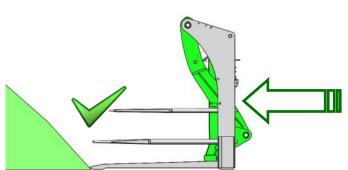
Before fitting the push off grass fork ensure that the tractor/ loader is suitably sized and is fitted with counterbalance weights if required. Check the hydraulic capability of the machine and ensure it is suited to the attachment. **Do not** stand directly under the push off grass fork at anytime. Single person operation only. **Do not** place arms, hands or any body part between gate and the rear frame at anytime (fig 39). **Not to be used** as a lifting device or for lifting objects other than loose free flowing grass, silage, maize and other feeding/ crop material being stored in a pit. **Do not** crown back the fork so that the contents can fall towards the operator.



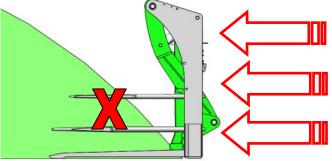
The push off grass forks are designed for filling loose free flowing grass, silage, maize and other feeding/ crop material being stored in a pit. **Not to be used** with lift/ breakout force from the loader to loosen material - **loose free flowing material only** (fig 40). This attachment is **not designed** to withstand coming into contact with the material at speed (fig 41). The push off grass fork is to be driven into the material at a controlled speed (fig 42). It is recommended to approach the material until the tines are almost in contact with the material and come to a stop before proceeding to drive into the material. Ensure the tine tips and heel plate are parallel to the ground when approaching material. Avoid over crowning forward when approaching the material, this will lead to uneven wear on the tines and additional strain on the folding grass fork and loader arms (fig 43).



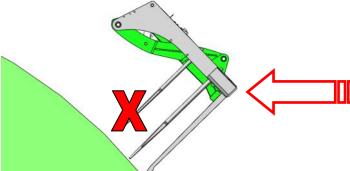
(Fig 40) <u>Not to be used</u> with lift/ breakout force to loosen material - <u>loose free flowing material only</u>



(Fig 42) Ensure the tines and heel plate are parallel to the ground when approaching material.



(Fig 41) Not to be driven into the material at speed

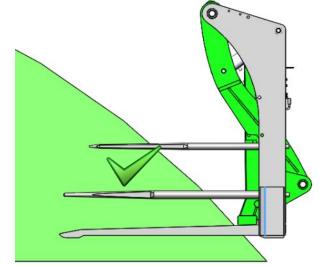


(Fig 43) **<u>Avoid</u>** over crowning forward when approaching the material

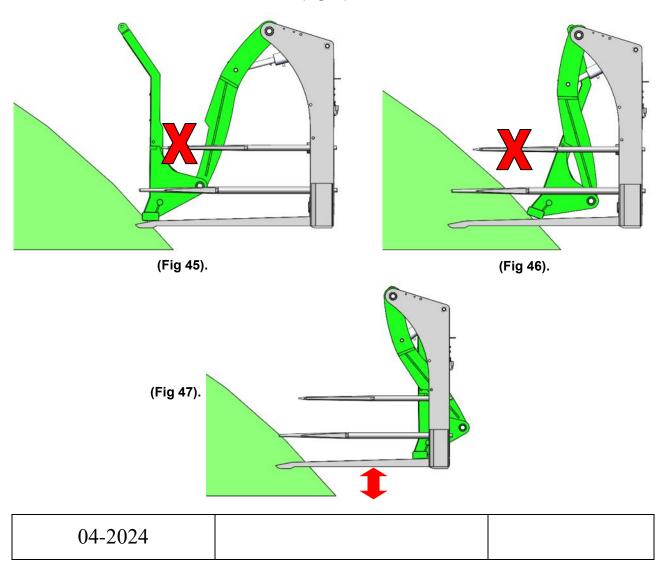


Operating Safety

Ensure the gate is fully closed and resting against the buffers on the rear frame when approaching the material (fig 44). **Do not** approach the material with the gate fully or partly opened (fig 45 & 46) as this places all the force onto the gate, pins and hydraulic cylinders rather than transferring the force to the rear frame. To avoid additional and premature wear, try to limit the amount of contact between the tines / bottom wear plates against concrete. Where possible, keep the tines/ bottom wear plates raised off the ground when approaching and pushing material (fig 47).









