

Contact Juggling:

A Technical Guide

On Fundamental Tricks and Practice Methods

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Introduction

Out of all the people who have had an interest in contact juggling, the vast majority will have given up. There may be many who just don't find it interesting, however there are a great number who will have quit because they don't know the correct way to practice, they didn't feel themselves improving, or they simply lacked motivation.

Today, you will see a large number of contact juggling videos on websites such as YouTube, and also people at your local club/gathering who will be practicing with a stage ball or acrylic. However, with the current situation it feels like it is far too easy to fall into the abovementioned pitfalls due to the lack of information available about contact juggling, leading to slumps in progress and boredom. I don't feel that the situation has changed in a long time, so I have decided to put my experiences into words in the hope that it will help those struggling to get into the world of contact juggling.

If you have any questions, or if you simply wish to leave a comment, please contact me via my blog or my twitter account:

<http://jcjc.exblog.jp/>

<https://twitter.com/JCJCyoyogi>

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Why Do People Quit?

In the introduction, I wrote that many people give up on contact juggling. I feel this is true of this type of juggling more than any other types. In fact, if we made a graph to show the ratio of people who quit a particular type of juggling, contact juggling would most likely be close to the top. Aside from contact juggling I also do toss juggling, which I feel differs from contact juggling in the following ways:

- Progress is easily measured
 - If you drop, you know you have failed
- It is easy to set goals
 - Judged by number of catches/how many times a trick can be done in a row
- From the beginning it is possible to learn a wide range of tricks
 - Cascade/tennis/half shower/mills mess etc. can be learnt within several hours or days

In contact juggling, isolations, rolls, and stalls are all considered the fundamental elements. However the majority of these tricks are measured by how cleanly they can be done, or how stable the position is, making it hard to tell if you are improving, and thus making it hard to set yourself goals or targets. In addition, there are few tricks that can be easily learnt from the beginning, making it hard to want to continue. There are a number of things you can do to combat this, including taking videos of your practice sessions on a regular basis to give you a sense of where you are improving. As the number of contact jugglers increases,

I expect these kinds of videos would have a positive impact on our progression and motivation.

Choosing a Ball

The first problem facing you if you are new to contact juggling is choosing a ball. There are a wide range of ball types available in varying sizes, meaning it can be very difficult to make a choice. Below I will write a little bit about the types of balls available.

Ball types

There are basically two types of contact juggling ball: acrylic balls and stage balls. The table below shows the pros and cons of both:

	Acrylic balls	Stage balls
Type	Acrylic balls	MB stage ball Play stage ball Jea9 ball Dekaball
Pros	+ Suited for isolation tricks	+ Does not hurt if you hit yourself + Does not matter if you drop the ball
Demerits	- If you drop the ball it will scratch/break - Can cause fires	- Not good for isolation tricks
Other	- Heavy	Light Good grip
Summary	Good for isolations	Good for body rolling

Acrylics are used in order to enhance the effect of isolations and give an air of mystery to your performance. Also, for those who wish to focus on isolation style juggling the acrylic is the best choice as isolations are typically easier to do with heavy balls. On the other hand, every time you drop the ball there is the risk of damaging either the ball or your surroundings, making a number of people afraid to practice properly, leading to poor form or simply the inability to practice in a certain places. As a rule when practicing, it is best to expect that the ball you are using will become damaged eventually, and that you cannot really do anything about it.

Due to their weight, there is a risk that you could injure yourself or others when using an acrylic ball. Also, due to the balls ability to magnify light, there is a very real risk of starting a fire if the ball is left exposed in the sun (I know people who have burnt carpets or clothing because of this!) Please keep your surroundings in mind when practicing with acrylic balls!

The advantages of stage balls are their comparatively light weight, and their safeness in regards to yourself and your surroundings. Although this sounds obvious, these are very important factors, and when it comes to practicing advanced body rolling tricks the last thing you want to worry about is a heavy acrylic ball hitting you in the face. In addition, you can extend the number of tricks available by making use of the bounce available with stage balls, which would be impossible with acrylic balls. As a result, for those who wise to focus on body rolling it is clear that a stage ball is the best option.

One of the downsides of this is that due to their lighter weight and

appearance, making your isolation tricks look convincing requires a higher degree of skill than is needed with an acrylic ball. On the other hand, tricks involving some degree of grip (e.g the enigma) can be more easily learnt with a stage ball.

Metal balls are also available. These fall somewhere in between the acrylic and stage balls, offering the ability to do effective isolation tricks while at the same time being much lighter than an acrylic ball. As a downside, when these balls are dropped they can dent very easily. Due to their hardness and heavier weight than stage balls, they tend to feel quite different. Although it is rare to see these types of balls used, for completeness I decided to include them for those who like the appearance. There are few metal balls made specifically for juggling, so if you are interesting in them, your best option is to look at places such as garden or home centers.

Size and weight

In general, the size of balls ranges from 70mm to 125mm, with weights anywhere between 280g to 700g for acrylics, and 150g to 300g for stage balls. 70mm and 75mm balls are typically only used for multiball.

The characteristics of the sizes of balls are as follows:

- Large - Good for rolling tricks
- Small - Good for stalls, but they have poor visual impact
- Heavy - Good for isolations, but put strain on the fingers
- Light – Easy to handle

Acrylic balls between 90mm and 100mm are most often used for single ball contact juggling. The weight difference between these two sizes is 180g, so if you find one or the other too light or too heavy, changing sizes can make a big difference. In the case of stage balls, the weight and hardness varies greatly, so please take a look at the table below. As a personal recommendation, I feel that Mr Babache stage balls or Play stage balls tend to be a good starting point. Having said that, trying out various balls yourself is the best option.

Ball	Size (mm)	Weight (g)	Comments
Mr Babache stage ball	100	180	I tend to see this ball as the "standard". Note: Hardness and colour can vary.
Play stage ball	100	260	Slightly harder and heavier than the Mr Babache ball. Slightly less well made, so there are times when the seam can look rough.
Renegade stage ball	100	180 ?	Has a very hard, rubber shell.
Jea9 ball	125	300	This feels like a large Mr Babache stage ball, but due to the extra size is a little softer.
Dekaball	125	240	The same size as a Jea9 ball, but with a lighter, slightly harder shell
Sil-x ball	100	280	It tends to have a rather unique feel when rolling as there is liquid inside. It does not bounce so it is good for head catch style tricks.

Online stores

Home of Poi (US): <http://www.homeofpoi.com>

Renegade Juggling (US): www.renegadejuggling.com

Juggling Store (US): <http://www.jugglingstore.com/>

Master Onga Prop Shop (US): <http://www.masterongaspropshop.com>

Oddballs (UK): <http://www.oddballs.co.uk>

Firetoys (UK): <https://www.firetoys.co.uk>

Naranja (Japan): <http://www.naranja.co.jp>

RAD FACTOR (Japan): <http://radfactor.shop-pro.jp/>

Recommended Videos

Recently, a large number of contact juggling videos have appeared on YouTube. Some videos are also available on DVD such as:

- Contact Juggling Part 1 & 2 (Greg Maldonado and Owen Edson)
A DVD that goes into great detail about a variety of contact juggling tricks.
- In Isolation
A performance based contact juggling DVD with over 10 different jugglers covering a range of styles.

Recommended YouTube channels:

Okotanpe: <http://www.youtube.com/user/okotanpe>

Komei Aoki: <http://www.youtube.com/user/komeiaoki>

Tony Duncan: <http://www.youtube.com/user/tonyjuggles>

Darren Wakefield: <http://www.youtube.com/user/TekuFlat>

Santi: <http://www.youtube.com/user/santimalabari3M>

Cyrille Humen: <http://www.youtube.com/user/CyrilleHumen>

Kyle Johnson: <http://www.youtube.com/user/jugglelulz>

Mr Om: <http://www.youtube.com/user/AyaContemporaryCircu>

Joseph Viatte : <http://www.youtube.com/user/JugglingForCake>

Thierry Fremaux : <http://www.youtube.com/user/timo731>

Tendonitis

Tendonitis is an injury that can plague many contact jugglers, and is caused by overuse of the wrists and fingers leading to inflammation. If you have suffered from it once, there is a good chance that it can occur again if you don't take care. Typically, if symptoms of tendonitis occur, the only option is to take an extended break from using that particular part of your body until it fully heals.

As I have limited knowledge on the subject, I recommend that you do some research into this yourself. For the time being just be aware that tendonitis is a problem that can easily occur with contact jugglers, especially those who focus on multiball or isolation tricks. Awareness of the causes and symptoms of tendonitis could come in handy at a later date should you start to feel discomfort in your wrists or hands.

If you feel any pain or strange sensations while practicing, stop immediately and take a break for a few days. If the symptoms persist, it may be best to check with your doctor. Becoming a better contact juggler is not a race; those few days of rest could save you weeks or months of rehabilitation at a later date, so take it easy!

Isolation

Isolation refers to the skill of making an object appear as if it is fixed in place, while your hand or body continues to manipulate it. This is one of the defining styles of contact juggling, and is used to make it look as though the ball is floating in the air.

Overall pointers for isolation

The aim of the isolation is to isolate the ball as cleanly as possible.

