

**HEAD**

***TYROLIA***



**ALPINE SKIBINDINGS**

**08.09**

**TECHNICAL MANUAL**

# HEAD®



## Ski bindings 2008/2009

# Reliability, Quality, Competence and Continual Improvement

With its constant innovation philosophy and a perfect understanding of the market, TYROLIA secures a strong leadership position in the alpine ski binding sector. For the last 80 years, TYROLIA has been the driving force for new developments and technologies. Functionality, continual improvement and high quality service guarantee dealers, ski manufacturers and consumers a high-tech product with unique safety features.

Everything under one roof. TYROLIA responds as rapidly as possible to the needs of the market and its customers, enabled by a wide vertical range of manufacturing processes and a faster time to market for development of new products. Well known brands like HEAD, FISCHER and ELAN have entrusted the market leader TYROLIA for many years and recognize its competence. The ISO 9001:2000 certification is the result of comprehensive quality planning, quality audits, setting of benchmarks, on-going process evaluation and measurements based on self-imposed norms - the prerequisites for excellence that our company has achieved for years.



Safety for unrestricted skiing fun

The 2008/2009 HEAD/TYROLIA Line represents once more the values  
that stand for all HEAD/TYROLIA products:

QUALITY - SAFETY - PERFORMANCE- LIGHT WEIGHT

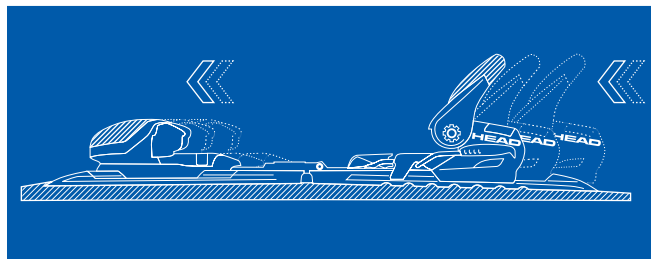
## RAILFLEX TECHNOLOGY

THE FOCUS ON HEAD RAILFLEX SYSTEM II AND SPEEDRAIL



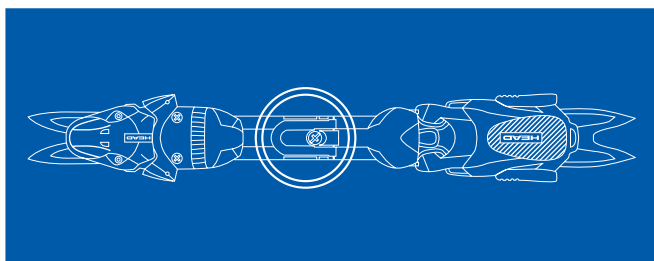
### GLIDING ON RAILS

HEAD's signature Railflex System II has all the Railflex features known from the TYROLIA Railflex System II. It fits perfectly with the Railflex base, maintaining the characteristics of the ski and allowing it to flex freely.



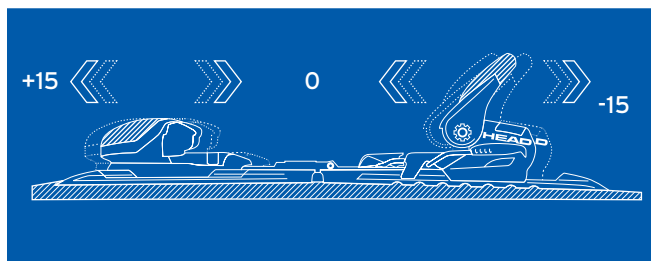
### MOUNTING WITHOUT DRILLING

Mounting a binding on a HEAD Railflex II base is as easy as it gets. Simply slide it on the rails, one screw and you are ready to go!



### SPEEDRAIL INSTANT SIZE- AND PERFORMANCE - RELATED BOOT ADJUSTMENT

- choose your sole-length
- open the lever
- slide toe and heel to the desired position
- close the lever
- control your forward pressure
- and you're done



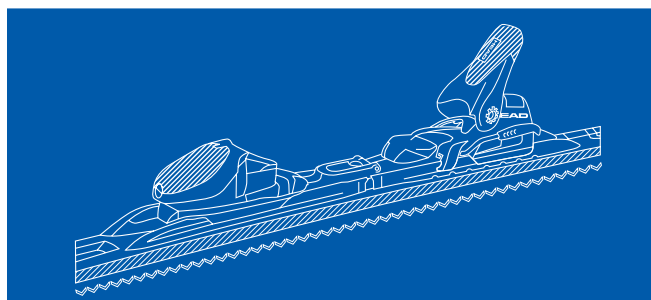
### FOR OPTIMUM PERFORMANCE, THE BOOT CENTER CAN BE ADJUSTED OVER THE SKI:

- |                  |                          |
|------------------|--------------------------|
| +15 mm forwards  | for moderate speed       |
| 0 mm             | for allround performance |
| -15 mm backwards | for experts              |



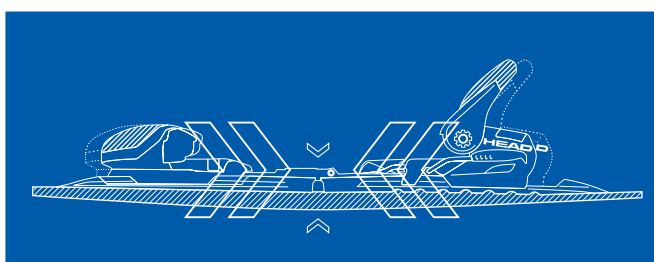
### EXCELLENT CONTROLL

With the Railflex base perfectly aligned within the ski's binding area, power is distributed evenly throughout the entire length of the ski. A smoother ride and more power in controlling your ski are the natural consequences.



### OPTIMAL POWER TRANSMISSION

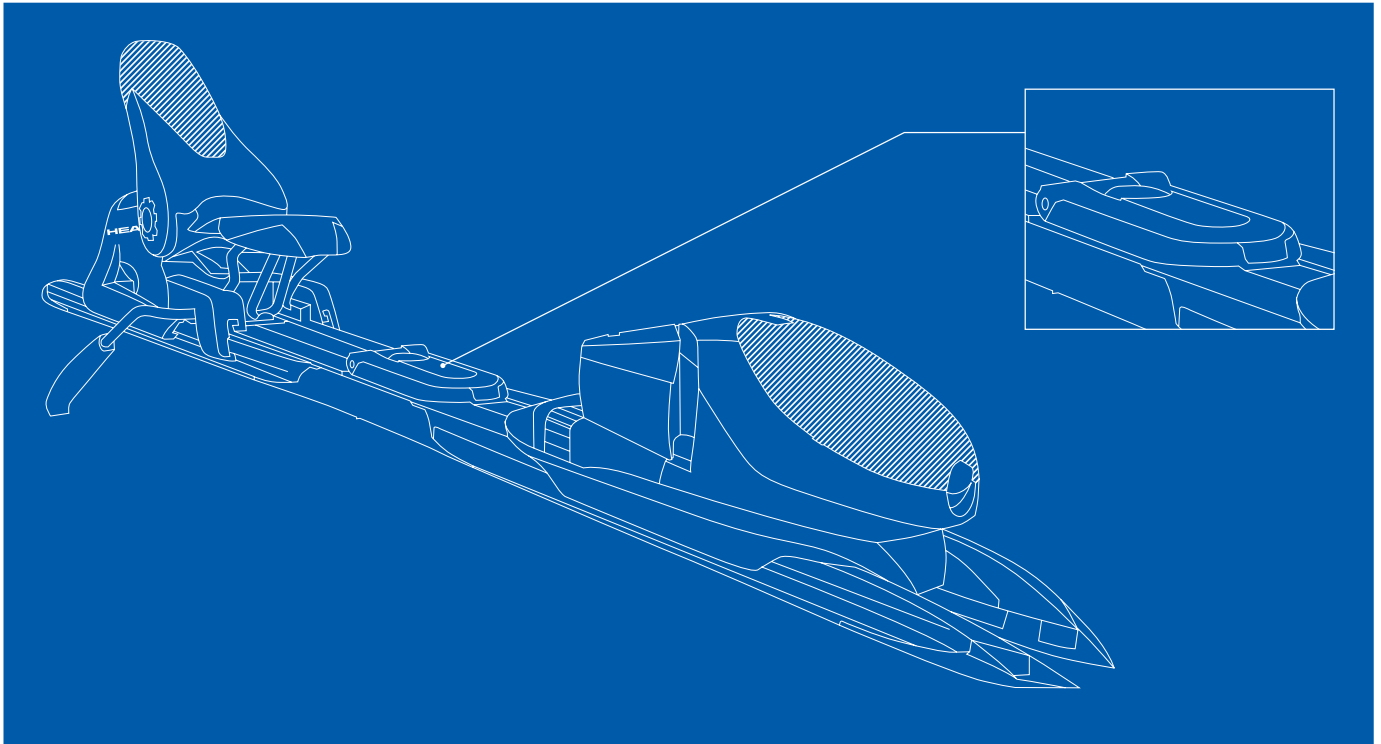
With the binding firmly mounted on the Railflex base, power transmission from foot to edge becomes even more direct.



### DOUBLE FREEFLEX

The Double Freeflex free-floating suspension is based on two elements: For one, double sided oblong holes in the Railflex base enable the ski to flex underneath. Secondly, gliding toe and heel units provide even more freedom and make sure toe- and heel-pressure remain constant for more safety and performance.

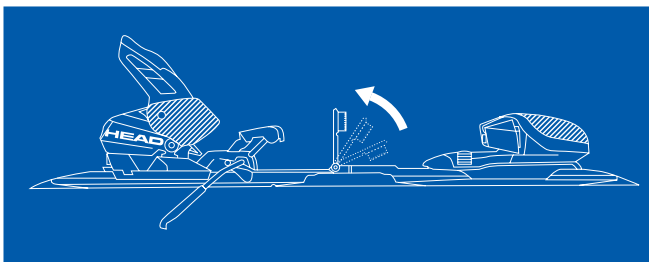
# SPEEDRAIL SYSTEM



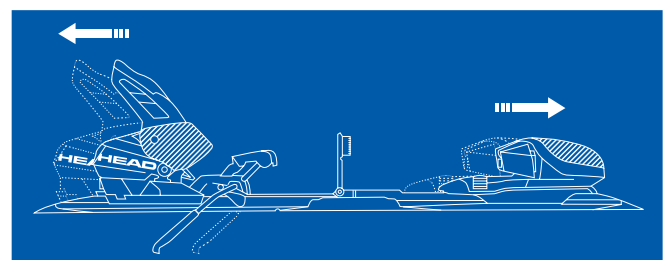
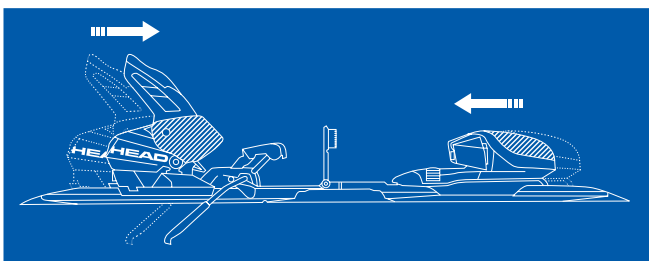
## EASIER, FASTER, SAFER: HEAD SPEEDRAIL 08.09

Not only does the Speedrail System cut your set-up-time down to almost zero, it also lets you adjust your clients' bindings by hand, with just one move, without adding bulk or weight to the binding. Speedrail is compatible with all Railflex System II skis.

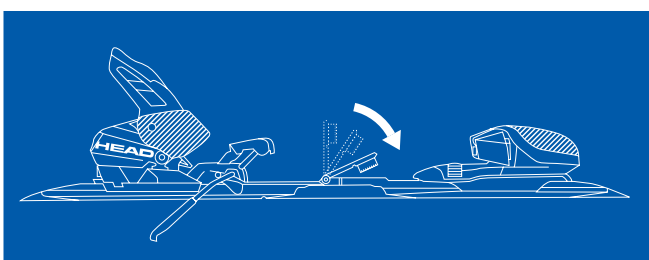
Speedrail means that retail skis can be displayed complete with their bindings and can be adjusted effortlessly while you sell them over the counter. Also: Retail skis and demo skis no longer have to differ from each other. Any retail ski with Speedrail can easily be used as a demo ski.



Open the SPEEDRAIL lever with a flick of your wrist.



Adjust the binding by sliding toe- and heel-piece to the right boot sole length.



simply close the lever and your customer is ready to roll.



## SAFETY FEATURES

### ONLY PERFECTION PROVIDES SAFETY

TYROLIA has especially dedicated itself to the core characteristic Active Safety. Unique safety features, such as the exclusive TYROLIA ABS band and TYROLIA Diagonal Heel offer optimal all-round protection for every skier.

#### TRP TOE SYSTEM

The TYROLIA Roller Pincer - System (TRP System) of the TYROLIA bindings with its four rollers and gliding inserts ensure a 180° release and exact centering of the ski boot. The TRP system reduces the load on knees and ligaments and improves performance considerably.

#### RACE DIAGONAL VS. FULL DIAGONAL TOE

Race Diagonal: Diagonal Toe tuned for racing purposes. Due to its higher release force vertically than horizontally, it holds up to the high backward lean forces in racing.

Full Diagonal: Intelligent 180° release both horizontally and vertically of the Diagonal Toe and therefore maximum safety in backward twisting-fall situations.



# SAFETY FE

# HIGH TECH & HIGH QUALITY

## ABS - ANTI BLOCKING SYSTEM

The exclusive TYROLIA technology of the ABS continuous band allows the boot to move out of the binding almost without any friction, hence delivering maximum safety in case of icing up, dirt and boot wear.

## RACE PRO HEEL

The stand height was reduced according to the actual FIS rules. An increased contact area reduces friction and provides constant forward pressure in all skiing situations.



## FREEFLEX PRO

Best performance enabled by the new, innovative Freeflex Pro System. The free-gliding heel allows the ski to bend through unimpeded and to retain its natural dynamics. Due to the reduced stand height, the Freeflex band is now much closer to the ski boot. Constant release values reduce the risk of injury and ensure safe ski steering.

# FEATURES

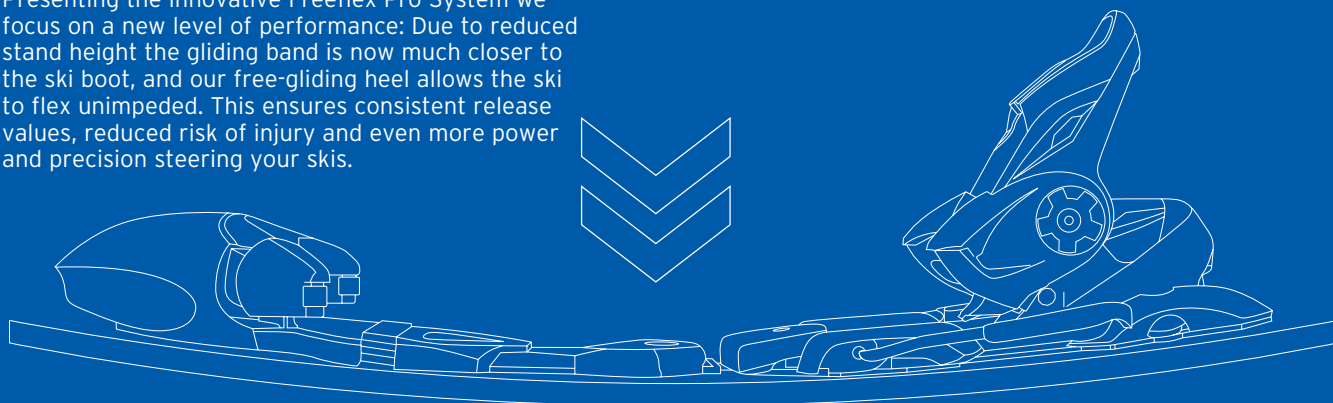
## FREEFLEX PRO TECHNOLOGY

### ALL-NEW RACE BINDINGS

Flash your bindings: Proudly introducing a complete new racing line with stunning design and improved racing features.

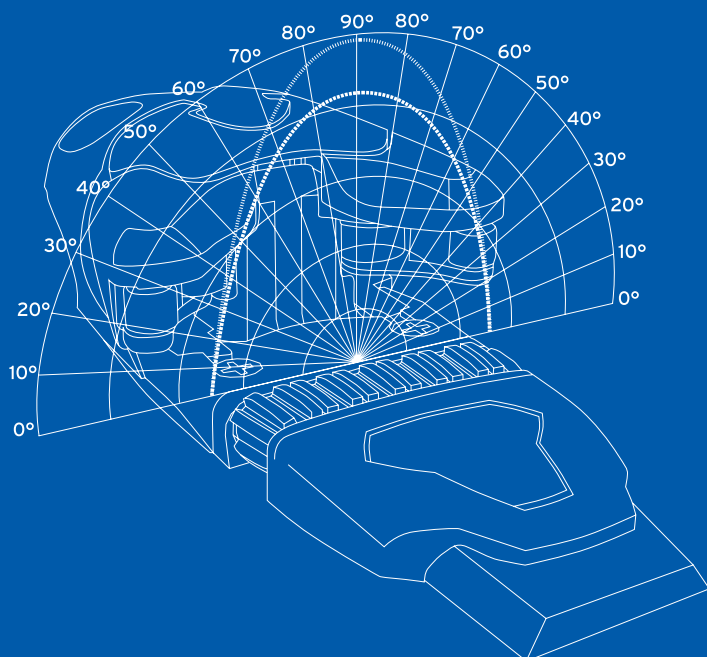
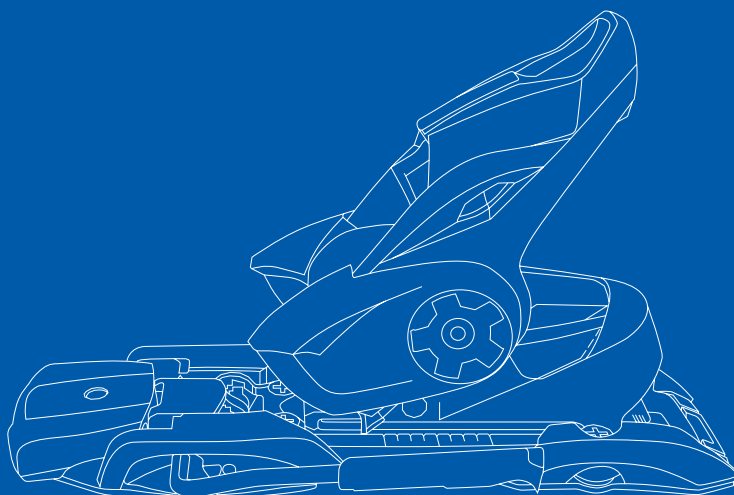
### ALL-NEW RACE BINDINGS

Presenting the innovative Freeflex Pro System we focus on a new level of performance: Due to reduced stand height the gliding band is now much closer to the ski boot, and our free-gliding heel allows the ski to flex unimpeded. This ensures consistent release values, reduced risk of injury and even more power and precision steering your skis.



### NEW: RACE PRO HEEL

The new, reduced stand height corresponds to the new FIS regulations. This gave us the opportunity to redesign the heel track, making it 1 mm higher and 8 mm wider for even more stability and direct power transmission. Moreover, increased size of the gliding inserts reduces friction and provides even smoother and more consistent release performance in all skiing situations and conditions.



### DIAGONAL TOE

Full Diagonal Toes feature 180° release action from horizontally to vertically. Maximum safety in backward twisting-fall situations.

Race Diagonal Toes are tuned for racing purposes. Due to higher release force vertically than horizontally, it holds up to the high backward lean forces occurring in racing.

## DIAGONAL HEEL

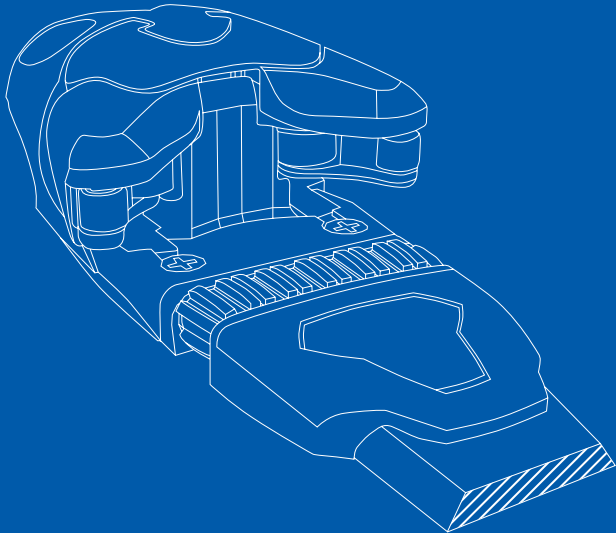
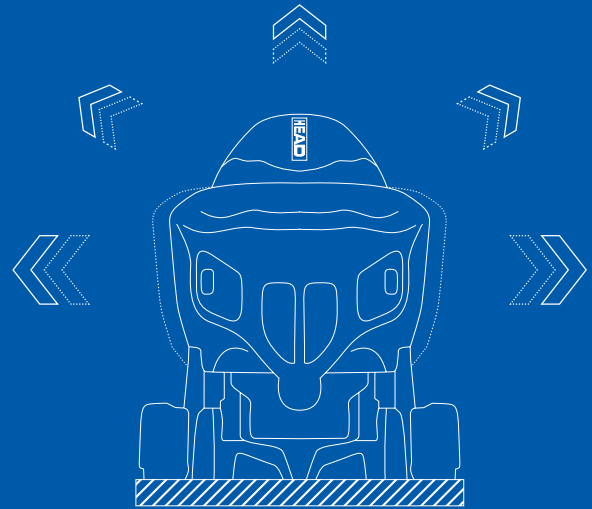
The Light Diagonal Heel has been redesigned for even better performance. 150° release action provides even more safety. Whether in backwards or forwards twisting falls, the load on knees and ligaments is lowered and the risk of injury is reduced.

### CONVENIENCE

Cleverly designed Diagonal release cam for easy step in.

### PERFORMANCE

Perfectly balanced heel retention in all directions enables high levels of power transmission without unwanted releasing.



## ABS SYSTEM

### SAFETY

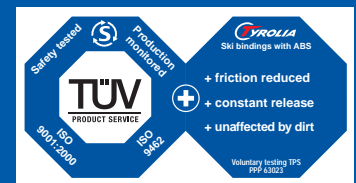
Release without any friction significantly reduces strain on ligaments in forward twisting falls. Perfect release regardless of temperature, boot-wear, icing-up, or dirt on the binding.

### CONVENIENCE

Self-cleaning design and maintenance-free.

### PERFORMANCE

Best results in independent safety testing and awarded with the TÜV high quality mark.



## TRP TOE SYSTEM

### SAFETY

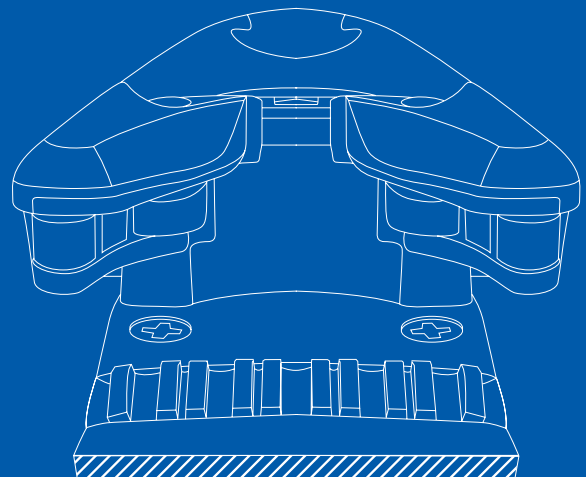
The HEAD 4-Roller Pincer System remains flexible at all times, absorbing short impact peaks on ligaments and automatically recentering the boot. Perfect 180° release action allows up to 30% higher retention force without compromising on safety.

### CONVENIENCE

Easy entry and perfect centering of the boot, no snow- or dirt-clogging.












### PERFORMANCE

Positive power transmission, perfect power link between boot and binding (30% better centering accuracy than conventional cams).

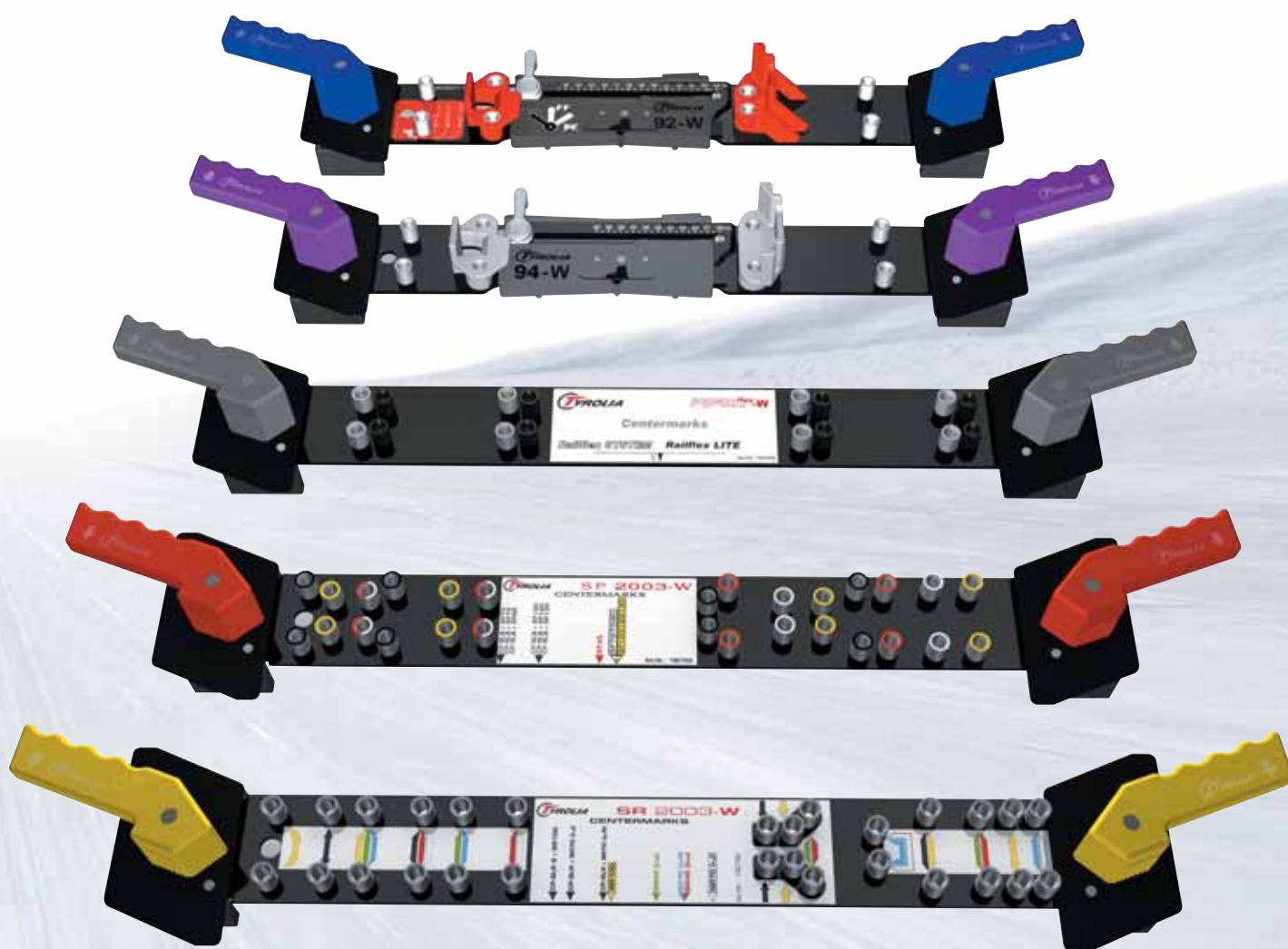




## WORKSHOP TOOLS & AIDS

Tool		Packed/art. nr.
	Drill Template Adapter-Set (adapter for TYROLIA-Templates)	per piece 162 569
	Drill 4,1 Ø x 7 mm long	per piece 162 772
	Drill 4,1 Ø x 9 mm long	per piece 162 773
	Drill 3,5 Ø x 7 mm long	per piece 162 770
	Drill 3,5 Ø x 9 mm long	per piece 162 771
	Drill-set complete	per set 162 774
	Screwdriver for all adjustment screws	per piece 160 806
	Screwdriver + magnetic bit (160 805)	per piece 162 800
	Handy Ratchet incl. bits (162 575 + 162 576)	per piece 162 574
	Slotted Screw Bit for Handy Ratchet	per piece 162 575
	Pozidrive 3 Bit for Handy Ratchet	per piece 162 576
	Universal bit for Screwdriver 162 800 and electric drivers hexagon. 1/4" (6.35 mm)	per piece 160 805
	Screwdriver for electric driver (Black & Decker, Skill, Thor, Atlas-Copco, Virax, Consolidated, Bosch, Ingersoll-Rand), hexagon. 1/4" (6.35 mm)	per piece 160 802
	Screwdriver for electric driver (Bosch, Metabo, AEG), hexagon. 1/4" (5.5 mm)	per piece 160 803
	Screwdriver for electric driver (Fein, AEG)	per piece 160 804
	Special set for repairs	per set 162 127
	Drill bit for repair set	per piece 162 128
	Special plastic plugs for repair set	1 set = 50 piece 162 129
	Plastic plugs mixed	500 piece 160 857
	Plastic plugs silver	500 piece 162 856
	Service-Grease-Spray (500 ml)	per piece 162 779
	TYROLIA Grease	per piece 160 052
	TYROLIA Glue	per piece 160 858
	Rubber band for brake	10 pieces 162 562
	Brake Retainer for all POWER BRAKE-Models	per piece 162 769
	Rental Boot Indicator (Single Code, mm)	per piece 162 617
	Slide (replacement) for Rental Boot Indicator	per piece 162 518
	Tibia-Chart	per piece 169 431
	Release/retention chart (weight method, new ASTM and ISO-Standard, DIN A3, water resistant, English Version)	per piece 169 756
	"SINGLE CODE" Rental Boot Stickers (5 sheets)	per set 162 561

