



US00D952692S

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

(10) **Patent No.:** **US D952,692 S**
(45) **Date of Patent:** **** May 24, 2022**

(54) **DIAPHRAGM PUMP**
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(73) Assignee: **YAMADA CORPORATION**, Tokyo (JP)
(**) Term: **15 Years**
(21) Appl. No.: **35/510,957**
(22) Filed: **Jun. 17, 2020**
(80) **Hague Agreement Data**
Int. Filing Date: **Jun. 17, 2020**
Int. Reg. No.: **DM/209146**
Int. Reg. Date: **Jun. 17, 2020**
Int. Reg. Pub. Date: **Dec. 18, 2020**

(30) **Foreign Application Priority Data**
Dec. 19, 2019 (JP) 2019-028262 U
(51) **LOC (13) Cl.** **15-02**
(52) **U.S. Cl.**
USPC **D15/7**
CPC **F02M 37/04** (2013.01)
(58) **Field of Classification Search**
USPC D15/7-9; D23/231-232, 225;
417/355-363, 235, 265, 321, 410.1, 415,
417/416, 405, 900; 60/408-412;
184/28-37; 415/140-147; 123/495, 509;
137/365.34
CPC F02M 37/04; F02M 37/14
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

D294,947 S * 3/1988 Wilden D15/7
D380,218 S * 6/1997 McKee D15/7
D388,796 S * 1/1998 Conti D15/7
D388,797 S * 1/1998 Conti D15/7

D400,210 S * 10/1998 Reynolds D15/7
D435,855 S * 1/2001 Donelson D15/7
D484,145 S * 12/2003 Roberts D15/7
D515,101 S * 2/2006 Wiechers D15/7
D667,465 S * 9/2012 Headley D15/7
D674,815 S * 1/2013 Headley D15/7
D675,231 S * 1/2013 Headley D15/7
D677,282 S * 3/2013 Soja D15/7
D682,316 S * 5/2013 Rogne D15/7

(Continued)

FOREIGN PATENT DOCUMENTS

JP D503034 S 5/1954
JP HJ25022958 6/2013

(Continued)

OTHER PUBLICATIONS

Japanese Decision to Grant Design Registration for Japanese Application No. 2019-028262, dated May 19, 2020, with an English translation.

(Continued)

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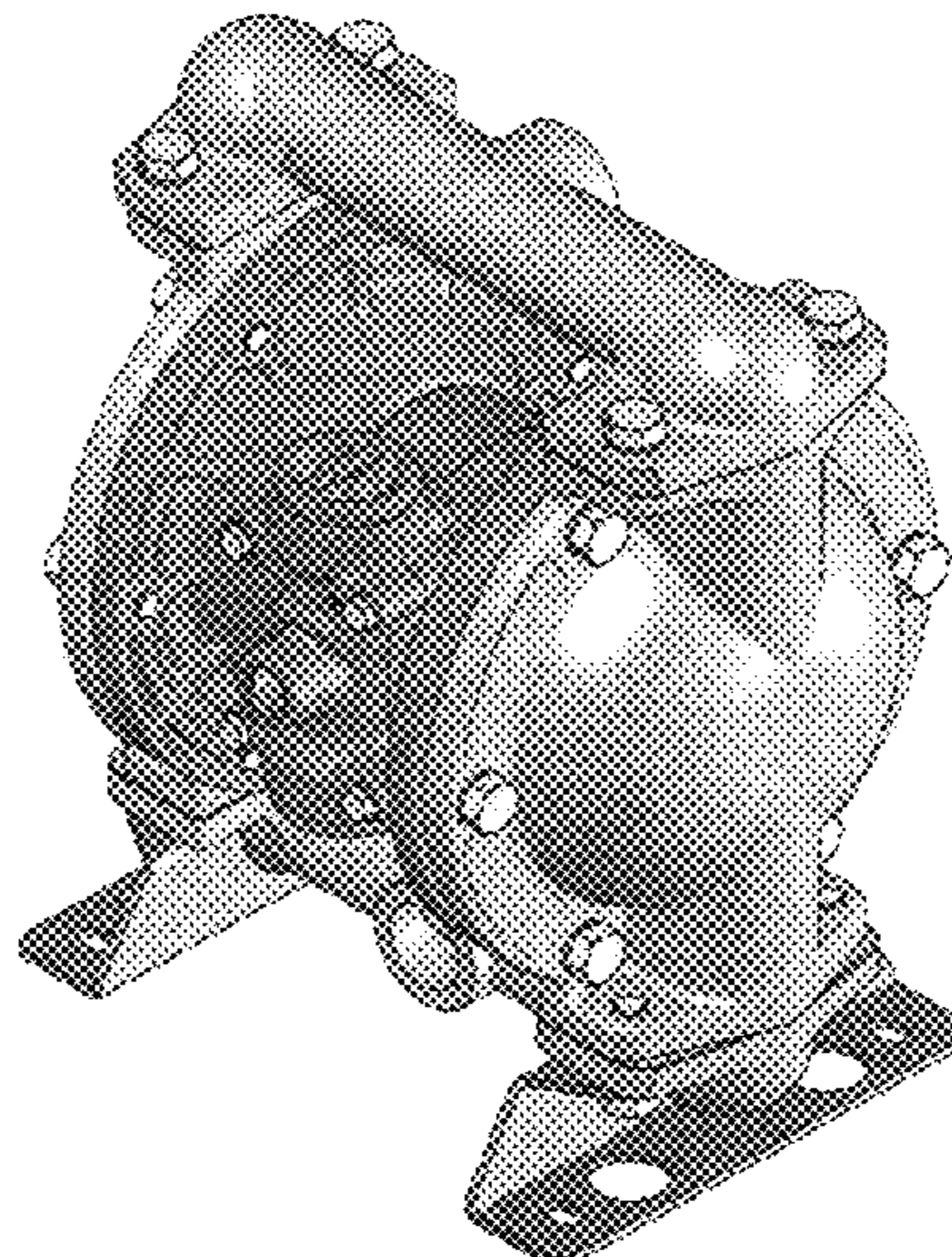
(57) **CLAIM**

