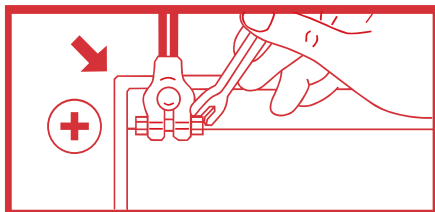
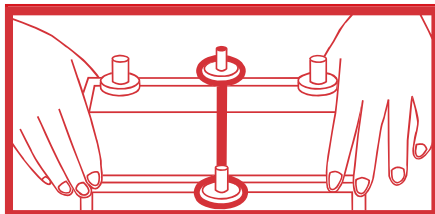
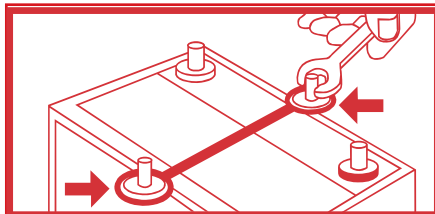
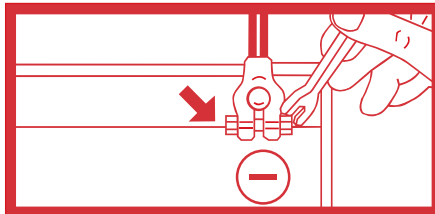
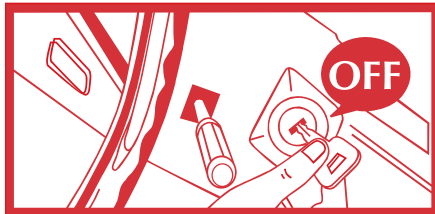


Battery Replacement Guide



Please ensure extreme care is taken when replacing the battery in your vehicle. Also please make sure the engine, lights and all accessories are turned off before removing old battery. Check if vehicle has a computerised electrical system. Most vehicles with on-board computer systems require an alternative power source or memory minder to maintain electronic memory when the battery is disconnected. Disconnecting the battery on such a vehicle without a memory minder may cause damage to the main computer or other electrical equipment. We recommend you wear safety glasses during the replacement procedure. Ensure replacement battery meets or exceeds minimum capacity and CCA rating for your vehicle.

Safety First! Do The Right Thing.

1. Lower the driver's window enough to access the ignition keys via window. (A safety measure against total-close central-locking systems)
2. Turn off the engine, place into a neutral gear or park position and engage the handbrake.
3. Fit memory minder into the cigarette lighter socket or OBD / OBD II port and turn ignition key to the accessory position.*NOTE: Radio memory can only be saved if radio is still operating prior to engaging minder.
4. It is preferable to perform replacement in a well ventilated environment. (To minimise the potential of explosion from hydrogen gas emitted from the faulty battery)
5. Remove the negative terminal first, then positive terminal and wrap the terminal securely in a rag to insulate from shorting to ground. (This precaution is necessary to avoid potential damage to the wiring and / or electrical systems as a terminal may still be alive)
6. Remove the hold-down clamp and carefully remove the battery, taking note of the battery terminal positions, both positive and negative.
7. Corroded steel parts should be cleaned and neutralised, (use Bi-Carb Soda or terminal cleaning spray), dried and painted.
8. Terminals should be thoroughly cleaned.
9. Battery cable and starter motor connections should be checked and tightened if necessary.
10. If terminal clamps or cables are badly corroded, they should be replaced.
11. Clean the battery tray of all debris, stones, etc. to ensure no sharp objects can damage the battery casing.
12. Check the height of the replacement battery to ensure there is sufficient bonnet clearance to avoid terminals shorting/fouling on the closed bonnet.
13. Place the new battery in the tray, ensuring it sits level and that terminal posts are positioned exactly the same as the battery being replaced.
14. Replace and tighten hold-downs securely so that the battery cannot move in the tray. Do not over-tighten as this can distort the plastic battery casing. Be sure to check that radiator fan, hoses and drive belts do not make contact with the battery.
15. Re-fit cables and tighten terminals, (do not over-tighten), ensuring that the negative ground terminal is connected last.
16. If a spark occurs during reconnection of the negative terminals, have an auto electrician check for a current drain at your earliest convenience.
17. Never hammer terminal connections onto battery posts as this can damage the battery terminals or cause internal damage to the battery.
18. Apply a coating of battery terminal protector to the posts and bare cable connections.
19. Carefully remove memory minder from cigarette socket or OBD port and start the engine. Check that Charge Warning indicator light goes out and the charge gauge, (if fitted), shows a normal level.
20. Check radio and clock functions to ensure no memory loss has occurred.

