

# IRV

## VAULT (VLT) DIFFICULTY CATALOGUE 2023+

VALID FROM 1<sup>ST</sup> JANUARY 2023



<b>VLT Difficulty Catalogue 2023+</b>		
<b>Category A</b>		
<b>Vaults performed in tuck or straddle position from arm support on the wheel</b>		
<b>A1</b>	Straddle Sitting	<b>0.0</b>
<b>A2</b>	Back Straddle Sitting	<b>1.0</b>
<b>A3</b>	Tuck Through	<b>1.0</b>
<b>A4</b>	Handstand, Straddle Down	<b>5.5</b>
<b>A5</b>	Straddle Over	<b>3.0</b>
<b>A6</b>	Tuck Over	<b>4.0</b>
<b>Category B</b>		
<b>Vaults performed from a FORWARD standing position on the wheel</b>		
<b>B1.0</b>	Straight Jump forwards	<b>1.0</b>
<b>B1.05</b>	Straight Jump forwards + 0.5 twist	<b>1.8</b>
<b>B1.10</b>	Straight Jump forwards + 1.0 twist	<b>2.9</b>
<b>B1.15</b>	Straight Jump forwards + 1.5 twists	<b>4.2</b>
<b>B1.20</b>	Straight Jump forwards + 2.0 twists	<b>5.8</b>
<b>B2</b>	Pike Straddle Jump	<b>1.5</b>
<b>B3.0</b>	Tuck Front Somersault	<b>4.1</b>
<b>B3.05</b>	Tuck Front Somersault + 0.5 twist	<b>4.9</b>
<b>B3.10</b>	Tuck Front Somersault + 1.0 twist	<b>6.0</b>
<b>B3.15</b>	Tuck Front Somersault + 1.5 twists	<b>7.3</b>
<b>B3.20</b>	Tuck Front Somersault + 2.0 twists	<b>8.9</b>
<b>B4.0</b>	Pike Front Somersault	<b>4.6</b>
<b>B4.05</b>	Pike Front Somersault + 0.5 twist	<b>5.4</b>
<b>B4.10</b>	Pike Front Somersault + 1.0 twist	<b>6.5</b>
<b>B4.15</b>	Pike Front Somersault + 1.5 twists	<b>7.8</b>
<b>B4.20</b>	Pike Front Somersault + 2.0 twists	<b>9.4</b>
<b>B5.0</b>	Straight Front Somersault	<b>5.2</b>
<b>B5.05</b>	Straight Front Somersault + 0.5 twist	<b>6.0</b>
<b>B5.10</b>	Straight Front Somersault + 1.0 twist	<b>7.1</b>
<b>B5.15</b>	Straight Front Somersault + 1.5 twists	<b>8.4</b>
<b>B5.20</b>	Straight Front Somersault + 2.0 twists	<b>10.0</b>
<b>B6</b>	Tuck Gainer Back Somersault	<b>6.5</b>
<b>B6.10</b>	Tuck Gainer Back Somersault + 1.0 twist	<b>8.4</b>
<b>B7</b>	Pike Gainer Back Somersault	<b>7.3</b>
<b>B8</b>	Straight Gainer Back Somersault	<b>8.6</b>
<b>B9</b>	Double Tuck Front Somersault	<b>9.0</b>
<b>Category C</b>		
<b>Vaults performed from a REVERSE standing position on the wheel</b>		
<b>C1.0</b>	Straight Jump backwards	<b>1.0</b>
<b>C1.05</b>	Straight Jump backwards + 0.5 twist	<b>1.8</b>
<b>C1.10</b>	Straight Jump backwards + 1.0 twist	<b>2.9</b>
<b>C1.15</b>	Straight Jump backwards + 1.5 twists	<b>4.2</b>
<b>C1.20</b>	Straight Jump backwards + 2.0 twists	<b>5.8</b>

<b>C2.0</b>	Tuck Back Somersault	<b>3.8</b>
<b>C2.05</b>	Tuck Back Somersault + 0.5 twist	<b>4.6</b>
<b>C2.10</b>	Tuck Back Somersault + 1.0 twist	<b>5.7</b>
<b>C2.15</b>	Tuck Back Somersault + 1.5 twists	<b>7.0</b>
<b>C2.20</b>	Tuck Back Somersault + 2.0 twists	<b>8.6</b>
<b>C3.0</b>	Pike Back Somersault	<b>4.3</b>
<b>C3.05</b>	Pike Back Somersault + 0.5 twist	<b>5.1</b>
<b>C3.10</b>	Pike Back Somersault + 1.0 twist	<b>6.2</b>
<b>C3.15</b>	Pike Back Somersault + 1.5 twists	<b>7.5</b>
<b>C3.20</b>	Pike Back Somersault + 2.0 twists	<b>9.1</b>
<b>C4.0</b>	Straight Back Somersault	<b>4.9</b>
<b>C4.05</b>	Straight Back Somersault + 0.5 twist	<b>5.7</b>
<b>C4.10</b>	Straight Back Somersault + 1.0 twist	<b>6.8</b>
<b>C4.15</b>	Straight Back Somersault + 1.5 twists	<b>8.1</b>
<b>C4.20</b>	Straight Back Somersault + 2.0 twists	<b>9.7</b>
<b>C5</b>	Reverse Stand, Half Twist into Tuck Front Somersault	<b>5.0</b>
<b>C6</b>	Reverse Stand, Half Twist into Pike Front Somersault	<b>5.5</b>
<b>C7</b>	Double Tuck Back Somersault	<b>8.7</b>
<b>Category D Overswing Vaults</b>		
<b>D1.0</b>	Overswing	<b>4.5</b>
<b>D1.05</b>	Overswing + 0.5 twist	<b>5.0</b>
<b>D1.10</b>	Overswing + 1.0 twist	<b>5.8</b>
<b>D1.15</b>	Overswing + 1.5 twists	<b>6.8</b>
<b>D2.0</b>	Straddle Overswing	<b>4.2</b>
<b>D2.05</b>	Straddle Overswing + 0.5 twist	<b>4.7</b>
<b>D2.10</b>	Straddle Overswing + 1.0 twist	<b>5.5</b>
<b>D2.15</b>	Straddle Overswing + 1.5 twists	<b>6.5</b>
<b>D3.0</b>	Straddle Sitting, Overswing	<b>3.5</b>
<b>D3.05</b>	Straddle Sitting, Overswing + 0.5 twist	<b>4.0</b>
<b>D3.10</b>	Straddle Sitting, Overswing + 1.0 twist	<b>4.8</b>
<b>D3.15</b>	Straddle Sitting, Overswing + 1.5 twists	<b>5.8</b>
<b>D4.0</b>	Front Lying, Overswing	<b>3.5</b>
<b>D4.05</b>	Front Lying, Overswing + 0.5 twist	<b>4.0</b>
<b>D4.10</b>	Front Lying, Overswing + 1.0 twist	<b>4.8</b>
<b>D4.15</b>	Front Lying, Overswing + 1.5 twists	<b>5.8</b>
<b>D5</b>	Front Lying, Overswing, Front Somersault	<b>9.0</b>
<b>D6</b>	Front Lying, Overswing, 0.5 twist, Back Somersault	<b>10.0</b>