The ornamental design for a diaphragm pump, as shown and described.

DESCRIPTION

- 1. Diaphragm pump
- 1.1 : Front
- 1.2 : Back
- 1.3 : Right
- 1.4 : Left
- 1.5 : Top
- 1.6 : Bottom
- 1.7 : Perspective
- 1.8 : Perspective

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D692,923	S	*	11/2013	Conrad	.....	D15/7
D780,227	S	*	2/2017	Hines	.....	D15/7
D781,922	S	*	3/2017	Suwabe	.....	D15/7
D781,923	S	*	3/2017	Suwabe	.....	D15/7
D781,924	S	*	3/2017	Araki	.....	D15/7
D782,541	S	*	3/2017	Hines	.....	D15/7
D817,360	S	*	5/2018	Dietzsch	.....	D15/7
D822,067	S	*	7/2018	Hines	.....	D15/7
D822,719	S	*	7/2018	Hines	.....	D15/7
D822,720	S	*	7/2018	Hines	.....	D15/7
D861,043	S	*	9/2019	Suwabe	..... F02M 37/04	D15/7

FOREIGN PATENT DOCUMENTS

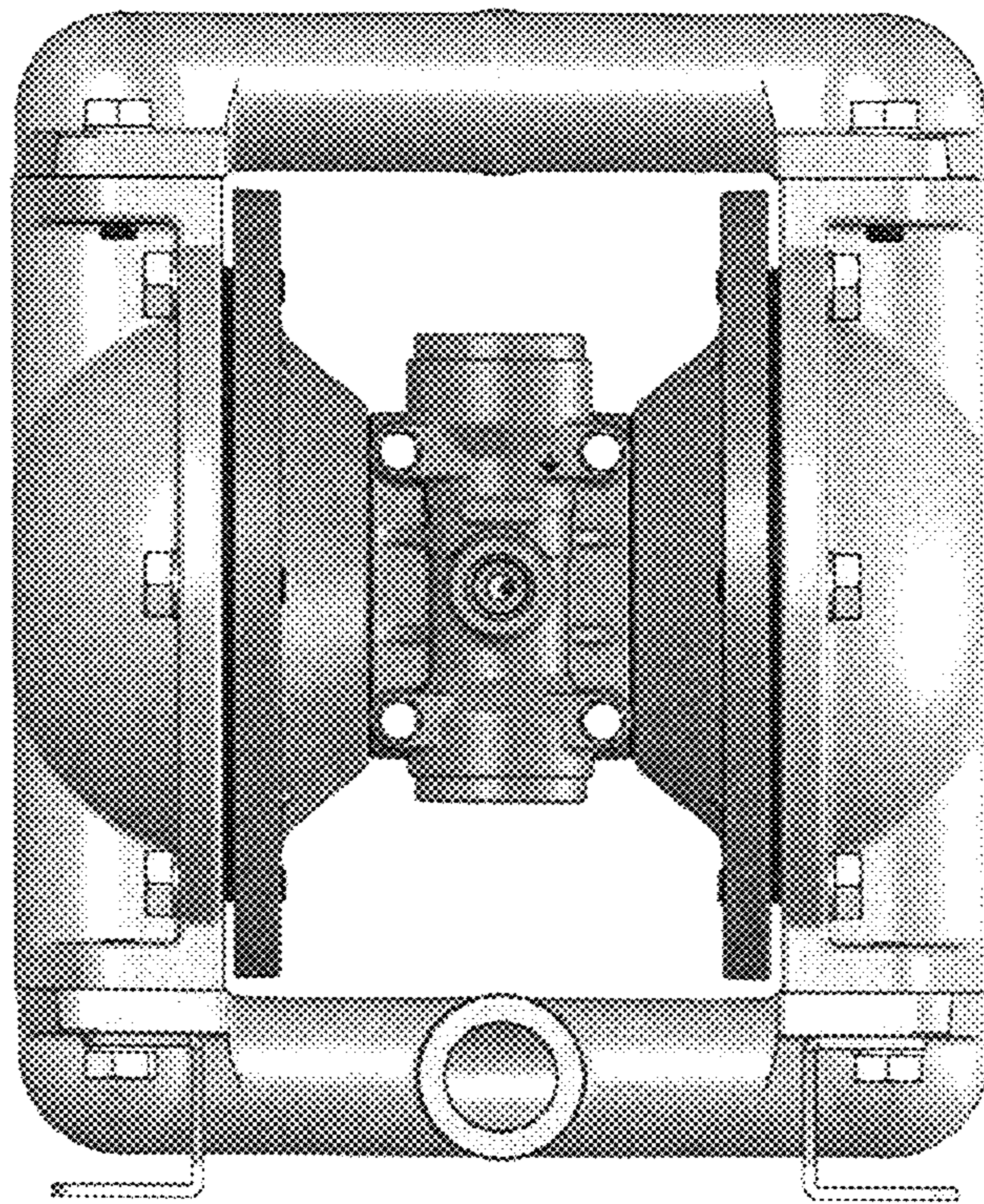
JP	HJ28015379	6/2016
JP	HJ28025782	7/2016
JP	D1556911 S	8/2016
JP	HJ29018488	7/2017

