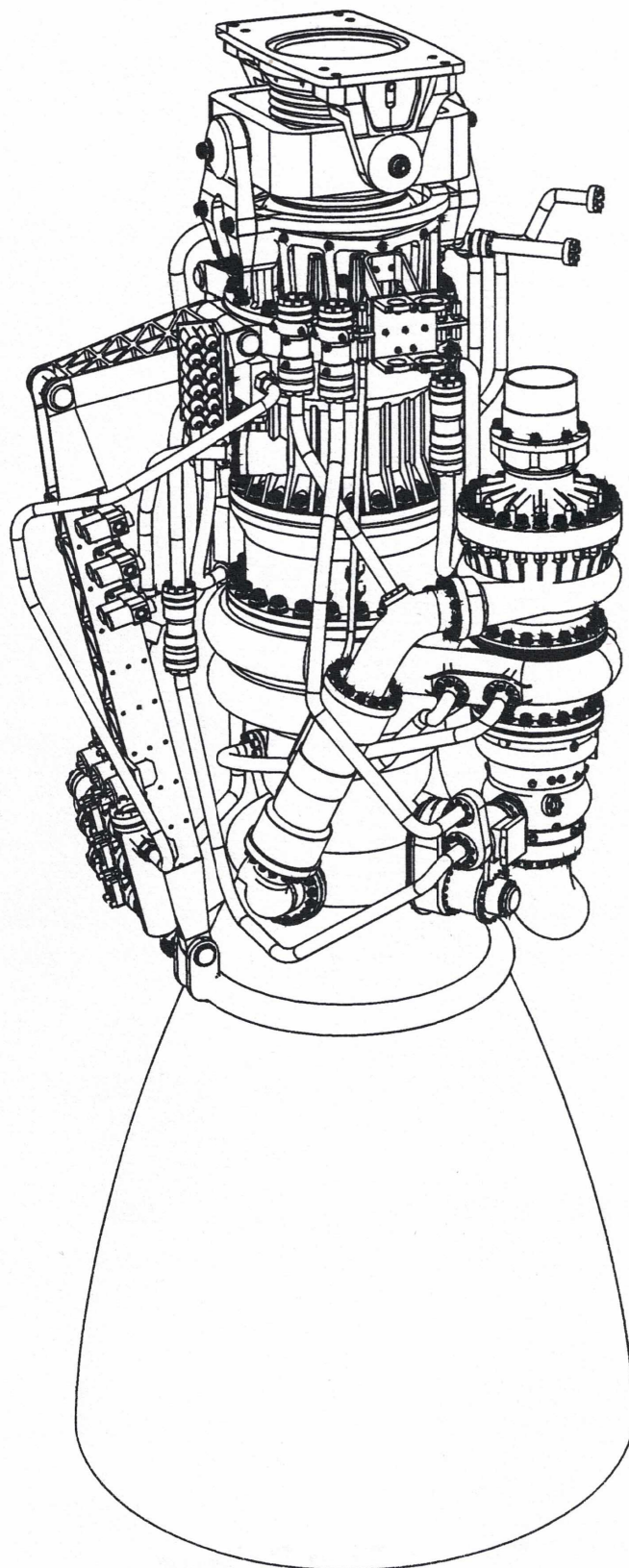


Raptor

Rocket Engine



1/12
SCALE
High detail
scale model
kit

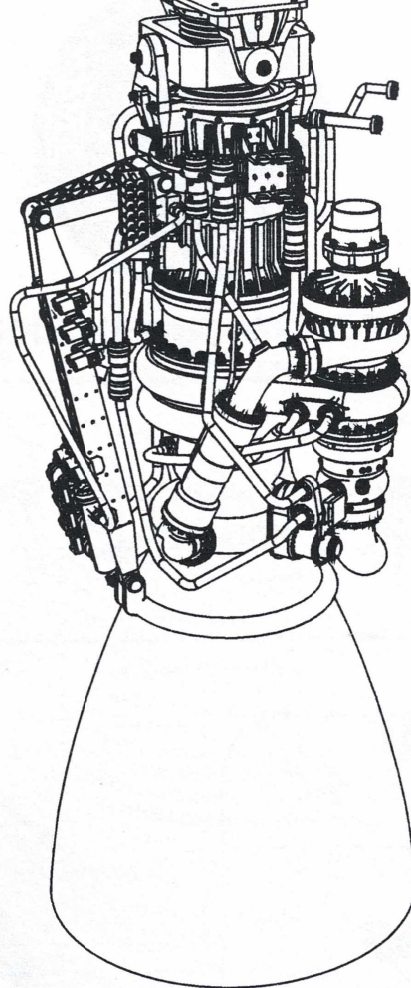
Assembly Instructions



First Release
February 2021

Raptor

Rocket Engine

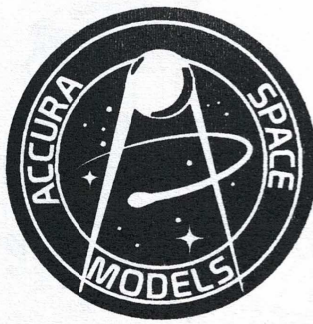


The SpaceX Raptor is an advanced rocket engine featuring a full-flow staged combustion manufactured by SpaceX. The engine is powered by cryogenic liquid methane and liquid oxygen (LOX), rather than the RP-1 kerosene and LOX used in SpaceX's prior Merlin and Kestrel rocket engines. The Raptor engine has more than twice the thrust of the Merlin 1D engine that powers the current Falcon 9 launch vehicle. The Raptor engine is using a more efficient design with a Full Flow Staged Combustion cycle, in contrast to the simpler "open-cycle" gas generator system and LOX/kerosene propellants that current Merlin engines use this feature was used before only by some Russian rocket engines, including the NK-33, RD-180 and the RD-191. A full-flow staged combustion offers a great advantage of higher fuel efficiency through higher specific impulse with the disadvantage that requires more complex and advance engineering to create such an engine. Raptor will be used in both stages of the two-stage-to-orbit, super-heavy-lift Starship system launch vehicle, which is designed to replace all existing SpaceX launch vehicles, including the Falcon 9 , Falcon Heavy and the SpaceX Dragon 2. Raptor engines are expected to be used in various applications, including Earth-orbit satellite delivery market, deployment of a large portion of SpaceX's own Starlink megaconstellation, and the exploration and eventual colonization of Mars.

Currently (2021) the Raptor produces the highest combustion chamber pressure ever reached by an operational rocket engine, at 330 bar, surpassing the record held by the RD-701 rocket engine at 300 bars.

Specifications:

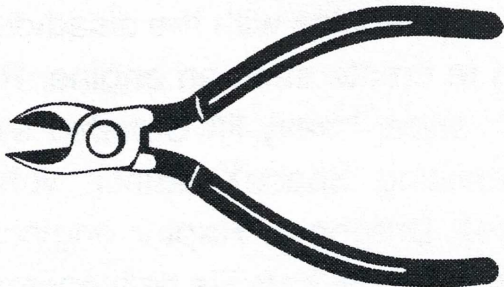
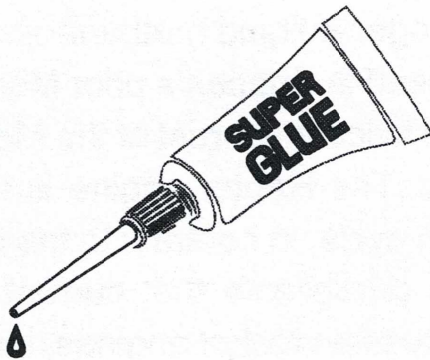
Trust: 2,210 kN (500,000 lbf) Dry weight: 1,500 kg (3,300 lb)



www.accuraspacemodels.com

Limited edition, high quality fully additive manufactured SLA resin scale model kit.

Tools required



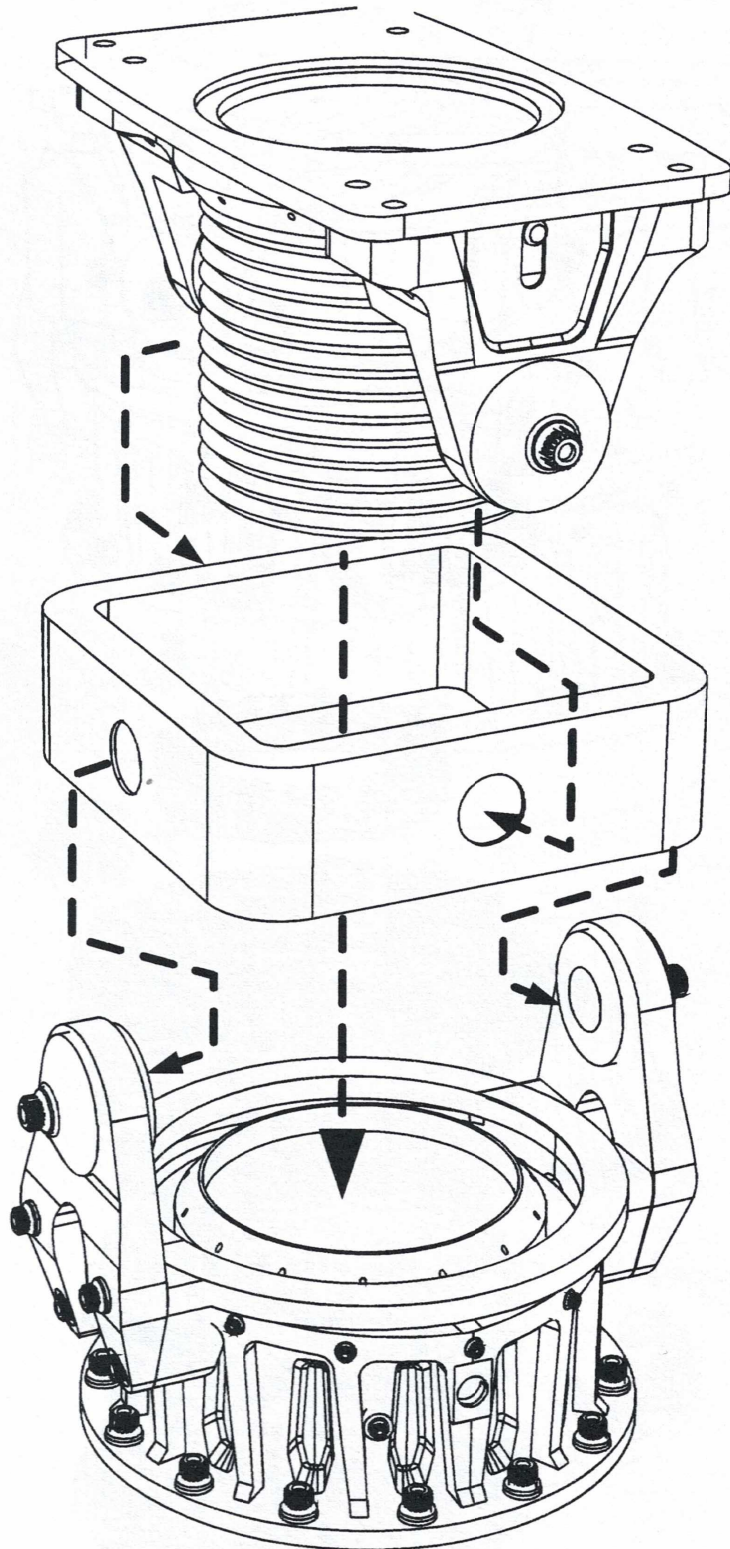
Warning!

Use safety glasses and dust mask when cutting or sanding.

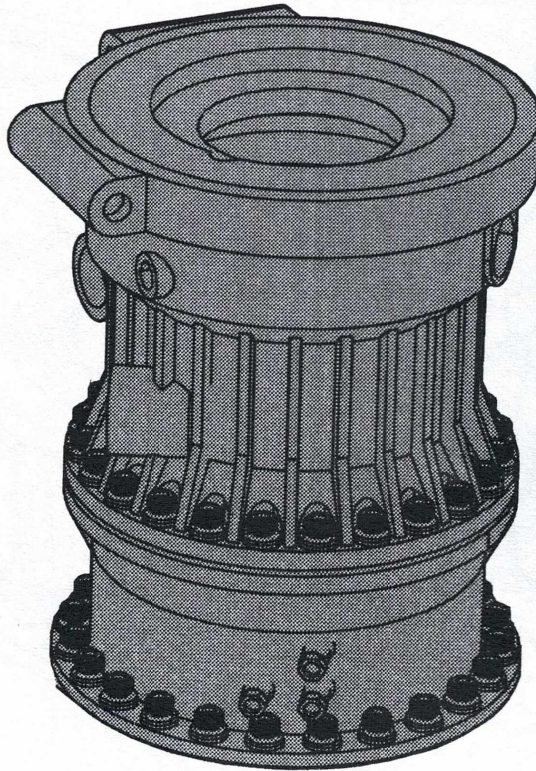
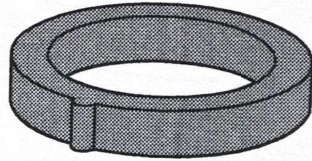
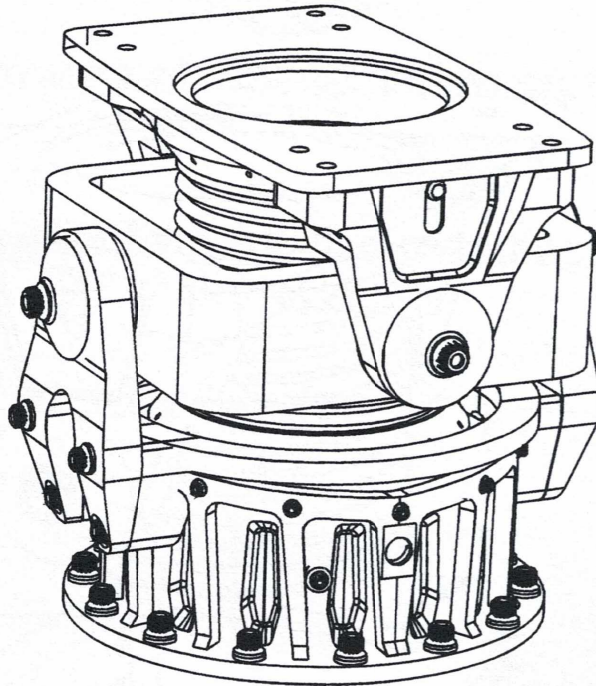


