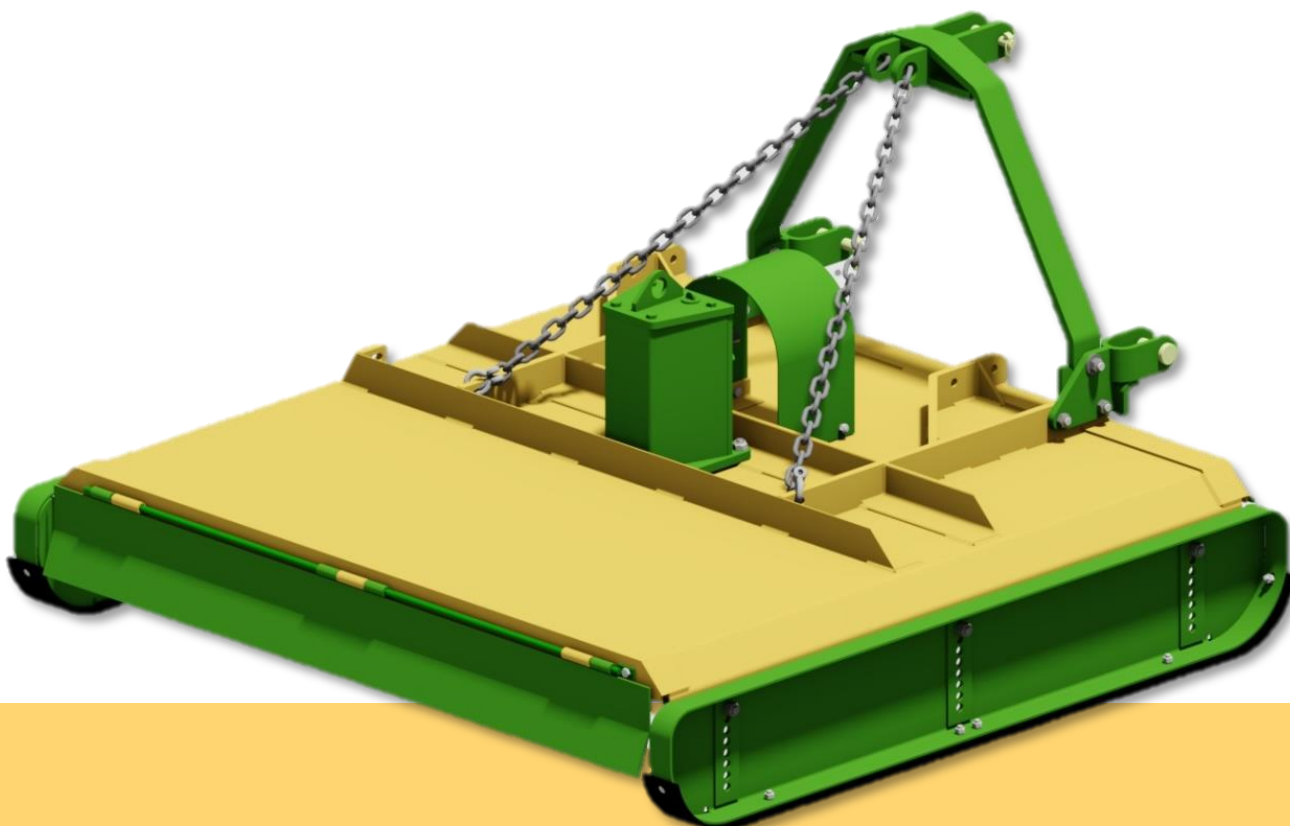




OPERATORS MANUAL / OPERATEURSHANDLEIDING

# Slashers / Wentelsnyers

Heavy Duty



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**INHOUD**

VOORWOORD
MAATSKAPPYPROFIEL
WAARBORG EN VRYWARING
PRODUKREEKS
INSTALLERING
WERKING
INSTANDHOUDING
FOUTOPSPORING
PARTELYSTE

Authorised Dealer / Gemagtigde handelaar:

Date of Sale / Verkoopsdatum:

Implement:

Model No. / Model Nr.:

Serial No. / Reeks Nr.:

Part number	M8417	Onderdeelnummer
Version	1	Weergawe
Date of publication	2017/11/22	Datum van publisering

## FOREWORD

## VOORWOORD

We at Falcon commend and congratulate you on the purchase of your Falcon implement, which we consider to be the best of its type available.

However, we would like to remind you that your success and satisfaction with the product will be greatly improved by you familiarising yourself with the contents of this manual. It contains important information relevant to the responsible operation, maintenance and most importantly, safe use of the product.

Note that failure to observe or comply with the provisions of this manual may result in unsafe operating conditions as well as damage to products and property which shall not be covered under warranty.

Should this manual become misplaced, damaged or destroyed, further copies are available from your Falcon dealer. Alternatively, this document is available for download from our website: [www.falconequipment.co.za](http://www.falconequipment.co.za)

### Symbols used in this document




Ons by Falcon wens jou geluk met die aankoop van jou Falcon-implement, wat ons as die beste beskikbare werktuig in sy soort beskou.

Ons herinner u egter graag daaraan dat u sukses en tevredenheid met die produk grootliks verbeter sal word as u met die inhoud van hierdie handleiding vertrou raak. Dit bevat belangrike inligting met betrekking tot die verantwoordelike gebruik, instandhouding en, die heel belangrikste, veilige gebruik van die produk.

Let asseblief op dat versuim om die bepalings van hierdie handleiding na te kom tot onveilige bedryfstoelestande asook skade aan produkte en eiendom kan lei wat nie onder die waarborg gedek sal wees nie.

Indien hierdie handleiding dalk verloor, beskadig of vernietig sou word, is daar verdere kopieë by u Falcon-handelaar beskikbaar. Hierdie dokument kan ook van ons webwerf, [www.falconequipment.co.za](http://www.falconequipment.co.za), afgelaai word.

### Simbole wat in hierdie dokument gebruik word

	<b>Safety-critical notices</b>	Failure to comply with these notices may result in serious damage to equipment, personal injury or death.
	<b>Veiligheidskritieke kennisgewings</b>	Versuim om aan hierdie kennisgewings gehoor te gee kan ernstige skade aan toerusting, persoonlike beserings of dood tot gevolg hê.
	<b>Procedures and checks</b>	To be carried out by suitably competent persons in the course of installation, operation and maintenance of the equipment.
	<b>Prosedures en kontroles</b>	Moet deur toepaslik bekwame persone uitgevoer word by die installering, bedryf en instandhouding van die toerusting.
	<b>General information</b>	Information provided for references purposes, including any external references intended to be read in conjunction with this manual.
	<b>Algemene inligting</b>	Inligting vir verwysingsdoeleindes, insluitend enige eksterne verwysings wat bedoel is om saam met hierdie handleiding gelees te word.

## COMPANY PROFILE

## MAATSKAPPYPROFIEL

Falcon Agricultural Equipment (Pty) Ltd is the largest manufacturer of rotary cutters in Africa. The company opened its doors in 1985, at its current premises in Howick, Kwazulu-Natal, South Africa. This is the ideal location as it is an agricultural area with a leading agricultural college nearby.

Falcon Agricultural Equipment (Edms.) Bpk. is die grootste vervaardiger van wentelsnyers in Afrika. Die maatskappy het sy deure in 1985 by sy huidige perseel in Howick, KwaZulu-Natal, Suid-Afrika, geopen. Die ligging is ideaal: in 'n boerderygebied met 'n vooraanstaande landboukollege naby.

Our primary market is the agricultural sector, with niche efforts into the industrial and turf implement markets. We distribute our products through a network of over 250 authorised dealers and approximately 110 dedicated mechanisation dealers countrywide. We also distribute our products across our borders into other African countries such as Botswana, Kenya, Malawi, Mozambique, Namibia, Uganda, Swaziland, Tanzania, Zambia, and Zimbabwe.

Ons hoofmark is die landbousektor, met nisverkope in die nywerheids- en grasbaanimplement-markte. Ons versprei ons produkte deur 'n netwerk van meer as 250 gemagtigde handelaars met ongeveer 110 toegewyde meganisasiehandelaars landswyd. Ons versprei ook ons produkte oor ons grense na ander Afrikalande soos Botswana, Kenia, Malawi, Mosambiek, Namibië, Uganda, Swaziland, Tanzanië, Zambië, en Zimbabwe.

We manufacture the Falcon range of implements, and our ongoing program of innovation and improvement ensures that we consistently launch implements to satisfy our customers' ever-changing needs.

Ons vervaardig die Falcon-implementreeks en ons voortgesette program van vernuwing en verbetering verseker dat ons konstant implemente bekendstel wat ons kliënte se immer veranderende behoeftes bevredig.

The Falcon range includes slashers, Haymakers®, material handling implements, mulchers, mowers, spreaders, rotavators, and flail implements. Each is designed to be simple, safe, and serviceable while offering excellent value for money. They are built to last and are capable of coping with the tough South African conditions.

Die Falcon-reeks sluit wentelsnyers, Hooimakers®, materiaalhanteringsimplemente, mulchers, grassnyers, strooiers, kapploë en vleëlimplemente in. Almal is ontwerp om eenvoudig, veilig en diensbaar te wees terwyl hulle uitstekende waarde vir geld bied. Hulle is gebou om te hou en ons strawwe Suid-Afrikaanse toestande die hoof te bied.

In many parts of South Africa "Falcon" is the generic term for grass-cutting implements, making us the undisputed leader in our field. Delivery on a marketing promise is the foundation of any successful marketing drive and farmers buying the Falcon brand buy more than just a product - they buy the heritage and expertise of a company that has been around for a long time!

In baie dele van Suid-Afrika is "Falcon" die generiese term vir grassny-implemente, wat ons die onbetwiste leier op ons gebied maak. Die nakom van 'n bemarkingsbelofte is die grondslag van enige geslaagde bemarkingsveldtog, en boere wat die Falcon-handelsmerk koop, koop meer as net 'n produk – hulle koop die erfenis en deskundigheid van 'n maatskappy wat al lank in die land is!

We also import a range of implements that complement the locally manufactured ones. These include the Amazone spreaders, sprayers, mowers, and soil tillage implements (from Germany).

Ons voer ook 'n reeks implemente in wat die plaaslik-vervaardigdes komplementeer. Dit sluit in die Amazone-strooiers, -spuite, -grassnyers en -grondbewerkings-implemente (uit Duitsland).

Falcon Agricultural Equipment (Pty) Ltd is committed to supporting our local communities in many different ways. Our main focus is the well-being of children and we provide a safe and suitable school environment for them, as well as school-related necessities.

Falcon Agricultural Equipment (Edms.) Bpk. is verbonde tot die ondersteuning van ons plaaslike gemeenskappe op baie verskillende maniere. Ons hooffokus is die welsyn van kinders, en ons verskaf vir hulle 'n veilige en geskikte skoolomgewing, sowel as skoolverwante benodigdhede.

Our team prides itself on its professional approach to business. We have built long-standing relationships with our dealers and their customers based on honesty, trust, respect, and integrity. Excellent customer service is an important part of the Falcon promise.

Ons span is trots op sy professionele benadering tot besigheid. Ons het langdurige verhoudings met ons handelaars en hul klante opgebou wat op eerlikheid, vertroue, respek en integriteit gebaseer is. Voortreflike klantediens is 'n belangrike deel van die Falcon-belofte.

## WARRANTY AND DISCLAIMER

Falcon products are manufactured in accordance with established quality standards and are accompanied by a limited warranty against defective materials and workmanship. In terms of this warranty, Falcon or an authorised Dealer may conduct reasonable repairs or replacement of products or parts of products, as required.

### General conditions of limited warranty

Any claim with respect to warranty shall satisfy the following minimum conditions.

- The implement has not been subjected to misuse, abuse, damage or acts of negligence.
- The Owner is in possession of, and can demonstrate an understanding and application of the provisions of this manual.
- The implement has been used exclusively for its intended purpose and in a configuration in which it was designed to operate.
- Installation, setup, operation and maintenance of the implement have been carried out in accordance with this manual.
- Maintenance of the implement has been carried out as prescribed in this manual, using original and approved parts.
- The implement has not been subjected to structural, mechanical or any other unauthorised modification or repair.
- A warranty claim has been reported to an authorised Dealer within the prescribed warranty period for the product concerned.

### Exclusions

The following items are excluded from warranty cover, including any costs relating to these.

- Parts reckoned as consumable or wearing parts.
- Products or parts of products exhibiting acceptable wear and tear.
- Temporary replacement, loan or hire of substitute parts or equipment.
- Transport and handling of affected products.
- Consequential damage or loss on the part of any person, organization or otherwise affected party.

### Validity

This warranty supersedes all previous conditions of warranty, whether expressed or implied, including any previous obligation or liability on the part of Falcon in respect of non-conforming or defective product.

### Disclaimer

Falcon maintains a programme of continuous product improvement and consequently reserves the right to change designs, specifications, descriptions and materials

## WAARBORG EN VRYWARING

Falcon-produkte word vervaardig ooreenkomstig met gevestigde gehalte-standaarde en word deur 'n beperkte waarborg teen defektiewe materiale en vakmanskap gedek. Kragtens hierdie waarborg mag Falcon of 'n gemagtigde Handelaar redelike herstelwerk of vervanging van produkte of produkonderdele uitvoer, soos vereis.

