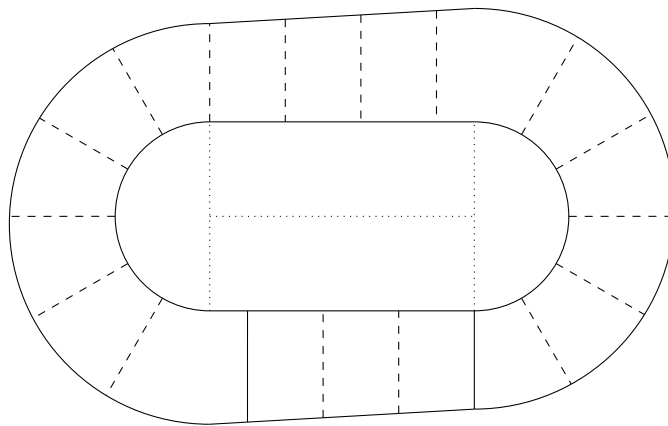


Contents

This document is split into three sections. The first deals with the development of basic skating skills. These ephasise technique and form over application to roller derby. Different skills may be marked as being predicated on other skills, forming a rough progression. These form chapter 1 to ??.

The second portion contains derby related drills. These assume that the skater is familiar with the bulk of the content from the first section, and may make reference to techniques from that section.

Lastly a selection of sample training sessions is provided.



Chapter 1

Sticky Skating

This chapter deals with ‘sticky’ skating skills that involve the skater’s feet not leaving the ground.

The advantage of this over duck walking is that it requires less balance as the skater does not have to skate with only one foot in contact with the ground. This also provides a solid basis to work on training the various muscles and reactions that are required to skate, without the added distractions associated with balancing.

Developing skaters should consider Sections [1.1](#) to [1.4](#).

1.1 Eggshells

Also called ‘melons’, ‘bubbles’, ‘lemons’ and likely a small plethora of other names.

Technique

Eggshell technique is focused around stance and weight distribution. To move in a forwards direction weight should be centered two-thirds back in the skater’s foot, typically towards the front of the heel, or right in front of the back axle of the skate. This leaves the front wheels relatively unweighted to ‘steer’ the skate through the turns as required. This will vary slightly from skater to skater, and will be adjusted depending on the position of their upper body.

The skater’s skates should move outwards from their body via application of weight to their outside edges, then move back inwards via application of weight to their inside edges. The movement can be seen in Figure [1.1](#).

The skater should be using just their lower body to perform this motion. By bending their legs they can offset the extension of their legs with the outwards push and maintain a constant height without “bobbing” up and down.

Common Pitfalls: If the skater is bobbing up and down as they perform eggshells then they are not bending their knees enough.

If the skater is lifting or correcting foot position then they are not applying their weight to the edges of their skates.

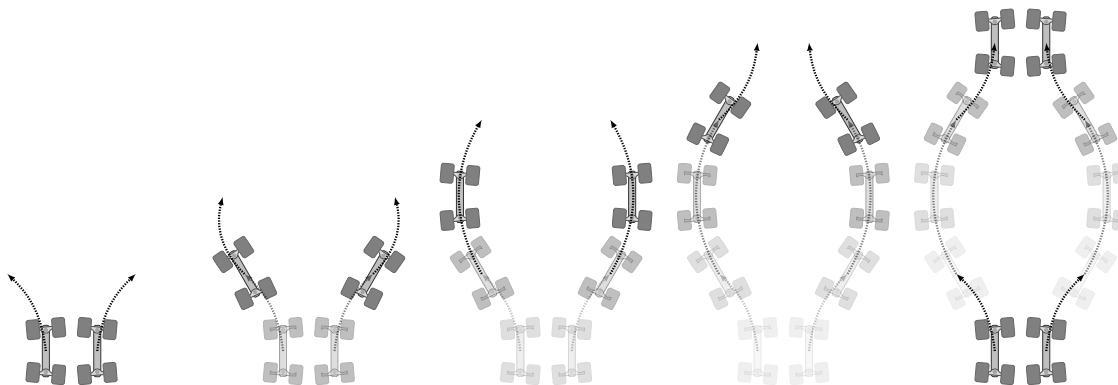


Figure 1.1: Eggshell motions. The darker wheels indicate where weight should be distributed between the edges of the skates.

If the skater is jittering backwards and forwards as they attempt to perform the eggshell, then their weight distribution is in the centre of their skate, not shifted back towards the heel.

Variant: Wide Eggshells

As with the regular eggshell, except this time the skater should attempt to take a wider trajectory. As this will involve a greater leg extension, and we are still trying to avoid bobbing up and down, this will require a lower initial stance.

Variant: Figure 8

The outwards push is identical to a regular eggshell, except this time the inwards pull should be staggered such that one skate ends up in front of the other. The skate in front should alternate between eggshells.

Variant: Fast Eggshells

In this we avoid pushing the eggshell fully out or in, instead the skate oscillates on the inside and outside of the knee. Weight should be distributed more towards the back truck such that the front is unweighted for faster steering.

Developmental Drill: On the Spot

This drill is about getting comfortable enough with the edges of the skates to perform the motions required for an eggshell.

It also assists in shifting weight from the front to the back of the skate.

Starting from a stopped position, the skater should attempt to perform one eggshell motion forwards, then the same motion backwards, ending up in their starting position.

Common Pitfalls: As this is likely one of the first drills that a new skater will attempt, this is also where you may pick up that a skater's trucks are too tight, and are impeding their ability

to turn their skate.

Development Drill: One Edge at a Time

This is a variant drill for regular sticky skating. It's targeted skaters who are comfortable moving around on skates, but may be compensating for not fully developed edge-work in sticky skating. Breaking down the motions and forcing each to pull their own weight should show this up quite quickly.

The core idea of the drill is to only use a single movement for propulsion.

One leg should be stationary, the other should begin on the in, push out as you would when sticky skating then lift the leg at the end of the motion. Place the leg back on the inside and repeat.

For the alternative motion the leg should start on the out and pull in.

Avoid large flicks and other crossover-like motions.

Repeat the following skating forwards and backwards.

- 1× lap right leg pushing out, left leg stationary
- 1× lap left leg pushing out, right leg stationary
- 1× lap right leg pulling in, left leg stationary
- 1× lap right leg pulling in, right leg stationary

To put the motions back together:

- 2× laps regular sticky skating.

Warm Up Drill: Eggshells and Variants

This is a collection of egg-shell drills that can be performed as part of a warm-up.

- Regular eggshells
- Wide eggshells
- Eggshells with alternating legs crossing in front and behind (figure 8)
- Short fast eggshells, skates coming into proximity
- Squat position eggshells, skates only sliding

1.2 Weaving

Weaving is a useful skill for developing and warming up to edgework.

Technique

Weaving involves forwards motion on skates while the skates remain approximately parallel.

A simple version is to syncopate the motions of a basic eggshell. One leg is pushing out while the other is dragging in, then the legs swap roles.

Emphasis should be on the form of the skater's hips, shoulders, ankles and knees. In particular the skater's shoulders should maintain an even height, while their hips, knees and ankles should oscillate laterally with hips and ankles aligned and knees out of alignment. Hips should turn sharply with each weave, and should feel like the skater is 'throwing' their hips.

Speed is generated through the egg-shell-like cuts performed by each leg, and by the skater dropping their weight with each turn.

Developmental Drill Sequence: Reconstruction

After eggshells, developing skaters may not yet have sufficient control to be doing different things with each leg.

This drill sequence tries to break down and re-build weaves as a series of simple motions.

Serial D Cuts

Begin with locking one leg in the forwards position. Perform an 'eggshell' like manoeuvre with the free leg, starting by **pushing out** then pulling in. Swap which leg is locked, and repeat.

Turning

As with the previous component, but now bring the free foot further through the turn such that the skater turns with each motion rather than simply rolling forwards. This will require bringing the inside leg through the turn slightly. Focus on turning the hips to face and pull through the turn.

Internal D Cuts

Begin with locking one leg in the forwards position. Perform an 'eggshell' like manoeuvre with the free leg, starting by **pulling in**, then pushing out. Swap which leg is locked, and repeat.

Internal Turning

As with the previous component, but now bring the free foot further through the turn such that the skater turns with each motion rather than simply rolling forwards. This will require bringing the outside leg through the turn slightly. Focus on turning the hips to face and pull through the turn.

Composition

We now combine the motions of each foot, hopefully having keyed this in part to the hip movements. The goal here is to get the synchronisation and rhythm down having developed the components.

Warm Up Drill

A common warm-up drill is to weave within lanes or from line to line in derby direction.

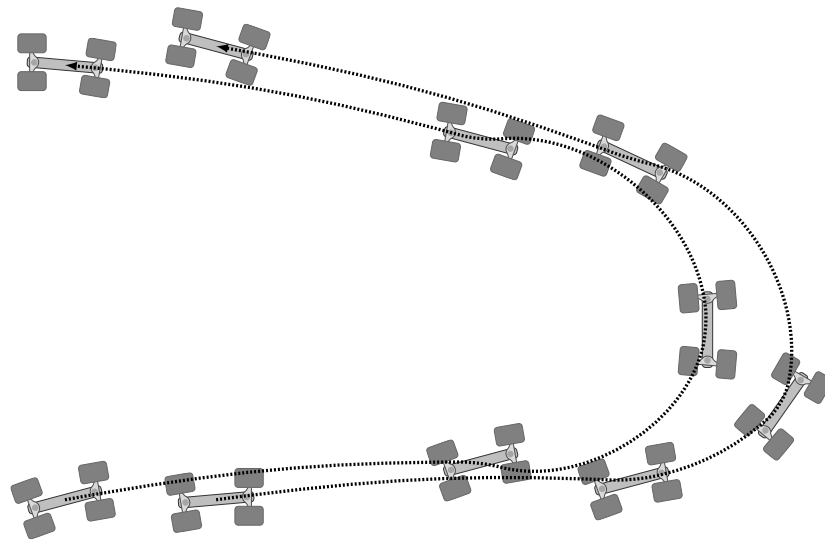


Figure 1.2: Approximate path of the carve. Note that in the turn the back leg is brought through and exits before the front leg.

