ASSEMBLY / OPERATOR'S MANUAL

GMD 600 - 700
MULTIDISC MOWER

PLEASE READ CAREFULLY
BEFORE USING THE MACHINE

N° 95002 B.GB - 02.97

DEAR OWNER,

In buying a **KUHN** machine you have chosen wisely. Into it have gone years of thought, research and improvements. You will find, as have thousands of owners all over the world, that you have the best that engineering skill and actual field testing can produce. You have purchased a dependable machine, but only by proper care and operation can you expect to receive the performance and long service built into it.

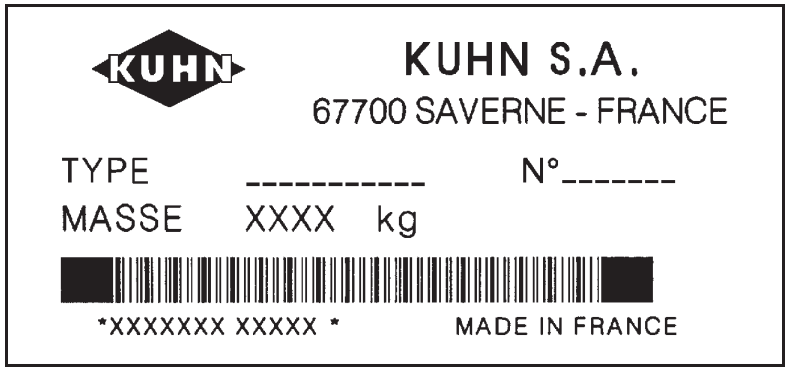
This manual contains all the necessary information for you to receive full efficiency from your machine. The performance you get from this machine is largely dependant upon how well you read and understand this manual and apply this knowledge. Please DO NOT ASSUME THAT YOU KNOW HOW TO OPERATE AND MAINTAIN YOUR MACHINE before reading this manual carefully. KEEP THIS MANUAL AVAILABLE FOR REFERENCE.

Your **KUHN** dealer will instruct you on the general operation of your machine. He is interested that you get the best performance possible and will be glad to answer any special questions that may arise regarding the operation of the **KUHN** machine.

Your **KUHN** dealer can offer a complete line of genuine **KUHN** service parts.
These parts are manufactured and carefully inspected in the same factory that builds the machine to assure high quality and accurate fitting of any necessary replacements.

When ordering service parts it is important that you indicate the type of machine concerned and its serial number.

For this reason please complete the model identification plate diagram below with the required information. This will provide you with an easy reference for future service parts orders.



ABOUT IMPROVEMENTS

KUHN is continually striving to improve its products and, therefore, reserves the right to make improvements or changes when it becomes practical to do so, without incurring any obligations to make changes or additions to the equipment sold previously.

CONTENTS

SAFETY

The symbol above is used throughout this manual every time recommendations are made concerning your safety, the safety of others, or the good operation of the machine.
These recommendations must be made known to all machine operators.

DESIGNATED USE OF THE MACHINE

GMD 600 - 700 Disc Mowers must only be used for the work which they have been designed : mowing on the ground of hay fields, grass silage fields and improved pastures for the purpose of harvesting fodder for feeding livestock.

The manufacturer is not held liable for any damage resulting from machine applications other than those specified by the manufacturer.

Any use other than the designated operation is at the risk and responsibility of the operator.

Designated use of the machine also means :
- following operation, maintenance and repair recommendations given by the manufacturer ;
- using only genuine spare parts, equipment and accessories as designated by the manufacturer.

GMD 600 - 700 Disc Mowers must only be operated, maintained and repaired by competent persons who are familiar with machine specifications and operation and are aware of any danger involved.

The operator must imperatively respect current legislation concerning :
- accident prevention,
- work safety,
- public traffic circulation.

All safety advice indicated on the machine must be strictly observed.

The manufacturer is not held liable for any damage resulting from machine modifications carried out by the operator himself or by a third party without previous written agreement from the manufacturer.

GENERAL SAFETY RECOMMENDATIONS

Before operating the machine, always ensure that tractor and machine are in accordance with work safety and road traffic regulations.

BASIC PRINCIPLES

1. In addition to the recommendations given in this manual, legislation on work safety and accident prevention must also be respected.

2. Advice is indicated on the machine, specifying safety recommendations in order to prevent accidents.

3. Before travelling on public roads, the operator must ensure that the machine conforms to road traffic regulations.

4. Before starting work, the operator must be familiar with all machine controls, handling devices and their functions. Once at work, it is too late to do so !

5. Do not wear loose clothing which could become caught up in moving elements.

6. Use a tractor equipped with a safety cab. Keep windows and roof hatch closed for reduced sound level while operating the PTO driven implement.

7. Before starting up the machine and beginning work, check the surrounding area (beware of children !). Make sure there is sufficient visibility. Keep all people and animals away from the danger zone of the machine (risk of projection!).

8. Carrying people or animals on the machine when working or in transport is strictly forbidden.

9. Machine must only be attached to tractor using means provided and in accordance with current safety standards.

10. When attaching or removing the machine, place the parking stand into the corresponding position.

11. Special care should be taken when attaching or removing the machine from the tractor.

12. Before attaching the machine, ensure that the front tractor axle is sufficiently ballasted.
    Ballast is to be placed on the supports provided in accordance with instructions of the tractor manufacturer.

13. Do not surpass the maximum axle load or the overall transport weight as prescribed by the tractor manufacturer.

14. Do not surpass the maximum transport width authorized by road traffic regulations.

15. Before transporting the machine on public roads, ensure that all legally required guards and indicators (lights, reflectors ...) are in place and in good operation.

16. All operating controls (cords, cables, rods ...) must be positioned so that they cannot be set off accidently, risking accident or damage.

17. Before transport on public roads, locate the machine into its transport position as instructed in this operator's manual.

18. Never leave the tractor seat while the machine is operating.

19. Drive speed must be adapted to ground conditions as well as roads and paths.
    Always avoid abrupt changes of direction.

20. Precision steering, tractor adherence, road holding and efficient braking are influenced by the type of implement, weight, ballast of front axle, ground or road conditions. It is therefore of utmost importance to be cautious in every given situation.

21. Be particularly cautious when turning corners, paying attention to machine overhang, length, height and weight.

22. Before operating the machine, ensure that all safety guards are firmly in place and in good condition. If worn or damaged, replace immediately.

23. Before operating the machine, check tightness of nuts and bolts, particularly on tool fixing elements (blades, tines, knives, spades ...). Retighten if necessary.

24. Keep clear of the machine operating area.

25. WARNING ! Danger of crushing and shearing can exist when components are operated by hydraulic or pneumatic controls.

26. Before leaving the tractor or before adjusting, maintaining or repairing the machine, turn off the engine, remove ignition key and wait until all moving parts have come to a complete stop.

27. Do not stand between the tractor and the machine unless the hand brake is tight and/or stops have been placed under the wheels.

28. Before any adjustments, maintenance or repairs are carried out, ensure that the machine cannot be started up accidentally.

ATTACHMENT

1. When attaching or removing the machine from the tractor, position hydraulic lift control lever in such a way that it cannot be set off accidentally.

2. When attaching the machine to tractor 3-point linkage, ensure that diameter of link pins corresponds to diameter of ball joints.

3. WARNING ! Danger of crushing and shearing can exist in the lifting zone of the 3-point linkage !

4. Do not stand between the tractor and the machine when operating the outer control lever of the lift mechanism.

5. In transport, the machine lift mechanism should be stabilized by tractor tie rods to avoid floatation and side shifting.

6. When transporting the machine in the raised position, lock the lift control lever in place.

7. Do not operate the machine with narrow wheeltrack tractors when working or transporting on uneven or sloping terrain.

POWER TAKE-OFF

1. Only use PTO shaft supplied with the machine or recommended by the manufacturer.
2. PTO guards must always be in place and in good condition.
3. Check for correct PTO overlap when at work and in transport.
4. Before attaching or removing the PTO shaft, disengage PTO shaft, turn off engine and remove ignition key.
5. If a primary PTO shaft is equipped with a slip clutch or a free wheel, these must be fitted on the machine PTO.
6. Ensure that PTO shaft is always correctly fitted and locked into place.
7. Make sure guards are correctly in place and secured with the safety chains provided.
8. Before engaging PTO, ensure that PTO speed and direction are in accordance with manufacturer's recommendations.
9. Before engaging PTO, keep all people and animals clear from the machine.
10. Never engage PTO shaft when tractor motor is turned off.
11. Never surpass PTO angle recommended by the manufacturer.
12. WARNING ! Rotating elements can continue turning momentarily after PTO is disengaged. Keep clear until all rotating elements are at a standstill.
13. When removing the machine, locate PTO shaft on the supports provided.
14. Fit safety cap on tractor PTO.
15. Replace any worn or damaged PTO guards immediately.

HYDRAULIC SYSTEM

1. WARNING ! Hydraulic system is under pressure.
2. When fitting hydraulic motors or cylinders, ensure that connections have been made correctly, as per manufacturer’s instructions.
3. Before connecting hoses to the tractor hydraulics, ensure that tractor and machine circuits are not under pressure.
4. It is strongly recommended that the operator marks the hydraulic connections between tractor and machine to avoid making a wrong connection. WARNING ! Functions could be reversed (for example : lift/lower).

5. Check hydraulic hoses regularly ! Worn or damaged hoses must be replaced immediately.
   Replacement parts must be in accordance with manufacturer's recommendations concerning specifications and quality.

6. Should a leak be found, take all necessary precautions to avoid accidents.

7. Any liquid under pressure (particularly oil from hydraulics) can penetrate the skin and cause severe injury. If injured, see a doctor immediately, there could be danger of infection.

8. Before any adjustments, maintenance or repairs are carried out, lower the machine, depressurize the circuit, turn off the engine and remove ignition key.

MAINTENANCE

1. Before checking any machine malfunction and before adjusting, maintaining or repairing the machine, disengage PTO, turn off engine and remove ignition key.

2. Check tightness of nuts and bolts regularly. Retighten if necessary.

3. If the machine is raised, prop it up in a stable position before carrying out any maintenance work.

4. When replacing a working part, wear protection gloves and only use standardized tools.

5. It is forbidden to discard any oil, grease or filters. These must be given to waste disposal organisations to protect the environment.

6. Disconnect power source before any work is done on the electric system.

7. Check safety guards regularly, particularly those that are subject to wear. Replace immediately if damaged.

8. Spare parts used must be in accordance with specifications and standards as defined by the manufacturer. Use only genuine KUHN parts !

9. Before any electric welding is carried out on tractor or attached machine, disconnect generator and battery terminals.

10. Repairs on elements under pressure or tension (springs, accumulators etc.) must only be carried out by competent persons with standardized equipment.

SPECIAL SAFETY RECOMMENDATIONS

1. Use a tractor equipped with an enclosed cab with windows made of safety glass and kept closed. It is recommended to fit polycarbonate screens inside the tractor safety cab's side and rear windows or to install mesh guards on the exterior of them.

2. Stay a safe distance away from the mower when discs are rotating.

3. For safe machine operation, it is imperative that cutting tools be fitted in accordance with the manufacturer's recommendations. Use only the tool outfit supplied with the machine.

4. Each time before using the mower, inspect condition of cutting elements (knives, discs). Replace any missing, worn or damaged cutting elements immediately. Use only genuine KUHN spare parts.

5. To avoid creating dangerous out of balance forces, always replace missing, damaged or worn knives in pairs.

6. When replacing knives or discs, systematically inspect their securing elements as per the manufacturer's recommendations.

7. Regularly inspect the disc mower's protection cover. Worn or damaged protection covers must be replaced immediately.

8. Protection devices (such as guards, shields etc.) are intended to prevent stones, rocks or other foreign objects from being projected. They also prevent access to the machine's danger zones. Therefore, it is imperative that protection devices are put in place and properly secured each time before using the machine.

9. Crushing and shearing zones which could cause serious bodily injury when changing the machine from transport to work position and vice versa may exist. To prevent possible injury, be extra careful when maneuvering and ensure that everyone is at a safe distance away from the machine.

10. PTO drive to the mower must never be engaged unless the cutterbar skid shoes are in contact with the ground and the protective cover is folded down.

11. Ground of the pastures to be mown must be free of foreign objects.

12. Even when the machine is used in accordance with its purpose, objects may be projected. It is therefore imperative that everyone be kept away from the danger zone, that extra care be taken and that extra precaution (such as safety indicators) be taken when mowing pastures alongside roads or near public areas (parks, schools etc.).

13. Never mow in reverse.

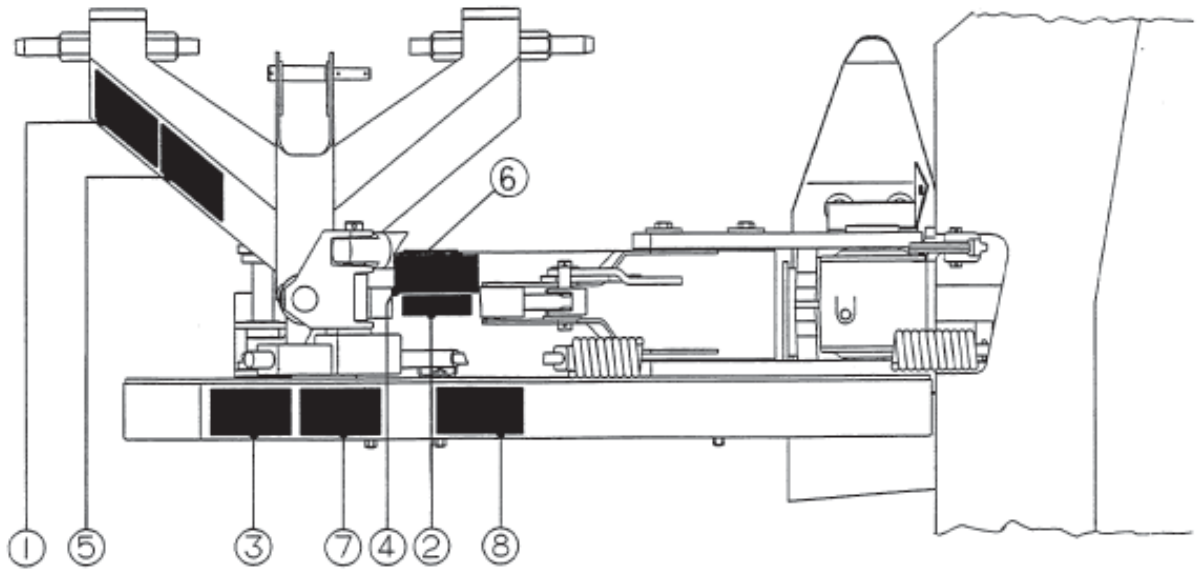
14. When disengaging the PTO drive, moving parts continue to rotate for some time. Wait for all moving parts to come to a complete stop before approaching the machine.

15. If an obstruction is hit, stop the tractor immediately, disengage PTO drive, turn off engine, remove ignition key and wait for all moving parts to come to a complete stop.
    Check the entire machine for any damage before resuming work.

16. It is strongly recommended to have your machine checked by your dealer after each season, especially blades and discs and their fixing devices (nuts, bolts etc.).

SAFETY DECALS

THE FOLLOWING SAFETY PICTORIALS HAVE BEEN PLACED ON YOUR MACHINE IN THE AREAS INDICATED. THEY ARE INTENDED FOR YOUR PERSONAL SAFETY AND FOR THE SAFETY OF THE PEOPLE WORKING WITH YOU. THE TEXT SHOWN ON THEM GIVES THEIR PRECISE MEANING. KEEP THE PICTORIALS LEGIBLE. IF THEY ARE NOT, REPLACE THEM.



