



**Speedtronic Pro** Operating manual

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# Foreword

This operating manual must be read by operating personnel and those responsible for machine maintenance before initial use and serves as a supplement to the training documentation.

Damage caused by failure to follow the instructions herein will not be covered by the warranty. The user of this machine is legally bound to observe the accident prevention regulations of the country in question.

Furthermore, this operating manual shall be treated confidentially. Only authorised persons shall be allowed access to it. It shall only be entrusted to third parties on written permission from WINTERSTEIGER.

All documents are protected under copyright. Distribution, reproduction and utilisation of documents and parts thereof, as well as communication of its contents, are not permitted unless authorised expressly and in writing.

Infringements are liable to prosecution and will result in damage claims. WINTERSTEIGER shall retain all rights to exercise industrial property rights.

# Appropriate usage

The machine has been designed solely to test and set ski bindings (appropriate use).

Any other use is deemed inappropriate. The manufacturer shall not be liable for damage occurring from inappropriate use. The user takes sole responsibility in such cases.

Appropriate usage also includes following the operating, maintenance and service stipulations set out by the manufacturer.

The applicable accident prevention regulations and other generally accepted safety and occupational health regulations shall also be adhered to.

Any changes to the machine by the user renders manufacturer liability null and void with regards to any resulting damage.

We constantly try to improve our products and therefore reserve the right to make any changes or improvements we feel are appropriate. This does not constitute any obligation to extend these changes or improvements to machines or devices already supplied.

All images, dimensions and weight information in the operating manual are non-binding.

### Translation of original operating manual

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# 1 General information

### 1.1 Explanation of the symbols used in the manual



DANGER indicates a hazard with a high degree of risk, which, if not prevented, will cause death or serious injury.



WARNING indicates a hazard with a medium degree of risk, which, if not prevented, could cause death or serious injury.



CAUTION describes a hazard with a low degree of risk, which could result in little or moderate injury if it is not prevented.



This exclamation mark indicates possible damage to / destruction of the product, the process and/or its surrounding area.



This sign precedes special information on practical work or a general recommendation.

This operating manual is a component part of the machine. Therefore, suppliers of new and second hand machines are required to confirm in writing that this operating manual was supplied with the machine. This operating manual helps users to familiarise themselves with the machine and to work with it.

The service/maintenance section contains tips on how to keep the machine fully operational for many years. The operating manual also points out (potential) dangers.

### 1.2 Safety information

#### 1.2.1 Safety basics

This machine is constructed using state-of-the-art technology according to accepted safety regulations. However, dangers for the user or third parties, as well as damage to the machine and other objects can occur if the machine:

- is used by untrained or unauthorised personnel,
- is used inappropriately,
- is not properly serviced or maintained.

#### 1.2.2 General safety information

- Remove the power plug each time that the location is changed or when manipulating the machine.
- Only use the machine in dry rooms.
- The machine may only be operated with original WINTERSTEIGER spare parts / consumables. Any use of foreign material shall be at the risk of the operator and will invalidate the machine warranty.
- Place the machine on a level surface and fasten it using the parking brake of the steering rollers.
- Set up the machine in such a way that the switch on the primary power receptacle can be activated at any time.
- The service door key is to be kept by the person responsible for the machine.



#### 1.2.3 Safety information with respect to transportation

- During transportation work, a safety helmet, safety shoes and protective gloves must be worn.
- Never step beneath suspended loads.
- For transportation to the installation location, only appropriate, standardised and checked lifting devices (fork-lift truck, mobile crane, gantry crane) and load-securing devices (round slings, sling bands, slinging rope, chains) shall be used.
- When selecting the lifting and load-securing devices, always take the maximum load into account.
- Information on dimensions and weights can be found in the technical data (see chapt. 2.1 Technical data, page 15).
- Always ensure that the machine is transported without hitting or bumping into anything.
- Follow the pictograms on the packaging.
- Report any transportation damage and/or missing parts to the supplier immediately.
- Only attach transportation crates and transport cradles at the attachment points marked.
- Always secure loads to be transported to prevent them from falling or tipping over.
- Transportation fastenings may be removed only after installation.

#### 1.2.4 Safety information for the operator (owner)

- Always observe the accepted technical regulations for safe and appropriate operation, in addition to the binding stipulations on accident prevention and work safety valid in the country of use and at the usage site.
- The operator shall oblige operating personnel to wear personal protection equipment.
- First-aid equipment (first-aid kit etc.) should always be within reach. The location and operation of fire extinguishers shall be made known. Arrangements for fire detection and fire extinguishing shall be made.
- The operator/user of the machine may not make any changes, additions or modifications to the machine that may affect safety without authorization from WINTERSTEIGER.
- Only use trained or instructed personnel. The persons responsible for operating, setting up, maintaining and servicing the machine shall be clearly specified. Appoint a machine manager who has responsibility for the machine and the staff. Persons who are being trained or instructed in any way or who are undergoing a general apprenticeship may only work on the machine under constant supervision from experienced, trained personnel.

#### 1.2.5 Safety information for operating personnel (user)

- The operating manual must always be within reach at the machine's installation site.
- The applicable accident prevention regulations and other generally accepted safety and occupational health regulations shall be adhered to.
- The machine shall only be used if it is in a technically sound condition and is used appropriately and safely, under consideration of the dangers and under observance of this operating manual. Faults which could affect safety shall be repaired immediately.
- The operator is obliged to wear safety equipment.
- When working with the machine, wear only tightly fitting clothing.
- Follow the activation and deactivation processes in accordance with the operating manual for all work related to operating, refitting and setting the machine and its safety equipment.
- For inspection, maintenance and repair work on the machine, always implement the safety measures required for these activities.
- The warning and information signs on the machine provide important information on operating the machine in a safe manner. This information shall be followed for your safety.
- Do not linger in the vicinity of the release mechanism while adjusting the height of the release mechanism or during the release procedure.
- Furthermore, make sure to prevent any collisions with the release mechanism (ski, binding, ski tightener, etc.)!
- Do not stick your arm between the release arms, release columns and the ski boot during the release/measuring procedure!
- The machine may be operated only with completely attached guards and covers.

#### 1.2.6 Safety information with respect to operation

- The machine may only be operated by trained personnel.
- The machine must not be operated by several people at the same time.
- The machine may be put into operation only when assembled and ready for operation.
- The machine may be operated only when all protective and safety equipment, e.g. detachable safety equipment or guards, are in place and functional.
- Set up mode may be implemented only by qualified, skilled personnel. Work on proximity switches and machine parts can cause unintentional movements which lead to serious injury.
- Check the machine for external, detectable damage and defects at least once per day. Report any changes (including changes to the operating characteristics) to the appropriate person/department immediately. Shut down and secure the machine immediately.
- Never leave the machine unattended while in operation.
- Follow the activation and deactivation processes and observe the control displays in accordance with the operating manual.
- The operator must always switch the machine off and secure it against switching on by unauthorised personnel when he leaves the machine.
- The machine may only be operated with ancillary devices (e.g. printers) that have been purchased or tested by WINTERSTEIGER (see chapt. 2.1 Technical data, page 15).



#### 1.2.7 Safety information for maintenance, servicing and fault elimination

- The prescribed time limits for regular checks/inspections and those stated in the operating manual must be adhered to.
- Manual intervention while the machine is running is not permitted as this could lead to serious accidents. Should it be necessary to switch the machine on during activities such as this, it shall only be done in the permitted operating modes, under observance of special safety measures.
- Dispose of operating agents, auxiliary materials and replacement parts safely and in an environmentally-friendly way.
- Suitable workshop equipment is imperative in order to carry out maintenance and servicing work. Clean oil, operating agents, dirt etc. from the machine, and from connections and threaded joints in particular, before maintenance/repairs. Aggressive detergents must not be used. When carrying out maintenance and servicing work, all screw connections which have been undone must be screwed tight again with the required torques.

