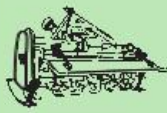













HOWARD

Owner's Manual & Parts List *for* HOWARD



 Rotavator	 Fertiliser Spreader	 Post-Hole Digger	 Multiset Grader
Made in Malaysia	 Rotaslasher	 Mulcher	 Levelling Bucket
	 Rollermower	 Rollerslasher	 Grass Collector

HOWARD Alatpertanian Sdn. Bhd.

2, Jalan Perusahaan Tiga, Batu 20, 48000 Rawang, Selangor Darul Ehsan, Malaysia.







Tel : 603 - 6093 1010 Fax : 603 - 6092 1010

e-mail : howardmy@tm.net.my www.howardmy.com

SAFETY

In the Owner's Manual accompanying each machine manufactured by HOWARD Alatpertanian Sdn. Bhd., Malaysia, (HOWARD), Safety features and precautions to be taken when operating the various implements are duly described.

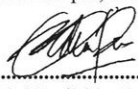
Some or all of the following information or warning labels are affixed to the machines.


Machine model	Label	Warning / Information
All	Model	Followed by model number embossed on the machine frame..
All	Serial No.	Followed by year of manufacture (alphabet code), and production serial number embossed on the machine frame.
All		General warning that : a) the machine may pose danger to operator and/or surroundings. b) such dangers are described with precautions to be taken in the accompanying Owner's Manual. c) HOWARD has sought to minimise such dangers in compliance with appropriate safety directives, and maintains technical records accordingly. Name and address of manufacturer (HOWARD) and year of manufacture. Beware of flying objects and stay clear of operating machine.
All		
All		
All		
All		
HR/HS/HFS/PHD/ HM/HRM/HSW/ HSC/HA/HMC/HTS		Affixed to rotating universal drive shaft (U/J) linking tractor with implement. Refer also to the safety and maintenance guidelines as described by the OEM U/J manufacturer supplied with each universal drive shaft.
HR/HS/PHD/ HM/HRM/HSC/ HA/HMC	Hot oil	Gearbox oil may become hot after continuous operation.
Various	Others	General informative or safety stickers as appropriate.

DECLARATION OF CONFORMITY

We declare that HOWAD implements/machines have been manufactured in conformity with EU Council Directive 2006/42/EC - L 157.

Kuala Lumpur, Malaysia - 12th January 2010.


 Mohd Rafi bin Jamlus
 (Production Manager)


 Balasubramaniam Vailu
 (QA - Inspection)


 Diana Bartolome
 (ISO MR)

HEALTH

The safety and health of operators and fitters is generally the responsibility of the owner of the machine. However, HOWARD has strived to design its implements so as to minimise risks.

Likewise, in the manufacturing process, employee safety and health is monitored in accordance with Malaysian law and HOWARD's internal production management systems.

ENVIRONMENT

Environmental assesment is carried out on HOWARD's products and manufacturing processes, as described in the company's 9001 ISO management procedures.

WARRANTY

We undertake to supply , free of charge, new parts in place of parts which break or wear excessively through faulty material or bad workmanship within SIX months after delivery, provided such faulty parts are returned to us carriage paid, for examination.

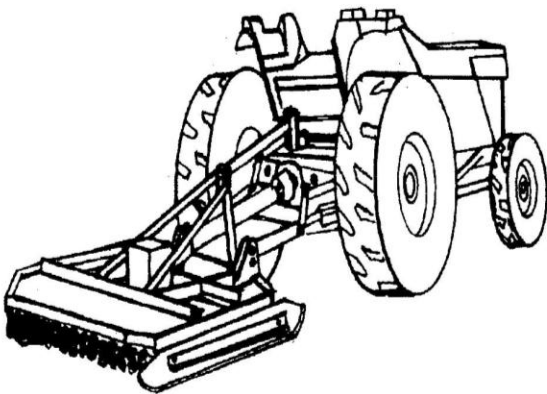
But we are not liable for labour, or any loss or damage direct or consequential, nor responsible for any accident, or in any way for the effect of any accident, whether due to defective material, workmanship or otherwise, and our guarantee does not apply to defects which in our opinion are caused by accident, wear or tear, misuse or neglect, including the use of unsuitable or dirty lubricants, or by interference with the construction of the machine as completed by us.

Your obligation as the Owner is to give the machine proper attention and care, in accordance with the guidelines given in this OWNER'S MANUAL PARTS LIST>

We reserve the right to make changes in design, and changes or improvements upon our product, without imposing any obligations on us to install the same on products there-to-fore manufactured.



HOWARD MULCHER



Serial number

The Serial and Model Numbers are stamped on the frame of your **MULCHER**.

For future reference record the numbers below.

ALWAYS quote them when ordering spareparts.

MODEL No. _____

SERIAL No. _____

Date Purchased _____

We hope you will be happy with your **HOWARD** Mulcher.
Treat it well - and it will serve you diligently for many years to come.
Should you encounter problems - or have questions in respect of mulching
- please feel free to contact us or consult our dealers.

Notes:

- 1) Continuous R & D may result in the technical contents of this Manual not always being identical to the specifications for the latest model delivered. **HOWARD** in ASIA since 1962.
- 2) For more details and technical support, consult our web-page:
www.howardmy.com

HOWARD Alatpertanian Sdn. Bhd.
2, Jalan Perusahaan 3
Batu 20, 48000 RAWANG
Selangor, W. Malaysia
Tel: (6 03) 6093 1010
Fax: (6 03) 6092 1010
E-mail: howardmy@tm.net.my
Spare Parts Direct Line : (6 03) 6093 6363

! SAFETY PRECAUTIONS & OPERATING INSTRUCTION !

Before use

- Ensure operators have read and are familiar with the instructions contained in this manual.
- Consult the Tractor Manufacturer's Manual for instructions on mounting implements and safe working methods.
- Ensure the MULCHER is sitting on firm, level ground.
- Ensure the MULCHER is set parallel to the ground, when looking from the back of the machine - this is to ensure uniform height of cut.
- Ensure the MULCHER BLADES are securely fitted.
- Make certain that all guards, covers, warning labels and safety devices are correctly fitted and operative.
- Ensure the work area is clear of bystanders.
- Inspect the work area for obstructions which may constitute a hazard.
- Disengage all clutches and shift into neutral prior to starting the tractor engine.

During use

- Lower the MULCHER to the ground, then engage the PTO drive before moving forward at a speed suitable for prevailing conditions.

As a general guide, the more unfavourable the conditions are, the SLOWER the tractor forward speed should be.
- Observe all safe driving procedure such as reducing speed on slopes and sharp turns.
- Avoid working on ground where there is a risk of the tractor overturning.
- Do not operate across the face of slopes.
- When making sharp turns, while operating the MULCHER, ALWAYS lift the machine clear of the ground and disengage the PTO drive.

