

### TC 910NSRD - F 240540RD - F 241000RD

RIF.	CODE	QTY	TYPE	DESCRIPTION
1	91004200	1	TC910-F24	DEFLECTOR
2	91004600	1	F24	DECK
	91000100	1	TC910	DECK
3	1436	11	TC910-F24	SCREW
4	1231	9	TC910-F24	WASHER
5	1222	9	TC910-F24	SELF LOCKING NUT
6	1076	24	TC910-F24	SCREW
7	59007010	5	TC910-F24	SUPPORT COMPLET
8	1225	30	TC910-F24	WASHER
9	1080	25	TC910-F24	NUT
10	59010700	4	TC910-F24	PULLEY
11	2094	2	TC910-F24	BELT
	2143	2	F24-1000	BELT
12	M1502310	2	TC910-F24	PULLEY
13	1977	4	TC910-F24	BEARING
14	1570	2	TC910-F24	CIRCLIP
15	1979	2	TC910-F24	CIRCLIP
16	16001510	2	TC910-F24	PN
17	1236	2	TC910-F24	WASHER
18	1965	4	TC910-F24	SCREW
19	59003600	2	TC910-F24	PIN
20	91003500	2	TC910-F24	SUPPORT
21	1928	2	TC910-F24	WASHER
22	1027	2	TC910-F24	NUT
23	1558	9	TC910-F24	SELF LOCKING NUT
24	91004100	1	TC910-F24	VERTICAL-ROD
25	1944	1	TC910-F24	SCREW
26	1408	1	TC910-F24	SCREW
27	1408	1	TC910-F24	SCREW
28	59006410	1	TC910-F24	DISK
29	59007300	1	TC910-F24	COVER
30	15003320	1	TC910-F24	SUPPORT
31	15002810	2	TC910-F24	BUSH
32	71002300	1	TC910	GEAR BOX COMPLET
33	1227	1	TC910-F24	WASHER
34	1228	4	TC910-F24	WASHER
35	1100	4	TC910-F24	SCREW
36	59000700	4	TC910-F24	WHEEL
37	59000210	4	TC910-F24	SPACER
38	1183	6	TC910-F24	CLIPS
39	1253	4	TC910-F24	WASHER
40	59005200	4	TC910-F24	SPACER
41	59005000	12	TC910-F24	SPACER
42	59005100	4	TC910-F24	SPACER
43	59004300	4	TC910-F24	SPACER
44	91004300	2	TC910-F24	SUPPORT
45	59006110	4	TC910-F24	FORK
46	1407	6	TC910-F24	SCREW
47	59009600	6	TC910-F24	WASHER
48	1222	10	TC910-F24	SELF LOCKING NUT

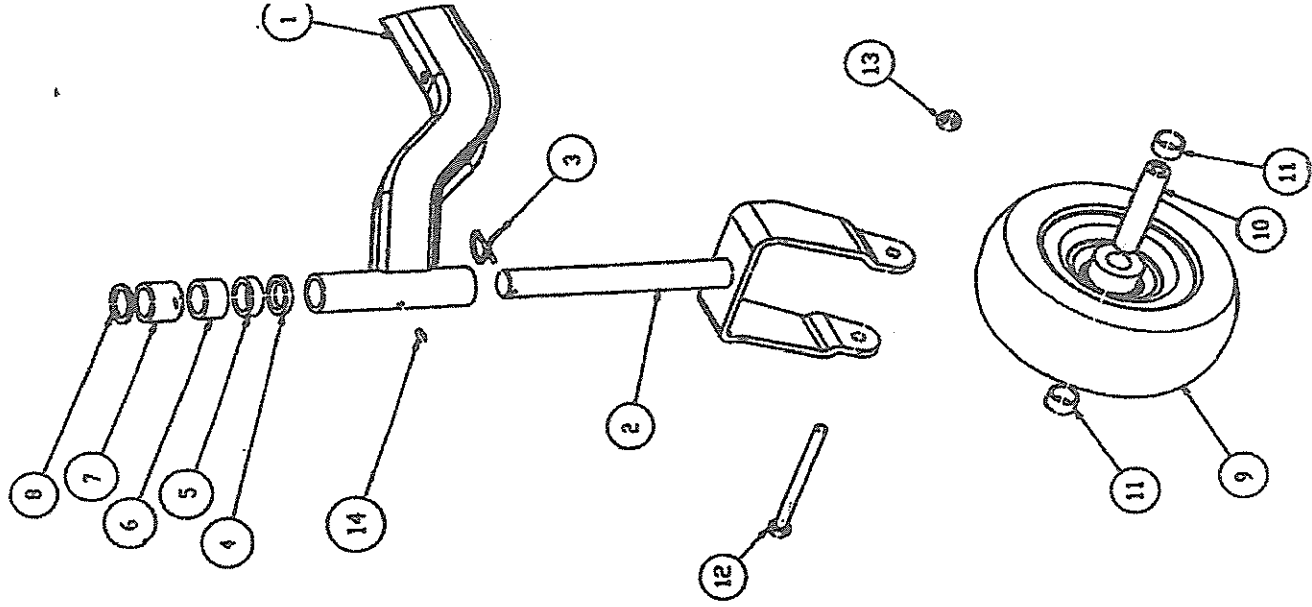
RIF.	CODE	QTY	TYPE	DESCRIPTION
50	91002300	1	TC910-F24	COVER LEFT
	91002200	1	TC910-F24	COVER RIGHT
51	1234	4	TC910-F24	FITTING
52	15005600	2	TC910-F24	HE-ROD
53	91003000	1	TC910-F24	SUPPORT
54	59001110	1	TC910-F24	PULLEY
55	59002400	1	TC910-F24	PULLEY
	F5900700	1	F24-1000	PULLEY
56	59006500	1	TC910-F24	WASHER
32	91004900	1	F24	GEAR BOX COMPLET



# TC910NSRD NEW VERSION

## SPARE PARTS LIST

FOR MOWER PRODUCED FROM SERIAL NR. 93654 OF IMMATRICOLATION



ASC #	RIF.	CODE	Q.TY	DESCRIZIONE	DESCRIPTION	DESIGNATION
52719	1	590 303 10	2	SOPPORTO RUOTA	WHEEL SUPPORT	SUPPORT
52713	2	590 306 00	4	FORCELLA	FORK	FOURCHE
56236	3	1183	4	CLIP	CLIP	CLIP
51370	4	F59 026 00	4	DISTANZIALE	SPACER	ENTRETOISE
51369	5	F59 027 00	4	DISTANZIALE	SPACER	ENTRETOISE
51368	6	F59 028 00	4	DISTANZIALE	SPACER	ENTRETOISE
51367	7	F59 029 00	4	DISTANZIALE	SPACER	ENTRETOISE
51366	8	1150	4	RONDELLA	SHIM	RONDELLE
68244	9	2558	4	RUOTA	WHEEL	ROUE
52715	10	2331	4	TUBO RUOTA	WHEEL SPACER	ENTRETOISE DE ROUE
52716	11	2333	8	DISTANZIALE	SPACER	ENTRETOISE
52717	12	2332	4	VITE	SCREW	VIS
30886	13	1558	4	DADO	S.L. NUT	ECROU AUTOFREINE
32844	14	1234	4	INGRASSATORE	FITTING	GRAISSEUR





(I)	MANUALE D'USO E MANUTENZIONE E NORME DI SICUREZZA PER TOSAERBA, TRINCIAERBA E FRESATRICI
(GB)	USER AND MAINTENANCE MANUAL AND SAFETY RULES FOR MOWERS, FLAIL MOWERS AND ROTARY CULTIVATORS
(F) (B)	MODE D'EMPLOI ET D'ENTRETIEN ET NORMES DE SÉCURITÉ POUR TONDEUSES, BROYEURS D'HERBE ET FRAISES ROTATIVES
(D)	GEBRAUCHS- UND INSTANDHALTUNGSHANDBUCH UND SICHERHEITSVORSCHRIFTEN FÜR MÄHMASCHINEN, MULCHGERÄTE UND BODENFRÄSEN
(E)	MANUAL DE USO Y MANTENIMIENTO Y NORMAS DE SEGURIDAD PARA SEGADORAS, DESMENUZADORAS DE HIERBAS Y FRESADORAS
(P)	MANUAL DE USO E MANUTENÇÃO E NORMAS DE SEGURANÇA PARA CORTADOR DE ERVAS, TRINCHA-ERVAS E FRESAS ROTATIVAS
(NL) (B)	HANDLEIDING VOOR GEBRUIK EN ONDERHOUD EN VEILIGHEIDSVOORSCHRIFTEN VOOR MAAIMACHINES, HAKSELAARS EN FREESMACHINES
(DK)	BRUGSVEJLEDNING, VEDLIGEHOLDELSE OG SIKKERHEDSNORMER FOR PLÆNEKLIPPERE, SLÅMASKINER OG JORDFRÆSERE
(S)	ANVÄNDINGS- OCH UNDERHÅLLSHANDBOK OCH SÄKERHETSNORMER FÖR GRÄSKLIPPARE, GRÄSSKÄRARE OCH FRÅSMASKINER
(SF)	KÄYTTÖ- JA HUOLTO-OPAS SEKÄ TURVALLISUUSMÄÄRÄYKSET NIITTOKONEELLE, SILPPURILLE JA AURALLE
(GR)	ΕΓΧΕΙΡΙΔΙΟ ΧΡΗΣΗΣ ΚΑΙ ΣΥΝΤΗΡΗΣΗΣ ΚΑΙ ΚΑΝΟΝΙΣΜΟΙ ΑΣΦΑΛΕΙΑΣ ΓΙΑ ΧΟΡΤΟΚΟΤΤΙΚΑ, ΧΟΡΤΟΑΙΛΑΝΗΤΙΚΑ ΚΑΙ ΦΕΖΕΣ