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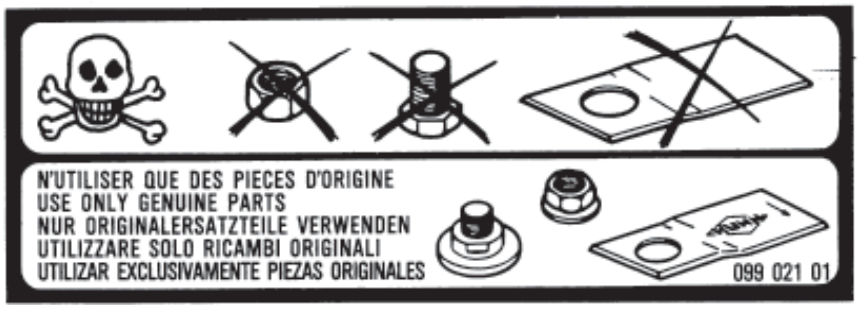

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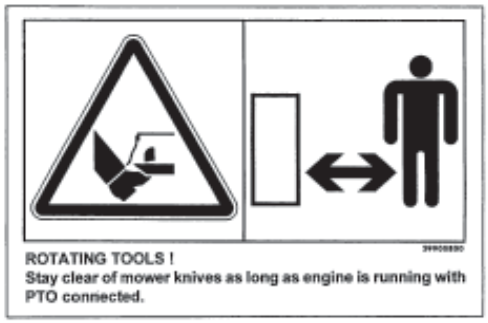

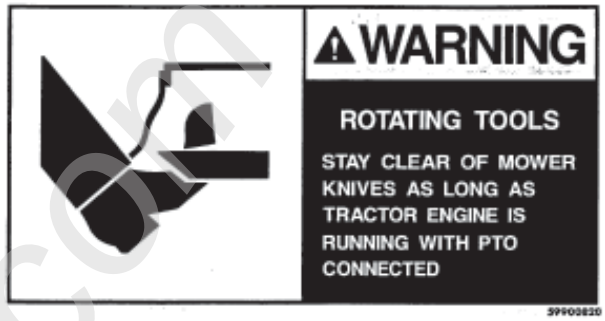

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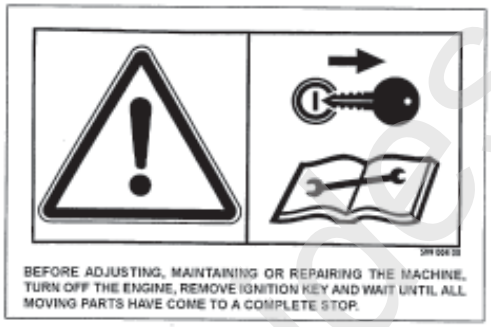

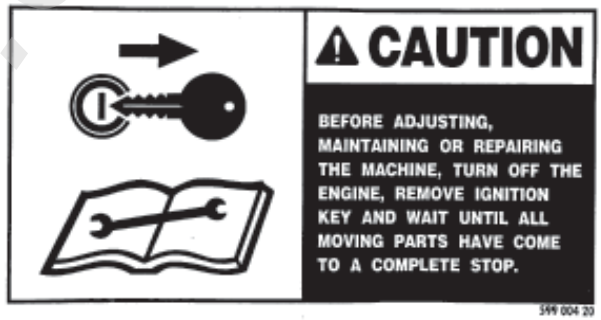

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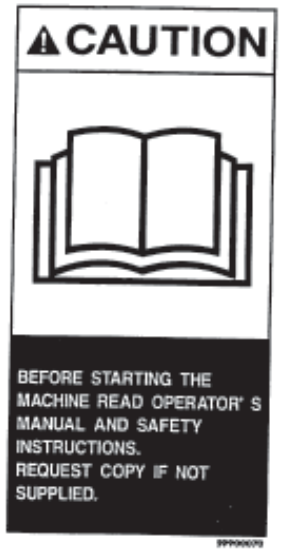

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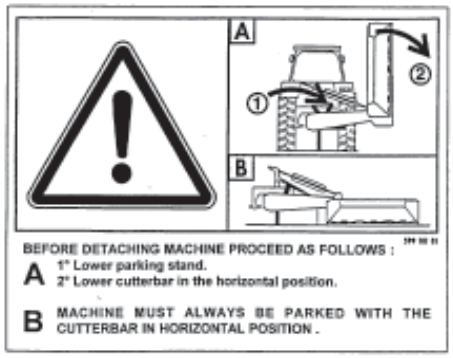

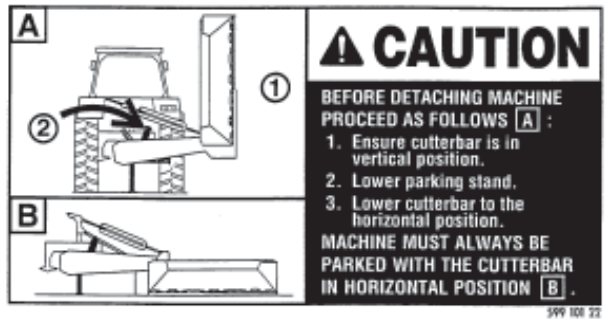

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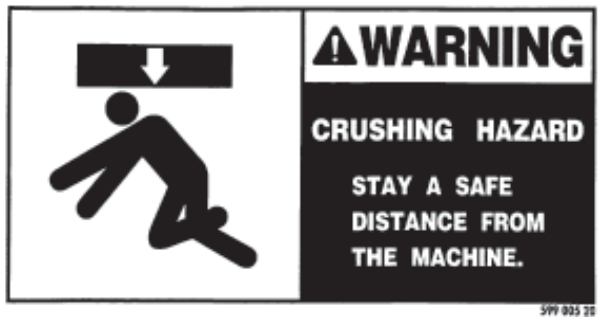


TECHNICAL SPECIFICATIONS

TYPE	GMD 600	GMD 700
Number of discs	6	7
Width of cut	2.40 m / 7' 10"	2.80 m / 9' 2"
PTO power requirement	30 kW (42 hp)	36 kW (50 hp)
P.TO. speed	540 rpm	540 rpm
Disc speed	2986 rpm	2986 rpm
Width in transport position	*0.23 m (9") wider than tractor width*	
Lift system	hydraulic	hydraulic
Weight (approx.)	494 kg / 1086 lbs	527 kg / 1160 lbs
Bevel gearbox oil capacity Oil quality : SAE 80 GL4 (EP)	0.45 l / 1 US pint 0.75 Imp pint	
Cutterbar oil capacity Oil quality : SAE 80 GL4 (EP)	2.00 l / 4.25 US pint 3.5 Imp pint	

* Applicable if machine is attached in such a way that a 5 cm / 2" distance "A" is respected (see page 18).

ASSEMBLY

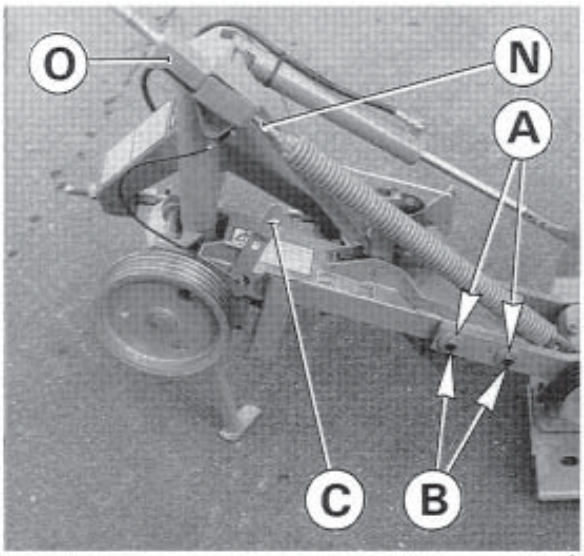
To facilitate shipping of the **GMD 600** and **700** disc mowers, certain parts or assemblies are partially disassembled to reduce bulk. To assemble these parts proceed as follows :

1. Mounting chassis to cutterbar

Make sure that the bore of nylon bushings is clean and well greased. Remove protective paint from the front cover of bevel gearbox where bushings make contact. Chock chassis. Pull parking stand control lever (C) backwards and swing it to the right (looking in the direction of travel). Attach chassis to cutterbar with 2 self-locking screws (B) (M 16 x 50) and 2 washers (A) (dia. 16.5 x 60) as shown in photo 1 and figure 1. Torque : 30 daNm/220 ft.lbs. Install compensating spring rod (N) in its housing (O) (photo 1).

DANGER

FOR YOUR SAFETY BE SURE TO CHOCK CHASSIS CORRECTLY.



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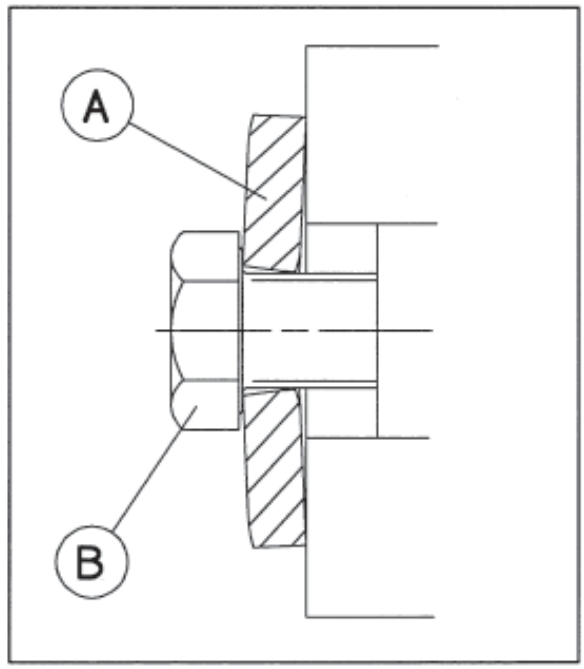
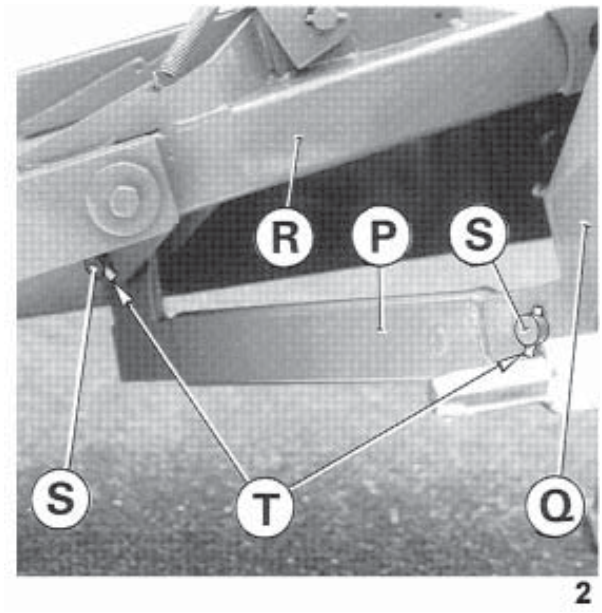


Fig. 1

2. Fitting the break-away latch

Fit break-away latch (P) on headstock yoke (Q) and main frame yoke (R) with 2 pins (S) and 4 roll pins (T) (dia. 6 x 36) as shown in photo 2.



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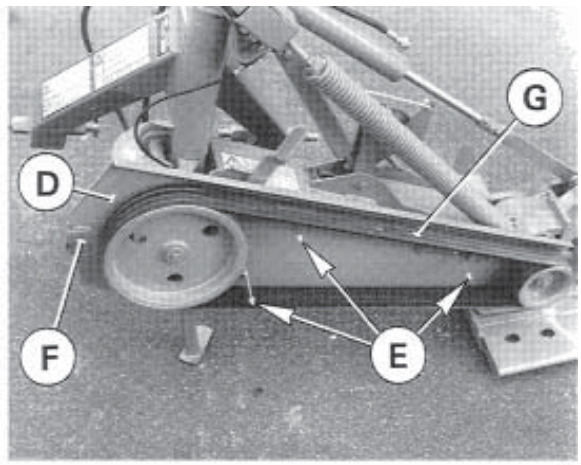
3. Assembly of belt shield and belts

- Install the inner belt shield (D) (photo 3) in place and secure with the 3 spacer bolts (E) taped on the stop chain.
- Install closing plate (F) equipped with elastic nut as shown in photo 3.



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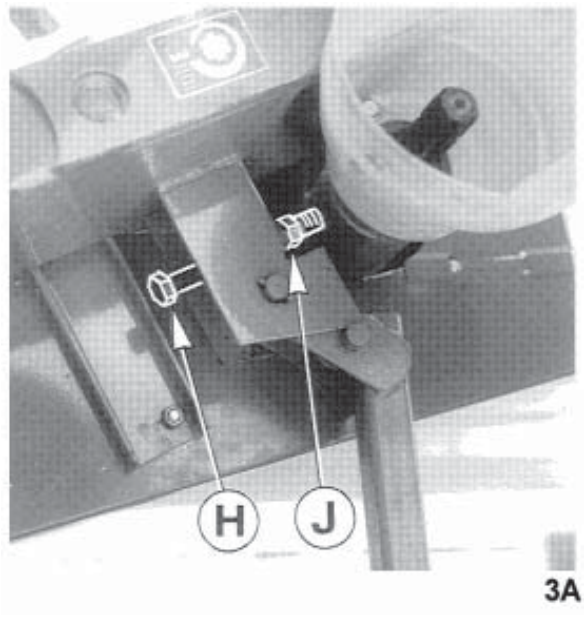
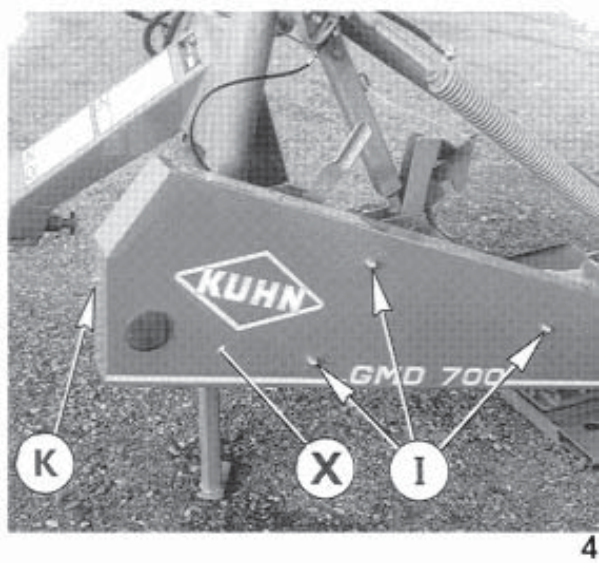


3A

- Install belts (G) (photo 3) on pulleys and tension them by tightening screw (H) (photo 3 A).
- Belt tension is correct if deflection does not exceed 10 mm (2/5") when belt is pressed upon with a force of 3.5 kg (8 lbs) at mid distance between pulleys.
- When correct tension has been obtained, tighten lock nut (J) (photo 3 A).

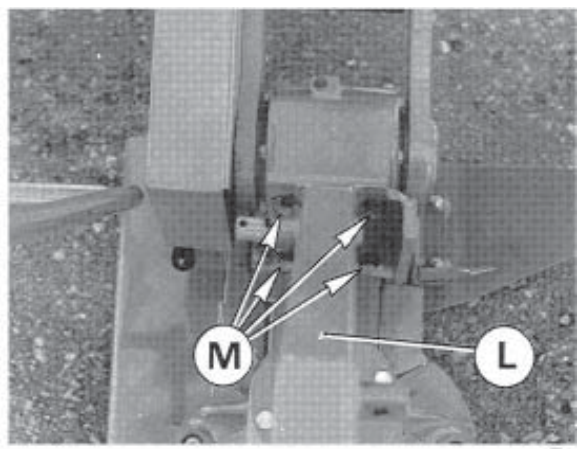


4

- Attach outer belt shield (X) with 3 washers and 3 cap nuts (I) (photo 4).
- Assemble closing plate and outer belt shield with one self-locking screw (K) (M 8 x 16) (photo 4).

4. Frame pipe and lift bracket assembly

- After cleaning attach frame pipe (L) (photo 5) to bevel gearbox with 4 screws (M) (M 16 x 40). (Torque : 21 daNm / 155 ft.lbs).



