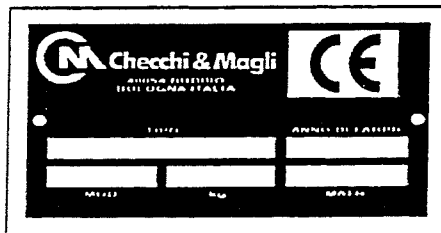
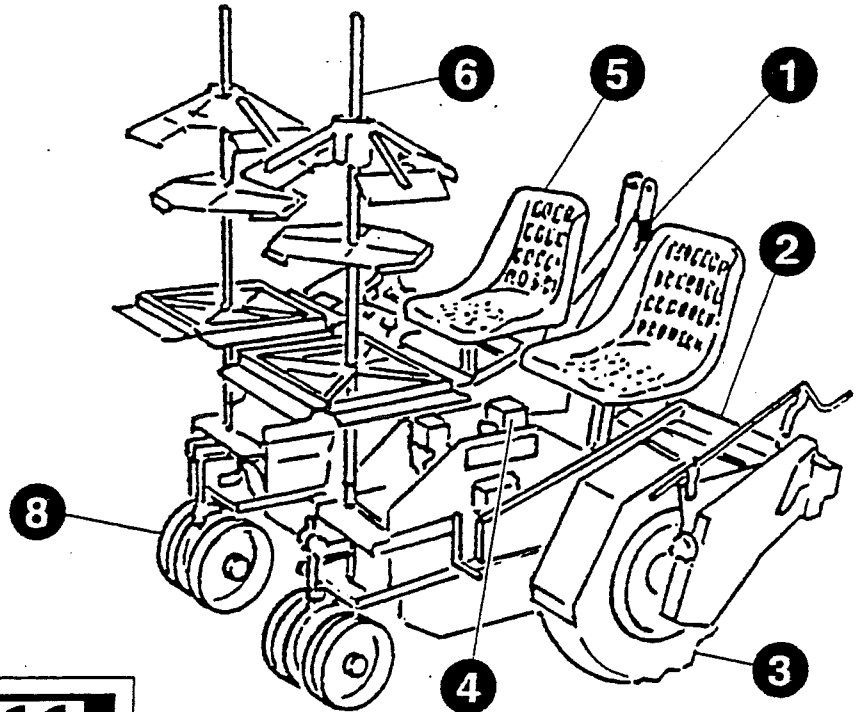


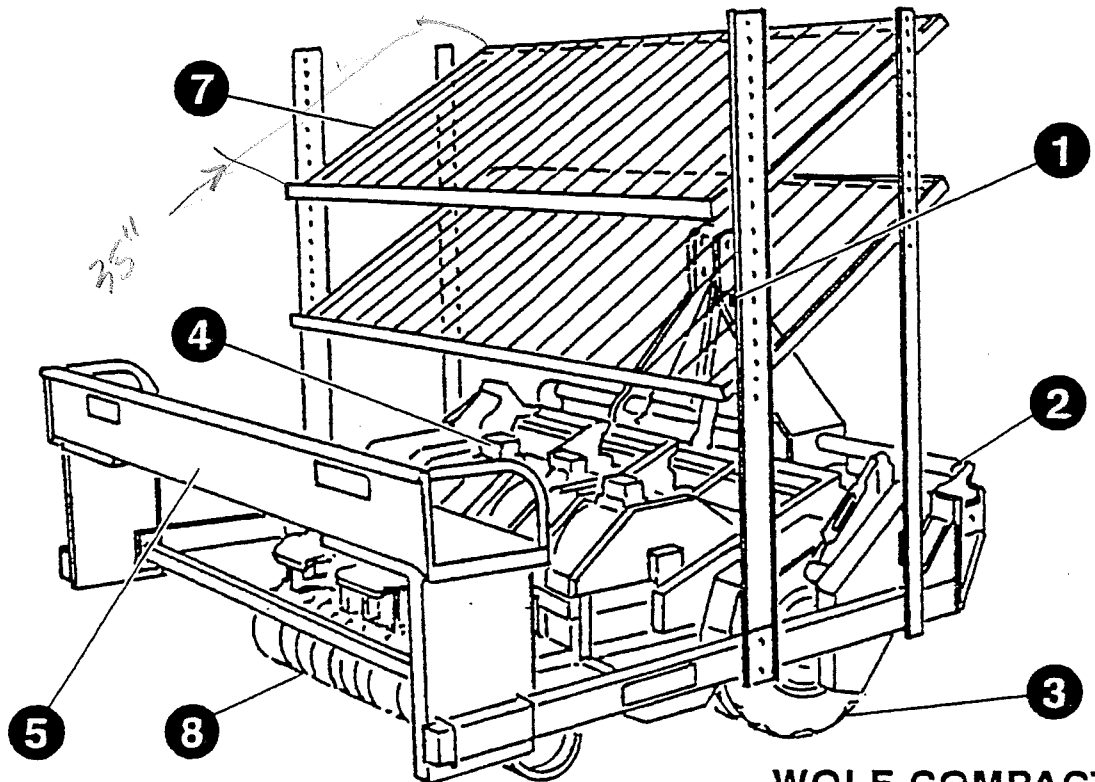
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- 1 = Identification plate
- 2 = Frame
- 3 = Drive wheel
- 4 = Distributor
- 5 = Seat
- 6 = Rotating tray holder
- 7 = Transverse tray holder
- 8 = Ridging wheels














WOLF



WOLF-COMPACT

4.0 - TECHNICAL DATA

WOLF		 1	 2	 3	 4	 5				
 cm.		140	180	140	180	140	180	140	180	
 cm.		150	200	200	250	300	300	350	350	400
 cm.		150	150	150	150	150	150	150	150	150
 Kg		185	450	315	600	485	750	590	900	700
 HP		20	30	25	40	30	50	40	60	50
 Kw		14	22	18	29	22	36	29	44	36





WOLF-COMPACT		 3	 4	 5	 6
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FIG. 1

5.0 - WARNING AND DANGER SIGNS

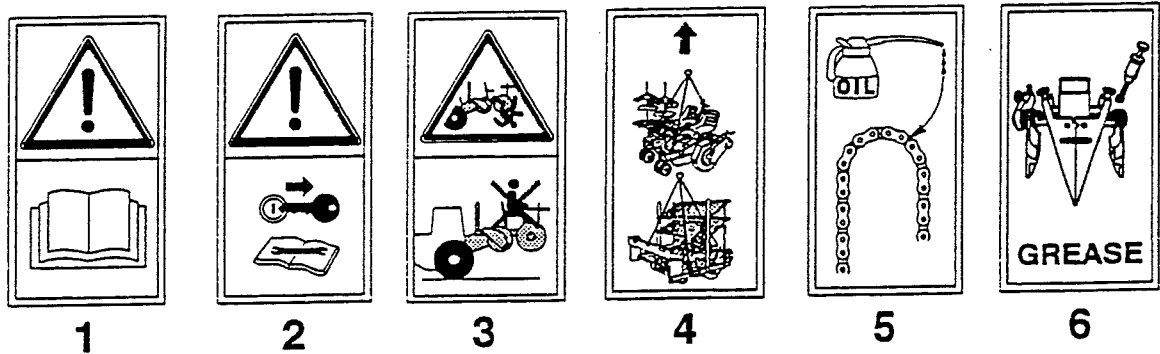


FIG. 2

Warning signs:

- 1 - Before starting work, read the instruction booklet carefully.
- 2 - Before carrying out any maintenance work, stop the machine and consult the use and maintenance manual.