# USER AND MAINTENANCE MANUAL AND SAFETY RULES

## CONTENTS

ag. 12	NOISE TEST MEASUREMENTS FOR ALL MODELS
" 12	FOREWORD FOR ALL MODELS
" 12	 ACCIDENT PREVENTION FOR ALL MODELS (SAFETY)
" 13	 PREPARATION FOR USE (START UP)
" 13	CARDAN SHAFT FOR ALL MODELS
" 14	THIRD POINT COUPLING CATEGORIES
	<b>MOWERS - MODELS TC / F / TC...RD / F...RD</b>
" 15	CONTENTS OF PACKING CASES
" 15	WHEEL SUPPORT AND CUTTING HEIGHT ADJUSTMENT
" 15	BELTS AND GEAR BOX
" 15	GUARDS
" 15	THIRD POINT COUPLING
" 16	THIRD POINT COUPLING FOR F MODELS
" 16	BLADE REPLACEMENT
" 16	POSITIONS AND DESCRIPTIONS OF LABELS FOR MOWERS
	<b>FLAIL MOWERS - MODELS TL - TM</b>
" 17	SET UP
" 17	BELT AND CUTTING HEIGHT ADJUSTMENT
" 17	BLADE REPLACEMENT
" 18	POSITIONS AND DESCRIPTIONS OF LABELS FOR FLAIL MOWERS
	<b>ROTARY CULTIVATORS - MODELS FL - FM</b>
" 19	SET UP
" 19	CHAIN TENSION AND WORKING DEPTH ADJUSTMENT
" 19	TINE REPLACEMENT
" 20	POSITIONS AND DESCRIPTIONS OF LABELS FOR ROTARY CULTIVATORS
" 115	TECHNICAL FEATURES AND AVAILABLE MODELS
" 119	DRAWINGS 1 TO 18

## NOISE TEST MEASUREMENTS FOR ALL MODELS

ACOUSTIC PRESSURE LEVELS MEASURED  
FROM THE DRIVER'S SEAT (LpA)

MODEL	dB (A)
MOWERS	85
FLAIL MOWERS	84
ROTARY TILLERS	73

## FOREWORD FOR ALL MODELS

CARONI SPA would first of all like to thank you for choosing the quality of our machines.

To ensure that the machines purchased from us will offer the highest performance for a long time, we invite you to take note of the user and maintenance instructions listed in this manual. Scrupulous respect for these instructions will help you to prevent difficulties and accidents resulting from negligence or a failure to comply with the safety rules, for which our company henceforth declines all responsibility.



### ACCIDENT PREVENTION SAFETY



The majority of accidents occurring during the operation, maintenance or transportation of the machines are caused by the failure to observe the most elementary rules of accident prevention.

It is therefore of fundamental importance that the persons authorised to use the machines take note both of the rules given below and the labels attached to each machine and respect them scrupulously.

1. Always switch off the tractor motor, disengage the cardan shaft and wait until all the moving parts have come to a standstill before commencing any adjustments, maintenance or cleaning operations. Always place the machine on the ground or on robust supports and never lie under the machine without the supports.
2. Before use, check that screws and nuts are tightened, especially those of the blades and tines.
3. Work only with the guards mounted. If they are damaged, replace them immediately.
4. Make sure that all persons or animals are at safe distances before you set up your machine.
5. Work with particular caution along roads or pathways to beware of stones being thrown up.
6. Preferably a tractor provided with a cabin should be used to protect the operator.
7. Do not leave the machine in operation without due supervision.
8. During checks or repairs, ensure that no one can switch the machine on accidentally.
9. Wear tight fitting garments that will not catch on the machine's moving or rotating parts; wear heavy-duty shoes and gloves when handling blades or sharp edges.
10. Do not carry persons or objects on the machine or the tractor during work or travel on the road.
11. During operation the cardan shaft guards must always be in good condition and must be hooked onto the special safety chains to prevent their rotation. If the guards are damaged or worn, replace them immediately with originals.

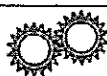
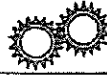


12. For circulation on public roads, the operator must ensure that the machine complies with the current highway code, and must scrupulously observe the regulations in force in his/her particular state.
13. For your own safety and that of others and to avoid forfeiting your guarantee, use only original spare parts.
14. Beware in particular of the hazards that can be caused by rotating parts.
15. CARONI SPA declines all responsibility for a failure to observe these rules.

**WARNING:**

This symbol will be used in the course of the manual wherever your own safety or that of others is at risk, or wherever the correct operation of the machine might be compromised. You should therefore pay attention to paragraphs with this symbol.

**PREPARATION FOR USE (START UP)****DIRECTIONS: FOR ALL MODELS**

- i. Before starting work, fill the gear boxes with HD 80 W 90 oil. When closing the cap, be careful not to tighten it too much, to avoid bending the seal; once this is bent, it could give rise to oil leaks.
- ii. After the first 40 hours of work, replace the gear box oil by discharging it from the special plug. Fill up with the prescribed type of oil via the fill-up hole and check the quantity with the special dip-stick. See the table below. This operation should then be repeated every 200 hours of work.

TYPE		Q.TY LITRES
TC/F		0,5
TL/TM		0,5
FL/FM		0,75
FL/FM		0,5

- C. Check the direction of rotation and number of revolutions of the tractor and machine drive shafts respectively. They must be the same as those indicated on the machine by two yellow labels near its drive shaft.

**WARNING:**

Any speeds other than those indicated can result in injury to the operator and damage to the machine.

**CARDAN SHAFT**

(USE ONLY CARDAN SHAFTS  
WITH GUARDS MARKED "CE")

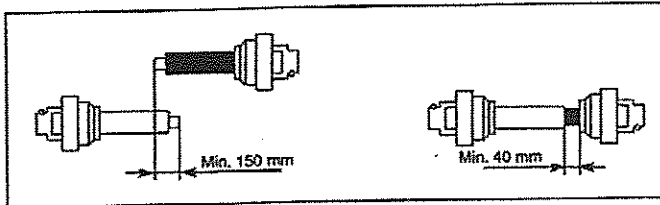
Once the tool is coupled to the tractor, check the exact length of the cardan shaft. If it is too long, equal lengths must first be cut off the external guards and then off the cardan transmission tubes. Trim and clean them carefully.

**VERY IMPORTANT:**

In the various work positions, the drive tubes of the cardan shaft must overlap, one inside the other, by at least 150 mm, as shown in the figure below.

Repeat this check when the tool is coupled to another tractor.

*Figure showing cardan shaft*



**WARNING:**

The cardan shaft guards must be in good condition and must remain immobile when the shaft rotates. For this reason the special chains provided must be used.

For your own safety, when the condition of the cardan shaft guards deteriorates, they must be replaced without delay. When the machine is not in operation, to prevent the cardan shaft from resting on the ground, use the supplementary chains we have provided and not the two anti-rotation chains supplied with the cardan shaft.

When the cardan shaft is coupled (inserted), ensure it locks correctly.

## THIRD POINT COUPLING CATEGORIES

### THIRD POINT COUPLING CATEGORY "0"

REAR MOWERS ..... TC 480

FRONT MOWERS ..... F12

### THIRD POINT COUPLING CATEGORY "1"

REAR MOWERS ..... TC590 / TC710 / TC910

FRONT MOWERS ..... F15 / F18 / F24

REAR FLAIL MOWERS ..... TL0900 / TL1200 / TL1500

TM1300 / TM1600

TM1900

FLAIL MOWERS ..... FTL0900 / FTL1200

FTL1500 / FTM1300

FTM1600 / FTM1900

ROTARY CULTIVATORS ..... FL0800 / FL0900 / FL1000

FL1100 / FL1200 / FL1300

FL1400 / FM1100

FM1300 / FM1500

FM1700

# MANUAL FOR ALL MOWER MODELS

## CONTENTS OF PACKING CASES

See Figure N. 1


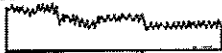
Check that the packaging and the contents of the packing case are intact. Use the following table to check the components..