#### 1.2.8 Safety information for work on the electrics

- Ensure that the supply voltage is correct. The supply values can be found on the rating plate below the primary power receptacle. Check whether these specifications match the mains voltage.
- The machine may only be connected to an earthed socket with the mains lead, which is available and approved by WINTERSTEIGER.
- In the event of faults to the electric system, switch off the machine immediately using the switch on the primary power receptacle.
- Work on the electric machine equipment may only be performed by qualified electricians in accordance with the regulations regarding electrics. Only qualified electricians are permitted access to the machine's electric systems and may perform work on them. Always keep the switch cabinets closed as soon as they are no longer monitored.
- Changes to the control system program can adversely affect safe operation. Changes can be made to the program only if approved by the manufacturer.

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Proper earthing of the electrical system must be ensured by means of a protective earth conductor.

### 1.3 Test limiting deviation (acc. to ISO 11088)

This is the deviation between the measured release torque and the reference torque.

The max. deviation may be as follows:

- Twisting fall (Mz): max. +/- 15% or 3 Nm;
- Forward fall (My): max. +/- 15% or 10 Nm.
- MzR => release on the right (R)
- MzL => release on the left (L)
- My => heel release (F)



The test limiting deviation (in %) is specified in the standards valid for the corresponding country.

### 1.4 Visual check and handling of used equipment (acc. to ISO 11088)

If one of the elements of the function unit (ski, binding, ski boot) is used, the technician must carry out a visual check according to the following criteria.

- The edges and bases of the running surfaces must be prepared correctly according to the recommendations of the ski manufacturer. If present, unused mounting holes must be filled carefully according to the specifications of the manufacturer.
- The condition of the boot sole must satisfy the requirements of the binding manufacturer. The condition of all buckles, connection elements and support surfaces must be correct.
- The condition of the binding components must satisfy the requirements of the binding manufacturer (no broken, bent or worn parts).
- Guides or pivot points must be freely movable and free of perceptible rust, corrosion, dirt etc.
- The manufacturer's instructions regarding checking, care and maintenance must be heeded.
- The brakes may not be bent. Damaged parts must be repaired or replaced.

### 1.5 Explanation of the symbols "<" and ">"

Certain selection parameters for entering the data of the skier contain abbreviations for "less than" (<) and "greater than" (>). For example,

- < 250 means "less than 250"</p>
- <= 250 means "less than or equal to 250"</p>
- > 300 means "greater than 300"
- >= 300 means "greater than or equal to 300"

#### Age of the skier

- 10 49 means "from 10 to 49 years old"
- <10 | >=50 means less than 10 years old or 50 years old or older.

# 1.6 Information concerning special tour bindings

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Please consult the supplied additional sheets for information regarding the correct positioning and setting of special tour bindings such as Dynafit.

If there are further developments regarding tour bindings and tour ski boots, additional sheets regarding the testing and setting of these will be supplied at a later date or can be requested from our customer service department. In order to ensure that the inspection/setting is correct, it is essential that these notes be observed.

For a product combination of binding "Silvretta Pure" and tour ski boots without alpine norm sole like e.g. Garmont the testing is only possible with reservation.

For further information please contact your WINTERSTEIGER contact person.

### **1.7 Personal protection information**



Wear protective equipment: close-fitting protective clothing

### **1.8 Warning stickers**



The operating manual and the safety information must be read and observed before commissioning the machine.

Order number: 78-166-001



Remove the mains plug before opening the device. Order number: 78-166-002



Caution - risk of injury! Order number: 78-166-007



Warning: laser beam - do not look at the LASER beam!



Regular checks must be made to ensure that the warning labels are still attached to the machine. Illegible or missing warning labels must be replaced immediately. They can be ordered at WINTER-STEIGER with the respective order number.

#### 1.9 Intended use

The has been constructed solely to test and set ski bindings. When the binding is set, it must be mounted correctly on the ski. Furthermore, the setting must be made using the entire functional unit (ski/binding/boot).

If these instructions are not obeyed, WINTERSTEIGER is freed of any and all liability for damage incurred.

### 1.10 Function



The corresponding data of the skier are entered into the device using the selection fields on the touchscreen display or the binding ticket; the installed computer then determines the release torques and presettings conforming to standards of each binding and then shows them on the display.

Using electronically controlled linear drives, the two release arms (side release) or a lifting mechanism (heel release) press the ski boot out of the binding and use special sensors to measure the applied forces/torques.

Now the computer compares the measured actual values with the set values; the setting is shown as being correct (GOOD) if the values agree or if the tolerance range is maintained.

The data can be output on a printer to document that the correct setting has been made.

# 1.11 Calibration

Once a year, but at least once every 2 years, the device must be calibrated and tested by an authorised WINTERSTEIGER technician. The values of the calibration are entered into the accompanying test booklet.

The binding setting device should be checked once a week - once a month is required - during the season using a set test binding of the device's user. The values of the tests are to be entered in the corresponding table of the accompanying test booklet.

# 2 Technical description

# 2.1 Technical data

Type Speedtronic Pro				
Connection data				
Rated voltage, frequency	1 AC x 100-240V, 50/60Hz			
Power rating	0.4 kW			
Rated current	4 - 1.7A			
Min./max. fuses	10/13A			
Degree of protection	IP20			
Dimensions				
Length	1003 mm (39.5 in) with tool holder			
Width	600 mm (23.6 in)			
Height	1430 mm (56.3 in) with operating panel			
Operating height	850 mm (33.5 in)			
Weight	148 kg (326 lbs)			
Maximum ski width in binding area	140 mm (5.5 in)			
Permissible ambient conditions				
The machine may only be used indoors!				
Temperature range	+ 10 to 35 °C			
Humidity	5 80% (entire temperature range)			
Maximum altitude	up to 3000 meter			
Display				
Color display	5.7" touchscreen			
Buffer battery	3V lithium button cell, type CR2032, order number 15-480- 105			
Data input/output				
Entry	using touchscreen or binding tickets			
Output	integrated Epson dot-matrix printer, external printer, USB			
Scanner (optional)	Heron-G D130 CCD barcode scanner			
Interfaces				
USB 2.0 interface	Software update, data backup, connection for scanner or ex- ternal printer			



Type Speedtronic Pro				
Ethernet for Easyrent	Option			
Release data				
Release path	Side; 80mm (3.1 in)/300mm (11.8 in)sole length Heel; 50 mm (2.0 in)			
Max. release torque	Side; 150 Nm Heel; 800 Nm (depending on sole length)			
Release velocity	=<20 mm/sec			
Noise emission				
Sound pressure level	<70 dB (A)			

Subject to technical changes.

### 2.2 Machine overview



- 1) Release arm
- 2) Heel lifting mechanism
- 3) Heel release belt
- 4) Operating panel
- 5) Touchscreen display
- 6) Printer
- 7) Ski tightener
- 8) Laser
- 9) Sole length scale

- 10) Tool storage
- 11) Binding ticket slot
- 12) Automatic press-in mechanism (option)
- 13) Scanner (option)
- 14) Primary power receptacle with switch
- 15) Buttons for release arm height adjustment
- 16) Steering rollers with parking brake
- 17) USB interface

# 3 Before commissioning

# 3.1 Transportation

Inspect the machine for transportation damage. Report any damage to the manufacturer immediately.

When transporting the machine, fasten it to a pallet (as for the as-received condition). Position the machine on a level and steady surface.

### 3.2 Installation



Only an authorized WINTERSTEIGER service technician may attach the display column and commission the machine.

Any manipulations on the machine by the user render the manufacturer liability null and void with regards to any resulting damage.

Remove the transport safety devices before initial use.

Place the machine on a level surface and fasten it using the parking brake of the steering rollers.



Connect the Speedtronic Pro to the power supply.

# 4 Description of the controls







#### A: Power switch

After the power switch is activated, the device starts the taring procedure, i.e. the force measurement sensors and the electronics are set to zero and/or their functions are checked.

