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

(10) **Patent No.:** **US D551,998 S**
(45) **Date of Patent:** **** Oct. 2, 2007**

(54) **TORQUE MEASURING DEVICE**

(57) **CLAIM**

(75) Inventors: **Tatsuo Hirai**, Otsu (JP); **Yasunobu Kaneyama**, Osaka (JP)

The ornamental design for torque measuring device, substantially as shown and described.

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

DESCRIPTION

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

(21) Appl. No.: **29/235,351**

(22) Filed: **Aug. 1, 2005**

(30) **Foreign Application Priority Data**

Feb. 3, 2005 (JP) 2005-002761

(51) **LOC (8) Cl.** **10-04**

(52) **U.S. Cl.** **D10/85**

(58) **Field of Classification Search** D10/46,
D10/85; D23/233, 236; 73/862.08, 862.11,
73/862.17, 862.21, 862.23, 862.26, 862.27,
73/862.29, 862.31, 862.37, 862.44, 862.191,
73/862.192, 862.193, 862.324, 862.326,
73/862.328, 862.329, 862.331, 862.332,
73/862.333, 862.338, 862.339

See application file for complete search history.

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Primary Examiner—Antoine D. Davis

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FIG. 1 is a first perspective view of a torque measuring device of the present invention;

FIG. 2 is a second perspective view of the torque measuring device of the present invention;

FIG. 3 is a front view of the torque measuring device of the present invention;

FIG. 4 is a left side view of the torque measuring device of the present invention;

FIG. 5 is a top plan view of the torque measuring device of the present invention;

FIG. 6 is a rear view of the torque measuring device of the present invention;

FIG. 7 is a right side view of the torque measuring device of the present invention;

FIG. 8 is a bottom view of the torque measuring device of the present invention;

FIG. 9 is a reference illustration showing the torque measuring device attached to a bolt or nut tightening device; and,

FIG. 10 is a reference illustration showing that the torque measuring device is removed from the bolt or nut tightening device.

The broken line showing of the bolt and nut tightening device is included for the purpose of illustrating non-claimed and referential subject matter and forms no part of the claimed design.

