
CROQUET
ACA
AUSTRALIA

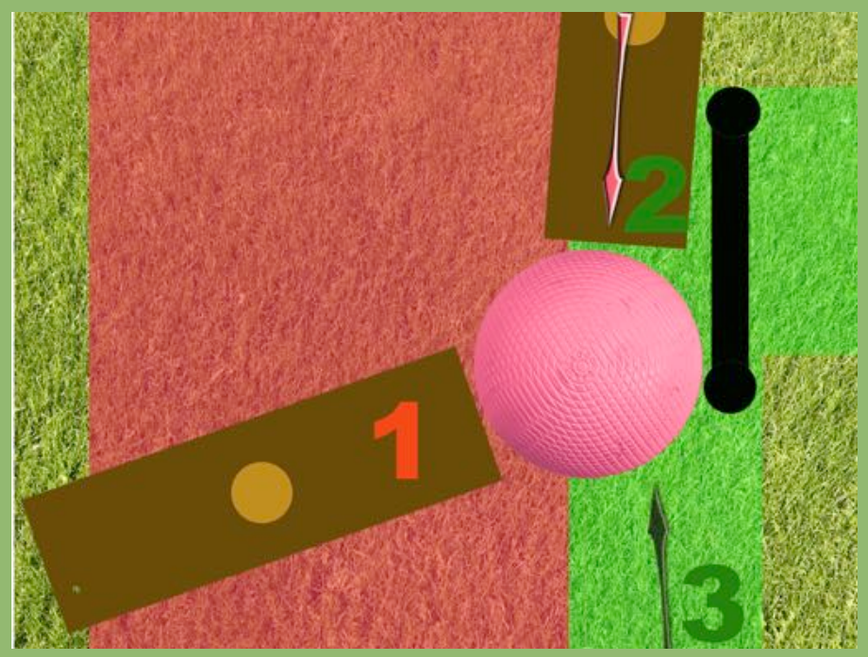
Hoop Crush Strokes

https://www.youtube.com/watch?v=wfMov2V

This potentially occurs anytime the mallet, ball and hoop leg are in simultaneous contact.

The ball placed on right hoop leg, where the stroke being played is in the direction of the arrows in the diagram (green zones), may be clean strokes.

