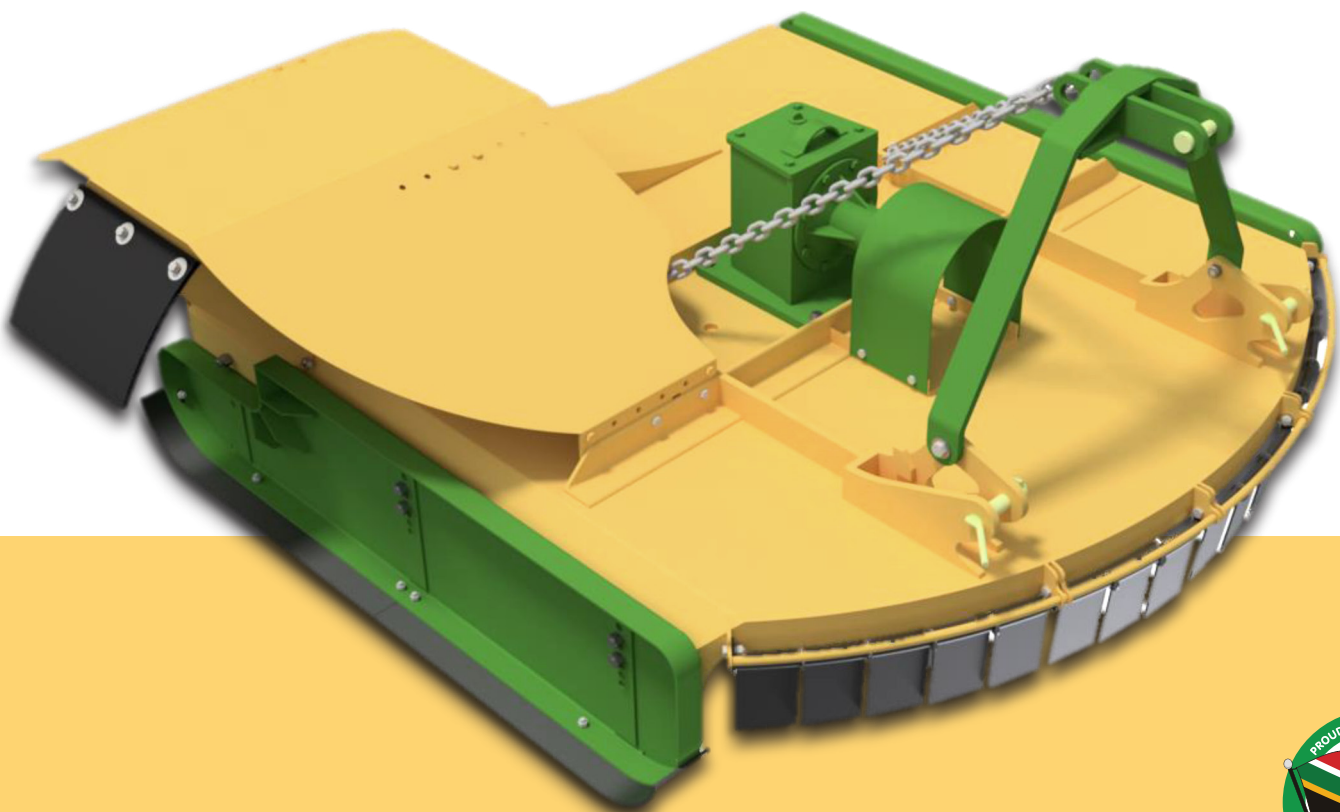




OPERATORS MANUAL / OPERATEURSHANDLEIDING

Side Discharge Mulcher



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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 M8414
Version 1
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FOREWORD



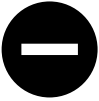
We at Falcon commend and congratulate you on the purchase of your Falcon implement, which we consider to be the best of its type available.

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

Symbols used in this document

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

VOORWOORD

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, afgelaai word.

Simbole wat in hierdie dokument gebruik word

COMPANY PROFILE

Falcon Agricultural Equipment (Pty) Ltd is an owner-managed business and 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 is a recognised BBBEE contributor and our skilled labour force is a dedicated team of whom we are proud.

Our primary market is the agricultural sector, with niche efforts into the industrial and turf implement market. We distribute our products through more than 350 authorised dealers countrywide, as well as across our borders into other African countries.

We manufacture the Falcon and Locust ranges of implements and our on-going programme 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 cutters. 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!

The Locust range of economy implements is particularly suited to smallholders, more price-sensitive buyers and emerging farmers. These implements, which include slashers and roller mowers, work well with older or lower-powered tractors.

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), the Votex shredders and mowers, including reach mowers (from the Netherlands), and the heavy-duty Woods Batwing rotary cutters (from USA).

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.

MAATSKAPPYPROFIEL

Falcon Agricultural Equipment (Edms.) Bpk. is 'n eienaar-bestuurde besigheid en 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 boerderijgebied met 'n vooraanstaande landboukollege naby. Falcon is 'n erkende BBBEE-bydraer en ons geskoolde werksmag is 'n toegewyde span op wie ons trots is.

Ons hoofmark is die landbousektor, met nisverkope in die nywerheids- en grasbaanimplement-markte. Ons versprei ons produkte deur meer as 350 gemagtigde handelaars landwyd, asook buite ons grense in ander Afrika-lande.

Ons vervaardig die Falcon- en Locust-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, kapploeë en vleëlsnyers 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!

Die Locust-reeks ekonomiese implemente is veral geskik vir kleinboere, meer prysgevoelige kopers en ontlukende boere. Hierdie implemente, wat wentelsnyers en rollersnyers insluit, werk goed saam met ouer of minder kragtige trekkers.

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), die Votex-stokkiekappers en -grassnyers, insluitend reiksnyers (uit Nederland), en die swaardiens Woods Batwing-wentelsnyers (uit die VSA).

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 demonstreer.
- 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 vervangings-onderdele 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.

produkeienskap 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
				F60	2y
				F80	3y
		PTO shafts	Imported	All	2y
	OEM parts	Falcon	All	2y	
	Slashers, Dual-spindle Slashers, 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 cutters	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	
Locust	Slashers Rollermowers	Gearboxes	Generic	All	1y
		OEM parts	Falcon	All	1y
Amazone	Spreaders Sprayers Disk/Combo harrows Power harrows Turf equipment	All	Amazone-DE	All	1y
Votex	Shredders	All	Votex-NL	All	1y
Woods	Batwing rotary cutters	All	Woods-USA	All	1y

PRODUCT RANGE

The Falcon Side-Discharge Mulcher enables users to perform a variety of maintenance and production cutting processes on a wide range of materials.

This specialised rotary cutter cuts, mulches and discharges the cut material through an adjustable discharge chute, depositing a row of material to the right-hand side of the tractor's path. These attributes make this implement a popular choice in vineyards and orchards, where the deposited material provides a re-usable mulch at the base of the tree-line.