Emphasis should be on the maintaining form and the sharpness of the turn. For the purposes of technique, sharper angled weaves should be focused on over forwards speed. Maintaining parallel skates is also important, otherwise weaves blur into carves.

- n laps carving, 1 lane
- n laps carving, 2 lanes
- n laps carving, line to line (4 lanes)

Progressions: Progressing weaving involves increasing speed while maintaining form. Speed is generated by increased force through the edges.

Another approach is to encourage skaters to weave using only two wheels on each skate. This places greater emphasis on edge-work.

1.3 Carving

Technique

Carving is where the skater's skates are nearly co-linear with the weight distributed either over the front leg, or back leg. A figure of the approximate arc of a carve can be seen in Figure 1.2.

Working on carves is a good idea to improve edge-work in skating.

When turning on the side of the front leg the skater should lean into the turn. When turning on the side of the rear leg the skater should pre-emptively bring the rear leg forward through the turn and switch leading legs as they lean into the turn. When turning the skater's weight should be on the edge closest to their body.

Typically front leg weighted carving is used to challenge another skater for space, and is heavily practiced by blockers. Conversely, back leg weighted carving is generally considered to be less committal and lends itself more easily to disengaging and juking.

Common pitfalls: Skaters may attempt to turn via lifting their front wheels and correcting their position. This comes from attempting to turn via pulling the foot rather than putting the weight through their edges.

Developing skaters may be concerned about their loss of momentum on the turn. Momentum in the new direction is gained by the cutting motions in the turn, and dropping weight into the turn. Both of these will develop with time as the skater's sticky skating improves and should not be a cause for concern.

Skaters may focus on their front leg, leaving their trailing leg at a perpendicular angle to their direction of motion. Remind them to bring their trailing leg through the turn and that edges on both skates need to be engaged .

Developmental Drill: Circles

This drill is designed to focus on the edgework technique of a carve without the added complexities of pulling the other leg through.

Rather than ending the carve the skater should attempt to simply keep carving in a circle until they run out of momentum. Newer skaters may attempt overly eager turning circles. They should be encouraged to instead take larger circles with better technique.

Warm Up Drill

A common warm-up drill is to carve within lanes or from line to line in derby direction, alternating leading leg with each turn.

Emphasis should be on the maintaining form and the sharpness of the turn. For the purposes of technique sharper angled carves should be focused on over forwards speed.

- n laps carving, 1 lane
- n laps carving, 2 lanes
- n laps carving, line to line (4 lanes)

Progressions:

- Progressing with carving is a matter of increasing lateral speed and taking sharper angles without hockey stopping.
- Another progression is to move enough weight to the edges that only two wheels on each skate make contact with the ground.
- Foregoing some of the purpose of the drill, with enough speed the carves can be replaced with partial hockey stops. Rather than coming to a complete stop the goal should be to burn off speed until the stop can be skated out of in a carve.

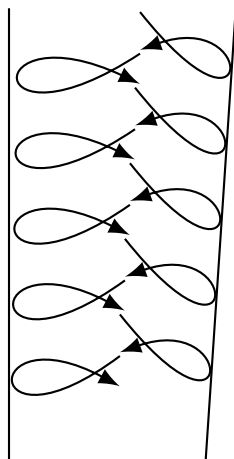


Figure 1.3: Path of the turned about curves along the track.

Cross-over Carves

A variant on the previous drill. While carving line to line skaters should perform a crossover in between each carve in the direction of motion.

- Carve on the outside line
- Crossover towards the inside line
- Carve on the inside line
- Crossover towards the outside line
- Repeat

This will increase the lateral speed with which the skater enters the carve, and by extension puts more pressure on the edge-work required.

This is a useful drill for developing up to hockey stops.

Turn-About Carves

A variant on the warm up drill.

Rather than carving inwards, instead take the larger outwards carve, looping back in to the center of the track.

The path taken along the track can be seen in Figure 1.3.

1.4 Backwards Sticky Skating

The basic skills here are similar to those in Section 1.1 except now we are going backwards.

This necessitates a few minor changes. The first being that our weight has moved from just in front of the back truck, to just behind the front truck of the skate. Instead of steering with the front of the skate, we now steer with the back.

Additionally, as going backwards involves the skater not seeing the direction in which they are

skating, it is strongly advised to look over one shoulder - typically towards the inside of the track.

The drills here are near identical to the front facing eggshells.

Developmental Drill: On the Spot

This drill is about getting comfortable enough with the edges of the skates to perform the motions required for an eggshell.

It also assists in shifting weight from the front to the back of the skate.

Starting from a stopped position, the skater should attempt to perform one eggshell motion forwards, then the same motion backwards, ending up in their starting position.

Development Drill: One Edge at a Time

This is a variant drill for regular sticky skating. It's targeted skaters who are comfortable moving around on skates, but may be compensating for not fully developed edge-work in sticky skating. Breaking down the motions and forcing each to pull their own weight should show this up quite quickly.

The core idea of the drill is to only use a single movement for propulsion.

One leg should be stationary, the other should begin on the in, push out as you would when sticky skating then lift the leg at the end of the motion. Place the leg back on the inside and repeat.

For the alternative motion the leg should start on the out and pull in.

Avoid large flicks and other crossover-like motions.

Repeat the following skating forwards and backwards.

- 1× lap right leg pushing out, left leg stationary
- 1× lap left leg pushing out, right leg stationary
- 1× lap right leg pulling in, left leg stationary
- 1× lap right leg pulling in, right leg stationary

To put the motions back together:

- 2× laps regular sticky skating.

Warm Up Drill: Backwards Eggshells and Variants

This is a collection of egg-shell drills that can be performed as part of a warm-up.

- Backwards eggshells
- Wide eggshells
- Eggshells with alternating legs crossing in front and behind (figure 8)
- Short fast eggshells, skates coming into proximity
- Squat position eggshells, skates only sliding

1.5 Backwards Weaves

The backwards version of a weave **TODO**

Developmental Drill: One Leg at a Time

Lock in one leg Backwards eggshell with the other leg Alternate

1.6 Backwards Carving

The backwards version of a carve.

As with the forwards version of the carve, weight may be distributed over either the forwards or backwards leg. With that said, typically the backwards leg is easier.

Starting by skating backwards in a split stance the skater draws their inside leg (relative to the track) through the turn first, following with their outside leg. The legs should leave the turn co-linearly.

: *Common Pitfalls* Skaters that are weighting up their back leg may neglect their front edges. If this is happening then their front foot will fail to follow their back, leaving their back leg over-extended behind them.

Skaters that are not drawing their back leg behind their front leg may find themselves falling over.

Developmental Drill: Backwards Circles

This drill helps develop the stance needed for a backwards carve, without worrying about changing direction or other aspects of movement.

Warm Up Drill:

A common warm-up drill is to backwards carve within lanes or from line to line in derby direction, alternating leading leg with each turn.

Emphasis should be on the maintaining form and the sharpness of the turn. For the purposes of technique sharper angled carves should be focused on over forwards speed.

Progressions:

- Progressing with carving is a matter of increasing lateral speed and taking sharper angles without hockey stopping.
- Another progression is to move enough weight to the edges that only two wheels on each skate make contact with the ground.
- Foregoing some of the purpose of the drill, with enough speed the carves can be replaced with partial hockey stops. Rather than coming to a complete stop the goal should be to burn off speed until the stop can be skated out of in a carve.

Cross-over Carves

A variant on the previous drill. While carving line to line skaters should perform a backwards crossover in between each carve in the direction of motion.

- Carve on the outside line
- Backwards Crossover towards the inside line
- Carve on the inside line
- Backwards Crossover towards the outside line
- Repeat

This will increase the lateral speed with which the skater enters the carve, and by extension puts more pressure on the edge-work required.

Turn-About Carves

A variant on the warm up drill.

Rather than carving inwards, instead take the larger outwards carve, looping back in to the center of the track.

The path taken along the track can be seen in Figure 1.3, in this instance the skater will be moving along this path backwards.

1.7 Manuals

Manuals are a dance-skating technique involving skating or balancing on two wheels on each skate. Typically these are either the front or back two wheels, but they may also be the side wheels.

Manuals are not technically a necessary derby skill, but are required for some variant skills (such as pivot transitions in ??).

Developmental Drill: Heel-Toe

Start in a split stance. Front wheel balances on the heel, the back wheel balances on the toe. Simply practice adopting this stance and dropping back into the stagger.

Developmental Drill: Manual Pull

This drill improves egg shells as well as generates force using fewer than four wheels on the ground.

Adopt a split stance. Leave all four wheels of the back leg on the ground. On the front leg use either a heel or a toe manual.

Perform eggshells using just the front or back two wheels of the front skate.

Front-Back Balancing

The easiest manual to perform is to take a split stance and balance on the front wheels of the back foot, and the back wheels of the front foot.

Progressions: The tighter the split stance the more difficult the balancing act. Bringing legs closer together will increase the difficulty of the activity.

Sideways Balancing

This technique runs the risk of rolling and ankle badly.

The easiest form is to balance on the outside wheels of each foot.

A rolling version of this manual is to raise the non-engaged edges during weaving or carving.

Switching

Using almost any manual configuration, switch legs without dropping the manual.

Do not attempt this with both feet using heels.

Manual Eggshells

Perform eggshells without dropping out of a manual.

1.8 Reversed Carves

Typically the stance of a carve leans such that the direction of turning, the skates and the edges are all aligned. Here we will generalise these assumptions. The goal of this drill is to work on reversing the usual edge-work, without changing stance.

Using the same split stance as a carve, manipulate your edges to turn in the opposite direction.