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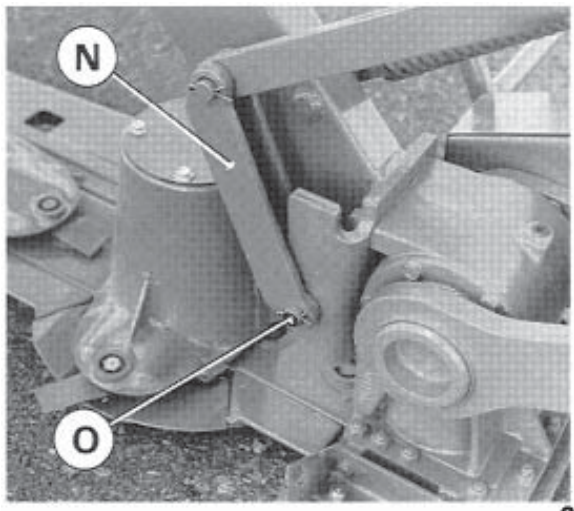

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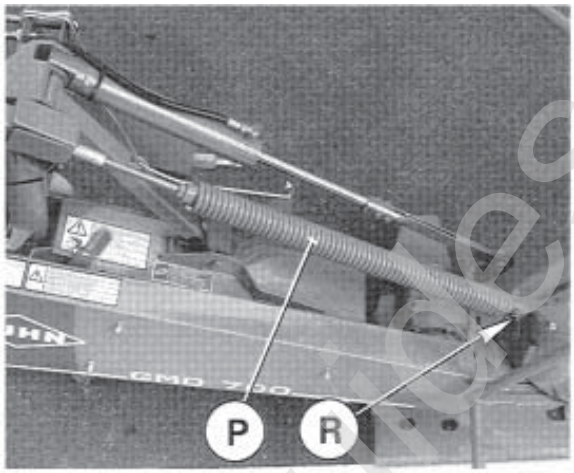
- Attach lift bracket (N) (photo 6) using axle (O) and split pins (dia. 5 x 32) provided.

5. Compensating spring, inner shoe and inner swath board assembly



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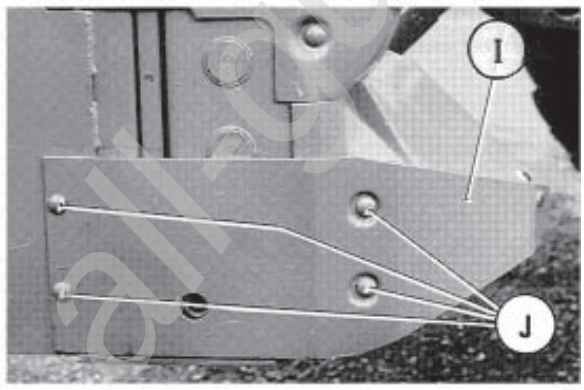
- Connect compensating spring (P) (photo 7) to axle (R) of frame pipe and secure with 2 roll pins (dia. 8 x 40).



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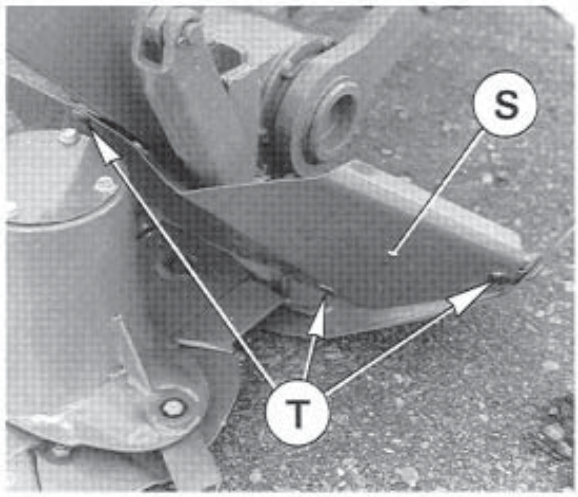
- Fit inner shoe (I) by means of 4 cup square bolts (J) (M 10 x 25) and 4 self locking nuts (M 10) (photo 8).

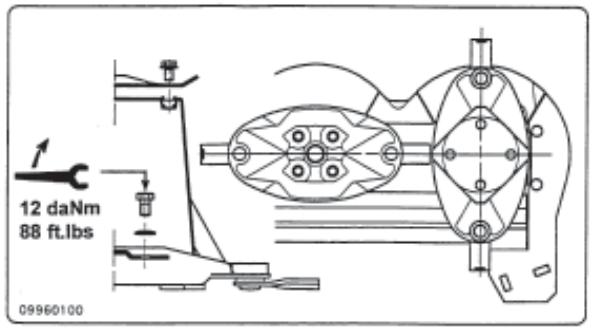


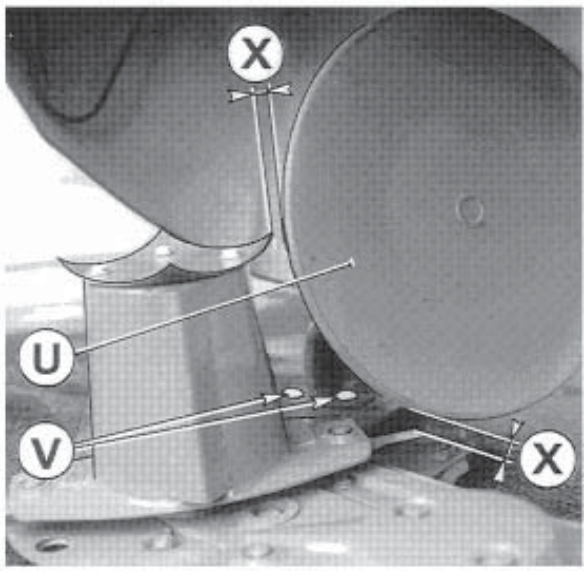
8A

- Attach inner swath board (S) (photo 8 a) in place with 3 cup square bolts (T) (M 10 x 20), 3 flat washers (dia. 11 x 24 x 2) and 3 self locking nuts (M 10). Tighten all swath board bolts (T).

6. Installing outer disc with cone and outer swath wheel

- Attach the outer disc with cone using 4 hexagon screws (M 12 x 20) and 4 conical spring washers (position the conical centre at the top) so that its largest diameter is positioned at a right angle in relation to the adjacent disc (see pictorial opposite). **Tighten at 12 daNm (90 ft.lbs).**
- Attach swath wheel assembly (U) to outer skid shoe (photo 9) with 2 cup square bolts (V) (M 12 x 35), 2 conical washers (dia. 13 mm) and 2 self-locking nuts (M 12).
  Torque : 8.5 daNm/65 ft.lbs
  Before tightening screws (V), make sure that swath wheel does not come into contact with cone cover or knives.
  Keep to a distance of **X = 15 to 25 mm / 3/5" - 1"**.





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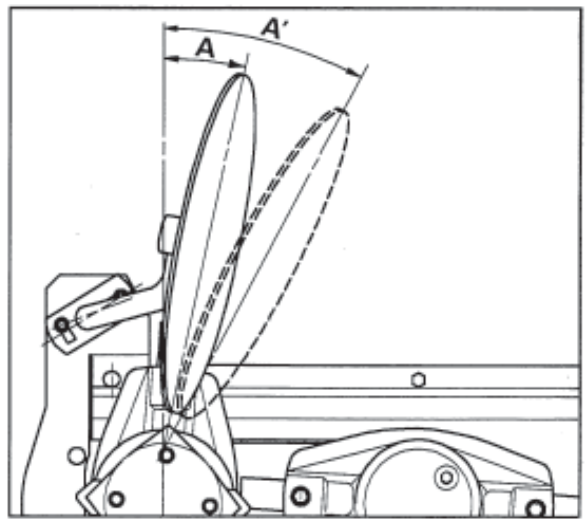
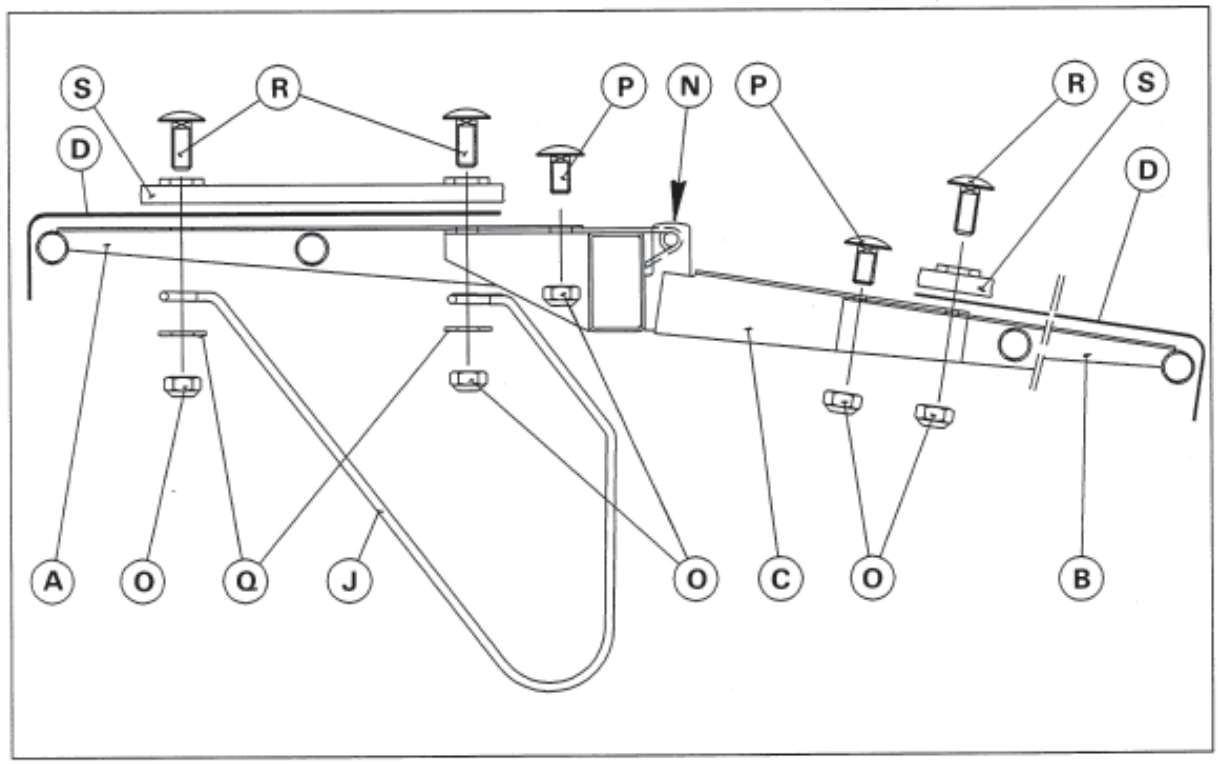


9A

The angular position of the swath wheel compared to the cutterbar can be adapted to working conditions enabling a regular flow of the cut crop towards the rear.
Position the swath wheel so that **maximum angle (A')** (fig. 9 A) is obtained. In difficult working conditions (long, dense, bent over crops) position it towards **minimum angle (A)** (fig. 9 A).

7. Safety guard and locking device assembly



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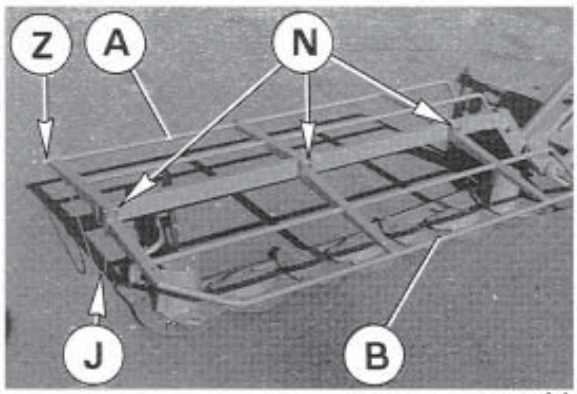

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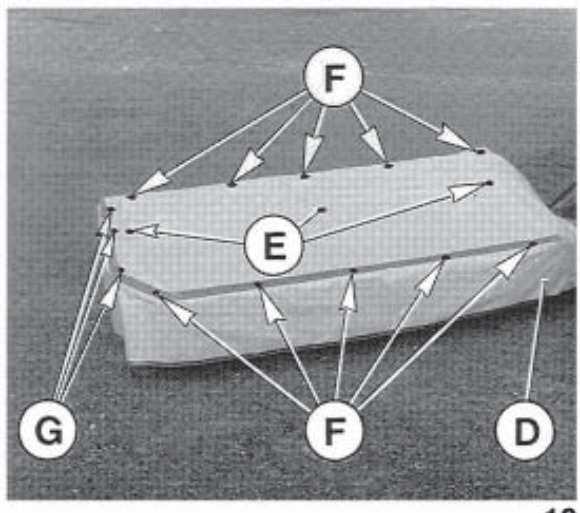
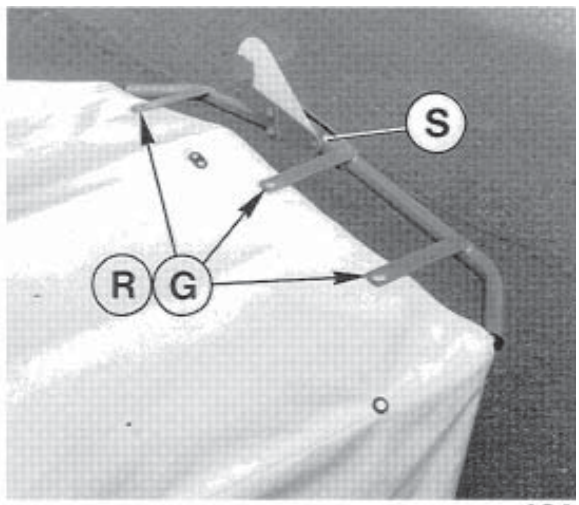
- Attach the front safety bar (B) to its 3 hinges (C) with the 5 cup square bolts (P) (M 10 x 25) and 5 self-locking nuts (O) (M 10) (fig. 10).

- Then attach the pre-assembled front safety bar (B) at (N) with 3 hexagonal screws (M 12 x 75) and self-locking nuts (M 12) (photo 11). Do not tighten these 3 screws completely, so that the front safety bar can still pivot.

- Next attach rear safety bar (A) with 5 round head bolts (P) (M 10 x 25) and 5 self-locking nuts (O) (M 10) (fig. 10 and photo 11). **Fit end-plug (Z) on rear safety bar (A) (photo 11)**.



12



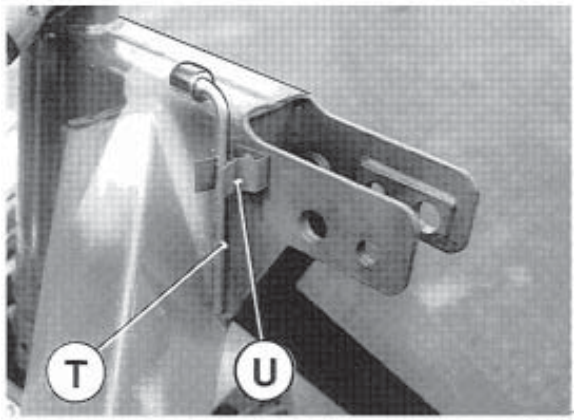
12A

- Install cover (D) as shown in photo 12. Buckle straps around the pipe frame at E. Buckle straps (F) around front and rear safety bar. All these straps are attached to the underneath of the safety cover.
- Punch 3 holes in the safety cover at (G) and use 3 cup square bolts (R) (M 10 x 35) with self-locking nuts (0) (M 10) (fig 9) and plain washers (Q) (dia. 11 x 24 x 2) to attach the following components on the outside arms of the safety bars : safety guard locking device (S) ; safety cover (D) ; stop rod (J) (see fig. 10 and also refer to photos 11, 12 and 12 A).

Note : Make sure that the pivot axis of the safety guard locking device (S) is lined up with the pivot axis (N) of the front safety bar before tightening self-locking nuts (O).

ATTENTION

CAUTION : ALWAYS OPERATE MOWER WITH SAFETY COVER IN PLACE AND THE FRONT END OF THE COVER LOWERED. NEVER LEAN AGAINST OR STAND ON SAFETY COVER.



13

The safety guard locking device is operated with an 18mm box spanner (T) to be stored in holder (U) (photo 13).

