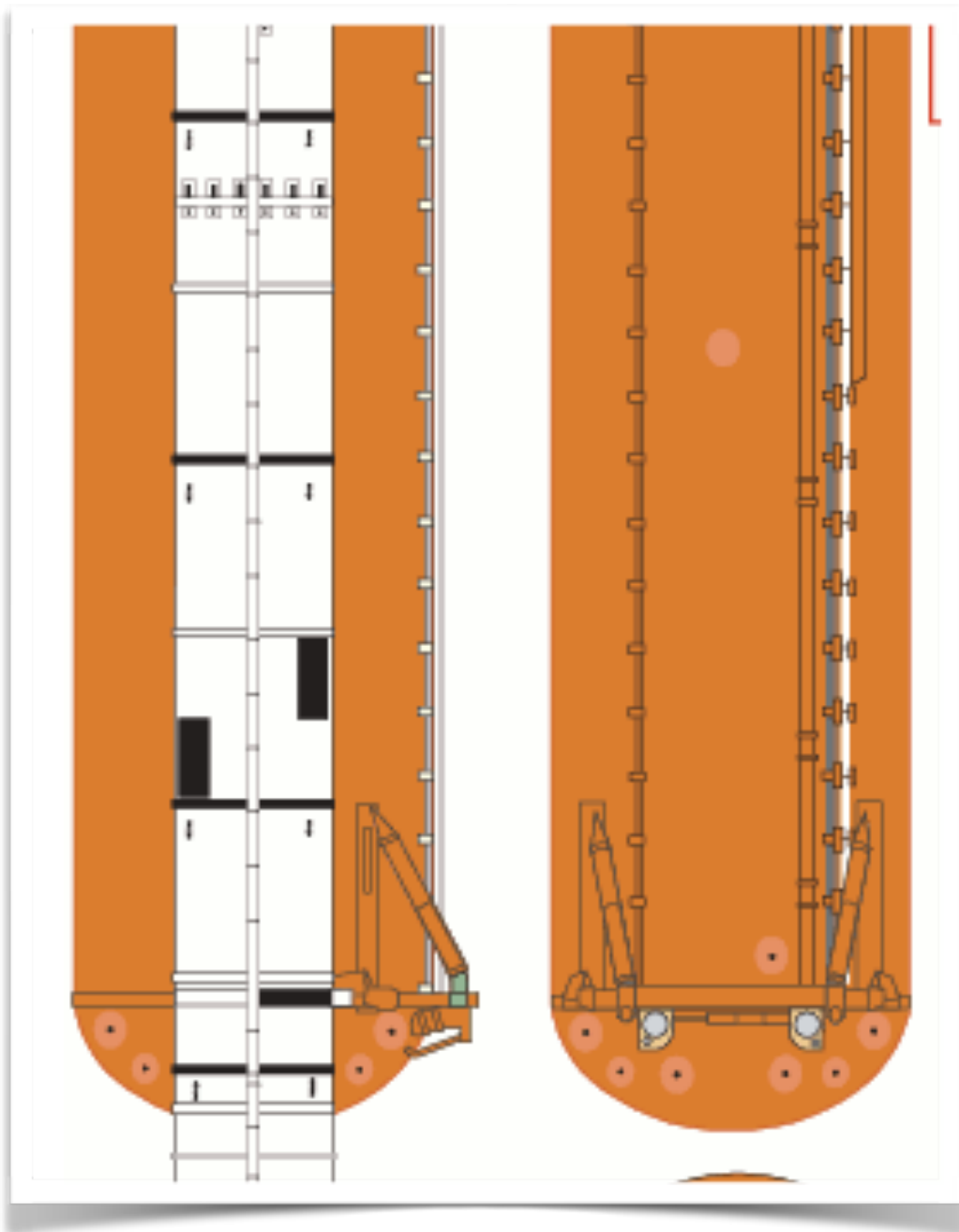


External Tank and SRB Markings

A Guide for the Scale Modeler



By Alfonso X Moreno
2013

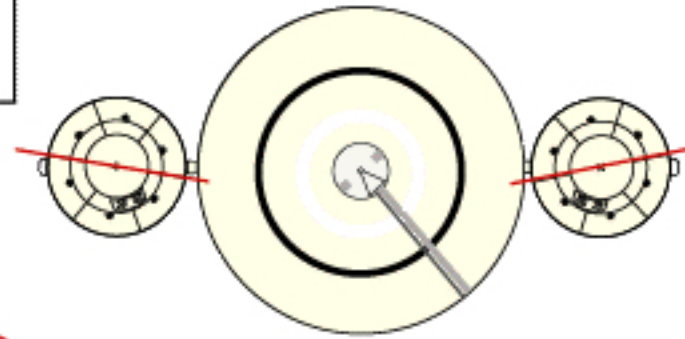




External Tank - Solid Rocket Booster Markings Stack #1

Missions flown:
1981: STS-1

Note details and angles



Bipod design:
45 degree angle (STS-1 through 41-G)

Note detail of fuel lines.
Also note size of bipod foam.

Note position of
"LOADED" markings on SRB's

Note white band and circular patches

Dots only on left side

Note left side PAL ramp

LO2 PAL ramp and LH2 PAL ramp

Light cream color

Note detail STS-1 only

Bipod (cream color)

LOADED



L

R

R

L

R

Note detail Green-left Red-right

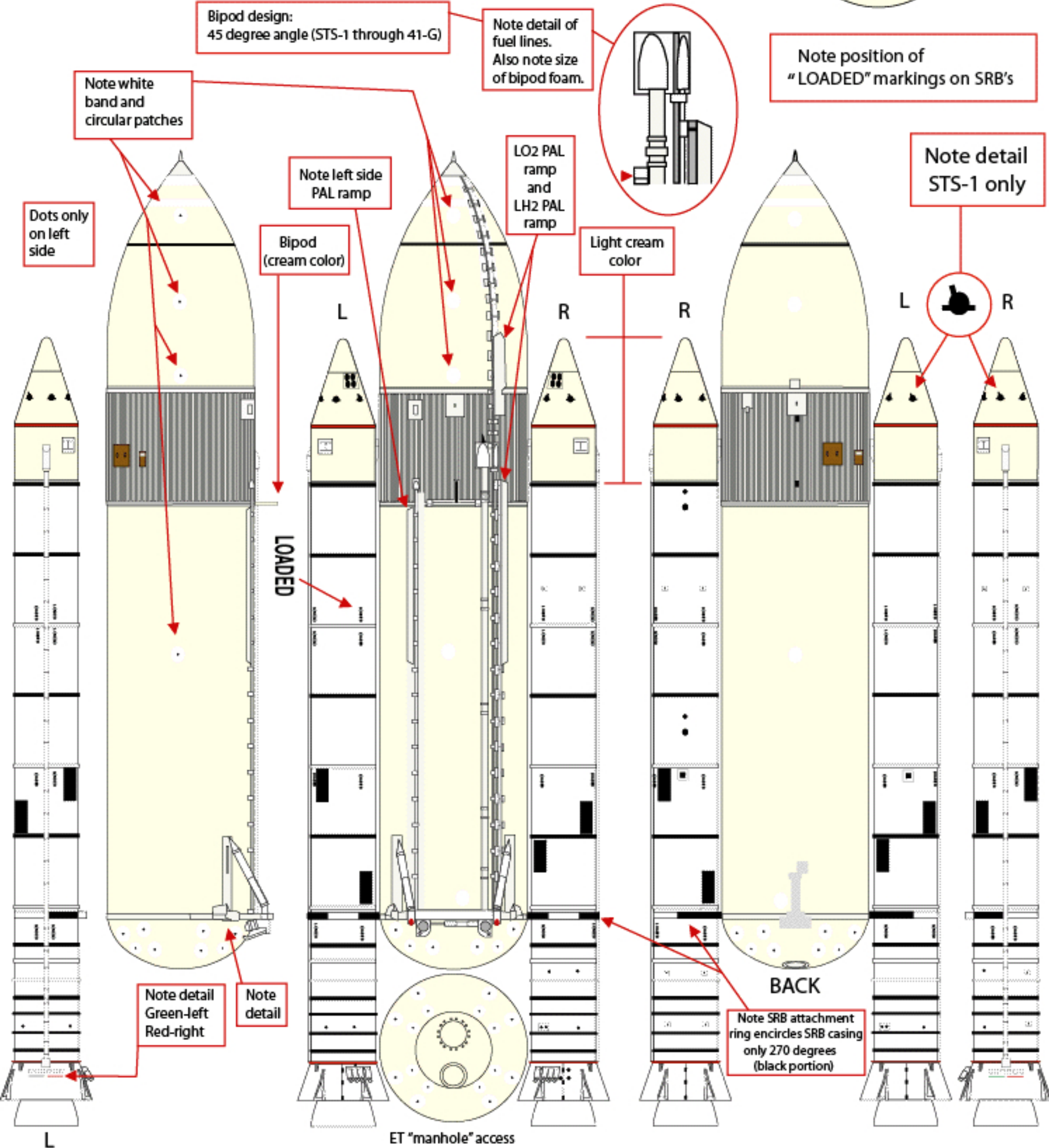
Note detail

BACK

Note SRB attachment ring encircles SRB casing only 270 degrees (black portion)

ET "manhole" access

L

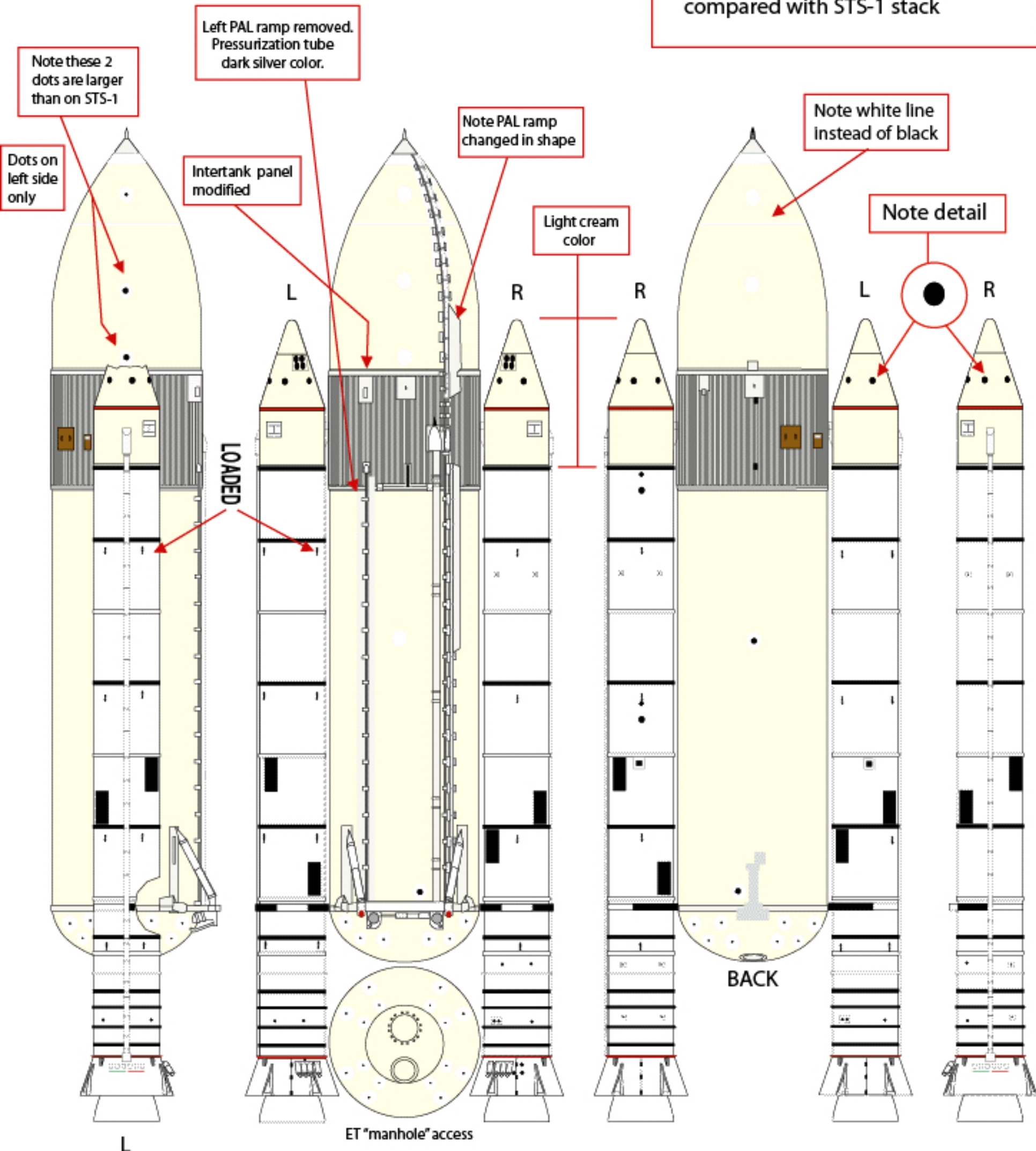




External Tank - Solid Rocket Booster Markings Stack #1.1

Missions flown:
1981: STS-2

“LOADED” markings are smaller and in asymmetrical position when compared with STS-1 stack



Note these 2 dots are larger than on STS-1

Left PAL ramp removed. Pressurization tube dark silver color.