Highly oblique angles are fine for this, unlike a regular carve where the drop and turn affords the skater the ability to gain additional momentum, for this technique the turn comes from edgework, necessarily trading forwards momentum to both burn off the initial lateral momentum, and turning to provide the opposite lateral momentum.

Serpentine Reversed Carves

Begin skating forwards in a split stance.

Start a carve towards either the out or inside, then without changing stance turn the carve towards the opposite line.

Regain momentum and repeat.

Chapter 2

Falling

Skaters will fall over. Rather than trying to avoid this at all costs, instead we wish to learn to fall safely.

As all falls are relatively similar, we will run the same generic drill for all falls.

Falling Drill

Skaters should skate around the track, on one straight they perform one fall, on the other straight they perform another fall. These may be the same fall, or different falls.

2.1 Knee Falls

A useful skill for falling.

The goal of this skill is to take a knee to regain control.

Rather than falling directly down, the primary goal should be to burn off speed at an oblique angle. The shallower the angle the lessen the impact.

If the skater reaches a stop then the next question should be how to resume an upright position. For stability it may be useful to plant a rear toe-stop. If they have sufficient thigh strength they should be able to stand up from this position. If that is not the case then it is imperative that skaters push up by first placing their hands on their thigh, and not on the track. This minimises the risk that another skater runs over their fingers.

Knee Taps

A controlled knee fall. Skaters should lower themselves while skating and tap a knee pad to the floor regain control, then rise again to a skating position.

Sequential Knee Taps

Technically these are lunges on skates.

Rather than regaining position skaters should instead bring their other knee forward and perform a sequential knee tap. This can be repeated around the track.

2.2 Knee Falls

A useful skill for falling.

The goal of this skill is to safely fall on two knees.

As with the single knee fall, rather than falling directly down, the primary goal should be to burn off speed at an oblique angle. The shallower the angle the less the impact.

Unlike the single knee fall we now need to content with two knees falling. In this situation the goal is to stagger the timing of the impact of the knees.

As there is a risk of tipping forwards it is advised to lean backwards from the hips in an ersatz rock-star pose.

2.3 Slide Falls

So far the falling drills have assumed that you are falling forwards. This technique exists for situations where that is not the case.

Our primary goal is to avoid falling either backwards, or directly onto a hip. The idea is then to 'pick a cheek', to fall onto.

The fall then maximises contact area along the glutes and thigh, and as with the other falls aims to turn it into a slide.

Falling directly onto your backside may result in a tailbone injury, which is ill advised.

2.4 Turtle Falls

In the double knee falls in ?? there was a concern about pitching forwards. This fall is about managing that situation.

Here the skater begins with a double knee fall, they then pitch forward making contact with the ground with both their wrist and elbow pads. The concern here is how to avoid injury from this position. The advice is to 'turtle' - to assume as small a pose as possible by retracting arms and bringing the head in, while keeping the fingers either clenched or folded out of the way.

The skater should then re-emerge from their shell once it is safe to do so.

Chapter 3

Stopping

Most warm up stopping drills are agnostic to the style of stop being used. As a result we provide those drills here, they may be applied to any of the stops in this section.

Developing Skaters should consider the stops in????.

Drill: Jackie Daniels

The classic stopping drill. Skaters begin approximately 20 ft apart facing each other (the width of the infield of a derby track).

For a period of time (i.e. 45 seconds, 2 minutes etc) one skater skates across the track, and attempts to perform the stop as close to the line as possible without going over, before skating back and repeating the stop on the other line.

Once the time is up the skater rests while the skater they were facing performs the drill.

Attention should be paid to performing the stop on both sides.

The focus in this drill should be firstly on decreasing stopping distance, then increasing speed while maintaining that stopping distance.

Progressions:

A simple progression is to skate backwards out of the stop, and perform an equivalent backwards stop on the other line. Plough stops should be paired with backwards plough stops. One footed ploughs with power slides, T-stops with backwards T-stops and hockey stops with backwards hockey stops.

Drill: Circular Stopping

This is a similar generic stopping drill. Unlike Jackie Daniels which allows skaters to work at their own pace, this variant begins to add some notion of pace.

Skaters space themselves in pairs in 20ft increments around the track. On a whistle one skater in each pair is to accelerate and stop at the next 20ft marker. On the subsequent whistle the other member of the pair is to do the same.

Whistle timing may be varied, at the start of the drill skaters may be allotted 5 seconds per

stop, towards the end this can be brought down to 3 seconds.

Drill: Stopping on the Whistle

One downside to the previous two stopping drills is that the skater expects the stop.

The goal of this drill is to train performing stops without prior conceptual preparation.

The trainer declares a style of stop, and then blows the whistle at random increments. Skaters skate around the track in derby direction. When the whistle is blown, that style of stop should be performed.

One variant of this is to assign different stops to different whistles (single, double etc).

3.1 Plough Stops

Plough stop technique varies with skating ability and edgework. Often what is good technique to learn and develop plough stops is poor technique later on.

For this reason we will strictly split developmental plough stop technique from derby utility plough stop techniques.

3.1.1 Developing Plough Stops

3.1.2 Developmental Drill: Rocking

One method of attempting to develop the required motion for plough stops is to

Rock back and forwards on the spot using eggshells. The idea is that the forwards momentum of a single outwards push of an eggshell from a standing position is very small, and can be arrested very quickly by the second motion of the eggshell.

3.1.3 Developmental Drill: Cruising

The focus of this drill is not to engage the edges for a sharp stop, but instead to work on leg position and holding form for the stop.

Begin by performing a series of eggshells to build some speed. The skater should then hold the position of their final eggshell just after they have begun to bring their legs in. Feet should be tilted in only slightly, if the angle is too sharp a developing skater is liable to topple.

3.2 One Footed Plough Stops

Application depends on the floor.

Developing skaters should lock in one leg and plough with the other. Weight should be distributed onto the front inside wheel, while the back wheels are free to pivot, controlling the stop.

Progression is to moving the stopping leg forward and only turning the ankle rather than any sweeping motions.

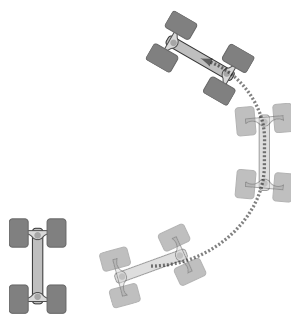


Figure 3.1: Tight one foot plough.

3.2.1 Developmental Drill: Non-passive Ploughs

In this drill we begin to replace the ‘eggshell’ model of plough stops with a C cut model.

While at rest start with both feet parallel.

Move one foot forwards with weight distributed to the inside front wheel, while pushing out with both back wheels. This forms the basis of a plough stop.

3.3 T Stops

This stop is highly discouraged in actual gameplay.

Behind T stops

Traditionally the easiest form of T stop, though this may vary from skater to skater.

Side T stops

Front T stops

These are typically the hardest T stop due to the limited ankle support.

3.4 Turn Around Toe Stops

Turn around toe stops is a sharp stop that requires that a skater can perform a transition while rolling. Developing skaters should see ?? before attempting this stop.

This stop can be performed with any style of transition.

Warm Up Drill: Transition Variants

When performing turn around toe stops as a regular Jackie Daniel’s warm up (see ??), skaters should attempt to perform a different transition for each pair of turn around toe stops. The pairing of the stops is so that skaters may perform the transition on each side.

3.5 Backwards Plough Stops

Backwards plough stops are, as the name implies, plough stops while skating backwards. These can be incorporated as an extension to the Jackie Daniels drill ??.

3.6 Power Slides

3.7 Hockey Stops

There are two rough approaches to hockey stopping: the carve into the stop, and a single sudden sharp turn.

Developmental Drill: Carving In

The first and most straightforward approach to learning hockey stops. Begin with a carve, and apply more force to the edges closest to the skater's body such that you come to a stop during the movement.

The focus should be on the sharpness of the carve at low speeds, while applying force on the frontward facing outside edges on both skates, and leaning backwards into the stop.

Ideally the skater should end with their feet parallel.

Common Pitfall: Skaters may fail to bring their back leg through the carve and end up in a power-slide instead of a hockey stop.

TODO: Figure

Developmental Drill: Question Marks

A developmental drill that helps with skaters that have the initial movement down, but have not yet got the stopping portion of the hockey stop nailed down.

Place two cones 10ft apart. Starting from the rear cone, skate forwards and carve around the front of the front cone. If the skater stopped then they've managed to do a hockey stop, if they did not stop continue the carve through and around till the skater is facing the rear cone. Repeat the motion, increasing speed to help get a better edge for stopping.

Developmental Drill: Lateral Approach

Another approach to learning hockey stops is to begin with a lateral movement rather than a forwards one. The advantage of this is that there is less distance to turn, the hip movement is already incorporated, and having a set line to stop on may assist conceptually.

Starting with a lateral, perform a C cut to stop.

Developmental Drill: Straight On

This is similar to the lateral hockey stops. Rolling at a low speed in a forwards direction the skater should attempt to shift their weight to their front wheels and push out with their rear

wheels, turning to enter a stopping position.

While moving to this position they should begin to engage the stop. The skater's weight should shift to the edges of their skates closest to their body, with weight loaded mostly on the leg closest to their body.

TODO: Figure

3.8 One Footed Hockey Stops

Chapter 4

One Footed Skating

4.1 Stepping

While not technically skating on one foot, this is a developmental skill for weight transfer that help with one footed skating and techniques that depend on it. For example laterals, transitions etc.

Technique

Stepping technique varies between the direction of motion.

The first concern is to have sufficient static balance when standing (i.e. not rolling) and lifting and placing skates. Preventing rolling is a matter of weight distribution. The rhythm to achieve is to weight up one skate, lift the other, place it, transfer weight to the other skate, lift the first skate, place it and repeat.

Stepping side to side is easier, as the motion of the movement is orthogonal to either direction of rolling.

Stepping forwards and backwards may be improved by turning the skates slightly inwards or outwards (different skaters have reported opposite methods as being useful), to get a slight edge to bind against. Skaters may also find that weighting up the inside or outside edges improves stability.