## **Definition of body positions and recognition of difficulty (Excerpt from the CoP 2023+)**

Each somersault can be performed in a tuck, pike or straight position. The body positions are defined by the angles of the hip and knees as follows:

A perfect **straight body position** is one in which a line from the shoulders through the hips to the ankles is straight or slightly bent forwards or backwards. If the hip assumes a flexion of more than 45° during the vault, it will be considered piked.

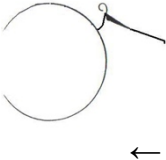
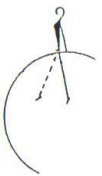
A perfect **pike body position** is one in which the knees are straight and the hips are bent at least 90° from the extended position. If the knees assume a flexion of more than 45° during the vault, it will be considered tucked.



A perfect **tuck body position** is one in which the hips are strongly bent and the bent knees are brought to the chest – a minimum 90° bend in each.


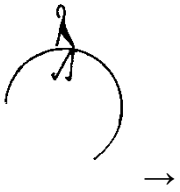
Deviations from these body positions can lead to an up- or downgrading of the difficulty score. They will also result in minor deductions applied by the execution judges.

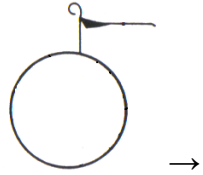
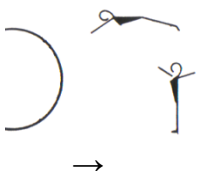
## **Recognition of twists (Excerpt from the CoP 2023+)**

In the case of vaults with an additional twist in the flight phase, the gymnast must fully complete the twist in order for the bonus to be given. A margin of error of up to 30° is permitted (judged by the landing position of the feet) and will incur a minor deduction. This means that if a gymnast announces a somersault with 1½ twists (=540°), but does not achieve at least 510° before landing, the difficulty judges will only award the bonus for a full twist (=360°). Deductions for execution will also apply.

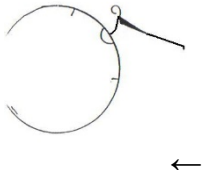

<b>Category A:</b>		
<b>Vaults performed in a tuck or straddle position from arm support on the wheel</b>		
<b>A1</b>		<b>Difficulty value: 0.0</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>←</p>  <p>Position on wheel</p>  <p>←</p>	<p>Take-off must be from 2 feet</p> <p>Layout mount: Slight bending of arms permitted (elbow angle not less than 135°). Legs straight and together after take-off. Should reach almost horizontal (160°-180° angle to floor), hips extended, acute angle between arms and upper body, body slightly arched.</p> <p>Straddle sitting, hips extended and inner thighs in contact with wheel (no "sitting" on back of thighs). Legs straight, feet extended. Gymnast reaches behind (both hands together) to hold rims of wheel immediately behind sitting position.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li>   <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• lack of hip extension</li> <li>• legs not together after take-off</li> <li>• legs not straight</li> <li>• feet not extended</li>   <li>• lack of hip extension</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• hands not moved at same time</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> </ul>

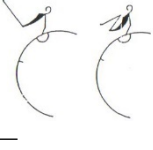

<b>Unit 3:</b>		
<p>Thrust from wheel</p> 	<p>Legs (straight) swing forwards and join when clear of wheel. Swing movement is stopped abruptly, hips extended and gymnast thrusts away from wheel with hands.</p>	<ul style="list-style-type: none"> <li>• legs not together once clear of wheel</li> <li>• feet not extended</li> <li>• no hip extension at end of swing</li> <li>• legs bent in order to initiate thrust from wheel</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> </ul>
<p>Flight phase</p> 	<p>Hips rise above contact point of hands on wheel. Extended body in flight phase.</p>	<ul style="list-style-type: none"> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> </ul> <ul style="list-style-type: none"> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>



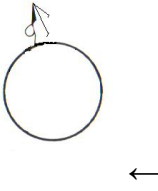
<p><b>A2</b> <b>Back Straddle</b> <b>Sitting</b></p>		<p><b>Difficulty value: 1.0</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Reverse mount: Slight bending of arms permitted (elbow angle not less than 135°). Immediate half-turn after take-off into back straddle on wheel, legs straight, feet extended. No height requirement in this mounting phase. Reverse mount from front lying also possible.</p> <p>Release hands (simultaneously) from original holding position and untwist upper body to hold rims in front of backward straddle sitting position. Inner thighs are in contact with wheel, legs straight, feet extended.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• hands not released simultaneously</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• 'extra swing' taken before thrust</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> </ul>


<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>For backwards thrust from wheel, legs (straight) swing backwards and join when clear of wheel (no 'extra swing' permitted), body slightly arched. Leg movement stops and gymnast thrusts away from wheel with hands. Hips extended.</p> <p>Hips rise above contact point of hands on wheel, extended body approaching horizontal (<math>160^\circ - 180^\circ</math>).</p>	<ul style="list-style-type: none"> <li>• legs not straight in swing movement</li> <li>• legs do not join once clear of wheel</li> <li>• feet not extended</li> <li>• lack of hip extension at end of swing</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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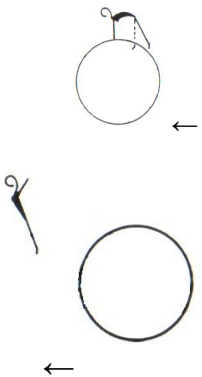