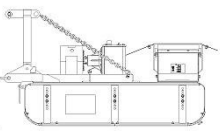
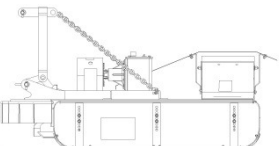
The range consists of two models of widths of 1.5 and 1.8m, suitable for tractors from 45 to 80kW.

PRODUKREEKS

Die Falcon Side-Discharge Mulcher stel gebruikers in staat om verskeie instandhouding- en produksie-snyprosesse op 'n wye verskeidenheid materiale uit te voer.

Hierdie gespesialiseerde wentelsnyer sny en mulch, en stoot dan die verwerkte materiaal deur 'n verstelbare afvoergeut uit wat 'n ry materiaal aan die regterkant van die trekker se pad vorm. Hierdie eienskappe maak hierdie implement 'n gewilde keuse in wingerde en boorde, waar die neergelegde materiaal 'n herbruikbare mulch aan die basis van die boomlyn voorsien.

Die reeks bestaan uit twee modelle van 1.5 en 1.8m, geskik vir trekkers van 45 tot 80kW.

Profile	Model (Part No.)	Blades/ Spindles (qty)	Working width (mm)	W x L (mm)		Mass (kg)	Power, max. (kW)
	F80-150SD (A0007)	6 (x1)	1 500	1 905	1 780	612	45–80
	F80-180SD (A0043)	6 (x1)	1 800	2 150	2 020	680	45–80
Profiel	Model (Onderdeelnr.)	Lemme/ Spille (aantal)	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 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.
- ✔ After attachment to the tractor, lift the implement to an acceptable transporting height and ensure 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.
- ✔ Set the tractor hitch lift arms to a floating position to enable independent movement of the arms during cutting.

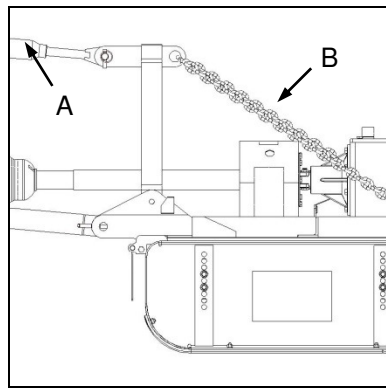


Fig. 1

- ⊖ Note that the F80/150SD model is provided with an alternative hitch offset position. The preferred offset position should be established before attachment to the tractor.

Installing the PTO drive shaft

- ⚠ Ensure proper engagement between the PTO drive shaft couplings and the input and output shafts on the implement and tractor.
- ⚠ Ensure sufficient overlap of the PTO drive shaft tubes at the working position.
- ⚠ Do not exceed the specified PTO drive shaft speed.

Koppel van die implement aan die trekker

- ⚠ Moenie tussen die trekker en die implement inbeweeg tensy die trekkerenjin afgeskakel is, die handrem opgetrek 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.

- ✔ Vetsel die trekker se 3-punt-boskakeel (Fig. 1-A) om genoeg speling in die implement se topmaskettings (Fig. 1-B) te bied om artikulasie van die implement oor ongelyke terrein toe te laat.
- ✔ Nadat dit aan die trekker vasgehaak is, lig die implement tot 'n aanvaarbare vervoerhoogte op en verseker dat daar geen kontak tussen die implement en enige deel van die trekker is nie.
- ✔ Verstel die trekker se 3-punt-haak-stabiliseerderarms om oormatige sywaartse beweging van die implement te verhoed.
- ✔ Stel die trekkerhaak se laerskakelarms in die flotering posisie op om onafhanklike beweging van die arms tydens sny moontlik te maak.

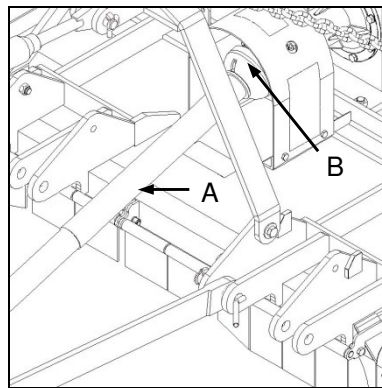


Fig. 2

- ⊖ Let daarop dat die F80/150SD-model oor 'n alternatiewe kontrahaakposisie beskik. Die verkieslike haakposisie moet vasgestel word voordat die implement aangehaak word.

Installering van die kragaftakkeras

- ⚠ Verseker behoorlike inskakeling tussen die kragaftakkeras se koppelstukke en die inset- en leweringsasse aan die implement en trekker.
- ⚠ Verseker voldoende oorvleueling van die kragaftakkeras se buise in die werksposisie.
- ⚠ Hou streng by die voorgeskrewe kragaftakkeras-spoed.

- ⚠ Do not operate the implement without PTO drive shaft 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 drive shaft, 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 drive shaft will have to be cut to suit the operating distance between the tractor and the implement.

- ✔ Before cutting the PTO drive shaft to the appropriate operating length, refer to the manufacturer's instructions supplied with the PTO drive shaft.
 - ✔ Following installation of the PTO drive 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 drive shaft 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 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.

- ⚠ 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.
- ⚠ 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 oorkompressie of oorverlenging van die kragaftakkeras plaasvind nie (Fig. 2-B).
- ⊖ 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.

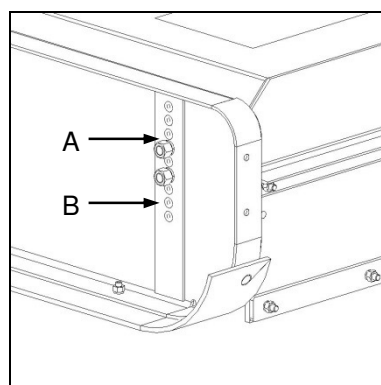


Fig. 3

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

- ✔ To set working height of the implement, remove the side panel retaining nuts (Fig. 3-A) and relocate the side panel position by selecting an appropriate hole (Fig. 3-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 before using 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.

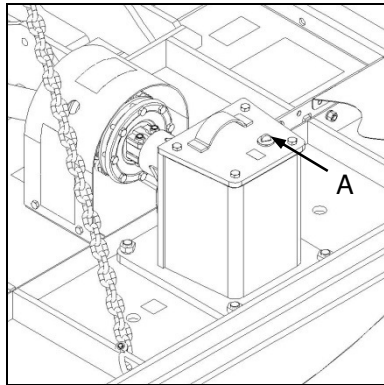


Fig. 4

Ensure that the PTO shaft is properly lubricated before using the implement.

- ✔ Apply grease to the universal joints (Fig. 5-A) and telescopic tubes (Fig. 5-B) of the PTO drive shaft.
- ✔ Refer to the PTO drive shaft manufacturer's handbook supplied with the implement.

