

Derny Driver (Pacer) training resource



Introduction.

Definitions:

Derny drivers are known as “pacers”, riders are known as “followers”.

Derny pacers possess both the riding skills of racing cyclists and empathy with the followers they pace.

This course will develop those skills to defined and recognised levels.

Dernys are used extensively for both racing and training activities worldwide.

Key assumptions that underpin the Derny Driver process and help pacers with their intended outcomes are:

- Followers are at the centre of the process. Pacers will support, co-ordinate and manage the process effectively and safely. They should identify and recognise the follower’s ability and needs. Then address those needs via their planning and pacing.
- Pacers should aim to empower followers, supporting their right to make choices, discover their own solutions, and enable them to participate, develop and communicate as part of a team.
- Pacers should lead risk control of this high-speed activity.
- Pacers should underpin follower’s confidence and trust.
- Pacers should reflect on their own practise, seeking ways to improve and develop their own ability.

Purpose:

Train Derny pacers to:

- Motor Pace “C” Standard – (training).
- Motor Pace “B” Standard – (racing).
- Tutor (instruct and assess) pacers for C and B accreditation.

Roles:

- Derny pacers: to pace followers on Cycling velodromes.
- Tutors: to train and assess Pacers and Tutors (instructors/assessors).

Requirements:

- Working knowledge and understanding of local velodrome operational protocols.
- Familiarity with British Cycling Technical Regulations 24.15 (Motor Pace) and 25.2 (Track markings) - 25.2.1.3 makes reference to the Blue stayers line, which is the “datum” for the control of motor pace races covered in 24.15.

Assessment:

- Assessment will be continuous throughout this predominantly practical course for B and C accreditation including track demonstrations of driving skill.
- Tutors will need to demonstrate competence and communication skills through an additional verbal/written/practical assessment.

Syllabus:

Defined in the following Derny pacer’s manual.

Tutor training:

- Tutors will require a minimum of Motor Pace “B” Standard.
- A British Cycling Club Coach/Tutor qualification will assist with communication/assessment skills.

Course structure:

- A single day practical course on the velodrome.
- Pacers will attend with a Derny, full clothing and a follower.
- As a pre-requisite pacers will have been issued with and expected to have read the Pacers Manual.

Administration:

- Course fee will be £30.00.
- BC will maintain a database of qualified Motor Pace C/B pacers and Pacing instructors and assessors.

Derny Pacer's Manual.

General:

Clothing:

- Protective headgear – a minimum standard is compliance with BSI, ANSI or Snell standards. European lightweight scooter rider-helmets are recommended as they give better protection than cycle helmets.
- Keirin helmets from Japan are also recommended.
- Motorcycle helmets are too heavy and cover the ears, which inhibits verbal follower communication.
- Protective eyewear is also recommended.
- Clothes - normal warm close fitting cycling tights & jersey layers.
- Gloves, not padded, to retain sensitivity.
- Footwear – Cycle touring style shoes are recommended, their heels provide a key with the pedals. Robust trainers can also be used.
- All footwear must have laces tied and securely hidden, or preferably Velcro fastenings.

Machine check:

- Controls - brakes & speed control.
- Fuel tank, fuel and fuel supply on/reserve/off valve. Fuel operations, including storage and fire hazards. (Fuel mixing to be carried out only by dedicated persons).
- Fuel level.
- Chain tension.
- Tyre condition and pressures.
- Speedo calibration.

Starting & stopping procedures:

Starting:

- Fuel on.
- Prime/choke.
- Select small amount of throttle. (Approx 25% on *Simon Dernys*)
- Push Derny up to starting speed with clutch/decompression out, with weight over back wheel for traction engage clutch/compression, ready to get aboard as engine starts.

Stopping:

- Accelerate away from rider.
- Close throttle.
- Brake.
- Stop.
- Engage clutch/decompress engine to stop engine.
- Park Derny and switch of fuel supply.
- Refuel if necessary.
- Practice starting/stopping procedure. Try different machines.
- Become familiar with machine.
- Practice laps on track at medium pace and on black, red and blue lines.
- Explore all areas of the track at different speeds.

Risk:

- Safety must prevail at all times.
- Both equipment and facility (Derny, clothing and velodrome) must be checked before a session to check serviceability, hence safety.
- The pacer must give a full briefing to all followers participating in a pacing session. This briefing will clearly state pacing protocols and details of the session.
- While Derny pacing activities are taking place, there should be no other riders on the track.
- A risk assessment will assist to reduce any risks to “minimum”, and therefore the probability of accidents and their effects.
- Non-compliance with the foregoing risks compromise of insurance cover.
- Accident risk is present in all cycling activities. The consequences of an accident with heavier machines travelling at greater speed can be severe.
- A pacer must be aware at all times of the position and speed of all others sharing the track while operating to common recognised protocols.