OTHER PUBLICATIONS

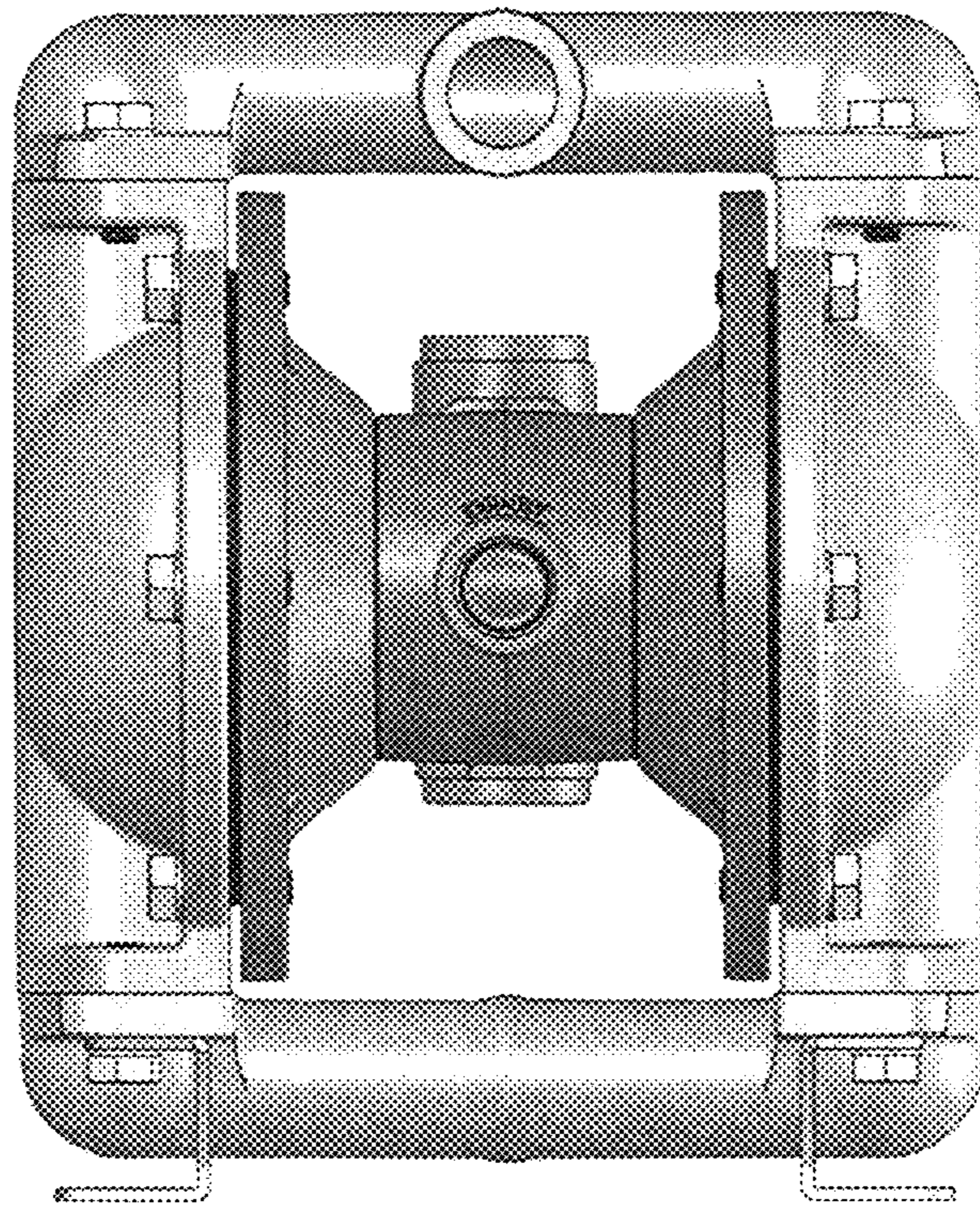
Japanese Notifications for Japanese Application No. 2019-028262, dated May 19, 2020, with an English translation.

