

The Bux & Oxon 4x4 Response Group Handbook



V1.0 August 2010

Greenlane Association drivers code of conduct

- Use only rights of way with known, proven or provable vehicular rights. If challenged, discuss; if not resolved, then leave as requested until status is rechecked.
- Keep to the defined track. Detour only to pass immovable obstructions.
- Report any obstructions (including low branches) to the highway authority and the local GLASS Area Representative.
- Be critical of your own abilities and equipment when assessing an obstruction; it is your right to abate a non-lawful obstruction, but do not commit yourself to a bigger task than you are equipped for.
- If the route is not obvious on the ground, ask locally, or check on the maps held at the highway authority offices or consult the local GLASS Area Representative.
- Travel at a quiet and unobtrusive pace and as slowly as practicable; we recommend a maximum of 12 mph when in a 4x4 and on an Unsurfaced Right of Way (URoW).
- Ensure your vehicle is fully road-legal, URoW are subject to the same laws as surfaced roads.
- When travelling in groups, keep to a small number - four or less. Split larger parties up and either use a different route or allow a good interval to elapse before following.
- Do not travel on URoW when they risk being affected beyond a point of natural recovery once the weather improves. Do not use URoW that may be damaged by the wheel pressure applied by your vehicle.
- Avoid damage to trees, hedgerows and boundaries. Some roads carry vehicular rights but are physically too narrow for 4x4s.
- Do not practice recovery techniques on any URoW. Use a winch only with extreme caution, and use only the correct equipment and techniques.
- Be courteous to other road users - pull over and stop your vehicle for walkers, but pull over, stop your vehicle and switch off the engine for passing horses.
- Thank those who move over for you.
- After consultations with Country Landowners Association and National Farmers Union HQ's, "best practice" dictates that gates, if they were found to be secured in an Open position, should be left open, and those which are found shut or swinging should be shut behind you; the landowner might appreciate being told about a gate insecurely propped open if you see them.
- Keep dogs and children under supervision. Watch out for injured or trapped animals, and report all suspicious events to the landholder.
- Guard against all risks of fire.
- Take your litter home and that left by others if you see it, wherever practicable. Plastic bags can suffocate stock if swallowed.
- Remember that wildlife faces many threats and URoW are valuable habitats; take special care in spring and early summer.

Follow the Country Code, but be aware that it is for guidance only!

Contents

- Foreword
- Response role
- Emergency call out
- Recommended equipment list
- Your vehicle insurance and voluntary work
- Towing/recovering vehicles owned by the general public
- Recovery of your vehicle—your responsibilities
- Basic recovery techniques 1
- Basic recovery techniques 2

Foreword

This Operational Handbook has been compiled to offer guidance to all members, whether new, novice member, highly experienced 4x4 driver or competitor alike, to ensure we all have a basic understanding of what is expected and start from the same base line.

It is not a 'book of rules', but an operational handbook put together using many years of collective experience & learning within a long established group. It is certainly not exhaustive or definitive – so if you know better – please share it with us.

It is designed to inform not only members on the Response side of our organisation, but all others who will find some of the information useful in other disciplines. It is also anticipated that some members who have not initially expressed an interest in the Response role, might, at the point of an emergency, wish to assist. So we would like all members to be aware of its contents.

We are an organisation consisting of volunteers and this should not be forgotten. We strive to keep bureaucracy to a minimum and rely mainly on 'peer to peer' training on an ongoing basis, using our regular green lane trips, trials, winch challenges etc. to pass on our knowledge to new members as well as continually assess their ability. Marshalling at various competitive and public events is also useful training for the tasks we may be called upon to do. There will be some specific training from time to time offered by the Agencies we work with or within the group. This could include recovery, driving, winching, cold water awareness etc. This type of training and regular activity allows us all to become part of a team, ready to move into action very rapidly with everyone having an understanding of the attributes of your fellow team mates. To assist in this aim we would like you all to participate as much as possible in the activities we have to offer – we are all here to assist and advise.

The fact that we can offer more than just a Response role is also valuable as we do not know how often or when we may be called upon. For the first 10 years or so of our existence we were never deployed. We do not, however, know when we may be called upon so need to be in a state of readiness at all times.