O

Under no circumstances may the release mechanism be subjected to pressure or a load during the taring procedure (if necessary, remove the ski and boots)!

#### In addition, the following is checked:

- if the release mechanism (release arms, heel release belt) is in the correct initial position.
- if the taring values are within the specified tolerance limits.
- if the printer (if present) is in the initial position.

After the taring procedure is complete, the main menu appears in the display.

- B: Ski tightener
  - The tighteners, which can be moved on the sides, are used to fasten the ski to the support (see chapt. 5.3 Fastening the ski using tighteners, page 22).
- C: Release arms
  - Movable release arms for side release
- D: Heel release belt
  - Required to release the heel clamp
- E: Positioning scale
  - Used to correctly position the ski in the longitudinal direction
- F: Sole length scale
  - To measure the sole length of the ski boot
- G: Touchscreen display
  - To manually enter values and operate the machines / display the measured values
- H: Buttons for release arm height adjustment
  - When the buttons are pressed, the release arms move upwards or downwards.
  - LASER button

1:

Press the button [I] to activate the linear laser beam to position the sole end.



Risk of eye injuries!

Warning: laser beam - do not look at the LASER beam!



# 5 Positioning and fastening the ski/boot/binding unit



- 1) Open the two ski tighteners [B].
- 2) Now position the ski with the front clamp on the left-hand side.
- First, position the ski/binding unit for side release (see chapt. 5.1 Positioning for side release, page 21). In the case of turntable bindings or those with a fixed pivot point, the ski/boot/binding must be repositioned for heel release (see chapt. 5.2 Positioning for heel release, page 21).
- 4) Fasten the ski using the two tighteners (see chapt. 5.3 Fastening the ski using tighteners, page 22).
- 5) Insert the heel release belt [N] <u>(see chapt. 5.4 Inserting the heel</u> release belt, page 22).
- 6) Place the boot into the binding.

If the press-in mechanism is used, the ski boot can be pressed into the binding using the automatic press-in mechanism after reading in or entering the data. Then the release arms position themselves at the correct height. However, a visual check of the position must be made.

If the press-in mechanism is not used, press the ski boot into the binding.



Pressing the boot in is greatly simplified by applying additional pressure on the heel clamp.

7) Set the positions of the release arms (see chapt. 5.5 Setting the release unit and release arms, page 22).



Marking the ski with "left" or "right" simplifies subsequent allocation of the release values.



### 5.1 Positioning for side release

5.2 Positioning for heel release

The sole end of the boot [J] must be positioned 30 mm behind the device pivot point [K] so that the two rotary axes (boot and device) overlap.



Exempted from the 30 mm rule are turntable bindings [L] and those that have a fixed pivot point [M]. For these bindings, the pivot point must be aligned with the device pivot point (for side release only).

Positioning the sole end / pivot point of the turntable bindings using the laser (30 mm rule only for the automatic heel device).



Risk of eye injuries!

Warning: laser beam - do not look at the LASER beam!

 Press the button [I] to use the linear laser beam to mark the sole end [J] for approx. 2 minutes.

Regardless of the binding type, the sole end of the boot [J] must always be positioned 30 mm behind the device pivot point [K] for heel release. This means that the bindings [L and M] must be repositioned for heel release. Furthermore, ensure that the release belt is inserted straight.

Positioning the sole end using the laser.



```
Warning: laser beam - do not look at the LASER beam!
```

Press the button [I] to use the linear laser beam to mark the sole end [J] for approx. 2 minutes.



### 5.3 Fastening the ski using tighteners



- Push both ski tighteners [B] as close as possible to the binding, align the ski centrally and clamp it tight.
- Check that the ski is held fast.



Danger of injury to the skier!

Check once again that the ski/boot/binding unit is correctly positioned using the positioning scale. If positioning is incorrect, the measuring result is falsified!

#### 5.4 Inserting the heel release belt



"0" mark



Danger of injury to the skier!

In general, the heel release belt can also be attached for the side release. However, since this can have a minimal effect on the releasing result, the heel release belt should be removed during a measurement in the limit range.

For heel release, the belt is threaded precisely at the "0" mark (pivot point) between the binding and the ski boot, regardless of the position of the release device.

#### 5.5 Setting the release unit and release arms





Do not linger in the vicinity of the release mechanism while adjusting the release mechanism or during the release procedure.

#### Setting using the automatic press-in mechanism

Press the button [H] to set the height of the release unit in such a manner that the press-in fingers [O] are located above the lateral surfaces of the boot heel.

#### Setting not using the automatic press-in mechanism

Press the button [H] to set the height of the release arms in such a manner that no parts of the binding can be contacted during the side release procedure.



The length of the release arms [C] must be adapted to the length of the boot sole; the left-hand and right-hand arms must be set equally.

However, the best pressure point can be selected at any point in the front area of the sole (approx. 2-3 cm from the toe of the ski boot).



# Do not come into contact with any binding parts during the release procedure.

As a rule, the roller located on the release arm may press onto the boot sole only, and not on the exterior shell of the boot.

- max. sole length = 390 mm
- min. sole length = 210 mm



# 6 Test functions

# 6.1 Symmetry test

This function can be carried out at any time without entering data so that you can obtain a rough overview of the condition of the binding (front clamp).





Press the "CURVE" button to open a graphic overview.





The graphical display can now be used to show the symmetry of the left/right release values on the display.

### 6.2 Measuring mode

This function can be used to carry out measurements after entering the sole length. Only Nm values are displayed for the side and the heel. These values cannot be printed out (they are used for simple and fast measurements without body data).



MENU						
GENERAL CONFIGURATIONS	SELECT METHOD					
SERVICE MENU	PRINTER CONFIG.					
Setup Menu						
BACK						

Press the "MENU" button.

Press the "SELECT METHOD" button.



- SELECT METHOD WEIGHT X TABLE TIBIA PERCENT ASTM-WEIGHT BACK NEXT SERIE EXIT MEASURE
- HEEL
   IOE

   0 Nm
   0 Nm

   0 Nm
   0 Nm

Press the "MEASURE" button.

- The desired sole length can be selected by touching the bar at the corresponding position.
  - If the sole length is unknown, the length can be measured on the machine using the sole length scale.
- The sole length can also be entered using the number pad.
- Press the "NUM" button.

- 7
   8
   9

   4
   5
   6

   1
   2
   3
   320

   0
   .
   CLEAR
   ENTER
- Enter the desired sole length using the number pad and press EN-TER to confirm the value.

#### Danger of injury due to squeezing!

Do not stick your arm between the release arms, release columns and the ski boot during the release/measuring procedure!

After the sole length has been entered, a side release / heel release can be carried out by pressing the corresponding buttons.

#### Heed the ski positioning!

(see chapt. 5 Positioning and fastening the ski/boot/binding unit, page 20)

# 7 Entering values using the binding ticket

A further characteristic of the Speedtronic Pro is the possibility of data entry using a binding ticket and a data reader. For this purpose, the skier data must be marked on the corresponding input box of the binding ticket using a HB/2 pencil or, alternatively, with a black pen.



The on t

The appropriate binding tickets must be used depending on the method selected.



Danger of injury due to squeezing!

If the press-in mechanism is used, the ski boot can be pressed into the binding using the automatic press-in mechanism after reading in the data and the release arms can be positioned at the correct height.

The ticket is now inserted into the slot provided <u>(see chapt. 8.11.1 Utilizing the binding ticket, page 47)</u>; the device draws it in and reads it.

- The data can then be seen on the display; the setpoint values and preset values are also shown.
- If data have been entered incorrectly, the ticket can be removed by pressing the "NEW" button and, if necessary, corrected, or a new tikket can be filled out.



Preferably use only HB/2 pencils.

Making heavy marks on the ticket does not increase readability; instead, this can lead to soiling of the reading head due to graphite deposits!





The customer must confirm that the data are correct with his signature.



Danger of injury to the skier!

