



Case Use History SLS Artemis II-A (Left) Booster

Fwd Dome 55	STS-111, 120, 131, QM-2
Cylinder 89	TEM-9, STS-73, 94, STS-100, 115, 127, QM-1
Capture Feature Cylinder 43	STS-111, 120, DM-2, QM-1
Cylinder 104	TEM-6, STS-51, 69, STS-94, 101, 124, FSM-1, FVM-1
Capture Feature Cylinder 64	STS-48, 60, 73, 89, STS-100, 123, 134, FSM-10
Cylinder 37	STS-8, 23, TEM-10
Capture Feature Cylinder 92	STS-107, 123, 134
Cylinder 31	STS-8, 23, TEM-10
Capture Feature Cylinder 88	STS-110, 120, DM-2
Stiffener 77	QM-1
Stiffener 76	QM-1
Attach 60	STS-126, QM-1
Aft Dome 42	QM-1



Shuttle Flights

47

Static Tests

9

DM — Demonstration Motor • **FSM** — Flight Support Motor
FVM — Flight Verification Motor • **STS** — Space Transportation System
TEM — Technical Evaluation Motor • **QM** — Qualification Motor

Key Facts:

- The twin boosters contribute 3.6 million pounds of thrust each, providing more than 75% of the SLS's total thrust at launch.
- Only one never-flown component is part of the SLS boosters for Artemis II.
- Artemis II booster hardware has supported 14 static tests.
- Artemis II booster hardware has supported 84 total Space Shuttle Program missions.
- The most flown components of the Artemis II boosters are the left and right-hand forward skirts with 14 total flights each that supported the maiden flight of Endeavour (STS-49) and the last space shuttle night launch (STS-131) among other missions.



Case Use History SLS Artemis II-B (Right) Booster

Fwd Dome 56	STS-113
Cylinder 86	STS-5, 20, TEM-10, FSM-17
Capture Feature Cylinder 46	FSM-11, STS-113, 119
Cylinder 82	STS-26, 27, 38, 52, STS-68, 85, 98, QM-1
Capture Feature Cylinder 89	STS-110, 120, FSM-17, QM-1
Cylinder 33	STS-8, 48, TEM-11
Capture Feature Cylinder 72	STS-52, 68, 85, 106 TEM-13, STS-131
Cylinder 61	STS-14, TEM-7, STS-75 STS-88, 110, 122, 132
Capture Feature Cylinder 56	STS-37, 53, 70, 86, STS-92, 114, 126, DM-2
Stiffener 78	New
Stiffener 36	STS-66, 82, 103, STS-134, FVM-2
Attach 53	STS-126, QM-1
Aft Dome 45	STS-26, 32, 48, 57, STS-71, 83, 101, 130, TEM-13



Shuttle Flights
64

Static Tests
9

New
1

DM — Demonstration Motor • **FSM** — Flight Support Motor
FVM — Flight Verification Motor • **STS** — Space Transportation System
TEM — Technical Evaluation Motor • **QM** — Qualification Motor

Key Facts:

- The SLS booster is the largest solid rocket booster ever built for human spaceflight.
- The component with the earliest shuttle flight is cylinder 86 that supported STS-5 in 1982. Cylinder 64 and stiffener 36 are the most recently used components, supporting STS-134, the final flight of Endeavour, in 2011.
- Components from the first (STS-49) and last (STS-134) flight of Endeavour support Artemis II.
- Four different components that flew with Northrop Grumman executive Rick Mastracchio on his space shuttle missions will fly on Artemis II.
- Seven different components that will fly on Artemis II supported Northrop Grumman executive Dan Tani on his space shuttle flights, STS-108 and STS-120.
- Cylinder 19 and aft skirt 29 supported Northrop Grumman executive Doug Hurley on his first space shuttle mission, STS-127.