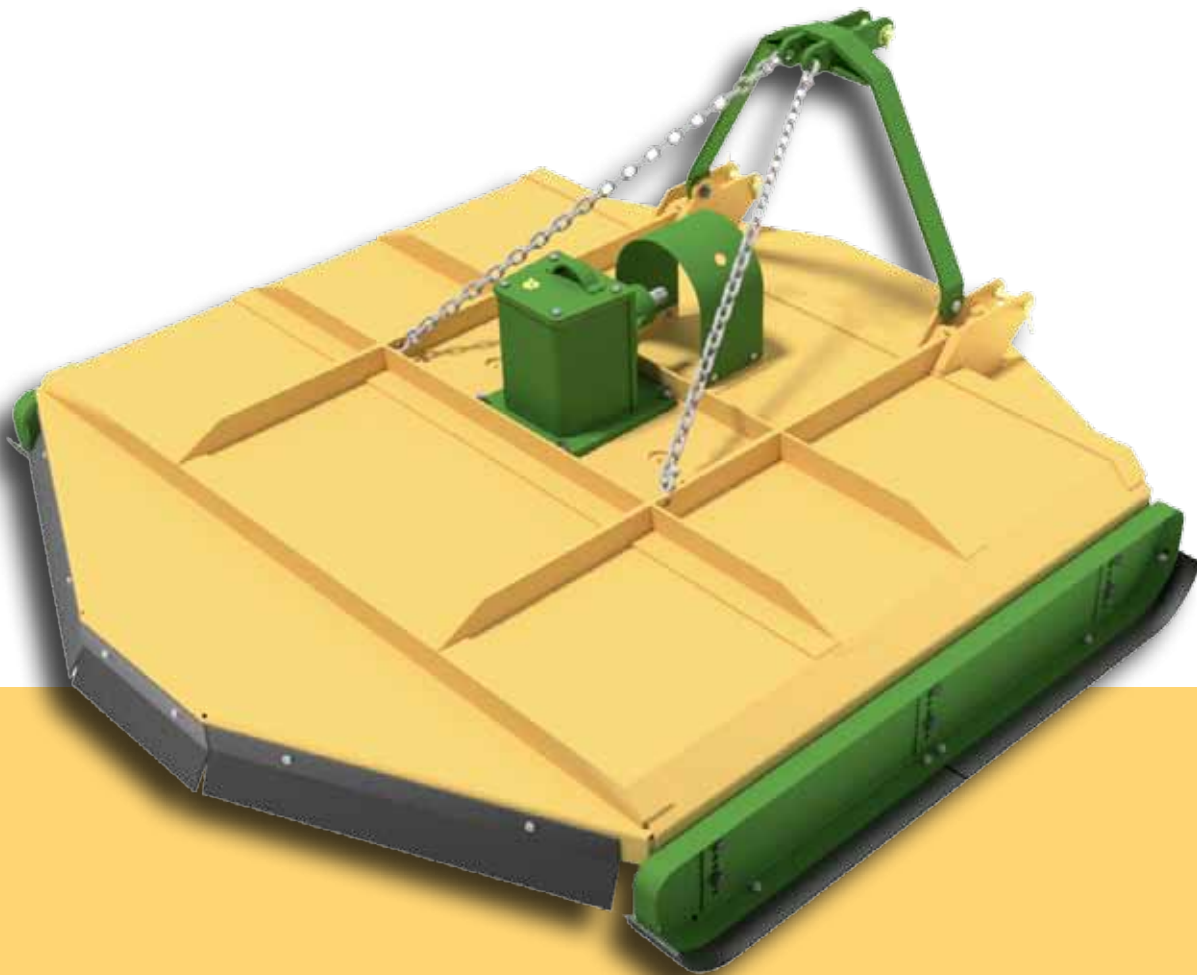




OPERATORS MANUAL / OPERATEURSHANDLEIDING

# Fieldmulcher



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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

M8413

Onderdeelnummer

Version

1

Weergawe

Date of publication

2017/06/29

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



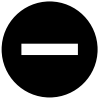
Ons by Falcon wens jou geluk met die aankoop van jou Falcon-implement, wat ons as die beste beskikbare werktuig in sy soort beskou.

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.

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.

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.

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.

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!

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).

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.

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.

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.

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.

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.

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 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!

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 (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.

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 Fieldmulcher enables users to adopt regular and efficient pasture maintenance programs.

This specialised rotary cutter cuts, mulches and spreads cut material evenly over the entire working width. These attributes encourage rapid, high-quality re-growth of most pasture grasses.

The Falcon Fieldmulcher is capable of processing a wide range of materials, including rye grass which is often introduced in periods of reduced kikuyu growth.

The range consists of three models of widths 1.5, 1.8 and 2.0m and suitable for tractors from 45 to 80kW.

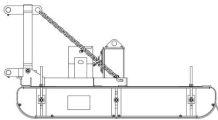
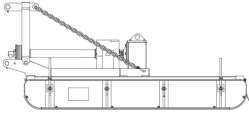
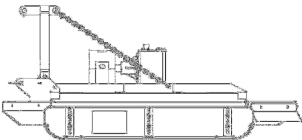
## PRODUKREEKS

Die Falcon Fieldmulcher stel gebruikers in staat om gereelde en doeltreffende weidingsinstandhouding-programme aan te neem.

Hierdie gespesialiseerde snyer sny, mulch en versprei gesnyde materiaal eweredig oor die hele werkswydte. Hierdie eienskappe moedig vinnige, hoë-gehalte hergroei van die meeste weiding grasse aan.

Die Falcon Fieldmulcher is in staat om 'n verskeidenheid van weiding grasse te bewerk, insluitend rog grasse wat voor kom in tydperke van verminderde kikoejoe groei.

Die reeks bestaan uit drie modelle met breedtes van 1.5, 1.8 en 2.0m en is geskik vir trekkers tussen 45 en 80kW.

Profile	Model/ (Part No.)	Blades/ Spindles (qty)	Working Width (mm)	W x L (mm)		Mass (kg)	Power, Max. (kW)
	F50-150FM (A0007)	4 (x1)	1500	1760	1750	421	45 - 65
	F50-180FM (A0043)	4 (x1)	1800	2060	2200	580	45 - 65
	F80-200FM (A0050)	4 (x1)	2000	2340	2320	720	55 - 80
Profiel	Model/ (Onderdeelnr.)	Lemme/ Stelle (hoev.)	Werkswydte (mm)	B x L (mm)		Massa (kg)	Krag, Maks. (kW)

## INSTALLATION

## INSTALLERING

### Attaching the implement to the tractor

- ⚠ Do not enter the area between the tractor and the implement unless the tractor engine is shut off, handbrake applied and the key is removed from the ignition.
- ⚠ Use only hitch pins and lynchpins 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 transport 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.

