

(12) United States Design Patent

Torigai

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(54) BOLT OR NUT TIGHTENING DEVICE

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(73) Assignee: Maeda Metal Industries, Ltd., Osaka

(JP)

(**) Term: **14 Years**

(21) Appl. No.: 29/315,375

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(30) Foreign Application Priority Data

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(51)	LOC (9) Cl.	•••••	08-05

(52) **U.S. Cl.** **D8/69**

(58) **Field of Classification Search** D8/61–70; 81/57.11, 429, 454–456, 469, 489; 173/13,

173/104, 114, 167–171, 178, 201, 211, 213, 173/217, 198; 227/8, 113, 114, 120, 130, 227/136, 142; 310/50; 408/20, 124, 125,

408/234, 241 R, 58, 67; 451/358

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

5,953,965 A *	9/1999	Kaneyama et al 81/55
6,053,080 A *	4/2000	Kaneyama et al 81/469
D569,207 S *	5/2008	Torigai et al D8/69
D586,640 S *	2/2009	Torigai et al D8/69
2002/0162421 A1*	11/2002	Galat 81/57.13

* cited by examiner

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(74) Attorney, Agent, or Firm—Kirk D. Houser, Esquire;
Eckert Seamans Cherin & Mellott, LLC

(57) CLAIM

The ornamental design for bolt or nut tightening device, substantially as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a bolt or nut tightening device of the present design;

FIG. 2 is a rear elevational view thereof;

FIG. 3 is a left side view thereof;

FIG. 4 is a right side view thereof;

FIG. 5 is a top plan view thereof;

FIG. 6 is a bottom plan view thereof;

FIG. 7 is a sectional view taken on line 7—7 of FIG. 1

FIG. 8 is a sectional view taken on line 8—8 of FIG. 1

FIG. 9 is a sectional view taken on line 9—9 of FIG. 1

FIG. 10 is a sectional view taken on line 10—10 of FIG. 1

FIG. 11 is a sectional view taken on line 11—11 of FIG. 1

FIG. 12 is a sectional view taken on line 12—12 of FIG. 1

FIG. 13 is a first perspective view thereof, as seen from diagonally left upward of a socket attached side;

FIG. 14 is a second perspective view thereof, as seen from diagonally right upward of the socket attached side;

FIG. 15 is a third perspective view thereof, as seen from diagonally left downward of the socket attached side;

FIG. 16 is a fourth perspective view thereof, as seen from diagonally right downward of the socket attached side;

FIG. 17 is a fifth perspective view thereof, as seen from diagonally left upward of a handle side;

FIG. 18 is a sixth perspective view thereof, as seen from diagonally right upward of the handle side;

FIG. 19 is a seventh perspective view thereof, as seen from diagonally left downward of the handle side; and,

FIG. 20 is a eighth perspective view thereof, as seen from diagonally right downward of the handle side.

The broken lines are shown in the views for illustrative purposes only and form no part of the claimed invention.