# TEMPLATES & TOOLS



## DRILL TEMPLATE SELECTION

### DRILL TEMPLATE 92 W (162 760)



#### HEAD

##### LINE 08.09

FREEFLEX PRO 18 (X), FREEFLEX PRO 16, FREEFLEX PRO 14, FREEFLEX PRO 12, FREEFLEX PRO 11, MOJO 18 (X), MOJO 15, MOJO 12, MOJO 11, MOJO 7.5, LD 12, SL 110 ABS, SL 100, ONE LD 12, ONE SL 90, SL 90 ABS JR RACE, SL 75, SL 70 AC, FREEFLEX PLUS 11

##### EARLIER LINES

FREEFLEX PLUS 17, LD 12 CYBER, LD 12, MOJO 20 (X), GOLD THANG 12 LD, SL 75 ABS

#### TYROLIA

##### LINE 08.09

FREEFLEX PRO 18 (X), FREEFLEX PRO 17, FREEFLEX PRO 15, FREEFLEX PRO 11, PEAK 18 (X), PEAK 15, PEAK 12, PEAK 11, LD 12, SL 100, SL 75, SL 70 AC, SL 110 CARVE ABS

##### EARLIER LINES

FREEFLEX PLUS 18 (X), FREEFLEX PLUS 15 (X), FREEFLEX PLUS 10 (X), FREEFLEX PLUS 8 (X), FREEFLEX PLUS 17, FREEFLEX PLUS 15, FREEFLEX PLUS 14, FREEFLEX PLUS 10, FREEFLEX PLUS 8, FREEFLEX PLUS 8 LD, FREEFLEX PLUS 7, MAD FLEX 9, SLD 11 ABS, LD 12 CYBER, LD 12 S, LD 10, CYBER CARBON D 9 SX, CYBER CARBON D 9, CYBER D 8 SX, CYBER SL 110, CYBER D 9, CYBER D 8, CYBER 8, CYBER 7, CYBER 6, CYBER 4, CYBER FREEFLEX, MOJO 20 (X), MOJO 15, MOJO 11, MOJO 7, POWER SELECT FREERIDE 9, POWER SELECT FREERIDE 8, POWER SELECT FREERIDE SL 110, POWER SELECT 9, POWER SELECT 9 RENT, POWER SELECT 8, POWER SELECT 8 RENT, POWER SELECT 8 RENT DEMO, SL 110 ABS, SL 110 S ABS, SL 100 CARVE ABS, SL 100 ABS, SL 100 CARVE, SLW 90 ABS, SL 70 CARVE ABS, SL 70 ABS, SL 70, TD 9 T, TD 8 TS, TD 8, T 7, T 6.5, T 6, T 5.6i, T 5.6, T 5, FREEFLEX 9 WORLD CUP, FREEFLEX 9 RACING, FREEFLEX 8 RACING, FREEFLEX 9 T, CARVE FLEX 6, CARVE FLEX 4, SYMRENT 4, FREEFLEX JUNIOR RACE 11, T 6

### DRILL TEMPLATE 94 W (162 761)



#### HEAD

##### LINE 08.09

SL 45

#### TYROLIA

##### LINE 08.09

SL 45

##### EARLIER LINES

SYMRENT 2 SL, SPIRIT 2, 620 D, T2

## DRILL TEMPLATE BASES & PLATES (162 855)



### HEAD

#### LINE 08.09

SPEEDPLATE PLUS 13, POWER PLATE 9, RAILFLEX BASE 07, RAILFLEX BASE 06, RAILFLEX LITE BASE

#### EARLIER LINES

CARVE PLATE 13 SLR, CARVE PLATE 9 SLR, HEAD PLATE 14, RAILFLEX BASE 07, RAILFLEX BASE 06, RAILFLEX LITE BASE

### TYROLIA

#### LINE 07.08

CARVE PLATE 13 SLR, POWER PLATE 9, RAILFLEX BASE II, RAILFLEX LITE BASE

#### EARLIER LINES

CARVE PLATE 13 SLR, CARVE PLATE 9 SLR, JUNIOR RACE PLATE 11, SUPER RAILFLEX BASE II, SUPER RAILFLEX BASE

## DRILL TEMPLATE RACEPLATE RDX (162 866)



### HEAD

#### LINE 08.09

RACEPLATE RDX

### TYROLIA

#### LINE 08.09

RACEPLATE RDX

## DRILL TEMPLATE SP 2003 W (162 763)



### TYROLIA

#### LINE 08.09

SP 130 ABS DEMO AERO, SP 120 ABS, SP 100 ABS, SP 90 ABS, SP 75 ABS, SP 45

#### EARLIER LINES

SP 70 ABS, SYMPRO 9 ABS DEMO AERO, SYMPRO 9 ABS, SYMPRO 9 ABS DEMO, SYMPRO 9 ABS PROMO, SYMPRO 8 ABS, SYMPRO 8 ABS DEMO, SYMPRO 8, SYMPRO 7, SYMPRO 4, SYMPRO 2 SL, SYMRENT 9 PRO, SYMRENT 8 PRO, 750 DS PRO, 680 DS PRO, 650 DS PRO, CARVE PLATE 13 SLR (only Rental), CARVE PLATE 9 SLR (only Rental), JUNIOR RACING PLATE (only Rental)

## DRILL TEMPLATE SR 2003 W (162 762)



### TYROLIA

#### LINE 08.09

SR 100, SR 70, SR 45

#### EARLIER LINES

SR 75, SYMRENT 7, SYMRENT 6, SYMRENT DEMO, SYMRENT 3, SYMRENT 2 SL, SYMRENT 2, 680 DS PRO, 650 DS PRO, 650 DSR, CARVE PLATE 13 SLR (only Rental), CARVE PLATE 9 SLR (only Rental), JUNIOR RACING PLATE (only Rental)



# RETAIL BINDINGS



## HEAD BINDING LINE 08/09

Model	Z-DIN	kg	lbs	Feature	AFD	Toe stand height	Toe system	Toe type	
COMPETITION									
FREEFLEX PRO 20 (X) RD	10–20	from 97	from 209	FREEFLEX PRO	DELRIN	11	RACE DIAGONAL	AERO	
FREEFLEX PRO 20 (X) RS	10–20	from 97	from 209	FREEFLEX PRO	DELRIN	11	RACE DIAGONAL	AERO	
FREEFLEX PRO 18 (X) SALE	8–18	from 79	from 175	FREEFLEX PRO	TEFLON	12	RACE DIAGONAL	AERO	
FREEFLEX PRO 16 (X) RD	8–16	from 79	from 175	FREEFLEX PRO	DELRIN	11	RACE DIAGONAL	AERO	
RACING									
FREEFLEX PRO 16	5–16	from 49	from 109	FREEFLEX PRO	ABS	14	RACE DIAGONAL	AERO	
FREEFLEX PRO 14	4–14	from 42	from 92	FREEFLEX PRO	ABS	14	FULL DIAGONAL	LD	
FREEFLEX PRO 12	3.5–12	from 36	from 79	FREEFLEX PRO	ABS	14	FULL DIAGONAL	LD	
FREEFLEX PRO 11 LD	3–11	from 31	from 67	FREEFLEX PRO	ABS	14	FULL DIAGONAL	LD	
FREEFLEX PRO 11	3–11	from 31	from 67	FREEFLEX PRO	ABS	14	FULL DIAGONAL	SL HEAD	
MOJO									
MOJO 18 (X)	8–18	from 79	from 175	—	TEFLON	12	RACE DIAGONAL	AERO	
MOJO 15	5–15	from 49	from 109	—	TEFLON	12	RACE DIAGONAL	AERO	
MOJO 12	3.5–12	from 36	from 79	—	ABS	17.5	FULL DIAGONAL	LD	
MOJO 11	3–11	from 31	from 67	—	ABS	17.5	FULL DIAGONAL	SL HEAD	
MOJO 7.5	2–7.5	22-84	48-187	—	TEFLON	12	FULL DIAGONAL	SL LITE	
RAILFLEX SYSTEM									
RFD 14	4–14	from 42	from 92	SPEEDRAIL	ABS	32	RACE DIAGONAL	AERO	
RFD 14 DEMO	4–14	from 42	from 92	RAILFLEX BASE II	ABS	32	RACE DIAGONAL	AERO	
RFD 12	3.5–12	from 36	from 79	SPEEDRAIL	ABS	32	FULL DIAGONAL	SL HEAD	
RFD 11 DEMO	3–11	from 31	from 67	RAILFLEX BASE II	ABS	32	FULL DIAGONAL	SL HEAD	
RF 11	3–11	from 31	from 67	SPEEDRAIL	ABS	32	FULL DIAGONAL	SL HEAD	
RFL 7.5	2–7.5	22-84	48-187	RAILFLEX LITE	ABS	27.5	FULL DIAGONAL	SL LITE	
RFL 4.5	0.75–4.5	10-48	22-105	RAILFLEX LITE	TEFLON	23.5	FULL DIAGONAL	SL KID	
LIGHT DIAGONAL									
LD 12	3.5–12	from 36	from 79	—	ABS	17.5	FULL DIAGONAL	SL HEAD	
SUPERLIGHT									
SL 110 ABS	3–11	from 31	from 67	—	ABS	17.5	FULL DIAGONAL	SL HEAD	
SL 100	3–10	from 31	from 67	—	TEFLON	12	FULL DIAGONAL	SL HEAD	
WOMEN									
ONE LD 12	3.5–12	from 36	from 79	—	ABS	17.5	FULL DIAGONAL	SL HEAD	
ONE RF 9	2.5–9	from 26	from 57	SPEEDRAIL	ABS	32	FULL DIAGONAL	SL LITE	
ONE SL 90	2.5–9	from 26	from 57	—	ABS	17.5	FULL DIAGONAL	SL LITE	
JUNIOR									
SL 90 ABS JR RACE	2.5–9	26	57	—	ABS	17.5	FULL DIAGONAL	SL LITE	
SL 75	2–7.5	22-84	48-187	—	TEFLON	12	FULL DIAGONAL	SL LITE	
SL 70 AC	2–7	22-78	48-174	—	TEFLON	12	FULL DIAGONAL	SL JUNIOR	
SL 45	0.75–4.5	10-48	22-105	—	TEFLON	11.3	FULL DIAGONAL	SL KID	

# DATASHEET

	Heel stand height	Heel type	Brake type	Ramp angle (mm)	Length adjustment range (mm)	Boot sole type	Boot sole length (mm)	Drill template	Weight set
	16	RACE PRO	PB RACE PRO 16-78	5	32	ADULT	255-375	92 W	3030 g
	16	RACE PRO	PB RACE PRO 16-78	5	32	ADULT	255-375	92 W	3030 g
	17	RACE PRO	PB RACE PRO 17-78	5	32	ADULT	255-375	92 W	3030 g
	16	RACE PRO	PB RACE PRO 16-78	5	32	ADULT	255-375	92 W	3030 g
	19	RACE PRO	PB RACE PRO 17-78	5	32	ADULT	255-375	92 W	2680 g
	21	LD	PB LD 78	7	24	ADULT	257-372	92 W	2460 g
	21	LD	PB LD 78	7	24	ADULT	257-372	92 W	2460 g
	21	RACE LITE	PB LD 78	7	24	ADULT	257-372	92 W	2360 g
	21	RACE LITE	PB LD 78	7	24	ADULT	257-372	92 W	2200 g
	17	RACE PRO	PB RACE PRO WIDE 97	5	32	ADULT	—	92 W	2520 g
	17	RACE PRO	PB RACE PRO WIDE 97	5	32	ADULT	—	92 W	2280 g
	21	LD	PB LD WIDE 97	3.5	24	ADULT	—	92 W	2140 g
	21	SL HEAD	PB LD WIDE 85	3.5	32 (-8/+24)	ADULT	—	92 W	1710 g
	21	SL LITE	SL JUNIOR BRAKE WIDE 90	9	32 (-8/+24)	ADULT	—	92 W	1420 g
	35	LD	PB LD RAIL 80	3	—	ADULT	260-360 (290-390)	BASES & PLATES	2580 g
	35	LD	PB LD RAIL 80	3	100	ADULT	263-363	BASES & PLATES	2700 g
	35	LD	PB LD RAIL 80	3	—	ADULT	260-360 (290-390)	BASES & PLATES	2350 g
	35	LD	PB LD RAIL 80	3	100	ADULT	263-363	BASES & PLATES	2580 g
	33	SL HEAD	SL BRAKE SPEEDRAIL 78	1	—	ADULT	260-360 (290-390)	BASES & PLATES	1940 g
	31	SL LITE	SL JUNIOR BRAKE RAIL 78	3.5	8	ADULT	220-300 / 240-325	BASES & PLATES	1460 g
	31	SL KID	SL KID BRAKE RAIL 74	7.5	8	A / C	220-300 / 240-325	BASES & PLATES	1305 g
	21	LD	PB LD WIDE 85	3.5	24	ADULT	—	92 W	1980 g
	21	SL HEAD	SL BRAKE 78	3.5	32 (-8/+24)	ADULT	—	92 W	1655 g
	21	SL HEAD	SL BRAKE 78	9	32 (-8/+24)	ADULT	—	92 W	1565 g
	21	LD	PB LD WIDE 97	3.5	24	ADULT	—	92 W	1980 g
	33	SL HEAD	SL BRAKE SPEEDRAIL 78	1	—	ADULT	260-360 (290-390)	BASES & PLATES	1860 g
	21	SL LITE	SL JUNIOR BRAKE 72	3.5	32 (-8/+24)	ADULT	—	92 W	1540 g
	21	SL LITE	SL JUNIOR BRAKE 72	3.5	32 (-8/+24)	ADULT	—	92 W	1540 g
	21	SL LITE	SL JUNIOR BRAKE 72	9	32 (-8/+24)	ADULT	—	92 W	1400 g
	21	SL JUNIOR	SL JUNIOR BRAKE 72	9	32 (-8/+24)	A / C	—	92 W	1420 g
	15	SL KID	SL KID BRAKE 74	3.7	44	A / C	—	94 W	1210 g

## TYROLIA BINDING LINE 08/09

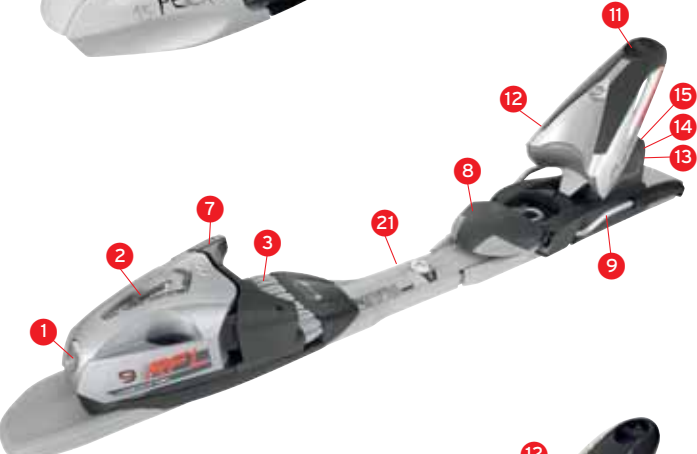
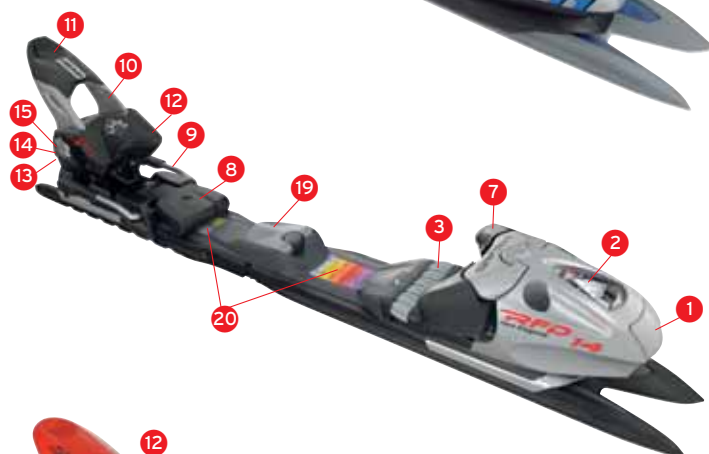
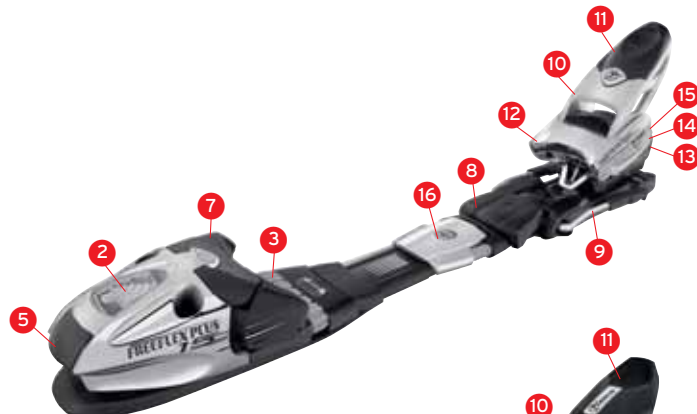
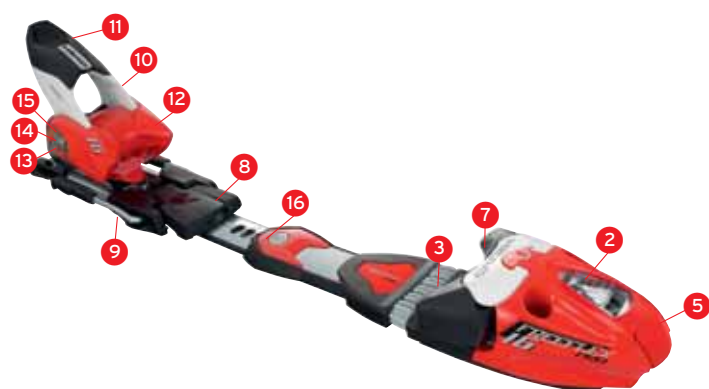
Model	Z-DIN	kg	lbs	Feature	AFD	Toe stand height	Toe system	Toe type	
COMPETITION									
FREEFLEX PRO 18 (X) SALE	8-18	from 79	from 175	FREEFLEX PRO	TEFLON	12	RACE DIAGONAL	AERO	
RACE									
FREEFLEX PRO 17	6-17	from 58	from 128	FREEFLEX PRO	ABS	14	RACE DIAGONAL	AERO	
FREEFLEX PRO 15	5-15	from 49	from 109	FREEFLEX PRO	ABS	14	RACE DIAGONAL	AERO	
FREEFLEX PRO 11	3-11	from 31	from 67	FREEFLEX PRO	ABS	14	FULL DIAGONAL	SL	
PEAK									
PEAK 18 (X)	8-18	from 79	from 175	—	TEFLON	12	RACE DIAGONAL	AERO	
PEAK 15	5-15	from 49	from 109	—	TEFLON	12	RACE DIAGONAL	AERO	
PEAK 12	3.5-12	from 36	from 79	—	TEFLON	12	FULL DIAGONAL	LD	
PEAK 11	3-11	from 31	from 67	—	TEFLON	12	FULL DIAGONAL	SL	
RAILFLEX SYSTEM									
RFD 12	3.5-12	from 36	from 79	SPEEDRAIL	ABS	32	FULL DIAGONAL	LD	
RFD 11	3-11	from 31	from 67	SPEEDRAIL	ABS	32	FULL DIAGONAL	SL	
RF 10	3-10	from 31	from 67	SPEEDRAIL	ABS	32	FULL DIAGONAL	SL	
RFL 9	2.5-9	from 26	from 57	RAILFLEX LITE	ABS	27.5	FULL DIAGONAL	SL LITE	
RFL 4.5	0.75-4.5	10-48	22-105	RAILFLEX LITE	TEFLON	23.5	FULL DIAGONAL	SL KID	
LIGHT DIAGONAL									
LD 12	3.5-12	from 36	from 79	—	ABS	17.5	FULL DIAGONAL	LD	
SUPERLIGHT									
SL 100	3-10	from 31	from 67	—	TEFLON	12	FULL DIAGONAL	SL	
JUNIOR									
SL 70 AC	2-7	22-78	48-174	—	TEFLON	12	FULL DIAGONAL	SL JUNIOR	
SL 45	0.75-4.5	10-48	22-105	—	TEFLON	11.3	FULL DIAGONAL	SL KID	
PROMO									
SL 110 CARVE ABS	3-11	from 31	from 67	CARVE FLEX	ABS	23.5	FULL DIAGONAL	SL	
SL 100	3-10	from 31	from 67	—	TEFLON	12	FULL DIAGONAL	SL	
SP 100 ABS CHIP	2.5-10	from 31	from 67	—	ABS	26	FULL DIAGONAL	SL REDESIGN OT	

# DATASHEET

	Heel stand height	Heel type	Brake type	Ramp angle (mm)	Length adjustment range (mm)	Boot sole type	Boot sole length (mm)	Drill template	Weight set
	17	RACE PRO	PB RACE PRO 17-78	5	32	ADULT	255-375	92 W	3030 g
	19	RACE PRO	PB RACE PRO 17-78	5	32	ADULT	255-375	92 W	2680 g
	19	RACE PRO	PB RACE PRO 17-78	5	32	ADULT	255-375	92 W	2660 g
	21	RACE LITE	PB LD 78	7	24	ADULT	257-372	92 W	2200 g
	17	RACE PRO	PB RACE PRO WIDE 97	5	32	ADULT	—	92 W	2520 g
	17	RACE PRO	PB RACE PRO WIDE 97	5	32	ADULT	—	92 W	2280 g
	21	LD	PB LD WIDE 97	9	24	ADULT	—	92 W	2040 g
	21	SL	SL BRAKE WIDE 90	9	32 (-8/+24)	ADULT	—	92 W	1600 g
	35	LD	PB LD RAIL 80	3	—	ADULT	260-360 (290-390)	BASES & PLATES	2500 g
	35	LD	PB LD RAIL 80	3	—	ADULT	260-360 (290-390)	BASES & PLATES	2340 g
	33	SL	SL BRAKE SPEEDRAIL 78	1	—	ADULT	260-360 (290-390)	BASES & PLATES	1810 g
	31	SL LITE	SL JUNIOR BRAKE RAIL 78	3.5	8	ADULT	220-300 / 240-325	BASES & PLATES	1470 g
	31	SL KID	SL KID BRAKE RAIL 74	7.5	8	A / C	220-300 / 240-325	BASES & PLATES	1305 g
	21	LD	PB LD 78	3.5	24	ADULT	—	92 W	2120 g
	21	SL	SL BRAKE 78	9	32 (-8/+24)	ADULT	—	92 W	1590 g
	21	SL JUNIOR	SL JUNIOR BRAKE 72	9	32 (-8/+24)	A / C	—	92 W	1400 g
	15	SL KID	SL KID BRAKE 74	3.7	44	A / C	—	94 W	1210 g
	31	SL	SL BRAKE 78	7.5	32 (-8/+24)	ADULT	—	92 W	1930 g
	21	SL	SL BRAKE 78	9	32 (-8/+24)	ADULT	—	92 W	1570 g
	31	RENT OT	PB LD 78	5	64+60 A-6	ADULT	263-391	SP 2003 W	2590 g



## PARTS-REFERENCE CHART RETAIL



### TOE PIECE

- 1 Adjustment screw
- 2 Visual indicator
- 3 ABS
- 4 AFD-Teflon
- 5 Toe cover
- 6 Stand height adjustment (A/C boots)
- 7 Wings

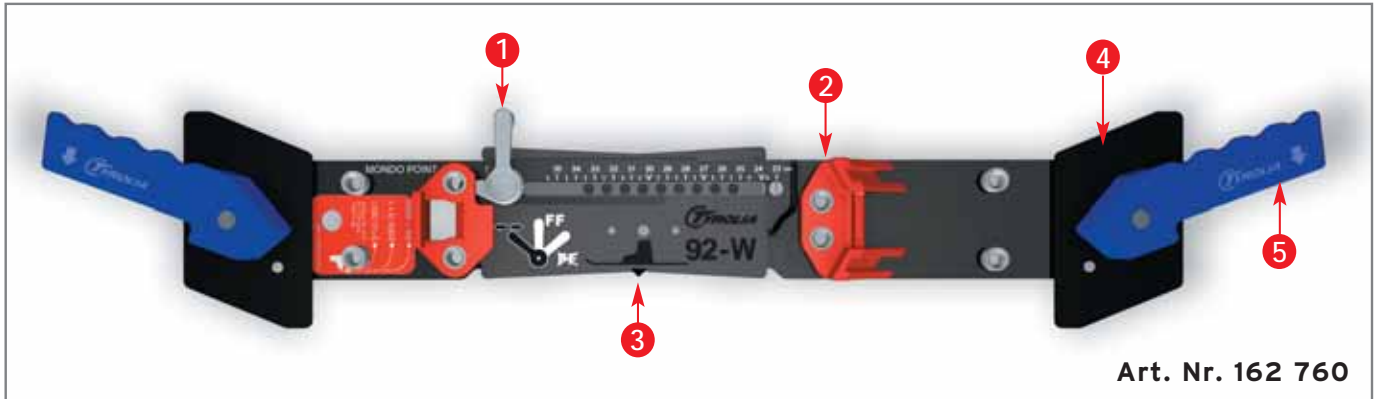
### HEEL PIECE

- 8 Brake treadle
- 9 Brake arms
- 10 Heel lever
- 11 Heel cover
- 12 Sole lug
- 13 Heel housing
- 14 Adjustment screw
- 15 Visual indicator

### MID PARTS

- 16 FREEFLEX Plus activation
- 17 SPEEDRAIL lever
- 18 Cyber bridge
- 19 RAILFLEX Demo lever
- 20 Single Code scale
- 21 Carve bridge

# DRILL TEMPLATE 92 W



Art. Nr. 162 760

## 1. COMPATIBILITY

Presently the drill template 92 W is valid for:

### HEAD BINDINGS:

FREEFLEX PRO 20 (X) RD,	MOJO 12,
FREEFLEX PRO 20 (X) RS,	MOJO 11,
FREEFLEX PRO 18 (X) Sale,	MOJO 7.5,
FREEFLEX PRO 16 (X) RD,	LD 12,
FREEFLEX PRO 16,	SL110 ABS,
FREEFLEX PRO 14,	SL 100,
FREEFLEX PRO 12,	ONE LD 12,
FREEFLEX PRO 11 LD,	ONE SL 90,
FREEFLEX PRO 11,	SL 90 ABS JR RACE,
MOJO 18 (X),	SL 75,
MOJO 15,	SL 70 AC,

### TYROLIA BINDINGS:

FREEFLEX PRO 18 (X) Sale,	PEAK 12,
FREEFLEX PRO 17,	PEAK 11,
FREEFLEX PRO 15,	LD 12,
FREEFLEX PRO 11,	SL100,
PEAK 18 (X),	SL 70 AC,
PEAK 15,	SL 110 CARVE ABS

All HEAD/TYROLIA adult bindings can be used with skis 140 cm and longer. The junior bindings are delivered with screws for skis shorter than 140 cm. If they are mounted on skis longer than 140 cm or on HEAD/TYROLIA plates, replace them with longer screws (see screw chart in this manual-page 50/51).

Drill template 92 W can be used for ski widths from 59 mm to 108 mm. For other skis use the template adapter set (art. nr. 162 569). With this adapter set, skis from 45 to 132 mm can be mounted.

**NOTE:** HEAD/TYROLIA offers different types of brakes. Refer to the brake overview on 56-59 for brake and binding compatibility.

The Description of the brakes always includes a number like 72, 78, 90, 97, 115, and so on .... This number stands for the maximum ski width in the brake area and not in the ski center!!!

## 2. ADJUSTING THE DRILL TEMPLATE

There are 3 different mounting procedures for template 92 W. One for FREEFLEX PRO and one for CARVE and TWO PIECE bindings.

To adjust the template unlock the locking lever (1) by rotating it counter-clockwise to the far left position.

