



RACING BOOT GUIDELINE

WINTER 23/24

HEAD
.COM

RACING LINE 23/24

RAPTOR WCR

The Raptor WCR is very smooth and easy to ski. When it happens to make mistakes I can react quickly to find the central position and be back on track.

Vincent Kriechmayr



The Raptor WCR is really nice boot to stay in a good central position. It feels smoother and easier to turn...

Lara Gut-Behrami

... I have also a good balance with this boots coming from a better forward position.

Alexis Pinturault

HEAD SKI BOOT DIVISION

RACING LINE 23/24

RAPTOR WCR

SIZE: 22,5 - 28,5
LAST: 93mm@265
MATERIAL: TPU



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RAPTOR WCR

WHY IS IT FASTER?

It is a question of balance of many details to be combined in a perfect mix.

All racers have immediately established a perfect feeling with the boot.



BUT EVOLUTION.

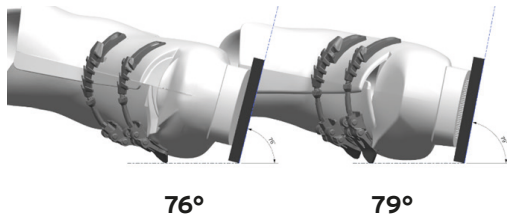
NO REVOLUTION

HEAD SKI BOOT DIVISION

WHAT'S NEW?

HIGHER BUCKLES POSITION

(+10mm) and compact shell reduce accidental snow contact.



THE LONGER TOE BOX

(12mm) has been designed to reduce torsion and increase power transmission. Combined with a new PU material that provides a more progressive flex, a smoother rebound, and less vibration for better control.

WHAT'S NEW?

NEW MATERIAL

New TPU material has been developed with different additives to optimize dynamic behavior between -20° to 5° (at room temperature it can be perceived slightly softer). The result is better handling in all ski conditions and particularly with the technical disciplines.

The target was to rebalance elastic rebound, and reduce over aggressive reaction to improve ski control.

Racers comment were: the boots return the same power you give and you can easily keep a central position on the skis.



HARDNESS

WHAT HARDNESS DO YOU USE WITH ATHLETES?

The hardness of the boot is a subjective decision and depends a lot on the physical structure of the athlete.

ANY RELATION TO THE DISCIPLINES?