Developmental Drill: Stepping in Place

Without moving, this drill is simply about raising and placing skates back on the ground without rolling.

Common Pitfalls Skaters may raise their hips when lifting their leg, unweighting their loaded leg and rolling. This is particularly prevalent on the forwards and backwards steps. One approach to ameliorating this is encouraging them to swing their leg from their hip rather than lifting it when placing their foot either forwards or backwards.

Warm Up Drill: Stepping

This is perhaps best conceived as an 80s aerobics class.

One skater leads the drill, the other skaters mirror the 'instructor'. The instructor indicates a direction of stepping, either forwards, backwards, left or right for the skaters to follow.

With more developed groups of skaters synchronisation of steps may be added to the drill. This is not recommended for developing skaters who should be free to set their own pace and level of comfort.

4.2 Developing One Footed Skating

This section discusses a number of preparatory drills to develop one footed skating. For introductory one foot skating it is enough to lock the thigh and glide forwards. More complex weight distributions and edge work are a progression from this skill.

Developmental Drill: Balancing

The first and simplest predicate for one footed skating is standing on one foot.

This may be practiced off skates for skaters who have not yet developed their proprioception.

The skate should be planted and pressure applied evenly to maintain position. The skater should not be rolling either forwards or backwards.

Developmental Drill: Lifting

The next issue that skaters often encounter is that when lifting their leg while skating that this action throws off their balance. They will manage to keep their balance while their leg continues its initial swing, then arresting that motion will throw off their balance, ending their one footed sojourn.

Starting stationary, lean out over one hip until one foot naturally leaves the ground. This circumvents the issues with raising the foot with too much force and places the skater's weight in the correct position for one footed skating.

Another approach to this is to emphasise lifting from the 'hip' rather than from the thigh. This may make the initial balance distribution slightly harder, but will also help with developing one foot form.

Developmental Drill: Lifting and Rolling

Assume the same position as the lifting drill, this time while rolling with a small amount of momentum. While rolling, gently lift the extended leg, allowing the extension to 'hitch' the hip. Keep the grounded leg bent and ready to fall forwards to take that knee if difficulties arise.

Developmental Drill: Rocking

Having established that the skater is able to lift into a one footed stance, and that they are able to balance while stationary, the next goal is to get a small amount of dynamic motion.

From a starting position of balancing on one foot, rock backwards and forwards on that foot. The skater will need to adjust their ankle to compensate for the movement.

Warm Up Drill: One Foot Glides

Gain some momentum and glide on one foot around the track.

If this is part of a developmental drill start at the jammer line and begin with a glide to the pivot line. You should aim to extend this through to the turn. At this stage some basic one footed edge work and leaning will be required to make it through the turn. Some reasonable benchmarks are: From a stationary start the skater should make it to either one quarter or halfway around the track.

From a rolling start the skater should aim to make it around the track. Eventually the goal should be to extend this to a glide around the track from a stationary start.

4.3 Backwards One Foot

Developmental Drill: Rocking

This is identical to the forwards one footed rocking drill.

Having established that the skater is able to lift into a one footed stance, and that they are able to balance while stationary, the next goal is to get a small amount of dynamic motion.

From a starting position of balancing on one foot, rock backwards and forwards on that foot. The skater will need to adjust their ankle to compensate for the movement.

Drill: Backwards C Cuts

For a developmental version, begin with both feet on the ground and one foot out front and perpendicular. Drag the front foot around and back in a 180 degree arc, performing the C cut. Once the motion is ready, remove the other foot from the ground.

Progressions: Progressions include performing a backwards crossover between backwards C cuts. Start facing side on the track and perform a backwards crossover, moving in derby direction. Then perform a backwards C cut flipping the facing of the skater. Next perform another backwards crossover, continuing the motion in derby direction.

4.4 Side Surfing

Side surfing is a close relative of one footed skating - most of the skater's weight is distributed to a single foot.

The core technique is to load all the skater's weight into their front leg (leaning may help) while keeping the back leg on the ground in an open position.

Common Pitfall: If the skater is spinning as they attempt to perform a side-surf it is likely that they are trying to centre their weight. Moving their weight to the front leg should assist with this.

Developmental Drill: Circling

When developing side-surfing skaters may discover that they don't have the hip flexibility to reach the required angle for a proper side surf.

Instead the skaters may opt for a smaller hip angle and instead work in small circles.

- Take a stance with the hips open to a comfortable angle.
- Pick a 'forwards direction' and lock that leg in.
- Perform egg-shell movements with the back leg to generate momentum.
- Steer in a circle with the forwards leg.

If the skater is cleared for contact, it may be helpful to circle while hold hands with another more experienced skater when performing this drill. The other skater can provide the initial momentum which will help with developing proper form and hip angling.

Stroked Side Surfing

Rather than holding the position, use the back leg to provide propulsion by lifting and performing a 'stroke'.

Progressions:

- Perform multiple strokes before resuming forwards skating.
- Alternate the facing of the side surf and stroke accordingly.

Backwards Weighted Side Surfing

Side surfing can also be performed near identically with the weight in the back foot.

The skater should begin skating forwards and lift and place their rear foot to enter into a side surf. The skater may initially weight their front leg. The skater should then transfer their weight to their back leg while maintaining the side surf. They should be able to demonstrate this by lifting their front leg as they skate.

This technique is useful for a number of loaded jumps.

Chapter 5

Crossovers

This chapter deals with crossovers.

Crossovers are the most stamina-efficient of maintaining speed around the track. Some styles provide large amounts of acceleration, but are often coupled with toe-stop running for the initial.

As crossovers are a common part of warm ups, we will begin with a few warm up drills:

Warm Up Drill: Hot Laps

A simple drill for skaters who are already proficient at crossovers. Perform 3-5 laps of crossovers at a moderate to fast pace.

Warm Up Drill: Pyramids

This is a common cardio and general fitness drill.

Skaters should form pairs. One member of each pair should perform {5, 4, 3, 2, 1} lap of crossovers, while the other performs a non-derby exercise (such as planks, sit ups, push ups, squats etc).

Once the skating member has finished their laps, the members swap positions.

Progression: Repeat the drill, in mirrored order this time increasing the number of laps.

Warm Up Drill: Balanced Hot Laps

A more balanced set of cross-overs.

Rolling rest implies that skaters should remain on track and upright, but simply roll.

- Two minutes of crossovers in derby direction
- 30 seconds rolling rest in anti-derby direction (still on track)
- Two minutes of crossovers in anti-derby direction
- 30 seconds of rolling rest in derby direction.
- Two minutes of backwards crossovers in derby direction.

- 30 seconds rolling rest in anti-derby direction (still on track)
- Two minutes of backwards crossovers in anti-derby direction

Warm Up Drill: Peeling Off

Skaters should line up from slowest to fastest.

Begin with the slowest skater performing either one or two laps of crossovers at a comfortable pace (say 60% of full effort). The pack should follow and keep pace with this leading skater. That skater then peels off and joins the back of the pack. The next fastest skater then takes over, at what they would consider to be a comfortable pace.

Skaters that have finished their lap should push themselves to keep up with faster skaters. If they find that they can no longer keep up, they may go and get a drink.

The drill continues until each skater has led a lap.

Progressions: The drill may also be run with backwards crossovers.

5.1 Forwards Crossovers

Developmental Drill: Punt

This drill involves breaking the motions required for a crossover down into individual leg movements. While this can be performed for any form of crossover, we will be focusing on the forwards derby-direction version in this description.

The first of these is a 'punt'. The skater should begin with their outside leg as far forwards and crossed in front of them as they feel comfortable. Their inside leg should be bent and 'locked' in for this drill.

The motion should be for a long, low stroke with the skate, pulling from left to right to the outside of the track, lifting at the end of the movement and placing the skate in the same relative starting position. Force is generated from the sideways motion of the skate.

Do two to three laps with this motion. Skaters may feel that the long hold with the passive leg may be tiring.

Developmental Drill: Pull Under

This drill involves breaking the motions required for a crossover down into individual leg movements. While this can be performed for any form of crossover, we will be focusing on the forwards derby-direction version in this description.

The second motion is the pull under. The skater should place their inside leg as far to their left as they feel comfortable. The skater's outside leg should be bent and 'locked' for the duration of this drill. The motion should be for a long, low stroke pulling under and behind the skater's outside leg.

Force is generated from the sideways motion of the skate.

Do two to three laps with this motion. Skaters may feel that the long hold with the passive leg may be tiring.

Developmental Drill: Lean-To

The previous developmental drills focused on the motion of the skate in contact with the ground. This drill looks at the flicking motion.

The flick is technically optional - most of the power is generated from contact with the ground - however it is stylistically correct.

The skater should lean their left shoulder against a wall, and bend and lock their right leg. Next the skater should pull their left leg under as if they were in motion.

The focus should be on the final flick of the motion, not the generation of force. As the skate reaches the end of its motion, lift first the inside two wheels, then drag and flick the outside two wheels.

Crossovers for Speed

This drill is focused on using crossovers for maintaining speed around the track.

The power driving the crossover comes from the lateral motion of the skate along the floor. In this drill the goal is to maintain contact with the floor for the longest period of time possible. This involves getting and staying low to provide the maximum reach for the legs.

Crossovers for Acceleration

Unlike the speed drill, this involves fast short crossovers as a method of gaining speed quickly. Here the focus is on using the crossover motion to kick the ground and quickly flick off it rather than stroking through. This is best performed from an initially stopped or slowly rolling position before settling into speed based crossovers for the lap.

Alternating Crossovers

A drill for using crossovers for agility.

Start on the outside line facing in derby direction.

- Perform an accelerative crossover towards the inside
- Before reaching the inside line, perform an accelerative crossover towards the outside.
- Repeat

5.2 Backwards Crossovers

5.3 Drop Step

A related movement to the backwards crossover.