## FREEFLEX PRO:

**NOTE:** Due to the center piece these bindings are limited to ski boots with sole lengths from 257 to 372 mm.

Place the ski boot in the template and push the template together until the stops (2) come against the ski boot sole. Take the boot out of the template. Position the locking lever (1) in the mid position, then open or close the template to the nearest centimeter mark.

## FOR CARVE AND TWO PIECE BINDINGS:

Place the ski boot in the template and push the template together until the stops (2) come against the ski boot sole. Lock the lever to the far right position to prevent length change, then take the boot out of the template.

## 3. POSITIONING OF THE DRILL TEMPLATE

Open the clamping jaws (4) of the template by rotating the clamping handles (5) and then place template correctly on the ski, with the boot midsole indicator (3) aligned with the mounting mark on the ski. Be sure the template is evenly seated against the ski's top surface. Release clamping handles to attach the template to the ski.

Check the boot midsole mark with template mark. If they are not the same use the boot midsole mark to align the template with the ski mounting mark.

**NOTE:** Keep in mind that some ski manufacturers do not use the center of boot sole location method. Always follow their instructions.

## 4. DRILLING THE HOLES

If not otherwise specified by the ski manufacturer, use a 4.1 Ø x 9.0 mm drill bit. Use a 4.1 Ø x 7.0 mm drill bit for skis that are shorter than 140 cm. Drill the holes using the appropriate drill bit. If required by the ski manufacturer, tap the holes. After drilling place a drop of HEAD/TYROLIA glue in each hole. It lubricates the screws and seals the holes (pict 1).



## 5. MOUNTING

### FOR FREEFLEX PRO:

Place the pre-assembled heel over the prepared holes (pict 2) and tighten the screws in a cross pattern (pict 3).

pict 2



pict 3



Then attach the AFD to the toe and place it together with the base plate over the front holes.

pict 4



Check if the AFD has snapped in, in its specific position.



pict 5

Then you have to place the pre-assembled toe over the holes.

pict 6



**ATTENTION:** First you have to tighten the screw in the center - the number has to correspond to the centimetre mark from the template.

pict 7



To fix it you have to hold the bands together and tighten the screw carefully.

pict 8



After this align the toe over the holes and fasten the screws.

pict 9





#### FOR SL 110 CARVE ABS:

Connect the Carve-Flex-Mid-plate with tab located under the heel base plate (pict 10).



Place the assembly over the prepared holes and fasten the screws. Place the toe over the Carve-Flex-Mid-Plate and the drilled holes and fasten the screws. Drive the rear screws first, then the front screws.

#### FOR TWO PIECE BINDINGS:

Place the binding over the predrilled holes and drive the screws.

### 6. FORWARD PRESSURE

Check to make sure the boot meets international standards and is not damaged.

Place the boot in the binding and close it. The indicating pointer should rest within the scribed area (pict 9) if not, you have to adjust the forward pressure.

**DON'T OPEN THE LENGTH ADJUSTMENT LOCK AS LONG AS A SKI BOOT IS FIXED IN THE BINDING.**

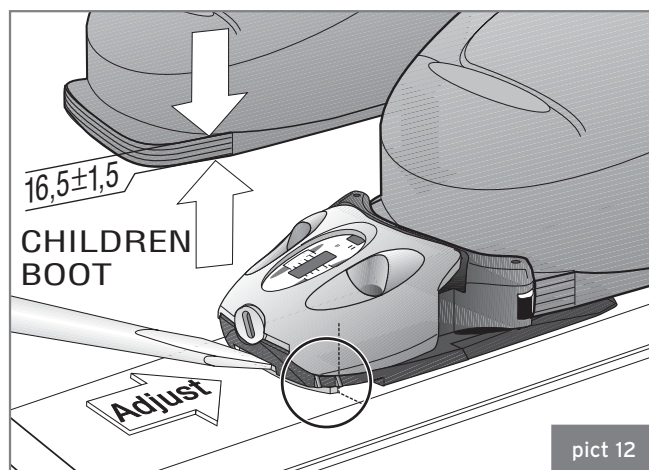
Place the ski boot in the open binding and rest the boot heel on the brake treadle. Lift the length adjustment lock (2) with a screwdriver and slide the heel until the heel cup just touches the boot. Lock the length adjustment by pushing it down. Latch the boot in the binding and check forward pressure again. The toe pincers should not be pressed open and the indicating pointer should rest within the scribed area (pict 11).



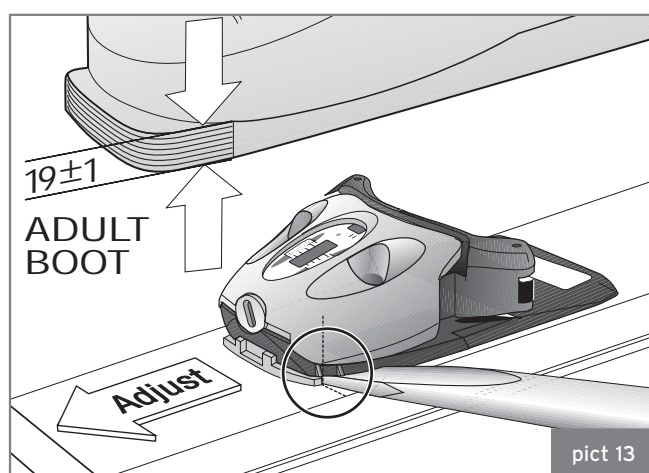
### 7. ADJUSTING THE TOE UNIT - SL 70 AC

The SL 70 AC is the only junior binding, which is for both ski boots type A-adult and ski boots type C-children. All other junior and adult bindings are only for ski boots type A-adult.

The toe sole lug of the SL 70 AC is pre-adjusted for ski boots type A-adult. If ski boots type C-children are used, use a screwdriver to push the wedge down under the toe unit up to the stop (pict 12).



To readjust the toe for ski boots type A-adult push the wedge back to its original position (pict 13).



### 8. ADJUSTING THE RELEASE VALUES

The release values of the toe and heel should be determined by height and body weight (ISO/ASTM) method. Set the binding accordingly with the adjustment screws. We recommend the use of a calibrated testing device and that you keep a written record of whether the system passes or fails (requirement in the US).

**NOTE:** Release/retention settings above a release moment of 100 NM at the toe and 400 NM at the heel are higher than the international standards recommend and are used solely at the skier's own risk!

### 9. FUNCTION CHECK

**ENTRY/EXIT:** Check to make sure that the boot does not catch on the heel hold down lug.

**BRAKE:** press the brake treadle (1) down by hand (pict 14 and 15).





The brake arms (2) must automatically return to the braking position when the treadle is released.

#### LATERAL ELASTICITY OF THE TOE:

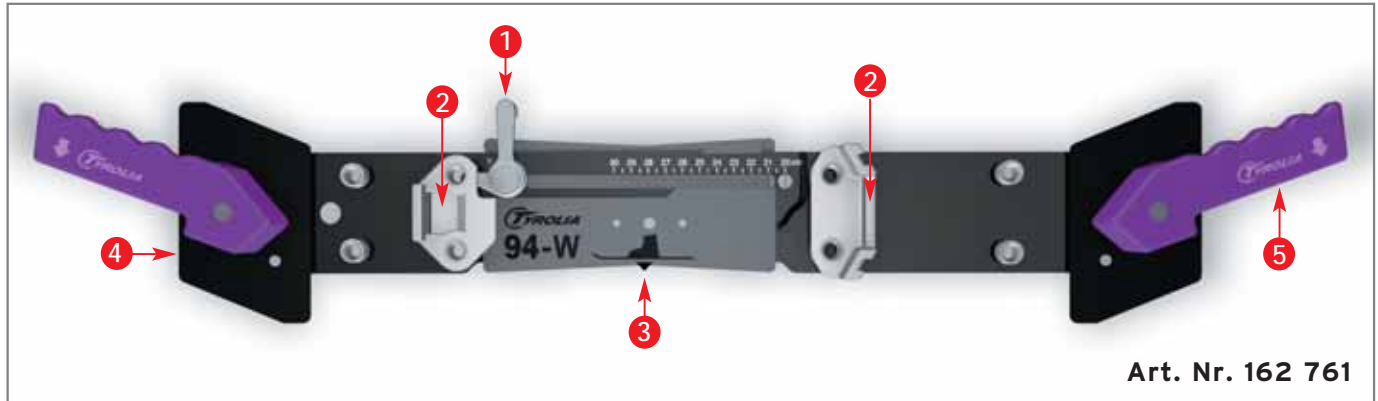
Press the boot laterally outward. The binding must re-center the boot easily and quickly from a 15 mm lateral displacement (junior bindings - 10 mm).

#### 10. FINAL CHECK

- Has the proper mounting point been selected?
- Functional brake test passed?
- Have all screws been fastened tightly?
- Has the forward pressure been properly set?
- Are the release values of the toe and heel properly determined and set?
- Is the instruction for use booklet ready to be handed over to the consumer?



# DRILL TEMPLATE 94 W



Art. Nr. 162 761

## 1. COMPATIBILITY

Presently the drill template 94 W is valid for:

**HEAD BINDINGS:**  
SL 45

**TYROLIA BINDINGS:**  
SL 45

This binding can be used for children's skis shorter than 140 cm. The standard brake, the SL KID BRAKE 74 (art.nr. 162 399), can be used for skis up to 74 mm, for wider skis use the SL KID BRAKE wide 84 (art.nr. 162 658), which is for skis from 74 to 84 mm.

**NOTE:** HEAD/TYROLIA offers different types of brakes. Refer to the brake overview on page 56-59 for brake and binding compatibility.

The description of the brakes always includes a number like 74 or 84. This number stands for the maximum ski width in the brake area and not in the ski center!!!

## 2. ADJUSTING THE DRILL TEMPLATE

Unlock the locking lever (1) by rotating it counter-clockwise. Place the template on the ski. Place the ski boot in the template. Push the template together until the stops are against the sole (2).

Lock the lever (1) to prevent length change and take the boot out of the template.

## 3. POSITIONING OF THE DRILL TEMPLATE

Align the boot midsole indicator (3) with the midsole mounting mark on the ski. Be sure the template is evenly seated against the ski's top surface.

Check the boot midsole mark with template mark. If they are not the same use the boot midsole mark to align the template with the ski mounting mark.

**NOTE:** Some ski manufacturers do not use the center of boot sole location method. Always follow the ski manufacturer's instructions.

## 4. DRILLING THE HOLES

If not otherwise specified by the ski manufacturer, use a 4,1 Ø x 7,0 mm drill bit. Drill the holes using appropriate TYROLIA drill. If required by the ski manufacturer, tap the hole. Place a drop of TYROLIA glue into the holes. It lubricates the screws and seals the ski. (pict 16).

pict 16



## 5. MOUNTING

Place toe unit over the holes and fasten the screws in a X-pattern. Then do the same for the heel.

## 6. FORWARD PRESSURE

Place the boot in the binding and close it. The indicating pointer should rest within the scribed area (pict 17), if not you have to adjust the forward pressure.

**DON'T OPEN THE LENGTH ADJUSTMENT LOCK AS LONG AS A SKI BOOT IS FIXED IN THE BINDING.**

Place the ski boot in the open binding and rest the boot heel on the brake treadle. Lift the length adjustment lock (2) with a screwdriver and slide the heel until the heel cup just touches the boot. Lock the length adjustment by pushing it down. Latch the boot in the binding and check forward pressure again. The toe piners should not be pressed open and the indicating pointer should rest within the scribed area (pict 17).

pict 17



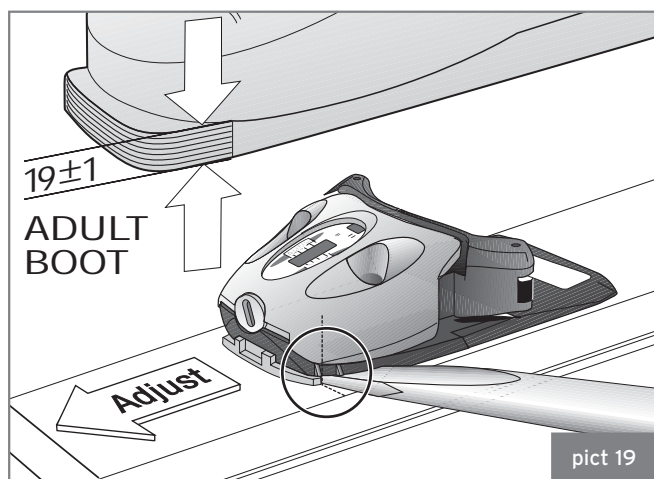
## 7. ADJUSTMENT

Check to make sure that the boot meets international standards and is not damaged.

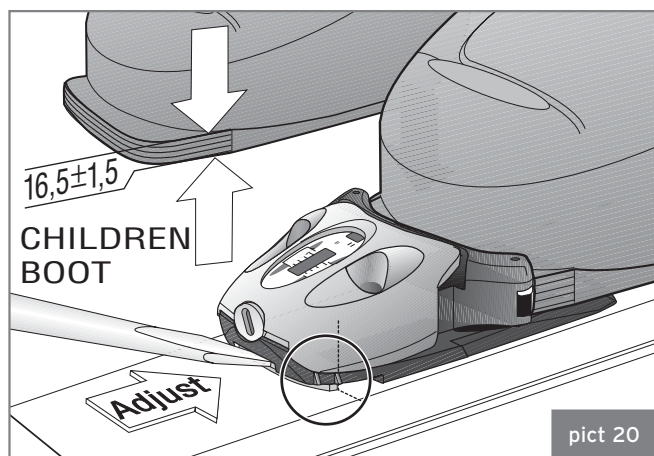


### ADJUSTING THE TOE UNIT:

The toe sole lug is pre-adjusted for ski boots type C-children. If ski boots type A-adult are used, use a screwdriver to push the wedge forward up to the stop (pict 19).



Use a screwdriver to return the wedge to the type C-children position (pict 20).



### ADJUSTING THE RELEASE VALUES

The release values at toe and heel should be determined by height and body weight (ISO/ASTM) method. Set the binding accordingly with the adjustment screws.

We recommend the use of a calibrated testing device and that you keep a written record of whether the system passes or fails (requirement in the US).

## 8. FUNCTION CHECK

**ENTRY/EXIT:** Check to make sure that the boot does not catch on the heel hold down lug.

**BRAKE:** press the brake treadle (1) down by hand. The brake arms (2) must automatically return to the braking position when the treadle is released (pict 21).



### LATERAL ELASTICITY OF THE TOE:

Press the boot laterally outward. The binding must re-center the boot easily and quickly from a 10 mm lateral displacement.

## 9. FINAL CHECK

- Has the proper mounting point been selected?
- Functional brake test passed?
- Have all screws been fastened tightly?
- Has the forward pressure been properly set?
- Are the release values of the toe and heel properly determined and set?
- Is the instruction for use booklet ready to be handed over to the consumer?

# DRILL TEMPLATE BASES & PLATES



## 1. COMPATIBILITY

Presently the drill template BASES & PLATES is valid for:

### HEAD BINDINGS:

RFD 14,	RF 11,
RFD 14 DEMO,	RFL 7.5,
RFD 12,	RFL 4.5,
RFD 11 DEMO,	ONE RF 9

### TYROLIA BINDINGS:

RFD 12,	RFL 9,
RFD 11,	RFL 4.5
RF 10,	

Drill template BASES & PLATES is for mounting of all types of plates and bases, except the RACEPLATE RDX.

Drill template BASES & PLATES can be used for ski widths from 59 to 108 mm. For other skis use the template adapter set (art. nr. 162 569). With this adapter set skis from 45 to 132 mm can be mounted.

## 2. POSITIONING THE DRILL TEMPLATE

Open the clamping jaws (2) by rotating the clamping handles (1) and then place the template on the ski. Align the boot midsole indicator (3) for the appropriate model with the midsole mounting mark on the ski. Be sure the template is evenly seated against the ski's top surface. Release clamping handles.

**NOTE:** Keep in mind that some ski manufacturers do not use the center of boot sole location method. Always follow the ski manufacturer's instructions.

## 3. DRILLING THE HOLES

If not otherwise specified by the ski manufacturer use for all bases a 4.1 Ø x 9.0 mm drill bit for skis 140 cm and longer. For skis shorter than 140 cm use a 4.1 Ø x 7.0 mm drill bit.

DRILL THROUGH THE APPROPRIATE BUSHINGS:

Model	Color of indicator
Speedplate Plus 13 Power Plate 9	yellow
Carve Plate 13 Carve Plate 9 JR Race Plate	red
Railflex Base	white (silver)
Railflex Lite Base	black

After drilling place a drop of TYROLIA glue into the holes. It lubricates the screws and seals the holes (pict 22).



## 4. PLATES

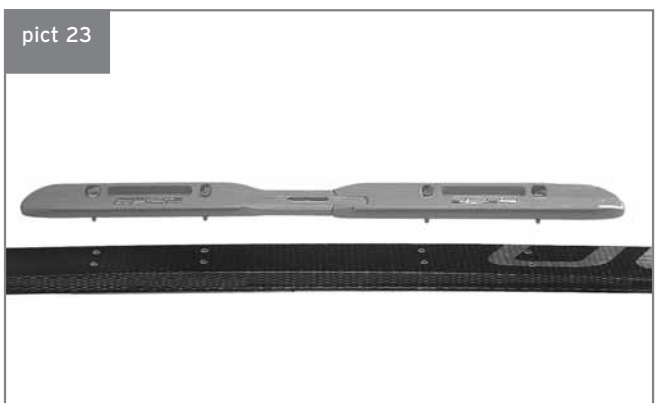
### 4.1 MOUNTING - PLATES

The compatible binding-plate combinations can be found in the compatibility chart (see page 48/49).

All HEAD/TYROLIA PLATES can be used for skis 140 cm and longer. If mounted on skis shorter than 140 cm, then the screws have to be replaced by shorter ones. See screw chart on page 61/63. For mounting junior bindings on HEAD/TYROLIA PLATES you have to replace the pre-mounted screws by screws with 8 mm penetration depth. Only with these screws can we guarantee the right pullout strength (see page 50/51).

**NOTE:** Use only the pre-drilled holes for installation - in no case drill holes into the plate to mount bindings of other manufacturers.

Place the front part of the plate over the holes and fasten the screws. Then place the back part over the holes and fasten the screws.



**NOTE-only for CARVE PLATE 13 and CARVE PLATE 9:**  
If you want to mount rental bindings on CARVE PLATE 13 or CARVE PLATE 9 use template SP 2003 W for SP models and Template SR 2003 W for SR models.

When mounting a RENTAL binding on the CARVE PLATE using template BASES & PLATES for installation then you have to displace the template to the rear according to the following table.

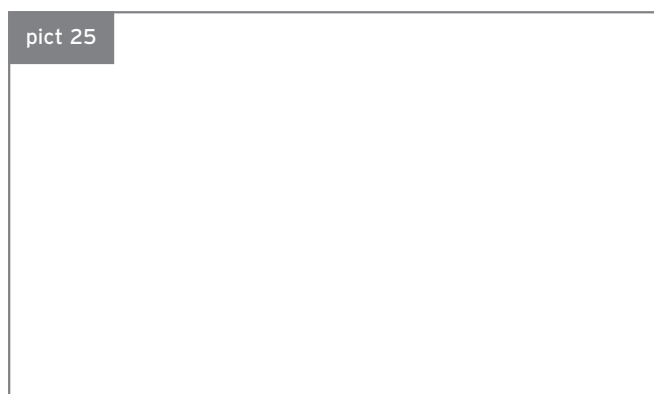
Binding	Displacement of the boot midpoint indicator to the rear, for template 92 W.
SP 130 ABS DEMO AERO SP 120 ABS DEMO SP 100 ABS,	10 mm
SR 100,	20 mm
SP 90 ABS SP 75 ABS	30 mm

## 4.2 MOUNTING - BINDINGS ON PLATES

Determine the boot sole length with the HEAD/TYROLIA Rental boot caliper and place the binding on the Carve Plate corresponding with the appropriate printed length markings.



Mount the binding in accordance with the procedures in this manual.



### MOUNTING HEAD/TYROLIA BINDINGS ON RAISED PLATFORMS:

- Replacing the POWER BRAKE is not necessary when you mount HEAD/TYROLIA bindings with the HEAD/TYROLIA SPEEDPLATE PLUS 13, POWER PLATE 9, CARVE PLATE 13 SLR or CARVE PLATE 9 SLR on skis which do not have integrated platforms.
- The HEAD/TYROLIA DRAGON BRAKE has extended brake arms and increased braking power. Unscrew and remove both front heel screws and pull the POWER BRAKE off the heel (see pict 26).



- Then slide on the DRAGON BRAKE (see pict 27) and screw it on.



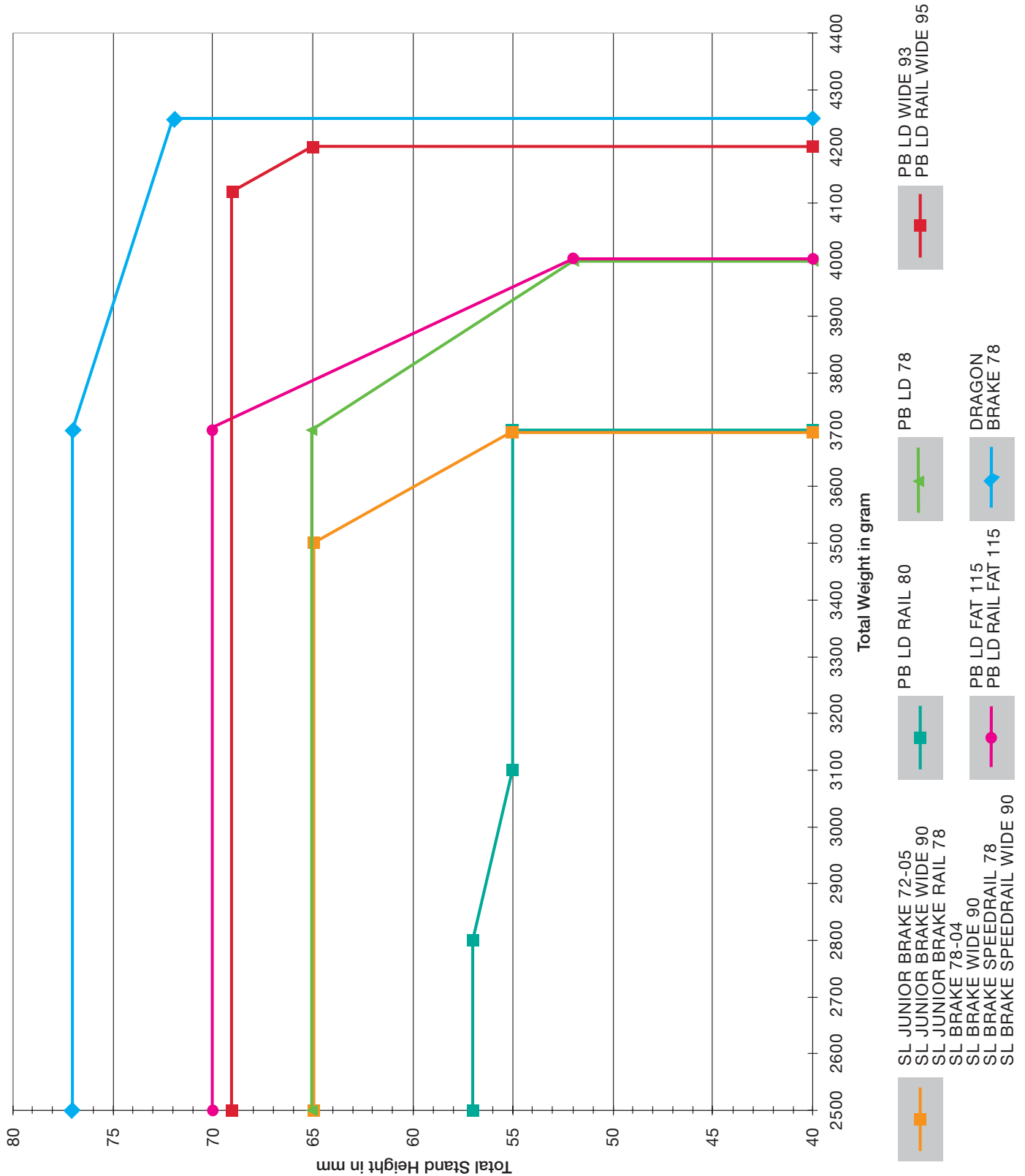
**CAUTION:** If you use HEAD/TYROLIA bindings on plates from other manufacturers, check the HEAD/TYROLIA Brake Matrix to see if the desired combination of ski-plate-binding is possible.

#### FOLLOW THE PROCEDURE BELOW:

- Add the weight of the components you want to mount (ski + plate + binding).
- Add the thickness of the components you want to mount (ski + plate + binding).
- Using the list below, determine which HEAD/TYROLIA brakes are standard on the bindings delivered.
- Find the value on the vertical axis which corresponds to the sum of the addition for the stand height.
- Follow the horizontal axis on the matrix to the right until you find the value which corresponds to the total weight on the horizontal axis.
- If the point of intersection of the weight and stand height lies below the respective curve, the brake will function properly.
- If the point of intersection lies above the curve for the POWER BRAKE/short or POWER BRAKE long, the brake must be replaced with the next stronger one.
- If the point of intersection lies above the curve for the DRAGON BRAKE, using this combination of ski + binding + plate is not recommended. In this case, you have the following possibilities to come within the permitted range:
  - Reduce the total thickness through:
    - a thinner plate,
    - a HEAD/TYROLIA binding with less stand height (see page 12-15).
  - Reduce the total weight to
    - a lighter plate, e. g. a HEAD/TYROLIA CARVE PLATE 9 SLR
    - a HEAD/TYROLIA binding with less weight,
    - a lighter ski.
  - Use a combination of a) + b).



# HEAD/TYROLIA BRAKE MATRIX LINE 2008/09





## HEAD BINDING-PLATE COORDINATION LINE 2008/09

<div>BINDING</div> <div>STAND HEIGHT</div>	CARVE PLATE 13 SLR 13 mm 261-351 SL - 363	CARVE PLATE 9 SLR 9 mm 261-341 SL - 353	HEAD PLATE 14 14 mm 251-332 SL - 334
FREEFLEX PRO 18 (X)	30,0	26,0	31,0
FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11	34,0	30,0	35,0
LD 12 CYBER	44,0	40,0	45,0
MOJO 20 (X) MOJO 15 MOJO 11 MOJO 7.5 LD 12 LD 12 WIDE BRAKE SL 110 ABS SL 100 GOLD THANG 12 LD SL 75 ABS SL 75 SL 70 AC	34,0	30,0	35,0
SL 45	—	—	—

—..... non compatible

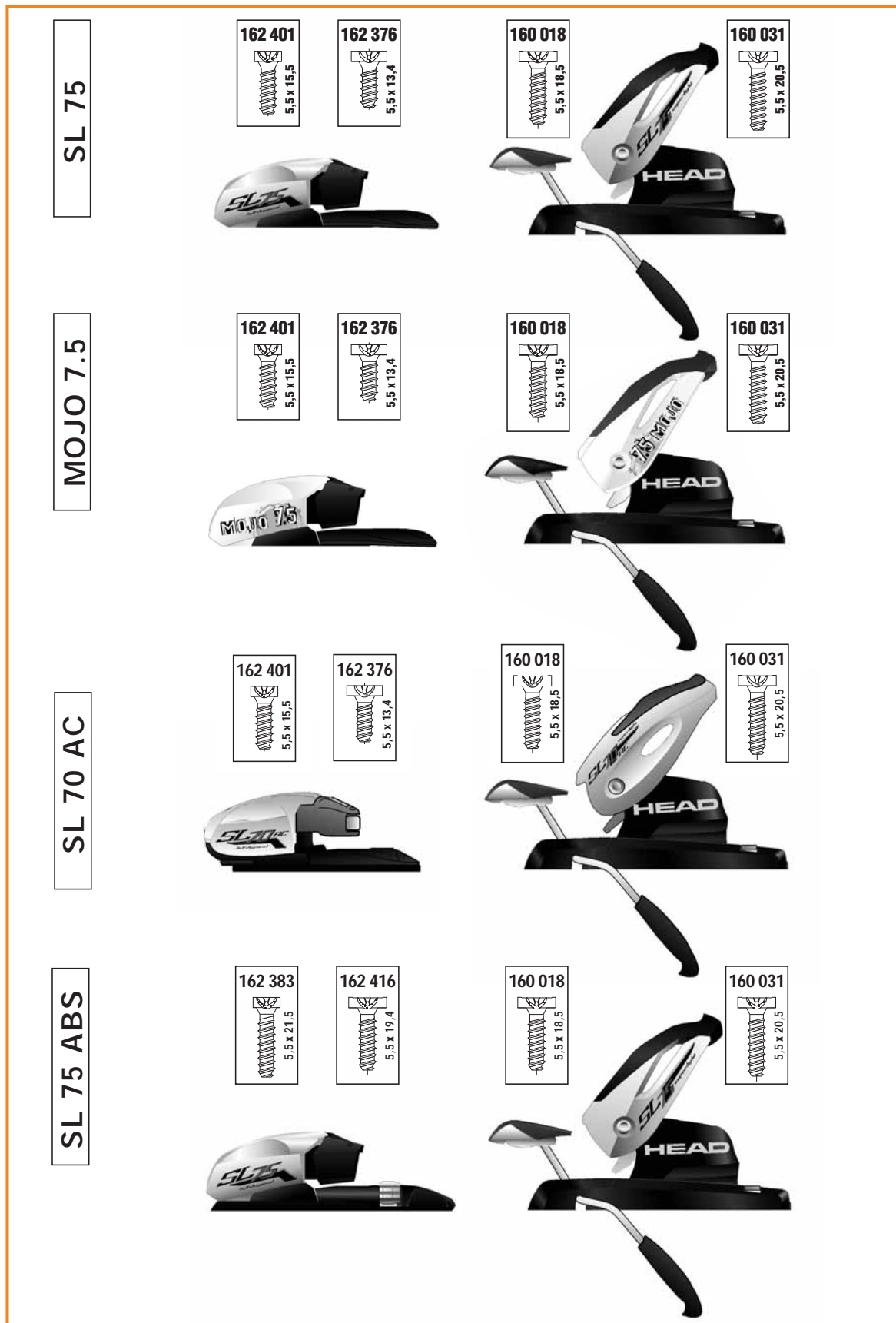
# TYROLIA BINDING-PLATE COORDINATION LINE 2007/08

<div>BINDING</div> <div>STAND HEIGHT</div>	CARVE PLATE 13 SLR 13 mm 261-351 SL - 363	CARVE PLATE 9 SLR 9 mm 261-341 SL - 353	JUNIOR PLATE 11 11 mm 251-332 SL - 334
FREEFLEX PRO 18 (X)	30,0	26,0	28,0
FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11	34,0	30,0	32,0
LD 12 CYBER SL 110 CARVE ABS	44,0	40,0	42,0
LD 12 LD 12 WIDE BRAKE SL 100 SL 100 WIDE BRAKE SL 75 SL 70 AC	34,0	30,0	32,0
SP 130 ABS DEMO AERO SP 120 ABS WIDE BRAKE SP 100 ABS	44,5	40,5	—
SP 90 ABS SP 75 ABS	44,5	40,5	42,5
SR 100	—	31,5	—
SR 70	35,0	31,0	33,0
SL 45 SP 45 SR 45	—	—	—

—..... non compatible

## MOUNTING OF JUNIOR BINDINGS ON HEAD CARVE PLATES OR ON SKIS $\geq 140$ CM

For mounting the SL 75, MOJO 7.5, SL 70 AC and SL 75 ABS on HEAD CARVE Plates or on skis, 140 cm and longer, replace the premounted screws by 8 mm penetration depth screws. Only with these screws can we guarantee the right pullout strength (see table).