Push Off Grass Fork - Fitting bolt on brackets

Requirements:

- 2 x brackets (Specified by machine head stock)
- M20 x 70mm bolts including (M20 Locknuts, M20 plain washers)

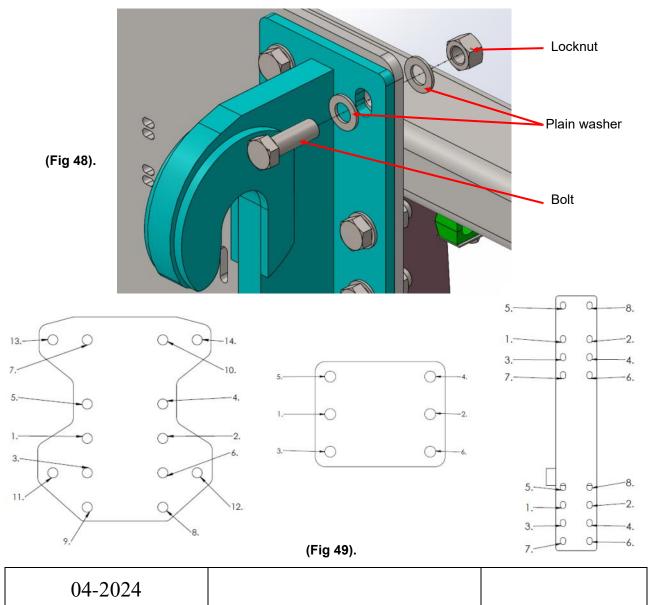
Tools Required:

• 30mm Spanner

Attaching the brackets to the attachment;

- 1. Place the brackets onto the back of the attachment aligned with bolt on plate (Fig 48).
- 2. Use the washers and locknuts supplied to fasten the brackets.
- 3. All M20 bolts are to be torqued (400Nm), follow the torque fastening procedure (Fig 49).
- 4. Before use, after fitting bolt on brackets check the attachment is locked securely by routing in all configurations (fully crowded, fully dumped, etc.)
- 5. Check torque after a period of time after first tightening but before thread lock has cured.
- 6. Re-check torqued bolts after 15hrs of use.

Periodically check bolt on hitches are fastened correctly and are not showing any sign of damage. If a bolt is broken or missing a nut do not use until fixed correctly as this will result on extra force being place on the remaining bolts. For bolt back out prevention ensure the following methods should be used: Torque control, lock nuts are used, thread lock glue (243 or equivalent) is used and allowed to cure before first use.



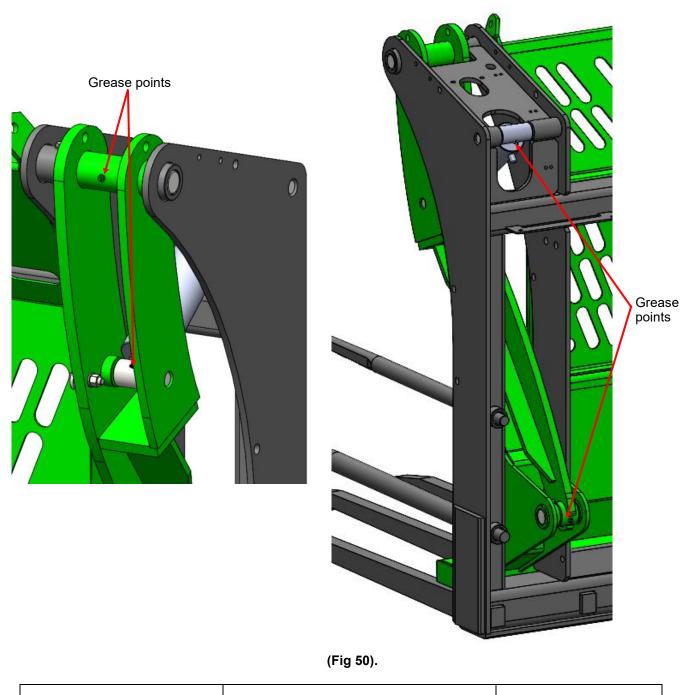


Storage

Place the Push Off Fork on a level surface in its closed position, this ensure the chrome on the hydraulic cylinder is retracted and not exposed to the elements. Disconnect the implement from the tractor/ loader after turning off the engine and applying the brake. Clean the machine thoroughly and remove and excess material that may be lodged in the pivot points, on the wings, etc.. Apply grease to the any portion of the ram left showing and all grease points. Cover the fork with a waterproof cover or store indoors.