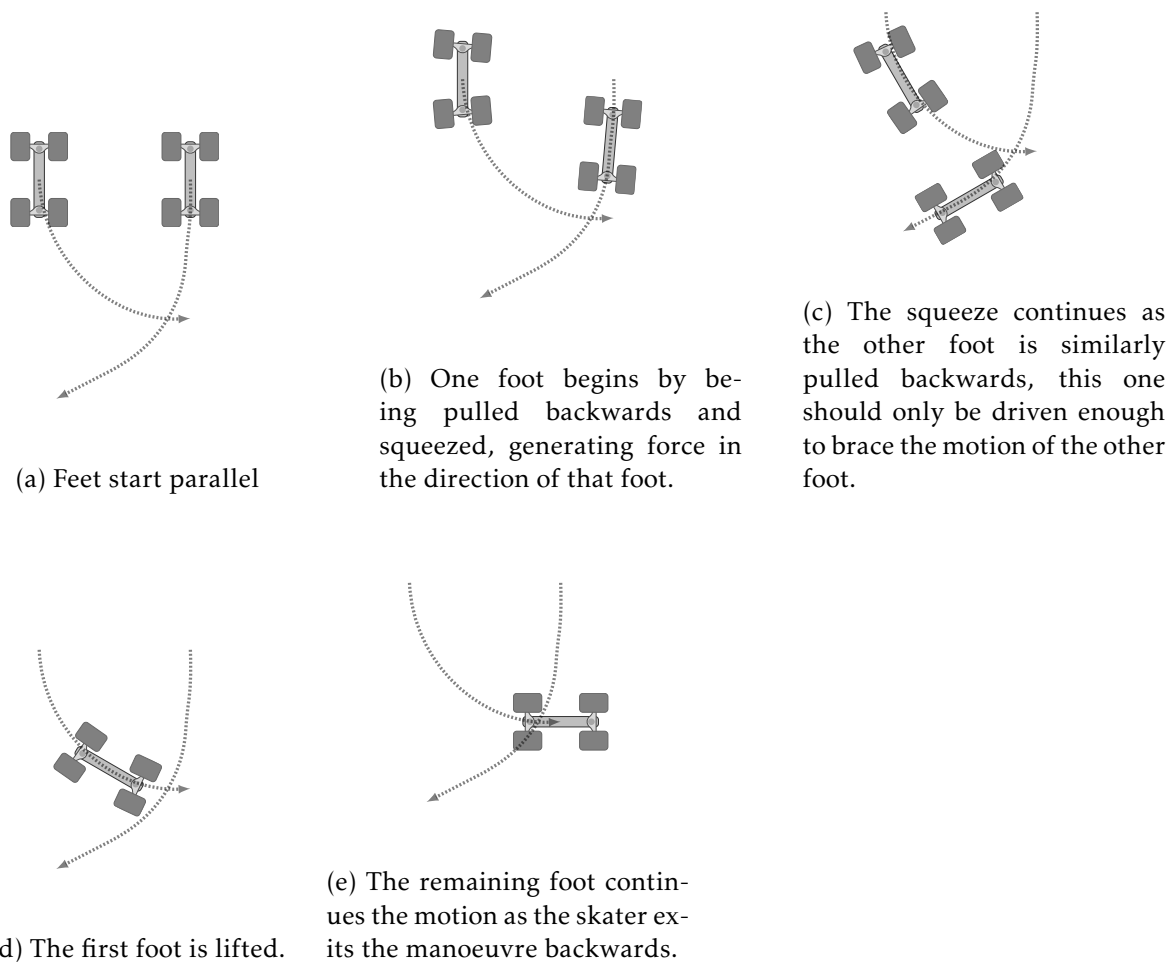


Figure 5.1: The "pull under" manoeuvre. This particular variant leaves the skater moving laterally relative to their starting position.

This motion generates considerable acceleration without the use of toe stops. The variant presented in ?? shows the generation of lateral motion, while later jammer juking drills (??) will use a whole spin to translate some of that acceleration to forwards momentum. The backwards momentum version of this is to simply do a backwards crossover.

Chapter 6

Transitions

This section details a collection of differing transition techniques. As different skaters will find different approaches here easier or harder, if you are learning then some degree of trialing techniques to find which ones work for you is a good idea.

These vary in difficulty, and it is advised to try the easier ones before progressing to the harder ones. You should consider that most of the one footed transitions are inappropriate for a beginner skater.

Before attempting transitions you should have a degree of comfort with both one footed glides and backwards skating.

If you are a beginner, the ones you may wish to consider include:

- Turnout - traditional 'textbook' transition style
- Staggered - easier than the turnout, good style for refereeing
- Pivot - an approach where your feet don't leave the ground. Some practice with manuals may help here.
- Partial jump - an approach that adds a small jump to assist with the turn. Good for starting but discouraged for derby gameplay due to instability.

Conversely, more experienced skaters are encouraged to learn as many of these as possible, purely for technique practice.

As part of all transitions practice, one foot glides and side surfing will help with balance, stability on one foot through the transition and conditioning the ligaments in the hips to open up to wider angles (depending on the transition technique).

It should first be noted here that basic refers to the relative difficulty of these transitions, not that they should be superseded by more complex transitions.

Tight, strong transitions that withstand impact from other skaters are almost always preferable to one footed jumps that leave the skater vulnerable to a hit.

There are a few general conceits that should be discussed with these introductory transitions. The first is that practicing these while stationary is strongly preferred before attempting them

while moving.

The mechanism of turning will vary between different forms of transition, so that particular discussion will be deferred to the relevant sections. What is universal to all forms of transition is the difference in weight distribution in the feet as the skater's relative motion goes from forwards to backwards (or vice versa). This is less important for transition styles where both feet flip simultaneously.

When turning from forwards to backwards, the skater's weight will begin in the heels of their feet during their forwards motion. Depending on the position of the skater and their relative balance and weight distribution, after lifting the first foot, moving the weight of the remaining foot to the heel (as when skating backwards) will prevent the forward foot from 'running away'. It will also slow the skater's motion slightly, leading to a more controlled turn.

Similarly when turning from backwards to forwards, initially the weight is in the heels. On the trailing foot this should be shifted to the toes.

Generic Transition Warm-Up Drills

There are a few generic transition warm-up drills, these apply to all types of transitions.

Additionally transitions are incorporated in turn around toe-stops style stops.

Transition on the Whistle Perform a

6.1 Turnout Transitions

The 'classic' transition.

- Begin with feet parallel and facing forwards.
- Turn head and shoulders from the waist either left or right as far as it comfortable.
- Lift the leg corresponding with the direction you have turned transferring your weight to the other foot, and open up at the hips to as close to 180 degrees as possible.
- Place that foot, leaving you in an open side surf position.
- Transfer weight to the back foot, raise the other leg and complete your turn.
- Place your second foot parallel to the first.

This can be practiced on the spot, or on a line while stationary.

Due to the potential lack of elasticity in the ligaments of the hip, it is unlikely that a skater will achieve a full 180 degrees without prior conditioning.

This additionally leads to problems when performing this style of transition in motion - if the skater cannot open up their hips wide enough then they may end in a situation where their second foot is perpendicular to the first.

To ameliorate this, any angle beyond 90 degrees can be used if the skater allows a change in their trajectory to the new direction of their skate. By then correcting their trajectory once they have raised their other foot the skater can still transition effectively. The greater their initial speed, the greater the strain on their edges when attempting this change in trajectory. For this

reason this transition is more effective at speed as you get closer to 180 degrees.

Common Pitfalls

If the skater is jumping to pull themselves through the transition, the skater should be encouraged to begin with a one foot glide before starting the transition. This prevents the jumping motion from a single foot.

6.2 Staggered Transitions

The staggered transition is similar to the turn out, but rather than starting with feet parallel we begin with them staggered. This stance begins with the skater's hips already open, which removes that portion of the manoeuvre from the turn out transition.

Developmental Drill: On the Spot

With or without skates, adopt a split stance. The skater should flip their back leg, then their front leg to face in the opposite direction.

6.3 Pivot Transitions

Some practice with manuals will assist with this technique. Manuals drills may be found in ??.

The goal of a pivot transition is to flip position using only the front or back two wheels on each skate.

6.3.1 Forwards Pivot Transitions

The skater begins in a staggered stationary position. The skater should then perform a front manual on both feet, and be comfortable holding that position.

The skater should then be able to turn both feet either clockwise or anti-clockwise while holding the manual. After turning 180 degrees and placing their heels the skater will have performed a pivot transition.

The motion for performing this transition while moving is identical.

6.3.2 Backwards Pivot Transitions

Unlike the forwards transition, this one requires backwards manuals on both wheels. It is important to note that when performing back-wheel manuals that there is no support for the skater should they begin to fall backwards. For this reason a staggered stance should be maintained.

While turning there will be a moment when the skaters wheels are in line and the stance is no longer staggered, it is best not to hold this position.

The skater begins in a staggered stationary position. The skater should then perform a front manual on both feet, and be comfortable holding that position.

The skater should then be able to turn both feet either clockwise or anti-clockwise while holding the manual. After turning 180 degrees and placing their heels the skater will have performed a pivot transition.

The motion for performing this transition while moving is identical.

6.3.3 One Foot Forwards Pivot Transitions

For this technique it is imperative that the skater keeps their knee bent.

Now that the other leg is no longer an issue, we are free to pivot transition either clockwise or anti-clockwise.

6.3.4 One Foot Backwards Pivot Transitions

6.4 Partial Jump

If the regular in place transitions are constrained by hip movements, adding a small jump can assist in the motion.

- Turn head to the direction that you wish to be facing
- Open up the back leg, keeping it above the ground
- Flick shoulders to follow the head
- Jump, turning hips to complete the turn and land on your back leg. This should leave you with your forwards leg in the air
- Bring the forwards leg around to complete the transition

6.5 Two Foot Jump

Similar to a staggered jump transition, but with the goal of leaving and landing on both feet simultaneously.