### Algemene voorwaardes van beperkte waarborg

Enige eis ten opsigte van die waarborg moet aan die volgende minimumvoorwaardes voldoen:

- Die implement is nie aan verkeerde gebruik, misbruik, beskadiging of verwaarlosing onderwerp nie.
- Die Eienaar is in besit van hierdie handleiding en kan 'n begrip en toepassing van die bepalings daarvan demonstree.
- Die implement is uitsluitlik vir die bedoelde doel gebruik en in 'n konfigurasie waarin dit ontwerp is om bedryf te word.
- Installering, opstelling, bedryf en instandhouding van die implement het in ooreenstemming met hierdie handleiding plaasgevind.
- Instandhouding van die implement is uitgevoer soos in hierdie handleiding voorgeskryf, met gebruik van oorspronklike en goedgekeurde onderdele.
- Die implement is nie aan enige strukturele, meganiese of enige ander ongemagtigde wysiging of herstelwerk onderwerp nie.
- Kennis van 'n waarborg-eis is binne die voorgeskrewe waarborgtydperk vir die betrokke produk aan 'n gemagtigde Handelaar gegee.

### Uitsluitings

Die volgende items word van waarborgdekking uitgesluit, insluitend enige onkoste daaraan verbonde.

- Onderdele as verbruikbare of slytonderdele geag.
- Produkte of produkonderdele wat aanvaarbare slytasie vertoon.
- Tydelike vervanging, leen of huur van vervangingsonderdele of -toerusting.
- Vervoer en hantering van geaffekteerde produkte.
- Gevolglike skade of verlies aan of deur enige persoon, organisasie of andersins geaffekteerde party.

### Geldigheid

Hierdie waarborg vervang alle vorige waarborgvoorwaardes, hetsy eksplisiet of geïmpliseer, insluitend enige vorige verpligting of aanspreeklikheid van Falcon ten opsigte van nie-ooreenstemmende of defekte produkte.

### Vrywaring

Falcon handhaaf 'n program van voortdurende produkverbetering en gevolg behou ons die reg om ontwerpe, spesifikasies, beskrywings, materiale en enige ander

of construction and any other product attribute without prior notice. This includes no obligation to reflect such changes in documentation or literature or to provide any such changes to products previously sold or held in stock.

produkteienskap sonder voorafkennisgewing te wysig, insluitend geen verpligting om sulke veranderinge in dokumentasie of literatuur te weerspieël of aan te bring aan produkte wat voorheen verkoop of aangehou is nie.

### Warranty Periods

Brands	Product groups	Components	Origin	Versions	Period	
Falcon	Slashers Haymakers® Rollermowers Blowermowers™	Gearboxes	Imported	All	2y	
			Falcon	F50	3y	
				F80	3y	
			PTO shafts	Imported	All	1y
		OEM parts	Falcon	All	2y	
	Dual-spindle Slashers Dual-spindle Haymakers® Flexwing Grassmulchers™ Fieldmulchers™ SD Mulchers Rotagang®	Gearboxes	Imported	All	1y	
				Falcon	F50	2y
			F60		1y	
			F80		2y	
			PTO shafts	Imported	All	1y
			OEM parts	Falcon	All	1y
	Flail implements	Gearboxes	Imported	All	1y	
		PTO shafts	Imported	All	1y	
		OEM parts	Falcon	All	1y	
	Rotavators	Gearboxes	Falcon	All	1y	
		OEM parts	Falcon	All	1y	
	Rotorspreaders	OEM parts	Falcon	All	1y	
PTO shafts		Imported	All	1y		
Limespreaders	OEM parts	Falcon	All	1y		
Bale forks + beams	OEM parts	Falcon	All	1y		
Unloaders®	OEM parts	Falcon	All	1y		
Bale Grab	OEM parts	Falcon	All	1y		
Amazone	Spreaders Sprayers Soil Tillage Turf equipment	All	Amazone	All	1y	

## PRODUCT RANGE

The Falcon F50 range of heavy-duty Slashers is intended for general grass-cutting and slashing operations.

- Available in a range of sizes with working widths from 1,2 to 1,8 m, they are suitable for tractors from 35 to 60 kW.
- The range is fitted with Falcon's locally manufactured F50 series gearbox, providing reliable, trouble-free operation.
- An alternative off-set hitch position is available on all models, allowing cutting up to boundaries and fence lines.
- All models are fitted with substantial safety flaps, curtains and guards.

Two cutting gear configurations are available.

- Blade beam with 2 blades: suited to heavier materials where high rates of impact are a possibility.
- Round blade disc with 4 blades: better suited to general cutting operations and providing a finer, higher-quality cut.

The RG models are specifically intended for use in orchards, with the rounded rear end allowing tighter turning radii in restricted spaces.

## PRODUKREEKS

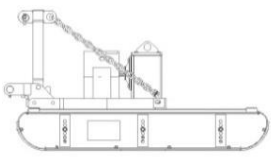
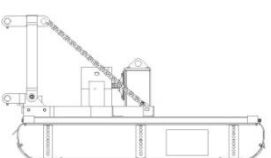
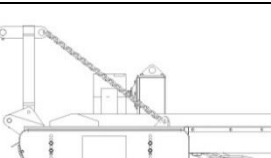
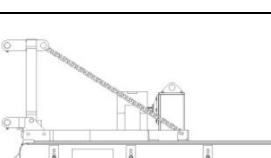
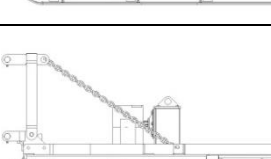
Die Falcon F50-reeks swaardienswentelsnyers is vir algemene grassny- en bossiekapwerk ontwerp.

- Hulle is beskikbaar in 'n verskeidenheid groottes met werkswydtes van 1,2 tot 1,8 m, en is geskik vir trekkers van 35 tot 60 kW.
- Die reeks is toegerus met Falcon se plaaslikvervaardigde F50-reeks-ratkas, wat betroubare, moeitevrye werkverrigting bied.
- 'n Alternatiewe kontrahaakposisie is op alle modelle beskikbaar, wat dit moontlik maak om tot teenaan grensrade en heinings te sny.
- Alle modelle is met stewige veiligheidsflappe, -gordyne en -skerms toegerus.

Twee snyemeganismekonfigurasies is beskikbaar.

- Lembalk met 2 lemme: geskik vir swaarder materiale waar 'n hoë mate van impak moontlik is.
- Ronde lemskyf met 4 lemme, meer geskik vir algemene snywerk en vir 'n fyner, hoërgehalte-afwerking.

Die RG-modelle is spesifiek ontwerp vir gebruik in boorde, aangesien die geronde agterdeel kleiner draaisirkels in beperkte ruimtes moontlik maak.

Profile	Model (Part no.)	Blades/ Spindles (qty)	Working Width (mm)	W x L (mm)		Mass (kg)	Power, max. (kW)
	F50-120 (A0027)	2 (x1)	1 200	1 500	1 420	314	35-50
	F50-150 (A0021)	2 (x1)	1 500	1 710	1 750	408	35-60
	F50-150-4 (A0021/4)	4 (x1)				437	
	F50-150RG (A0026)	4 (x1)	1 500	1 710	1 750	412	35-60
	F50-180 (A0023)	2 (x1)	1 800	2 060	2 060	504	40-60
	F50-180-4 (A0023/4)	4 (x1)				533	
	F50-180RG (A0028)	4 (x1)	1 800	2 050	2 010	508	40-60
Profiel	Model (Onderdeelnr.)	Lemme/Spille (getal)	Werkswydte (mm)	B x L (mm)		Massa (kg)	Krag, maks.(kW)

## INSTALLATION

### Attaching the implement to the tractor

- ⚠ Do not enter the area between the tractor and the implement unless the tractor engine is shut off, the handbrake applied and the key is removed from the ignition.
- ⚠ Use only hitch pins and linchpins of the correct specification, such as those provided with the implement.

The implement is equipped with a standard 3-point hitch for attachment to the tractor.

- ✔ Adjust the tractor 3-point hitch top link (Fig. 1-A) to provide sufficient slack in the implement topmast chains (Fig. 1-B) to allow articulation of the implement over undulating terrain.
- ✔ Lift the implement to an acceptable transportation height and operate the hitch offset facility to the extremities of its travel, ensuring that there is no contact between the implement and any part of the tractor.
- ✔ Adjust the tractor 3-point hitch stabiliser arms to prevent excessive lateral movement of the implement during transportation.
- ✔ Set the tractor hitch lift arms to a floating position to enable independent movement of the arms while cutting.

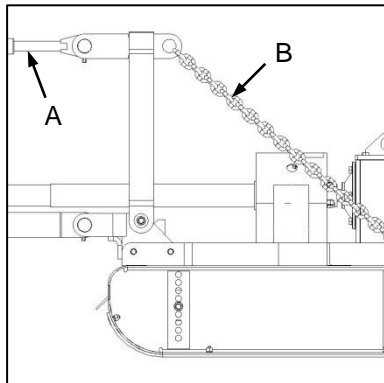


Fig. 1

### Installing the PTO driveshaft

- ⚠ Ensure proper engagement between the PTO driveshaft couplings and the input and output shafts on the implement and tractor.
- ⚠ Ensure sufficient overlap of the PTO driveshaft tubes at the working position.
- ⚠ Do not exceed the specified PTO driveshaft speed.
- ⚠ Do not operate the implement without PTO driveshaft guards in place and in good condition. Anti-rotation chains must be attached.
- ⚠ Replace damaged or missing PTO guard parts with original spare parts only.
- ⚠ Do not approach the rotating PTO driveshaft and avoid loose-fitting clothing to prevent entanglement.

## INSTALLERING

### Koppel van die implement aan die trekker

- ⚠ Moenie tussen die trekker en die implement inbeweeg tensy die trekkerenjin afgeskakel, die handrem opgetrek en die sleutel uit die aansitter verwyder is nie.
- ⚠ Gebruik slegs haak- en lunspeen met die korrekte spesifikasies soos dié wat saam met die implement verskaf is.

Die implement is toegerus met 'n standaard 3-punt-haak om dit aan die trekker te koppel.

- ✔ Verstel die trekker se 3-punt-boskamel (Fig. 1-A) om voldoende speling aan die implement se topmas-kettings (Fig. 1-B) te verskaf, sodat die implement die kontoere van die grond kan volg.
- ✔ Lig die implement tot 'n aanvaarbare vervoerhoogte en beweeg die haak tot by die uiterste punte om seker te maak dat die implement aan geen deel van die trekker raak nie.
- ✔ Verstel die 3-punt-haak se stabiliseerderarms om enige oormatige laterale beweging van die implement tydens vervoer te voorkom.
- ✔ Stel die trekker se 3-punt-haak se hysarms om vry te kan beweeg sodat onafhanklike beweging van die arms tydens sny moontlik is.

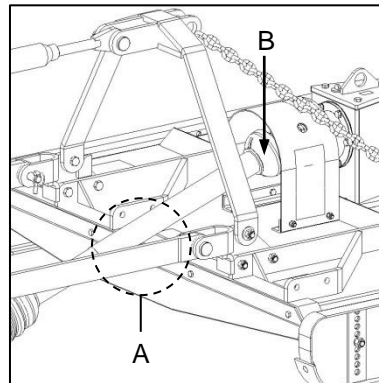


Fig. 2

### Installering van die kragtakkeras

- ⚠ Verseker behoorlike inskakeling tussen die kragtakkeras se koppelstukke en die inset- en lewingsasse aan die implement en trekker.
- ⚠ Verseker voldoende oorvleueling van die kragtakkeras se buise in die werksposisie.
- ⚠ Hou by die gespesifiseerde kragtakkeras-spoed.
- ⚠ Moenie die implement bedryf sonder die kragtakkeras-skerms in posisie en in goeie toestand nie. Teendraaikettings moet aangeheg wees.
- ⚠ Vervang beskadigde of ontbrekende kragtakkeras-skerm-onderdele slegs met oorspronklike onderdele.
- ⚠ Moenie na aan die draaiende kragtakkeras kom nie en vermy lospassende klere om verstrengeling te verhoed.



Due to the many variations in tractor and implement hitch configurations, it is likely that the supplied PTO driveshaft will have to be cut to suit the operating distance between the tractor and the implement.

- ✔ Before cutting the PTO driveshaft to the appropriate operating length, refer to the manufacturer's instructions supplied with the PTO shaft.
- ✔ Following installation of the PTO shaft, lift the implement to an acceptable transporting height and ensure that there is no contact between the PTO driveshaft and the implement (Fig. 2-A).
- ✔ Ensure that universal joint operating angles are not exceeded and that over-compression or over-extension of the PTO driveshaft is avoided (Fig. 2-B).
- ⊖ All PTO drive shafts supplied on Falcon implements are accompanied by a product handbook (IM-03-2008) describing all aspects of installation, operation, maintenance and safety with respect to the PTO drive shaft. The document constitutes part of this manual and will be found attached to the PTO drive shaft supplied with each new Falcon implement.

### Settings and adjustment

- ⚠ Do not perform maintenance or any other work on the implement unless the tractor engine is shut off, handbrake applied and the key is removed from the ignition.
- ⚠ Do not perform maintenance or any other work on the implement while it is suspended only on the tractor 3-point hitch, and without suitable additional support for the implement.

The working height of the implement is set by adjusting the position of the side panel in relation to the implement deck.

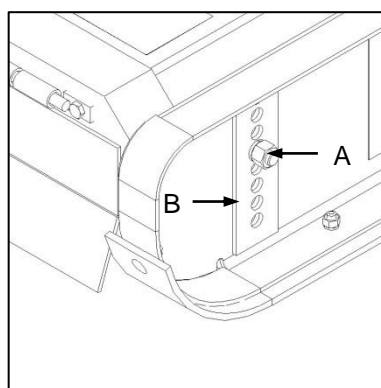


Fig. 3

- ✔ To set the working height of the implement, loosen the side panel retaining nuts (Fig. 3-A) and adjust the position of the nut (Fig. 3-B) as required. Ensure that the implement is level by measurement of the adjuster thread length protruding at each adjustment point.