- **Arm Height**

As the majority of isolations are done directly in front of you, the most comfortable height tends to be around the chest area. This is also the height where isolation tricks look their best. Doing isolations in line with your head tends to give you a smaller area for movement, and tricks generally become harder to perform when lowered to the height of your stomach, leading to less impressive isolations. In addition, as body rolling tricks also tend to be easier at chest height, it is generally best to stick to this area for all types of contact juggling, at least in the beginning stages.

- **Check the position of the ball**

When practising, there are several methods to check that the ball is not moving:

1. Check for changes in the reflection on the ball, or the balls location in relation to objects in the background.

2. Make a mark or line on a mirror, and check that there are no changes in the position of the ball relative to that point.
3. Film yourself and check for problems.

I would recommend using points 1 and 2 regularly, and then occasionally use point 3 to get a better overall picture of your posture and body movement. In particular, you should pay attention to the vertical movement of the ball, as this is much more apparently to an audience than side-to-side movement.

- Go slowly

A big point to take note of is to stop yourself from moving too quickly.

As the ball rotates during isolations, at a high speed it becomes much more obvious when there is movement in the position of the ball, as well as being harder to control accurately. Try to practice isolations as slowly as possible, then when you improve you can play around with different speeds to achieve different effects.

One reason for a lack of progress with isolation tricks is the mistake of thinking that moving your hand quickly will cover up any problems or incorrect technique in doing a trick. By doing this, you are unable to check which areas of your isolations need improvement. Working on isolations as slowly as possible allows you to check all areas of the trick and immediately know where any problems lie.

- Size of movement

Although this depends on the isolation you're doing, for many tricks more exaggerated movement tends to improve the look of the trick greatly. I will go into further detail later with each individual trick, but as a rule. doing this shows a greater difference between the stationary ball and your moving hand or body part, and thus gives a better isolation effect. However, overdoing this can make maintaining an isolation difficult, so it is best to strike a balance between movement and stability.

Claw Isolation

Explanation ([Video](#))

This is possibly the simplest isolation trick. You hold the ball so it appears stationary while moving the arm that holds it. As there are many variations of this trick, I will introduce the simplest here.

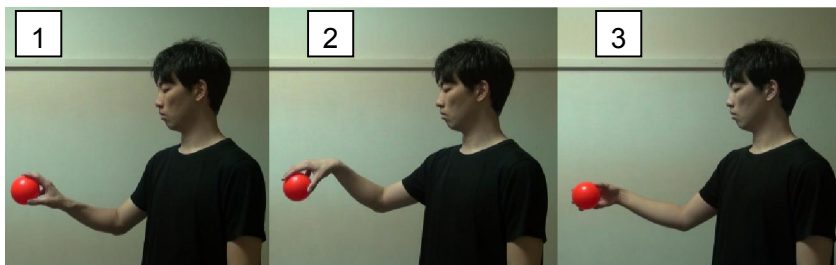
Practice method

This trick mainly uses the wrist, although a large degree of movement isn't required. I mentioned before that the larger the movement, the more effective the isolation; however this makes it harder to isolate the ball cleanly.

This trick can be broken down into 4 steps:

1. Hold the ball
2. Raise your wrist while keeping the ball fixed
3. Rotate your hand sideways
4. Return to step 1

With this movement you should be able to correctly isolate the ball.



Enigma

Explanation (Video: [Enigma 1](#), [Enigma 2](#))

The enigma is a simple and effective trick with a large number of variations, making it is one of the most common and popular isolations. If you can understand the basic concept, you should be able to learn this very quickly.

Practice method

In general you use your index finger, middle finger, and the thumb, however this trick can also be done with just the thumb and index finger, or by including the ring finger. In this explanation I will assume that you are using the index finger, middle finger and thumb. While it looks like the ball is being constantly manipulated with four fingers, in reality only two are used, with the other 2 fingers not actually making any contact with the ball. The ball always rotates in the same direction.

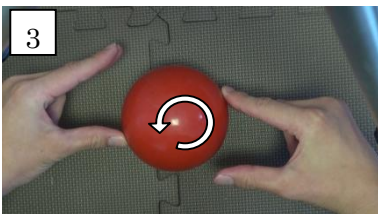
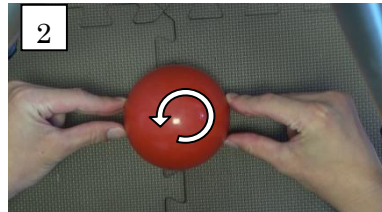
This trick can be broken down into the following steps:

1. Right hand - thumb at the 5 o'clock position
Left hand - index finger and middle finger at the 11 o'clock position
2. Rotate the ball anti-clockwise while keeping it isolated, and at the 3/9 o'clock position switch the fingers/thumbs which are in contact with the ball. At this point you should be in the following position:
right hand (3 o'clock) - index finger and middle finger, left hand (9 o'clock) – thumb

3. Rotate the ball anti-clockwise again, until you reach the 12 o'clock position with your right hand, and 6 o'clock position with your left hand
4. Switch your finger/thumbs so that you go back to the starting position as written in step. 1

(Video: [Enigma 1 explanation](#))

If done correctly, it should look like the video in the link.



In the beginning, the movement will most likely cause problems, so try to do each step slowly. As long as you keep the fingers not being used close to the ball while following the above steps, it should not be a problem. As acrylic balls tend to be heavy and do not offer much grip, you may find it easier to learn with a stage ball to begin with.

In order to improve your isolation, pay attention to your fingers. Different people will use different techniques and different fingers, so it is

best to practice the trick in front of a mirror to find a method that is comfortable and effective for you.

A common variation of this trick is to do it vertically, meaning that your fingers will move up and down as opposed to forwards and backwards as previously described (See [Video 2](#), [Enigma 2 explanation](#)).

To summarise this trick, only 2 fingers are in contact with the ball at any time. From this concept you can make all kinds of variations of the isolation.

Squeeze Up

Explanation ([Video](#))

The squeeze up is an isolation in which the hand holding the ball makes a squeezing motion beginning with the little finger and moving up to the index finger.

Practice method

To begin with, learn the movements without the ball. Starting with your hand open, close each finger from your little finger until you make a closed fist. Make the same motion with a ball-as each finger closes the ball should roll on top, staying isolated.

The key point with this trick is the thumb. If you close your fingers naturally you may find that the ball will fall off your index finger around the second joint. To combat this, you want your thumb placed in a way so that it keeps the ball stable, and not balanced solely on the index finger. Another point to note is that the ball should be rolling on the first joint of each finger (closest to the tip) to allow for a smooth transition. Having the ball too close to the palm of your hand makes it much more difficult to perform the trick smoothly. To improve, it is simply a case of watching the motion of your hand closing and checking the position of the ball.



Finger Roll

Explanation ([Video](#))

This is an isolation in which the ball rolls over the fingers of both hands side by side, palms facing up, with each finger closing as the ball rolls past. This movement is repeated in both directions.

Practice method

The initial difficulty with this trick is understanding the correct finger movement, so it is best to practice the following steps first:

1. Put both hands together, palms facing up, with your little fingers touching. Starting from either the left or right side close each finger in turn, mimicking the movement of a wave. After this, reverse the action, opening each finger in turn. ([Video](#))
2. Place the ball on top of your hand, and repeat the motions for step 1, this time rolling the ball from one side to the other ahead of the motion of your fingers. When you do this, roll the ball to the point where it is between your index finger and thumb, and then reverse direction. ([Video](#))
3. While doing step 2, move your hands from left to right so that the ball isolates on only your hand moves through the whole process.

To make this trick work, you want the ball to roll over the first joint of your fingers to make the roll clean and easy to perform. Begin by practicing steps 1 and 2, and once that movement has become smooth you can progress to step 3, isolating the ball. A common mistake is to use your arms and make a shape with your hand as if you were trying to

scoop water, which leads to up/down movement in the isolation. Focus as much as possible on keeping your hands flat so that the isolation can be seen clearly.

Finger Roll (Cross Hand)

Explanation (Video: [Pass below](#), [Pass above](#))

The name may be a little odd, but this trick involves rolling the ball over the fingers while you alternate between left and right hands in a crossed motion.

Practice method

For this trick, there are 4 different patterns:

- ▶ Roll the ball from the little finger of your right hand to the thumb, then pass the ball to the left hand which crosses over your right arm
- ▶ Roll the ball from the little finger of your right hand to the thumb, then pass the ball to the left hand which crosses under your right arm
- ▶ Roll the ball from the little finger of your left hand to the thumb, then pass the ball to the right hand which crosses over your left arm
- ▶ Roll the ball from the little finger of your left hand to the thumb, then pass the ball to the right hand which crosses under your left arm

Learning all of these patterns increases the number of connections and variations you can make, so it is worth investing the time into learning all of them if possible.

This trick differs from the finger roll in that it is not necessary for you to close your fingers as you perform the trick. The focus of this trick is to repeat the action of passing the ball from hand to hand, trying to avoid as much movement in the ball as possible. In my case, when passing the ball to the other hand which is crossed under the current hand, I tend to pass from my thumb to the index finger. When passing to the other

hand which is crossed above my current hand, I tend to overlap my index finger with the thumb. There are a number of ways to perform this trick, such as not using the thumb at all, so it is best to experiment and find out what works best for you.