Intertank panel modified

Note PAL ramp changed in shape

Note white line instead of black

Note detail

Light cream color

LOADED

BACK

ET "manhole" access

L

L

R

R

L

R



External Tank - Solid Rocket Booster Markings Stack #1A

"LOADED" markings
identical pattern as
STS-2

Missions flown:
1982: STS-3, STS-4, STS-5
1983: STS-7

Note External Tank color tones

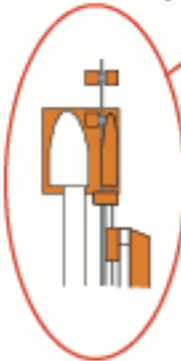
Note traces of
circular patches
from STS-2

STS-5 has no
circular patches
on ET

White cone

STS-5 only

Fuel lines
are rusted
color on STS-3



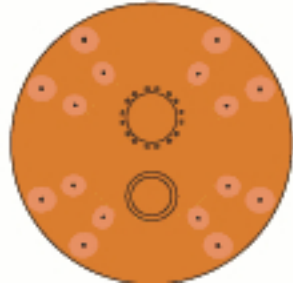
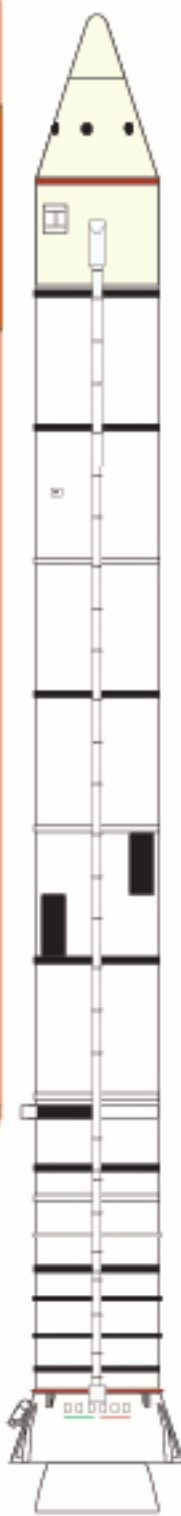
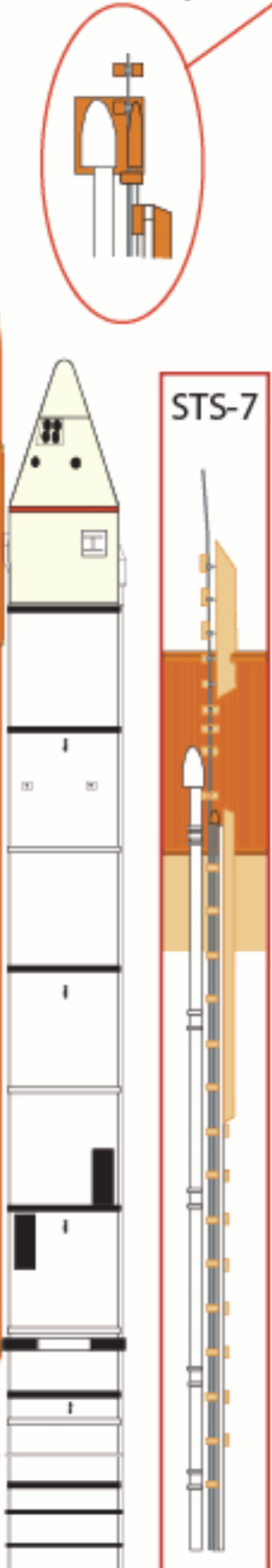
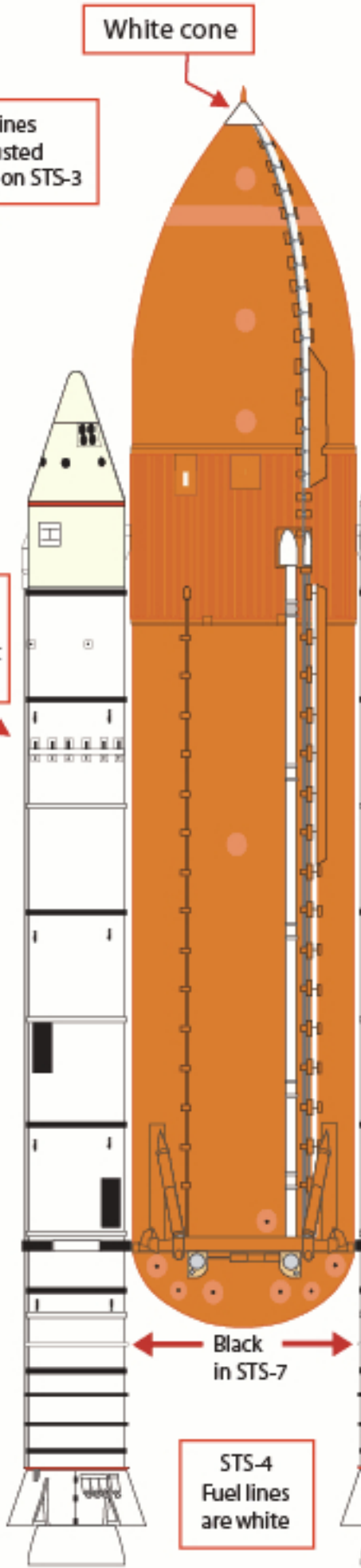
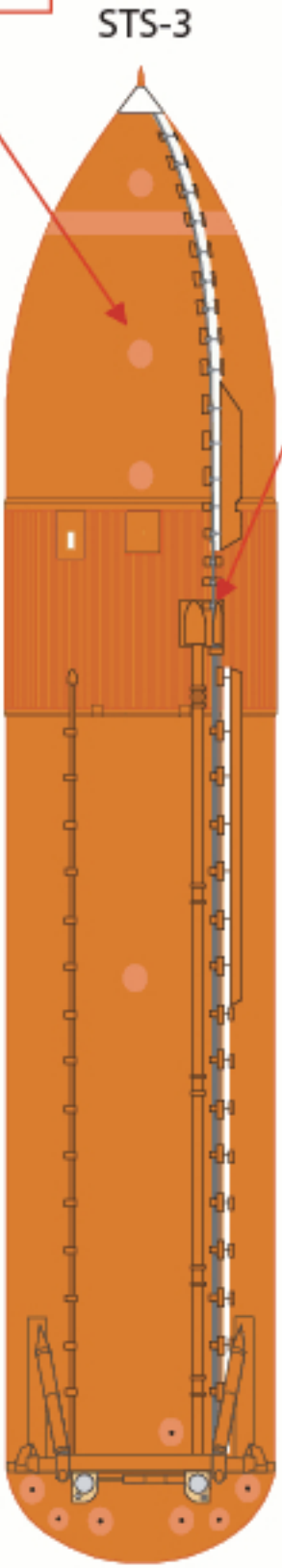
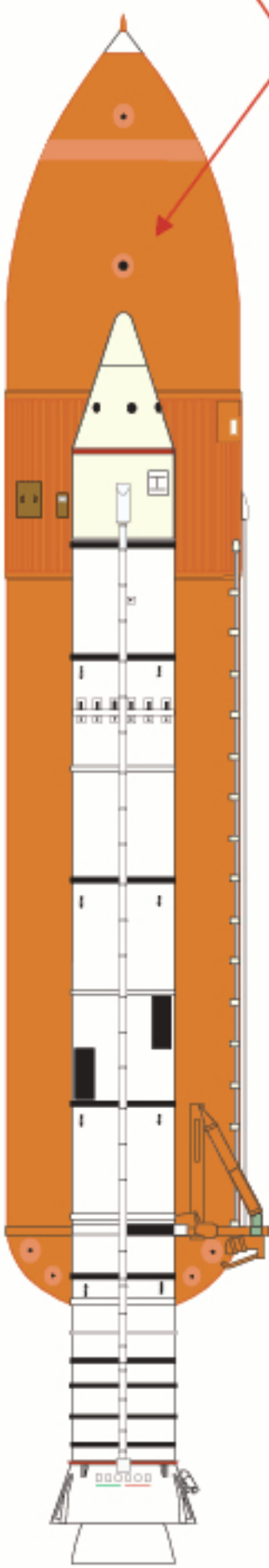
Note detail
(except
STS-7)

STS-7

Black in STS-7

Back

STS-4
Fuel lines
are white



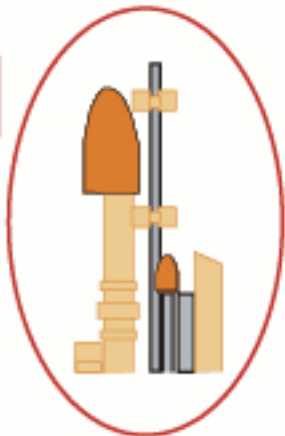
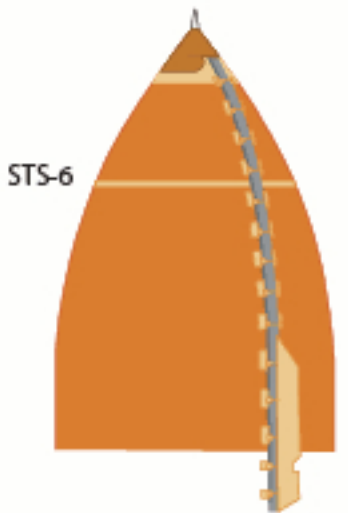


