### Multi-Trac CS78, CS78a, CS86a, CS94a

Sva 6-7130

TRIM THIS EDGE

TRIM THIS EDGE



IN THIS MANUAL; THIS WARNING SYMBOL IS USED TO INDICATE IMPORTANT NOTES ON SAFETY. WHENEVER THIS SYMBOL IS USED, THE INSTRUCTIONS FOLLOWING IT MUST BE READ THORUGHLY, SO THAT YOU ARE AWARE OF THE DANGERS, WHICH CAN CAUSE INJURY OR EVEN DEATH.

M171B

The safety labels on this machine uses the words **danger**, **warning or caution**. These terms are defined as follows

- **DANGER:** This indicates an imminent danger situation which, if not avoided, can lead to death or serious injury. The colour assigned to this term is RED.
- WARNING: This term indicates a possible danger situation, which if not avoided, can lead serious injury. The colour assigned to this term is ORANGE.
- CAUTION: This term indicates a possible danger situation, which if not avoided, can lead slight to medium injury. It can also be used to warn of unsafe practices. The colour assigned to this term is YELLOW.



IF THIS MACHINE IS USED IMPROPERLY IT CAN CAUSE INJURY OR EVEN DEATH. BEFORE USING THE MACHINE, ENSURE THAT THE POTENTIAL DRIVER FULFILLS THE FOLLOWING REQUIREMENTS.

- He must have been instructed in the safe, correct use of the machine.
- He must have read and understood the manual (manuals) referring to the machine.
- He must have read and understood ALL safety labels on the machine.
- He has turned away all persons from the working area.
- He must have studied and practiced the safe usage of the machines control elements in a safe and open training field before using this machine in the working environment.

It is your responsibility to pay attention to the relevant laws and guidelines and the notes of CASE-STEYR Landmaschinentechnik GmbH regarding working with and servicing this machine.

Sva 6-7130 ENG January 1999

© 1998 CASE-STEYR Landmaschinentechnik GmbH Jai Case and Steyr are registered trademarks of CASE-STEYR Landmaschinentechnik GmbH

TRIM THIS EDGE

#### **GENERAL TABLE OF CONTENTS**

| TO THE USER                                     | 1   |
|---|-----|
| AGGREGATE/SERIAL NUMBERS                        | 4   |
| PRODUCT IDENTIFICATION AND SERIAL NUMBER        | 4   |
| SAFETY  |     |
| CORRECT USAGE                                   | 6   |
| SAFETY/SAFETY PLATES                            | 6   |
| GENERAL RULES FOR SAFETY                        |     |
| AND FOR THE PREVENTION OF ACCIDENTS             |     |
| CARRIAGE OF PASSENGERS                          |     |
| DRIVINGLEAVING THE TRACTOR                      |     |
| ATTACHMENTS                                     |     |
| PTO SHAFT OPERATION                             |     |
| MAINTENANCE AND OTHER WORK                      |     |
| DANGEROUS CHEMICALS                             |     |
| BASIC RULES                                     | 9   |
| SAFETY LABELS                                   | 10  |
| INSTRUMENTS/OPERATING CONTROLS                  |     |
| CLIMBING ONTO THE TRACTOR                       |     |
| DRIVER'S SEAT                                   |     |
| INSTRUMENT PANEL                                |     |
| OPERATING CONTROLS                              | 37  |
| DRIVING   |     |
| BEFORE STARTING THE ENGINEBATTERY MASTER SWITCH |     |
| (If fitted)                                     |     |
| SAFETY SWITCH                                   | 64  |
| INDICATOR LAMPS AND COMBINATION INSTRUMENT FOR  | 0.5 |
| OPERATING STATUSSTANDARD STARTING PROCEDURE     |     |
| OPERATING THE TRACTOR AT LOW TEMPERATURES       | 00  |
| (WINTER OPERATION)                              | 68  |
| HINTS FOR DRIVING                               |     |
| OPERATING THE TRANSMISSION                      |     |
| STOPPING THE TRACTOR                            |     |
|   |     |