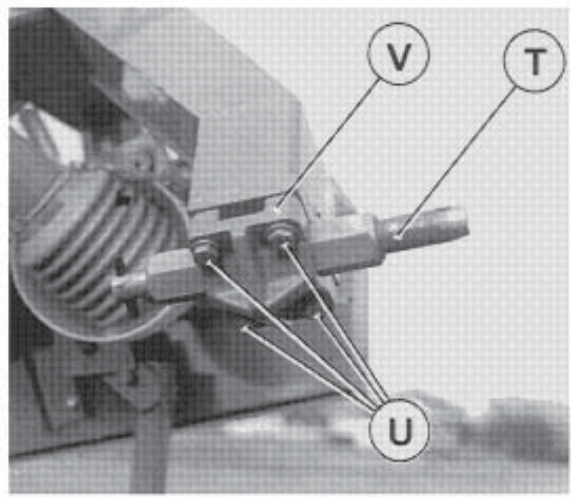
GENERAL INFORMATION

1. Minimum tractor power used should be 31 kW (42 PTO hp) for the **GMD 600** and 37 kW (50 PTO hp) for the **GMD 700**. If tractor power is not sufficient, quality of work will not be satisfactory.

2. **GMD 600** and **GMD 700** disc mowers can be adapted to all tractors having a PTO speed of 540 rpm and equipped with a normalized Cat. 2 three point hitch.

3. **GMD 600** and **GMD 700** are equipped with adjustable lower hitch pins allowing the machine to be offset 50 mm (2") to the left and 50 mm (2") to the right.

4. To adjust lower hitch pins (T) (photo 14), loosen the 4 hexagonal screws (U) of collar flanges (V) on each side. Reposition lower hitch pins respecting dimension 825 mm (2'8") (page 18) and retighten screws (U). Torque : 12 daNm/88 ft.lbs.



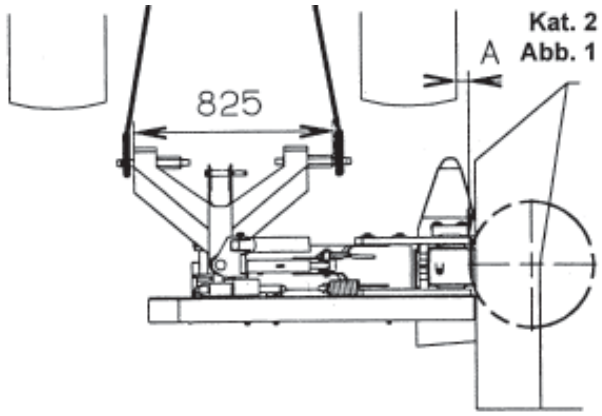
14

Check tightness of screws (U) after ten hours of use.

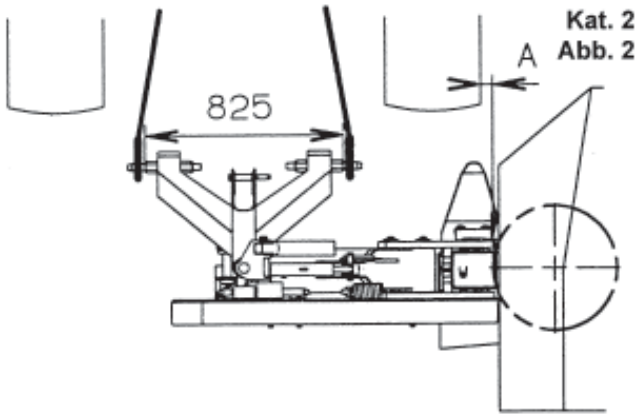
ADAPTING TO TRACTOR

Attachment of lower links and positionning of hitch pins :

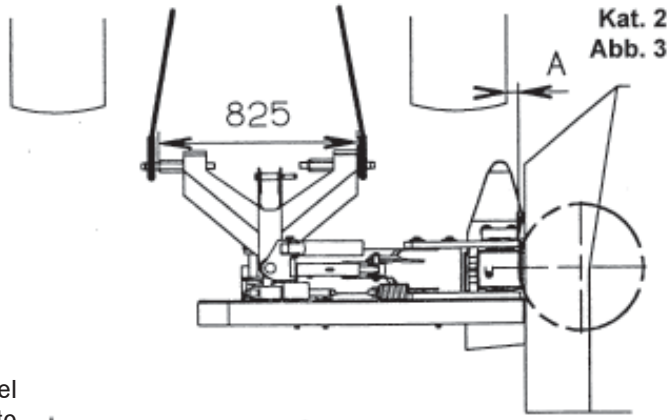
Follow fig. 1 for category 2 tractors with narrow wheel track.



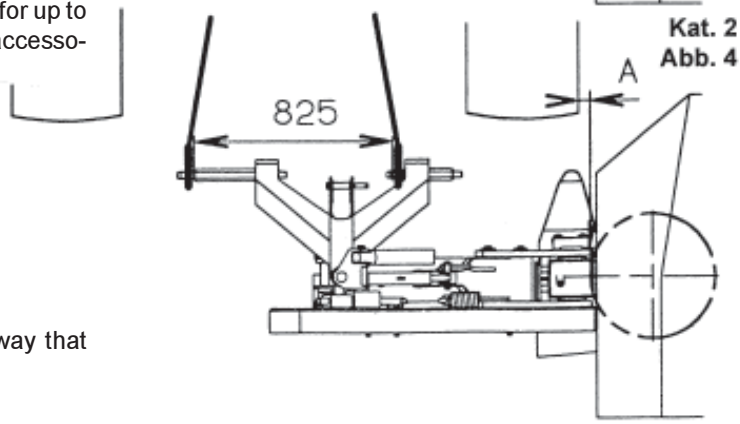
Follow fig. 2 for category 2 tractors with standard wheel track.



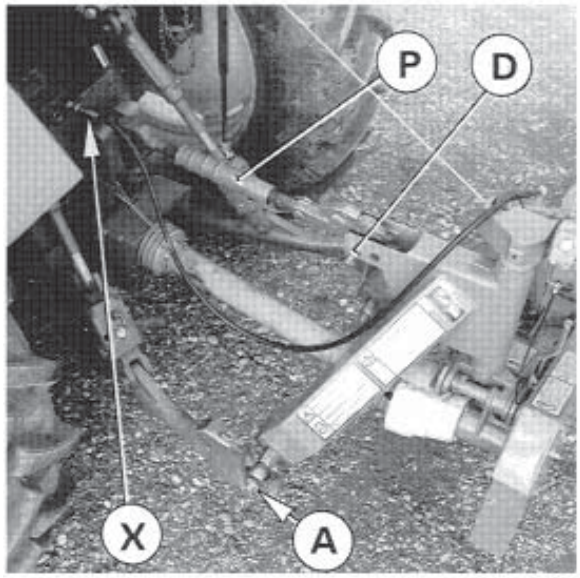
Follow fig. 3 for category 2 tractors with wide wheel track.



Follow fig. 4 for Cat. 2 tractors with very wide wheel track. In this case a lengthened left hitch pin for up to 200 mm (8") offset is required (see optional accessories on page 35).



NOTE : Always attach machine in such a way that distance (A) is approximately 50 mm (2").

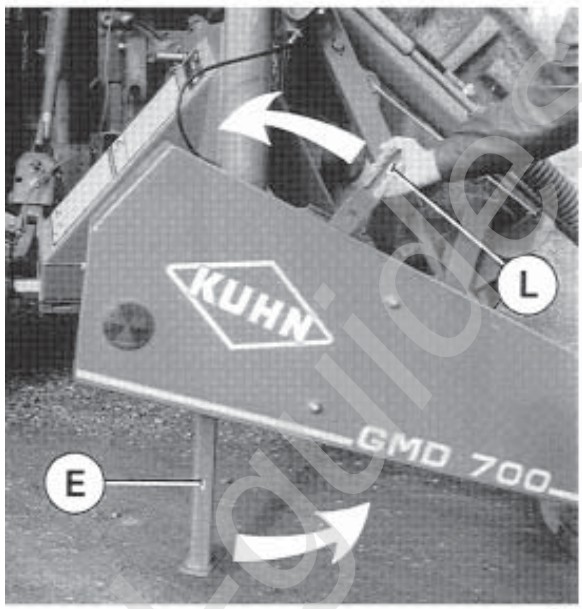


16

1. Attach the lower links to the hitch pins and secure with linchpins (A) (photo 16).

2. Attach the top link (P) using pin (D). Two positions are available on the pin, depending on the diameter of the ball joint, to secure the link to the mower .

3. Connect the hydraulic hose (X) to the tractor.



17

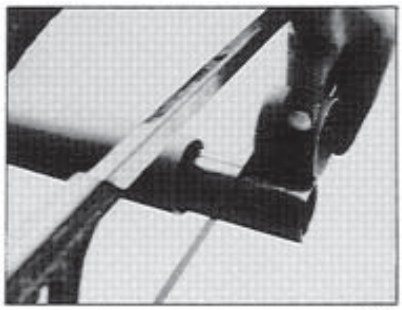
4. Raise machine with the tractor 3-point hitch, pull parking stand control lever (L) towards the rear and pivot it to the left (looking in the direction of travel) which raises parking stand (E). The lever is automatically locked in place when fully pivoted towards the left (photo 17).

P.T.O. SHAFT

Connect the PTO shaft **to the 540 rpm tractor drive** (with the free wheel fitted on the machine side).

Make sure PTO length is correct :
1° When the PTO is in its maximum extended position, a minimum tube overlap of 250 mm (10") must be maintained.
2° When the PTO is in its maximum overlap position (retracted), tubes should not butt against the yokes. As a safety measure a clearance of at least 10 mm (2/5") must be maintained. If this is not the case, shorten the two transmission tubes and the two guard tubes by the same length (photos 18 and 19). Bevel and clean the tubes (photo 20) and grease the inside of the outer tube (photo 21).
3° Never operate the PTO at too great an angle (30° maximum) (photo 22).


18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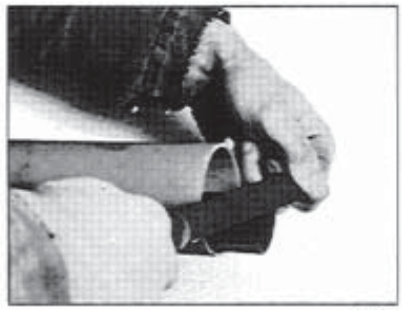
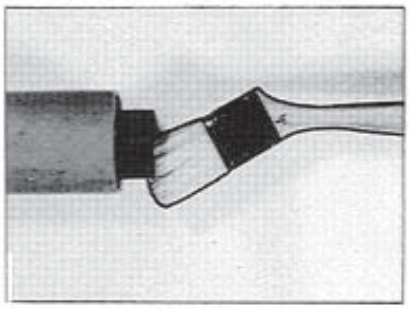

20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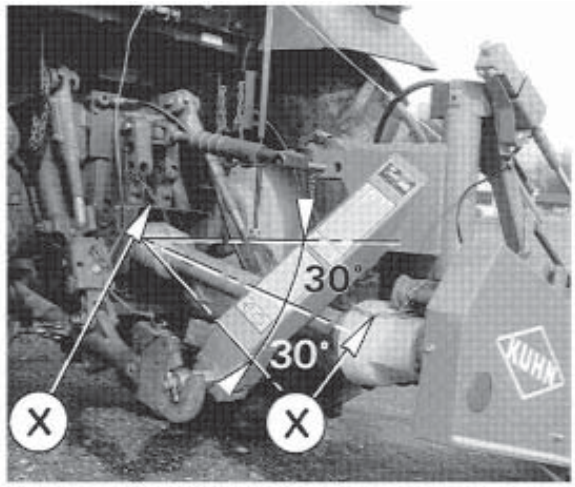


22

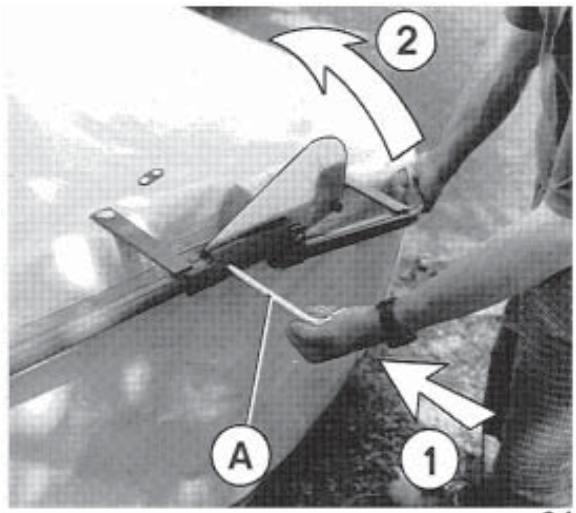
These recommendations and adjustments must be respected to avoid damage or premature wear of the PTO.

Never connect the PTO to the **1000 rpm tractor drive**.

DANGER

To avoid accidents which could be serious, make sure that the guards are always correctly in place and secured with the safety chains (x) (photo 22). Damaged guards should be replaced immediately.

TRANSPORT

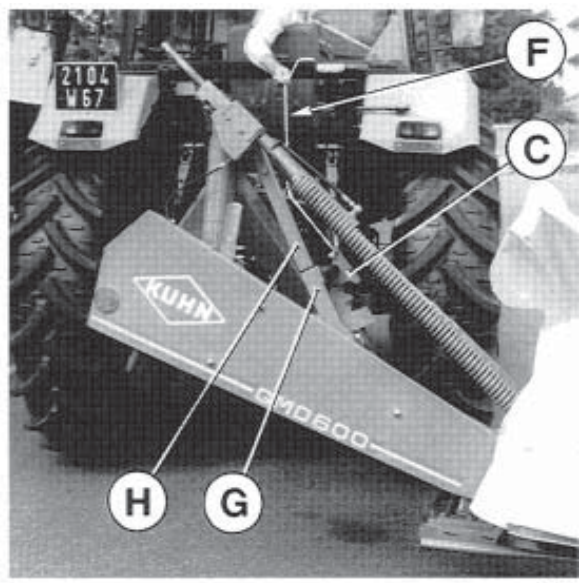


24

BEFORE TRANSPORTING THE MACHINE ON THE PUBLIC HIGHWAY, THE OPERATOR SHOULD MAKE SURE THAT THE MACHINE CONFORMS TO THE HIGHWAY CODE.

To transport the machine on public highways or from one field to another, proceed as follows :
- Disengage the PTO drive and wait for all movement to stop.
- Raise the machine with the tractor 3 point linkage.
- Release lock by applying pressure with the box spanner (A - arrow 1) supplied with the machine and fold the front safety bar upwards (arrow 2) (photo 24) till it is automatically locked in transport position.
- Pull cord (F) (photo 25) to pivot stop plate (G) which locks the spring compensating system.
- Raise cutterbar in the full vertical position, keeping cord pulled until cutterbar is raised up. It will automatically be locked in place by latch (C) (photo 25) when it reaches the vertical position (photo 26).

The cord (F) (photo 25) must be pulled each time when raising the cutterbar in the vertical position.