Danger signs:

- 3 - Do not travel from one work area to another or on the road with the lift unit raised and operators on board.

Indication signs:

- 4 - Fixing points for lifting
- 5 - Points to be oiled
- 6 - Points to be greased

8.0 - REGULATIONS FOR SAFE USE AND THE PREVENTION OF ACCIDENTS



8.1 - Read all the instructions before using the machine, especially those which relate to safeguarding against physical injury. The Manufacturer accepts no responsibility for any damage arising from improper use of the machine or failure to observe these instructions.

It is the duty of the user to inform employees and other personnel of the directions set out in this document (**this is a legal requirement**).



8.2 - Pay attention to the danger symbols shown in this manual and on the machine.

8.3 - Adjustment, maintenance or work of any kind on the machine must be carried out only with the engine OFF, the machine resting on the ground, and the tractor chocked.



8.4 - Couple the machine only to a tractor of adequate power (see technical bulletin referring to the model in use), and with a lift unit which complies with standards specifically for tractors.

Adhere to the maximum stipulated weight on the axle, and the total mobile weight.

8.5 - When coupling and uncoupling the machine, pay maximum attention so as to avoid the risk of crushing.



8.6 - It is strictly forbidden for the tractor to be driven by inexperienced personnel or personnel not in possession of a driving licence or in poor health.

8.7 - Never leave the operator position when the tractor is running.

Before leaving the tractor, lower the lift unit, stop the engine, operate the parking brake and remove the ignition key from the control panel.

8.8 - Remember that the road-holding, steering and braking are affected by the presence of a carried or towed machine.

8.9 - When driving on the road it is necessary to abide by the highway code of the country in question.

8.10 - When transporting by road, with the machine lifted, put the hydraulic lift unit control lever in the locked position.



8.11 - The operators must take position on their respective seats and place their feet on the foot-rests (fig. 4.A) **only when the tractor is stationary and chocked and the machine is on the ground.**

~~It is strictly forbidden to travel from one work area to another or on the road with the lift unit raised and operators on board.~~ It is forbidden to alight if the machine is moving or not positioned on the ground.

8.12 - The moving parts (wheels - chains - distributors etc.) are protected by appropriate guards, and where this is not reasonably possible, sufficient space has been allowed so as to prevent the risk of crushing. **Upon no account wear loose clothing**, which may become trapped in the parts described above during operation, and in any event, pay maximum attention while working, as moving parts of any machine are inherently dangerous.

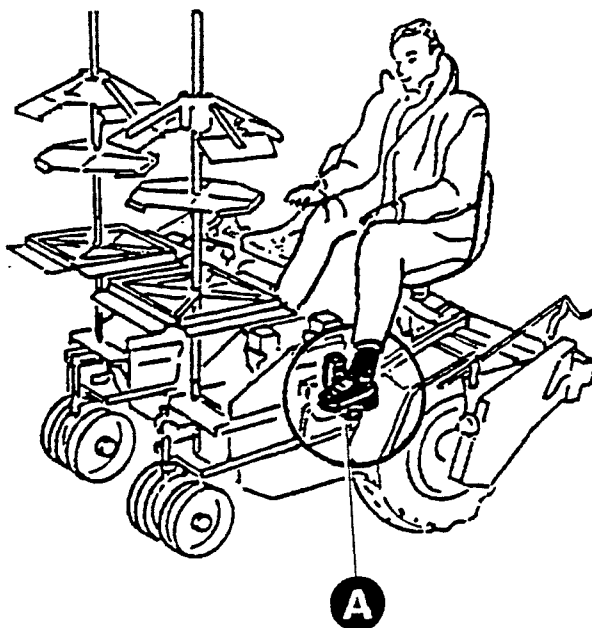
8.13 - Do not remove the safety and protection devices which have been installed. If they are removed for the purpose of making adjustments or carrying out maintenance, ensure that they are refitted in their correct place.

8.14 - Check the efficiency of the protection devices periodically and renew them when necessary, using only original spare parts, which can be supplied by the Manufacturer or its authorized dealers.



8.15 - **Do not lend the machine to inexperienced persons:** in the event of an accident, you may be accountable.

WOLF



WOLF-COMPACT

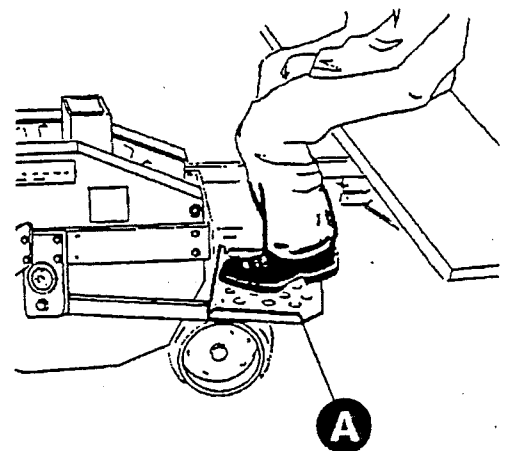


FIG. 4

9.0 - COUPLING TO THE TRACTOR

9.1 - The machine must be coupled to the tractor on flat ground.

9.2 - Check that the three-point linkages are of a compatible category.

9.3 - Bring the tractor up to the machine, **taking care not to get between the two at this stage**, and proceed with coupling only when the tractor is stationary. Fix the three coupling arms with the relative pins and insert the appropriate safety split pins (fig. 5).

9.4 - Limit sideways movements and keep the machine parallel with the tractor, using the stabilizer chains and arm adjustment device (fig. 5.b).

9.5 - Adjust the third point arm until the machine coupling is at right angles (fig. 5.a).

9.6 - If applicable, position the support foot as shown in fig. 6.

10.0 - UNCOUPLING FROM THE TRACTOR

-position the equipment on the ground, only in a flat area;

-lower the support foot, if applicable;

-make certain that the equipment remains stable;

-remove fixing pins and plugs, taking care not to get between the equipment and the tractor;

-ensure again that everything is stable, bearing in mind all eventualities.