Palm Circle

Explanation ([Video](#))

The palm circle is an isolation in which you roll the ball in a circular motion around the palm of your hand. This trick is one of the most popular isolations, however it is also one of the hardest to perform properly.

Practice method

To begin with, you should try to get the ball to roll around the palm of your hand in a circular motion. There are two ways to practise this trick, breaking it down into steps or learning it with two balls.

- The steps ([Video](#))

1. Place the ball between your thumb and index finger
2. Move your thumb away, and roll the ball to your index and middle finger
3. Move your index finger away, and roll the ball to your middle and ring finger
4. Move your middle finger away, and roll the ball to your ring and pinky finger
5. Move your ring finger away, and roll the ball to the palm of your hand
6. Move your hand so that you return to the position in step 1

With this, you will have rotated the ball around your hand. When you get used to each individual step, you can begin to practice the

motion continuously without pausing at each position. The key here is to practise as slowly as possible so that you learn the correct technique, doing the trick too quickly can lead to a messy isolation, and an inability to spot individual mistakes you make within the motion. For this trick you also want the ball to roll over the first knuckle of each finger.

- Two ball practice ([Video](#))

For this you want to practise with two 65-75mm acrylic balls. You will practice spinning both balls in your palm, the idea being that the sensation of rolling the ball around your palm is easier to notice when there is another ball there. Which direction you prefer to circle the ball differs with each person, although eventually it is best if you can spin in both directions with both hands. Once you are comfortable with spinning two balls in your palm, try removing one ball and repeating the action.

The key to this trick is learning the correct movement of the fingers, so both of the above practice methods can help you to understand what you need to do. One method may work better for you than the other, so be sure to try both. Once you have understood the movement of the trick, it is then time to work on isolating the ball. The only advice I can give is to work on maintaining the finger movement you learnt in the above steps, while trying to understand the correct speed and placement of the hands that is required to keep the ball fixed in place.

(Video: [1 Ball](#), [2 Ball](#))

For a cleaner isolation:

- Get rid of any vertical movement

Once you are able to isolate the ball, you should work on removing any up/down movement in the isolation. This is especially useful/true when transferring balls from the fingers to the palm.

- Try to make the movement of your hand as large as possible

In order to increase the effectiveness of the isolation, you should aim to move your hand in as exaggerated way as possible, while keeping the ball still. To do this, you should try to roll the ball over the first joint of each finger. However, overdoing this can lead to an unstable isolation, so you will need to find the balance between large movements and a clean isolation

- Keep your palm open

Having your fingers bent upwards as you isolate can conceal the ball and thus ruin the look of the trick, so make a point of keeping your fingers as flat as possible throughout the whole movement.

- Keeping your movements steady

Doing some parts of the trick quicker and others slower can make it harder to maintain a clean isolation. To begin with, aim for a consistent speed with your isolations.

- The look of your isolation

You may come to notice that your isolations look very different from other contact jugglers, even if both of your moves are very clean. If you find yourself wondering why, try looking at the movement of their fingers, the speed of their movements, how they use their arms during the trick etc. These may seem like minor points, but they can have a huge impact

on the look and feel of your performance.

Body Rolls and Stalls - Part 1

Body rolling is the skill of rolling a ball over various parts of your body.

Stalls are tricks where the ball is stationary on a part of your body.

Combining these with isolations or even toss juggling is a great way to expand the range of tricks possible.

In this section, we will cover the most fundamental tricks - the cradle, butterfly, elbow stall, and basic arm rolls.

Cradle

Explanation

The cradle is one of the most fundamental positions in contact juggling, in which the ball is placed between the index and middle fingers which are slightly spread apart in a “V” shape.

First, let's think about what happens when you want to roll a ball from your fingers. To get a stable roll, you first need to start from the same stable starting position every time, something that cannot easily be easily done if your fingers are all aligned and together. To create a stable recess in which the ball can be held, you spread your index and middle fingers apart to create the cradle. Using this logic, other combinations of fingers can also be used to create a cradle, however as a general rule it is best to start off with the index and middle fingers, as this is the most comfortable.

Practice method

Place the ball between your index and middle fingers. Getting used to having the ball in this position is very important, so try some of the

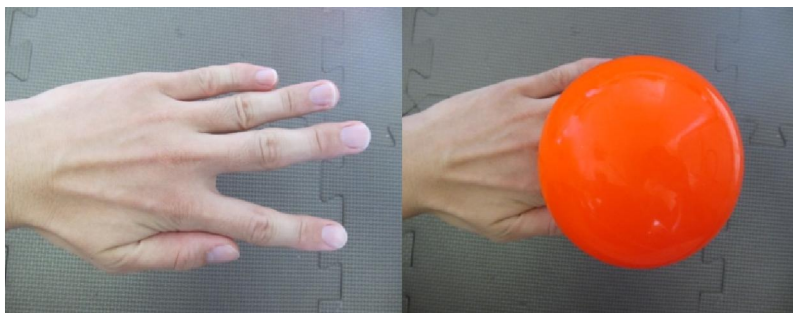
following:

- Sway your hand from side to side
- Throw the ball in the air and catch it in a cradle
- Throw from a cradle to a cradle on the opposite hand
- Throw from a cradle to the opposite hand, and before you catch do another movement (such as touching the top of your head)

These are just a few of the things you can practice ([Video](#)).

For those who can toss juggle, the following may also be useful:

- Using two balls in one hand while doing one of the tricks listed above
- Do a kickup into the cradle position
- Do a cascade with one or both hands in the cradle position



The three-finger cradle

You may have seen a version of the cradle in which the index, middle, and ring fingers are used. This can be used to lessen the strain on the hand and fingers, especially when working with heavy acrylic balls. However, in my personal opinion I recommend that beginners start by

learning the cradle with the index and middle fingers only. As the cradle is a position from which various rolls and transfers are made (such as the butterfly), it is important that the cradle position is stable and in the correct position so as to allow for easy rolling away from the hand. For example, in the case of a trick such as the butterfly, with the regular two finger cradle no changes need to be made to begin the butterfly motion. However, when using the three-finger cradle the middle finger gets in the way, meaning that a minor adjustment is required so that the ball rolls only over the index and middle fingers.



The shape of your fingers

For those who begin practicing with an acrylic ball, there are people who find it difficult to do the cradle successfully. This is most likely because the weight of the ball is putting a lot of strain on the fingers. When trying to finish a roll in the cradle position it is easy to strain the fingers trying to reduce speed, and thus the correct shape of the cradle is lost. The key with the cradle is to focus on keeping the same shape with your hand and fingers, if this proves too difficult because of the weight of the ball, it may be worth considering changing to a smaller size.

Elbow Stall

Explanation

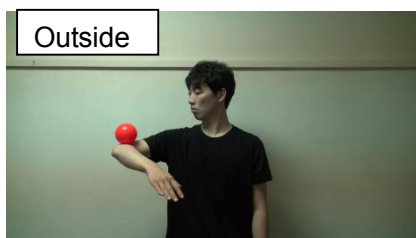
In contact juggling, a stall is where you keep the ball stationary in a specific part of the body. The naming is simple, stalls on top the head are known as head stalls, and elbow stalls are called...you guessed it, elbow stalls. If there is an area of muscle or bone with creates a small indent on the body, then it can be made into a stall point. Stalls can be used as a starting point for other tricks, used on their own, combined with other body movement, or combined with other stalls. In toss juggling, stalls can be done while doing another trick at the same time, or can be used as a replacement for regular catches with the hand. Because of this, stalls have a lot of uses in all types of juggling. Next, I will explain the most fundamental of all stalls, the elbow stall.

Practice method

The most basic elbow stall is as shown on the picture on the left side below, with your arm extended away from you. This is known as an inside elbow stall. The picture on the left shows a slightly harder variation known as the outside elbow stall, where the forearm and hand is bent 90 degrees relative to the upper arm.

To practice stalls, try the following two-steps (these apply to all types of stall, not just the elbow stall):

1. Find a position in which it is easy to place the ball and keep it stable, by testing various shapes and angles with your arms/body
2. Trying moving around while doing the stall.



As stalls are based upon the idea of using flat or indented part of the body as a place to stop the ball, these positions can vary between people. Thus, the first step is to find a comfortable position that works for you.

In order to find a position to stall the ball on your elbow, it is important to pay attention to the position and state of your hand. To check the relationship between your hand and the elbow, first try an inside elbow stall without using a ball. Then, try moving your hand in different directions (bending from the wrist) to see what effect the movement has on the muscles around the elbow. You should find that even though your elbow is not moving, there is a great deal of movement around your elbow. The same can be said for the outside elbow stall. The degree that you tilt your hand will have a large effect on the stall area. If you are finding that the ball will not stay on your elbow after finding a suitable stall point, check the direction in which the ball is falling and try to compensate by slightly tilting your arm in the opposite direction. As a rule you want to have your arms as evenly balanced as possible.