6.6 Two Foot Jump

Similar to a staggered jump transition, but with the goal of leaving and landing on both feet simultaneously.

6.7 One Footed Jumps

Chapter 7

Toe Stops

This chapter deals with basic toe stop movement techniques.

We will begin with some basic toe-stop guidance. Our primary concern with toe-stop movement is stability. There is an inherent risk of injury when falling or twisting a toe-stop. For this reason the first thing to check is that the toe stops are securely mounted (i.e. not turning). Next, it is imperative that skaters do not attempt manoeuvres which they do not have the balance and strength for. Slow but steady development is key here.

To core idea of the toe-stop is the 'front tripod' formed by the toe-stop and the front two wheels. This needs to be placed both carefully and firmly enough that the wheels bind rather than roll, otherwise the skater will fall backwards. When practicing, distributing weight to the toes and leaning slightly forwards is strongly encouraged for two reasons.

- With a weight distribution on the front more weight is placed into the toe-stop rather than the wheels in the tripod.
- In the worst case falling forwards onto a knee is infinitely preferable to falling backwards when wheels slip out from under toe-stops.

7.1 Development

This section contains a collection of conditioning drills for toe-stops. These are suitable for skaters that are becoming comfortable with their toe-stops, but cease being useful after that.

Developmental Drill: Balances

While stationary, the skater should start on skates adopt a staggered stance, and pop up onto their toe stops.

Progressions: One foot balances. Skaters should already be comfortable balancing on one foot before they attempt this. The main complexity here is the loss of the staggered stance, skaters should be low with knees bent while balancing.

Developmental Drill: Popping Up

The skater begins by skating backwards. They should then stagger their stance and lean onto their toe stops, coming to a stop.

After this, they should resume skating backwards and repeat.

Progressions: The first progression of this skill is for the skater to not come to a stop, but instead burn off speed, then drop back down onto their wheels and continue skating.

Another progression is to do this on one foot, skate backwards, lift a foot, drop onto the toe stop either to stop or slow. If slowing on one foot the skater should be encouraged to drop back to that one foot rather than two feet immediately.

Developmental Drill: Weight shifting

The skater should begin stationary in a flat stance with skates facing slightly inwards. Start by popping up onto toe stops from this non-staggered stance.

Next shift weight to one side and lift the other foot, then place that foot, shift weight and lift the first foot. When placing feet it is essential that the placement is of the toe-stop first, then the front two wheels, otherwise a developing skater is liable to lose their balance when trying to support themselves with just the front two wheels.

Progressions: Eliminate the placement step so that it becomes a hop from toe-stop to toe-stop.

Increase the distance between the legs that weight is being shifted over. Increase the pace of the shift. With high enough pace and far enough distance this is no longer a developmental drill, but juking practice.

7.2 Walking

Toe stop walking is an elementary skill more about developing familiarity with toe-stops rather than being of direct utility in a game.

Walking sideways is easier than backwards or forwards.

Similar to the weight shifting drills in ?? begin with feet in line but slightly pointed inwards and pop onto toe stops. Pick a direction, shift weight and move the un-weighted leg closer to the weighted leg, while maintaining the toe-stop pointing inwards. When placing the foot it is imperative that the toe-stop is placed before the wheels. Shift weight, and then move the now un-weighted leg away from the weighted leg. This should be done while maintaining the inwards pointing feet.

Backwards is next and easier than forwards. This is because skaters are required to place their toe-stops before their wheels. As with the side-ways steps, but instead of moving legs towards and away from each other, we now move them forwards one at a time.

7.3 Grape Vines

As with sideways walking, except the goal is to place the trailing leg alternatively in front, and behind the fixed leg.

7.4 Side Shuffle

Similar to sideways walking on toe stops, except now both feet will be airborne.

7.5 Sliding to Toe Stops

Most of the manoeuvres in this section assume that the skater has already completed transitions. Some of the drills in this section complement turn around toe stop work.

TODO: First section

7.6 Acceleration

This is a simple toe stop movement that doesn't risk balance.

While skating forwards in a 'duck walk', flick the skate down to the toe stop and kick, pushing off the ground and gaining momentum.

7.7 Running

Toe stop running is a useful skill for gaining speed from a stopped position.

Starting from a stopped position, pop up onto toe stops and lean forwards. The goal is to match the angle of the toe stop to the speed of the skater. When the skater feels comfortable they may drop down from their toe stops and continue skating.

Developmental Drill: Building Up

Pick three 10ft markers on the track.

The first is the start line, the second is as far down the track as the skater is comfortable running (start at the 10ft), the third is a stopping line.

The skater begins at rest at the start line, on toe stops. The skater should launch from toe stops and run as far as they feel able, ideally till the second line. The skater should perform a turn-around toe-stop at the third line, and run out of it back to the first line.

When developing this skill start with one to two steps, and build up from there.

7.8 Skating to Toe Stops and Back

This section deals with alternating between skating, running on toe-stops and moving back to skating.

The primary difficulty with this skill is that toe-stops are typically angled such that jumping onto them while rolling without first matching momentum will result in the skater falling over. This angling also means that this skill is easier to practice backwards.

All of the following drills should be attempted at low speed first. If the skater is not comfortable moving at the required speed when starting on toe stops, they should not attempt to move onto toe stops from that speed when rolling.

7.8.1 Skating Backwards

Skate backwards, hop onto toe stops for a couple of steps, resume skating backwards. This is easier than the forwards version as the toe stops are already angled backwards.

If the skater needs to bail out from this movement they can drop onto their toe stops and come to a stop.

7.8.2 Sideways

Similarly to the backwards version, this can also be performed sideways while avoiding angling issues with toe-stops.

From a side surf, incorporate a small jump landing on toe stops. The skater then uses their existing momentum to perform a side shuffle or a grapevine on toe stops. They then return to a side surf.

If the skater is concerned by the sideways momentum on their toe-stops, the first toe-stop steps may be accompanied by a partial transition for greater stability.

7.8.3 Skating Forwards

The hardest of the three. Care must be taken to place the toe-stops at the correct angle while moving forwards. Leaning forwards will help with this, as will maintaining momentum.

Chapter 8

Laterals

Laterals are a technique for travelling laterally across the track. For the purposes of this chapter we will consider three different components of the lateral: the starting push, the transfer between feet (if any), and the stopping technique.

Some of these may be mixed and matched.

8.1 Opening the Book Laterals

Begin on the line with your feet in a 'T' position. The capping bar of the T should run parallel to the line, while the other foot should be pointing away from the line.

Skateboard push using the forwards facing foot, laterally skating on the other foot.

Place the raised foot in line with and parallel to, but facing in the opposite direction to the planted foot.

Developmental Drill: Lateral Balancing

Laterals involve three different movements, each of which can be practiced independently.

The first issue that new skaters may encounter is that while they may be proficient in one footed glides with their legs parallel, they may not have practiced with their legs akimbo. As this utilises different sets of muscles this may require some initial practice.

The goal of this drill is low speed control. This is markedly harder than skating on one foot at speed, and so will help develop better technique before looking at speed and power.

Begin by standing and balancing on one foot facing forwards with the foot turned out 90 degrees. The other leg should be raised but still facing forwards. The skater's hips should be turned towards the turned out foot. Practice this on both legs.

Developmental Drill: Lateral One Foot Glide

Once the skaters are comfortable with lateral balancing position add a small 'skateboard push' using the outside edges of the otherwise raised leg. This push should have minimal force such that the motion can be halted without requiring any large stomps or difficult techniques.

This motion is similar to side-surfing. **TODO: Ref side-surfing.** Weight should be heavily over the forwards leg. The knee of this leg should be bent out over and possibly past the toes of the same leg. The knee should also be in line with the foot, if it's misaligned then the skater will turn.

Common Pitfall: It is important that the source of the force from this push is from behind the planted foot. If the force comes from too far forwards, or the skateboard pushing foot rolls this will throw off the balance of the push. Typically this can be seen when the skater performs the push, remains stable for a few seconds while their pushing leg is in motion, then when they attempt to arrest and return the pushing leg the acceleration on that leg throws off their balance.//

Common Pitfall: If the skater is having issue maintaining stance, it is possibly a positioning issue. Ensure that the knee is out over their toes and that it is aligned with their foot rather than turned or offset.

Developmental Drill: Static Weight Transfer

Having grasped the initial push, the next drill focuses on transferring between the two feet.

As before we begin with performing the motion at a standstill.

- Starting with feet in the 'T' position, we begin by turning the hips as far as possible in the direction of the turned out foot.
- Next raise the forward facing foot.

The speed of the next few motions depends on the hip flexibility of the skater. With lower flexibility these should be performed in quick succession, conversely skaters that are more adept at side surfing might perform a side surf at this point.

- Place the raised foot inline-with, but facing out and away from the planted foot.
- Lift the first foot, keeping it perpendicular to the newly planted foot and flip the hips towards the newly planted foot.

Developmental Drill: Rolling Weight Transfer

8.2 Stomp Stop Laterals

8.3 Lateral Hockeys

A regular lateral, but to come to a stop the skater should perform a hockey stop.

Done correctly, this stop should leave you in a square position relative to the track.

8.4 Pull Under

Chapter 9

Jumping

9.1 Staggered

One of the first developmental skills for jumping is a staggered jump.

While skating raise one leg. Begin to place that leg back on the ground, and as you transfer weight lift the other leg in a small jump.

To avoid falling backwards, as the skater performs the jump they should shift their weight forwards. Additionally as the skater lands they should bend their legs into the landing to absorb the impact safely.

As an important part of this drill, the goal is not to launch forwards, only up. The existing momentum of the skater from before they leave the ground will provide the necessary forwards motion.

9.2 Leaping

Development of one footed skating (??), and edgework (chapter 1 and ????) are necessary before attempting this skill.

Leaping is a sideways motion. While skating forwards lift one leg, then using the opposite edges of the trailing foot push the trailing foot off the ground and land on the other leg.