External Tank - Solid Rocket Booster Markings Stack #1B

Missions flown:
1983: STS-6, STS-8

Note cone detail

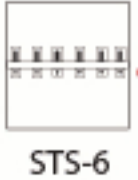
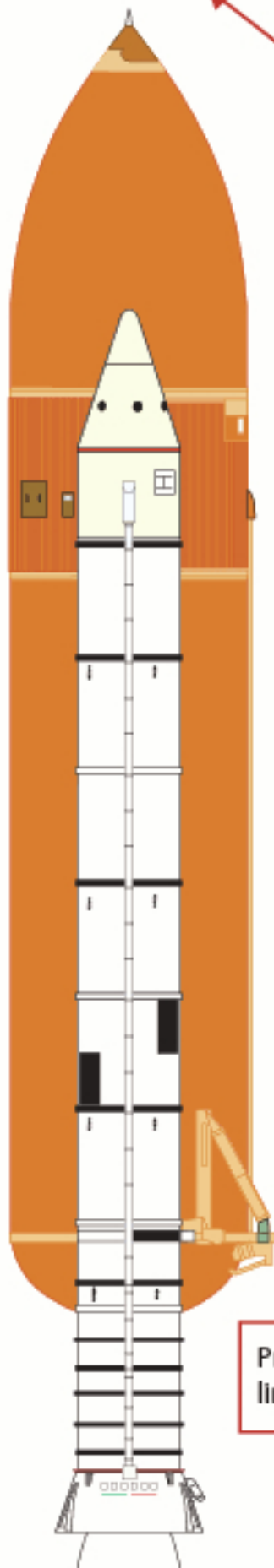
Note detail of fuel lines



Intertank modification
(inner section)

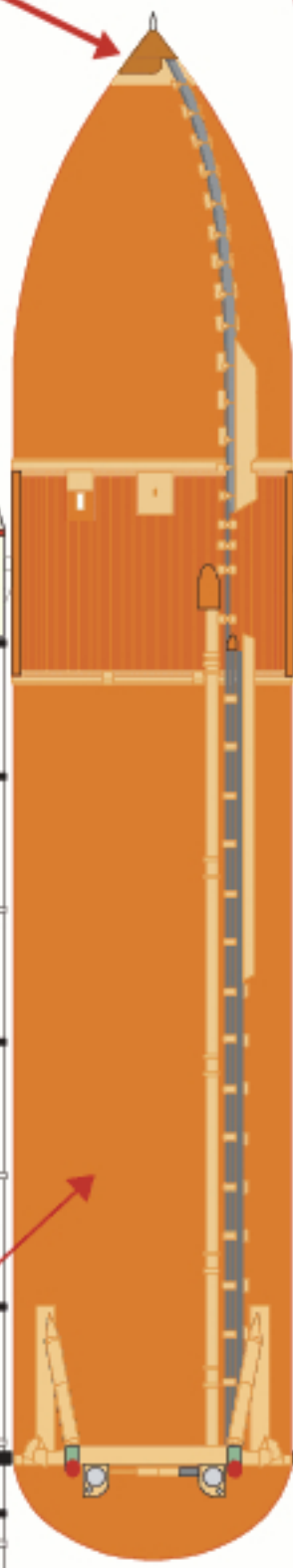
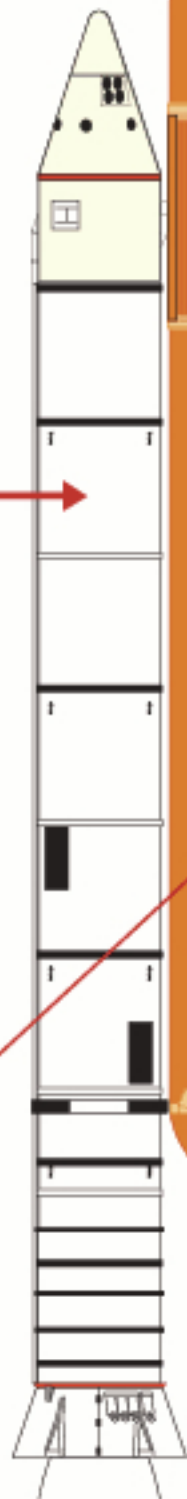
LWT
(Light weight tank)

STS-6
Stripe pattern



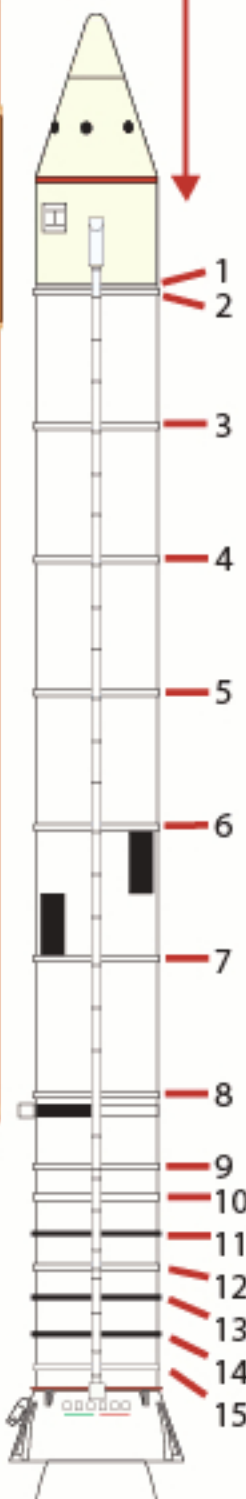
STS-6

Pressurization line removed



Back

12
(White stripe
on STS-8)

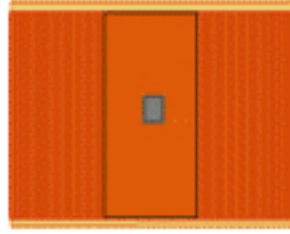
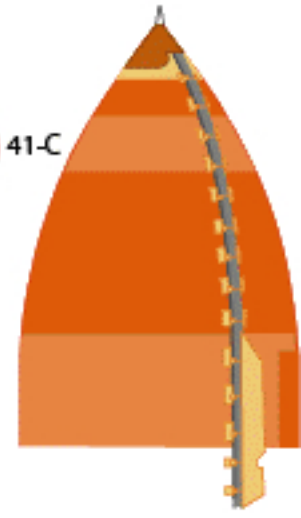


- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

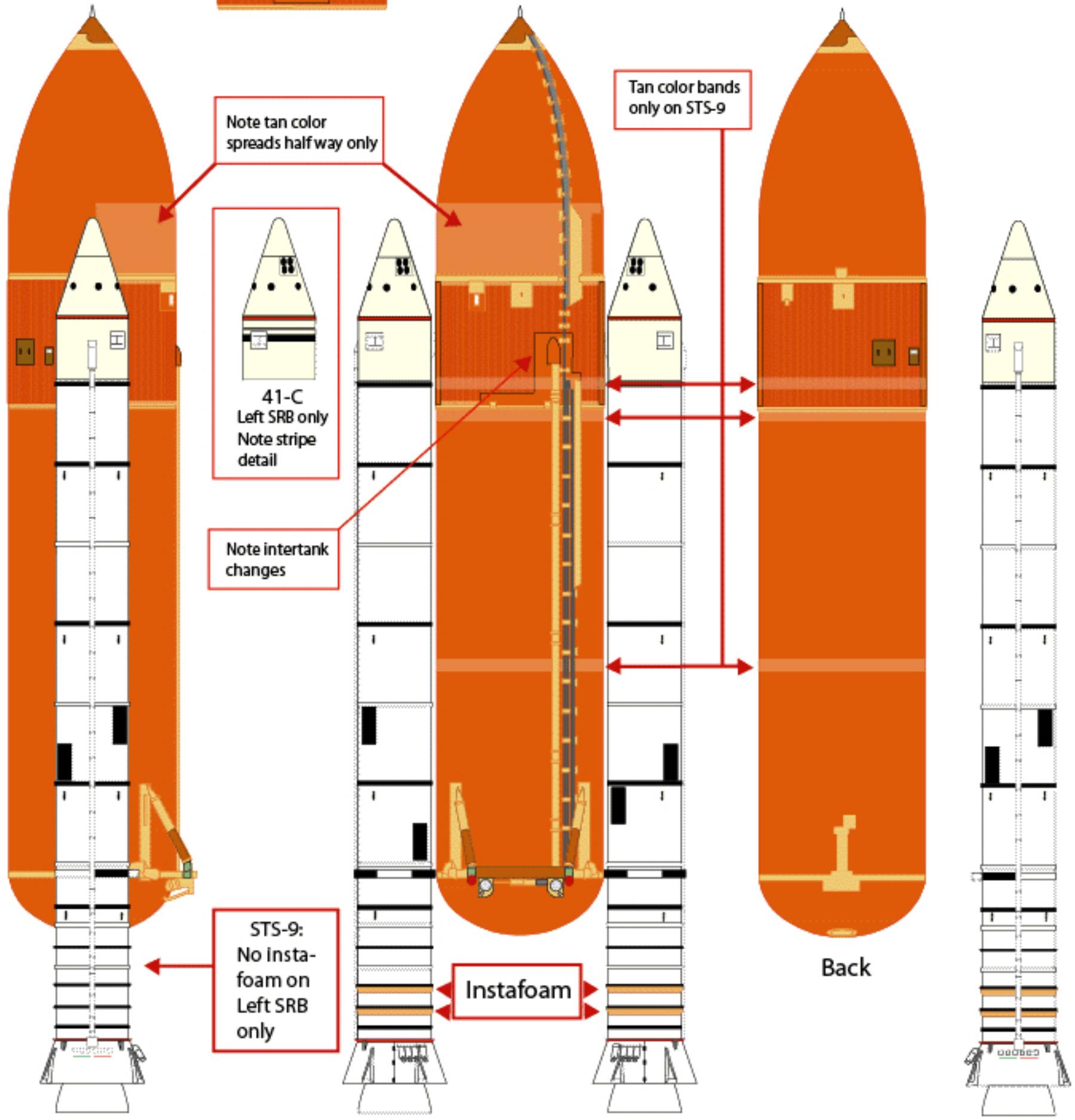


External Tank - Solid Rocket Booster Markings Stack #1C

Missions flown:
1983: STS-9
1984: 41-B, 41-C



Note position of "LOADED" markings.
Applies only to 41-B and 41-C.
STS-9 "LOADED" pattern identical as STS-2