- ➔ For lubrication requirements, refer to MAINTENANCE, Table 2, Lubrication Requirements.

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 stel, verwyder die sypaneel klemmoere (Fig. 3-A) en verskuif die sypaneel posisie deur die geskikte gat posisie te kies (Fig. 3-B). Maak seker dat die implement gelyk is deur soortgelyke gat posisies by elke verstelpunt te kies.

Smearing en olievlakke

➤ Alle modelle

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.

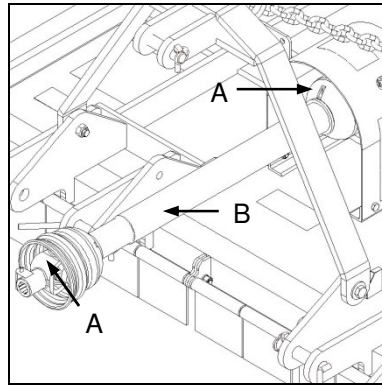


Fig. 5

Verseker dat die kragaftakkeras behoorlik gehries is voor die implement gebruik word.

- ✔ Ghries die kruiskoppelings (Fig. 5-A) en teleskopiese buise (Fig. 5-B) van die kragaftakkeras.
- ✔ Verwys vir verdere inligting na die kragaftakkeras se vervaardigershandboek wat saam met die implement voorsien is.

- ➔ Vir smering vereistes, verwys na INSTANDHOUDING, Tabel 2, Smearing 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.

- ➔ 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, 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.

With mulching and shredding applications (typically involving prunings and other solid materials), proper preparation of the material to be processed will always produce more consistent results and extend the service life of the implement.

- ✔ Identify and discard any material of a diameter in excess of the recommended maximum.
- ✔ Where possible, prunings, branches and other solid materials should be cut as short as practically possible to prevent snagging and blockages.
- ✔ Avoid bifurcated (forked) off-cuts as these are also more likely to snag on the equipment and cause

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 Beroepsgesondheid en Veiligheid nr. 85 van 1993 en die Suid-Afrikaanse Wet op Nasionale Padverkeer nr. 93 van 1996 nie.
- ➔ 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 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.

Met mulch- en kerfaanwendings (tipies waar snoeisels en ander soliede materiale betrokke is) sal behoorlike voorbereiding van die materiaal wat verwerk gaan word, altyd meer konsekwente resultate lewer en die dienslewe van die implement verleng.

- ✔ Identifiseer en verwyder enige materiaal met 'n groter deursnee as die aanbevole maksimum.
- ✔ Waar moontlik moet snoeisels, takke en ander soliede materiale so kort as prakties moontlik gesny word om vashaak en blokkasies te verhoed.
- ✔ Vermy gevurkte snysele, aangesien hulle ook meer waarskynlik aan/in die toerusting sal vashaak en

blockages.

- ✔ Where possible, arrange material in an ordered fashion, parallel to the direction of travel of the implement and within the working width of the implement.
- ✔ As a guide, to prevent snagging and dragging, the stacked height of prepared material should not be higher than the front throat height of the implement.
- ⊖ Due to the large variation in material properties and operating conditions, the actual capability of the implement in the intended application should be established by test, and in consultation with an authorised Falcon Dealer.
- ⊖ The processing of heavier and harder materials will, in general, have the effect of reducing cutting gear and blade life as well as the overall lifespan of the implement.
- ⊖ All recommended material sizes are intended as a guide only.

Operating the implement

- ⚠ Never approach, or allow anyone else to approach, the implement unless the implement has been lowered to the ground, the tractor engine shut off and the handbrake applied, and the implement's 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.
- ⚠ Operate the implement only at the specified PTO shaft 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 Side-Discharge Mulcher is typically used in orchards, vineyards and similar environments where it provides a combination two principal processes:

- Cutting, shredding and mulching of a broad range of materials of variable consistency, size and volume, e.g. previously cut or pruned branches.
- A discharge mechanism which ejects processed material (in the form of reusable mulch) to the right-hand side during cutting.

The implement is equipped with a scroll system (Fig. 1-A) for containment of material during processing, and an adjustable discharge chute and hood to allow controlled ejection of cut material (Fig. 1-B).

blokkasies sal veroorsaak.

- ✔ Waar moontlik, organiseer materiaal op 'n geordende manier, parallel met die werksrigting van die implement en binne die werkswydte daarvan.
- ✔ As riglyn, om vashaak en sleep te verhoed, moet die stapelhoogte van voorbereide materiaal nie hoër as die voorste openinghoogte van die implement wees nie.
- ⊖ Vanweë die groot variasie in materiaaleienskappe en bedryfstoeestand moet die werklike vermoë van die implement per proefneming vasgestel word, en in oorleg met 'n gemagtigde Falcon-handelaar.
- ⊖ Die verwerking van swaarder en harder materiale sal oor die algemeen lei tot 'n korter lewensduur van die snymeganisme en lemme, asook van die implement in sy geheel.
- ⊖ Alle aanbevole materiaalgroottes moet slegs as riglyne gesien 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 verhoed verstrengeling deur lospassende klere te vermy.
- ⊖ Versuim om die implement teen die gespesifiseerde kragaftakkerasinsetspoed te bedryf kan onveilige bedryfstoeestand skep, en ook strukturele en meganiese onklaarraking veroorsaak wat nie deur die waarborg gedek word nie.

Die Side-Discharge Mulcher word tipies in boorde, wingerde en soortgelyke omgewings gebruik, waar dit 'n kombinasie van twee hoofprosesse bied:

- Sny, opkerf en mulch van 'n wye verskeidenheid materiale van wisselende digtheid, grootte en volume, bv. reeds gesnyde of gesnoeide takke.
- 'n Afvoermeganisme wat verwerkte materiaal (in die vorm van herbruikbare mulch) in die snyproses na die regterkant uitstoot.

Die implement is toegerus met 'n krulplaat-stelsel (Fig. 1-A) vir die inhou en beheer van materiaal tydens verwerking, en 'n verstelbare afvoergeut om beheerde uitwerp van die gesnyde materiaal moontlik te maak (Fig. 1-B).

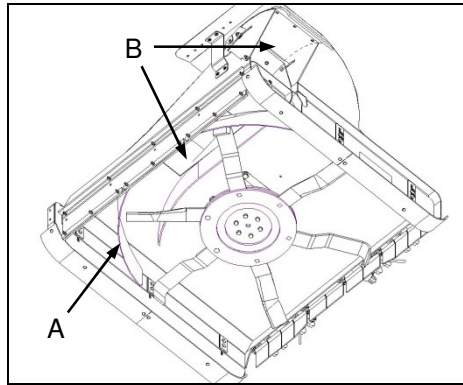


Fig.1

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

- ➔ Om doeltreffende mulch te verseker en om oormatige brandstofverbruik te verhoed, moet die krulplate en geut gereeld nagegaan word vir verstopping, blokkasies en skade.