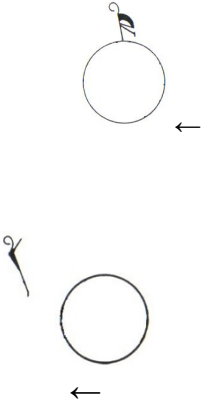
A3 Tuck Through		Difficulty value: 1.0
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Layout mount: No prescribed grip zone, but this vault will only be possible if hands hold near rim handles. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight and together after take-off. Should reach almost horizontal (160°-180° angle to floor), hips extended, acute angle between arms and upper body, body slightly arched.</p> <p>Tuck support position, whereby angle between upper body and thighs should momentarily be less than 90°. Legs together, feet extended (legs pass through wheel below rim level).</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• lack of hip extension</li> <li>• legs not together after take-off</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• insufficient tuck position (angle between upper body and thighs greater than 90° throughout vault)</li> <li>• legs not together</li> <li>• lack of tension in legs</li> <li>• feet not extended</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> </ul>

<p><b>Unit 3:</b> Thrust from wheel</p>  <p>←</p>  <p>Flight phase</p>  <p>←</p>	<p>From tuck support position legs are swung forwards, together and straight until body is beyond horizontal. Leg movement stops abruptly and gymnast thrusts away from wheel with hands, hips extended.</p>  <p>Body must rise above horizontal. Extended body in flight phase.</p>	<ul style="list-style-type: none"> <li>• legs not straight in swing movement</li> <li>• legs not together in swing movement</li> <li>• feet not extended</li> <li>• lack of hip extension</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li>   <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li>   <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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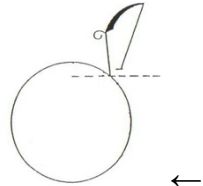
<p><b>A4</b> <b>Handstand, Straddle Down</b></p>		<p><b>Difficulty value: 5.5</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p>  	<p>Take-off from 2 feet</p> <p>Handstand mount: Elbow angle minimum 90°, hip angle 90°-180°, feet above level of hands on wheel. Legs straight and together, feet extended.</p> <p>Handstand position must be achieved first. Straddle down by closing the hip angle and straddling the legs.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 90°</li> <li>• hip angle less than 90°</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• insufficient height in mounting phase</li> <li>• handstand position not reached (i.e. hip angle remains less than 160°) before straddle down</li> <li>• legs not straight</li> <li>• legs not together in handstand</li> <li>• feet not extended</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> </ul>

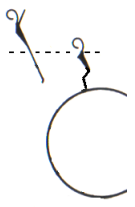
<p><b>Unit 3:</b> Thrust from wheel</p> <p>Flight phase</p> 	<p>After straddling down from handstand, an extended body is achieved by way of a powerful hand thrust from the wheel and a lifting of the upper body.</p> <p>The thrust from the wheel must be sufficient to ensure that the hips of the gymnast in the flight phase are above the level of the hand thrust from the wheel. Body extended, legs together.</p>	<ul style="list-style-type: none"> <li>• legs not straight in straddle down</li> <li>• feet not extended</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension (hips extended, legs straight, upper body lifted) after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• legs not together before landing</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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<p><b>A5</b> <b>Straddle Over</b></p>		<p><b>Difficulty value: 3.0</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase/ Position on top of the wheel</p> <p><i>NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault (and A6).</i></p>	<ul style="list-style-type: none"> <li>• Take-off from 2 feet</li> </ul> <p>Hands reach <u>high up</u> on wheel. After a strong take-off (no layout required) and powerful arm pull (bent arms permitted), the gymnast passes through a straddle support position on top of the wheel.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• legs not straight after take-off</li> <li>• feet not extended</li> <li>• legs in contact with wheel</li> </ul>
<p><b>Unit 3:</b> Thrust from wheel / Flight phase</p> 	<p>The hand thrust from the wheel takes place while the gymnast is still gaining height. By way of a powerful arm push, extension of the hips and lifting of the upper body (arms elevated) the gymnast achieves an extended body position during the flight phase. The gymnast should continue to gain height after thrusting from the wheel (hip level of gymnast should be visibly above top of wheel in flight phase).</p>	<ul style="list-style-type: none"> <li>• lack of hip extension after thrust from wheel</li> <li>• arms not elevated</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of height in flight phase</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

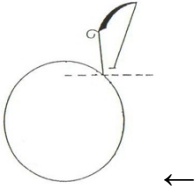
<p><b>A6</b> <b>Tuck Over</b></p>		<p><b>Difficulty value: 4.0</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase/ Position on top of the wheel</p> <p><i>NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault (and A5).</i></p>	<ul style="list-style-type: none"> <li>• Take-off from 2 feet</li> </ul> <p>Hands reach <u>high up</u> on wheel. After a strong take-off (no layout required) and powerful arm pull (bent arms permitted), the gymnast passes through a tuck support position on top of the wheel. The feet must <u>not</u> fall below the rim of the wheel.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• lack of tension in legs</li> <li>• legs not together in tuck position</li> <li>• feet not extended</li> <li>• legs in contact with wheel</li> <li>• feet fall below rim of wheel</li> </ul>
<p><b>Unit 3:</b> Thrust from wheel / Flight phase</p> 	<p>The hand thrust from the wheel takes place while the gymnast is still gaining height.</p> <p>By way of a powerful arm push, extension of the hips and lifting the upper body (arms elevated) the gymnast achieves an extended body position during the flight phase. The gymnast should continue to gain height after thrusting from the wheel (hip level of gymnast should be visibly above top of wheel in flight phase).</p>	<ul style="list-style-type: none"> <li>• lack of hip extension after thrust from wheel</li> <li>• arms not elevated</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of height in flight phase</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

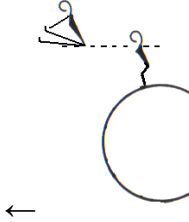
## Category B: Vaults performed from a FORWARD standing position on the wheel

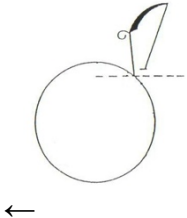

<b>B1 Straight Jump forwards</b>		<b>Difficulty value: 1.0</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p>	<p>Take-off must be from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Arms (straight) may be elevated above head or kept behind lower body ready to swing upwards.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• legs not straight</li> <li>• feet not immediately behind hands</li> <li>• feet not pointing forwards</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>