Not suitable for kids

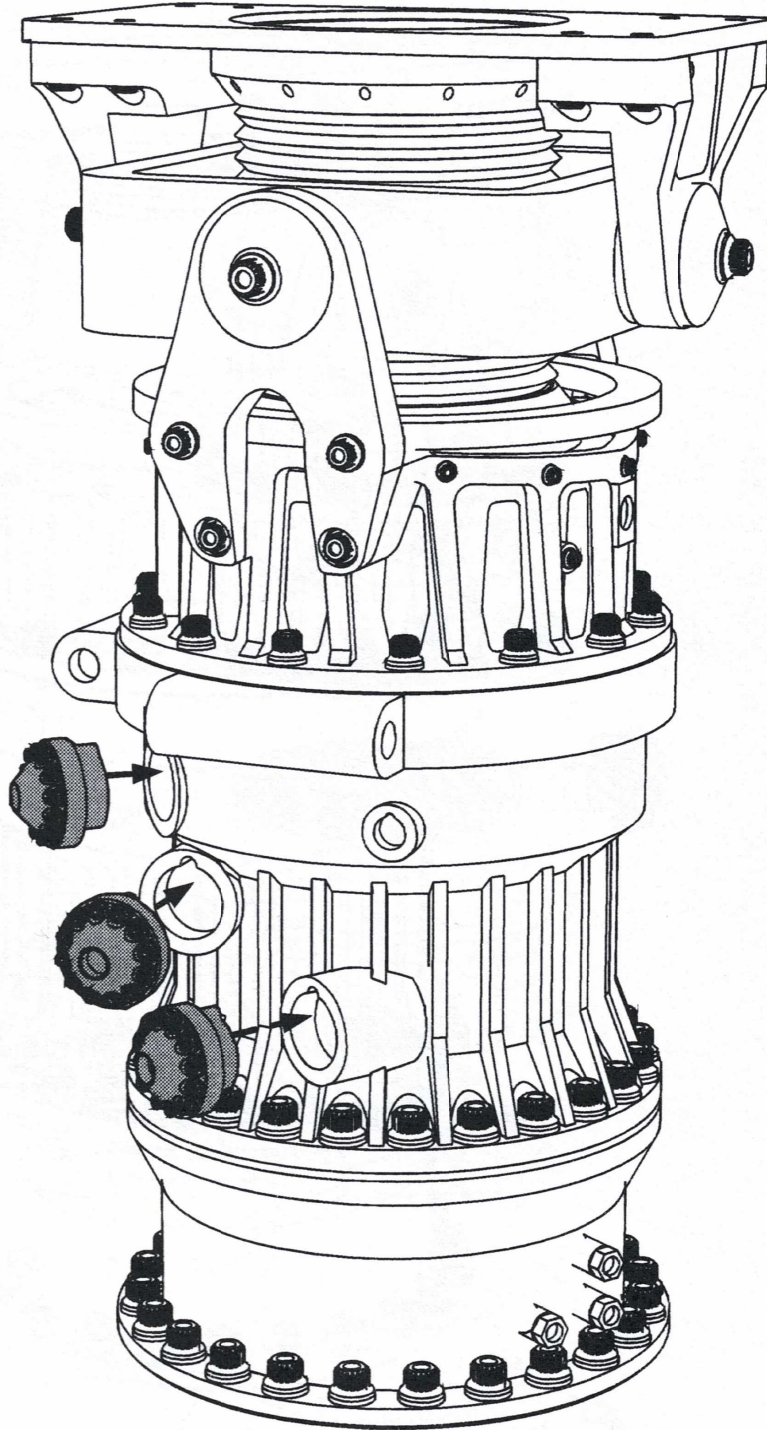
1



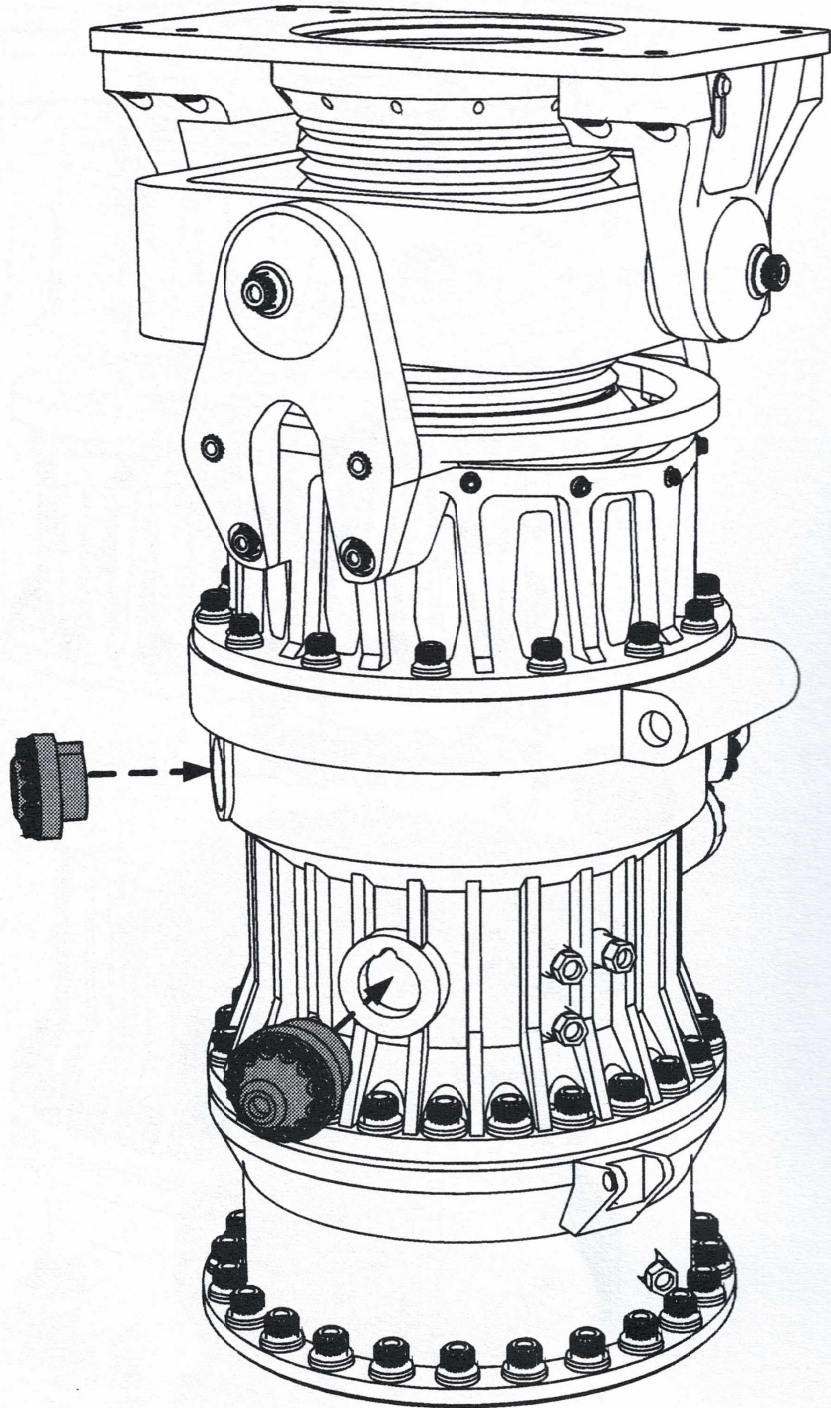
2



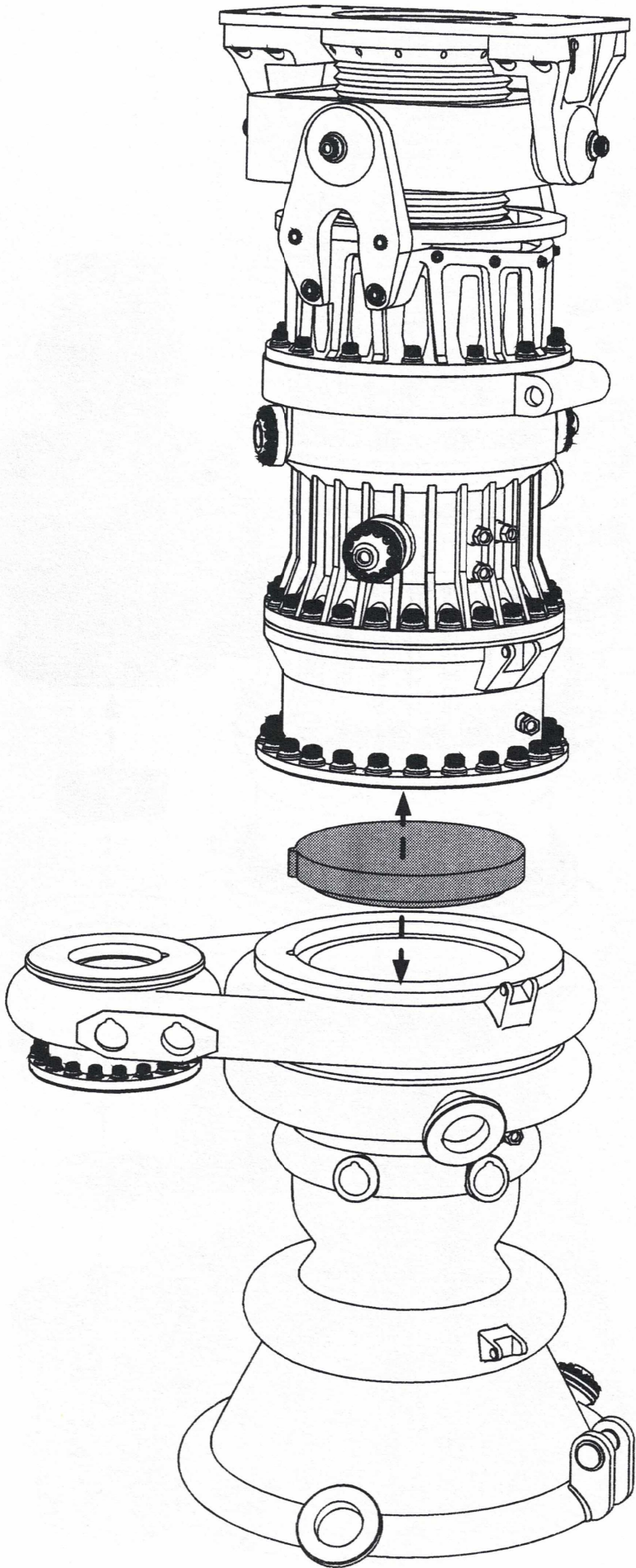
3



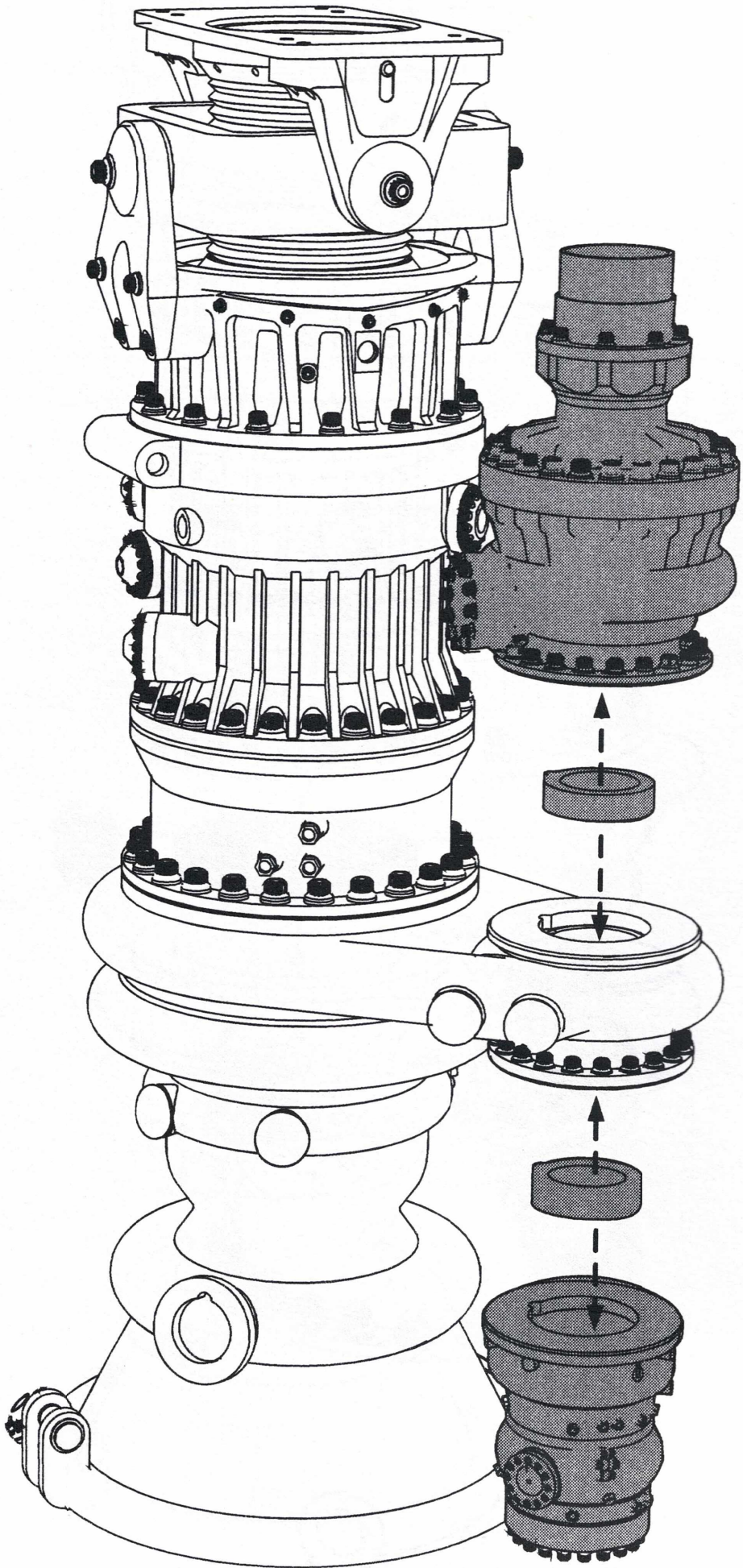
4



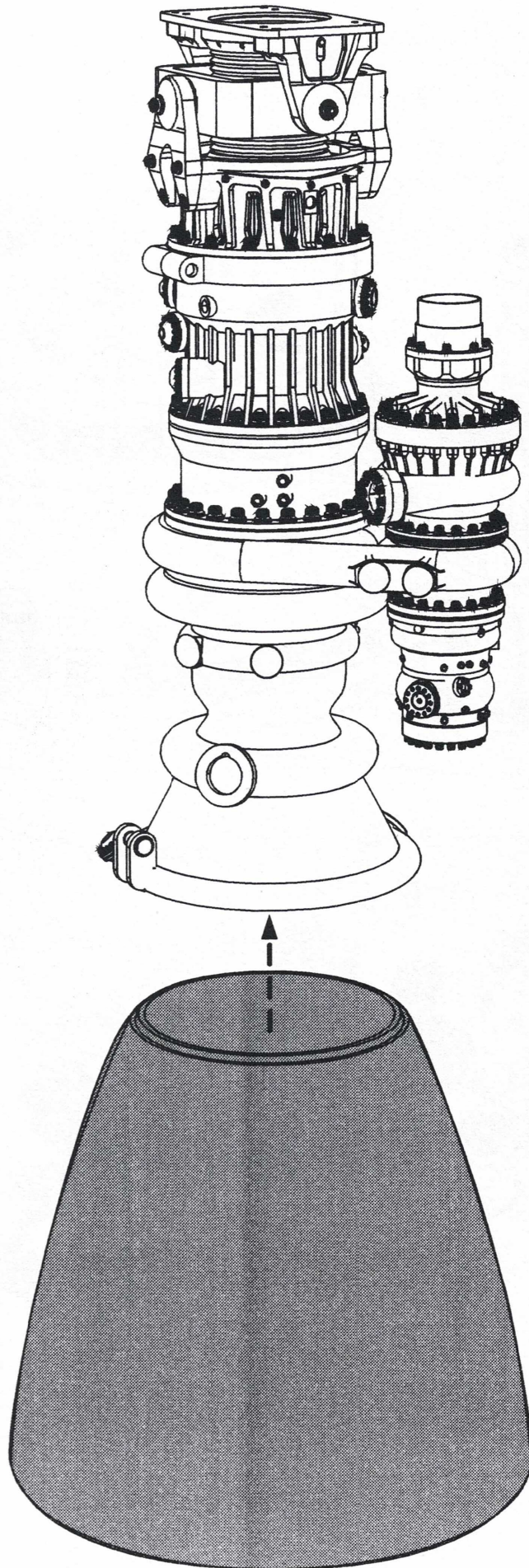