Grease Points

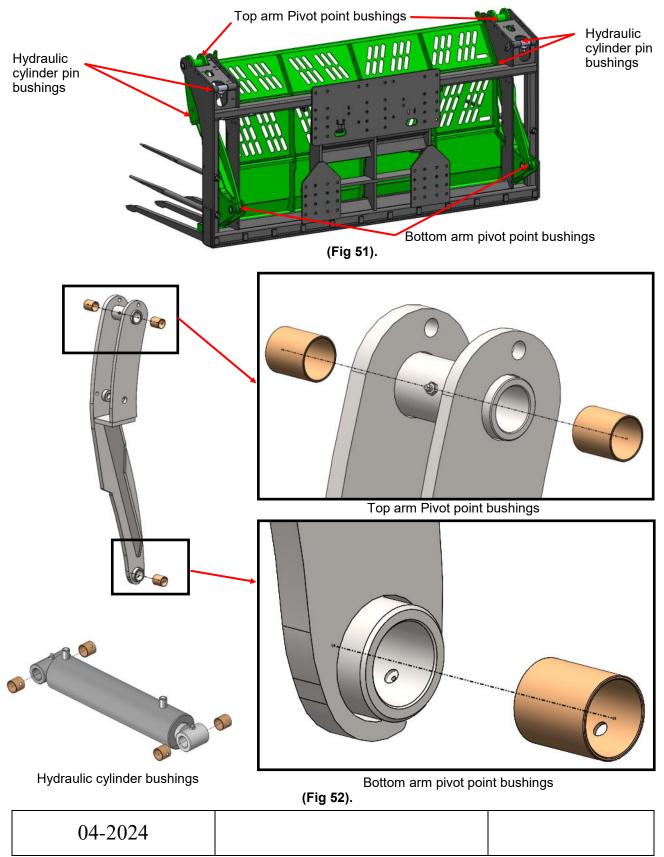
The diagram below shows the machines grease points that should be greased daily (fig #). These include the two main pivot points and also both ends of all hydraulic rams.

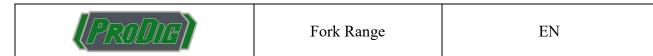




Bushings

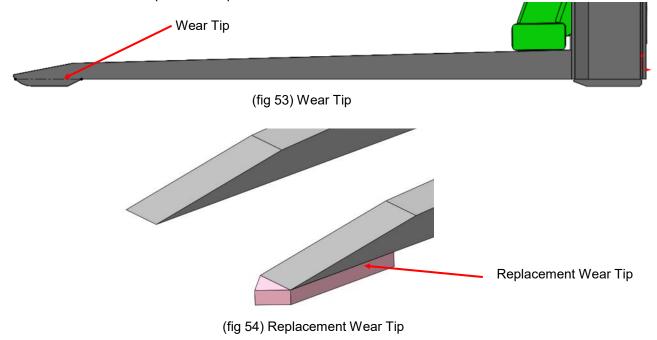
The units pivot points & hydraulic cylinder are fitted with bushings, over time the pins and bushings may wear and need replacing (fig 51 & 52). There are no:3 x 40mm bushings on each arm (no:6 total) and no:4 x 25mm bushings on each hydraulic cylinder (no:8 total). It is recommended to replace pins and bushings at the same time as a worn pin may cause premature wear on new bushings. Contact your dealer for replacement bushings, pins, etc.. See parts documents for replaceable pins, bushings and any other spare part.





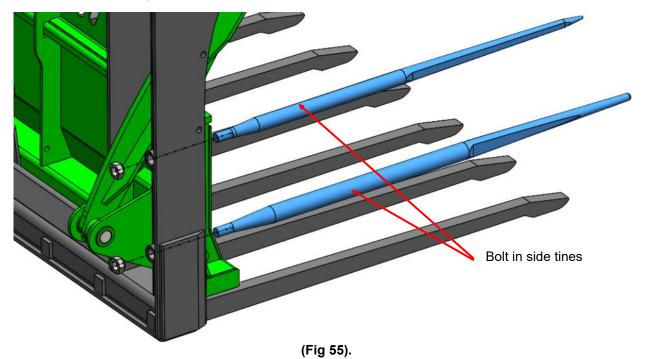
Tines

Over time the tines will wear back (fig 53), all fork tines are manufactured with the wear tip, once the wear tip is worn away it is recommended that these are re-placed with weld on wear tips (fig 54). Contact your Prodig dealer in this event for replacement tips.