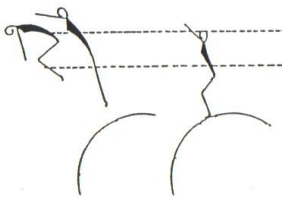
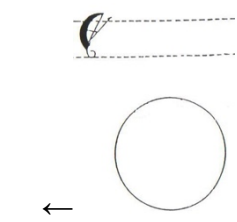
<p><b>Unit 3:</b></p> <p>Thrust from wheel</p> <p>Flight phase</p> 	<p>The thrust from the wheel is initiated through a slight bending of the legs followed by a powerful thrust (jump) from the wheel. The gymnast may (but does not have to) use an upward arm swing to achieve required height in flight phase.</p> <p>Body extended after thrust from wheel. Straight legs and extended feet. Level of hips at top of straight jump should be at least equivalent to gymnast's shoulder level in standing position on top of wheel. Extended body throughout flight phase.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li>   <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li>   <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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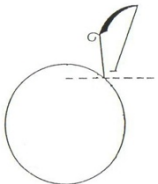



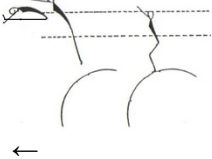
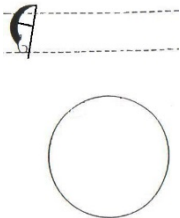
<b>B2</b> <b>Pike Straddle Jump</b>		<b>Difficulty value: 1.5</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p>	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip on wheel and lifts upper body into upright standing position. Arms (straight) may be elevated above head or kept behind lower body ready to swing upwards.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> </ul> <ul style="list-style-type: none"> <li>• legs not straight</li> <li>• feet not immediately behind hands</li> <li>• feet not pointing forwards</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>

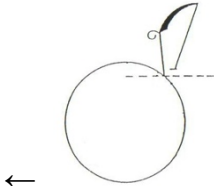

<p><b>Unit 3:</b> Thrust from wheel</p> <p>Flight phase</p> 	<p>The thrust from the wheel is initiated through a slight bending of the legs followed by a powerful thrust (jump) from the wheel. The gymnast may (but does not have to) use an upward arm swing to achieve required height in flight phase.</p> <p>Body extended after jump from wheel, straight legs and extended feet. Lift legs into pike straddle position at highest point of flight phase, hip angle 90° or less, at least 90° angle between straddled legs. Hip level at highest point in flight phase should be at least equivalent to gymnast's shoulder level in standing position on top of wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li>   <li>• lack of body extension after thrust from wheel</li> <li>• pike straddle position not at highest point in flight phase</li> <li>• lack of height in flight phase</li>   <li>• legs not straight</li> <li>• feet not extended</li> <li>• hip angle more than 90°</li> <li>• angle between straddled legs less than 90°</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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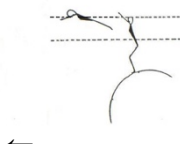
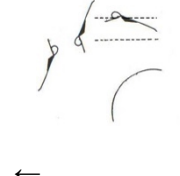
<p><b>B3</b> <b>Tuck Front Somersault</b></p>		<p><b>Difficulty value: 4.1</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands on wheel</li> <li>• legs not straight</li> <li>• feet not pointing forwards</li> <li>• lack of body tension</li> <li>• arms not straight above head</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>

<p><b>Unit 3:</b> Thrust from wheel</p> 	<p>The gymnast initiates the front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> </ul>
<p>Flight phase</p> 	<p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• somersault rotation not at highest point in flight phase</li> <li>• legs not together</li> <li>• knee angle more than 90°</li> <li>• hip angle more than 90°</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

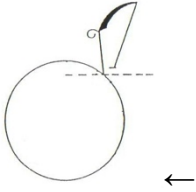
<b>B4</b> <b>Pike Front</b> <b>Somersault</b>		<b>Difficulty value: 4.6</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands on wheel</li> <li>• legs not straight</li> <li>• feet not pointing forwards</li> <li>• lack of body tension</li> <li>• arms not straight above head</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>


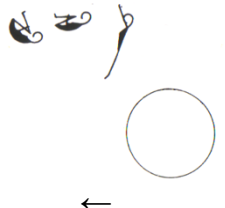
<p><b>Unit 3:</b> Thrust from wheel</p> 	<p>The gymnast initiates the front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> </ul>
<p>Flight phase</p> 	<p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a pike position (hip angle 45° or less, legs together and straight, extended feet) for the pike front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• somersault rotation not at highest point in flight phase</li> <li>• hip angle more than 90°</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• knee flexion of more than 45° (i.e. knee angle less than 135°) throughout the somersault</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

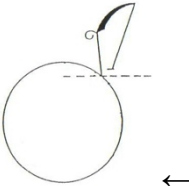
B5 Straight Front Somersault		Difficulty value: 5.2
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands on wheel</li> <li>• legs not straight</li> <li>• feet not pointing forwards</li> <li>• lack of body tension</li> <li>• arms not straight above head</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>


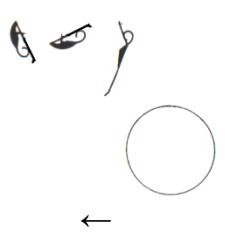
<p><b>Unit 3:</b> Thrust from wheel</p> 	<p>The gymnast initiates the front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> </ul>
<p>Flight phase</p> 	<p>Body extended immediately after take-off from wheel. Rotation is initiated through a dynamic heel lift, while the hip angle must be minimum 160° throughout the somersault, legs together and straight, extended feet. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel.</p>	<ul style="list-style-type: none"> <li>• somersault rotation not at highest point in flight phase</li> <li>• hip angle less than 160° in first half of somersault</li> <li>• flexion in the hips of more than 45° (i.e. a hip angle of less than 135°)</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