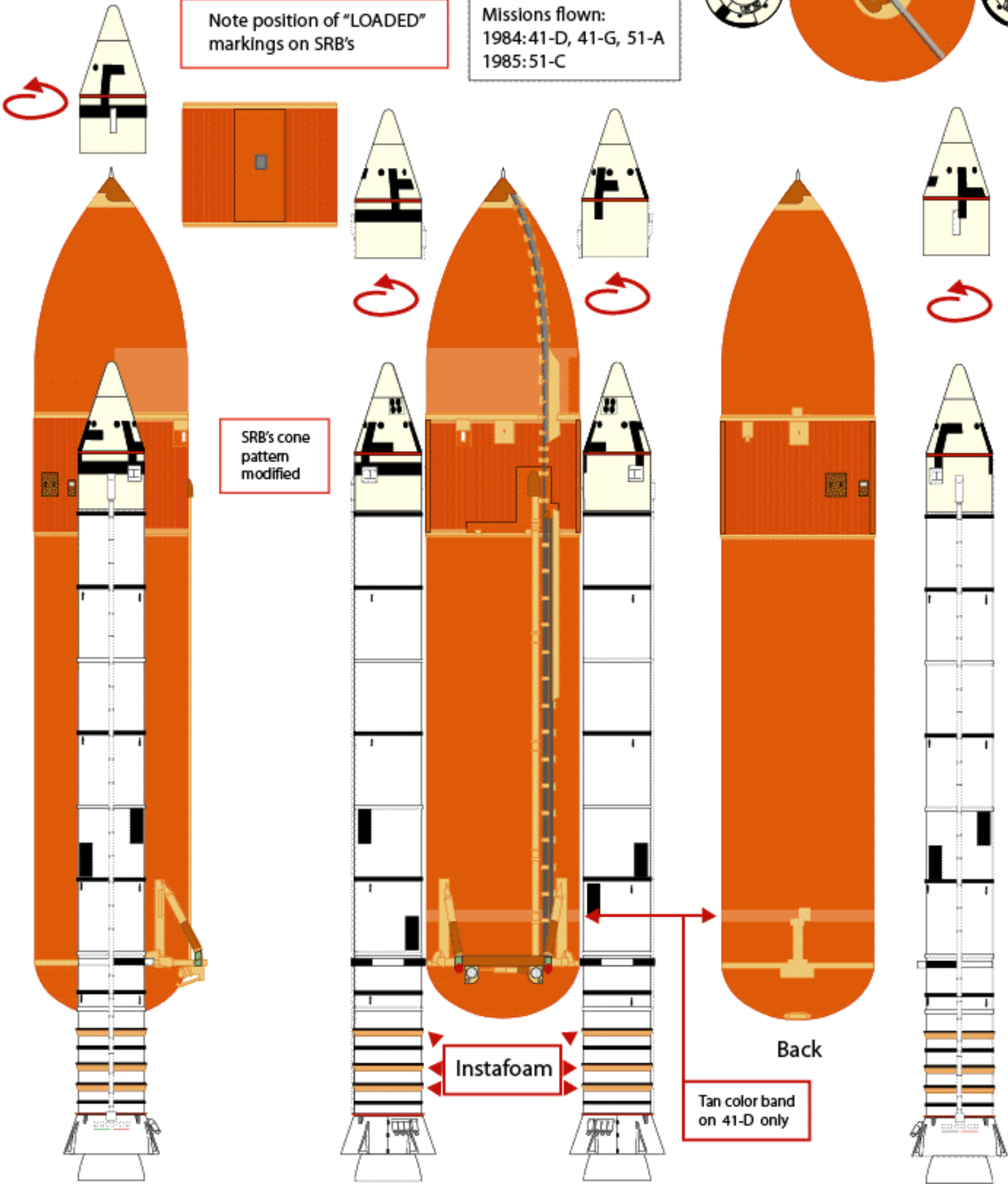
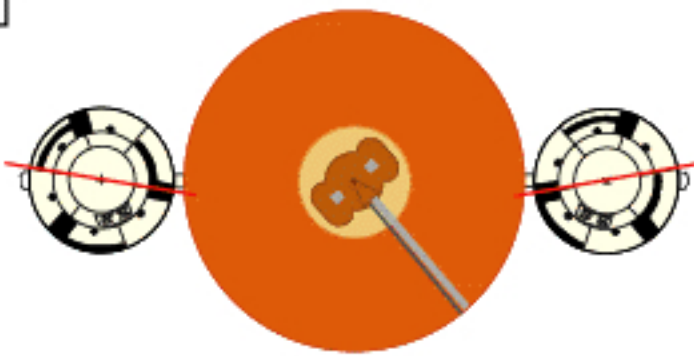
External Tank - Solid Rocket Booster Markings Stack #2

Note detail of SRB markings and angles

Bipod design:
22-30 degree angle (51-A through STS-75)

Note position of "LOADED" markings on SRB's

Missions flown:
1984: 41-D, 41-G, 51-A
1985: 51-C



SRB's cone pattern modified

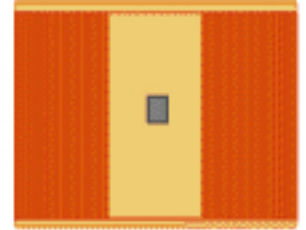
Instafoam

Tan color band on 41-D only

Back



External Tank - Solid Rocket Booster Markings Stack #2A



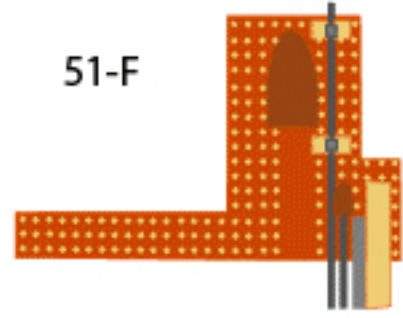
51-J

51-L

Missions flown:
1985: 51-D, 51-B, 51-G, 51-F, 51-I, 51-J, 61-A, 61-B
1986: 61-C, 51-L
1988: STS-26

Systems Tunnel
modification:
STS-26 only

51-F

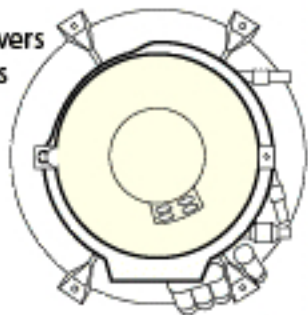


Note darker ET area
below Intertank.
Only for STS-26

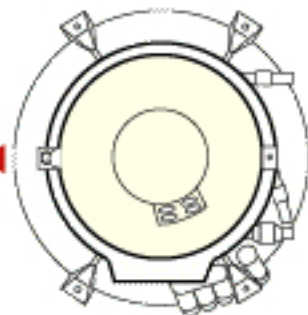
51-D
51-B
51-G
51-F
51-I
51-J
61-A
61-B
61-C

Black
rectangles
on SRB's
removed

SRB ring covers
270 degrees
(STS-1
through
51-L)



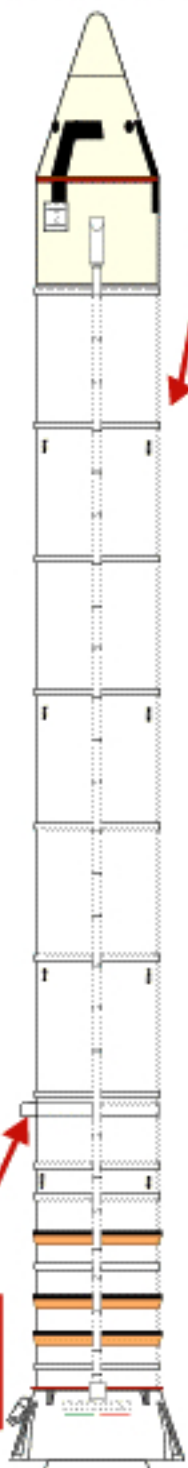
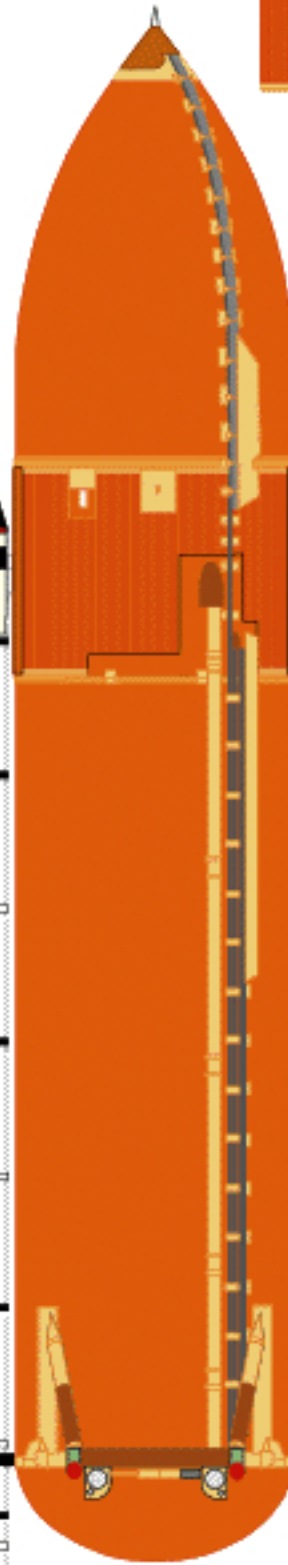
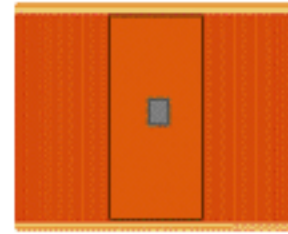
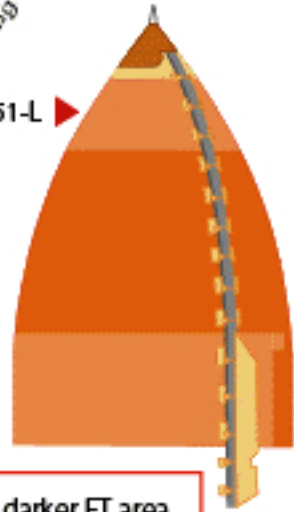
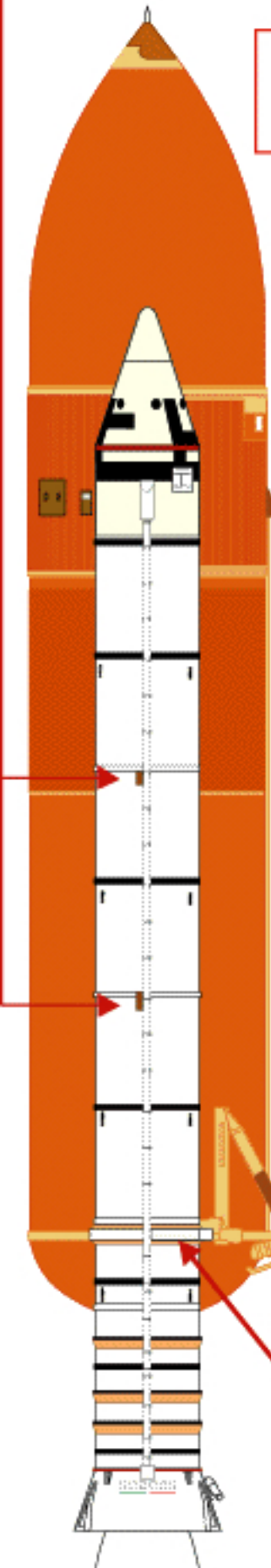
Starting with STS-26,
SRB attachment ring encircles
the SRB casing completely
360 degrees and has instafoam
installed on both SRB's.



51-L
(Stripe pattern
both SRB's)
No black stripes

Back

On 51-L only , both SRB
attachment rings are white,
no instafoam yet.





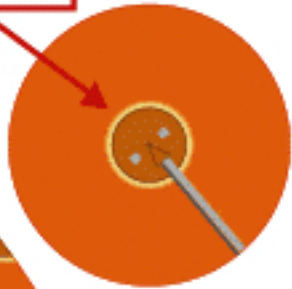
External Tank - Solid Rocket Booster Markings

Stack #2B

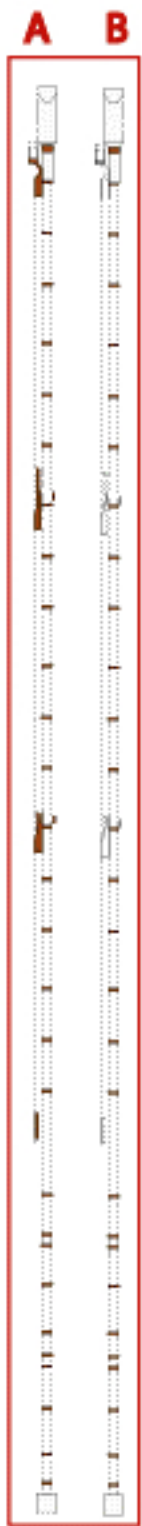
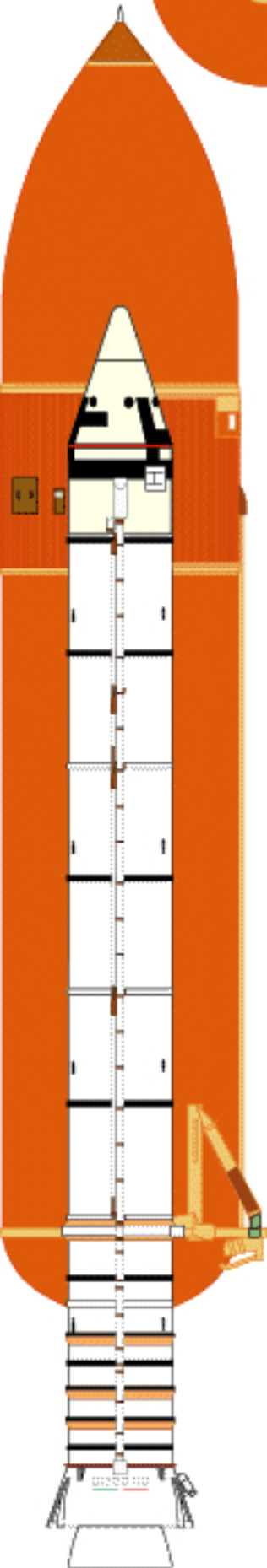
Missions flown:

1988: STS-27	1991: STS-37, STS-39, STS-40, STS-43, STS-48, STS-44
1989: STS-29, STS-30, STS-28, STS-34, STS-33	1992: STS-42, STS-45, STS-49, STS-50, STS-46, STS-47, STS-52, STS-53
1990: STS-32, STS-36, STS-31, STS-41, STS-38, STS-35	1993: STS-54, STS-56, STS-55, STS-57, STS-51, STS-58

Nosecone color changed



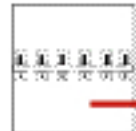
Note position of "LOADED" markings



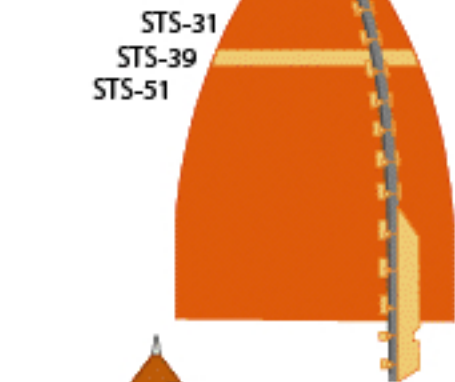
STS-58

Systems Tunnel configuration for Stack 2b:

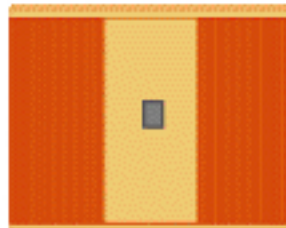
- A: STS-29
STS-30
STS-28
- B: STS-34
up to
STS-58



STS-27
STS-29



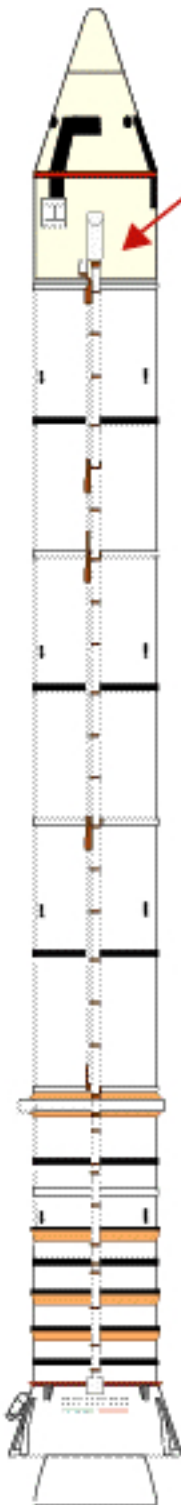
STS-31
STS-39
STS-51



STS-30



Note SRB system tunnel modification for STS-27 only.



Back

Note detail

Systems Tunnel markings: (Left) facing away from Orbiter. (Right) facing towards Orbiter.

L

R



External Tank - Solid Rocket Booster Markings Stack #3

- Missions flown:
 1993: STS-61
 1994: STS-60, STS-62, STS-59, STS-65, STS-64, STS-68, STS-66
 1995: STS-63, STS-67, STS-71, STS-70, STS-69, STS-73, STS-74
 1996: STS-72, STS-75, STS-76, STS-77, STS-78, STS-79, STS-80
 1997: STS-81, STS-82, STS-83, STS-84, STS-94, STS-85, STS-86, STS-87
 1998: STS-89

Bipod design:
 22-30 degree angle with different geometry (STS-76 through STS-107)

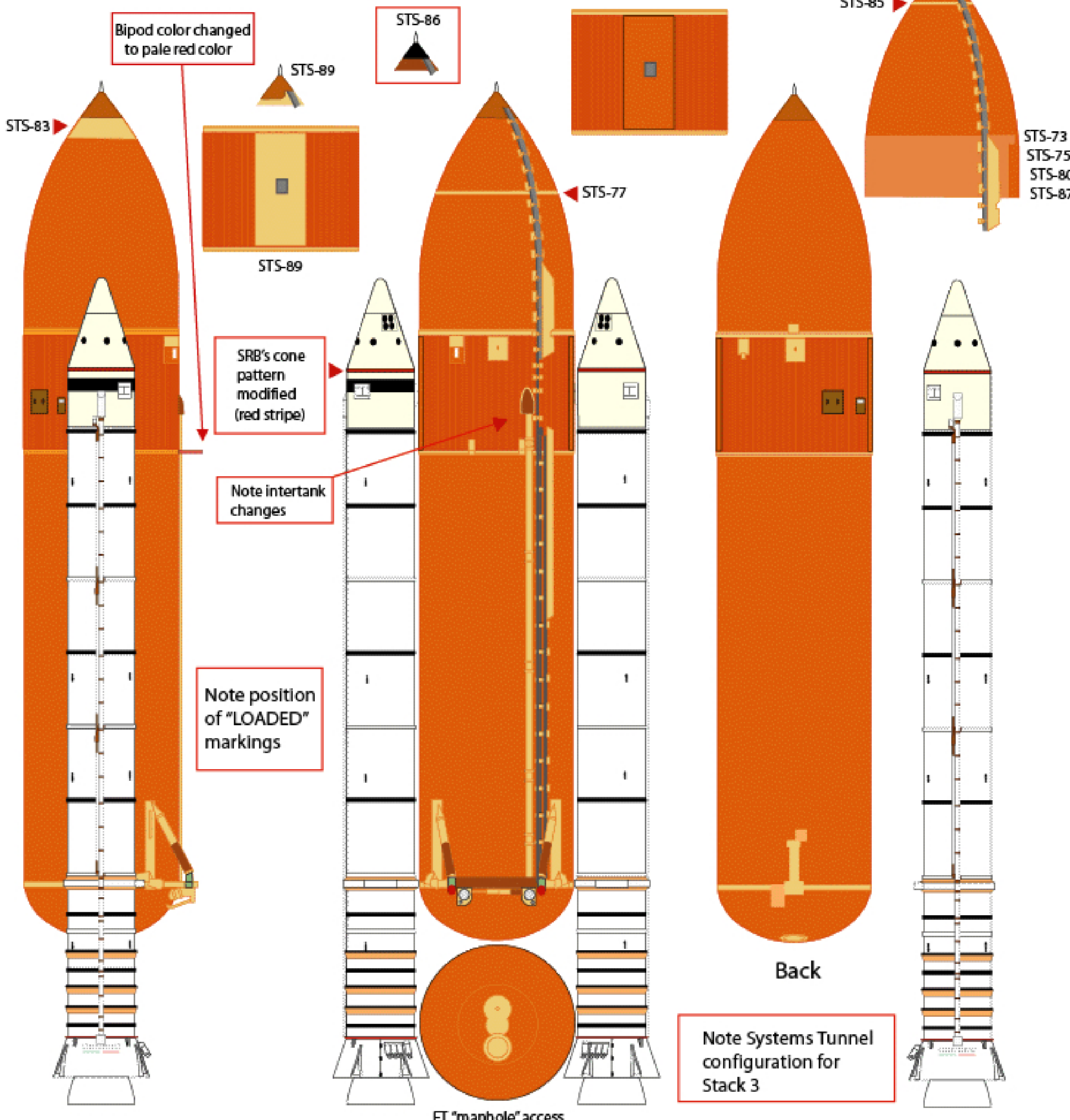
Bipod color changed to pale red color

SRB's cone pattern modified (red stripe)

Note intertank changes

Note position of "LOADED" markings

Note Systems Tunnel configuration for Stack 3



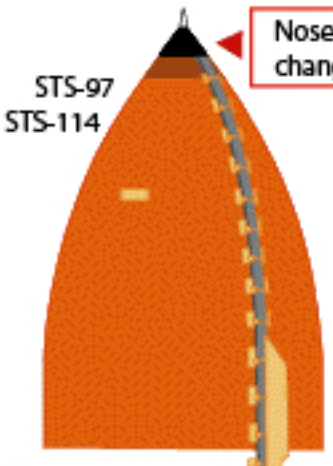
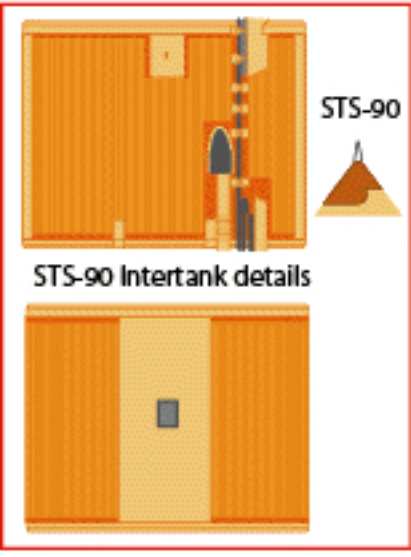


External Tank - Solid Rocket Booster Markings

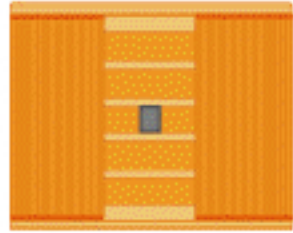
Stack #4

- Missions flown:
- 1998: STS-90, STS-91, STS-95, STS-88
 - 1999: STS-96, STS-93, STS-103
 - 2000: STS-99, STS-101, STS-106, STS-92, STS-97
 - 2001: STS-98, STS-102, STS-100, STS-104, STS-105, STS-108
 - 2002: STS-109, STS-110, STS-111, STS-112, STS-113
 - 2003: STS-107
 - 2005: STS-114*