ITEM CODE	TC	TC - RD F - RD	F	TC910 F24
1	1	—	1	—
2	1	1	1	1
3	2	2	2	2
4	2	2	2	2
5	2	2	2	2
6	—	2	2	—
7	1	1	1	1
8	1	1	1	—
9	1	1	1	1
10	2	2	2	—
11	—	—	—	2
12	—	1	—	1

## WHEEL SUPPORT AND CUTTING HEIGHT ADJUSTMENT

See Figure N. 2

- A. Position the wheel supports "1" on the machine body and tighten the 4 screws "2" over the washers "3" and the washers "4". For the moment do not mount the 2 central screws "2". If necessary, adjust the cutting height as required. For this operation consult the following table.

	
5	18 mm
6	25 mm
7	37 mm
8	44 mm

## BELTS AND GEAR BOX

See Figure N. 3 - 4 - 5

- Set the belts "9" on the pulleys. For type TC910-F24, see Fig. 4.
- Position the gear box "10" as in Fig. 3 and tighten the 4 screws "11" over the 4 washers "12".
- Loosen the screw "13" and the nuts "14" entirely or almost entirely to allow the belts "9" to be inserted in the pulley race.
- Tighten the belts by means of the screw "13" and lock the tension with the 5 nuts "14". Ensure that the belts have the right tension and about 10 mm camber as indicated in Fig. 5.

## GUARDS

See Figure N. 6

- Position the guards "15" and secure them with the 6 nuts "16" and the washers "17". Now tighten the central screw "2" with washers "3" and "4" of the wheel support referred to in the paragraph WHEEL SUPPORT AND CUTTING HEIGHT ADJUSTMENT.
- Position the deflector "18" and secure with three screws "19", three washers "17" and three nuts "16".
- For rear discharge models RD, mount deflector "26" (see figure).
- Position the plastic guard "23" over the zinc-plated disk "24" and secure with 2 screws "19" and 2 open washers "25".

## THIRD POINT COUPLING

See Figure N. 7

- Mount the connecting rods "26" and the uprights "27" with the U bolt "28", paying attention to the position of the bushings "29" (see figure).
- Tighten the screw "30" with the nut "31".



- C. Secure the coupling pins "32" with the washers "33" and the nuts "34".
- D. Tighten the screws "35" with the nut "36".

### THIRD POINT COUPLING FOR F MODELS

See Figure N. 8

- A. Position the coupling supports "37", secure the nuts "38" with the washers "39" to the U bolt "40".
- B. The distance between the two supports must be about 700 mm.

### BLADE REPLACEMENT

See Figure N. 9

#### WARNING:

Before carrying out any maintenance work on the machine, ensure that the tractor is switched off, that the cardan shaft is disengaged from the drive shaft and that all the moving parts are stationary.

- A. Check the performance of the blades daily and replace damaged or chipped blades without delay. This should be done not only for your safety, but also to permit your machine always to obtain a perfect cut.
- B. For blade replacement, proceed as follows:  
**REST THE MOWER ON SOLID SUPPORTS:**
  1. Hold the shaft firm with a 30 mm spanner and loosen the nut "41" with a 27 mm spanner.
  2. Extract the blade from the shaft and replace it, placing the hole on the blade over the shaft.
  3. Tighten nut "41" over washer "42". The torque should be at least 15 kgm.
- C. Grease the blade shaft supports every 10-12 hours of work. Use EP2 grease.
- D. After finishing work, wash the underbody carefully to maintain perfect machine performance.



#### WARNING:

Use only original cutting tools to preserve your own safety as that of others (also for the sake of the guarantee).

### POSITIONS AND DESCRIPTIONS OF LABELS FOR TC...LD - TC...RD - F...LD AND F...RD



See Figure N. 10

- ① Aluminium plate showing the model of the machine, the serial number and year of manufacture. For any future need, quote this data. **IMPORTANT:** They should **ALWAYS** be indicated for ordering spare parts.
- ② Arrow indicating the direction of rotation that the machine should have. Consequently you should check that it is the same on the tractor.
- ③ Without oil - for the purpose of transportation, the machine is supplied without oil.
- ④ Read carefully the safety rules and the user and maintenance instructions given in this manual before switching on the machine.
- ⑤ This indicates the revolutions per minute that the drive shaft must have (540 min<sup>-1</sup>, 1000 min<sup>-1</sup>, 1500 min<sup>-1</sup> or 2000 min<sup>-1</sup>)
- ⑥ Do not put hands or feet under the body when the machine is working. In any case, before carrying out any operation on the machine, ensure that the tractor is switched off and that all the moving parts are stationary.
- ⑦ Danger of flying objects that can cause contusion, keep a safe distance when the machine is working.
- ⑧ Do not remove the guards of moving parts when the machine is in motion and ensure that they are closed before starting the machine.
- ⑨ Do not climb onto the machine when it is in movement or when the drive shaft is rotating.

# MANUAL FOR ALL FLAIL MOWERS MODELS

## SET UP

Follow the directions from pages 12 to 14 carefully.

See Figure N. 11

- A. Position the jack "6" and secure with the screws "7", washers "8" and nuts "9". For models with the possibility of off-centre coupling, choose the most suitable position for the work that has to be done.
- B. Position the guards "2" (that for safety reasons should never be removed and for the purpose of packing cannot be mounted before delivery) and secure them with the screws "3" and the washers "4". Mount the plastic cardan guard "5" with the already mounted reinforcement disk positioned between the guard and the screw heads.  
*(The guards "2" are necessary and obligatory only for EC member states).*
- C. Fill the gear box with oil as indicated in the table on page 13 of the directions. Then grease the points "1" every 8-10 hours of operation with EP2 grease.

## BELT TENSION (A) AND CUTTING HEIGHT (B) ADJUSTMENT

See Figure N. 12

- A. A correct belt tension will permit an optimal functioning of your machine. Every 10 hours of operation it is therefore advisable to check tension carefully.  
Carry out the following operations after switching off the tractor and waiting until all the moving parts are stationary:
  1. Remove the guard.
  2. Tighten the nut "10" to make the belts tauter, unscrew it to give them more slack.
  3. Replace the guard as indicated.



B. Carry out the following operations after switching off the tractor motor and waiting until all the moving parts are stationary:

1. Lift up the machine and rest it on firm supports.
2. Loosen and remove screws "11" and adjust to the chosen height by lowering the sliding block "12", then tighten the screws.
3. Repeat the operation for the opposite sliding block bearing in mind that, for a correct use of the machine, it must operate with the sliding block "12" and the roller "13" at the same height. For the purpose of packing, the roller may be positioned higher up.

## BLADE REPLACEMENT

See Figure N. 13



### WARNING:

Before carrying out any maintenance work on the machine, ensure that the tractor is switched off, that the cardan shaft is disengaged from the drive shaft and that all the moving parts are stationary.



A. To replace the blades proceed as follows:

1. Lift up the machine and rest it on very firm supports.
2. Loosen the nut "14" and remove the screw "15". Position the new blades as indicated in Fig. 13.
3. Tighten the screw "15" and the nuts "14".
4. It is recommended, to avoid unnecessary stress and vibrations on the machine, to replace all the blades at the same time.

B. After finishing work, wash the underbody carefully to maintain perfect machine performance.



**WARNING:**

Use only original cutting tools to preserve your own safety and that of others (also for the sake of the guarantee).

⑧ Do not remove the guards of moving parts when the machine is in motion and ensure that they are closed before starting the machine.

⑨ Do not climb onto the machine when it is in movement or when the drive shaft is rotating.

**POSITIONS AND DESCRIPTIONS OF LABELS  
FOR TL / TM AND FTL / FTM**

See Figure N. 14



- ① Aluminium plate showing the model of the machine, the serial number and year of manufacture. For any future need, quote this data. **IMPORTANT:** They should **ALWAYS** be indicated for ordering spare parts.
- ② Arrow indicating the direction of rotation that the machine should have. Consequently you should check that it is the same on the tractor.
- ③ Without oil - for the purpose of transportation, the machine is supplied without oil.
- ④ Read carefully the safety rules and the user and maintenance instructions given in this manual before switching on the machine.
- ⑤ This Indicates the revolutions per minute that the drive shaft must have (540 min<sup>-1</sup>, or 1000 min<sup>-1</sup>).
- ⑥ Do not put hands or feet under the body when the machine is working. In any case, before carrying out any operation on the machine, ensure that the tractor is switched off and that all the moving parts are stationary.
- ⑦ Danger of flying objects that can cause contusion, keep at a safe distance when the machine is working.