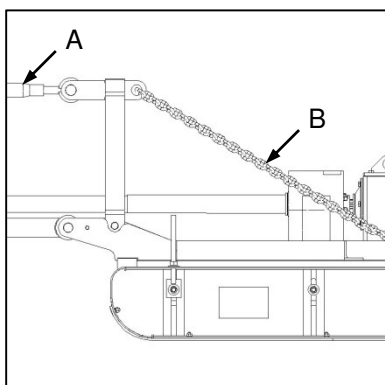


Fig. 1

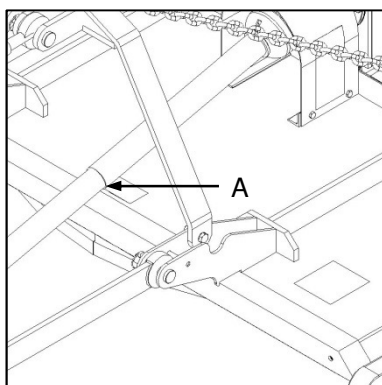


Fig. 2

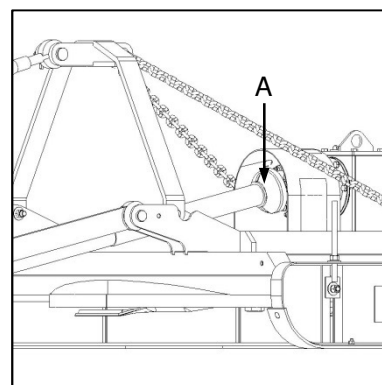


Fig. 3

### 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 only with original spare parts.

### Koppel van die implement aan die trekker

- ⚠ Moenie tussen die trekker en die implement inbeweeg tensy die trekkerenjyn afgeskakel, die handrem opgetrek en die sleutel uit die aansitter verwyder is.
- ⚠ 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-boskabel (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 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.

### Installering van die kragaftakkeras

- ⚠ Verseker behoorlike inskakeling tussen die krag-aftakkeras se koppelstukke en die inset- en leweringssasse aan die implement en trekker.
- ⚠ Verseker voldoende oorvleueling van die kragaftakkeras se buise in die werksposisie.
- ⚠ Hou streng by die voorgeskrewe kragaftakkeras-spoed.
- ⚠ Moenie die implement bedryf sonder dat kragaftakkeras-skerm in posisie en in 'n goeie toestand is nie. Teendraaikettings moet aangeheg wees.
- ⚠ Vervang beskadigde of afwesige kragaftakkeras-skerm-onderdele slegs met oorspronklike onderdele.



- ⚠ Do not approach the rotating PTO driveshaft and avoid loose fitting clothing to prevent entanglement.

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 transport 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. 3-A).

- ⊖ 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.

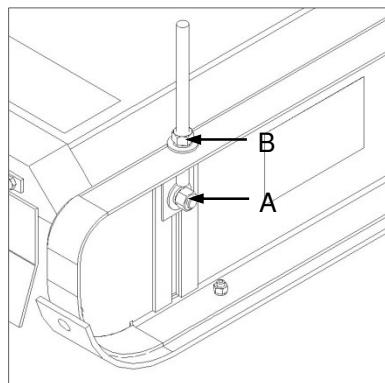


Fig. 4

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

- ⚠ Moenie naby die draaiende kragaftakkeras kom nie en verhoed lospassende klere om verstrengeling te vermy.

Vanweë die talle variasies in trekker en implemente se haakkonfigurasies, sal die kragaftakkeras wat verskaf is, waarskynlik verkort moet word om by die werksafstand tussen die trekker en die implement te pas.

- ✔ Verwys na die vervaardiger se instruksies wat saam met die kragaftakkeras voorsien is voordat die as tot die gepaste lengte gesny word.
- ✔ Nadat 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 daar geen oorcompressie of oorverlenging van die kragaftakkeras plaasvind nie (Fig. 3-A).

- ⊖ Alle kragaftakkeraste wat voorsien word saam met Falcon produkte word verskaf met 'n handleidingsboek (IM-03-2008) wat alle aspekte van installasie, operasionele verbruik, onderhoud en veiligheidsmaatreëls i.v.m. die kragaftakkeras verduidelik. Die dokument vorm deel van die handleiding en sal aangeheg word aan elke kragaftakkeras wat op elke nuwe implement deur Falcon voorsien 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-punthaak hang, en sonder addisionele steun vir die implement nie.

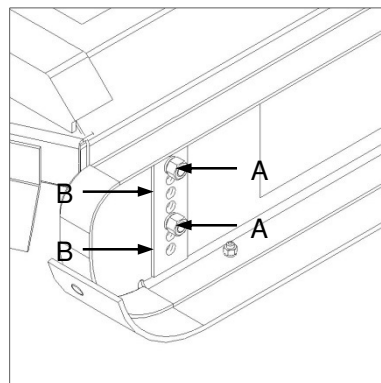


Fig. 5

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

- ✔ To set working height on an F50 model implement, loosen the side panel retaining nuts (Fig. 4-A) and adjust the position of the nut (Fig. 4-B) as required. Ensure that the implement is level by measurement of the adjuster thread length protruding at each adjustment point.
- ✔ To set working height on an F80 model implement, remove the side panel retaining nuts (Fig. 5-A) and relocate the side panel position by selecting an appropriate hole position (Fig. 5-B). Ensure the implement is level by selecting similar hole positions at each adjustment point.

### Lubrication and oil levels

#### ➤ All models

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

- ✔ A dipstick (Fig. 6-A) is provided on the implement gearbox for this purpose. The oil level should fall within the area indicated on the dipstick.

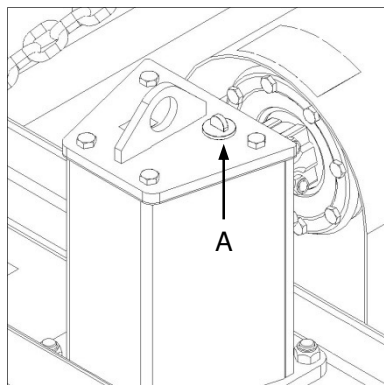


Fig. 6

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

- ✔ Apply grease to the universal joints (Fig. 7-A) and telescopic tubes (Fig. 7-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.

- ✔ Om die werkshoogte van 'n F50 model implement te verstel, laat skiet die sypaneel klemmoere (Fig. 4-A) en verstel die posisie van die moer (Fig. 4-B) soos verlang. Maak seker dat die implement gelyk is deur die lengte van die draad te meet wat uitsteek op elke verstelpunt.
- ✔ Om die werkshoogte van 'n F80 model implement te verstel, verwyder die sypaneel klemmoere (Fig. 5-A) en verskuif die sypaneel posisie deur die geskikte gat posisie te kies (Fig. 5-B). Maak seker dat die implement gelyk is deur soortgelyke gat posisies by elke verstelpunt te kies.

### Smering en olievlakke

#### ➤ Alle modelle

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

- ✔ Die ratkas het 'n peilstok (Fig. 6-A) vir hierdie doel. Die olievlak moet binne die perke val wat op die peilstok aangedui word.

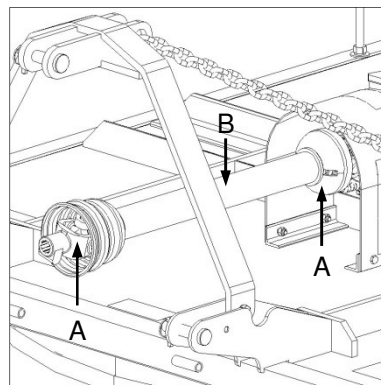


Fig. 7

Verseker dat die kragtakkeras behoorlik gesmeer is voordat die implement gebruik word.

- ✔ Ghries die kruiskoppelings (Fig. 7-A) en teleskopiese buise (Fig. 7-B) van die kragtakkeras.
  - ✔ Verwys vir verdere inligting na die kragtakkeras se vervaardigershandboek wat saam met die implement voorsien is.
- ⊖ Vir smering vereistes, verwys na INSTANDHOUDING, Tabel 2, Smering Vereistes.