After use

- Disengage the PTO drive when transporting the MULCHER or not in use.
- Inspect the MULCHER for damage and that its disc beam has not bent and blades broken/missing. Clean the machine thoroughly before storage.
- Check that all bolts, nuts and fasteners are tight. Replace worn, broken or bent blades.
- Carry out lubrication and maintenance as detailed in this manual.

Always

- Wear substantial or safety footwear.
- Avoid loose clothing which may be caught in moving parts.
- Wear earmuffs or earplugs. Prolonged exposure to noise can cause impairment or loss of hearing.
- Wear gloves when handling worn implements or parts with sharp edges.
- Use the implement only for the purpose for which it was designed, tested and in accordance with the instructions contained in this manual.
- Ensure the MULCHER is not operated by children or untrained persons.
- Interpret "left" or "right" as the left or right hand of the operator when sitting on the tractor seat and facing forward.

NEVER

- Use your MULCHER unless the safety guards are in place.
- Touch any moving parts of the implement or parts which may be hot from operation.
- Allow passengers on the tractor or implement when operating.
- Check oil levels whilst the implement is running.
- Attempt to clear any obstruction around the spindle or carry out cleaning, lubricating, adjustments, repairs to a mounted implement unless the tractor engine is stopped and the implement is resting on firm level ground.
- Leave the tractor seat unless the implement is lowered, the PTO drive disengaged, the gear shift in neutral, the brake applied, the engine stopped and the ignition key removed.

**BE A SAFE OPERATOR
BY THINKING - BEFORE ACTING**

SPECIFICATION OF YOUR MULCHER

Specification	HM 50	HM 60
Working width, cm	115	140
For Tractor Hp.	75 - 100	85 - 120
Three-point linkage	Cat. II	Cat. II
Universal driveshaft / Safety Device	A7 w/Sintered Metal Disc Slip Clutch Assy.	A7 w/Sintered Metal Disc Slip Clutch Assy.
Weight, kg	490	550

New Machine

Power Take-Off Drive Shaft & Clutch

The MULCHER is supplied with an A7 PTO Drive Shaft complete with Sintered Metal Disc Slip Clutch Assy. For transport reason, the Outer Half Shaft c/w PTO Yoke is taken off and must be refitted before use.

HOWARD MULCHER is a heavy-duty machine - suitable for shredding of felled / chipped tree trunks into useful compost; for eradicating breeding grounds of the Rhinoceros Beetle in oil palm plantations. Also suitable for pulverising empty fruit bunches (EFB), pineapple stalks and other fibrous matter. Effective mulching also helps eliminating Ganoderma (Basal Stem Rot) by exposing and drying out this destructive fungus.

The resulting humus, incorporated into the topsoil, provides long-term nutrient uptake benefits, stabilises the granular structure of the soil, improves water retention, promotes vigorous rooting and minimises leaching loss.

Tractor travel speed will influence the type of cut achieved. For finer cut, a slower speed should be used.

TRANSMISSION

The Mulcher is supplied with a PTO Drive Shaft A7 series for 540 rpm tractor PTO. For protection of tractor and implement, the Drive Shaft is fitted with multi plate Sintered Metal Disc Safety Clutch.

GEARBOX

Steel fabricated housing with case hardened nickel chrome alloy steel gears. Forged carbon steel spindle supported by tapered roller bearings. Optimum blade tip cutting speed is achieved at 540 rpm PTO.

CUTTING HEAD

The vertically mounted special steel blades are designed to penetrate 2 cm below skid/tractor tyre level. Ideally the debris should be scattered prior to mulching. If stacked in windrows, the operation will be slower and several passes may be necessary.

SAFETY

Equipment

- Technical safety features to protect the MULCHER and Tractor against operational abuse are in-built standards on all HOWARD implements.

Surroundings

- Side skids left and right - together with front and rear mounted shields will retain flying objects inside the cutting chamber.

Warning

- HOWARD MULCHERS are powerful mechanical implements. Utmost care must be exercised when handling such equipment. To minimise risks, Owners and Operators are strongly recommended to familiarise themselves with the contents of this manual.



SERIOUS DAMAGE CAN RESULT FROM FAILURE TO CARRY OUT THE ABOVE PROCEDURES

COMMISSIONING OF YOUR PTO DRIVEN MULCHER

Your MULCHER has been designed to work in a wide variety of conditions, and is a very simple machine to use. The following adjustments will ensure optimum performance in all conditions.

Attaching the MULCHER to the tractor

The PTO Drive Shaft must be set to a safe working length to ensure the inner shaft does not "bottom" or separate from the outer shaft under all conditions of use and transport.

Position the tractor at a distance from the Mulcher to give 24 cm minimum engagement of the inner half of the PTO Drive Shaft in the outer half when connected to the tractor. This establishes the safe working length of the PTO Drive Shaft for connection to the tractor.

Position the tractor lower link ball joints in line with the mounting pins.

Connect the tractor lower links, left hand link first, securing with Cotter Assembly, adjusting the right hand tractor lift arm if necessary.

Fit the tractor upper link and secure. Attach the PTO Drive Shaft to the tractor ensuring the quick release pin engages the spline shaft groove.

Attach the PTO Drive Shaft Guard Chains to the tractor and Mulcher.

Attach stabiliser bar or check chains to limit sway to 5 cm. Adjust tractor linkage to level the Mulcher laterally and longitudinally.

Before engaging the tractor PTO, lift the Mulcher on the hydraulic lift linkage until the PTO Drive Shaft attains an angle of 25° and set the limit stop on the hydraulic lift control quadrant.

THE PTO DRIVE SHAFT ANGLE MUST NEVER EXCEED 25°.

Finally check that during transport and use, the PTO Drive Shaft does not "bottom" or separate and that the maximum angle of 25° is not exceeded.

Should it not be possible to obtain the aforementioned setting with your tractor, SEEK ADVICE; it may be necessary to reduce the length of the PTO Drive Shaft by cutting of equal amount from both the Inner & Outer Cardan Tubes with a hacksaw.

OPERATING INSTRUCTIONS

Please read again the "SAFETY PRECAUTIONS & OPERATING INSTRUCTION" on page 1 and 2.

Set the cutting height by lifting the MULCHER on the tractor hydraulics and adjusting side skirts to required position.

Lower the MULCHER and engage the PTO with the tractor operating at the required r.p.m. and move off at a travel speed to suit the conditions. (Excessive speed will cause bumping and skip cutting.)

MAINTENANCE AND ADJUSTMENTS

UNIVERSAL / PTO DRIVE SHAFT

Safety Guards

MULCHER is supplied with non-rotating PTO Drive Shaft Guards which must be correctly fitted and well maintained.