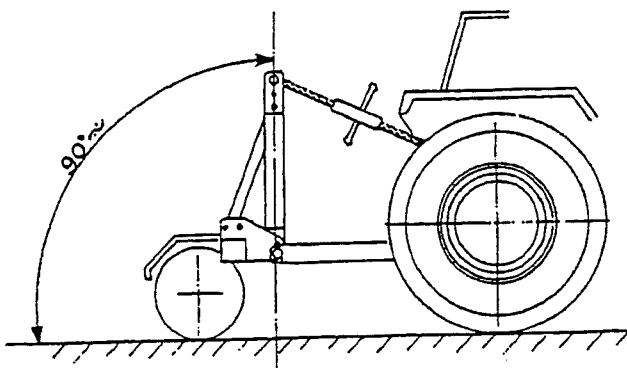


FIG. 5a

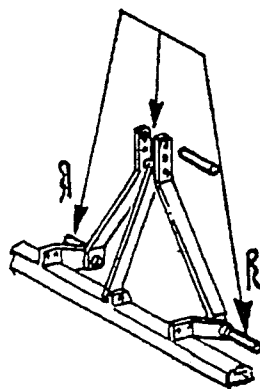


FIG. 5

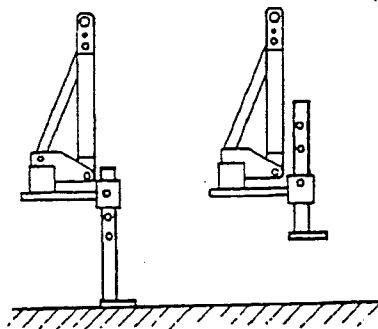


FIG. 6

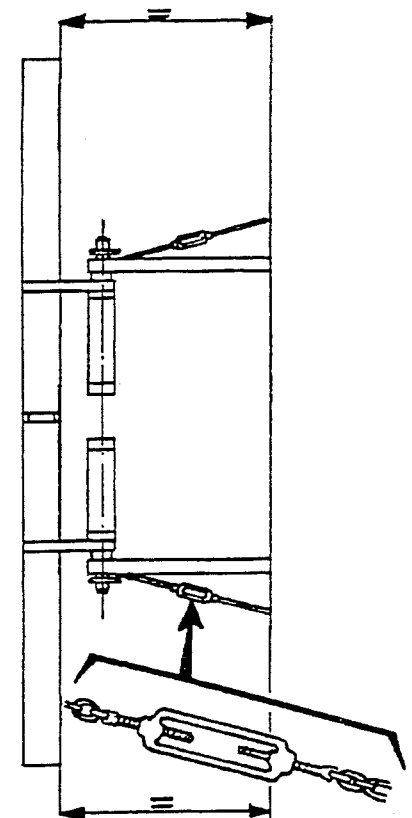


FIG. 5b

11.0 - USABLE PLANTS

11.1 - Plants with rootball

This transplanter has been produced for transplanting seedlings of vegetables, flowers, tobacco, nursery plants etc., with rootballs having the following characteristics:

- conical or cylindrical with a diameter of up to 6 cm (fig. 7)
- cubic, from 3x3 to 4x4 cm (fig. 7.1) with the special optional insert inserted in each cup (see chapter 26.5)
- cubic, from 5x5 to 6x6 cm (fig. 7.2) using the special 6x6 drilling cups, optional (see chapter 26.2).

11.2 - Plants without rootball

It is also possible to transplant bare root plants, provided their leaf system is small, for example nursery cuttings, peppers, onions, leeks, etc., within the size limits indicated in (fig. 7.3).

11.3 - Bulbs and seeds.

It is possible to plant bulbs and seeds of any kind, up to a maximum diameter of 6 cm.

12.0 - PLANT MAGAZINE

MOD. WOLF

One rotating tray holder for each row (fig. 8.A) is normally provided.

The following additional types of plant holder are also provided:

- inclined box holder (fig. 8.B)
- plant holder for plants with rootball (fig. 8.C)
- transverse tray holder (fig. 8.D).

MOD. WOLF-COMPACT

A two-level transverse tray holder (fig. 8.D) is normally provided.



All plants must be removed from the magazines when travelling on the road.

A = cm 1 ÷ 6
B = cm 4 ÷ 7
C = cm 4 ÷ 15
D = cm 8 ÷ 22

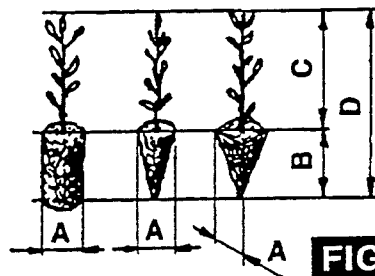


FIG. 7

A = cm 3 ÷ 4
B = cm 3 ÷ 7
C = cm 4 ÷ 15
D = cm 8 ÷ 22

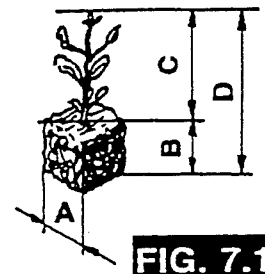


FIG. 7.1

A = cm 5 ÷ 6
B = cm 5 ÷ 7
C = cm 4 ÷ 15
D = cm 9 ÷ 22

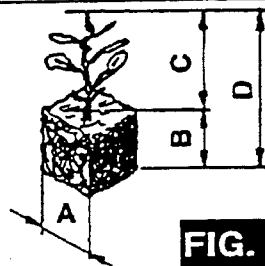


FIG. 7.2

A = cm 1 ÷ 4
B = cm 5 ÷ 7
C = cm 4 ÷ 15
D = cm 9 ÷ 22

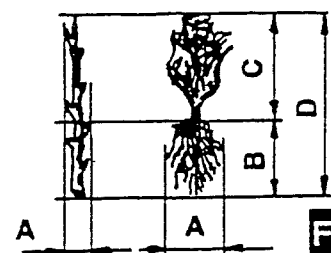


FIG. 7.3

13.0 - LAND

You are advised to work on land which has been suitably prepared with harrows or hoes. **The land must be sufficiently fragmented and slightly compacted on the surface.**

Do not work on very loose or very compact land, as this will make it difficult to achieve consistent and good quality transplanting.



Take extreme care during manoeuvres on steeply sloping land.

13.1 - Use on plastic/cellulose film.

To obtain the best results when transplanting onto film the film must be laid on ground that has been carefully levelled and lightly compacted on the surface.

It is also important that the film be taught and folded under at the sides.

14.0 - OPERATORS ON BOARD



Pay particular attention to the safety regulations in points 8.11 and 8.12.

15.0 - FUNCTIONS OF THE TRACTOR DRIVER



Pay particular attention to the safety regulations in points 8.11 and 8.12.

Before starting work decide with the operator(s) on a "start" and "stop" signal.

Adjust to the required speed by means of the gear change, keeping at the lowest possible rpm.

Make certain that the tractor's exhaust fumes are not directed at the operators and that the silencer is completely efficient. By adhering to the above instructions, it is possible to work with limited noise levels, thus facilitating communication between the operators and the tractor driver.

-AVOID REVERSE MOTIONS WITH THE TRANSPLANTER STILL ON THE SOIL.

