

# **GDL-011-1.0**

## **Mutant Vehicle Guide**

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## 1 What is a Mutant Vehicle?

A Mutant Vehicle is a unique, motorised creation that shows little or no resemblance to their original form, or to any standard street vehicle. Mutant Vehicles are radically, stunningly, (usually) permanently, and safely modified from their base vehicle and are an expression of art and/or a public service that enhances the creativeness of the event whole in an imaginative and safe manner. Sometimes the whole vehicle is made from scratch.

Mutant Vehicles may include such non-standard motorised forms such as furniture, other non-street vehicles such as a boat or train, animals, or just about anything imaginable. For safety reasons, they must not mimic any type of emergency service or law enforcement vehicle.

Vehicles merely stripped to the frame and engine, and vehicles with minimal changes or temporary decorations are not considered Mutant Vehicles.

When designing your Mutant Vehicle, use your Mutant Imagination! Your Mutant Vehicle should provide a sense of awe to the community, something that is unique and also interactive for others to enjoy!

Great Examples of Burning Man mutant vehicles for some inspiration can be found here - <https://gallery.burningman.org/collections/Mutant-Vehicles/?p=2>

Note: Your vehicle must not resemble an everyday vehicle of any sorts ie: a car with its roof cut off and simply covered in fur or lights. This will not be accepted as a mutant vehicle and thus will not be approved!

### 1.1 How are Mutant Vehicles different from any Art Car?

A Mutant Vehicle is, in essence, a specific variety of art car that is more modified, customised or changed (i.e. 'mutated') from its original form, if any, than most Art Cars.

The Mutant Vehicle classification was specifically created for use in Jilakin Rock City (JRC). The classification was created because the term "Art Car" can have a broad definition, and, because of the limit on the number of vehicles the DMT can license, the DMT needed a classification that better described the level of 'mutation' that was required for a license.

Mutant Vehicles are integral to the culture and community at Blazing Swan. They contribute to the surreal, visual quality that binds Jilakin Rock City together.

### 1.2 Non-negotiable requirements

If you are interested in bringing a Mutant Vehicle to Jilakin Rock City your vehicle must comply with the requirements laid out in this document. This includes requirements on:

- Mutant Vehicle licence criteria and classifications
- Design and safety
- Vehicle driving protocols and rules at the Blazing Swan event

All Mutant Vehicle drivers will be required to hold a valid Australian driving licence suitable for the type of vehicle they plan to drive on site. Examples of the different licence classes can be found on the

Department of Transport website (links below) and you should check to ensure you meet DMT's requirements on this as your licence will be checked on site, along with a copy being required for your JRC Licence application.

<https://www.transport.wa.gov.au/licensing/vehicle-classes.asp>

<https://www.transport.wa.gov.au/licensing/license-an-off-road-vehicle.asp>

Just because Blazing Swan is held on private property, does not mean Mutant Vehicles can be driven by un-licensed or under licence age drivers. Breaches of this could result in JRC licences being revoked and Mutant Vehicles being restricted from being driven on site.

You must also comply with any applicable WA legislation set out by the Department of Transport if you are planning to drive your Mutant Vehicle to Blazing Swan. Either contact them to check requirements on vehicle modifications that may affect your ability to drive your Mutant Vehicle legally on WA's roads or head here for information –

<https://www.transport.wa.gov.au/licensing/modify-or-construct-a-vehicle.asp>

Should you wish to operate your mutant vehicle at Blazing Swan, you then need to carry out the following -

- Register and have your mutant vehicle approved by the DMT.
- Apply for your JRC driving licence

Please note – Having your Mutant Vehicle registered and Licenced with Blazing Swan for use at the event, does not negate any Laws or Legislation you must adhere to in Western Australia.

Also, if you breach any Mutant Vehicle rules on site, your JRC driving licence may be revoked and you may not be permitted to drive at the event.