Blade selection

- ✔ Appropriate blade selection is key to the operator's achieving the most effective process result. Therefore, due to the large variation in material properties and operating conditions likely to be encountered, blade selection should be arrived at through consultation with an authorised Falcon Dealer.
- ✔ In general, it is recommended that the implement be used to process material up to a maximum diameter of 50 mm.

Lemseleksie

- ✔ Gepaste lemseleksie is deurslaggewend vir die operateur om die mees effektiewe prosesresultate te verkry. Vanweë die groot wisseling in materiaaleienskappe en bedryfs-toestande wat waarskynlik teëgekomp sal word, moet die regte lemme in oorleg met 'n gemagtigde Falcon-handelaar gekies word.
- ✔ Oor die algemeen word aanbeveel dat die implement gebruik word om materiaal tot 'n maksimum deursnee van 50 mm te verwerk.

Three different blade types (including combinations thereof) may be fitted, each providing a specific contribution to the desired result.

1. Mulching blades: For general cutting, effective mulching and mild discharge rates.
2. Shredding blades: Hook-shaped blades with the capability to shred heavy, solid materials.
3. Paddle blades: These blades only provide added draught and higher rates of material discharge.

Drie verskillende soorte lemme (en kombinasies daarvan) kan aangebring word, waarvan elkeen 'n bepaalde bydrae tot die gewenste resultaat lewer.

1. Mulchlemme: Vir algemene snywerk, effektiewe mulch en matige afvoerkoerse.
2. Kerflemme: Haakvormige lemme met die vermoë om swaar, soliede materiale op te kerf.
3. Spaanlemme: Hierdie lemme verseker slegs ekstra lugdruk in die snykamer en hoër materiaalafvoerkoerse.

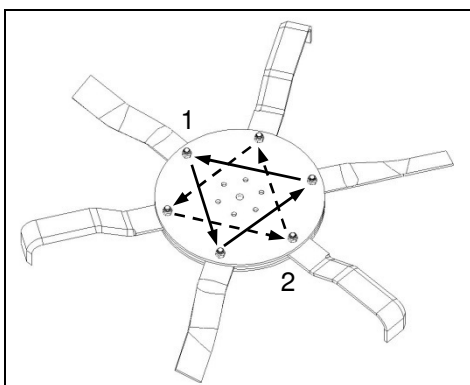


Fig. 2

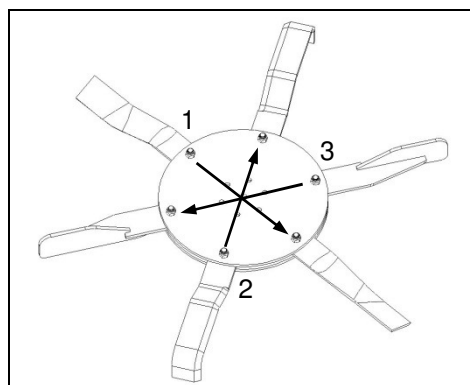


Fig. 3

In cases where two or three of the above blade types are to be fitted, these must be fitted to the blade disc in a specific

In gevalle waar twee of drie van bogenoemde lemsoorte aangebring gaan word, moet hulle in 'n bepaalde volgorde

sequence (Fig. 2 / Fig. 3). In no cases should blades be eliminated or removed.

- ❌ Failure to observe these configurations will result in erratic performance and severe mechanical vibration. Consequential structural or mechanical failure will not be 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 the PTO input is engaged.

- ✔ Start the tractor with the implement suspended on the tractor 3-point hitch and in an area clear of large volumes of material.
 - ✔ Lower the implement so that skids are just clear of the ground and engage the tractor PTO at idling speed.
 - ✔ Gradually increase the tractor throttle position to achieve the specified PTO operating speed.
 - ✔ Lower the implement to the operating position, place the tractor in a low gear and begin to approach the material to be cut.
- ❌ Unless otherwise indicated, the specified implement PTO input speed shall be 540 r/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 forward speed should be controlled by gear selection and NOT engine speed.
- ✔ Tractor engine speed must be pre-set to continually provide the specified PTO input speed, while forward speed should be controlled by appropriate gear selection.
- ✔ In general, the optimal gear selection can be identified by selecting the highest forward speed which does not result in stalling or the ejection of large unprocessed pieces of material.
- ✔ Forward speed, material volumes and material size should be controlled in order to prevent any unnecessary reduction of the equipment lifespan, as well as other damage and failures not covered under warranty.

Other settings and adjustments

➤ F80-150SD model

The F80-150SD model is provided with an alternative offset hitch position. This allows the implement to be offset to the right-hand side of the tractor centre line, allowing the implement to extend closer to the row.

aan die lemskyf aangebring word (Fig. 2 / Fig. 3). In geen gevalle moet lemme uitgeskakel of verwyder word nie.

- ❌ Versuim om hierdie konfigurasies te volg, sal tot wisselvallige werkverrigting en erge meganiese vibrasie lei. Gevolglike strukturele of meganiese onklaarraking sal nie onder 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 trekkerenjin aan met die implement wat aan die 3-punt-haak hang en in 'n gebied wat vry is van groot volumes materiaal.
 - ✔ Laat die implement sak sodat die glystukke net bokant die grond is en aktiveer die kragaftakker teen luierspoed.
 - ✔ Versnel geleidelik met die handversneller totdat die voorgeskrewe kragaftakkerinsetspoed bereik word.
 - ✔ Laat sak die implement na die werksposisie, skakel die trekker in 'n lae rat en begin na die materiaal beweeg wat gesny moet word.
- ❌ 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 toereter) verwys na die trekkerbestuurder se handleiding vir die kies van die tersaaklike kragaftakkerinsetspoed-verhouding om die gespesifiseerde implement se kragaftakkerinsetspoed te handhaaf.

Beheer van die snyproses.

- ✔ Die trekker se vorentoe spoed moet deur ratseleksie en NIE enjinspoed beheer word.
- ✔ Trekkerenjinspoed moet vooraf gestel word om die vereiste kragaftakkerinsetspoed konstant te hou, terwyl vorentoe spoed deur gepaste ratseleksie beheer moet word.
- ✔ Oor die algemeen kan die optimale rat geïdentifiseer word deur die hoogste vorentoe spoed te selekteer wat nie die enjin laat vrek of maak dat groot stukke onverwerkte materiaal uitgewerp word nie.
- ✔ Vorentoe spoed, materiaalvolumes en materiaalgrootte moet beheer word om onnodige verkorting van die toerusting se lewensduur te verhoed, asook enige ander skade en brekasies wat nie onder die waarborg gedek word nie.