TRIM THIS EDGE

| AND STOPPING THE ENGINE  | 79         |
|--|------------|
| CAB VENTILATION/HEATING  | 81         |
| ADJUSTABLE TOWBAR  | 85         |
| HEIGHT-ADJUSTABLE TOWBAR (If fitted)                                       | 89         |
| AUTO HITCH WITH HOOK AND ADJUSTABLE TOWBAR                                 |            |
| (If fitted)  | 93         |
| DIMENSIONS FOR TRAILERS/   |            |
| EQUIPMENT DRAWBARS   | 97         |
| CONNECTIONS FOR TRAILER BRAKE LINES  |            |
| (If fitted)  | 98         |
| ADDITIONAL ELECTRICAL SOCKET   |            |
| TRACTOR WARNING LAMPS  |            |
| TOWING AWAY  |            |
| TRANSPORTING THE TRACTOR   | 107        |
|  |            |
|  |            |
| OPERATIONAL USE  |            |
| REAR POWER TAKE OFF (PTO) SHAFT  | 109        |
| OPERATING THE STEYR FRONT PTO  |            |
| (If fitted)  | 117        |
| PREPARING THE REAR THREE-POINT LINKAGE                                     |            |
| OPERATING THE HYDRAULICS   |            |
| Steyr Front end lifting gear (if fitted)                                   |            |
| AUXILIARY control units  |            |
| OPERATING THE AUXILIARY CONTROL UNITS                                      |            |
| DIFFERENTIAL LOCK  | 156        |
| OPERATING THE 4-WHEEL DRIVE  |            |
| (If fitted)  | 159        |
| FASTENING BRACKET FOR EXTERNAL   |            |
| LEVERS AND DEVICES   |            |
| DIGITAL TRACTOR METER SPEED CALIBRATION                                    | 164        |
|  |            |
| TYRES/WHEELS/TRACK WIDTH/BALLAST   | 4 C E      |
| TYRES AND RIM FITTINGS   |            |
|  |            |
| WORKING ON TYRES AND RIMSADJUSTING THE FRONT AXLE AND THE FRONT AXLE TRACK |            |
| ADJUSTING THE FRONT AXLE AND THE FRONT AXLE TRACK                          |            |
|  |            |
| ADJUSTING THE REAR AXLE TRACK WIDTH  |            |
| 4 WHEEL DRIVE – TYRE COMBINATIONS  | 181        |
| FRONT WHEEL MUDGUARD – 4-WHEEL DRIVE TRACTOR                               | 100        |
| (If fitted) TRACTOR BALLAST  | 183<br>184 |
|  |            |
| ENVIRONMENT PLASTIC AND FIBRE-GLASS RE-INFORCED PARTS                      |            |
| TOOL BOY   | 190        |

П

| LUBRICATION / MAINTENANCE   | 190        |
|---|------------|
| OPERATING HOURS COUNTER   | 191        |
| ENGINE HOOD   |            |
| LUBRICATION AND FILLING LEVELS  | 193        |
| LUBRICATION / MAINTENANCE PLAN  | 198        |
| ENGINE MAINTENANCE  |            |
| POWER UNIT MAINTENANCE  | 216        |
| HYDRAULICS/STEERING MAINTENANCE   | 217        |
| FRONT AXLE MAINTENANCE  | 219        |
| FRONT PTO-SHAFT MAINTENANCE   | 221        |
| BRAKE MAINTENANCE   | 222        |
| TOWBAR MAINTENANCE  |            |
| ELECTRICAL MAINTENANCE  | 224        |
| FRONT HYDRAULIC MAINTENANCE   | 225        |
| GENERAL MAINTENANCE   | 226        |
| BATTERY   | 229        |
| ELECTRICAL SYSTEMREPLACING BULBS AND LAMPSFUSES                         | 232        |
| TECHNICAL DATA  ELECTRICAL SYSTEM  GENERAL VEHICLE DATA  DRIVING SPEEDS | 249<br>250 |
| VEHICLE WEIGHTS   |            |
| VEHICLE DIMINSIONS  | -          |
| VEHICLE DIVINGIONS  | 202        |
| DETAIL INDEX  | 264        |

Ш

#### **Multi-trac CASE CS94a TRACTOR**

#### with 4-wheel drive



SD98N016



#### MANUFACTURER:

CASE-STEYR Landmaschinentechnik GmbH Steyrerstrasse 32 A-4300 St. AUSTRIA



1

TRIM THIS EDGE

#### How to use this manual

This manual must be read thoroughly before starting up the engine or working with you tractor. Visit your dealer if you require further information.

This manual contains important information concerning working, setting up and maintaining your Case Steyr tractor safely. This manual is divided into individual chapters corresponding to the contents so that you can easily find information. Information concerning the tractor is divided into 4 chapters:

- INSTRUMENTS AND CONTROLS The layout of all controls is shown here.
- 2. WORK NOTES General notes on daily work with the tractor e.g. starting up/turning off the tractor, operating the transmission etc.
- 3. OPERATIONAL USE This chapter contains notes on various work uses, specifically for use with implements, e.g. three-point linkage, rear PTO etc.
- 4. TYRES/WHEELS/TRACK WIDTHS/BALLASTING Settings for various tractor working scenarios are described here, e.g. tyre pressures, track widths etc.

Tractor maintenance is divided into two chapters:

- 1. LUBRICATION/MAINTENANCE Regular maintenance intervals.
- 2. ELECTRICAL LAYOUT General maintenance notes on electrics.