## 5. RAILFLEX SYSTEM II & RAILFLEX LITE

### RAILFLEX SYSTEM II - SPEEDRAIL

All HEAD/TYROLIA RAILFLEX SYSTEM II bindings can be used with skis measuring 140 cm and longer. Beginning in season 2007/08, all RAILFLEX System II bindings will be equipped with the new SPEEDRAIL band. Now it is possible to adjust the binding to the boot sole length directly on the ski, and do so without any screws. You can use this system also for DEMO purposes, but for on snow demos we still recommend the RAILFLEX DEMO bindings.

The SPEEDRAIL band is for boot sole lengths from 260-360 mm. For longer boot soles we still offer the longer RAILFLEX band as a spare part. This band is for boot soles from 290-390 mm, but doesn't offer the feature BOOT CENTER ADJUSTMENT (+15 / 0 / -15).

### RAILFLEX LITE SYSTEM

HEAD/TYROLIA offers two versions of the RAILFLEX LITE band. The appropriate band is delivered with the integrated HEAD ski. The RAILFLEX LITE BASE always comes with the long version.

	Band version	
	short	long
Spare part number	162757	162758
Ski length (Recommendation)	under 127cm	127cm and longer
Boot sole length	220-300 mm	240-325 mm
Mondo size	17.0-25.5	19.5-27.5

**NOTE:** For skis under 140 cm we are offering the RAILFLEX LITE BASE with short screws (penetration depth: 6 mm) and for skis of 140 cm and longer with long screws (penetration depth: 8 mm). Choose the right screw length according to the ski length (see [screw chart on page 61-63](#)).

**NOTE:** HEAD/TYROLIA offers different types of brakes for RAILFLEX bindings. Refer to the brake overview on [page 56-59](#) for brake and binding compatibility.

### 5.1 MOUNTING - BASES

The mounting of both RAILFLEX Base and RAILFLEX LITE Base is similar to the plates. Just select the right mounting mark and the appropriate bushings - black for RAILFLEX LITE and white for RAILFLEX. For more details see page ??.

### RAILFLEX BASE

Place the front section of the RAILFLEX Base over the holes and tighten the screws. Then place the rear section over the holes and tighten the screws as well (pict 28).



Finally cover the RAILFLEX BASE with the appropriate covers (pict 29).



### RAILFLEX LITE BASE

Place the front section of the RAILFLEX LITE Base over the holes and tighten the screws. Repeat the same procedure with the rear section of the base (pict 30).



## 6. MOUNTING - BINDINGS

### RAILFLEX SYSTEM II - SPEEDRAIL

Make sure that the boot is satisfying the international standards and has no functional damage. Take the binding parts out of the box and follow the steps on the instruction leaflet. Determine the boot sole length with the HEAD/TYROLIA rental calliper (art.nr. 162 617).



### FIRST INSTALLATION

Adjust the band to the closest sole mark and lock it by closing the lever in the centre position. Then you can also hook the band into the heel and into the toe - there is only one position possible.



Now hook the brake into the heel housing.

pict 33



Then you can slide the binding on the RAILFLEX base from the rear until the mark on the band cover is aligned with the selected mark on the center piece (+15/0/-15). Make sure that all components of the binding are engaged with the base. Then fix the binding position by tightening the screw in the center piece.

pict 34



pict 35



Finally put a boot into the binding and check the forward pressure. If you followed each step correctly, the indicator should rest in the marked area.

pict 36



OK

If you have too much or not enough forward pressure, open the lever in the centre with a slotted screwdriver and check the settings. If necessary, adjust slightly at the heel and the toe. Then close the lever and check the forward pressure again. Now it should be okay.

Once the binding is mounted onto a ski it is very easy to adjust it to another boot sole length. Just open the lever in the center and slide toe and heel to the desired centimetre mark.

pict 37



Finally close the lever and check forward pressure as described before.

## RAILFLEX SYSTEM II - DEMO

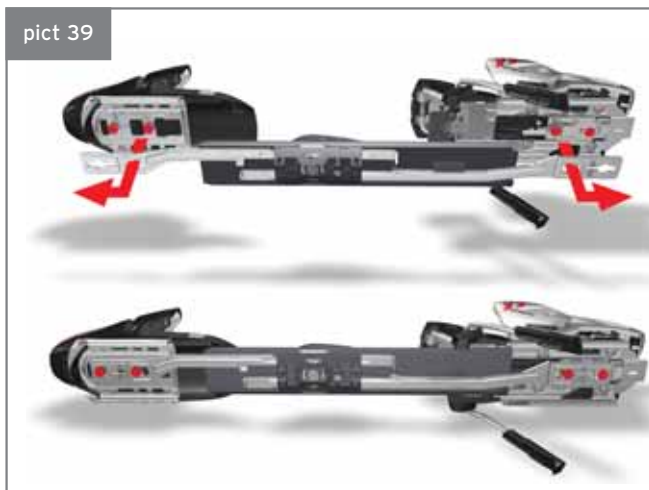
Make sure that the boot is satisfying the international standards and has no functional damage. Hook the brake into the heel housing as shown in pict 38.

pict 38



Connect toe and heel with the Railflex Demo Band by snapping the metal pins of the toe in the band (pict 39).

pict 39



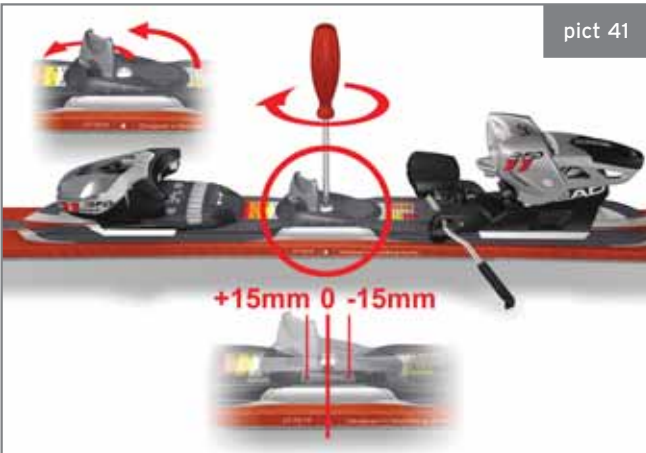


Slide the binding on the RAILFLEX base from the rear until the mark on the band cover is aligned with the selected mark on the center piece (+15/0/-15). Make sure that all components of the binding are engaged with the base. Then fix the binding position by tightening the screw in the center piece.

pict 40



pict 41



Determine the boot sole length with the HEAD/TYROLIA Rental calliper (art.nr. 162617) (pic 42).

pict 42



Lift the locking lever of the binding, located in the center piece and turn it 45° counterclockwise to adjust the sole length. Slide toe and heel to the position visible on the sticker on the band. Lock the system by turning the locking lever to its original position (pict 43).

pict 43



Finally put a boot into the binding and check the forward pressure. If you followed each step correctly, the indicator should rest in the marked area.

pict 44



If you have too much or not enough forward pressure, check the settings. If necessary open the lever in the centre, adjust slightly at the heel and the toe. Then close the lever and check the forward pressure again. Now it should be okay.

pict 45



### RAILFLEX LITE SYSTEM

Make sure that the boot is satisfying the international standards and has no functional damage.

Take the binding parts out of the box and follow the steps on the instruction leaflet.

Determine the boot sole length with the HEAD/TYROLIA rental calliper (art.nr. 162617).

pict 46



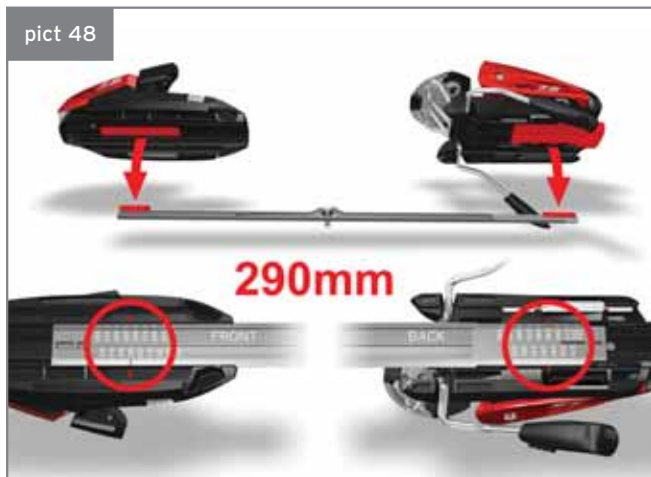
Hook the brake into the heel housing.

pict 47



Connect the toe and heel with the RAILFLEX LITE band at the closest sole length mark corresponding to the measured boot sole length (pict 48).

pict 48



Slide the binding on the RAILFLEX base from the rear until the mark on the band cover is aligned with the center mark. The feature BOOT CENTER ADJUSTMENT (+15/0/-15) is only available if a RAILFLEX LITE binding is used in combination with the RAILFLEX LITE base. At the integrated version this feature is not available. Make sure that all components of the binding are engaged with the base. Then fix the binding position by tightening the screw in the center piece (pict 49).

pict 49



Finally put a boot into the binding and check the **forward pressure**. If you followed each step correctly, the indicator should rest in the marked area.

pict 50



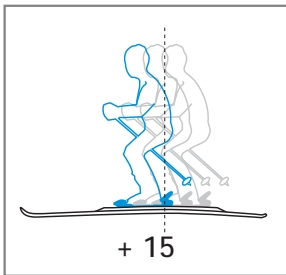
If you have too much or not enough forward pressure, open the adjustment lock at the heel with a slotted screwdriver. The adjustment range is  $\pm 4$  mm. Then close the lock and check the forward pressure again. Now it should be okay.

pict 51



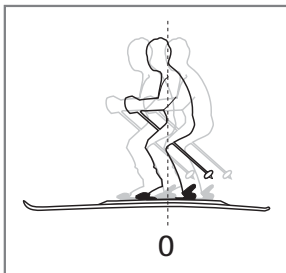
## 7. BOOT CENTER ADJUSTMENT

Depending on the position selected the skiing behavior of the system is different (see below).



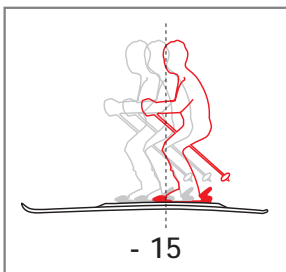
### 1. Moderate Speed + 15mm

The center of the body is shifted to the front. The ski reacts earlier and can be controlled easily. Good for skiers preferring moderate speeds.



### 2. All-around 0 mm

Neutral adjustment for optimal all around-performance. For every skier!



### 3. Experts - 15mm

By shifting the center of the body backwards, the ski is more stable. Better speed at the end of the run. For experts and terrain skiers.



pict 53

Check the elasticity and retention of the toe by pushing the boot inward and outward. The binding must recenter the boot easily and quickly from a 15 mm lateral displacement. (RFL 7.5, RFL 4.5 - 10 mm).

## 9. FINAL CHECK

- Is the proper mounting point selected?
- Functional brake test passed?
- Are all screws fastened tightly?
- Is the forward pressure properly adjusted?
- Are the release values of toe and heel properly determined and set?
- Is the Instruction for use booklet ready to be handed over to the customer?

## 8. ADJUSTMENT OF THE RELEASE VALUES

The release values at toe and heel should be determined by height and body weight (ISO/ASTM) method. Set the binding accordingly with the adjustment screws. We recommend the use of a calibrated testing device and that you keep a written record of whether the system passes or fails (requirement in the US).

**NOTE:** Release/ Retention settings above a release moment of 100 NM at the toe and 400 NM at the heel are higher than the international standards recommend and are used solely at the skier's own risk!

## 9. FUNCTION CHECK

Check the function of the heel. Make sure that the boot does not catch on the heel during entry and exit. Check the brake function by pressing down the brake treadle (1) by hand. The brake arms (2) must open to the braking position when the brake treadle is released (see pict 52 and 53).



pict 52



## DRILL TEMPLATE RACEPLATE RDX



### 1. COMPATIBILITY

Presently the drill template 92 W is valid for:

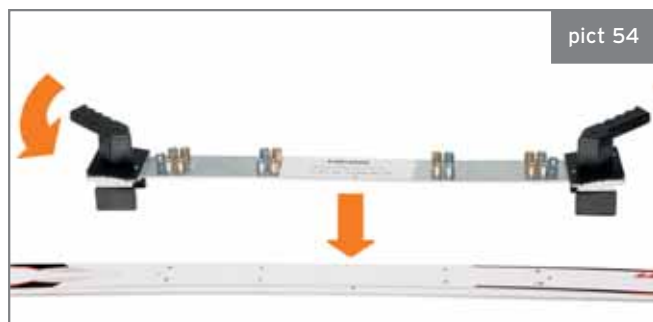
**HEAD BINDINGS:**  
RACEPLATE RDX

**TYROLIA BINDINGS:**  
RACEPLATE RDX

Drill template RACEPLATE RDX is for mounting of RACEPLATE RDX. It can be used for ski widths from 59 to 108 mm. For other skis use the template adapter set (art. nr. 162 569). With this adapter set skis from 45 to 132 mm can be mounted.

### 2. POSITIONING THE DRILL TEMPLATE

Open the clamping jaws (2) by rotating the clamping handles (1) and then place the template on the ski. Align the boot midsole indicator (3) with the midsole mounting mark on the ski. Be sure the template is evenly seated against the ski's top surface. Release clamping handles.



**NOTE:** Keep in mind that some ski manufacturers do not use the center of boot sole location method. Always follow the ski manufacturer's instructions.

### 3. DRILLING THE HOLES

If not otherwise specified by the ski manufacturer use a 4.1 Ø x 9.0 mm drill bit for skis 140 cm and longer.

**DRILL THROUGH THE APPROPRIATE BUSHINGS:**

Boot sole length	Color of indicator
260 - 320 mm	gold
290 - 350 mm	silver

After drilling place a drop of TYROLIA glue into the holes. It lubricates the screws and seals the holes (pict 55).



### 4. MOUNTING - BASES

Place a washer on the outer outside holes and drive the screws (4x).



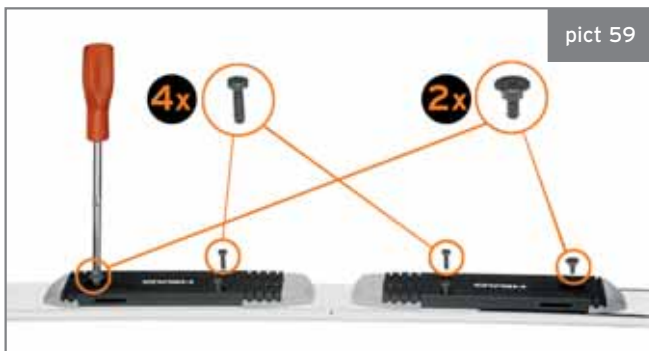
Place a washer also on the outer center hole.



Then you can place the front and the rear part over the screws and push it in the appropriate position. Take care that the washer stays in its position.



To fix the plate, just tighten the screws.

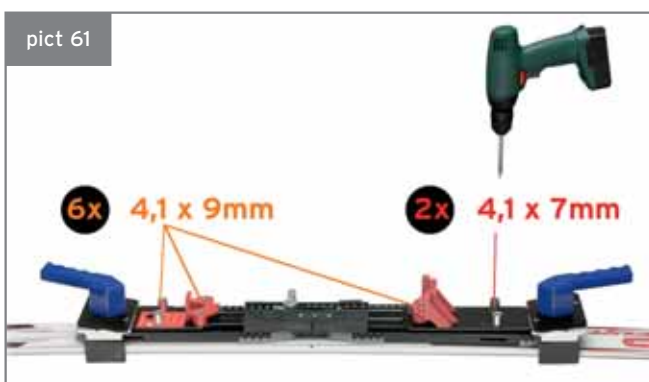


#### MOUNTING - BINDING:

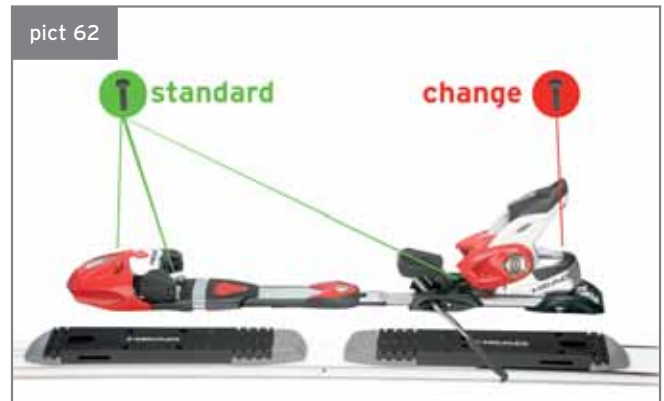
Presently the RACEPLATE RDX is designed for FREEFLEX PRO bindings. We can guarantee the right pullout strength only if for this models. Mount the binding in accordance with the procedures in this manual with following exceptions.



Use a 4.1 Ø x 9.0 mm drill bit for the toe holes and the front heel holes. For the rear heel holes use a 4.1 Ø x 7.0 mm drill bit.



Change the standard rear heel screws according to the mounted binding!!! The screws come in a separate box with the RACEPLATE RDX!



Beside those two points the mounting is similar as described in this manual!







# RENTAL BINDINGS



## TYROLIA RENTAL LINE 08/09

Model	Z-DIN	kg	lbs	AFD	Toe stand height	Toe system	Toe type	Heel stand height	Heel type	
SP 130 ABS DEMO AERO	4-13	from 42	from 92	ABS	26	RACE DIAGONAL	AERO OT	31	RENT OT	
SP 120 ABS	4-12	from 42	from 92	ABS	26	FULL DIAGONAL	LD OT	31	RENT OT	
SP 120 ABS WIDE BRAKE	4-12	from 42	from 92	ABS	26	FULL DIAGONAL	LD OT	31	RENT OT	
SP 100 ABS	2.5-10	from 26	from 57	ABS	26	FULL DIAGONAL	SL OT	31	RENT OT	
SP 100 ABS HEAD	2.5-10	from 26	from 57	ABS	26	FULL DIAGONAL	SL OT	31	RENT OT	
SP 90 ABS	2.5-9	from 26	from 57	ABS	26	FULL DIAGONAL	SL LITE OT	31	RENT OT	
SP 75 ABS	1.5-7.5	18-84	39-187	ABS	26	FULL DIAGONAL	SL LITE OT	31	RENT OT	
SP 45	0.75-4.5	10-48	22-105	TEFLON	24	FULL DIAGONAL	SL KID OT	25	SL KID OT	
SR 100	2.5-10	from 26	from 57	TEFLON	15.5	FULL DIAGONAL	SL	22	RENT OT	
SR 100 FAT	2.5-10	from 26	from 57	TEFLON	15.5	FULL DIAGONAL	SL	22	RENT OT	
SR 45	0.75-4.5	10-48	22-105	TEFLON	13.5	FULL DIAGONAL	SL KID	15	SL KID OT	
BYS 100	2.5-10	from 26	from 67	ABS	17.5	FULL DIAGONAL	SL	21	CONTROL	
B <sup>2</sup> YS 45	0.75-4.5	10-48	22-105	TEFLON	13.5	FULL DIAGONAL	SL KID	15	SL KID	

# DATASHEET

	Brake type	Ramp angle (mm)	Length adjustment range (mm)	Single Code	Mondo-point	Boot sole type	Boot sole length (mm)	Drill template	Drill template adjustment	Weight set
	PB LD 78	5	Toe: 64/Heel: 60	A-6	22-36	ADULT	263-391	SP 2003 W	yellow bushings	2760 g
	PB LD 78	5	Toe: 64/Heel: 60	A-6	22-36	ADULT	263-391	SP 2003 W	yellow bushings	2700 g
	PB LD WIDE 97	5	Toe: 64/Heel: 60	A-6	22-36	ADULT	263-391	SP 2003 W	yellow bushings	2700 g
	PB LD 78	5	Toe: 64/Heel: 60	A-6	22-36	ADULT	263-391	SP 2003 W	yellow bushings	2590 g
	PB LD FAT 115	5	Toe: 64/Heel: 60	A-6	22-36	ADULT	263-391	SP 2003 W	yellow bushings	2590 g
	PB LD 78	5	Toe: 40/Heel: 36	A-T	22-30	ADULT	263-343	SP 2003 W	white bushings	2490 g
	PB LD 78	5	Toe: 40/Heel: 36	A-T	22-30	ADULT	263-343	SP 2003 W	white bushings	2490 g
	SL KB SYMPRO 74	1	Toe: 40/Heel: 52	a-w/F	15-24	A / C	190-286	SP 2003 W	red bushings	1670 g
	PB LD 78	6.5	Heel: 84	A-V	22-31	ADULT	263-351	SR 2003 W	yellow arrow	2140 g
	PB LD FAT 115	6.5	Heel: 84	A-V	22-31	ADULT	263-351	SR 2003 W	yellow arrow	2140 g
	SL KB 74	1.5	Heel: 52	b-o	15-21	A / C	199-255	SR 2003 W	red arrow	1260 g
				* j-w/F	19-24	A / C	231-287	SR 2003 W	green arrow	
	PB LD 78	3.5	—	Black Yellow Silver	B = 23-26.5 Y = 27-30.5 S = 32-34	ADULT	B = 289 Y = 329 S = 365	92 W	—	1890 g
	SL KB 74	3.5	—	Blue Black Yellow Silver	B = 15-16.5 B = 17-18.5 Y = 19-20.5 S = 21-22.5	A / C	B = 201 B = 221 Y = 241 S = 261	94 W	—	1260 g

\* Spare Part: 162 538

## PARTS-REFERENCE CHART RENTAL



### TOE PIECE

- ① Adjustment screw
- ② Visual indicator
- ③ ABS
- ④ Color coded ABS (BYS)
- ⑤ AFD-Teflon
- ⑥ Toe cover
- ⑦ ONE TOUCH lever
- ⑧ Base Plate
- ⑨ Bar Code
- ⑩ Single Code scale

### HEEL PIECE

- ⑪ Brake treadle
- ⑫ Brake arms
- ⑬ Heel lever
- ⑭ Heel cover
- ⑮ Sole lug
- ⑯ Visual indicator
- ⑰ Heel housing
- ⑱ Adjustment screw
- ⑲ Single Code scale
- ⑳ ONE TOUCH lever



# DRILL TEMPLATE SP 2003 W



Art. Nr. 162 763

## 1. COMPATIBILITY

Presently the drill template SP 2003 W is valid for:

### TYROLIA BINDINGS:

SP 130 ABS DEMO AERO,  
SP 120 ABS,  
SP 120 ABS WIDE BRAKE,  
SP 100 ABS,  
SP 100 ABS HEAD,  
SP 90 ABS,  
SP 75 ABS,  
SP 45 ABS,  
CARVE PLATE 13 SLR,  
CARVE PLATE 9 SLR,  
JUNIOR PLATE 11,  
(Carve Plate only if mounted for Rental)

All TYROLIA adult bindings can be used with skis 140 cm and longer. The junior binding SP 75 ABS is delivered with screws for skis shorter than 140 cm. If it is mounted on skis longer than 140 cm or on TYROLIA CARVE plates, replace them with longer screws (see screw chart in this manual - page 50/51). SP 45 is only for skis under 140 cm. Drill template SP 2003 W can be used for ski widths from 59 to 108 mm. For other skis use the template adapter set (art. nr. 162 569). With this adapter set skis from 45 to 132 mm can be mounted.

**NOTE:** TYROLIA offers different types of brakes. Refer to the brake overview on page 56-59 for brake and binding compatibility.

The Description of the brakes always includes a number like 74, 78, 93 or 115. This number stands for the maximum ski width in the brake area and not in the ski center!!!

## 2. POSITIONING THE DRILL TEMPLATE

Open the clamping jaws (4) by rotating the clamping handles (5) and then place the template on the ski. Align the boot midsole indicator (3) for the appropriate binding model or Carve Plate with the midsole mounting mark on the ski. Be sure the template is evenly seated against the ski's top surface. Release the clamping handles (5) and attach the template firmly to the ski.

**NOTE:** Some ski manufactures do not use the center of boot sole location method. Always follow the ski manufacturer's instructions.

## 3. DRILLING THE HOLES

If not otherwise specified by the ski manufacturer, for all SYMPRO adult models use a 4,1 Ø x 9,0 mm drill bit for skis 140 cm and longer.

For SP 90 ABS, SP 75 ABS and SP 45 use a 4,1 Ø x 7,0 mm - drill bit for skis shorter than 140 cm. Drill through the appropriate bushings (see table).

Model	Color of Bushings
SP 130 ABS Demo Aero	Yellow
SP 120 ABS	Yellow
SP 100 ABS	Yellow
SP 90 ABS	White
SP 75 ABS	White
SP 45	Red
CARVE PLATES	Black



If required by the ski manufacturer, tap the hole. After drilling place a drop of TYROLIA glue into the holes. It lubricates the screws and seals the holes (pict 65).



## 4. MOUNTING

### MOUNTING THE TOE

Connect the plastic mid section (3) with the metal toe track (1). Place the assembled toe track (1) over the holes and drive the screws. Open the one touch latch (2) and slide the toe piece on from the front. Adjust the toe piece to the desired SINGLE CODE position and close the latch (2) (pict 66).

pict 66



Make sure that the lever snaps in place completely (it may be necessary to slide the toe forward and backwards slightly).

## MOUNTING THE HEEL

Place the heel unit with its brake, guide and track over the holes. Drive the screws in a X-pattern.

## 5. FORWARD PRESSURE CONTROL

Place a suitable reference boot in the binding using the SINGLE CODE for length adjustment and close it. Then check the indicator (see pict 67 located at the rear end of the heel piece. With boot inserted the pointer should rest in the middle of the scribed area.

pict 67



If necessary, readjust the boot sole length, check the SINGLE CODE.

**NOTE:** Always remove the boot from the binding before adjusting.

## 6. ADJUSTMENT

### FOR ALL MODELS

Find adjustment ranges and some handling hints in the "SYMPRENT / SYMPRO" section of the Technical Manual. Take at least one reference boot satisfying all standards and free of functional damages to perform test adjustments with the binding.

### USING THE SINGLE CODE

Adjust toe and heel to the corresponding alpha-setting (SINGLE CODE) of the ski boot (pict 68).



pict 68

## IF A BOOT OF UNKNOWN SIZE IS USED PROCEED AS FOLLOWS:

Place the boot in the toe cup. Slide the heel piece forward until it just touches the boot. Close the binding and check the forward pressure.