1 Claim, 8 Drawing Sheets

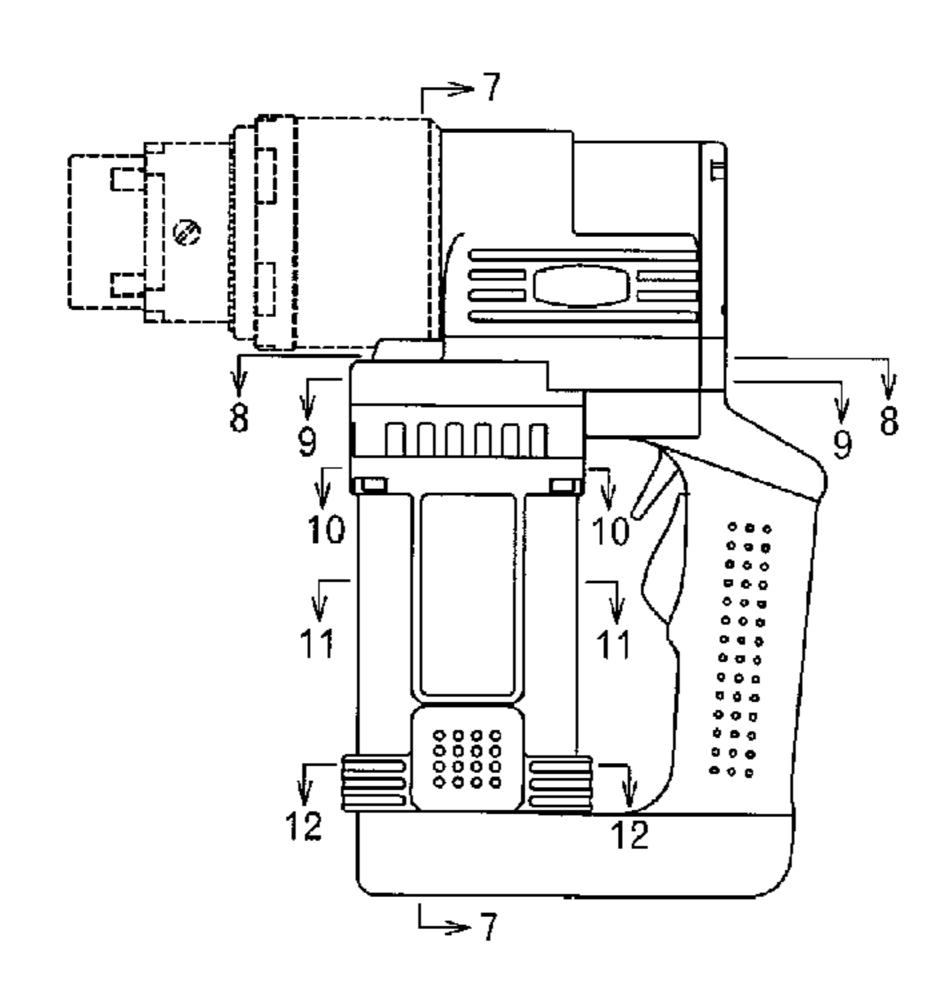
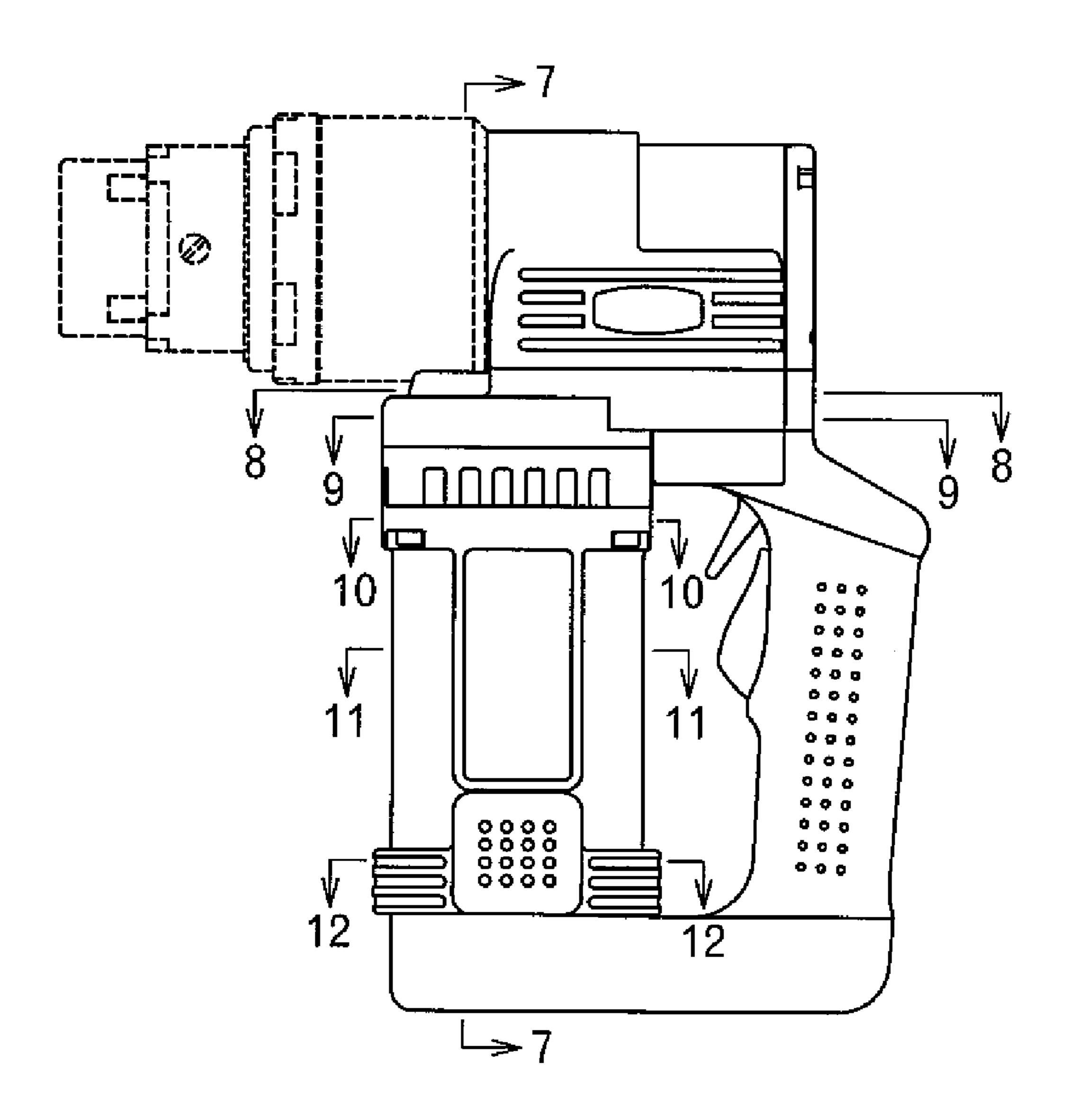
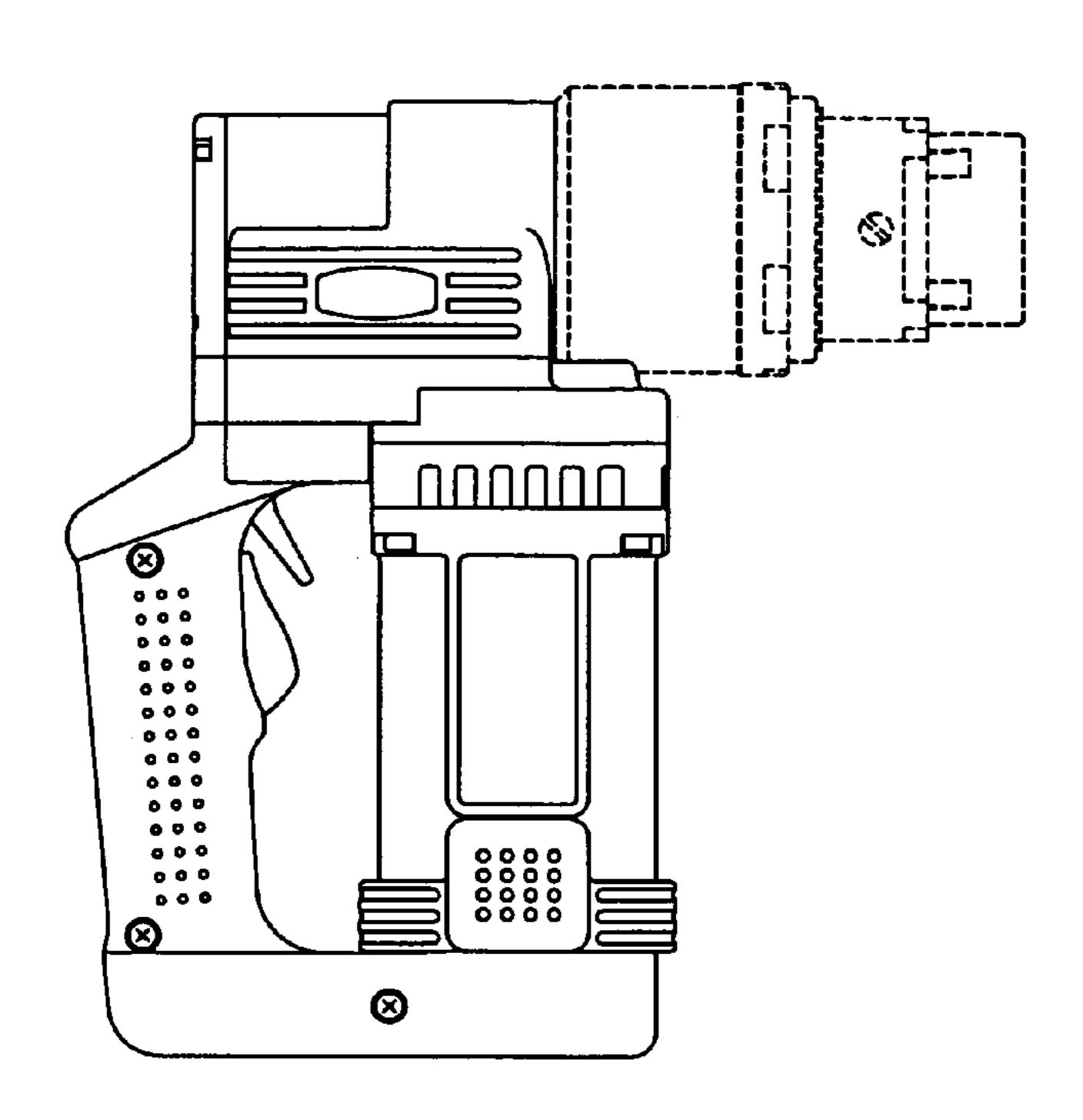