1 Claim, 6 Drawing Sheets

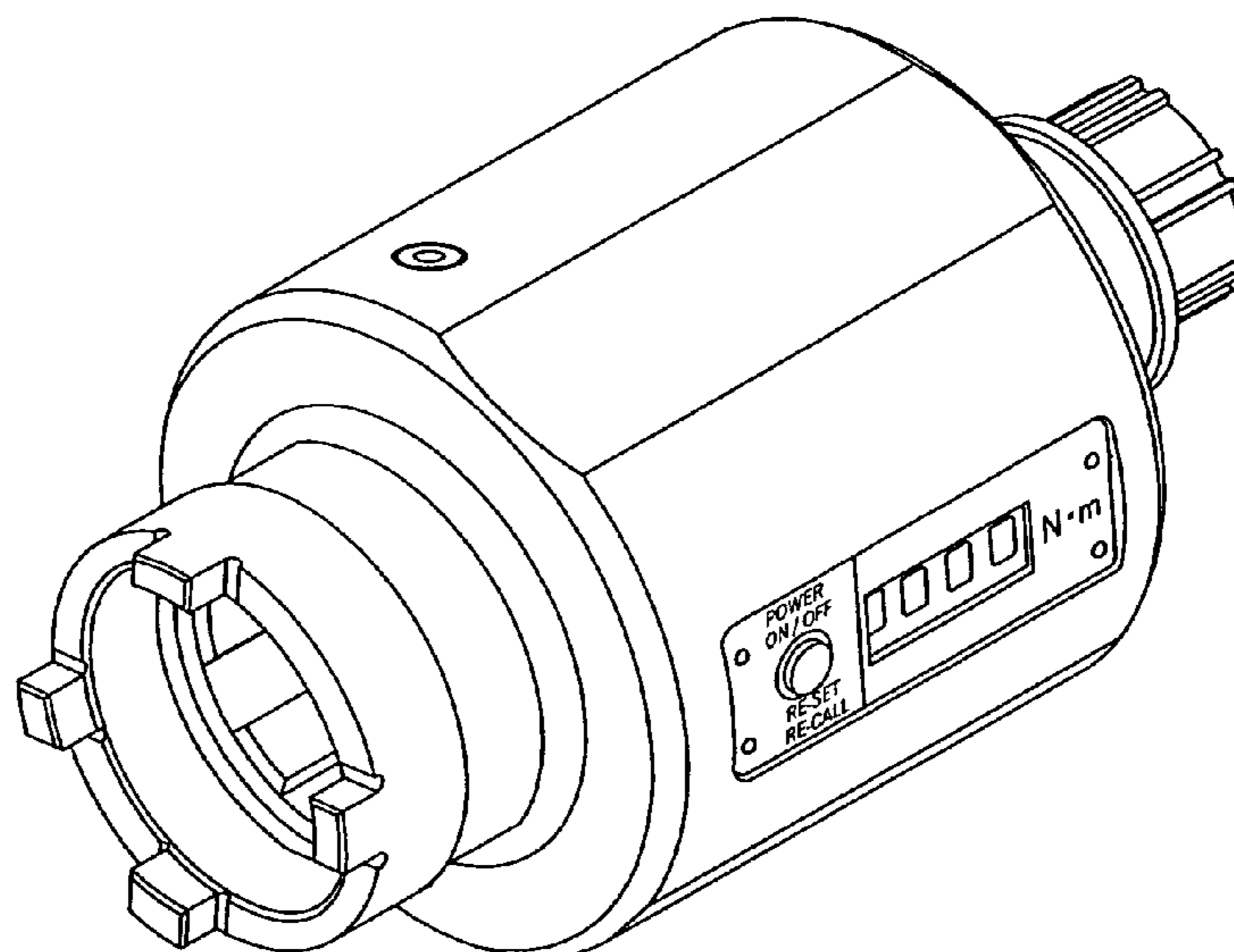


FIG. 1