# MANUAL FOR ALL ROTARY CULTIVATORS MODELS

## SET UP

Follow the directions from pages 12 to 14 carefully.

See Figure N. 15

- A. Position the jack "1" and secure with the screws "2", washers "3" and nuts "4". For models with the possibility of off-centre coupling, choose the most suitable position for the work that has to be done.
- B. Position the supports "5" and tighten the screws "6" with washers "7" and the nut "8". **WARNING:** For the purpose of packaging the supports "5" may have been positioned in another way. They should therefore be positioned as in Fig. 15 and the distance between them must be about 670 mm.
- C. Position the guards "9" by loosening the nuts "10" and then tightening them. For safety reasons, the guards must never be removed. Before mounting the extensions "11" on the guards "9" with the screws "12" and the nuts "13", they must be shortened by cutting them to ensure that, according to the chosen coupling position with the tractor, the protected area around the machine is continuous. (The extensions "11" are not necessary for cultivators FL0800 and FL0900). *(The guards "9" and the extensions "11" are necessary and obligatory only for EC member states);*
- D. Fill the gear box and the lateral chain housing with oil as indicated in the table on page 13 of the directions.

## DRIVE CHAIN TENSION (A) AND WORKING DEPTH (B) ADJUSTMENT

See Figure N. 16

- A. The chain tension should be adjusted after the first 3 hours of operation and subsequently every time the machine is

used. Proceed as follows:

1. Lift the machine with the tractor's hoist and rest it on firm supports so that the tines can rotate freely. Switch off the tractor motor and wait until all the moving parts have come to a standstill.
2. Loosen the nut "14" with a 24 mm spanner.
3. Tighten the screw "15" MANUALLY until the chain tightening sliding block resists. **DO NOT TIGHTEN ANY FURTHER.** Excessive tightening will make the chain too taut and it will soon become unusable.
4. Tighten the nut "14" securely.
5. This adjustment ensures that the chain will last a long time and that the machine will maintain a high performance.



- B. Ensure that the tractor motor is switched off and that all the moving parts are stationary, then proceed as follows:

1. Loosen the screws "16", loosen and remove the screw "17", choose the required height by lowering or raising the adjustment blade "18".
2. Tighten the screws loosened in the previous step.

## TINE REPLACEMENT

See Figure N. 17



### WARNING:

Before carrying out any maintenance work on the machine, ensure that the tractor is switched off, that the cardan shaft is disengaged from the drive shaft and that all the moving parts are stationary.



A. Lift the machine and rest it on firm supports, then proceed as follows:

1. Loosen and remove the screws "19".
2. Replace the worn or chipped tines "20", being careful to respect the right or left-hand mounting positions.
3. Tighten the screws "19" with the washers "21" and the nuts "22".

B. After finishing work, wash the underbody carefully to maintain perfect machine performance.



**WARNING:**

Use only original tines to preserve your own safety and that of others (also for the sake of the guarantee).

- ⑤ This indicates the revolutions per minute that the drive shaft must have (540 min<sup>-1</sup>).
- ⑥ Do not put hands or feet under the body when the machine is working. In any case, before carrying out any operation on the machine, ensure that the tractor is switched off and that all the moving parts are stationary.
- ⑦ Danger of flying objects that can cause contusion, keep a safe distance when the machine is working.
- ⑧ Do not remove the guards of moving parts when the machine is in motion and ensure that they are closed before starting the machine.
- ⑨ Do not climb onto the machine when it is in movement or when the drive shaft is rotating.

## POSITIONS AND DESCRIPTIONS OF LABELS FOR FL AND FM

See Figure N. 18



- ① Aluminium plate showing the model of the machine, the serial number and year of manufacture. For any future need, quote this data. IMPORTANT: They should ALWAYS be indicated for ordering spare parts.
- ② Arrow indicating the direction of rotation that the machine should have. Consequently you should check that it is the same on the tractor.
- ③ Without oil - for the purpose of transportation, the machine is supplied without oil.
- ④ Read carefully the safety rules and the user and maintenance instructions given in this manual before switching on the machine.

# **CARATTERISTICHE TECNICHE E MODELLI DISPONIBILI** **TECHNICAL FEATURES AND AVAILABLE MODELS**

## **TOSAERBA POSTERIORE SERIE TC** **REAR MOWER TC SERIES**

CODICE MACCHINA MACHINE CODE	LARGH. DI TAGLIO CUTTING WIDTH mm (inch)	ALTEZZA DI TAGLIO CUTTING HEIGHT mm (inch)	N° DI COLTELLI N° BLADES	POTENZA TRATTORE TRACTOR POWER HP	N° DI GIRI PRESA DI FORZA PTO SPEED rpm	N° DI GIRI COLTELLO BLADE SPEED rpm	ATTACCO HITCH CAT.	PESO WEIGHT Kg (lbs)	TIPO DI SCARICO GRASS OUTLET
TC480NSLD	1200 (48")	25 ÷ 100 (1" to 4")	3	12 ÷ 20	540	3250	0	166 (366)	Lat./Side
TC480NSRD	1200 (48")	25 ÷ 100 (1" to 4")	3	12 ÷ 20	540	3250	0	166 (366)	Post./Rear
TC590NSLD	1500 (59")	25 ÷ 100 (1" to 4")	3	15 ÷ 30	540	2630	1	183 (404)	Lat./Side
TC590NSRD	1500 (59")	25 ÷ 100 (1" to 4")	3	15 ÷ 30	540	2630	1	183 (404)	Post./Rear
TC710NSLD	1800 (71")	25 ÷ 100 (1" to 4")	3	20 ÷ 40	540	2230	1	226 (499)	Lat./Side
TC710NSRD	1800 (71")	25 ÷ 100 (1" to 4")	3	20 ÷ 40	540	2230	1	226 (499)	Post./Rear
TC910NSRD	2350 (93")	25 ÷ 100 (1" to 4")	5	45 ÷ 60	540	2630	1	300 (662)	Post./Rear

## CARATTERISTICHE TECNICHE E MODELLI DISPONIBILI TECHNICAL FEATURES AND AVAILABLE MODELS

### TOSAERBA FRONTALE SERIE F FRONT MOWER F SERIES

CODICE MACCHINA MACHINE CODE	LARGH. DI TAGLIO CUTTING WIDTH mm (inch)	ALTEZZA DI TAGLIO CUTTING HEIGHT mm (inch)	N° DI COLTELLI N° BLADES	POTENZA TRATTORE TRACTOR POWER HP	N° DI GIRI PRESA DI FORZA PTO SPEED rpm	N° DI GIRI COLTELLO BLADE SPEED rpm	ATTACCO HITCH CAT.	PESO WEIGHT Kg (lbs)	TIPO DI SCARICO GRASS OUTLET
F120540LD	1200 (48")	25 ÷ 100 (1" to 4")	3	12 ÷ 20	540	3250	0	166 (366)	Lat./Side
F120540RD	1200 (48")	25 ÷ 100 (1" to 4")	3	12 ÷ 20	540	3250	0	166 (366)	Post./Rear
F121000LD	1200 (48")	25 ÷ 100 (1" to 4")	3	12 ÷ 20	1000	3250	0	166 (366)	Lat./Side
F121000RD	1200 (48")	25 ÷ 100 (1" to 4")	3	12 ÷ 20	1000	3250	0	166 (366)	Post./Rear
F150540LD	1500 (59")	25 ÷ 100 (1" to 4")	3	15 ÷ 30	540	2630	1	183 (404)	Lat./Side
F150540RD	1500 (59")	25 ÷ 100 (1" to 4")	3	15 ÷ 30	540	2630	1	183 (404)	Post./Rear
F151000LD	1500 (59")	25 ÷ 100 (1" to 4")	3	15 ÷ 30	1000	2630	1	183 (404)	Lat./Side
F151000RD	1500 (59")	25 ÷ 100 (1" to 4")	3	15 ÷ 30	1000	2630	1	183 (404)	Post./Rear
F180540LD	1800 (71")	25 ÷ 100 (1" to 4")	3	20 ÷ 40	540	2230	1	226 (499)	Lat./Side
F180540RD	1800 (71")	25 ÷ 100 (1" to 4")	3	20 ÷ 40	540	2230	1	226 (499)	Post./Rear
F181000LD	1800 (71")	25 ÷ 100 (1" to 4")	3	20 ÷ 40	1000	2230	1	226 (499)	Lat./Side
F181000RD	1800 (71")	25 ÷ 100 (1" to 4")	3	20 ÷ 40	1000	2230	1	226 (499)	Post./Rear
F240540RD	2350 (93")	25 ÷ 100 (1" to 4")	5	30 ÷ 60	540	2630	1	300 (662)	Post./Rear
F241000RD	2350 (93")	25 ÷ 100 (1" to 4")	5	30 ÷ 60	1000	2630	1	300 (662)	Post./Rear

Per tutti i modelli F12 / F15 / F18 a richiesta la macchina può essere fornita con presa di forza da 1500 o 2000 giri.  
For models F12 / F15 / F18, the machine may also be supplied with power take-off of 1500 or 2000 rpm.