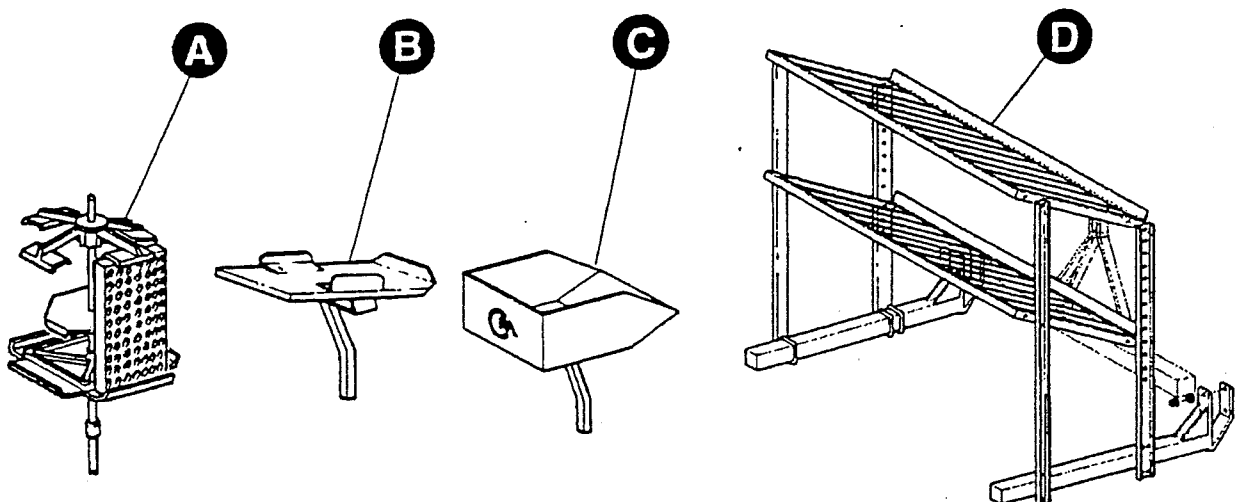


FIG. 8

16.0 - FUNCTIONS OF THE OPERATOR

Pick up the plants from the special containers and place them correctly in the distributor drill cups (fig. 9).

Decide, with the tractor driver, upon a working speed which allows sufficient time to perform the above functions properly.

Make constant visual checks of the transplant quality, and in the event of anomalies, give the STOP signal, so that you can check the causes and take the necessary corrective action.



17.0 - TRANSPLANT UNIT IN WORK PHASE

17.1 - Use the drive wheel adjustment device (fig. 10.A) to set the transplant units to a horizontal position in relation to the ground (fig. 10.B).

17.2 - Check that an oscillation space of approximately 2 cm remains between the beam stop and the linkage (fig. 11).

This is essential to allow the transplant unit to adapt itself to any unevenness in the ground.

18.0 - TRANSPLANT DEPTH

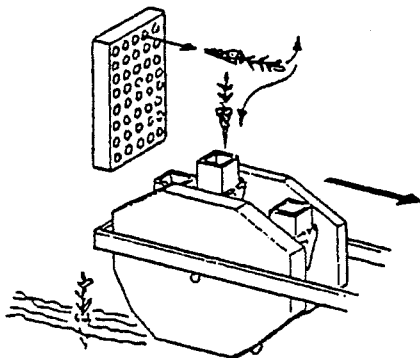
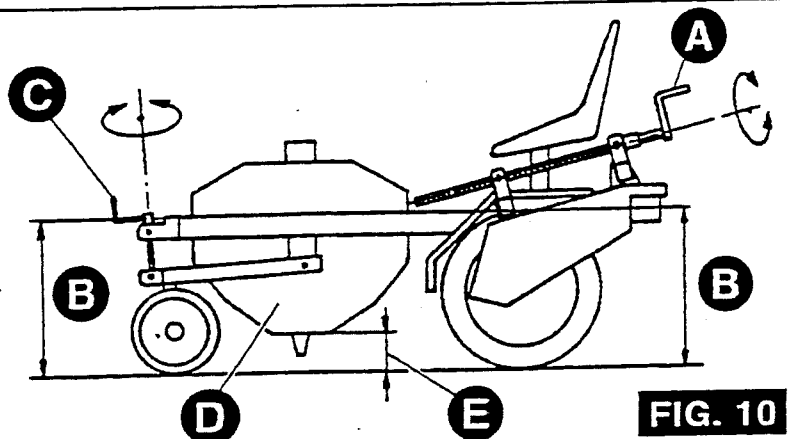
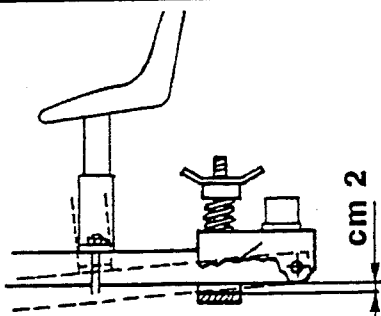
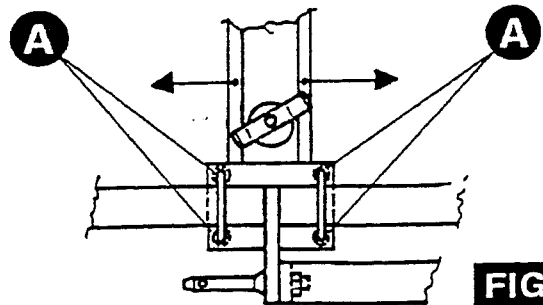
Adjust the rear wheel height register (fig. 10.C)

- TO INCREASE DEPTH turn in a clockwise direction.

- TO DECREASE DEPTH turn in an anti-clockwise direction.

After each adjustment, ensure that the hood elements (fig. 10.D) are at least 2 cm above the ground or the plastic mulching film (fig. 10.E).

This is to avoid any mechanical breakages, malfunctions and damage to the plastic film.


FIG. 9

FIG. 10

FIG. 11

FIG. 12

19.0 - TRANSPLANT DISTANCE

INTER-ROW SPACING:

WOLF /2 rows - min. cm. 32 after fitting the special optional kit - max. cm. 90, or over upon request.

WOLF /3-4-5 rows - min. cm. 50 - max. cm. 90, or over upon request.

WOLF-COMPACT - min. cm. 32 - max. cm. 45, or over upon request.

Inter-row spacing must be adjusted with the machine coupled to the tractor and with the lift unit lowered.

Clean the hexagonal axis and the frame of any soil or other dirt, slacken the screws (fig. 12.A), position the unit at the desired distance, sliding it along the frame. Do not carry out these operations by hammering with metal objects, as this could cause serious damage to the components.

SPACING BETWEEN PLANTS:

The diagram (fig. 14) shows the distances which can be obtained with the standard or optional gear ratios, respectively.

To change the standard gears and obtain the distances indicated, **observe the safety regulations**, and proceed as follows:

- Tighten the wheel depth adjustment device (fig. 13.F) to reduce the tension of the chain
- Remove the casing (fig. 13.A) by turning the nuts (fig. 13.B)
- Without opening the chain, support the tensioning device with the chain still on it
- Move the chain to the outside of the lower and upper gears
- Release the chain tensioner gradually
- Change the gears by turning the appropriate fixing screws (fig. 13.D), positioning them as shown in the table (fig. 14)
- Reposition the chain making certain that it is correctly inserted on the appropriate chain tensioner (fig. 13.C)
- Fix the casing and return the depth adjustment device to its initial position.

