



CHAPTER  
TWO



# COMPULSORY BASIC TRAINING

What your first steps towards a full licence should cover



**Compulsory Basic Training**, or CBT for short, is your first objective. You can't progress to the motorcycle test without first earning a CBT certificate. CBT is, as the name implies, just the basics: on an off-road Tarmac area, you get familiar with the bike's controls, and learn how to start, stop, ride slowly, manoeuvre around cones and do emergency stops.

Just showing up does not guarantee you a pass; you must complete CBT satisfactorily before your certificate is issued.

There are five sections, known as elements A to E. Here's what's in each, and what you can expect.

## Element A What's in it

- Eyesight check (reading a standard number plate 20.5 metres away)
- Introduction to the course, its objectives and strategies

- Driving licence check
- Discussion on the legalities and merits of clothing and crash helmets.

(Our advice: Buy the best helmet you can afford, from a shop with trained staff to ensure it fits. Close-fitting, high quality leathers give the best crash protection, but need a waterproof oversuit for rain and cold weather. Textile clothing is warm, comfortable and waterproof but less abrasion resistant. Also, any armour in a loose suit can easily be twisted out of position in a crash. More on protective gear in Chapter 7)

## What you can do

Ask as many questions as you like. You may not have slept well last night, but your instructor should put your mind at rest and run things at a pace that suits you and no one else.

Bring your licence today, and keep it with you throughout your course, especially on test day.



**EYESIGHT**  
You'll have to be able to read a number plate 20.5 metres away. Right: learning what the various bits are called, and what they do. If you've ridden a bicycle it's all fairly obvious



**STEERING**  
The handlebars go this far in both directions, then stop solid. It's enough to handle any tight manoeuvre you will ever need



**FRONT BRAKE**  
Use all four fingers, whether you need a gentle squeeze (far left) or something a bit more meaty (near left). The circular dial on the lever allows you to adjust the distance to suit your fingers

**THROTTLE**  
The equivalent of a car's accelerator pedal. The nearest picture shows how not to do it. You'll have no finesse, and far too much response. The furthest pic is the right position. Even then it'll feel ultra sensitive at first.





**REAR BRAKE**  
Ride with your instep on the footrest, so that the ball of your foot hovers over the brake lever. Never take your foot off the footrest to brake (right). You'll lock the wheel



**LEFT SWITCHES**  
Big black switch is high and low beam. Yellow button is headlamp flasher. Toggle knob is indicators. Pull the lever in to disengage the clutch (like pressing the clutch pedal in a car)



**GET OFF THE BRAKE**  
A common beginner's mistake is to ride with your foot over the brake pedal. Keep it off, or you'll find yourself puzzled by the lack of power



**SIDE STAND**  
Make sure you kick it down all the way (below left), using the little prong at the end. If you don't (below), the bike can roll forward and topple over

**INSTRUMENTS**  
Speedometer with trip meter (handy to monitor fuel tank range). Also engine rev counter and warning lights. Newer bikes have liquid crystal displays with many extra functions



**RIGHT SWITCHES**  
Toggle switch turns on lights (now automatic on newer bikes). Big red switch kills the engine. Front brake lever and throttle you already know

**CENTRE STAND**  
Left: find grab handle, press stand to floor. Middle: press right leg down, pull right hand up. Right: the bike will roll backwards and come to rest



**GEAR PEDAL**  
With your instep on the footrest you can snick the pedal up (near right) or down (far right). Click down for first gear, then one click up for second (and so on, to sixth). To come back down, reverse the sequence



## Element B What's in it

- Meeting your bike, identifying the controls and learning how it all works
- Getting the bike on and off the centre stand
- Walking the bike in all directions
- Getting on and off correctly
- Starting and stopping the engine
- Learning the basic rider's safety checks: Chain

and sprockets, Brakes, Oil, Lights, Tyres, Steering/ Suspension (C-BOLTS). See over the page.