* cited by examiner

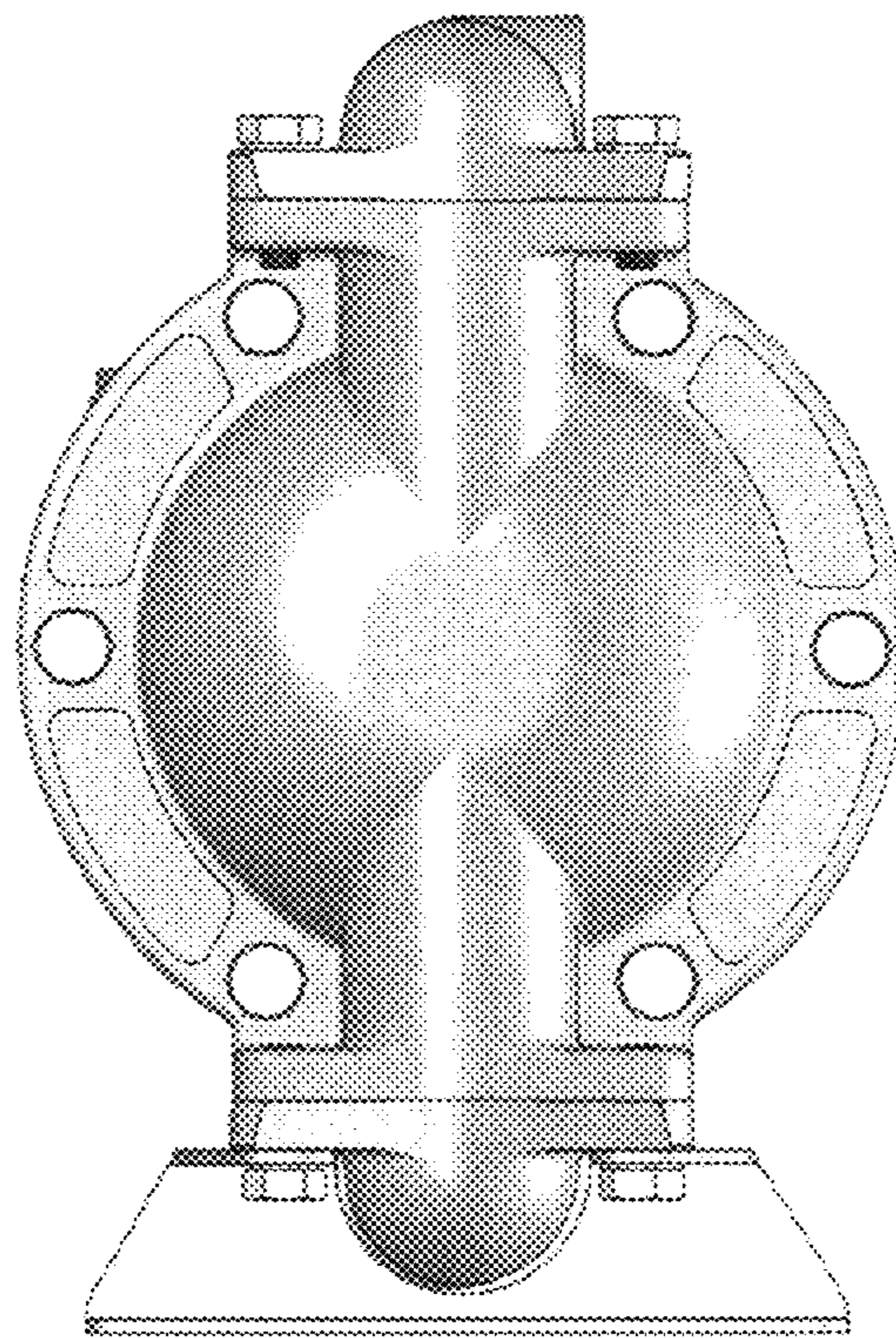