Battery Safety Warnings & Information

Corrosive Hazard:

- The product is hazardous according to the definition of WorkSafe Australia.
- All relevant safety precautions should be followed.

Warning:

- Keep battery and acid out of reach of children at all times.
- Always store in a safe place, preferably in a plastic tray.
- Keep battery out of direct sunlight, away from any heat sources.
- When charging battery, ensure good ventilation.
- Polypropylene casing can be subject to static electricity. Do not rub casing; wear rubber gloves when handling.
- Batteries are heavy in nature - use correct lifting procedure.
- Do not tilt the battery - this allows acid to leak out of vents.
- Use baking soda (Soda-Ash) and water to dilute any acid spillage.

Warning statements:

- Observe the precautionary information on the battery label and the vehicle's operational manual regarding handling and safety requirements of the battery.

Protective clothing:

- Always wear eye protection and appropriate clothing as a precautionary measure when working with the battery.
- A damp towel covering the battery when handling will minimise some splash and spark dangers.

Handling Warning:

- Naked flames, sparks, and smoking are potential ignition sources for explosions when in the vicinity of batteries.
- Avoid shorting any wiring, terminals or spanners when working around the battery, including electrostatic discharge.
- A short circuit has the potential to cause fire or the explosion of the battery, even burns to the operator/ technician.
- Only use a damp cloth with mild soap to clean the battery case, only clean terminals with battery removed from vehicle and avoid shorting terminals with brush to prevent explosion.

Explosion Danger:

- Explosive gases are emitted when batteries are charged or in service; these gases can cause injuries such as burns and blindness.

Corrosive Warning:

- The contents of lead-acid batteries are very corrosive. Any direct contact with skin or eyes can result in burns and blindness.
- Protective clothing and safety glasses should be worn when handling to help prevent injury.
- Do not allow electrolyte to escape from the battery casing; it is a hazardous material and should not make contact with ground water or drainage systems, intentionally or otherwise.

First Aid:

- Immediately rinse eyes with water or milk if they come into contact with acid mix, then seek medical advice without delay.
- If contact with skin occurs, wash off with water and mild soap at earliest opportunity. Clothes should be washed the same way and rinsed thoroughly.

Disposal:

- Always dispose of scrap batteries at an accredited collection station. Never place batteries with household waste. Do not allow battery electrolyte (acid) to leak. If the casing is damaged, place into a plastic collection tray to contain leaking acid prior to disposal. (Enquire regarding local regulations)
- Damaged and scrap lead-acid batteries can be returned to any branch of R&J Batteries for safe disposal / recycling.

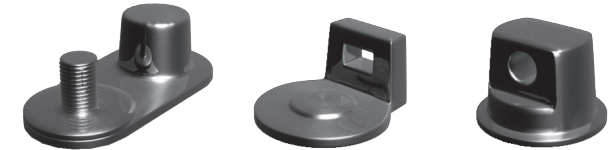
Terminal Types



STUD

Standard / SAE

Small / JIS

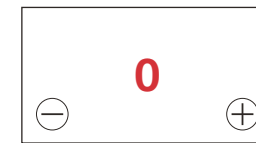


Marine Twin

LUG

Multi Fit / DF

Battery Layouts



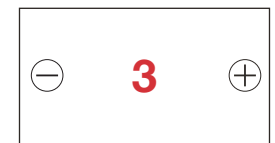
- RHP



- LHP



- Multi



- Multi



- RHP



- LHP