As with staggered jumping the goal is not to apply any forwards motion. The existing forward momentum should provide sufficient forwards motion.

9.3 Vertical Two Foot Jump

Another developmental jump, this one focuses on launching and landing from two feet in parallel.

This is easiest practiced on the inside of the approach into the apex, and is hardest on the outside of the apex.

Approach line, place opposite toe stop on line, swing around line with other foot while facing

inwards. If required, the movement should stop prior to the placement.

Progress with longer distances of swinging, and incorporate skating into the motion.

Eventually add a toe stop shuffle into the mix.

9.3.1 One Foot Jump

Mr. Bump

On either lane 1 or lane 4.

9.3.2 Two Step Jump

This is an extension of the two step turn. The basic version of this jump with the spin preferences the outside line, while eliminating the spin allows it to be used effectively on the inside too.

The static version starts with the skater in a split stance in lane 1 or lane 4. The leg closest to the line should be behind.

The stepping movement is a toe-stop step from the back, then on the front leg, into a jump around the line. The initial focus should be on spinning to land back on the initial toe stop, plant the second toe stop and stop dead.

This drill should start with no obstacles except maybe a cone on the line, but should then progress to a chair. The chair should initially be seat side out, then back side facing the skater, then back side facing the line.

Initial Progressions are as follows:

- Moving the chair closer to the line.
- Gaining Height on the jump
- Maintaining momentum from the toe stop landing.
- Rolling into the motion.
- Increasing the distance of the jump.

Subsequent progressions focus on improving the form of the jump. Our goal is to eliminate the spin entirely, for this we need to land with our first toe stop half a lane in from the line, then grape-vine with our other leg behind the first.

The final motion should allow the skater to continue moving in a forward direction without losing momentum to the spin.

The next progressions are to:

- Add incoming speed
- Add distance

Another variant is to stop dead on toe stops from the jump, before cutting hard towards the centre of the track. Emphasis here is on stopping on the landing and getting into a low position. As with the basic turn. First foot planted passes one blocker on the line, the second foot then continues the turn to pass a second blocker on the line.

As with the basic turn the progression is to begin static on the inside of the apex, add movement speed and distance, and then progress to the outside of the apex.

9.4 Back Foot Jump

Less powerful than the two footed jump, but requires less setup.

Chapter 10

Footwork

This chapter contains a number of combined footwork drills. This often involves combining components from the previous non-contact chapters into 'derby-ready' non-contact drills.

10.1 Russian Circles

10.2 Plough Stop Footwork Drills

These are footwork drills involving plough stops.

Back and Forwards

1. The skater starts at the inside line and accelerates forwards.
2. After 10 feet they should perform a plough stop.
3. Next they should perform a lateral to the middle of the track
4. Next they should accelerate backwards 10 feet and perform a backwards plough stop.
5. They should perform a lateral to the outside of the track
6. The skater should then accelerate forwards 10 feet and perform a plough stop.
7. Next the skater should perform a lateral to the middle of the track
8. Mirroring their previous motion they should then skate backwards 10 feet and perform a backwards plough stop
9. After a final lateral to the inside of the track the skater will be in the same position in which they started.

TODO: Figure

Progressions A natural progression of this is to replace all of the plough stops with hockey stops, and all of the lateral movements with pull-unders. Backwards plough stops should be replaced with backwards hockey stops.

10.3 Stop to Slides

This section contains footwork drills relating to moving between stops and toe-stops. This forms the basis of a range of dynamic jammer movements which are useful in constructing jukes.

Drill: Powerslide to Toe Stops

This is a more advanced drill that requires that the skater can already perform either hockey stops or power slides, see ?? and ?? for drills on these techniques.

Set up either across both sides of the track, or across the middle of the track. Skate from one line to the other and perform either a hockey stop, or a power-slide. Drop from that stop onto toe-stops to reset.

TODO: Figure

Drill: Powerslide to Juke

This is an extension of the previous drill. Set up two chairs representing blockers in lanes 1.5 and 3.5.

The skater should begin behind the chairs and skate towards a line. As they reach the line they should perform a powerslide or hockey stop, and then finalise the stop with their toe stops. This stop should put them right next to the inside or outside edge of the track.

From this position they should then either perform a toe-stop side shuffle (??), or directly launch from their toe stop into a jump around the chair.

To complete the motion they should then skate through the middle of the chairs and back around. This motion should form a figure 8 pattern.

TODO: Figure

Chapter 11

Whips

11.1 Spin Hip Whip

This is an offensive whip that is initiated on the jammer by a team-mate.

The jammer begins stuck in the seam of a wall. The offence approaches alongside the wall and takes the jammer's hips from behind.

The offence then spins, hitting one of the butts as they pull their jammer around the side of the wall. The manoeuvre is completed by releasing the jammer, and performing a hit or screen on the brace.

Leg Whips

This drill is included for completeness. In general it is not encouraged to perform this manoeuvre in a game.

Hold pose with leg extended behind. The whip recipient should place one hand over the laces, the other on the heel of the skate.

The whip-ee should then pull their leg in at the knee, generating a forwards pull.

The recipient should be incredibly careful not to pull too hard, as there is a high likelihood of pulling the skater performing the whip over in a position in which they cannot place a foot to steady themselves. For this reason, and for reasons of being in an unsafe position to receive contact there is a high likelihood of injury in performing this technique.

Chapter 12

Blocker Drills: Three Walls

12.1 Three Wall Rotation

A collection of drills that focus on rotating the three wall.

Common Pitfalls: The blocker who swings out along the line will invariably spend part of that movement in an anti-derby direction. This invariably leads to the risk of a direction penalty being issued to that blocker.

Drill: Moving Rotations

12.2 Three Wall Driving

In groups of four. Three blockers, one jammer. Jammer works on moving between lanes 1 and 4, while the three-wall tries to drive the jammer. Walls should focus on not rotating and not hitting out. Brace should try to be colinear with the jammer. More experienced blockers may attempt to wrap the jammer.

Progression The first progression is to request that the jammer stops facilitating the drill.

Three walls with Offence

In groups of five. Jammers are free to jam and challenge the wall. More experienced skaters should perform offence as this session had no prior offence drills. Walls should focus on not rotating and not hitting out, while mitigating the impact of the offence.

Wall anti-offence goals:

- Avoid the offence
- Block of the offence
- Reform

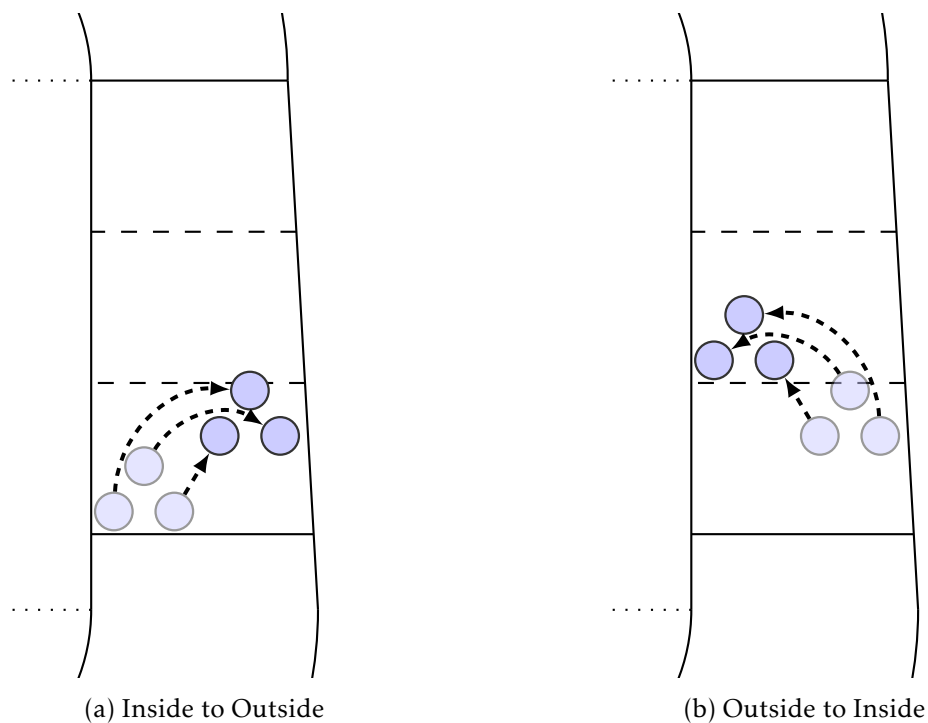


Figure 12.1: Three Wall Rotation Movements

Three walls in Proximity

In groups of eight. Six blockers in two teams of three, two jammers. Jammers are free to jam. Walls should focus on not rotating and not hitting out. Walls should also consider using the other wall to zone part of the track. Jammers should consider how to use their friendly wall to screen. Blockers should swap to Offence once they have lost the jammer.

Wall Goals:

- Maintain pack
- Drive the jammer to a line and hold them there.
- Recapture an escaping jammer and reform
- Hit out an escaping jammer, reset and reform

12.3 Jammer Ping Pong

This drill requires at least three blockers, and at least three jammers.

The focus of the drill is the wall knowing when to hold, control and release jammers, and when to reset and change focus. Jammers may simply jam.

Jammers begin with two jammers behind the jammer line, and one jammer behind the pivot line. At the start of the drill one jammer from the jammer line is released.

The blockers should attempt to block the jammer as per usual derby rules.

When the jammer reaches the pivot line, that jammer stops, and the jammer at the pivot line is released. The next jammer is then blocked in anti-derby direction back to the jammer line. This is then repeated with the jammers cycling. The drill may be run from anywhere from 2-5 minutes depending on the stamina of the blockers.

If the jammers are having too much success, then additional blockers may be added.

TODO: Figure

Variant: No Hitting Out

This variant focuses on controlling juke-y jammers who will gain an advantage if they're hit out instead of controlled on track.