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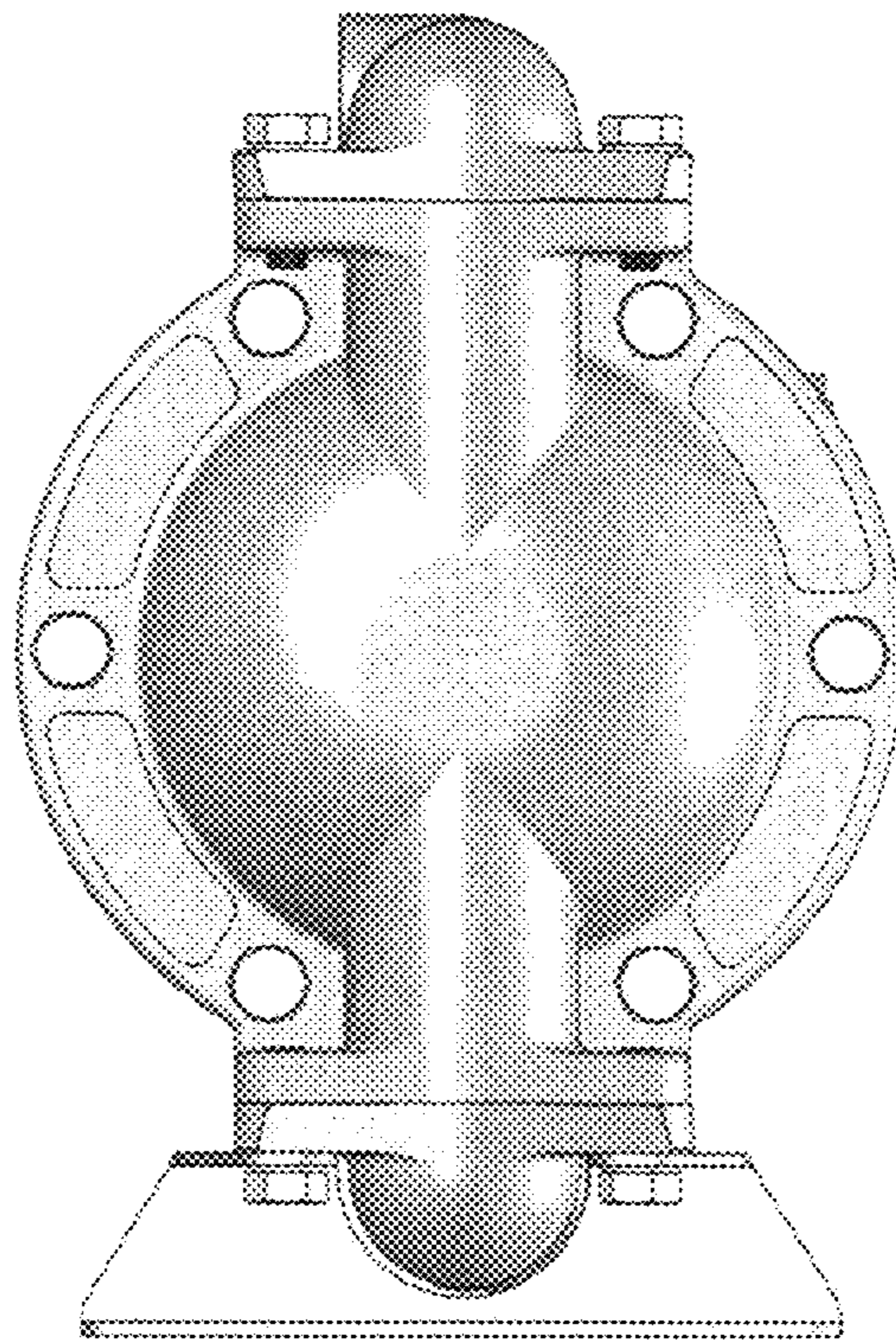