Vanweë die talle variasies in trekker-en-implementhaak-konfigurasies sal die kragaftakkeras wat verskaf is, waarskynlik verkort moet word om by die bedryfsafstand tussen die trekker en die implement te pas.

- ✔ Verwys eers na die vervaardiger se instruksies wat saam met die kragaftakkeras voorsien is voordat die as tot die gepaste lengte gesny word.
- ✔ Na installering van die kragaftakkeras moet die implement tot 'n aanvaarbare vervoerhoogte gelig word, en maak seker dat daar geen kontak tussen die kragaftakkeras en die implement is nie (Fig. 2-A).
- ✔ Verseker dat kruiskoppelingwerkshoeke nie oorskry word nie en dat geen oorkompressie of oorverlenging van die kragaftakkeras plaasvind nie (Fig. 2-B).
- ⊖ Alle kragaftakkerasse wat saam met Falcon-implemente verskaf word, word vergesel van 'n produkhandleiding (IM-03-2008) wat alle aspekte van installering, bedryf, instandhouding en veiligheid m.b.t. die kragaftakkeras beskryf. Dit vorm deel van hierdie handleiding en sal aan elke kragaftakkeras van elke nuwe Falcon-implement gevind word..

### Instelling en verstelling

- ⚠ Moenie enige instandhouding- of ander werk aan die implement doen tensy die trekkerenjin afgeskakel, die handrem opgetrek en die sleutel uit die aansitter verwyder is nie.
- ⚠ Moenie enige instandhouding- of ander werk aan die implement uitvoer terwyl dit nog aan die trekker se 3-punt-haak hang, en sonder bykomende steun vir die implement nie.

Die werkshoogte van die implement word gestel deur die posisie van die sypaneel in verhouding tot die implementdek te verstel.

- ✔ Om die werkshoogte van die implement te verstel, laat skiet die sypaneel klemmoere (Fig. 3-A) en verstel die posisie van die moer (Fig. 3-B) soos verlang. Maak seker dat die implement gelyk is deur die lengte van die draad te meet wat uitsteek op elke verstelpunt.

## Lubrication and oil levels

Confirm that all gearbox oil levels are correct before use of the implement.

- ✔ A dipstick (Fig. 4-A) is provided on the implement gearbox for this purpose. The oil level should fall within the area indicated on the dipstick.

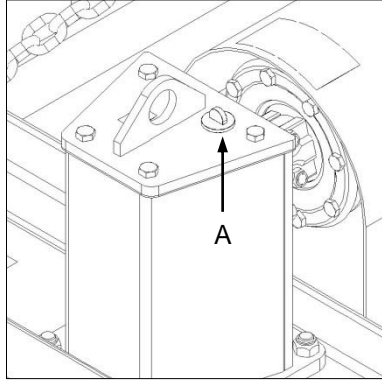


Fig. 4

Ensure that the PTO shaft is properly lubricated before use of the implement.

- ✔ Apply grease to the universal joints (Fig. 5-A) and telescopic tubes (Fig. 5-B) of the PTO shaft.
- ✔ For additional information, refer to the PTO manufacturer's handbook supplied with the implement.
- ⊖ For lubrication requirements, refer to MAINTENANCE, Table 2, Lubrication requirements.

## Smering en olievlakke

Verseker dat alle ratkasolievlakke korrek is voordat die implement gebruik word.

- ✔ Die ratkas het 'n peilstok (Fig. 4-A) vir hierdie doel. Die olievlak moet binne die perke val wat op die peilstok aangedui word.

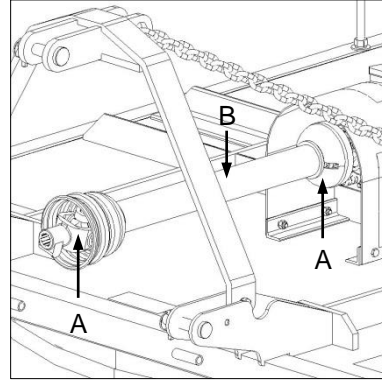


Fig. 5

Verseker dat die kragtakkeras behoorlik gesmeer is voor gebruik van die implement.

- ✔ Ghries die kruiskoppelings (Fig. 5-A) en teleskopiese buise (Fig. 5-B) van die kragtakkeras.
- ✔ Verwys vir verdere inligting na die kragtakkeras se vervaardigershandboek wat saam met die implement voorsien is.
- ⊖ Vir smeringvereistes, verwys na INSTANDHOUDING, Tabel 2, Smeringvereistes.

## OPERATION

### General

It is the responsibility of the owner to ensure that the operation of an agricultural tractor and any attached equipment is carried out in accordance with all applicable laws, regulations and practices relating to safe and responsible operation.

- ➔ Applicable regulations should include but not be limited to the South African Occupational Health and Safety Act No. 83 of 1993 and the South African National Road Traffic Act No. 93 of 1996.
- ➔ Refer also to operational information relevant to the tractor concerned, including handbooks, operator manuals, safety and warning notices and decals.

### Preparation for use

⚠ Only suitably trained persons should operate the implement and no person should operate the implement without first studying and establishing a complete understanding of the content of this manual.

The implement should be thoroughly inspected and prepared before each use and with reference to procedures described elsewhere in this manual.

1. Attaching the implement to the tractor.
2. Installing the PTO driveshaft.
3. Settings and adjustments.
4. Lubrication and oil levels.
5. Routine maintenance (before and after each use).

Inspect the work area.

- ✔ Remove any movable obstructions from the work area, especially any object which may become a projectile.
- ✔ Note the presence of ditches, holes, stumps, rocks, or any other obstruction that might destabilise the tractor or cause damage to the implement. Remove these obstacles where possible, otherwise note and avoid these areas during cutting.

### Operating the implement

- ⚠ Never approach or allow any person to approach the implement unless the implement has been lowered to the ground, the tractor engine is shut off, the handbrake applied and the implement cutting gear has come to a complete stop.
- ⚠ Actively discourage spectators and cease operation of the implement if any person approaches or enters the work area.

## WERKING

### Algemeen

Dit is die verantwoordelikheid van die eienaar om te verseker dat die bedryf van 'n landboutrekker en enige gekoppelde toerusting uitgevoer word in ooreenstemming met alle toepaslike wette, regulasies en praktyke wat met veilige en verantwoordelike bediening te doen het.

- ➔ Toepaslike regulasies sluit in, maar is nie beperk tot, die Suid-Afrikaanse Wet op Beroepsgeesondheid en Veiligheid nr. 85 van 1993 en die Suid-Afrikaanse Wet op Nasionale Padverkeer nr. 93 van 1996 nie.
- ➔ Verwys ook na bedryfsinligting oor die betrokke trekker, insluitend handboeke, operateurshandleidings en veiligheid- en waarskuwingskennisgewings en -plakkers.

### Voorbereiding vir gebruik

⚠ Slegs toepaslik opgeleide persone moet die implement bedryf, en geen persoon moet dit bedryf sonder om eers die inhoud van hierdie handleiding te bestudeer en 'n volledige begrip daarvan te verkry nie.

Die implement moet telkens eers deeglik geïnspekteer en voorberei word voor dit gebruik word en met verwysing na prosedures wat in ander dele van hierdie handleiding beskryf word.

1. Koppeling van die implement aan die trekker.
2. Installering van die kragaftakkeras.
3. Instellings en verstellings.
4. Smering en olievlakke.
5. Roetine-instandhouding (voor en na elke gebruik).

Inspekteer die werksgebied.

- ✔ Verwyder enige los obstruksies van die werksgebied, veral enige voorwerp wat dalk 'n projektiel mag word.
- ✔ Let op enige dongas, gate, stompe, klippe, of enige ander obstruksie wat die trekker mag destabiliseer of die implement kan beskadig. Verwyder hierdie hindernisse waar moontlik, of anders moet hierdie gebiede gedurende sny vermy word.

### Bedryf van die implement

- ⚠ Moet nooit na die implement beweeg, of toelaat dat enigiemand anders dit doen, tensy die implement op die grond laat sak is, die trekkerenjin afgeskakel is, die handrem opgetrek is en die implement se snyemeganisme heeltemal tot stilstand gekom het nie.
- ⚠ Toeskouers moet aktief ontmoedig word en snywerk moet onmiddellik gestaak word as enige persoon die werksgebied benader of dit betree.

- ⚠ Be sure to operate the implement only at the specified PTO input speed.
- ⚠ Do not approach the rotating PTO shaft and avoid loose-fitting clothing to prevent entanglement.
- ⊖ Failure to operate the implement at the specified PTO shaft speed can result in unsafe operating conditions as well as structural and mechanical failure not covered under warranty.

### The cutting process

The following procedure is recommended for starting the cutting process and, in general, should be followed on each occasion that PTO input is engaged.

- ✔ Start the tractor with the implement suspended on the tractor 3-point hitch.
- ✔ Lower the implement so that blades are just clear of the material to be cut and engage the tractor PTO at idling speed.
- ✔ Gradually increase the tractor throttle position to achieve the specified PTO operating speed.
- ✔ Set the throttle to provide the specified PTO input speed and lower the implement to the working position.
- ✔ Engage a low gear in the tractor and begin cutting.
- ⊖ Unless otherwise indicated, the specified implement PTO input speed should be 540r/min.
- ⊖ On tractors with an “economy” PTO drive option (indicated as 540E on the tractor’s tachometer), refer to the tractor’s operator manual in selecting the relevant PTO gearbox ratio on the tractor to maintain the specified implement PTO input speed.

### Transportation and storage

The implement may be transported on the tractor 3-point hitch between work sites.

- ✔ Ensure that the implement is lifted to a suitable height to clear any obstacles.
- ✔ Adjust stabilisers on the tractor hitch to prevent excessive lateral sway and possible contact with the tractor tyres.
- ✔ Maintain a speed low enough to prevent excessive bouncing and resultant damage to mounting points and other load-bearing components.

- ⚠ Verseker dat die implement slegs teen die gespesifiseerde kragaftakkerasinsetspoed bedryf word.
- ⚠ Moenie die draaiende kragaftakkeras benader nie en verhoed verstrengeling deur lospassende klere te vermy.
- ⊖ Versuim om die implement teen die gespesifiseerde kragaftakkeras-insetspoed te bedryf kan tot onveilige bedryfstoeënde lei, asook tot strukturele en meganiese onklaarraking wat nie deur die waarborg gedek word nie.

### Die snyproses

Die volgende prosedure word aanbeveel om die snyproses te begin en moet in die algemeen gevolg word elke keer wanneer die kragaftakker gebruik word.

- ✔ Skakel die trekkerenjien aan met die implement wat aan die 3-punt-haak hang.
- ✔ Laat die implement sak totdat die lemme net bokant die materiaal is wat gesny moet word en aktiveer die kragaftakker teen luierspoed.
- ✔ Versnel geleidelik met die handversneller totdat die voorgeskrewe kragaftakkerinsetspoed bereik word.
- ✔ Stel die versneller om teen die gespesifiseerde kragaftakkerinsetspoed te loop en laat sak die implement na die werksposisie.
- ✔ Sit die trekker in ‘n lae rat en begin sny.
- ⊖ Tensy anders aangedui, moet die gespesifiseerde implement se kragaftakkerinsetspoed 540r/min wees.
- ⊖ By trekkers met ‘n “ekonomie”-kragaftakker-dryfopsie (aangedui as 540E op die trekker se toereter) verwys na die trekkerbestuurder se handleiding vir die kies van die tersaaklike kragaftakkeratkas-verhouding om die gespesifiseerde implement se kragaftakkerinsetspoed te handhaaf.

### Vervoer en berging

Die implement kan tussen werksterreine aan die trekker se 3-punt-haak vervoer te word.

- ✔ Verseker dat die implement hoog genoeg gelig is om tydens vervoer bo-oor enige hindernisse te kan beweeg.
- ✔ Verstel stabiliseerders aan die trekkerhaak om oormatige laterale beweging en moontlike kontak met die trekker se bande te verhoed.
- ✔ Handhaaf ‘n spoed wat laag genoeg is om oormatige borsing en gevolglike skade aan monteerpunte en ander ladingdraende komponente te verhoed.

## MAINTENANCE

## INSTANDHOUDING

### Routine maintenance

- ⚠ Do not perform maintenance or any other work on the implement unless the tractor engine has been shut off, the handbrake applied and the key from the ignition.
- ⚠ Do not perform maintenance or any other work on the implement while it is suspended only on the tractor 3-point hitch, or without suitable additional support for the implement.
- ⚠ Use only original and approved Falcon replacement parts and lubricants. Refer to the parts information provided in this manual.

Maintenance should be carried out before and after each use and in accordance with the schedules provided in this chapter.

- ⊖ Bolted connections should be checked for tightness with reference to Bolt Torque Specifications (Table 1).

#### ➤ BEFORE each use

To be carried out at least daily in periods of continuous use. Otherwise before each occasion that the implement is put to use. Extra care and attention should be given to implements which may have been unused for prolonged periods (longer than 1 month).

- ✔ Check all fasteners for tightness. This includes special attention to safety-critical fasteners such as blade bolts and nuts (Fig. 1-A / 2-A), cutting gear mounting bolts (Fig. 1-B / 2-B), gearbox mounting bolts (Fig. 3-A), topmast mounting and pivot bolts (Fig. 4-A) and side panel retaining bolts (Fig. 4-B).
- ✔ Inspect blades for indications of wear and sharpen or replace as necessary. Where sharpening is carried out, ensure that blades are of similar shape and mass to prevent imbalance.
- ✔ Ensure that all guards, shields and other safety devices are in place, properly secured and in good condition.