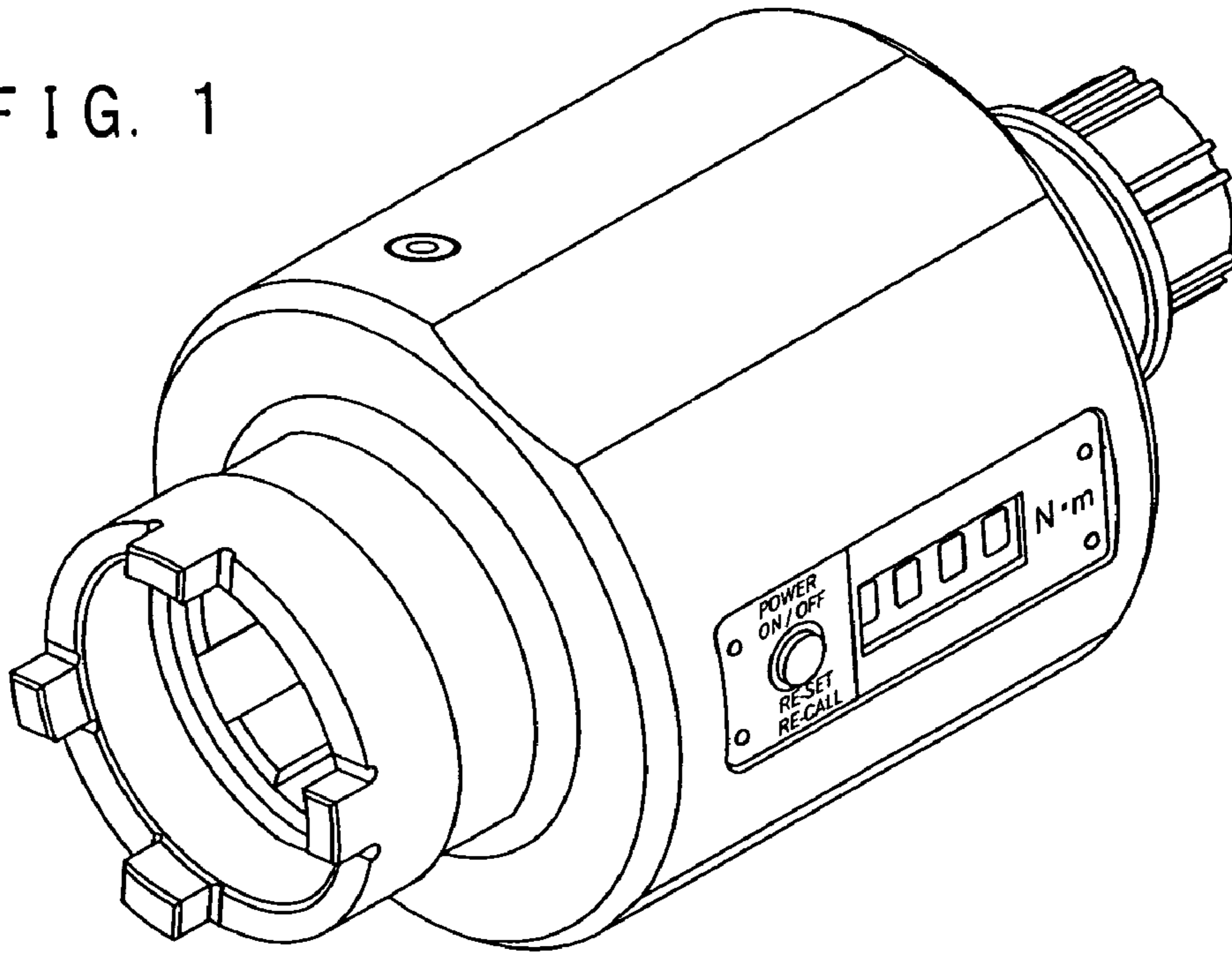


FIG. 2

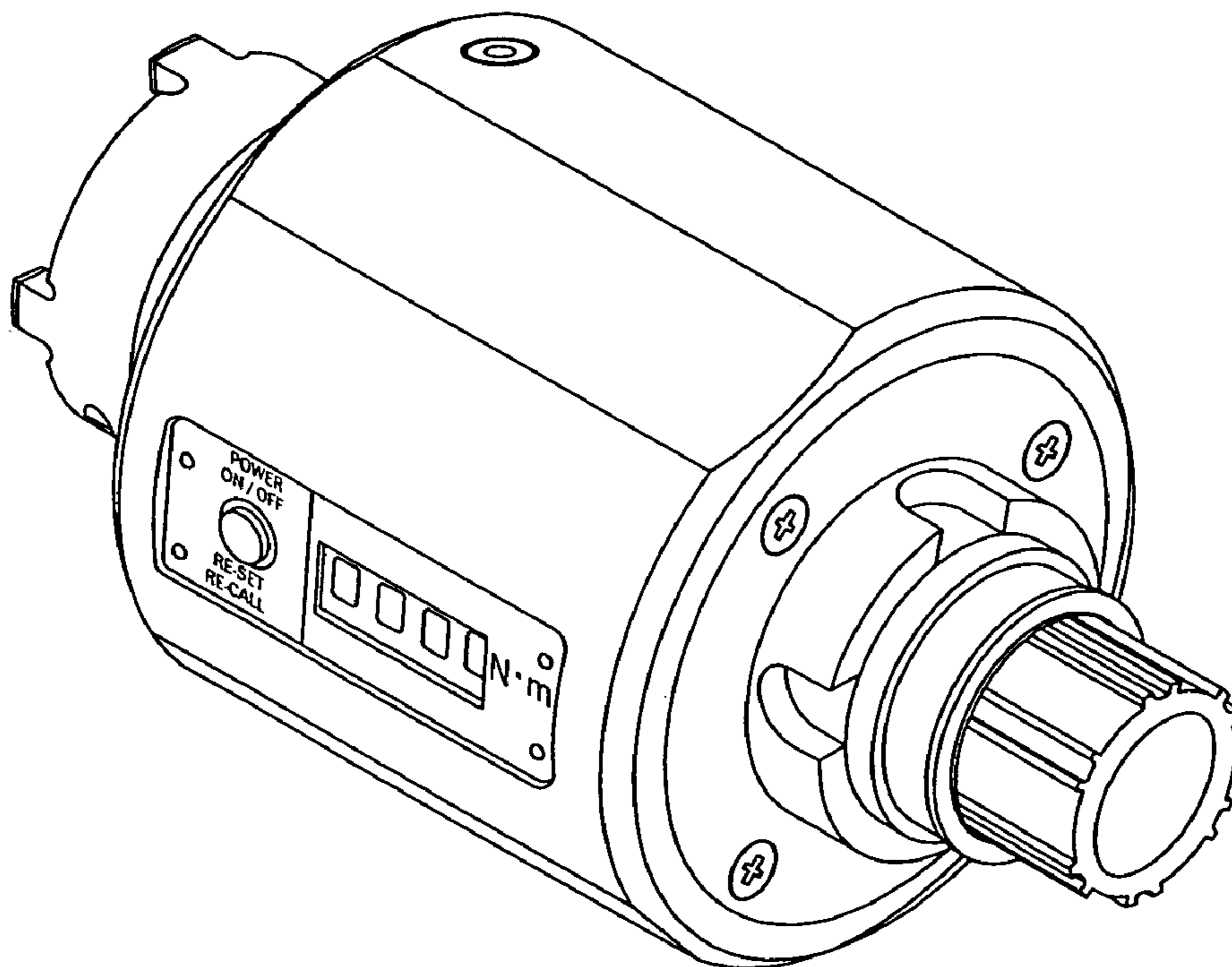