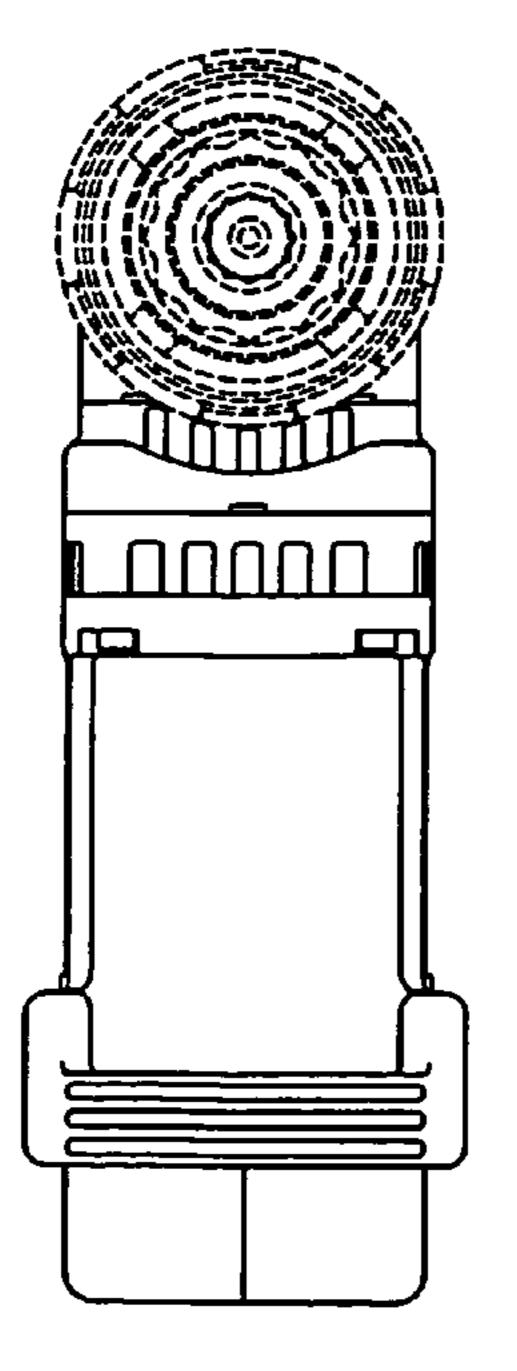
FIG. 1



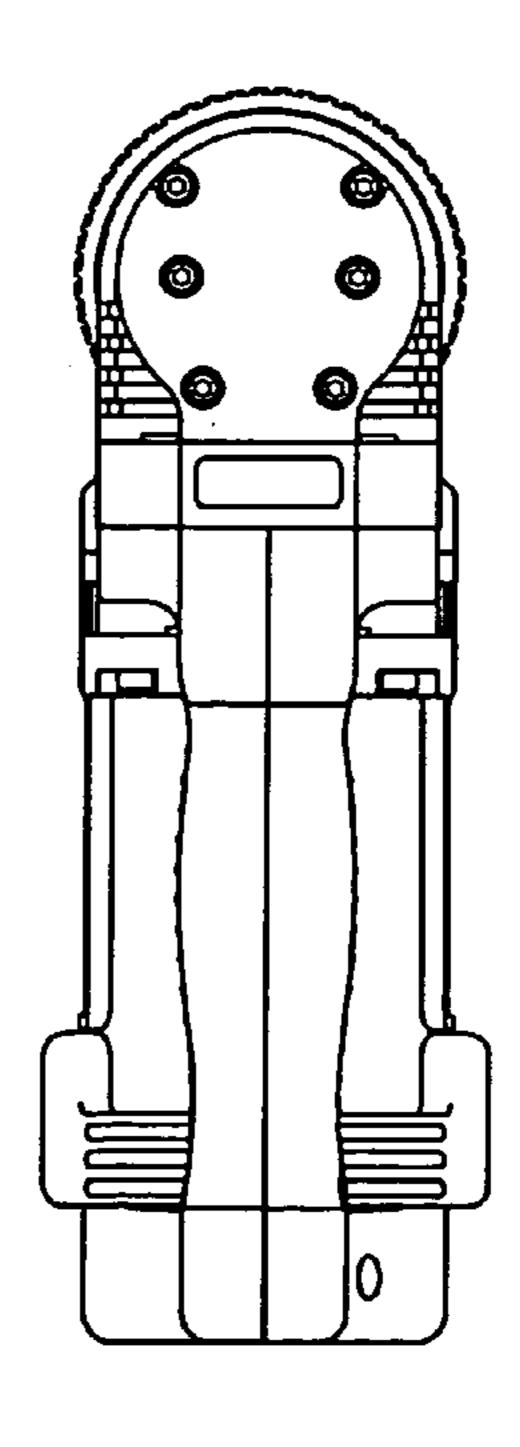
F I G. 2



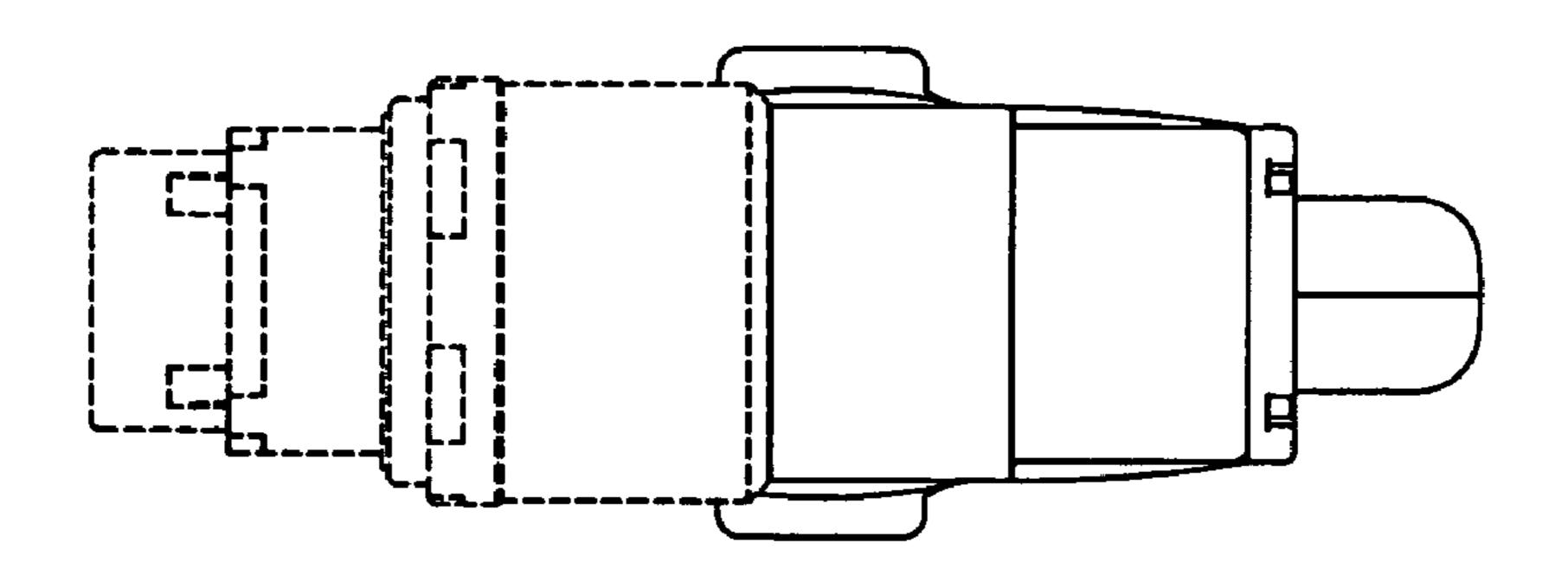
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