Before and after each use, the PTO Drive Shaft should be examined to ensure it rotates freely in the guards, the guards are not damaged, securely fitted, correctly seated on the shaft grooves and the restraining chains attached

to the tractor and MULCHER.

Should the guards be broken, damaged or badly fitted, the MULCHER must not be used until damaged parts have been replaced and/or bad fitting corrected.

Avoid damage to guards when the PTO Drive Shaft is being connected or disconnected

from the tractor by resting it on a support.

Never allow PTO Drive Shaft Guards to fall into the MULCHER or drop to the ground; damage will almost certainly occur.

Always ensure the sliding surfaces of the guard tubes are clean and the guard bearings lubricated.

BEWARE !!!

▲ Raising and lowering of the MULCHER will result in the telescopic movement of the PTO Drive Shaft Assembly. Please ensure that it does not jam or become disengaged.

▲ As a general rule, the Outer Cardan Tube and the Inner Cardan Tube must be at least half engaged (minimum 24 cm).

▲ The more the Outer and Inner Cardan Tubes are engaged, the longer the service life of the PTO Drive Shaft Assembly is, besides ensuring optimum power transmission.

Oiling/Fitting of the Universal Drive Shaft

☉ Periodical oiling will ensure easy operation of the Lock Pin Kit sitting at the side-end of the PTO Yoke Assy. of the Drive Shaft.

☉ When fitting this Drive Shaft, ensure that the Lock Pin Kits are properly seated in the grooves of the PTO SHAFT of the tractor and the INPUT SHAFT of the MULCHER.

☉ Also ensure that the Safety (Plastic) Guard of the Drive Shaft does not foul the tractor PTO Guard (if fitted).

Maintenance of Universal Drive Shaft

- ✦ ✦ ✦ ✦ ✦ Cleanliness will help prolong the life span of the Drive Shaft.
- ⌘ Daily grease Cross Journals until grease exudes from all 2 x 4 cups.
- ⌘ Daily clean and smear a layer of graphite grease on the Cardan Tubes.
- ⌘ Inspect Cross Journals periodically and replace them when necessary.
- ⌘ Apply a coat of grease to the inside splines of the PTO Yokes to ease assembly and disassembly.

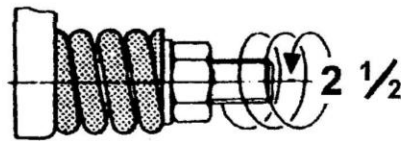
Clutch Maintenance

Daily or every 8 hours worked, check and adjust Slip Clutch.
 Weekly or every 50 hours worked, inspect/replace worn clutch friction discs.

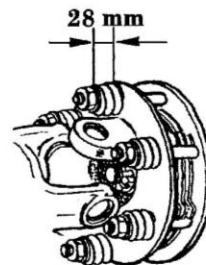
Clutch Setting/Adjustment

To adjust the clutch, turn the six nuts until the six springs are coil-bound. Then loosen the nuts evenly and diametrically with a spanner:

Method No. 1 (initial guide only)
 until you achieve 2.1/2 turns on each nut;
 (see Diagram on right)



Method No. 2 (initial guide only)
 until the springs are compressed to 28 mm;
 (see Diagram on right)



Local working conditions may necessitate some further adjustments of the nuts. If so, the adjustment should be even, the same amount being given to each nut.

In normal operation, the temperature of the clutch should be no higher than the temperature of the gearbox. However, if the clutch becomes hotter than the gearbox, this will indicate the clutch needs tightening. If set too loosely, the clutch plates slip excessively, generating considerable frictional heat. In addition to causing the clutch plates to quickly wear out, too loose a clutch setting will result in erratic turning of the disc beam assembly and irregular work. It is, therefore, important to check that the clutch is correctly adjusted.

Service Guide

After Initial Four Hours Worked

1. Check clutch setting.
2. Check tightness of all bolts and nuts.
3. Drain and flush out gearbox, refill with SAE 140 gear oil.

Daily or Every Eight Hours Worked

1. Separate the two sections of the PTO Drive Shaft, clean well and smear with graphite or molybdenum disulphide grease.
2. Grease Cross Journals with lithium base grease.
NOTE: It is essential that the lubricant is forced out of all four cups, out of one cup is not sufficient. If the lubricant does not flow out of all four cups under pressure from the gun, the joint should be examined for blocked galleries before continuing work.

Every 250 Hours Worked

1. Drain and flush out gearbox, refill with SAE 140 gear oil.
2. Inspect Cross Journal needle bearings. Replace Cross Journal if badly worn.
3. Check Friction Discs for wear.

Weekly

1. Tighten all bolts and nuts.
2. Lubricate pivot points.
3. Check clutch setting.
4. Check gearbox oil level and replenish if necessary, use SAE 140 gear oil.
5. Check blades for wear or damage, replace if necessary, also check blade bolts and disc mounting bolts for tightness.
6. Check skid mounting bolts for tightness
7. Grease roller bearings (if rollers are fitted).