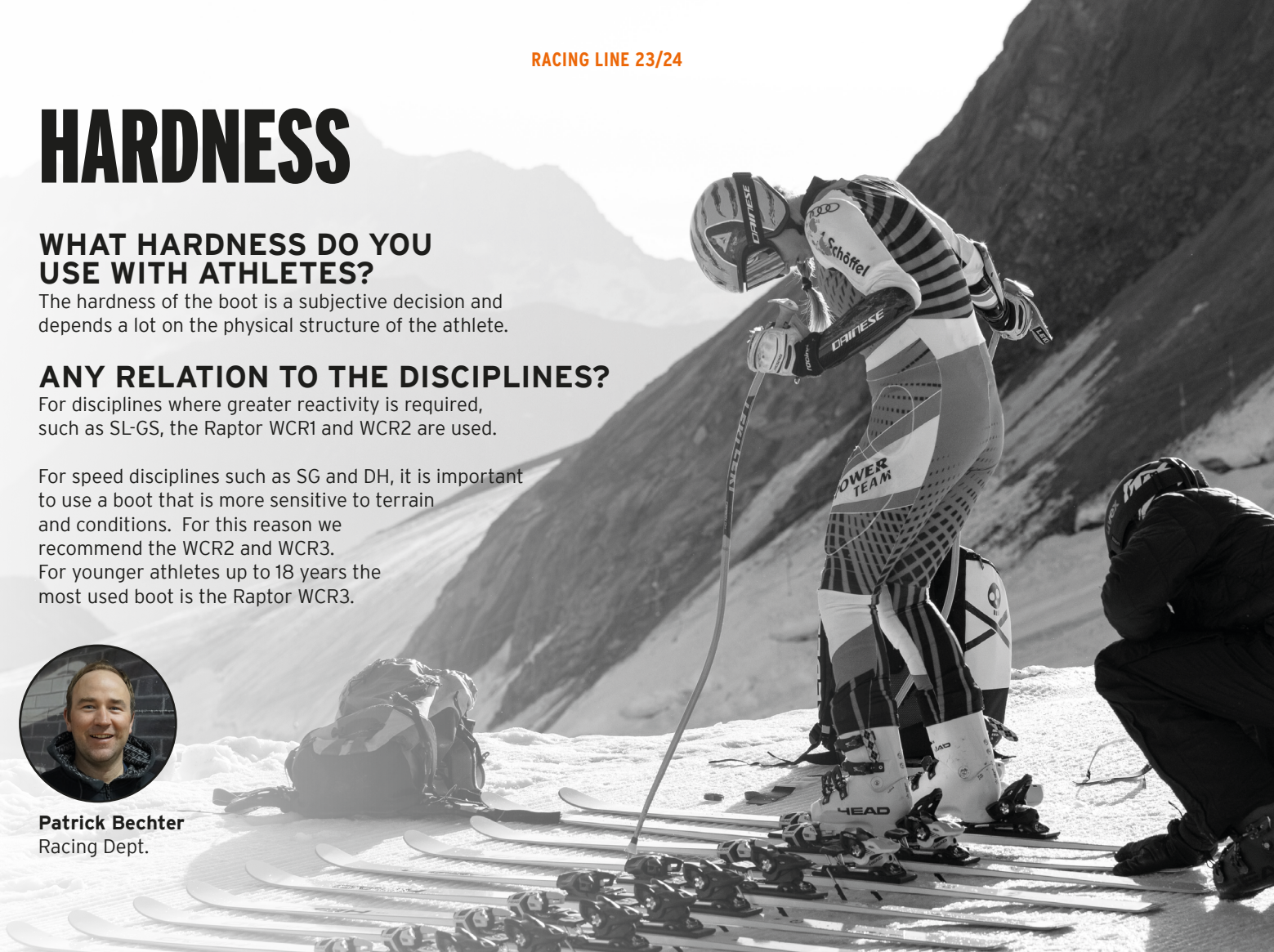
For disciplines where greater reactivity is required, such as SL-GS, the Raptor WCR1 and WCR2 are used.

For speed disciplines such as SG and DH, it is important to use a boot that is more sensitive to terrain and conditions. For this reason we recommend the WCR2 and WCR3.

For younger athletes up to 18 years the most used boot is the Raptor WCR3.



Patrick Bechter
Racing Dept.



LIFTERS

WE OFFER THE FOLLOWING LIFTERS:

Measurements of the height between the sole and the base of the heel inside the boot:

STANDARD	37 mm
LIFTERS 3 mm	40 mm
LIFTERS 5 mm	42 mm
LIFTERS 7 mm	44 mm

FIS, limits at 43mm, +2mm tolerance



ATTENTION:

When the lifters with spare part code are ordered, remember that size O1 is mounted only on size 22, while size O2 is mounted from size 23 to 28.

3 mm

5 mm

7 mm

NEW



LIFTERS

WHICH LIFTERS DO YOU OFFER TO ATHLETES? ANY RELATION TO DISCIPLINE?

We prefer to plane the boot sole before we mount the lifters.

The 3mm lifters are hardly used by the racing department, except in SL.

The 3mm lifters are most used by the sports dealers.

We generally use 5mm in all disciplines.

HOW AND WHEN DO YOU USE 7MM LIFTERS?

We mainly need 7mm for the small sizes 22, 23 and 24 to reach the height limit.



Patrick Bechter

Racing Dept.

LIFTERS

IMPORTANT

We recommend that toe and heel lifter installation and routing should ALWAYS be done by a trained technician at an authorized retailer. The limitations for adult boots are:

	ADULT	TOLLERANCE
TOE	19 mm	+/- 1 mm
HEEL	30 mm	+/- 1 mm

WARNING!

Once added the lifters, the toe and heel interface to the binding have to be milled in order to fulfill the ISO 5355 safety norm, otherwise the boot will not be compatible with the binding until the boot has been milled.



