Board Maintenance

Avoid riding in wet conditions, clean your bearings, and watch your board closely. Always check your truck/wheel nuts before riding to ensure they're secure. <u>Learn more here.</u>

Deck

- \cdot If your deck is cracked/delaminating
 - Use either wood glue or epoxy. If it's a big chip, you can use wood filler.
- Clean your grip tape with Belt Sander Cleaner
 - You can buy it from Amazon or hardware stores.
- Remove old grip tape by heating it up
 - Use hairdryer, heat gun or leave it in the sun.

Wheels

 \cdot Clean wheels with luke warm water, soap, and toothbrush.

Bearings

• Remove the bearing shields

- Carefully use a knife, exacto or flathead screwdriver.
- \cdot Clean with mineral spirits or citrus cleaner
 - Do not use WD 40. It's a solvent, not a lubricant and will dry them out / attract more dirt.
- Let dry, then lubricate with Bones Speed Cream

Trucks Insights The three most common truck types are reverse kingpin (RKP), traditional kingpin (TKP) and double kingpin (DKP). **Anatomy of trucks** Most trucks are made of the same parts, just built differently. Axle Hanger Kingpin **Bushing** Washer **Basplate Pivot** Cup

Axle

The metal rod that goes through the hanger.

Hanger

The metal triangular piece that connects the axle and pivot cup to the baseplate.

Washer

The metal circles positioned on both sides of the bushings.

Baseplate

The metal flat part that mounts directly onto the deck. It supports the rest of the truck's components

Kingpin

The metal bolt that fastens the hanger to the baseplate.

Bushings

The polyurethane pieces placed onto the kingpin.

Pivot Cup

Small, urethane cup where the hanger's pivot point sits.

Baseplate angles

The baseplate angle determines the orientation of the hanger in relation to the baseplate, affecting your board's turning dynamics.

Truck orientation

Pivot cups always face towards the nose/kicktails.

RKP: Kingpins face the outside of the board. **TKP & DKP:** Kingpins face the inside of the board.

Truck sizing

It's generally best practice to match the width of your trucks to be flush with the width of your deck. You also have to consider your wheel size, since the core placement, and wheel thickness can add more width.

It can be confusing because truck sizes are in "mm" and decks in "inches". Reference our <u>truck size spreadsheet</u> for the top brands converted into inches.

Bushing Insights

Bushings are cylindrical pieces of polyurethane that allow the trucks to pivot. Bushing types and hardness will determine how your trucks feel and ride.

Common bushing shapes

Cone

Cones have a larger diameter on one end.

- · Less resistance when turning.
- · Less rebound. Less stable.

Barrels have the same diameter throughout.

- More resistance when turning.
- · More rebound. Increased stability.

Barrel A combination of barrel and cone is a common combination because the stability of the barrel is complemented by the flexibility of the cone.

Durometer

Durometer is a standardized way to measure the hardness of the bushings and wheels. The skateboard industry uses the Shore A Scale to get a rough idea of hardness. However, it's not an exact science because every company uses a different urethane formula.

General bushing hardness

78a	Extra soft
80a	Soft
86a	Med soft
90a	Med hard
95a	Hard

Are your bushings making noises?

A simple solution is to use wax, petroleum jelly, or white lithium grease on the bushings. Be wary of applying to the hangar this can cause problems.

Hardware Insights

Nut Standard Sizes





Baseplate Nuts 10-32 Thread Wheel/Axle Nuts 5/16"- 24



Kingpin Nuts 3/8"- 24

Bolt/Screw Standard Size



Bolts 10-32 Thread The standard bolt size is 10-32. 10 refers to the standardized sizing by ANSI B1 and 32 refers to the thread count. There are 32 threads per inch.



How to figure out bolt length size?

It's always best to measure your setup, but here's a rough estimator. The average 7-ply maple deck is 1/2" thick, truck baseplates are an additional 1/8", and the nuts are about 1/4". Combined, the average setup is 7/8" thick.

Let's make it easy; we'll round it up to an inch. So all you have to do is add 1" + your riser pad size to get the proper bolt size.

Riser Thickness	Hardware Size
No riser	7/8″
1/8" riser	1 1/8"
1/4" riser	1 1/4"
1/2" riser	1 1/2″

7-Ply Deck

8-Ply Deck

Riser Thickness	Hardware Size
No riser	1 1/8"
1/8" riser	1 1/4"
1/4" riser	1 1/2"
1/2" riser	2″

Angled Riser Pads



You can use angled riser pads to manipulate the geometry of your trucks. They're an affordable way to change your setup's riding feel.

Wedging is when the thickest part faces the center of the board.

- \cdot More turn, less lean
- Decreased stability

De-wedging is when the tallest part faces the end of the board.

- \cdot More lean, less turn
- Increased stability

Common angled riser combos

Front Wedge

A front wedge is when you face the thick end toward the center of your board. This will make your setup turn sharper.

Wedge & Dewedge



A split setup – front wedge & back dewedge. When the front has the thick part toward the center of the board and the back has the thick part toward the tail. This will increase the turn in the front and decrease it in the back.

Double Wedge



A double wedge is when you face both thick ends toward the center of your board. This will turn the sharpest, but getting speed wobbles will be easier.