## 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.

- ➊ 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.
- ➋ Refer also to operational information relevant to the tractor concerned, including handbooks, operators 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 adjustment.
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, 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.
- ⚠ Be sure to operate the implement only at the specified PTO input speed.
- ⚠ Do not approach the rotating PTO shaft and avoid loose

## WERKING

### Algemeen

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

- ➊ Toepaslike regulasies sluit in, maar is nie beperk tot, die Suid-Afrikaanse Wet op Beroepsgesondheid en Veiligheid nr. 85 van 1993 en die Suid-Afrikaanse Wet op Nasionale Padverkeer nr. 93 van 1996 nie.
- ➋ Verwys ook na tersaaklike bedryfsinligting oor die betrokke trekker, insluitend handboeke, operateurs-handleidings, 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 obstrukties 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 die implement benader, of toelaat dat enigiemand anders dit doen, tensy die implement op die grond laat sak is, die trekkerenjin afgeskakel is, die handrem opgetrek en die implement se snymeganisme heeltemal tot stilstand gekom het nie.
- ⚠ Toeskouers moet aktief ontmoedig word. Snywerk moet onmiddellik gestaak word as enige persoon die werksgebied benader of dit betree.
- ⚠ Verseker dat die implement slegs teen die gespesifiseerde kragaftakkerasinsetspoed bedryf word.
- ⚠ Moenie die draaiende kragaftakkeras nader nie en

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 implement is intended mainly for use in pastures to provide a combination of processes with beneficial results.

- ✔ Clean topping of grazed areas, which promotes efficient material re-growth.
- ✔ Mulching and dispersion of animal excrement and other residues.

It is equipped with a unique system of scrolls and baffles to accomplish these tasks (Fig. 1).

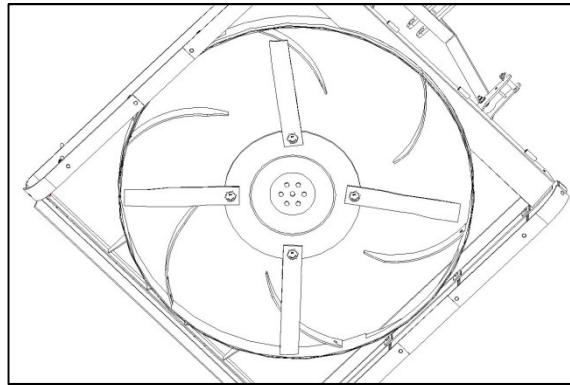


Fig. 1

- ⊖ To ensure efficient mulching and to prevent excessive fuel consumption, scrolls and baffles should be regularly checked for clogging, blockages and damage.

Wherever possible, cutting of pastures should be undertaken as often as circumstances and growth programs might permit. This will reduce the volume and density of materials being processed on each occasion and which will, in general, have the effect of extending cutting gear and blade life as well as the overall lifespan of the implement.

- ⊖ Due to the large variation in material properties and operating conditions, the actual capability of the implement should be established by test, and in consultation with an authorised Falcon Dealer.

### 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 engaged.

- ✔ Start the tractor with the implement suspended on the tractor 3-point hitch.
- ✔ Lower the implement so that blades are just clear of

verhoed verstregeling deur lospassende klere te vermy.

- ⊖ Versuim om die implement teen die gespesifiseerde kragaftakkerasinspoed te bedryf kan onveilige bedryfstoestande skep, en ook strukturele en meganiese onklaarraking veroorsaak wat nie deur die waarborg gedek word nie.

Die implement word hoofsaaklik in weidings gebruik met 'n kombinasie van prosesse wat voordelige resultate lewer.

- ✔ Skoon afsny van beweidde areas wat doeltreffende hergroei van materiaal bevorder.
- ✔ Deklaagbewerking en die eweredige verspreiding van snysels en diere mis.

Dit is toegerus met 'n unieke sisteem van krul en terugslagplate om hierdie take uit te voer (Fig. 1).

- ⊖ Om doeltreffende mulch te verseker en om oormatige brandstofverbruik te verhoed, moet krul en terugslagplate gereeld nagegaan word vir verstopping, blokkasies en skade.

Waar moontlik, moet die sny van weidings so dikwels as wat omstandighede en groei programme dit toelaat, onderneem word. Dit sal die volume en digtheid van die materiaalverwerking elke keer verminder en sal, oor die algemeen, die snymeganisme en lem lewe, sowel as die algehele leeftyd van die implement, verleng.

- ⊖ Weens die groot wisseling in materiaaleienskappe en bedryfstoestande moet die eintlike vermoë van die implement deur toetsing bepaal word, en in oorleg met 'n gemagtigde Falcon-handelaar.

### 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 trekkerenjin aan met die implement wat aan die 3-punt-haak hang.
- ✔ Laat die implement sak totdat die lemme net bokant die

the material to be cut and engage the tractor PTO at idle 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.
- ✔ Place the tractor in a low gear and begin cutting.
  
- ⊖ Unless otherwise indicated, the specified implement PTO input speed shall be 540r/min.
- ⊖ On tractors with an "economy" PTO drive option (indicated as 540E on the tractor tachometer) refer to the tractor operators manual in selecting the relevant PTO gearbox ratio on the tractor to maintain the specified implement PTO input speed.

#### Controlling the cutting process.

- ✔ Tractor engine speed must be pre-set to continuously provide the specified PTO input speed, while forward speed should be controlled by an appropriate gear selection.
- ✔ When cornering or turning at the headland, should it be necessary for tractor forward speed to be reduced, the PTO drive should be disengaged and re-engaged prior to the next cutting pass.

#### 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.

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 werkspesie.
- ✔ Sit die trekker in 'n lae rat en begin sny.
  
- ⊖ Behalwe as anders aangedui, is die gespesifiseerde implement se kragaftakkerinsetspoed 540r/min.
- ⊖ By trekkers met 'n "ekonomie"-kragaftakker-dryfopsie (aangedui as 540E op die trekker se toereteller) verwys na die trekkerbestuurder se handleiding vir die kies van die tersaaklike kragaftakkerinsetspoed om die gespesifiseerde implement se kragaftakkerinsetspoed te handhaaf.

#### Beheer van die snyproses.

- ✔ Trekkerenjinspoed moet vooraf gestel word om die vereiste kragaftakkerinsetspoed konstant te hou, terwyl vorentoe spoed deur gepaste ratseleksie beheer moet word.
- ✔ Wanneer daar gedraai of by die wenakker omgedraai word en dit nodig is om die trekker se spoed te verminder, ontkoppel die trekker se kragaftakker en herkoppel dit voor die volgende omgaanslag.

#### 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.

**Routine maintenance**

- ⚠ Do not perform maintenance or any other work on the implement unless the tractor engine is shut off, handbrake applied and the key 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, 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 gearbox oil levels and replenish as necessary.
- ✔ Lubricate PTO shaft UV joints and telescopic tubes and inspect for evidence of wear.
- ⊖ For lubrication requirements, refer to MAINTENANCE, Table 2, Lubrication.
- ✔ Confirm proper operation of PTO friction clutch as described elsewhere in this chapter.