## What you can do

Ask your instructor to demonstrate everything he explains – if he isn't already. Remember you are allowed as much time as you need to master each new stage, or return to any areas of concern. Only continue when you and your instructor are happy with your control and understanding.

Pushing the bike about with confidence is a skill that needs practising. Take time to get used to the weight, and how it feels



## The C-BOLTS check

### Chain and sprockets

Is the chain lubricated and adjusted to the correct tension (see chain guard sticker, or failing that the owner's manual)? Apply lube to the inside of the chain run, so that it gets flung out.

### Brakes

Do they work? How much pad life is left in them? Does the lever/pedal feel spongy? They should always feel sharp and firm.

### Oil

Is the level correct when the engine is cold and upright? Some bikes have a dipstick, others a sight window. Either way the level must be between the 'high' and 'low' indicator marks. Check in the manual for precise details and always use the recommended grade for top-ups.

### Lights

Do they all work, and are they clean?

### Tyres

Are the pressures correct? The values (in bar and psi) are usually on the chain guard. If not, look in the owner's manual. Is tyre tread depth at least 2mm? (The law says 1mm, but 2mm is safer). Are there any foreign objects in the tread? Are the tyre sidewalls smooth and clean? Any bulges or splits?

### Suspension/steering

Bounce the forks and rear end. Is the movement smooth and predictable? Are the forks and shock free of oil leaks? Turn the bars fully both ways. Is the steering smooth and unobstructed? Is the engine tickover speed unaffected?



**SAFETY CHECKS**  
Clockwise from top left: chain tension within limit? Brake levers nice and firm? Tyre tread depth at least 2mm (and pressure correct)? Oil level between 'E' and 'F'? Plus (below) oil filler cap





If you're a raw beginner, CBT is tiring – but also great fun as long as you have the space and time to progress at your own pace



**FIGURE OF EIGHT**

This is your first step in really getting to control a motorcycle. It tests your balance, and forces you to learn fine control of clutch, throttle and brake. How smooth can you get?



**Element C**  
**What's in it**

- Basic machine handling through a minimum of three gears up to a minimum speed of around 30mph. This must be away from public roads in a safe, controlled environment.
- You must demonstrate safe use of your gears, throttle, brakes, steering and balance. Also, the following must be performed to an acceptable standard:
  - Emergency stops
  - Controlled braking to a halt using both brakes
  - Figure of eight in both directions
  - U-turns in both directions
  - Rear observations
  - Left/right turns
  - The road-riding discipline of Observe, Signal,

Manoeuvre, Position, Speed, Look (OSMPSL) is introduced at this stage.

**What you can do**

This is very likely to be your first go at making a motorcycle answer to your command, and it's normal and natural to find it strange at first. Your instructor should always talk you through each new manoeuvre and be readily available to demonstrate each aspect of control, to further clarify matters.

You should always be given plenty of time to master each new stage, and return to any areas of concern before moving on.

There is still no time limit. You should only continue when you and your instructor are happy with your control and understanding.



**ONE-LEG FIGURE OF EIGHT**

It's not part of the CBT syllabus, but it's something we at Circuit Based Training encourage. With only one footrest to press down on, your balance and control is seriously tested



**TWO-MAN FIGURE OF EIGHT**

Another Circuit Based Training optional extra. It gets you used to other vehicles, and teaches you to time your actions. Get it right and you'll have a grin a mile wide



So you think you've got the figure of eight sorted and want a bigger challenge? OK - now try it without using the clutch. Or the brakes

Braking is all about finesse: using the best balance of front and rear pressure for the conditions. Here's how not to do it: stamping on the pedal, locking the back up and causing a skid. Cue hospital



## How to brake

For reasons too obvious to mention, you need to get very good at this. What you learn in CBT is just a first step, and you must practice continually, at higher and higher speeds, until you feel confident. Even if your bike has ABS.