Strokes attempted from the red area illustrated will usually crush



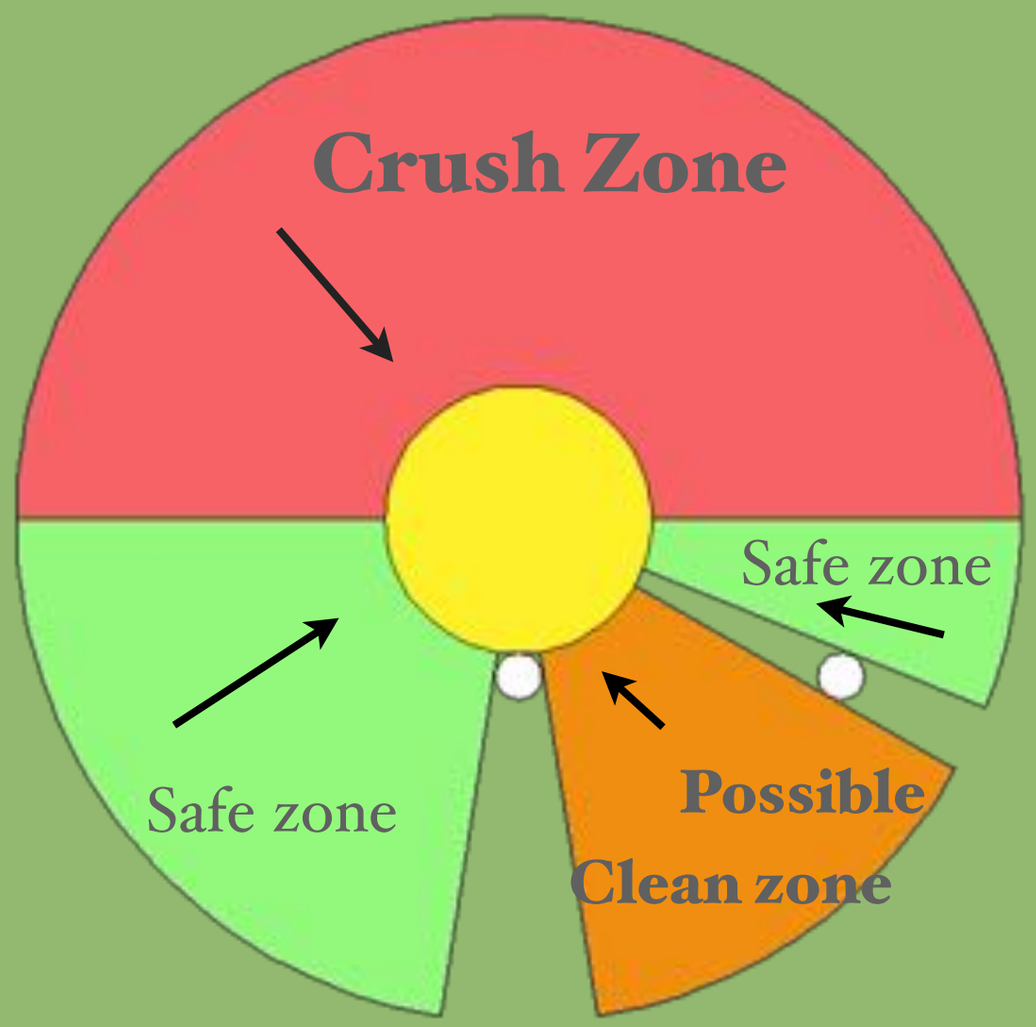


Fig. (Courtesy Dr Ian Plummer)

Oxford Croquet www site

Hoop Crush Shots

The definition of a possible “crush” is when the mallet, ball and wire (all three in contact) are all simultaneously in contact at any given moment. Worded differently the referee must confirm that the mallet does not push the ball against a wire. This is judged by:

1. The direction of the swing and orientation of the mallet head.

2. The amount of follow-through.

3. The noise made during the stroke.

4. The angle of emergence and the distance travelled by the ball.

In addition the referee must watch for any other standard faults being committed. The common ones are resting arms on legs, balls bouncing back onto the mallet, or feet or air-shots.

The best observation position may be viewed from behind the player along the line of the stroke, taking care not to cast a shadow over the playing area. It is the referee’s duty to take up the most favorable position in order to adjudicate the fairness and effect of any questionable stroke. Both the line of the swing can then be seen and the noise of the impact(s) heard. It is however difficult to judge the amount of follow-through or the angle of the mallet head. The direction of the mallet face, swing and amount of follow through can be seen from that position and the way the ball emerges from the hoop.

For a ball < 24 mm away from a hoop the event you are witnessing will take place in less than 1/20 000 second. You will be able to *hear* the stroke at that speed but not always *see* it. For a steeply angled hoop it is unlikely that a ball will travel any distance through the hoop. Given that a ball may ricochet between the jaws before emerging from a hoop, it can come out at any angle.

The term "crush" is the term or colloquial way of describing Law 28(a)(9,10).

The following is a quote from ORLC 28.12 ----- Law 28(a)(9) “strikes the striker's ball so as to cause it to touch a hoop upright or, unless the striker's ball is pegged out in the stroke, the peg when in contact with the mallet”

This is the classic *crush stroke* and while periodically difficult to adjudicate confidently referees must be aware of these possible faults. Croquet strokes may be forced, hit hard and played over a very short time.