**IMPORTANT:** See the alphabetical index at the end of the manual in order to find a particular item in the manual concerning your machine.

Position descriptions such as in front, behind, right and left are understood to be as seen from the tractor's seat, facing in a forward direction.

Do NOT drive the machine or carry out maintenance work without having read this manual. The same is valid for third parties. Only employ capable drivers, whose ability to work with and maintain the machine are proven.

With its standard equipment and licensed fittings, this tractor is intended for use in agriculture etc.

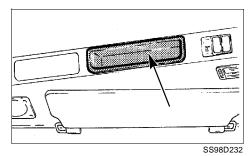
Do NOT use the machine for any other purpose other than those described in the manual. Get in touch with an authorized retailer or the Case Steyr Company concerning changes, additions or modifications which could be necessary for your machine to fulfill the relevant national guidelines and safety requirements. Release or approval from the manufacturer is required in the case of special bodies. Unapproved changes render product liability void.

#### Keeping your manual safe

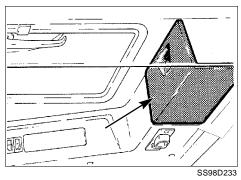
Keep the operating manual in the compartment provided for that purpose on your tractor.

Ensure that this manual is complete and remains in good condition.

Ask your retailer for additional manuals or further information as well as support for your machine. Your retailer employs specially trained engineers who know the best method of repair and maintenance for your machine.



LOW-TOP VERSIONS



**HIGH-TOP VERSIONS** 

**IMPORTANT:** This manual is a part of your tractor. If the tractor is sold or hired out, the operating manual MUST be handed over with it.

#### **Declaration of conformity**

This tractor meets the EC Electromagnetic compatibility guideline (89/336/EEC) – and is marked with CE.

#### Type approval

The tractors are road traffic law approved in all EC countries with the following overall type approvals.

e1 - 74/150 - 0042

3

#### PRODUCT IDENTIFICATION AND SERIAL NUMBER

Enter the type designation of the machine, the product identification number (P.I.N.) and serial number on the lines provided below. These numbers must be given to your Case-Steyr Dealer when ordering spare parts, for queries or any other reference purposes.

Make a note of the identification numbers. Keep the papers and registration documents in a safe place. These identification numbers are to be given to the local police in the case of the machine being stolen.

#### Type plate details



SS98N015

#### **Arrangement of individual numbers**

**TRACTOR ENGINE** 



SD9M005



SD98M004

Product identification number

Type designation \_

Serial No.\_

TRIM THIS EDGE

#### CAB



Serial No.

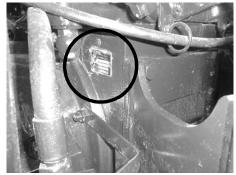
#### 4-WHEEL AXLE



SD98E008

Serial No.

#### **TRANSMISSION**



SD98M006

Serial No.

5

TRIM THIS EDGE

RIGHT PAGE



#### **SAFETY**



Read and observe the operating instructions and safety notes and before starting.

You should be aware that your own safety and the safety of others depends on how the machine is serviced and operated. You must become acquainted with the arrangement and function of all control elements before attempting to work with the machine. ALL CONTROL ELEMENTS MUST BE TESTED IN A SAFE AREA BEFORE STARTING WORK.

READ THE MANUAL THOROUGHLY and ensure that you understand the purpose and function of the control elements. Each device has certain function related restrictions. Before work is begun, ensure that the speed, braking effect, maneuverability, stability and load ratio of this machine has been correctly estimated.

Safety regulations, insurance requirements and national, regional and local law is not replaced by the safety notes in this manual. Ensure that the machine is properly equipped according to the respective laws and guidelines.

It is allowed to modify the vehicle within the framework of technical values under compliance with possible modification guidelines in force, type relevant modifications must be made known to the authorities concerned.

CASE-STEYR strives towards improvements in safety: This occurs through the production of tractors with better and better safety facilities and through notes on the rules for their safe operation.



THIS SAFETY WARNING SYMBOL INDICATES IMPORTANT SAFETY NOTES IN THIS MANUAL. WHEN THIS SYMBOL APPEARS, THE SUBSEQUENT NOTES MUST BE READ THOROUGHLY AND YOU SHOULD BE AWARE OF POSSIBLE DANGER OF INJURY AND POSSIBLY DEATH.

M171B

#### **CORRECT USAGE**

This tractor is built exclusively for use in agricultural, communal or forestry work (correct usage). The tractor's function is mainly in its pulling power and to pull, push, carry or operated particular implements, machines or trailers.

Usage above and beyond this is considered as incorrect. The manufacturer will not accept responsibility for any resulting damages. The risk is carried solely by the user.

Strict adherence to the operating, service and maintenance requirements stipulated by the manufacturer also fall under correct usage.