Response Role

As an organisation, we are set up to simply supply 'logistic' support in an emergency to the Agencies who may call upon us. We supply our vehicles and driving skills to move equipment and personnel around in conditions where their normal transport is rendered unsuitable. We are not 'First Responders' – but can carry Paramedics and other Medical teams to the scene of an incident or where needed and back them up as requested. Similarly, we are not 'Search & Rescue' – but may be asked to assist them with our capabilities and skills. This is the case with any other Agency we may be deployed with, we operate under their instruction which means we are operating within their terms of liability.

We ask that you do not place yourself in a position you are not comfortable with – especially in relation to the vulnerable. Always have an accredited member of the Agency we are deployed with in attendance at all times and remain in your vehicle unless specifically asked otherwise.

Do not place yourself in danger and operate only within your ability – remember – you are a volunteer and can stand down at any time (but please inform our control).

We cannot 'self deploy' – but if you call our Emergency Planning Liaison Officer (EPLO), he will then contact the relevant Agency. Only they can give the necessary authorisation to proceed and if they do we can continue under their jurisdiction with the correct liability cover in place.

It is the responsibility of our EPLO to allocate the personnel and vehicles to the tasks requested of him as he sees fit, based on type of vehicle, ability of driver and location etc.

Members in the Response role will be provided with certain specific pieces of equipment related to that role – a tabard bearing the BORG logo; a reflective plaque bearing the BORG Response logo to be displayed on the vehicle whilst deployed, personal photo ID (to be used in conjunction with a current membership card) to be carried visibly whilst deployed and a buoyancy aid (due to cost, a returnable deposit is required and not all members are required to have this item). All this equipment remains the property of BORG and should be returned if you leave the group.

Emergency call out

Control's Number is 07514 525964

On receipt of standby **VODAFONE** Text Message, reply either:

Yes with name and location to the number in the Vodafone text message.

Or:

No with your name.

You must reply when you receive the Vodafone message whether it's yes or no. It is important for our records and that of our tasking agencies.

You will be contacted if a task comes in for your area and vehicle type.
What you should do:

1. Write down address and contact details and task type e.g.: Bucks County Council, Oxford Fire & Rescue etc.
2. If asked to make contact, note the person you are going to; their number will have been given to you.
3. Don't forget to take your ID and Membership Card as well as your vehicle ID. Keep note of your mileage.
4. Once home and finished, please text control (The number given in the Vodafone text) to say you are home and safe; don't forget to include your name.

Until you receive a Vodafone text message to say we have been stood down **we remain on standby.**

IMPORTANT - WHILE ON STANDBY

1. Please keep your mobile/pager with you at all times, day or night.
2. If for any reason you become unavailable please contact control.
3. So long as you keep your receipts you may be entitled to claim back for any food or drink purchased whilst out on task, if you have been out on duty for more than 3 hours.

Recommended equipment list

This list is intended as a basic guide to equipment you may require on a callout or for general off-road trips. It is not a mandatory list. Items marked * are suggested minimum requirements for response work.

Personal safety, clothing & comfort

*Mobile phone (plus in-car charger and hands free kit)

*Hi-Vis waistcoat/jacket

*Buoyancy aid (if issued)

Waterproof coat and over trousers/gloves/hat/spare socks/change of clothes

Wellington boots/hiking/work boots

Sleeping bag/blanket

Bin bags - for wet or contaminated items

Hot drinks in flask/cold drinks/water/Food for up to 8 hours

Work gloves/hard hat/safety glasses

Antibacterial hand wash - important with reference to flu incidents

General items

*Personal I/D (driving licence/ID card)

*Pens & notepad

*Buckinghamshire and Oxfordshire Street & O/S maps

Call out telephone list

500 watt torch & car charger/pocket torch/map light/head torch

Clock/watch

Money (small change)

Hand compass and/or GPS

Vehicle equipment

*First aid kit (personal use only)

*Fixed front recovery point/Fixed rear recovery points

*Blankets for the total number of passengers carryable

*BORG vehicle I/D sticker

Fire extinguisher - 1.5kg foam or powder (easy access vehicle mounted)

Life hammer/release knife

Warning triangle/Roll of barrier tape (preferably reflective)

Recovery rope (Nylon)/strap or derivative thereof. NOT Kinetic (KERR)

Tow rope/strap or derivative thereof

Shortening chain - to allow safer attachment to vehicles without adequate recovery points.

