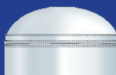


Case Use History SLS Artemis II-A (Left) Booster

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



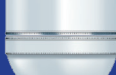
QM-1

Attach 60



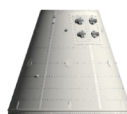
STS-126, QM-1

Aft Dome 42



QM-1

Frustum 16



STS-25, STS-35,
STS-50, 51, 66, 75,
STS-85, 101, 110, 119

Fwd Skirt 16



STS-23, 31, 30,
STS-38, 42, 54, 62,
STS-69, 81, 89, 99,
STS-105, 120, 129

Aft Skirt 21



STS-25, 39, 52, 59,
STS-72, 83, 95, 108,
STS-132

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.

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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

Frustum 22



STS-27, 34, 48, 52,
STS-61, 67, 80, 95,
STS-102, 107, 116, 128

Fwd Skirt 19



STS-27, 30, 35, 49,
STS-51, 67, 76, 94,
STS-93, 100, 107, 116,
STS-124, 131

Aft Skirt 29



STS-27, 32, 44, 51,
STS-71, 82, 93, 108,
STS-127

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.

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