5



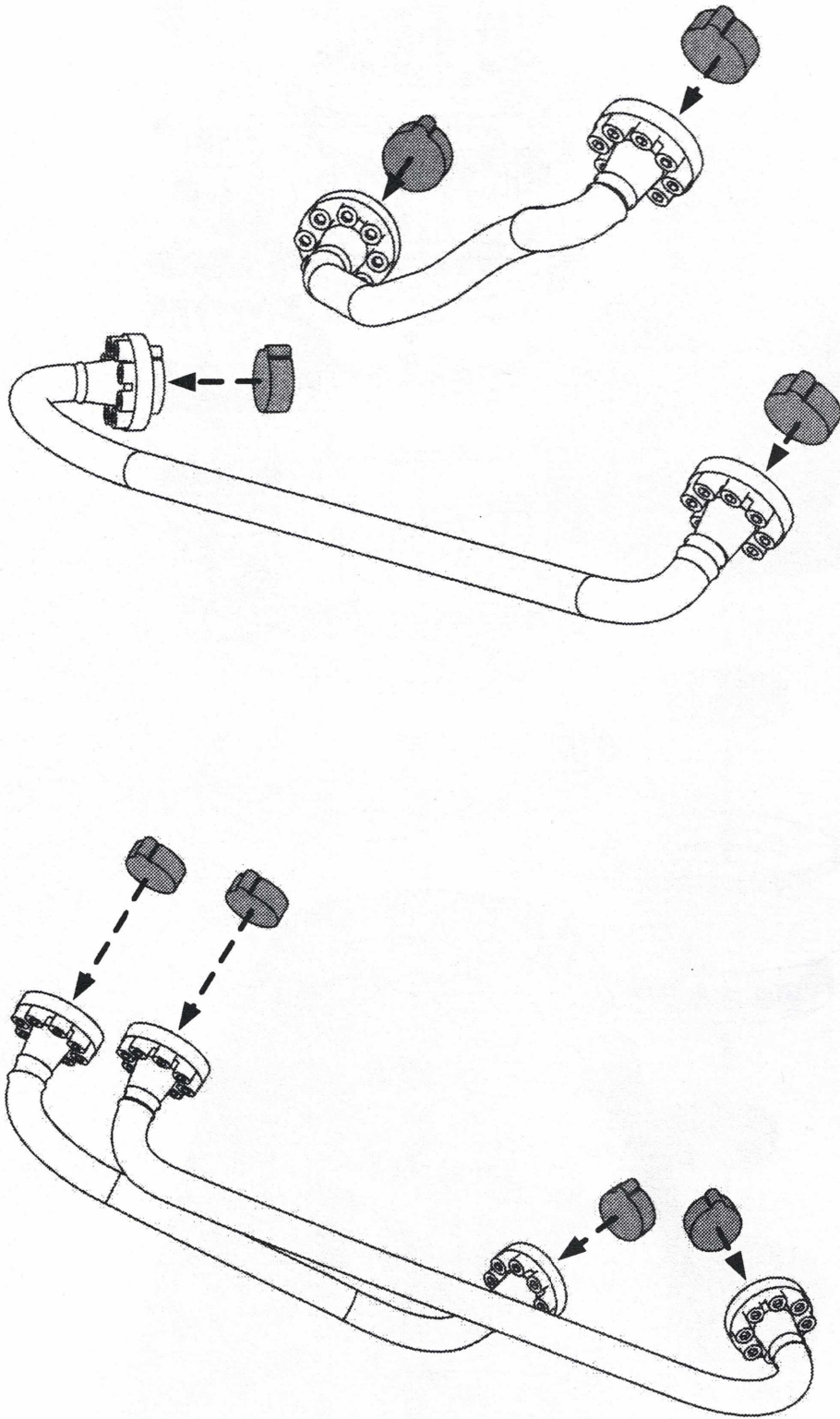
6



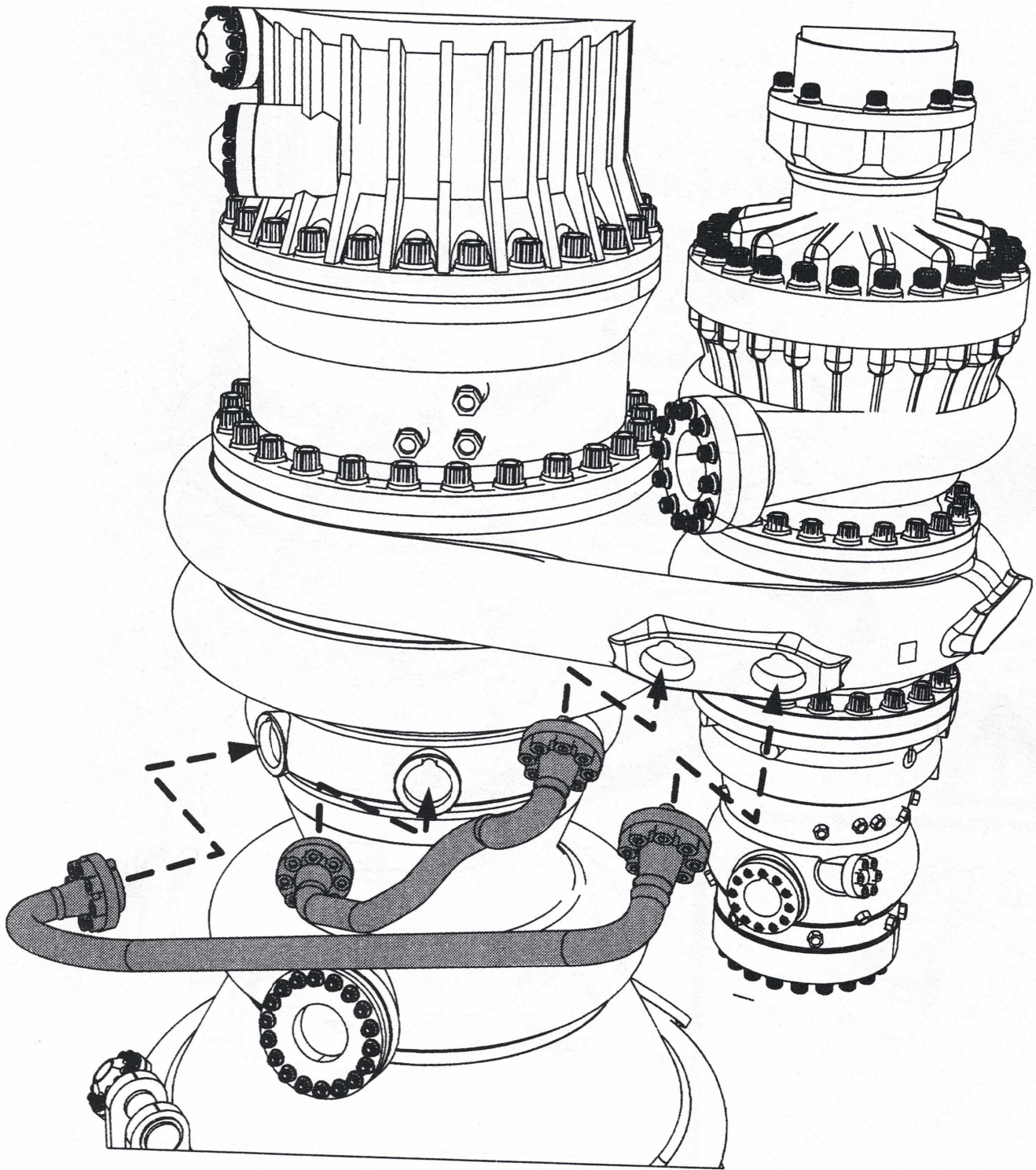
7

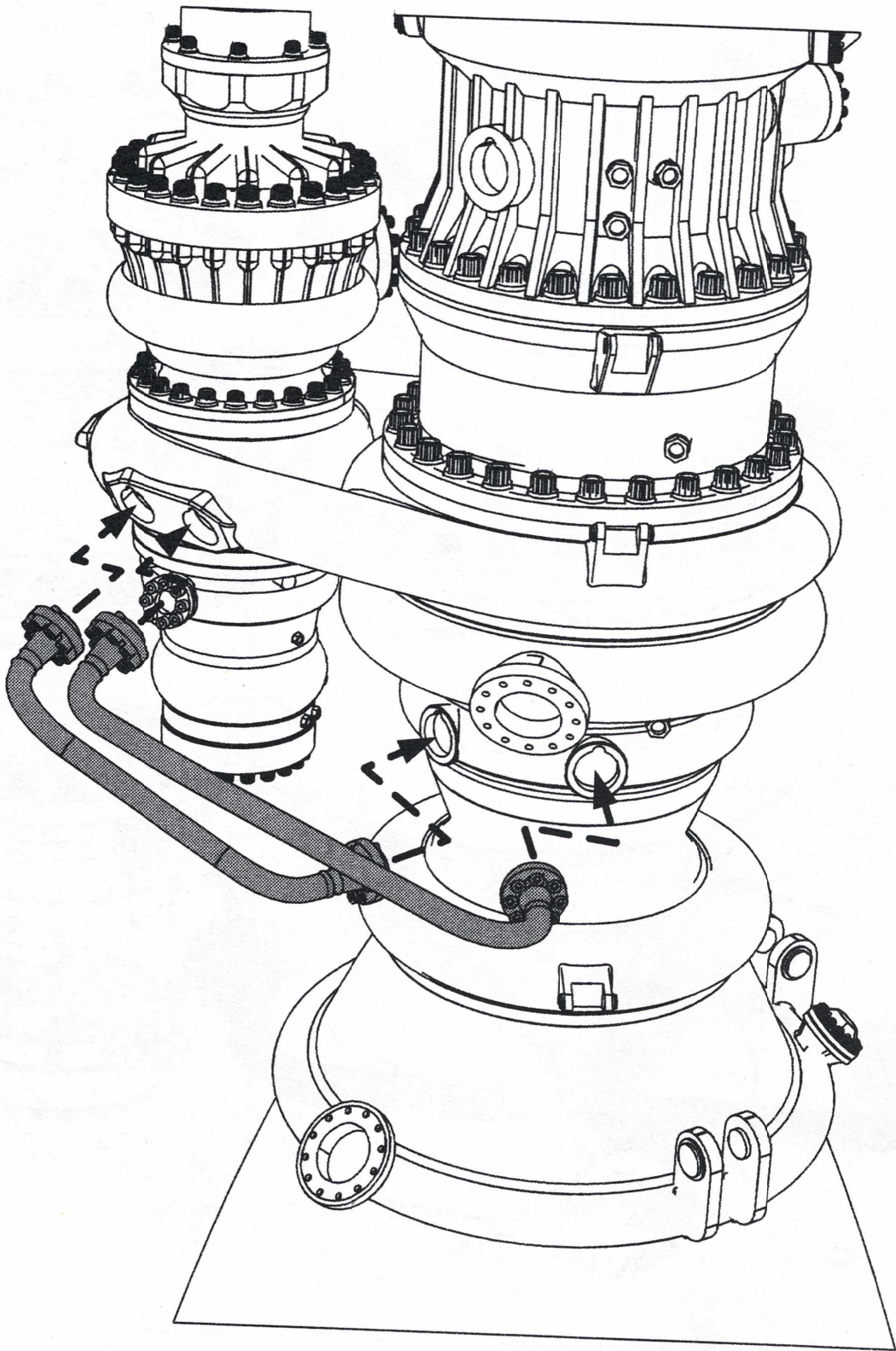


8

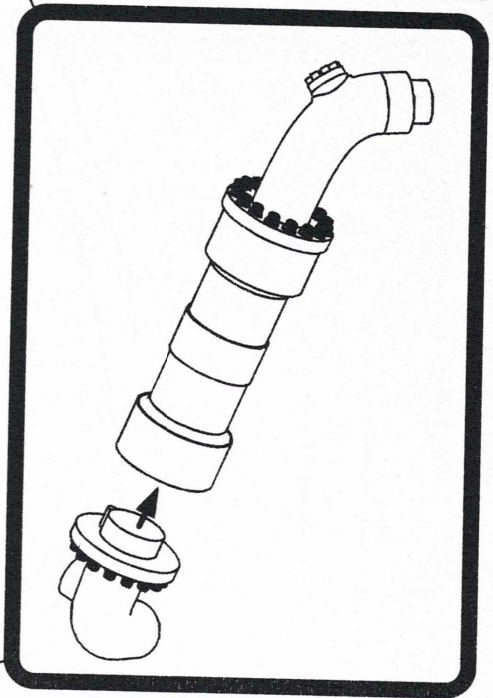
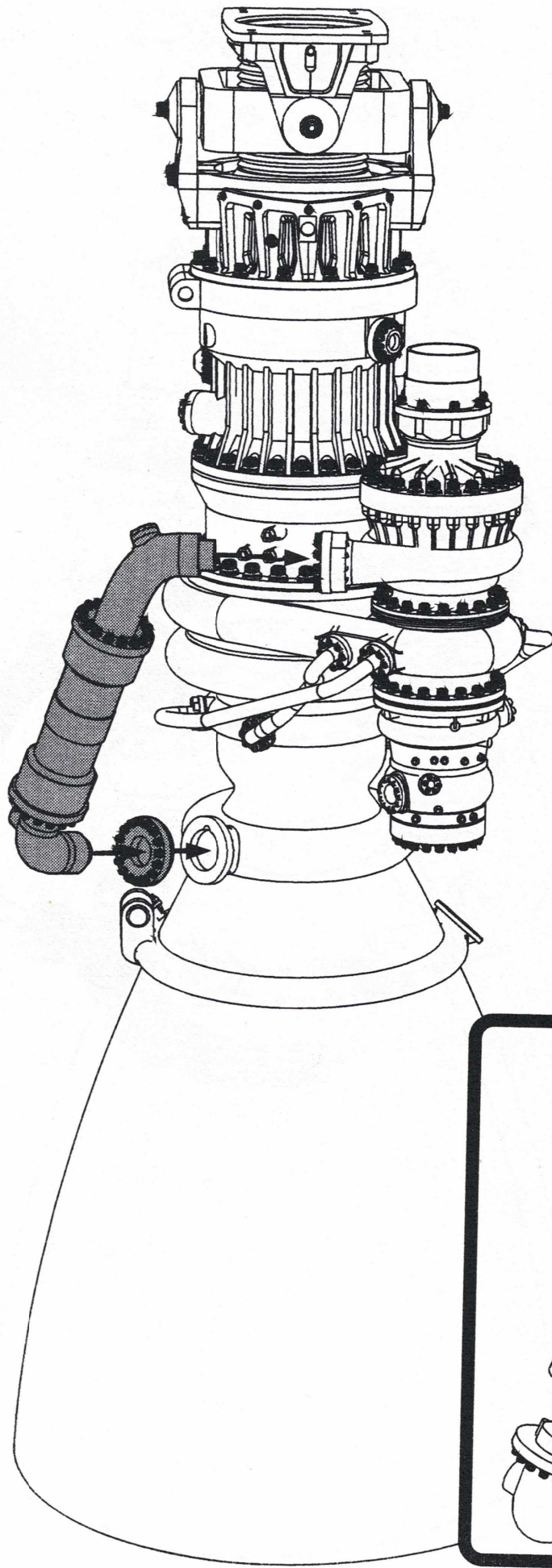