After the binding icket has been read in, all the values on the display must be checked, i.e. the individual values on the binding ticket must correspond to the values that the device displays after reading in on the screen or the panel. If there are irregularities or deviations, repeat the read-in procedure. If both values agree, the bindings can be set. If the values differ again, contact WINTERSTEIGER Customer Service or a service point.

The remaining procedure is identical to the procedure for entering the values using the keyboard.

# 8 Entry using touchscreen display

# 8.1 Method WEIGHT



8.1.1 Entering the sole length in mm

320			Ż	<b>Å</b> #				
	Please select sole length in mm							
			:	320 ↓				
200			290		380			
BACK	NEX	T	NUM		HELP			

If the basic menu is visible in the display, you can start to enter the skier data by pressing the visual buttons.

Press the "DATA" button.

If the sole length is unknown, the length can be measured on the machine using the sole length scale.

Sample entry: Sole length 320 mm

Touch the bar to select the desired sole length at the corresponding position.

The sole length can also be entered using the number pad.

- Press the "NUM" button.
- Enter the desired sole length using the number pad and press EN-TER to confirm the value.





### 8.1.2 Weight entry



- Select the weight of the skier in kg.
  - Sample entry: 80 kg
  - Either press the "79-94" button or press the "NUM" button to enter the desired value on the number pad.

#### 8.1.3 Body height entry

320	79- 94		¢.	<b>Å</b> Å		
Please select the height [cm]						
(	(=148	1	49-157		158-166	
167	7-178	1	79-194		>=195	
BACK	NEX	T	NUM		HELP	

Select the height of the skier.

- Sample entry: 1.74m
- Either press the "1.67-1.78" button or press the "NUM" button to enter the desired value on the number pad.

#### 8.1.4 Skier type entry



Select the skier type according to the following table:

Туре	1	2	3
Speed	slow to moderate	Skiers who do	fast
Terrain	light to medium	not fully satis-	steep
Style	careful (or not clearly deter- mined)	ty the descrip- tions in either 1 or 3	aggressive

- Sample entry: 2
- Press the "2" button.

**WARNING** 

Danger of injury to the skier!

Please observe the binding manufacturer's instructions for skier types (-1) and (3+).

#### 8.1.5 Age entry



- Select the age of the skier.
- Sample entry: 37 years
- Either press the "10-49" button or press the "NUM" button to enter the desired value on the number pad.

#### 8.1.6 Binding type entry

320	79- 94	167- 178	2	10 4	<b>1</b> 9		
C	Please select binding						
TYROLIA			ATOMIC		ROSSIGNOL		
LOOK		1	MARKER		SALOMON		
FISCHER		BL	BLIZZARD		TECNO		
BACK	NEX	T O	THER			HEL	P

320	79- 94 1	7- 78 2	10 - 49	MARKER TURNTABL			
P	Please select type of binding						
HEEL	HEEL TURNTABLE TOUR BINDING						
BACK	NEXT			HELP			

- Select a binding type.
- **Sample entry:** MARKER
- Press the "MARKER" button.

As there are various types of this binding, for example, select the corresponding type.

#### Heel

This selection applies to standard automatic heel releases.

-20

BACK

-5

NEXT



320

NUM

+20

HELP

+5

#### Turntable

If turntable bindings or bindings with a fixed pivot point are selected, a "Check ski positioning" message window appears in order to make sure that the pivot point for side release corresponds with the device pivot point for these bindings (see chapt. 5.1 Positioning for side release, page 21) and (see chapt. 5.2 Positioning for heel release, page 21).

Acknowledge the message window by pressing the "NEXT" button.

#### **Tour binding**

In the case of the Tour binding selection, a window (left) appears.

- As the pivot point of the heel release differs according to the tour bindings and type, a correction value for the measured sole length may need to be entered, depending on the information of the binding manufacturer.
- The correction value can be entered either by pressing the "-20, -5, +5, +20" buttons or by pressing the "NUM" button to enter the desired value on the number pad.
- The corrected sole length is accepted by pressing the "NEXT" button.

### 8.2 TIBIA method



#### 8.2.1 Entering the sole length in mm



7	8	9		
4	5	6		
1	2	3	320	)
0	•	CLEAR	ENTER	
BACK				

If the basic menu is visible in the display, you can start entering the skier data by pressing the visual buttons.

Press the "DATA" button.

If the sole length is unknown, the length can be measured on the machine using the sole length scale.

- Sample entry: Sole length 320 mm
  - The desired sole length can be selected by touching the bar at the corresponding position.

The sole length can also be entered using the number pad.

- Press the "NUM" button.
- Enter the desired sole length using the number pad and press EN-TER to confirm the value.



#### 8.2.2 Sex entry

320	<u>†</u>	Ø	Ż	<b>Å</b> Å		
<b>ħ₫</b> å	Please :	select t	he sex			
CHILD WOMAN MAN						
BACK	NE>	T			HELP	

- The sex is selected using the corresponding buttons.
- Sample entry: MAN

Press the "MAN" button.

#### 8.2.3 Tibia diameter / tibial plateau width entry

320	MAN	Ø	\$	<b>*</b> *	
Ø	TIBIA-w	idth-MAN			
<=76	77-79	80-82	83-85	6 86-88	89-91
92-94	95-96	97-99	100-10	1 >=102	]
BACK	NEX	T			HELP

- Select the measured tibia diameter
- Sample entry: 88 mm
- Press the "86-88" button.

# **WARNING**

Danger of injury to the skier!

Only a precisely measured tibial plateau diameter results in binding settings that are correct for the skier. Therefore, the measurement using a tibiameter must be carried out with extreme care.

#### 8.2.4 Skier type entry



Select the skier type according to the following table:

Туре	1	2	3
Speed	slow to modera- te	Skiers who do	fast
Terrain	light to medium	not fully satis- fy the descrip-	steep
Style	careful (or not clearly deter- mined)	tions in either 1 or 3	aggressive

Sample entry: 2

Press the "2" button.

#### 8.2.5 Age entry



# 8.2.6 Binding type entry



320	MAN	<b>N</b> 86-88	2	18-59	MARKER TURNTABL		
	Please select type of binding						
HE	HEEL TURNTABLE TOUR BINDING						
BACK	NE>	(T			HELP		

- Select the age of the skier
- **Sample entry:** 37 years
- Either press the "18-50" button or press the "NUM" button to enter the desired value on the number pad.

- Select the existing binding type
- **Sample entry:** MARKER
- Press the "MARKER" button.

As there are various types of this binding, for example, select the corresponding type.

#### Heel

This selection applies to standard automatic heel releases.





Turntable

In the case of the Tour binding selection, a window (left) appears.

As the pivot point of the heel release differs according to the tour bindings and type, a correction value for the measured sole length may need to be entered, depending on the information of the binding manufacturer.

Acknowledge the message window by pressing the "NEXT" button.

- The correction value can be entered either by pressing the "-20, -5, +5, +20" buttons or by pressing the "NUM" button to enter the desired value on the number pad.
- The corrected sole length is accepted by pressing the "NEXT" button.

### 8.3 Notes regarding data entry



#### Check the data after entering them!

All the entered values can be checked using the upper icon bar.

If incorrect values have been entered, you can scroll through the input fields using the "BACK" and "NEXT" buttons or by pressing the corresponding icon and carry out changes, if necessary.

# 8.4 Automatic press-in mechanism (option)



The automatic press-in mechanism is designed for support with medium to high Z values.

Some damage cannot be ruled out if you use the press-in mechanism with children's, youth's or ladies boots made of very soft composite materials. We thus recommend not using the press-in mechanism with this kind of ski boot.

If the automatic press-in mechanism has been activated in the general configuration and a standard automatic heel device was selected for the binding type, the "Press in boot" window is called up after the binding type has been selected.

Check whether the heel release belt is inserted.

- Use the arrow keys [H] to adjust the height of the release unit in such a way that the press-in fingers [O] are located above the lateral surfaces of the heel.
- Press the "Close" button to close the press-in fingers [O].