Tree strop/Load restraint straps to secure loads carried

Selection of bow/D shackles (rated 3.5 tonnes plus)

Spare fuel in can

WD40

Shovel/basic tool kit/crow bar/Hi lift jack

Rag/hand wipes/container of water (preferably sealed shop bottled water)

Bow saw and spare blades/pick axe/small axe

CB radio

Your vehicle insurance & voluntary work

Most of the Agencies we work for (& nationally) require Business use to be included on your policy and make it a stipulation on their expense claim forms.

Many insurance companies offer this facility on their standard Social, Domestic and Pleasure clause at no extra cost for voluntary work – **provided you notify them.**

It is a stipulation that you conform with this requirement when you are deployed by the group in the course of your Response duties.

We have checked with many of the specialist insurance companies that we in the 4x4 community tend to use. They confirm the situation that as our 'business' use is sporadic and not for profit, they will offer the cover free of charge. Please check with your own insurance company to confirm their situation and register your requirement as appropriate.

Towing/recovering vehicles owned by the general public

The Committee of the Bux & Oxon 4x4 Response Group would like to bring to your attention, the issues raised by assisting members of the general public and other road users if their vehicles become stuck in inclement weather or require recovery back to the 'hardstuff'.

We, as a Club, do not have any public liability cover for this sort of activity and would ask that you do not attempt to do this under the auspices, or in the name of Bux & Oxon 4x4 Response Group. The ONLY time we would be involved in vehicle recovery (other than our own vehicles) is under the DIRECT instruction of the agency with whom we are working at that time. This would mean that we are covered by their third party liability insurance as per our Memorandum of Understanding with them.

Such situations would be where a stricken vehicle posed a danger, or it was hampering an emergency situation. That decision would be made by the agency we were working for – Fire, Police, Ambulance etc. and we would then proceed, trying to cause as little damage as possible, but all the time being mindful of our own safety, and that of others.

If you were asked to go to a site to tow vehicles up a hill by the agency which had deployed us –and provided you operated within acceptable limits, then we have no problem.

If you feel you wish to drive around towing & recovering hapless motorists, or going to the top of the nearest hill to be a 'Good Samaritan' please do so, but not in the name of Bux & Oxon 4x4 Response Group and be aware of the insurance implications for yourself if it all goes wrong.

Recovery of your vehicle - your responsibilities

Within our club we have many members who will help out in time of need to repair a broken down or damaged vehicle when on a club activity, even to the point of towing over long distances. However, is it fair to expect these individuals to continually give up their time and energy to dive into the mud under your vehicle to keep you going? A vehicle breaking on a trip can hold up the entire group and curtail their opportunities whilst the said vehicle is sorted, no one likes driving off and abandoning a colleague (and we are not suggesting they should). But it should be remembered that the final responsibility for your vehicle lies with you, the owner. Here are a few pointers regarding what we would regard as your responsibilities as the owner of a vehicle attending a club event. These are not 'club rules' but should be taken seriously. The majority of our more seasoned members will already be aware of the problems caused by not heeding these pointers – but it will serve as a reminder.

Recovery and tow points. These are essential to the well being of the recovery vehicle and the 'victim' as well as the safety of bystanders. A good tow hitch, properly attached at the rear, will suffice in most scenarios. More thought, however, must be given to recovery points at the front. 'Tie down' loops are not really good enough for a violent recovery where a heavy vehicle is embedded in mud, so we would recommend the fitment of 'Jate' rings securely (and correctly) bolted directly to the chassis as a cost effective minimum. There are other recovery options available. You must ensure, however, that whatever you choose it is substantial enough for the job and attached firmly to a part of the chassis checked against corrosion. The condition of your recovery points should be checked regularly, particularly against corrosion as not only will great embarrassment be caused all round if your chassis breaks under the strain of recovery, but should it break loose, severe injury or even death could occur due to flying metal. If you do not have good recovery points then you, the owner, must take responsibility for attaching the recovery rope to your vehicle and accept full responsibility for any ensuing damage to your vehicle i.e. an axle wrenched from its mountings, a bumper pulled off or even a broken chassis.