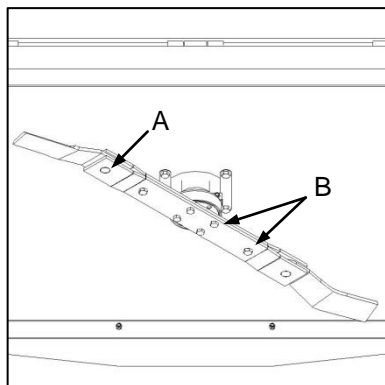


Fig. 1

- ✔ Inspect all mounting pins, chains, shackles and other

### Roetine-instandhouding

- ⚠ Moenie instandhouding- of enige ander werk aan die implement doen tensy die trekkerenjin afgeskakel, die handrem opgetrek en die sleutel uit die aansitter verwyder is nie.
- ⚠ Moenie instandhouding- of enige ander werk aan die implement doen terwyl dit net aan die trekker se 3-punt-haak hang, of sonder geskikte ekstra stutte vir die implement nie.
- ⚠ Gebruik slegs oorspronklike en goedgekeurde Falcon-ervangingsonderdele en smeermiddels. Verwys na die onderdeel-inligting in hierdie handleiding.

Instandhouding moet telkens voor en na gebruik gedoen word, en in ooreenstemming met die skedules wat in hierdie hoofstuk vervat is.

- ⊖ Verseker dat koppelboute in ooreenstemming met die boutwringkragspesifikasiekaart vas is (Tabel 1).

#### ➤ VOOR elke gebruik

Moet ten minste daaglik in tye van deurlopende gebruik uitgevoer word. Anders voor elke geleentheid waar die implement gebruik word. Gee ekstra sorg en aandag aan implemente wat dalk vir lang tydperke (meer as 'n maand) nie gebruik is nie.

- ✔ Verseker dat alle hegstukke vas is. Dit sluit in spesiale aandag aan veiligheidskritieke hegstukke soos lemboute en -moere (Fig. 1-A / 2-A), snymeganisme monterboute (Fig. 1-B / 2-B), ratkas monterboute (Fig. 3-A), topmasmonter- en -spilboute (Fig. 4-A) en sypaneel monterboute (Fig. 4-B).
- ✔ Inspekteer lemme vir tekens van slytasie en slyp of vervang indien nodig. As met die hand geslyp word, verseker dat lemme daarna eenders lyk en dieselfde weeg om wanbalans te voorkom.
- ✔ Verseker dat alle skutplate en ander veiligheidstoestelle in posisie is, behoorlik vas en in 'n goeie toestand is.

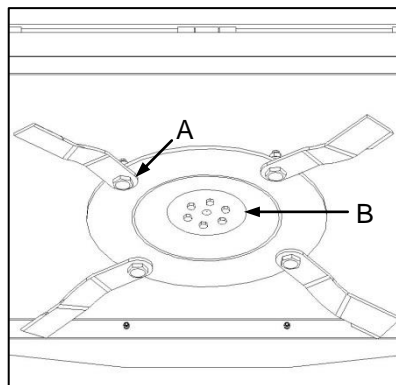


Fig. 2

- ✔ Gaan alle monterpenne, kettings, penskakels en

load-bearing components for signs of wear. Check that all secondary securing mechanisms such as linchpins, split-pins and clips are in place.

- ✔ Run the implement up to operating speed and conduct visual and audible checks for excessive vibration and noise.

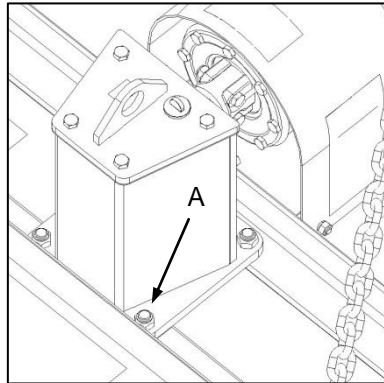


Fig. 3

ander lasdraende komponente na vir tekens van slytasie. Verseker dat alle sekondêre hegmeganismes soos lunspenne, splitpenne en knippe in posisie is.

- ✔ Versnel die implement tot werkspoed en voer visuele en gehoorinspeksies uit vir oormatige vibrasie en geraas.

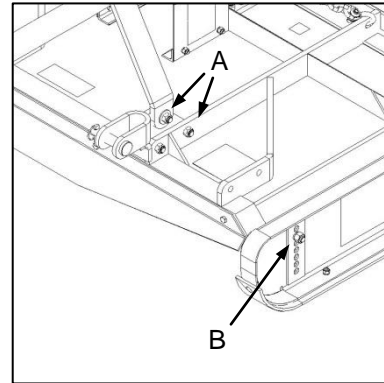


Fig. 4

- ⊖ Causes of excessive vibration and noise must be identified and eliminated immediately to prevent consequential structural or mechanical failure not covered under warranty.

#### ➤ AFTER each use

To be carried out at least every 40 hours in periods of continuous use. Otherwise after each occasion that the implement is put to use, or before long-term storage (longer than 1 month).

- ✔ Clean all debris from the implement, particularly the underside of the deck. Where pressurised cleaning is undertaken, care must be taken in areas around seals, breathers, lubrication points and PTO driveshaft components.
- ✔ Thoroughly inspect the implement for any damages incurred during use and note these for attention before next use.
- ✔ Ensure that all safety and warning decals are in place and in a legible condition.
- ✔ Before long-term storage (longer than 1 month), check oil levels and thoroughly lubricate all specified lubrication points.
- ✔ Store the implement in a clean, dry, weather-protected area.

#### PTO friction clutch inspection and adjustment

- ⚠ The PTO friction clutch installed on this product is a torque-limiting device. It is an integral part of the PTO driveshaft assembly and is intended to protect both the implement and tractor PTO drivelines and transmission.
- ⚠ Improper operation, maintenance or adjustment of the PTO friction clutch may result in damage not covered under warranty.
- ⚠ The instructions which follow refer only to parts fitted

- ⊖ Oorsake van oormatige vibrasie en geraas moet geïdentifiseer en onmiddellik uitgeskakel word om gevolglike strukturele of meganiese onklaarraking te verhoed wat nie deur die waarborg gedek word nie.

#### ➤ NA elke gebruik

Moet minstens elke 40 uur in tye van deurlopende gebruik uitgevoer word, of anders na elke geleentheid dat die implement gebruik word, of voor langtermynberging (langer as 1 maand).

- ✔ Verwyder alle vuiligheid van die implement, veral aan die onderkant van die dek. Drukspuitskoonmaak moet versigtig gedoen word, veral naby seëls, luggate, ghriespunte en kragtakkeras-komponente.
- ✔ Inspekteer die implement deeglik vir enige beskadiging tydens gebruik. Merk dit aan vir aandag en herstel voor dit weer gebruik word.
- ✔ Verseker dat alle veiligheids- en waarskuwingsplakkers in posisie, sigbaar en leesbaar is.
- ✔ Voor langtermynberging moet olievlakke in die implement nagegaan en alle ghriespunte deeglik gesmeer word.
- ✔ Stoor die implement in 'n droë, skoon, weerbestande plek.

#### Kragtakkeraswrywingkoppelaar inspeksie en verstelling

- ⚠ Die wrywingkoppelaar aan hierdie produk is 'n wringkragebeperkende toestel. Dit is 'n integrale deel van die kragtakkeras en is ontwerp om die implement sowel as die trekker se kragtakkeras-dryfstelle en transmissie te beskerm.
- ⚠ Onbehoorlike bedryf, instandhouding of verstelling van die kragtakkeras se wrywingkoppelaar kan tot skade lei wat nie deur die waarborg gedek word nie.
- ⚠ Die instruksies wat volg, verwys slegs na oorspronklike

by Falcon as original equipment, as reflected in the parts lists provided elsewhere in this manual.

Proper operation of the PTO driveshaft friction clutch must be confirmed before to use of the implement, especially after long-term storage where corrosion and lack of use may result in binding or seizure of the friction clutch mechanism.

- ✔ Release the pre-load on the friction clutch plates by loosening the nuts (Fig. 4-A) until the compression spring is just free to rotate by hand. Do not remove the nuts completely.
- ✔ Apply power to the PTO shaft and confirm that the centre hub rotates freely within the friction plate housing.
- ✔ If the friction clutch assembly is seized it will require rebuilding. This should be carried out using only original replacement parts.

The PTO friction clutch should also be regularly inspected for the following evidence of excessive slipping – typically an indication of transmission overload.

- ✔ Evidence of smoke, burning odours or residues.
- ✔ Discolouration or blistering of painted surfaces of the friction clutch housing (Fig. 6-B).
- ✔ The friction clutch housing feels significantly hotter than the surface of the gearbox casing (Fig. 6-A).

The friction discs within the friction clutch housing should be regularly inspected for wear. Wear is determined by measuring the thickness of the friction disc.

- ⊖ All models: Friction clutch Type F2 by Comer Industries; minimum friction plate thickness = 2,0 mm

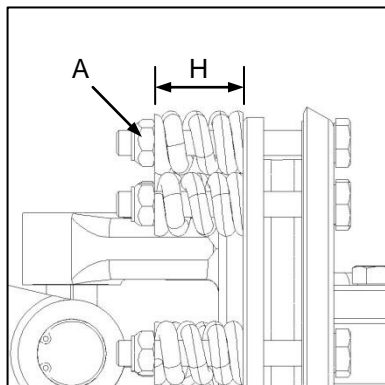


Fig. 5

Following any maintenance or repair of the PTO friction clutch assembly the pre-load on the friction clutch plates must be adjusted to factory specifications. This is accomplished by adjusting the nuts (Fig. 4-5) to set the compressed spring length (Fig. 5-H).

- ⊖ All models: Friction clutch Type F2 by Comer Industries; H = 31,2 mm

Falcon-onderdele, soos in die onderdeellyste elders in hierdie handleiding weerspieël.

Behoorlike bedryf van die kragaftakkeraswrywingkoppelaar moet bevestig word voor gebruik van die implement, veral na langtermynberging waar roes en onbruik dalk na binding of vasbranding van die wrywingkoppelaarmeganisme kan lei.

- ✔ Ontspan die voorlas op die wrywingkoppelaarplate deur die moere los te draai (Fig. 4-A) totdat die drukveer net vry genoeg is om met die hand te draai. Moet die moere nie heeltemal verwyder nie.
- ✔ Kry die kragaftakkeras met krag aan die draai en bevestig dat die middelnaaf vrylik binne die wrywingplaatomhulsel draai.
- ✔ As die wrywingkoppelaarmontering vasgebrand is, sal dit herbou moet word deur slegs gebruik van oorspronklike vervangingsonderdele te maak.

Die kragaftakkeraswrywingkoppelaar moet ook gereeld vir die volgende tekens van oormatige gly nagegaan word – tipies 'n teken van transmissie-ooresing.

- ✔ Tekens van rook, brandreuke of oorblyfsels.
- ✔ Verkleuring of blaasvorming van geverfde oppervlakke van die wrywingkoppelaarmhulsel (Fig. 6-B).
- ✔ Die wrywingkoppelaarmhulsel voel beduidend warmer as die ratkasomhulsel (Fig. 6-A).

Die wrywingskywe in die wrywingkoppelaarmhulsel moet gereeld nagegaan word vir slytasie, wat vasgestel word deur die dikte van die wrywingskyf te meet.

- ⊖ Alle modelle: Wrywingkoppelaar Tipe F2 deur Comer Industries; minimum wrywingplaatdikte = 2,0 mm

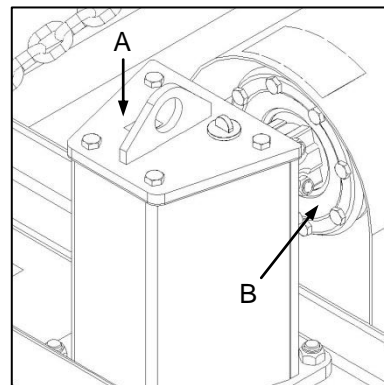


Fig. 6

Na instandhouding of herstel van die kragaftakkeraswrywingkoppelaarmontering moet die voorlas op die koppelaarplate volgens fabriekspesifikasies verstel word. Dit word gedoen deur verstelling van die moere (Fig. 5-A) om die saamgeperste veer se lengte te stel (Fig. 5-H).

- ⊖ Alle modelle: Wrywingkoppelaar Tipe F2 deur Comer Industries; H = 31,2 mm

## Blade replacement

- ⚠ The cutting gear installed on these implements rotates at extremely high speed. Improper maintenance or repairs can result in failures which might cause serious damage, injury or death.
- ⚠ Use only original Falcon parts of the correct specification and grade for installation of the cutting gear. High-speed failure of rotating parts can result in serious damage, injury or death.

Blades should be replaced if they become damaged, bent or broken or have been reduced in mass by more than 20% as a result of wear.

- ✔ Replace all mounting hardware when fitting new blades. This includes blade bolts, bushes and nuts.
- ✔ Check blade mounting holes (Fig. 7-A / 8-A) for signs of wear, elongation or fractures. In the event of any observed defect do NOT attempt a repair, but provide immediate replacement of the defective disc.
- ✔ Check blade discs for distortion before installation of new blades. Run the implement at a low speed without the blades attached and check for visible run-out (both radially and vertically) at the perimeter of the disc. In the event of any observed defect do NOT attempt a repair, but immediately replace the defective disc.