WARNING!

If you grind the sole measure the canting afterward - this is important. FIS heel height (and ISO 5355 norm) approved FIS, limits at 43mm the height between the sole and the base of the heel inside the boot.

RACING LINE 23/24

WHAT'S NEW?

FLAT BOOTBOARD

Benefit: Start flat, manipulate as needed.



NEW FLEX ADJUSTMENT

- additional screw + 10 flex

WARNING!

Canting position to be fixed before drilling the shell.

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WEDGE

HOW MUCH IS THE WEDGE GRINDED? ANY RELATION TO THE DISCIPLINES OR OTHER ATHLETE CHARACTERISTICS?

There is no relation to the wedge height and the discipline.
The standard wedge size is 25,5 mm.

Most of our athletes prefer to grind the wedge to 23mm.

The range can vary according to the athlete's requests from 21 - 24mm.

STANDARD
25,5
MM



Patrick Bechter
Racing Dept.

WHAT'S NEW?

NEW CANTING

The new canting provides a more precise adjustment, a more stable connection, and less friction between the shell and cuff.



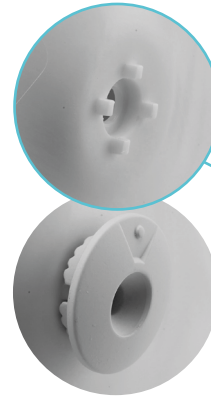
Neutral canting



1.2 mm canting



	EXTERNAL CANTING	INTERNAL CANTING			
SETTING 1	NEUTRAL	NEUTRAL		0,5°	
SETTING 2	1,2mm (+)	NEUTRAL			1°
SETTING 3	1,2mm (+)	1,2mm (+)			1,5°
SETTING 4	1,2mm (-)	NEUTRAL		0°	
SETTING 5	1,2mm (-)	1,2mm (-)	-0,5°		



Ensure the canting is positioned correctly before tightening. The canting must be flush with the shell.



CANTING

NOTE

The Raptor WCR canting is 0,5°:

- the canting of the shell is 0°
- the canting of the cuff is 0,5° external

Warning: canting position to be fixed before drilling the shell and fixing the 2° screw. Once you have drilled the boot there is no turning back.

HOW MUCH DO YOU SET THE CANTING?

First of all, we state that the canting of the boot is a subjective decision and it depends a lot on the characteristics of the athlete. We generally use canting settings that vary between 0 ° and 0.5 °

In speed disciplines the canting more towards 0 °.
In technical disciplines more towards 0,5 °.



Patrick Bechter
Racing Dept.

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RACING LINE 23/24

WHAT'S NEW?

BALANCE AND GEOMETRY

-16°/9° forward lean
(It should be noted that the 9° forward lean is the result of a new forward lean measurement methodology.)

-4° ramp angle



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WHAT'S NEW?

BALANCE AND GEOMETRY

- 9° forward lean / 4° ramp angle same as current raptor

- To be noticed the measurement criteria has been changed for a more accurate definition of the forward lean

We have inserted a prosthesis in the boot, simulating it was a leg. We have calculated the angle of the prosthesis, as you can see from the image. We believe it is an interesting measure, because it is the position that the leg rests on the boot.

ROSSIGNOL HERO WORLD CUP Z 92 mm	8,5°
NORDICA DOBERMANN WC EDT 93 mm	13°
LANGE WC RS 92 mm	8,5°
ATOMIC REDSTER STI 93 mm	8°
ATOMIC REDSTER TI 95 mm Narrow	8°