Regarding tow and recovery ropes. We would like each vehicle to carry their own and to use it if you are the 'victim' unless the recoverer decides they wish to use their own. A good recovery rope can cost about £50, a Halfords tow rope will not do. You are responsible for the condition of your own gear.

The recovery of a disabled vehicle is a very important point, and we would ask that all vehicles have recovery cover. Towing a stricken vehicle over long distances is very stressful to both drivers and we should not make a fellow club member feel obliged to undertake such a task. Be prepared to tell your colleagues to continue if your vehicle cannot be made driveable and await your own recovery having made all the necessary arrangements. Your colleagues should make sure you are in a safe position and do their best to get your vehicle onto a surfaced road to allow recovery.

A CB radio is a very useful piece of equipment, allowing information to be passed easily from vehicle to vehicle, helping to keep a group together and avoid members from becoming separated, with the ensuing confusion and uncertainty caused by such a happening. You are also missing a lot of 'banter', chat and information if you are not CB equipped. A good 'rig' now costs less than a tank full of fuel.

Ideally, we would like all vehicles equipped to the above standard as a minimum. We should not expect 'someone else' to supply these essential items, as one day you might find yourself in a group stuck on the moors where everyone has taken the same attitude.

If help is offered in a time of need, accept it gratefully, consider the effect on the rest of the group, but do not expect it. Everyone is entitled to a 'bad hair day' and a refusal of help can upset more than just the 'victim'.

If you require any assistance or advice relating to the above, please do not hesitate to contact a Committee Member who will offer any advice they can, or pass you on to the appropriate person for assistance.

'Jate' rings can be purchased from most 4x4 suppliers and the prices do vary (considerably), so shop around. A good tow or recovery rope can be obtained from some specialised 4x4 outlets along with winches, rated shackles, strops etc.

Vehicle Recovery cover can quite often be obtained at a good price through your insurance – you do not have to have AA or RAC. In fact sometimes, if you use a specialist 4x4 insurance company, you will find their recovery people more inclined to recover a muddy vehicle, as that is what they expect.

We hope the above information is of some use to both old and new members. Remember, if you have any questions, please ask.

Basic recovery techniques 1

No recovery is safe and risk free, therefore a risk assessment should be performed prior to commencement at all times. Any reference to 'safe' practice is relative and should be taken as less dangerous. All club vehicles should be fitted with adequate and easy to access recovery points front & rear. Tie down points are NOT adequate. A properly fitted tow bar and attachment is normally sufficient at the rear – but check rating of tow ball & bolts. Jate rings to the front (or rear) of a Land Rover are normally adequate provided they are properly fitted and the chassis checked for corrosion. There are other proprietary attachment points (on steering guards for example). If you are unsure what you require, or want it checked, then contact one of our members who have built & fabricated vehicles. They have a good idea of the stresses involved and can advise. Be wary of tow balls and other attachments to standard bumpers, these are often fitted to allow easy manoeuvring of boat trailers & other equipment. These are NOT generally suitable for recovery, but, if they are used please make sure they have a spreader plate behind them and the bumper is modified to take the stresses. For owners of vehicles so equipped, do everything you can to prevent their use; it could kill someone if inadvertently used in a tense, stressed situation.

There are several 'pulling mediums' you may encounter in recovery or towing: chain, wire rope, lifting strap or strop, tow strap or polypropylene rope, nylon recovery rope or strap, or the 'elephant in the room' – Kinetic (KERR) rope or strap. There are other mediums and derivatives of the aforementioned. However, they can be grouped into what should and should not be used for recovery. For the purpose of this discussion we will define a recovery as being the most common we will encounter (the most risky as well). This will see a vehicle losing traction and becoming stuck due to sinking in mud, bellied out on a ridge, a diff caught on a high point, cross axled, unable to climb a step or tree roots etc – NOT a vehicle stopped on a hard, level surface – that is a tow.