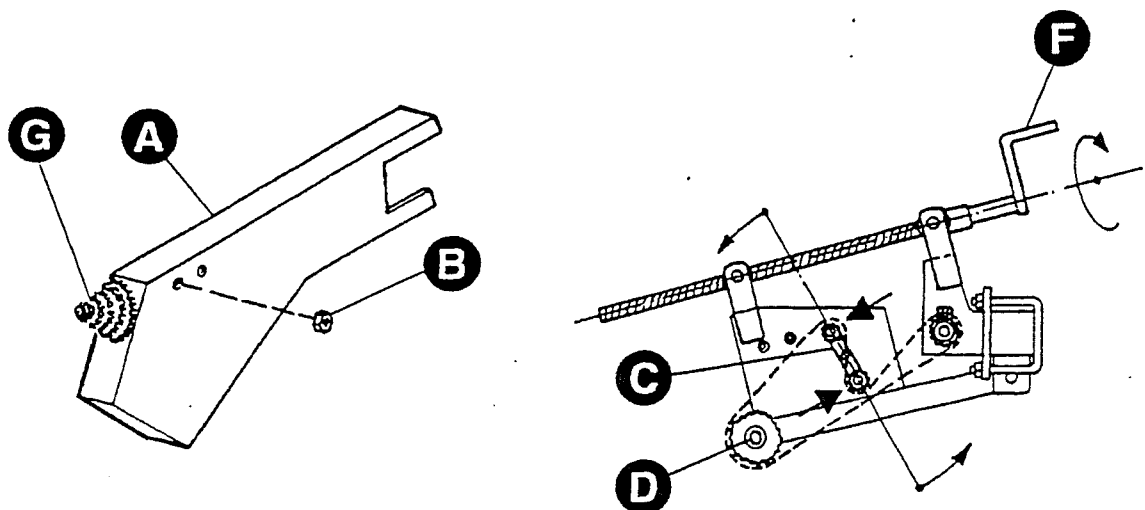


FIG. 13

20.0 - DRIVE WHEELS

During work, the drive wheels **must hold the ground constantly** to operate the transplanting equipment. The tractor's hydraulic lift unit must be completely lowered and the drive wheels positioned suitably, see chapter 17 (fig. 10).

21.0 - RIDGING INTENSITY

As well as determining the transplant depth, the two rear wheels (fig. 15) also provide for ridging around the plant. By loosening the screws it is possible to adjust aperture (fig. 15.A) and inclination (fig. 15.B).

22.0 - TRACTOR GAUGE

The imprint left on the ground by the wheels of the tractor, as well as having a compacting effect, also usually lowers the surface of the ground. **Keep a transplanting distance of not less than 10-12 cm from the imprint** (fig. 16) by adjusting the inter-row spacing or the gauge of the tractor.

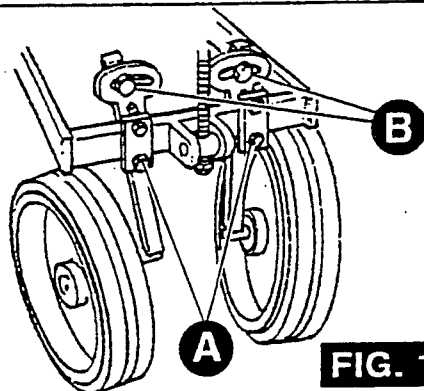
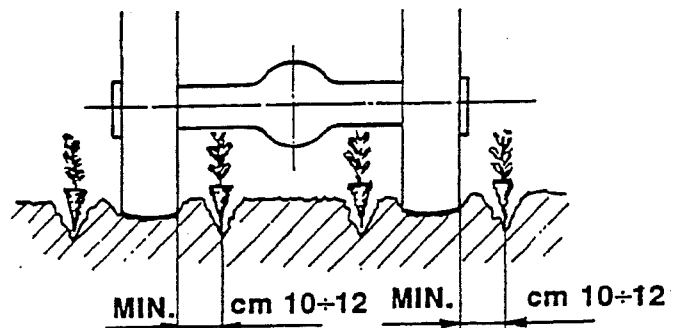
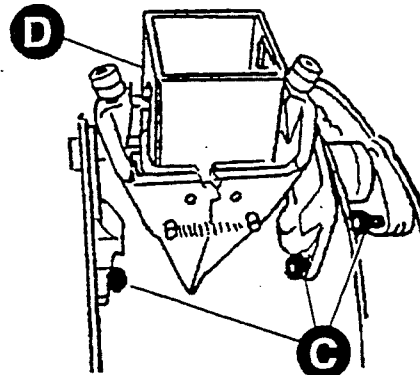
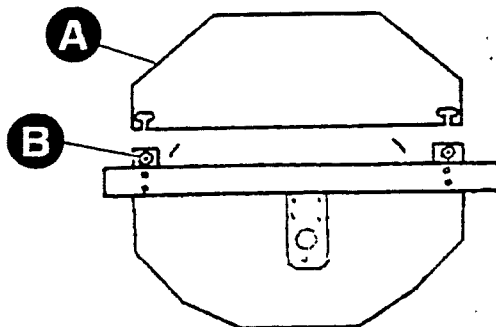
23.0 - TRANSFORMATION OF DISTRIBUTOR

To vary the number of cups applied to the distributor (from 1 to a maximum of 6), proceed as follows:

- remove the top casing (fig. 17.A), by loosening the screws (fig. 17.B);
- use the 3 cup fixing screws (fig. 17.C) to apply or remove cups (fig. 17.D), arranging them in the special housings on the distributor (fig. 18.A).

Each housing is marked with a reference number from 1 to 12.

Position as shown in the table (fig. 18.B).


FIG. 15

FIG. 16

FIG. 17

The cup fixed at reference point $N_{\infty} 1$ must not be removed (fig. 18.C).

Warning: to use the distributor with only 1 or 2 cups installed, $N_{\infty} 2$ phasing spacer shafts (fig. 18.D) must be fixed to the distributor to enable the group to operate correctly.

- 1-cup version, spacers in housings 5 and 9.
- 2-cup version, spacers in housings 4 and 10.

24.0 - DRILLING CUP INCLINATION

The clamp (fig. 19.B) allows vertical adjustment of the cups (fig. 19.D):

Fig. 19.C - cups in a vertical position; considered the standard position.

Fig. 19.D - cups inclined to the rear; considered the corrective position, advisable when transplanting on plastic film, at a distance between plants obtained using setting 19 (wheel) and 17 (hexagonal shaft) (see chapter 19, fig. 13).

By adjusting the screws (fig. 19.A) and fixing the clamp (fig. 19.B) in the bores (fig. 19.C') the cups are set to the standard position (fig. 19.C).

By fixing the clamp (fig. 19.B) in the bores (fig. 19.D') the cups are set to the inclined position (fig. 19.D).