Ander instellings en verstellings

➤ F80-150SD-model

Die F80-150SD-model het 'n alternatiewe kontrahaakposisie wat dit moontlik maak om die implement na regs van die trekker se middellyn te verplaas, sodat die implement nader aan die ry gebring word.

- ✔ Remove the implement topmast (Fig. 4-A) and reinstall it on the alternative mounting brackets located to the left-hand side of the implement deck (Fig. 4-B).
- ✔ Attach the implement to the tractor hitch using the corresponding alternative hitch clevises (Fig. 5).

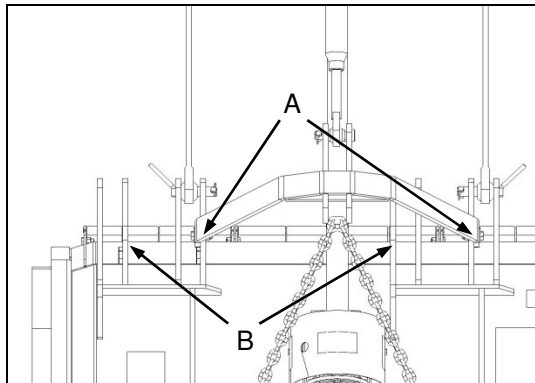


Fig. 4

- ✔ Verwyder die implement se topmas (Fig. 4-A) en herinstalleer dit op die alternatiewe monterhake aan die linkerkant van die implementdek (Fig. 4-B).
- ✔ Haak die implement aan die trekker met gebruik van die ooreenstemmende aanhaakvirke.

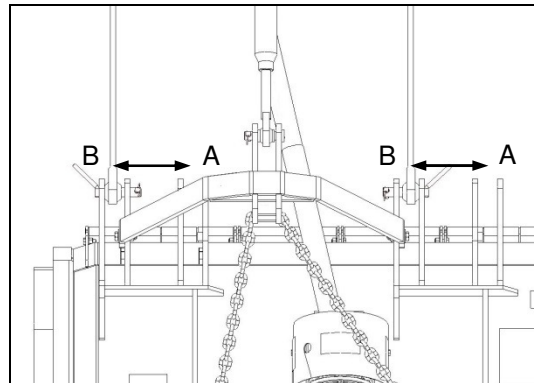


Fig. 5

➤ All models

The angle of discharge is variable, and achieved by adjusting the discharge hood position.

- ✔ Loosen the locking nuts (Fig. 6-A) situated on both sides of the discharge hood.
- ✔ Tilt the discharge hood (Fig. 6-B) to the appropriate angle and retighten the locking nuts.

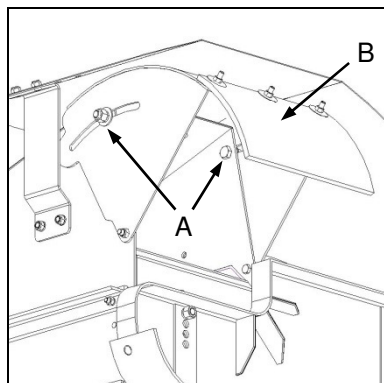


Fig. 6

➤ Alle modelle

Die afvoerhoek kan wissel, en kan gestel word deur die afvoerkap se posisie te verstel.

- ✔ Draai die sluitmoere (Fig. 6-A) aan albei kante van die afvoerkap los.
- ✔ Kantel die afvoerkap (Fig. 6-B) tot dit die gepaste hoek bereik en draai die sluitmoere weer vas.

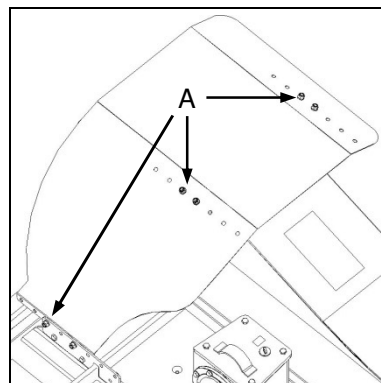


Fig. 7

The implement is fitted with a deflector which prevents damage to delicate low-hanging fruit. The extended position of the deflector can be adjusted.

- ✔ Remove the retaining bolts (Fig. 7-A), and reposition the deflector using the range of holes provided.

Die implement beskik oor 'n deflekteerplaat wat skade aan laaghangende vrugte verhoed. Die verlengposisie van hierdie plaat kan verstel word.

- ✔ Verwyder die klembout (Fig. 7-A) en herposisioneer die deflekteerplaat met gebruik van die reeks gaatjies wat voorsien is.

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

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

tractor tyres.

- ✔ Maintain a speed low enough to prevent excessive bouncing and resultant damage to mounting points and other load-bearing components.

se bande te verhoed.

- ✔ Handhaaf 'n spoed wat laag genoeg is om oormatige borsing en gevolglike skade aan monterpunte en ander ladingdraende komponente te verhoed.

MAINTENANCE

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 used. 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.
- ✔ 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-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.

INSTANDHOUDING

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- vervangingsonderdele 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

Word ten minste daagliks 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 kragaftakkeras-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 kragaftakkeras-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 monterboute (Fig. 1-B), ratkas monterboute (Fig. 2-A), topmasmonter- en -spilboute (Fig. 3-A) en sypaneel monterboute (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 monterpenne, 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 vibrasie en geraas.

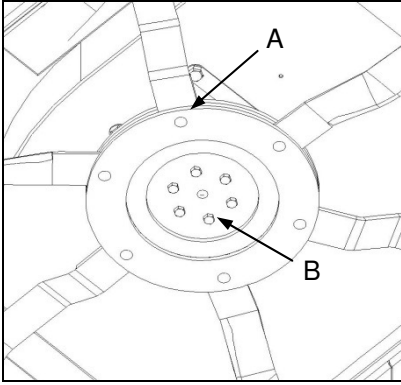


Fig. 1

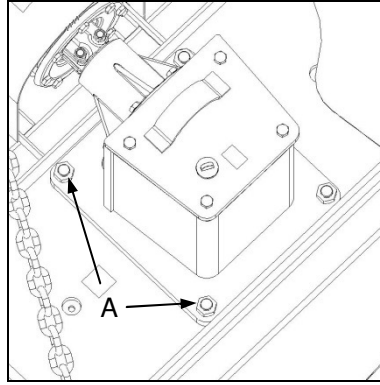


Fig. 2

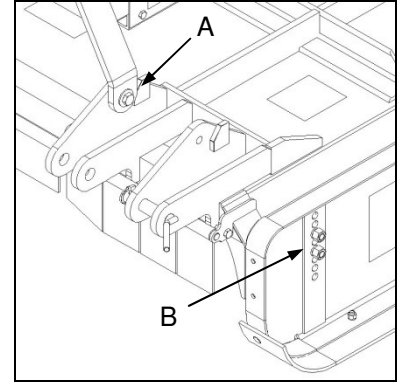


Fig. 3

- ⊖ 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 used, 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, visible 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.