### **1.3 Transporting your Mutant Vehicle to Blazing Swan**

If your Mutant Vehicle is not able to be driven to Blazing Swan due to excessive modifications that will prevent this, DMT may be able to assist you or secure cheaper transport methods for you due to the bulk transport to site Blazing Swan will already be undertaking for the event.

Contact DMT for advice on this on [dmt@blazingswan.com.au](mailto:dmt@blazingswan.com.au)

If you plan to transport the Mutant Vehicle to site yourself, make sure you do this safely and secure everything down well. There are guides on how to safely tow available on the Department of Transport website - <https://www.transport.wa.gov.au/licensing/towing-trailers-tilt-trays-and-caravans.asp>

### **1.4 Vehicles for person with a disability at Blazing Swan**

Licences for vehicles used by a person with a disability are issued by the DMT to participants with physical disabilities. Just like Mutant Vehicles, you should pre-register in order to get a license to operate these vehicles.

The following vehicles do not require licensing when used as a vehicle for a person with a disability:

- Electric Wheelchairs
- Mobility Scooters
- Electric Bicycles
- Segways
- Go-ped style stand up powered skateboards (with no seat)

(Note) All vehicles used at night need to be radically illuminated!

The following are NOT allowed for use as a disability access vehicle:

- Vehicles larger than a standard-sized UTE/SUV
- Vehicles with trailers
- RVs/ Motorhomes
- Motorcycles/Mopeds

Please register on the form found on the Blazing Swan website here –

<https://blazingswan.com.au/participate/mutant-vehicles/> then come see us at DMT when you arrive on site.

## 2 Mutant Vehicle criteria

These criteria stem from the two basic requirements of a mutant vehicle, that it has a positive impact the event, and that it is safe to be at the event. These criteria are not fixed, and special cases may be considered.

### 2.1 It must have a positive impact

Level of mutation

- The vehicle must not resemble or represent a car, truck, golf cart or any other readily identifiable vehicle Interactivity
- Interactivity is defined as an opportunity for any village citizen to participate in some activity offered by your vehicle. The theme and/or size of the vehicle is what's considered here. What service to the community does your vehicle provide?
- Lack of interactivity can be compensated for by visually adding to the event (e.g flame effects or art on wheels) Sound
- Engine noise must not draw attention or take away from the experience of others
- Once in event see vehicle sound policy excerpt found later in this document.

### 2.2 It must be safe

Must pass basic safety checks

- Maintain 4km/h around corners and up hills
- Brakes must be effective
- Sturdy hand railings and, if applicable, stair railings
- No sharp protruding objects
- Safe access area and method for (un)loading passengers

- Fire extinguisher highly recommended (a must have if flame effects are present)
- First aid kit highly recommended
- Good field of view but hazardous blind spots will require walkers/ spotters while driving

#### Lighting (24-hour licences only)

- People need to be able to see your vehicle and you need to be able to see them. The vehicle must include front head lights and the front, rear, AND sides must be lit. All vehicle extremities must be lit. Any dangerous area of the vehicle must be lit. Anywhere someone would walk, step, or climb on your vehicle should be lit, especially stairs and ladders.
- The visual presentation of your vehicle should be at least as stimulating at night as it is during the day, if not even more so.

#### Fire/flame effects

- Any flame effects need a permit from the Fire Arts Safety Team. You must contact them for advice and approvals before attempting this. Find more details on Fire on the Blazing Swan website - <https://blazingswan.com.au/participate/fire/>

### 2.3 Day and 24-hour Licences

Vehicles given a Day Licence can only operate after sunrise and before sunset. Vehicles with a 24-hour licence can operate through the night so must be FULLY and RADICALLY illuminated.

### 2.4 Trailers

Trailers are strongly discouraged on Mutant Vehicles at Jilakin Rock City. This is because of a number of injuries and deaths at Burning Man and other regionals involving Mutant Vehicle trailers. If the trailer is not a necessary part of the design it will likely not be licenced. For a Mutant Vehicle trailer to be licenced it must not be possible for a person to come between the vehicle and trailer, from the side or from above.