In the beginning, as long as you can find a spot in which the ball will stay in place (even if it's only for a few seconds), then you are

doing fine. Try some of the following while doing a stall in order to help you learn balance:

- Trying doing the stall with your arm at different heights
- Walk around
- Try sitting down and standing up again
- Spin in circles
- Try the above while not looking directly at the ball

When you have some confidence with the stall:

- Try shaking your arm
- Catch a thrown ball in that stall position
- Try wiggling your fingers or bending your wrist while doing the stall
- Throw from the stall to the same stall on the opposite side of your body

If you can manage these, it is safe to say that your stalls are stable!

For those interested in toss juggling:

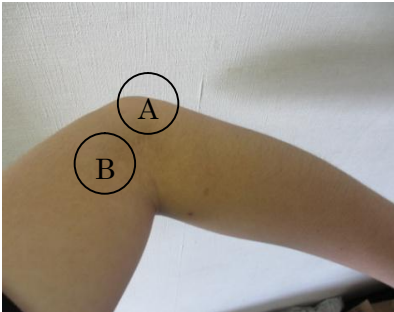
- Use two balls in one hand while doing a stall with the other arm
- Throw from two in one hand into a stall

These tricks may be useful to perfect the stalls. When you are comfortable with a range of stalls, you can also try throwing between all of them. ([Video](#))

Muscle mass

From what I have seen, there are 2 different positions for the outside elbow stall, depending on the amount of muscle you have in your arm.

For people with low muscle mass, position (A) along the forearm shown below may be best, whereas people with more muscle mass may find that position (B) is more suitable. Depending on your own physique, it may also be easier for you to bend your hand downwards at the wrist, as this relaxes the muscles around the elbow and makes it easier to do the stall.



Introductory arm rolls

Explanation

Arm rolls are one of the most common type of body roll, typically referring to tricks done between the hand and elbow. They can be divided roughly into two types; rolls from the palm of the hand to an inside arm stall, and rolls from the cradle to an outside arm stall.

As there are a wide range of arm rolls available, I will start with the basic lines that can be made around the arm, which will hopefully give you an idea of where to focus when practicing.

Practice method

- **Inside arm roll (1)** ([Video](#))

1. Place the ball in the palm of your hand, and bring your arm up to the same height as when you practise the inside elbow stall
2. Roll the ball towards the inside elbow stall position
3. Let the ball roll off of your arm and then catch it

At first you may find that the ball will fall before it reaches the elbow. This simply means that you have not quite grasped the correct movement for the roll yet. This comes with time, so it is important to keep practicing the movement until you have an idea of the correct path to take.

If you're a beginner, pay attention to the following:

- Do not rely on leaning sideways or tilting your arm upwards in order to start the roll. For this trick you should only need to move your fingers and wrist

If you do step 1 correctly you will find your hand and elbow are parallel, thus only a small degree of movement from the fingers and wrist should be required to begin the roll. If you use your whole arm, you will find that this causes the ball to roll too quickly, and makes it harder to control.

- **Inside arm roll (2)** ([Video](#))

In this method you move the ball under your hand and arm, creating an isolation effect:

1. Begin in the same position as step 1 for method (1)
2. Slide your hand underneath the ball in a forward motion towards the elbow
3. When the ball reaches the elbow, let it fall and then catch it with the other hand.

- **Outside arm roll (1)** ([Video](#))

For the outside arm roll, the ball will roll along the outside of the arm from the cradle position until it falls off at the elbow.

Try the following the steps below:

1. Hold the ball in the cradle position, close to your chest
2. Hold your arm at the same height as you use when practicing the outside elbow stall
3. Roll the ball from the cradle position to the outside elbow stall position
4. Let the ball roll past the stall point and fall off the end of the elbow

into your other hand.

Much like the inside arm roll, only use your hand and wrist to push the ball towards your elbow.

- **Outside arm roll (2)** ([Video](#))

1. Perform a cradle, keeping your hand at chest level
2. While maintaining the same height, slide your hand and arm under the ball until you reach the outside elbow stall position
3. Let the ball fall off of the elbow and then catch it.

By doing this, it should look like the ball is being isolated on top of the arm. This method may be easier than method (1).

- **Summary**

By repeating these actions over and over, you should gradually begin to get a feel for how the ball moves along that part of the arm. By catching the ball after you complete a roll, you will then be able to do the same roll with the opposite arm. As a general tip, try to keep the part of the arm that the ball is rolling on flat in order to build proper technique.

First Steps to Combine Arm Rolls and Elbow Stalls

Explanation (Video: [Inside](#), [Outside](#))

If you have reached this point, then you will have noticed that arm rolls can both start and end with stalls, and that isolations can be made by moving your arm underneath the ball. (Video: [Inside](#), [Outside](#))

In order to get a ball moving from a stall point into a roll, a small degree of force/movement is required to get the ball in motion, much like when rolling from the palm or cradle position. In the same way, by applying the right amount of force you should be able to get a slow, steady roll.

When changing from a stall into a roll, it is important to be aware of the height of your arm. In the case of elbow stalls, it is very easy to unconsciously angle your arm downwards in order to make the ball roll, however this method makes it much harder to control the ball and has an effect on the overall appearance of the trick. This problem is common for people using acrylic balls, as the possible fear of dropping the ball causes them to change their posture and thus the angle the arm makes. If this is a concern, I recommended that you practise in front of a mirror in order to check your form. (Video: [There are times when the ball won't roll properly](#))

Using both arms

It is important to practice with both arms at the same time so that your level of ability with either arm does not differ too greatly. Unlike toss juggling or other types of juggling which generally require use of both hands, it is very easy in contact juggling to only focus on one side of your body. Doing so results in an over reliance on your strong arm and a sense of imbalance, especially in the case of a performance or video. In addition, there are many tricks in which both arms are needed, thus an equal level of ability is required for smooth transitions between hands/arms. Although practising with your weaker side tends to take longer at first, you should find that as your progress this difference will lessen to a degree, and practicing on both sides becomes a natural habit rather than a tiresome exercise.

Body Rolls & Stalls - Part 2

In Part 1 we covered the cradle, basic arm rolls, and elbow stalls. When you are comfortable with doing these tricks, then it is time to try combining them!

The Butterfly

Explanation ([Video 1](#), [Video 2](#))

The butterfly is a trick where the ball rolls over the index and middle fingers from the cradle position to the palm of the hand and back again. This is considered to be one of the most fundamental tricks, and by learning this trick alone a significant number of new tricks and movements will become available to you. Without this trick, rolling to the palm of the hand or cradle position simply results in the ball reaching a dead end, with the only option being to return in the direction it came.

By doing the butterfly, the ball can be seen to be making either a half-circle shape or a figure of eight shape on its side, depending on the way in which you use your arm during the trick. As the figure of eight shape is a variation of the half-circle shape movement, in Part 2 we will learn the half-circle shape first.

With the half-circle, the arm should move in a way mimics that of a windscreen wiper (some people still call the butterfly by this name, although you rarely hear it any more). While maintaining this movement, the ball will roll from the cradle position, over the index and middle fingers, and come to a stop in the palm of your hand.

Practice method ([Video](#))

When first practicing the butterfly, it is very difficult to keep the ball in contact with your fingers. To begin with it is best to throw the ball slightly and then catch, instead of trying the complete roll. While throwing the ball is easier at first, it is important that you still focus on only using the index and middle fingers to do the action, as getting used to using these fingers is essential for doing a clean butterfly.

As a practice method, try the steps below;

1. From the cradle position, make a wiper-like motion with your arm, raising the ball up and onto your fingertips
2. As your arm rises up in the wiper motion, let the ball lift away from your fingers (think of it as a small hop), and then catch it again with the same fingers on the palm side of the hand. It is ok to catch the ball with your palm at first, the most important thing to focus on in the beginning is that the ball rolls up to your finger tips properly in step 1
3. From the palm-up position, make the reverse motion of the wiper described in step 1. Again, you want the ball to roll up the index and middle fingers
4. Let the ball lift away from your fingers, and as the ball comes back down catch in the cradle position
5. While repeating steps 1-4, gradually reduce the gap between your fingers and the ball at the peak of the wiper motion until the ball stays in contact through the whole movement

Through practice, you will find that the gap lessens, and the motion of rolling up and down the index and middle fingers becomes more automatic.

One thing to be careful of when practising the butterfly is the shape of your hand. While doing the butterfly motion it is very easy to bend your fingers, which has a negative impact on the look of the trick. This is especially true when going from the cradle to the palm of the hand.

Another related problem is holding the ball when it is in the palm of your hand. You should aim to have your fingers flat, in line with your palm, with the ball simply resting on top. Watching out for these two things will dramatically improve the look of your butterfly.

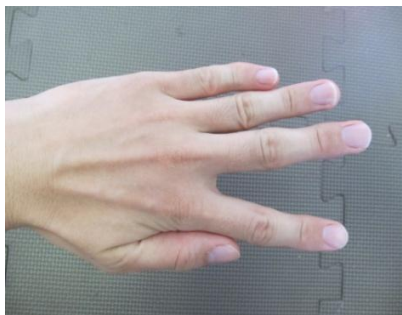
The shape of the hand

Some of the most common questions beginners have with regards to the cradle are 'What is the best shape to make with my hand when doing the cradle?' and 'How far should you spread your fingers apart?' I'll go into a little detail here to make it clearer.