TECHNICAL DATA

HEAD BOOT COLLECTION 2023/24 @265

MODEL	SAMPLE SIZE (MP)	EXTERNAL (mm)			INTERNAL (mm)						WEIGHT (g)		CANTING (°)			FORWARD LEAN (°)	RAMP (°)
		SOLE LENGHT	HEIGHT (only shell and cuff)	HEIGHT (boot with liner)	LAST WIDTH	MALLEOLUS WIDTH	INSTEP WIDTH	HEEL WIDTH	HEEL HEIGHT	TOE HEIGHT	WEIGHT (1/2 pair)	WEIGHT (1/2 pair) LINER	STANDARD	Max OUTSIDE	Max INSIDE	STANDARD	RAMP ANGLE
RAPTOR WCR 1	26,0	304	314	361	93	76	168	54	35	50	2575	566	0,5°	1,5°	-0,5	16°/9°	4°
RAPTOR WCR 2	26,0	304	314	361	93	76	168	54	35	50	2575	566	0,5°	1,5°	-0,5	16°/9°	4°
RAPTOR WCR 3	26,0	304	314	361	93	76	168	54	35	50	2571	566	0,5°	1,5°	-0,5	16°/9°	4°
RAPTOR WCR 4	26,0	304	314	361	93	76	168	54	35	50	2569	566	0,5°	1,5°	-0,5	16°/9°	4°
RAPTOR WCR 5 SC	26,0	304	304	351	93	76	168	54	35	50	2547	566	0,5°	1,5°	-0,5	16°/9°	4°
RAPTOR WCR 6 SC	26,0	304	304	351	93	76	168	54	35	50	2547	566	0,5°	1,5°	-0,5	16°/9°	4°

NOTE: The shell standard canting is 0°. The cuff is 0,5°

WHAT'S NEW?

NEW LF INNERBOOT

increases precision and comfort even for the high standard of racers' needs.

- New thin flaps construction

RACING DEPT	LIQUID FIT		
0	50	100	
DATE:			



RACING LINE 23/24

WHAT'S NEW?

NEW LF INNERBOOT

**LEATHER
UPPER**
for better wrapping

**ANATOMICAL
TONGUE**
for better contact

**LACES
OPTION**

**ADJUSTABLE
TONGUE**



HEAD SKI BOOT DIVISION

WHAT'S NEW?



NEW LF INNERBOOT

Liquid fit provides a supreme heel and ankle retention for a better performance and racing behavior.

1. It is recommended that the liquid fit process is performed before any shell modifications.
2. Perform the Liquid Fit process with a custom insole to ensure proper and consistent foot positioning.
3. Beginning with the internal side, start injecting while the athlete stands on a skiing position. Inject half of the cartridge for each side of the liner. Add material as necessary to reach the desired level of ankle retention.
4. After completing the Liquid Fit injection process, be sure to fold the Liquid Fit sleeves over and tuck them into the liner as indicated in the image 4 above. This will prevent any excess material that was left in the sleeve from escaping.
5. Upon completion of the Liquid Fit process, make a fist and run your fist in a downward motion through the ankle and Achilles tendon area. This will ensure that the one-way valve that is attached to the Liquid Fit bladder is closed as indicated in the image 5 above.



LIQUID FIT



HOW AND WHEN DO YOU USE LIQUID FIT WITH ATHLETES?

Liquid Fit is recommended because it adds precision to heel and ankle area without the aggressiveness that is associated with a foam liner. It also can be adapted over time by adding or removing material.

We use liquid fit with any athlete for whom a foam liner is too aggressive.



Patrick Bechter
Racing Dept.



LINERS FOAM LINER

On the base of the Racing pro liner a **foam innerboot** has been developed. It is available as spareparts in a kit containing all necessary foams 60118598

The injection gun for the tongue is available as a separate sparepart 60113662

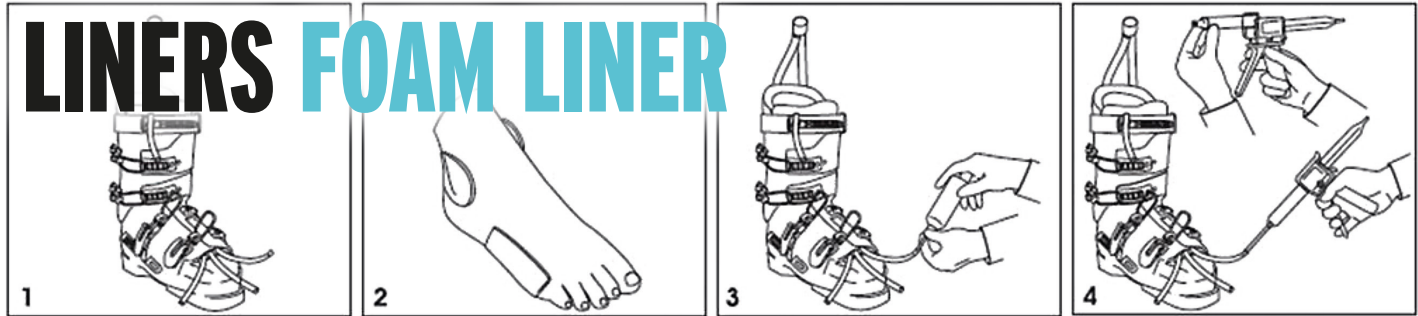
Follow the instructions on the box for a perfect customization of the liner