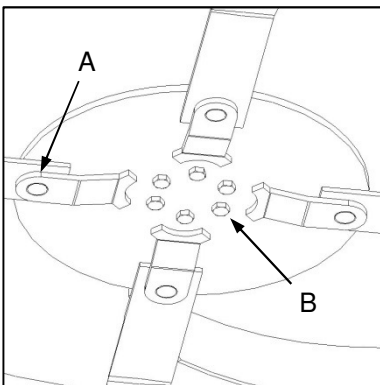


Fig. 1

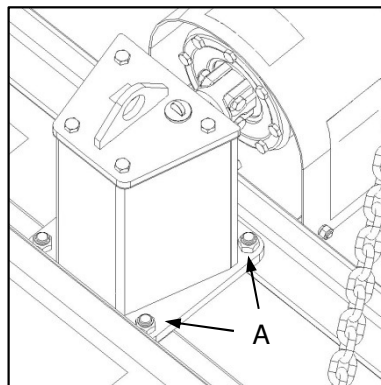


Fig. 2

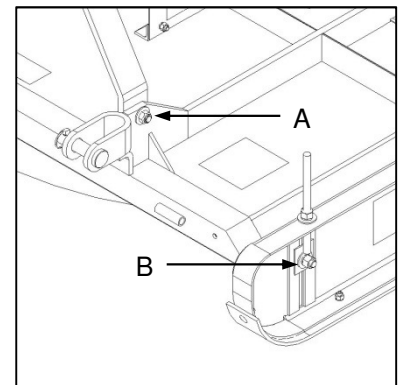


Fig. 3

- ✔ Check all fasteners for tightness. This includes special attention to safety-critical fasteners such as blade bolts and nuts (Fig. 1-A), cutting gear mounting bolts (Fig. 1-

**Roetine-instandhouding**

- ⚠ Moenie instandhouding- of enige ander werk aan die implement doen tensy die trekkerenjin afgeskakel, die handrem opgetrek en die sleutel uit die aansitterpunt 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 onderdele-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**

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

- ✔ Gaan ratkasolievlakke na en vul aan soos benodig.
- ✔ Ghries kragtakkeras-kruiskoppings en teleskopiese buise en inspekteer vir tekens van slytasie.
- ⊖ Vir smering vereistes, verwys na INSTANDHOUDING, Tabel 2, Smering Vereistes.
- ✔ Bevestig behoorlike werking van die kragtakkeras-wrywingkoppelaar soos elders in dié hoofstuk beskryf.

- ✔ Verseker dat alle hegstukke vas is. Dit sluit in spesiale aandag aan veiligheidskritieke hegstukke soos lemboute en -moere (Fig. 1-A), snymeganisme

B), gearbox mounting bolts (Fig. 2-A), topmast mounting and pivot bolts (Fig. 3-A) and side panel retaining bolts (Fig. 3-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.
- ✔ Inspect all mounting pins, chains, shackles and other 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.

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

monteerboutte (Fig. 1-B), ratkas monteerboutte (Fig. 2-A), topmasmonteer- en -spilboutte (Fig. 3-A) en sypaneel monteerboutte (Fig. 3-B).

- ✔ Inspekteer lemme vir tekens van slytasie en slyp of vervang indien nodig. Wanneer met die hand geslyp word, verseker dat die skerp gemaakte lemme eenders lyk en dieselfde weeg om ongebalanseerde rotasie te voorkom.
- ✔ Verseker dat alle skutplate en ander veiligheidstoestelle in posisie is, behoorlik vas en in 'n goeie toestand is.
- ✔ Gaan alle monteerpenne, kettings, penskakels en 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.

- ⊖ 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

Word ten minste elke 40 uur in tye van deurlopende gebruik uitgevoer. Anders na elke geleentheid wat die implement gebruik is, of voor langtermynberging (langer as 1 maand).

- ✔ Verwyder alle vuiligheid van die implement, veral onder die dek. Drukspuitskoonmaak moet versigtig gedoen word, veral naby seëls, luggate, ghriespunte en kragaftakkeras-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 olievakke in die implement nagegaan en alle ghriespunte deeglik gesmeer word.
- ✔ Stoor die implement in 'n droë, skoon, weerbestande plek.

#### Kragaftakkeraswrywingkoppelaar inspeksie en verstelling

- ⚠ Die wrywingkoppelaar aan hierdie produk is 'n wringkragebeperkende toestel. Dit is 'n integrale deel van die kragaftakkeras en is ontwerp om die implement sowel as die trekker se kragaftakkeras-dryfstelle en transmissie te beskerm.
- ⚠ Onbehoorlike bedryf, instandhouding of verstelling van die kragaftakkeras se wrywingkoppelaar kan tot skade lei wat nie deur die waarborg gedek word nie.
- ⚠ In die instruksies wat volg is onderdele waarna verwys word, streng oorspronklike Falcon-onderdele, soos weerspieël in die onderdeellyste wat elders in hierdie handleiding verskyn.

Proper operation of the PTO driveshaft friction clutch must be confirmed prior 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.

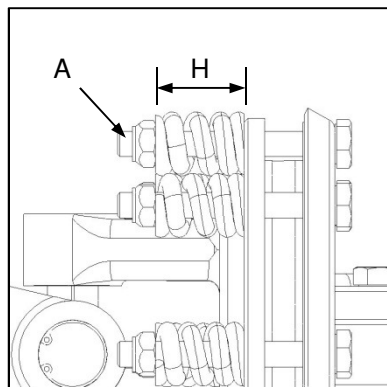


Fig. 4

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.
- ✔ Discoloration or blistering of painted surfaces of the friction clutch housing (Fig. 5-B).
- ✔ The friction clutch housing feels significantly hotter than the surface of the gearbox casing (Fig. 5-A).

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

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-A) to set the compressed spring length (Fig. 4-H).

- ➔ All models: Friction clutch Type F2 by 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

Behoorlike bedryf van die kragaftakkeraswrywingkoppelaar moet bevestig word voor gebruik van die implement, veral na langtermynberging waar roes en onbruik 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 te maak van oorspronklike vervangingsonderdele.

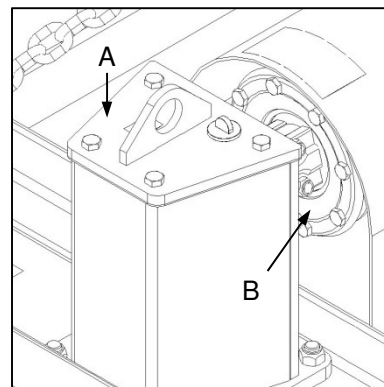


Fig. 5

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

- ✔ Tekens van rook, brandreuke of oorblyfsels.
- ✔ Verkleuring of blaasvorming van geverfde oppervlakke van die wrywingkoppelaarmhulsel (Fig. 5-B).
- ✔ Die wrywingkoppelaarmhulsel voel beduidend warmer as die ratkasomhulsel (Fig. 5-A).

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

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. 4-A) om die saamgeperste veer se lengte te stel (Fig. 4-H).

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

### Lemvervang

- ⚠ Die snymeganisme aan hierdie implemente draai teen 'n uiters hoë spoed. Gebrekkige instandhouding of herstelwerk kan tot brekasies lei wat ernstige skade,



damage, injury or death.

- ⚠ Use only original Falcon parts of the correct specification and grade for installation of the implement 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, 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. 6-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 disk.
- ✔ Check blade disks for distortion prior to 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 disk. In the event of any observed defect do NOT attempt a repair, but provide immediate replacement of the defective disk.

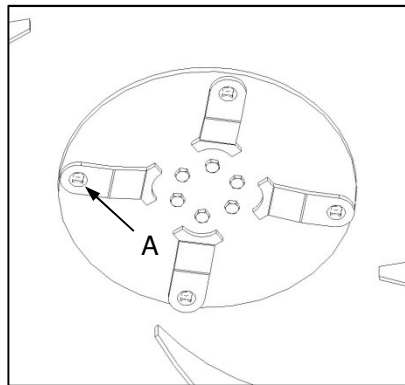


Fig. 6

- ✔ 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. 7).
- ✔ 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.

beserings en selfs dood kan veroorsaak.

- ⚠ Gebruik slegs oorspronklike Falcon-onderdele met die korrekte spesifikasie en graad vir die installering van die snymeganisme. Hoëspoedbrekasing van draaiende onderdele kan ernstige skade, beserings of dood veroorsaak.