Check whether the press-in fingers [O] are well-located on the heel.

The manufacturer is not responsible for damage to the ski/ boot/binding unit by the automatic press-in mechanism! Manual activation of the press-in fingers [O] is not permitted.

**CAUTION** Danger of injury due to squeezing!

Do not grasp between the release arms, release columns and the ski boot while pressing in the boot!

Actuate the "Press in" button to push the boot into the binding.



If an "Object jammed" message is displayed during pressing in, please check the correct position of the binding and boot. If the boot and binding are correctly positioned, and the message is again displayed on pressing in, you must press in the boot manually.

Then the release arms position themselves at the correct height. However, a visual check of the position must be made.

After the press-in procedure, the window with the calculated values is displayed.

### 8.5 Display of the calculated values



If all the entered data lie in the normal range, the setpoint values (in Nm) and the default values for setting the binding (default option value) appear on the display.

The machine is now ready for release of the **left-hand ski**/binding. This can be seen by the inverse display of the diagram [B]. Press the graphic [C] to switch to the right-hand ski/binding.

The first release test can be carried out by pressing the "Test" button (see chapt. 8.7 Release test, page 39).

### 8.6 Selecting the release procedure

- Press one of the arrow buttons [A] to start the "Normal" release procedure. This is a full release procedure that results in loosening the ski boot during side release (see chapt. 8.8 Normal release procedure, page 40).
- You can switch to the "FAST" release procedure by pressing the "NORMAL" button. This release procedure can be applied to a multitude of bindings. If the binding is in the reduced testing limit range, the boot is moved alternatingly to the left (twice) and the right (twice) and is then pressed back into the binding. The testing limit range is limited for this setting (see chapt. 8.9 FAST release procedure, page 41).
- You can switch to the "SPEED" release procedure by pressing the "FAST" button. This release procedure has been developed for use in ski rental stations. The boot is moved once to the left and once to the right and is then pressed back into the binding. The testing limit range is limited for this setting (see chapt. 8.10 SPEED release procedure, page 44).
- You can switch to the "FULL" release procedure by pressing the "SPEED" button. This release procedure was designed for cases in which the use of the "NORMAL" release procedure causes problems. Whereas with the "NORMAL" release procedure the release movement stops as soon as the binding has released, the "FULL" release procedure continues to perform the release movement up to the limit switch. This prevents the ski boot jamming in the binding. If a specific combination of ski boot and binding causes problems, you must use the "FULL" release procedure.

### 8.7 Release test





Danger of injury due to squeezing!

Do not stick your arm between the release arms, release columns and the ski boot during the release/measuring procedure!

If the ski boot / binding unit is correctly positioned, you can press the "START" button to carry out the test for the front clamp. The boot is moved alternatingly to the left and right, only until the force has exceeded the highest value; the boot is then pressed back into the binding (partial release). Test duration: 30 seconds.

Press the "STOP" button to cancel the test.

#### 8.7.1 GOOD (green) range

	Testing limit ranges of the selected method				
	Normal release	FAST/SPEED release			
WEIGHT	<b>± 15%</b> (± 1 line in the weight table)	± 13%			
ΤΙΒΙΑ	± 10%	± 9%			
ASTM WEIGHT	<b>± 15%</b> (± 1 line in the weight table)	± 13%			

If the binding is in the valid range, press the "NEXT" button.

#### 8.7.2 IN USE (yellow) range (resetting limit range ± 30%)

If the binding is in the IN USE range (+/-30% or ± 2 lines in the weight table), the binding must be adjusted until both sides are located in the GOOD range.

#### 8.7.3 Range beyond the limit value for resetting (red range)

If a binding deviates from the setpoint value by more than 30% after the default value has been set on the binding scale, check the functional unit (procedure according to information from the binding manufacturer, e.g. friction, contact pressure, etc.) and repeat the test.



The Z-value (default value) is to be compared with the value of the binding manufacturer. If the values differ, use the value of the binding manufacturer.



#### 8.8 Normal release procedure

According to ISO 11088, each release direction is to be carried out three times. If the first two release measurements in the same direction lie within a limit range of  $\pm$  15%, it is not necessary to carry out a third release measurement.

#### 8.8.1 Side release



The machine is now ready for release of the **left-hand ski**/binding. This can be seen by the inverse display of the diagram [B]. Check whether the ski boot / binding unit is correctly positioned.

# **CAUTION** Danger of injury due to squeezing!

Do not stick your arm between the release arms, release columns and the ski boot during the release/measuring procedure!

Pressing the right-hand side release button [R] completely releases the binding on the right.

If necessary, correct the Z-value on the binding adjusting screw.

If the valid range (more than ± 30%) is not attained, the STOP button can be used to cancel the procedure. Check the functional unit (procedure according to information from the binding manufacturer) and repeat the release procedure.

- If the binding is in the valid testing range for complete release, the following screen appears.
- Read the Z-number set on the binding and press the corresponding number or enter it using the "NUM" function.

Repeat this procedure using the left-hand side release button [L]. If the actual values lie within the valid testing limit range, the Z-number as well as "GOOD" for the left-hand and right-hand releases are shown on the display. In addition, the side release buttons [R and L] are displayed inversely after a valid release.



The release procedure can be cancelled by pressing the opposite side release button.

Only a complete release (i.e. the boot must be pressed completely from the binding) is accepted by the device.

Danger of injury to the skier!

Both sides (left and right) of a front clamp must always be released!



#### 8.8.2 Heel release



Check whether the ski boot / binding unit is correctly positioned and the release belt is attached correctly.

- Press the button [O] to start heel release.
- If the release is within the testing limit range, read the Z-number set on the binding and select and confirm the corresponding number in the subsequent window or enter it using the "NUM" function.

If the actual value lies within the valid testing limit range, the Z-value as well as "GOOD" for heel release are shown on the display. In addition, the heel release button [O] is displayed inversely after a valid release.

Hold the boot lightly with one hand on the upper end of the shaft so that it is not thrown from the machine. However, do not exert pressure on the boot; this would falsify the measuring result.

U

The release procedure can be cancelled by pressing the heel release button [O]; arrow points downwards. Press the heel release button [O] again to move the heel release mechanism back to the initial position.



The machine is now ready for the releases of the right-hand ski/binding. This can be seen by the inverse display of the diagram [C].

You can switch to the left-hand/right-hand ski by pressing the corresponding icon.



Attach the second ski and repeat the entire release procedure with the second ski.

If the boot jams in the binding, you must use the "FULL" (see chapt. 8.6 Selecting the release procedure, page 38) release procedure!

#### 8.9 FAST release procedure



The FAST release procedure is not suitable for turntable bindings!

WINTERSTEIGER recommends a full release (MzR/L and My), as dictated in the standard. However, it is possible to carry out the binding test using the FAST release mode if this satisfies the standards in your country. Although these release modes shorten the release procedure, they are subject to conditions of use that are to be observed precisely. Furthermore, the variety of the binding systems and age-related

changes do not rule out deviations. As a result, WINTERSTEIGER cannot be held responsible for any damage resulting from the improper use of the FAST release mode.

The FAST release mode can be used if no deviations in the results between a full release and the FAST release mode have been observed in the past using comparative measurements with various types of bindings and skis.

Reduced torque tolerance limits are used in the FAST release mode!

# **WARNING**

Danger of injury to the skier!

The FAST release mode may not be used if differences in the measuring results between FAST and NORMAL mode have been detected.

#### 8.9.1 Side release



Check whether the ski boot / binding unit is correctly positioned and the release belt is attached correctly.

# 

#### Danger of injury due to squeezing!

Do not stick your arm between the release arms, release columns and the ski boot during the release/measuring procedure!

Press the button [F] to start the side release procedure.



The boot is moved alternatingly to the left and right until the maximum value has been exceeded. If the left-hand and right-hand maximum values are within the limited testing range two times in sequence, the procedure is stopped and the following screen is displayed.