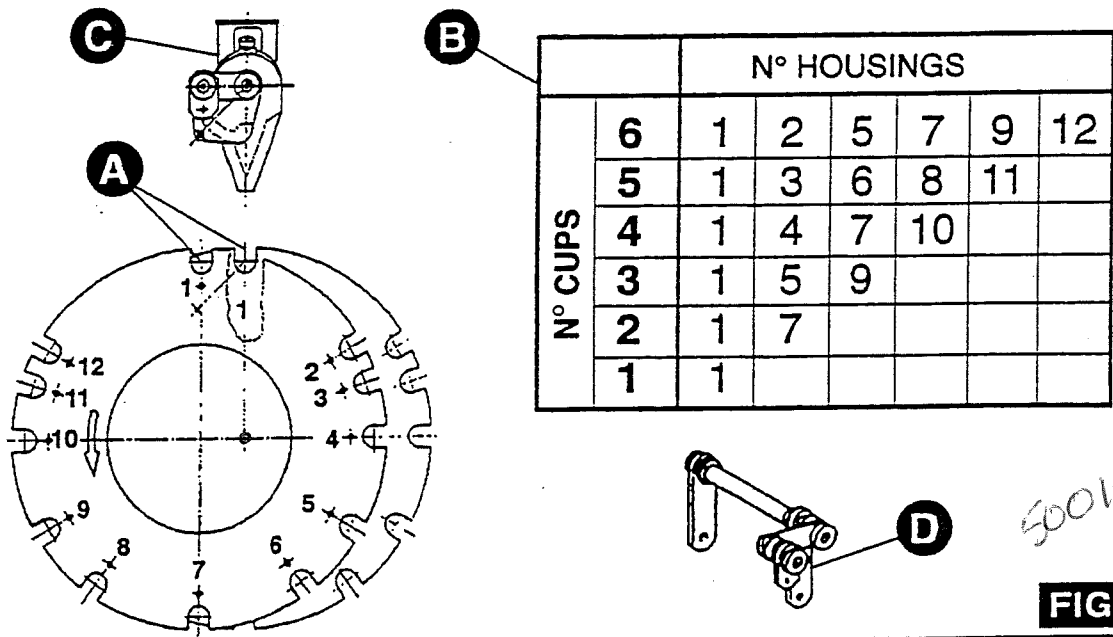


FIG. 18

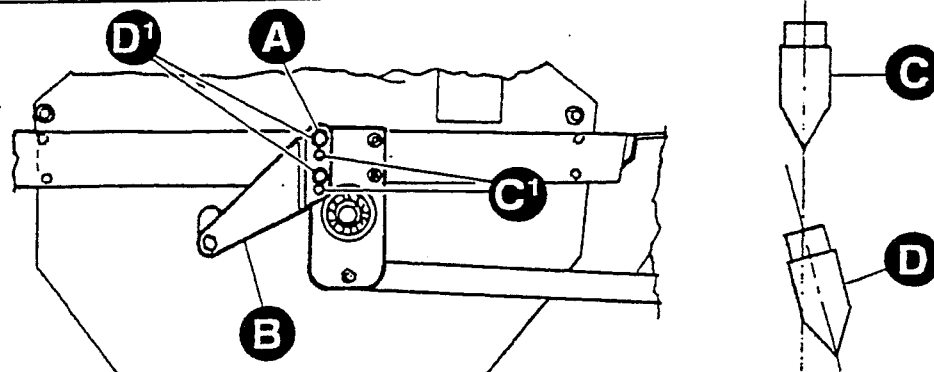


FIG. 19

25.0 - ADJUSTMENT OF DISTRIBUTOR BRAKE

This serves to keep rotation of the distributor constant.

Should the distributor rotate jerkily, brake pre-load must be increased by adjusting the screws (fig. 20.A).



Never overload the brake, after adjustment it must always be possible to rotate the distributor manually.

26.0 - ACCESSORIES

26.1 - ROW MARKERS

Fit as shown (fig. 21) and adjust the point of the marker (fig. 21.A) to the desired distance. Positioning on the ground and lifting are manual. Carry out these operations with the machine stationary and make certain that there is nobody in the area in question.

When this accessory is fitted, the overall dimensions of the machine are increased; for this reason, take greater care during manoeuvres and disassemble before travelling on the road.

26.2 - 6x6 DRILLING CUP

Suitable for transplant of 5x5 and 6x6 cm. cubic rootballs.

Cannot be fitted to the 6-cup distributor.

Install as described in chapter 23.

26.3 - LONG DRILLING CUP

Suitable for in-depth transplant of conical and cylindrical rootballs of up to 6 cm. in diameter.

Only for use in soft soil; cannot be fitted to the 6-cup distributor.

Install as described in chapter 23.

26.4 - KIT TO DELAY CUP CLOSING

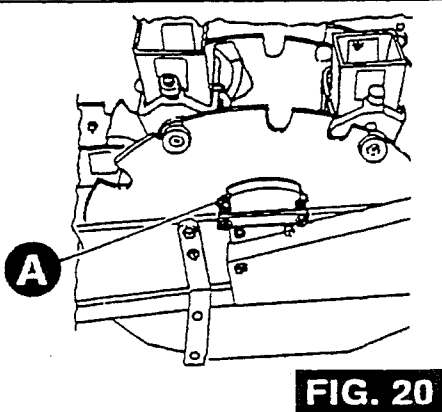
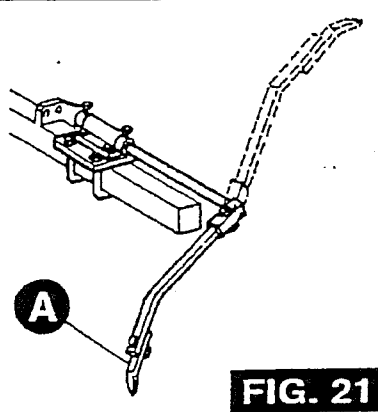
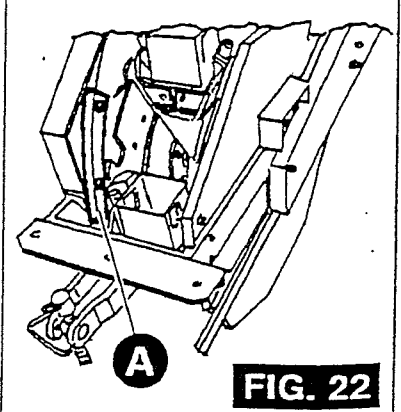
This serves to delay closing of the cups on leaving the soil, thus allowing plants with a leaf system of over 15-18 cm. to be transplanted.

Fit as indicated in fig. 22.A.

26.5 - INSERT FOR 4x4 cm CUBIC ROOTBALLS

Allows greater precision when transplanting 3x3-4x4 cm. cubic rootballs.

Fit to the cups as indicated in fig. 23.A with the openings (fig. 23.B) corresponding to the pins (fig. 23.C).


FIG. 20

FIG. 21

FIG. 22

26.6 - INSERT FOR LEAFY PLANTS

Allows transplantation of leafy plants (melons, watermelons, etc.).

Avoids damage to leaves and facilitates insertion into the soil.

Fit to the cups as indicated in fig. 23.D with the openings (fig. 23.E) corresponding to the pins (fig. 23.C).

Cannot be applied to the 6-cup distributor.

26.7 - FILM PRESSER CARRIAGE

Recommended when transplanting onto film. Presses the plastic or cellulose film lightly to keep it in contact with the soil, even when the cups are in the extraction phase. Fit as indicated in fig. 24.A.

26.8 - KIT FOR INTER-ROW SPACING MIN. 32 cm.