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

- ✔ Vervang al die betrokke monteringsonderdele wanneer nuwe lemme aangebring word. Dit moet lemboute, -busse en -moere insluit.
- ✔ Gaan lemmonteringsgate (Fig. 6-A) na vir tekens van slytasie, rekking of breuke. In die geval van enige waargenome defek, moet NIE probeer om dit herstel nie, maar vervang die defekte skyf onmiddellik.
- ✔ Gaan die lemskyf na vir verwringing voordat nuwe lemme aangebring word. Laat die implement sonder die lemme teen 'n lae spoed 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.

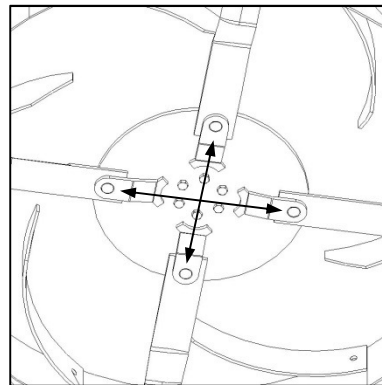


Fig. 7

- ✔ Weeg lemme voor hulle aangebring word. Lemme met die naaste eenderse massas moet teenoor mekaar op dieselfde snymeganismonterings aangebring word om balans te handhaaf (Fig. 7).
- ✔ Na installering van nuwe snymeganisme-onderdele, kry die implement op werkspoed vir 'n visuele inspeksie vir oormatige vibrasie.
- ⊖ Oorsake van oormatige vibrasie moet vasgestel 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 Lubrication/ Smering	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	6.0	9.0	11.0	13.0	17.0	15.0	19.0
M8	12.0	15.0	22.0	28.0	32.0	40.0	37.0	47.0
M10	23.0	29.0	43.0	55.0	63.0	80.0	75.0	95.0
M12	40.0	50.0	75.0	95.0	110.0	140.0	130.0	165.0
M14	63.0	80.0	120.0	150.0	175.0	225.0	205.0	260.0
M16	100.0	125.0	190.0	240.0	275.0	350.0	320.0	400.0
M18	135.0	175.0	260.0	330.0	375.0	475.0	440.0	560.0
M20	190.0	240.0	375.0	475.0	530.0	675.0	625.0	800.0
M22	260.0	330.0	510.0	650.0	725.0	925.0	850.0	1075.0
M24	330.0	425.0	650.0	825.0	925.0	1150.0	1075.0	1350.0
M27	490.0	625.0	950.0	1200.0	1350.0	1700.0	1600.0	2000.0
M30	675.0	850.0	1300.0	1650.0	1850.0	2300.0	2150.0	2700.0
M33	800.0	1150.0	1750.0	2200.0	2500.0	3150.0	2900.0	3700.0
M36	1150.0	1450.0	2250.0	2850.0	3200.0	4050.0	3750.0	4750.0

Table / Tabel 2

## Lubrication Requirements / Smeringsvereistes

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

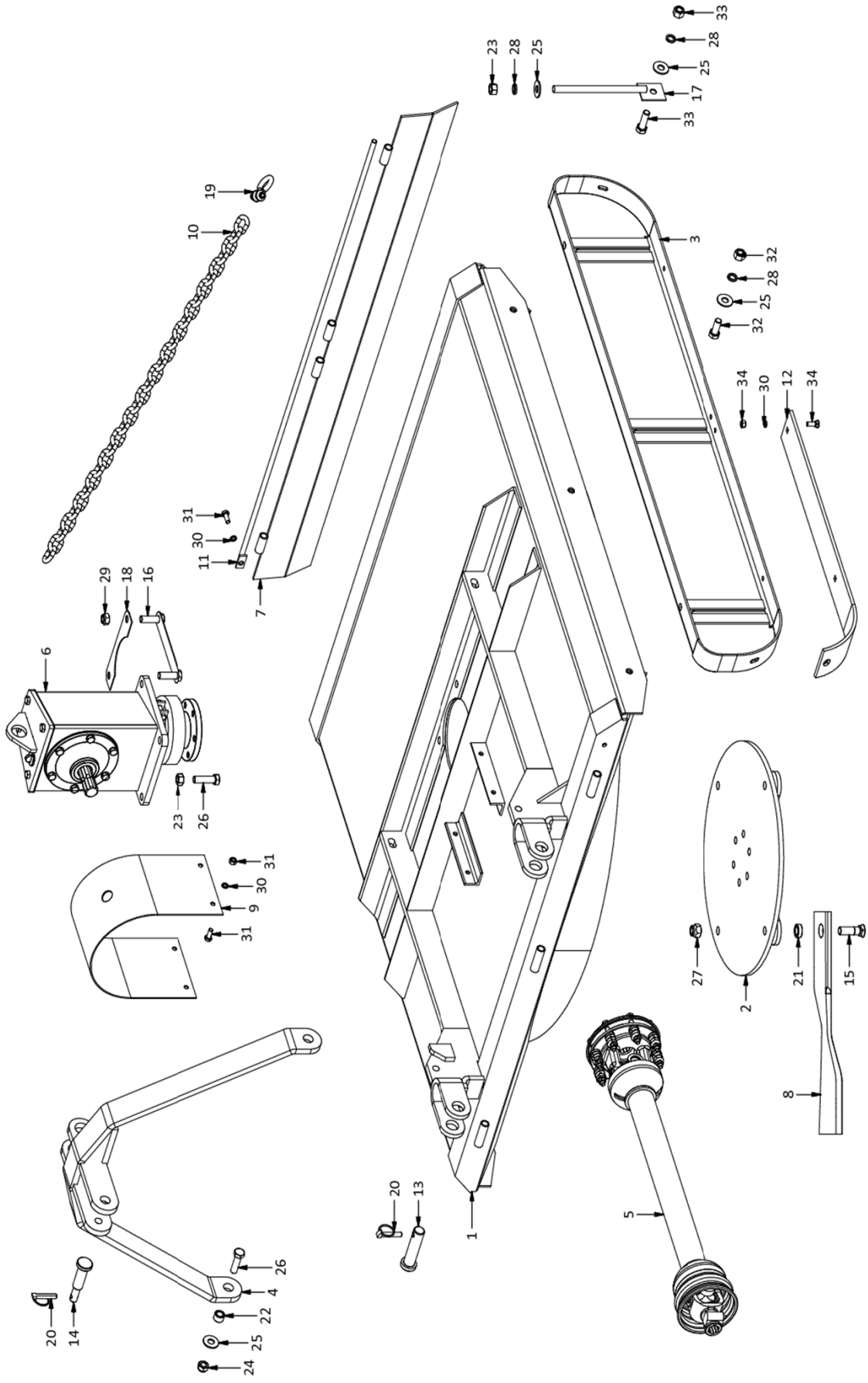
Die tafel onder (Foutopsporingsgids - AFR) bied riglyne vir die oplos van probleme wat algemeen voorkom. As 'n fout nie reggestel kan word nie, moet verdere hulp van 'n gemagtigde Falcon-handelaar bekom word.