Wheels Insights



The diameter and contact patch is measured in milimeters (mm). When a wheel is referred to as 65mm, they are refering to the diameter.

Diameter

Contact Patch

Wheel Size

The larger the wheel, the slower it accelerates, but the longer it keeps the momentum made from a push.

Personal preference above anything else.

Smaller wheels (50-55mm) are best suited for street skating.

Medium-small wheels (55-60mm) are best suited for bowls and parks.

Medium wheels (60-65mm) are best suited for longboards/cruisers.



Large wheels (75mm+) are best suited for long-distance and electric skateboarding.

Polyurethane Formula

Urethane formulas vary by brand and play a significant role in the wheel's feel. The formula can make the wheels harder, softer, grip, or slide better. This is done using different chemical ratios and techniques during the pouring/curing.

Wheel Cores

Centerset wheels can be flipped and rotated to extend their lifespan, often used for sliding and long-distance. Offset and sideset have a larger lip than the other, better for deep carving riding styles.





Offset



Sideset

Wheel Lip/Edge Profiles

The most common lip/edge profiles are rounded and sharp. There are many variations of rounded and sharp lips.



Rounded lips break traction easier.

- \cdot Less likely to chunk
- · Easier for sliding



Sharp lips grip surfaces more. • More likely to chunk

• Grips surface more

Contact Patches

Common contact patch surfaces are stoneground & smooth.

Stoneground- When the wheels have a pre-worn surface texture. This makes it easier to slide out of the box.

Bearing Insights

Most beginners put too much weight on bearings. They're not as important as having good wheels. Keep them maintained, and even cheap bearings can last a long time.

ABEC Rating

ABEC stands for Annular Bearing Engineering Committee of the American Bearing Manufacturers Association (ABMA). It wasn't made with skateboarding in mind, so using it as reference doesn't make sense.

Types of bearings

To keep it simple, structurally, there are two types of bearings.



Standard Bearings



Built-In Bearings

I prefer built-ins since the spacers and speed rings are built into the bearing, making it easier to keep track of everything when swapping to new wheels.

Deck Insights

Decks are commonly made by pressing 7 or 8 plys of maple veneers together. Each veneer is glued together and pressed

on a mold for an extended period of time to create it's shape.

Nose

Kicktail

Kicktails and noses are the upturned ends of a deck, functional for tricks or deep carving. There are various kicktail designs, including single, double, and symmetrical.

Concave is the rail-to-rail curvature.

More aggressive concave can help by locking you in when doing deep carves but can be uncomfortable if you have larger feet or going for longer distances.

Camber is the upward curvature of the deck from nose to tail, enhancing carving ability since it flexes.

Rocker

Rocker is the downward curvature, which lowers the center of gravity, improving stability and slide control. It also acts as a wedge, which will make your setup turn a bit sharper.

Wheelbase

The standardized way to measure wheelbase is the front two truck holes



on the rear of the deck, and the rear two on the front of your deck.

How wheelbase affects riding feel

The shorter your wheelbase, the tighter your turning radius will be. You have a higher chance of getting speed wobbles with a small wheelbase. A longer wheelbase will offer more stability and your carves will be more drawn out.

The griptape covers the top of the board, and helps stop your feet from slipping while you ride.

Types of griptape are sheets, spray-on or built-in.





Lowgrit

Highgrit

The grit refers to the roughness of the griptape. Think of it like sandpaper: the higher the grit number, the finer and smoother it is, while a lower grit number means it's coarser.

Common Myths



If your setup is slow, it's most likely your bearings.

Most of the time if your setup feels slow to ride, it's the urethane formula of your wheels. You can reference <u>this post</u> for other solutions I outlined.



A higher ABEC rating means faster bearings.

The ABEC rating focuses on precision for industrial use, not skateboarding performance. Don't pay attention to ABEC #s

Myth #3

Using durometer as an exact measurement.

While durometer is a decent way to tell how a wheel will feel, it's not an exact science. A 78a wheel from one brand could feel completely different from a 78a from another because they mixed and cured the chemicals in a different way.



Using WD-40 to lubricate your bearings.

Don't use WD-40 because it'll dry them out and attract more dirt. WD-40 might temporarily seem like it's working, but it'll ruin them over time.

Common Issues

Wheelbite?

You can tighten your trucks, add harder bushings, add riser pads or get smaller wheels. More info on **wheelbite here**.

Speed wobbles?

Proper riding technique can help a lot. Put your weight forward on your front foot rather than your back. Also, you can tighten your trucks, get harder bushings, use angled riser pads or use a longer wheelbase. <u>Learn more here.</u>

Setup making noises? (sqeaking/creaking)

Flip your board over, lay it on the ground, and gradually put pressure on one side of your truck. Try to listen to where the noise is coming from. If you hear creaking or squeaking, it's most likely the pivot cup or bushings. The squeaking is likely the urethane creating it.

Trouble sliding?

Most wheels will slide if you practice enough. It will be easier to learn on smaller, harder centerset wheels made for sliding. Street wheels may also be used.

Nuts keep loosening?

In a pinch, you can use Loctite. But the nyloc in your nut is most likely worn out and you should get new ones.

Feedback

I want this to be the most helpful board guide. I'd love to hear how this can be improved. Do you notice anything missing or incorrect? Send me an email!

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