### 2.5 Quads and motorbikes

Quads and motorbikes are discouraged because they are often only for personal transport, and the drivers tend to exceed the speed limit. If a quad or motorbike is heavily mutated and meets the criteria above it can be licenced.

## 2.6 Human and Low powered vehicles

These vehicles do not require licencing from DMT, and do not require a licenced operator to use. Decorating these or mutating these vehicles is strongly encouraged. They are still required to be used in a safe manner.

Vehicle	Description	Requirements
Bicycles and other human powered vehicles	Any vehicle solely human powered	Lights required for night use
Electrically assisted bicycles	Motor output must be under 750 watts (1 HP)	Lights required for night use
Motorised skateboards	Small, stand-up (no seat), one-person style "skateboards on wheels".	<p>We encourage you to use an electric model, or one that does not create that loud "buzz", which many feel detracts from the event.</p> <p>These are motor vehicles, so riders must obey the same driving rules as other vehicle drivers.</p> <p>Lighting required for night-use</p>
Stand-up wind powered vehicles	Only the stand up, pivoting mast type are considered low powered	Do not use in crowded areas or at night.
Electric wheelchairs or mobility scooters	Small vehicle to aid a person with a disability	Obey the speed limit. Lights required for night use

## 3 Design and Safety

### 3.1 Design your Mutant Vehicle

See the [ePlaya mutant vehicle forums](#) for build advice, but be aware their rules are different from Blazing Swan's.

For inspiration to see what is possible, check out some of Burning Mans Mutant Vehicles in this gallery - <https://gallery.burningman.org/collections/Mutant-Vehicles/?p=2>

You should plan out your Mutant Vehicle in detail to make sure it is safe for all participants and as visually appealing as possible in a way that enhances the creativeness of the event.

The next sections will help you with the safety items you should be thinking of. If your design is not safe, you risk it not being approved by the DMT.

### 3.2 Risk Management

One of the best ways to ensure the safety of yourself and anyone else that drives or/rides on your Mutant vehicle is with Risk Management.

Risk management is a four-step process whereby you;

- Identify hazards from your Mutant Vehicle
- Assess the risk of those hazards and then
- Implement control measures, which will eliminate or minimise the risk of injury from the hazards you have identified.
- Periodic reviews of control measures and risk assessments

You could look to ask yourself the following questions:

- What hazards exist/ could exist on your Mutant Vehicle?
- What injuries or damage could these hazards cause, and how serious could that be??
- What can you do to remove or control these hazards?

The following steps provide some further information on Risk Management.

#### 1. Identify all the Hazards.

Think of all the hazards you can, you may be surprised how many you come up with.

#### 2. Risk Assessment

Risk Assessment determines how likely and how serious the effects will be on people in the workplace being exposed to the hazard. Work out which hazards are most serious and deal with them first. To assess the risk, you should consider:

- The type of hazard
- How severely could the hazard injure or cause illness (consequence)
- How likely is this consequence going to happen? (likelihood)
- The frequency and duration of exposure
- Who it may affect



- Capabilities of those involved
- Skills, experience and age of people
- Layout and condition of the operating environment.

### 3. Risk Control

Risk Control involves deciding what needs to be done to eliminate or control the risks to health and safety. Where possible, you should always try to remove or eliminate the problem from the workplace, for example by using a different process, or changing the way a job is done.

If it is not possible to eliminate the hazard, the Hierarchy of Risk Control must be used to determine the most effective measures to minimise the risks.