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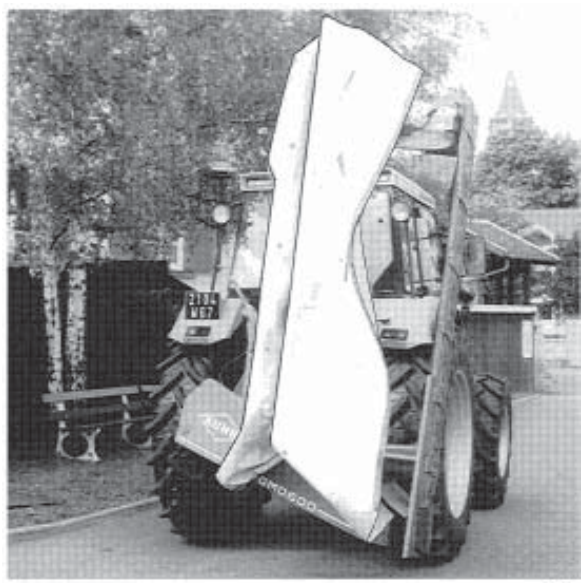
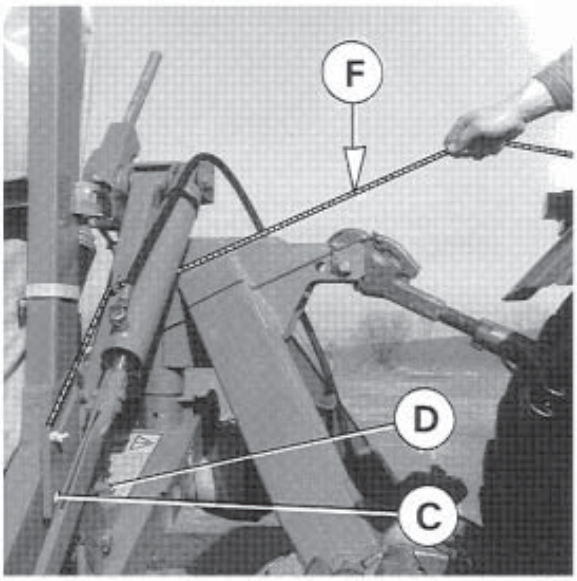

26

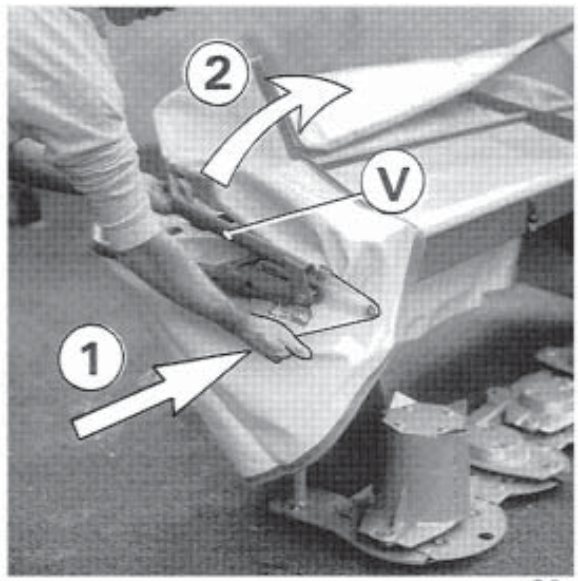
Note : It is normal that the vent plug may seep lubricating fluid during the first activations of the hydraulic cylinder.

WORKING POSITION AND ADJUSTMENTS

WARNING : BEFORE PUTTING THE MACHINE IN WORK OR TRANSPORT POSITION, ENSURE ALL PERSONS ARE WELL CLEAR OF THE CUTTERBAR PIVOTING AREA.



27



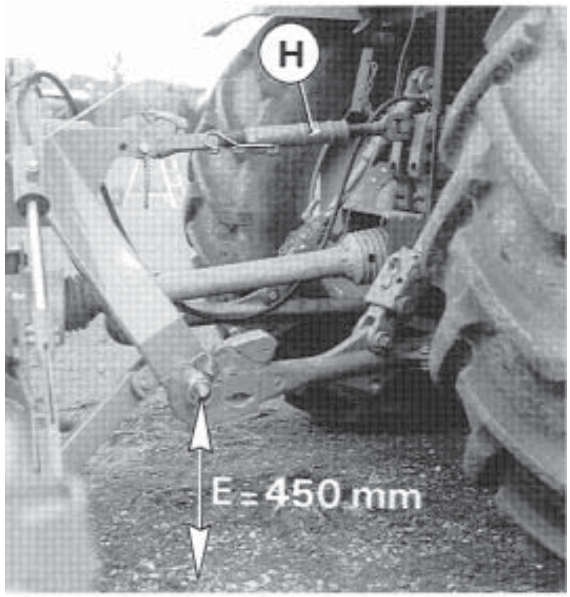
28

1. Pressurize the disc mower's lift cylinder so that the cutterbar closes up against its stop.

2. Pull cord (F) to free latch (C) (photo 27).

3. Lower the cutterbar down to the horizontal position by releasing hydraulic pressure. Keep cord pulled until cutterbar is lowered half-way, as cord also activates stop plate (D) which unlocks the spring compensating system.

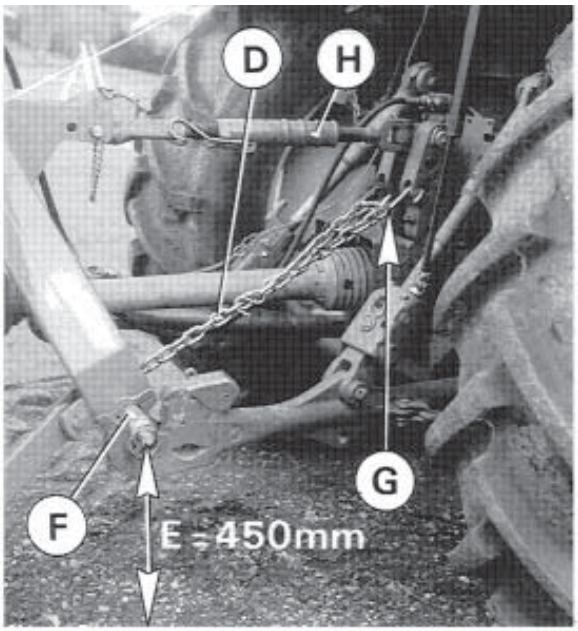
4. Release lock by applying pressure with the hand palm (arrow 1) and fold front safety bar (V) downwards (arrow 2) (photo 28) till it is automatically locked in working position.



29

Adjustment of chassis height from the ground

1. **For tractors equipped with hydraulic position control function**, set position control so that lower hitch pins are 450 mm (18") from the ground (photo 29).
   In this case the stop chain delivered with the machine must not be used.



30

2. **For tractors not equipped with hydraulic position control function** the stop-chain delivered with the machine must be used.

- Lower machine until hitch pins (F) are 450 mm (18") or slightly more from the ground.
- Connect stop-chain (D) with its hook (G) supplied in the hardware kit of the machine to one of the free holes at the tractor's top link attachment clevis.
- Lower the machine into working position. Chassis height is correct when :

> - The cutterbar is resting on the ground.
> - Stop-chain (D) is tight.
> - E = 450 mm (18") (distance of lower hitch pins from ground).

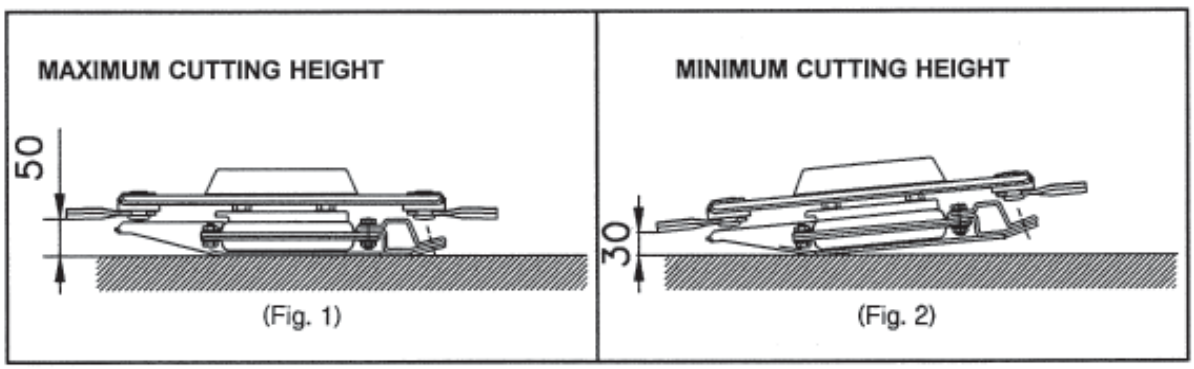
- To keep this adjustment permanently, close hook eyelet with roll pin (dia. 5 x 45 mm).

ATTENTION

WARNING : BEFORE PUTTING THE MACHINE IN WORK OR TRANSPORT POSITION, ENSURE ALL PERSONS ARE WELL CLEAR OF THE CUTTERBAR PIVOTING AREA.

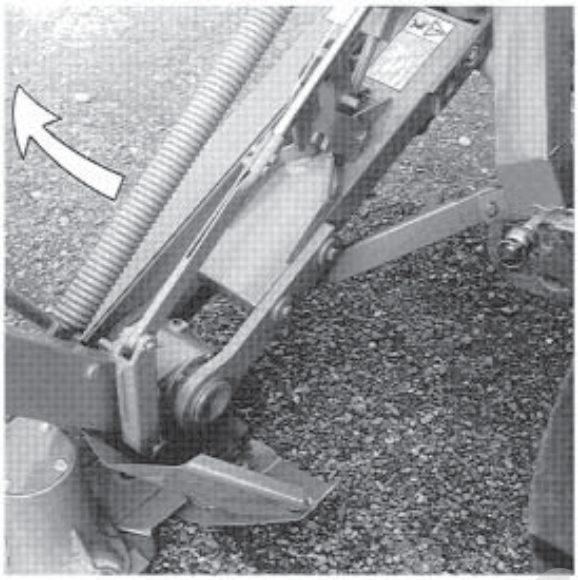
CUTTING HEIGHT

Maximum cutting height (50 mm / 2") (fig. 1) is achieved when the discs are parallel to the ground. Adjustment of cutting height is achieved by altering the cutterbar tilt angle. This is effected by varying top link length (H) (photos 29 and 30) until desired cutting height is achieved. To minimize blade and disc wear, improve grass regrowth and get maximum nutritive value from the crop, minimum cutting height should never be adjusted less then 30 mm / 1 1/4" (fig. 2).

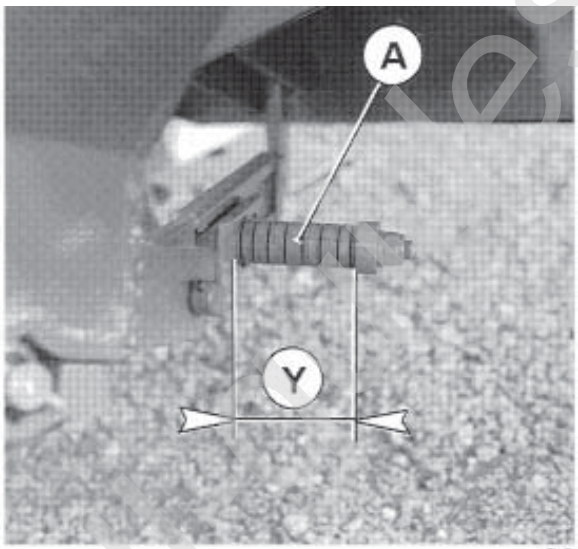


(Fig. 1) (Fig. 2)

SAFETY BREAK-AWAY



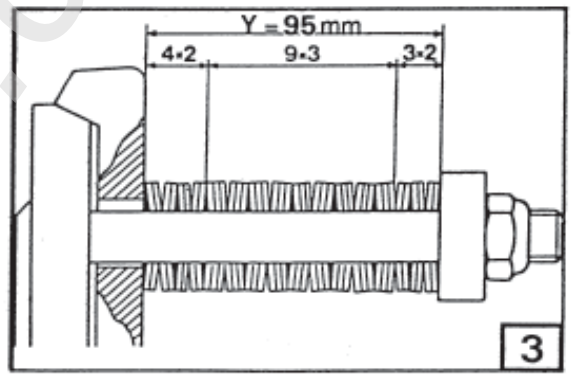
31



32

A breakaway latch allows the cutterbar to swing back if an obstruction is hit (photo 31).
IF THE LATCH RELEASES, STOP THE TRACTOR IMMEDIATELY AND DISENGAGE THE PTO.
To reset the cutterbar, back the mower until the cutterbar is in its normal position.
The factory setting of the latch is adapted to most working conditions.

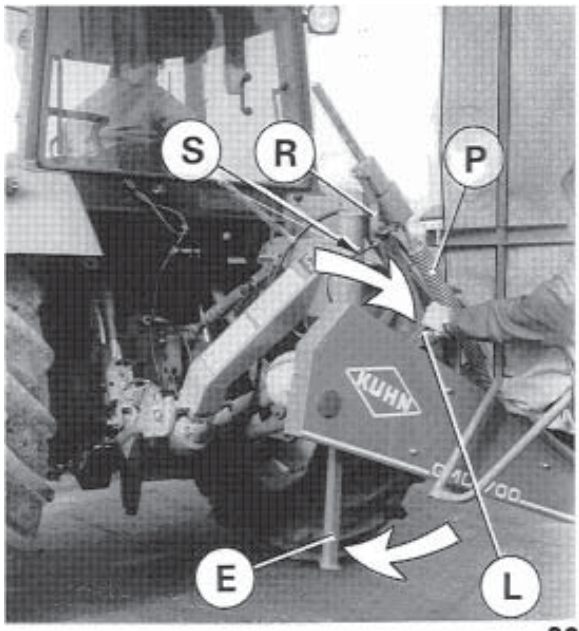
NOTE : Before using the mower, the break-away linkage must be checked for good operation making sure all components slide correctly and are well greased. Check for any cutterbar damage if an obstruction is encountered.



For the **GMD 600** and **GMD 700**, the stack of spring washers should be compressed to 95 mm (3 3/4") (fig. 3). Observe spring-washer arrangement in fig. 3 (photo 32) carefully.

If after resetting, the cutterbar continues to break away, the pressure of spring assembly (A) (photo 32) can be increased, but in all cases stacking must not be less than 91 mm (3 2/3"), as otherwise safety disengagement cannot function.

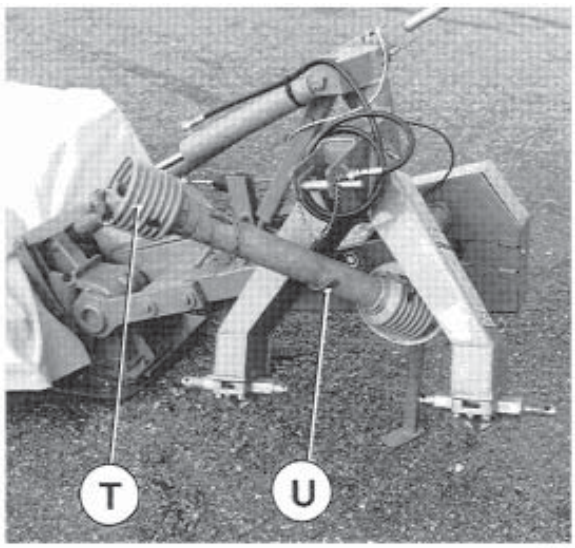
PARKING THE MACHINE



33

BEFORE ATTEMPTING TO LOWER THE PARKING STAND, RAISE THE CUTTERBAR TO ITS VERTICAL TRANSPORT POSITION, TO RELEASE ALL PRESSURE ON THE COMPENSATING SPRING.

- Pull parking stand control lever (L) and pivot it to the right which lowers stand (E) and at the same time unlocks compensating spring (P).
  This second operation is completed by cable (S) releasing stop (R).
  Lever (L) will automatically lock into place when fully pivoted towards the right.



34

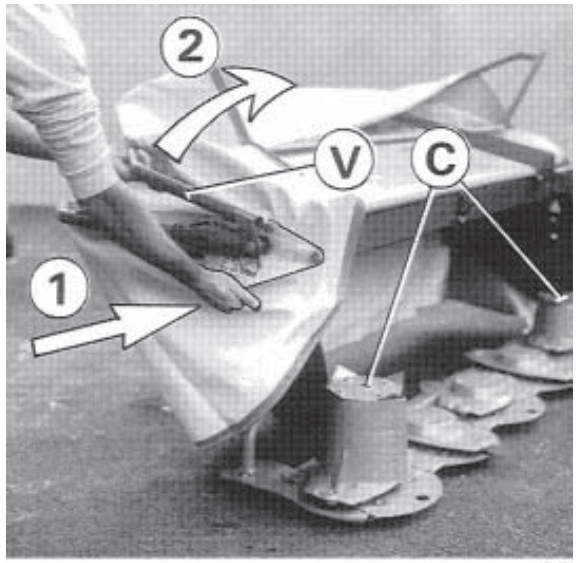
- Release hydraulic pressure to lower cutterbar to the horizontal position (see page 22 for correct procedure).
- With the hydraulic 3-point lift, lower the machine to the ground and disconnect the top link and the hydraulic hose.
- Then disconnect lower links and the PTO shaft.
- Place the PTO shaft (T) in its support (U) and wind the hydraulic hose around the top link clevis (photo 34).