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

- ⊖ 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 wrywingbeperkende 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.

Behoorlike bedryf van die kragaftakkeraswrywingkoppelaar moet bevestig word voor gebruik van die implement, veral na langtermynberging waar roes en onbruik na binding of

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. 5-B).
- ✔ The friction clutch housing feels significantly hotter than the surface of the gearbox casing (Fig. 5-A).
- ⊖ If the friction clutch assembly shows signs of excessive slipping it will require rebuilding. This should be carried out using only original replacement parts and with reference to the parts information provided in this manual.

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

- ⊖ All models: Friction clutch Type F2 by Comer Industries. Minimum friction plate thickness = 2.0mm.

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 = 31.2mm.

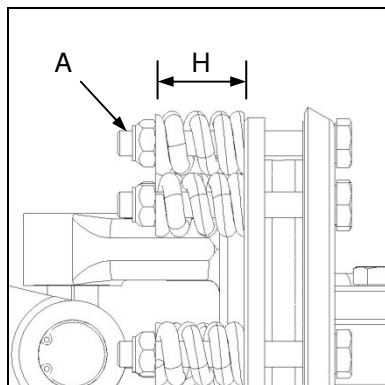


Fig. 4

vasbranding van die wrywingkoppelaar meganisme 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.

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 wrywingkoppelaaromhulsel (Fig. 5-B).
- ✔ Die wrywingkoppelaaromhulsel voel beduidend warmer as die ratkasomhulsel (Fig. 5-A).
- ⊖ As die wrywingkoppelaarmontering tekens van oormatige gly toon, moet dit herbou word, en dan slegs met oorspronklike vervangingsonderdele en met verwysing na die onderdeelinligting wat in hierdie handleiding voorsien word.

Die wrywingskywe in die wrywingkoppelaaromhulsel 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 plaatdikte = 2.0mm.

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.

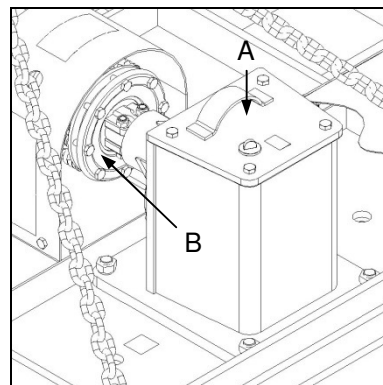


Fig. 5

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 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 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. 6-A) for signs of wear, elongation or fractures. In the event of any observed defect do NOT attempt a repair, but immediately replace the defective disc.

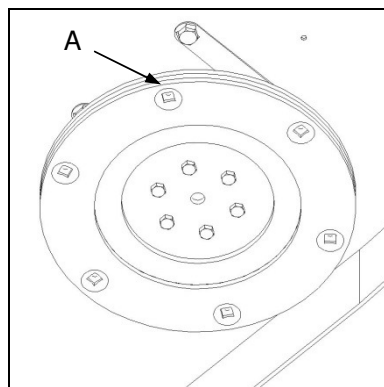


Fig. 6

- ✔ 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.
- ✔ Weigh blades before installation. To maintain balance, only blades of nearest equivalent masses should be installed in the prescribed positions on the same cutting gear assembly. (See OPERATION, Blade selection – described elsewhere in this manual).
- ✔ 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 vir die installering van die snymeganisme. Hoëspoedbrekasie 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.
- ✔ Weeg lemme voor installering. Om balans te handhaaf, moet slegs lemme wat min of meer dieselfde weeg in die voorgeskrewe posisies op dieselfde snymeganismontering aangebring word. (Kyk WERKING, Lemseleksie – elders in hierdie handleiding beskryf).
- ✔ Na enige instandhoudingswerk of vervanging van snymeganismekomponente, kry die implement op bedryfspoed en kyk om seker te maak dat daar geen oormatige vibrasie is nie.
- ⊖ 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.

