

NASA's Space Launch System **SLS**

FUELING THE WORLD'S MOST POWERFUL ROCKET.

Powered by Aerojet Rocketdyne

SLS CORE STAGE

Fuel: Liquid Hydrogen Oxidizer: Liquid Oxygen

Standing 212 feet tall, SLS has the largest rocket propellant tanks in existence

FORWARD SKIRT

Holds "BRAINS" of rocket – flight computers, cameras, avionics

LIQUID OXYGEN (LOX) TANK

Holds 196,000 Gallons of liquid cooled to **-297° F**

INTERTANK

Joins LH2 and LOX tanks – flight computers and avionics

LIQUID HYDROGEN (LH2) TANK

Holds 537,000 Gallons of liquid cooled to **-423° F**

ENGINE SECTION

With 4 RS-25 Engines and steering Avionics
Delivers propellants from tanks to engines with temperate ranges from **-423° F to 6,000° F** for a span of **8 1/2 minutes**.

FORWARD SKIRT
LIQUID OXYGEN (LOX) TANK

INTERTANK

LIQUID HYDROGEN (LH2) TANK

ENGINE SECTION WITH 4 RS-25 ENGINES

SLS CORE STAGE



3 barges carrying 60 LOX-filled trucks

Three 98,000-gallon barges will be used to fill the tank. It takes about 20 tanker trucks of LOX to fill each barge.

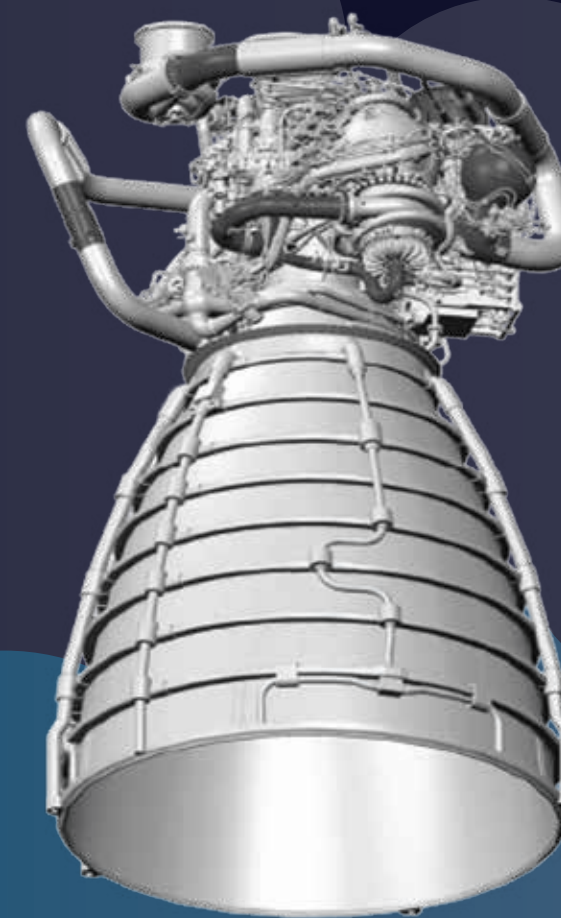


3 barges carrying 54 LH2-filled trucks

Three 200,000-gallon barges will be used to fill the tank. It takes about 18 tanker trucks of LH2 to fill each barge.

4 RS-25 Engines powered with LOX and LH2

The engines are capable of draining an Olympic sized swimming pool in 7.3 minutes.



The RS-25

The engines are powered with liquid hydrogen and liquid oxygen propellants from the core stage at a rate of **1,500 gallons per second**.

Exhaust velocity travels at 9,000 MPH, the same as traveling from NYC to LA in 15 minutes, and it's clean – it's superheated water vapor.



NASA's Space Launch System (SLS), Core Stage GREEN RUN Test - powered by Aerojet Rocketdyne

**AEROJET
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