

## Battery & Electrical

<b>Engine Will Not Start</b>	
<b>Flat battery</b>	Recharge
<b>Battery terminals loose, corroded or dirty.</b>	Clean/grease and tighten
<b>Battery earthed terminal lead defective</b>	Check battery/terminal condition Check earth cable
<b>Battery in Continually Low State of Charge</b>	
<b>Loose fan/drive belt</b>	Tighten to correct tension
<b>Battery terminals loose corroded or dirty</b>	Clean/grease and tighten
<b>Excessive stop-start operation</b>	Re-charge on charger regularly
<b>Excessive starter use</b>	Check starter circuit
<b>Low electrolyte level</b>	Top up battery electrolyte level
<b>Battery leaks through cracked case</b>	Check/replace
<b>Defective charging circuit</b>	Check charging circuit cables/components and voltage
<b>Excessive Charging Required</b>	
<b>Faulty charging circuit (battery being overcharged)</b>	Check charging circuit
<b>Bad control box rectifier earth</b>	Check condition/security
<b>Defective battery</b>	Check/replace if necessary

<b>not turning Starter motor</b>	
<b>Unable to turn engine by hand.</b>	Locate and remedy cause of stiffness.
<b>Able to turn engine by hand:</b>	
<b>A. Discharged Battery</b>	Check Battery
<b>B. Corroded/loose connections on circuit</b>	Check for corrosion, loose connections or poor earth connection
<b>Starter operates but does not turn engine</b>	
<b>Starter pinion not engaged with flywheel</b>	Remove starter and clean drive pinion Bench test starting motor
<b>Starter pinion will not disengage from flywheel when engine is running</b>	
<b>Pinion jammed with flywheel</b>	Remove starting motor and check for pinion teeth for damage Bench test starting motor