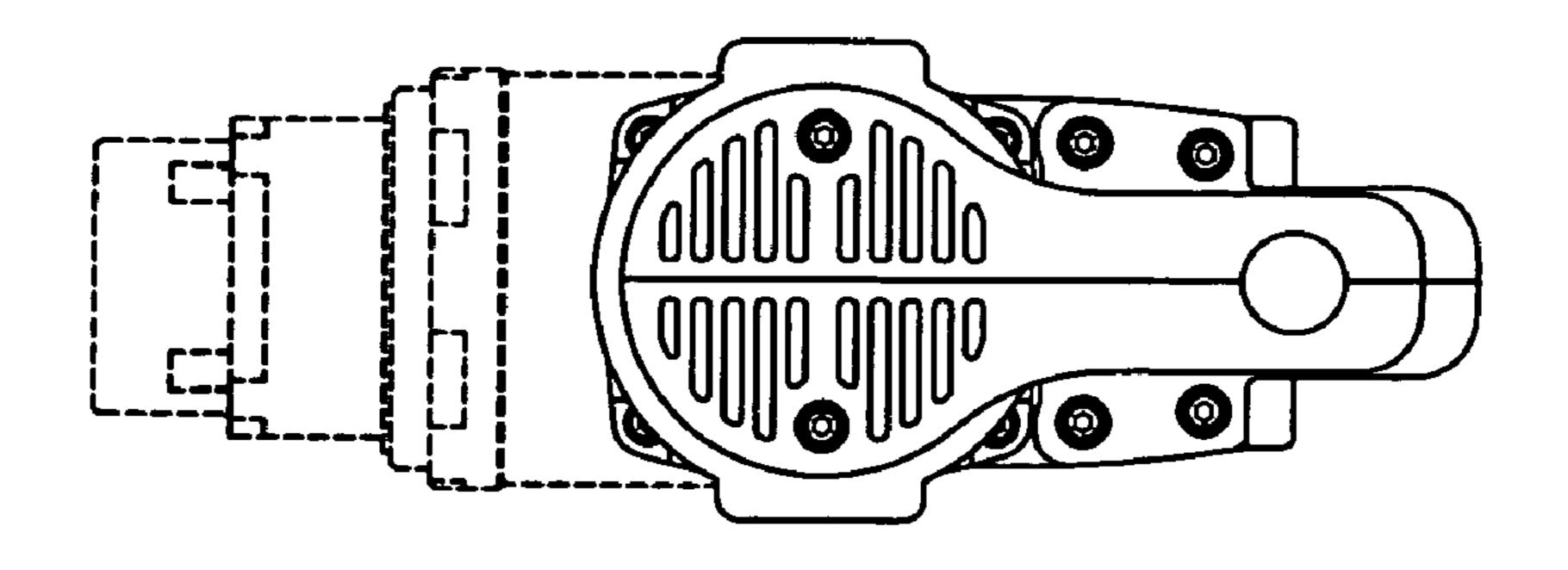
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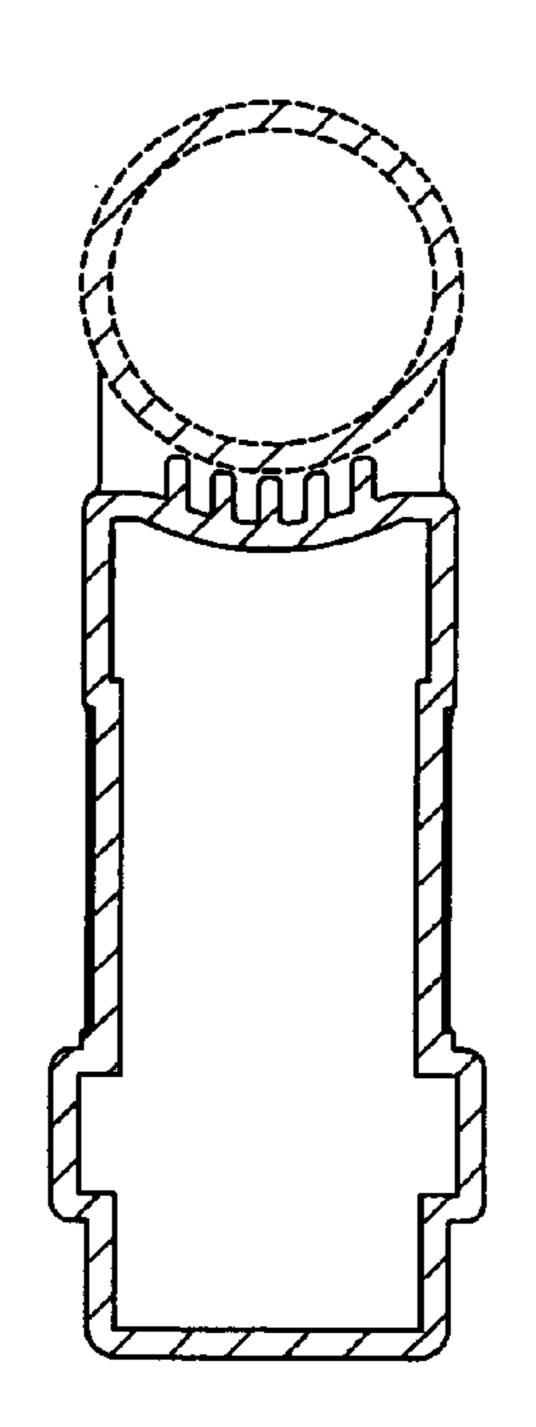
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F I G. 6