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 boutte 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

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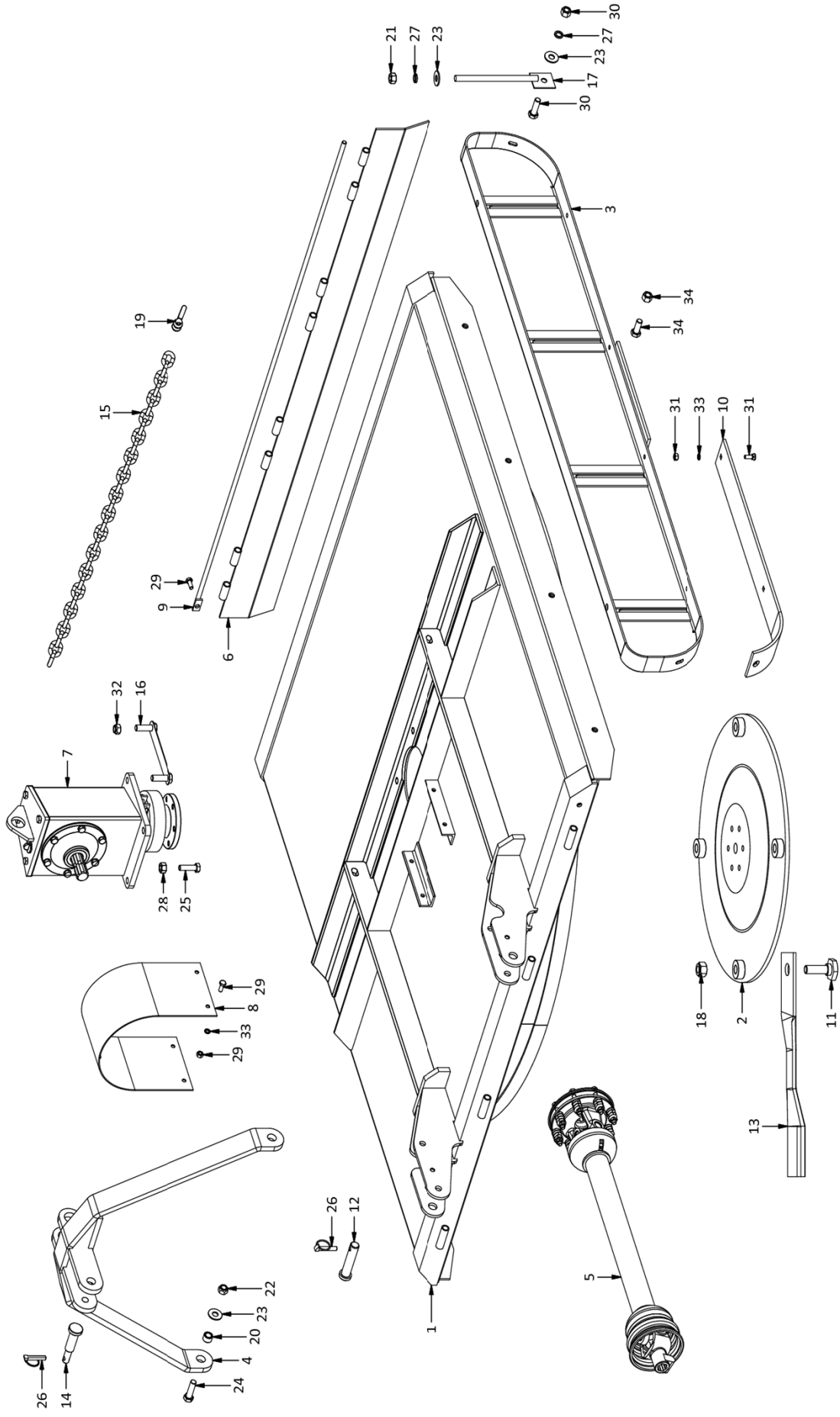
F50-150 Fieldmulcher  
A0007



**F50-150 Fieldmulcher  
A0007**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0509	Deck Painted 150	1	41	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
2	H1127	Disc Round 50/120 BM & 50/150 GM	1	42	M3171	Decal Baie Belangrik Alvorens U Die	1
3	H0419	Skid Plate Fieldmulcher	2	43	M3174	Decal IMPORTANT WHEN LOADING.....	1
4	H0603	Top mast Cat 1/2	1	44	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
5	T600960CE112F22	PTO shaft T60 960 112 F22	1	45	M3178	Decal Blade/Lem	1
6	H1300	Gearbox 1:1.81 F50 Falcon	1	46	M3187	Decal ATTENTION if your tractor is ....	1
7	H0202	Flap Rear 1.5m	1				
8	H1527	Blade 10x100x530mm 32.5 CL	4				
9	H0702	PTO guard	1				
10	R0611	Chain Gr5 10mm 2T	1				
11	H0102	Rod Flap 1.5m	1				
12	H0422	Skid Runner 8x90x86.5	4				
13	H0643	Pin Bottom link Cat2	2				
14	H0633	Pin Top link Cat 1/2	1				
15	M51963	Blade bolt 3/4UNCx2-1/2 CSK HT	4				
16	H5357	Bolt set M16Fx55-2 F50	2				
17	H0440FM	Height Adjuster Roller (Long Series)	4				
18	M0623	Spacer Gearbox 2mm	1				
19	M0622	Shackle 7/16in 1.5T	2				
20	FLP11	Lynchpin 11mm	3				
21	H71911	Bush Hard 19x32x11	4				
22	H71617	Bush 16x25x17	2				
23	M31612	Nut M16	10				
24	M61616	Nut Nyloc M16	2				
25	M81603	Washer M16x40x3	12				
26	M41655	Bolt M16x55 HT	8				
27	M61920	Nut Nyloc 3/4UNC	4				
28	M91604	Washer Spring M16	10				
29	M61616F	Nut Nyloc M16F	4				
30	M91002	Washer Spring M10	17				
31	M11025	Bolt + Nut M10x25 HT	9				
32	M11640	Bolt + Nut M16x40 HT	4				
33	M11650	Bolt & Nut M16 x 50	8				
34	M21030	Plough bolt + Nut M10x30 HT	24				
35	M3176	Decal Brid FALCON Meduim	1				
36	M3003	Serial plate Metal FALCON	1				
37	M3124	Decal F50/150FM Fieldmulcher	1				
38	M3172	Decal DANGER STAY AWAY - ROTATING.....	1				
39	M3173	Decal Lifting hook	1				
40	M3169	Decal Bird FALCON Small	2				