## ADJUSTING THE RELEASE VALUES

The release values at toe and heel should be determined by height and body weight (ISO/ASTM) method. Set the binding accordingly with the adjustment screws. We recommend the use of a calibrated testing device and that you keep a written record of whether the system passes or fails (requirement in the US).

**NOTE:** Release/ Retention settings above a release moment of 100 NM at the toe and 400 NM at the heel are higher than the international standards recommend and are used solely at the skier's own risk!

## 7. FUNCTION CHECK

Before the newly mounted ski equipment is rented perform a complete functional check.

**NOTE:** In some countries (USA) rental equipment has to pass a Pre-Season Test (See the Rental section of this manual). The boot should not catch on the sole hold-down of the heel as it opens and closes.

### BRAKE

Press the step-on plate (1) down by hand. The brake arms (2) must close and open automatically to the braking position when the step-on plate is released (pict 69).



## LATERAL ELASTICITY OF THE TOE

Press the boot laterally outward. The binding must re-center the boot easily and quickly from a 15mm lateral displacement. (Model SP 90 ABS, SP 75 ABS and SP 45 - 10 mm).

## 8. FINAL CHECK

- Has the proper mounting point been selected?
- Have all screws been fastened tightly?
- Has the forward pressure setting been controlled?
- Has at least one full adjustment been made using a representative reference boot including Release- / Retention setting and momentum test?
- Has the functional check been passed successfully?
- Functional brake test passed?

# DRILL TEMPLATE SR 2003 W



## 1. COMPATIBILITY

Presently the drill template SR 2003 W is valid for:

### TYROLIA BINDINGS:

SR 100,  
SR 45,  
CARVE PLATE 13 SLR,  
CARVE PLATE 9 SLR,  
JUNIOR PLATE 11,  
(Carve Plate only if mounted for Rental)

SR 100 can be used with skis 140cm and longer. SR 45 is only for skis under 140 cm.

Drill template SR 2003 W can be used for ski widths from 59 to 108 mm. For other skis use the template adapter set (art. nr. 162 569). With this adapter set skis from 45 to 132 mm can be mounted.

**NOTE:** TYROLIA offers different types of brakes. Refer to the brake overview on [page 56-59](#) for brake and binding compatibility.

The Description of the brakes always includes a number like 74, 78, 93 or 115. This number stands for the maximum ski width in the brake area and not in the ski center!!!

## 2. POSITIONING THE DRILL TEMPLATE

Open the clamping jaws (4) by rotating the clamping handles (5) and then place template on the ski. Align the boot mid-sole indicator (3) for the appropriate binding model or Carve Plate with the midsole mounting mark on the ski. Be sure the template is evenly seated against the ski's top surface. Release clamping handles (5) and attach the template firmly to the ski.

**NOTE:** Some ski manufactures do not use the center of boot sole location method. Always follow the ski manufacturer's instructions.

## 3. DRILLING THE HOLES

If not otherwise specified by the ski manufacturer, for all SYMRENT adult models use a 4,1 Ø x 9,0 mm drill bit for skis 140 cm and longer.

For ski shorter than 140 cm use a 4,1 Ø x 7,0 mm drill bit. Drill through the appropriate bushings (see table).

Model	Color of Indicator
SR 100	Yellow
SR 45 (Standard)	Red (b-o)
SR 45 (Spare Part)	Green (j-w/F)
CARVE PLATES	Black



If required by the ski manufacturer, tap the hole. After drilling place a drop of TYROLIA glue into the holes. It lubricates the screws and seals the holes (pict 70).



## 4. MOUNTING

### MOUNTING THE TOE

Place toe piece on the prepared holes and drive the screws.



### MOUNTING THE HEEL

Place the heel unit with its brake, guide and track over the holes. Drive the rear screws first, then the front screws.



## 5. FORWARD PRESSURE CONTROL

Place a suitable reference boot in the binding using the SINGLE CODE for length adjustment and latch it. Then check the indicator (see pict 72) located at the rear end of the heel piece. With boot inserted the pointer should rest in the middle of the scribed area.



**NOTE:** If the forward pressure is not correct, readjust the boot sole length and check the SINGLE CODE. Please make sure that no boot is placed in the binding during adjusting!

## 6. ADJUSTMENT

### FOR ALL MODELS

Find adjustment ranges and some handling hints in the "SYMRENT" section of the Technical Manual. Take at least one reference boot satisfying all standards and free of functional damages to perform test adjustments with the binding.

### USING THE SINGLE CODE

Adjust the heel to the corresponding alphasetting (SINGLE CODE) of the ski boot (pict 73).



### IF A BOOT OF UNKNOWN SIZE IS USED PROCEED AS FOLLOWS:

Place the boot in the toe cup. Slide the heel piece forward until it just touches the boot. Close the binding and check the forward pressure.

### ADJUSTING THE RELEASE VALUES

The release values at toe and heel should be determined by height and body weight (ISO/ASTM) method. Set the binding accordingly with the adjustment screws. We recommend the use of a calibrated testing device and that you keep a written record of whether the system passes or fails (requirement in the US).

**NOTE:** Release/ Retention settings above a release moment of 100 NM at the toe and 400 NM at the heel are higher than the international standards recommend and are used solely at the skier's own risk!

## 7. FUNCTION CHECK

Before newly mounted ski equipment is rented perform a complete functional check.

**NOTE:** In some countries (USA) rental equipment has to pass a Pre-Season Test (See the Rental section this manual). The boot should not catch on the sole hold-down of the heel as it opens and closes.

### BRAKE

Press the step-on plate (1) down by hand. The brake arms (2) must close and open automatically to the braking position when the step-on plate is released (pict 74).



### LATERAL ELASTICITY OF THE TOE

Press the boot laterally outward. The binding must re-center the boot easily and quickly from a 15mm lateral displacement. (Model SR 45 - 10 mm).

## 8. FINAL CHECK

- Has the proper mounting point been selected?
- Have all screws been fastened tightly?
- Has the forward pressure setting been controlled?
- Has at least one full adjustment been made using a representative reference boot including Release- / Retention setting and momentum test?
- Has the functional check been passed successfully?
- Functional brake test passed?

# SYMPRO-SYMRENT-SYSTEM 07/08

Performance, for a rental binding, is not only what happens on the hill. A key measure of a product's quality is the ease with which a system can be adjusted and maintained throughout the course of many seasons.

## THE TYROLIA'S MECHANIC-FRIENDLY RENTAL DESIGN FEATURES:

- Easy mounting: This means fewer mistakes and reduced set-up time.
- Easy pre-season testing, low drop-out rate.  
The automatic sole lug design and the precise centering of the toe pincer system mean: fewer correction factors will be needed and less time spent testing.
- The SINGLE CODE system gives you a super fast option for binding-to-boot adjustment: set the heel length using the special sole length scale. Forward pressure will be right on, first time, every time.
- All models have automatic lug height adjustment which accommodate standard differences in boot sole-height.
- Easy, hand-levered "ONE TOUCH"- set up. One tool adjustment, easy to turn adjustment screw, "easy-in" boot feature.
- Almost maintenance-free, easy to change the AFD, clean and lubricate the heel track.

TYROLIA made the commitment to offer a comprehensive product and service program.

## THE TYROLIA-RENTAL BINDINGS

No single rental binding can ever fulfill all the needs of all types of shops. We therefore offer the following line up of rental/demo models.

### SYMPRO:

SP 130 ABS DEMO AERO,  
SP 120 ABS,  
SP 100 ABS

## THE BINDINGS THAT HELP YOUR HIGH PERFORMANCE SKI SET-UP:

- Hand lever-adjusted heel (60 mm) and toe (64 mm).
- 7-toe positions.
- DIN-ranges from 2.5 up to 13 that accommodate even high level skiers.
- Short, lightweight heel track, despite wide adjustment range.
- SINGLE CODE: "A-6" for ski boots from 263-391 mm sole length.
- Replaceable brake
- Diagonal toe.
- Well-known brand that provides confidence for the skier.
- Optimal for Carving skis, minimized deviation between ski and boot mounting point.



### SP 90 ABS, SP 75 ABS

- High performing models for adult boot sole dimensions.
- "ONE TOUCH" hand lever adjustment for toe (40 mm) and heel (36 mm).
- SINGLE CODE: "A-T" for ski boots from 263-343 mm sole length.
- DIN settings from 1.5-7.5 or rather 2.5-9.0 cover all requirements
- Replaceable brake
- Diagonal toe

### SP 45

A child and junior model, super convenient, "parent-free" operation.

- Automatic toe and heel pieces accept child and adult boot sole dimensions, giving you full utilization of your child/junior ski inventory.
- SINGLE CODE "a-w/F" for ski boots from 191-287 mm sole length.
- „ONE TOUCH" hand lever adjustment for toe and heel.
- Replaceable brake.
- Diagonal toe.
- For ski lengths shorter than 140 cm.
- DIN range 0.75 up to 4.5.

### SYMRENT:

#### SR 100

A technically proven workhorse for the discerning skier who rents.

- Retail cosmetics enhance the value of the binding to the skier.
- DIN range of 2.5 up to 10.
- Diagonal toe.
- Large 84 mm heel adjustment range.
- SINGLE CODE "A-V".
- Automatic toe and heel height adjustment.
- "ONE TOUCH"- Hand lever adjustment for the heel.
- POWER BRAKE - replaceable

#### SR 45

A child and junior model, super convenient, "parent-free" operation.

- Automatic toe and heel pieces accept child and adult boot sole dimensions, giving you full utilization of your child/junior ski inventory.
- SINGLE CODE "b-o" (199-255 mm) standard, or "j-w/F" (231-287 mm) with spare part: 162 538).
- "ONE TOUCH"- Hand lever adjustment of the heel.
- Replaceable brake.
- Easy to open, easy to close.
- For ski lengths shorter than 140 cm.
- DIN range 0.75 up to 4.5.



## BYS SYSTEM 08/09



### BYS SYSTEM

**Features:** SnakeSkin Top Sheet  
Laminated Wood Core  
Heavy-duty Torsion Box  
Rental Profile  
UHM C Rental Base  
Rental Edges  
Tip Protector  
Graphics colored by length  
Mounted BYS System Binding

**Lengths:** S/M/L/XL

**Sidecut:** 117/69/106 @ L

**Radius:** r = 10.0 @ L

**Art. no.:** 312808 BYS System black  
312818 BYS System yellow  
312828 BYS System silver

### BINDINGS BYS 100

**Features:** Fitted and ready to go  
Non-adjustable length  
No rental track  
Each pair is 1 kg (2.2 pounds) lighter than similar traditional bindings  
Color coded ABS - Anti Blocking System

**Setting:** Each skier has only 3 possible DIN settings depending on the color coding. The value of the binding setting does not need to be changed if a boot is used with a different size within the same color code

**Sizes:** DIN 2.5 - 10

**Art. no.:** 312808 BYS System black  
312818 BYS System yellow  
312828 BYS System silver





## EZON 2 BYS HP

- Level/Last:** Intermediate/W106
- Shell:** PU/SL
- Liner:** Rental, Charcoal footbed, 28 mm Velcro Strap, prepared for heating system
- Buckles:** 4 plastic buckles, Flip Up Buckle Design, 1 Supermacro Ratchet
- Features:** 3 sole lengths, DIN interface for all rental bindings, Foot is centered on the boot, Center of foot is correct for every size
- Color Code:** Black  
**Sizes:** 235-245-255-265  
**Sole Length:** 289 mm
- Color Code:** Yellow  
**Sizes:** 275-285-295-305  
**Sole Length:** 329 mm
- Color Code:** Silver  
**Sizes:** 310-320-330-340  
**Sole Length:** 365 mm
- Art. No.:** 607730

## BYS

- Level/Last:** Beginner/W106
- Shell:** PU/SL
- Liner:** Rental, Charcoal footbed, prepared for heating system
- Buckles:** 4 plastic buckles, 1 Supermacro Ratchet
- Features:** 3 sole lengths, DIN interface for all rental bindings, Foot is centered on the boot, Center of foot is correct for every size
- Color Code:** Black  
**Sizes:** 235-245-255-265  
**Sole Length:** 289 mm
- Color Code:** Yellow  
**Sizes:** 275-285-295-305  
**Sole Length:** 329 mm
- Color Code:** Silver  
**Sizes:** 310-320-330-340  
**Sole Length:** 365 mm
- Art. No.:** 605915



## B<sup>2</sup>YS JUNIOR SYSTEM 08/09



### JUNIOR B<sup>2</sup>YS SYSTEM

**Features:** SnakeSkin Top Sheet  
X-Frame Construction  
UHM C Rental Base  
Mounted B<sup>2</sup>YS Junior System

**System Blue:** Binding blue  
**Lengths:** 67/77/87  
**Sidecut:** 91/65/84 @ 87  
**Radius:** r = 5.3 @ 87

**System Black:** Binding black  
**Lengths:** 77/87/97  
**Sidecut:** 91/65/84 @ 87  
**Radius:** r = 5.3 @ 87

**System Yellow:** Binding yellow  
**Lengths:** 87/97/107  
**Sidecut:** 91/65/84 @ 87  
**Radius:** r = 5.3 @ 87

**System Silver:** Binding silver  
**Lengths:** 107  
**Sidecut:** 93/65/87 @ 107  
**Radius:** r = 8.2 @ 107

**Art. no.:** 312858 BYS System blue  
312868 BYS System black  
312878 BYS System yellow  
312888 BYS System silver

### BINDINGS B<sup>2</sup>YS

**Features:** Fitted and ready to go  
Non-adjustable length  
No rental track  
Each pair is 0.5 kg (more than a pound) lighter than similar traditional bindings  
Color coded barcode holder

**Setting:** Each skier has only 4 possible DIN settings depending on the color coding. The value of the binding setting does not need to be changed if a boot is used with a different size within the same color code

**Sizes:** DIN 0.75 - 4.5

**Art. no.:** 312808 BYS System black  
312818 BYS System yellow  
312828 BYS System silver





# SYMPRO-SYMRENT ON THE SHOP FLOOR

## PREPARING AND CHECKING RENTAL SYSTEMS

Customers usually don't treat rental equipment as gently and carefully as they would handle their private property. In order to keep your rental fleet as functional and appealing as possible, a systematic maintenance program is a must. The best results are obtained with an ongoing program that constantly checks boots, bindings and skis. To keep the equipment in good condition while minimizing liability we recommend the following program (this is a requirement in the U.S.). In order to produce a truly efficient rental inventory some pre-season setup is required.

## SINGLE CODING

This enables a quick binding to boot adjustment even during the rush hours of rental business.

TYROLIA offers self adhesive color stickers (art. nr.: 162 561) with the SINGLE CODE to be applied before season. You simply check the boot's SINGLE CODE and adjust the binding accordingly.

In order to gain the efficiencies of SR, all you need to do is follow our simple procedure.

1. Mount all bindings according to the TYROLIA SR procedures. Pick a mounted sample binding of each model.
2. Place a boot of each size in the binding and adjust forward pressure until correct.
3. Open the heel and remove boot.
4. Record the SINGLE CODE from the track on the side of the heel housing. (The boot must not be in the binding when you read the code.)
5. Check each code again before marking all boots of this size with their SINGLE CODE (pict 76)!

You can get SINGLE CODE stickers as a spare part.

„SINGLE CODE“ sticker set art. nr. 162 561

For this procedure the TYROLIA Rental Boot Indicator (art. nr.162 617) can be used.



**NOTE:** Beginning with line 2003/04 the TYROLIA SINGLE CODES differ 1 mm. To make sure that there is a clear relation to the sole length column in the release/ retention chart.

## RENTAL INSPECTION SUMMARY

Since it is impractical to perform a full inspection each time a system is rented, a routine of preseason and in season inspections has been developed to verify release indicator accuracy, confirm correct equipment function, and assure proper assembly and adjustment procedures by the rental shop staff.

Fully implemented, the procedures that follow provide rental shop customers a standard of care equivalent to that provided retail shop customers under current ISO and ASTM standards.

The program is based on standards:  
ISO 13993 and ASTM F1064.

## PRESEASON INSPECTION

Preseason inspections are performed on components of the release system: bindings and boots.

All rental bindings, new and used, are visually inspected, and then tested using specially selected Reference Boots. Bindings that fail go through a troubleshooting procedure to identify and correct the deviation or malfunction. If this procedure does not correct the problem, the binding is removed from inventory. All rental boots, new and used, are visually inspected for damage, wear, contamination, broken or missing parts, or inferior materials at contact points with the binding. In addition, one boot per "cell" is tested for boots that are new to the rental inventory.

A cell is all boots of the same make, model, age, and shell size. A random selection of 5% of all boots, previously accepted into inventory, is also tested. Tests are performed with a test device and a pair of specially selected reference bindings. If a boot fails, all boots from that cell are then tested. Boots that fail and cannot be repaired are removed from inventory.

## IN SEASON INSPECTION

In season inspections are performed on complete rental systems to ensure that the equipment is adjusted appropriately and continues to function correctly. Typically 5% of the rental inventory is tested during each two weeks sampling period. The random sample is equally divided between equipment that is available for rental and equipment that has just been rented. The equipment in the "as rented" category is from real skiers in the condition in which it is either dispatched or returned, while the "available for rental" equipment may be set up for fictitious skiers. Only single skis, not pairs, are tested, and testing at the toe is only required in one direction. A count is maintained of test results which exceed allowable limits. The magnitude and frequency of these deviations determines the frequency of future inspections. Shops which fail an inspection must sample daily until the source of the problem is found and corrected. Then, as inspection results improve, the frequency of sampling and inspection is relaxed.

## INSPECTION PROCEDURES

### IMPORTANT TERMS

#### CORRECTION FACTOR

The value that must be added or subtracted from the initial visual indicator setting to bring the result within the Inspection Tolerance (or Inspection Range).

#### DIRECTIONS OF RELEASE

Unless otherwise specified (see In season Inspection), the directions of release to be tested are forward lean and clockwise and counter clockwise in twist.

#### TEST DEVICE

A device which meets ISO standard 11110 or ASTM standard F1061 and has been checked and maintained in the manner specified by the device manufacturer.

#### TEST RESULT OR RELEASE TORQUE

The middle quantitative value of three tests made in the same direction.

## PRESEASON TEST

### REFERENCE BOOT SELECTION

The Reference Boot is a boot of a designated sole length which is otherwise typical of the boot inventory. Use the procedure below if the boot inventory includes several models and a representative boot can not easily be identified.

1. Select five single boots with sole lengths as specified in Table [A] for the binding type to be tested: adult, junior, child, BYS or B<sup>2</sup>YS.
2. Clean all five boots with a mild detergent and water.
3. Adjust a rental binding to the release indicator setting specified in Table [A] for the binding type.
4. Fit the binding to the boot and determine the Release Torque in all three directions of release (forward lean and both directions in twist-three releases in each direction).
5. Average the Release Torque for CW (clockwise) and CCW (counter clockwise) twist release.
6. Reject and replace any boot with a CW to CCW difference of more than 6 Nm for adult boots or 4 Nm when testing child boot types.
7. Rank the five twist results and select, as the Reference Boot for twist, the middle boot.
8. Rank the five forward lean results and select, as the Reference Boot for forward lean, the middle boot.

### PRESEASON BINDING INSPECTION

The procedure that follows is an integral part of pre-season maintenance. It is also a good way to determine if maintenance and which units have outlived their usefulness and must be removed from inventory.

1. Clean areas of the bindings that contact the boot and perform all preseason binding maintenance.

2. Visually or manually check:

- a.) AFD condition.
- b.) Brakes function.
- c.) Release indicator readability and travel.
- d.) Screw tightness.

3. Adjust each binding with the reference boot, then adjust the release value indicators to the specified value found in table [A].  
Due to the fixed length of BYS bindings there is an adapted table for BYS (table [B]).
4. Check that the heel track and toe track Single Code agree with the sole length Single Code of the reference boot.
5. With the Reference Boot in the binding, verify elastic travel of the toe piece by striking the boot toe with a mallet or dead hammer and checking that the toe piece returns the boot quickly and completely to center.
6. Verify elastic travel of the heel piece by lifting the boot while depressing the heel piece cocking lever and checking that the heel piece returns the boot quickly and completely to the latched position.
7. Manually release the binding 3 times in each direction.
8. Lubricate all boot/binding interfaces with a mild liquid detergent and water solution.
9. With the Ski Binding Test Device determine the Release Torque for each direction of release (forward lean and both directions in twist).
10. Record "PASS" in the bindings maintenance record if Test Results are within the Inspection Range provided in Table [A].
11. Set the ski aside if the Test result in any directions of release is outside the Inspection Range in Table [A].
12. Follow Troubleshooting Procedure on [page 69/70](#) for units which have been set aside and retest if changes in the unit's condition or adjustment are made.
13. Record "FAIL" in the binding's maintenance record if, after troubleshooting, test results in any direction of release are outside the In-Use Range. Replace the "failed" unit and retest before returning the ski to service.
14. If after troubleshooting, Test Results are outside the Inspection Range but within the In-Use Range, apply a Correction Factor to the unit and note the Correction Factor for that unit in the binding's maintenance record.
15. If many bindings fail, check the test device and re-inspect the Reference Boot. If necessary, select another boot and retest the bindings.

Skier Code	Binding Type	Sole length mm	Release Indicator Setting	Reference Torque Twist Nm	Reference Torque Forward Nm	Twist Inspection Range Nm	Forward Inspection Range Nm	Twist In-Use Range	Forward In-Use Range Nm
F	Children	270 mm	2.5	25 Nm	94 Nm	21–29 Nm	80–108 Nm	17.5–33 Nm	66–122Nm
J	Junior	306 mm	4.5	45 Nm	175 Nm	38–52 Nm	149–201 Nm	31–59 Nm	122–228 Nm
L	Adult	327 mm	6.0	60 Nm	239 Nm	51–69 Nm	203–275 Nm	42–78 Nm	167–311 Nm

Table [A] Preseason Binding Inspection

Skier Code	Binding Type	Sole length mm	Release Indicator Setting	Reference Torque Twist Nm	Reference Torque Forward Nm	Twist Inspection Range Nm	Forward Inspection Range Nm	Twist In-Use Range	Forward In-Use Range Nm
J	Black	289 mm	5.0	43 Nm	165 Nm	37–50 Nm	141–194 Nm	31–58 Nm	120–229Nm
L	Yellow	329 mm	6.0	58 Nm	229 Nm	50–67 Nm	194–271 Nm	43–78 Nm	165–320 Nm
M	Silver	365 mm	6.0	67 Nm	271 Nm	58–78 Nm	229–320 Nm	50–91 Nm	194–380 Nm

Table [B] BYS-Preseason Binding Inspection



## PRESEASON BOOT PREPARATION

The procedure that follows is an integral part of preseason maintenance.

1. Clean all boots with a mild detergent and water, and repair or replace damaged or missing parts.
2. Visually check:
  - a.) Conformance with ISO and other applicable standards- ISO 5355. If the boot contacts the binding, brake, or AFD in areas other than the designated contact points, it may be incompatible with the binding.
  - b.) Boot material. If the sole at the contact points with the binding or AFD can be scratched with a finger nail, the boot may be of inferior quality and incompatible with the binding.
  - c.) Boot sole condition. If the boot sole is damaged, worn, or contaminated at contact points with the binding or AFD in a manner which can not be corrected, the boot may be incompatible with the binding, "Verify boot sole dimensions" [on page 43](#).
  - d.) Brake compatibility with sole.
  - e.) Rubber and/or metal sole protectors. If such materials contact the binding or AFD the boot may be incompatible with the binding.
  - f.) Mold flashings. Flashing which can be seen or felt at contact points with the binding, brake, or AFD must be carefully removed.
3. Remove from inventory all boots that have failed the visual check.

## PRESEASON BOOT SAMPLING

Although sampling eliminates the need to test every boot before the season starts, the sample chosen must be representative of the inventory.

1. For boots that are new to inventory or have never been inspected, take a single boot from each cell (a cell is all boots of the same make, model, year, and shell size).
2. For used boots, take a 5% (but not less than 16 or more than 80) random sample of the entire inventory, see Table [B]. Make sure that there is at least one boot from each cell in the sample.

## PRESEASON BOOT INSPECTION

The procedure that follows helps to assure boot/ binding compatibility and boot interchange ability.

**NOTE:** when using Table [A], in the Boot Inspection procedures that follow, the Sole Length and release Indicator Setting columns should be ignored.

1. Randomly select a pair of bindings that have passed the preseason inspection from each binding type; adult, junior, child.
2. Lubricate all boot/binding contact points with a mild liquid detergent.
3. Without regard to whether the boot is new or used, sort the sample by sole type and length according to the 20 mm Sole Length Categories defined by the Release/Retention Adjustment Chart.
4. In each Sole Length Category rank the boots by sole length and select the middle boot.
5. In each Sole Length Category fit the appropriate reference bindings to this "typical" boot and adjust the two bindings to release as close as practical to the Reference Torque in Table [A]. Use the Reference Torque corresponding to Skier Code [L] for the Adult binding, [J] for Junior binding, and [E] for the Child binding.
6. Rinse the lubricant from one binding and mark it "clean". Mark the other "lubricated".

7. Test each boot in the Sole Length Category with the clean Reference Binding and then the lubricated Reference Binding in both twist and forward lean (only one direction in twist is required for the clean binding).
8. Set aside any boots for which the lubricated Test Result is more than 20% less than the clean Test Result in the same direction of release or the lubricated Test Result in any direction of release is outside of the Inspection Range provided in Table [A] for Skier Code used to set up the Reference Binding (L, J, or F).
9. Repeat the Visual check on all boots that have been set aside, correct any defects noted, and retest. Remove from inventory boots that fail the retest.
10. Check all other boots from the same cell (make, model, year, and shell size) as those that failed.

**NOTE:** On completion of the preseason inspection, clean the liquid detergent from equipment and lubricate the binding before returning it to service.

## IN SEASON SAMPLING AND INSPECTION

The In season Inspection is a test of complete systems and all the procedures used by the rental staff to assemble and adjust the system. The program uses random samples of rental inventory taken at routine intervals. Any sampling program that gives every unit of inventory the same chance as every other of being picked is valid.

## SAMPLE FREQUENCY

Random sampling is conducted throughout the entire season. Frequency is as follows:

1. After 7 days of operation.
2. If the sample passes the next sampling is taken after another 7 days operation.
3. If two consecutive samples pass, sampling frequency is increased to 14 days.
4. If a sample fails at any time, daily sampling is instituted until two consecutive samples pass, at which point weekly sampling resumes.

## SAMPLE SIZE

Sample size is 5% of inventory but not less than 16 nor more than 80 units as noted in Table [B]. Sample size is based on average daily output. If rental output drops below 50% of capacity over the sampling period, the sample size can be reduced proportionately.

## IN SEASON INSPECTION

1. Take a random sample of the rental inventory as determined by Table [B]. Take half the sample from inventory as it is either rented or returned and the remainder from inventory available for rental.
2. The returned samples are tested with the last customer's data, the other samples adjust to randomly selected skier data. Consider already applied Correction Factors.
3. Wipe the boot clean and cycle the boot/binding systems at least once in each direction.
4. Test sample units in Twist (one direction only) and Forward Lean.
5. Compare the Test Results with the Inspection Range for the appropriate Skier Code, see ISO 11088 Release/ Retention Adjustment Chart ([page 73](#)).
6. If the results are within the Inspection Range, one value above to one value below the reference value, the unit passes.

7. If the results are outside Inspection Range but within the In-Use Range, two values above to two values below the reference value, count the unit as a Class I Deviation.
8. If the results are outside the In-Use Range, count the unit as a Class II Deviation.
9. Check elastic travel and visually inspect the ski brake function, interface areas between boot and binding, including AFD, lug height adjustment (if appropriate), and forward pressure. Count any deficiencies as Class I Deviations.
10. If more than the maximum number of Class I Deviations given in Table [B] are found in the sample, or a single Class II Deviation is detected the sample fails and daily sampling must be conducted until the problem which led to the failed sample is found and corrected. See page 69/70 for Troubleshooting Procedures following a Failed In season Inspection.
11. Record the date the sample was tested, the number of units tested the number of Class I and Class II Deviations, whether the sample passed or failed and any actions taken. There is not need to record the identity of units tested or actual Test Results.

Min.											Max	
Inventory Size - pairs	50	100	200	300	400	500	600	700	800	900		
Inventory Size - units (half pairs)	100	200	400	600	800	1000	1200	1400	1600	1800		
Sample Size - units (half pairs)	16	16	20	30	40	50	60	70	80	80		
Max. Class 1 dev.	3	3	4	6	8	10	12	14	16	16		

Table [B]

## RENTAL / DEMO OF PARTIAL SYSTEMS

Many shops rent their customers partial ski equipment systems. Boots only if customers own their own skis with bindings, or skis and bindings if the customers own their own boots.

Additionally some shops utilize on-hill "demo days" as a means by which new products can be tested and evaluated by potential buyers.