9

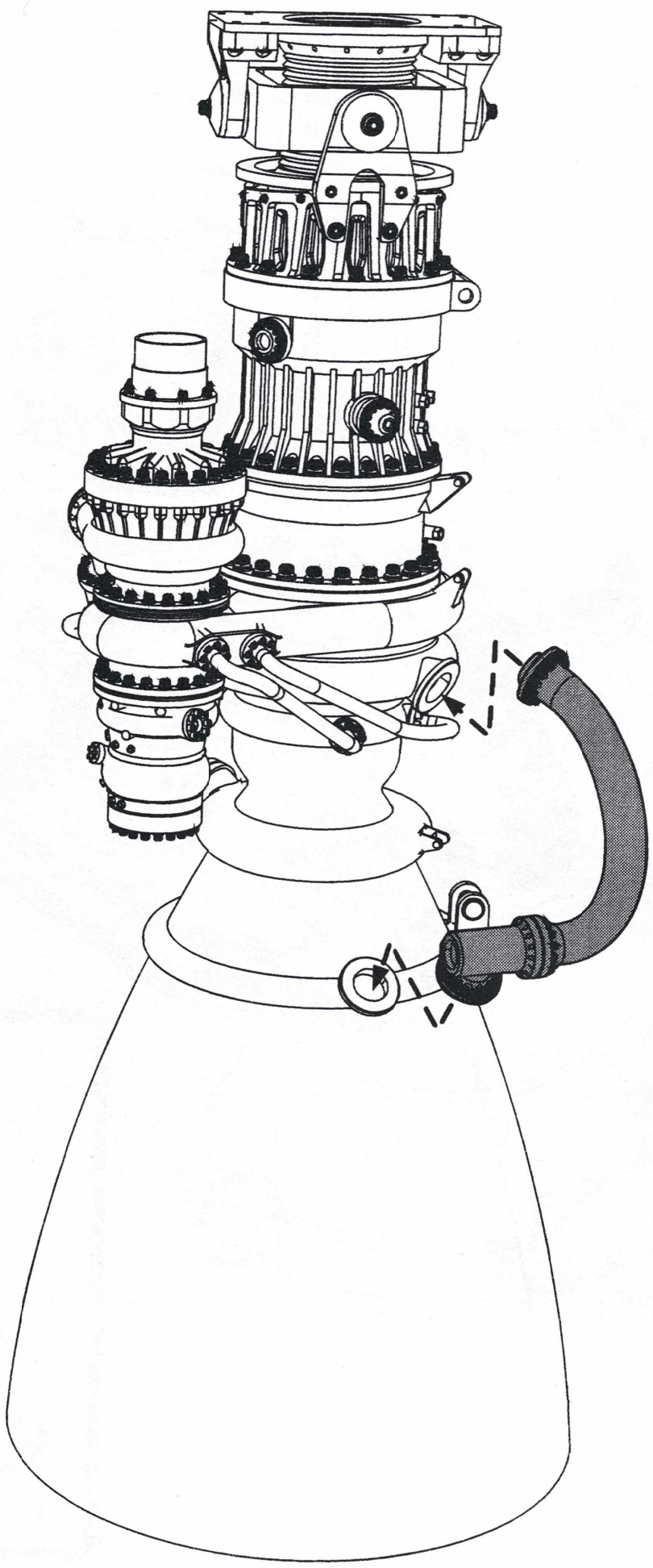




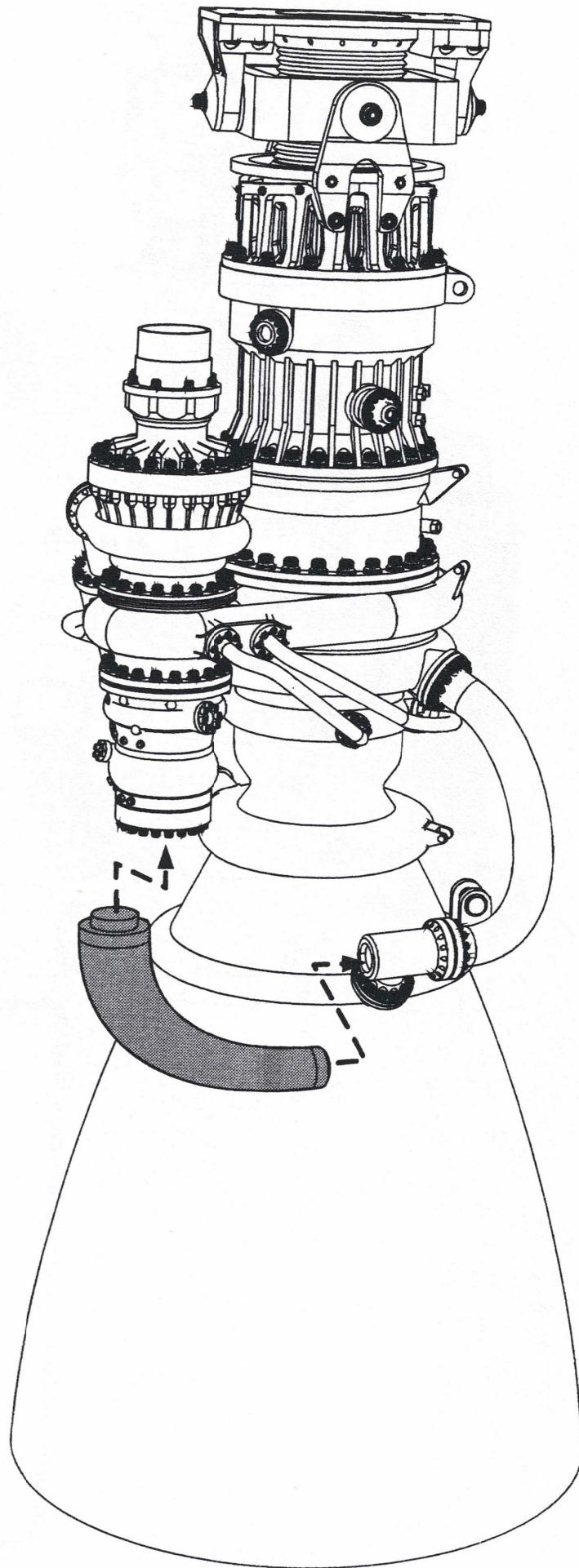
11



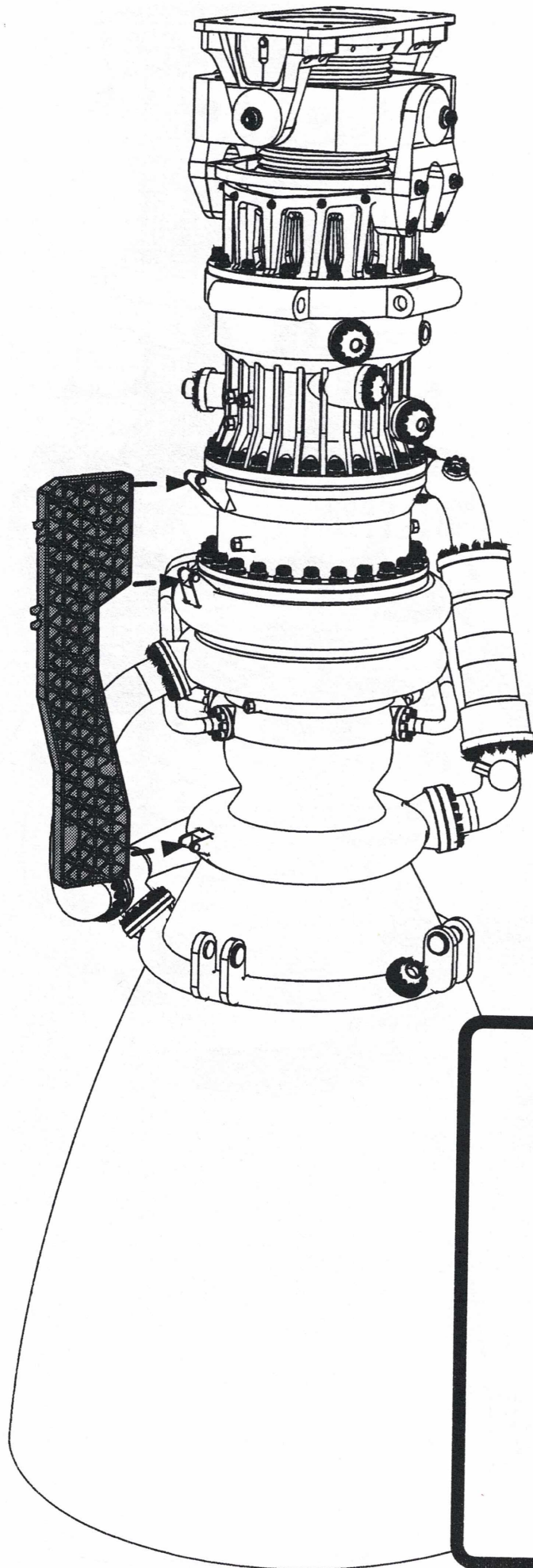
12



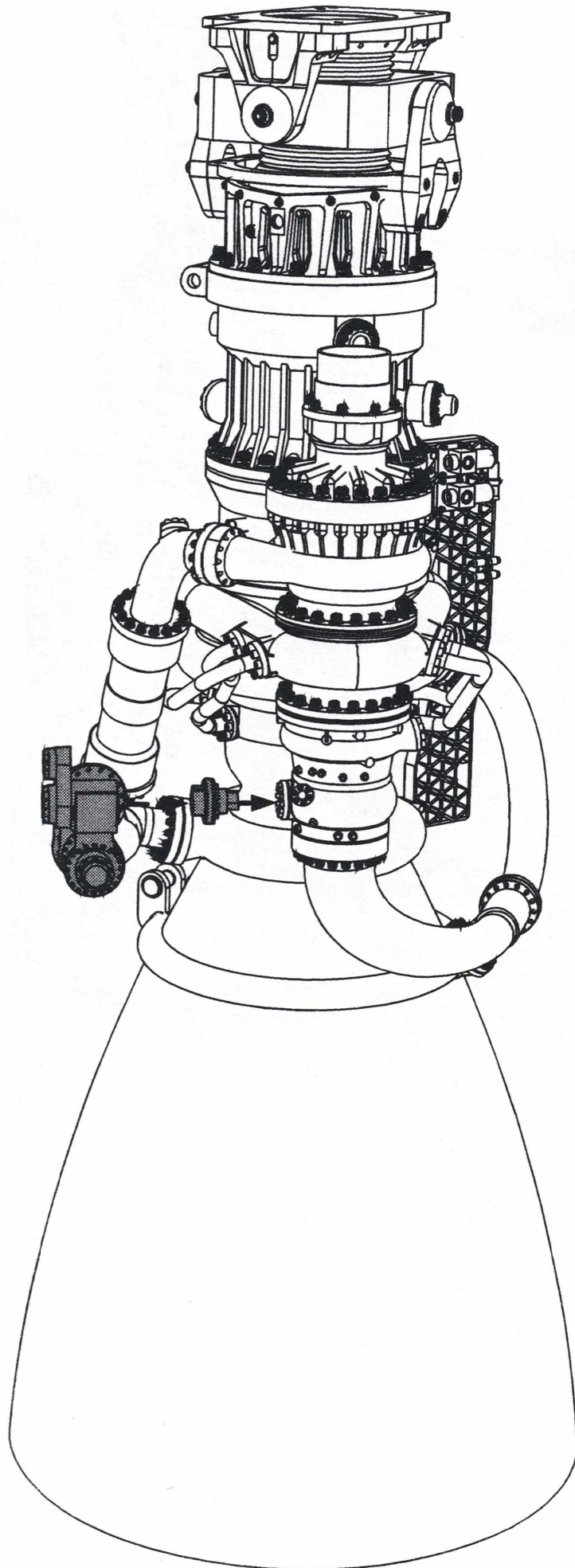
13

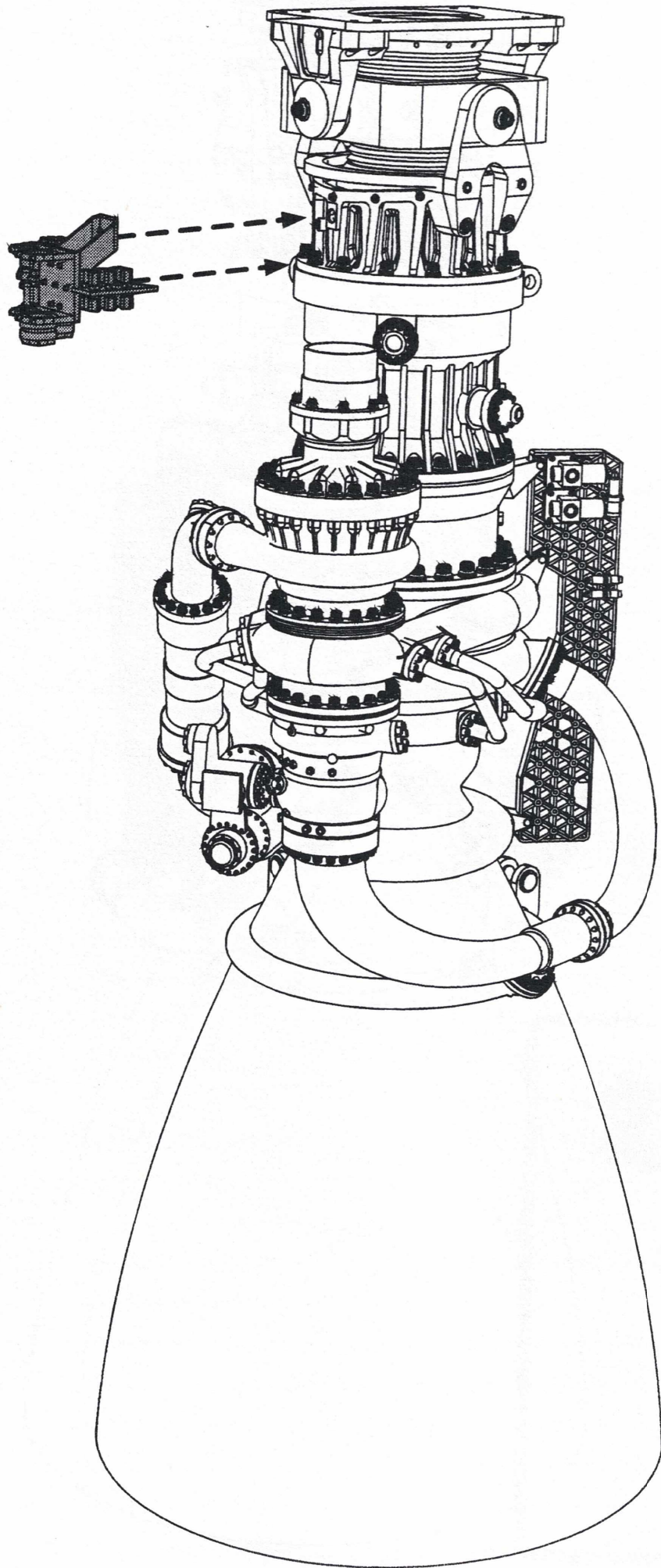


14

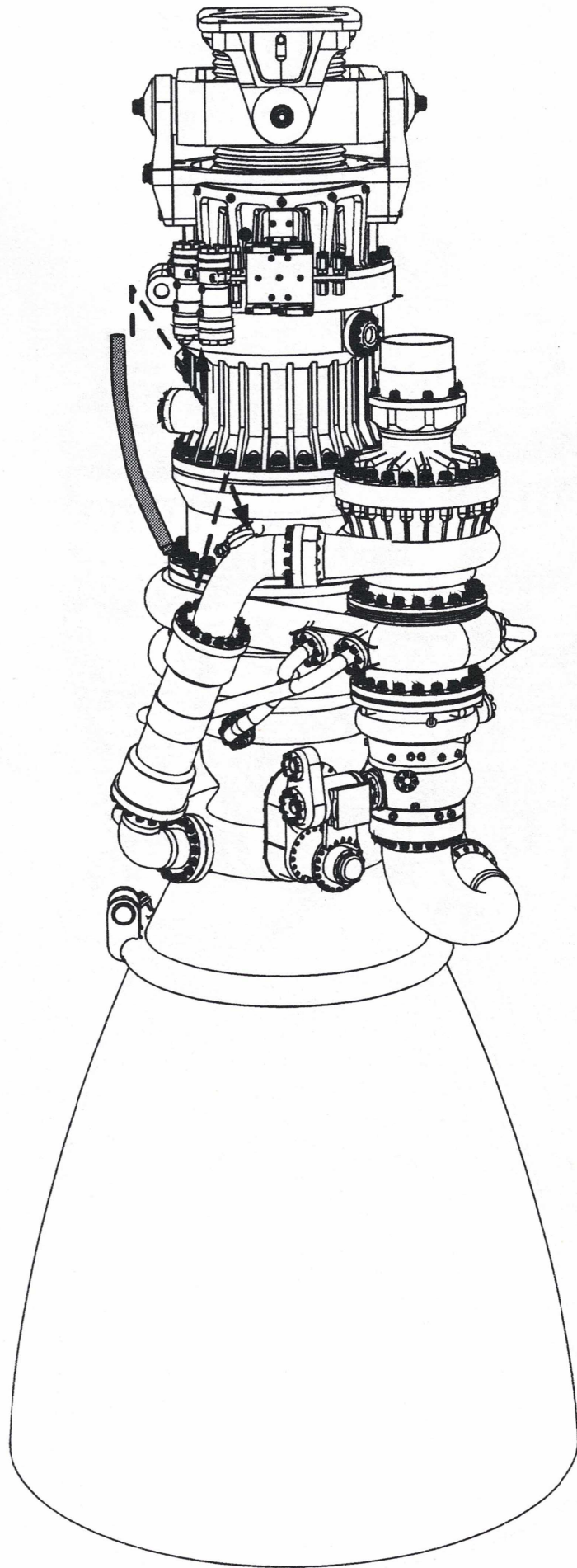