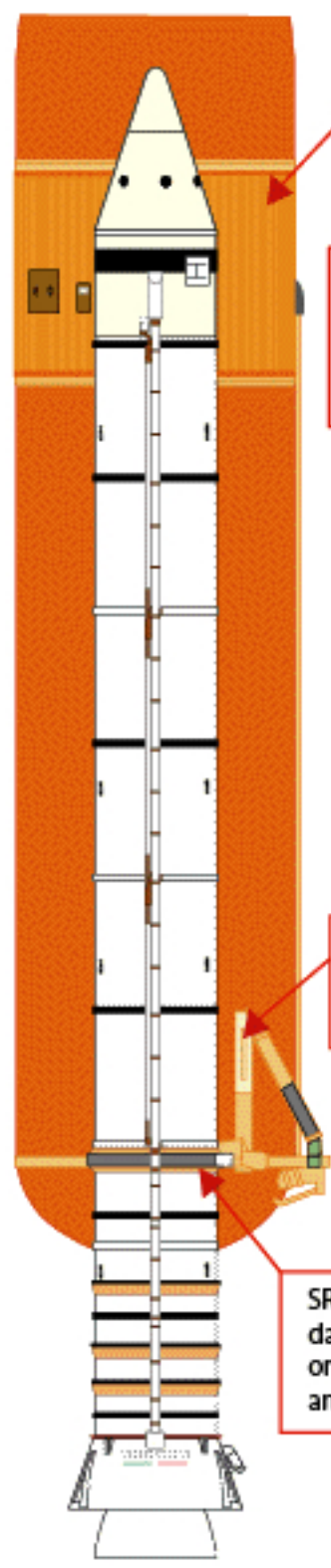
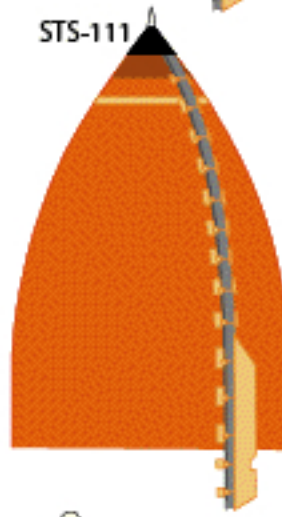
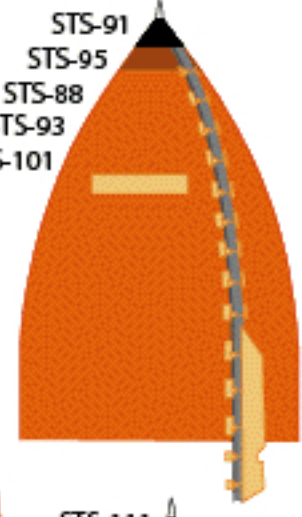
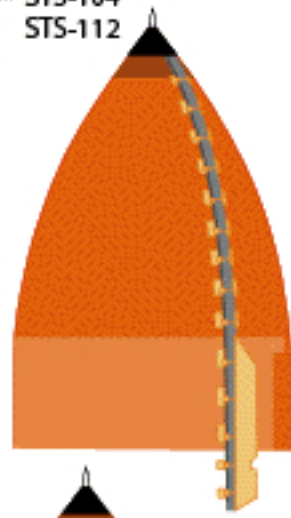
- STS-96
- STS-103
- STS-106
- STS-102
- STS-104
- STS-112
- STS-91
- STS-95
- STS-88
- STS-93
- STS-101



SLWT started with STS-91



SLWT (Super light weight tank)



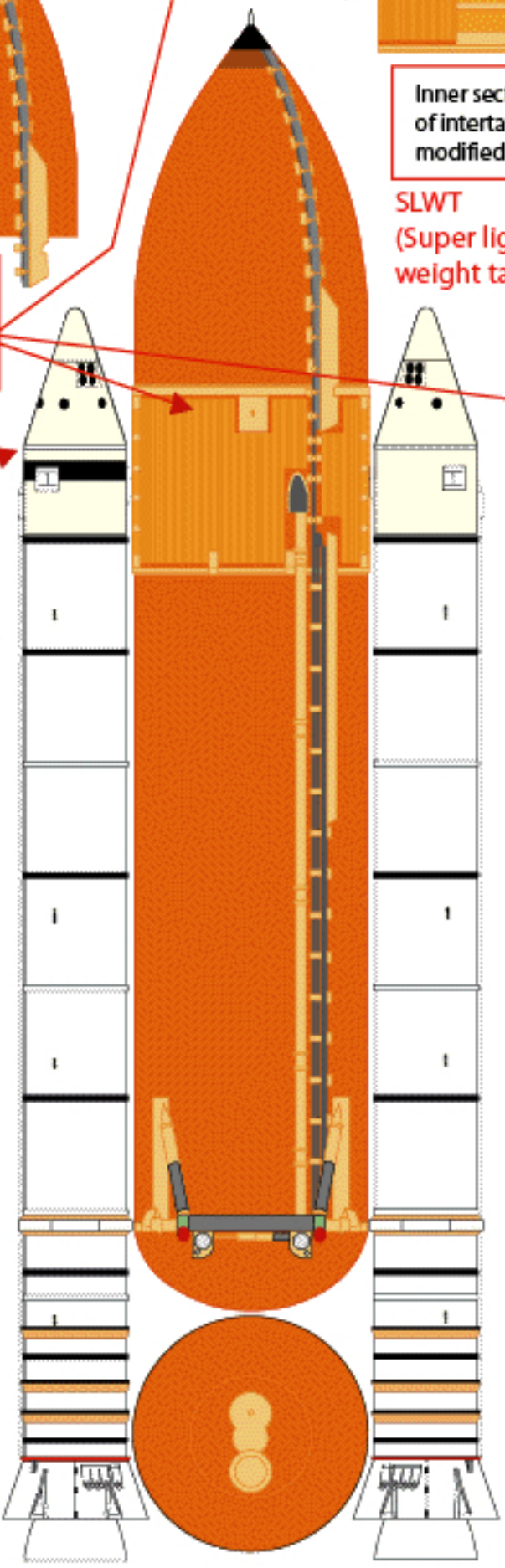
Intertank modification, lighter color, note all details

SRB's cone pattern modified (white stripe)

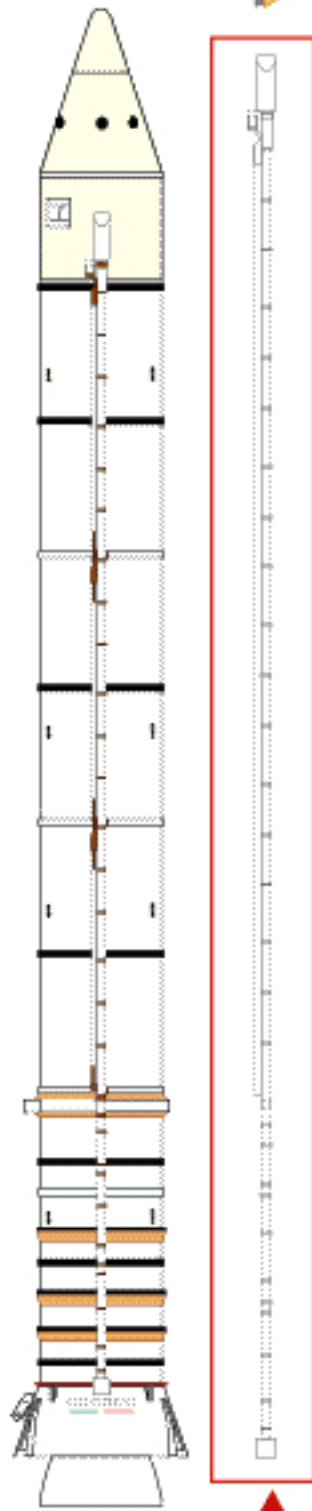
Bipod foam removed on STS-114*

Half of support is light cream on STS-114

SRB ring is dark gray on STS-107 and STS-114



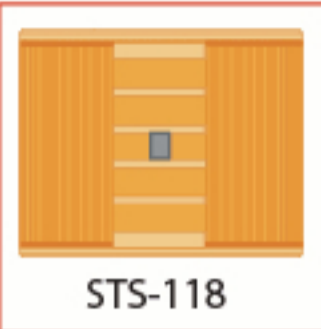
Systems Tunnel configuration for STS-114 only





External Tank - Solid Rocket Booster Markings Stack #5

Missions flown:
2006: STS-121, STS-115, STS-116
2007: STS-117, STS-118
*2011: STS-134



STS-118

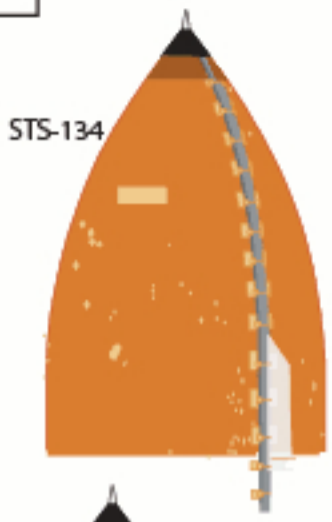


STS-121 only

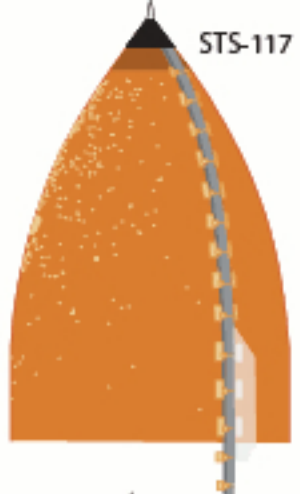
ET modification: PAL ramps removed
but footprints still can be seen



New intertank panel design implemented on STS-116



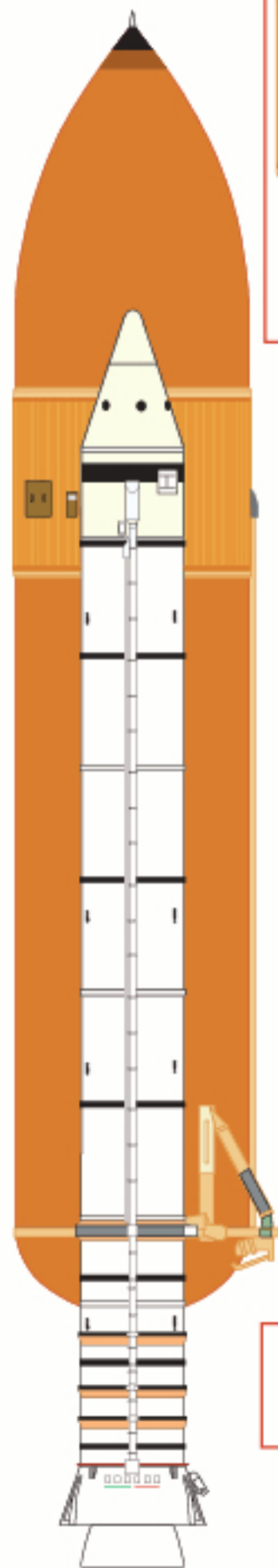
STS-134



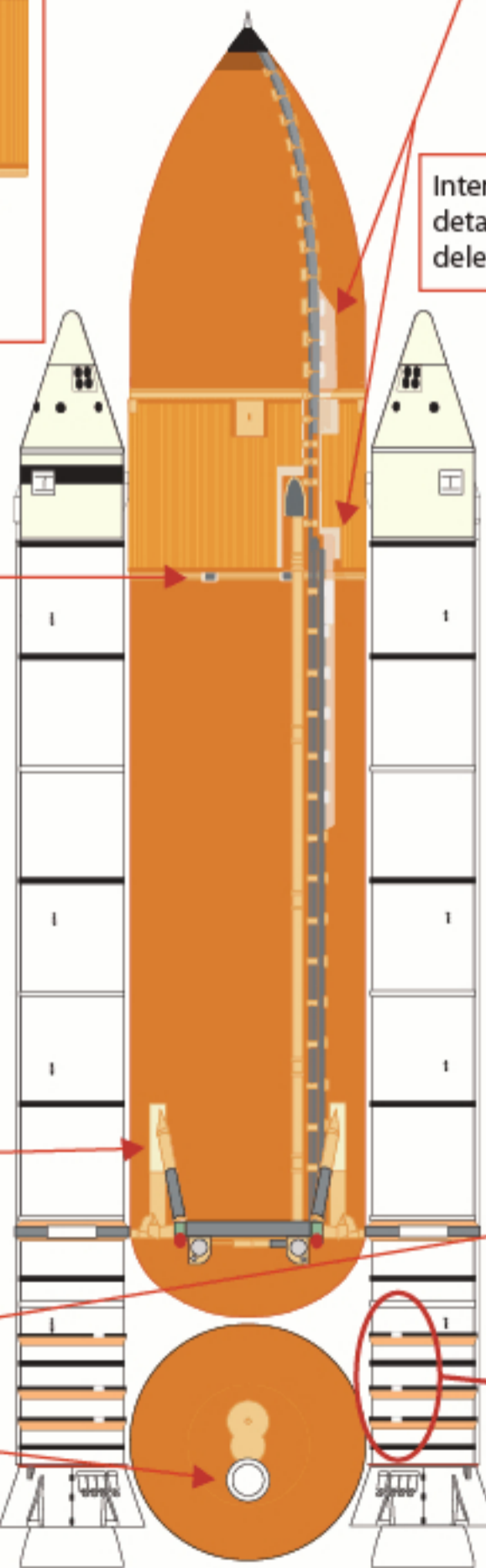
STS-117



STS-116



Bipod modification



Interstage detail deleted



Back

ET-122 for STS-134 was repaired after hurricane Katrina. A commemorative logo was added to the interstage panel door on the ET.