This Case-Steyr tractor may only be used, serviced and maintained by capable persons who are familiar with the particular properties of the machine and who have been instructed in the corresponding safety regulations (accident prevention).

Accident prevention regulations and other general recognised safety technical, industrial health and road safety guidelines must be adhered to.

6

TRIM THIS EDGE

Alterations made to the machine without the manufacturer's express, written permission, will render the guarantee null and void.

### GENERAL RULES FOR SAFETY AND FOR THE PREVENTION OF ACCIDENTS

- In addition to the instructions contained in these operating instructions, general safety and accident prevention regulations must be observed.
- Observe the relevant regulations when using public traffic areas.
- Familiarisation with all mechanisms and control elements and with their functions is required before starting work. It will be too late for this during the actual work.
- Before starting, check the immediate vicinity of the machine (e.g. children).
   Ensure you're vision is not impaired.
- Never leave the engine running in enclosed areas. Sufficient ventilation is required.
- Handle fuel with great care. Increased fire hazard. Never refuel close to open flames or flying sparks. Do not smoke when refueling.
- Switch off the engine and remove the ignition key when refueling. Do not refuel
  in enclosed areas. Wipe off spilt fuel immediately.
- Keep the engine clean to avoid fire hazards.
- Handle battery acids with extreme caution (toxic and caustic).



- Passengers may only carried if a regulation passenger seat is fitted.
- The carriage of persons is not permitted beyond this.
- Children may only be carried if special seats are provided (available on the open market).

7

TRIM THIS EDGE



- Always adjust your speed to the relevant circumstances. Avoid sudden turns when driving uphill, downhill or diagonally on hillsides. Switch the differential lock OFF when driving around bends. Never disengage the clutch and change gear when travelling downhill.
- Connect trailers and/or implements correctly. Connected implements, trailers or ballast weight have a direct influence on handling characteristics, maneuverability and braking. It must therefore be ensured that you have sufficient strength for steering and braking.
- Observe the maximum permissible axle or support loads and all-up tractor weight.
- When driving around bends with trailers or implements connected, take overhang and pendulum force of the equipment into consideration.



- When leaving the tractor, make sure that it can not roll away (apply parking brake, wheel chocks, switch off the engine).
- Remove the ignition key and lock the driver's cab (if fitted).
- As long as the engine is still running, the tractor my not be left unobserved.
- Never leave the driver platform/cab while the tractor is moving.
- Lower all equipment or attachments to the ground before leaving the tractor.



- Take particular care when coupling trailers or other equipment do not walk or stand directly between the tractor and the trailer or equipment
- Secure trailers and equipment against rolling away.
- Only operate the tractor if all safety devices are fitted and in the correct safety position.



- Stop the engine before attaching and detaching the universal drive shaft.
- When operating the PTO, do not allow anyone, under any circumstance to stand near the turning PTO shaft or universal drive shaft.
- Protective coverings must be mounted on the universal drive shaft and the PTO shaft stub. See page 115

8

TRIM THIS EDGE

- Equipment with high intertia does not immediately stop when the PTO shaft is switched OFF. Use universal drive shafts with overrun idling. Wait until the equipment has run down and has completely stopped before cleaning or carrying out adjustments.
- Immediately after disconnecting the universal drive shaft, the PTO shaft stub must be covered with a protective cap.



#### MAINTENANCE AND OTHER WORK



- Do not carry out maintenance work on the tractor with the engine running.
   Follow the instructions in this manual or consult your dealer.
- Leaking fluids (fuel or hydraulic fluid) under high pressure can penetrate the skin and cause serious injuries. If any kind of fluid penetrates the skin, immediately consult a doctor, otherwise it could lead to serious infections.
- Dispose of old oil, fuel and used filters according to local regulations. Do not drain oil onto the ground or into drains. Be aware of environmental protection.
- Re-tighten wheel nuts after the number of operation hours stated in this hand book. See page 178.
- Always disconnect the battery grounding strap (straps) before having any kind of repair work carried out on the vehicle's electrical system. See page 231.
- Only use original replacement parts from the manufacturer. Replacement parts must fulfill the manufacturer's technical specifications.



#### DANGEROUS CHEMICALS



- Becoming exposed to or coming in contact with dangerous chemicals can lead to serous injuries. Always consider the environment before carrying out maintenance work on the vehicle or disposing of old fluids and old oil. NEVER drain oil or fluids onto the ground or into containers that could leak.
- For advice on correct disposal, you should consult your local environmental agency, a recycling company or your dealer.



#### **BASIC RULES**



Check the tractor for roadworthiness and operational safety before starting up.

9

TRIM THIS EDGE

Thank you so much for reading.

Please click the "Buy Now!"

button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email: ebooklibonline@outlook.com