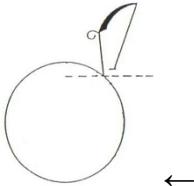



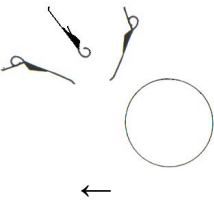
<p><b>B6</b> <b>Tuck Gainer Back Somersault</b></p>		<p><b>Difficulty value: 6.5</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p>	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet at least at level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position (legs bend in preparation for powerful thrust from wheel). Arms are usually kept behind lower body ready to swing upwards into somersault.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands on wheel</li> <li>• legs not straight on initial contact with wheel</li> <li>• feet not immediately behind hands</li> <li>• feet not pointing forwards</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>

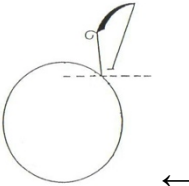
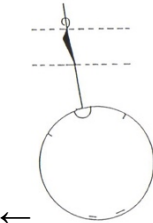
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>The gymnast initiates the back somersault from forward standing position on the wheel by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the wheel.</p> <p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• somersault rotation not at highest point</li> <li>• head too far back (not an extension of backbone)</li> <li>• legs not together</li> <li>• knee angle more than 90°</li> <li>• hip angle more than 90°</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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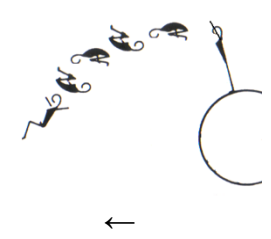
<b>B7 Pike Gainer Back Somersault</b>		<b>Difficulty value: 7.3</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p>	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet at least at level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position (legs bend in preparation for powerful thrust from wheel). Arms are usually kept behind lower body ready to swing upwards into somersault.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands</li> <li>• legs not straight on initial contact with wheel</li> <li>• feet not immediately behind hands</li> <li>• feet not pointing forwards</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>

<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>The gymnast initiates the back somersault from forward standing position on the wheel by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the wheel.</p> <p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a pike position (hip angle 45° or less, legs together and straight, extended feet) for the pike back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> </ul> <ul style="list-style-type: none"> <li>• knee bend used to initiate rotation</li> <li>• somersault rotation not at highest point</li> <li>• head too far back (not an extension of backbone)</li> <li>• hip angle more than 90°</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• knee flexion of more than 45° (i.e. knee angle less than 135°) throughout the somersault</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> </ul>
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<p><b>B8</b> <b>Straight Gainer</b> <b>Back Somersault</b></p>		<p><b>Difficulty value: 8.6</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p>	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet at least at level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Pike straddle stand, straight legs, closed hip angle, feet immediately behind hands on wheel (pointing forwards). After placement of feet on wheel, the gymnast releases grip and lifts upper body into upright standing position (legs bend in preparation for powerful thrust from wheel). Arms are usually kept behind lower body ready to swing upwards into somersault.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands</li> <li>• legs not straight on initial contact with wheel</li> <li>• feet not immediately behind hands</li> <li>• feet not pointing forwards</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>

<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>The gymnast initiates the back somersault from forward standing position on the wheel by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the wheel.</p> <p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height as gymnast maintains straight position (hip angle at least 160°, legs together and straight, extended feet) for the straight back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• knee bend used to initiate rotation</li> <li>• somersault rotation not at highest point</li> <li>• head too far back (not an extension of backbone)</li> <li>• hip angle during second half of somersault less than 160°</li> <li>• flexion in the hips of more than 45° (i.e. a hip angle of less than 135°)</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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<p><b>B9</b> <b>Double Tuck Front Somersault</b></p>		<p><b>Difficulty value: 8.6</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Pike mount: Hands grip wheel rims at approximately waist height. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight after take-off. Closed hip angle with hips rising to above shoulder level. Feet above level of hands on wheel, angle between arms and upper body greater than 90°. Pike mount from front lying also possible.</p> <p>Gymnast releases grip on wheel and lifts upper body into upright standing position immediately after placement of feet on wheel. Straight legs, feet on rims (pointing forwards), body tension, arms (straight) above head.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• legs not straight</li> <li>• feet not extended before placement on wheel</li> <li>• legs in contact with wheel before feet</li> <li>• feet not placed immediately behind hands on wheel</li> <li>• legs not straight</li> <li>• feet not pointing forwards</li> <li>• lack of body tension</li> <li>• arms not straight above head</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel (including “dragging” legs up wheel)</li> </ul>



<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>The gymnast initiates the double front somersault from standing position on the wheel through a slight bending of the legs followed by a powerful thrust (jump) from the wheel.</p> <p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast adopts a tuck position for the first of two rotations. The first rotation should take place at the highest point of the flight phase, with hips rising to at least the equivalent of the gymnast's shoulder level when standing on top of the wheel. Second rotation in immediate succession to the first. "Cowboy" style rotation (legs apart) permitted, hip and knee angles as small as possible. An extended body before landing is not required, but the hips must <u>not</u> be below at the level of the knees on landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• first somersault rotation not at highest point in flight phase</li> <li>• less than half the second somersault rotation completed above the level of the wheel</li> <li>• hip angle more than 90°</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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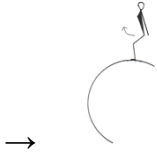
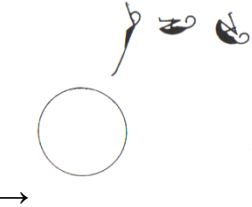



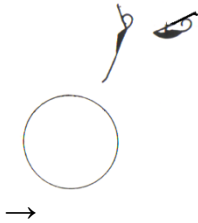
## Category C: Vaults performed from a REVERSE standing position on the wheel


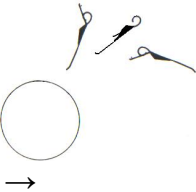
### Reverse Mounts



For Category C there are 5 alternative mounts that can be used to achieve a reverse standing position on the wheel. A detailed description of these 5 mounts can be found in the IRV Code of Points 2023+ in the Vault section. On the following pages, we will only describe the vaults without the mount.