Innerboot Foam Pro Kit
60118598
Size: 225-235...-285



Tongue Injection Gun
60113662



HEAD FOAMKIT INSTRUCTIONS

KIT COMPONENTS:

4 bottles (2 big and 2 small) for the injection of liners (liner bottles).
 2 cartridges for the injection of the tongues (tongue cartridges).
 Nylon foot booties.
 Nylon protective gloves.
 Maintain boxes at temperature between 18°C and 25°C (64°F e 77°F).

PRECAUTIONS:

Do not touch foam and do not stain the skier's garments. If it happens use hot water.
 Use protective tools provided.
 The following instructions must only be performed by qualified HEAD dealers.

INJECTION PROCESS:

Wear the liner to check if:
 The size of the boots fits skier foot (if the skier uses custom footbed replace the footbed provided in the liner with his personal ones).
 The tongue is tight to the instep. If it is not, adjust the Velcro connection between the liner and the tongue.
 2. Insert the liner in the shell. Photo 1.
 3. If the skier's foot has bone spurs etc., then apply the protective pads provided inside the liner box. Photo 2.
 4. The skier has to wear the nylon protective booties over the skiing socks.
 5. Help the client to get into the boots. Foot has to find its natural position. Pull the liner to avoid liner wrinkling and keep the heel in contact with the bottom of the liner.
 6. Once the buckles have been closed, check the canting and if necessary adjust it.
 7. Open the buckles and blow inside the tube to check if there are some obstructions.
 8. Injection must be done on one boot, and then

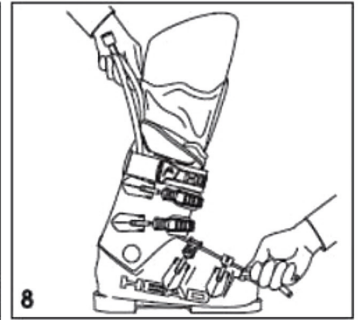
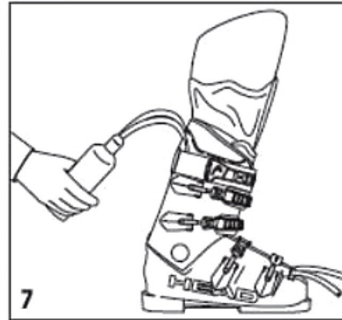
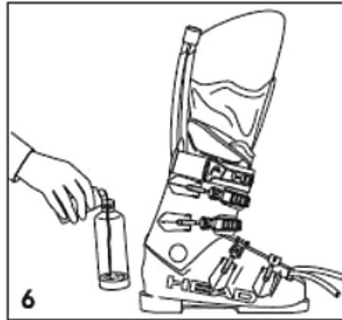
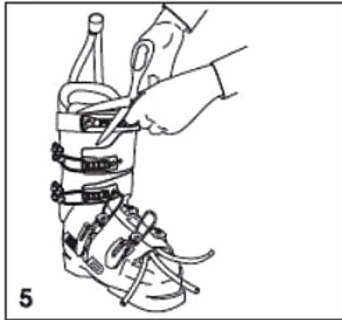
on the other.

9. We suggest performing the injection process on a tilted surface with toes higher than the heels.

TONGUE INJECTION.