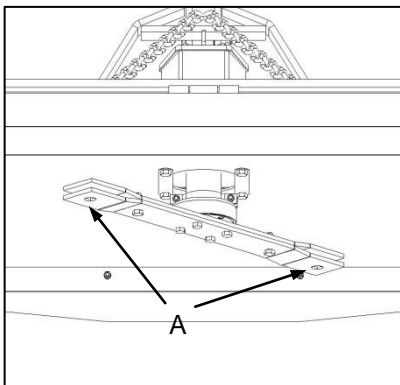


Fig. 7

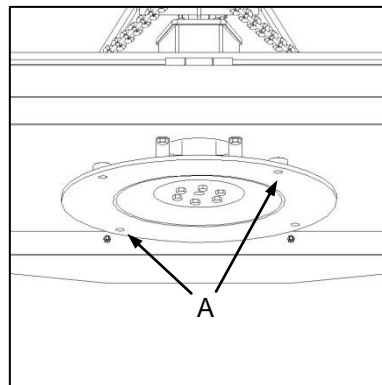


Fig. 8

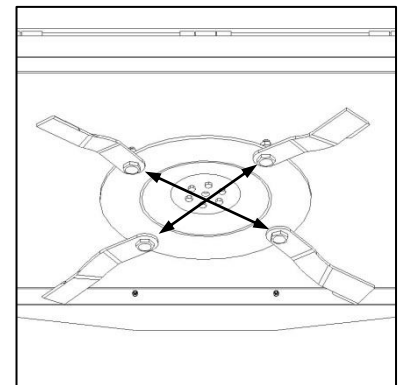


Fig. 9

- ✔ Weigh blades before installation. Blades of nearest equivalent masses should be installed in opposing positions on the same cutting gear assembly to maintain balance (Fig. 9).
- ✔ Following any maintenance or replacement of cutting gear components, run the implement up to operating speed and conduct visual checks for excessive vibration.
- ⊖ Causes of excessive vibration must be identified and eliminated immediately to prevent consequential structural or mechanical failure not covered under warranty.

## Lemvervanging

- ⚠ Die snymeganisme aan hierdie implemente draai teen 'n uiters hoë spoed. Gebrekkige instandhouding of herstelwerk kan tot brekasies lei wat ernstige skade, beserings en selfs dood kan veroorsaak.
- ⚠ Gebruik slegs oorspronklike Falcon-onderdele met die korrekte spesifikasie en graad om die snymeganisme te installeer. Hoëspoedbrekasie van draaiende onderdele kan tot ernstige skade, beserings of dood lei.

Lemme moet vervang word as hulle beskadig word, buig of breek, of weens slyting meer as 20% ligter geword het.

- ✔ Vervang alle monteringsonderdele by die aanbring van nuwe lemme, insluitend lemboute, -busse en -moere.
- ✔ Gaan lemmonteringsgate (Fig. 7-A / 8-A) na vir tekens van slytasie, vergroting of breuke. In die geval van enige waargenome defek, moet NIE probeer om dit herstel nie, maar vervang die defekte skyf onmiddellik.
- ✔ Gaan lemskywe na vir verwringing voordat nuwe lemme aangebring word. Laat die implement teen 'n lae spoed sonder die lemme loop en kyk of daar enige sigbare waggeling (sowel radiaal as vertikaal) by die omtrek van die skyf is. In die geval van enige waargenome defek, moet dit NIE probeer herstel nie, maar vervang die defekte skyf onmiddellik.

- ✔ Weeg lemme voor installering. Lemme met die mees eenderse massas moet teenoor mekaar op dieselfde snymeganismemontering aangebring word om balans te handhaaf (Fig. 9).
- ✔ Na enige instandhouding of vervanging van snymeganismekomponente, kry die implement op bedryfspoed vir visuele inspeksie vir oormatige vibrasie.
- ⊖ Oorsake van oormatige vibrasie moet geïdentifiseer en onmiddellik uitgeskakel word om gevolglike strukturele of meganiese skade wat nie deur die waarborg gedek word nie, te verhoed.



Table/Tabel 1

## Bolt Torque Specifications (N.m)/Boutwringkragspesifikasies (N.m)

Class/Klas	4.6		8.8		10.9		12.9	
	Wet/Nat	Dry/Droog	Wet/Nat	Dry/Droog	Wet/Nat	Dry/Droog	Wet/Nat	Dry/Droog
M6	4,8	6	9	11	13	17	15	19
M8	12	15	22	28	32	40	37	47
M10	23	29	43	55	63	80	75	95
M12	40	50	75	95	110	140	130	165
M14	63	80	120	150	175	225	205	260
M16	100	125	190	240	275	350	320	400
M18	135	175	260	330	375	475	440	560
M20	190	240	375	475	530	675	625	800
M22	260	330	510	650	725	925	850	1 075
M24	330	425	650	825	925	1 150	1 075	1 350
M27	490	625	950	1 200	1 350	1 700	1 600	2 000
M30	675	850	1 300	1 650	1 850	2 300	2 150	2 700
M33	800	1 150	1 750	2 200	2 500	3 150	2 900	3 700
M36	1 150	1 450	2 250	2 850	3 200	4 050	3 750	4 750

Table/Tabel 2

## Lubrication Requirements/Smeringvereistes

Application		Type	Process	Interval	Products
Gearboxes	Bevel gearboxes	Oiled	Replace	12M	Gear oil, Fuchs, Renep1000
			Check	1D	
	Splitter gearboxes	Oiled	Replace	12M	
			Check	1D	
PTO driveshafts	UV-joints	Greased	Refresh	10H	Grease, Universal, Moly #2
	CV-joints	Greased	Refresh	10H	
	Telescopic tubes	Greased	Refresh	20H	
Auxiliary drives	Intermediate shafts	Greased	Refresh	10H	Grease, Fuchs, HT Lithium M2
	Spindles	Greased	Replace	12M	
			Refresh	10H	
	Bearing housings	Greased	Replace	3M	
Refresh			10H		
Wheels	Wheel bearings	Greased	Refresh	1W	Grease, Universal, Moly #2
Pivot points	Pins and bushes	Greased	Refresh	10H	Machine oil, Universal
		Oiled	Refresh	10H	
	Ball joints	Greased	Refresh	10H	Grease, Universal, Moly #2
		Oiled	Refresh	10H	Machine oil, Universal
Adjusters/Levers	Threaded rods/ Leadscrews	Greased	Refresh	20H	Grease, Universal, Moly #2
		Oiled	Refresh	20H	Machine oil, Universal

## TROUBLESHOOTING

## FOUTOPSPORING

### General troubleshooting

The table below (Troubleshooting Guide - ENG) offers guidance in remedying commonly encountered problems. If a remedy is not possible, further assistance should be sought from an authorised Falcon dealer.

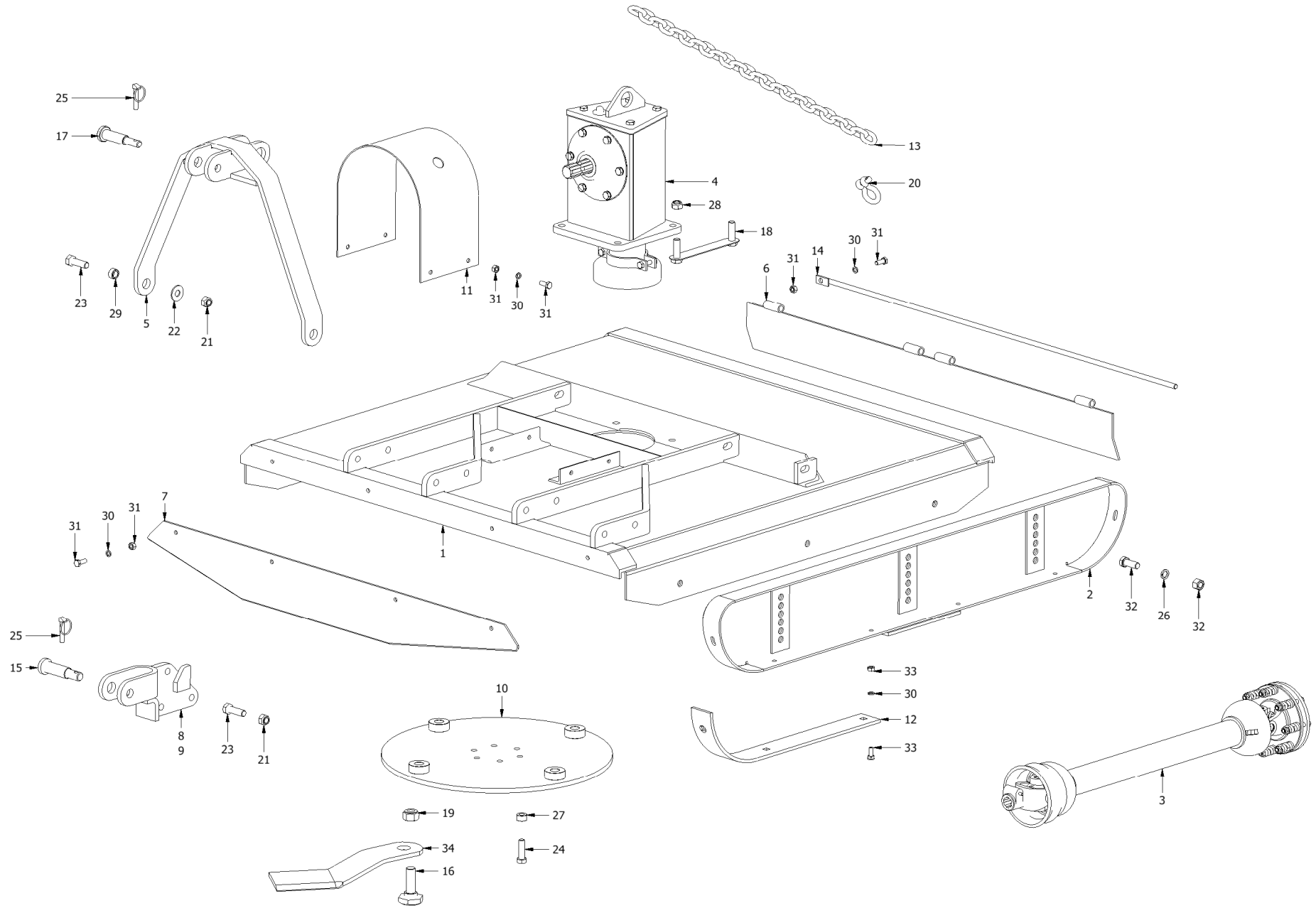
### Algemene foutopsporing

Die tafel onder (Foutopsporingsgids - AFR) bied riglyne vir die oplos van probleme wat algemeen voorkom. As 'n fout nie reggestel kan word nie, moet verdere hulp van 'n gemagtigde Falcon-handelaar bekom word.

Troubleshooting Guide – ENG		
Observation	Probable cause	Available remedy
Uneven cut	Implement not level Worn, damaged or bent blades	Adjust operating height Sharpen/replace blades
Poor material distribution	Material build-up under deck Implement not level Worn blades Wet/damp material	Clean Adjust operating heights Sharpen/replace blades Await suitable conditions
Mechanical noise	Loose components Low gearbox oil level	Check all fasteners for tightness Check and adjust oil levels
Rapid blade wear	Blade contact with ground Incorrect PTO speed Incorrect forward speed	Adjust operating height Maintain specified PTO speed Adjust forward speed
Poor cut quality	Excessive forward speed Defective friction clutch Worn blades	Adjust forward speed Maintain/adjust as necessary Sharpen/replace blades
Excessive vibration	Damaged/worn cutting gear Damaged/worn PTO driveshaft	Replace damaged/worn parts Replace damaged/worn parts

Foutopsporingsgids - AFR		
Waarneming	Waarskynlike oorsaak	Beskikbare regstelling
Oneweredige snit	Implement nie gelyk nie Geslyte, beskadigde of gebuigde lemme	Verstel snyhoogte Slyp/vervang lemme
Swak materiaalverspreiding	Materiaal-opbou onder dek Implement nie gelyk nie Geslyte lemme Nat/klam materiaal	Maak skoon Verstel werkshoogtes Slyp/vervang lemme Wag vir geskikte toestande
Meganiese geraas	Los komponente Ratkasolievlak laag	Maak seker alle boute ens. is vas Maak seker olievlakke is reg
Vinnige lemslytasie	Lemkontak met grond Verkeerde kragaftakkeras-spoed Verkeerde vorentoe-spoed	Verstel snyhoogte Hou by korrekte kragaftakkeras-spoed Verstel vorentoe-spoed
Swak snitgehalte	Te hoë vorentoe-spoed Defekte wrywingkoppelaar Geslyte lemme	Verstel vorentoe-spoed Herstel/verstel soos nodig Slyp/vervang lemme
Uitermatige vibrasie	Beskadigde/geslyte snymeganisme Beskadigde kragaftakkeras	Vervang beskadigde/geslyte onderdele Vervang beskadigde/geslyte onderdele