In my case, to make sure my hand is as flat as possible I keep my fingers all aligned and together, then slightly separate the index finger to create a V shape. While a wider V makes the butterfly easier, it also gives the appearance that the ball is moving between the fingers instead of over them, which affects the look of the trick. As mentioned before, bending of the fingers during the butterfly, or holding the ball when it is in your palm hides the ball, and thus reduces the effectiveness of the trick.

The above is simply my opinion on correct technique for the butterfly. Depending on the person or their style this may differ. For

reference I would recommend watching a variety of videos to see how other people do the trick.



Back to Palm/Palm to Back and Palm to Palm

Explanation (Video: [Back to palm and Palm to back](#), [Palm to palm](#))

The back to palm/palm to back, and palm to palm rolls are all variations on passing the ball from one hand to the other, and are one of the simplest tricks to learn. While they may not be used often on their own, combining them with the butterfly opens up a large range of new tricks and combinations, as well as making a good connection between rolls and isolation tricks.

- Back to Palm/Palm to Back

This trick involves rolling the ball from the cradle of one hand into the palm of the other or the reverse.

- Palm to Palm

Place the ball in the palm of one hand, and roll the ball into the palm of the other hand. Join your hands together at the wrists, making a very shallow V shape with your palms in order to create a smooth transfer between hands.

There is also a trick called the back to back, however this will be discussed later due to its higher difficulty level.

Practice method

As a general rule for all of the above tricks, check that you pass the ball to the other hand properly via the index and middle fingers. Also check that there is no difference in height between the two hands to

avoid any vertical movement.

Instead of practicing these tricks on their own, try some of the following combinations;

- Outside elbow stall → Outside arm roll → Back to palm → Palm to palm → reverse the above actions back to the outside elbow stall position on the opposite side ([Video](#))
- Cradle → Butterfly → Palm to back ([Video](#))
- Palm of the hand → Butterfly → Back to palm ([Video](#))

Arm Rolls: Inside to Outside Arm Roll Transfer

Explanation ([Video](#))

In order to combine the inside and outside arm rolls introduced in Part 1, in this section I will explain how to transition between the two tricks. To begin with, you need to have a solid inside and outside arm roll to stall, and the same goes with the reverse.

First, put your arm in the outside arm roll position without using a ball, and then turn your arm into the inside arm roll position. Then repeat this motion back to the outside elbow roll position. When doing this you want to imagine the elbow as a fixed point that can only pivot, so that while your arm is changing position the elbow remains in the same place. This is necessary because the elbow is where the ball will be positioned when you transfer the ball from outside to inside and vice versa occurs. This is the basic motion required to switch between both types of arm rolls.

Practice method (Video: [Transition below the elbow](#)、[Transition at the elbow](#))

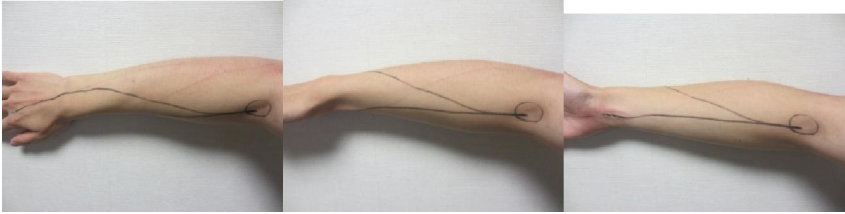
This trick is similar to the previously described arm rolls in that there are two ways to do this trick: applying force with your fingers or hand in order to start the roll, and moving your arm under the ball in order to create an isolation effect. To begin with choose the method that feels most comfortable for you.

The most important thing to concentrate on here is the route the ball takes over your arm. From what I can gather there seems to be two types of route that you can take.

1. Transition before the ball reaches your elbow

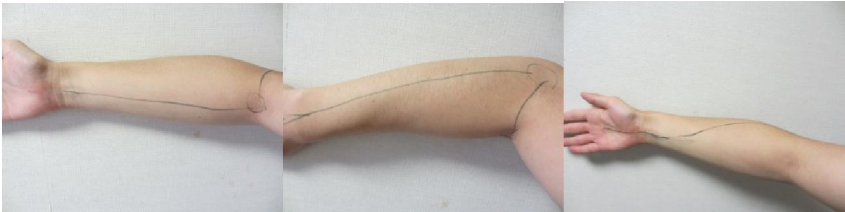
- Start with the cradle

Cradle → Inside Elbow Stall → Inside Arm Roll → Palm



- Start from the palm

Palm → Outside Elbow Stall → Outside Arm Roll → Cradle

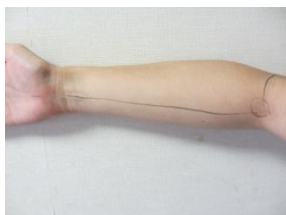


To sum up the movement, roll the ball either inside or outside, and switch to the opposite stall before the ball reaches the elbow. From there, let the ball roll back to your hand.

In order to practise this trick, you can split it into two parts and then practise the switch to elbow stall, or you can practice the whole movement together. The latter is required when you want to smooth out the trick so that there is no longer a pause when the ball reaches the elbow. Understanding the correct time to move your arm is key, and that understanding will only come through practice.

2. Transition at the elbow

- From the cradle (route shown below)
Cradle → Outside elbow stall → Inside elbow stall → Inside arm roll
→ Palm
- From the palm (reverse of above)
Palm → Inside elbow stall → Outside elbow stall → Outside arm roll
→ Cradle



Compared to method 1, method 2 allows you to break the trick up into more parts, making it easier to practice overall.

I tend to use method 1 when performing this trick, as I feel it is smoother than method 2. The switch between elbow stalls in method 2 isn't so easy, and it adds a pause to the roll, breaking the flow of the trick. However, it is all down to personal preference so try both methods and see which one works out best for you.

The relationship between stalls and rolls

You may be wondering why stalls are necessary. When switching between difficult rolls, the ball has to roll on parts of the arm that are normally avoided as they are not considered 'stable'. By making sure the ball rolls through a stall point, it's easier to predict where the ball will roll,

as well as giving better overall control. I recommended that you learn as many stall points as possible so that you can make any combination of switches with ease and confidence.

Palm to Palm Loop

Explanation ([Video](#))

The palm to palm loop is a trick where the ball makes a vertical loop with the palm of your hands.

Practice method ([Video](#))

This trick can be split into two sections: a palm to palm pass and a fingertip to fingertip pass.

1. Like the previously described palm to palm pass, connect your hands at the wrists with the palms facing upwards, and keep your fingers straight
2. Perform the palm to palm pass
3. When the ball reaches the fingers of the other hand, bring both of your hands close together as if trying to make a prayer, to pass the ball to the fingers of the other hand. Keep a slight space between your fingertips so that the ball can transfer easily (forming a 100 or 110 degree angle between your hands). If done correctly, the ball should make a vertical loop.
4. Repeat steps 2 and 3

Once you have a basic understanding of how to do the trick, the next step is to work on making the movement as smooth as possible. The biggest problem you will face is finding the best way to pass the ball between your fingertips at the top of the loop. There are two different ways of doing the pass:

- Throw slightly from the fingertips, keeping your hands mostly static

- Curl your fingers slightly, and move your whole hand to make the ball loop

Try both, and test them in a mirror to get an idea of which works best for you.

Combining with the butterfly ([Video](#))

With this variation, you do a butterfly after the palm to palm pass, and at the same time use your free hand in order to make an interesting visual effect. As this trick is hard to describe, I recommend that you check out the video included above. To begin with, you can try practising the movement without using a ball ([Video](#)).

For the basic trick without the added free hand movement, follow the following steps:

1. From the cradle position, perform a butterfly
2. Perform a palm to palm pass
3. Perform a butterfly from the palm of your hand
4. Repeat from step 1

Back to Back Pass

Explanation ([Video](#))

The back to back pass is simply the palm to palm pass done on the back of the hand via the cradle position.

Practice method

When you first try rolling the ball from the back of your hand to the back of your other hand, you will most likely find that it is hard to find the correct path for the ball to roll between hands, or that the ball will fall into the other hand instead of rolling smoothly. This is because the ball will most likely roll down the centre of the back of your hand (if you stretch your fingers you should see the path between the bones of your index and middle fingers), whereas you want the ball to roll more towards the little finger in order to transition correctly.

In order to deal with this, one method is to slightly tilt the hand outwards (lifting from the thumb side) so that the ball rolls naturally towards the other hand.

The parts of the hand you use to transition will vary between each person. In my case, I tend to let the ball roll as far as the wrist before doing the transition, however there are many people who prefer do the transition on the back of the hand, so try both and see which feels best for you.

Extra: When combining with the palm to palm loop ([Video](#))

Half Chest Roll and Chest Roll

Explanation (Video: [Half Chest Roll 1](#), [Half Chest Roll 2](#), [Chestroll](#))

Rather than starting off with the full chest roll, I think it is best to break the trick down into two half chest rolls as shown below:

- Cradle to chest (Video: [Facing](#), [Side](#))
- Chest to cradle (Video: [Facing](#), [Side](#))

If you are able to do these two tricks separately, combining them both into the full chest roll should not be a problem.

