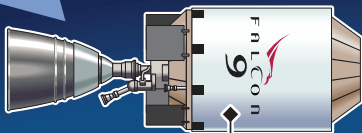


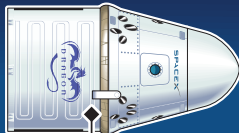
NASA's private-sector rocket to lift off

The Falcon 9 rocket, built by SpaceX under a \$1.6bn contract with NASA, is set for its maiden test flight. Designed to launch commercial spacecraft on cargo trips to the International Space Station, SpaceX says the Falcon 9 and its Dragon capsule can be modified to deliver astronauts to space by 2013



First stage: Nine Merlin engines powered by RP1 (refined kerosene) and liquid oxygen

Test flight will place mock version of Dragon spacecraft in circular orbit about 250km above Earth



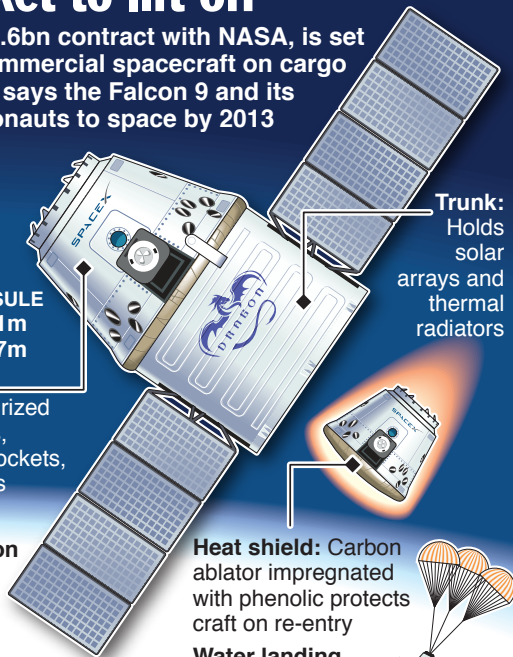
Second stage: Powered by single Merlin engine

DRAGON CAPSULE

Length: 6.1m
Diameter: 3.7m

Spacecraft:

Houses pressurized cargo, avionics, manoeuvring rockets, and parachutes



Trunk: Holds solar arrays and thermal radiators

Heat shield: Carbon ablator impregnated with phenolic protects craft on re-entry

Water landing with parachute

FALCON 9

Length: 55m Width: 3.6m

Lift-off weight: 333,400kg

Payload Cost per launch: \$51.5m

To low Earth orbit: 10,450kg

To geostationary transfer orbit: 4,540kg

Crewed version could carry up to seven astronauts

Source: SpaceX
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