ATTENTION

FOR YOUR SAFETY : ALWAYS PARK THE MACHINE WITH THE CUTTERBAR IN THE HORIZONTAL POSITION.

OPERATING THE MOWER

Release lock by applying pressure with the hand palm (arrow 1) and fold front safety bar (V) downwards (arrow 2) (photo 35) till it is automatically locked in working position.



35

DANGER

ENSURE THAT THE SAFETY CURTAIN IS COMPLETELY IN PLACE AROUND THE CUTTER-BAR.

Safety curtain will avoid projection of most foreign objects.

Always allow a few minutes for oil to spread in the cutterbar before engaging PTO when changing cutterbar from transport to operating position.
Before cutting, engage tractor PTO and slowly increase speed up to 540 rpm.
Do not be disturbed by the high pitched whine of the discs. This will be reduced to some extent when cutting.

Forward speed must be adapted to working conditions and should be reduced when mowing dense crops.
Check correct fixation of plugs (C) (photo 35) on the outer and inner disc cone.
Replace lost or worn plugs immediately.

ADVERSE FIELD CONDITIONS

DANGER

NEVER MOW IN STONY OR ROCKY GROUNDS.

Extra care and precautions should be taken in rough or debris-ridden fields. The following adjustments should be made to the mower in these conditions to minimize the possibility of foreign objects being deflected by the cutting knives.

1° Tilt the angle of the cutterbar back towards the horizontal position by turning the top link handle (H) (photo 29, page 22 and photo 30 page 23) to raise the cutting height of the knives.
2° Reduce the forward speed.
3° Make sure the cutting knives can pivot if an obstruction is hit.

ATTENTION

NEVER OPERATE THE MOWER WITHOUT THE PLASTIC COVER IN PLACE. DO NOT LEAN AGAINST OR STAND ON THE GUARD COVER.

LUBRICATION

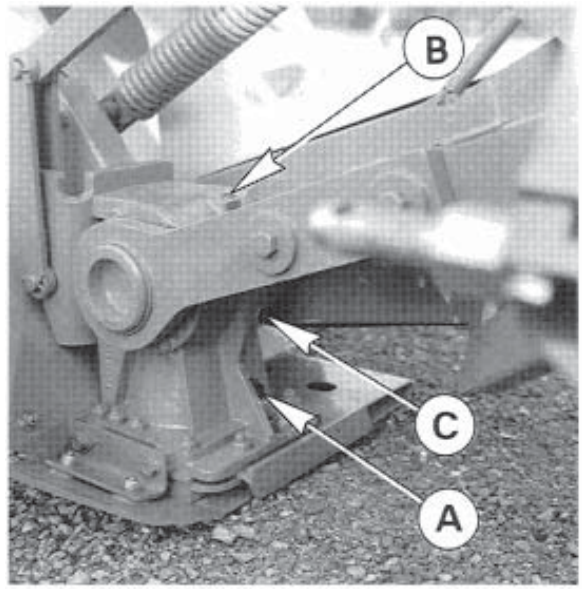
IMPORTANT : It is very important that the oil in the bevel gearbox and the cutterbar be changed after the first ten hours of use with E.P. SAE 80 GL4 OIL. Thereafter, it should be changed every 200 hours of use or at least once per year.
NOTE : Oil should be drained immediately after use while still warm.
The pressure relief valve (A) (photo 36) located on the side of the bevel gearbox must also be unscrewed and cleaned after the first ten hours and thereafter should be checked and cleaned regularly. The ball detent must be free to relieve pressure.

1° BEVEL GEARBOX

Check oil level once a day . Add oil through filler plug (B) (photo 36) if required.
The maximum oil capacity of this gearbox is as shown in the table below and **it is important not to exceed this quantity.**

GEARBOX OIL CAPACITY :
0.45 litre - 1 US pint - 0.75 Imp. pint

Plug (C) (photo 36) serves as a check plug when the bar is horizontal. Remove plug (C). When oil level is correct, it will just begin to flow out of the hole. Plug (C) is also used as a drain plug when the cutterbar is in the vertical transport position.

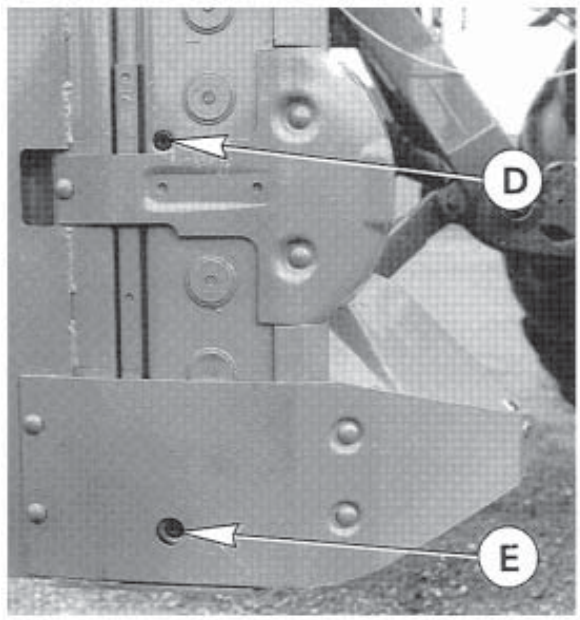


36

2° CUTTERBAR

Check oil level once a day. Add E.P. SAE 80 GL4 oil to the cutterbar at fill plug (D) (photo 37). The oil level is correct when oil flows out of the fill plug hole.
Note : Make sure the cutterbar is in the vertical position when checking or adding oil.

CUTTERBAR OIL CAPACITY :
2.00 litres - 3.5 Imp.pints - 4.25 US pints



37

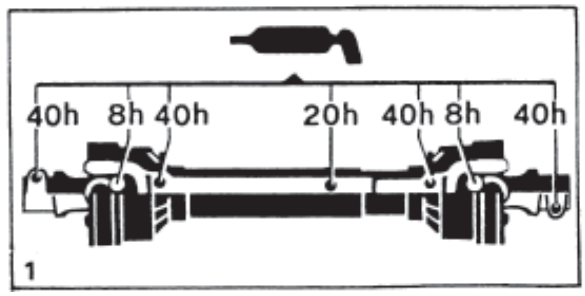
NOTE : Provided above intructions are strictly observed, there is no cause for alarm if it is found that the transmission case is very hot to touch, provided that the discs turn freely by hand. .
Attention : Before carrying out this check, turn off the tractor engine, remove ignition key and disconnect the PTO shaft.

To drain oil, remove magnetic drain plug (E) (photo 37) located underneath the cutterbar below the bevel gearbox. Clean all metal particles off the magnetic drain plug before refitting.

GREASE FITTINGS

Clean fittings before applying grease. Oil all pivot and linkage points every fifty hours.
Grease breakaway sliding components as required.

Lubricate the PTO shaft at the hourly intervals indicated in figure 1 with SHELL Multi-Purpose grease NLGI grade 2



THE RECOMMENDED GREASE AND OIL CHANGE PERIODS ARE BASED ON NORMAL FIELD AND WORK CONDITIONS.
SEVERE OR UNUSUAL CONDITIONS MAY REQUIRE MORE FREQUENT LUBRICATION OR OIL CHANGES.

RESPECT SPECIFIED OIL QUANTITIES AND GRADES : SAE 80 W EP (GL4) OIL ONLY.

(In certain countries SAE 80 W EP (GL4) oil may not be available. In this case a GL 4 or GL 5 grade SAE 80 W 90 oil may be used as a replacement. Never use a straight EP 90 oil).

ADJUSTMENTS AND MAINTENANCE

DANGER

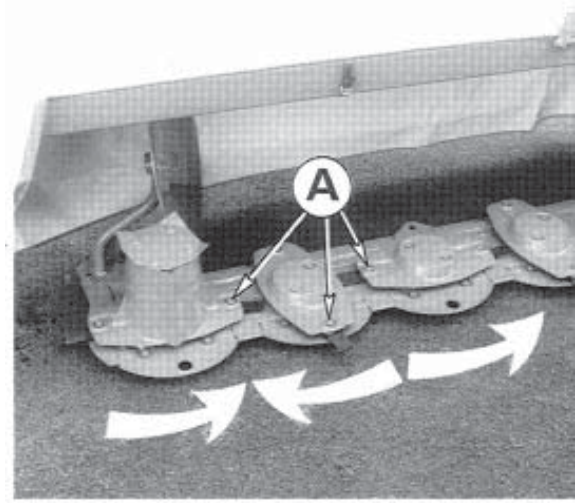
Adjust machine to clear obstructions and debris. Foreign objects and other debris can be deflected toward the operator and bystanders.

1. Discs and knives

Discs, knives and securing elements are manufactured from high quality steel and have been subjected to a heat-treatment to assure a high resistance to wear.
Worn or damaged items must immediately be replaced with genuine KUHN parts as otherwise warranty will be withdrawn.

CAUTION : ONLY USE GENUINE KUHN SPARE PARTS.

Worn knives should either be turned over on the same disc to use the other cutting edge, or replaced. When turning or replacing the knifes, make sure there is a 1 mm minimum gap between the knives or their mounting bolts and the cutterbar wear plates. If otherwise, insert one (maximum two) distance spacer(s) (code 568 071 00) between the discs and the disc bearing stations (see fig. 2, page 29). Dull knives require more horse power to cut the crop and will leave an uneven stubble.



38

To replace or turn over knives, first clean the area around nut (A) (photo 38) and remove nut with the box spanner supplied with the machine.
Ensure securing elements are in good condition and fit knives so that the arrow on their upper face is pointing in the direction of rotation of the disc it is fitted to. Torque locknut to 12 daNm (90 ft.lbs).

DANGER

IMPORTANT : ALWAYS REPLACE SECURING ELEMENTS (LOCK-NUTS AND BOLTS) WHEN THEY HAVE BEEN REMOVED 5 TIMES.

DANGER

CAUTION : ALWAYS REPLACE DAMAGED KNIVES, NEVER STRAIGHTEN A BENT KNIFE.
NEVER REPLACE ONE KNIFE ONLY PER DISC, ALWAYS REPLACE BOTH OF THEM TO AVOID CREATING AN OUT-OF-BALANCE FORCE.

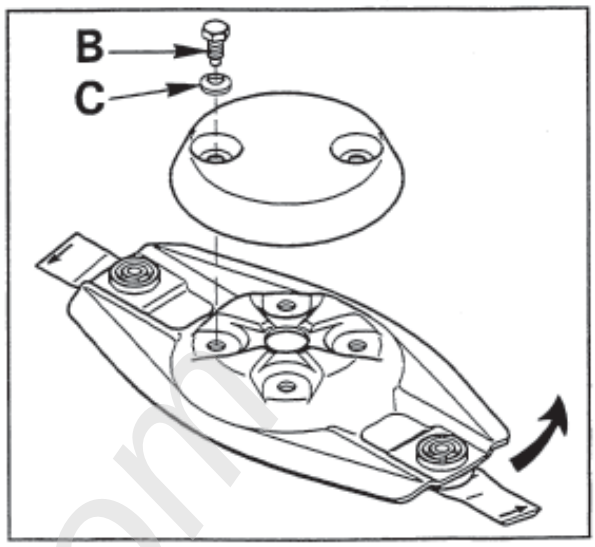


Abb. 1

Discs are secured by 4 nipple-screws (B) and 4 conical spring washers (C) on a hub (fig. 1).
Two of these diametrically opposite bolts are also used to secure the conical covers on top of the discs. Tighten all 4 bolts to a torque of **12 daNm (90 ft.lbs)**.
The discs must have their largest diameters positioned at right angles to each other. This positioning must be scrupulously respected so as to avoid interference between the knives.
Take extra care when fitting the conical spring washers (C) (fig. 1), which must be positioned with the conical centre at the top.

IMPORTANT

Discs supplied through our spare parts department come with a 1 mm spacer (part no. 568 071 00) (fig. 2) attached to them. When installing a new disc check if the gap between the blades or their mounting bolts and the cutterbar protection shields is at least 1 mm. If this is not the case fit the 1 mm spacer between the disc and its mounting hub for increased clearance (fig. 2).

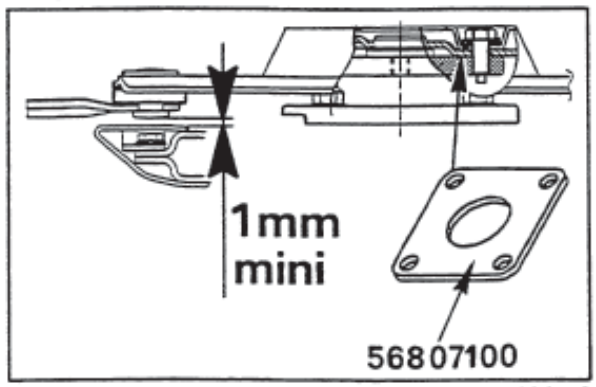


Abb. 2

DANGER

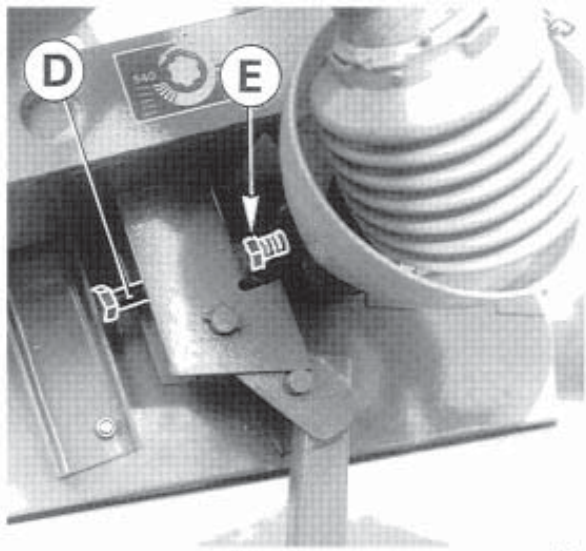
CAUTION : BEFORE CARRYING OUT SERVICE OR ADJUSTMENTS TO THIS MACHINE, TURN OFF THE TRACTOR ENGINE, REMOVE IGNITION KEY AND DISCONNECT THE PTO SHAFT.

2. Belts

Belts must be properly tensioned at all times to avoid excessive flopping and slipping. Loose belts will also cause poor cutting and premature wear.
To tension the belts, loosen lock-nut (E) and tighten screw (D) (photo 39). When belts have been tensioned correctly, retighten the lock-nut.

Belt tension is correct if deflection does not exceed 10 mm (2/5") when a belt is pressed upon with a force of 3.5 kg (8 lbs) at mid distance between pulleys. This must be checked, particularly during the first hours of work, through the cut-out (C) located underneath the belt shield (photo 40).

Note : Belts must never be changed individually. If one of them becomes damaged, the whole set (code No. 83101791) must be replaced.



