NASA's Space Launch System SLS RS-25 AWESOMENESS

The Most Reliable, Flight Proven Engine Ever Built.

Powered by Aerojet Rocketdyne



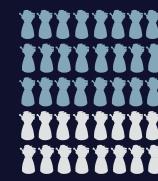
The RS-25 engine is a reliable, high-performance engine in a class all by itself.

The RS-25 engines are flight proven. A collective 1.1 M seconds of hot-fire experience and 405 engine flights.

SLS REACHES MACH 23
Faster than 17,000 MPH in just 8.5 minutes

Anticipating the need for new engines after the current inventory is expended, NASA and Aerojet Rocketdyne have restarted production of new RS-25s that will cost at least 30 percent less than previous RS-25 engines while providing 521,000 pounds of thrust, and will operate at 111% power level.





24 ENGINES
IN PRODUCTION
16 IN INVENTORY

FORWARD SKIRT
LIQUID OXYGEN
(LOX) TANK
INTERTANK

LIQUID
HYDROGEN
(LH2) TANK

ENGINE SECTION
WITH 4 RS-25
ENGINES



Upgraded for SLS from the Space Shuttle program, engines 2045, 2056, 2058 and 2060 will support the first SLS flight, Artemis I, and the Core Stage Green Run test. These four flight proven engines contributed to 21 successful Space Shuttle flights for more than three decades. Two of the engines supported the last Space Shuttle mission, STS-135, and now they will usher in a new era of exploration.

ENGINE 2056

9 Starts

4,389 Seconds

4 Flights

Including Hubble
Telescope Servicing

2056 2045

2058

ENGINE 2045

14 Starts 7,016 Seconds 12 Flights

Including John Glenn Flight and Shuttle Final Mission

ENGINE 2058

8 Starts

4,105 Seconds

6 Flights

6 Missions to Space Station ENGINE 2060

6 Starts 2,951 Seconds 3 Flights

Including Shuttle Final Mission

Green Run is composed of a series of tests validating core stage design and performance. It also verifies the readiness of the stage to be shipped to Kennedy Space Center for final processing and integration before launch. Green Run includes several first-time events for the world's largest rocket stage.

2060