#### Hierarchy of Risk Control

If the risk cannot be removed, then you should look to control the risk by one of the following methods. You should try and remain as high up the list as possible - i.e. ideally signage and PPE should be your last line of control.

a) **Design or reorganise to eliminate the hazard from the Vehicle**

Try to ensure that hazards are designed out when new materials, equipment and work systems are being planned for the vehicle.

b) **Remove or substitute the hazard**

Where possible remove the hazard or substitute with less hazardous materials, equipment or substances.

c) **Enclose or isolate the hazard**

This can be done through the use of barriers, introducing a strict work area, enclosing a noisy process from a person.

d) **Minimise through engineering controls**

This can be done through the use of machine guards, effective ventilation systems etc (if you are using power tools, grinders, etc)

e) **Minimise the risk by adopting administrative controls**

Establish appropriate procedures and safe work practices such as job rotation to reduce exposure time or boredom; timing the work so that fewer crew members are exposed; routine maintenance and housekeeping procedures; training on hazards and correct work methods.

f) **Personal Protective Equipment**

Provide suitable and properly maintained personal protective equipment and ensure crew members are trained in its proper use (examples include gloves, earplugs etc.).

If no single control is appropriate, a combination of the above controls needs to be taken to minimise the risk to the lowest level that is reasonably practicable.

### 4. Review

Periodic reviews of control measures and risk assessments should be conducted to ensure the control measures implemented are appropriate and effective and the risk assessments are still valid. This can be achieved through safety audits, regular inspections, consultation with crew members and review of incident investigations. Risk management should be built into all Mutant vehicle activities that can give rise to safety issues.

### **3.3 Potential Hazards**

#### **Nasty Grabby's**

Pinch points and exposed gears or drive belts, chains, pulleys, etc. are often the cause of injuries. These injuries happen when the construction of the design has neglected small exposed areas where fingers, hands and feet can get caught in, especially when the person is in motion or exploring the dynamics of your creation!

Remember these injuries can also occur on non-moving parts such as hand railings, stairs and often do!

Ensure that all of these little and large Dangerous areas that are accessible to the public are properly covered, filled, deburred, taped-up and/or not accessible, so that we may keep all our limbs and extremities safe. We will need them!

#### **Sharpy Stabby's**

Sharp edges or pointy protrusions are an obvious hazard. Someone brushing past your creation shouldn't get scratches or cuts. Be especially careful of pointy things at eye level. We will try and cut ourselves on your vehicle, if she bleeds, you fail.

#### **Exhaust Systems and Hazards**

Your Vehicle should be as quiet and clean running as possible so please fit it with an effective muffler to avoid unwanted noise pollution and exhaust fumes throughout the event.

All hot parts of the exhaust system should be obvious, however reachable parts of your vehicle that may get hot from residual exhaust gas should be marked as HOT and a guard permanently fixed over the area. Anyone should be able to lean on any part of the vehicle without burning themselves.

Any vehicle that has an enclosed area either for an operator or passengers must be well ventilated or closed off to persons.

Remember that an idling vehicle can create a build-up of exhaust gasses and be not only harmful to passengers but unwanted by nearby campers

### **3.4 Overall Vehicle Operation**

#### **Braking System**

All vehicles must be able to stop safely in an emergency as well as to be able control their speed downhill.

All vehicles will also require an emergency park brake.

We will test the braking system with emergency stopping procedures at 25kmph and determine if effective enough for vehicle size and purpose.

The park brake will be tested at idle and in gear. The vehicle should not move when the park brake is engaged.

## **Steering System and Operation**

All vehicles will be required to have a normal or higher steering capability in order to manoeuvre effectively around the event without reversing. All safe cornering must be able to be done at a speed no greater than 4kmph

We will test this by measuring that you at least have a 15M turning radius at 4kmph without stalling of the vehicle.

## **3.5 Extra Vehicle Safety Provisions**

### **Hand Railings**

Railings will need to be provided where people may be (standing) higher than 1.5M or moving without sitting.

Handrails will be tested with a vigorous shake at each section by a Burly person.

### **Staircases and Exits**

Staircases should be easy to access and use, railings should be in place to assist with ascending/ descending the vehicle, staircases are to be preferably at the rear of the vehicle if possible. A rope, chain, or door should be in place to prevent passengers from entering or exiting the vehicle while in motion. This needs to be strictly enforced by the driver and/or a gatekeeper.