In order to offer these skiers the same level of care as that afforded under the preceding procedures, the following guidelines should be used:

## RENTAL OF SKIS / BINDING ONLY. CUSTOMER - OWNED BOOTS

Although the retail test procedure may be applied in this case, it is often impractical to require actual system testing, especially in on-hill situations. In lieu of retail testing, the following procedures may be employed:

1. The ski/binding system to be rented or demoed should be tested "pre-season" using a boot which passes the TYROLIA Boot Visual Inspection.
2. The skier's boot should also pass the Visual Inspection. If any questions exist regarding the quality of the boot, retail-type testing should be used.
3. The binding should be adjusted and its indicators set per current TYROLIA recommendation.
4. A full record noting appropriate customer information and binding settings should be kept by the individual or organization responsible for the adjustment.
5. After seven days of use, the ski/binding system should be tested according to the In-Season Inspection Procedures previously described.

**NOTE:** for US and Canada:

Signatures of both the customer and HEAD/TYROLIA Certified Mechanic are required on all shop forms to qualify for the HEAD/TYROLIA Dealer Indemnity Program.

# BOOT-HANDLING AND TESTING

## VISUAL INSPECTION OF SKI BOOTS

In assembling a system for the skier, it is the responsibility of the shop to inspect and evaluate each equipment component. This inspection checklist should be followed before any mounting or adjusting is performed.

Ideally, they should be posted and used on the sales floor while the customer is still in the shop so that any deficiencies can be explained on the spot.

In retail, boots must pass all four points of this inspection before being accepted for use. In rental, this inspection is the first step in the "preseason boot test procedure".

### 1. CHECK TYPE, SIZE AND OVERALL CONDITIONS

- Is the performance level appropriate for the skier?
- Is the size correct (SINGLE CODE, boot sole length)?
- Is all hardware intact and in working order?
- Is the boot free of excessive or asymmetric wear?
- Is the boot free of dirt or sole warp?

### 2. CHECK MATERIAL

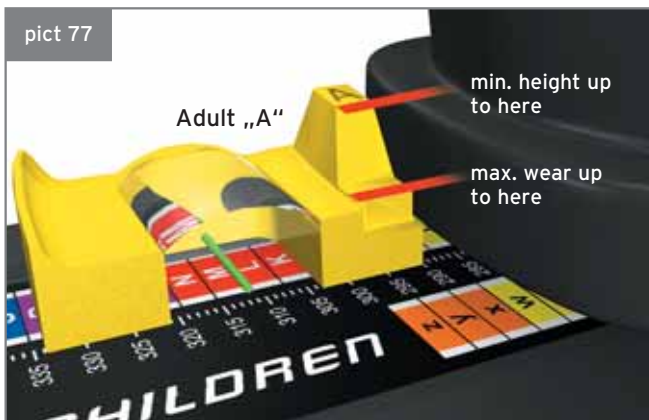
- Binding contact surfaces require a high quality hard, low-friction material. Check both lower shell and any separately attached inserts.
- If you can easily scratch the surface of the sole with your fingernail, that's an indication of extremely soft material that can degrade system performance.

### 3. CHECK CONDITION OF BINDING CONTACT SURFACES, TOE AND HEEL

- Any scratches or other roughness should not be deeper than 1mm.
- Check for any rocks, gum, or other foreign matter stuck to the sole.

### 4. VERY BOOT SOLE DIMENSIONS

- Ski boots must meet international standard specifications.
- Use the HEAD/TYROLIA Boot Rental Indicator to determine whether wear is excessive. The most critical dimension for HEAD/TYROLIA bindings is the front surface and height of the boot toe. Any boots worn past the indicated amounts should be repaired or not used with HEAD/TYROLIA bindings.



## THE HEAD/TYROLIA BOOT INDICATOR

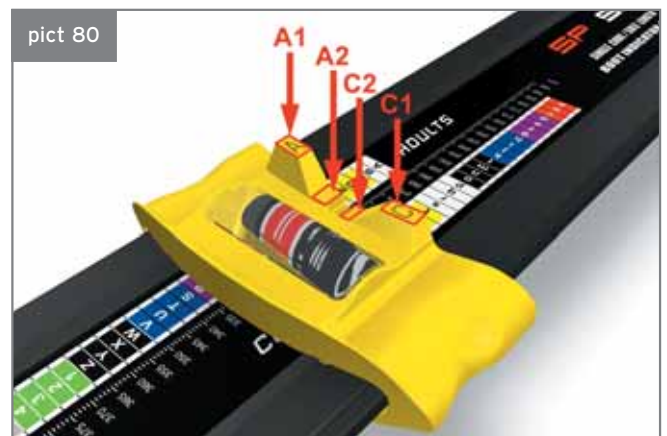
INDICATOR art. nr. 162 617

This TYROLIA rental boot device is a multifunction-tool:

1. Sole length: Put the boot in the device and slide the toe stop up to the boot toe. Read sole length in the window, used for TYROLIA rental bindings: the SINGLE CODE (see pict 79).



2. Boot sole wear: The standardized interfaces (contact boot sole with sole lugs) are important in the functioning of HEAD/TYROLIA bindings.
3. Boot toe bottom: Excessive wear is indicated if the lower edge of the front surface is at or above the bottom step on the appropriate child (C 2) or adult (A 2) post (see pict 80).
4. Boot toe ledge height: With the toe stop against the boot toe, the level of the toe should be at or above the top of the appropriate post, "Child" (C1) or "Adult" (A1) (see pict 80). Replace toe pads if worn.



5. Heel height and wear: Check this boot standard with the same procedure used for the toe. The heel posts (A 3) + (C 3) are located at the rear of the device (see pict 81).
6. The marks "A/C" help to select a "Child" boot from an "Adult" by indicating the standardized sole width.



**NOTE:**

Any boot which passes points 3, 4 and 5, as well as conforming to the Visual Inspection Checklist, may be accepted for use with TYROLIA bindings.

Boots which fail any point should be repaired or replaced.

These checks apply only to boots used with TYROLIA bindings. Consult other binding manufacturers for their used boot specifications.

## CLEAN VS. LUBRICATED SKI BOOT TEST

This test is designed to determine the influence of a given boot on the release characteristic of a binding. It should be performed on boots not meeting all the points of the HEAD/TYROLIA boot visual inspection criteria, or if measured release values fall outside the system "inspection" tolerance. It is seen as the "last chance" for a boot to qualify before getting eliminated from inventory.












1. Clean the boot(s) to be tested with soap and water. Allow to dry.
2. Select an appropriate HEAD/TYROLIA "reference" binding that has displayed release values within the inspection tolerance on the TYROLIA Adjustment Chart. Clean the binding's boot contact surfaces with soap and water and allow to dry.
3. Test the binding and boot in Twist and Forward Lean at a mid-scale indicator value (Only one direction of twist is required).
4. In a further test run lubricate all boot/binding contact areas with soapy water. Retest in Twist and Forward Lean.
5. Results of each lubricated test should be within 20% of the corresponding results when tested clean. Any boot which fails this test should not be used with a HEAD/TYROLIA binding.

# **BRAKES SPARE PARTS MAINTENANCE & SERVICE**










## HEAD BRAKE LINE 07/08

Ski width	Art. Nr.	Brake	Picture	Model 2008/09	Model 2007/08
up to 74 mm	162 399	SL Kid Brake 74		SL 45	SL 45
up to 84 mm	162 658	SL Kid Brake wide 84		SL 45	SL 45
up to 72 mm	162 764	SL Junior Brake 72-05		MOJO 7.5 ONE SL 90 SL 90 ABS JR RACE SL 75 SL 70 AC	SL 75 ABS SL 75 SL 70 AC
up to 90 mm	162 776	SL Junior Brake wide 90		MOJO 7.5 ONE SL 90 SL 90 ABS JR RACE SL 75 SL 70 AC	SL 75 ABS SL 75 SL 70 AC
up to 78 mm	162 642	SL Brake 78-04		SL 110 ABS SL 100	SL 110 ABS SL 100
up to 90 mm	162 755	SL Brake wide 90		SL 110 ABS SL 100	SL 110 ABS SL 100
up to 74 mm	162 753	SL Kid Brake Rail 74		RFL 4.5	RFL 4.5
up to 78 mm	162 754	SL Junior Brake Rail 78		RFL 7.5	RFL 9 RFL 7.5 LITE THANG 9 RFL
up to 78 mm	162 798	SL Brake Speedrail 78		RF 11 ONE RF 9	RF 11 SURE THANG 9 RF
up to 90 mm	162 804	SL Brake Speedrail wide 90		RF 11 ONE RF 9	RF 11 SURE THANG 9 RF
up to 80 mm	162 716	Power Brake LD Rail 80		RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO	RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO
up to 97 mm	162 767	Power Brake LD Rail wide 97		RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO	RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO
up to 115 mm	162 765	Power Brake LD Rail FAT 115		RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO	RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO
up to 78 mm	162 850	Power Brake Race PRO 16-78		FREEFLEX PRO 20 X RD FREEFLEX PRO 20 X RS FREEFLEX PRO 16 X RD	FREEFLEX PRO 20 X RD FREEFLEX PRO 20 X RS FREEFLEX PRO 16 X RD
up to 78 mm	162 851	Power Brake Race PRO 17-78		FREEFLEX PRO 18 X Sale FREEFLEX PRO 16 MOJO 18 X MOJO 1	FREEFLEX PRO 18 X Sale

Ski width	Art. Nr.	Brake	Picture	Model 2008/09	Model 2007/08
up to 97 mm	162 875	Power Brake Race PRO wide 97		FREEFLEX PRO 18 X Sale FREEFLEX PRO 16 MOJO 18 X MOJO 15	FREEFLEX PRO 18 X Sale
up to 115 mm	162 876	Power Brake Race PRO FAT 115		FREEFLEX PRO 18 X Sale FREEFLEX PRO 16 MOJO 18 X MOJO 15	FREEFLEX PRO 18 X Sale
up to 130 mm	162 877	Power Brake Race PRO X FAT 130		FREEFLEX PRO 18 X Sale FREEFLEX PRO 16 MOJO 18 X MOJO 15	FREEFLEX PRO 18 X Sale
up to 78 mm	162 578	Power Brake LD 78		FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11 MOJO 12 MOJO 11 LD 12 ONE LD 12	FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11 LD 12 CYBER LD 12 MOJO 20 X MOJO 15 MOJO 11 GOLD THANG 12 LD
up to 85 mm	162 805	Power Brake LD wide 85		FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11 MOJO 12 MOJO 11 LD 12 ONE LD 12	FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11 LD 12 CYBER LD 12 MOJO 20 X MOJO 15 MOJO 11 GOLD THANG 12 LD
up to 97 mm	162 874	Power Brake LD wide 97		FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11 MOJO 12 MOJO 11 LD 12 ONE LD 12	FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11 LD 12 CYBER LD 12 MOJO 20 X MOJO 15 MOJO 11 GOLD THANG 12 LD
up to 115 mm	162 603	Power Brake LD FAT 115		FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11 MOJO 12 MOJO 11 LD 12 ONE LD 12	FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11 LD 12 CYBER LD 12 MOJO 20 X MOJO 15 MOJO 11 GOLD THANG 12 LD
up to 130 mm	162 710	Power Brake LD X FAT 130		FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11 MOJO 12 MOJO 11 LD 12 ONE LD 12	FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11 LD 12 CYBER LD 12 MOJO 20 X MOJO 15 MOJO 11 GOLD THANG 12 LD
up to 78 mm	162 499	Dragon Brake 78		FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11 MOJO 12 MOJO 11 LD 12 ONE LD 12	FREEFLEX PLUS 17 FREEFLEX PLUS 14 FREEFLEX PLUS 11 LD 12 CYBER LD 12 MOJO 20 X MOJO 15 MOJO 11 GOLD THANG 12 LD

## TYROLIA BRAKE LINE 07/08

Ski width	Art. Nr.	Brake	Picture	Model 2008/09	Model 2007/08
up to 74 mm	162 399	SL Kid Brake 74		SL 45 SR 45 B²YS 45	SL 45 SR 45
up to 74 mm	162 559	SL Kid Brake Sympro 74		SP 45	SP 45
up to 84 mm	162 658	SL Kid Brake wide 84		SL 45 SP 45 SR 45	SL 45 SP 45 SR 45
up to 72 mm	162 764	SL Junior Brake 72-05		SL 70 AC	SL 75 SL 70 AC
up to 90 mm	162 776	SL Junior Brake wide 90		SL 70 AC	SL 75 SL 70 AC
up to 78 mm	162 642	SL Brake 78-04		PEAK 11 SL 110 CARVE ABS SL 100	SL 110 CARVE ABS SL 100
up to 90 mm	162 755	SL Brake wide 90		PEAK 11 SL 110 CARVE ABS SL 100	SL 110 CARVE ABS SL 100 SL 100 WIDE BRAKE
up to 74 mm	162 753	SL Kid Brake Rail 74		RFL 4.5	RFL 4.5
up to 78 mm	162 754	SL Junior Brake Rail 78		RFL 9	RFL 9 RFL 7.5
up to 78 mm	162 798	SL Brake Speedrail 78		RF 10	RF 10
up to 90 mm	162 804	SL Brake Speedrail wide 90		RF 10	RF 10
up to 80 mm	162 716	Power Brake LD Rail 80		RFD 12 RFD 11	RFD 11 RFD 11 DEMO
up to 97 mm	162 767	Power Brake LD Rail wide 97		RFD 12 RFD 11	RFD 11 RFD 11 DEMO
up to 115 mm	162 765	Power Brake LD Rail FAT 115		RFD 12 RFD 11	RFD 11 RFD 11 DEMO
up to 78 mm	162 851	Power Brake Race PRO 17-78		FREEFLEX PRO 18 X Sale FREEFLEX PRO 17 FREEFLEX PRO 15 PEAK 18 X PEAK 15	FREEFLEX PRO 18 X Sale
up to 97 mm	162 875	Power Brake Race PRO wide 97		FREEFLEX PRO 18 X Sale FREEFLEX PRO 17 FREEFLEX PRO 15 PEAK 18 X PEAK 15	FREEFLEX PRO 18 X Sale
up to 115 mm	162 876	Power Brake Race PRO FAT 115		FREEFLEX PRO 18 X Sale FREEFLEX PRO 17 FREEFLEX PRO 15 PEAK 18 X PEAK 15	FREEFLEX PRO 18 X Sale

Ski width	Art. Nr.	Brake	Picture	Model 2008/09	Model 2007/08
up to 130 mm	162 877	Power Brake Race PRO XFAT 130		FREEFLEX PRO 18 X Sale FREEFLEX PRO 17 FREEFLEX PRO 15 PEAK 18 X PEAK 15	FREEFLEX PRO 18 X Sale
up to 78 mm	162 578	Power Brake LD 78		FREEFLEX PRO 11 PEAK 12 LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 BYS 100	FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11 LD 12 CYBER LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 SR 70 BYS 100
up to 85 mm	162 805	Power Brake LD wide 85		FREEFLEX PRO 11 PEAK 12 LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 BYS 100	FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11 LD 12 CYBER LD 12 LD 12 WIDE BRAKE SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 SR 70 BYS 100
up to 97 mm	162 874	Power Brake LD wide 97		FREEFLEX PRO 11 PEAK 12 LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 BYS 100	FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11 LD 12 CYBER LD 12 LD 12 WIDE BRAKE SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 SR 70 BYS 100
up to 115 mm	162 603	Power Brake LD FAT 115		FREEFLEX PRO 11 PEAK 12 LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 BYS 100	FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11 LD 12 CYBER LD 12 LD 12 WIDE BRAKE SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 SR 70 BYS 100
up to 130 mm	162 710	Power Brake LD X FAT 130		FREEFLEX PRO 11 PEAK 12 LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 BYS 100	FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11 LD 12 CYBER, LD 12 LD 12 WIDE BRAKE SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100, SR 70 BYS 100
up to 78 mm	162 499	Dragon Brake 78		FREEFLEX PRO 11 PEAK 12 LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100 BYS 100	FREEFLEX PLUS 17 FREEFLEX PLUS 15 FREEFLEX PLUS 11 LD 12 CYBER, LD 12 SP 130 ABS DEMO AERO SP 120 ABS SP 100 ABS SP 90 ABS SP 75 ABS SR 100, SR 70 BYS 100

## HEAD SCREW OVERVIEW - 08/09

Model	Article	Ski ≥ 140 cm																Ski < 140 cm															
		160 016	160 018	160 030	160 031	162 319	162 376	162 383	162 401	162 402	162 416	162 417	162 418	162 419	162 426	162 458	162 460	162 488	162 524	162 526	162 639	162 717	162 780	162 781	162 782	162 783	162 784	162 787	162 788	162 789	162 852	162 910	
SPEEDPLATE PLUS 13 POWER PLATE 9 JUNIOR RACE PLATE 11		Ski ≥ 140 cm																Ski < 140 cm															
SL 45																																	
MOJO 7.5 (<140 cm) SL 75 (<140 cm) SL 70 AC (<140 cm)																																	
ONE SL 90 (< 140 cm) SL 90 ABS JR RACE (< 140 cm)																																	
MOJO 7.5 (≥140 cm) SL 100 SL 75 (≥140 cm) SL 70 AC (≥140 cm)																																	
RAILFLEX LITE BASE																																	
RFL 7.5 RFL 4.5																																	
RAILFLEX BASE II																																	
RFD 14 RFD 14 DEMO RFD 12 RFD 11 DEMO RF 11 ONE RF 9																																	
MOJO 12 MOJO 11 LD 12 SL 110 ABS ONE LD12 ONE SL 90 (≥140 cm) SL 90 ABS JR RACE (≥140 cm)																																	
FREEFLEX PRO 14 FREEFLEX PRO 12 FREEFLEX PRO 11																																	
FREEFLEX PRO 16																																	
FREEFLEX PRO 18 X MOJO 18 X MOJO 15																																	
		5.5 × 13.4	5.5 × 18.5	5.5 × 15.5	5.5 × 20.5	5.5 × 14.0	5.5 × 13.4	5.5 × 21.5	5.5 × 15.5	5.5 × 11.4	5.5 × 19.4	5.5 × 26.5	5.5 × 27.5	5.5 × 17.6	5.5 × 16.9	5.5 × 29.0	5.5 × 30.5	5.5 × 19.5	5.5 × 20.5	5.5 × 11.2	5.5 × 9.0	5.5 × 7.3	5.5 × 13.7	5.5 × 12.2	M6 × 12.8	5.5 × 12.1	5.5 × 14.4	M6 × 18.0	5.5 × 10.1	5.5 × 11.0	5.5 × 8.2	5.5 × 18.3	





TYROLIA SPARE PARTS RENTAL 08/09

Model Article		SYM PRO / SYM RENT									
		SP 130 ABS Demo Aero	SP 120 ABS SP 100 ABS	SP 90 ABS SP 75 ABS	SP 45	SR 100	SR 45	BYS 100	BYS 45		
Heel Guide		162 880	162 880	162 881	162 882	162 883	162 884 * 162 885 **				
Brake		162 578	162 578	162 578	162 559	162 578	162 399	162 578		162 399	
AFD					162 382	162 382	162 382			162 382	
ABS		162 634	162 634	162 634							
Toe Base Plate										Black: 162 870 Blue: 162 871 Yellow: 162 872 Silver: 162 873	
Toe Cover		162 660									

\* Heel Guide for „b-o“,  
\*\* Heel Guide for „j-w/f“.

Model Article		SYM PRO / SYM RENT									
		SP 130 ABS Demo Aero SP 120 ABS SP 100 ABS SP 90 ABS + Plate SP 75 ABS ≥ 140 cm + Plate	SP 90 ABS SP 75 ABS SP 100 ABS SP 45 + Plate SP 75 ABS ≥ 140 cm + Plate	SP 45	SR 100	SR 45 BYS 45	BYS 100	BYS 100 + Protection Plate			
160 018	5.5 x 18.5										
160 030	5.5 x 15.5										
160 031	5.5 x 20.5										
162 332	5.5 x 10.3										
162 376	5.5 x 13.4										
162 383	5.5 x 21.5										
162 401	5.5 x 15.5										
162 416	5.5 x 19.4										
162 417	5.5 x 26.5										
162 418	5.5 x 27.5										
162 423	5.5 x 21.4										
162 426	5.7 x 16.9										
162 429	5.5 x 24.5										
162 455	5.7 x 10.7										
162 458	5.5 x 29.0										
162 460	5.5 x 30.5										
162 461	5.5 x 32.5										
162 488	5.5 x 19.5										
162 639	5.5 x 9.0										
162 640	5.5 x 7.0										
162 700	5.5 x 24.9										

\* 4 Screws for Toe Track

# MAINTENANCE & SERVICE

## VISUAL INSPECTION OF BINDING

In assembling a system for the skier, it is the responsibility of the shop to inspect and evaluate each equipment component. This inspection checklist should be followed before any mounting or adjusting is performed. Ideally, they should be posted and used on the sales floor while the customer is still in the shop so that any deficiencies can be explained on the spot.

## CHECK SUITABILITY

- Is the binding model appropriate for the skier's ability?
- The binding must be compatible with the customer's boot/ski.
- The skier's release/retention setting should fall within the binding's adjustment range. Additionally, we recommend that the skier's setting not be closer than one number from the minimum or maximum settings on the binding in order to allow for future readjustment.
- Are the mounting screw lengths appropriate for the ski being used?

## CHECK THE CONDITION OF BINDING

- Are all parts present and in working order?
- Is the AFD surface smooth and secure?  
If not, it should be replaced.
- Are all mounting screws present or tight?
- Does the binding show signs of contamination?
- Has proper periodic lubrication been performed?  
Dried out or corroded bindings can function improperly.

## RETAIL TESTING

Completion and documentation of the following Retail Test Procedures is recommended for U.S.: required under the terms of the HEAD TYROLIA Dealer Indemnity Program.

These tests should be conducted any time work is performed on a ski/boot/binding system that may affect its release values. The procedure applies to all HEAD/TYROLIA alpine bindings, new as well as used.

1. Follow HEAD/TYROLIA procedures for inspection, mounting, adjustment, and maintenance as appropriate.
2. Confirm that toe and heel indicator values match those specified on the actual HEAD/TYROLIA Adjustment Chart.
3. Using a calibrated testing device, according to its instructions for use, "exercise" the binding by releasing it at least once in each direction (clock-wise and counter clock-wise at the toe, vertically at the heel). Then measure Twist and Forward Lean Torque Values. The middle quantitative value of 3 releases in each direction should be used as the test result.
4. Compare Twist and Forward Lean test results with the System Inspection Ranges on the actual HEAD/TYROLIA Adjustment Chart.
5. If any test results fall outside the System Inspection Range, consult HEAD/TYROLIA Troubleshooting Procedures which follow this section.
6. With testing complete, the HEAD/TYROLIA Certified Mechanic must complete and sign the workshop ticket. Be sure the Final Indicator Settings are correctly shown there.

The workshop ticket should simply reflect that the system has "passed all tests" or that "all manufacturer's procedures have been completed".

## REPLACING THE BRAKE

If the brake feels too hard or blocks during the hand test, if the brake arms are damaged, if the pedal is worn out or if a wider brake is necessary then the brake should be replaced immediately.

HEAD/TYROLIA offers for almost each binding, different brakes with wider (WIDE and FAT brakes) or longer (DRAGON brake) brake arms. Refer to the brake overview on page 56-59 for brake and binding compatibility.

To change the brake, all you have to do is to unscrew the old brake and replace it with the proper brake previously selected for the binding. In order to fix the brake, tighten the screws.

On most Railflex and Railflex Lite bindings the brake is hooked into the heel housing and not fixed with screws. Slide the heel off from the rails and replace the brake (pict 82).

pict 82



On Railflex Lite bindings the heel lever has to be opened and the brake pedal has to be in its top position to do this. (pict 83).

pict 83



## REPLACING THE HEEL GLIDE INSERTS

### FOR FREEFLEX PRO 18 (X) AND FREEFLEX PLUS 17

Unscrew the brake and take it off. Open the heel-locking lever and pull off the heel. Remove the inserts and mount the new ones (pict 84).

pict 84



## COLORS OF THE HEEL GLIDE INSERTS:

**FREEFLEX PRO 18 (X) ART. NR. 162 803 - GREY:**

**FREEFLEX PLUS 17 ART. NR. 162 510 - RED/YELLOW:**

Lubricate the new inserts with HEAD/TYROLIA grease, clean the heel track, and slide the heel back into the track. Lock the locking lever into the same position it was before, re-mount the brake and tighten the screws. For remounting the brake it is necessary that the cross-bolt of the brake is located under the hooks of the heel track. The brake has to be in the up-right-braking position (pict 85).

pict 85



## FOR MOST RAILFLEX (RF 11, RF 10, RF 9 W) AND ALL RAILFLEX LITE HEELS

Use 162 801 for RAILFLEX and 162 725 for RAILFLEX LITE. Remove the center screw and slide the binding off. Separate the heel from the Railflex band and turn the heel around. Remove the inserts and replace them with new ones (pict 86).

pict 86



## SPARE PART IDENTIFICATION

Most of the replaceable parts have an article number (000 000) imprinted on the bottom. Reference this number when you order spare parts to prevent confusion.

## LONG & SHORT SCREWS

Junior Bindings (DIN 7 or 7.5) are delivered with screws for ski lengths under 140 cm (penetration depth 6 mm). If they are mounted on longer skis, the screws have to be replaced with longer screws. (penetration depth 8 mm - see screw chart on page 50/51).

## TAPPING

HEAD/TYROLIA recommends tapping the drilled binding holes of any ski before mounting. Of course, there is a never-ending discussion among the mechanics if this is really necessary. But the pros are convincing:

- smooth and easy mounting

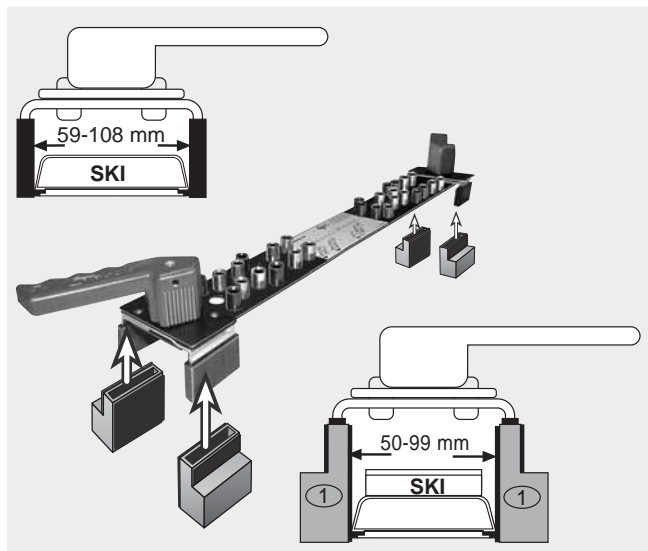
- reduced risk of stripping a screw
- same momentum adjustment of the screwdriver regardless of the ski material
- increased mounting quality/precision
- fewer pull outs.

## TEMPLATE „ADAPTER SET“

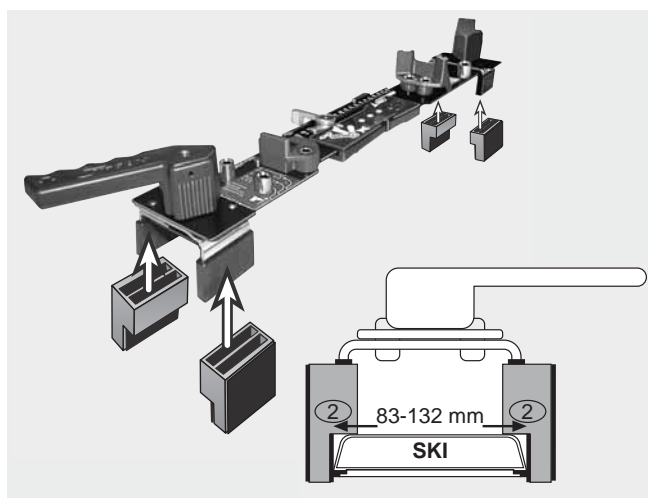
(art. nr. 162 569)

Compatible to all TYROLIA-Template.

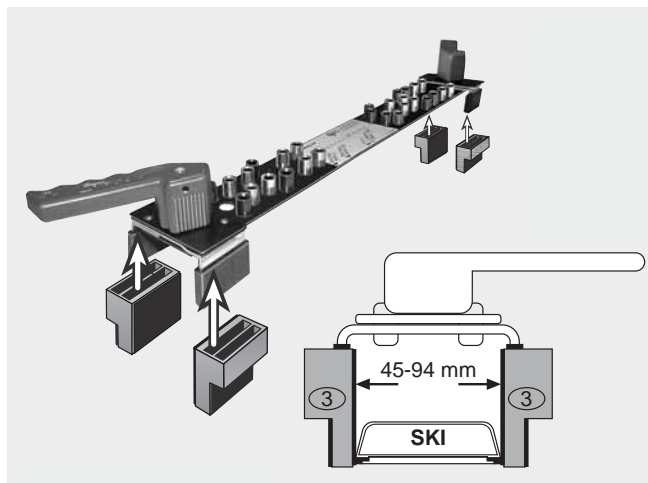
**WARNING:** Avoid dropping of the template. The clamping jaws could be damaged.



For skis with integrated our mounted plates.



For wide skis.



For children skis.