If necessary, correct the Z-value on the binding adjusting screw.



If the valid range (more than  $\pm$  30%) is not attained, the STOP button can be used to cancel the procedure. Check the functional unit (procedure according to information from the binding manufacturer) and repeat the release procedure.

#### Graphic

Pressing the "CURVE" button shows the symmetry of the left/right release values on a graphic display.

ΕN



FAST Z-set val Nm-desi Nm-ACT. 6.00 58 58 TOE HEEL 229 6.00 217 GOOD GOOD PRINT FAS NEU TES HELF E

Read the Z-number set on the binding and press the corresponding number or enter it using the "NUM" function.

If the actual values lie within the valid testing limit range, the Z-number as well as "GOOD" for the left-hand and right-hand releases are shown on the display. In addition, the side release button [F] is displayed inversely after a valid release.

#### 8.9.2 Heel release



Check whether the ski boot / binding unit is correctly positioned and the release belt is attached correctly.

- Press the button [O] to start heel release.
- If the release is within the testing limit range, read the Z-number set on the binding and select and confirm the corresponding number in the subsequent window.

If the actual value lies within the valid testing limit range, the Z-value as well as "GOOD" for heel release are shown on the display. In addition, the heel release button [O] is displayed inversely after a valid release.



Hold the boot lightly with one hand on the upper end of the shaft so that it is not thrown from the machine. However, do not exert pressure on the boot; this would falsify the measuring result.



The release procedure can be cancelled by pressing the heel release button [O]; arrow points downwards. Press the heel release button [O] again to move the heel release mechanism back to the initial position.





The machine is now ready for the releases of the right-hand ski/binding. This can be seen by the inverse display of the diagram [C].

You can switch to the left-hand/right-hand ski by pressing the corresponding icon.

Attach the second ski and repeat the entire release procedure with the second ski.

### 8.10 SPEED release procedure



The SPEED release procedure is not suitable for turntable bindings!

WINTERSTEIGER recommends a full release (MzR/L and My), as dictated in the standard. However, it is possible to carry out the binding test using the SPEED release mode if this satisfies the standards in your country. Although these release modes shorten the release procedure, they are subject to conditions of use that are to be observed precisely. Furthermore, the variety of the binding systems and age-related changes do not rule out deviations. As a result, WINTERSTEIGER cannot be held responsible for any damage resulting from the improper use of the SPEED release mode.

The SPEED release mode can be used if no deviations in the results between a full release and the SPEED release mode have been observed in the past using comparative measurements with various types of bindings and skis.

Reduced torque tolerance limits are used in the SPEED release mode!



Danger of injury to the skier!

The SPEED release mode may not be used if differences in the measuring results between SPEED and NORMAL mode have been detected.

#### 8.10.1 Side release



Check whether the ski boot / binding unit is correctly positioned and the release belt is attached correctly.

Danger of injury due to squeezing!

Do not stick your arm between the release arms, release columns and the ski boot during the release/measuring procedure!

Press the button [F] to start the side release procedure.



The boot is moved once to the left and once to the right until the maximum value has been exceeded. If the left-hand and right-hand maximum values are within the limited testing range, the procedure is stopped and the following screen is displayed.

If necessary, correct the Z-value on the binding adjusting screw.



If the valid range (more than  $\pm$  30%) is not attained, the STOP button can be used to cancel the procedure. Check the functional unit (procedure according to information from the binding manufacturer) and repeat the release procedure.

#### Graphic

Pressing the "CURVE" button shows the symmetry of the left/right release values on a graphic display.





Read the Z-number set on the binding and press the corresponding number or enter it using the "NUM" function.



**Risk of injury!** 

The heel release is carried out automatically after the corresponding value has been pressed!

0

Hold the boot lightly with one hand on the upper end of the shaft so that it is not thrown from the machine. However, do not exert pressure on the boot; this would falsify the measuring result.

f Th he he

The release procedure can be cancelled by pressing the heel release button [O] arrow points downwards. Press the heel release button [O] again to move the heel release mechanism back to the initial position.

Read the Z-number set on the binding and press the corresponding number or enter it using the "NUM" function.

If the actual values lie within the valid testing limit range, the Z-number plus "GOOD" for the left-hand and right-hand releases as well as for the heel release are shown on the display.

The machine is now ready for the releases of the right-hand ski/binding. This can be seen by the inverse display of the diagram [C].

You can switch to the left-hand/right-hand ski by pressing the corresponding icon.



Attach the second ski and repeat the entire release procedure with the second ski.

After the Z-number for the heel release of the right-hand ski has been input, the printout is started immediately, assuming that the data were read in using a binding ticket.



# 8.11 Printout



8.11.1 Utilizing the binding ticket



Press the "PRINT" button to start the printing procedure.

All the entered data, as well as the setpoint and actual values and the binding scale values, can be seen on the printout.

Insert the binding ticket into the slot [1] located below the display the printing procedure starts.

All the entered data, as well as the setpoint and actual values and the binding scale values, can be seen on the printout.

### 8.12 Serial Test (ISO 13993 Tool)

The serial test function enables serial tests to be performed on bindings and documented before and during the season. The results are output on a USB memory stick or paper printout.

2	SELI	ECT METHOD		
$\boxtimes$	WEIGHT		$\bigotimes$	TABLE
0	TIBIA		0	PERCENT
0	ASTM-W			
BACK	NEXT	SERIE	EXIT	MEASURE

Press the "Series" button ..

ID

Ĥ

000

ÄllÜ

QUI

B

öΠß

4

alpha

5 || 6



🗙 Enter ID	Serialtest XX continuously	
Pre-saisonal Saisonal	I	ł
Child Junior Adult	Required Z-value 6.0 Current sole length <u>325</u>	
BACK START	EXIT	

Change the settings for the desired test. The Z value is pre-set, the sole length can be adjusted.

6 H C D E F Q R N P M 0 S UP W X Y Z CLR DOWN B9

ç

- || SPC

8

ENTER

If the ID entry is enabled an ID must be entered for each ski pair using the keypad. Alternatively, the ID can be scanned in using the barcode scanner.

- Please insert paper or connect a memory stick to the USB port BACK
- If no USB memory stick is plugged in and no paper inserted, the following screen will appear:
  - Plug in a USB memory stick or insert paper.
    - If a USB memory stick is plugged in and paper inserted, the data will be output to the USB memory stick. The data will not be printed out.



169 Nm 52 Nm MARKER Counter: 1 TOE HEEL → Left Ski Right Ski CORR R GOOD R GOOD 0.0 GOOD GOOD F CLASS I F GOOD V NEXT NORMAL QUIT HELP

Start side and heel release by pressing the respective keys.

- Once the two skis have been tested, all data will be displayed on the screen and will also be saved on a USB memory stick or printed out for documentation purposes. Any necessary correction values for the current ski can be entered at the bottom right of the screen.
- If all tests are concluded with "Good", an automatic change is made to the next ski.
- If all tests are not concluded with "Good", the Next button must be pressed to continue with the next ski.
- The serial test will be terminated when the Exit button is pressed.

# 9 Device settings

Speedt: WEIGHT TO	ronic Pi ABLE	<b>°O</b> 2005	09:01:00 We 15.10.08 I
Keady	i for data	entry !	
INFO	DATA	SYM. TEST	MENU

MENU

SELECT METHOD

PRINTER CONFIG.

EXIT

Press the "MENU" button.

Press the "GENERAL CONFIGURATIONS" button.

BACK

GENERAL CONFIGURATIONS

SERVICE MENU

SETUP MENU



The date format and the beep tone can be set in this window.

- The "Beep on/off" button can be used to switch the beep tone on or off.
- The date format can be set by pressing the corresponding selection field.
  - AMERICA MM.DD.YY
  - EUROPE DD.MM.YY
- Press the "NEXT" button.

### 9.2 Entering the date and time



- By pressing the "ENTER" button, you can activate the time/date fields individually and change them using the +/- buttons.
- After having made the change, press the "ENTER" button repeatedly until "Set" is displayed inversely in the field [A].
- Press the "NEXT" button.