Practice method

- Where to roll

To begin with, you want to have your arms out in front of you in a similar position to the outside elbow stall, except this time you should extend your arms further out to create a circular shape. If you have learnt all of the tricks in this guide up until this point, you should now be comfortable with rolling from the cradle to the outside elbow stall.

The main issue you will find is rolling across the shoulder to the chest area. Ideally you want the ball to roll just under your collarbone, however if there is a difference in height between your shoulder and chest, the ball can fall off the chest instead of roll across.

Your pectoral muscles are the connection between the shoulders and chest, so you should find that if you clench them you will have something resembling a path over which the ball can smoothly travel. It may help to try pushing the ball from the pectoral/under the collarbone to the cradle in order to get a better understanding of the path.

- Bending your body

You may find that slightly bending backwards helps create a flat route for the ball. You should aim to do this just as the ball has passed the elbow, and you should return your posture to normal when the ball reaches the elbow of the other arm. There is no need to bend back excessively, as this will simply strain your body (especially the back). Eventually you will find that you barely need to bend backwards at all.

When practising the half chest roll, you should follow these steps:

- Cradle → Chest
1. Roll the ball from the cradle position to the chest, then let it drop
 2. Catch (you can either catch the ball normally or catch it the cradle position)

The main problems you will face are the ball rolling over the shoulder (due to too much speed or an incorrect path) or the ball dropping down too quickly at the shoulder area. If this problem keeps occurring it is best to analyse your moments to see if there is a correction or different path to take.

- Chest → Cradle
1. Either holding the ball or from the cradle position, bring the ball to your chest and roll it in the direction of your other hand (while bending backwards slightly)
 2. Roll to cradle

Rolling down to the cradle tends to be more difficult for most people

than the roll from the cradle to chest. This is because it is relatively difficult to find the correct path for the ball to take after it has rolled over the chest, as well as the fact that the speed of the ball needs to be reduced so that you can end in a stable cradle.

The path down to the cradle differs for each person, so experiment with rolling the ball from different areas of the chest in order to get a better understanding

- Chest Roll

When you are comfortable with doing both types of half chest roll, the next step is to combine them. In order to gain speed to complete the roll, some people tend raise their starting arm when releasing from the cradle, which leads to an overall imbalance in the roll and a much higher chance of the ball not taking the desired path. You should aim to keep your arms level with your shoulders and chest so that you create as flat a path as possible, and instead use your fingers to give the ball the push it needs to travel around the chest.

You should also avoid crossing your arms while doing the chest roll ([Video](#)), as this movement affects the path in that ball takes, in addition to having a negative impact on the look of the trick to observers. Aim to maintain the circular shape described above throughout the roll.

Chest roll from the palm (Video: [Facing](#), [Side](#))

When doing a chest roll from the palm, you will find the biggest problem is around the upper arm area due to the shape of the bicep. Depending on the person, slightly rotating the arm left or right during this

part of the roll can help to keep the ball on a stable path. You may find this version of the trick is easier than the cradle to cradle version, plus it becomes useful practice when moving on to practising two or three ball chest rolls from the palm.

Combining Arm Rolls

In this section I will introduce a few common ways of combining some of the rolls I have laid out.

Arm roll + butterfly

Explanation (Video: [Regular](#), [Reverse](#))

Do an inside arm roll, and allow the ball to roll off your arm into the cradle position in your other hand. From here do a butterfly so that you return to a starting position on the other hand.

For the reverse version, take the ball from the cradle position on one hand and release it from the inside arm stall position on the opposite arm.

Outside arm roll + cradle ([Regular](#), [Reverse](#))

Do an outside arm roll, and allow the ball to fall from the elbow of one arm into the cradle position of the opposite hand which is waiting directly below.

For the reverse version of the trick, release the ball from the cradle position onto the outside elbow stall position of the opposite arm, bringing the cradle up under it, until it reaches the cradle position on the other hand.

Arm roll isolation

- Version 1 ([Video](#))

While keeping the ball isolated, do the following sequence of tricks:

- Cradle → Outside arm roll → Outside elbow stall → Outside arm roll

→ Cradle → Cradle in the other hand → Repeat from start

Note: You will need to twist your body in order to do this correctly as an isolation.

- Version 2 (Video: [Side](#), [Front](#))

In version 1, I made a horizontal movement with my arms and hands, while in version 2 I used a 45 degree angle, along with the slide motion described before for isolation style tricks. At this angle the outside elbow stall is not possible as when the ball reaches the elbow it moves straight into the cradle position of the other hand without stopping.

As the reverse version of this trick is quite difficult and does not look very effective, it is best left as something to practice rather than using it as a performance trick.

Folding line ([Video](#))

The basic pattern is as follows:

From the palm → Inside to outside arm roll transfer → Cradle → Cradle in the other hand → Outside to inside arm roll transfer → Palm

As this trick combines both types of arm roll transfer, this trick is recommended as a good practice method to learn both types well.

Inside to outside arm roll transfer + arm roll ([Video 1](#), [Video 2](#))

In this variation the inside to outside arm roll transfer is done on one arm, with only a single arm roll on the other side. There are many variations of this trick, so try to find and learn as many as you can.

Passing between palm and cradle + butterfly ([Video](#))

The basic pattern is as follows:

Palm to back → Back to back → Back to palm.

From here you can add butterflies, insert a palm to palm or change direction of the ball to come up with many different variations.

Body Rolls and Stall - Part 3

Butterfly (Figure of eight)

Explanation([Video](#))

This trick is named after the shape you create with the ball when performing a regular butterfly. Although this is similar to the half circle described earlier, the movement of the hand and arm differs.

Practice method ([Video](#))

1. Do a butterfly from the cradle position
2. While the ball is in the palm of your hand, move your hand in the shape of a half circle
3. Do a butterfly from the palm
4. From the cradle position, move your hand in the shape of a half circle (the opposite half of step 2)
5. Repeat from step 1

First, practice the steps separately, and once you are comfortable try connecting everything together in a smooth motion that should form a figure of eight shape from the audience's perspective. While you can make this shape as big or small as you like, I recommend that you start large and slow in order to gain good control of the trick. Once you have mastered this, you will find that going on to try the trick quickly should be no problem.

You want to keep the movement as horizontal as possible, without any backwards or forwards movement. You may find it helps to practise

in front of a wall to prevent yourself from getting used to reaching outwards when doing the trick.

The difficulty level of the butterfly

The butterfly is typically one of the first tricks that a contact juggler will learn, so many people incorrectly assume that it is a trick that can be learnt easily. In reality this trick can take a long time to perfect, especially when using heavy acrylic balls. Many people find it difficult to judge and control the speed of the ball at first, meaning that it overshoots the palm or cradle and stability is lost. On the other hand, when you are able to do this trick a very wide range of new tricks and combinations become available to you, meaning that the initial struggles are worth bearing in the long term.

Half Chest Roll

Explanation ([Video](#))

These are variations of the chest roll where only one side of the body is used (when starting on the left side, you end on the left side).

The routes the ball can take are as follows:

- Cradle → Bring ball to chest → Chest roll → Cradle (Same hand)

For the reverse you would do a regular chest roll, and when the ball reaches the chest area catch it in a cradle again.

- Cradle → Half chest roll → Chest → Catch in a cradle (Same hand)

Practice method

The only real requirement here is to have a stable chest roll. From there it should not be much of a problem to catch the ball in the cradle position again. Make sure to catch the ball at the chest level without letting it drop, as this may ruin the flow of the trick.

Shoulder Roll

Explanation ([Video](#))

The shoulder roll is a trick where you roll the ball from your shoulder to the palm of your hand - a trick that I first saw in a video made by Santi. The ball is placed on the shoulder, and then is rolled back down to the hand.

Practice method

Although this trick is relatively simple, you should pay attention to the part of the shoulder that you place the ball on, as this can greatly affect how easy the roll is.

Bridge Roll

Explanation (Video: [Facing](#), [Side](#))

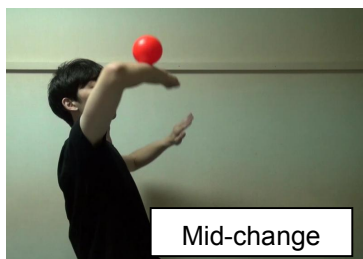
This trick begins in the outside elbow stall position, and then rolls along and up your arm to your hand which has been raised above your head. From here you pass to the other hand, and then return back to the outside elbow stall position. It is important to point out that the ball is not being thrown at any point in this trick.

Practice method

Firstly I will explain the shape you should be making with your arms. From the outside elbow stall position, imagine yourself raising your arms upwards to make a “<” shape (or “>”, depending on the side you do the trick).

Initially try to raise your arms from your elbows, then towards the end raise up your hand to finish the shape. By raising from your elbows first you give the ball the momentum to roll up your arm to your hand. Without this the ball will simply fall off of your elbow.

You want your palms to be turning to face upwards as you raise your arms, so that as the ball rolls upwards it reaches your palm, ready to be passed to the other hand (as shown in the picture below).