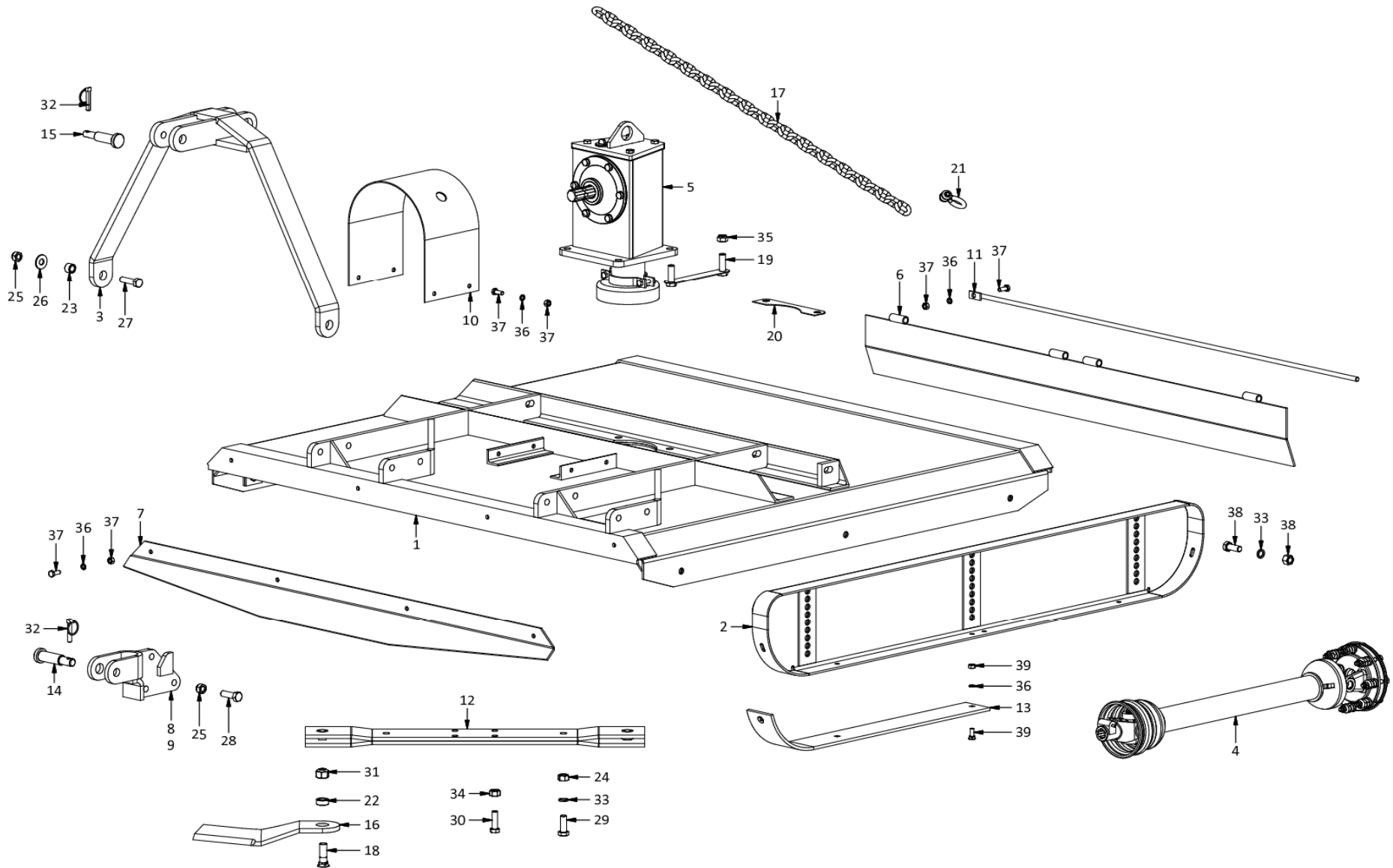
# F50-120 Slasher



**F50-120 Slasher  
A0027**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0519	Deck Painted 1200	1	41	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
2	H0402	Side Panel	2	42	M3169	Decal Bird FALCON Small	2
3	T400760CE112F12	PTO shaft T40 760 112 F12	1	43	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
4	H1300	Gearbox F50	1	44	M3171	Decal Baie Belangrik Alvorens U Die	1
5	H0601	Top mast	1	45	M3174	Decal IMPORTANT WHEN LOADING.....	1
6	H0212	Flap Rear 1.2m	1	46	M3178	Decal Blade/Lem	1
7	H0252	Skirt 1.2m	1	47	M3187	Decal ATTENTION If your tractor is ....	1
8	H0655	Clevis Right + stop	1				
9	H0654	Clevis Left	1				
10	H1122	Blade disk 1.2m	1				
11	H0702	PTO guard	1				
12	H0420	Skid runner 8x65x645	4				
13	R0609	Chain GR5 9mm 2t	1				
14	H0101	Rod Flap 1.2m	1				
15	H0645	Pin Bottom Link Cat2	2				
16	M52275	Blade bolt M22-12.9 Special	4				
17	H0633	Pin Top link Cat 1/2	1				
18	H5357	Ganged bolts M16Fx55	2				
19	M62222	Nut Nyloc M22	4				
20	M0622	Shackle 7/16in 1.5T	2				
21	M61616	Nut Nyloc M16	6				
22	M81603	Washer M16x40x3	2				
23	M41650	Bolt M16x50 HT	6				
24	M41450	Bolt M14x50 HT	6				
25	FLP11	Lynchpin 11mm	3				
26	M91604	Washer Spring M16	6				
27	M31410	Nut M14 HT Galv	6				
28	M61616F	Nut Nyloc M16F Galv	4				
29	H71613	Bush 16.5x25x13	2				
30	M91002	Washer Spring M10	21				
31	M11025	Bolt + Nut M10x25 HT	18				
32	M11640	Bolt + Nut M16x40 HT	12				
33	M21030	Plough bolt+nut M10x30HT	24				
34	H1812	BLADE BANANA 10x90x(375)-32.5	4				
35	M3003	Serial plate Metal FALCON	1				
36	M3141	Decal F50/120 Slasher	1				
37	M3117	Decal WARRANTY 2+3 WAARBORG.....	1				
38	M3168	Decal Bird FALCON Large	1				
39	M3172	Decal DANGER STAY AWAY - ROTATING.....	1				
40	M3173	Decal Lifting hook	1				

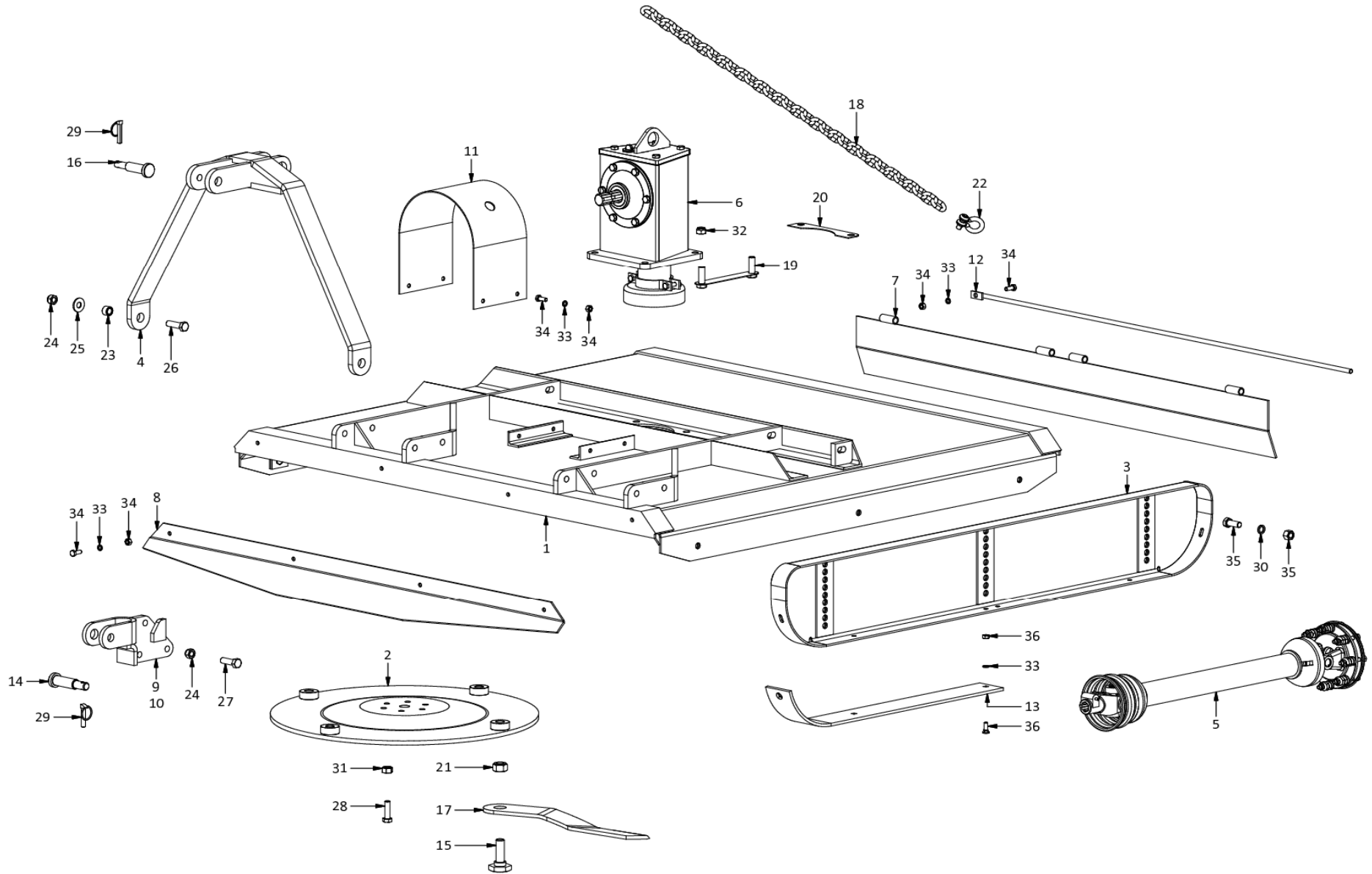
F50-150 Slasher  
A0021



**F50-150 Slasher  
A0021**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0520	Deck Painted 1500	1	41	M3187	Decal ATTENTION If your tractor is ....	1
2	H0404	Side panel	2	42	M3171	Decal Baie Belangrik Alvorens U Die	1
3	H0603	Top mast Cat1/2	1	43	M3168	Decal Bird FALCON Large	1
4	T600960CE112F22	PTO shaft T60 960 112 F22	1	44	M3176	Decal Bird Falcon Meduim	2
5	H1300	Gearbox F50	1	45	M3178	Decal Blade/Lem	1
6	H0202	Flap Rear 1500	1	46	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
7	H0253	Skirt 1500	1	47	M3133	Decal F50/150 Slasher	1
8	H0655	Clevis Right +stop	1	48	M3174	Decal IMPORTANT WHEN LOADING.....	1
9	H0654	Clevis Left	1	49	M3173	Decal Lifting hook	1
10	H0702	PTO guard	1	50	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
11	H0102	Pin Hinge 1500	1	51	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
12	H1351	Blade beam 10x100 PCD890	2	52	M3117	Decal WARRANTY 2+3 WAARBORG.....	1
13	H0422	Skid runner 8x90	4	53	M8400	Operators manual Slashers	1
14	H0645	Pin Btm link Cat2/1	2				
15	H0633	Pin Top link Cat2/1	1				
16	H1804	Blade Banana 12x90x(345)-32.5	2				
17	R0611	Chain GR5 10.0	1				
18	M51963	Blade bolt 3/4UNCx2-1/2HT CSK	2				
19	H5357	Ganged bolts M16Fx55	2				
20	M0623	Spacer	1				
21	M0622	Shackle 7/16in 1.5T	2				
22	H71914	Bush Hard 19x32x14	2				
23	H71617	Bush 16x25x17	2				
24	M31612	Nut M16	2				
25	M61616	Nut Nyloc M16	6				
26	M81603	Washer M16x40x3	2				
27	M41655	Bolt M16x55HT	2				
28	M41650	Bolt M16x50HT	4				
29	M41645	Bolt M16x45HT	2				
30	M41450	Bolt M14x50HT	4				
31	M61921	Nut Nyloc 3/4UNC CSK	2				
32	FLP11	Lynchpin 11mm	3				
33	M91604	Washer Spring M16	8				
34	M31410	Nut M14	4				
35	M61616F	Nut Nyloc M16F	4				
36	M91002	Washer Spring M10	21				
37	M11025	Bolt+nut M10x25HT	18				
38	M11640	Bolt+nut M16x40HT	12				
39	M21030	Plough bolt+nut M10x30HT	24				
40	M3003	Serial plate	1				