15

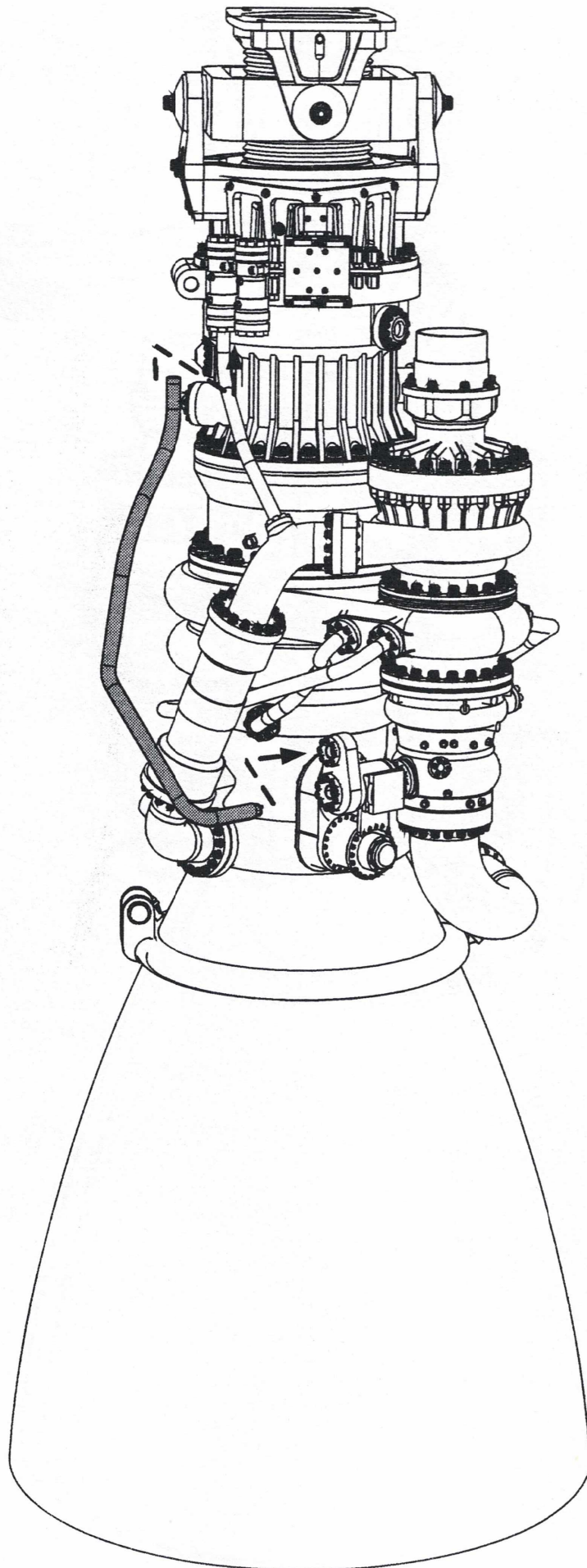


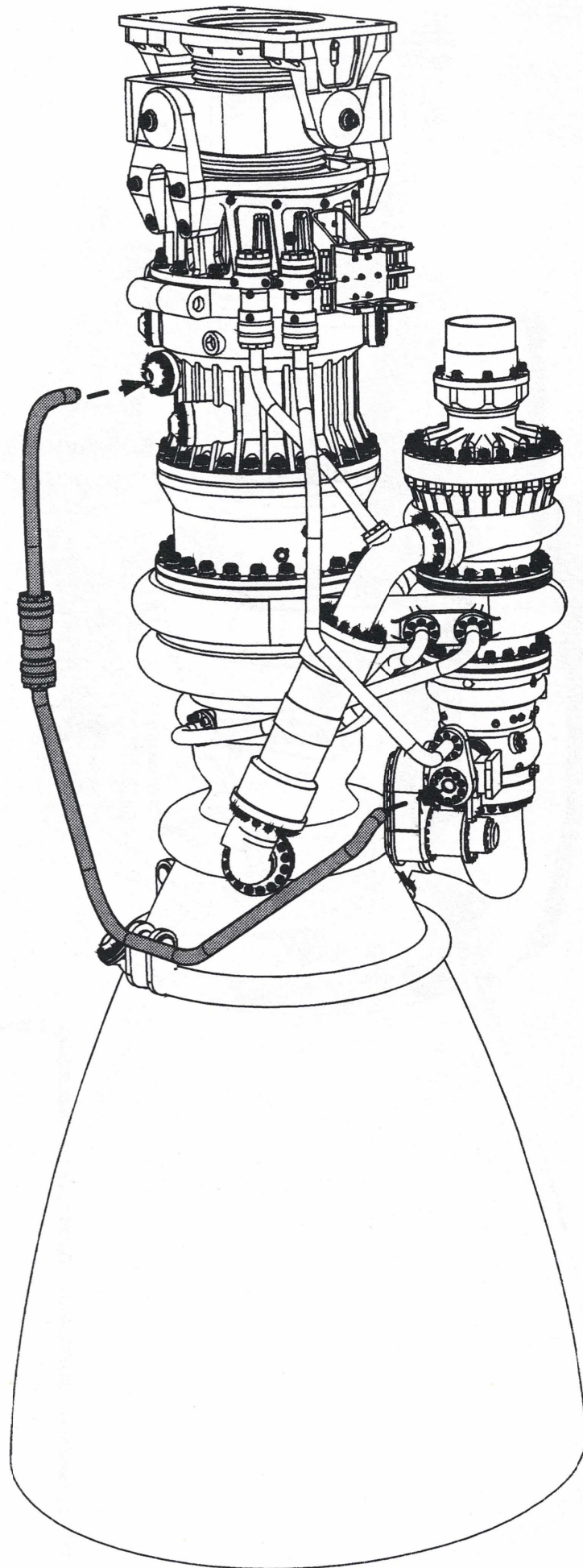


17

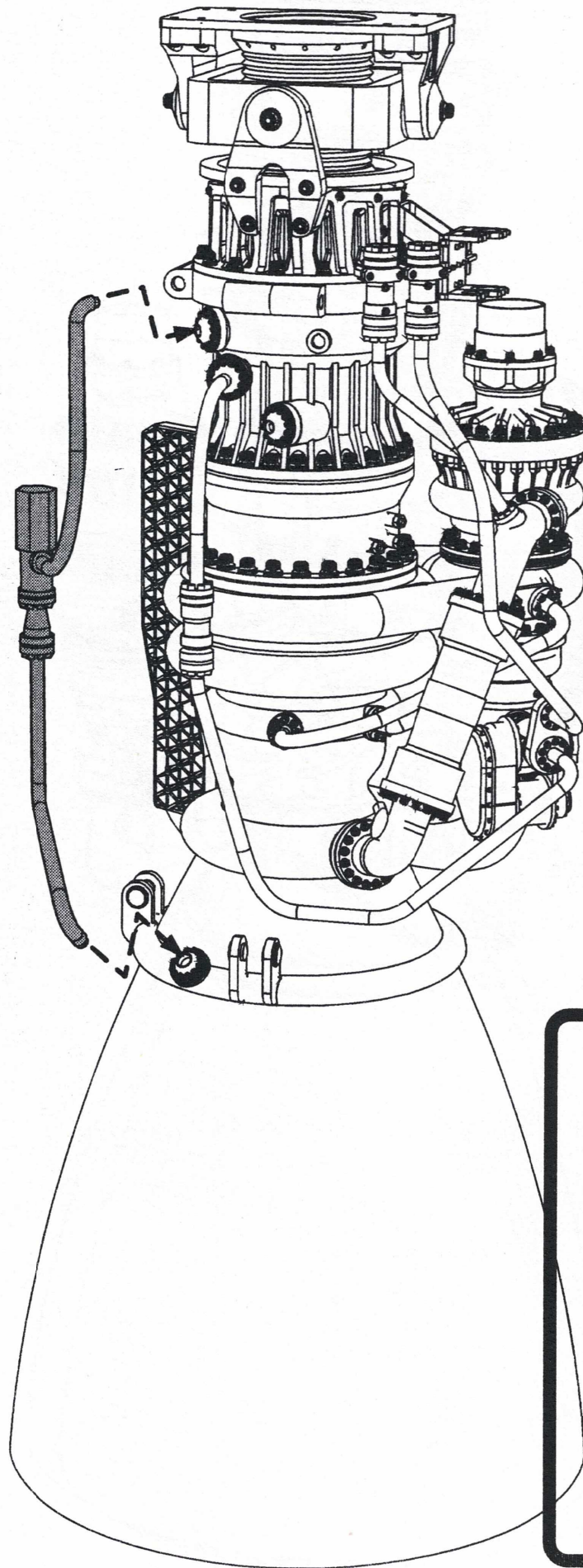


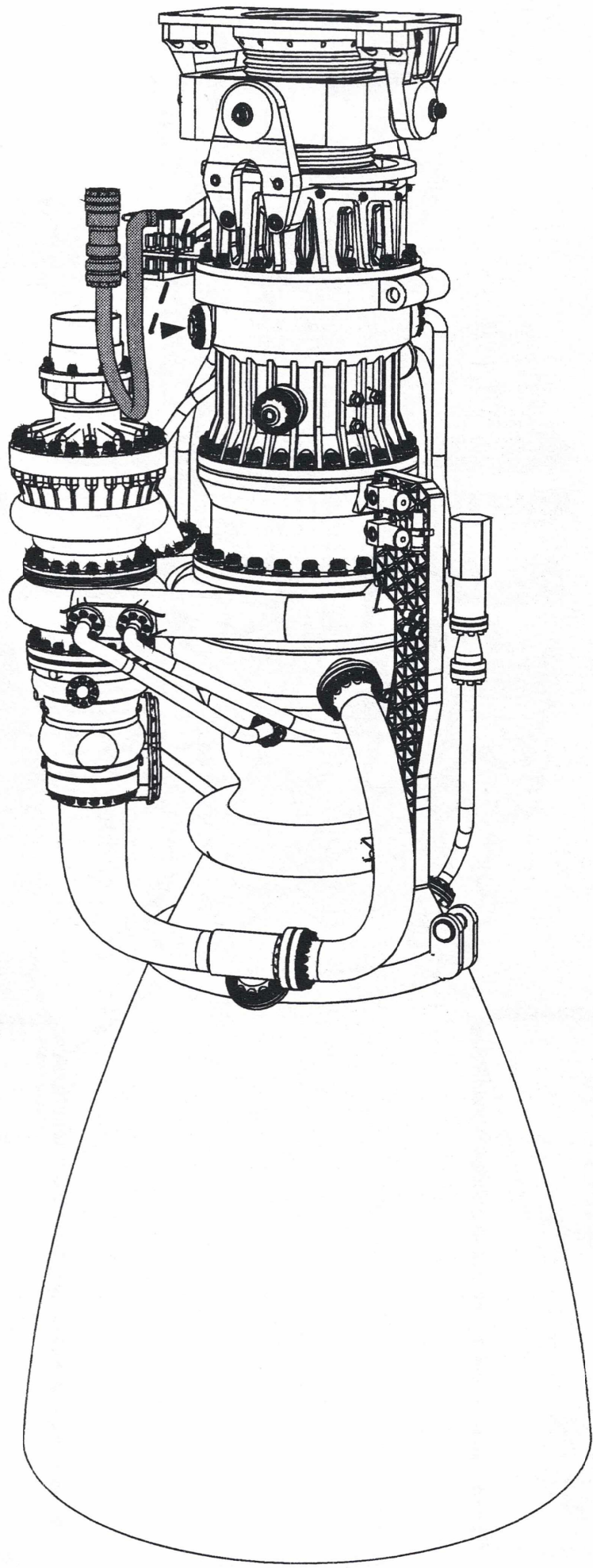
18

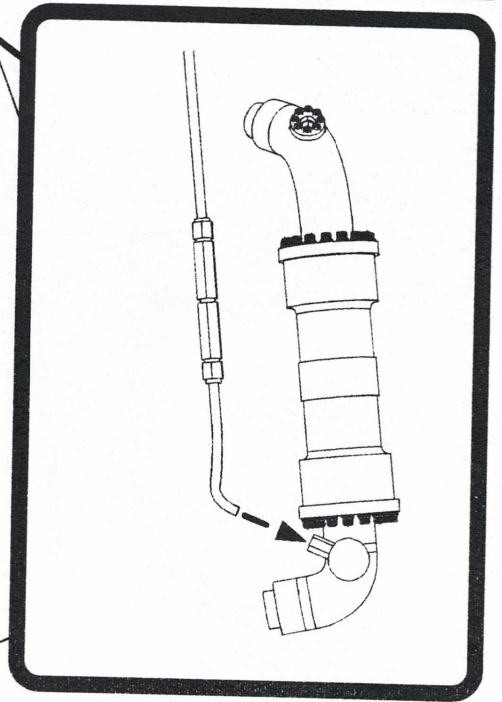