FIG. 3

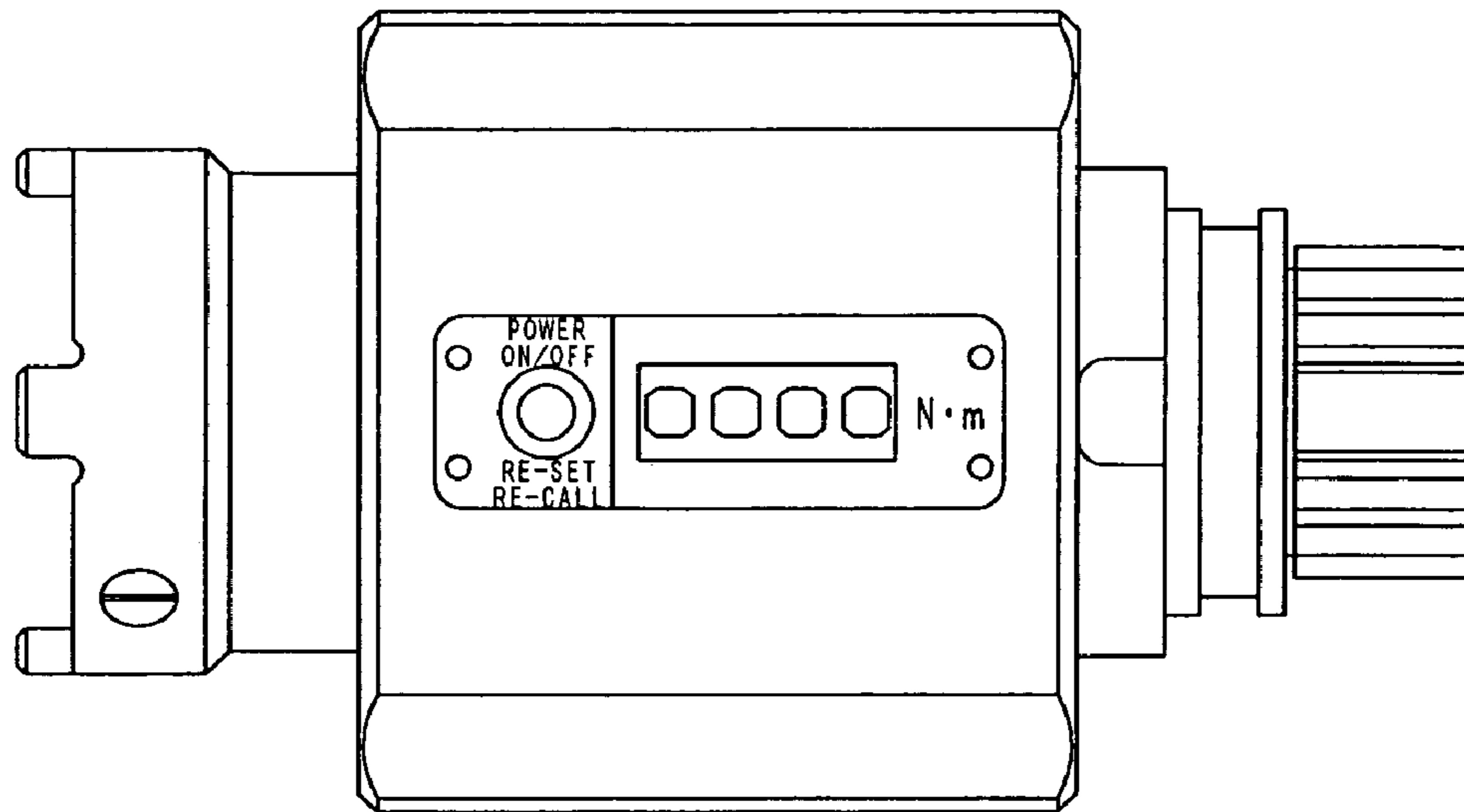


FIG. 4

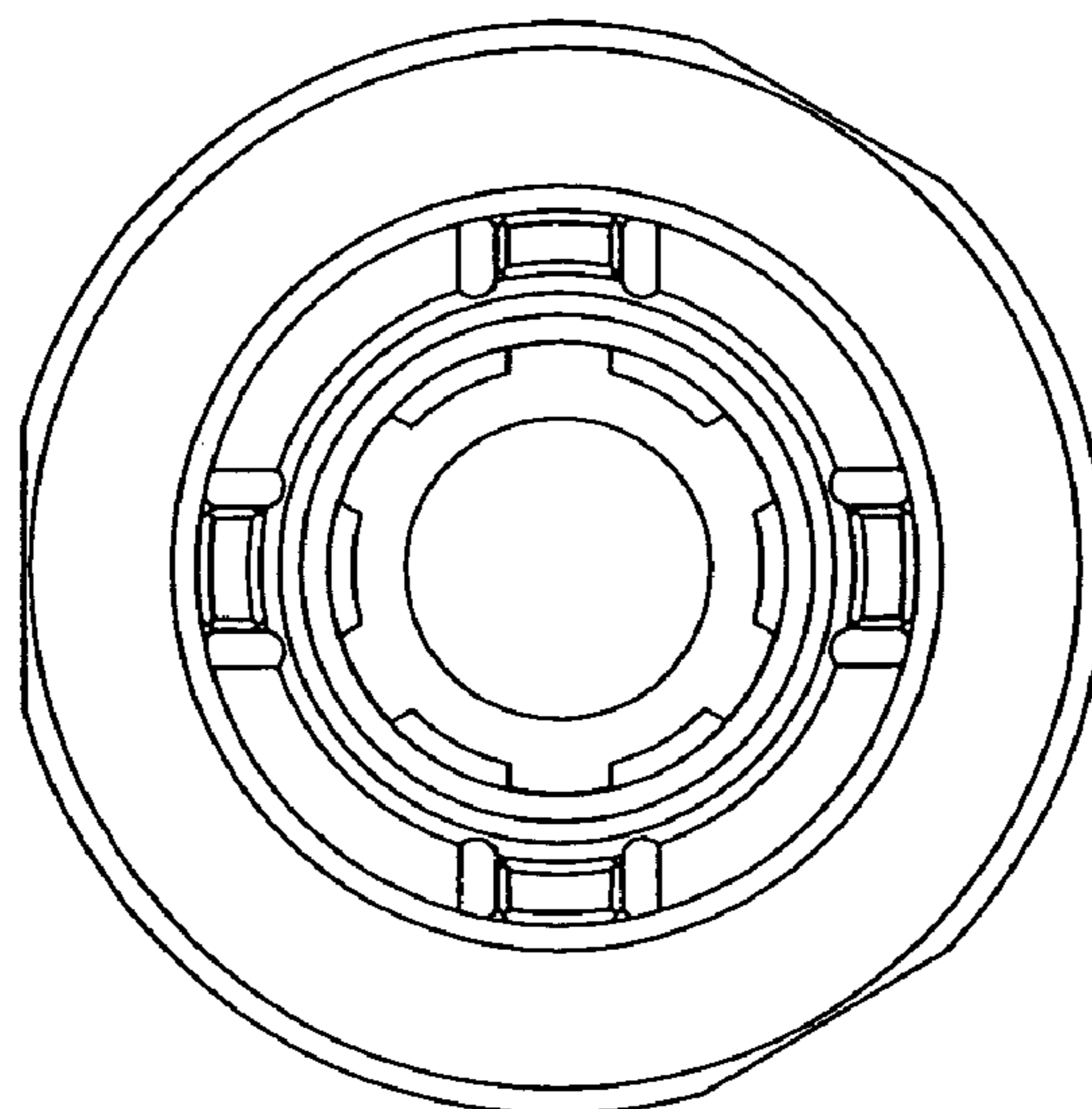