# **CARATTERISTICHE TECNICHE E MODELLI DISPONIBILI** **TECHNICAL FEATURES AND AVAILABLE MODELS**

## **TRINCIABERBA** **FLAIL MOWERS**

CODICE MACCHINA MACHINE CODE	LARGH. DI LAVORO WORKING WIDTH mm (inch)	TIPO DI ROTORE TYPE OF ROTOR	N° COLTELLI N° BLADES	PESO WEIGHT Kg (lbs)	POTENZA TRATTORE TRACTOR POWER HP	TIPO DI ATTACCHI TYPE OF HITCHES
TL0900ASC	970 (39'')	A	28	120 (265)	20 ÷ 40	Fissi/Fixed
TL0900FSC	970 (39'')	F	56	120 (265)	20 ÷ 40	Fissi/Fixed
TL1200ASC	1225 (49'')	A	36	150 (331)	20 ÷ 40	Fissi/Fixed
TL1200FSC	1225 (49'')	F	72	150 (331)	20 ÷ 40	Fissi/Fixed
TL1500ASC	1485 (59'')	A	44	180 (397)	20 ÷ 40	Fissi/Fixed
TL1500FSC	1485 (59'')	F	88	180 (397)	20 ÷ 40	Fissi/Fixed
TM1300ASC	1335 (53'')	A	40	230 (507)	30 ÷ 60	Regol./Adjustable
TM1300BSC	1335 (53'')	B	40	230 (507)	30 ÷ 60	Regol./Adjustable
TM1300FSC	1335 (53'')	F	80	230 (507)	30 ÷ 60	Regol./Adjustable
TM1600ASC	1585 (63'')	A	48	275 (606)	30 ÷ 60	Regol./Adjustable
TM1600BSC	1585 (63'')	B	48	275 (606)	30 ÷ 60	Regol./Adjustable
TM1600FSC	1585 (63'')	F	96	275 (606)	30 ÷ 60	Regol./Adjustable
TM1900ASC	1845 (73'')	A	56	325 (716)	30 ÷ 60	Regol./Adjustable
TM1900BSC	1845 (73'')	B	56	325 (716)	30 ÷ 60	Regol./Adjustable
TM1900FSC	1845 (73'')	F	112	325 (716)	30 ÷ 60	Regol./Adjustable

Optional pattini laterali per tutti i modelli. A richiesta tutti i modelli possono essere forniti con attacco frontale categoria 1.  
Optional side skids for all models. If requested, all models may be supplied with a class 1 front hitch.

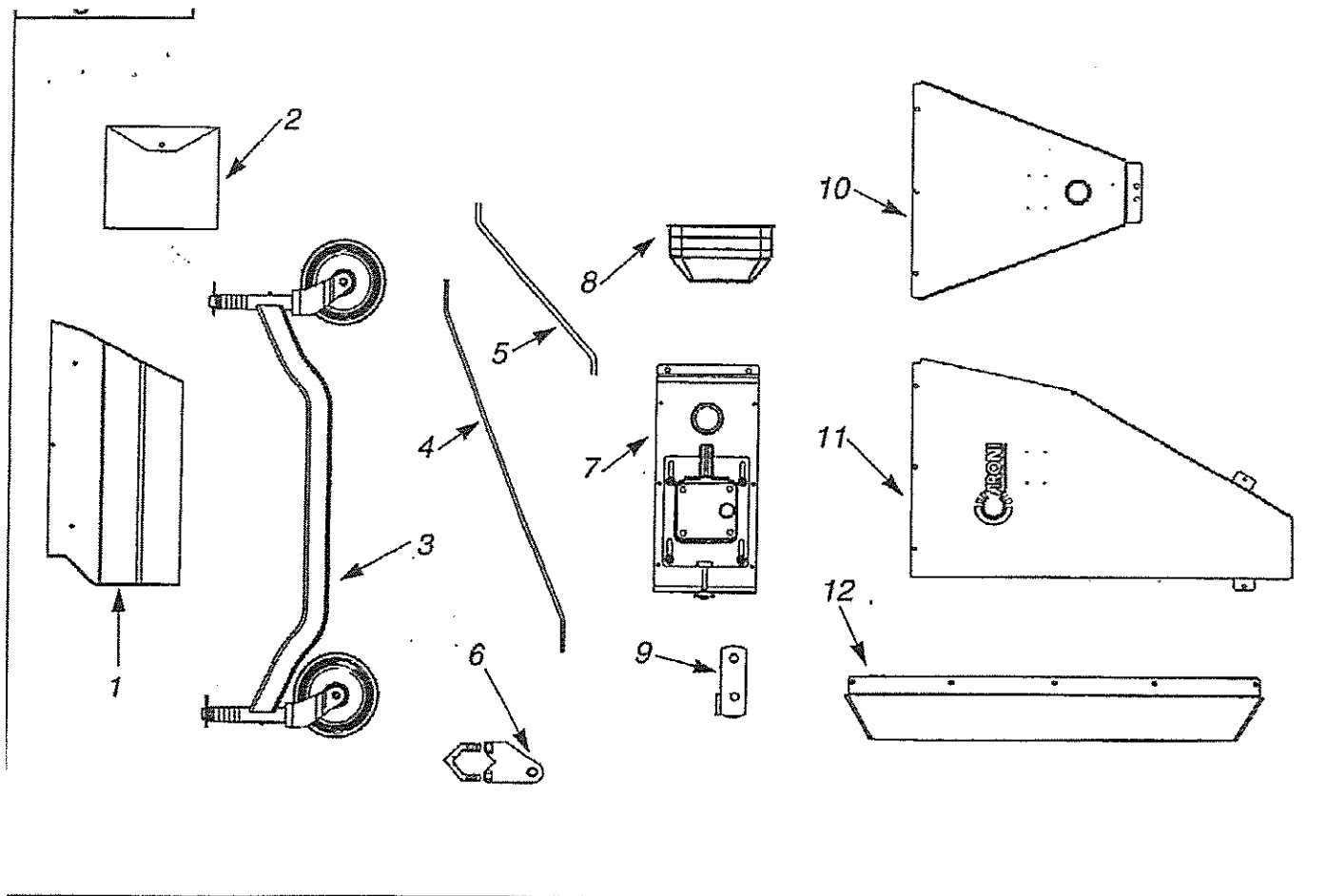


# **CARATTERISTICHE TECNICHE E MODELLI DISPONIBILI** **TECHNICAL FEATURES AND AVAILABLE MODELS**

## **FRESATRICI SERIE FL-FM** **ROTARY CULTIVATORS FL-FM SERIES**

CODICE MACCHINA MACHINE CODE	LARGH. DI LAVORO WORKING WIDTH mm (inch)	N° DI ZAPPE N° OF HOES	N° DI FLANGE N° OF FLANGES	SPOSTABILE VERSO DESTRA DISPLACEMENT TO RIGHT mm (inch)	PESO WEIGHT Kg (lbs)	POTENZA TRATTORE TRACTOR POWER HP	PROF. DI LAVORO WORKING DEPTH mm (inch)	N° GIRI PRESA DI FORZA PTO SPEED rpm	ATTACCO (3° PUNTO) HITCH (3rd POINT) CAT.
FL0800	800 (32")	18	3	—	144 (318)	15 + 40	180 (7")	540	1
FL0900	900 (36")	24	4	—	149 (329)	15 + 40	180 (7")	540	1
FL1000	1000 (40")	24	4	—	155 (342)	15 + 40	180 (7")	540	1
FL1100	1100 (44")	24	4	160 (6" 1/2)	173 (382)	15 + 40	180 (7")	540	1
FL1200	1200 (48")	30	5	160 (6" 1/2)	182 (402)	15 + 40	180 (7")	540	1
FL1300	1300 (52")	30	5	160 (6" 1/2)	188 (415)	15 + 40	180 (7")	540	1
FL1400	1400 (56")	36	6	160 (6" 1/2)	197 (435)	15 + 40	180 (7")	540	1
FM1100	1100 (44")	24	5	160 (6" 1/2)	203 (447)	35 + 60	200 (8")	540	1
FM1300	1300 (52")	30	6	160 (6" 1/2)	253 (557)	35 + 60	200 (8")	540	1
FM1500	1500 (60")	36	7	160 (6" 1/2)	278 (612)	35 + 60	200 (8")	540	1
FM1700	1700 (67")	42	8	160 (6" 1/2)	303 (667)	35 + 60	200 (8")	540	1

A richiesta limitatore di coppia Couple reducer available upon request.