You will find it difficult to roll the ball up to your palm if you immediately rotate it to face upwards. To combat this, I recommend that when the ball is rolling from the middle of your arm up until around the little finger, you should have your palm facing to the side. This should create an easier path for the ball to roll up, and then you just need simply to rotate your hand another 90 degrees to allow the ball to reach your hand.

To learn this trick, try to practice the following steps:

1. Outside elbow stall
 2. Raise the ball upwards, being conscious to lift from your elbow
- ([Video](#))

This may be difficult at first, and you may find that the ball will roll away from you quite easily, but if you persist with this practice, you will find that the movement will soon become second nature. If you are able to get the ball to reach your hand without the need of a throw, try to be conscious of the movement you made when practicing the full bridge roll.

Something I often see when people practice this trick is the raising of the arm with considerable speed or force. In reality little force is needed on the ball to make it roll up your arm correctly. In fact forcing the ball too much is more likely to make the trick unstable and difficult to complete. There is also no need to raise your arms up very high. While doing this is fine, at first you should aim for a slightly small roll, and then gradually get bigger as you grow more confident.

Once you have mastered the upward movement, you will want to work on the reverse roll to an outside elbow stall. For many people this is in fact more difficult than the upward roll, as you need to find a way to stop the ball after it has rolled down your arm. To begin with just let the ball fall off at your elbow to get a feel for the route (which should be the same as the upwards motion), and then gradually work up to trying to stop in the stall position. There isn't much advice I can give for this part except to keep working on it until you get a feel of how much speed is required to roll correctly but still come to a stable stop.

Twist Arm Roll

Explanation ([Video 1](#), [Video 2](#))

As this is not a very common trick, I decided to give it the name I always use when describing it to others. This name is not official so please be aware that other people may have a completely different name for it.

This trick is very similar to the inside arm roll, the only difference being that you twist your hand 360 degrees and then release the ball. Look at the pictures below if you are having trouble picturing the position.



Practice method

- Starting from your hand ([Video](#))

The first problem you will face with this trick is the initial roll from the hand. Avoid throwing the ball from your hand with a flicking motion: instead work on releasing the ball gently so that it can roll smoothly up your arm. How you do this will differ depending on your ability to twist your arm and hand, it may be necessary to lean slightly to one side in order to prevent the ball from immediately falling off of your arm. If possible, you want to build up to being able to do the trick with a completely straight posture.

As in the bridge roll, initially work on getting the ball to your elbow cleanly, and from there you can consider connecting to other rolls. To learn the trick on both sides, try catching the ball at the elbow with your other hand and then repeating the roll on the other side.

- Combining with other rolls

While you can combine this trick with both inside and outside arm rolls, the inside arm roll is most likely the easiest to begin with. From this trick you simply need to roll the ball from your hand, and before it reaches the elbow twist your arm back into the regular inside arm roll position. If you have your inside and outside elbow stalls solid, it should not take too much practice to roll the ball to these positions, then you can then go on to combine with any other trick.

Extra: Rolls and elbows

When combining arm rolls, the use of the elbow is very important. This is simply because there are a whole range of stall points around the elbow which act as the connection between all rolls. As these stall points tend to be flat or concaved, they offer the most stable route for a ball to pass through, and at the very least act as a recovery point should you lose balance in the middle of a roll.

In addition, as all of these stall points can be connected together, it follows that you can replace one type of elbow stall with another as a start or end point of a trick e.g:

- Bridge roll (downwards) → Inside arm roll
- Inside arm roll → Bridge roll (upwards)

- Bridge roll → Twist arm roll

There are a huge range of variations available when it comes to combining rolls and stalls, so experiment with as many as you can in order to expand the movements and combinations you can perform.

Cradle to Behind the Neck Roll

Explanation (Video: [Facing](#), [From the side](#), [From behind](#))

This is a trick that I first saw being done by the contact juggler Kelvin Kalvus. As I do not know if there is an official name for it, I decided to go with “Cradle behind the neck roll” as it is (relatively) easy to understand.

- Cradle → In the cradle position bring the ball behind your neck → Release and let the ball roll back to the same hand

As this trick is done back to the same hand, it can be looped repeatedly (something you can see in Kelvin Kalvus’s online videos.)

Practice method

This trick is very difficult to do when standing upright, so you will want to be slightly bent forwards with your head lowered in order for the ball to roll cleanly behind the neck.

As for the position to release the ball from the cradle, I find that the area behind the base of the neck tends to be best, which means that your hand will most likely be at a diagonal angle and touching your neck as you release. This can differ depending on your muscle mass, so try to experiment to see where is most consistent for you.

Combining the Butterfly and Folding Line (One Side)

Explanation (Video: [Regular](#), [Reverse](#))

This combination of the butterfly and the folding line is often used in body rolling, and serves as a key trick when moving on to multi ball body rolling.

The sequence is as follows:

- Cradle → Butterfly → Folding line → Butterfly

To explain in more detail:

- Cradle → Butterfly (Half-circle) → inside arm roll → Switch to outside arm roll → Butterfly

This sequence is then repeated. If you are able to do all the tricks listed up to this point, you should not find this very difficult.

The main problem you will face with this trick is performing it smoothly. This is something that takes a long time: however the look greatly improves when you remove any pauses or awkward movements.

There is also a reverse version of this trick:

- Butterfly → Cradle → Folding line → Butterfly

To explain in more detail:

- Butterfly (Half-circle) → Cradle → Outside arm roll → Switch to inside arm roll → Butterfly

Some people may find the reverse version is easier than the regular version, so try both to see which feels more comfortable for you

Practice method

If you break this trick up into sections (like above), and do all of the parts separately, you will find that the speed of the ball will increase and decrease throughout, especially in the cradle position. ([Video](#)) In order to perform the trick smoothly, try the following:

- Start the butterfly motion mid-way through the arm roll

By the time the ball reaches the cradle position, your arm should be in a diagonal position. The degree to which you should raise your arm will differ between each person, but an angle between 35-45 degrees should be appropriate.



By the time you practice this trick, you will have become used to the fact that the butterfly is typically entered from a more or less static cradle position. However, this time you will have to deal with the extra momentum that comes from transferring directly from the outside arm roll. As this extra speed will tend to make the ball overshoot during the wide half circle butterfly movement, the raising of the arm before the butterfly will allow you to slow the ball down and make the butterfly easier to control as the ball will spend less time on the fingertips.

Another advantage of this is that the speed of the ball should remain relatively fixed, making the roll appear much cleaner.

To begin with you may find it easier to alternate between the inside and outside elbow stall via the butterfly, using the techniques mentioned previously. This will also allow you to learn both directions of the trick at the same time. As you get more confident, you can then go on to loop the same direction, being careful to maintain the same speed throughout.

Extra ([Video](#))

It is also possible to combine the bridge roll with the butterfly, as can be seen in the above video. As the variation in height is extreme, this can be hard to control, especially the speed of the ball.

Behind the Neck Roll

Explanation

This trick begins in the same way as the chest roll, but instead of rolling over the chest, the ball will roll behind the neck before continuing back along the opposite arm to the cradle position. With practice, this trick can be done relatively easily, however the real problem comes in being able to do the trick cleanly without any pauses or changes in speed.

Practice method

This is a trick that may vary between different people, so try some of the below tips and see if they can assist you in performing the roll/

- Lower your head (more than you think!) ([Video](#))

While keeping your arms raised in the chest roll position, lower your head as much as possible so that when the ball passes the neck, you are looking down. In addition you want to keep your shoulders as relaxed as possible so that the path for the ball doesn't become bumpy or have an up/down motion.

- Make a straight line between the elbows and neck ([Video](#))

Instead of the circular shape created by the arms when performing the chest roll, try bringing the elbows backwards so that they create a straight line with the neck. Adding a slight turn may help.

- Bend forwards ([Video](#))

If you are having problems with the ball falling backwards, try to

bend forwards slightly during the neck roll part of the trick. After the ball has passed the neck, return to the normal chest roll stance.

As a general outline, I listed some of the main points for this trick below:

- Don't raise your shoulders
- Aim to roll the ball in a slightly wider circle than a chest roll in order to get the ball behind your neck
- Watch the ball as much as possible before and after the neck roll
- Imagine a circular path for the ball that is slightly wider than the regular chest roll – From the elbow onwards the ball should take a slightly wider path

Be careful not to lower your arms after the neck section of the roll, as this can make the ball roll quicker and thus go out of control easily

Tony Duncan

Have you heard of Tony Duncan? He is the winner of the 1994 IJA (International Juggling Association) championships, and was famous even in Japan when I started juggling in 2006. As many of the past IJA videos are no longer available, many people are not aware of him. Tony won with a unique combination of palm spinning with silicon balls, body rolling with stage balls, club balance and three-ball juggling, and his style influenced many jugglers. Although 20 years have passed since his IJA win, he still has an amazing level of body rolling ability (among other skills), and I would personally rate him as one of the best in the world for ball control in regards to contact juggling. For those interested, you can see some of his juggling on YouTube.

Body Rolling/Stalls - Part 4

For this next section I will go into detail on two-ball body rolling tricks. The first time I saw this type of body rolling was through a video of Thierry Fremaux on YouTube, and it greatly influenced the direction of my contact juggling from that point onwards. As this can be a very deep topic, I will go through some of the more basic tricks as an introduction.