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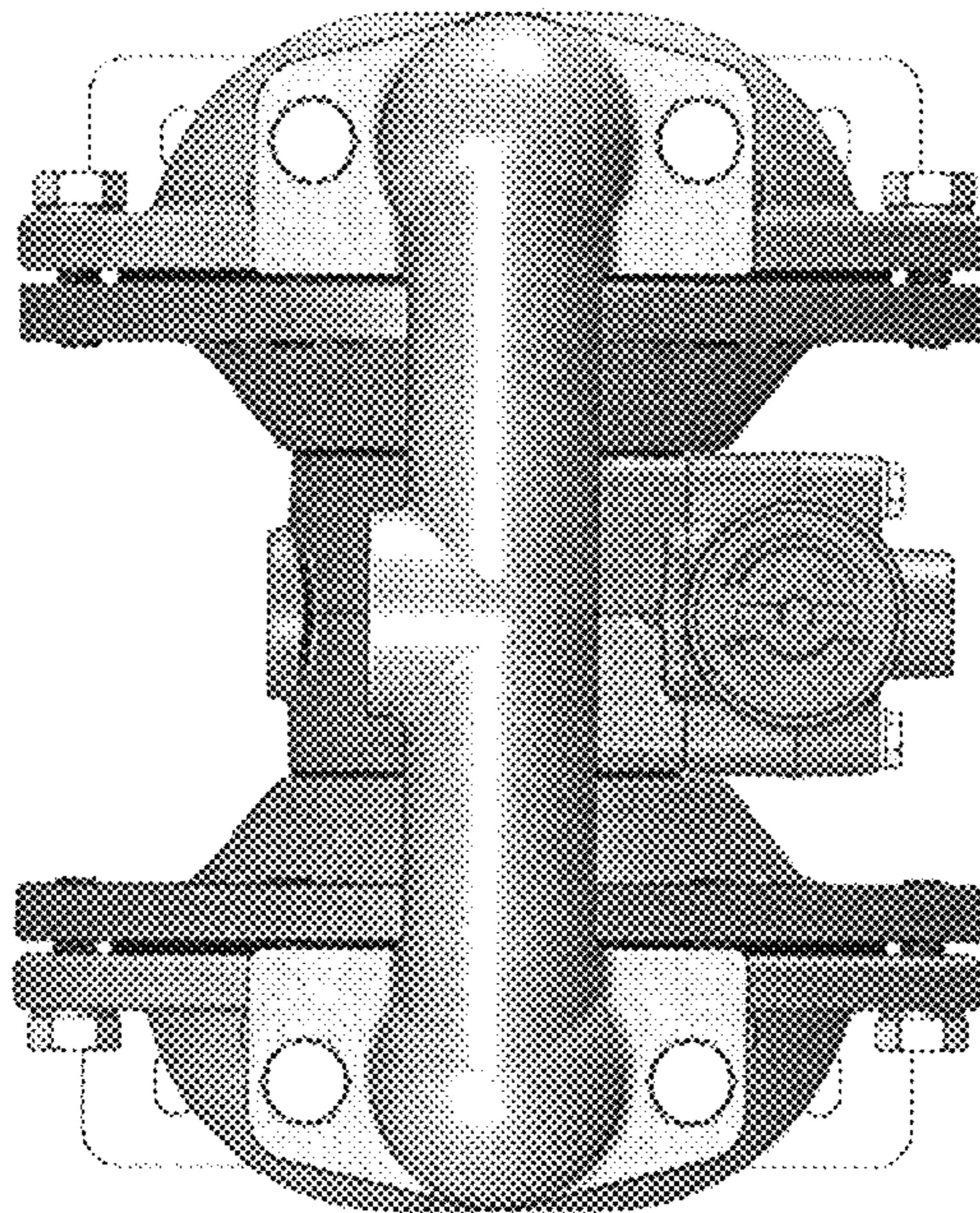


