



Title:	<b>Learning to ride 5.0</b> Body position, vision, bike balance
Objectives:	Instruct good body position, racing tuck, keeping vision up and forward. Explain how to achieve this and how they affect performance.
Goals:	At the end of this period of instruction the student should be able to: Demonstrate good body position, or know what it looks like and be working towards it; Demonstrate keeping their vision up and forward; Understand why body position and forward vision are important while racing, (reducing drag, moving centre of gravity, bike balance, understanding where you are going, planning forward).
Subject:	<ol style="list-style-type: none"> <li>1. Racing tuck</li> <li>2. Arms and legs tucked in</li> <li>3. Head position down, looking forward</li> <li>4. Eyes up and looking forward, not down towards front wheel</li> <li>5. Moving upper body off the motorcycle into the corner, leading with head/shoulders, not hips/legs</li> <li>6. Elbows and knees out into the corner</li> <li>7. When to move body in the corner</li> <li>8. Body off, bike up</li> <li>9. Maintaining concentration and form as fitness ebbs</li> <li>10. Maintaining breathing</li> </ol>
Procedures	Stationary instruction and demonstration and on-track/carpark demonstration, photographs and videos of higher level championship riders (e.g. Moto3).
Technique	Demonstrations: visual, practical, stationary and mobile, physical action.
Most Common Mistakes	Not moving appropriately with the body, dropping vision into corner rather than forward, loss of form and concentration with decreasing fitness, inability/failure to perform the instructed tasks, forgetting to breathe, leaning bike too far over while not moving body off the bike, moving lower body excessively while not moving upper body.
Summary	This period of instruction is dedicated to teaching the student how to place themselves on the bike, and how to use their body



	<p>to balance the bike into, through and out of corners on the race track, along with maintaining form on straights to obtain optimal speed.</p> <p>The instruction will also instruct the rider how to and the importance of keeping their vision up and looking forward, not down into the corner or braking point.</p> <p>The approach will also allow the rider to continue their development and confidence to ride around racetracks more safely, and to question their trainer if they have concerns.</p> <p>The instruction will include practical demonstration of the systems, images and video instruction and on-the bike repetitive practice of their actions. This part of the instruction will be a mixture of stationary and mobile training and is best undertaken on the racetrack (kart track) or closed car park.</p> <p>Having trainers stand very near certain corners in order to observe closely the actions of the riders is important. Binoculars and taking video of the riders help with this too.</p>
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**Assessment sheet**  
**Learning to ride 5.0**  
**Body position, vision and bike balance**

Item	Pass/Fail	Comment
Racing tuck.		
Hand, arm, leg, foot position		
Head position		
Eyes up looking where rider is going		



Smooth movement on bike when changing body position (side to side, braking)		
No excess input into handlebars during body movement		
Counter-steer to initiate turn		
Maintaining body position during braking (no 'shooting upwards' of body when braking), use of knees to maintain body position		
Not using excessive lower body movement (moving beyond old-school knees and bum-out techniques to head/torso down elbows out techniques)		
Feet position changes during cornering, braking, etc (up on balls of feet, tipping feet sideways on pegs (advanced))		

Overall Comments:

Guardian/Student Signature:

Trainer/coordinator Signature:

Date:



Good racing tuck. Head down, chest and helmet on tank, elbows tucked in as much as possible, wrists cocked to allow arms to tuck in. Good breath control is required to maintain this. This should be maintained as much as possible even in some corners.



Rider leading into the corner with head, upper body, arms, not leading with knees and lower body. Improved bike balance, reduced lean angle, better bike control, more arm leverage, open and free shoulders.

Note angle of spine in rear shot, parallel with the bike or indeed, pointing slightly down at the front.

Note head position so that rider is leading into the corner with the head and eyes, not the knees and butt.

Note how body remains in a tucked position, not sticking up in the breeze.

Note how outside leg/knee, not hands and arms, is used to lock the body onto the bike.



## **Bike and body balance**

It is important to maintain your racing tuck for as long as possible all around the track.

Many riders get into the habit of popping up out of the tuck when braking and then stay sitting up all the way until the next straight. Balance is maintained by being able to stay in a racing tuck around corners as well as on the straights. Balance is maintained by moving your body weight only as much as is needed and moving it smoothly when you do move it.

When watching MotoGP (Moto3, Moto2 and MotoGP), analyse the riders' movements.

Watch the races for the tactics, racing lines, braking etc. But also analyse the riders themselves. Observe their racing tuck, their economy of movement, how they do not hang their bodies right off the bikes but keep everything that they can behind the fairing, then use their torso weight rather than lower body weight to lower the centre of gravity (CofG) of the bike+rider.

On your bike, find a riding position that is as comfortable as possible for you. Change positions of things (handlebars, levers, seat height etc) if they are not right for you. Stay as relaxed on the bike as you can.

Don't 'white knuckle' the handlebars, 'caress' the bike, move back and forth as little as possible to control the pitching of the bike (rocking back and forth) and the smoothness of the suspension.

Aim to "become one with the bike" so that all movements and inputs have a good reason and become second nature.







This is what can be achieved with good basic skills and bike balance: Combination of body weight balance, rear brake, front and rear brake balance, leading with upper body, inside leg not needed to control bike so is used to balance the rotation of the bike into the corner.

Note, bent arms and body not fully upright during braking.

Note that the Kayo MiniGP150 is perfect for learning and then continued practicing skills of this type, well after the rider has progressed to other motorbikes.