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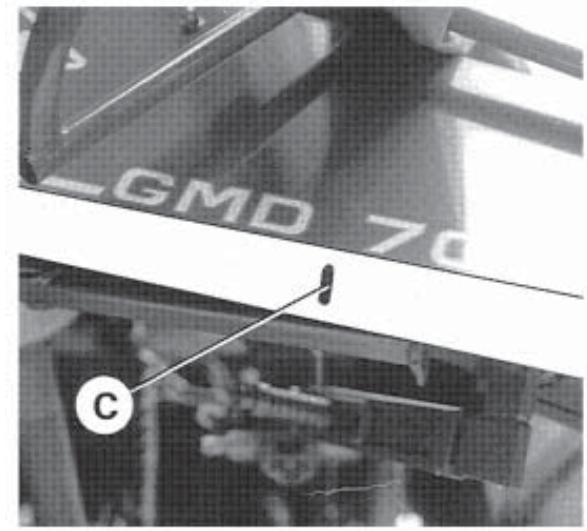
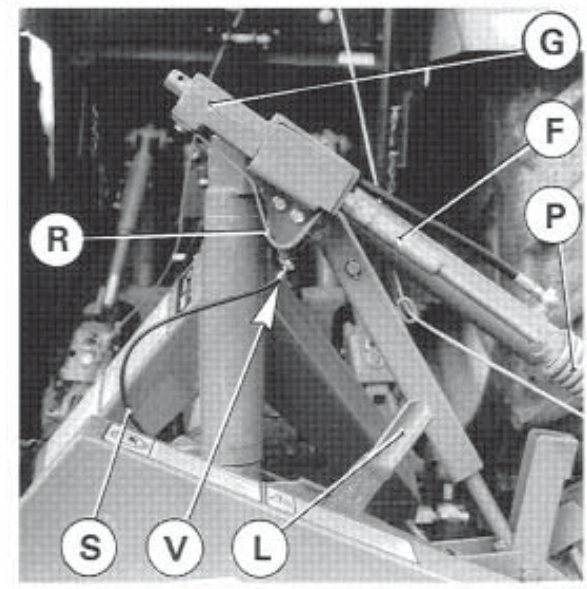


40

3. Releasing compensating spring (photo 41)

When parking the machine, the compensating spring is automatically released by operating the parking stand control lever which also activates the transport lock through cable (S), allowing the shouldered rod (F) to slide freely in its guide (G). Length of cable (S) can be adjusted by using screw (V), if necessary.

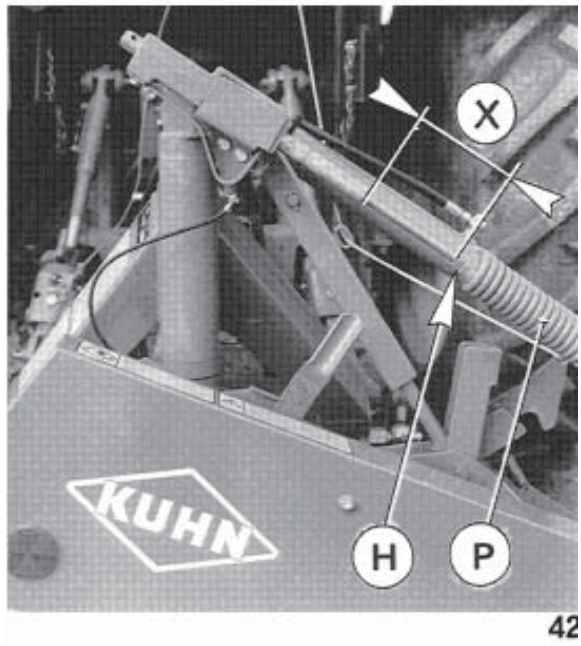


41

4. Adjustment of compensating spring tension

The compensating spring is factory adjusted so that dimension (X) (photo 42) is 200 mm (8") for the **GMD 600** and 170 mm (7") for the **GMD 700**.

When working conditions are difficult, adjustment can be modified as follows :
- Put machine in parking position, which releases compensating spring (P) (photos 41 and 42).
- Loosen lock nut (H) and adjust rod (F).
- After adjustment retighten lock nut (H).



42

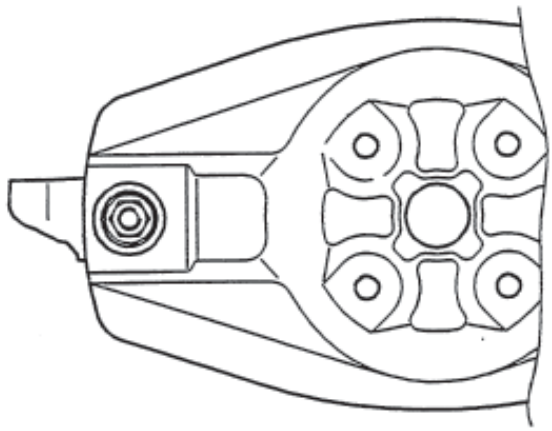
ATTENTION

REGULARLY CHECK ALL NUTS AND BOLTS FOR CORRECT TIGHTNESS, PARTICULARLY THOSE SECURING THE DISCS AND KNIVES.

INSPECTION OF KNIVES AND SECURING ELEMENTS

A. KNIVES : Should be inspected systematically each time before the machine is operated.

Cutting quality as well as safe operation depend on the regular inspection and care given to the knives. Knives should be replaced in the following cases :

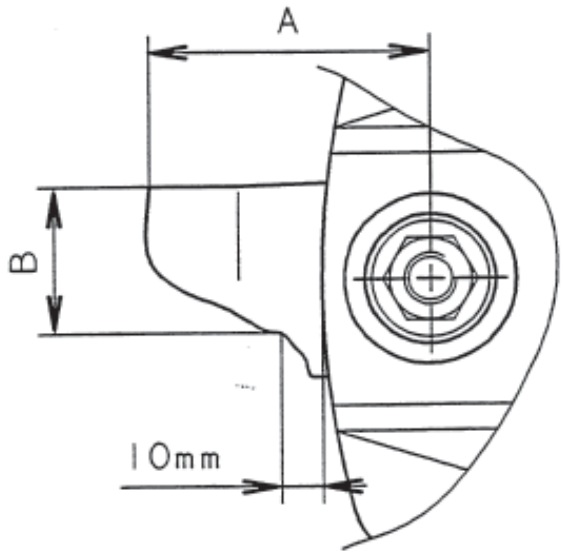


1. Damaged knives

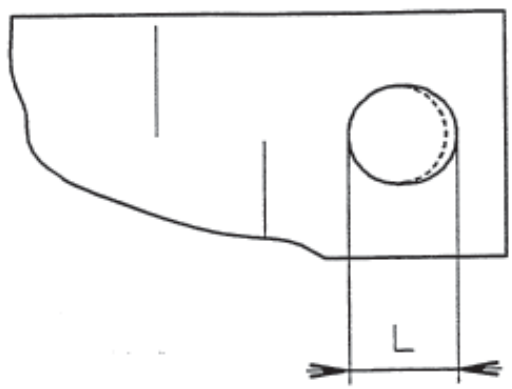
Very rough conditions can cause knives to crack and become deformed leading to :
- increased risk of accidents ;
- deterioration of cutting quality ;
- risk of damage to the cutterbar.

2. Worn knives

Length (A) of a knife should be greater than 65 mm. The width (B) of a knife, measured at a distance of 10 mm away from the edge of the disc should be greater than 34 mm



The hole (L) for the securing bolt must not become oval by more than 20 mm for an 18 mm hole.



B. SECURING ELEMENTS : To be inspected regularly !

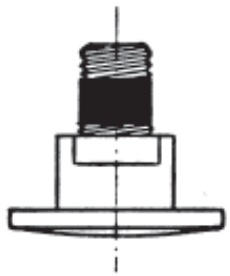
(particularly the tightening torque of the nut: **12 daNm / 90 ft.lbs**).

- Inspect immediately after hitting an obstruction.
- Inspect when replacing knives.
- Check at the beginning of each season.

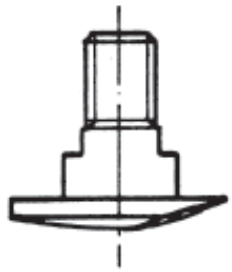
1. The securing bolt must be replaced:

- When a visible deformation is found.

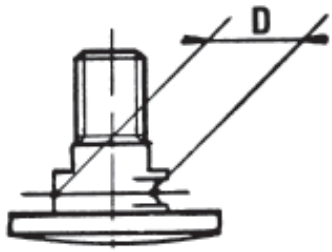
- When the locking compound on the threads has worn away or if the locking compound has become inoperational due to inclusion of water, oil or dirt.



- When wear on the head reaches the contact area of the knife.

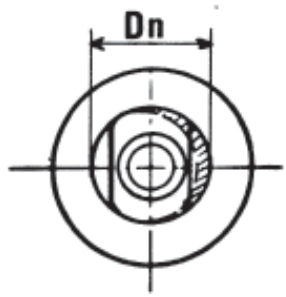


- When the diameter (D) of the bolt shoulder is less than 15 mm (5/8 ").



2. The nuts must be replaced :

- When the contact washer has lost its elasticity or when it becomes loose from the nut.



- When wear on the nut reaches a = 5 mm.

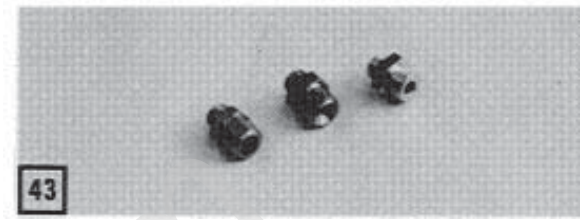
FOR THE CORRECT OPERATION OF YOUR MACHINE,
ALWAYS USE GENUINE KUHN SPARE PARTS

OPTIONAL EQUIPMENT

1. Hydraulic adaptators (photo 43)

For fitting to different types of hydraulic connectors, three adaptators are available :

M16 x 1.5 / 1/2 GAZ - CON 22	(823 012 05)
M16 x 1.5 / 1/2 NPT - 24	(823 012 06)
M16 x 1.5 / 3/4 UNF - JIC	(823 019 02)

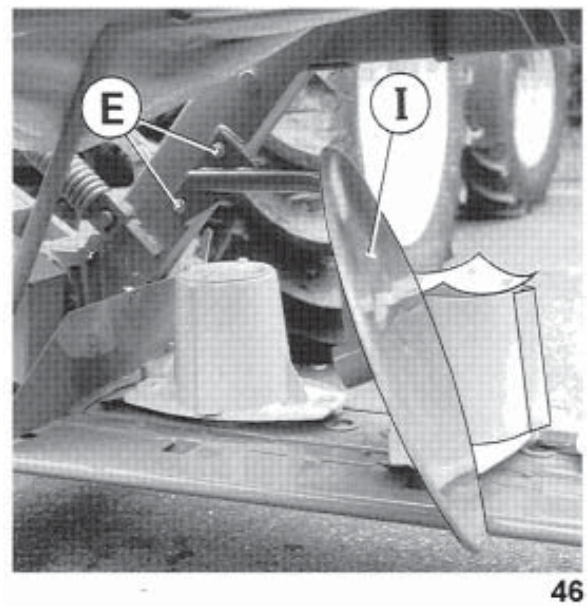


2. High cone (kit No. 104 6130 for GMD 700)

To reduce swath width on the **GMD 700**, the second disc can be replaced by a cone. Tighten fixation bolts to **12 daNm/88 ft.lbs**.

3. Inside swath wheel (kit No. 104 6100)

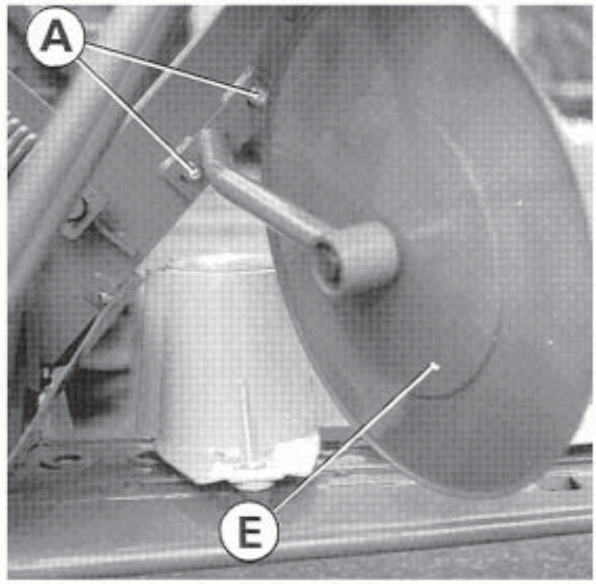
On the **GMD 700** an inside swath wheel can be installed in conjunction with the second cone (n° 104 6130). This set enables reducing the swath width to 1,55 m (approx. 5').
The swath wheel (I) is attached to the frame pipe with 2 screws (E) (M 12 x 20) and 2 conical spring washers, as shown in photo 46. Torque of screws : **12 daNm/ 88 ft.lbs.**



46

4. Inside swath wheel (kit No. 103 6130)

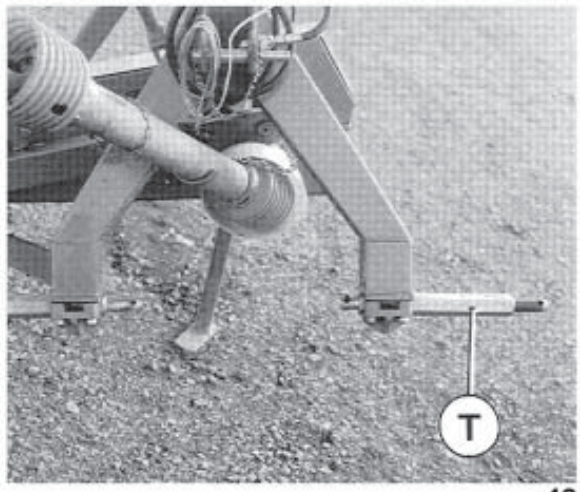
To reduce swath width to 1,50 m (approx. 4' 11"), an inside swath wheel can be mounted on the **GMD 600**. The swath wheel (E) is attached to the frame pipe with 2 screws (A) (M 12 x 20) and 2 conical spring washers as shown in photo 47.
Torque of screws : **12 daNm/88 ft.lbs.**



47

5. Lengthened left hitch pin (kit No. 568 207 00)

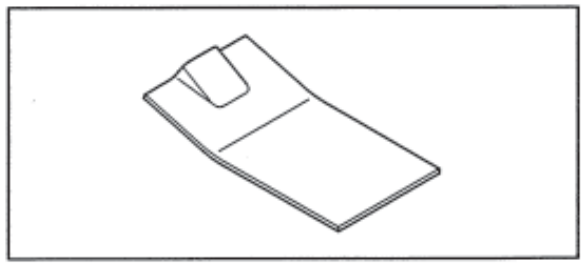
For offsetting the machine up to 200 mm (8") a lengthened hitch pin (T) (photo 48) can be mounted on the left arm of the 3-point frame (looking in the direction of travel).
Installation : see pages 17 and 18.



48

6. Wear plate (568 017 00)

To prolong the life of worn disc guards when working in very difficult and abrasive conditions, wear plates are available through our spare parts department for welding to the underside of each individual disc guard (fig. 49).

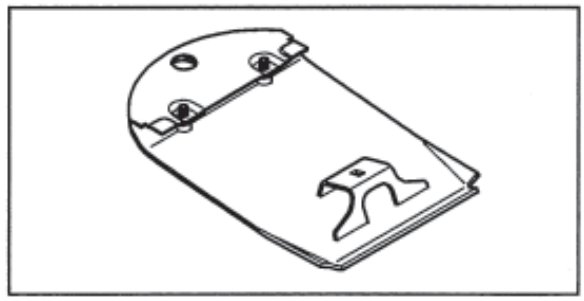


49

7. Raised skids (fig. 50) Kit No. 103 6190

A raised skid shoe kit comprising 2 raised skids is available as an optional equipment. This kit serves 2 purposes :
- providing a cutting height adjustable between 35 mm and 90 mm (1.5" and 3.5"),
- operating on sticky grounds.

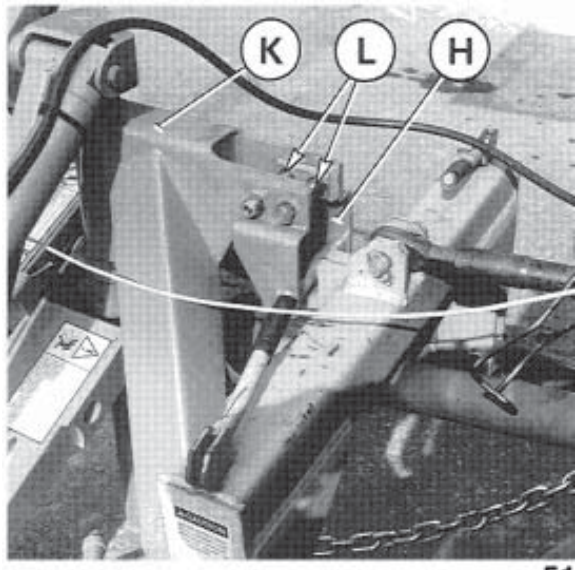
This 2 raised skids are installed instead of the 2 regular end skids.