FIG. 5

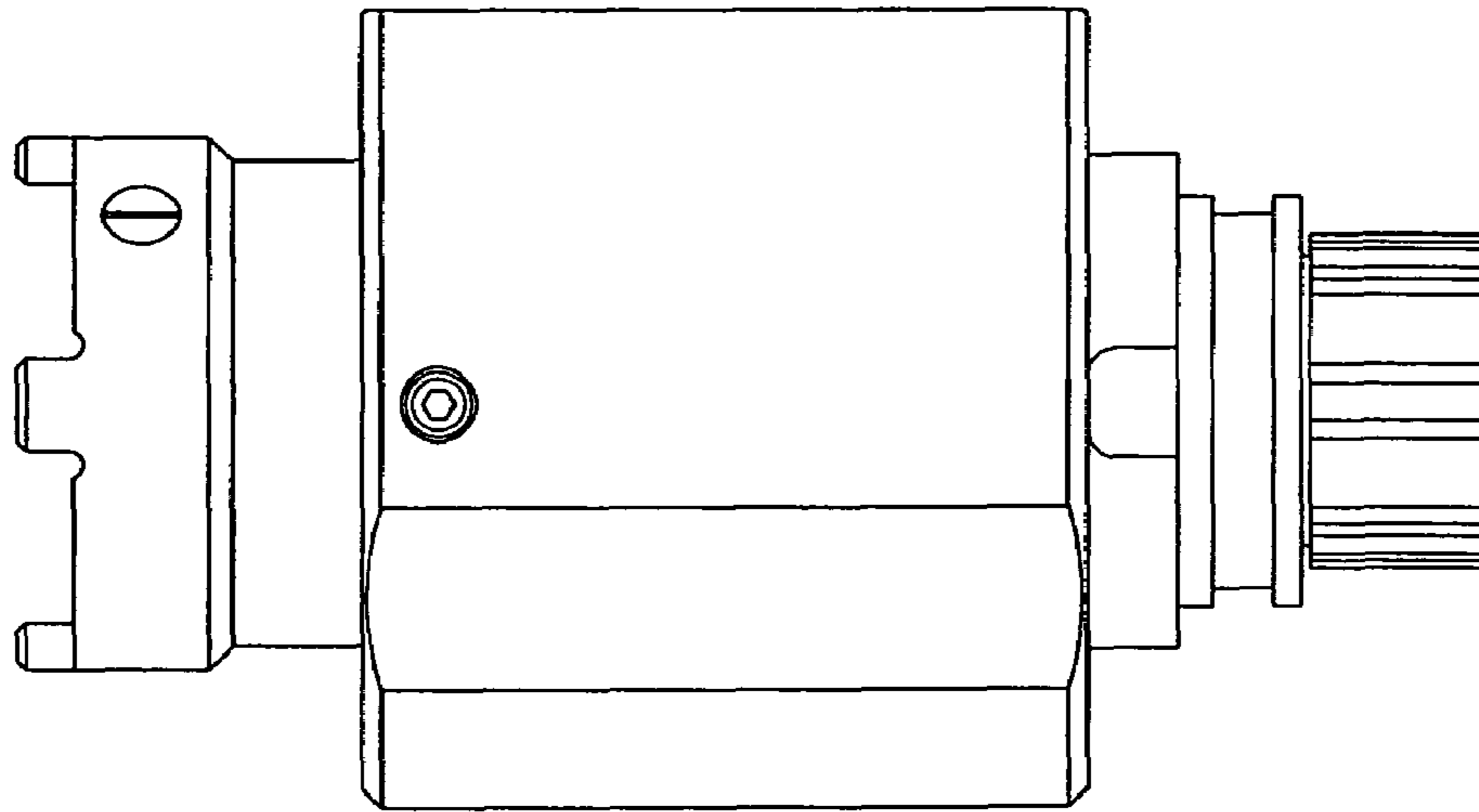


FIG. 6