Note lighter color tones

Note color for STS-117



Right srb ring is white on STS-118

Note details on SRB's (same details are seen on back of SRB'S) Changes also apply to STS-114



External Tank - Solid Rocket Booster Markings Stack #5A

STS-122

Missions flown:
2007: STS-120
2008: STS-122

LH2 PAL ramp
footprint deleted

STS-120 only

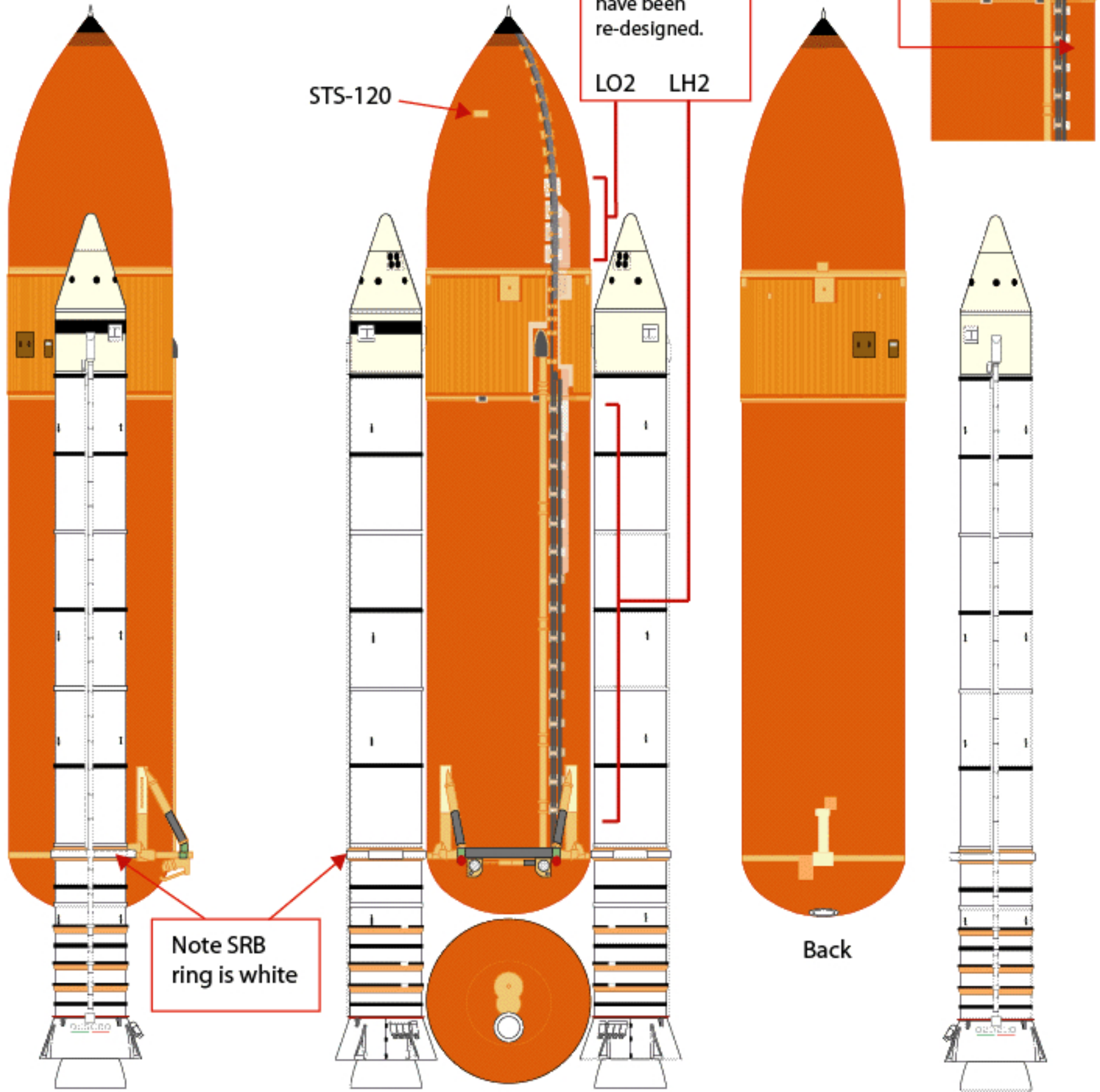
ET modification:
Ice/Frost ramps
have been
re-designed.

LO2 LH2

STS-120

Note SRB
ring is white

Back

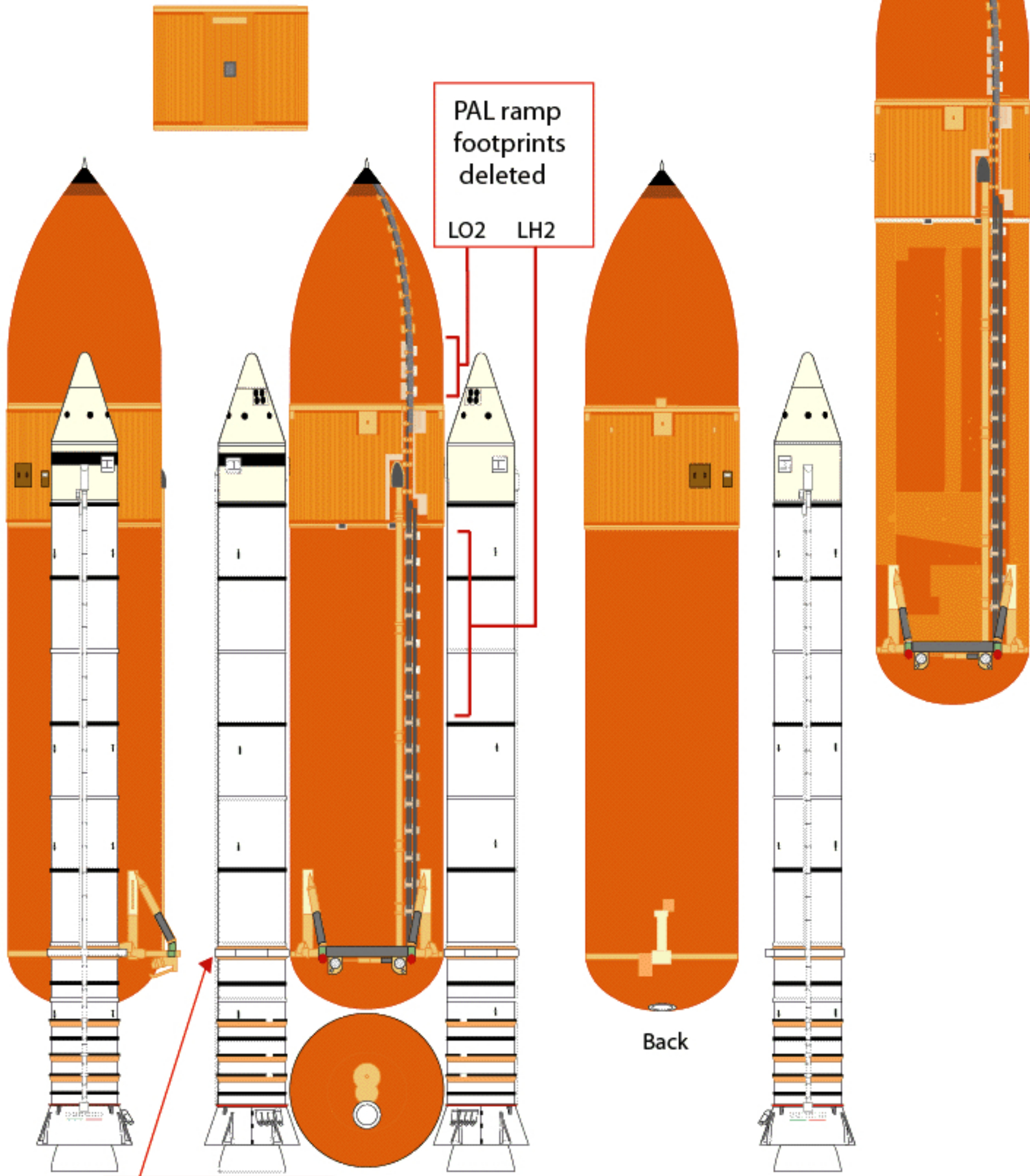




External Tank - Solid Rocket Booster Markings Stack #6

Missions flown:
2008: STS-123, STS-124

STS-124

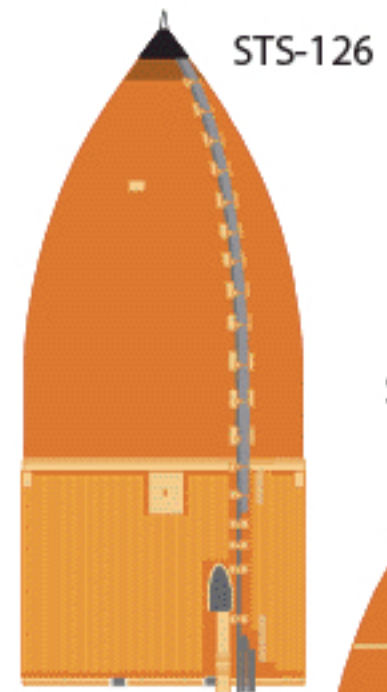


Note SRB ring is white

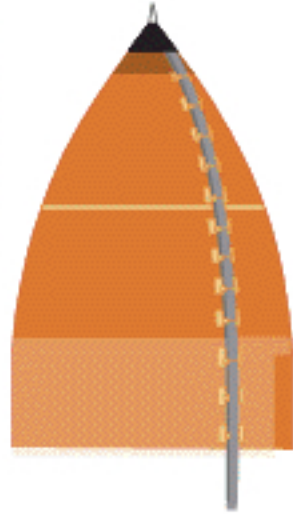


External Tank - Solid Rocket Booster Markings Stack #6A

Missions flown:
2008: STS-126
2009: STS-119, STS-125, STS-127, STS-128, STS-129
2010: STS-130