In this variant if the jammer is hit out then they are done and the next jammer is released immediately. Blockers should focus on holding the jammer without knocking them out.

Variant: They Don't Stop Coming

This variant focuses on sucking back and intercepting an incoming jammer. Jammers all start behind the jammer line, and are released from the jammer line.

Jammers are released when the previous jammer has escaped.

Blockers may extend past the pivot line as if the last opposing blocker on track is at the pivot line. Blockers should not break pack.

The wall should reform and re-catch the next jammer who will likely have a run-up.

Chapter 13

Jukes

This chapter will cover a collection of juking drills, primarily for jammers.

The core philosophy of the juke is that the jammer should maintain at least two options for movement at all points in time. Ideally the blockers should not be able to determine what the jammer's next action will be, and are forced to pre-emptively react. If the jammer has maintained their options then the blocker's pre-emptive reaction will leave them out of position, and hopefully overcommitted.

As a result, each juke drill in this chapter will practice at least two movements, with the idea that the jammer should be prepared to transpose between either based on how the blocker's react.

Jukes will then be broken up into a 'main line', which typically will be the telegraphed motion, and then a 'secondary line', representing the transposition.

13.1 Lateral Leaps

Drill: Cones

Place a line of cones down the centre of the track.

The goal is to pick a side of the cones and leap laterally as far over them as you can manage, before leaping back.

For this drill the focus should be on improving distance, not on speed.

13.2 Toe Stop Line Jukes

This juke is best performed from a rolling start, such as on a scoring pass.

The main line of this juke is to approach either the outside or inside line, turn sideways and perform a toe-stop run along the line.

The transposition is to instead perform a toe-stop stop, then move to the opposite line.

To achieve this juke the transition to toe stops should occur inside the blind spot of the butt

closest to the line. Performing the transition too early will telegraph which movement the jammer is taking, along with burning off speed. To convince the blockers of the jammer's commitment to the line it is advised to maintain or even increase speed, and then practice a very sharp toe-stop stop.

13.3 Toe Stop Spin

This is a simple juke with both a secondary and tertiary line. The juke is best performed against a single blocker with their back to the jammer.

13.4 Pull Under Spin

This technique is designed to leverage the idea that a hip is typically stronger than a thigh when challenging laterals.

Starting engaged with a wall the jammer performs a pull under while turning 180 degrees, with the goal to roll around one of the butts hip first, blocking off any laterals.

13.5 Backwards Glide Juke

This juke begins with skating towards a line, stopping with a tight hockey stop. From this position the back foot is then pulled in a backwards one foot glide towards the opposite line.

Chapter 14

Derby Scenario Drills

This chapter contains drills relating to derby scenarios. Typically these will require at least a pack, possibly two.

14.1 Spring the Jammer

This drill trains the offence to defence switch and back again. It runs on the assumption that one team's jammer has just gained lead, and the other team needs to perform a fast offence before setting up to receive the opposing jammer.

Requires two packs, one in black one in white.

Drill: One jammer starts engaged on a back wall on the jammer line, the other starts unengaged just past the pivot line. This setup can be seen in ??.

The drill begins with the front jammer gaining lead. The back jammer's team should seek to perform a large offensive manoeuvre to 'spring' their jammer.

The drill ends when the lead jammer calls it off. The lead jammer's goal is to maximise their own points, while ensuring the other jammer scores no points.

Concepts:

Once the back team's jammer has gained lead, those blockers should be aware that offence is imminent. One option for this team is to hit the jammer out, and use the offence to stretch pack backwards along the track, elongating the run-back.

If the jammer is driving hard, rather than allowing the offence to break apart the wall, the wall might consider using the momentum from the drive to overshoot the offence while still holding as a three wall.

Progressions:

Move the front jammer back behind a two wall of opposing skaters. Lead is called when either jammer escapes. The setup for this drill can be seen in ??.

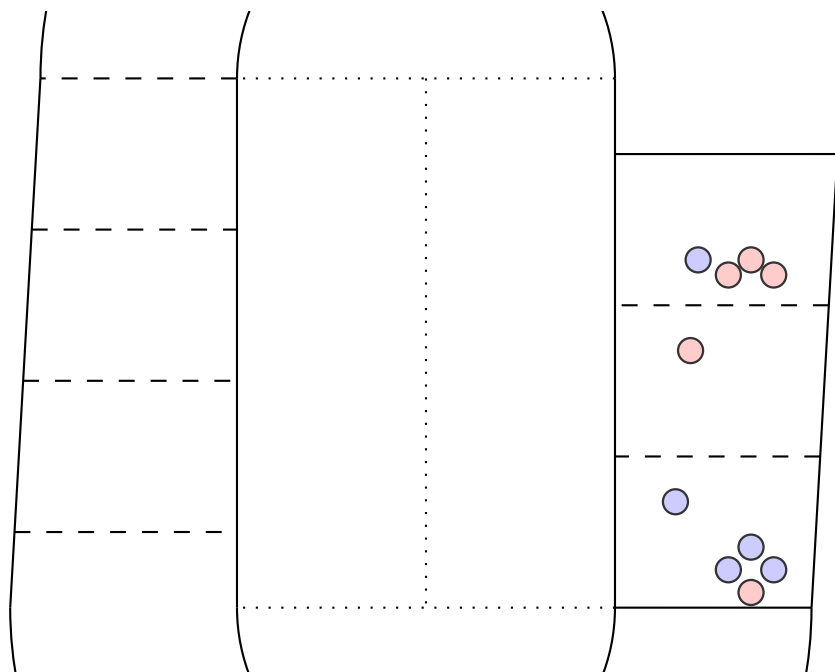


Figure 14.1: Spring the Jammer drill setup.

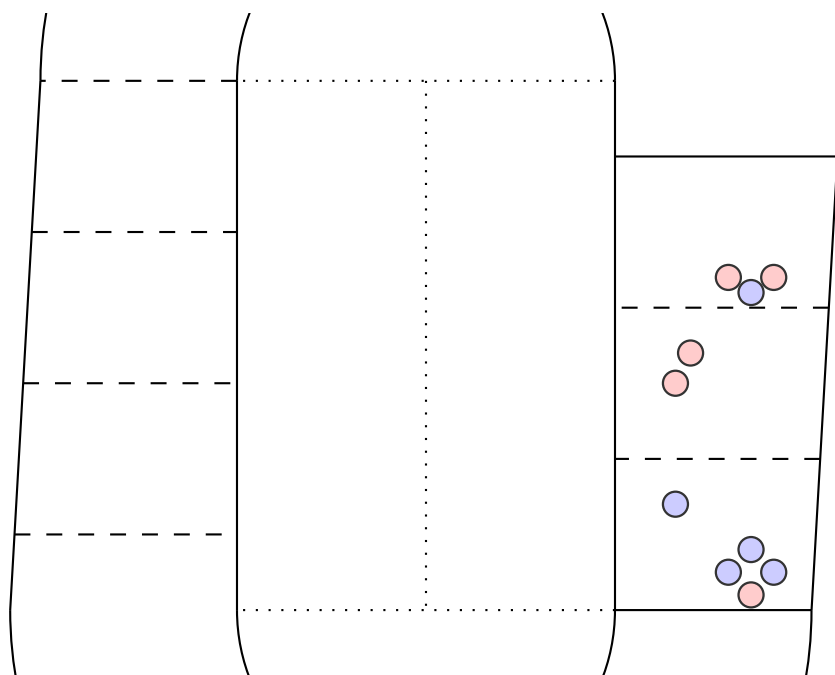


Figure 14.2: Spring the Jammer drill setup with a front two-wall.

14.2 Power Jam Scenarios

Starting with one jammer in the box.

There are three variants of this drill depending on how long the jammer is in the box for.

1. The jammer is in for a short period of time (typically less than 10 seconds).
2. The jammer is sitting, but only just (10-20 seconds)
3. The jammer is in the box for close to, or the full 30 seconds.

In the first case the goal for the 'power-ful' blockers is to perform at most one quick offensive move, then reset to intercept the returning jammer. The defending blockers will try to prevent that first move before settling into regular derby.

In the second case the goal is to get the jammer out, and reset, with a clean pass the power-ful jammer can hope to be re-entering the engagement zone as the power-less jammer is returning from the box. The defending blockers may wish to

In the last case the blockers have free reign for typically at least the initial pass and one scoring pass. They should consider how best to set their jammer up for points on their first scoring pass, and reset when required to catch the returning jammer.

Defensive blockers

Progressions Alternatively the time that the jammer is in the box may be randomised, the jammer may wish to attempt to communicate their time remaining to their own team to help with defensive options.

14.3 Endless Offence

Requires two three walls two offence and two jammers.

Jammers begin engaged and may be directed to only take supporting offence.

14.4 Last Blocker Standing

The drill requires a three or four wall on one team, a single blocker on the other team and either one or two jammers. If a single jammer, they should be on the same team as the single blocker.

The single blocker's goal is to manipulate pack to tactically trigger destruction or out of play situations to allow their jammer past.

14.5 Collapsing Pack

The goal of this scenario is to move pack backwards along the track, it requires some mindless assistance of an opposing blocker. The defending team should not be told the objective of this drill.

Start with one jammer on the track, a four-wall of defending blockers, and one to two assisting

blockers. A cone begins 5 feet behind the jammer, representing the furthest non-involved blocker.

The goal of the offensive blockers is to knock a defending blocker off the track, and recycle them behind the cone. Once this is done, both offensive blockers should retreat behind the cone, causing pack to be moved to the back, and resulting in the front wall being rendered out of play. The complexity is that this has to be achieved without moving pack to the front, or incurring a destruction penalty by causing a no-pack split situation.

The defending blockers need to hold the jammer while maintaining pack.

After a few repetitions of the drill the defending blockers should seek to develop counter-measures. The most obvious is that the blocker who is knocked out should simply not return to track. The next is to allow the jammer to drive the wall as the blockers approach, moving pack to the front and releasing their own hypothetical jammer.