In any event, the longest distance that mallet and ball will travel in contact with each other is about 10 millimeter (mm) but this does NOT mean that any ball within 10 mm from an upright is therefore a candidate for a crush. The distance that matters is that between the impact points on

1. the ball's diameter and dimensions

2. the upright's circumference. In practice, unless the striker is so incompetent as to drive the SB almost straight at the upright (in which case he will double tap anyway), this means that the nearest point of the ball must be on the upright before there is any real chance of a “crush".

Quote: ORLC 28.13 Law 28(a)(10)

“This is the easiest way to commit a crush but should only occur if the striker is ignorant of basic physics or tries to play close to the forbidden line and the referee believes he transgressed it".

This has also been simplified by an ACA Statement:

Unless a ball is actually:

- touching a hoop leg, and not playing away from the hoop or
- within 2 mm of the hoop leg then a 'crush' cannot occur

In this situation a double-tap will probably occur.

If multiple noises occur as a result of the stroke it probably will not be a crush but possibly will be a DT. The issue is difficult when players deliberately angle a clean shot but the mallet crashes into the near hoop leg. This sounds awful, can be tricky hearing brass faced mallet sounds, but may be a clean stroke, if the ball has left the mallet and traverses the hoop successfully. The mallet deliberately being stopped by the hoop may avoid a DT.

https://www.youtube.com/watch?v=luOKzVJ8s4U

URL& Date: 8-9-13 JAT & SH,	Ball Colour SB	CB	U Tube Time	Real t Call	Slomo Call	Fault type & Consequence	INDEX Manual	Comment
1	G	-	0:00	? Clean	Clean	Play On		Ball stuck clean
2	U	-	1:47	??Clean	Clean	Play On		Then mallet sound
3	R	-	3:08	Clean	Clean	Play On		Note NOT DT
TIME Clip			4:20					

- **http://www.youtube.com/watch?v=OZuU3-p2o6w**

- **Referee 2: (BK)**
- **t= 47 sec, Real time suspect, BUT double tap fault blue** ball exiting hoop,

https://www.youtube.com/watch?v=mAMTakIZgoY

Running the hoop from an angle all clean strokes except stroke 4 yellow ball DT

Referee 3

- http://www.youtube.com/watch?v=BfDHObFR538
- t= 50 sec, clean yellow ball

Nice example of a crisp clear sound of ball near L wire, and slomotion confirming noDT, so clean stroke play on.

- **Referee 4**
- http://www.youtube.com/watch?v=65ScBTBhhao
- t= 44 sec, blue ball ? bevel edge or DT fault

Sounds suspect real time, not sure from angle mallet if crush and DT but slomotion confirms BOTH are faults. Balls must be marked, since the adversary now may elect to play where the balls end or elect to replace the balls at beginning of faulted stroke. Remember the striker in a fault stroke is responsible for this position of the balls, the adversary simply choosing a ball placement.

- **Referee 6**
- http://www.youtube.com/watch?v=NIMmV4zSwYk
- t=27 sec a clear double tap (DT) fault Rw ball

Fig 3.2 Potential “Crush Faults”:

Crush of a ball, simultaneously hitting in the direction of the arrow, will contact the mallet (a) the (b)R ball and the (c)hoop at one time.

Fig 3.2-1 and 2

This is a “crush” fault. This is more clearly seen in the left panel where the mallet lines up directly at the right hoop leg
(see red box zone in 3.2d)

Fig 3.2-2

On the right, a sweep (Bray) stroke may result in a similar thing, as the sweep goes from top 1 to bottom 3 direction.
Sometimes a player will try direction 3 upwards to 1, when a crush will be likely. Also a bevel edge may occur.