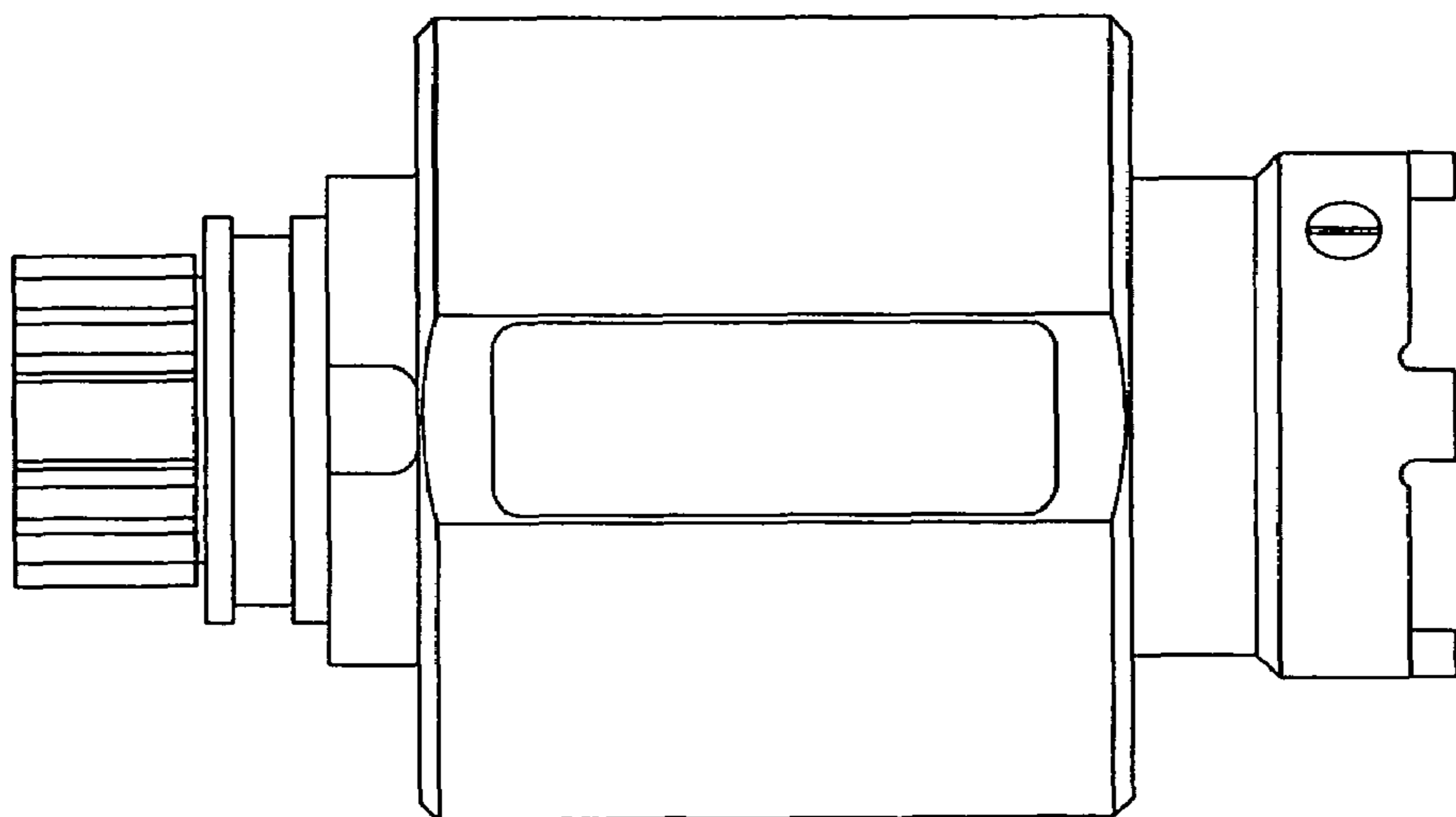


FIG. 7

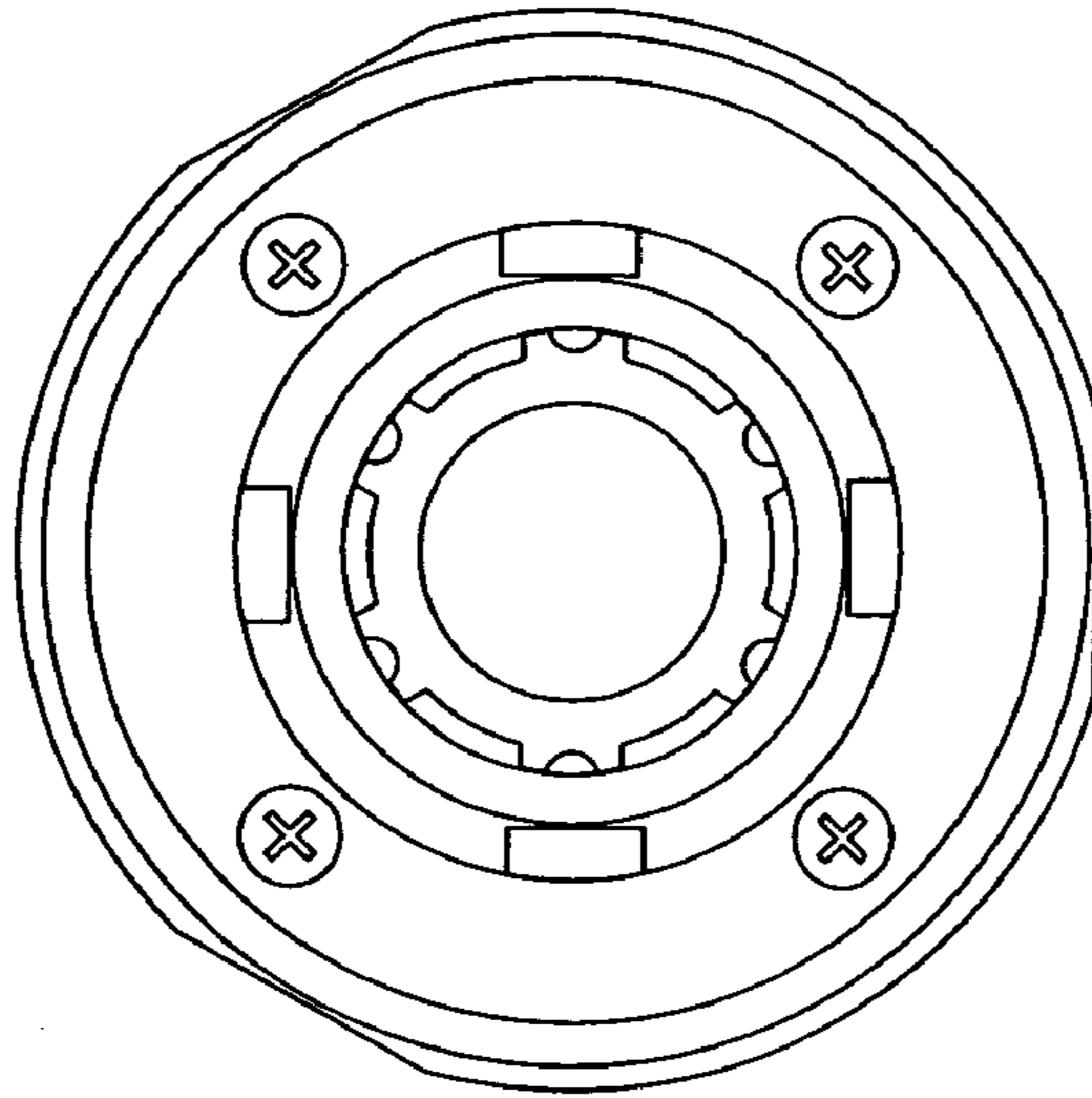


FIG. 8