Service Diagnosis

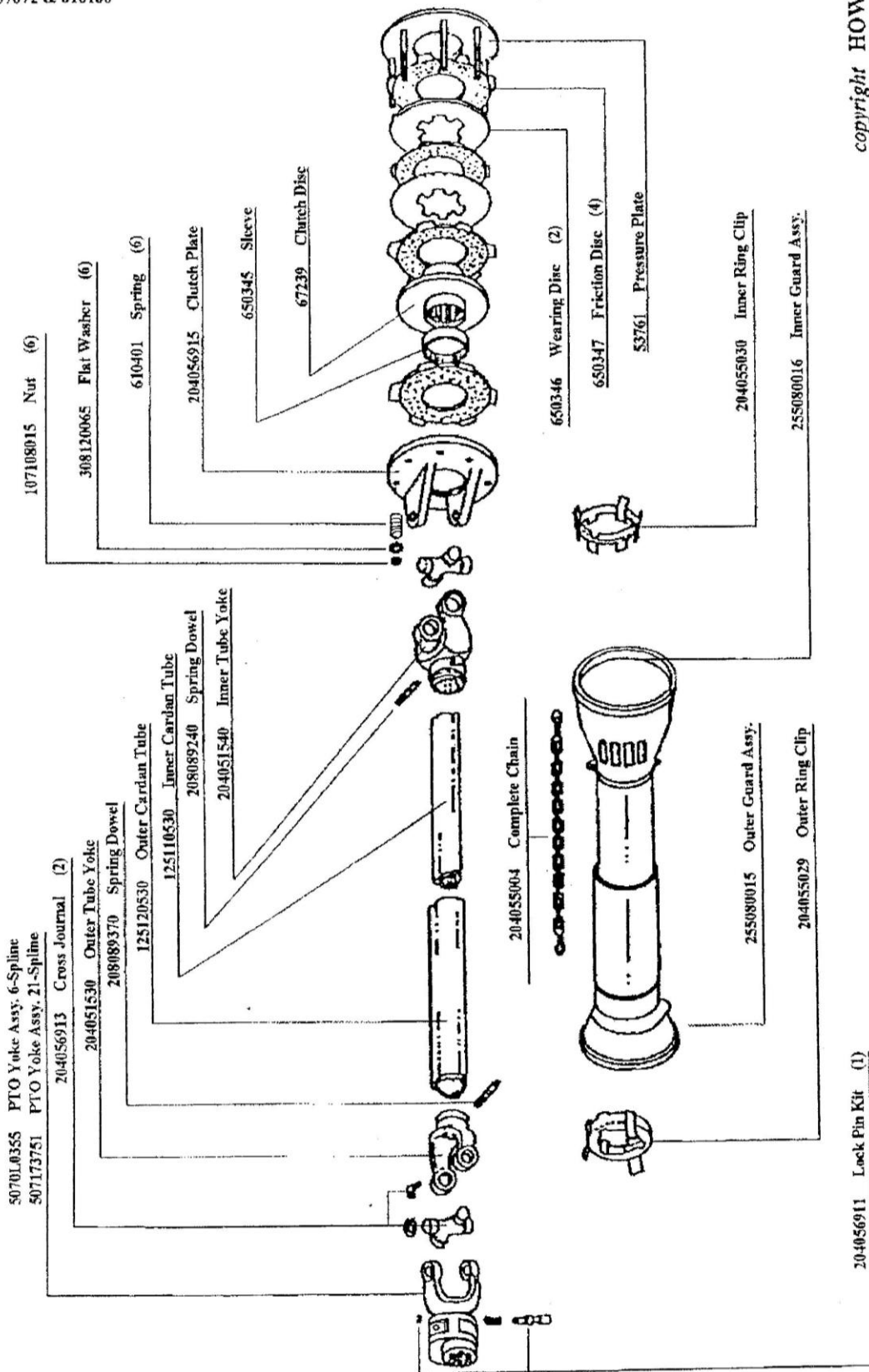
Assembly	Defect	Possible cause
PTO Drive Shaft	Vibration	<ul style="list-style-type: none"> - due to twisted inner or outer shaft - collapsed needle rollers in Cross Journal - lifting machine too high when PTO Drive Shaft is still engaged.
Clutch Assembly	Slipping Excessive heat	<ul style="list-style-type: none"> - due to incorrectly adjusted clutch springs - badly worn friction discs - pressure plate not located correctly on clutch disc - due to above
Gearbox Assembly	Excessive noise Oil leaking from gearbox Insufficient oil in gearbox	<ul style="list-style-type: none"> - due to incorrect backlash between crownwheel and pinion - worn or loose bearings in gearbox - due to worn or damaged input shaft seal - blocked or damaged breather/breather hole in dipstick (in gearbox) - due to wrap up of crop around spindle damaging the spindle oil seals - due to damaged or worn spindle oil seals
Disc and Blade Assembly	Vibration	<ul style="list-style-type: none"> - due to loose blade / disc mounting - due to damaged or unevenly worn blades - due to excessively loose or damaged spindle bearings



HOWARD MULCHER

Universal Driveshaft A7

810707072 & 610100



copyright HOWARD
81S/04/04

810707072F Inner Half Shaft c/w Clutch Plate
810707072M Outer Half Shaft c/w PTO Yoke

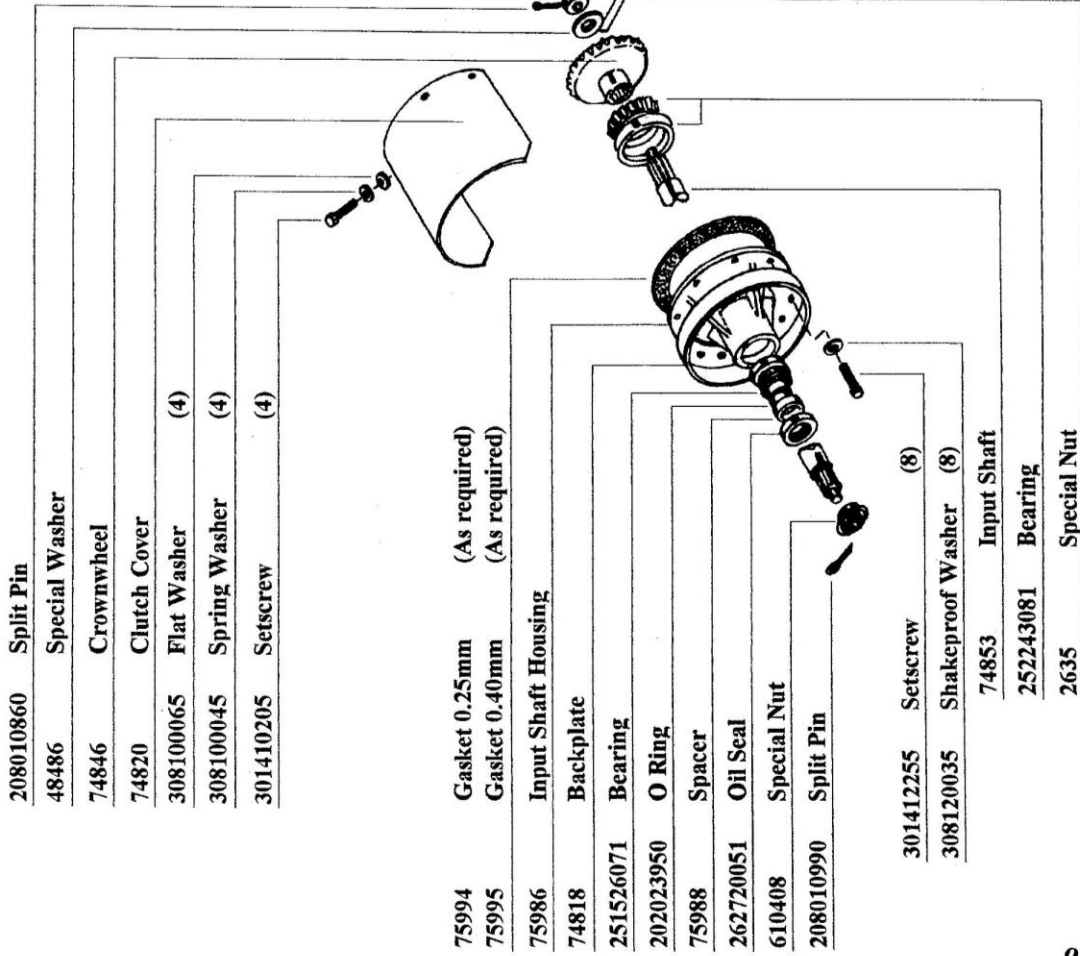
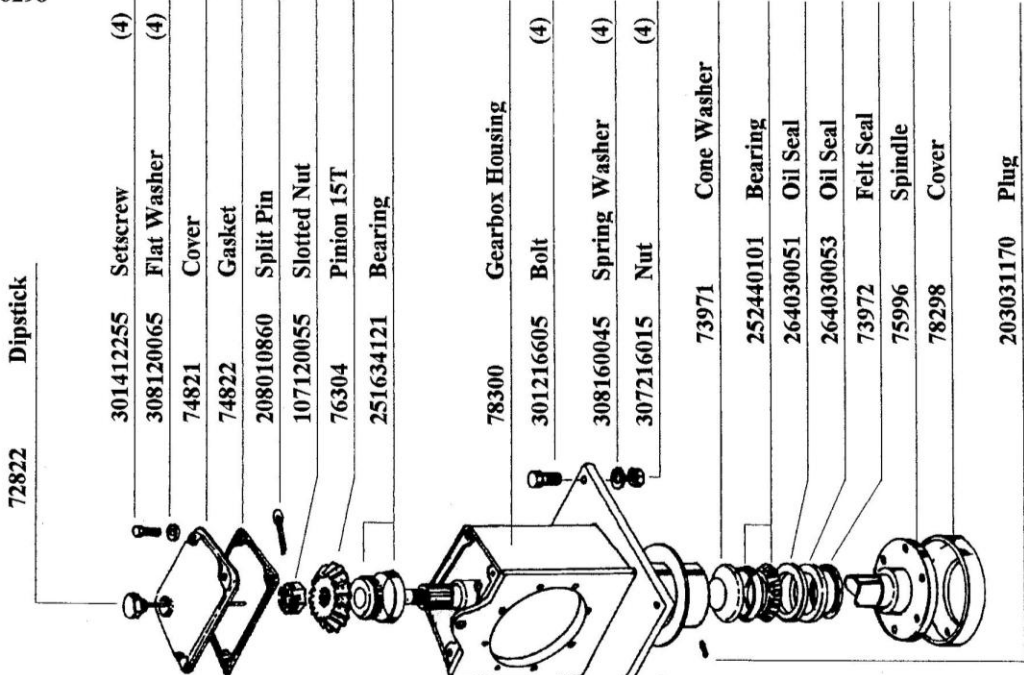
810707072 PTO Drive Shaft c/w Clutch Plate
610100 Sintered Metal Disc Slip Clutch Assy.