**Fig. n. 2**

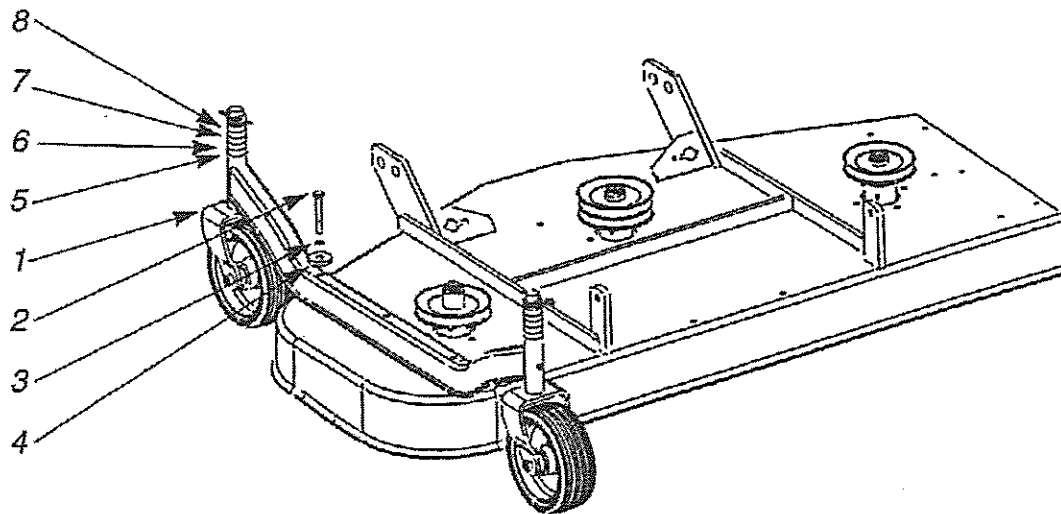


Fig. n. 3

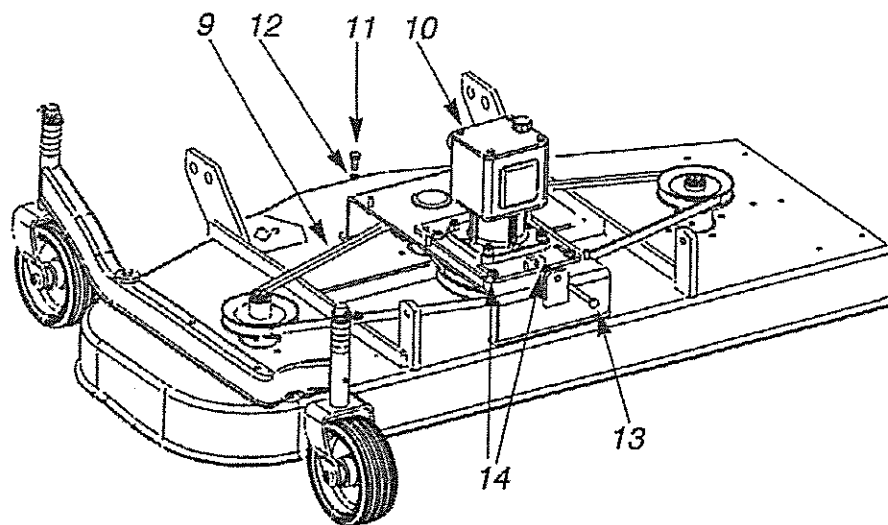


Fig. n. 4

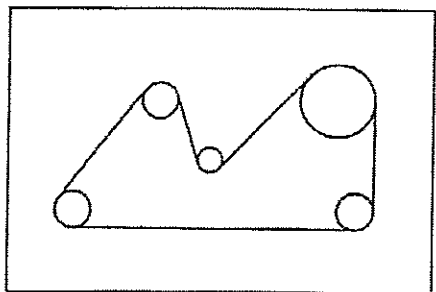


Fig. n. 5

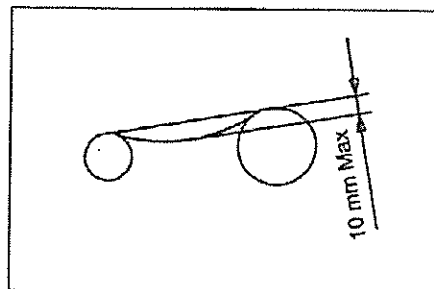
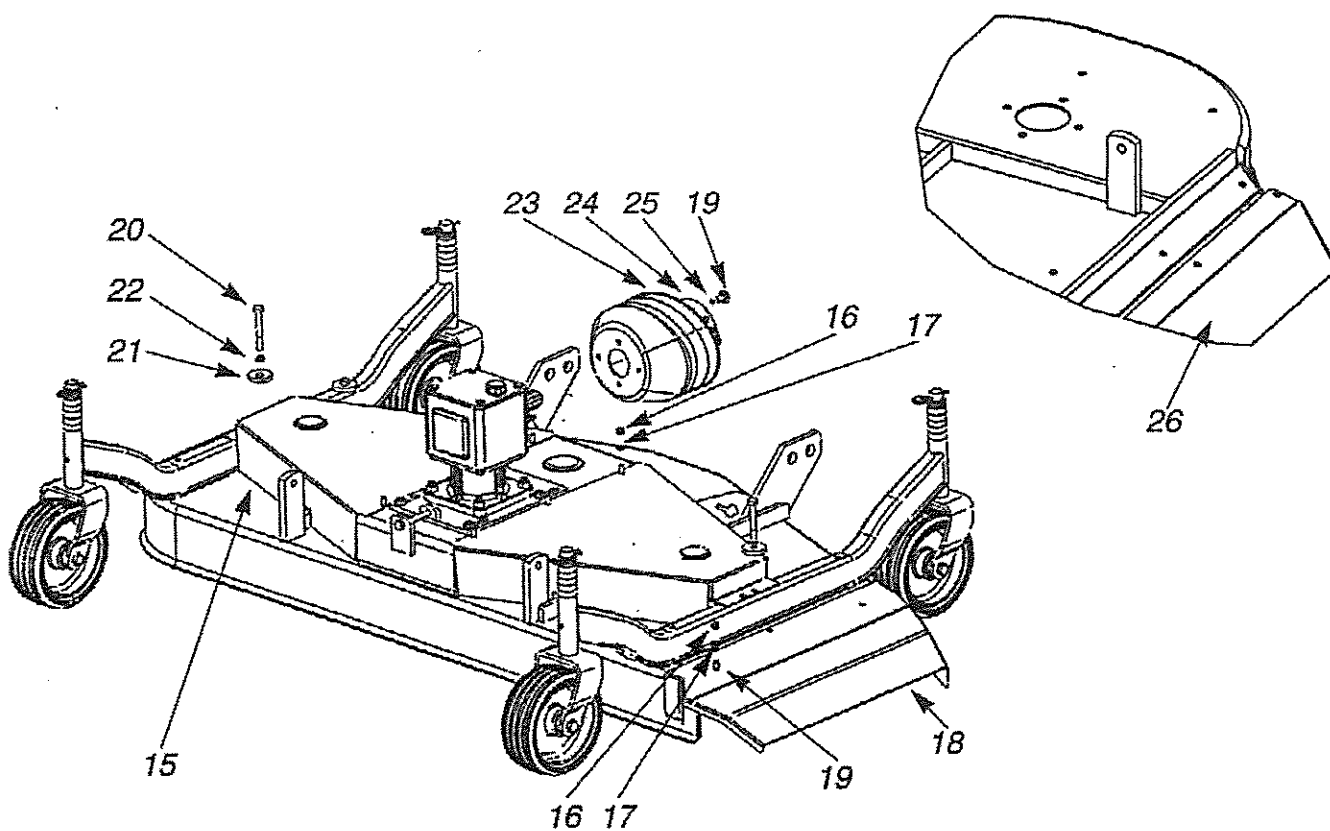


Fig. n. 6



**Fig. n. 7**

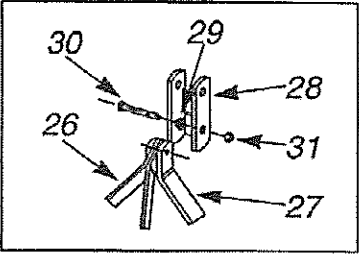


Fig. n. 8

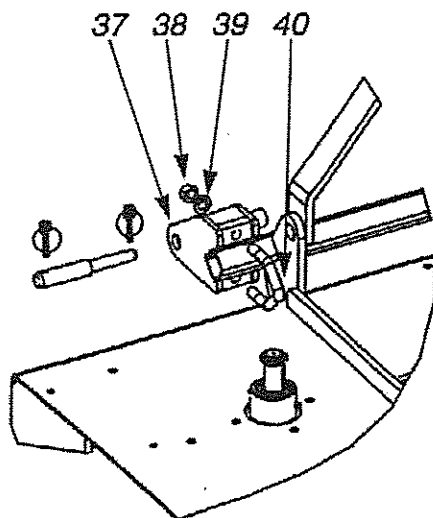


Fig. n. 9

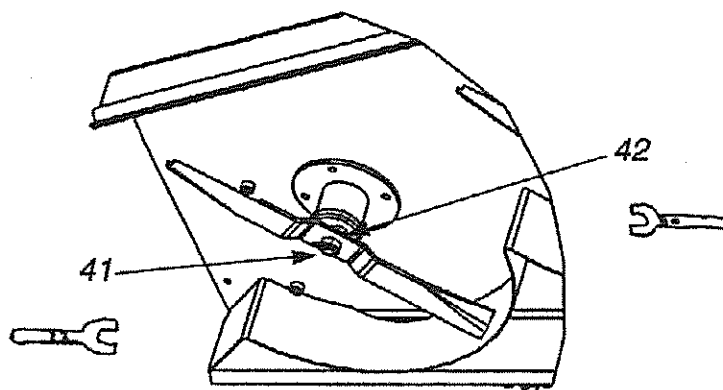


Fig. n. 10.