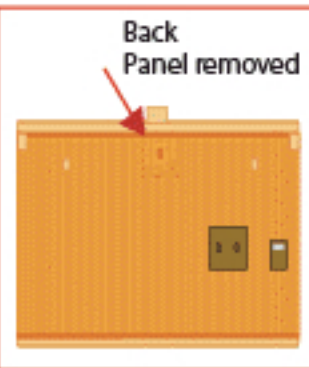


STS-127



Intertank
variation:
white area
is deleted

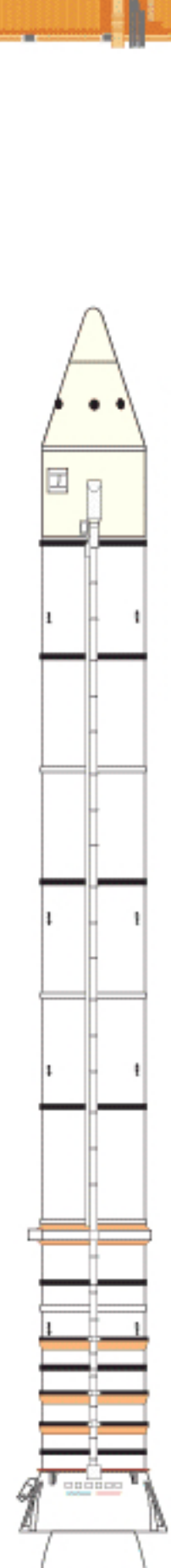
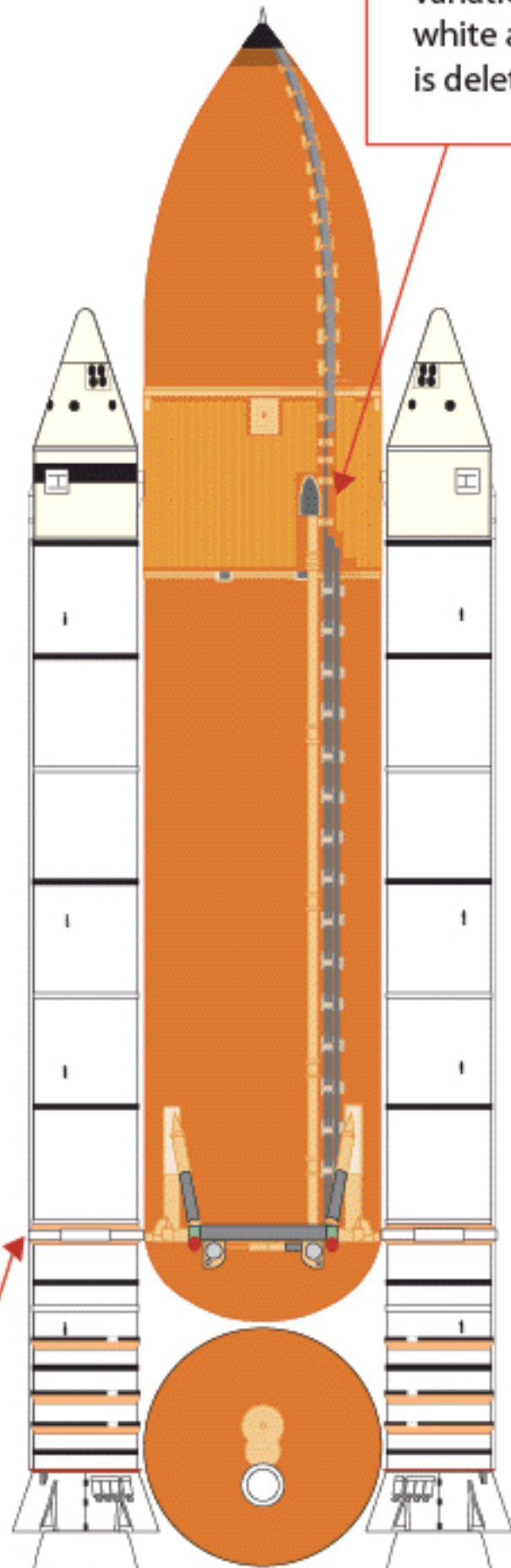
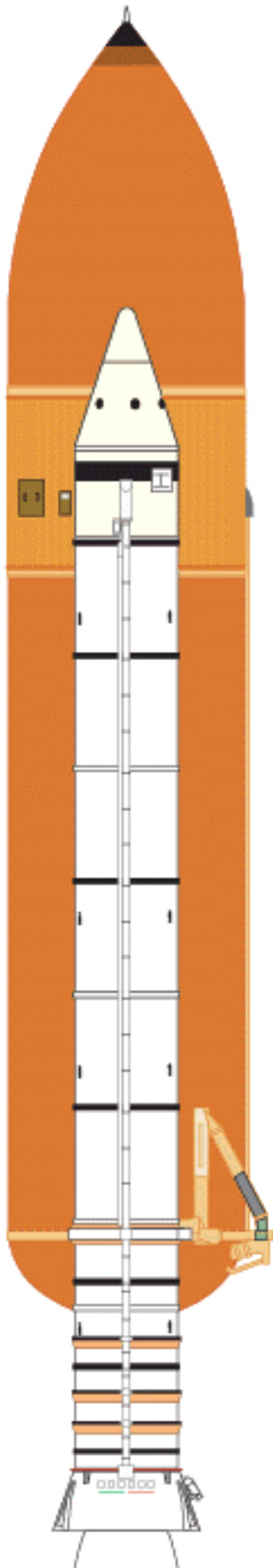
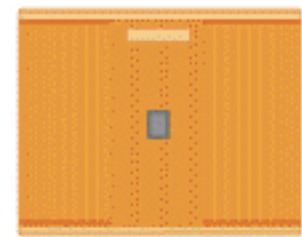
Back
Panel removed



STS-128
STS-129
STS-130

Back

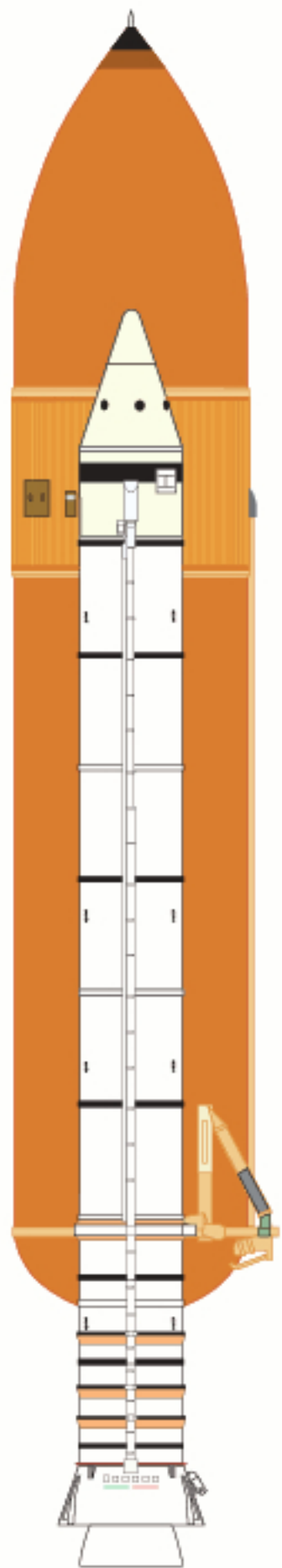
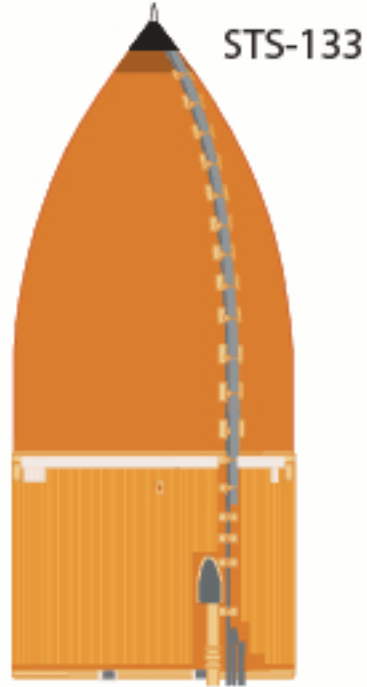
Note SRB ring is white



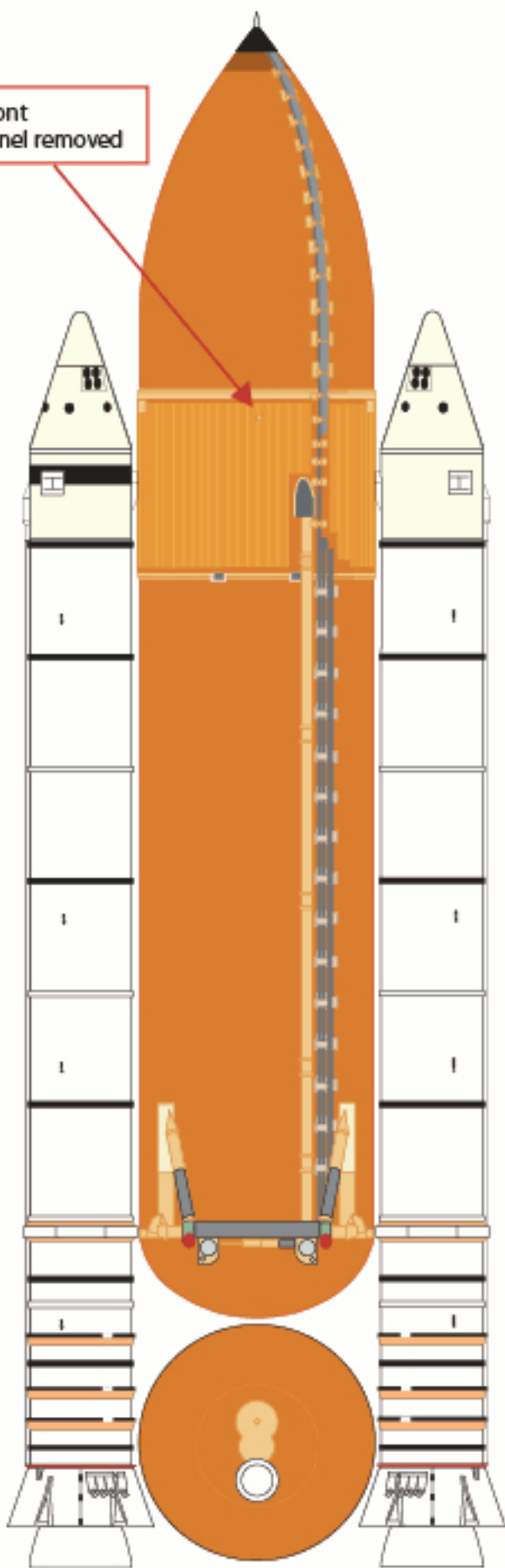


External Tank - Solid Rocket Booster Markings Stack #6B

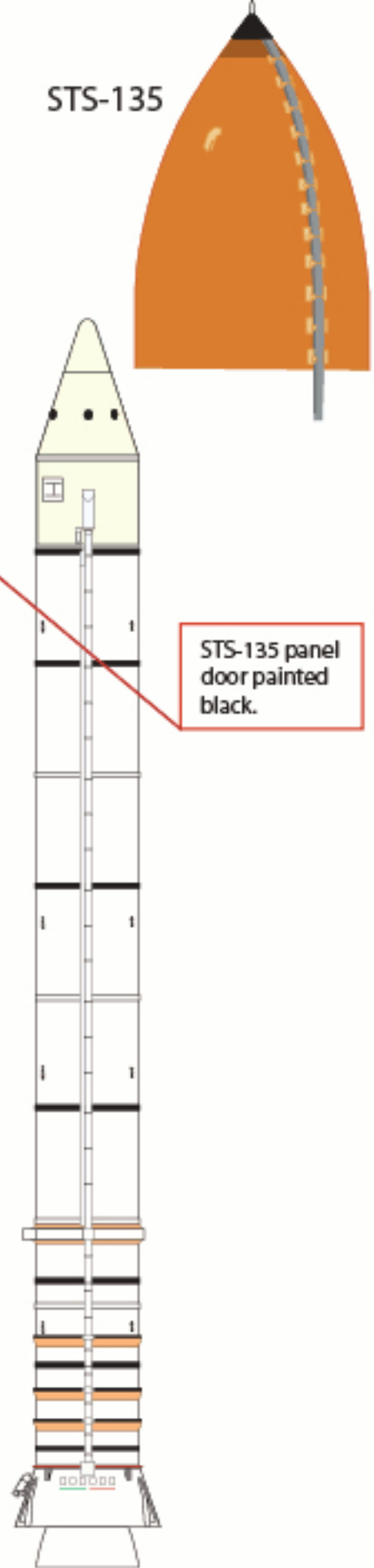
Missions flown:
2010: STS-131, STS-132
2011: STS-133, STS-135



Front Panel removed



Back



STS-135 panel door painted black.

STS-133

STS-135