HOWARD MULCHER

Gearbox Assembly

90086298



208010860	Split Pin	
48486	Special Washer	
74846	Crownwheel	
74820	Clutch Cover	
308100065	Flat Washer (4)	
308100045	Spring Washer (4)	
301410205	Setscrew (4)	

75994	Gasket 0.25mm	(As required)
75995	Gasket 0.40mm	(As required)
75986	Input Shaft Housing	
74818	Backplate	
251526071	Bearing	
202023950	O Ring	
75988	Spacer	
262720051	Oil Seal	
610408	Special Nut	
208010990	Split Pin	

301412255	Setscrew (8)	
308120035	Shakeproof Washer (8)	
74853	Input Shaft	
252243081	Bearing	
2635	Special Nut	

72822 Dipstick

301412255	Setscrew (4)
308120065	Flat Washer (4)
74821	Cover
74822	Gasket
208010860	Split Pin
107120055	Slotted Nut
76304	Pinion 15T
251634121	Bearing

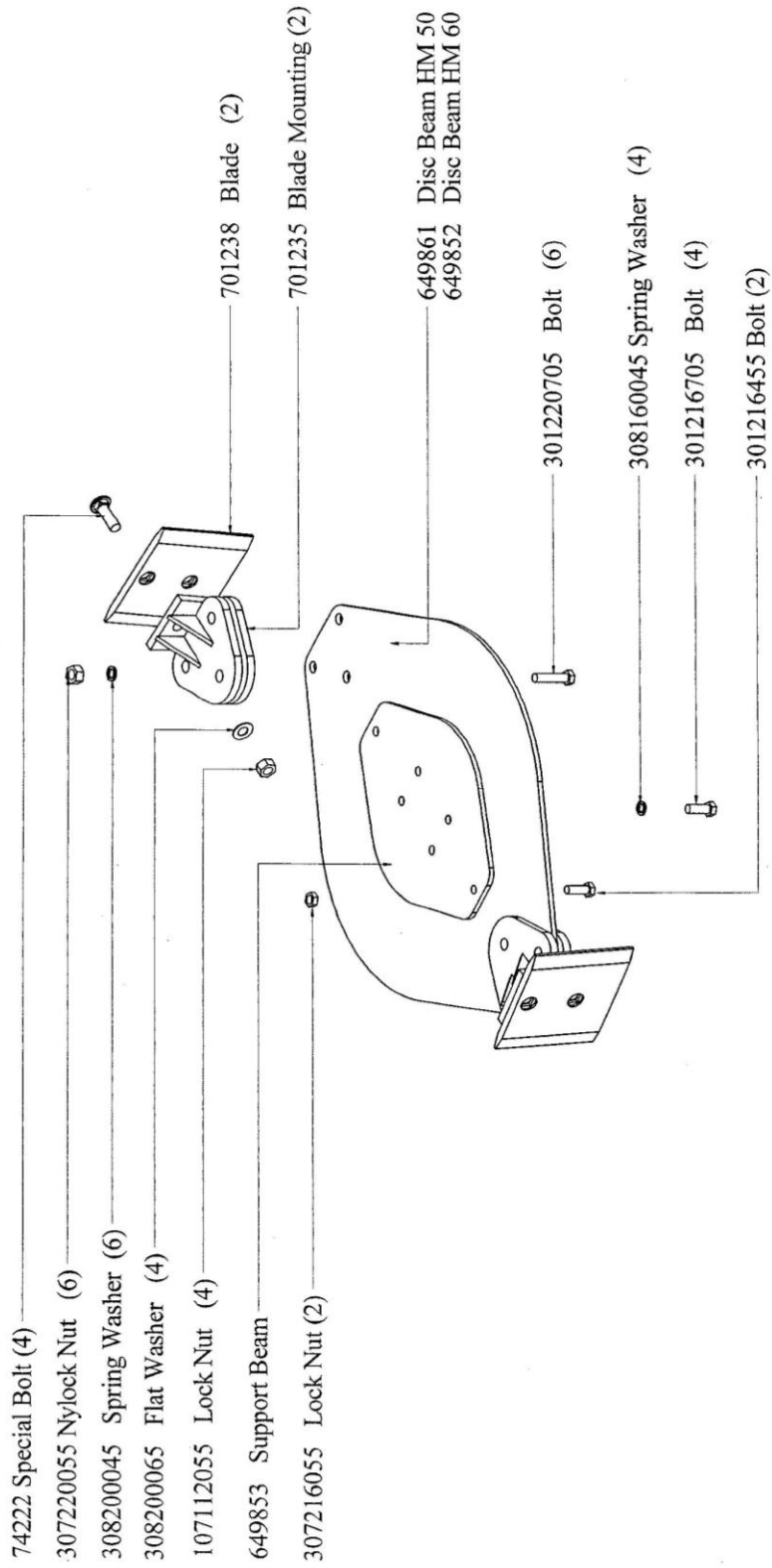
78300	Gearbox Housing
301216605	Bolt (4)
308160045	Spring Washer (4)
307216015	Nut (4)

