



## Blackwood Special Schools Outdoor Education Centre

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Campus of:- **Frankston Special Developmental School**

Member of:- **Residential Outdoor Schools Association (ROSA)**

### MOUNTAIN BIKE RIDING HINTS

Whilst riding any bike the rider requires certain basic skills. Off road riding by its very nature demands more from the cyclist. Step descents & ascents, rough tracks, corrugations, loose rocks and slippery surfaces can bring the unprepared rider to grief.

#### RIDING IN GROUPS

- 🐾 An off-road rider may have to swerve or stop suddenly to avoid obstacles, so greater care should be taken when overtaking.
- 🐾 Ample space should be allowed between riders.
  - Approximately TWO (2) bike lengths in rough conditions.
- 🐾 Riding in single file enables the cyclist to choose the best path, avoiding holes, sticks, etc. and to warn riders behind of hazards.

#### STEEP DOWNHILL RIDING


- 🐾 Maintain safe distances between riders.
- 🐾 Even application of both brakes.
- 🐾 Keep body weight to the rear of the bike to avoid tipping the bike forward.
- 🐾 Keep feet on the pedals with cranks parallel to the ground.
- 🐾 Grip seat with thighs for added control.
- 🐾 Hands lightly gripping the handle bars, arms slightly bent to absorb shock/vibration.
- 🐾 Avoid being in a low gear as this may lead to the slack chain jamming between the chain stay and the tyre.




## STEEP UPHILL RIDING

### SELECT A LOW GEAR BEFORE THE ASCENT.


- Many gear shifts will not change down satisfactorily when under pressure.
- Taking pressure off the pedals at the instant of a gear change can assist when changing down.

 Maintain a balance between keeping enough weight on the rear wheel (for traction) and the front wheel to prevent the bike from tipping backwards.


## SAND / MUD

 For a long stretch of sand/mud – select a low gear and ‘power through’ – if your approach is too timid the bike will stall.

## PUDDLES


 Puddles can be deceptive – there may be a deep hole in the middle of apparently shallow water – if in doubt AVOID or check the puddle before entering.


## CORRUGATIONS

 Often form on the inside of curves and before road intersections, particularly at the bottom of hills.


- APPROACH WITH CAUTION.

## BRANCHES, STICKS & TREE ROOTS


 Small branches, sticks & tree roots can be ridden over provided the front wheel passes over at a right angle so that the bicycle doesn’t slip sideways.

 REMEMBER small sticks may flick up into the wheel, pedals, chain or derailleur – and can cause considerable damage to the bike and rider.


- **AVOID IF POSSIBLE** and **STOP INSTANTLY** should a stick lodge anywhere on the bike.

 Watch out for overhanging branches & blackberries.

## ROUGH SURFACES

 The cyclist's arms, wrists & hands can become sore from off-road riding due to the constant vibration transmitted via the handlebars.

- This problem usually occurs because the rider is gripping the handlebars too tightly and can be overcome by loosening the grip and bending the elbows slightly.

 IF POSSIBLE rise out of the saddle over rough patches.

## GEARS - GETTING TO KNOW YOUR "GRANNY"

Good Mountain bikes are equipped with extensive gear ranges enabling the cyclist to cope with a wide range of riding conditions and terrain. To gain the most from the bicycle the rider needs to be aware of four basic concepts in using gears:-

### **1. LOW GEAR**

- i. The steeper the terrain the closer the chain needs to be to the frame.
  - ie. towards the lowest gear;
- ii. The smallest chain wheel (the granny gear) and the largest sprocket (Fig. 1).

### **2. HIGH GEAR**

- i. The flatter the terrain the further the chain should be from the frame.
  1. towards the highest gear;
- ii. The largest chain wheel and the smallest sprocket (Fig. 2).

### **3. CHAIN ANGLE**

- i. The chain SHOULD run as straight as possible (Fig. 1 & 2).
- ii. AVOID selecting gear combinations which force the chain to run at extreme angles as this causes excessive gear & chain wear (Fig. 3).

### **4. GEAR CHANGES**

- i. Pre-plan gear changes to avoid strain on the chain and gear (transmission) particularly when approaching hills.



## A BICYCLE CHECKLIST

**FRAME:-** Welding secure, no cracks. Frame & forks straight and free of bends and buckles.

**HANDLEBARS:-** Symmetrical, square to the front wheel. Tightly held in the gooseneck with no movement. Covered in tape (or have hand grips) and the ends plugged.

**HEADSTEM:-** Gooseneck sufficiently inserted into the forks and the fixing bolt is tight. No headset movement when the bike is rocked with the front brakes applied.

**BRAKES:-** Cables not frayed or seized. Brake blocks not worn out or worn unevenly. Blocks aligned correctly to contact the metal wheel rim only. Brake levers adjusted to activate the brakes with minimal travel & effort. Brakes release evenly from both sides of the rim.