## RACING (X)-BINDINGS

Certain binding models are produced by HEAD/TYROLIA each year for the exclusive use of qualified competitors under the supervision of HEAD/TYROLIA Technical Specialists. These bindings are not covered by either the HEAD/TYROLIA Warranty or any Dealer Indemnity Program. We recommend you decline to service them, and warn against their use. DIN settings  $\geq 10$  do not satisfy the standard. Protection assertions are not applicable. Adjustments exceeding this range are made on one's own risk.

## CLEANING AND LUBRICATING

Ski bindings need regular maintenance. Proper function is no longer assured if this procedure is not followed periodically.

- Please use only HEAD/TYROLIA recommended lubrication:  
**TYROLIA grease - 160 052**  
**TYROLIA service - grease- spray - 162 779**  
Both have the same content, but the grease tube is for more precise lubrication and the spray is suited for spots which are hard to reach with the tube.
- Clean the surfaces with a dry rag or warm water and mild soap.
- Avoid any contact with aggressive solvents or degreasers!
- Don't use cleansers!
- High pressure cleaning is not recommended. It might have the negative side effect of washing away the lubricating films.

## LUBRICATING THE TOE PIECE

### AERO TOES

- Lubricate the adjustment screw and the guides of the main spring in the housing with the HEAD/TYROLIA service - grease spray.

### ALL SYMPRO/SP TOES

- In case of friction in the track system: Mark the toe position, open the SP hand lever and slide the toe piece off.
- Dry clean the track and the toe guide base gently using a plastic brush.
- Then lubricate the locking mechanism at both sides of the toe guide base.
- Lubricate also both sides of the track guide over the entire length.

pict 87



## LUBRICATING THE HEEL

### ALL RENTAL BINDINGS

- Mark heel position, open the hand lever and slide the heel off backwards. At the SR 100 the guide lock has to be opened with a screwdriver (pict 88) to get the binding off.



pict 88

## LUBRICATE

- the edge of the release cam under the heel lug as shown in pict 89.

pict 89



- both sides of the heel track (inside) over the entire length.
- the bearings of the opened hand lever on both sides (pict 90).

pict 90



- the guiding channel of the release setting adjustment screw.

After finishing the heel lubrication slide on the heel and lock it in its original position.

## SL 45 AND SR 45

### LUBRICATE

- the contact areas between housing and the release cam on the frontside and the backside as shown in pict 91 and 92.



pict 91



- both sides of the heel track (inside) over the entire length.
- the guiding channel of the release setting adjustment screw (pict 92).

pict 92



After finishing the heel lubrication slide on the heel and lock it in its original position.

## NOT TO BE LUBRICATED

The locking element and the corresponding holes in the heel track should be cleaned but not lubricated. This should prevent dirt accumulation in this area, which could interfere with the ease of handling.

## TEST YOUR DRILL TEMPLATE

A worn or damaged drill template could create a lot of trouble. Please check your templates periodically:

1. Position the fully extended drill template on a discarded ski.
2. Turn the clamping lever to open the clamping jaws of the mounting template.
3. Position the template properly on the ski so that the boot center marking is aligned with the mounting point described on the ski.
4. Let go of the clamping lever. The template clamps automatically.
5. Drill all the holes.
6. Remove the mounting template and clean the ski.
7. Measure the holes with a slide gauge.
8. The distance of the screw holes to the edge of the ski must be equal for each pair of related holes. The deviation must not be more than 1 mm.
9. The mounting template must be discarded if greater deviations occur!

## REPAIR OF DAMAGED MOUNTING HOLES OR BROKEN SCREWS

For repairing damaged holes, we suggest our special "Repair Set" – art. nr. 162 127.

It consists of a hollow drill bit and plastic inserts (pict 93).

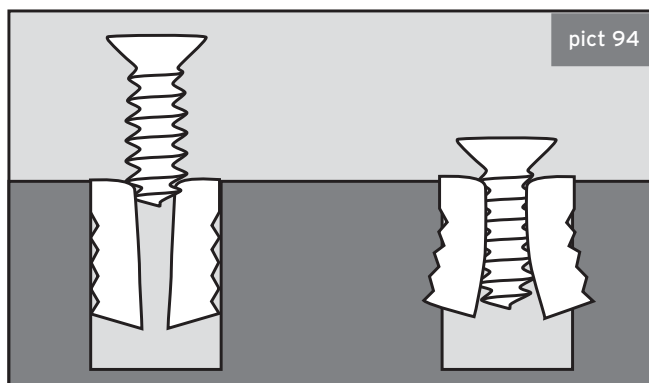
pict 93



You can extract broken screws too. Remove the binding from the ski.

Drill with the hollow drill through the bushing of the appropriate drill template and drive in the plastic insert. Mount the binding again (pict 94).

pict 94



## SEALING OLD MOUNTING HOLES


For sealing old holes you can use wood-plugs or plastic plugs (art. nr. 160 857), if not otherwise specified by the ski manufacturer.

# TROUBLESHOOTING (INCLUDING RENTAL)

Problem	Possible Reason	Solution
Difficulty when stepping in	Non-standard boot sole	Test and select a new boot
	Forward pressure too high	Readjust according to instructions
	Brake jams	Clean & lubricate; replace
Brake does not retract	Obstruction under the brake	Remove, clean, lubricate
	Brake arm bent	Replace brake
	Ski obstructs brake	Replace the standard brake with a wider brake, accordingly to the ski width.
Boot fails pre-season test	Low-quality boot material	Replace boot
	Excessive wear or contamination	Clean, repair or replace boot
	Reference binding worn	Recheck reference binding with a boot that has passed
	Boot does not meet ISO 5355	Replace boot
	Improper use of testing device	Check calibration and operating technique
Excessive in-season class 1 or class 2 deviations	Excessive boot sole wear or contamination	Clean, repair or replace boot
	Inadequate binding service/lubrication	Conduct recommended maintenance every 15–20 days of use
	Improper use of testing device	Check calibration and operating technique
	Indicator correction factor needed	Test system according to pre-season testing. Define indicator correction factor for subsequent adjustments
SINGLE CODE on binding interferes SINGLE CODE on boot	Incorrect template adjustment used when mounting	Set template to proper length and remount heel
	Incorrect track guide scale chosen for given mounting position	Choose binding according to given mounting position

Problem	Possible Reason	Solution
SYMPRO toe wobbles in this track	Toe locking lever not properly engaged in locking holes	Remove toe, clean track. Be sure toe piece locks into place
CYBER or FREE FLEX-drill pattern not fitting	Toe / equalizing bridge in wrong position	Dismount, place toe in correct position
	Drill template not locked	Readjust, drill new holes
Heel slides backwards when customer steps in	Rear locking lever not fully closed or boot length exceeds adjustment range	Lever should fully engage locking teeth in slots on track or boot sole length exceeds binding range
Binding fails pre-season test: release values too high or too low	Reference boot contaminated or worn	Clean or replace boot as indicated by clean vs. lube test result
	Forward pressure set incorrectly	Readjust to TYROLIA recommendations
	Incorrect or off-center-mounting	Check the template. Remount using template correctly
	Improper use of testing device	Check calibration and operating technique
Adult bootsole does not fit into Junior toe lug	Boot sole exceeds the standard tolerance	Clean AFD and boot sole, check standard tolerance, change boot
Diagonal or Railflex heel wobbles in the track	Heel glide inserts worn	Remove heel and replace plastic heel guides

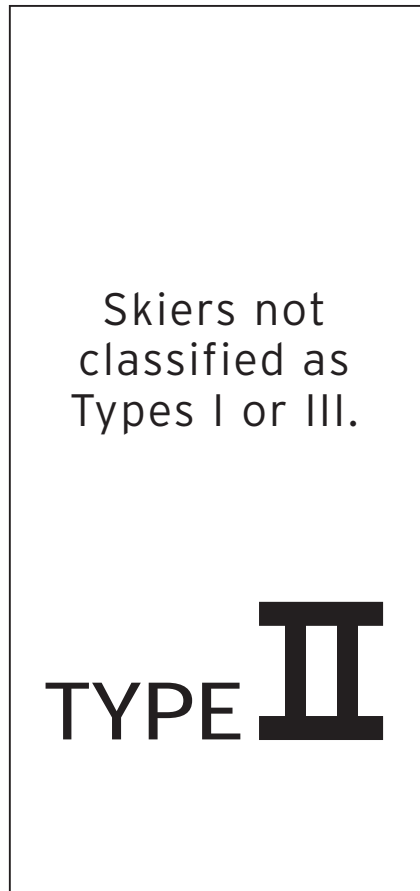
# ADJUSTMENT

													
		SINGLE CODE											
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## CLASSIFY YOURSELF

### DETERMINING YOUR SKIER TYPE IS YOUR RESPONSIBILITY!

Your Skier Type, height, weight, age and boot sole length are used by the shop technician to determine the release/retention settings for your bindings. Consult these descriptions to select your classification. Be sure to provide accurate information. Errors increase your risk of injury.



Skiers who designate themselves as Type I receive lower than average release/retention settings. This corresponds to an increased risk of inadvertent binding release in order to gain releasability in a fall. This type also applies to entry-level skiers uncertain of their classification.





Skiers who designate themselves as Type II receive average release/retention settings appropriate for most recreational skiing.

Skiers who designate themselves as Type III receive higher than average release/retention settings. This corresponds to decreased releasability in a fall in order to gain a decreased risk of inadvertent binding release. Type III settings should not be used by skiers of less than 22 kg/48 lbs.

If you are unsatisfied with the release/retention settings that result from your classification please mention this to your binding technician.



# RELEASE/RETENTION ADJUSTMENT TABLE

		<div><div><div><div></div><div>mm</div><div></div></div><div>12345678</div></div></div>											
		SINGLE CODE											
		B <sup>2</sup> YS					BYS					Mz (Nm)	My (Nm)
		SKIER CODE	a-i	j-n	o-s/B	t/C-G	H-L	M-Q	R-V	V-6			
kg (lbs)	cm (ft'in")		<230	231-250	251-270	271-290	291-310	311-330	331-350	>351	5	18	
10-13 kg (22-29 lbs)		A	0,75	0,75							8	29	
14-17 kg (30-38 lbs)		B	1,00	0,75	0,75						11	40	
18-21 kg (39-47 lbs)		C	1,50	1,25	1,25	1,00					14	52	
22-25 kg (48-56 lbs)		D	2,00	1,75	1,50	1,50	1,25				17	64	
26-30 kg (57-66 lbs)		E	2,50	2,25	2,00	1,75	1,50	1,50			20	75	
31-35 kg (67-78 lbs)		F	3,00	2,75	2,50	2,25	2,00	1,75	1,75		23	87	
36-41 kg (79-91 lbs)		G		3,50	3,00	2,75	2,50	2,25	2,00		27	102	
42-48 kg (92-107 lbs)	≤148 cm (≤4'10")	H			3,50	3,00	3,00	2,75	2,50		31	120	
49-57 kg (108-125 lbs)	149-157cm (4'11" - 5'1")	I			4,50	4,00	3,50	3,50	3,00		37	141	
58-66 kg (126-147 lbs)	158-166 cm (5'2" - 5'5")	J			5,50	5,00	4,50	4,00	3,50	3,00	43	165	
67-78 kg (148-174 lbs)	167-178 cm (5'6" - 5'10")	K			6,50	6,00	5,50	5,00	4,50	4,00	50	194	
79-94 kg (175-209 lbs)	179-194 cm (5'11" - 6'4")	L			7,50	7,00	6,50	6,00	5,50	5,00	58	229	
≥95 kg (≥210 lbs)	≥195 cm (≥6'5")	M				8,50	8,00	7,00	6,50	6,00	67	271	
		N				10,00	9,50	8,50	8,00	7,50	78	320	
		O				11,50	11,00	10,00	9,50	9,00	91	380	
		P						12,00	11,00	10,50	105	452	
											118	540	

## HOW TO USE THE RELEASE/RETENTION ADJUSTMENT TABLE:

- Determine the Skier Code by locating the skier's weight in the first column and the skier's height in the second column. If the height and weight are not on the same line select the Skier Code closer to the top of the chart.
- The Skier Code found in step 1 is for Type I skiers. For Type II skiers move down the chart toward the bottom one Skier Code. For Type III skiers move down two Skier Codes.
  - If the skier is age 50 or older or under 10 move up the chart one Skier Code toward the top. For skiers 13 kg/ 29 lbs and under, no further correction is required.
- Find the column that corresponds to the skier's boot sole measurement in millimeters.
- The value where the Skier Code and the boot sole measurement intersect is the initial indicator setting for the skier.  
*If the intersection of the row and column falls in a blank box, do not move up or down the chart. Move sideways on the same row to the nearest box showing a visual indicator setting.*
- This value should be recorded on the workshop form under Initial Indicator Settings.

## MECHANICAL SYSTEM TESTING

1. Adjust the bindings toe and heel indicators to the Initial Indicator Setting.
2. Use a calibrated torque measuring device according to the instructions provided by the supplier.
3. Exercise that binding by release it at least once in all direction.
4. Three tests are required in each direction. The middle quantitative value of the three releases should be used as the test result.
5. Using the previously determined Skier Code slide across the chart to the column representing twist torque reference values.
6. If the test result is within one torque value above to one torque value below the reference value, it is in the Inspection Range. These results are acceptable and no further adjustment is necessary.
7. If the test result is within two torque values above to two torque values below the reference value, it is in the In-Use Range. The indicator value should be readjusted and the system retested so that it falls in the Inspection Range. Record the corrected indicator value in the box for final release/ retention settings.
8. If the test result value falls out of the In-Use Range the system should be thoroughly inspected for the following:
  1. Correct forward pressure
  2. Correct Sole-hold down adjustment
  3. Worn or contaminated AFD's
  4. Out of standard boot solesNo work can be performed on the system until these problems are corrected.
9. Check the heel for forward lean the same way, determining the middle quantitative value of three vertical releases. Adjust if necessary.
10. Record final indicator settings on the workshop form in the area for final release/retention settings.

## TYPE I SKIERS

- Cautious skiing on smooth slopes of gentle to moderate pitch.

Skiers who designate themselves as Type I receive lower than average release/retention settings. This corresponds to an increased risk of inadvertent binding release in order to gain releasability in a fall. This type also applies to entry-level skiers uncertain of their classification.

## TYPE II SKIERS

- Skiers not classified as Type I or Type III.

Skiers who designate themselves as Type II receive average release/retention settings appropriate for most recreational skiing.

## TYPE III SKIERS

- Fast skiing on slopes of moderate to steep pitch.

Type III settings should not be used by skiers of less than 22 kg/48 lbs. Skiers who designate themselves as Type III receive higher than average release/retention settings. This corresponds to decreased releasability in a fall in order to gain a decreased risk of inadvertent binding release.

### NOTE:

If the skier reports release/retention problems see the chapter "trouble shooting release/retention problems", page 75 in the manual.

Skiers who desire release/retention settings lower than Type I may designate themselves (I-). Type I- is inappropriate for skiers 17 kg/38 lbs or less.

Type I- Move up the table one skier code.

Skiers who desire release/retention settings higher than Type III may designate themselves (III+).

Type III+ -Move down the table three skier codes.

Skiers may select skier type designations that are different for twist and forward lean. In such a case, the selection shall be indicated by a slash separating twist and forward lean selections, in that order ( for example, K/L, K for the toe and L for the heel.

# TROUBLE SHOOTING RELEASE/RETENTION PROBLEMS

## IF THE SKIER REPORTS A RELEASE OR RETENTION PROBLEM:

- Re-inspect the equipment to make sure that all components are in good condition and function properly.
- Test the system to make sure that it is calibrated properly.
- Have the skier use the "Classify Yourself" materials to make certain that the correct Skier Type has been selected.

If component inspections and a calibration check do not reveal a problem the skier may be requesting discretionary settings.

## INFORMATION FOR SKIERS REQUESTING DISCRETIONARY SETTINGS.

1. Your normal release/retention settings comply with ISO/ASTM standards. Although these guidelines may be inappropriate for some types of competitive skiing or competition training, they are believed to provide an effective compromise between the release and retention needs of most recreational skiers.
2. Adhering to these guidelines may help to reduce the risk of injuries resulting from improper release/retention setting selection. However, skiing involves inherent risks. Injury can result from simply falling down, impact with an object, or from many other actions. Many injuries are unrelated to the function of the release system. Furthermore, even a properly adjusted binding cannot protect the skier in all situations.
3. Difficulties with release or retention may be unrelated to release/retention settings and can result from your skiing style, the incompatibility of your boots and bindings, or wear, damage, or contamination of a component of the release system. Be sure to describe your circumstances to the shop technician and to authorize recommended inspections and repairs before proceeding.
4. If you have been dissatisfied with the release/retention settings that result from your normal skier classification, you may wish to consider changing your skier classification, designating skier type classifications that are different for twist and forward lean, or request discretionary release/retention settings that are higher or lower than the normal range.  
Lower settings correspond to an increase in the risk of inadvertent binding release in order to gain increased releasability in a fall.  
Higher settings correspond to a decrease in releasability in a fall in order to gain a decreased risk of inadvertent binding release.
5. Although the shop technician may help you to record your choice on the appropriate form, the final decision on your release/retention settings is yours.

# HEAD/TYROLIA CERTIFICATION REQUIREMENTS

This section must be read, and thoroughly understood, prior to completion of HEAD/TYROLIA's Employee Training Documentation Form and viewing the 2007/08 HEAD/TYROLIA Certification Video.

At TYROLIA we realize that the quality added to our products in your shop is every bit as important as the quality we build in at the factory. The HEAD/TYROLIA Retailer Indemnity Program, which includes in depth technical training, is a key element of maintaining consistent quality.

## TECHNICAL INFORMATION

Procedures for installation, release/retention adjustment, testing, troubleshooting and record keeping should always be taken from the current season's HEAD/TYROLIA Technical Manual.

## EMPLOYEE TRAINING

This manual provides a depth of information unprecedented in the industry, it is here to help you fulfill the shop's responsibility to bring new employees to a basic level of competence. It also addresses our desire to provide information specific to selling, installing, function checking, and maintaining HEAD/TYROLIA products. Last but perhaps most important, we produced it to help you understand why HEAD/TYROLIA represents the state of the art in bindings. We hope you will use it as part of a well planned and professional employee training program which goes far beyond properly installing bindings. Done well it will translate into consistent quality and the high level of satisfaction your customers deserve. Look at it as one of the first steps in your Total Quality Management program.

**NOTE:** Hands on training is the best training - An ideal task that can be incorporated into the training is preseason testing. This will give your trainees hands on experience operating a testing device and adjusting ski/boot/binding systems. Other tasks, such as routine rental maintenance, can also be done during the training period.

## SHOP REQUIREMENTS

Each retail location must have:

- A current HEAD/TYROLIA Authorized Retailer Agreement on file with HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC.
- A current HEAD/TYROLIA Binding Indemnification Agreement on file with HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC.
- At least one HEAD/TYROLIA Certified Technician employed per location.
- The required equipment for installing and testing HEAD/TYROLIA bindings. All Agreements and Certifications must be valid for the current season.

## REQUIRED SERVICE SHOP TOOLS

This list is the bare minimum a shop can survive with.

- Tape Measure
- HEAD/TYROLIA Templates
  - #92 W (Blue)
  - #94 W (Violet)
  - #SP 2003 W (Red)
  - #SR 2003 W (Yellow)
  - #BASES & PLATES (Grey)
  - #RACEPLATE RDX (Black)
- Variable speed, reversible electric drill

- HEAD/TYROLIA Step Drill Bits (or equivalent)
  - 4.1 Ø x 9 mm
  - 4.1 Ø x 7 mm
  - 3.5 Ø x 9 mm
  - 3.5 Ø x 7 mm
- Tap, Tap Brace and Tap Guide
- HEAD/TYROLIA Pozidrive No. 3 screwdriver (or equivalent)
- HEAD/TYROLIA large slot screwdriver
- Current HEAD/TYROLIA retention/release adjustment table
- Approved mechanical testing device
- Screw extractor
- Tap extractor
- Hole plugs, plastic & wood
- HEAD/TYROLIA threaded plastic ski inserts
- Chisel
- Hammer

## CREATING AN INFORMED CONSUMER

Customers, whether rental or retail, come to your shop with all levels of knowledge. The range extends from true experts who really know the sport and their equipment needs, to never-ever skiers who know they must rely totally on your expertise.

A key role played by a good shop, and a requirement in the US and Canada under the "HEAD/TYROLIA Retailer Indemnity Program", is providing information, guidance and instruction to all customers.

## SPECIFICALLY THIS MEANS:

- Providing product and suitability information to help customers make an informed choice of which equipment models are right for them. The amount and type of advice given will naturally be different for each customer.
- The shop's responsibility is to be sure that each product sold or serviced is appropriate for the needs of its user.
- The shop must provide accurate information about the nature of the sport, and what equipment can and cannot do. Inform customers that there are risks inherent in the sport of skiing that no binding can protect against. It is imperative that each customer be informed there are limitations to the protection their equipment can afford and that injuries can and do occur in the normal course of skiing.
- Under no circumstances should you make any warranties or assertions about the customers safety on the hill. Speaking simply, no binding is "absolutely safe". Well designed shop record forms address the disclosure and agreement subject very directly and professionally. Use them to your advantage by making sure customers read and understand the form before signing it. The following points must be explained to all customers (rental or retail) before they leave the shop with their equipment (consumer awareness checklist):
  - Go through your workshop ticket and fully explain each task that has been performed by the shop.
  - Explain how to use bindings and equipment. Let customers put on their boots and step in and out of the binding if need be.
  - Remind skiers to clean their boots and bindings each time before stepping in.

Tell them that they should always walk through clean snow before entering the bindings.

- Deliver the “Instructions For Use” booklet to retail customers. It is an important document and is essential for warranty service.
- Advise the customers to return to your shop periodically for maintenance and a system inspection. The service interval is once each 15-20 days of skiing, or annually, whichever comes first. Failure to adhere to this service interval will void the HEAD/TYROLIA Limited Warranty.
- Recommend care in transport: heels closed, bindings covered.
- Recommend care in storage: dry, moderate temperature, heels closed, boots not in bindings.
- Explain that bindings and boots must be kept clean for optimal function.
- Skiers should make a visual inspection of their system before each use, including the AFD pad which should be checked for wear, damage or loss. It is also wise to visually verify the release indicator value.

#### NOTE:

- The workshop ticket must be read, initialled and signed by the customer. If the customer is a minor, his or her signature should be obtained, along with that of the parent or guardian. If a parent or guardian is not available, the equipment should only be released if the proper signatures have been obtained.
- Remember, the customer’s signature is required in two places under the terms of the HEAD/TYROLIA Retailer Indemnity Program. In order to avoid misunderstandings with the customer, please inform them of this requirement when equipment is taken in for service.
- If the customer is not the end user, every attempt should be made to make certain all aspects of the system are explained to the user, and to obtain his/her signature on the workshop ticket.

## ABOUT TESTING

Testing is required for all HEAD/TYROLIA retail and rental systems as specified in this manual. Many consumers view system testing as a valuable service provided by professional shops. They expect their equipment will be properly tested, and are willing to pay for it. On the other hand, some customers may be reluctant to accept any additional costs. They may be especially resistant to charges made by the shop for testing and inspections of equipment which is being serviced. Following are some communication techniques that have been found to be helpful:

- Post your shop’s testing policy. A clear statement, prominently displayed, will reassure customers that they’re all receiving the same treatment. Consider a text similar to the following:  
“Industry standards have defined shop testing procedures for your ski/boot/binding system. We’re proud to offer this service since it is in your best interest. While even the best ski equipment cannot eliminate all risks of injury, we strive to maximize your enjoyment of the sport by verifying the settings and function of your equipment. The extra time and expense of system testing will pay off for you in a better skiing experience.”
- Make your service shop a showplace. Place your testing bench in a prominent location. Many customers like to know what kind of work you’re doing for them. If you get a question, offer to let the skier watch.
- Proudly display diplomas and certificates received by your mechanics. Make their expertise known to your customers.

- Above all, don’t apologize for testing. It’s a valuable and necessary service well worth the cost.

## ABOUT TESTING DEVICES

ASTM and ISO have defined specifications for ski equipment system testing devices. Only those devices that meet these recognized performance standards should be used to test systems that include HEAD/TYROLIA bindings. You should make it the responsibility of your testing device supplier to verify that their device fulfills all ASTM/ISO requirements.

Each device has its own unique features and some will fit your shop’s needs better than others. Therefore, we can’t recommend a single device as universally “the best”. The following points, however, can be used as a guideline to getting the most out of your choice:

- Training is very important in the use of any device. Read the instructions thoroughly, and practice!
- To insure reproducibility from one technician to another a “Multiple Operator Reproducibility Test” should be performed by all users of the testing device. This simply requires that all technicians join in a “round robin” exercise where each tests the same system with the same test device. The goal is to verify that the testing techniques are the same and that all test results are comparable. Speak with your testing device supplier for the details on how to conduct this program.
- Beware of “black box” calculations that may be performed by some electronic testers, the calculations performed to arrive at an indicator value or determine an appropriate Torque Range could be based on old standards. Check the current HEAD/TYROLIA Adjustment Chart for applicable values.
- Periodic calibration of these devices is important, and this information should be documented in your shop records.
- Most important, never blindly trust the values given by any test device. This is just one tool to use in your evaluation of a complete release/retention system.

## MAINTENANCE

Inform every customer of the simple fact that periodic maintenance is needed. If they don’t bring their gear back for regular function checks, it is unreasonable to expect it to work as designed. Studies have shown that binding systems which have not been properly maintained have serious injury rates very much higher than those which have.

Following this simple, logical guideline is the single most effective way to decrease serious injuries dramatically. Have the system serviced by a HEAD/TYROLIA certified technician once each 15-20 days of skiing, or annually, whichever comes first.



## HEAD/TYROLIA RETAILER INDEMNITY PROGRAM

Today's equipment may help reduce certain hazards involved in the sport, but the risk of injury remains. The HEAD/TYROLIA Retailer Indemnity Program is designed to help formalize service procedures and minimize the risks to both you and your customer.

Under the plan, HEAD/TYROLIA will defend and indemnify the Authorized Retailer in bodily injury claims when certain conditions are met, including following all HEAD/TYROLIA required procedures.

The program benefits are not without limits, indemnification is not insurance, and it does not eliminate the need for a shop to have adequate insurance of its own. But, for the shop willing to make the investment in doing a quality job as an assembler of equipment systems from components, it is a key element in their Risk Management plan.

**This is only a summary of the HEAD/TYROLIA Retailer Indemnity Program, complete requirements are listed in the current HEAD/TYROLIA Binding Indemnification Agreement. You should read this Agreement carefully.**

Retailer benefits under the terms of the plan are based, in part, on the adequacy of the service work performed by the mechanic. For this reason, thorough employee training is essential. This manual, a tech video and technical seminars are presented by HEAD/TYROLIA to help define appropriate shop procedures.

It is the responsibility of the HEAD/TYROLIA Authorized Retailer to see that all technical and product information materials provided by HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC. are ordered and available in their shop.

This should be done with the aid of your HEAD/TYROLIA Representative while placing your TYROLIA pre-season binding order.