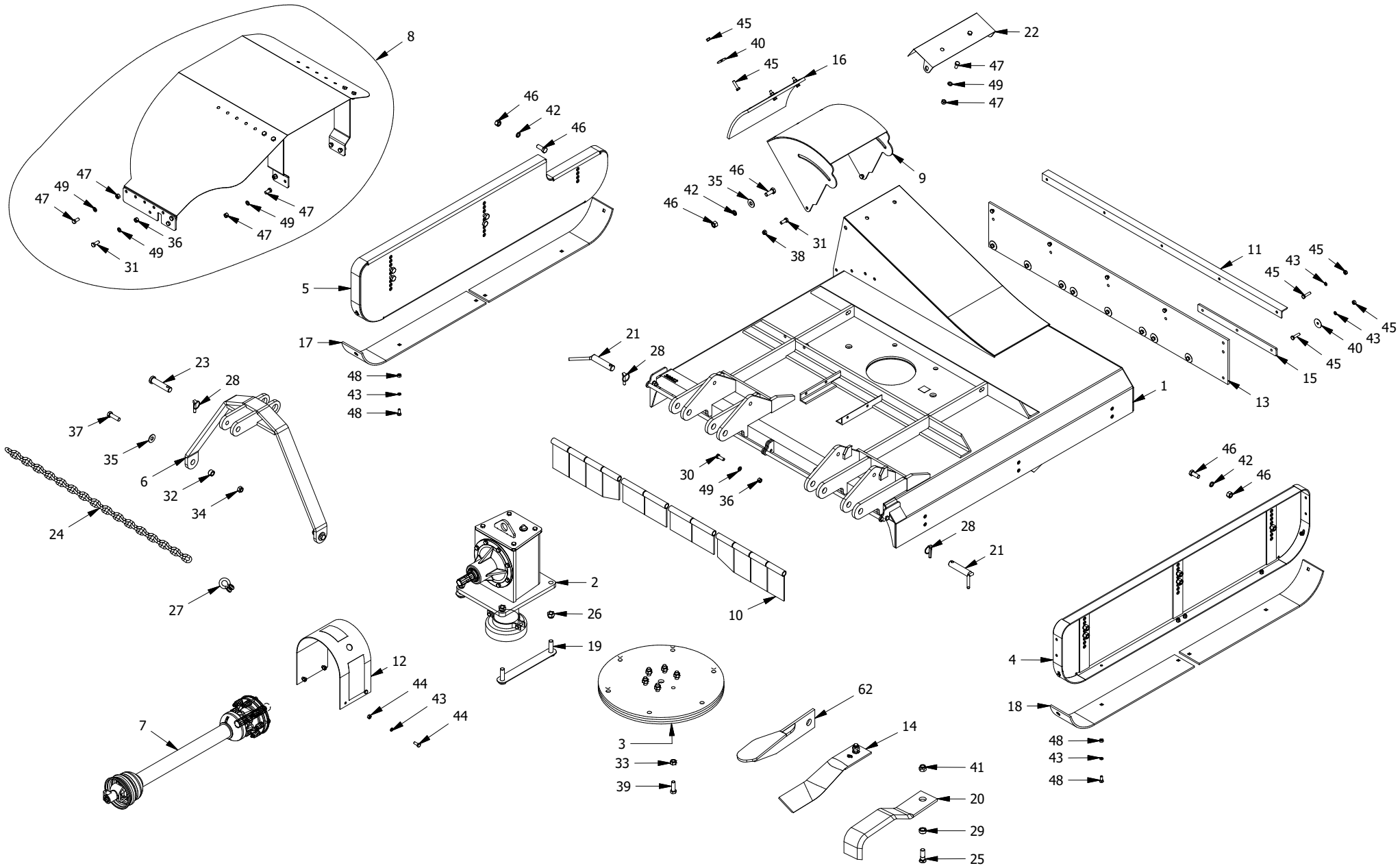
Algemene foutopsporing

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 / discharge	Material build-up under deck Blocked discharge chute Implement not level Worn blades Wet/damp material	Clean Remove obstructions 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 / -uitwerping	Materiaal-opbou onder dek Geblokkeerde afvoergeut Implement nie gelyk nie Geslyte lemme Nat/klam materiaal	Maak skoon Verwyder blokkasie 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

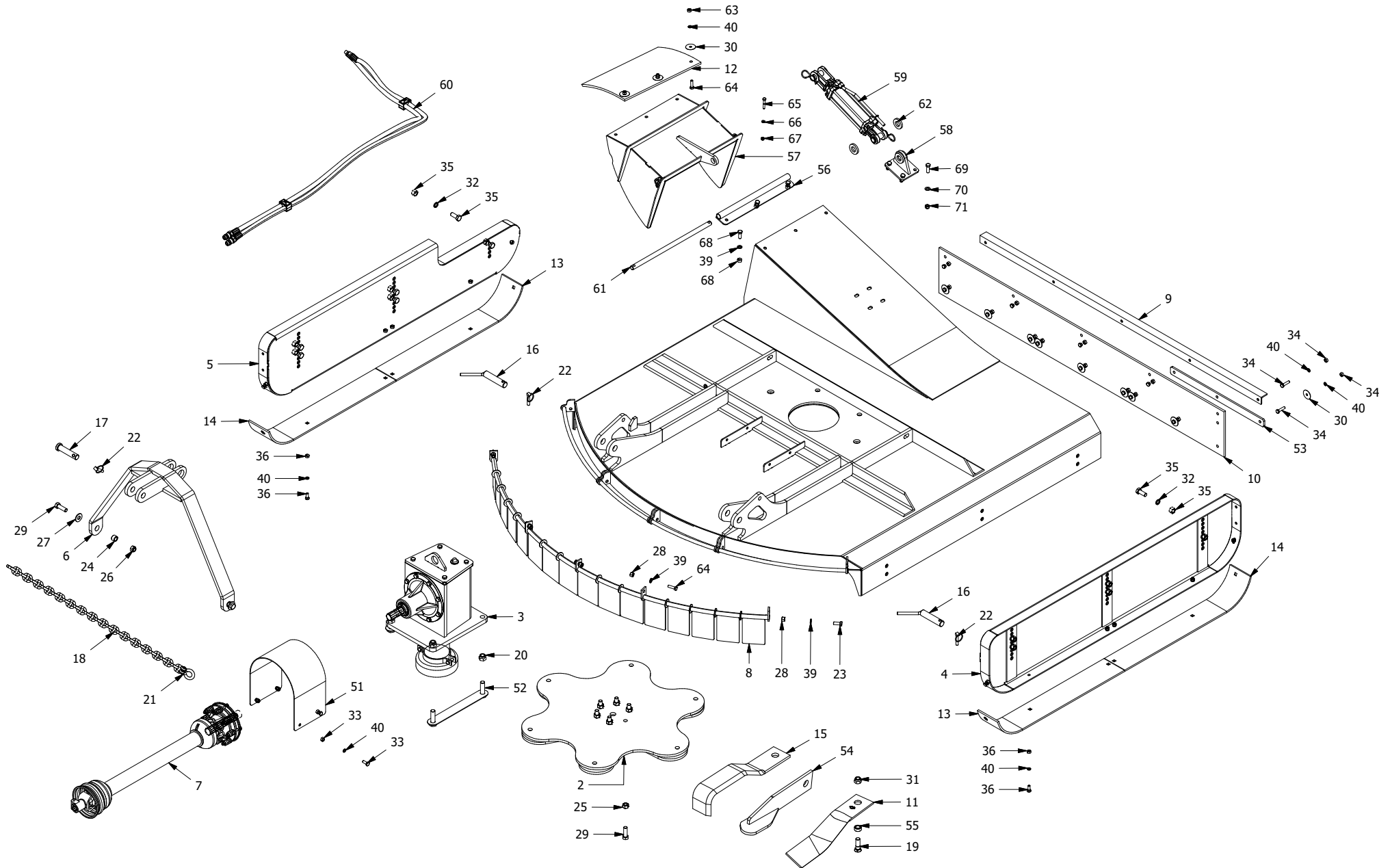
**F80-150 Side Discharge Mulcher
A0056 / A0070 (incl. paddle blades)**