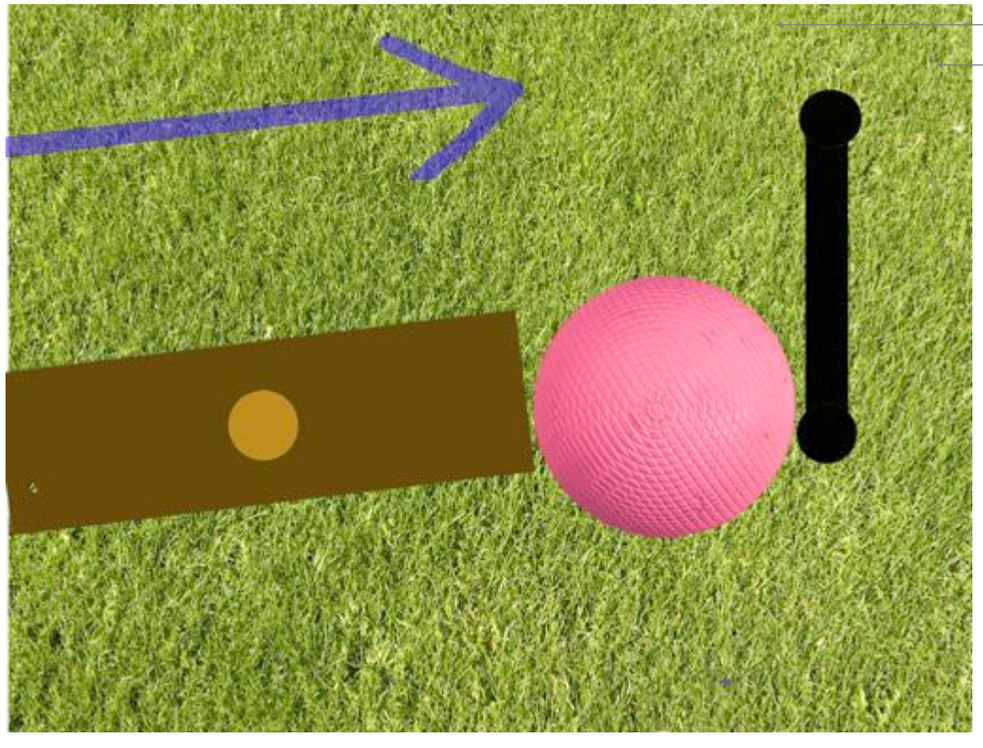


Fig 3.2-1

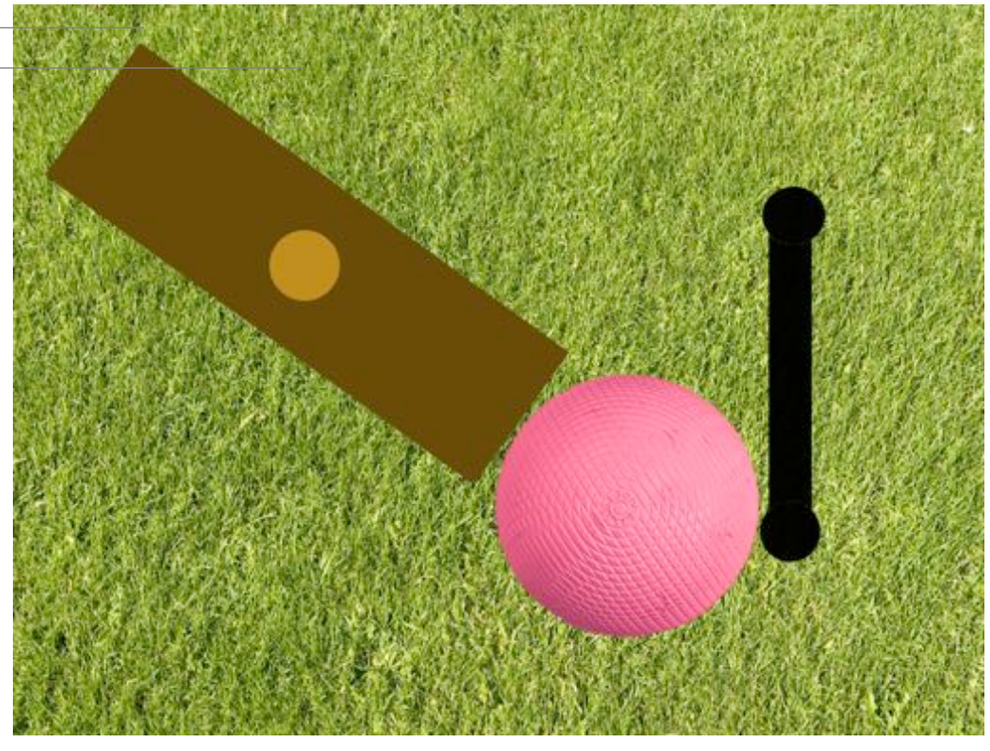