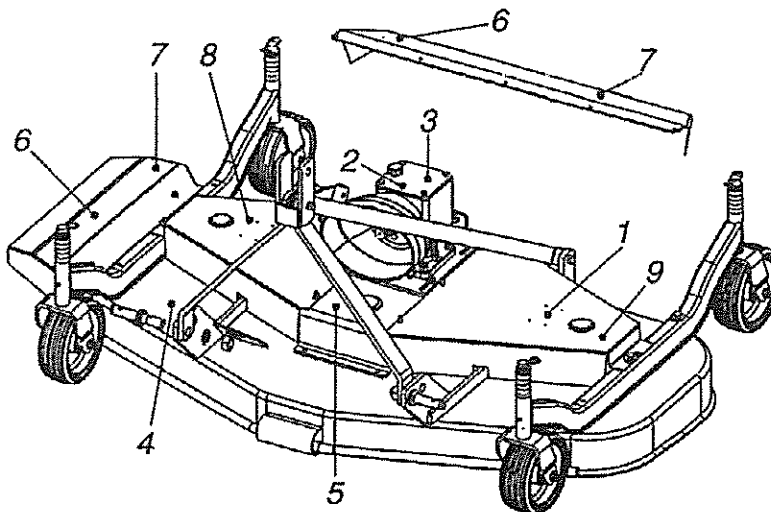
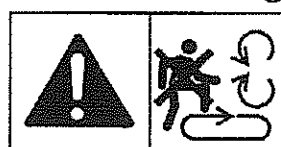
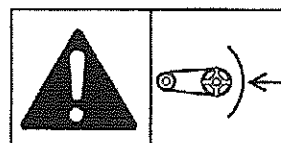
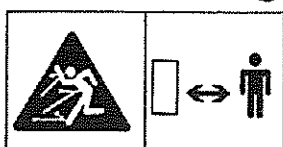
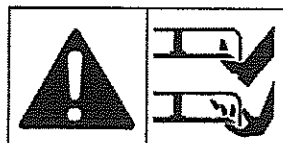
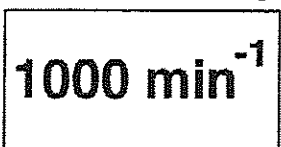
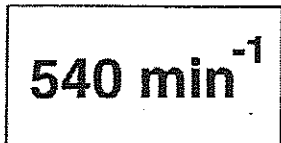
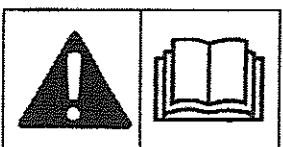
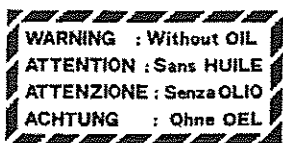
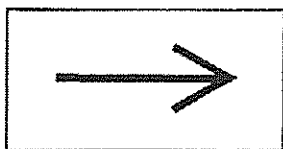
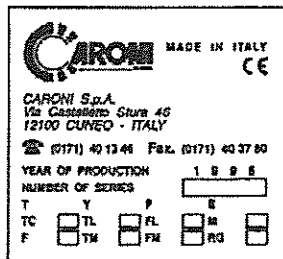