### THE HEAD/TYROLIA RETAILER INDEMNITY PROGRAM APPLIES ONLY TO THE FOLLOWING BINDINGS:

#### HEAD LINE 2007-2009:

##### COMPETITION

FREEFLEX PRO 20 (X) RD, FREEFLEX PRO 20 (X) RS, FREEFLEX PRO 18 (X) Sale, FREEFLEX PRO 16 (X) RD Slalom

##### RACING

FREEFLEX PRO 16, FREEFLEX PRO 14, FREEFLEX PRO 12, FREEFLEX PRO 11, FREEFLEX PLUS 17, FREEFLEX PLUS 14, FREEFLEX PLUS 11

##### PARK & POWDER

MOJO 20 (X), MOJO 18 (X), MOJO 15, MOJO 12, MOJO 11, MOJO 7.5

##### RAILFLEX SYSTEMS

RFD 14, RFD 14 DEMO, RFD 12, RFD 11 DEMO, RF 11, RFL 7.5, RFL 4.5

##### LIGHT DIAGONAL

LD 12 CYBER, LD 12, LD 12 WIDE BRAKE

##### SUPER LIGHT

SL 110 ABS, SL 100

##### WOMEN

ONE LD 12, ONE RF 9, ONE SL 90, GOLD THANG 12 LD, SURE THANG 9 RF, LITE THANG 9 RFL

##### JUNIOR

SL 90 ABS JR RACE, SL 75 ABS, SL 75, SL 70 AC, SL 45

#### TYROLIA LINE 2000-2009:

##### COMPETITION

FREEFLEX PRO 18 (X) Sale, FREEFLEX PLUS 20 (X) RD, FREEFLEX PLUS 20 (X) RS, FREEFLEX PLUS 16 (X) RD, FREEFLEX PLUS 15 (X) RD, FREEFLEX PLUS 10 (X), FREEFLEX PLUS 8 (X)

##### RACING

FREEFLEX PRO 17, FREEFLEX PRO 15, FREEFLEX PRO 11, FREEFLEX PLUS 17, FREEFLEX PLUS 15, FREEFLEX PLUS 14, FREEFLEX PLUS 11, FREEFLEX PLUS 10, FREEFLEX PLUS 8, FREEFLEX PLUS 8 LD, FREEFLEX PLUS 7, MAD FLEX 9

##### PARK & POWDER

PEAK 18 (X), PEAK 15, PEAK 12, PEAK 11, MOJO 20 (X), MOJO 15, MOJO 11, MOJO 7

##### RAILFLEX SYSTEMS

RFD 14, RFD 14 DEMO, RFD 12, RFD 11, RFD 11 DEMO, RF 11, RF 10, HD 14 FREEFLEX, HD 14 FREEFLEX DEMO, LD 12 RAILFLEX, LD 12 RAILFLEX, LD 10 RAILFLEX, SLD 11 RAILFLEX, SLD 11 RAILFLEX DEMO, SL 11 RAILFLEX, SL 10 RAILFLEX, LD 12 RAIL, LD 10 RAIL, SLD 11 RAIL, SLD 10 RAIL, RFL 9, RFL 7.5, RFL 7, RFL 4.5, SL 9 RAILFLEX LITE, SL 7 RAILFLEX LITE, SL 4.5 RAILFLEX LITE

##### LIGHT DIAGONAL

LD 12 CYBER, LD 12, LD 12 WIDE BRAKE, LD 12 S, SLD 11 ABS

##### CYBER

CYBER CARBON D 9 SX, CYBER CARBON D 9, CYBER D 8 SX, CYBER D 8, CYBER SL 110

##### SUPER LIGHT

SL 110 CARVE ABS, SL 100 CARVE ABS, SL 100 CARVE, SL 110 S ABS, SL 110 ABS, SL 110, SL 100 ABS, SL 100, SL 100 WIDE BRAKE

##### WOMEN

RF 9 W, RFL 9 W, SLW 9 RAILFLEX, SLW 90 ABS

##### JUNIOR

FREEFLEX JUNIOR RACE 11, SL 70 CARVE ABS, SL 70 ABS, SL 70, SL 70 AC, SL 45

##### RENTAL

SP 130 ABS DEMO AERO, SP 120 ABS, SP 120 ABS WIDE BRAKE, SP 100 ABS, SP 90 ABS, SP 75 ABS, SP 70 ABS, SP 45, SYMPRO 9 ABS PROMO, SYMPRO 9 ABS, SYMPRO 8 ABS, SYMPRO 8, SYMPRO 7, SYMPRO 4, SYMPRO 2 SL, SR 100, SR 70, SR 45, SYMRENT DEMO, SYMRENT 7, SYMRENT 4, SYMRENT 2 SL, SYMRENT 2, BYS 100 B, BYS 100 Y, BYS 100 S, B<sup>2</sup>YS 45

### RETAILER AGREEMENTS AND INDEMNIFICATION AGREEMENTS

Both Agreements must be completed annually. This years Retailer and Indemnification Agreements should already be completed, if not please contact customer service or your sales rep.

Completed Retailer Agreements, Indemnification Agreements and Employee Training Documentation Forms should be received at HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC no later than December 31, 2008.

An administrative fee of \$15 Cdn per year for each Certified Mechanic (maximum \$75 Cdn per location) will be charged by TYROLIA in Canada and \$30 US per location in

the USA. If a retailer loses his only TYROLIA Certified Mechanic, he must notify HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC in writing within 48 hours.

## SUMMARY OF REQUIREMENTS

These basic requirements help assure that the end product which is delivered to the customer is appropriate.

- Signed, current copies of the HEAD/TYROLIA Authorized Retailer Agreement and the HEAD/TYROLIA Bindings Indemnification Agreement must be on file with HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC.
- The shop must adhere to 2007/08 HEAD/TYROLIA procedures for selection, mounting, adjusting, testing and/or servicing of system components as detailed in this manual.
- The actual HEAD/TYROLIA retention/release adjustment, or its equivalent, must be used.
- A HEAD/TYROLIA Certified Mechanic must properly mount, inspect, adjust and/or service system components and/or check to make sure all service, adjustments, testing and record keeping were properly completed.
- Mechanics must receive full training, including hands-on practice in the use of system testing devices, as provided by the testing device supplier. A multiple operator reproducibility test should be completed and results documented by the shop each season.
- The shop must maintain records of all retail/rental testing and/or service work for 5 years or for the length of the statute of limitations in the state where your business resides, whichever is longer. Bear in mind that the statute of limitations for minors begins only when they come of legal age.

## PAPERWORK REQUIREMENTS

TYROLIA Retail/Rental Workshop tickets have proven their importance in the legal system, and we strongly recommend their use (see elsewhere in this manual). At the very minimum, records must contain the following information:

- Identification of shop and customer: name, address, phone.
- Date of transaction or work.
- Information on which binding settings are based: skier height, weight, skier type, age, boot sole length.
- A full description of the equipment being serviced or rented (skis/boots/bindings), including but not limited to brand, model, size and serial numbers.
- Skier code, "Initial" binding release/retention settings, and final settings.
- Signed, dated statement from the HEAD/TYROLIA Certified Mechanic that all manufacturer's procedures have been completed, and the signature of the mechanic who performed the service (if they are different individuals).
- An agreement dated and signed by the customer, the language of which is substantially similar to the current HEAD/TYROLIA form. This agreement must include the following points:
- User verification of skier information.
- WARNING that there are risks of injury inherent in the sport of skiing and that the customer accepts those risks.
- DISCLOSURE of the equipment's limitations, that it will not release, retain or prevent injury under all circumstances, and is no guarantee of the user's safety.

- RELEASE language whereby the user releases the retailer, manufacturer and distributor from liability and damages, to the fullest extent allowed by law.
- STATEMENT that no warranties of any kind are offered by the shop beyond those offered by HEAD/TYROLIA.
- AGREEMENT that instruction in the use of the equipment has been received, that the skier height, weight, skier type, age, boot sole length, as well as the settings on the binding match those on the record form, and that the skier will inspect the system, including the binding's AFD, before each use.
- Signatures by both the customer and HEAD/TYROLIA Certified Mechanic are required by for the HEAD/TYROLIA Retailer Indemnity Program.

### NOTE:

- Any changes in documentation requirements must be authorized in writing by HEAD TYROLIA WINTERSPORTS INC; USA or HEAD TYROLIA SPORTS CANADA INC. POST ACCIDENT REPORT (SEE SAMPLE IN APPENDIX).

In addition to the above information on the system's performance, fill out a Post Accident Report when you become aware that an injury has occurred. Keep this document for 5 years or the duration of the statute of limitations for minors, whichever is longer.

## IN THE EVENT OF AN INJURY CLAIM

- Notification to HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC. by retailer, of any bodily injury claim, must be made in writing on or before the tenth calendar day from the date on which the retailer first received notice of any such claim. In the event of a lawsuit the retailer must notify his/her own attorney and must cooperate with HEAD TYROLIA WINTERSPORTS INC., USA / HEAD TYROLIA SPORTS CANADA INC. and respond to requests as required.
- In a rental situation, from the time that any injury claim is made to the retailer, the retailer must maintain possession of any equipment that may have been involved in the accident. (Equipment may be returned to service upon passing a post-accident investigation.)
- In the event of an injury, a Post Accident Report must be completed and retained if the shop is in possession of all components of the system. If the entire system is not available for test it should be noted and all pertinent information such as equipment condition, visual indicator settings, and any equipment abnormalities should be recorded.

### NOTE:

HEAD/TYROLIA reserves the right to deny indemnity if HEAD/TYROLIA requirements are not fulfilled. Strict compliance by the dealer with all requirements, as stated in the HEAD/TYROLIA Binding Indemnification Agreement, is a condition precedent to favorable consideration of a request for indemnity.

This is only a summary. The precise requirements of the HEAD/TYROLIA Binding Indemnification Program are contained in your HEAD/TYROLIA Binding Indemnification Agreement.

# THE HEAD/TYROLIA LIMITED WARRANTY

HEAD/TYROLIA warrants to the initial purchaser that its 600, 700 series and newer bindings are warranted to be free from defects in materials and workman-ship for a period of four years from date of purchase or five years from date of manufacture, whichever period expires earlier.

For rental bindings it is 2 years from date of purchase.

HEAD/TYROLIA disclaims all other warranties express or implied (USA and Canada).

Buyer's sole remedy under the above warranty or under any implied warranty is limited to the repair or replacement, at HEAD/TYROLIA's sole option, of subject product or parts thereof. Buyer should return the subject product or parts to the place of purchase for warranty service.

This limited warranty applies only to products that have been subject to normal use and that have been properly serviced.

It excludes parts subject to wear such as AFD's, brakes, windows, plastic or metal tracks, etc. The "Instructions for Use" booklet (warranty), proof of purchase and proof of periodic service must accompany all bindings returned for replacement consideration.

## LIMITATION OF LIABILITY

In no event shall HEAD/TYROLIA be liable for incidental, consequential statutory or exemplary damages, whether the action is in contract, warranty, negligence or strict liability, including without limitation, loss to property other than the binding, loss of use of the binding or other property, or other economic losses. HEAD/TYROLIA shall not be liable for contribution or indemnification, whatever the cause. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Some states do not allow the exclusion of limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## SERVICE UNDER THE HEAD/TYROLIA WARRANTY

Products requiring service under the terms of the warranty should be dealt with as follows:

- Send the complete binding set to the authorized distributor where evaluation will be made and warranty action taken if required.
- If a clear warranty situation exists, and the shop wishes to replace the pair of bindings products out of stock for a customer, the shop may do so after the approval of the ski warranty department of your HEAD/TYROLIA distributor. Be sure to check suitability and mounting hole pattern before making a change of model.
- When possible, the replacement should be of the same model as the returned product.
- If the same model is not available, the shop should contact the authorized HEAD/TYROLIA distributor warranty department for authorization before a more expensive model is selected for replacement.
- If a replacement is made from retailer stock, the complete binding set should be returned to the authorized HEAD/TYROLIA distributor as soon as possible. The packing list must clearly state which model was used for replacement.

- The "Instructions for Use" booklet (warranty), and proof of purchase must accompany all products returned for consideration.
- No credits will be issued.
- The authorized HEAD/TYROLIA distributor reserves the right to deny replacement to the retailer if the alleged problem is not verified or if products are returned without the "Instructions for Use" booklet and proof of purchase.
- Replacement bindings are covered by the warranty stated above.
- Any bindings returned to the authorized HEAD/TYROLIA distributor due to inappropriate release values (i.e. values which fall outside the "In-Use" tolerance range on the current HEAD/TYROLIA Adjustment Chart) must be accompanied by a completed System Performance Report. The report form is printed in this manual; no warranty action will be taken on release value related claims unless this report accompanies the returned bindings.

Distributor addresses:

### HEAD USA

Shore Pointe, 1 Selleck St.  
Norwalk, CT 06855

USA

Phone: 800-874-3235

203-855-8666

Fax: 203-855-5719

[www.tyrolia.com](http://www.tyrolia.com)

### HEAD TYROLIA SPORTS CANADA INC.

P.O. Box 3620, Station Main  
Guelph, Ontario N1H 7H1

Canada

Phone: 800-265-7257

519-822-1576

Fax: 519-822-2202

[www.tyrolia.com](http://www.tyrolia.com)

# RISK MANAGEMENT

Indemnification, Insurance, and your liabilities.

## INDEMNIFICATION

Indemnification simply means that someone agrees to reimburse you for certain costs. In the ski industry it normally means that provided you fully follow the manufacturer's requirements and install and adjust the binding system correctly, the manufacturer or distributor will provide a defense and pay any judgment which may be entered against you if you are the subject of a claim or suit by a customer who claims to have suffered bodily injury as a result of using certain equipment.

The key here is you must be able to prove that you did your job properly in order to qualify. If you do not, you will not be entitled to a defense or indemnification in the event of a claim.

## YOUR PERSONAL LIABILITY

It's simple: If you make a mistake which causes harm to another, you can be held liable for it.

Be very careful not to make verbal warranties that extend beyond those made by HEAD/TYROLIA. Read the manufacturer's literature and warranties carefully. If a feature or benefit is not mentioned there, don't mention it to the customer.

## SHOP LIABILITY INSURANCE

No indemnification program is a substitute for liability insurance.

Common sense dictates that you should have an insurance policy that covers your shop and employees for commercial general liability and completed operations. Check with your insurance broker.

## SHOP PROCEDURE TO REDUCE LEGAL EXPOSURE

Risk Management has become a very important area in virtually every industry. In today's world it is more important than ever to do as much as possible to recognize how and where we might be exposing ourselves to a potentially serious problem.

HEAD/TYROLIA has been the leader in molding valuable risk management concepts into a program that virtually the entire ski industry follows today. HEAD/TYROLIA has defined proper shop practices and how shop personnel and customers need to interact in order to maximize skiing enjoyment while lowering the risks of liability.

If these procedures are followed properly, both the skier and the industry are well served. In the event of a mishap, the programs documentation and record keeping system will provide strong evidence of work performed.

## YOUR OBLIGATIONS UNDER THE HEAD/TYROLIA RETAILER INDEMNITY PROGRAM

Selecting equipment for your customer.

- Make sure the products are suitable for the skiers height, weight, ability, shoe size and level of ability.
- Always make sure your recommendations are consistent with the manufacturer's.

## BINDINGS SELECTION

Generally, the idea that top of the line products offer the greatest margins for safety as well as performance and durability is correct - provided the skier fits the weight range of the product.

Combine this knowledge with our weight and ability recommendations for the skier when selecting a binding. Avoid selling a product with the idea that the customer will grow into it. If a product is not suitable for their current requirements make another choice.

Avoid the temptation to do the customer a favor by re-writing the rules. More often than not, all you will do is cause problems.

At the time of delivery to the customer, the bindings must be accompanied by all the informational materials supplied by the manufacturer, i. e., pamphlets, forms, etc.

The product must be fully demonstrated to either the intended user or their parent or legal guardian if the child is a minor.

This includes instructions on inspecting the low friction surfaces, cleaning the boot sole, entry of the binding, re-entry after releasing on the hill and exiting the system.

You must also explain what care and maintenance the skier is responsible for, as well as when to return the equipment to your shop for a thorough function check. Routine maintenance is the most cost effective thing a skiers can do to protect their well being.

## BOOT SELECTION

Make sure the customer's boot choice is consistent with their level of skiing and that the boots meet all current DIN or ISO standards.

## SKI SELECTION

Take care to ensure that the skier's intended use of the chosen equipment is consistent with the manufacturer's recommendation for the skier's weight and level of skiing. This is another area where regular maintenance is critical. It is only logical that skis which help keep your customer upright reduce their overall chance of injury.

## RACING (X) BINDINGS

Certain binding models are produced by HEAD/TYROLIA each year for the exclusive use of qualified competitors under the supervision of HEAD/TYROLIA Technical Specialists. These bindings are not covered by either the HEAD/TYROLIA Warranty or any Dealer Indemnity Program. We recommend you decline to service them, and warn against their use.

In a similar vein some skiers may wish to use retention settings which are excessive. DIN settings over 10 do not satisfy current industry standards and should not be used. Adjustments exceeding this range are made on one's own risk.

## COMPLETING THE WORK ORDER WITH THE CUSTOMER

It is critical that certain basic information be included on all shop work orders. While we do not require it, the easiest way to make sure the form you use fits HEAD/TYROLIA's requirements is to use ours.

Once the customer has selected equipment or described the repair or service to be performed, the technician must ask the customer to complete a portion of the Work Order Form which includes their Name, Address, Phone number, Weight, Height, Age, Sex, and Skiing ability.

There are few things more embarrassing than having a customer come in to pick up a pair of skis that could not be serviced due to an improperly filled out form, or an unforeseen technical problem.



The best way to avoid this is to have a HEAD/TYROLIA Certified technician thoroughly inspect all incoming work, and check the paperwork. The skier must then sign indicating that they have read, understood, and agreed to the terms of your Rental/Repair agreement (this agreement must comply with HEAD/TYROLIA Dealer Indemnity Program requirements).

It is also important that the customer be informed that they will be expected to verify in writing that the indicator settings agree with what is written on the form, and that they have been instructed in the use and maintenance of their equipment, and fully understand it.

This procedure must be completed before the transaction is consummated. Remember, the customer has the option of going to another store if the terms of the contract are not acceptable to them, and under no circumstances should the transaction go any further without their signature. The end user, or their agent, must sign the incoming work order.

## SHOP PROCEDURES SUMMARY

For in depth details, see the "Binding Installation" section of this manual.

- Follow HEAD/TYROLIA procedures for inspection, mounting, adjustment and maintenance as appropriate.
- Confirm that toe and heel indicator values match those specified on the actual HEAD/ TYROLIA Adjustment Chart.
- Using a calibrated testing device, according to the manufacturer's instructions for use, "exercise" the binding by releasing it at least once in each direction (clockwise and counter-clockwise at the toe, vertically at the heel). Then measures Twist and Forward Lean Torque Values. The middle quantitative value of 3 releases in each direction should be used as the test result.
- Compare Twist and Forward Lean test, results with the System Inspection Ranges on the actual HEAD/TYROLIA Adjustment Chart.
- After the equipment is adjusted to the skier's needs according to the manufacturer's standards, the certified technician signs the form indicating that the work has been completed according to the manufacturer's specifications.
- With testing complete, the HEAD/TYROLIA Certified Technician must complete and sign the workshop ticket. Be sure the Final Indicator Settings are correctly shown there. The workshop ticket should simply reflect that the system has "passed all tests" or that "all manufacturer's procedures have been completed".

## PROCEDURES FOR RETAIL CUSTOMER PICK-UP

When the Retail Customer or his representative comes in to pick-up the equipment, the store employee has a fantastic opportunity to improve the skier's safety and enjoyment, while minimizing the risk of a lawsuit later on. All that's involved is properly informing the skier about the realities of skiing and ski equipment.

- Explain the function and operation of the binding, including a review of the manufacturer's pamphlet.
- Explain the settings that show in the release setting windows and how they were derived by referring to the manufacturer's release adjustment charts.
- Explain how much proper maintenance of the entire system (boots, bindings and skis) can improve their enjoyment and margins for safety. Also make it clear that skiing, like any sport, has its risks, and equipment can not eliminate them.

- Have the customer sign the form again indicating that they have been instructed on the use of the equipment and that they verified that the visual release indicators on the bindings correspond to the manufacturer's recommended settings shown on the work order ticket.

## ARCHIVING RECORD

Should you become one of the few that must defend against a law suit you will soon find out that the very best defense is made of paper. For this reason we recommend that you start out each ski season with a huge, brand new, manila envelope. Over the course of the season you should fill it with the following items:

- Collect a copy of the technical manual for each and every binding, boot and ski on the market. Be especially diligent with those you carry or work on regularly.
- Copies of the manufacturer's customer instruction booklets.
- Technician employment applications. Make sure they have the address of someone who will always know where they can be found, and is likely to stay put - Moms are good. This can be invaluable if you need the technician as a witness.
- A listing of all technician certifications and their dates. Keep all certification records as well.
- Copies of any pertinent wall charts, customer information posters etc.
- A copy of your shop procedures, including training materials, rental and repair shop practices, and binding setting charts.
- Copies of rental fleet test data.

This type of supporting documentation can be tremendously useful for your lawyer.

## STORAGE OF FORMS

All forms containing the customer's signature must be kept for a minimum of five years or the term of the statute of limitations in the state where the injury occurs, or your state, whichever is longer. As a practical matter you have no idea where or when your customer may sustain an injury on this equipment.

Naturally, should an injury occur to either an adult or a child, keep the original form in a safe place until the case is completely resolved.

Risk Management is really just common sense. Do your job well, have integrity, keep your customers well informed, and keep proper records. Follow these simple rules and you will have very few problems.



# USE OF NON-RECOMMENDED SETTINGS

## SKIERS REQUESTING SETTINGS NOT RECOMMENDED BY HEAD/TYROLIA

The 2008/09 HEAD/TYROLIA Release/Retention Adjustment Table is the only adjustment chart recommended for use by HEAD/TYROLIA dealers during the 2008/09 season.

Some skiers may request settings different from those in the HEAD/TYROLIA Release/Retention Adjustment Table. Most of these concerns can be addressed by following the procedures for reclassifying skier type and for troubleshooting which follow the instructions for using the HEAD/TYROLIA Release/Retention Adjustment Table.

HEAD/TYROLIA and the ISO/ASTM standards organizations do not recommend the use of release/retention settings outside of these tolerances, but skiers occasionally may request such settings. HEAD/TYROLIA recognizes a skier's right to choose other settings, but if the skier requests settings outside of those derived from the normal procedures for re-classifying skier type and for troubleshooting, the shop may either:

1. Adjust the system to the setting derived from HEAD/TYROLIA Release/Retention Adjustment Table and instruct the skier on how to change the setting (if this is done, make a note to this effect on the workshop or rental form), or
2. Adjust the system to the skier's individual request, but only if the technician notes on the workshop or rental form the reason the higher or lower setting was requested. Do not in any case adjust the system to a release/retention value higher than the maximum acceptable setting at the bottom of the HEAD/TYROLIA Release/Retention Adjustment Table. The customer must verify the request for the higher or lower settings by signing and dating the workshop or rental form by the reason noted next to the setting request. The skier must also read and sign a warning, release and indemnity agreement identical to the one printed on this page. In such cases, the system will only be indemnified if all other conditions of indemnification are met and the signed warning, release and indemnity agreement are attached to the completed workshop or rental form.

### Warning, Release and Indemnity Agreement

I, \_\_\_\_\_, hereby acknowledge that I have been advised by the \_\_\_\_\_ rental shop, sales department, etc.) that settings which I have requested for my

bindings (Model \_\_\_\_\_) is not the setting recommended by the manufacturer of the bindings for a skier of my height, weight, age and skier type. I understand and acknowledge that there may be an increased risk of injury or death to me as a result of my own personal preference for these binding settings.

To the fullest extent allowed by law, I hereby waive and release all claims arising from the use of the bindings and release from all liability the shop, the distributor and the manufacturer, their agents and employees, and I further agree to indemnify them from any and all liability or harm or damage of any kind whatsoever which may result from the use of these bindings by myself or anyone I allow to use the bindings.

I, the undersigned, have read and understand this liability release agreement, and agree that it is binding upon me, my heirs, guardians, administrators, assigns, and legal representatives. If any part of this agreement is held to be invalid or unenforceable, the remainder shall be given full force and effect.

\_\_\_\_\_  
Skier's Signature  
(or that of the skier's parent or guardian)

\_\_\_\_\_  
Shop Manager's Signature



## POST ACCIDENT INSPECTION REPORT

Date of Accident \_\_\_\_\_

Workshop Ticket # \_\_\_\_\_

Skier Name \_\_\_\_\_

Skier Phone \_\_\_\_\_

Address \_\_\_\_\_

Witness Name \_\_\_\_\_

City, State Zip \_\_\_\_\_

Witness Phone \_\_\_\_\_

Skier's Description of Accident and Injury \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Use Back For Additional Comments)

### Description of System

Rented Purchased

Ski Brand \_\_\_\_\_ Model \_\_\_\_\_ Size \_\_\_\_\_

Serial # \_\_\_\_\_ Inv. # \_\_\_\_\_

Boot Brand \_\_\_\_\_ Model \_\_\_\_\_ Size \_\_\_\_\_

Binding Brand \_\_\_\_\_ Model \_\_\_\_\_ Size \_\_\_\_\_

### Condition of System

Are the boot soles within industry standards? Yes \_\_\_\_\_ No \_\_\_\_\_

Are all buckles, boot adjustments functioning correctly? Yes \_\_\_\_\_ No \_\_\_\_\_

Are the A.F.D.'s Intact? Yes \_\_\_\_\_ No \_\_\_\_\_

What are the Visual Indicator Settings? Toe \_\_\_\_\_ Heel \_\_\_\_\_

Is the Forward Pressure set correctly? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the Toe Height set correctly? Yes \_\_\_\_\_ No \_\_\_\_\_ NA \_\_\_\_\_

Do the brakes function smoothly? Yes \_\_\_\_\_ No \_\_\_\_\_

Is the ski bent delaminated or damaged? Yes \_\_\_\_\_ No \_\_\_\_\_

Describe: \_\_\_\_\_

Was the equipment returned to service post-accident? Yes \_\_\_\_\_ No \_\_\_\_\_

### Mechanical System Testing

Testing Device \_\_\_\_\_

Last Calibration date / /

Clockwise

Ctr Clockwise

Clockwise

Ctr Clockwise

Toe L \_\_\_\_\_

R \_\_\_\_\_

Heel L \_\_\_\_\_

R \_\_\_\_\_

### Background

Shop Name \_\_\_\_\_

Inspected By \_\_\_\_\_

Checked By \_\_\_\_\_

Inspector Signature \_\_\_\_\_

Checker Signature \_\_\_\_\_



## SYSTEM PERFORMANCE REPORT

Shop Name \_\_\_\_\_  
Phone \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State, Zip \_\_\_\_\_

Date Report Completed                      /   /                      Workshop Ticket Date                      /   /  
Workshop Ticket #                      \_\_\_\_\_  
Inspector's Name                      \_\_\_\_\_                      Position                      \_\_\_\_\_

### A. Description of System

Rented      Purchased

Ski Brand	_____	Model	_____	Size	_____	_____	_____
		Serial #	_____	Inv. #	_____		
Boot Brand	_____	Model	_____	Size	_____	_____	_____
Binding Brand	_____	Model	_____	Size	_____	_____	_____

### B. System Performance

Boot Sole Length                      mm                      Binding Indicator      Toe      L              R  
Setting

Condition                      \_\_\_\_\_                      Heel      L              R

Testing Device                      \_\_\_\_\_                      Last Calibration date                      /   /

Chart date                      /   /

"In Use" Torque Tolerance:                      Forward Lean                      Twist                      \_\_\_\_\_

### Measured Release Values:

	Clockwise	Ctr Clockwise		Clockwise	Ctr Clockwise
Toe	L                      _____	_____		R                      _____	_____
Heel		L                      _____	R                      _____		

## USED BINDING CHECKLIST

1. Customer concerns
2. Service bulletins - maintenance
3. Suitability
4. Availability - parts/tools/technical info
5. Boot/binding compatibility
6. Compatibility of under-binding options
7. Defects:
  - a) parts - cracked/corroded/missing
  - b) boot contact area - worn/damaged
  - c) boot contact area - contaminated
  - d) screws - missing/protruding
  - e) brake/rollers/AFD - malfunctioning
  - f) positioning/alignment - incorrect
8. Binding to boot adjustments
9. INITIAL ASSESSMENT
10. Tests:
  - a) screw tightness
  - b) antishock travel
  - c) compatibility (if indicated)
  - d) release indicator verification
  - e) accelerated life cycle (with permission)
11. FINAL ASSESSMENT

## USED SKI CHECKLIST

1. Customer concerns
2. Service bulletins - tuning requirements
3. Suitability
4. Defects:
  - a) delaminated
  - b) edge pulled out
  - c) cracked side wall
  - d) warped, bent, twisted
  - e) damaged tip/tail protector
  - f) lost camber
5. INITIAL ASSESSMENT
6. Base/edge condition/thickness
7. Base/edge profile
8. FINAL ASSESSMENT

## USED BOOT CHECKLIST

1. Customer concerns
2. Service bulletins - fitting requirements
3. Suitability
4. ISO sole dimensions - Adult/Child
5. Sole hardness/material
6. Defects:
  - a) sole - warped
  - b) contact area - damaged/worn
  - c) contact area - contaminated
  - d) shell/liner/buckle - damaged
7. Type/position of foot bed/fitting aids
8. INITIAL ASSESSMENT
9. Fit:
  - a) foot anomalies
  - b) foot/boot size comparison
  - c) foot in boot evaluation
10. Performance adjustments
11. FINAL ASSESSMENT

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For more information log on to [check-itout.com](http://check-itout.com)

**ONLINE DEALER SUPPORT**  
**www.tyrolia.com**

## DEALER LOG-IN

## SIMPLE LOG-IN FOR USING THE DEALER AREA

Select your country (e.g. USA) in the Tool Box for Dealers and then enter this in lower case characters as a password e.g. usa). If the required country is not available on the list, select „others“.

- ENTER [www.tyrolia.com](http://www.tyrolia.com)
- SELECT YOUR COUNTRY (USA)
- ENTER THE PASSWORD (usa)



## TECHNICAL INFO

## SIMPLE SEARCHING FOR SPARE PARTS

Under the item „Searching for spare parts“ you can locate all the replacement parts from last four years or download the technical manual ready to print out.

- SELECT TECHNICAL INFO
- FIND ALL SPARE PARTS
- DOWNLOAD TECHNICAL MANUALS



## RENTAL SYSTEMS

## RENTAL LINE ONLINE

The entire TYROLIA Rental Line is available online for the first time. All the TYROLIA rental products are listed. Here you can download extensive information about the proven technologies and philosophy of the rental business.

- SELECT RENTAL SYSTEMS
- FIND ALL RENTAL PRODUCTS
- DOWNLOAD EXTENSIVE INFO







# HEAD

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