73971	Cone Washer
252440101	Bearing
264030051	Oil Seal
264030053	Oil Seal
73972	Felt Seal
75996	Spindle
78298	Cover
203031170	Plug

copyright HOWARD
873/03/01

**HOWARD MULCHER
DISC & BLADE ASSEMBLY**

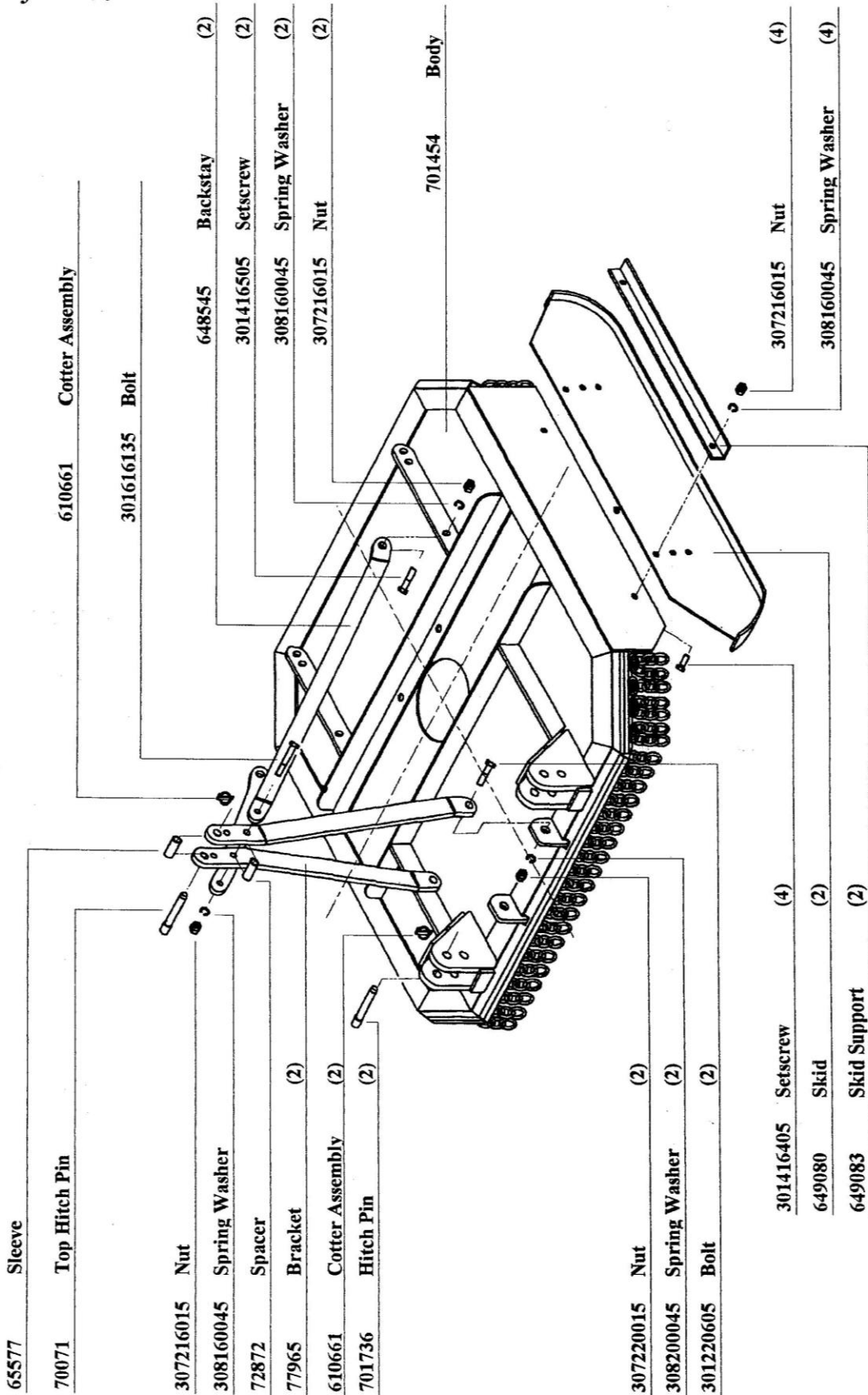
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HM 19 MAY 2008