Fig. n. 11

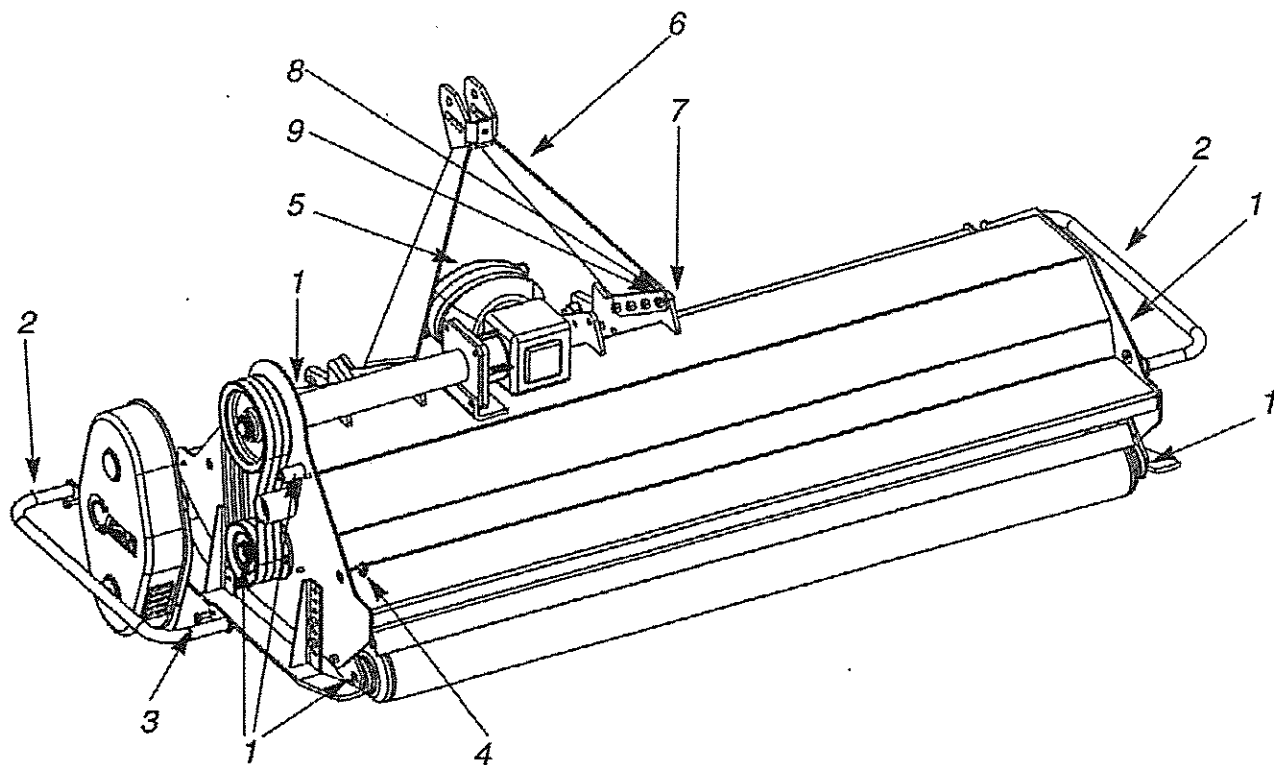


Fig. n. 12

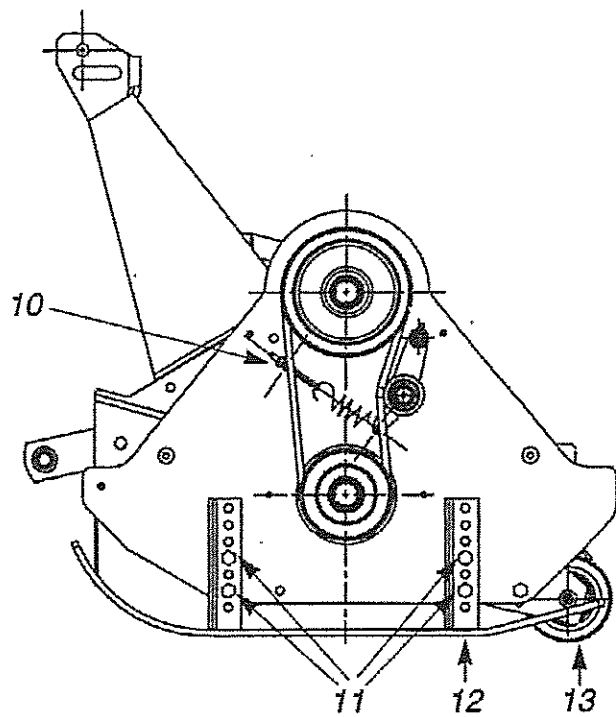


Fig. n. 13

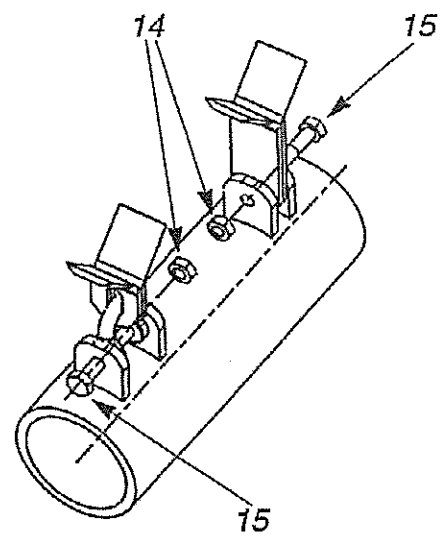


Fig. n. 14

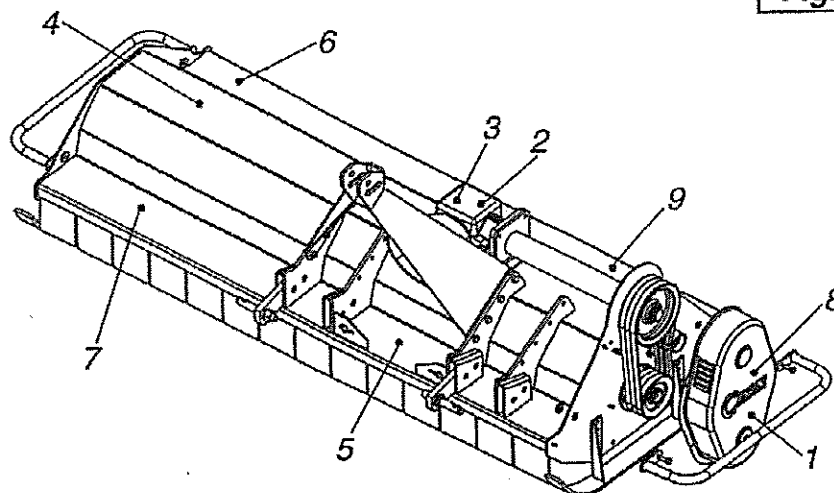
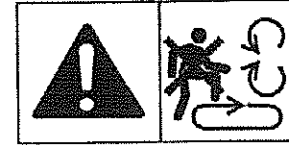
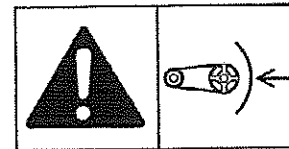
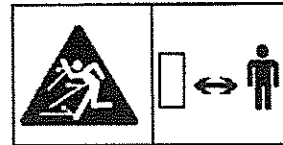
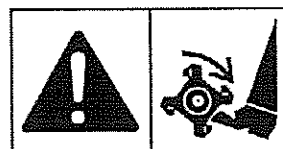
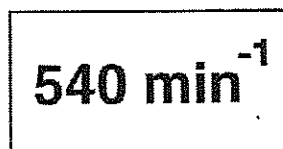
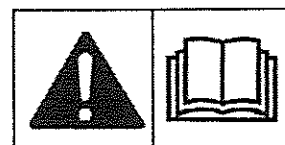
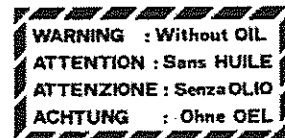
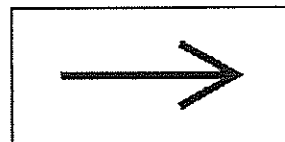
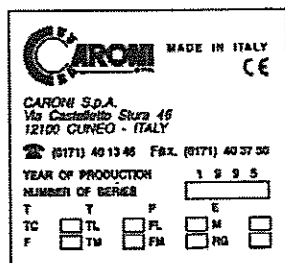


Fig. n. 15

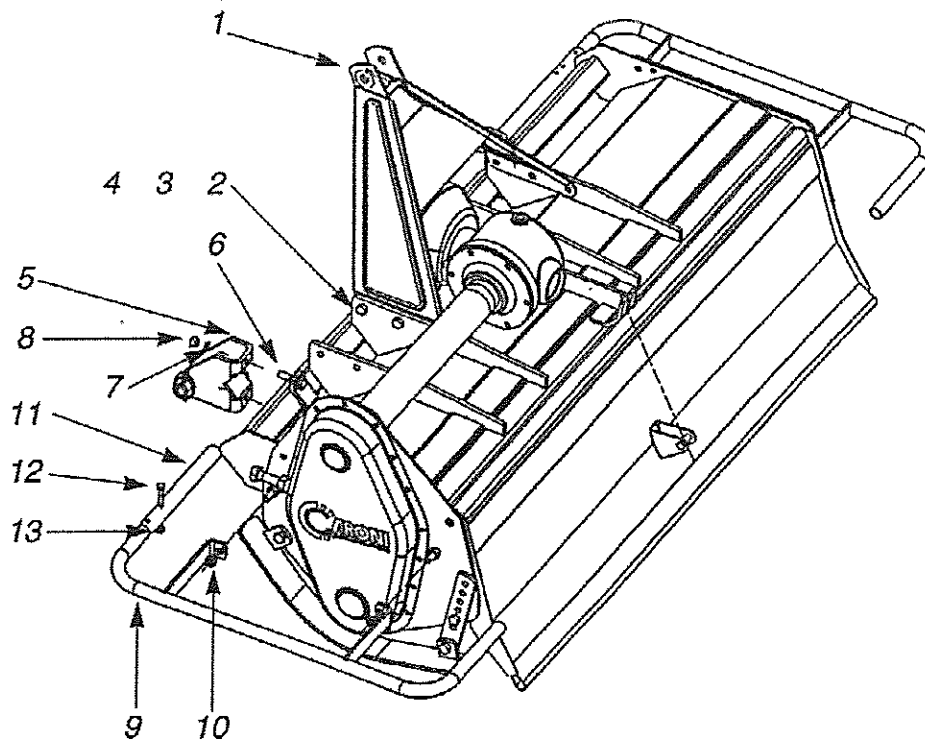


Fig. n. 16

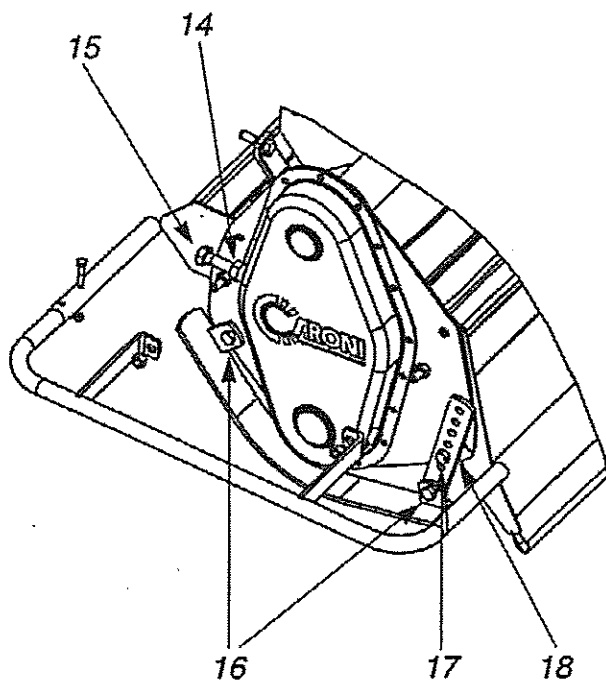


Fig. n. 17

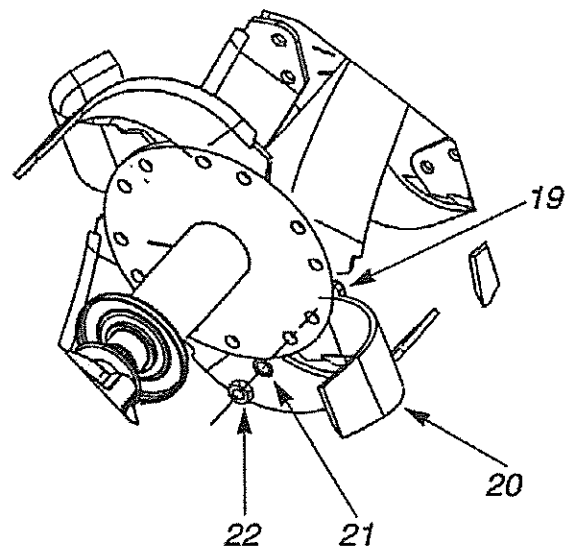


Fig. n. 18