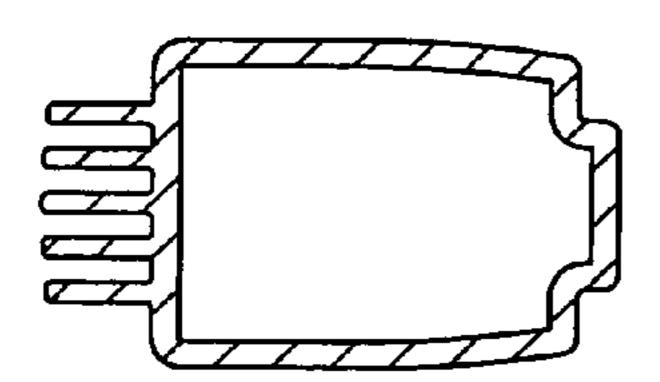


F I G. 7



F I G. 8

F I G. 9



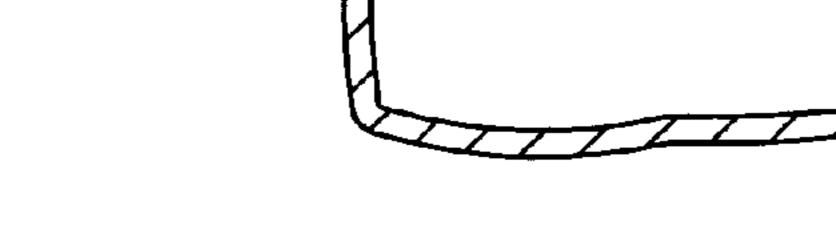
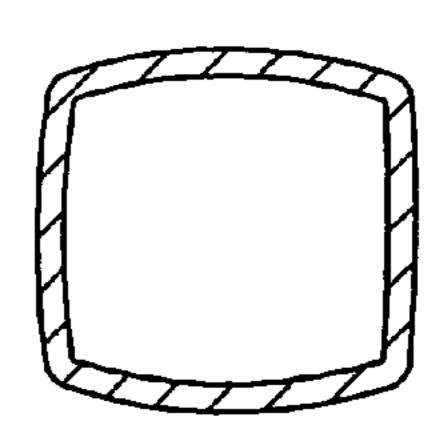
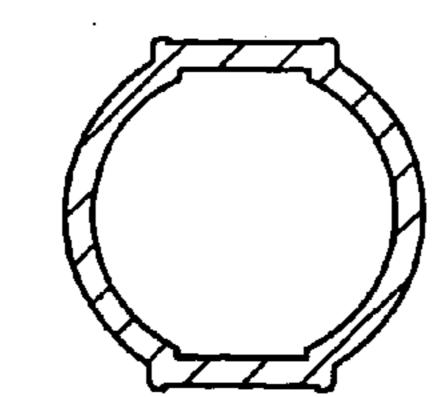
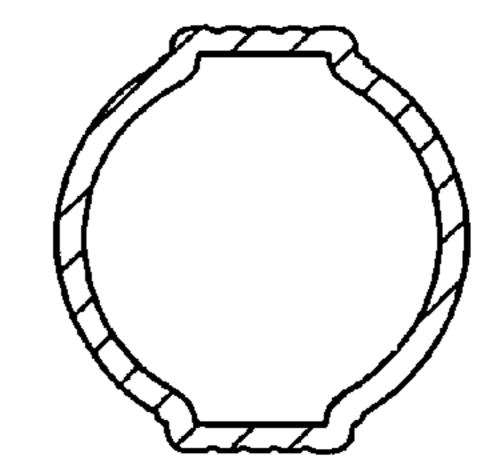