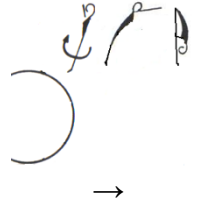
<b>C1 Straight Jump backwards</b>		<b>Difficulty value: 1.0</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 3:</b> Thrust from wheel</p> 	<p>From standing position backwards on wheel, the gymnast initiates the straight jump by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs (knee bend required before take-off from wheel).</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> </ul>
<p>Flight phase</p> 	<p>Body extended after thrust from wheel. Straight legs and extended feet. Level of hips at top of straight jump should be at least equivalent to gymnast's shoulder level in standing position on top of wheel. Extended body throughout flight phase.</p>	<ul style="list-style-type: none"> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>


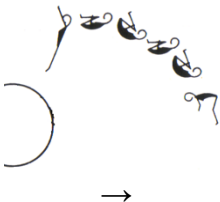
C2 Tuck Back Somersault		Difficulty value: 3.8
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>→</p> <p>Flight phase</p>  <p>→</p>	<p>From standing position backwards on wheel, the gymnast initiates the somersault through a powerful upward arm swing combined with a powerful thrust (jump) from legs.</p> <p>Body extended immediately after take-off from wheel, arms (straight) above head. There should be a noticeable gain in height before the gymnast adopts a tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li>   <li>• lack of body extension after thrust</li> <li>• lack of height in flight phase</li>   <li>• somersault rotation not at highest point in flight phase</li> <li>• head too far back (not an extension of backbone)</li> <li>• legs not together</li> <li>• knee angle more than 90° during somersault</li> <li>• hip angle more than 90° during somersault</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>



C3 Pike Back Somersault		Difficulty value: 4.3
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>From standing position backwards on wheel, the gymnast initiates the somersault through a powerful upward arm swing combined with a powerful thrust (jump) from the legs.</p> <p>Body extended immediately after take-off from wheel, arms (straight) above head. There should be a noticeable gain in height before the gymnast adopts a pike position (hip angle 45° or less, legs together and straight, extended feet) for the pike back somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust</li> <li>• lack of height in flight phase</li> <li>• knee bend used to initiate rotation</li> <li>• somersault rotation not at highest point in flight phase</li> <li>• head too far back (not an extension of backbone)</li> <li>• hip angle more than 90° during somersault</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• knee flexion of more than 45° (i.e. a knee angle of less than 135°)</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

<b>C4 Straight Back Somersault</b>		<b>Difficulty value: 4.9</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>From standing position backwards on wheel, the gymnast initiates the somersault by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs.</p> <p>Body extended immediately after take-off from wheel, arms (straight) above head. There should be a noticeable gain in height before the somersault rotation takes place at the highest point of the flight phase (legs together and straight, feet extended, hip angle at least 160°). Hips rise to at least the gymnast's shoulder level when standing upright on top of the wheel. From highest point after thrust from wheel, arms are pulled down in front of body as somersault rotates (arm angle completely closed), returning to elevated position before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust</li> <li>• lack of height in flight phase</li> <li>• somersault rotation not at highest point in flight phase</li> <li>• hip angle less than 160° during somersault</li> <li>• flexion in the hips of more than 45° (i.e. a hip angle of less than 135°)</li> <li>• head too far back (not an extension of backbone)</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>


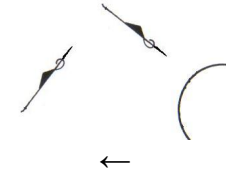
<p><b>C5 Reverse Stand, Half Twist into Tuck Front Somersault</b></p>		<p><b>Difficulty value: 5.0</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>From standing position backwards on wheel, the gymnast initiates the somersault by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs.</p> <p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast initiates a half twist (initiated by head and shoulders) into tuck position (legs together, feet extended, knee angle 90° or less, hip angle 90° or less) for the tuck front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• half twist initiated before thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• somersault rotation not at highest point in flight phase</li> <li>• head too far back (not an extension of backbone)</li> <li>• legs not together</li> <li>• knee angle more than 90° during somersault</li> <li>• hip angle more than 90° during somersault</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

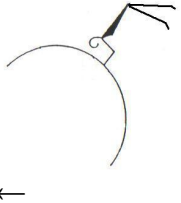

<b>C6 Reverse Stand, Half Twist into Pike Front Somersault</b>		<b>Difficulty value: 5.5</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>From standing position backwards on wheel, the gymnast initiates the somersault by way of a powerful arm swing upwards combined with a powerful thrust (jump) from the legs.</p> <p>Body extended immediately after take-off from wheel. There should be a noticeable gain in height before the gymnast initiates the half twist (initiated by head and shoulders) into pike position (hip angle 45° or less, legs together and straight, extended feet) for the pike front somersault. Rotation should take place at the highest point of the flight phase, with the hips rising to at least the gymnast's shoulder level when standing upright on top of the wheel. Extended body before landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li>   <li>• lack of body extension after thrust from wheel</li> <li>• half twist initiated before thrust from wheel</li> <li>• lack of height in flight phase</li>   <li>• somersault rotation not at highest point in flight phase</li> <li>• head too far back (not an extension of backbone)</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• hip angle more than 90° during somersault</li> <li>• knee flexion of more than 45° (i.e. a knee angle of less than 135°)</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

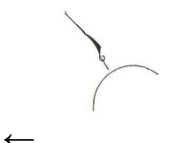
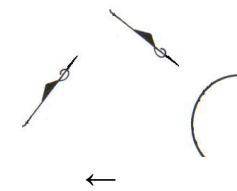
<b>C7</b> <b>Double Tuck Back Somersault</b>		<b>Difficulty value: 8.3</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>From standing position backwards on wheel, the gymnast initiates the somersault using a powerful arm swing upwards combined with a strong thrust (jump) from the legs. Body extended immediately after take-off from wheel.</p> <p>There should be a noticeable gain in height before the gymnast adopts a tuck position for the double tuck back somersault. The first rotation should take place at the highest point of the flight phase, with the hips rising to at least the equivalent of the gymnast's shoulder level when standing upright on top of the wheel. Second rotation in immediate succession to the first. "Cowboy" style rotation (legs apart) permitted, hip and knee angles as small as possible. An extended body before landing is not required, but the hips must <u>not</u> be below the level of the knees on landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> <li>• first somersault rotation not at highest point in flight phase</li> <li>• head too far back (not an extension of backbone)</li> <li>• less than half the second somersault rotation completed above the level of the wheel</li> <li>• hip angle more than 90°</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>