Deciding to brake should be a conscious decision based on good observation of hazards well ahead of you. It's not about over-reacting to situations too late. So cultivate a calm, unruffled mindset, and focus on what you're doing:

1. Roll off the throttle, but keep it in contact with the palm of your hand. This allows you to...
2. Reach for the front brake lever and start to apply it when you feel the throttle is fully closed. Closing the throttle reduces the speed of the bike through 'engine braking'. Build on this by

squeezing the front brake gently and smoothly, gradually increasing pressure.

3. The bike will pitch forward (see next page). You must understand that this is a good thing. It allows the front tyre to increase its grip on the road by pushing more of the bike's (and your) weight onto the front tyre. It also provides incredible stability: the more you brake, the more your bike will want to travel in a straight line.

4. It's always best to use both brakes. So, once you are starting with the front, introduce a small element of rear with your right foot. Don't stamp: be gentle and smooth.

5. If you do happen to lock either wheel, release the brake immediately and re-apply with more care to continue stopping.



### HOW BRAKING AFFECTS THE BIKE

When you use the front brake (right) the weight transfer compresses the forks, increasing front tyre grip. It also takes weight off the rear, so if you use too much foot pedal pressure (below) the back locks up



## The magic of weight transfer

A bike travelling at a constant speed will have a more or less 50/50 weight distribution (and therefore traction) between front and rear tyres. But when acceleration or braking come along, some interesting and very useful things happen.

Acceleration first: if you whack open the throttle, the weight shifts back. And, as luck would have it, the rearwards shift presses the back tyre harder onto the road, deforming its profile to create a bigger contact patch and giving you more traction just when you need it.

The reverse is true under braking: the weight shifts forward and gives the front tyre more grip, – also just when you want it.

Many beginners are initially startled when they experience this weight transfer. Indeed, research by Honda in the USA in the 1980s discovered that riders were so scared of the front diving they only used the rear brake! This was madness (the rear brake on its own needs a far greater stopping distance, which gets longer

### WEIGHT SHIFT UNDER ACCELERATION



When you open the throttle the resulting weight transfer extends the forks and causes the back to squat. This is very useful, because at this point your back tyre needs the traction more than the front

the faster you're going), and for many years Honda built bikes with linked brakes, where each control – the pedal and lever – worked some of both brakes.

It is far better to make friends with your bike's pitching under braking and acceleration. Learn to feel it happening, and realise that it's actually helping you. For instance, you'll approach maximum braking efficiency on a dry, grippy road when about 90 per cent of the weight is on the front wheel, and a mere 10 per cent on the rear. Stunt riders can even transfer 100 per cent of the weight onto the front (a 'stoppie'), or 100 per cent on the rear (a wheelie).

In wet or slippery conditions your use of front and rear brakes is more balanced – but even then you may end up with 60-75% of the weight transferred to the front.

Once you've found the correct speed for the situation and released the brakes, the bike will return to its natural 50/50 balance.

### WEIGHT SHIFT UNDER BRAKING



When you brake, the forks dive and the rear suspension extends. This causes the front tyre to take an increasing amount of the bike's weight, and so develop more traction when it's most needed



An Element D session in full swing. Smiles are important: if your instructor is a tedious old bore you'll nod off

## Element D What's in it

A classroom session to fully prepare you for your first venture out onto public roads. Besides general traffic principles it covers the things particularly relevant to motorcyclists: road positioning, hazard perception, forward planning, appropriate speed, road and weather conditions, following distances, the need to be clearly visible to other road users, and why motorcyclists are more vulnerable than other road users. You'll also learn the law to do with passing your test on a bike: CBT certificates,

125cc test passes, the 33bhp restriction, Direct Access for over-21s, and the full test pass.

### What you should expect

This needs to be an open discussion on all aspects of road riding. If your instructor has your best interests at heart he or she will also cover things not on the immediate schedule such as roundabouts, pedestrian crossings, filtering and speeding. If you have any other areas you're concerned about they should be welcomed and addressed before your first road ride.