Close the Velcro strap tightly so that the tongue of the liner fits snugly to the leg.
 Insert the end of the upper tongue tube (waste tube) in a nylon bag to avoid foam leak.
 Connect the tongue cartridge to the mixer of the bottom tube of the tongue and then to the injection gun (Can be ordered separately). Photo 3/4. Inject all the cartridge foam in the tongue.
 Firmly close the buckles after the material starts to leak from the higher waste tube. During injection the skier must keep an upright position.
 In order to avoid trapped air, pierce the upper border of the tongue with a needle.
 Wait 5 minutes leaning the leg on the tongue.
 Check the foam has stopped flowing in the higher waste tube, cut

LINERS FOAM LINER



the waste tube close to the tongue. Photo 5. Remove the cartridge from the injection gun. 9. Open the buckles and the Velcro strap.

LINER INJECTION:

Close the second buckle of the shell to a minimum and leave the other buckles engaged (but open) in the tooth-plates.

Insert the bottom ends of the liner tubes (waste tubes) in a nylon bag to avoid foam leaking.

Check that the big liner bottle could be correctly screwed onto the end of the 2 upper liner tubes. After this, unscrew it.

Pour the contents of the small liner bottle in the big liner bottle. Quickly, screw the liner big bottle onto the end of the 2 upper tubes. Photo 6/7.

Shake vigorously for at least 15 seconds so that the foam starts flowing in the tube and put the bottle upside-down. The foam will automatically start flowing in both tubes.

To control the flow of foam into the liner, squeeze one tube or the other, helping the distribution of foam by the skier flexing their ankles.

When the foam reaches the two ends of the bottom tubes close the first buckle.

When the foam finishes its flow in the upper tubes close the other buckles and tighten the Velcro strap.

After 2 minutes open the buckles and the strap and pull the lower tubes out of the liner, then the higher tubes. Photo 8.

Close the buckles and the Velcro strap and wait for 5 minutes before taking the boots off.

Take the liner out of the boot and cut the bottom tube of the tongue.

We suggest you allow 12 hours for the foam to cure before use.

SPOILER TUNING

REAR SUPPORT TUNING

Customization of the rear support thanks to a velcro spoiler to be applied on the collar of the liner.

HOW AND WHEN DO YOU USE THE LINER SPOILER?

The spoiler can be used to fill up volume around low leg. It can add additional forward lean when needed. And it can increase rearward support.



Patrick Bechter
Racing Dept.



SPOILER TUNING

RACING SPOILER

Customization of the rear support thanks to an additional plastic spoiler to be screwed on the rear part of the cuff.

HOW AND WHEN DO YOU USE THE CUFF SPOILER?

Cuff spoiler brings stability and takes up space.

- Increases rear support
- it is calf circumference reducer
- Increases cuff rear height

HOW AND WHEN DO YOU USE THE CARBON SPOILER?

Carbon spoiler brings stability and aggressiveness.



STRAPS

How and when do you use the following straps:

RACING STRAP SL 53MM

Code: 60121721-7257



RACING STRAP SL 39MM

Code: 60121788-7257



It is a mix between all athletes.

The decision Booster, SL53 or SL39 is individual and cannot be decided generally by us.

We advice to test on snow all options.

RACING LINE 23/24



RACING CARBON SPOILER

ARTICLE
NUMBER
60122049



INNERBOOT FOAM PRO

ARTICLE
NUMBER
60118598

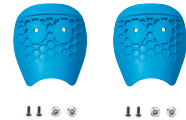
RACING STRAP SL 53MM

ARTICLE
NUMBER
60121721-7257



RACING STRAP SL 39MM

ARTICLE
NUMBER
60121788-7257



KIT SPOILER REAR CUFF

ARTICLE
NUMBER
60123478-1156 (6 mm)
60123479-1156 (9 mm)



HEEL/TOE LIFTERS 3MM

ARTICLE
NUMBER
60121988-1156



HEEL/TOE LIFTERS 5MM

ARTICLE
NUMBER
60121989-1156



HEEL/TOE LIFTERS 7MM

ARTICLE
NUMBER
60121990-1156



TUNING KIT RACING

ARTICLE
NUMBER
60123540



RACE TONGUE RAPTOR WCR

ARTICLE
NUMBER
60123520



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