F50-180 Fieldmulcher  
A0043

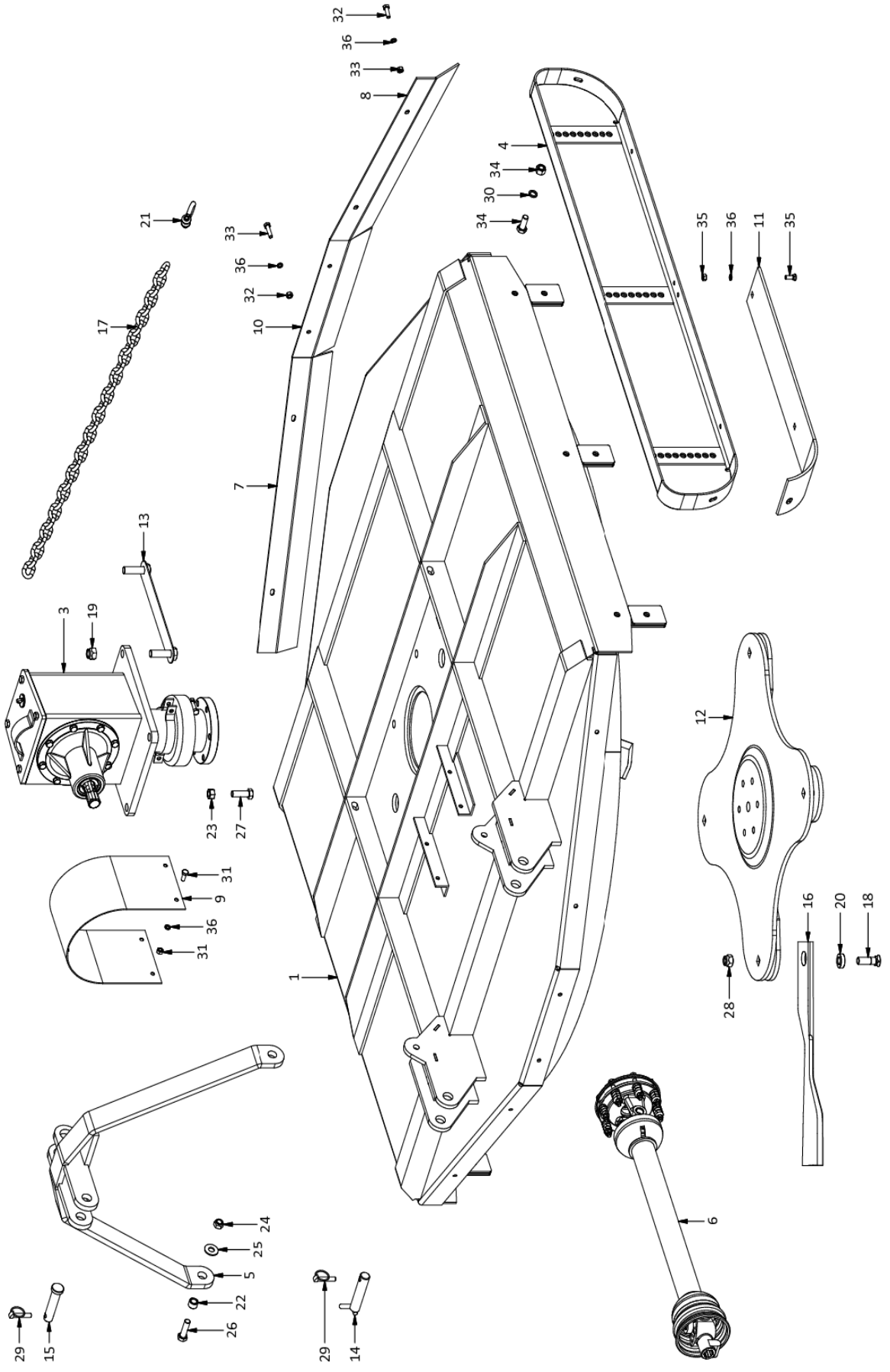


**F50-180 Fieldmulcher  
A0043**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0553	Deck Painted 180	1	41	M3169	Decal Bird FALCON Small	2
2	H1256	Disk 4-M22 D650	1	42	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
3	H0456	Side Runner	2	43	M3171	Decal Baie Belangrik Alvorens U Die	1
4	H0603	Top mast Cat 1/2	1	44	M3174	Decal IMPORTANT WHEN LOADING.....	1
5	T600960CE112F22	PTO shaft T60 960 112 F22	1	45	M3178	Decal Blade/Lem	1
6	H0203	Flap Rear 1.8m	1	46	M3187	Decal ATTENTION if your tractor is ....	1
7	H1300	Gearbox 1:1.81 F50 Falcon	1				
8	H0702	PTO guard	1				
9	H0103	Rod Flap 1.8m	1				
10	H0422	Skid Runner 8x90x86.5	4				
11	M52275	Blade bolt M22-10.9 Special Black Falcon	4				
12	H0632	Pin Top link Cat2	2				
13	H1523EXT	Blade 10x100x600mm 32.5 Mulcher	4				
14	H0633	Pin Top link Cat 1/2	1				
15	R0611	Chain Gr5 10mm 2T	1				
16	H5357	Bolt set M16Fx55-2 F50	2				
17	H0440FM	Height Adjuster Roller (Long Series)	4				
18	M62222	Nut Nyloc M22	4				
19	M0622	Shackle 7/16in 1.5T	2				
20	H71617	Bush 16x25x17	2				
21	M31612	Nut M16	4				
22	M61616	Nut Nyloc M16	2				
23	M81603	Washer M16x40x3	14				
24	M41655	Bolt M16x55 HT	2				
25	M41450	Bolt M14x50 HT	6				
26	FLP11	Lynchpin 11mm	3				
27	M91604	Washer Spring M16	12				
28	M31410	Nut M14 HT	6				
29	M11025	Bolt + Nut M10x25 HT	9				
30	M11650	Bolt & Nut M16 x 50	8				
31	M21030	Plough bolt + Nut M10x30 HT	24				
32	M61616F	Nut Nyloc M16F	4				
33	M91002	Washer Spring M10	17				
34	M11640	Bolt + Nut M16x40 HT	8				
35	M3176	Decal Brid FALCON Meduim	1				
36	M3003	Serial plate Metal FALCON	1				
37	M3155	Decal F50/180FM Fieldmulcher	1				
38	M3172	Decal DANGER STAY AWAY - ROTATING.....	1				
39	M3173	Decal Lifting hook	1				
40	M3175	Decal PROUD TO BE SOUTH AFRICAN	1				