Here we go – first time out on the road and all's well. We think you'll agree it's quite a moment



A tea stop during the Element E ride gives you a rest and the chance to talk the experience over

2000 Suzuki Bandit N600

## Element E What's in it

An on-road lesson of at least two hours, with your instructor talking to you via a radio earpiece in your helmet. You must successfully negotiate:

- A and B roads
- Hill starts
- U-turns
- Emergency stops
- Variable speed limits
- Junctions
- Traffic lights
- Roundabouts

You must deal with all these at a speed that does not hinder any road user or pedestrian. A safe

following distance (at least two seconds in the dry, four in the wet) is mandatory to pass this stage.

## What you should expect

The minimum requirement of two hours' successful on-road riding is law. During this time you should cover 20-40 miles and get the chance to follow immediately behind your instructor to see how to negotiate certain situations. You should also have the chance to lead and set the pace. There is no maximum time.

If you complete Elements A to E successfully you receive a CBT certificate, valid for two years. It entitles you to ride a bike with L plates up to 125cc, but not to carry a passenger or go on motorways.

## Help! It's all too much!

Your first road ride with 'big' traffic, at up to 70mph, can bring out some pretty strong anxiety. It's easy to feel you are the most vulnerable person out there, and get in a bit of a panic. Fortunately, there are a few things you can do about this.

### 1. Don't allow yourself to be pushed out onto the road before YOU are ready

If you're not confident, stay off road for a few more hours. Insist on it. Don't fall for the 'You'll be OK' line from your instructor – he's not a psychologist. You are the best judge. You decide.



Whoosh! Other traffic can feel scary at first

### 2. Don't chase the rider in front of you

There is absolutely no need. Just ride at a speed that you know will keep you safe. If the rider in front gets away, so what? They're not going to go left, right, left, right, hide! They will still be on the same road. You'll regroup at the next set of lights, junction, side road, etc. Trying too hard to keep up is not what this ride – or any ride for that matter – is about.



'Junction ahead, turn right,' says the voice on the radio

### 3. Stop for the first few T-junctions

Stop at every T-junction, even if there's nothing coming, until it's bleedin' obvious that you trust yourself on the approach to these difficult situations. It may take six junctions or 66, but discipline yourself not to move on before you are happy. Eventually you'll know that your observations, balance and control are reliable enough to let you pull out (when it's safe) without having to stop.



It's either 100 per cent safe to pull out or it's not. Don't ever take a chance if you're not sure

### 4. Set your own pace when leading

Instructors (and examiners) ride quite close behind to assess what you are doing. It's not a clue to make you ride like an arse and scare yourself stupid. Remember: you decide how fast you ride, not the rider behind (or in front of) you.



Rural roads are a chance to get up to a decent speed, use the gears and get a feel for real corners – all under the watchful eye of an instructor





The CBT certificate means you can ride a 125 on your own, but Direct Access riders rarely bother

### 5. Pull over when you need a break

You may be able to ride without stopping for 10 minutes or 40 minutes – you don't know yet. It's really important to understand that if you start to feel tired, overwhelmed, develop cramp or anything else, you can just pull over and stop for a few minutes to regain your composure.

This applies if you are leading or following. Don't think you'll be holding the others up, or upsetting your instructor. In fact, it's a good opportunity to discuss your progress.

### 6. Act on road signs

This is the biggest problem for new riders. With all their attention used up in riding, they don't look for road signs. Even when they see the signs they don't act on them in time. Example: going straight past a red triangular 'bend ahead' sign, then realising you're travelling too fast and slamming on the front brake in panic. The solution is always to ride within your limits. That way you always have some of your attention free to take in the big picture.

### 7. Be smooth

Smoothness is every motorcyclist's goal, and it starts with mental calmness. Even MotoGP riders, going to the absolute limit of what a motorcycle can do, and battling with a dozen other apparently crazy racers, are obsessed with smoothness. See those little pre-race rituals they create for themselves? They're doing it to calm and prepare their mind.

Well, you can be calm too. Listen to, and feel, how the bike is behaving under acceleration and braking. Build your speed at a pace you consider to be appropriate for the conditions. Allow yourself the space to be able to slow down at a rate that doesn't scare the living daylights out of you. The forces can feel quite strong at first, and the more you brake the more the bike will want to travel in a straight line. So choose where you brake in relation to the available Tarmac in front of you.