The vast majority of recoveries in which we will be engaged will require a degree of 'snatch' to initiate movement of the stricken vehicle. A 'snatch' refers to the method of allowing a certain amount of slack in the rope before driving off causing a 'jerk'. Hence the necessity for good recovery points and the use of the correct equipment as the stresses generated will be very high.

For these reasons certain 'pulling mediums' should not be used. These include Polypropylene tow ropes and tow straps, lifting straps and strops, wire ropes and chains. These have no 'give' (by design) and in a 'snatch' situation would be the equivalent of hitting your vehicle with a 2ton+

sledgehammer. They are a 'dead' medium. It was surprising how many people were shocked at the suggestion of attaching a chain to their vehicle – but they did not realise all the other 'dead' mediums would have exactly the same effect! If you venture out on your own without a method of recovery (a practice to be discouraged), become bogged down and call on the nearest farmer to pull you out, he will appear with his tractor & a length of chain – need I say more?

Recovery and Kinetic ropes on the other hand are 'live' mediums – they are designed to have an amount of elasticity and 'give' in use. These are the equivalent of hitting your vehicle with a 2ton+ soft faced hammer.

Kinetic ropes are designed to allow much lighter vehicles to move a much heavier vehicle bellied out in the mud with an aggressive 'snatch' pull using the additional kinetic energy built up by the elasticity of the rope. The vehicles involved are built to withstand the extreme stresses involved and the operatives undergo extensive training in the discipline involved in such a highly dangerous activity. With good reason, these ropes are treated by many with great trepidation, our vehicles are not designed with these stresses in mind and few people are sufficiently skilled in their use to reduce the danger to an acceptable level. Would you give an 18 year old with a baseball cap who has just passed his/her driving test a Porsche Carrera GT3? We do not wish to see them used either – except, possibly, by people who KNOW their own vehicle WELL, KNOW the stricken vehicle WELL, BOTH parties KNOW the risks, there is NO other option and the drivers are experienced and disciplined enough. In other words it will only happen in exceedingly rare situations. If you must have a Kinetic rope, lacquer it, mount it on a nice wooden plinth and put it on your mantelpiece to admire it!

So what DO we use? A recovery rope is the answer. These are made of Nylon – a material with a degree of elasticity. There are also recovery straps and other derivatives – but they all work in the same way. The recovery rope/strap is usually longer than a tow rope and has a limited amount of kinetic action. This will allow a degree of 'snatch', soften the 'jerk', is kinder to the vehicles and does not allow the build up of large amounts of kinetic energy. They are still dangerous – but are the least dangerous and damaging of all the recovery mediums. We would strongly recommend that all vehicles carry such a recovery rope and a tow rope for towing as a basic minimum.

On the subject of chains – a 'shortening chain' (one with small hooks which hook back into the links) is very useful for attaching to a vehicle with no adequate recovery or tow point. It can be wrapped around any sufficiently strong part of the under carriage (e.g. chassis mount) without damaging your strap or rope.

It is vital that there is good communication between both vehicles involved in a recovery to prevent such things as the pulling vehicle taking off before the driver of the stricken vehicle gets in the car – it has happened! Remember neither driver can see what is happening overall. The pulling driver will be concentrating on his route and may not be able to see what is happening in his mirror. To overcome this, we use the following procedure. All vehicles should be road legal and, therefore, have a working horn.

When the driver of the stricken vehicle is sure that the tow is correctly fastened, started his engine, engaged the correct gear and the wheels are just spinning, he/she should give a single, short blast on the horn to indicate they are ready for the recovery to begin. The pulling driver will reply with a single short blast to indicate they are going to move away. Once the stricken vehicle is clear of the obstruction and has traction, or if there is a problem, he/she will give a further short blast to indicate that the recovery should stop. These blasts on the horn will also have the benefit of alerting any bystanders that the vehicles are about to move – so getting them out of the way! It is accepted that in some instances horns may not work – but decide in advance another way of communicating – hand signals, banksman, CB etc. The use of the horn, however, should be the automatic, first method of communication – then everyone will know what to do and expect.

Basic recovery techniques 2

We will now look in more detail at the practice and the 'mechanical sympathy' required to reduce the potential of damage or injury. We will assume that the vehicles in use have all the correct attachment points in good order, are using a recovery rope as discussed earlier and have all the necessary rated shackles etc.