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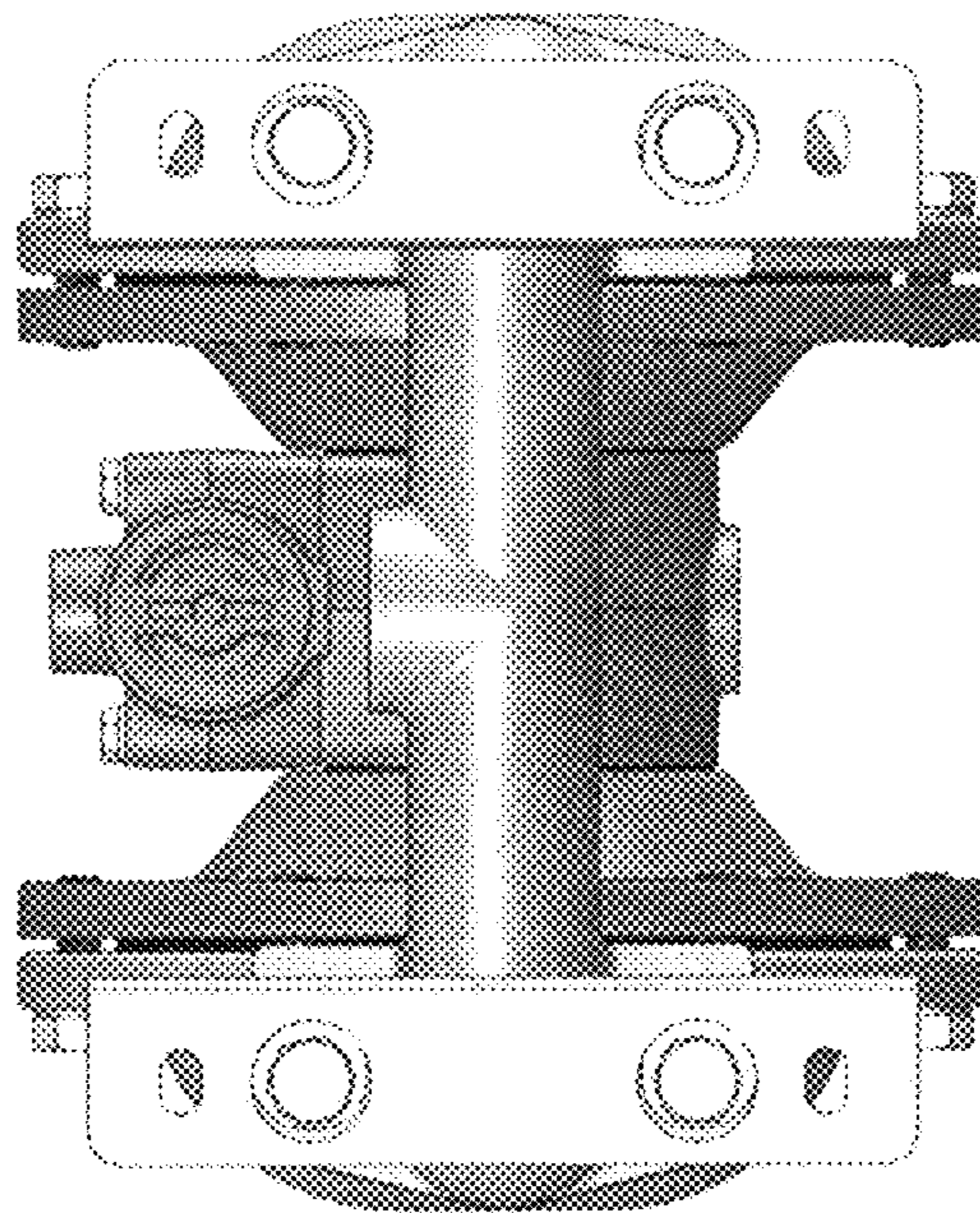