Side Tines

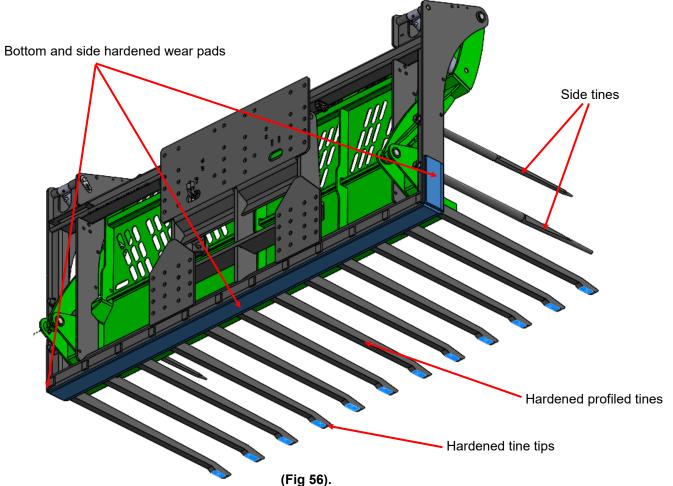
Over time the side tines may wear back or become damaged. All forks are manufactured with bolt in side tines that can be replaced in the event of damage (fig 55,side tines shown in blue), Contact your Prodig dealer in this event for replacement tines.





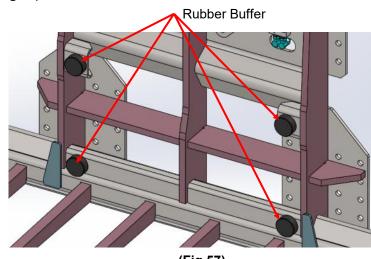
Replaceable Wear Components

Due to the working nature of the implement it is required to periodically check the unit for excessive wear of the wear pads and tines (fig 56). It is important that wear components are examined on a regular basis and replaced before the structural integrity of the fork is compromised. Structural failure due to excessive wear does not fall under warranty conditions. **Do not** stand under the attachment at any time. Examine the under side of the fork for wear. The bottom and side wear pads, tine tips and bolt in tines can be replaced by a qualified person. Consult your local Prodig dealer for replacement wear components. See parts documents for replaceable pins, bushings and any other spare part.



Buffer

As standard all forks are manufactured with rubber buffers to cushion the closing of the fork gate. Over time these may become worn or damaged. These buffers can be replaced in the event of damage (fig 57). Contact your Prodig dealer in this event for replacement buffers.



(Fig 57).

Gate Locking System

The gate locking system consists no:2 x m16 turnbuckles what are bolted between the rear frame and the gate preventing the gate from moving and allowing the fork to be use as a fixed fork (fig 58).

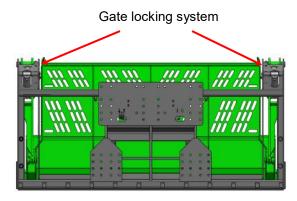
To all the gate locking system follow the below steps:

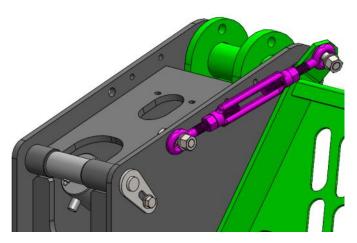
- 1. Close the gate fully and ensure the gate is pressing against the top and bottom rubber buffers.
- 2. Bolt the turnbuckles onto the unit with the m16 x 60 bolts with one end connected to the gate and the other connected to the fork rear frame.
- 3. Turn the turnbuckles to clamp the gate against top and bottom rubber buffers and ensure the gate is the rigid and unable to move.

<u>Do not</u> use in conjunction with the push off function.

Disconnect hydraulics when gate locking system is being used.

Part No: POGF-GATE-LOCK-01

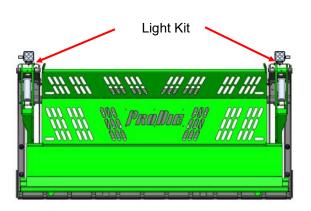


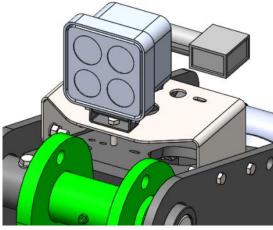


(Fig 58).