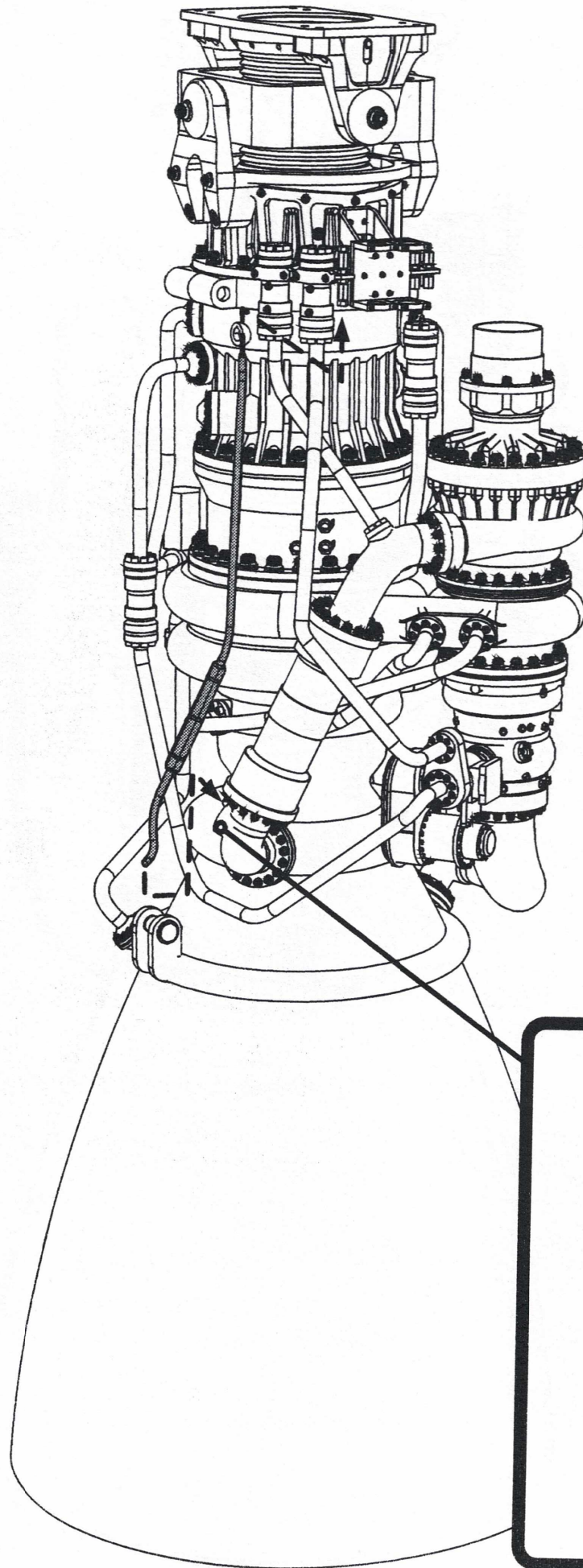


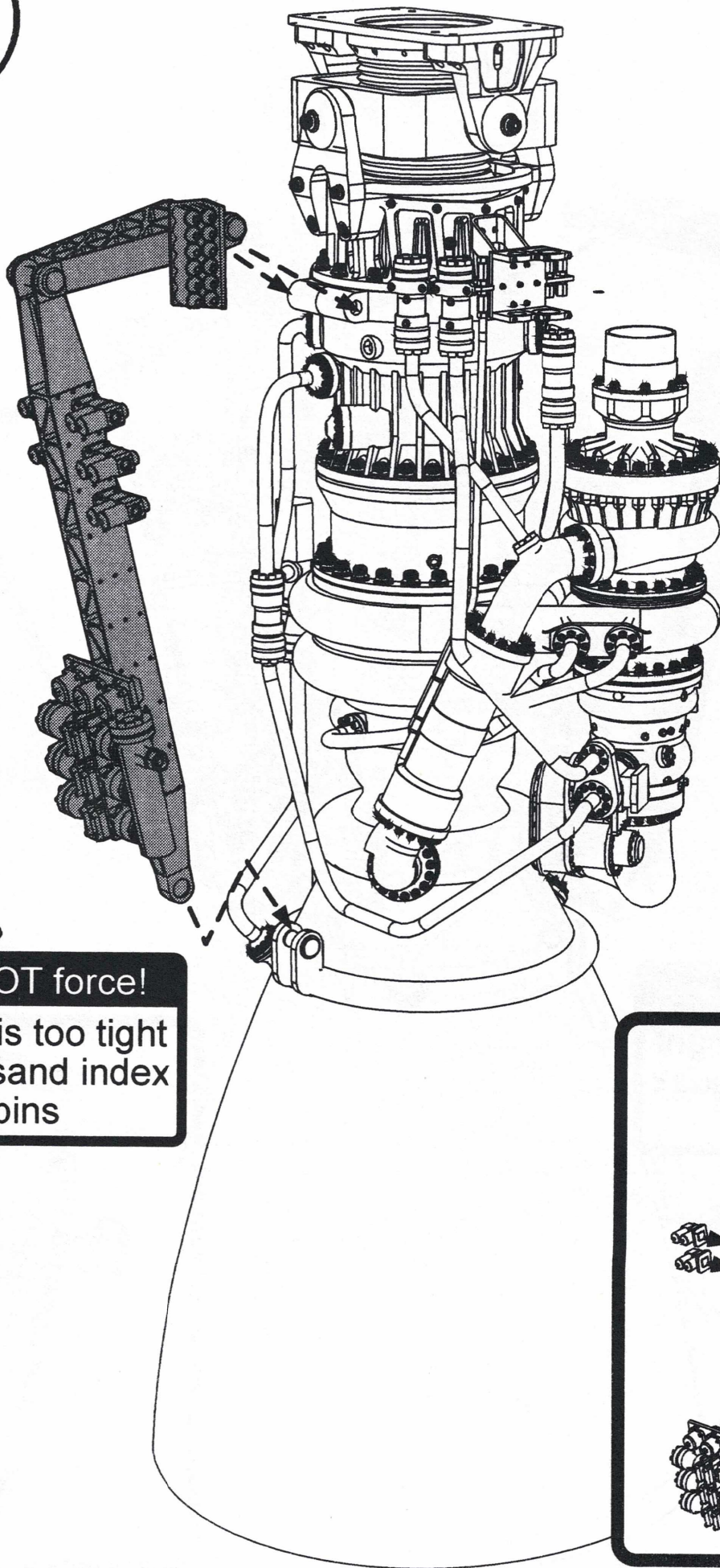


20

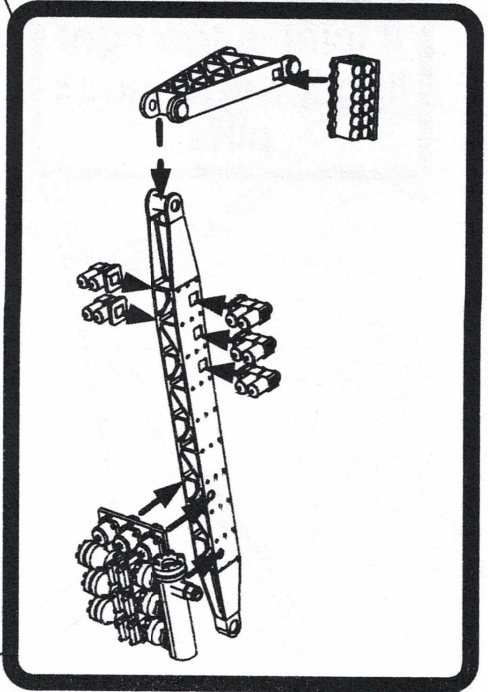




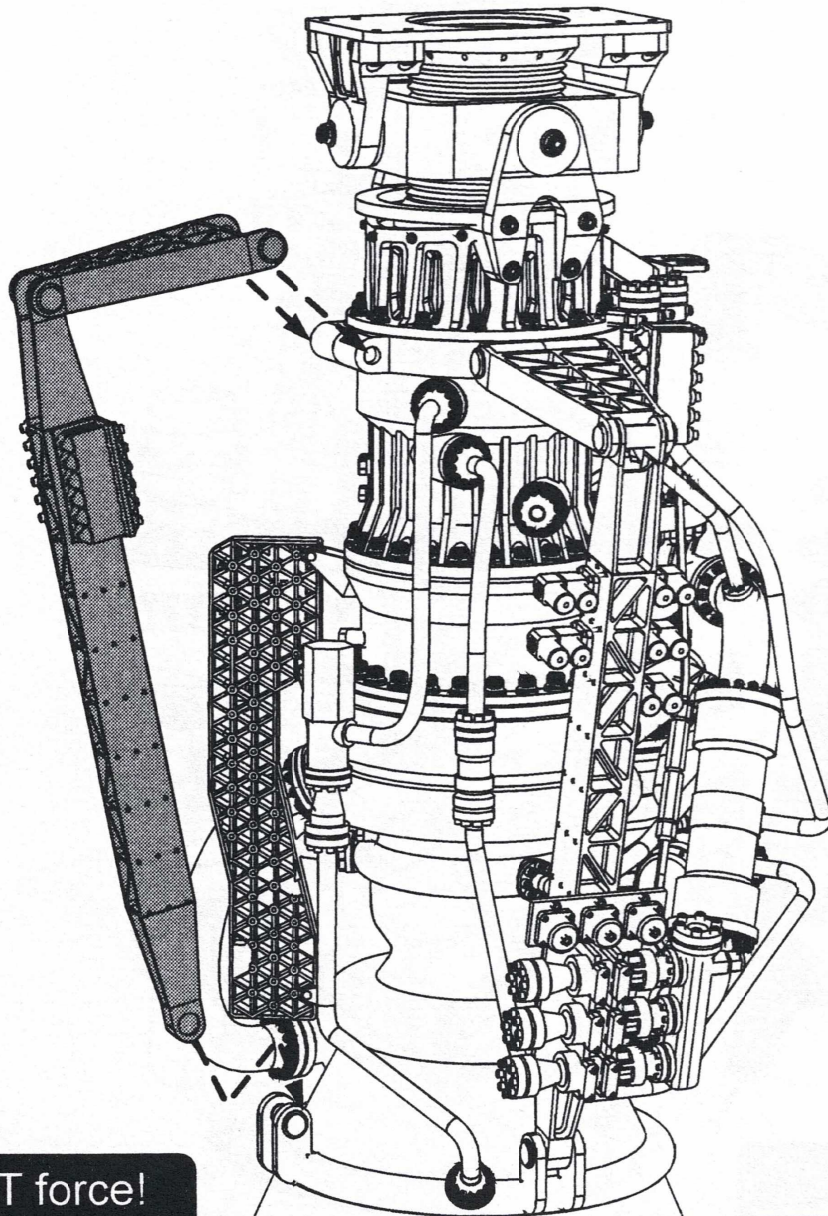




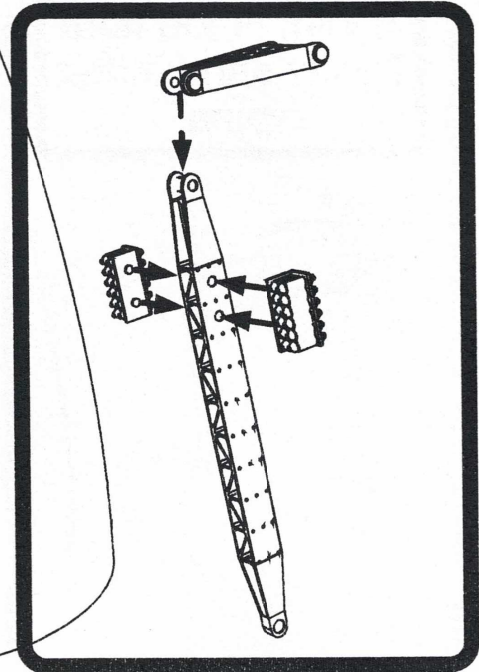
Do NOT force!
If joint is too tight
lightly sand index
pins