HOWARD MULCHER

Body HM50



65577 Sleeve

70071 Top Hitch Pin

610661 Cotter Assembly

301616135 Bolt

307216015 Nut

648545 Backstay (2)

308160045 Spring Washer

301416505 Setscrew (2)

72872 Spacer

308160045 Spring Washer (2)

77965 Bracket (2)

307216015 Nut (2)

610661 Cotter Assembly (2)

701736 Hitch Pin (2)

701454 Body

307220015 Nut (2)

308200045 Spring Washer (2)

301220605 Bolt (2)

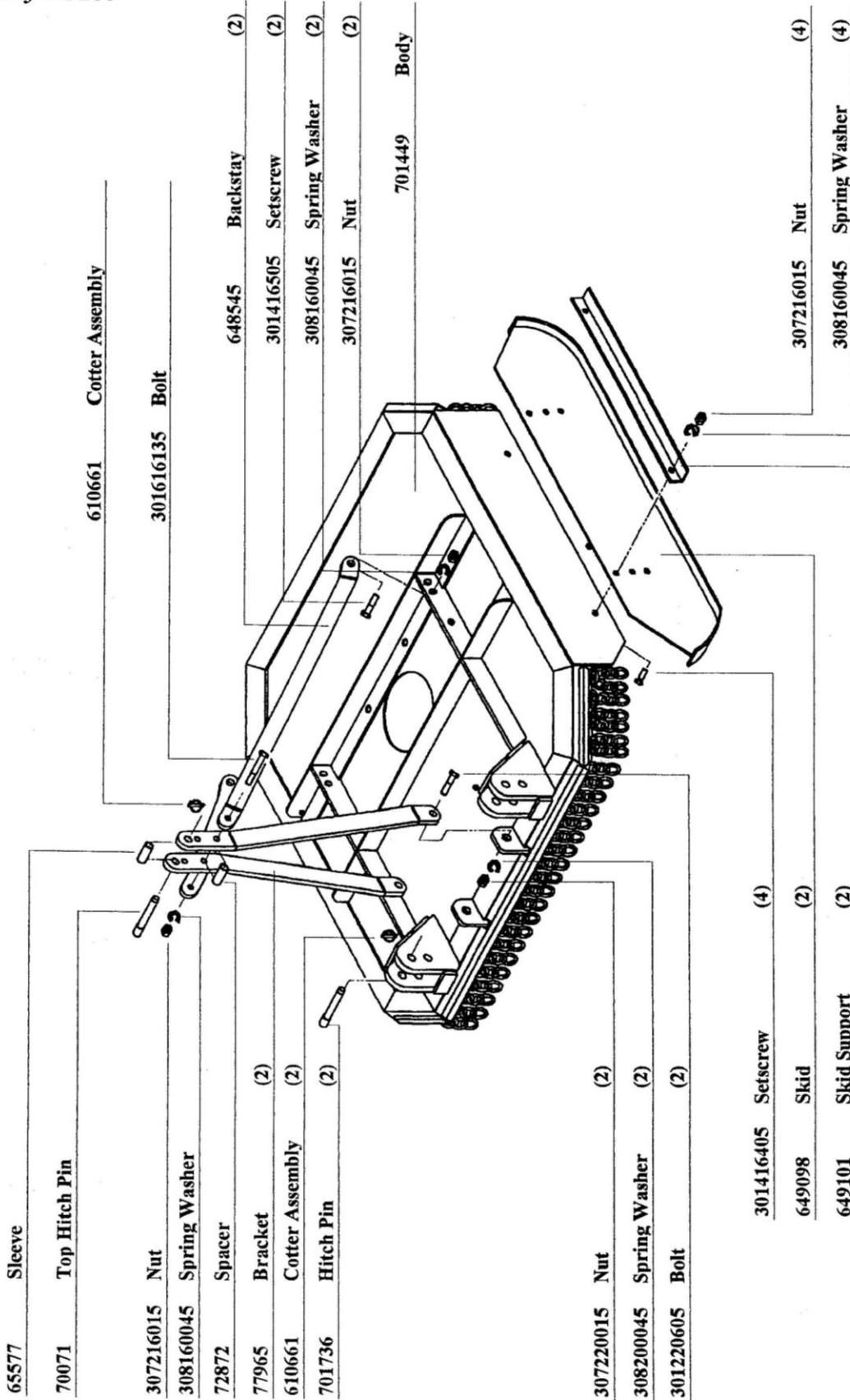
301416405 Setscrew (4)

649080 Skid (2)

649083 Skid Support (2)

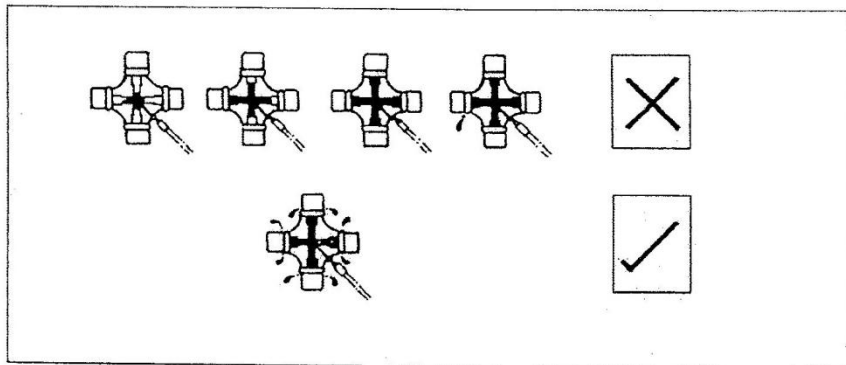
307216015 Nut (4)

308160045 Spring Washer (4)

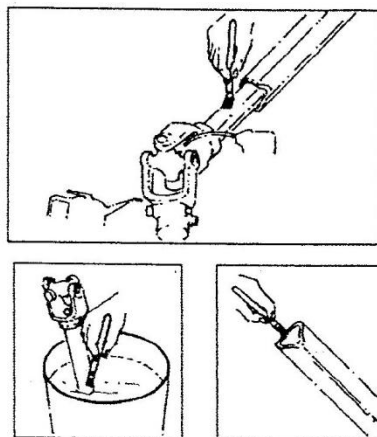
HOWARD MULCHER
Body HM60


MAINTENANCE OF UNIVERSAL DRIVESHAFT

1. Recommended use high quality grease LITHIUM BASE (type NL G2).
2. Make sure to pump grease into the cross journal nipple until the grease came out from all cups.



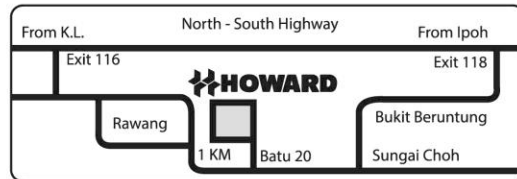
3. Make sure to dismantle both shaft assembly and then to brush at surface of inner and outer shaft with GRAPHITE POWDER OR MOLYBDENUM DISULPHIDE GREASE.
4. Difficulty to move the inner and outer shaft when operation will cause the serious damage to the shaft or output tractor shaft. If the surfaces of inner and outer shaft are dirty, we advise customer to clean it twice per day.