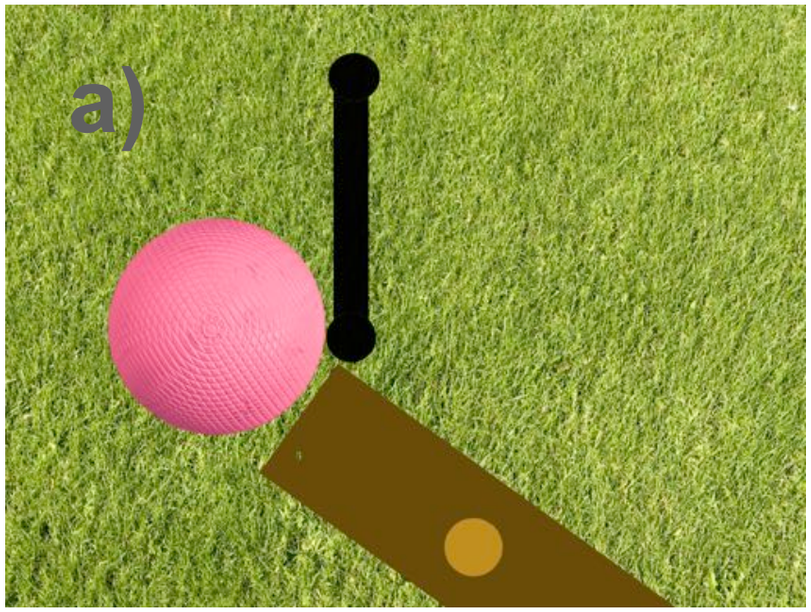
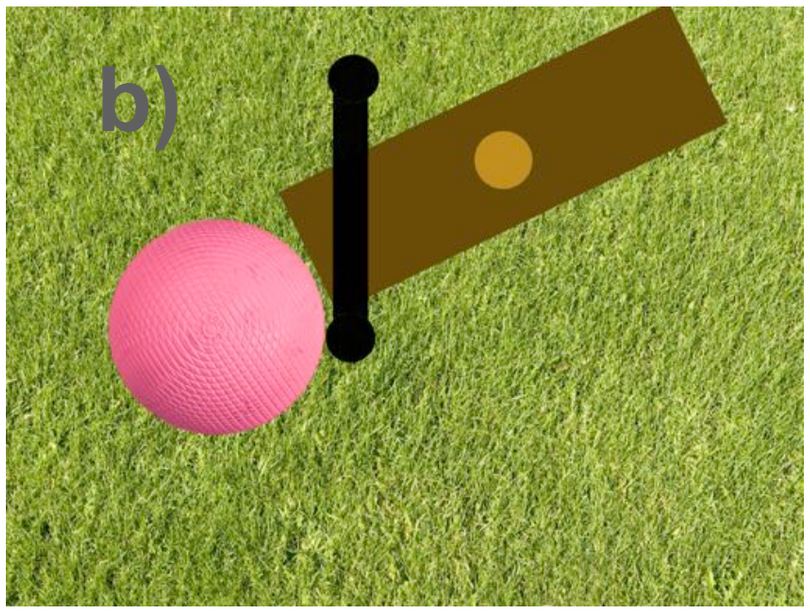
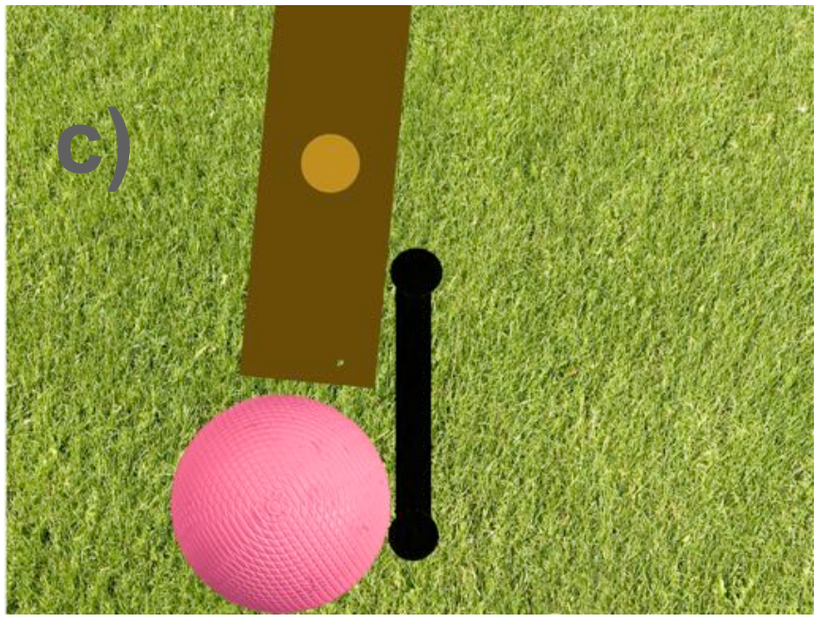