50

8. Quick hitch bracket (Kit No. 103 6170)

This kit is available as optional equipment for North America.
Attach bracket (H) to 3-point frame (K) with 2 bolts (L) and 2 self locking nuts (M 18) (photo 51).



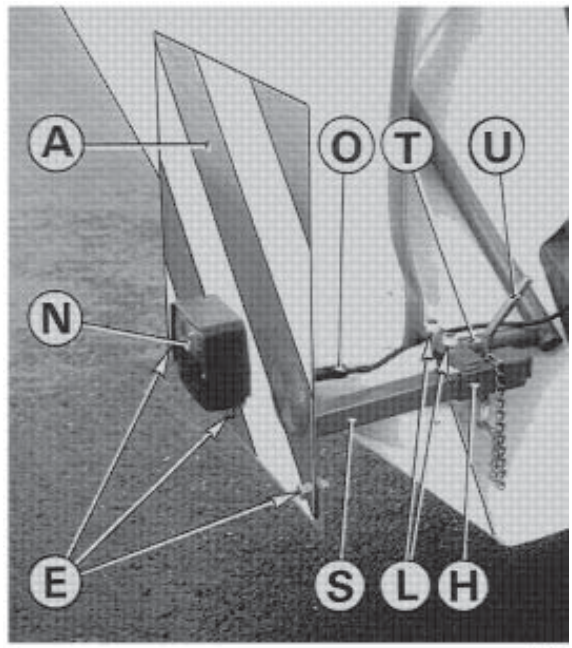
51

9. Signalling elements (photo 52) Kit No. 102 6100

Signalling elements can be ordered as an optional extra. To install this kit proceed as follows :
- Attach tail lamp (N) to panel (A).
- Bolt panel (A) to support (S) with 3 hexagon screws (E) (M 10 x 20), 3 plain washers (dia. 11 x 24 x 2) and 3 self-locking nuts (M 10).
- Attach guide (H) to the rear guard tube (T) with an U-bolt and 2 self-locking nuts (L) (M 10).
- Plug electric cable (O) into the lamp terminal (N).

In transport position mount the panel (A) with its support (S) in the guide (H) with lock (U) and plug electric cable at the rear of the tractor.

Before putting the machine in work position, dont forget to unbolt the panel.



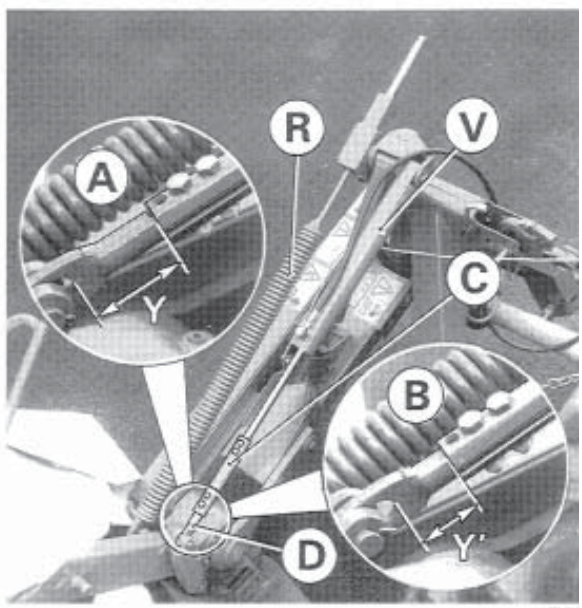
52

10. Kit for mowing at 35 degrees below horizontal (photo 53) (Kit no. 104 6140)

This kit consists of a longer hydraulic cylinder (V), a shorter attachment rod (D) and 2 connecting brackets (C) to be installed in place of the original parts.

Enlargement (A) indicates the correct connecting bracket positioning on GMD 600 (distance Y = 75 mm) whereas enlargement (B) shows the correct connecting bracket positioning on a GMD 700 (distance Y' = 50 mm).

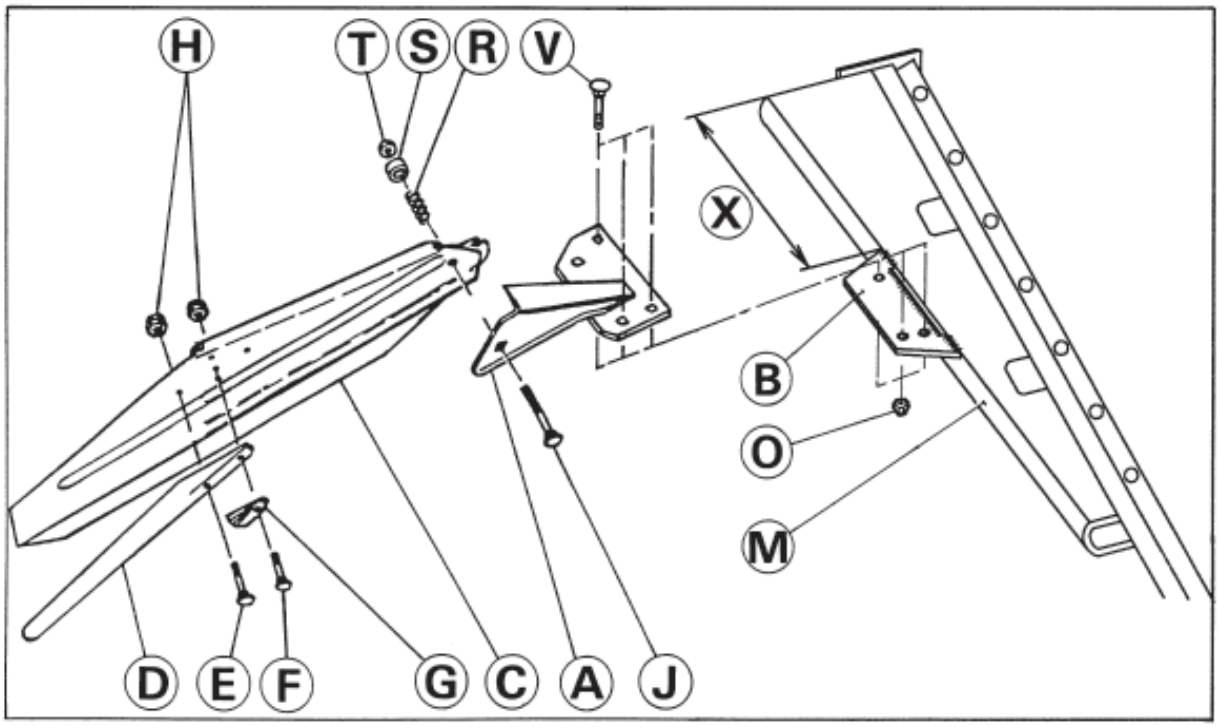
Note : In order to avoid too much tension on the spring (R) when the slope exceeds minus 25 degrees, adjust the compensating spring so that distance (X) (photo 42, page 31) is 245 mm (10").



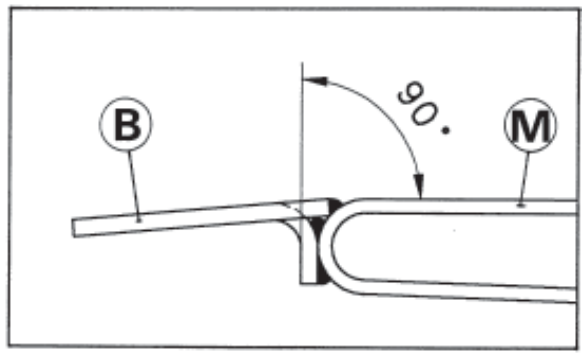
52

11. Inner swath board
(Kit no. 103 6200 for GMD 600)
(Kit no. 104 6150 for GMD 700)

The inner swath board set enables reducing the swath width to 1.20 m on the GMD 600 and to 1.25 m on the GMD 700 (approx. 4' on either models).
This set is to be used when combined with the first inner disc with cone and the inner swath wheel (n° 103 6130) on GMD 600.
On the GMD 700, it must be used in combination with the second high inner cone (n° 104 6130) and the inner swath wheel (n° 104 6100).



53



54

Before assembling the inner swath board, the mounting bracket (B) must be welded on the cutterbar stiffener (M) following the instructions on figure 54 and 55.
GMD 600 : X = 430 mm. GMD 700 : X = 720 mm.
Fit the inner swath board support plate (A) on the mounting bracket (B) with 3 cup square bolts (V) (M 12 x 30) and 3 self locking nuts (O) (M 12) (torque: **8 daNm / 60 ft.lbs**) (figure 54).
Next fit the inner swath board (C) on the support (A) by means of a cup square bolt (J) (M 12 x 80), a pressure spring (R), a dished washer (S) and a self-locking nut (T) (M 12) (figure 54). Do not overtighten the nut so that the board (C) can oscillate around the fixing bolt (J).
To finish the job, fix the swathing stick (D) on the plate (C) with 2 cup square bolts (E) (M 8 x 50) and (F) (M 8 x 30), a spacer (G) and 2 self-locking nuts (H) (M 8) (figure 54).

TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	REMEDY
Uneven stubble	Too much tilt on cutterbar	Reduce tilt (see page 23)
	Low PTO speed	Increase engine speed to run PTO at 540 rpm
	Knives not installed correctly	Make sure that the arrow on the knife upper face is pointing in the direction of rotation of the disc (see page 29)
	Low disc speed	Check belts for correct tension (see page 30)
	Dull or broken knives	Replace knives
Stubble too long	Incorrect angle on cutterbar	Change cutterbar angle using tractor top link (see page 23)
	Insufficient cutterbar down pressure	Adjust compensating spring tension (see page 31)
Soil built up in front of cutterbar	Very wet conditions	Adjust main frame height by shortening chain as necessary (see pages 22 / 23)
	Sticky ground	Fit a set of raised skids (see page 36)
	Too much cutterbar down pressure	Adjust compensating spring tension (see page 31)
Cutterbar not floating	Main frame setting incorrect	Adjust main frame as described on pages 22 and 23
Machine breaking back too easily	Insufficient tension on breakaway spring washers	Tighten breakaway spring washers (see page 24)

STORING THE MOWER

Store the mower in a dry place.

Thoroughly clean the mower.

Drain oil from gearbox and cutterbar and refill with new oil to correct level.

Inspect and replace worn knives and their fixation hardware.

Store cutterbar in operating position.

Untighten drive belts.

Clean bar and rusted areas and paint all areas from which the paint has worn.

SOUND LEVELS

Sound levels given out by : GMD 600 - GMD 700 Multidisc Mowers

Sound levels have been measured in accordance with the measuring methods as defined in :

HM Agricultural Inspectorate
AGRICULTURAL MACHINERY NOISE
Legislation and guidance on methods of testing
(Annex to AIC 1896/117 REV)
February 1988
Health and Safety Executive

The method employed corresponds to the method No. 4 in this document. Unspecified testing conditions comply with ISO 5131 standard.

Measuring equipment conforms to NF S 31-009 standard. The tractor used has a power of 92 kW.

A-weighted emission sound pressure level L (A) eq inside tractor cab (with closed windows) :

	GMD 600	**GMD 700**
Tractor only	76.0 dB (A)	76.0 dB (A)
Tractor + machine	80.3 dB (A)	80.6 db (A)

LIMITED WARRANTY

KUHN S.A. of 4 Impasse des Fabriques, 67706 SAVERNE CEDEX, France (hereinafter called the «Company») warrants, in accordance with the provisions below, to each original retail purchaser of KUHN new equipment of its own manufacture, from an authorized KUHN dealer, that such equipment is, at the time of delivery to such purchaser, free from defects in material and workmanship and that such equipment will be warranted for a period of one year starting from the date the goods are delivered to the end user and during this period up to a limit of 500 hours use, providing the machine is used and serviced in accordance with the recommendations in the Operator's Manual.

THESE CONDITIONS ARE SUBJECT TO THE FOLLOWING EXCEPTIONS :

1. Parts of machines which are not of our manufacture i.e. tyres, belts, P.T.O. shafts, clutches etc., are not covered by this Limited Warranty but are subject to the warranty of the original manufacturer. Any claim falling into this category will be taken up with the manufacturer concerned.

2. Warranty claims applying to these types of parts must be handled in the same way as if they were parts manufactured by KUHN. However, compensation will be paid in accordance with the warranty agreement of the manufacturer concerned in as much as the latter justifies such a claim.

3. This Limited Warranty will be withdrawn if any equipment has been used for purposes other than for which it was intended or if it has been misused, neglected or damaged by accident or let out on hire. Nor can claims be accepted if parts other than those manufactured by us have been incorporated in any of our equipment. Furthermore, the Company shall not be responsible for damage in transit or handling by any common carrier and under no circumstances within or without the warranty period will the Company be liable for damages for loss of use or damages resulting from delay or any consequential damage.

We cannot be held responsible for loss of earnings caused by a breakdown or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacements of components.

THE CUSTOMER WILL BE RESPONSIBLE FOR AND BEAR THE COSTS OF:

1. Normal maintenance such as greasing, maintenance of oil levels, minor adjustments, etc.

2. Transportation of any kind of any KUHN product to and from the place the warranty work is performed.

3. Dealer travel time to and from the machine or to deliver and return the machine from the workshop for repair.

4. Dealer travelling costs.

Parts defined as normal wearing items are listed as follows and are not in any way covered under this Limited Warranty :
V belts, discs, knives, wear plates, disc guards, tires, torque limiters, hydraulic hoses, pitman shafts, swath sticks, blades, tines and tine holders.

KUHN Limited Warranty will not apply to any product which is altered or modified without the expressed permission of the Company and/or repaired by anyone other than Authorized Service Distributors or Authorized Service Dealers.

LIMITED WARRANTY IS DEPENDENT UPON THE STRICT OBSERVANCE BY THE PURCHASER OF THE FOLLOWING PROVISIONS :

- That this Limited Warranty shall not be assigned or transferred to anyone unless the Company's consent in writing has first been obtained.

- The warranty/product registration form has been correctly completed by dealer and purchaser with their names and addresses, dated, signed and returned to the appropriate address as given on the warranty/ product registration form.

- The claim form sent to KUHN has been correctly completed stating:

    * dealer's name and address
    * owner's name and address
    * type of machine
    * machine serial number
    * delivery date to buyer
    * date of failure
    * tractor make and type
    * description of the failure and its cause
    * quantity, reference number and name of the damaged parts
    * reference number, quantity and date of the invoice for the replacement parts.

- The judgement of the Company in all cases of claims under this Limited Warranty shall be final and conclusive and the purchaser agrees to accept its decisions on all questions as to defect and to the exchange of any part or parts.

- That all safety instructions in the Operator's Manual shall be followed and all safety guards regularly inspected and replaced where necessary.

No warranty is given on second-hand products and none is to be implied. Persons dealing in the Company's products are in no way legal agents of the Company and have no right or authority to assume any obligation on their behalf, express implied, or to bind them in any way.

KUHN S.A. reserves the right to incorporate any change in design in its products without obligation to make such changes on units previously manufactured.

Moreover, because of the constant progress in technology, no guarantee is given to the descriptions of equipment published in any document by the company.

DISCLAIMER OF FURTHER WARRANTY

There are no warranties, expressed or implied, except as set forth above. There is no warranty of merchantability. There are no warranties which extend beyond the description of the product contained herein. In no event shall the company be liable for indirect, special or consequential damages (such as loss of anticipated profits) in connection with the retail purchaser's use of the product.

- NOTES -

This machine complies with the safety requirements of the European machinery directive.

The Operator should respect all Health and Safety regulations as well as the Highway Code. For your own safety, use only genuine KUHN spare parts. The manufacturer disclaims all responsibilities due to incorrect use or non-compliance with the recommendations given in this manual.

For your safety
and to get the best from your machine,
use only genuine KUHN parts

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