



Description of system:

The Jeep Cherokee XJ is a "sport utility vehicle" with many mechanical, electrical, computer controlled systems. The XJ is designed for general transportation of people and cargo as well as adventures of off-roading and overlanding.

Mechanical Systems:

Engine	Pumps
Steering	Barings
Brakes	Fluids
Gears	Hoses
Transmission	Belts
A/C Compressor	

Alternator



Alternator
Power source:
Chemical energy
Output power:
3Ph AC

Control System

Fuel Injection
Anti-lock Brakes
Cruise Control

Diodes and voltage regulator
Converts it to 12Vdc
150Amps – 1800W
2.4HP

Electrical System:

ECM

ECM
12Vdc
~16Amps

Wires

Temp sensor

Battery

Radiator Fan

Battery
12Vdc
~150Amps



Radiator Fan
12Vdc
~60Amps
~3500RPM

JEEP CHEROKEE XJ

A MECHATRONIC SYSTEM