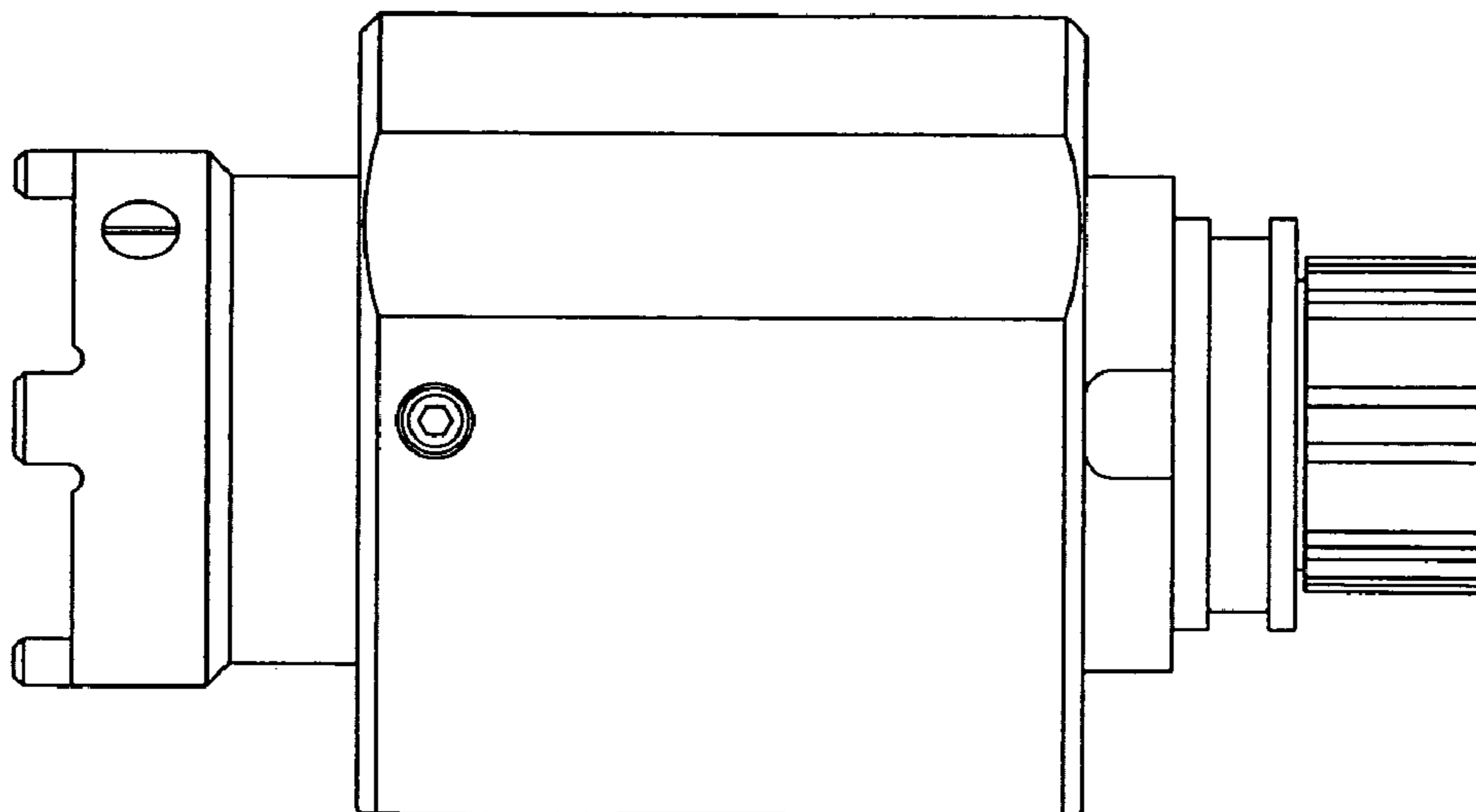
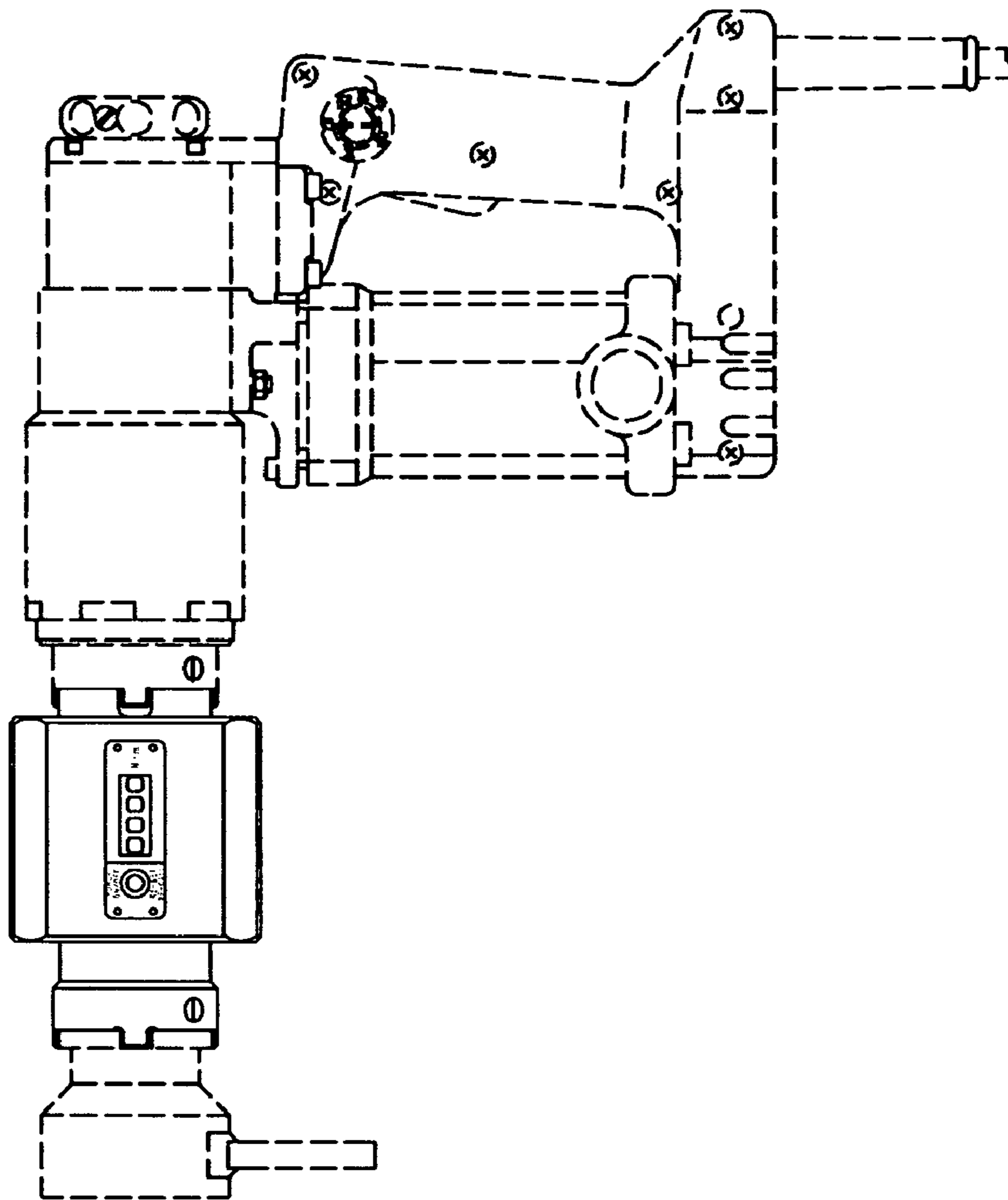