Where the line of sight may be obstructed by the driver, a “gatekeeper” with means of clear communication between the driver with a set “Go or No-Go” signals must be in effect!

We will test by ease of our ascension and inevitable descension back to earth.

### **Exposed Wheel Hazards**

Exposed wheels should have fender guards and/or push bumpers installed in order to keep a margin of safety from persons feet from getting caught in the wheels.

A visual check of conformity will be made

### **Emergency Kill Switch**

Readily accessible Emergency Kill Switch if any drive functions have been extended or modified in such a way that the operator can't easily disable the vehicle immediately by normal means when required.

We will test this by starting your vehicle and using the switch to shut it down.

It is also recommended to have your vehicle equipped with some type of horn for warning pedestrians if a situation becomes unsafe.

### **Operators Lines of Sight**

We don't want anyone to be run over or left behind.

Sufficient operators view for safe manoeuvrability through streets and crowds and/or loading/unloading of passengers at an egress point is a must. If this is not possible a sufficient communications system between driver and passenger load/ unload area and /or area of visible impairment must be set in effect.

If required, we will need to know what plan you may have in effect for this.

**Illumination - (Night Permit Only)**

Proper mounted illumination for all areas that people can walk on, move around in, or descend into.

Your vehicle must be lit up extremely well for night-time (Dusk til Dawn) operation.

The more lighting the better!

Note: EL Wire only is **not** sufficient. We recommend 12V LED Strip lighting.

We will test this by standing 10 meters away at night and asking ourselves if it's radically illuminated. It needs to be seen by "we wear our sunglasses at night people".

**Trailers**

Trailers are discouraged and will not be accepted if the same effect can be achieved without a trailer.

**Mandatory**

Your vehicle will need daily maintenance checks and/or repairs.

Please make sure that you bring extra tools or repair and maintenance equipment with you!

You will be solely responsible for making sure that your vehicle remains safe and operating well throughout the entire event.

Any Vehicle that becomes damaged or unsafe during the event and not repaired before further use, will be deemed unsafe by DMT and removed from the event for your retrieval and responsibility post event.

**Recommended to carry**

Tool and repair Kit

Small first aid kit

Small fire extinguisher (required for vehicles with Flame FX

Jerry cans of fuel – Blazing Swan will not be providing fuel if you run out.

Puncture proof wheels. (Double Gees are known to puncture wheelbarrow tyres easily)

**Prohibited**

Fluid leaks of any kind – Leave No Trace!

Trails of MOOP (Clean your rubbish out regularly)

Lasers of any kind are Not Permissible on your vehicle

## 4 Driving in Jilakin Rock City

### 4.1 Vehicle driving protocols

Jilakin Rock City is a pedestrian priority environment. It is designed for pedestrians and bicycles. All mutant vehicles must drive carefully and give way to all other people and vehicles. The following rules must be followed by all mutant vehicle operators:

- Only drive vehicles licensed or allowed to drive in Jilakin Rock City
- Only licensed operators may drive mutant vehicles
- Abide by all applicable state and national laws
- Drive at a maximum speed of 8 km/h (less if kicking up dust, or in hazardous situations such as tight crowds, poor lighting or bad weather)

- Must obey Playa signage regarding driving/ non-driving areas and roads
- Give the right of way to pedestrians, bicycles, and emergency services vehicles
- Follow the reasonable and applicable vehicle laws for road safety
- Stop immediately upon being hailed by any Jilakin Rock City staff member, Rangers, Fun Police (Safety Team) or law enforcement officer
- No driving under the influence of drugs or alcohol
- Obey mutant vehicle sound requirements as detailed in this document
- Clearly display the Mutant Vehicle License in a location specified by the DMT

## 4.2 Mutant Vehicles and the Community

A registered Mutant Vehicle is considered to be a public conveyance. When you are licensed to drive in Jilakin Rock City, you agree that you will share that privilege with others and give rides to those that need or ask.