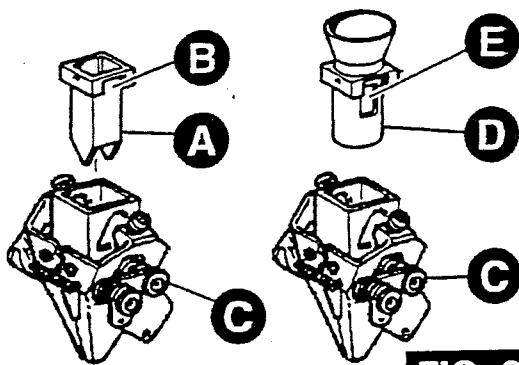
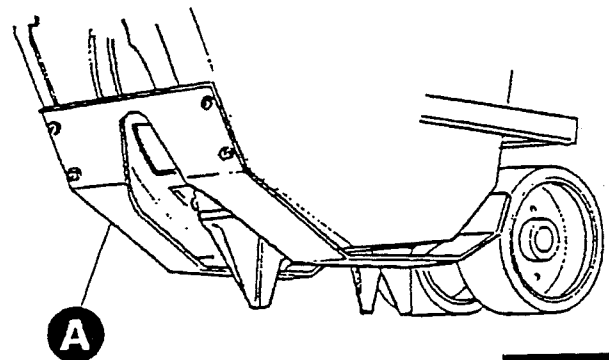
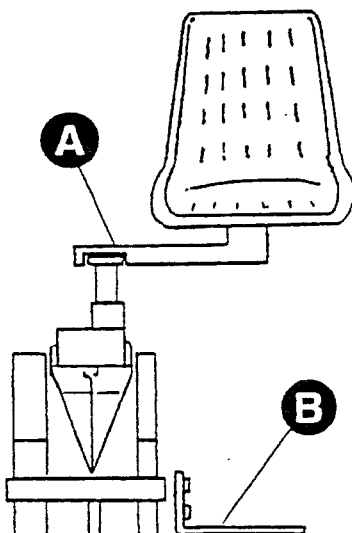
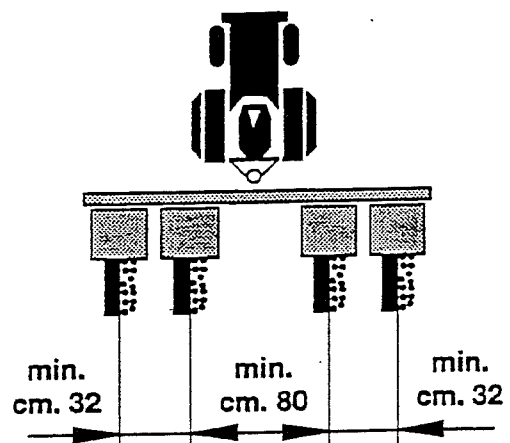
Allows transplantation with a minimum inter-row spacing of 32 cm.

Install the off-center seat support as indicated in fig. 25.A, and the operator foot-rest as indicated in fig. 25.B.

This kit enables one or more pairs of transplanters (WOLF) to work close together at minimum inter-row spaces, as shown in fig. 26.

26.9 - OTHER ACCESSORIES

Other possible accessories (e.g. microgranulator, fertilizer-broadcaster, etc.) come supplied with specific instructions for use and assembly.


FIG. 23

FIG. 24

FIG. 25

FIG. 26

27.0 - USE IN COMBINATION WITH FILM LAYING MACHINE

For use of the film laying machine, please read the use and maintenance manual for PS14 and PS19.

27.1 - LIFTING

Lift the machine as indicated in fig. 29, following the instructions given in chapters 6.1, 6.3 and 6.4.

27.2 - COUPLING UP THE FILM LAYING MACHINE

Couple up the film laying machine according to the instructions given in chapter 9. Following this, bring the tractor with the film laying machine up to the transplanter and couple it up according to the instructions given in chapter 9.

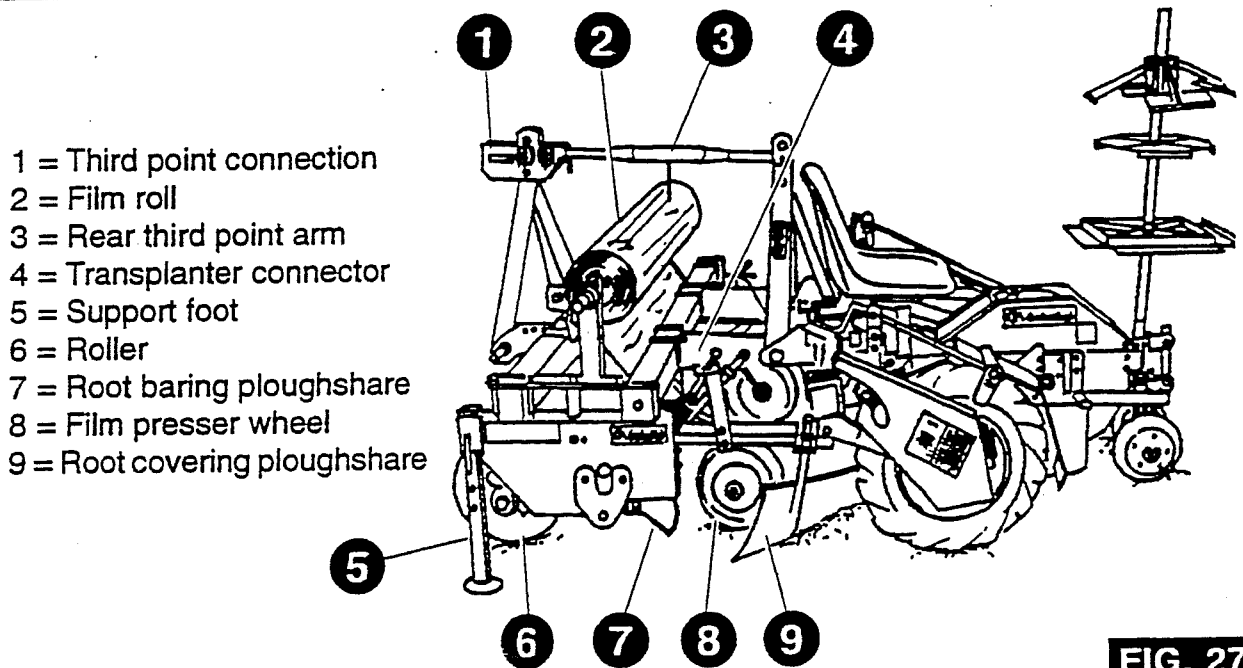


FIG. 27

	PS14 + WOLF/1	PS14 + WOLF/2	PS14 + WOLF/3
	230	230	275
	200	200	200
	150	150	150
	450	580	750
	40	50	65
	29	36	47

FIG. 28

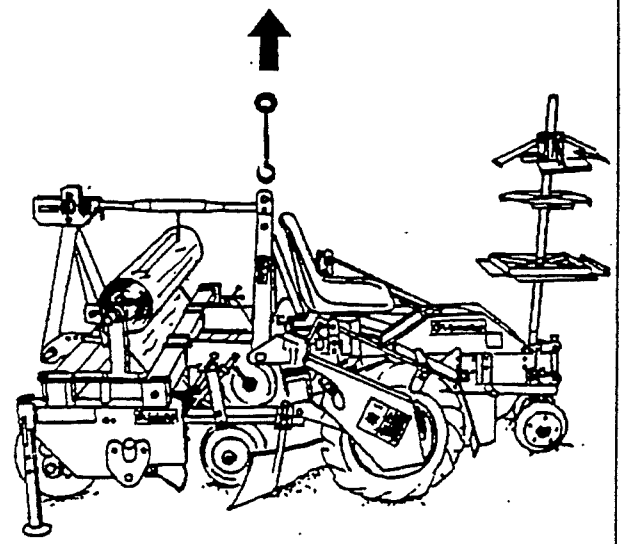


FIG. 29



WARNING: after coupling up the transplanter to the film laying machine, fix the two safety plates (fig. 30.A) using the special screws provided (fig. 30.B).
It is extremely dangerous to lift the combined machine without first securing the safety plates (fig. 30.A).

