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(12) **United States Design Patent**
Mordarski et al.

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(54) **LASER BEAM-COMBINING ENGINE WITH LASER RESONATORS**

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(**) Term: **15 Years**

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(52) **U.S. Cl.**
USPC **D15/127**

(58) **Field of Classification Search**
USPC D15/5, 122, 127, 199, 1, 4
CPC H01S 3/036; H01S 3/073; H01S 5/02218;
H01S 5/02315; H01S 5/0233
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,128,323 A * 10/2000 Myers G03F 7/70025
372/37
D647,929 S * 11/2011 Mesropyan D15/199
D908,148 S * 1/2021 Chann D15/127
D908,751 S * 1/2021 Chann D15/127

D918,972 S * 5/2021 Chann D15/127
2018/0278013 A1 * 9/2018 Kanskar H01S 3/094003
2021/0119411 A1 * 4/2021 Loch H01S 5/4012
2021/0167575 A1 * 6/2021 Sauter H01S 5/143

* cited by examiner

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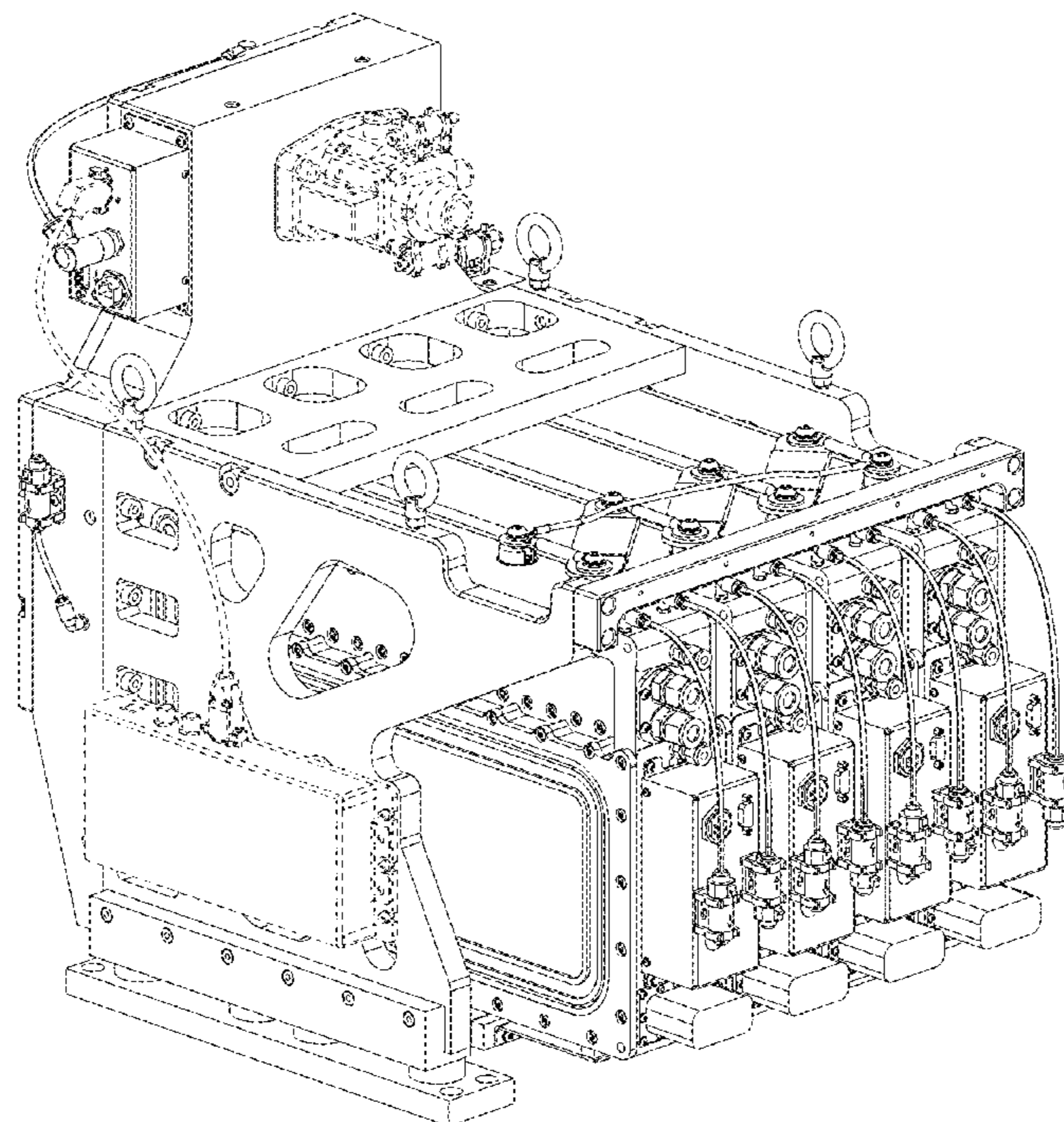
(57) **CLAIM**