### 9.3 Name and address field

	Retailer	informatio	n:	
Name: Street: Town: Phone: email:	WINTERSTEI	SER		
BACK	NEXT	INPUT	EXIT	

Name Stre Town Phon e-ma	et: WI et: h: he: hil:	NTERS	TEIGEF	8					
Ĥ	В	C	D	Ε	H	G	Η	Ι	J
K	L	M	N		Ρ	Q	R	S	T
U			X	Y	Ζ	UP	CLR	DOWN	BS
Ä	Ü	Ö	ß		$\overline{}$		-	SPC	0
1	1234567890								
BA	BACK alpha ENTER HELP								

Press the "ENTER" button to open the entry display.

- To create/change the data, press the corresponding buttons. To complete a line, press the "ENTER" button. Press the "alpha" button to switch between capital and lower case letters.
- The first line (Name) is shown on the Start screen.
- After completing the entry, press the "BACK" button and then the "NEXT" button.



# 9.4 Ticket text

		Ticket Text	;	
Ticketline Ticketline Ticketline Ticketline	1: 2: 3: 4:			
BACK	NEXT	INPUT	EXIT	

Ticketline 1: Ticketline 2: Ticketline 3: Ticketline 4:									
Ĥ	B			Ε	H	6	Η	Ι	J
K		M	N		P	Q	R	S	T
U			X	Y	Ζ	UP	CLR	DOWN	BS
Ä	Ü	Ö	ß		$\Box$		-	SPC	0
1 2 3 4 5 6 7 8 9 0									
BACK alpha				EN	TER	HEI	.P		

Press the "ENTER" button to open the entry display.

- To create/change the data, press the corresponding buttons. To complete a line, press the "ENTER" button. Press the "alpha" button to switch between capital and lower case letters.
- The entered ticket lines are included in the printout.
- After completing the entry, press the "BACK" button and then the "NEXT" button.

# 9.5 Selecting whether to enter the tibia width or the Z-value

	TIBIA I№	IPUT SELECTI	ION	
🔀 Tibial width [mm]				
🔿 Tibial width Z				
BACK	NEXT		FXIT	

- If the "TIBIA" method is used, you can choose whether to enter the tibia width or the Z-value in this window.
- The selection is made by pressing the corresponding field.
- Press the "NEXT" button.

ΕN

# 9.6 Language selection for display and printout



- Press the corresponding field to select the desired language for the display and the printout.
- Press the "NEXT" button.

### 9.7 Selection fields



Press the corresponding selection field to activate/deactivate them.

When the press-in mechanism is deactivated or the pressin check is deactivated, the height of the release arms must be set manually for the side release procedure!

#### 9.8 Resetting to default values



- Press the "YES" button to reset all the parameters to the default values.
  - Language -> German
  - Method -> weight
  - Printer -> internal
  - Press the "NEXT" button to return to the menu screen.

# 9.9 Selecting the method (Weight, Tibia, etc.)

Speedtronic Pro       We 15.10.08         WEIGHT TABLE       2005         Ready for data entry !         INFO       DATA         SYM. TEST       MENU	Press the "MENU" button.
MENU GENERAL CONFIGURATIONS SELECT METHOD SERVICE MENU PRINTER CONFIG. SETUP MENU BACK EXIT	Press the "SELECT METHOD" button.
SELECT METHOD	Press the corresponding selection field to select the desired standard.
VEIGHT X TABLE	Only the standards that are valid in your country may be set.
ASTM-WEIGHT BACK NEXT SERIE EXIT MEASURE	ASTM weight version: For the ASTM weight version, enter the weight in pounds and the body height in inches.
	Note for types (-1) and (3+): Type -1: desired lower settings Type +3: desired higher settings



Table:

If the Table field is selected, the torque tolerance limits according to the weight table (one line up or down) are

used.

This selection cannot be made for the Tibia setting!



Percent:

If the Percent field is selected, the torque tolerance limit is calculated as  $\pm$ -15% of the setpoint value.

In general, reduced torque tolerance limits are used in the FAST or SPEED release mode!

- The following screen is displayed after the desired standard has been selected.
- The sequence of the skier data can be changed in this window by selecting fields A, B or C. The active sequence is indicated by the letters being displayed inversely.
- Press the "EXIT" button to return to the main screen.

A				
Sole length	1	5	5	
Weight	2	1	2	
Height	3	2	1	
Skier type	4	3	4	
	5	4	3	
Binding	6	6	6	
	Α	В	С	
BACK			EXIT	

### 9.10 Printer settings



Press the "MENU" button.



MENU			
GENERAL CONFIGURATIONS	SELECT METHOD		
SERVICE MENU	PRINTER CONFIG.		
Setup Menu			
BACK			

Use the +/- buttons to select "PRINTER CONFIG." and confirm with "Enter".

#### 9.10.1 Printer selection



Press the corresponding selection fields to select the various printers, depending on how the machine is equipped.

#### Internal printer with ticket reader

If you select "Internal printer with ticket reader", the internal printer and the reading unit (if present) are activated.

#### TM295 on serial interface

If "TM295 connected to serial port" is selected, TM-U295 or similar external printers that print either to the WINTERSTEIGER binding ticket or their own form can be used.



If WINTERSTEIGER binding tickets are used for printing, the appropriate binding ticket must be used according to the method selected!

#### External thermal printer

If "External thermoprinter" is selected, the external Epson TM-T88 IV slip printer is activated.

#### Printer on USB interface

If "USB printer" is selected, external HP or Epson printers can be connected using the USB interface.

In addition, the number of copies (0-3) can be selected for the external printer.

#### Liability text

This function is valid only for the "ASTM" method.

Press the "NEXT" button.

#### 9.10.2 Printer mode selection for external TM-U295



- Select the corresponding selection field to make the setting whether the printing format is to be used for binding tickets or for blank cards.
- Press the "NEXT" button.



If "Printing on binding ticket" was selected in the previous window, an additional window, in which the binding ticket to be used must be selected, is opened.

The following steps must be taken to ensure that the printout on binding tickets functions correctly.

- To open the printing unit, press the "Release" button on the printer.
- Press the "Forward" button to clamp the card and draw it in 1/2 cm.

If this procedure is not observed, the printout will not be at the right position on the binding ticket.

Press the "EXIT" button to return to the main screen.

### 9.11 Information window



Press the "INFO" button.

#### Device settings

	SYSTEM	D69E.836
	МОТКО	V 6.23 25.09.2008
	C-MODUL	V 6.24 01.10.2008
Toe motor hours		4:27:06
Heel motor hours		6:31:18
Cou		
Adjustments:	1 since:	08.09.08 13:19:46
BACK NEXT	CLEAR	EXIT

#### This window displays the current software version and the operating hours of the side and heel drives.

WINTERSTEIGER

- Press the "CLEAR" button to set the day counter to zero and to update the date and time.
- Press the "NEXT" button to open the list of the last 30 binding settings.

### 9.11.1 List of the last 30 binding settings



- Press the "+/-" buttons to scroll through the list of the last 30 binding settings.
- In order to identify the setting you want, the entry number [A] and the ticket number [B] are displayed. The entry number is used for an internal counting function.
- Press the "PRINT" button to print the selected setting. Each printout of these binding settings is marked "COPY".
- Press the "NEXT" button.



Press the "CLEAR" button to delete the entry from the last binding settings.

#### 9.11.2 Inspection display

Speedtronic Pro	09:01:00
WEIGHT TABLE 2005	We 15.10.08
Ready for data entry !	I
INFO DATA SYM. TEST	MENU

An inspection bar is located on the main screen of the corresponding selected method.

If this is filled to approx. 80% (corresponds to approx. 1600 complete settings), a note appears the next time that you switch on the machine indicating that you should make a service appointment with your service partner.

You are also notified of the annual inspection.



Danger of injury to the skier!