F50-150-4 Slasher  
A0021-4

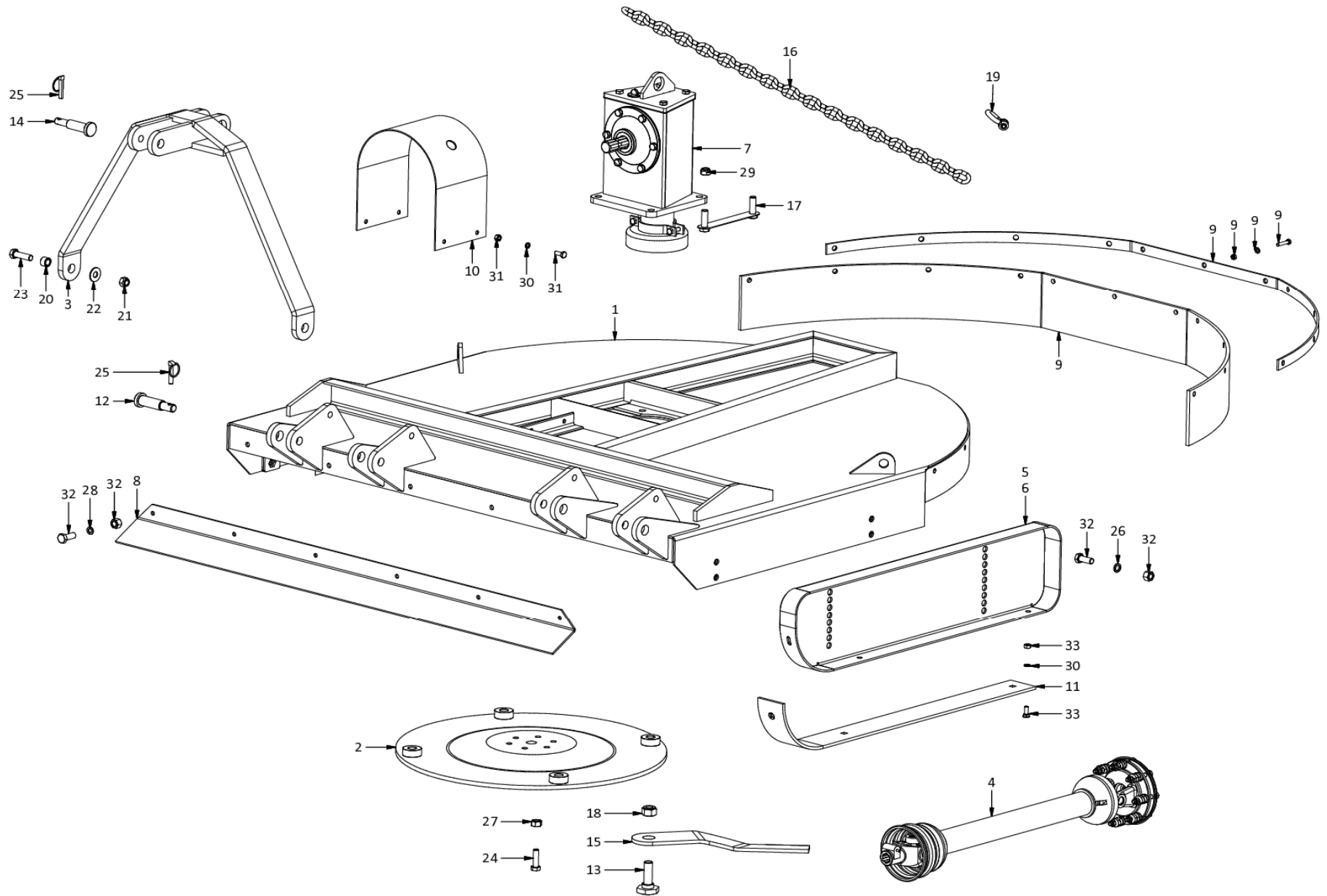


**F50-150-4 Slasher  
A0021-4**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0520	Deck Painted 1500	1	41	M3176	Decal Bird Falcon Meduim	2
2	H1256	Disk 4-M22 PCD650	1	42	M3178	Decal Blade/Lem	1
3	H0404	Side panel	2	43	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
4	H0603	Top mast Cat1/2	1	44	M3134	Decal F50/150/4 Slasher	1
5	T600960CE112F22	PTO shaft T60 960 112 F22	1	45	M3174	Decal IMPORTANT WHEN LOADING.....	1
6	H1300	Gearbox F50	1	46	M3173	Decal Lifting hook	1
7	H0202	Flap Rear 1500	1	47	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
8	H0253	Skirt 1500	1	48	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
9	H0655	Clevis Right +stop	1	49	M3117	Decal WARRANTY 2+3 WAARBORG.....	1
10	H0654	Clevis Left	1	50	M8400	Operators manual Slashers	1
11	H0702	PTO guard	1				
12	H0102	Pin Hinge 1500	1				
13	H0422	Skid runner 8x90	4				
14	H0645	Pin Btm link Cat2/1	2				
15	M52275	Blade bolt M22-10.9 Special	4				
16	H0633	Pin Top link Cat2/1	1				
17	H1801	Blade Banana 10x90x(440)-32.5	4				
18	R0611	Chain GR5 10.0	2				
19	H5357	Ganged bolts M16Fx55	2				
20	M0623	Spacer	1				
21	M62222	Nut Nyloc M22	4				
22	M0622	Shackle 7/16in 1.5T	2				
23	H71617	Bush 16x25x17	2				
24	M61616	Nut Nyloc M16	6				
25	M81603	Washer M16x40x3	2				
26	M41655	Bolt M16x55HT	2				
27	M41650	Bolt M16x50HT	4				
28	M41450	Bolt M14x50HT	6				
29	FLP11	Lynchpin 11mm	3				
30	M91604	Washer Spring M16	6				
31	M31410	Nut M14	6				
32	M61616F	Nut Nyloc M16F	4				
33	M91002	Washer Spring M10	21				
34	M11025	Bolt+nut M10x25HT	18				
35	M11640	Bolt+nut M16x40HT	12				
36	M21030	Plough bolt+nut M10x30HT	24				
37	M3003	Serial plate	1				
38	M3187	Decal ATTENTION If your tractor is ....	1				
39	M3171	Decal Baie Belangrik Alvorens U Die	1				
40	M3168	Decal Bird FALCON Large	1				



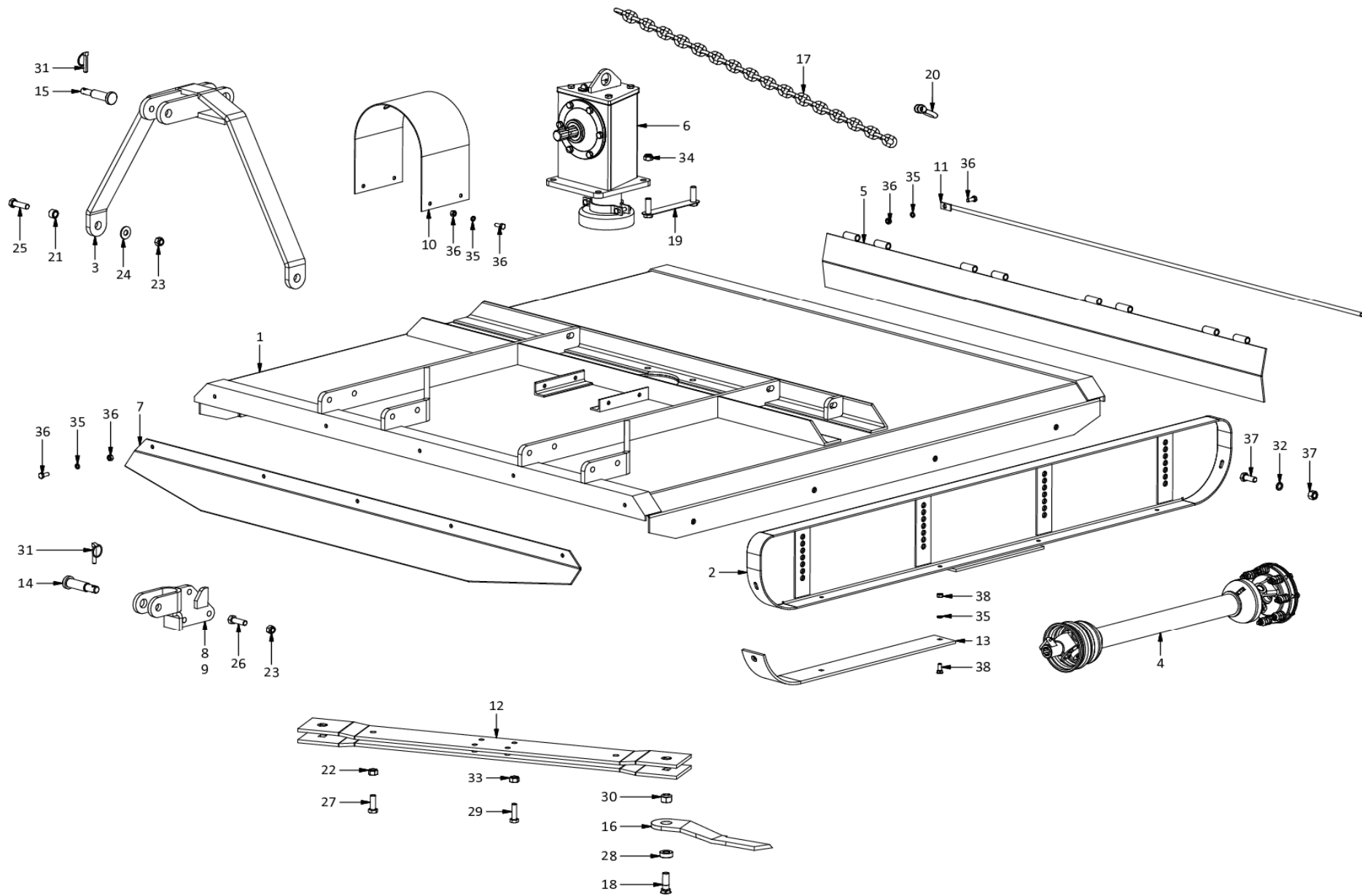
F50-150RG Slasher  
A0026



**F50-150RG Slasher  
A0026**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0524	Deck Painted 1500	1	41	M3140	Decal F50/150RG Slasher	1
2	H1256	Disk 4-M22 PCD650	1	42	M3174	Decal IMPORTANT WHEN LOADING.....	1
3	H0603	Top mast Cat1/2	1	43	M3173	Decal Lifting hook	1
4	T600960CE112F22	PTO shaft T60 960 112 F22	1	44	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
5	H0416	Side panel	1	45	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
6	H0416LH	Side panel	1	46	M3117	Decal WARRANTY 2+3 WAARBORG.....	1
7	H1300	Gearbox F50	1	47	M8400	Operators manual Slashers	1
8	H0255	Skirt 1500	1				
9	H0866	Guard kit	1				
10	H0702	PTO guard	1				
11	H0429	Skid runner 8x90	2				
12	H0645	Pin Btm link Cat2/1	2				
13	M52275	Blade bolt M22-10.9 Special	4				
14	H0633	Pin Top link Cat2/1	1				
15	H1801	Blade Banana 10x90x(440)-32.5	4				
16	R0611	Chain GR5 10.0	1				
17	H5357	Ganged bolts M16Fx55	2				
18	M62222	Nut Nyloc M22	4				
19	M0622	Shackle 7/16in 1.5T	2				
20	H71617	Bush 16x25x17	2				
21	M61616	Nut Nyloc M16	2				
22	M81603	Washer M16x40x3	2				
23	M41655	Bolt M16x55HT	2				
24	M41450	Bolt M14x50HT	6				
25	FLP11	Lynchpin 11mm	3				
26	M91604	Washer Spring M16	8				
27	M31410	Nut M14	6				
28	M91213	Washer Spring M12 Galv	6				
29	M61616F	Nut Nyloc M16F	4				
30	M91002	Washer Spring M10	10				
31	M11025	Bolt+nut M10x25HT	8				
32	M11640	Bolt+nut M16x40HT	28				
33	M21030	Plough bolt+nut M10x30HT	12				
34	M3003	Serial plate	1				
35	M3187	Decal ATTENTION If your tractor is ....	1				
36	M3171	Decal Baie Belangrik Alvorens U Die	1				
37	M3168	Decal Bird FALCON Large	1				
38	M3176	Decal Bird Falcon Meduim	2				
39	M3178	Decal Blade/Lem	1				
40	M3172	Decal DANGER STAY AWAY - ROTATING.....	1				