How to think about multi ball body rolling

To begin with, you should assume that tricks that can be done on either one arm or one side of the body could be done on both sides at the same time. You may have noticed that with one ball body rolling you tend to have a free arm that has nothing else to do. With this arm you can either copy the trick of the other arm, or do something completely different.

This type of body rolling is still in its development stages, so it may be a little too soon to say what tricks are fundamental and which ones aren't, but in order to spread the idea and get other people interested, I will explain what I have found through my own endeavors.

Requirements

In order to start with two-balls, ideally you should be able to do the following:

- Be able to do various body rolls on both sides of the body while holding a conversation with someone
- Be able to do chest rolls in both directions while holding a

conversation with someone

You may be wondering why being able to hold a conversation is a requirement for two ball tricks. This is simply an example that shows you can do a trick without fully needing to concentrate on it. With two-ball tricks you are unable to concentrate on both arms at the same time, so a degree of unconscious ability is required in order to learn tricks quickly.

Two Ball Folding Line (Async)

Explanation ([Video](#))

To do this trick you must be comfortable with the butterfly and the folding line with both arms. Alternating timing is the easiest way to do this trick, so let's consider that the basic version for now. I will explain the way I find easiest. Some people find the reverse easier, so try both and see which works out best for you.

Practice method

The two main points for this trick are remembering the movement of the balls and arms, and which ball you look at while doing the trick.

To begin with, let us break the trick up into sections ([Video](#)):

1. Right hand: Palm, Left hand: Cradle
2. Right hand: Folding line, Left hand: Butterfly
3. Right hand: Cradle, Left hand: Palm (the reverse of step 1)
4. Right hand: Butterfly, Left hand: Folding line (to cradle)
5. Return to step 1

While it may feel awkward at first, try practicing these steps to get an understanding of where each ball is and how your arms should be moving throughout the motion. At this point I will look at the arm I consider my weakest. Many people alternate which arm they are looking at for a particular part of the roll (for example looking at the transition between inside to outside arm roll). As a general rule if you look at the arm/part of the roll that is weakest, you will be able to concentrate on

your technique there while letting the other arm do the motions for the other trick automatically. Once you understand the movement, you should try to do steps 1-4 continuously.

For timing, aim to do the butterfly at around the same time as you are doing the inside arm roll (before switching to the outside arm roll).

Reverse pattern ([Video](#), [Separate practice](#))

1. Right hand: Cradle, Left hand: Palm
2. Right hand: Folding line (to palm), Left hand: Butterfly
3. Right hand: Palm, Left hand: Cradle (the reverse of step 1)
4. Right hand: Butterfly, Left hand: Folding line (to cradle)
5. Return to step 1

Your ability to do this or the “regular” roll simply depends on your confidence with the one ball versions of the trick.

Two-Ball Folding Line (Sync)

Explanation ([Video](#))

Although this has the same movements as the async version of the trick, the rolls are done at the same time, increasing the difficulty considerably.

Practice method

To begin with, make sure you are confident with the asynchronous version of the trick. From there it is just a case of practicing the trick until you are able to do both rolls at the same speed and with the same degree of movement. I recommend looking straight in front of you, with your head tilted slightly downwards so that you can see the movement of both balls in your peripheral vision.

Dual Folding Line

Explanation ([Video](#))

This trick is a variation of the two ball folding line listed above, however this time a folding line and reverse folding line are done at the same time, so that the two balls are synchronized when rolling left and right.

Practice method

1. Right hand: Palm, Left hand: Cradle
2. Right hand: Folding line (to cradle), Left hand: Folding line (to palm)
3. Right hand: Cradle, Left hand: Palm (the reverse of step 1)
4. Right hand: Folding line (to palm, Left hand: Folding line (to cradle)
5. Return to step 1

Extra: With a butterfly ([Video](#))

When mixed with a butterfly, the balls can appear to be rotating in circles next to each other.

1. Right hand: Palm, Left hand: Cradle
2. Right hand: Folding line, Left hand: Folding line
3. Right hand: Cradle, Right hand: Palm (the reverse of step 1)
4. Right hand: Butterfly, Left hand: Butterfly
5. Return to step 1

Two-Ball Chest Roll + Butterfly

Explanation ([Video](#))

This is a variation of the two-ball chest roll where a butterfly is included to slow down the pace of the trick. Typically, you want to learn this variation first before moving on to the regular two-ball chest roll.

Practice method ([Video](#))

When starting from the right hand:

1. Right hand: Cradle Left Hand: Palm (hold)
2. Right hand: Begin the chest roll
3. When the ball reaches your shoulder/chest, pass the ball in your left hand to the right hand.
4. When the ball reaches your left arm:
Left hand: Palm (hold) Right hand: Cradle
5. Do a butterfly with both balls in both hands
6. Right hand: Cradle Left hand: Palm (hold)
7. Return to step 1

The key point for this trick is the timing for passing the ball. If you pass the ball while the other is still rolling on your arm, you will find that it is very easy for the rolling ball to go out of control and fall off your arm. Thus, you want to pass the ball when the other ball is around your chest area, as here you have room to move your arms without affecting the course of the ball doing the chest roll.

Two-Ball Chest Roll

Explanation (Video: [Facing](#), [Side](#))

Here I will go into detail about the regular two-ball chest roll

Practice method

When starting from the right hand:

1. Right hand: Cradle Left hand: Cradle
2. Right hand: Begin the chest roll
3. When the ball reaches the right shoulder/chest area, pass the left hand ball to the right hand
4. When the rolling ball goes past your left shoulder, begin the chest roll with the ball in your right hand
5. Return to step 3

As in the two-ball chest roll + butterfly, you want to be aiming to pass one ball while the other ball is crossing your chest. The hard part is passing the ball in a stable manner between hands, as you will only be using the cradle position throughout. In order to get more stability, I recommend that you use the three-finger cradle method mentioned at the beginning of this guide.

Another thing to be careful of is maintaining a smooth rotation of the balls throughout the trick without any pauses in the cradle position, like the following:

1. Right hand: Cradle Left hand: Cradle
2. Right hand: Begin the chest roll

3. When the ball reaches the right shoulder/chest area, pass the left hand ball to the right hand
4. Wait until the ball reaches the left hand
5. Right hand: Cradle Left hand: Cradle
6. Return to step 1

If done like this, it will look like a single ball is being rolled at one time, ruining the effect of the trick.

Your ability to do the single ball chest roll will greatly influence how easily you pick up this trick, so if you are still not 100% confident it may be worth going back to polish that before moving on to this trick.

Two in One Hand

Explanation ([Video](#))

This is a trick where one ball rolls up and down the inside arm, while at the same time a second ball is tossed vertically from the hand. This was a trick I originally saw performed by Santi.

Practice method

To begin with you need to be comfortable with the inside arm roll to the point that you can do the trick without any horizontal movement. You should also be able to roll to the inside arm stall point without the need to pause and readjust the balance.

For timing, you want to throw the ball in your hand as the other ball is around half way down your arm. There should be very little space in between the throw and the catch, so that a vertical line is created by the two balls for as long as possible. As the tossed ball begins to descend, you should begin the inside arm roll to avoid collision.

Extra

Head Roll

Explanation ([Video](#))

The head roll is a general term for any tricks where the ball rolls between stall points around the head. While there are many stall points, for now I will explain what I consider to be the easiest roll, where the ball is rolled to and from the temple (or ear) and forehead.

Practice method ([Video](#))

To practice this trick:

1. Learn the correct posture to stall the ball

First, you need to be comfortable with both stalls. This also means that you are comfortable with making corrections when the ball moves. Practicing these stalls is the same as for previously mentioned elbow stalls.

- Walking/sitting/getting up while doing the stall
- Throw into a stall
- Do a toss pattern (such as the cascade) then throw a single ball into that stall point ([Video](#))
-

2. Practice the roll

Practice the Temple → Forehead and Forehead → Temple rolls separately. When rolling the ball up to the forehead, think of it more as lifting the ball rather than a regular roll. For the roll down to the temple, you need to be able to kill the speed of the ball so it settles

in the stall position properly. These tricks can only be learnt properly through feel, so really all that can be said is practice until you intrinsically understand the movement of the ball.

3. Practice the Temple → Forehead → Temple rolls combined

For this you simply need to be able to do step 2 comfortably both ways. You will want to learn this trick on both sides of the head as doing so will open up a wide range of variations

This trick takes a long time to learn and get comfortable with. Once you are able to do the trick to some degree, it is best to focus on cleaning up the roll and making sure there is no excess movement.

JCJC

JCJC (Japanese Contact Juggling Convention) is a contact juggling event held once a year at Yoyogi park in Tokyo. Everyone is welcome to participate regardless of skill level. For those who understand Japanese, please visit the JCJC website shown below, or follow the JCJC account on twitter. English speakers can contact Darren Wakefield at mrsabu[at]gmail[dot]com.

<http://jcjc.exblog.jp/>

<https://twitter.com/JCJCyoyogi>



Yoyogi Park, Tokyo

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