According to ISO 11110, inspection (calibration) should be carried out once a year, but at least every 2 years, by a WINTERSTEIGER customer service technician or by a WINTERSTEIGER-authorized technician. The calibration results are entered into the supplied test booklet.



# 10 Maintenance work

### 10.1 Cleaning the machine



Risk of injury!

#### Switch off the machine before cleaning it.

If necessary, clean the machine using a damp cloth. Do not use any cleansers when cleaning the display.

### 10.2 Replacing the buffer battery



The machine has an integrated battery replacement display. If the message "Replace buffer battery" appears in the display, the battery should be replaced within 14 days.

3V lithium button cell, type CR2032, order number 15-480-105



The machine must be switched on when replacing the buffer battery!

#### Procedure

- Loosen the 6 screws to remove the lid on the rear of the operating panel.
- Turn the buffer battery [1] to the left to remove it from the battery compartment.
- Insert the new battery into the battery compartment.



Pay attention to the battery poles! Do not play around with metal parts!

Reattach the lid on the rear of the operating panel.



Heed the regulations/guidelines applicable in your country regarding the disposal of lithium batteries.

#### 10.3 Cleaning the reading unit



Always store the binding tickets in a box so that they are kept away from dust and dirt; dirty cards can soil the reader!



If there are problems in reading data using a binding ticket, the glass tube [2] of the reader must be cleaned.





This can be accomplished using the supplied cleaning card [3].

To do this, moisten the felt side of the card with alcohol and insert it into the slot of the device (which is switched off!); the card can be moved only in the area marked by the arrow ( (). Cut off soiled felt areas with scissors so that the next clean surface can be used.

### **10.4 Inspection**

The inspection intervals are proposed by the machine using an integrated inspection display. Inspection (calibration) should be carried out once a year, but at least every 2 years, by a WINTERSTEIGER customer service technician or by a WINTERSTEIGER-authorized technician.

### 10.5 Changing the color ribbon



If the printout on the binding ticket is no longer easily readable, the color ribbon [4] must be replaced.

- Pull the cover [5] off to the front.
- Remove the used color ribbon by pulling it off to the right (see arrow). Please first note how the ribbon is inserted!
  - Insert a new ribbon and press it into the holder until it locks in.
- Tighten the ribbon using the knurled screw [6].
- Reattach the cover [5].

# 11 Shut-down and disposal



Risk of injury!

Disconnect the machine from the mains supply or any external drive prior to shutting down and dismantling. Use only suitable tools for dismantling.



When shutting down the machine dismantle and dispose of all machine parts properly. Clean all oily and greasy components prior to disposal. Oil and grease should never be allowed to pollute the environment.

Ensure that all disposal regulations specific to your country are adhered to!

- Dismantle the machine properly into its individual components.
- Clean oily and greasy components.
- Dispose of components by material group (steel, plastic, electrical and electronic components, etc.).
- Dispose of oil and grease in an environmentally friendly manner.

Konformitätserklärung Declaration of Conformity Certificat de conformité Declaración de conformidad Dichiarazione di conformità

Hiermit erklären wir, dass das Produkt: We hereby declare that this product... Par la présente nous certifions que le dit produit: Por la presente declaramos que el producto: Con la presente dichiariamo che il prodotto:

#### **Speedtronic Pro**

Bindungsprüfgerät

#### **Ski Binding Testing Device**

folgender(-en) einschlägigen Bestimmung(en) entspricht conforms to the following regulations: correspond à la (aux) spécification(s) suivante(s) corresponde a la(s) siguiente(s) directiva(s) competente(s) è conforme alla(e) seguente(i) disposizione(i)

#### EG-Maschinenrichtlinie 2006/42/EG

#### EG-EMV-Richtlinie 2004/108/EG

#### EG-Niederspannungsrichtlinie 2006/95/EG

Dokumentations-Bevollmächtigter:

Person authorised to compile the technical file: Personne autorisée à constituer le dossier technique: Persona facultada para elaborar el expediente técnico: Persona autorizzata a costituire il fascicolo tecnico:

Mag. Gottfried Aschauer WINTERSTEIGER AG A-4910 Ried / I., Dimmelstraße 9

#### Ried /.l.,am 13.01.2010

Ing. Walter Aumayr Vorstand

Mag. Gottfried Aschauer

Mag. Gottfried Aschaue CE-Beauftragter

WINTERSTEIGER AG A-4910 Ried i.l. ::: Dimmelstraße 9 Tel.: +43 7752 919-0 ::: Fax: 919-55 e-mail: office@wintersteiger.at www.wintersteiger.com



No.:



# **CERTIFICATE** No. Z1A 08 10 13727 015

Holder of Certificate:

Wintersteiger AG

Dimmelstrasse 9 4910 Ried im Innkreis AUSTRIA

**Certification Mark:** 



**Product:** 

# Laboratory Equipment (Ski binding machine)

The product meets the requirements of the German Equipment and Product Safety Act. The Certification marks shown above can be affixed on the product. The certification marks must not be altered in any way. The use of the GS-Mark is permitted until the listed date, the use of the TÜV-Mark is unlimited, unless it is cancelled. See also notes overleaf.

Test report no.:

028-71338900-000

GS-Mark valid until:

2013-10-28

Date, 2008-10-30

Page 1 of 2

R





# CERTIFICATE No. Z1A 08 10 13727 015

Model(s):

# Speedtronic Pro 7726-XXX-YY Drivetronic 7725-XXX-YY

Parameters:	Rated voltage: Rated frequency: Rated current: Protection class: Rated power: Matrix:	100-240V 50/60Hz 4 - 1.7A I 0,4kW		
	7726:	Speedtronic Pro		
	7725:	Drivetronic		
	XXX:	Can be any number from 000 to 999 to state a non safety relevant configuration(e.g. colour)		
	YY:	Can be any number from 00 to 99 to indicate the range within the rated voltage		
	Examples:			
	7725-402-15:	Drivetronic, Colour grey/green, 100-240V, 1AC, 50/60Hz		
	7726-421-15:	Speedtronic Pro, Colour grey/green, 100-240V, 1AC, 50/60Hz		
Tested according to:	EN 61010-1:2001 DIN ISO 11110:19	997		
	DIN ISO 11088:20	JU /		

Factory(ies):

13727

Page 2 of 2



# CERTIFICATE No. U8 08 10 13727 014

Holder of Certificate: Wintersteiger AG

**Dimmelstrasse** 9

4910 Ried im Innkreis AUSTRIA

**Certification Mark:** 



**Product:** 

# Laboratory Equipment (Ski binding machine)

The product was voluntarily tested according to the relevant safety requirements and mentioned properties. It can be marked with the certification mark shown above. The certification mark must not be altered in any way. See also notes overleaf.

Test report no.:

028-71338900-000

Date, 2008-10-29 Page 1 of 2



TÜV AMERICA INC • TÜV SÜD AG • 5 Cherry Hill Drive • Danvers MA 01923 USA • www.TUVamerica.com

CERTIFICATE No. U8 08 10 13727 014



# Model(s):

# Speedtronic Pro 7726-XXX-YY Drivetronic 7725-XXX-YY

**Parameters:** 

Rated voltage: Rated frequency: Rated current: Protection class: Rated power:	100-240V 50/60Hz 4 - 1.7A I 0,4kW		
Matrix:			
7726:	Speedtronic Pro		
7725:	Drivetronic		
XXX:	Can be any number from 000 to 999		
to state a non safety relevant configuration(e.g. colour)YY:Can be any number from 00 to 9 to indicate the range within the rated voltage			
Examples:			
7725-402-15:	Drivetronic, Colour grey/green, 100-240V, 1AC, 50/60Hz		
7726-421-15:	Speedtronic Pro, Colour grey/green, 100-240V, 1AC, 50/60Hz		

Tested according to:

UL 61010-1:2004 CAN/CSA-C22.2 No. 61010-1:2004

Production Facility(ies):

13727

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