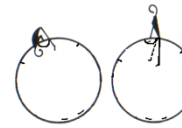
<b>Category D: Vaults performed using an overswing technique</b>		
<b>D1 Overswing</b>		<b>Difficulty value: 4.5</b>
<u>Vault Phases</u>	<u>Technique</u>	<u>Common Faults (not exhaustive)</u>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Handstand mount: Elbow angle minimum 90°, hip angle 90°-180°, feet above level of hands on wheel. Legs straight and together, feet extended.</p> <p>Hips must rise as quickly as possible. The upward movement continues until wrists, shoulders and hips are vertically aligned above the wheel, hip angle increasingly open. With a minimum elbow angle of 90°, the gymnast's shoulders should be clearly above the top of the wheel.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 90°</li> <li>• elbows on wheel</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• insufficient height in mounting phase</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• elbow angle less than 90°</li> <li>• no vertical alignment of wrists, shoulders, and hips above wheel</li> <li>• no visible opening of hip angle</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> </ul>


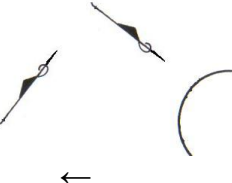


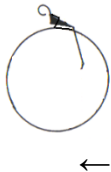
<b>Unit 3:</b>		
<p>Thrust from wheel</p> 	<p>Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.</p>	<ul style="list-style-type: none"> <li>• hip angle not fully extended</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• arms not straightened</li> <li>• flight phase initiated by bending knees</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no identifiable handstand position</li> </ul>
<p>Flight phase</p> 	<p>Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust</li> <li>• lack of height in flight phase</li> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>


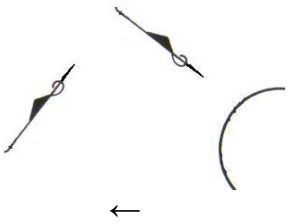
<p><b>D2 Straddle Overswing</b></p>		<p><b>Difficulty value: 4.2</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off from 2 feet</p> <p>Handstand mount: Elbow angle minimum 90°, hip angle 90°-180°, feet above level of hands on wheel. Straight legs in straddle position, feet extended.</p> <p>Hips must rise as quickly as possible. The upward movement continues until wrists, shoulders and hips are vertically aligned above the wheel. The hip angle is increasingly open and the legs are brought back together. With a minimum elbow angle of 90°, the gymnast's shoulders should be clearly above the top of the wheel.</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 90°</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• insufficient height in mounting phase</li> <li>• legs in contact with wheel</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• elbow angle less than 90°</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no visible opening of hip angle</li> <li>• no vertical alignment of wrists, shoulders, and hips above wheel</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> <li>•</li> </ul>


<p><b>Unit 3:</b> Thrust from wheel</p>  <p>Flight phase</p> 	<p>Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.</p> <p>Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.</p>	<ul style="list-style-type: none"> <li>• hip angle not fully extended</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• arms not straightened</li> <li>• flight phase initiated by bending knees</li> <li>• no identifiable handstand position</li> </ul> <ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> </ul> <ul style="list-style-type: none"> <li>• lack of body extension after thrust</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• lack of height in flight phase</li> </ul> <ul style="list-style-type: none"> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>
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<p><b>D3</b> <b>Straddle Sitting, Overswing</b></p>		<p><b>Difficulty value: 3.5</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase</p>  <p>Position on wheel</p> 	<p>Take-off must be from 2 feet</p> <p>Layout mount: No prescribed grip zone but need to hold near the rim handles in order to perform rest of vault. Slight bending of arms permitted (elbow angle not less than 135°). Legs straight and together after take-off. Should reach almost horizontal (160°-180° angle to floor), hips extended, acute angle between arms and upper body, body slightly arched.</p> <p>Straddle sitting, hips extended and inner thighs in contact with wheel immediately behind hands (no “sitting” on back of thighs). Legs straight, feet extended. Tilt body forwards, lower shoulders to level of wheel rim, elbow angle less than 45°. Upper body must not rest on elbows, shoulders may</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• elbow angle less than 135°</li> <li>• elbows on wheel</li> <li>• insufficient height in mounting phase</li> <li>• lack of hip extension</li> <li>• legs not together after take-off</li> <li>• legs not straight</li> <li>• feet not extended</li> </ul> <ul style="list-style-type: none"> <li>• lack of hip extension</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• upper body resting on elbows</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no visible opening of hip angle</li> <li>• no vertical alignment of wrists, shoulders, and hips above wheel</li> <li>• small adjustment of body position on wheel</li> <li>• major correction of body position on wheel</li> </ul>



	<p>touch wheel but must not sink below level of rims. Lift hips and start to open hip angle. Hips gradually lifted until wrists, shoulders and hips are vertically aligned above the wheel. Hip angle continues to open.</p>	
<p><b>Unit 3:</b> Thrust from wheel</p>  <p>←</p> <p>Flight phase</p>  <p>←</p>	<p>Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.</p> <p>Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.</p>	<ul style="list-style-type: none"> <li>• hip angle not fully extended</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• arms not straightened</li> <li>• flight phase initiated by bending knees</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no identifiable handstand position</li>   <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li>   <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li>   <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>


<p><b>D4</b> <b>Front Lying, Overswing</b></p>		<p><b>Difficulty value: 3.5</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase/ Position on top of the wheel</p> <p><i>NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault.</i></p> 	<p>Take-off must be from 2 feet</p> <p>After take-off from the floor the gymnast is in front lying position on one of the rungs, hands holding the rims of the wheel between the rung on which the gymnast is lying and the one above. Legs swing inwards (forwards) towards the centre of the wheel. As the gymnast's holding position passes the top of the wheel the gymnast swings his/her legs powerfully back and up. Shoulders remain at the level of the wheel rims (must <u>not</u> fall below), while the hips rise above shoulder level. Elbow angle less than 45°, upper body must not rest on elbows. Legs straight and together throughout, feet extended. The gymnast should pass through a position where wrists, shoulders and hips are</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• lack of hip extension immediately after take-off</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• upper body resting on elbows</li> <li>• no visible opening of hip angle</li> <li>• no vertical alignment of wrists, shoulders, and hips above wheel</li> <li>• small adjustment of body position</li> <li>• major correction of body position on wheel</li> </ul>