**F80-150 Side Discharge Mulcher
A0056 / A0070 (incl. paddle blades)**

Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	H0529	Painted Hull F80/150 SD Mulcher	1	39	M41650	Bolt M16x50 HT Galv	6
2	H1400A	Gearbox F80 1:1.87 Falcon	1	40	M84501	Washer Flat 10x45x1 Galv (Fender Washer)	12
3	H1277	Disc 80/150SD Mulcher	1	41	M61920	Nut Nyloc 3/4UNC	6
4	H0406	Side Panel	1	42	M91604	Washer Spring M16 Galv	14
5	H0457	Skid Plate F80/150SD & 80/180SD Special	1	43	M91002	Washer Spring M10 Galv	30
6	H0603	Top mast Cat 1/2	1	44	M11025	Bolt + Nut M10x25 HT Galv	8
7	T600960CE112F22	PTO shaft T60 960 112 F22	1	45	M11040	Bolt + Nut M10x40 HT Galv	34
8	H9045	Deflector Kit Complete F80/150SD	1	46	M11640	Bolt + Nut M16x40 HT Galv	28
9	H0281	Chute Ajustable 80/150 SD Mulcher	1	47	M11225	Bolt M12x25 + Nut Galv	24
10	H0279A	Stone Guard 80/150SD Mulcher	1	48	M21030	Plough bolt+nut M10x30HT Galv	24
11	H0282	Rubber Guard Securing Bar 80/150SD	1	49	M91213	Washer Spring M12 Galv	19
12	R6002-0166	PTO guard	1	50	M3003	Serial plate Metal FALCON	1
13	M3920	Rubber Guard Rear 80/150 SD(10x250x1560)	1	51	M3168	Decal Bird FALCON Large	1
14	H1467	Blade 12x100x530.0mm 32.5 C 150/180 Mulch	3	52	M3179	Decal F80/150 SD Mulcher	1
15	H0283	Reinforcing Flat Bar 40x8x510mm	3	53	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
16	M3921	Rubber Guard Chute 80/150 SD(10x250x360)	1	54	M3176	Decal Brid FALCON Meduim	2
17	H0428	Skid runner 8x130 LH	2	55	M3173	Decal Lifting hook	1
18	H0418	Skid runner 8x130 RH	2	56	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
19	H1448	Ganged bolts 3/4UNFx2-1/2 Galv	2	57	M3187	Decal ATTENTION If your tractor is	1
20	H1625	Blade 12x100x(485)-32.5 MULCHER	3	58	M3171	Decal Baie Belangrik Alvorens U Die	1
21	H7115	Pin Btm link Cat2 125mm	2	59	M3178	Decal Blade/Lem	1
22	H9050	Hood Mulcher Adj Bracket 80/150SD	1	60	M3174	Decal IMPORTANT WHEN LOADING.....	1
23	H0632	Pin Top link Cat2	1	61	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
24	R0611	Chain Gr5 10mm 2T	2	62	H1469	Blade Paddle SD Mulchers 150/180	1
25	M51963	Blade bolt 3/4UNCx2-1/2 CSK-10.9 Black	6				
26	M61919	Nut Nyloc 3/4UNF	4				
27	M0622	Shackle 7/16in 1.5T	2				
28	FLP11	Lynchpin 11mm	3				
29	M71913	Bush 19x13mm	6				
30	M41235	Bolt M12x35 HT Galv	3				
31	M41230	Bolt M12x30HT Galv	6				
32	H71617	Bush 16.5x25x17	2				
33	M31612	Nut M16 Galv	6				
34	M61616	Nut Nyloc M16 Galv	2				
35	M81603	Washer M16x40x3 Galv	4				
36	M31209	Nut M12 Galv	7				
37	M41655	Bolt M16x55 HT Galv	2				
38	M61209	Nut Nyloc M12 Galv	2				

**F80-180 Side Discharge Mulcher
A0058 / A0071 (incl. paddle blades)**



**F80-180 Side Discharge Mulcher
A0058 / A0071 (incl. paddle blades)**

Item	Part No	Description	Qty	Item	Part No	Description	Qty
1	H0556	Painted Hull F80/180SD Mulcher	1	37	M3168	Decal Bird FALCON Large	1
2	H1279_Lasercut	Disc F80/180SD Mulcher	1	38	M3176	Decal Brid FALCON Meduim	2
3	H1400A	Gearbox F80 1:1.87 Falcon	1	39	M91213	Washer Spring M12 Galv	8
4	H0406	Side Panel	1	40	M91002	Washer Spring M10 Galv	33
5	H0457	Skid Plate F80/150SD & 80/180SD Special	1	41	M3172	Decal DANGER STAY AWAY - ROTATING.....	1
6	H0602	Top mast Cat1/2	1	42	M3003	Serial plate Metal FALCON	1
7	T600960CE112F22	PTO shaft T60 960 112 F22	1	43	M3173	Decal Lifting hook	1
8	H0285A	Stone Guard 80/180SD Mulcher	1	44	M3175	Decal PROUD TO BE SOUTH AFRICAN	1
9	H0286	Rubber Guard Securing Bar F80/180SD	1	45	M3170	Decal VERY IMPORTANT BEFORE USING.....	1
10	M3761	Rubber Guard 80/180SD Mul 1830x250x10mm	1	46	M3171	Decal Baie Belangrik Alvorens U Die	1
11	H1467	Blade 12x100x530.0mm 32.5 C 150/180 Mulch	3	47	M3174	Decal IMPORTANT WHEN LOADING.....	1
12	M3762	Rubber Guards F80/180SD Mul 445x250x10mm	1	48	M3178	Decal Blade/Lem	1
13	H0418	Skid runner 8x130 RH	2	49	M3184	Decal F80/180SD Mulcher	1
14	H0428	Skid runner 8x130 LH	2	50	M3187	Decal ATTENTION If your tractor is	1
15	H1625	Blade 12x100x(485)-32.5 MULCHER	3	51	H0702	PTO Guard	1
16	H7115	Pin Btm link Cat2 125mm	2	52	H1448	Ganged bolts 3/4UNFx2-1/2 Galv	2
17	H0632	Pin Top link Cat2	1	53	H0288	Reinforcing Flat Bar 40x8x595mm	3
18	R0611	Chain Gr5 10mm 2T	2	54	H1469	Blade Paddle SD Mulchers 150/180	1
19	M51963	Blade bolt 3/4UNCx2-1/2 CSK-10.9 Black	6	55	H71914	Bush 32x19.5x14	6
20	M61919	Nut Nyloc 3/4UNF	4	56	H5599	Hinge SD Flap Pivot	1
21	M0622	Shackle 7/16in 1.5T	2	57	H5597	Flap 80/180 SD	1
22	FLP11	Lynchpin 11mm	3	58	H0268	Bracket Cylinder Mount	1
23	M41230	Bolt M12x30HT Galv	2	59	M7416B	Cylinder Hydraulic DB20006-106	1
24	H71617	Bush 16.5x25x17	2	60	M7423	Kit Hydraulic A0059	1
25	M31612	Nut M16 Galv	6	61	H5600	Shaft SDS Flap	1
26	M61616	Nut Nyloc M16 Galv	2	62	ML10481	Profile 8.0 MS PLB0	2
27	M81603	Washer M16x40x3 Galv	2	63	M31007	Nut M10 Galv	3
28	M31209	Nut M12 Galv	5	64	M41035	Bolt M10x35HT Galv	6
29	M41650	Bolt M16x50 HT Galv	8	65	M40850	Bolt M8x50mm	2
30	M84501	Washer Flat 10x45x1 Galv (Fender Washer)	12	66	M80803	Washer Flat M8 Galv	2
31	M61920	Nut Nyloc 3/4UNC	6	67	M60809	Nut Nyloc M8 Galv	2
32	M91604	Washer Spring M16 Galv	12	68	M11230	Bolt M12x30 + Nut Galv	3
33	M11025	Bolt + Nut M10x25 HT Galv	4	69	M41235	Bolt M12x35 HT Galv	4
34	M11040	Bolt + Nut M10x40 HT Galv	14	70	M81202	Washer Flat M12 Galv	4
35	M11640	Bolt + Nut M16x40 HT Galv	12	71	M61209	Nut Nyloc M12 Galv	4
36	M21030	Plough bolt+nut M10x30HT Galv	12				

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