27.3 - ADJUSTING THE COMBINED MACHINE

Adjust third point arms (fig. 31.A and 31.B) until the machine connections are perpendicular to the ground (fig. 31.C).

27.4 - POSITIONING THE TRANSPLANTER UNIT

The transplanter unit must be positioned at least 15 cm above the soil covering the film (see fig. 32.A).

It is recommended that the drive wheels be positioned in the furrow created by the covering ploughshare (fig. 32.B).



27.5 - USE OF THE COMBINED MACHINE

Take particular care to comply with the safety instructions given in chapter 8.

Due to the length of the combined machine, always ensure that the load on the front axle of the tractor is such as to guarantee good and constant stability before lifting.

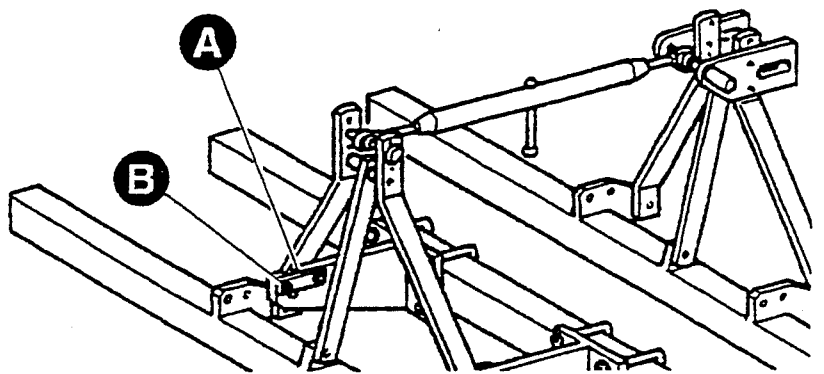


FIG. 30

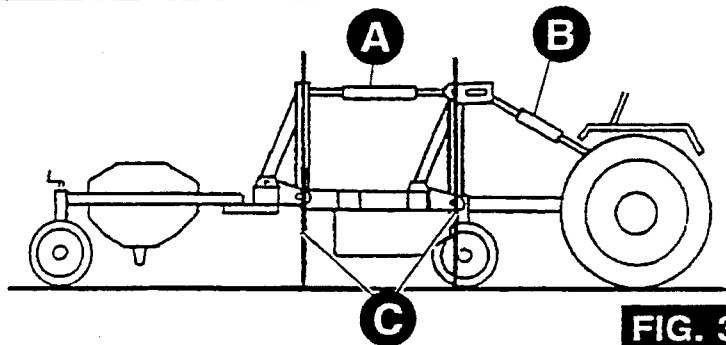


FIG. 31

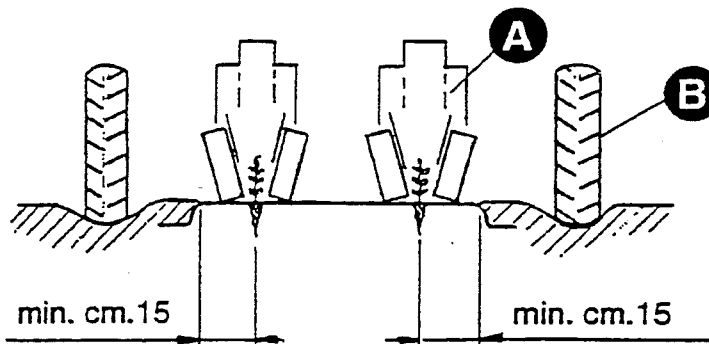


FIG. 32

28.0 - MAINTENANCE

The maintenance intervals listed below are guidelines for conditions of normal use. In the case of more demanding working conditions due to environment or seasonal factors, the frequency of maintenance operations must be increased accordingly. **Always carry out maintenance operations in accordance with the safety regulations set out in point 8.0.**

28.1 - CLEANING THE DRILLING CUPS

Constantly check that the drilling cups are clean (fig. 33.A) and that they close correctly. Should this not be the case, remove any excess soil or peat that may have accumulated on the inside and on the outside of the cups **and in particular in the area shown in fig. 32.B.**

28.2 - EVERY 40 HOURS OF WORK

- Grease the drilling cup (fig. 33.C)
- Oil the moving parts of the semi-cups (fig. 33.D)
- Oil the transmission chains (fig. 34.A and 34.B)
- Check that the screws are tight.

28.3 - RECOMMENDED LUBRICANTS

Grease and oil can be used in the same way as for the tractor, in accordance with the warnings and precautions appearing on the relative containers.

29.0 - SEASONAL DISUSE

At the end of the season, or in the event that a stoppage of more than one month is envisaged, it is advisable to proceed as follows:

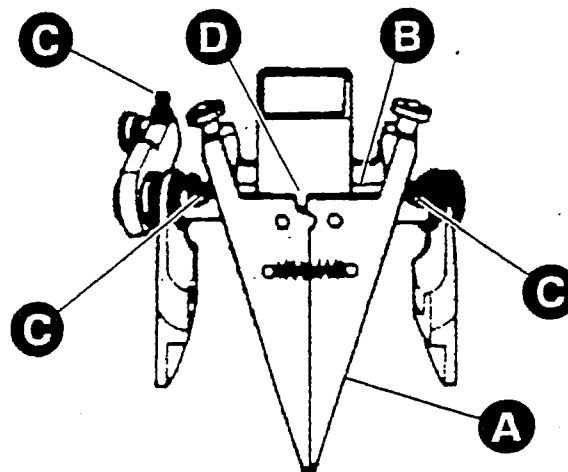
29.1 - wash and dry the equipment, paying particular attention to removing residues of fertilizers or chemical products.

29.2 - check and if necessary, renew damaged or worn parts.

29.3 - grease thoroughly, store the equipment in a dry area and protect it with a tarpaulin. Apply a thin layer of lubricant to the parts not protected by galvanization or paint.

29.4 - Position the equipment as indicated in point 8.0.

The advantages which derive from complying with the above recommendations are exclusively of benefit to the user, who will then find the equipment in excellent condition when it is next required.

**FIG. 33**