5. Please refer to the PTO owner's manual for further understanding.

HOWARD DEALERS & SPARE PART STOCKISTS

<p style="text-align: center;">PERLIS</p> <p>PPN Perlis, Kangar Sin Keat Seng, Kangar PPK Mata Ayer, M. Ayer</p> <p style="text-align: center;">KEDAH</p> <p>Nafas Jentera, A.S. Pertanian Utara, A.S. Sime Darby Ind, A.S. Hock Lean, Jitra TAE, Jitra TAE, Pendang Utara Agritrak, A.S.</p> <p style="text-align: center;">PULAU PINANG</p> <p>Eik Seng, B'worth Kien Seng, B'worth Sime Darby Ind, S. Prai Sime Kubota, B'worth TCIM, B'worth UMW, B'worth</p> <p style="text-align: center;">PERAK</p> <p>Benefarm, Ipoh Felera Process, Kg. Gajah PPN Perak, Ipoh Kej, Pertanian, T. Intan Overseas Union, T. Intan Sime Kubota, T. Intan Sime Darby Ind, Ipoh TCIM, Ipoh UMW, Ipoh</p> <p style="text-align: center;">SELANGOR</p> <p>BH Agri, K.L. Palm Mach, Kepong Yik Soon, Kepong Teck Seng, Sg. Besi Puncak Emas, B. Caves S.J.I, Klang Asia Turfquip, P.J. Bar Formula, P.J. Mareqsee, P.J. Nafas Jentera, P.J. Eurostar, Puchong Minda Agri, Puchong Sime Darby Ind, Puchong Sime Kubota, Puchong Sin Hup Hin, Sekinchan MZS Power, Shah Alam TCIM, Shah Alam UMW, Shah Alam</p>	<p style="text-align: center;">SABAH</p> <p>LSC K.K. Kong Seng, K.K. Lensoon, K.K. Palm Mach, K.K. Sime Kubota, K.K. Sin Ngiap, K.K. TCIE, K.K. Sime Darby, K.K. UMW, K.K. Wilpors, K.K. Win Hin, K.K. Sime Darby, Lahad Datu All Planters, Lahad Datu ATSB, Lahad Datu Benefarm, Lahad Datu Eurostar, Lahad Datu Palm Mach, Lahad Datu Nafas Jentera, Lahad Datu Sime Kubota, Lahad Datu Solid Firm, Lahad Datu TCIE, Lahad Datu Sime Darby, Labuan All Planters, Sandakan ATSB, Sandakan Benefarm, Sandakan Bri-Trail, Sandakan Eurostar, Sandakan Hup Seng, Sandakan Intan Karang, Sandakan TCIE, Sandakan Sime Darby, Sandakan Sime Kubota, Sandakan UMW, Sandakan Wilpros, Sandakan ATSB, Tawau Eurostar, Tawau LP Tractors, Tawau Sime Darby, Tawau UMW, Tawau</p> <p style="text-align: center;">NEGERI SEMBILAN</p> <p>Bahau Auto, Bahau Emdek, Seremban TCIM, Seremban</p>	<p style="text-align: center;">MELAKA</p> <p>CS Agriparts, T.M. Jaya TCIM, T.M. Jaya Sime Darby, T.M. Jaya PPN Melaka, Melaka Segamat Agri, Krubong</p> <p style="text-align: center;">JOHOR</p> <p>Asia Turfquip, J.B. Hock Guan Hin, J.B. Seriintan, J.B. TCIM, J.B. Teck Seng, J.B. Sime Darby Inds, J.B. UMW, J.B. Ah Bee, Kluang Hiap Thye, Kluang Kang Sang, Kluang Kluang Berjaya, Kluang Maju Estate, Kluang Nafas Jentera, Kluang Palm Mach, Kluang Sime Darby Inds, Kluang Eurostar, Segamat Kian Huat, Segamat Segamat Cycle, Segamat Wabco, Skudai JVR, Ulu Tiram</p> <p style="text-align: center;">KELANTAN</p> <p>Bogam, K.B. Hock Hoe Hin, K.B. K.B. Jaya, K.B. Eurostar, G. Musang Palm Mach, G. Musang Lea Thong, K.B. Minda, K.B. Nafas Jentera, K.B. Sime Darby Inds, K.B. PPK K. Sepat, P.M.S. Sime Kubota, W. Bharu</p>	<p style="text-align: center;">TERENGGANU</p> <p>J & J Machinery, K.T. KPT Peladang, K.T. K.T. Inds, K.T. Nafas Jentera, K.T. TADC, K.T. UMW, K.T.</p> <p style="text-align: center;">PAHANG</p> <p>Yi Cheng, Gambang Eurostar, Kuantan Nafas Jentera, Kuantan Sime Kubota, Kuantan TCIM, Kuantan Tractors M'sia, Kuantan UMW, Kuantan M'tab Agri, Mentakab</p> <p style="text-align: center;">SARAWAK</p> <p>Benefarm, Miri Sime Kubota, Miri TCM, Miri Sime Darby, Miri UMW, Miri Intan Karang, Bintulu Pan Sarawak, Bintulu Sime Kubota, Bintulu Sime Darby, Bintulu UMW, Bintulu Benefarm, Kuching JN Inds, Kuching Sime Kubota, Kuching TCIM, Kuching Sime Darby, Kuching UMW, Kuching Pan Sarawak, Sibul Sime Kubota, Sibul TCM, Sibul Sime Darby, Sibul Pansar, Sibul UMW, Sibul</p>	<p style="text-align: center;">BRUNEI</p> <p>Hock Hung Hing, BSB MPS Trading, BSB Tractors M'sia, BSB</p> <p style="text-align: center;">INDONESIA</p> <p>Agrisarana Altrak 1978 Bina Pertiwi Pioneer Trading Probesco SAHABAT Agritama Satrindo Traktor Nusantara Capella, Medan SAHABAT, Medan</p> <p style="text-align: center;">SINGAPORE</p> <p>ATS Tractors S'pore UMW</p> <p style="text-align: center;">PHILIPPINES</p> <p>Alpha Machinery KAMPI Major Tractors, Davao Sime Darby Up-Town, Pasig City</p> <p style="text-align: center;">THAILAND</p> <p>Phong La-or Patana Suptawee</p> <p style="text-align: center;">INDIA</p> <p>Farm Implements</p> <p style="text-align: center;">SRI LANKA</p> <p>Brown & Co. Hovael</p> <p style="text-align: center;">BANGLADESH</p> <p style="text-align: center;">TAIWAN</p> <p style="text-align: center;">PAKISTAN</p> <p style="text-align: center;">VIETNAM / CAMBODIA</p>
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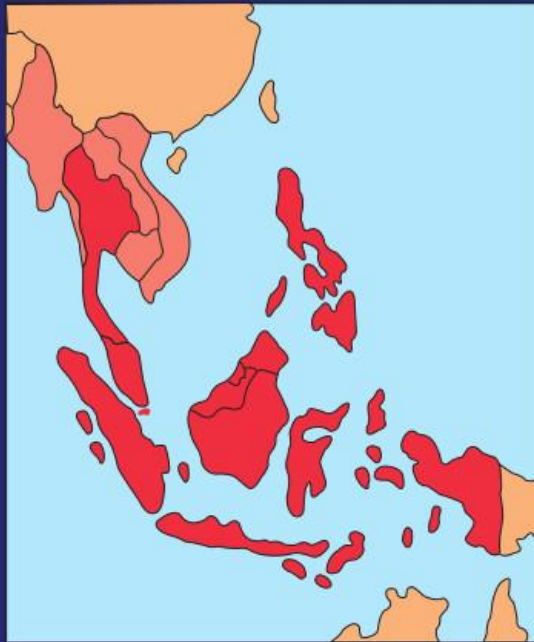


A. Nielsen
Managing Director

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