The ornamental design for a laser beam-combining engine with laser resonators, substantially as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a laser beam-combining engine with laser resonators depicting the new design; FIG. 2 is a left-side elevation view of the laser beam-combining engine with laser resonators of FIG. 1; FIG. 3 is a back view of the laser beam-combining engine with laser resonators of FIG. 1; FIG. 4 is a right-side elevation view of the laser beam-combining engine with laser resonators of FIG. 1; FIG. 5 is a front view of the laser beam-combining engine with laser resonators of FIG. 1; FIG. 6 is a top view of the laser beam-combining engine with laser resonators of FIG. 1; FIG. 7 is a bottom view of the laser beam-combining engine with laser resonators of FIG. 1; and, FIG. 8 is another perspective view of the laser beam-combining engine with laser resonators of FIG. 1. The broken lines showing features of the laser beam-combining engine with laser resonators form no part of the claimed design.

1 Claim, 8 Drawing Sheets



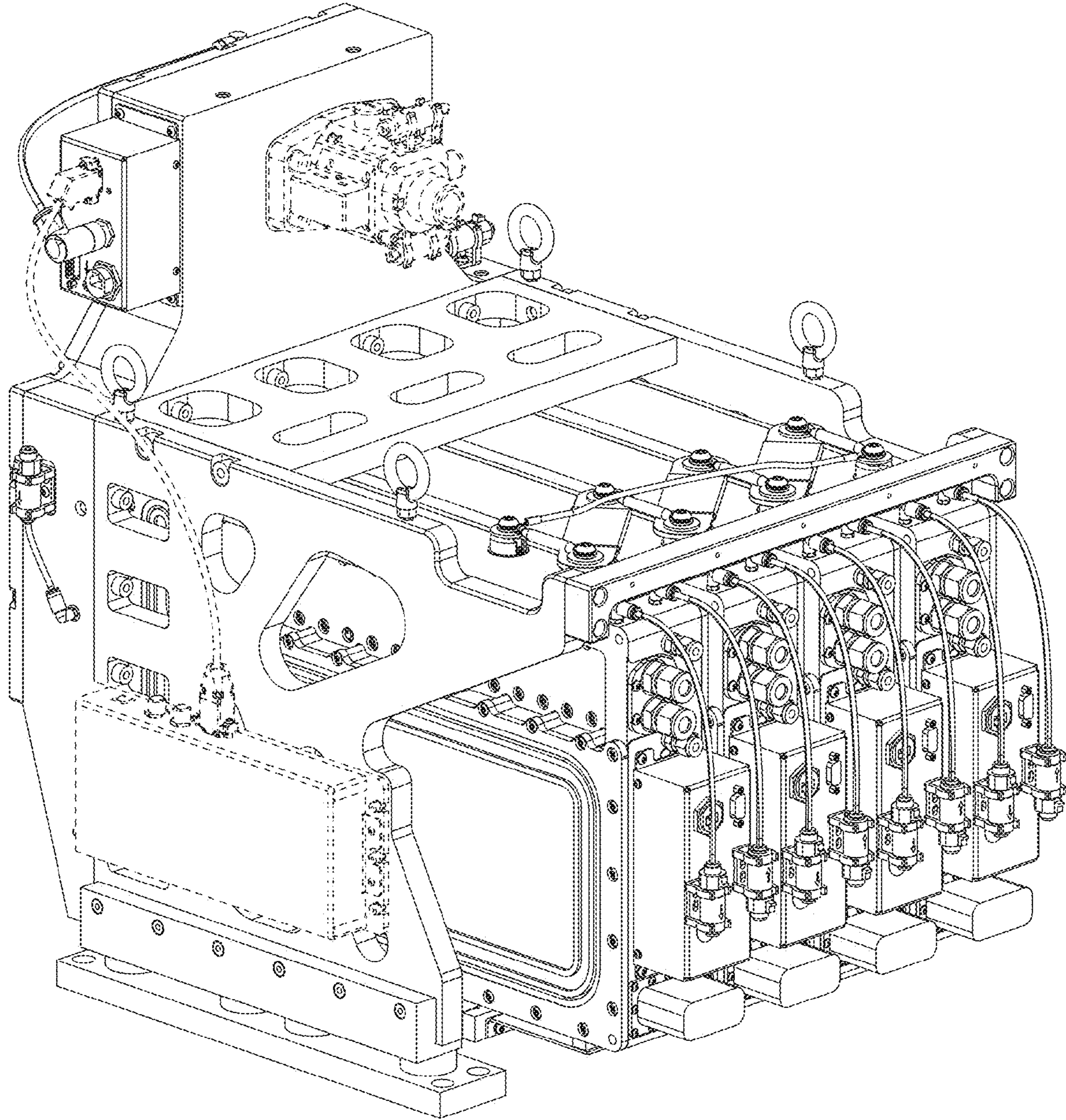


Fig. 1

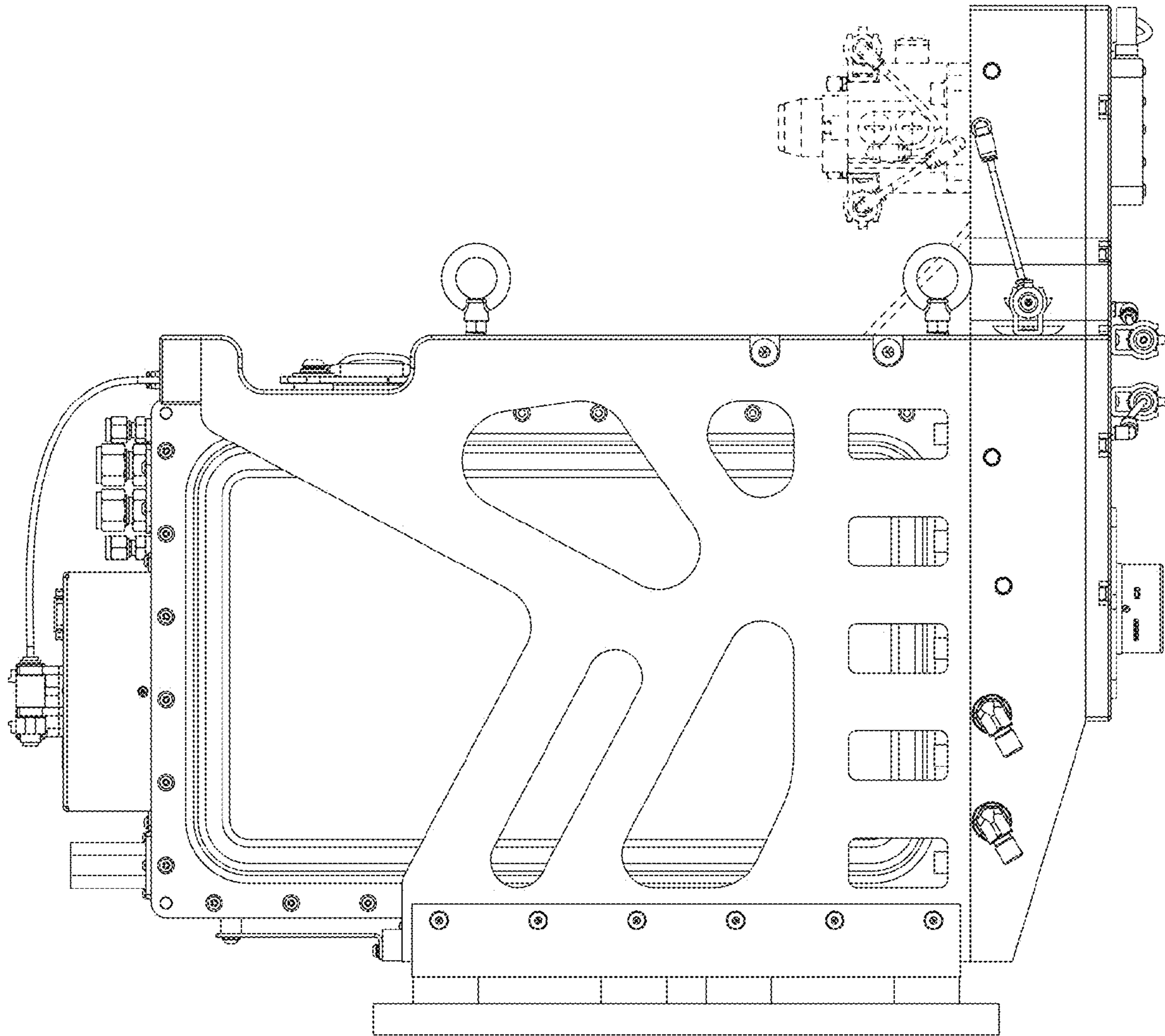


Fig. 2

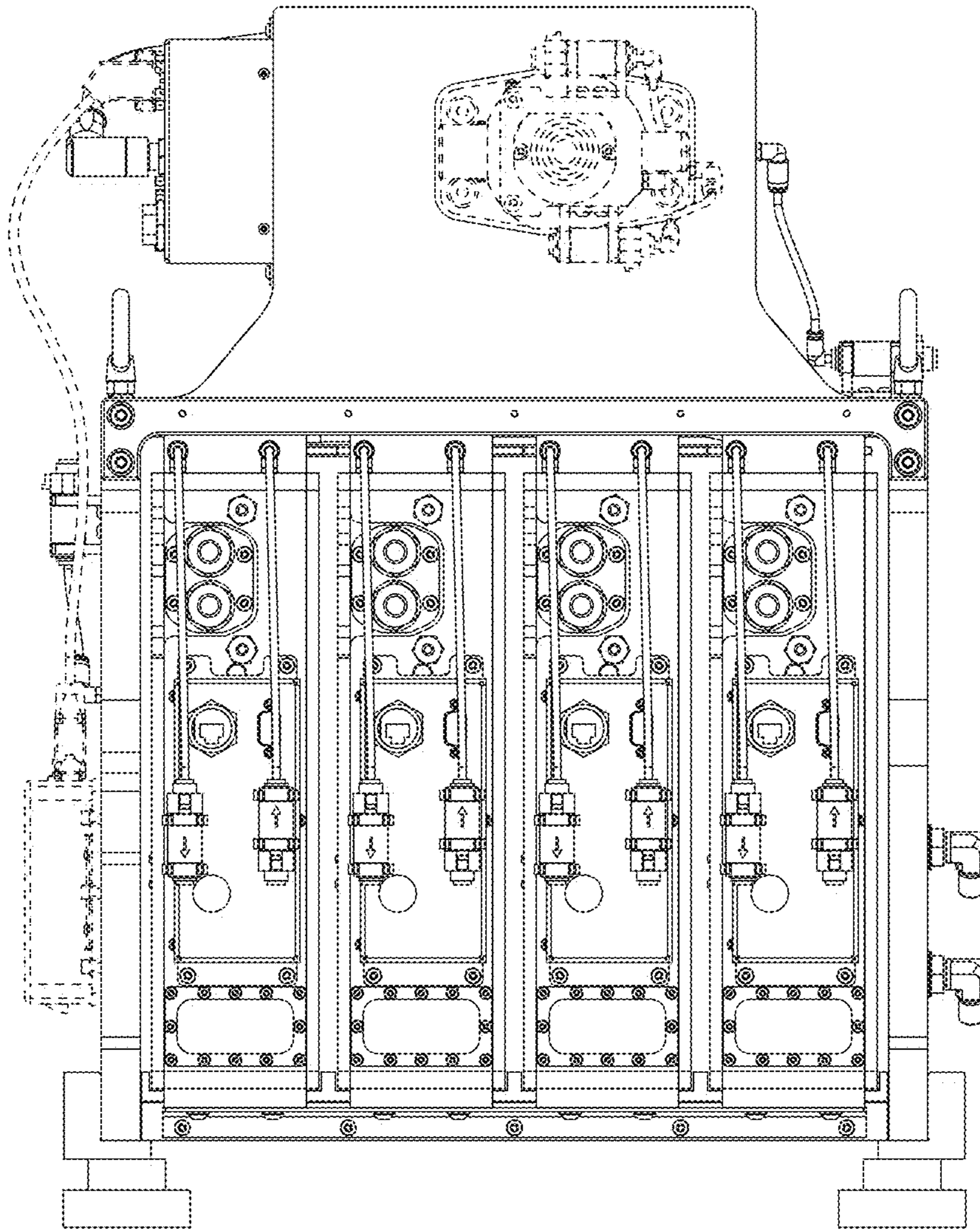


Fig. 3

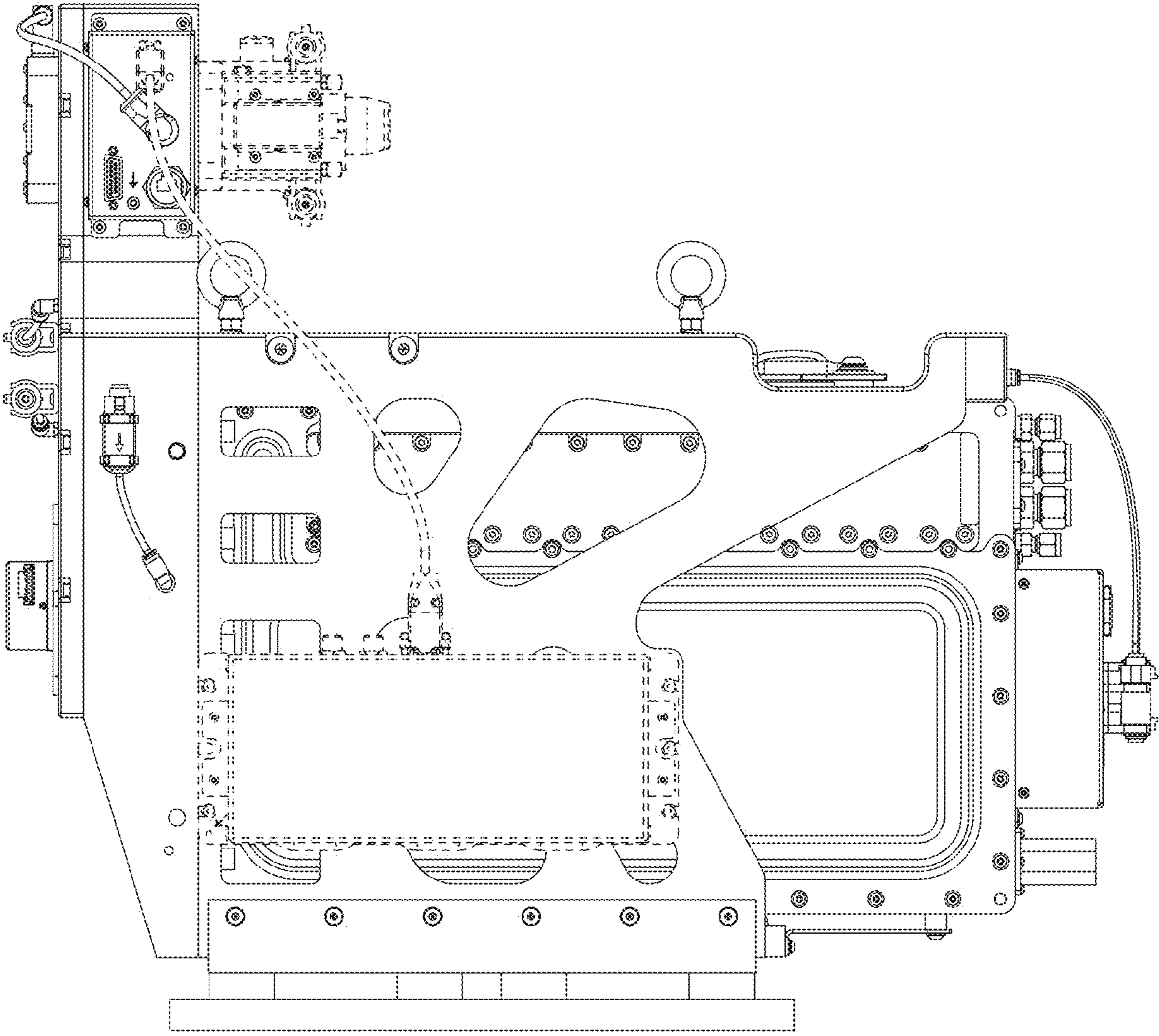