Light Kit

The light kit is fitted on the top section of the rear section of the fork (fig 59). The lights are wired to the left hand side of the hitch bracket. These are 12 - 24 volts LED working lights and side markers lights supplied in kit form and can be added to all models as a optional extra. Part No: POGF-LK-01



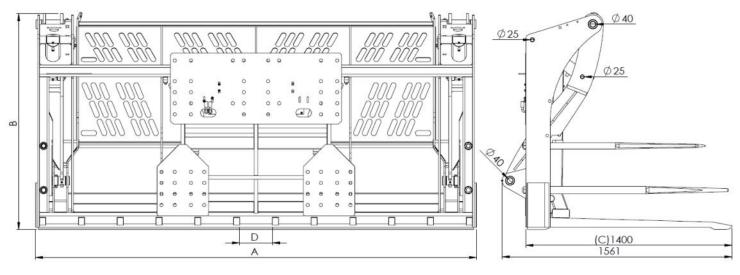


(Fig 59).

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Specification



Code		POGF-2500	POGF-2750	POGF-3000	POGF-3300	POGF-3600	POGF-4000
Width (mm)	A	2500	2750	2996	3300	3600	4000
Height (mm)	В	1465	1465	1465	1465	1465	1465
Tine Length (mm)	С	1400	1400	1400	1400	1400	1400
Tine Spacing (mm)	D	227	225	223	227	230	220
Tine Thickness (mm)		40	40	40	40	40	40
Capacity (m3)		3.7	4.1	4.5	4.95	5.4	6
Number Of Tines		10	11	12	13	14	16
Number of cylinders x Diameter (mm)		2 x 70 Bore	2 x 70 Bore	2 x 70 Bore	2 x 70 Bore	2 x 70 Bore	2 x 70 Bore
*Maximum working pressure (BAR)		200	200	200	200	200	200
**Required oil pressure (BAR)		170	170	170	170	170	170
Weight Excluding Hitch (kg)		1150	1222	1285	1358	1420	1526
Weight Including standard 3 Point Link- age Hitch (kg)		1217	1289	1352	1425	1487	1593
Weight of standard 3 Point Linkage Hitch (kg)		67	67	67	67	67	67
weight of Direct cut grass kg/m3		800	800	800	800	800	800
**Payload @ 800kg/m3 material		2960	3280	3600	3960	4320	4800
**gross weight of unit C/W Hitch 800kg/ m3 material x Capacity (kg)		4177	4569	4952	5385	5807	6393
All measurements approx (±5mm, ±5kg), Bra	acket weights va	ary				
*Machines operating above 200 BAR wil	l requ	iire a pressure i	relief valve				
**This information depends on the type of	of sila	ge and serves a	as guidance onl	у.			

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Warranty

ProDig warrants to its dealer, who in turn, warrants to their customer that each new product, replacement part, and accessory will be free from defects in material and workmanship for 12 months after delivery to the customer.

In the event of a fault, the dealer or ProDig are to be notified as soon as reasonably possible. On finding a fault, the product must not be used as the product may not be safe to use or could cause further damage.

This warranty does not cover damages resulting from abuse, normal wear, lack of maintenance, accident, alteration, or misuse as stated in this operator's manual. Warranty cover will cease immediately in the event of failure to observe the standards and instructions for use and maintenance of an attachment as specified in the user manual. Any modification to any part of an attachment supplied (rams, grab, tines, attachment itself, etc.) or use of a component installed on an attachment which has not originated from ProDig will void the warranty on the entire attachment. Our warranty may require equipment to be returned to the manufacturer – ProDig. The end user is responsible for all costs associated with transportation to and from the dealer or ProDig.

In the event of a warranty claim, the following information as soon as reasonably possible:

- Serial number and part number of the effected product.
- An accurate description of the fault.
- The operational situation in which the fault occurred
- Photographs that clearly illustrate the fault.

This info is to be filled in on the warranty claim form (see below link): <u>http://www.prodigattachments.com/en/warranty</u>

This warranty claim will be assessed and whether this claim is deemed to fall under warranty. Any work being carried out on any product involving fault tracing (diagnostics), repairs, replacement parts may only be undertaken by a skilled technician under ProDig's advice or by ProDig themselves. The manufacturer will not be responsible for any damages or injuries caused by unauthorised repair, alterations or mishandling of the product. For external repairs a price must be agreed and a warranty number issued before proceeding.

A copy of our full terms and conditions of warranty is available from our sales office on request.



Notes:

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