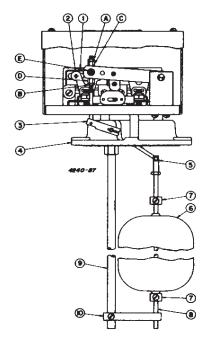
## MECHANICAL ALTERNATOR

**JANUARY, 1967** 

REPLACEMENT PARTS — When ordering replacement parts; always give complete Nameplate data.



Item Number	Description	Number Req'd.	Part Number
_	Switch Mechanism JG Types (Including Form R)	1	1551-C7-G1
_	Switch Mechanism JR, JW Types	1	1551-B19-G8
	Set of Movable and Stationary Contacts		1530-S9-G1
3	Link Arm JG Types		4240-M11-G1
3	Link Arm JR, JW Types		4240-L11-G1
4	Mounting Flange JG Types		4240-L2-X1
4	Mounting Flange JR, JW Types		4240-L8-X1
5	Retaining Ring		29909-01010
6	Float 7½" Types 1-5		4240-L7-G1
7	Stop Collar		4356-X5
8	Guide Rod (Give Nameplate Data)		
9	Ground Link (Give Nameplate Data)		
10	Rod Guide		4356-L4-X1
_	Gasket JW Only		1551-D20-X1
6	Float 5¼" Types 6, 7, 8		4356-D3-G1

## MECHANICAL ALTERNATOR

## **INSTRUCTIONS**

WIRING — See wiring diagrams inside cover for single and polyphase motor control and pilot operation.

**APPLICATION** — The Class 9038 Type J Mechanical Alternators serve to open and close an electric circuit by an upward and downward float movement. The forces are applied by means of a float operating between different liquid levels. The action is such that two switch units are alternated on successive cycles. If the liquid level continues to rise or fall with one pump in operation, the lever will continue to travel to a further position at which point the "second" switch will be operated, throwing the stand-by pump across the line.

**MOUNTING** — The Class 9038 Type J Mechanical Alternators are designed for applications where mounting is to be made at the top of a closed tank. Four bolt holes are provided in flange for direct mounting to tank. Flange gaskets are not provided but may be found desirable.

**STANDARD OPERATION** — Contacts are arranged for sump action. In this form the contacts will close on increase in liquid level.

**ADJUSTMENT** — These alternators are pre-set at the factory for proper operation. Reasonable adjustment of float travel can be made by loosening lock nuts (A) and (B) and adjusting the nuts (C) and (D). Nut (C) controls the upper limit of float travel, at which the switch is actuated and Nut (D) the lower limit. Extreme caution should be exercised in making this adjustment. For maximum vertical float travel, ultimately limited by internal stops, the adjusting nuts should be spaced so that both switch units have been actuated at the point of full float travel. For minimum float travel do not bind Nuts (C) and (D) on pin (E) of operating lever. Re-tighten Nuts (A) and (B).

 ${\tt PRESSURE}$  — In the use of the J Alternators, the pressure limit within the closed tank must not exceed 50 lbs.

MOTOR PROTECTION — A control of this type does not afford motor protection. However, it is quite frequently used as a pilot to operate a starter providing this desirable feature. The Square D Company manufactures a complete line of motor protective devices, information on which will be sent upon request.

MANUAL TRANSFER (LEAD-LAG) SELECTOR — Form N3 switches have a manually engaged selector which voids alternation. The pump selected to lead always comes on first. With selector disengaged, the unit reverts to normal alternation.