Fig. 4

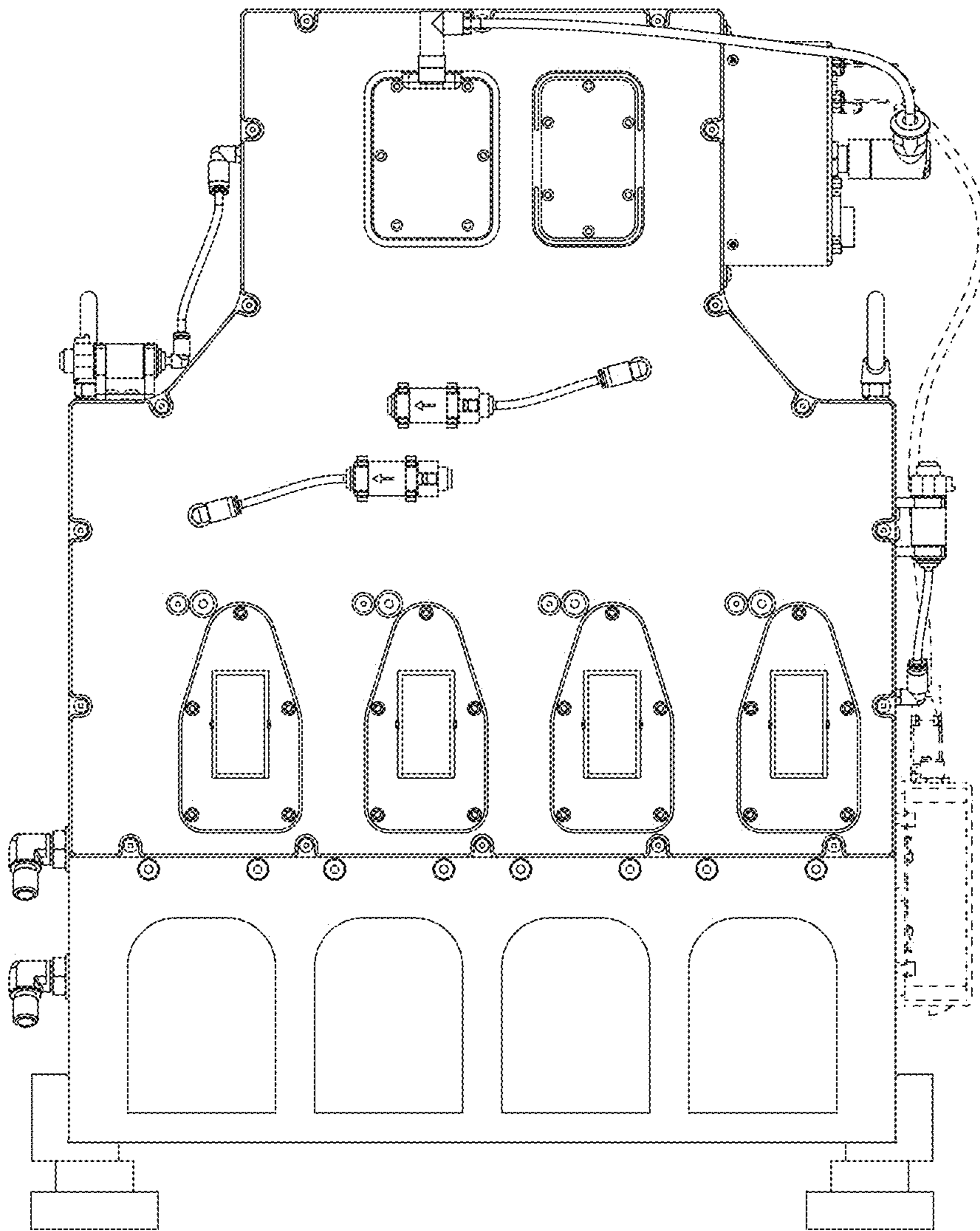


Fig. 5

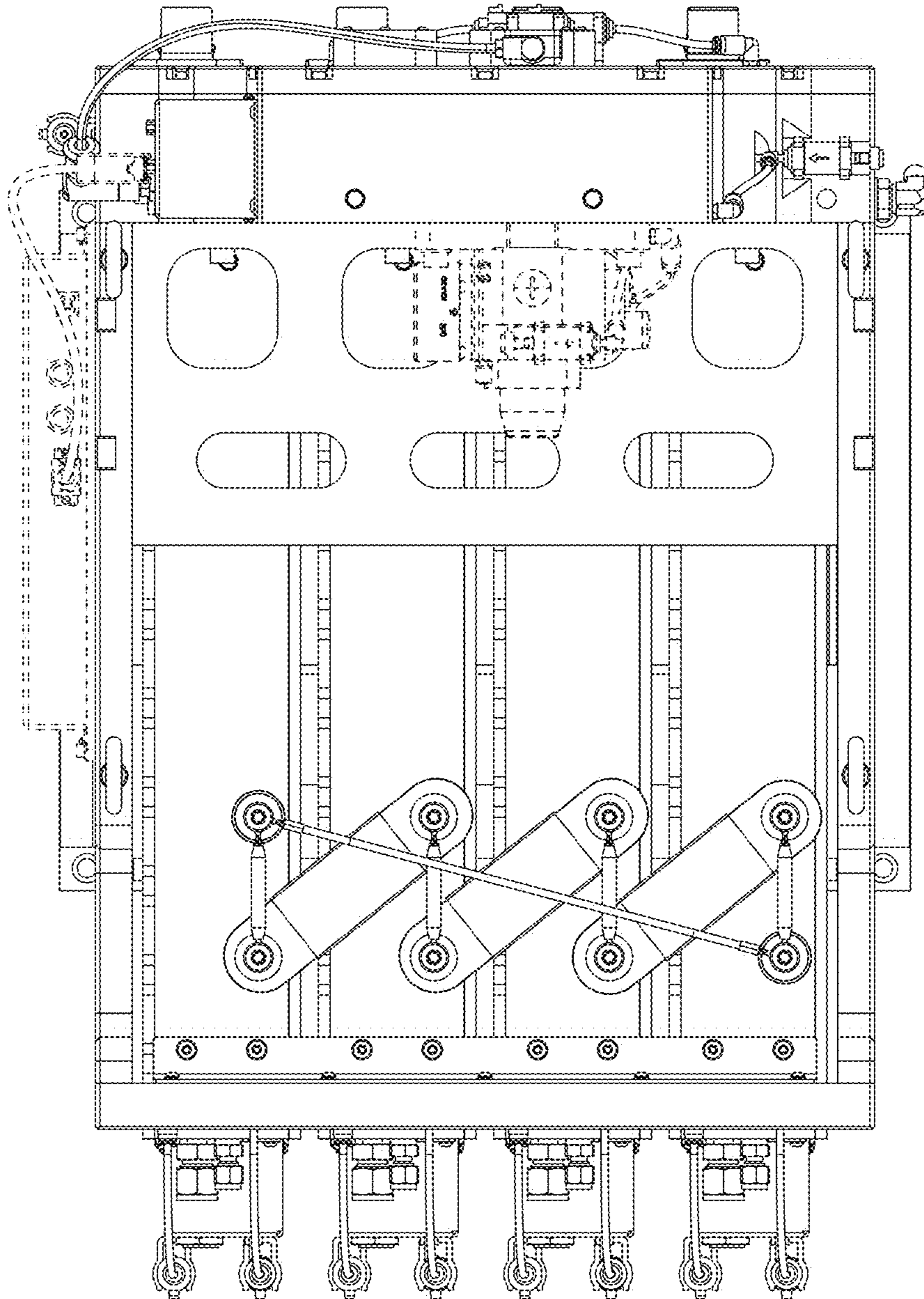


Fig. 6

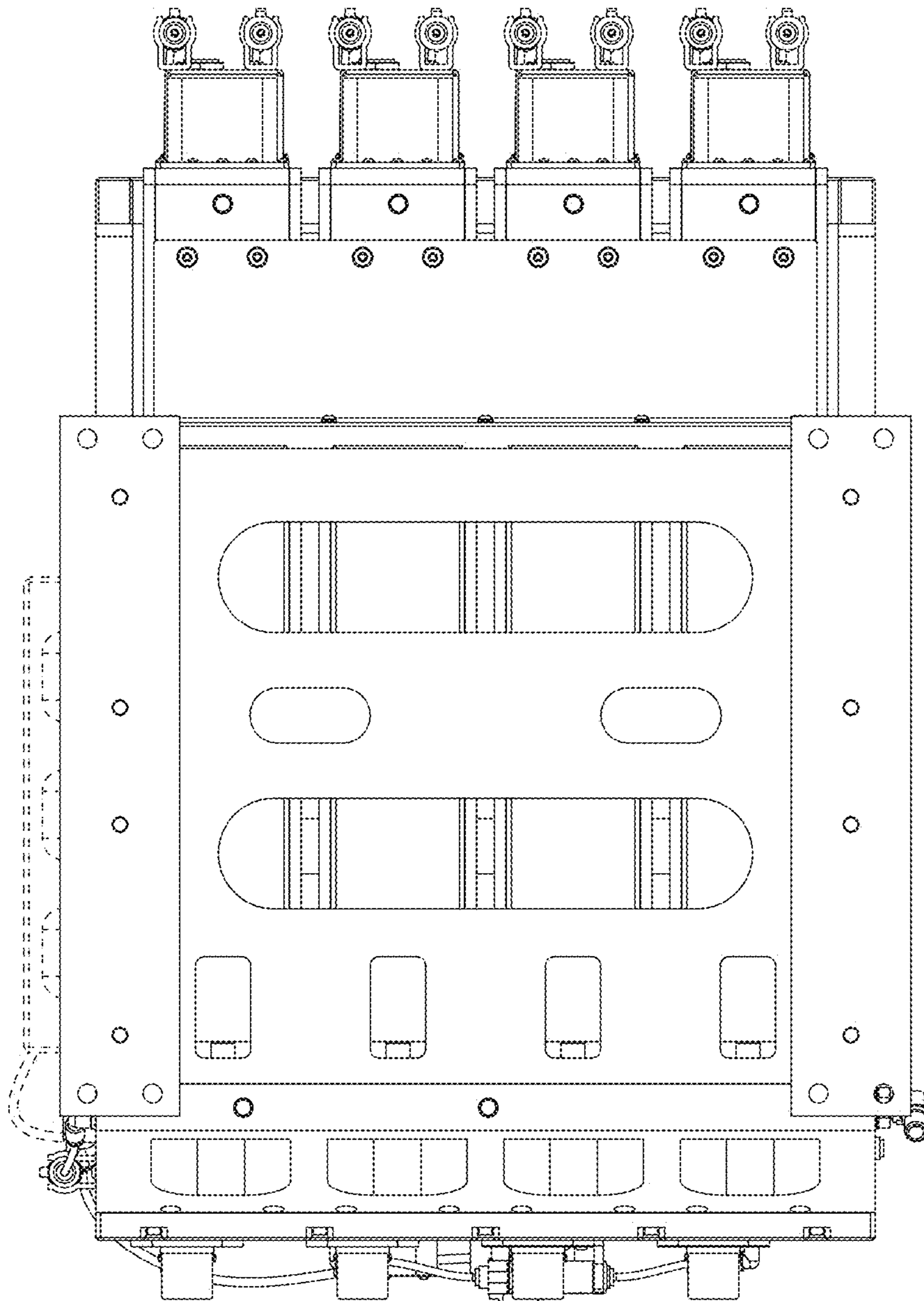


Fig. 7

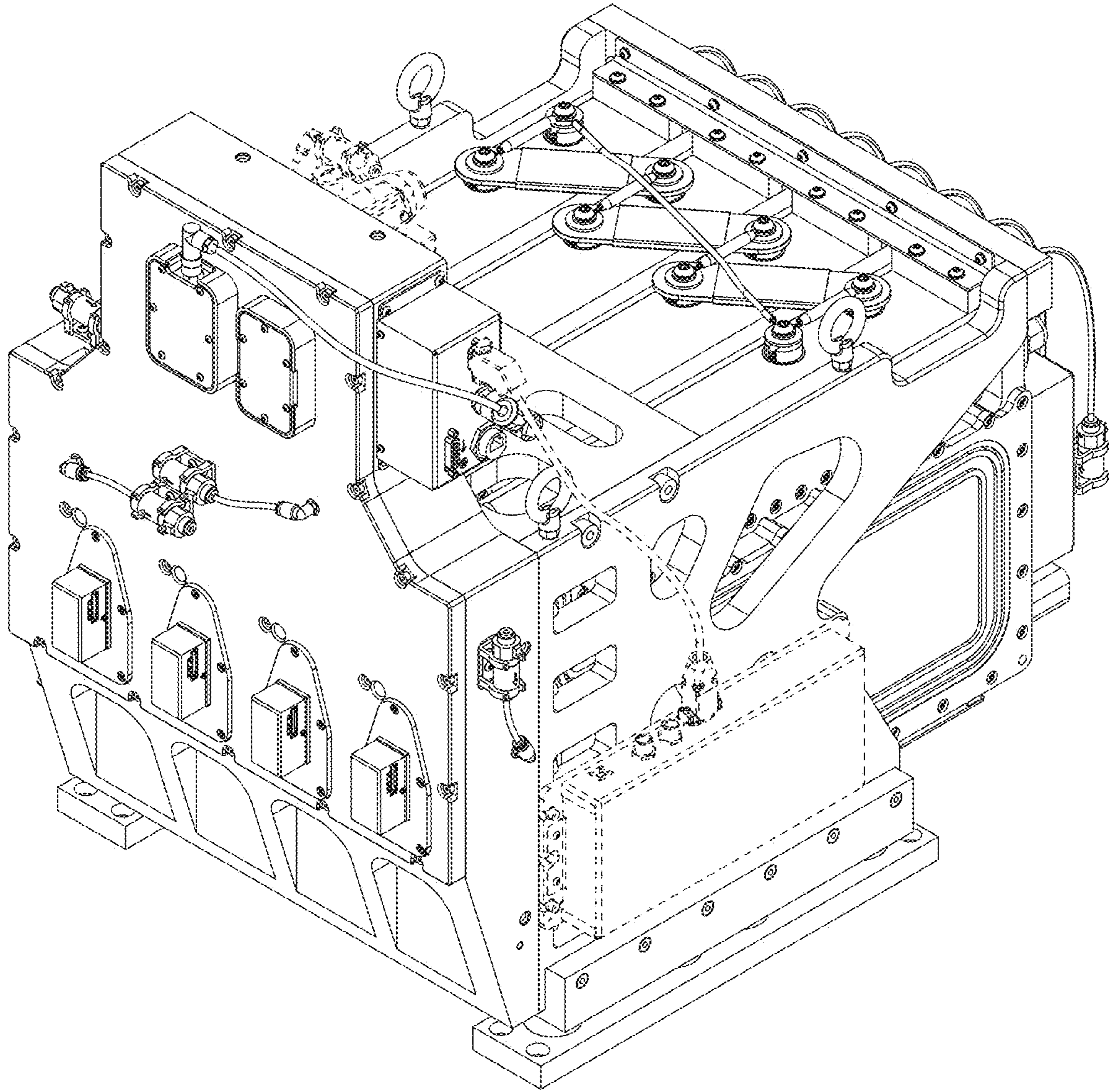


Fig. 8