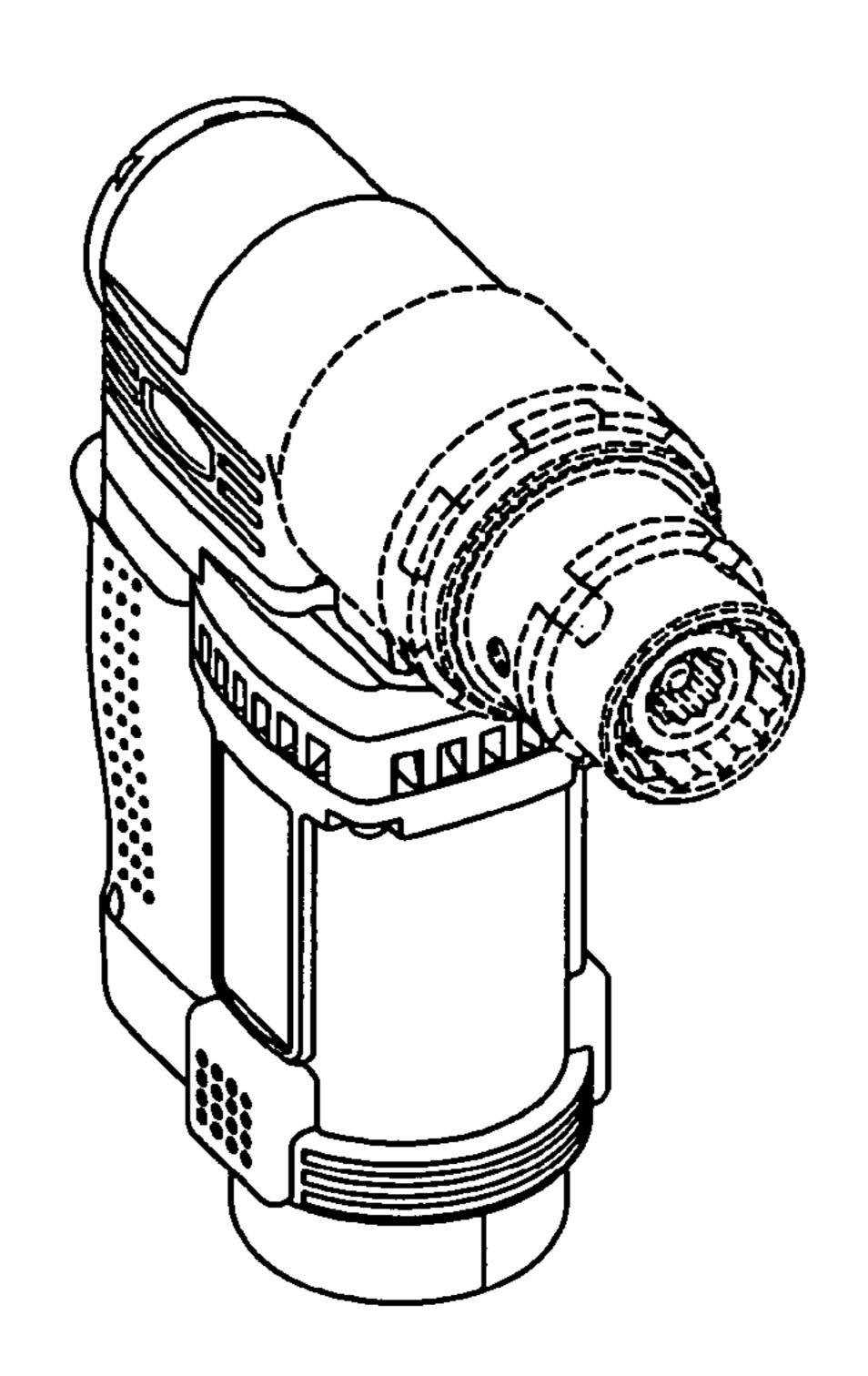
FIG. 10 FIG. 11 FIG. 12



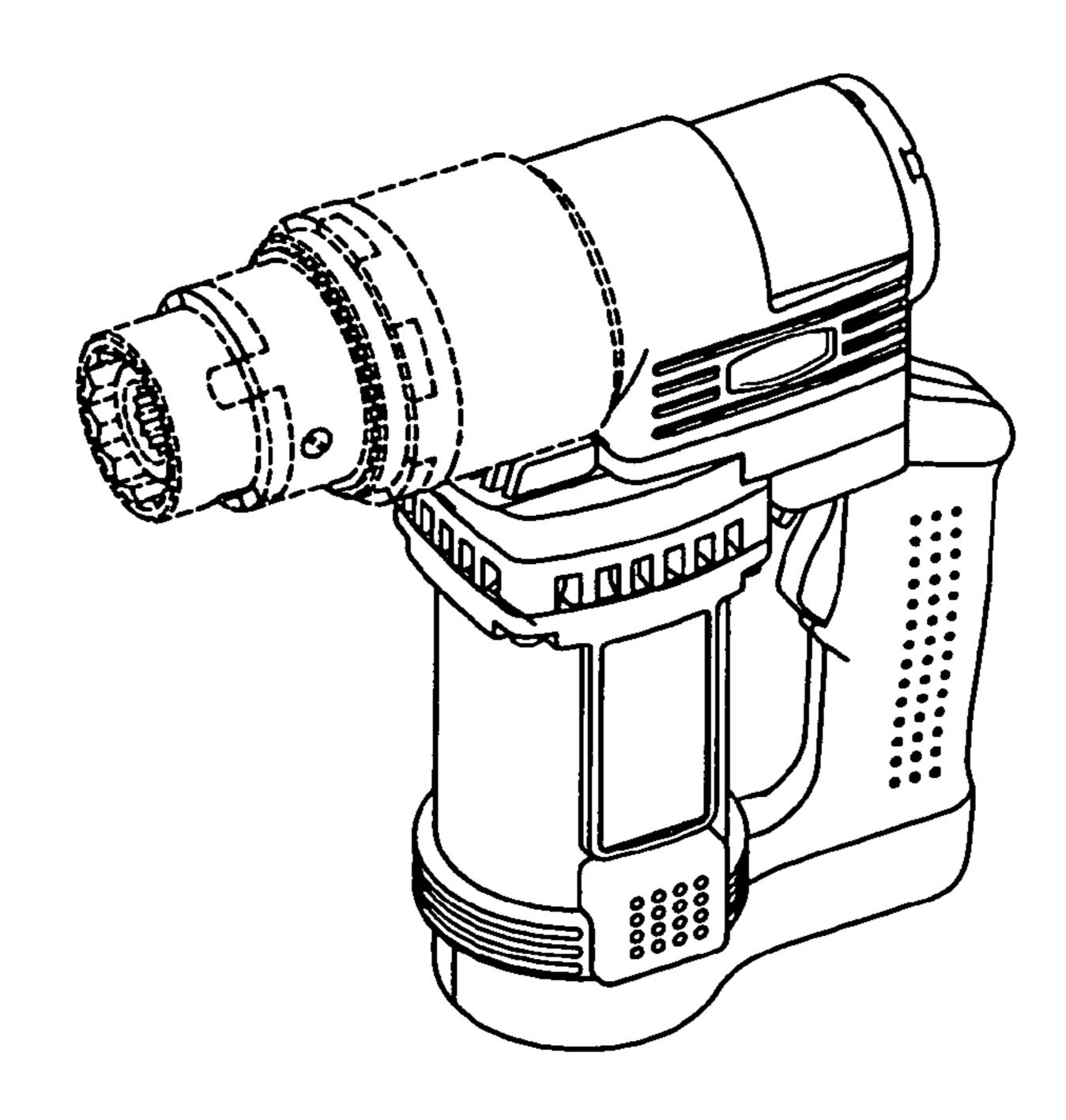




F I G. 13

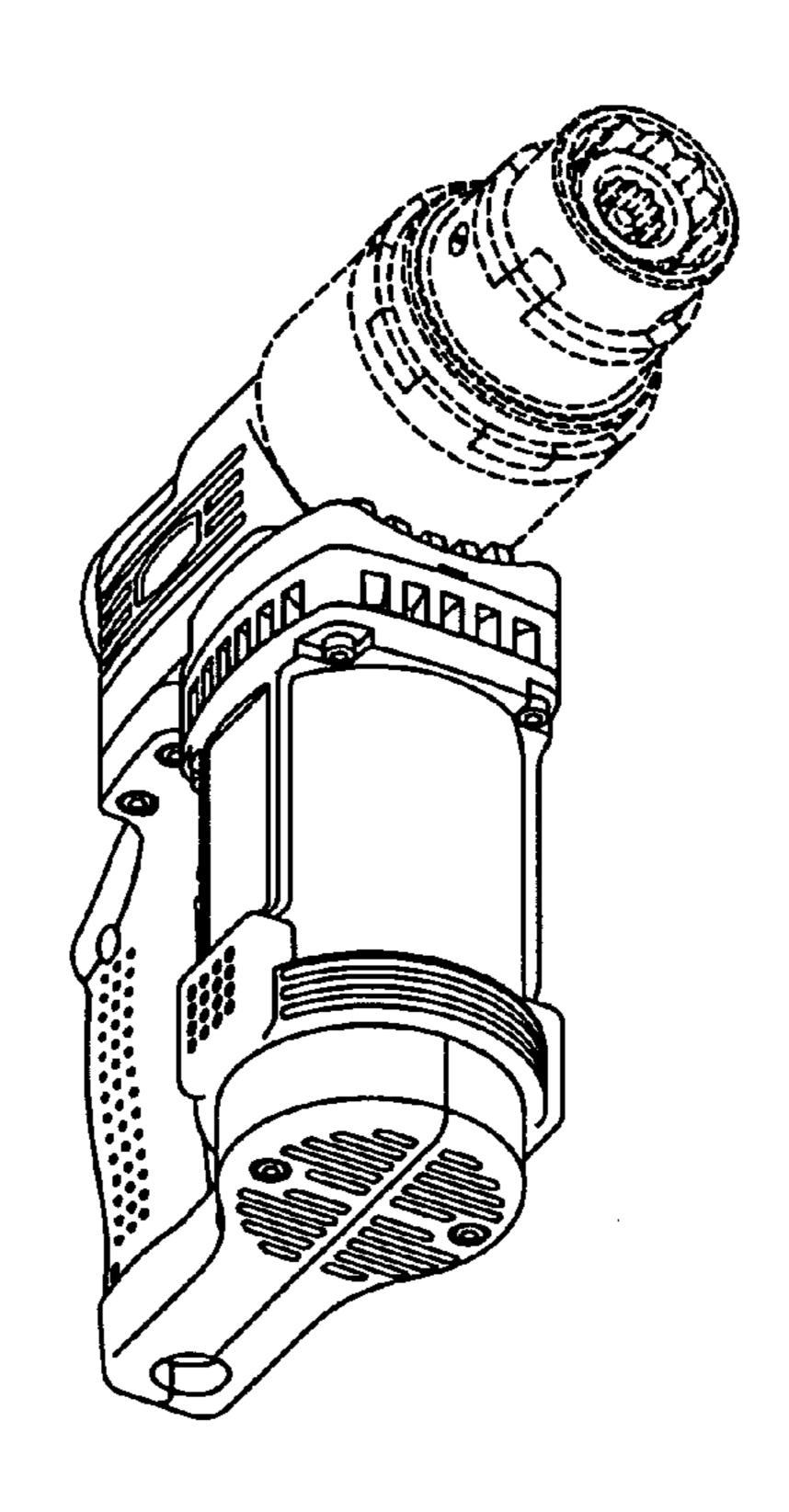


F I G. 14