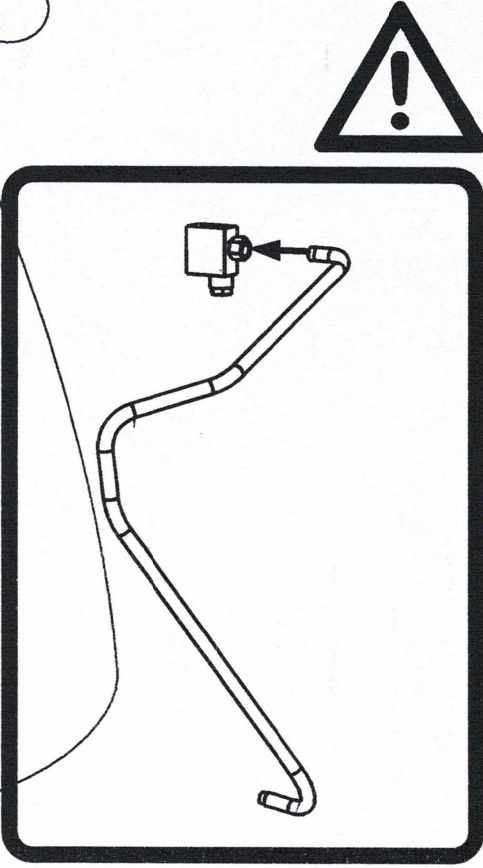
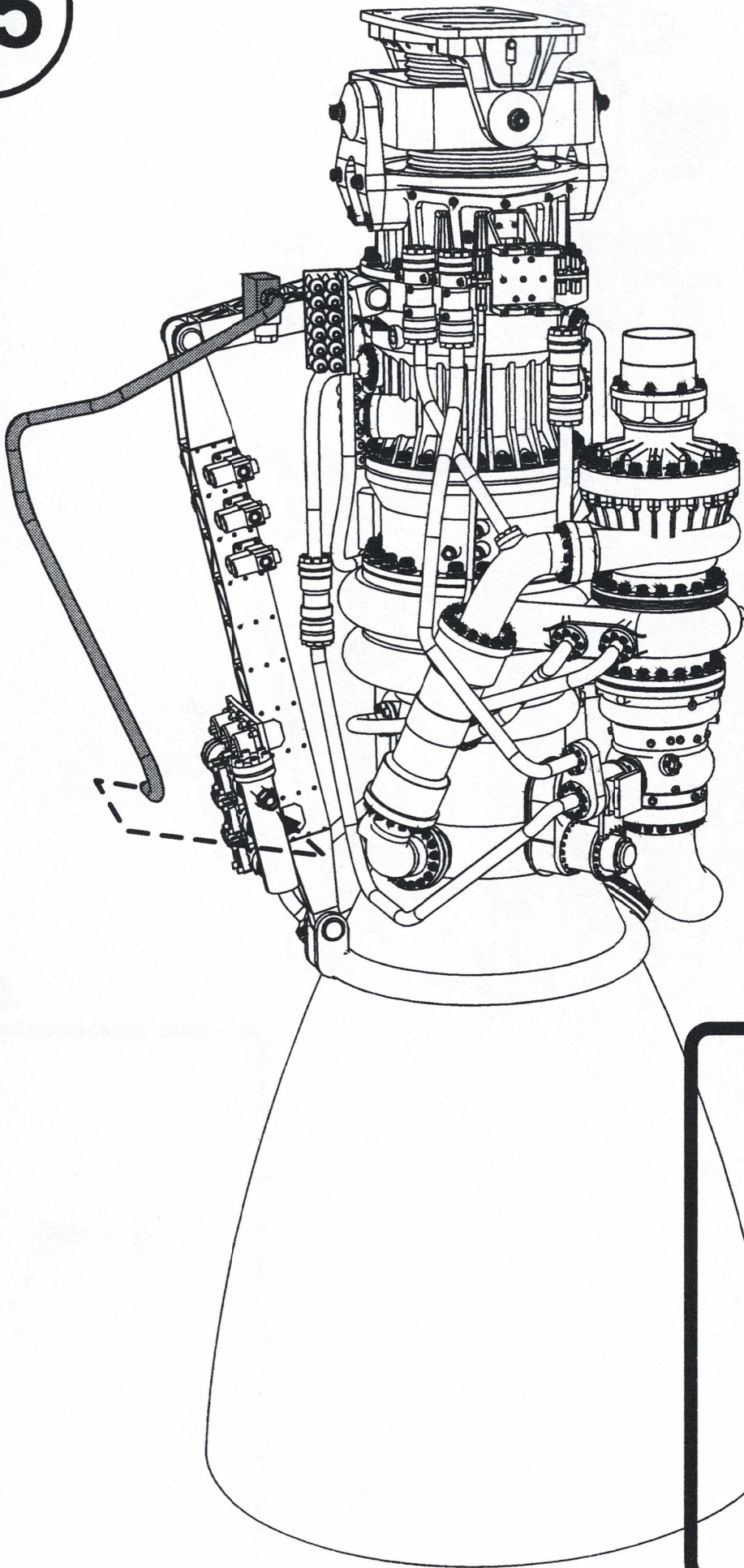


24

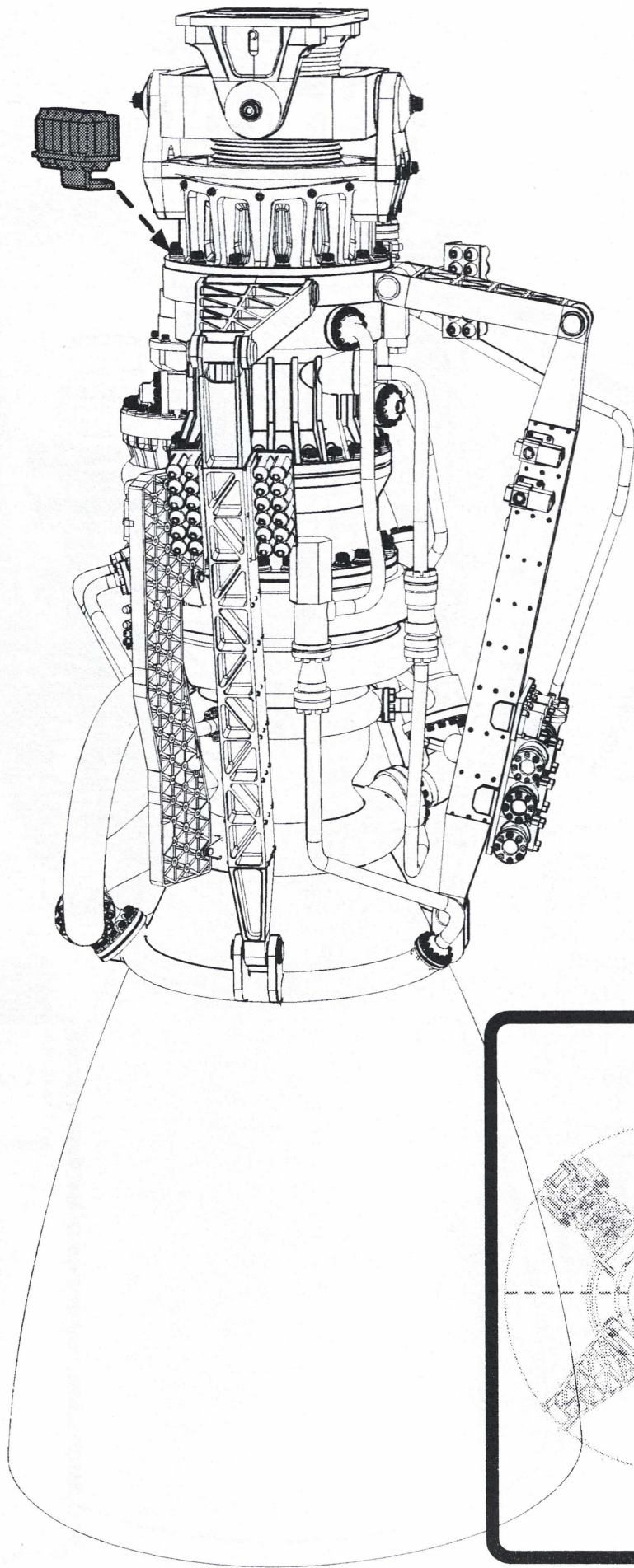


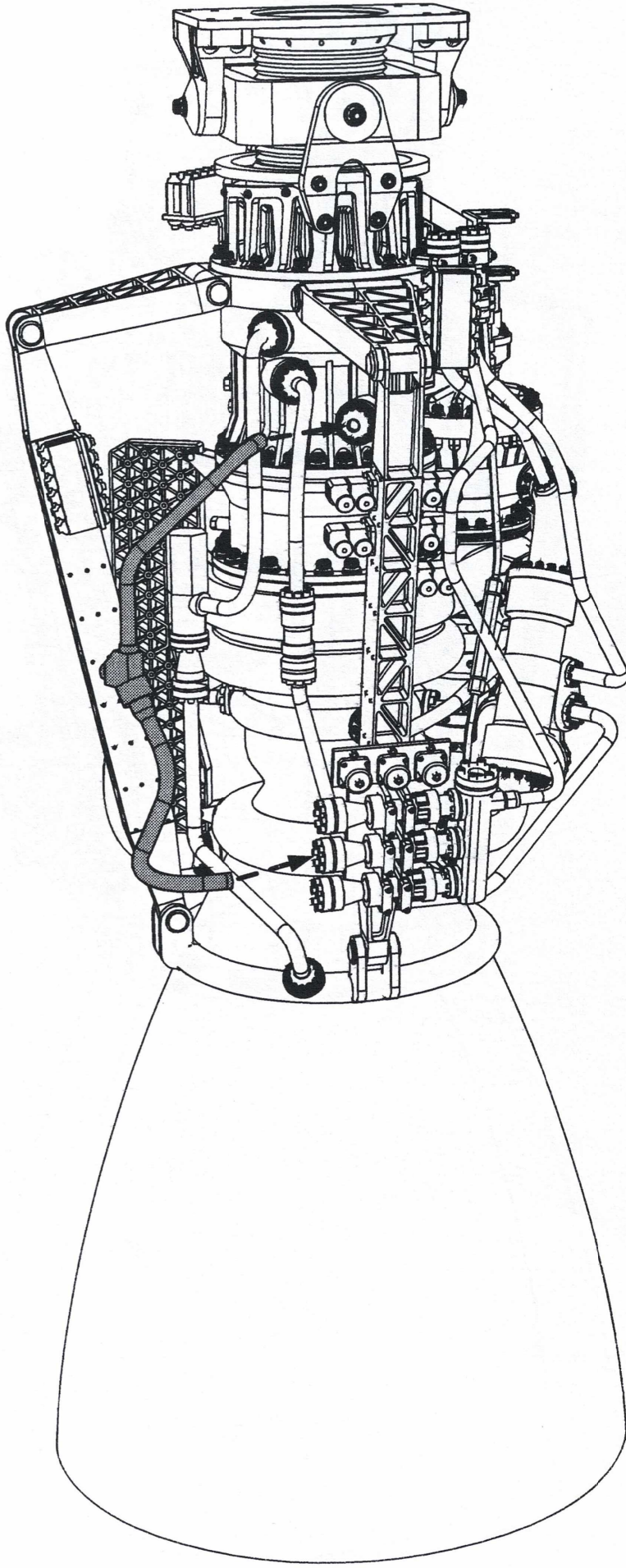
Do NOT force!
If joint is too tight
lightly sand index
pins