### Even if you forget all the above

Remember this: it's not worth carrying too much speed into any area of uncertainty.

## 'Aaaagh! It's a corner!'

Cornering appears very complex to new riders, particularly on the approach or half way round. When should I slow down? How far can I lean? Where do I look? How much grip do I have? Which way do I turn the front wheel? When do I get on the throttle? What line do I take?

All these questions need to be considered and discussed fully before you venture out. If you go into a bend at a speed that feels uncomfortable you are likely to run into problems. All it takes is doubt in your mind and suddenly the oncoming traffic, a parked car, the only bloody lamp post on the outside of the bend, some gravel on the road surface, a squashed coke can, that feeling

of 'running wide', will induce a panic response, and that creates the chance of an accident.

Any instructor who just says, 'Follow me, you'll be all right,' should not be trusted. His job is to explain the complexities of how to ride, and it goes way beyond 'Speed up, slow down, observe'. You must be happy with the entire cornering process (Chapter 6) before you enter your first bend.

It's so important to know what you intend to do before you go round a corner. Should anything else enter your mind or sight you are fine to acknowledge it for a very short period of time, but then you must revert back to plan A.



Does your instructor teach you about corners (and let you practice) before you hit the road? If not, sack him

# GOOD, BAD, INDIFFERENT: RIDERS' CBT EXPERIENCES



2003 Suzuki Bandit 650S

“ There are far too many schools which give inferior CBT training. The usual things that have not been covered are: emergency braking (especially on the road, rather than in a car park), U-turns, getting up to speed on the road rides, rural riding of any sort, hazard perception, and daily/weekly checks/maintenance pointers. They'll often cut short the length of the road ride. I know of instructors who regularly do an hour or less with students. It's just not safe, or right. **James Batchelor** ”

“ I took my basic rider training in 1979 in New Zealand. It concentrated on bike handling skills over three weekends. We were taught the fundamentals of how a motorcycle handles and behaves in all the relevant road and traffic situations. We also did practical exercises and repeated these until we were at least consciously incompetent, but had the skills to continue to practice.

Most of it was done in a closed car park and involved exercises for slow control, balance, body position, coordination of throttle and brakes, countersteering and heavy braking. The last weekend concentrated on putting these skills to the test out on the country roads and lanes. We also learned road craft including concepts such as a safety zone, bike position, and most importantly what to do when things go wrong – for example what other motorists are most likely to do in the event of pulling out in front of you and seeing you at the last minute, etc.

Is imperative to give our new riders the best chance of survival possible. Unfortunately most of them don't know that they don't know. To allow a new rider to use our roads without the basic skills to survive is potentially manslaughter. **Hugh McParland** ”

“ My CBT was a real eye-opener. Obviously some of the people on it had never even sat on a bike, and to see them trying to master the controls before being let loose on the open road worried me. A recipe for disaster, and unfortunately there were a few (thankfully none serious). Getting to know these people over the following weeks, some of their 'funny' near miss stories really raised questions for me as to the ease at which they passed the CBT, and the real value of what they'd been told. **David George** ”

“  I fulfilled a lifelong ambition to ride with my CBT in June 2005 and my test in July 2006. The 15 or so minutes training in braking in a quiet car park did not properly prepare me for the road: I hit the deck because of over-zealous use of the brakes in the wet, cracking my ribs and smearing my confidence all over the Tarmac. I already had over 30 years' car driving experience yet felt I had barely been trained sufficiently to be let loose on public roads. ”

**Maurice Cook**

“ As an enthusiast with 20 years' road and track experience on four wheels, the CBT gave me my first day's experience of biking. I had about 30 minutes teaching myself before I was expected to perform a figure of eight, etc. A few hours later I was out on the road. The course confirmed I had a saddo's obsession with the Highway Code, but taught me absolutely nothing about how to survive on the road or, crucially, how to ride a bike. ”

**Ayo Hughes**