This is also a great way to meet people and a wonderful show of our community. Proper etiquette should be followed; all participants should be allowed to ride Mutant Vehicles as long as there is not an unsafe number of passengers aboard at any given time.

## 5 Mutant Vehicle Sound Policy

The following section provides information on sound being used on a Mutant Vehicle

	Sound level	Analogy	Areas permitted
Level 1	<70 dBA at 30m	Normal car stereo or living room	These systems may play anywhere on the playa, but must be respectful of volume and surroundings, especially in quieter areas in the city or later at night.
Level 2	<90 dBA at 30m	Dance club or theatre	Systems may only play at high volume in open areas (not in or pointing right into the village streets) and must be mindful of where you are playing e.g. around art pieces, burns, etc. and turn it down when appropriate
Level 3	>100 dBA at 30m	Large dance club, arena, or stadium	These systems may only play at high volume by the Large-Scale Sound Camps, with speakers pointing out to the lake.

Note: All dB levels refer to maximum potential dBA. The important thing here is the impact of the sound itself. The numbers (DB) are guidelines and the important thing is the impact your sound is having. If you get more than two warnings about your sound system, you may lose your vehicle and/or operator's licence.

## 6 Mutant Vehicle Application process

1. Fill in the Mutant Vehicle Application form found on the website here – <https://blazingswan.com.au/mutant-vehicles/>
2. Pre event DMT checks are essential for all new vehicles and available by request for returning vehicles during the month of March before the event. Organise your pre event check by contacting [dmt@blazingswan.com.au](mailto:dmt@blazingswan.com.au)
3. Once DMT give your application approval, apply for Jilakin Rock Drivers licenses for all drivers of your Mutant Vehicle using the Mutant Vehicle Licence Test and Application form found on the website here – <https://blazingswan.com.au/mutant-vehicles/>
4. Obtain final approval on site from Monday – Friday. Daytime and night-time checks are available to be scheduled.

The four main areas your vehicle will be assessed for approval on are -

- Mechanical
- Mutation
- Safety
- Illumination

## 7 Mutant Vehicle Application

All Mutant Vehicles must apply to be considered to be allowed to drive in Jilakin Rock City. You will find the application form on the Blazing Swan website here – <https://blazingswan.com.au/mutant-vehicles/>

The DMT must balance the desire to have vehicles at the event, with the community standards of keeping Blazing Swan a foot and bike friendly event and maintaining a level of safety. Because of these limiting factors, not all vehicle applications will be accepted.

You will be notified if your application has been successful by the DMT. Only then should you commence to applying for a licence. If you want to ensure a successful application, following the guidelines in this document will help with this, so read it in its entirety.

## 8 Mutant Vehicle Licencing

Mutant vehicles are licenced by The Jilakin Rock City Department of Mutant Transport “the DMT”. The DMT also licenses vehicles for use by a person with a disability. The DMT must balance the desire to have vehicles at the event, with the community standards of keeping Blazing Swan a foot and bike friendly event and maintaining a level of safety. Because of these limiting factors, not all vehicles can be licensed.

You must apply for a Jilakin Rock City Mutant Vehicle licence. You will not be permitted to drive your Mutant Vehicle on site without one. You will find the Mutant Vehicle Licence Test and Application form on the Blazing Swan website here (Mutant Vehicle application acceptance required) –

<https://blazingswan.com.au/mutant-vehicles/>

## 9 Questions, Advice or Clarification??

Please always feel free to contact us at [dmt@blazingswan.com.au](mailto:dmt@blazingswan.com.au) and we will be happy to discuss any queries you may have.

We are here to help.

**DMT Loves you!**

## 10 Document control

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## Definitions

Term	Definition
DMT	Department of Mutant Transport
JRC	Jilakin Rock City