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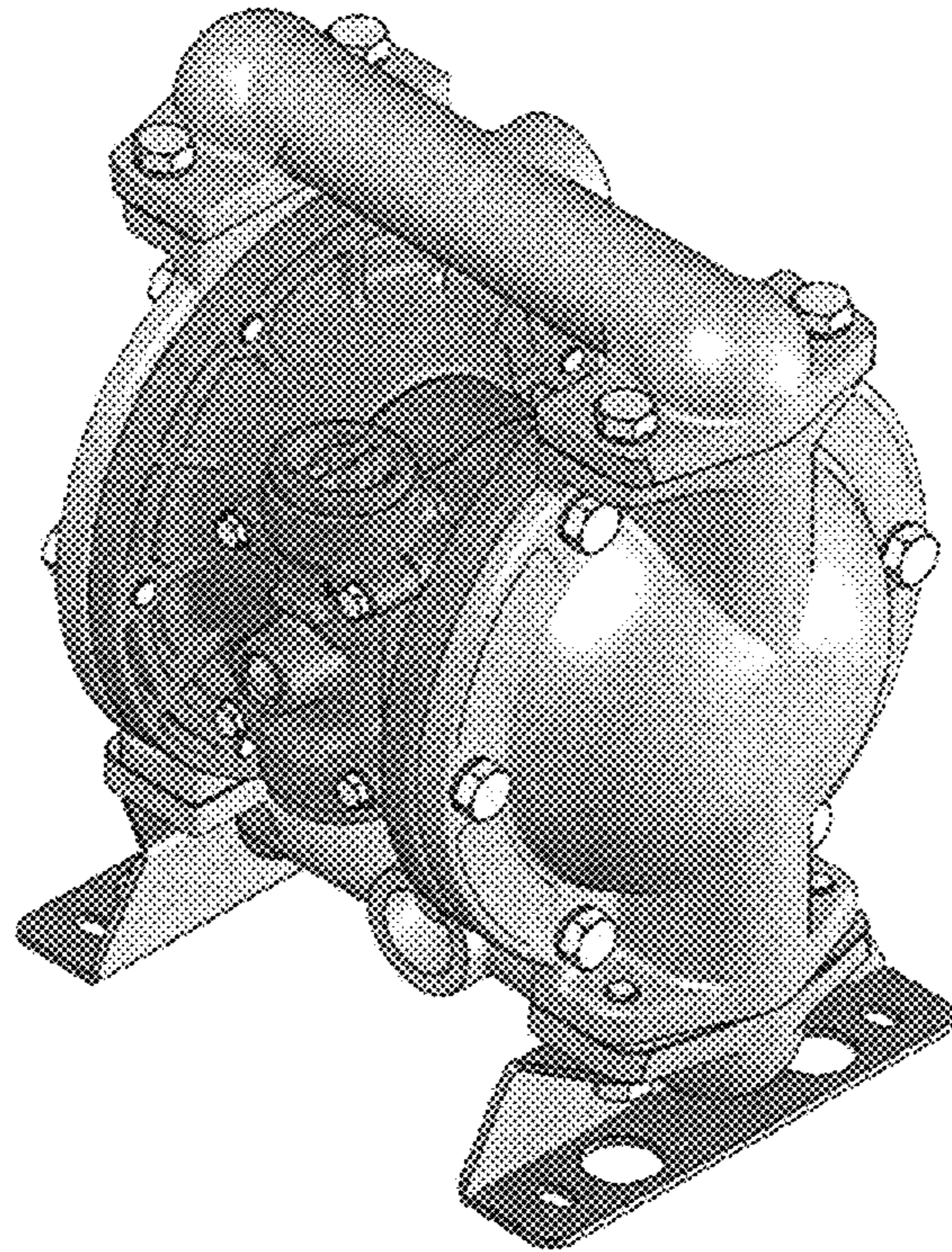


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