You may use any other form of rope, chain, strap etc ('live' or 'dead') correctly rated, in addition to your recovery rope to increase your reach and allow your recovering vehicle to attain ground with good grip. You must remember to have at least one 'live' rope in your rig to maintain a degree of elasticity. In joining the ropes, it is a good idea to consider the fact that the use of shackles increases the risk of flying metal should anything break. There is a method of joining the ropes by passing each rope through the loop of the next and using something like a piece of wood or even rolled up newspaper passed between the loops to prevent them from 'locking' together as the strain is applied. Without the piece of wood or some other 'blocking' mechanism, the ropes will become tightly connected and be impossible to separate. This is easier to demonstrate than explain.

If you have any doubts about the strength of any mounting point you are attaching to, then there is a method of reducing the potential for damage or injury caused by the failure of the attachment point – a restraining leash. This could be a length of 'draw' cord (the blue rope you see lying about all over the place). One end should be attached to the end of the Recovery rope closest to the suspect attachment and the other to another point on the same vehicle allowing a small amount of slack. The idea being that in the event of failure of the main attachment, the restraining loop will prevent the broken parts from flying too far, causing damage or injury. This method should perhaps be employed on all occasions when recovering unknown vehicles on a play day or on public driving courses at the various shows we marshal on. It may well save severe damage to your vehicle or serious injury. It would also be a useful method to apply when recovering a car (especially a modern one) when we are asked to do so in the course of our Response duties. The use of a 'winch blanket' or similar to reduce the propensity for a 'broken' recovery to fly would be of limited value as the blanket would most likely be thrown clear of the rope as the initial 'snatch' was taken up.

The first thing to take into consideration when setting up to recover a 'stuck' vehicle is the direction of the pull. It should be as far as possible a straight pull in the direction of travel of both vehicles. An off line pull may give unwanted consequences, putting either vehicle in danger as it slides. The forces required to initiate movement are usually much higher, and the strain on the

attachments may be in a direction that will weaken them with disastrous consequences—so beware. Under some circumstances you may wish to pull 'off line'. This is OK provided you are aware, and more careful, doing all you can to mitigate failure. This is where a bridle can be of great value, allowing the load to be spread and giving a 'self centring' attachment point.

Once attached, and using the procedures referred to earlier, you should start with as gentle a 'snatch' as possible to try to initiate movement, building up the momentum over a series of attempts, and STOP before something breaks. Listen to the advice of more experienced drivers who will be more in tune with the dynamics of what is happening and should have more 'mechanical sympathy' by virtue of their experience (hopefully). If you are unsure about the strength of any component and the punishment it is getting – STOP – and look at other solutions. That is better than vehicle damage or personal injury. If the vehicle refuses to budge after a few attempts then look for other solutions to ease the situation – increase traction e.g. waffle boards or branches under the wheels; lengthen or shorten ropes to attain better ground; change vehicles – a longer/shorter wheelbase or different track may help; more aggressive wider/narrower tyres; pull from the other direction; digging/filling; jacking and throwing vehicle out of the rut or hole – all the previous methods may help to alleviate the stresses in certain situations. DO NOT, however, keep building up the intensity of the 'snatches' until something breaks (it may be your transmission).

Be aware of the limitations of ALL your equipment - that is what we call 'mechanical sympathy'.

The above comments are neither exhaustive nor definitive – all situations are different and there are no real 'rules'. Combinations of all recovery methods may be necessary in any one situation – so try to think about what you want to do and its consequences before you start. Be as safe as you can and expect the unexpected. It may be a good idea to elect a 'banksman' (someone who has some experience) to take charge from the outside to observe what is happening.

There are times when the best, if not only, method of recovery is with a winch. Indeed it is the only method of recovery if you are on your own. Winching is a specialist subject beyond the scope of this publication but practical training sessions are available as part of our club activities. These will be useful to the owners of winch equipped vehicles and those without in equal measure. Any of us may be asked to assist in the rigging of a winch recovery at any time – and the rigging is the most important part – the driver just has to press the winch switch as he is told!