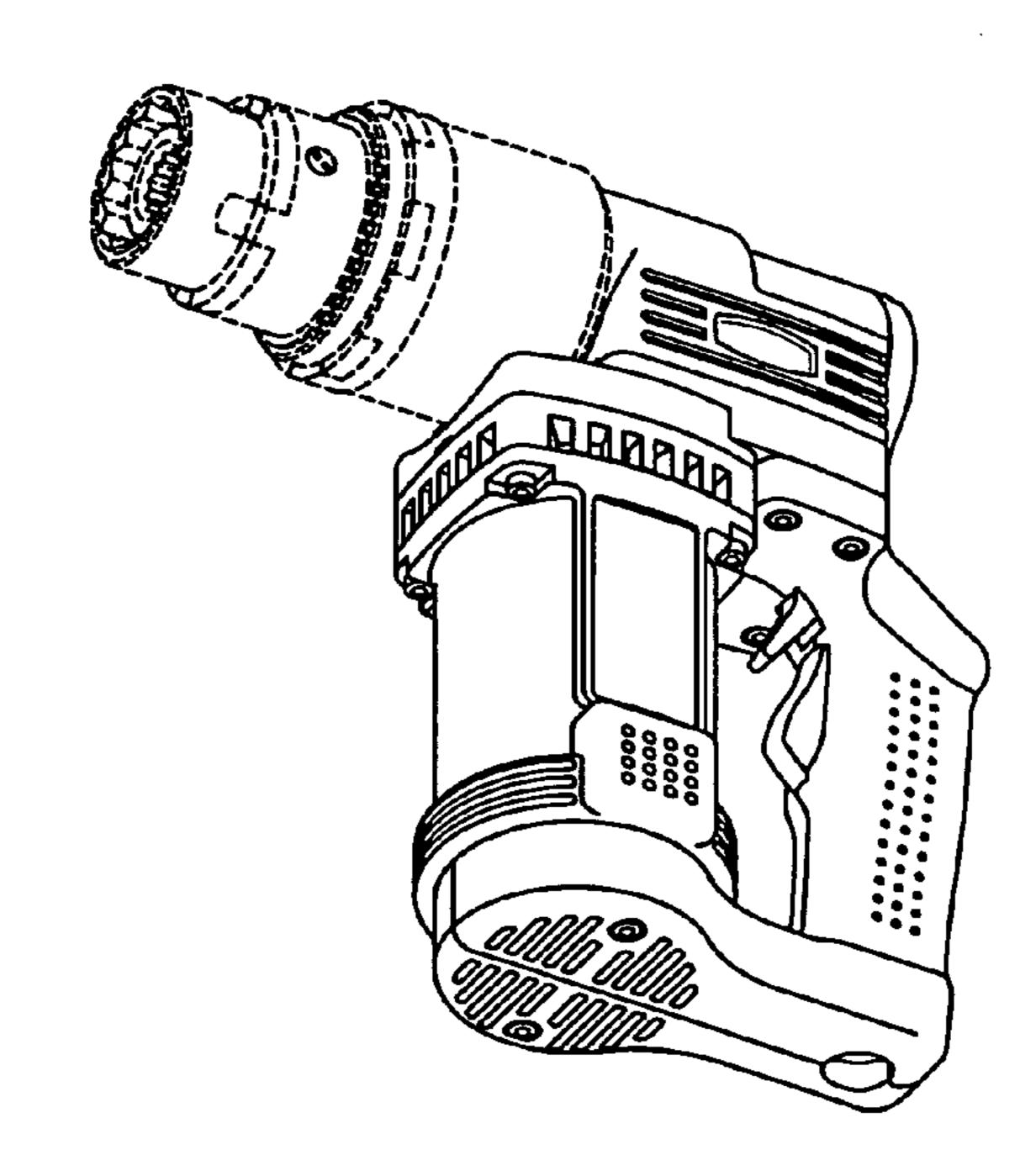


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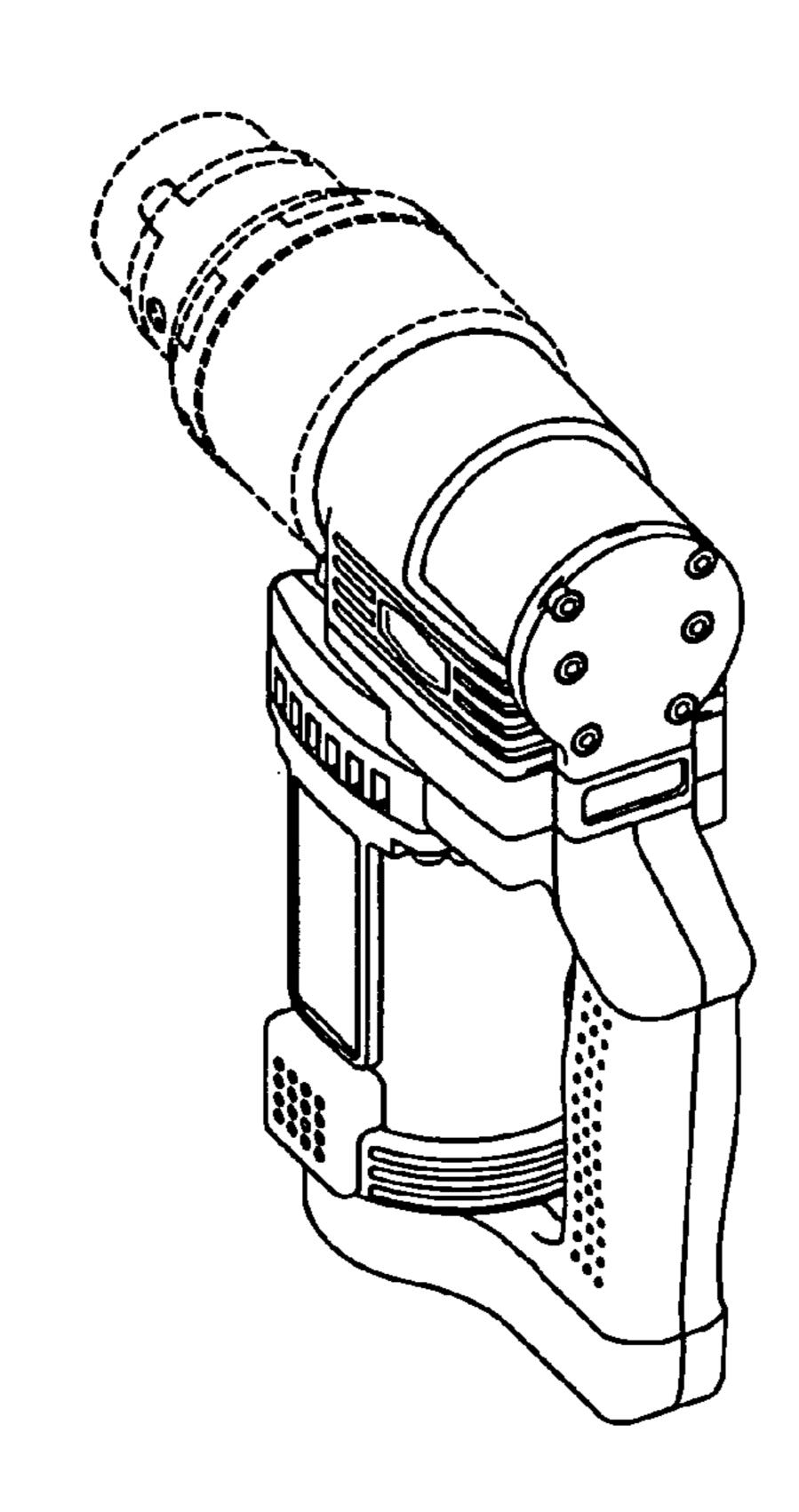
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