**SADDLE:-** In good condition and at the correct height for the rider (knee slightly bend when the heel is on the pedal at its lowest point). Seat post sufficiently inserted into frame seat tube. Seat approximately horizontal, no rocking vertically.

**WHEELS:-** No buckle or dents in the rim. Cones adjusted for no lateral movement in the bearings, but wheel spins freely. Spokes are all there and tight. Valve square to the rim.

**TYRES:-** Inflated to the correct pressure (marked on the side of the tyre). No visible cracks, splits, bulges or bald patches. Good tread.

**PEDALS:-** In good condition. Spin freely without lateral movement. Secure to the crank.

**BOTTOM BRACKET:-** Cranks securely fastened to bottom bracket axle. No lateral movement of this axle.

**CHAIN:-** Clean & LIGHTLY lubricated. No frozen links. Check if stretched: pull the chain away from front of chainring without exposing two of the gear teeth.

**GEARS:-** All gears are accessible when selectors moved. Cables not frayed, ends capped. Check adjustment of high and low stop screws on front and back derailleurs.

**REFLECTORS:-** Fitted front & back. Clean and securely attached to frame & spokes.

**FRAME** \_\_\_\_\_

**HANDLEBARS** \_\_\_\_\_

**HEADSTEM** \_\_\_\_\_

**BRAKES** \_\_\_\_\_

**SADDLE** \_\_\_\_\_

**WHEELS** \_\_\_\_\_

**TYRES** \_\_\_\_\_

**PEDALS** \_\_\_\_\_

**CHAIN** \_\_\_\_\_

**GEARS** \_\_\_\_\_

**REFLECTORS** \_\_\_\_\_

**Items requiring attention:-**

1. \_\_\_\_\_

2. \_\_\_\_\_

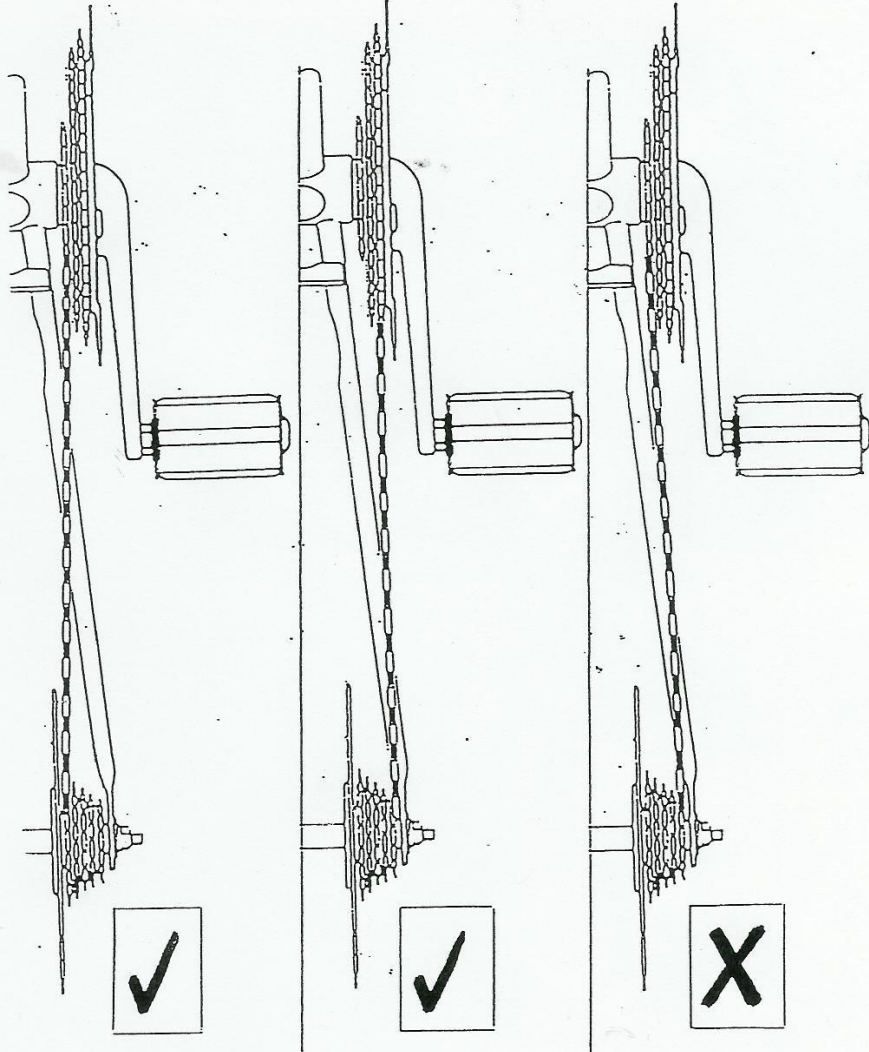
3. \_\_\_\_\_

4. \_\_\_\_\_

### CHECKLIST



# GEARS



(Fig.1)

(Fig.2)

(Fig.3)