Fig 3.2-2







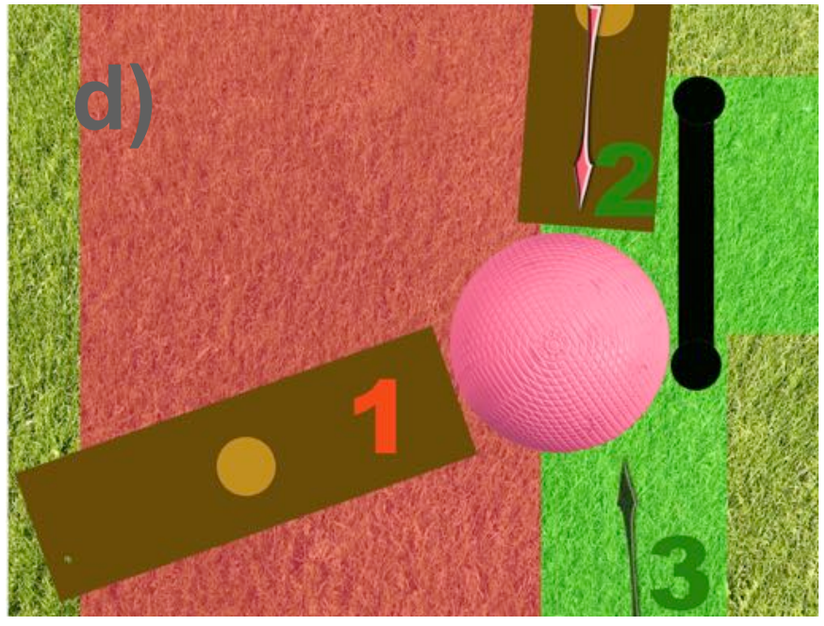


Fig 3.2-3 a,b,c,d

a) Clean stroke, even if hoop leg is struck, the mallet hits away from the hoop
b) Clean watch for bevel mallet strike, but clean if hit as shown
c) Also clean, the mallet is hitting away from the hoop
d) Same as previous picture with red " crush stroke" and green (arrows) probable clean stroke zone superimposed.