FIG. 9



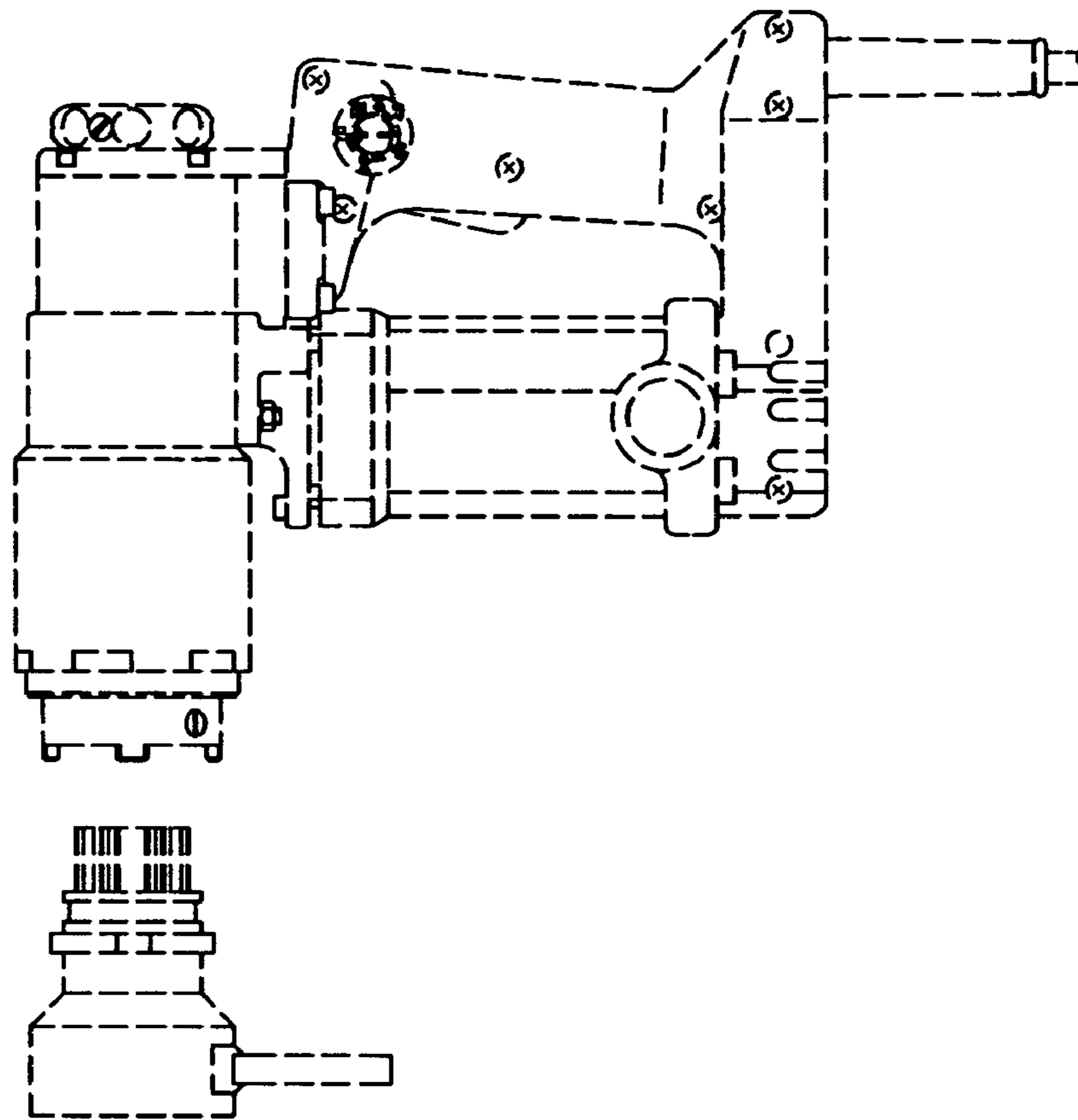


FIG. 10