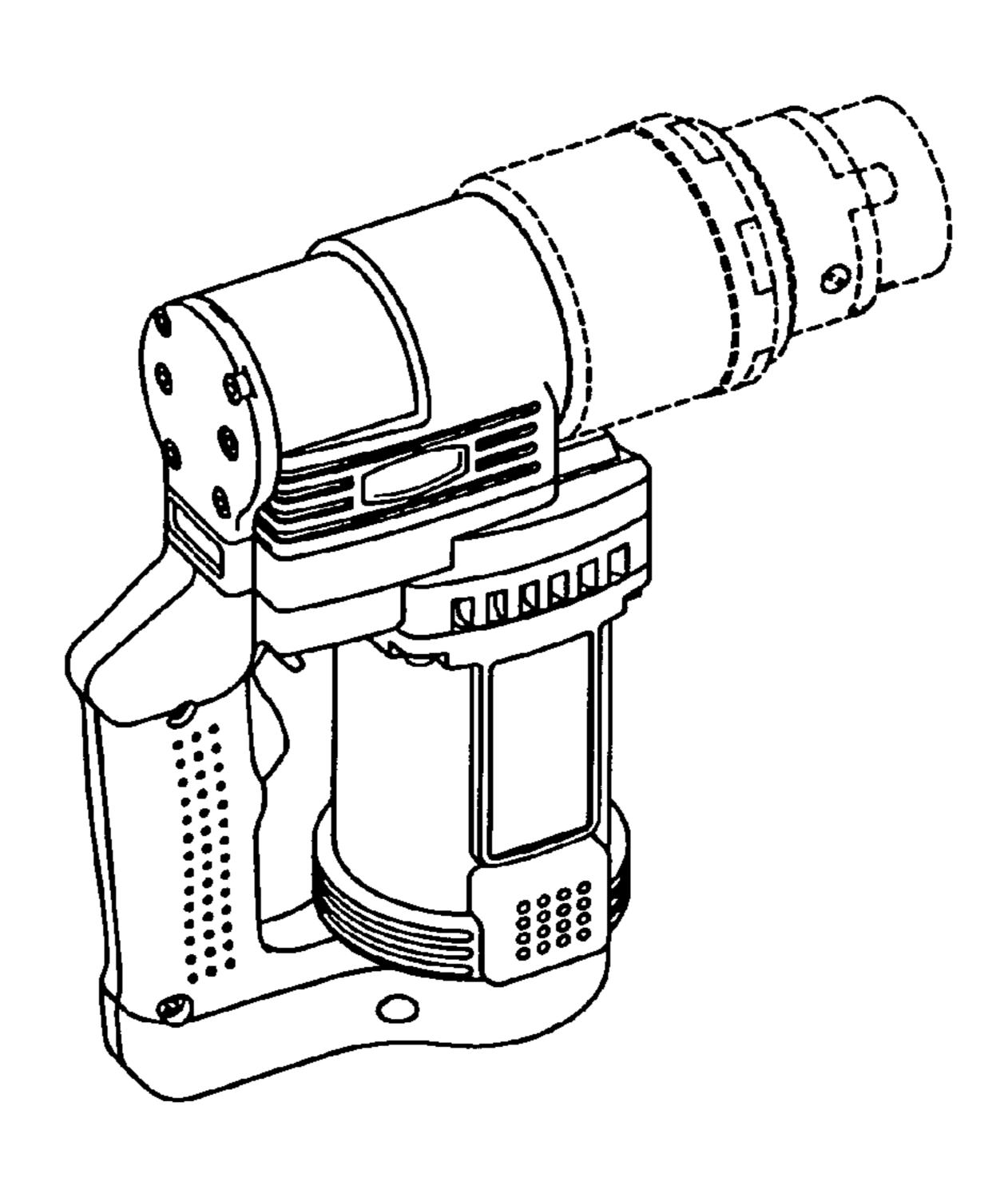
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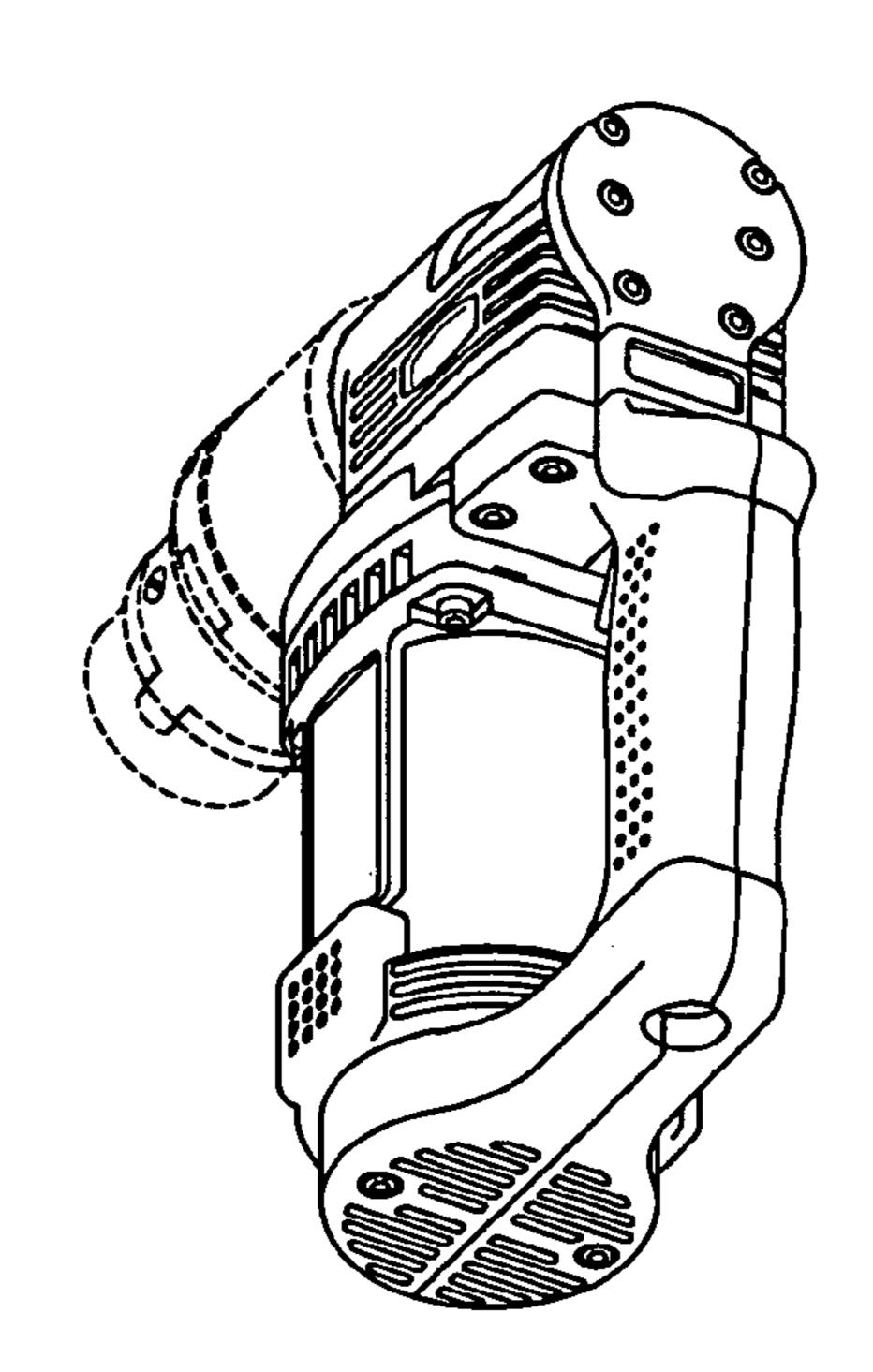
F I G. 17



F I G. 18



F I G. 19



F I G. 20