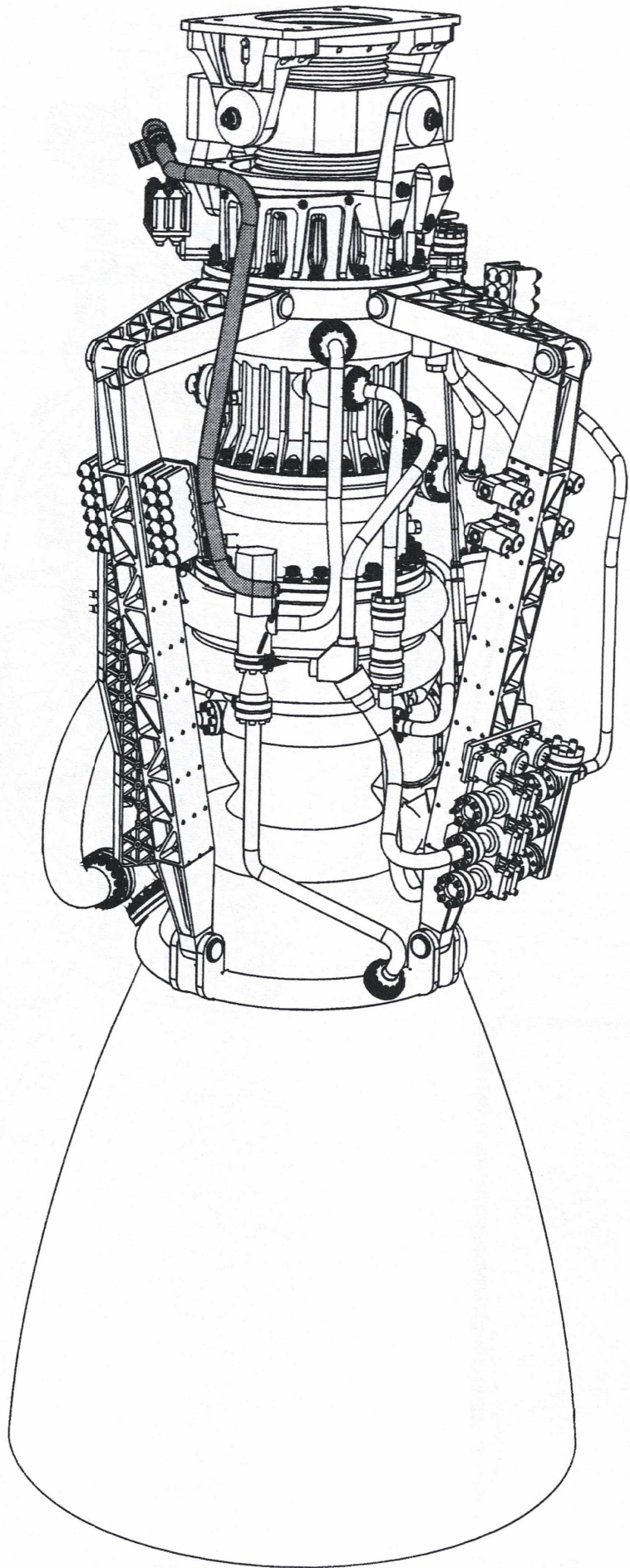


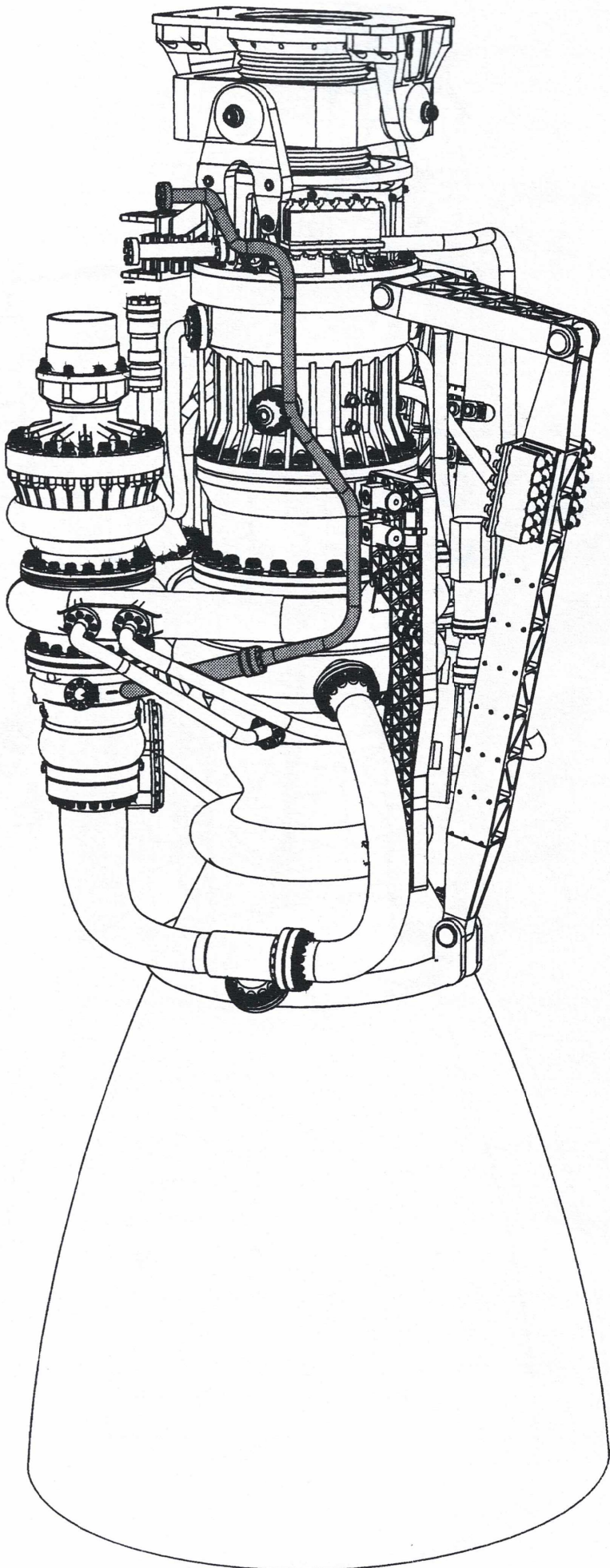


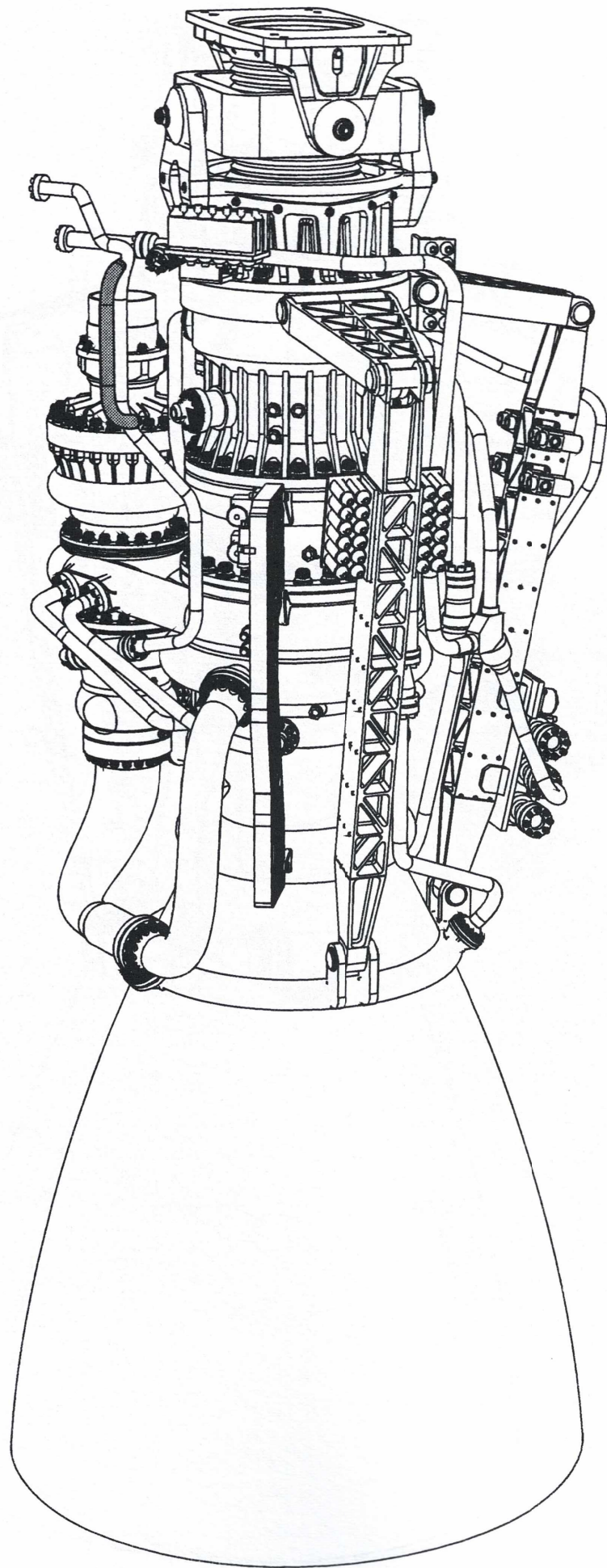
26



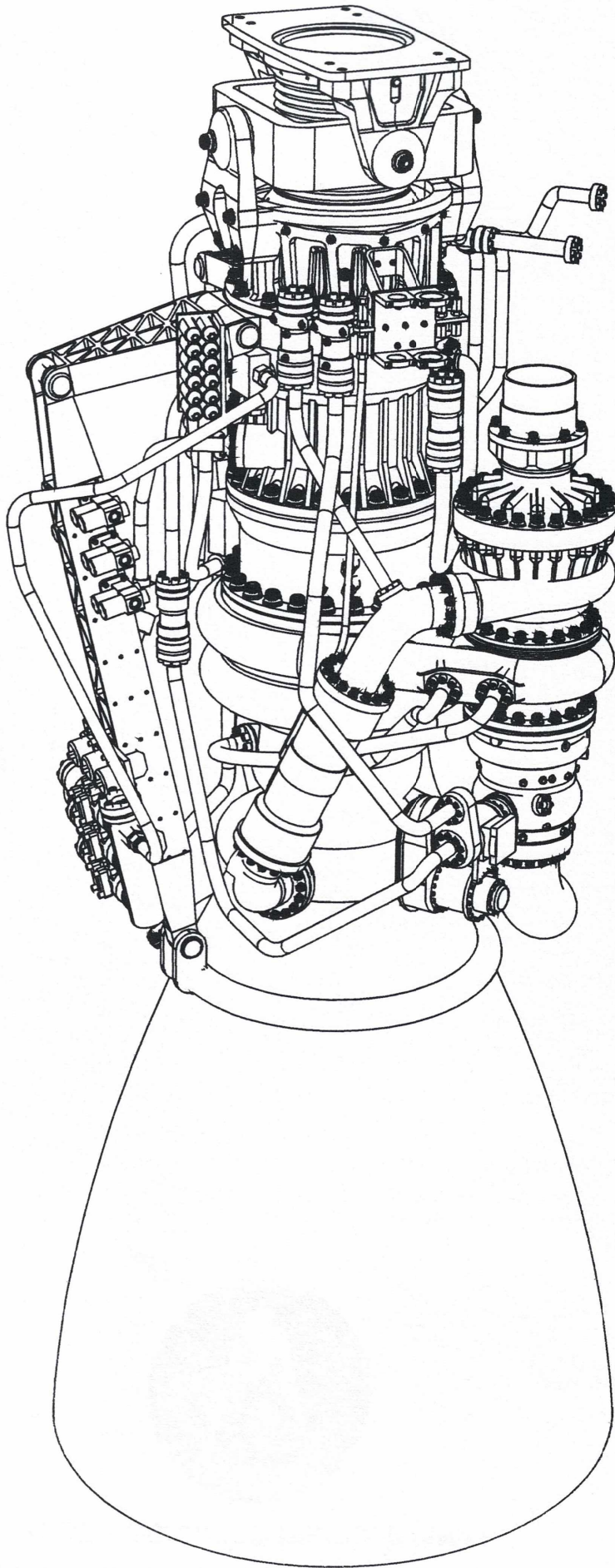


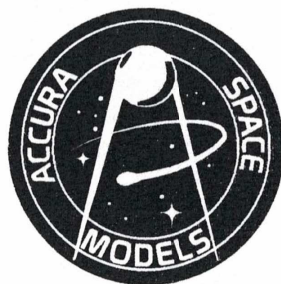






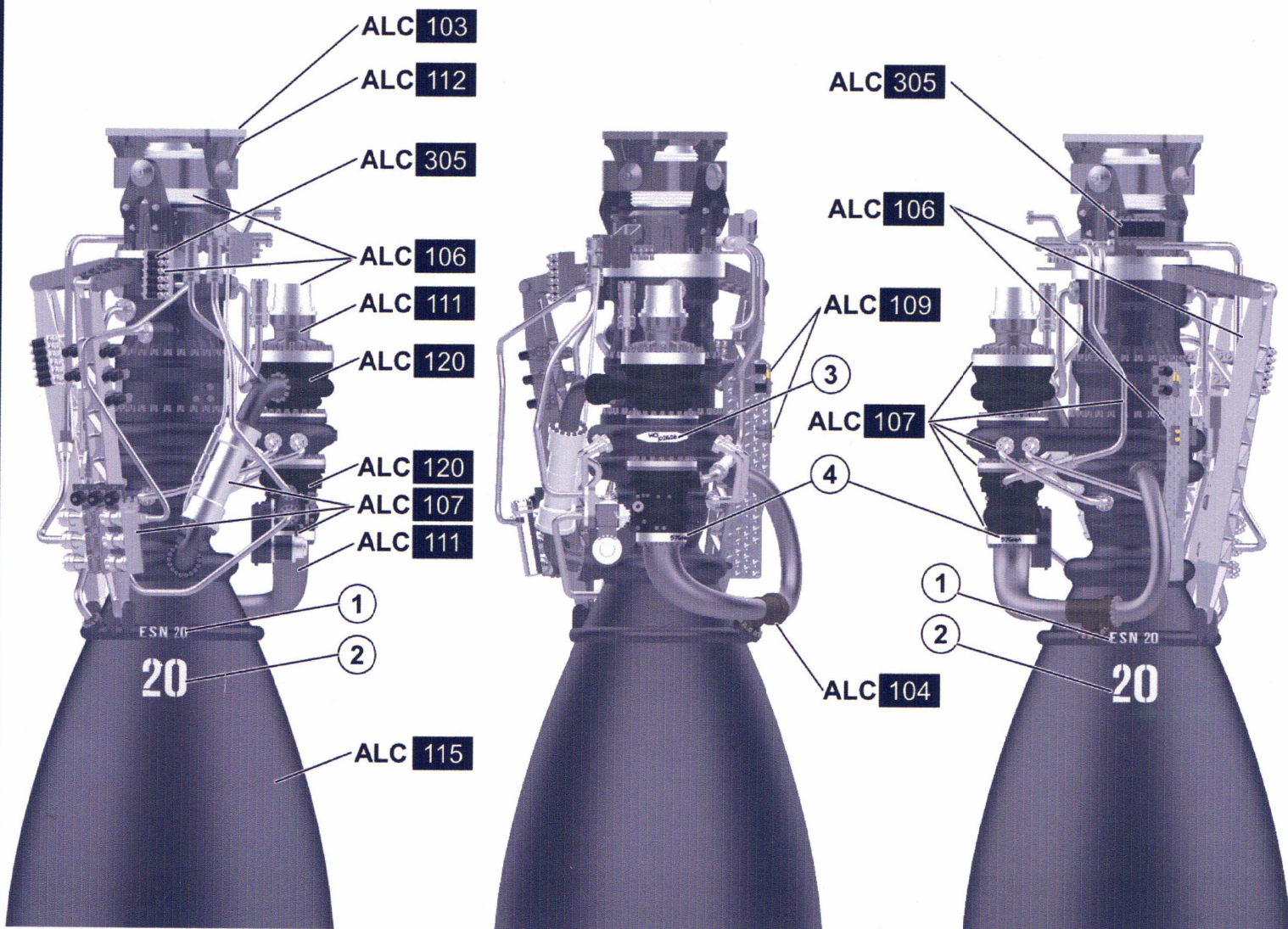
31





www.accuraspacemodels.com

Painting & Marking guide



PAINT REFERENCE COLOR

Color	Alclad II	Model Master	Mr.Hobby	Vallejo	Tamiya
White Aluminium	ALC-105 ✓	1781	MC-218	77.706	XF-16
Dark Aluminium	ALC-103 ✓	1780	MC-213	77.703	XF-56
Steel	ALC-112	1404	SM-204	77.712	X-56
Gun Metal	ALC-120	1423	MC-212	77.720	X-10
Magnesium	ALC-111	1403	SM-205	77.711	LP-61
Chrome	ALC-107 ✓	1790	SM-08	77.707	X-11
Black	ALC-305	FS-17038	C-02	70.861	X-1
Pale Burnt Metal	ALC-104	1424	MC-219	77.710	LP-63
Polish Brass	ALC-109 ✓	1417	MC-217	77.725	LP-62