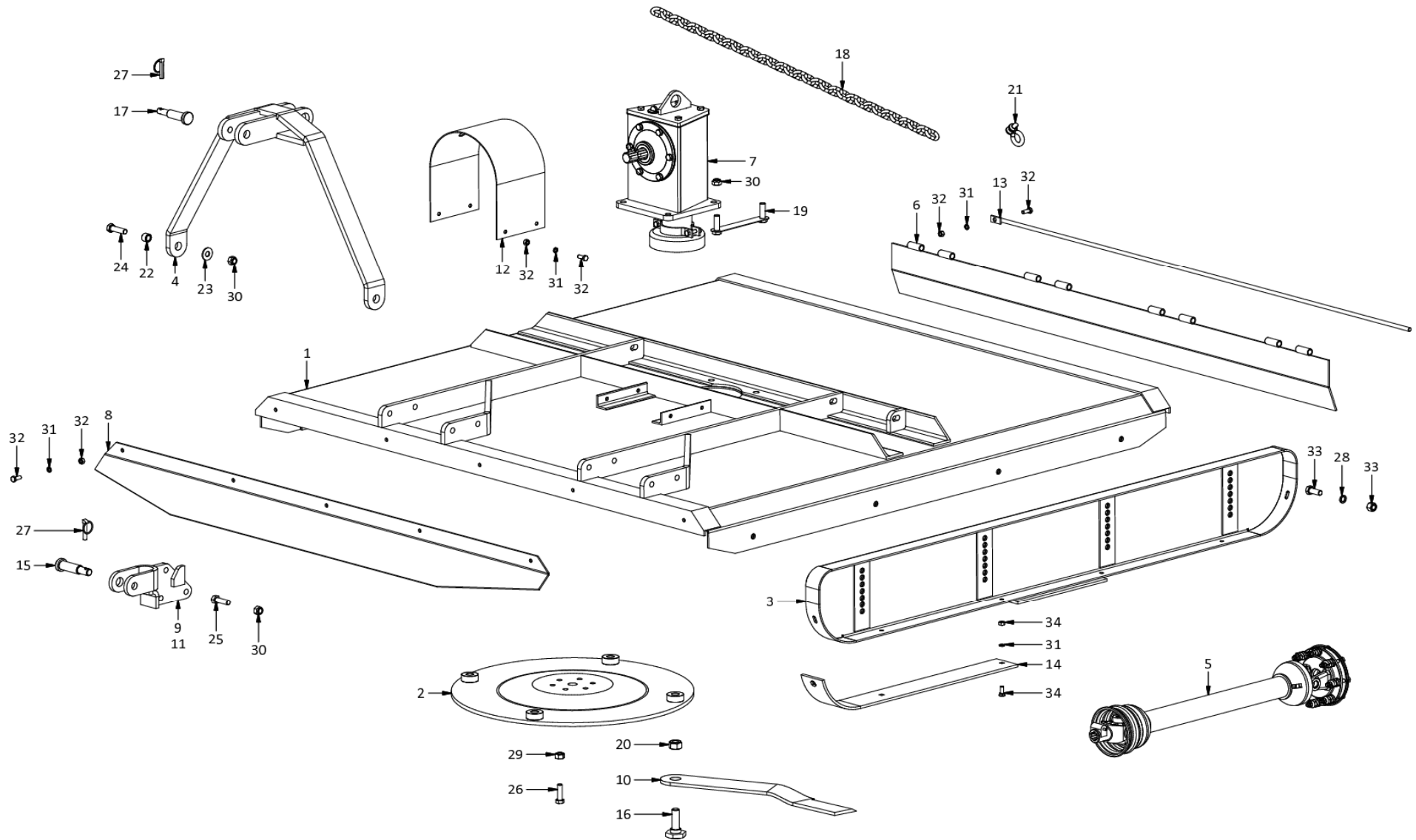
F50-180 Slasher  
A0023



**F50-180 Slasher  
A0023**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0521	Deck Painted 1800	1	41	M3171	Decal Baie Belangrik Alvorens U Die	1
2	H0405	Side panel	2	42	M3168	Decal Bird FALCON Large	1
3	H0603	Top mast Cat1/2	1	43	M3176	Decal Bird Falcon Medium	2
4	T600960CE112F22	PTO shaft T60 960 112 F22	1	44	M3178	Decal Blade/Lem	1
5	H0203	Flap Rear 1800	1	45	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
6	H1300	Gearbox F50	1	46	M3136	Decal F50/180 Slasher	1
7	H0256	Skirt 1800	1	47	M3174	Decal IMPORTANT WHEN LOADING.....	1
8	H0655	Clevis Right +stop	1	48	M3173	Decal Lifting hook	1
9	H0654	Clevis Left	1	49	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
10	H0702	PTO guard	1	50	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
11	H0103	Pin Hinge 1800	1	51	M3117	Decal WARRANTY 2+3 WAARBORG.....	1
12	H1350	Blade beam 10x130 PCD1090	2	52	M8400	Operators manual Slashers	1
13	H0422	Skid runner 8x90	4				
14	H0645	Pin Btm link Cat2/1	2				
15	H0633	Pin Top link Cat2/1	1				
16	H1804	Blade Banana 12x90x(345)-32.5	2				
17	R0611	Chain GR5 10.0	1				
18	M51963	Blade bolt 3/4UNCx2-1/2HT CSK	2				
19	H5357	Ganged bolts M16Fx55	2				
20	M0622	Shackle 7/16in 1.5T	2				
21	H71617	Bush 16x25x17	2				
22	M31612	Nut M16	2				
23	M61616	Nut Nyloc M16	6				
24	M81603	Washer M16x40x3	2				
25	M41655	Bolt M16x55HT	2				
26	M41650	Bolt M16x50HT	4				
27	M41645	Bolt M16x45HT	2				
28	M71914	Bush Hard 19x32x13	2				
29	M41450	Bolt M14x50HT	4				
30	M61921	Nut Nyloc 3/4UNC CSK	2				
31	FLP11	Lynchpin 11mm	3				
32	M91604	Washer Spring M16	10				
33	M31410	Nut M14	4				
34	M61616F	Nut Nyloc M16F	4				
35	M91002	Washer Spring M10	22				
36	M11025	Bolt+nut M10x25HT	20				
37	M11640	Bolt+nut M16x40HT	16				
38	M21030	Plough bolt+nut M10x30HT	24				
39	M3003	Serial plate	1				
40	M3187	Decal ATTENTION If your tractor is ....	1				

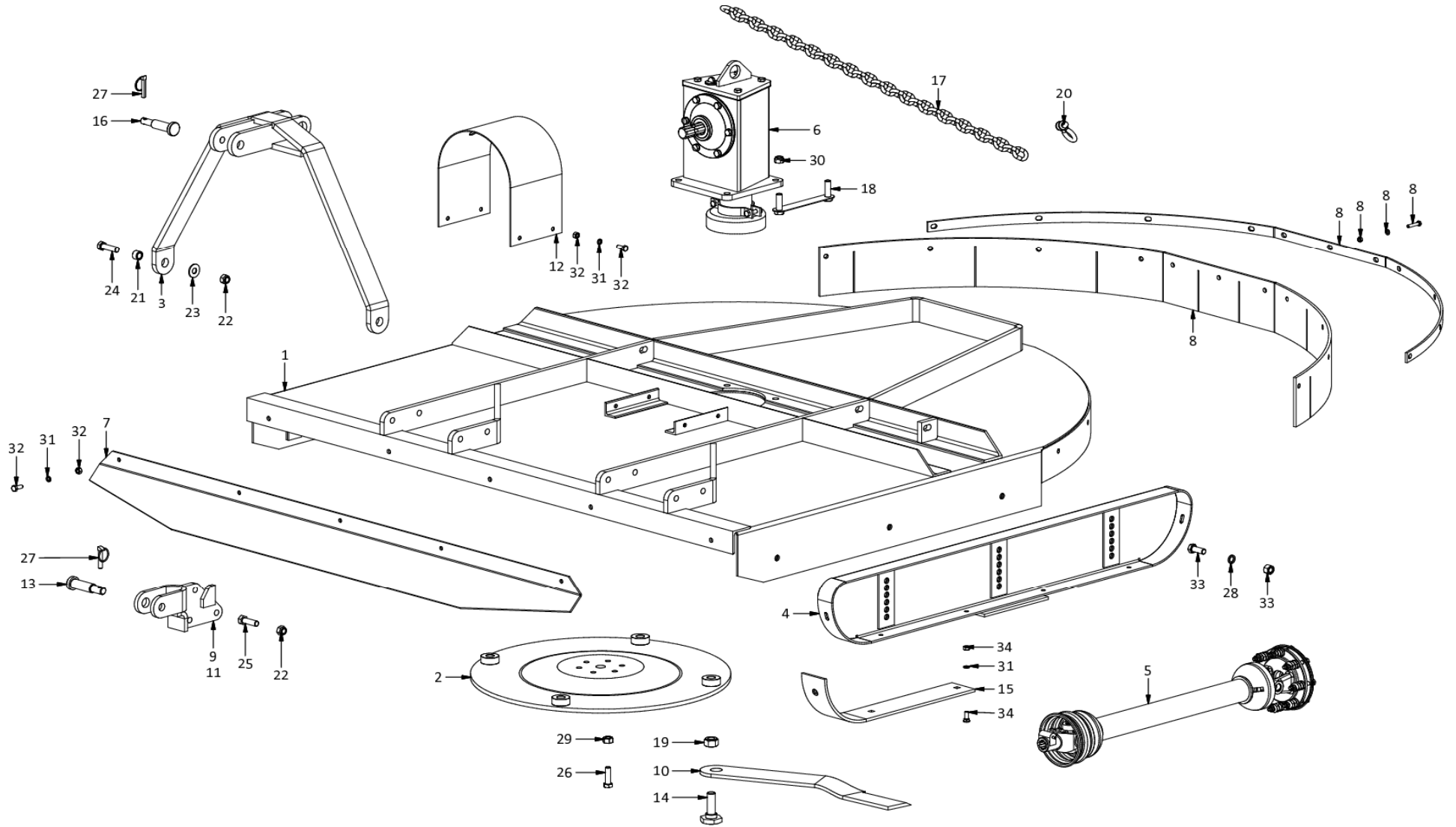
F50-180-4 Slasher  
A0023-4



**F50-180-4 Slasher  
A0023-4**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0521	Deck Painted 1800	1	41	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
2	H1256	Disk 4-M22 PCD650	1	42	M3137	Decal F50/180/4 Slasher	1
3	H0405	Side panel	2	43	M3174	Decal IMPORTANT WHEN LOADING.....	1
4	H0603	Top mast Cat1/2	1	44	M3173	Decal Lifting hook	1
5	T600960CE112F22	PTO shaft T60 960 112 F22	1	45	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
6	H0203	Flap Rear 1800	1	46	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
7	H1300	Gearbox F50	1	47	M3117	Decal WARRANTY 2+3 WAARBORG.....	1
8	H0256	Skirt 1800	1	48	M8400	Operators manual Slashers	1
9	H0655	Clevis Right +stop	1				
10	H1810	Blade Banana 10x90x(585)-32.5	4				
11	H0654	Clevis Left	1				
12	H0702	PTO guard	1				
13	H0103	Pin Hinge 1800	1				
14	H0422	Skid runner 8x90	4				
15	H0645	Pin Btm link Cat2/1	2				
16	M52275	Blade bolt M22-10.9 Special	4				
17	H0633	Pin Top link Cat2/1	1				
18	R0611	Chain GR5 10.0	1				
19	H5357	Ganged bolts M16Fx55	2				
20	M62222	Nut Nyloc M22	4				
21	M0622	Shackle 7/16in 1.5T	2				
22	H71617	Bush 16x25x17	2				
23	M81603	Washer M16x40x3	2				
24	M41655	Bolt M16x55HT	2				
25	M41650	Bolt M16x50HT	4				
26	M41450	Bolt M14x50HT	6				
27	FLP11	Lynchpin 11mm	3				
28	M91604	Washer Spring M16	8				
29	M31410	Nut M14	6				
30	M61616F	Nut Nyloc M16F	10				
31	M91002	Washer Spring M10	22				
32	M11025	Bolt+nut M10x25HT	20				
33	M11640	Bolt+nut M16x40HT	16				
34	M21030	Plough bolt+nut M10x30HT	24				
35	M3003	Serial plate	1				
36	M3187	Decal ATTENTION If your tractor is ....	1				
37	M3171	Decal Baie Belangrik Alvorens U Die	1				
38	M3168	Decal Bird FALCON Large	1				
39	M3176	Decal Bird Falcon Meduim	2				
40	M3178	Decal Blade/Lem	1				

F50-180RG Slasher  
A0028



**F50-180RG Slasher  
A0028**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0526	Deck Painted 1800	1	41	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
2	H1256	Disk 4-M22 PCD650	1	42	M3142	Decal F50/180RG Slasher	1
3	H0603	Top mast Cat1/2	1	43	M3174	Decal IMPORTANT WHEN LOADING.....	1
4	H0459	Side panel	2	44	M3173	Decal Lifting hook	1
5	T600960CE112F22	PTO shaft T60 960 112 F22	1	45	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
6	H1300	Gearbox F50	1	46	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
7	H0256	Skirt 1800	1	47	M3117	Decal WARRANTY 2+3 WAARBORG.....	1
8	H0867	Guard kit	1	48	M8400	Operators manual Slashers	1
9	H0655	Clevis Right +stop	1				
10	H1810	Blade Banana 10x90x(585)-32.5	4				
11	H0654	Clevis Left	1				
12	H0702	PTO guard	1				
13	H0645	Pin Btm link Cat2/1	2				
14	M52275	Blade bolt M22-10.9 Special	4				
15	H0430	Skid runner 8x90	4				
16	H0633	Pin Top link Cat2/1	1				
17	R0611	Chain GR5 10.0	1				
18	H5357	Ganged bolts M16Fx55	2				
19	M62222	Nut Nyloc M22	4				
20	M0622	Shackle 7/16in 1.5T	2				
21	H71617	Bush 16x25x17	2				
22	M61616	Nut Nyloc M16	6				
23	M81603	Washer M16x40x3	2				
24	M41655	Bolt M16x55HT	2				
25	M41650	Bolt M16x50HT	4				
26	M41450	Bolt M14x50HT	6				
27	FLP11	Lynchpin 11mm	3				
28	M91604	Washer Spring M16	6				
29	M31410	Nut M14	6				
30	M61616F	Nut Nyloc M16F	4				
31	M91002	Washer Spring M10	21				
32	M11025	Bolt+nut M10x25HT	18				
33	M11640	Bolt+nut M16x40HT	12				
34	M21030	Plough bolt+nut M10x30HT	24				
35	M3003	Serial plate	1				
36	M3187	Decal ATTENTION If your tractor is ....	1				
37	M3171	Decal Baie Belangrik Alvorens U Die	1				
38	M3168	Decal Bird FALCON Large	1				
39	M3176	Decal Bird Falcon Meduim	2				
40	M3178	Decal Blade/Lem	1				



## Gearbox F50 H1300

	Item	Part No.	Description	Qty
	1	H1310	Gear Bevel Z29/z10	1
	2	M1311	Bearing L44610	1
	3	M1312	Bearing L44649	1
	4	M1313	Shim 35x49x0.25	A/R
	4	M1341	Shim 35x49x0.5	A/R
	4	M1342	Shim 35x49x1.0	A/R
	5	H1309	Shaft Input 1-3/8 Z6	1
	6	M1306	Bearing LM48510	1
	7	M1307	Bearing LM48548	1
	8	H1308	Washer Hard 50x35x4	1
	9	M1301	Seal Radial lip 137227	1
	10	M81201	Washer Star M12	6
	11	H1303	Input cover F50	1
	12	M1304	Gasket Input F50	1
	13	M1305	Shim 0.1mm Plastic	A/R
	14	M1334	Plug + Dipstick F50	1
	15	M41225	Bolt M12x25HT	10
	16	H1321A	Cover Gearbox F50	1
	17	M1320	Gasket Top F50	1
	18	H1314	Housing F50	1
	19	M1319	Nut Slotted 1.0UNF	1
	20	M1343	Washer 40x26x2	1
	21	H1318	Gear Bevel Z16/z6	1
	22	M1407	Bearing LM29749	1
	23	M1408	Bearing LM29710	1
	24	H1324	Retainer Domed	1
	25	M1327	Bearing 603011	1
	26	M1328	Bearing 603049	1
	27	M1325	Seal Radial lip 103905	2
	28	M1326	Seal Felt 75x50x10	1
	29	H1323	Dust cover	1
	30	M41045	Bolt M10x45HT	2
	31	M31007	Nut M10	2
32	H1315	Shaft Output F50	1	
33	M1416	Split pin B5x60	1	

A/R = As Required