Communication:

- A clear briefing of followers and pacers must be made before a pacing session.
- Where more than one pacer and a trackside coach are providing a Derny training session, the trackside coach takes overall charge.
- Each pacer is responsible for signals to their own followers.

Internationally recognised verbal instructions from the follower to pacer are:

- To speed up – “ALLEZ”.
- To slow down – “HO”.

Internationally recognised hand signals from the pacer to the follower are:

- Clinched fist – Attack.
- Left hand out – Slowing down.
- Arm straight up – Derny breakdown.
- All sessions should finish with a debrief.

Pacing skills:

1. Riding position – sitting upright, heels on pedals & knees out gives the rider maximum protection.
2. Use of throttle, brakes (rear only when pacing) and pedals to regulate speed.
3. Pace judgement compatible with the exercise.
4. Holding a smooth line to give the rider a comfortable ride.
5. No sudden manoeuvres.
6. Awareness - The pacer must remain alert to his follower’s situation at all times by:
 - Looking over his shoulder at least once a lap without wandering from the pacing line to check that the follower is still there, especially on the bankings.
 - Development of peripheral vision/awareness to check on his follower/s and the positions of other pacers/followers. The noise from other Dernys indicates their proximity.
7. Use of recognised signals.
8. Only pass other Dernys/riders on the outside. NEVER pass on the inside.
9. Allow safe clearance space to rider after overtaking manoeuvres. (Don’t cut in)
10. Develop “peleton” (group) pacing skills, riding 2/3/4 abreast.

Pacing protocols:

General:

- Start – Derny up first on blue stayers line – followers ride up from and join the Derny from the bottom of the track.
- Finish – Derny stays on blue stayers line (accelerates away) until followers have cleared track – followers ride down to bottom and off the track.

Training:

- Changing: With a number of followers in a string behind one Derny, the follower finishing his stint at the front (immediately behind the Derny) will move smoothly past the Derny until the next follower’s front wheel is just behind the Derny’s mudguard. This will enable the next follower to remain in a slipstream while dropping in smoothly behind the Derny. The finishing follower is now free to swing out and

rejoin the end of the string. Remind followers of this protocol at the briefing stage and agree how often (every 1,2,3 laps) changes are made. If the finish line is used as the datum for this manoeuvre, followers will be aware when a change is due.

- When leaving a pacing string followers must always move to the inside of the track from the rear of the string. If the follower is mid-string and want to leave the string, they must move up and overlap the rider in front, as in "Changing" above.
- A fast string of pacer/followers must not overtake a slower string. The fast string can ride higher on the track to maintain speed. The trackside coach is responsible for managing these situations.
- A fast string of pacer/followers must overtake a slower string with caution. The faster string will ride higher on the track and overtake on the outside. The pacer/trackside coach is responsible for pre-session protocol briefing and then managing these situations.
- At the end of a training session the pacer will signal laps to go with a show of fingers (5,4,3,2,1) and then accelerate away from the followers.

Racing:

- It must always be remembered when overtaking that you have a follower in tow. Do not cut in/down on the Deryn that you have just overtaken. Make sure that you have given your follower safe space to follow and that the overtaken Deryn driver does not have to take any avoiding action.
- Do not overtake another pacer/follower and then slow down. This action would necessitate avoiding action from all following.
- Practice verbal/visual communication with your follower. Development of empathy with your follower is essential to be a safe competitive pacer.
- If a follower loses his motor at speed he should hold his line and then move down to the bottom of the track when it is safe to do so. Followers should be reminded of this protocol at the briefing stage.
- Solo followers must be briefed to NEVER SWING UP there could be another Deryn overtaking.
- When pacing in a "peleton" be aware that the Deryn will speed up in the slipstream of other Pacers/followers.

Following:

Followers should be fully familiar with **Communication** and **Training/Racing** as above.

Qualifications:

B (racing) and C (training) endorsement requirements:

- Requirements for these awards are similar, however a higher level of skill and experience is required for a B (racing) endorsement. A "C" (training) endorsement will enable a pacer with safe basic skills to develop those skills in training sessions and develop skill towards a "B" endorsement.
- Common requirements for C and B awards are:
- British Cycling membership – minimum of Silver grade – with motor pace endorsement upon completion of the award. This provides Deryn specific insurance cover whilst training, with separate event insurance covering any Deryn races at BC sanctioned track meetings. When joining BC, all members receive a provisional licence, which allows entry level racing in most disciplines. Deryn pacers who also wish to compete as riders would need to purchase a racing licence when purchasing their annual membership.

Compliance with the foregoing

- **Clothing**
- **Machine check**
- **Starting & stopping procedures**
- **Risk and Communication** sections
- **Pacing/riding skills** – C award 1-9, B award 1-10.

Tutor (instructor/examiner) requirements:

- A minimum of a current B (racing) endorsement on membership card.
- A British Cycling Club Coach/Tutor award is strongly recommended.
- Demonstration of tutor communication skills through a verbal/written/practical examination by a qualified tutor.

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