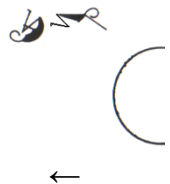
	<p>vertically aligned above the wheel.</p>	
<p><b>Unit 3:</b></p> <p>Thrust from wheel</p>  <p>Flight phase</p> 	<p>Thrust from the wheel takes place just after the gymnast's holding position has passed the top of the wheel. As the hip angle reaches full extension the arms are straightened, and the gymnast pushes away from the wheel, passing through a handstand position.</p> <p>Extended body in flight phase. Hip level must rise visibly after thrust from wheel. The body may be in a straight or slightly arched position.</p>	<ul style="list-style-type: none"> <li>• hip angle not fully extended</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• arms not straightened</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no identifiable handstand position</li> </ul> <ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> </ul> <ul style="list-style-type: none"> <li>• lack of body extension after thrust from wheel</li> <li>• lack of height in flight phase</li> </ul> <ul style="list-style-type: none"> <li>• lack of body extension before landing</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

<p><b>D5 Front Lying, Overswing, Front Somersault</b></p>		<p><b>Difficulty value: 8.0</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b> Take-off</p> <p>Mounting phase/ Position on top of the wheel</p> <p><i>NB: Note that the mounting phase and position on wheel are integrated into one movement for this vault.</i></p> 	<p>Take-off must be from 2 feet</p> <p>After take-off from the floor the gymnast is in front lying position on one of the rungs, hands holding the rims of the wheel between the rung on which the gymnast is lying and the one above. Legs swing inwards (forwards) towards the centre of the wheel. As the gymnast's holding position passes the top of the wheel the gymnast swings his/her legs powerfully back and up. Shoulders remain at the level of the wheel rims (must <u>not</u> fall below), while the hips rise above shoulder level. Elbow angle less than 45°, upper body must not rest on elbows. Legs straight and together throughout, feet extended. Wrists, shoulders and hips</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• lack of hip extension immediately after take-off</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• upper body resting on elbows</li> <li>• no visible opening of hip angle</li> <li>• no vertical alignment of wrists, shoulders, and hips above wheel</li> <li>• small adjustment of body position</li> <li>• major correction of body position on wheel</li> </ul>



	should pass through vertical alignment.	
<p><b>Unit 3:</b></p> <p>Thrust from wheel</p> 	<p>The thrust from the wheel is achieved by straightening the arms and pushing away from the wheel at the same as the hip angle is fully opened, passing through a handstand position.</p>	<ul style="list-style-type: none"> <li>• hip angle not fully opened</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• arms not straightened</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no identifiable handstand position</li> </ul>
<p>Flight phase</p> 	<p>Extended body at beginning of flight phase. Hip level must rise visibly after thrust from wheel and the front somersault should be initiated at the highest point of the flight phase. "Cowboy" style rotation (legs apart) is permitted. An extended body before landing is not required, but the hips must <u>not</u> be below the level of the knees on landing.</p>	<ul style="list-style-type: none"> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust</li> <li>• lack of height in flight phase</li> <li>• somersault rotation not at highest point in flight phase</li> <li>• less than half the somersault rotation completed above the level of the top of the wheel</li> <li>• hip angle more than 90°</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>

<p><b>D6</b>  <b>Front Lying,</b>  <b>Overswing Half</b>  <b>Twist, Back</b>  <b>Somersault</b></p>		<p><b>Difficulty value: 8.5</b></p>
<p><u>Vault Phases</u></p>	<p><u>Technique</u></p>	<p><u>Common Faults (not exhaustive)</u></p>
<p><b>Unit 2:</b>          Take-off</p> <p>Mounting phase/          Position on top of          the wheel</p> <p><i>NB: Note that the          mounting phase          and position on          wheel are          integrated into one          movement for this          vault.</i></p> 	<p>Take-off must be from 2 feet</p> <p>After take-off from the floor, the gymnast is in front lying position on one of the rungs, hands holding the rims of the wheel between the rung on which the gymnast is lying and the one above. Legs swing inwards (forwards) towards the centre of the wheel. As the gymnast's holding position passes the top of the wheel the gymnast swings his/her legs powerfully back and up. Shoulders remain at the level of the wheel rims (must <u>not</u> fall below), while the hips rise above shoulder level. Elbow angle less than 45°, upper body must not rest on elbows. Legs straight and together throughout, feet extended. Wrists, shoulders and hips</p>	<ul style="list-style-type: none"> <li>• take-off from 1 foot</li> <li>• uneven hand positioning on wheel</li> <li>• lack of hip extension immediately after take-off</li> <li>• legs not together</li> <li>• legs not straight</li> <li>• feet not extended</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• upper body resting on elbows</li> <li>• no visible opening of hip angle</li> <li>• no vertical alignment of wrists, shoulders, and hips above wheel</li> <li>• small adjustment of body position</li> <li>• major correction of body position on wheel</li> </ul>

	should pass through vertical alignment.	
<p><b>Unit 3:</b></p> <p>Thrust from wheel</p>  <p>Flight phase</p> 	<p>The thrust from the wheel is achieved by straightening the arms and pushing away from the wheel at the same as the hip angle is fully opened, passing through a handstand position.</p> <p>The half twist is initiated immediately after thrusting from the wheel (not before) by turning the feet and hips at the same time as “opening” the hip angle. The hip level must rise visibly until the gymnast has completed the half twist and is at the top of the flight phase. At this point, the gymnast adopts a tuck position (“cowboy” permitted) for an immediate tuck back somersault at the highest point of the flight phase. An extended body before landing is not required, but the hips must <u>not</u> be below the level of the knees on landing.</p>	<ul style="list-style-type: none"> <li>• hip angle not fully opened</li> <li>• legs not straight</li> <li>• legs not together</li> <li>• feet not extended</li> <li>• arms not straightened</li> <li>• shoulders below (or weight resting on) rim of wheel</li> <li>• no identifiable handstand position</li> <li>• wheel touches mat before gymnast leaves wheel</li> <li>• wheel rolls into the landing mat such that the rolling movement is severely impaired before the gymnast thrusts from the wheel</li> <li>• lack of body extension after thrust</li> <li>• twist initiated while still on wheel</li> <li>• lack of height in flight phase</li> <li>• somersault rotation not at highest point in flight phase</li> <li>• less than half the somersault rotation completed above the level of the top of the wheel</li> <li>• hip angle more than 90°</li> <li>• flight phase too short (inside 90 cm zone)</li> </ul>