# F80-200 Fieldmulcher A0050

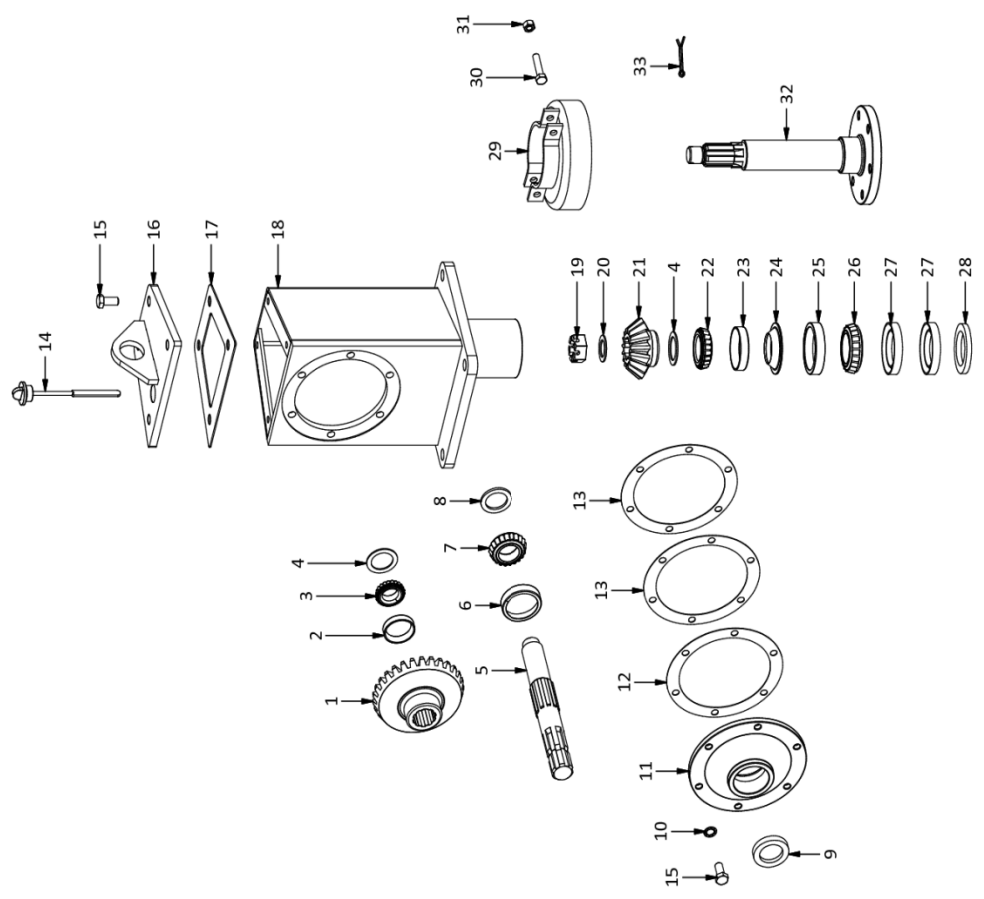


**F80-200 Fieldmulcher  
A0050**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0554	Deck Painted A0050	1	41	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
2	H1276	Disc Petal 4-PCD830	1	42	M3173	Decal Lifting hook	1
3	H1400A	Gearbox F80	1	43	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
4	H0404	Side panel	2	44	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
5	H0602	Top mast Cat2	1	45	M3171	Decal Baie Belangrik Alvorens U Die	1
6	T600960CE112F22	PTO shaft T60 960 112 F22	1	46	M3174	Decal IMPORTANT WHEN LOADING.....	1
7	H0213	Guard	1	47	M3187	Decal ATTENTION If your tractor is ....	1
8	H0214	Guard	1				
9	H0702	PTO guard	1				
10	H0215	Guard	1				
11	H0418	Skid runner 8x130 RH	2				
12	H0428	Skid runner 8x130 LH	2				
13	H1448	Ganged bolts 3/4UNFx2-1/2	2				
14	H7115	Pin Btm link Cat2-125	2				
15	H0632	Pin Top link Cat2	1				
16	H1524	Blade 10x100x600-38.5	4				
17	R0611	Chain GR5 10.0	1				
18	M51963	Blade bolt 3/4UNCx2-1/2HT CSK	4				
19	M61919	Nut Nyloc 3/4UNF	4				
20	H71912	Bush 19x38x12 Hard	4				
21	M0622	Shackle 7/16in 1.5T	4				
22	H71617	Bush 16x25x17	2				
23	M31612	Nut M16	6				
24	M61616	Nut Nyloc M16	2				
25	M81603	Washer M16x40x3	2				
26	M41655	Bolt M16x55HT	2				
27	M41650	Bolt M16x50HT	6				
28	M61920	Nut Nyloc 3/4UNC	4				
29	FLP11	Lynchpin 11mm	3				
30	M91604	Washer Spring M16	12				
31	M11025	Bolt+nut M10x25HT	8				
32	M11030	Bolt+nut M10x25HT	6				
33	M11040	Bolt+nut M10x25HT	6				
34	M11640	Bolt+nut M16x40HT	24				
35	M21030	Plough bolt+nut M10x30HT	24				
36	M91002	Washer Spring M10	22				
37	M3176	Decal Brid FALCON Medium	2				
38	M3003	Serial plate	1				
39	M3177	Decal F80/200FM Fieldmulcher	1				
40	M3168	Decal Bird FALCON Large	1				

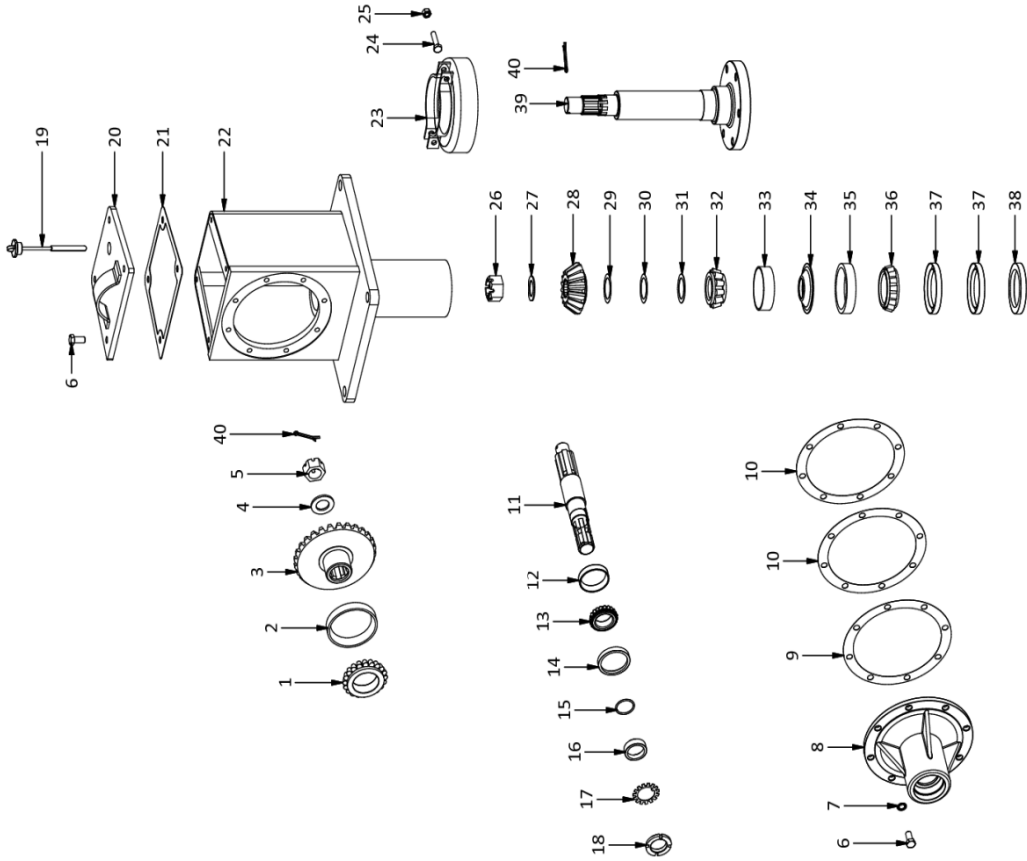
**Gearbox F50  
H1300**

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



**Gearbox F80  
H1400A**

Item	Part No.	Description	Qty
1	M1413	Bearing 390	1
2	M1412	Bearing 394A	1
3	H1414	Gear Bevel Z28/z6	1
4	H82802	Washer 29x50x4	1
5	M1415	Nut Slotted 1-1/8in	1
6	M41225	Bolt M12x25HT	12
7	M81201	Washer Star M12	8
8	H1410	Input cover F80	1
9	M1434	Shim Input 0.1 Plastic	A/R
10	M1411	Gasket Input F80	1
11	H1409	Shaft Input 1-3/8 Z6	1
12	M1408	Bearing LM29710	1
13	M1407	Bearing LM29749	1
14	M1404	Seal Lip 187275	1
15	M1406	O-ring 34.5x3.5	1
16	H1405	Seal Lip	1
17	M1403	Washer Tabbed KM06	1
18	H1402	Locknut M36x2.0	1
19	M1439	Plug + Dipstick	1
20	H1420A	Cover Gearbox F80	1
21	M1421A	Gasket Top F80	1
22	H1417A	Housing F80	1
23	H1428	Dust cover	1
24	M41045	Bolt M10x45HT	2
25	M31007	Nut M10	2
26	M1422	Nut Slotted 1-1/4in	1
27	M1446	Washer Hard 32x50x2	1
28	H1423	Gear Beval Z15/z10	1
29	M1441	Shim 38x60x0.5	A/R
30	M1440	Shim 38x60x0.25	A/R
31	M1442	Shim 38x60x1.0	A/R
32	M1424	Bearing 3577	1
33	M1425	Bearing 3525	1
34	H1429	Retainer Domed	1
35	M1430	Bearing 28920	1
36	M1431	Bearing 28985	1
37	M1432	Seal Lip 300400	2
38	M1433	Seal Felt 75x100x12	1
39	H1426	Shaft Output F80	1
40	M1416	Split pin B5x60	2





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