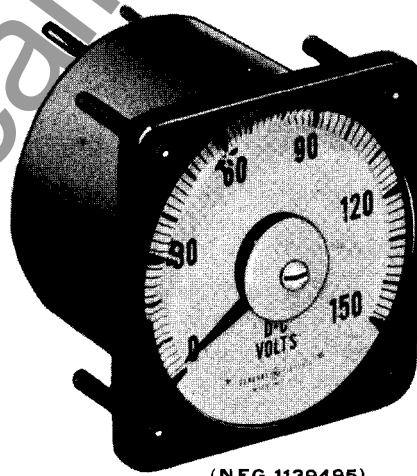
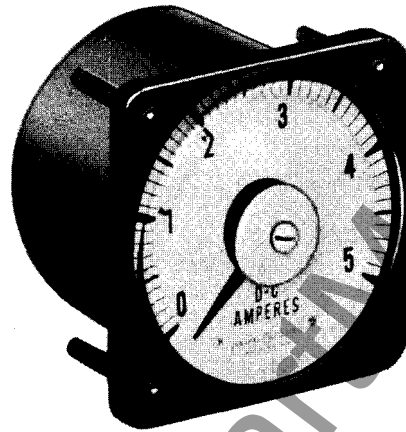


RENEWAL PARTS**TYPE DB ELECTRIC INSTRUMENTS**

Types DB-14, DB-15, DB-16, DB-18 and DB-19
Ammeters, Temperature Meters, Voltmeters and
Tachometer Voltmeters



(NEG 1139495)

NOTE: When an order is placed for renewal parts, please give: quantity, reference numbers, name of parts, rating, model number, and serial number of instrument and refer to above bulletin (GEF) number.

GENERAL  **ELECTRIC**

ORDERING INSTRUCTIONS

This publication illustrates and describes the individual parts of the types DB-14, DB-15, DB-16, DB-18 and DB-19 long scale switchboard instruments designed and manufactured by the General Electric Company, West Lynn, Mass. It should not be construed as instructions for repair, assembly, or disassembly. The General Electric Company recommends that instruments in need of repair be returned to the nearest G-E Service Shop or to the factory.

This list of parts is presented for those having adequate service facilities and trained personnel.

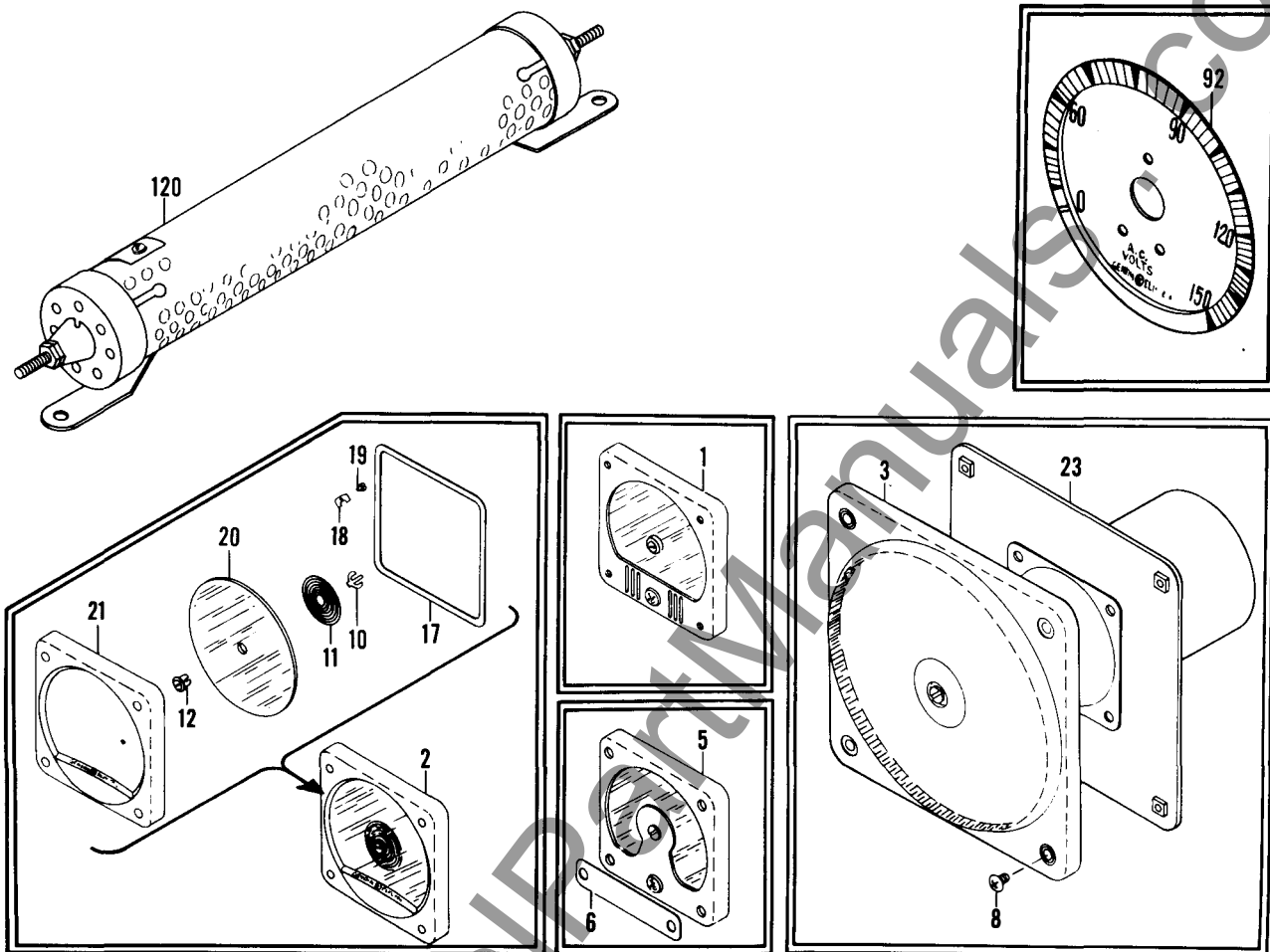
Because of the wide variety of ratings and models, no catalog numbers have been assigned to the parts in this list. The parts shown here are typical of those used in type DB DC ammeters, temperature meters, voltmeters, and tachometer voltmeters. The correct part will be furnished if proper ordering information is given as outlined in the following paragraph.

When ordering parts listed in this publication the following information must be given to insure the proper identification of the parts required.

1. COMPLETE model number and serial number of the instrument as shown on the nameplate.
2. Instrument rating (scale reading and operating frequency).
3. Complete description of the part including color, value, or size where necessary.
4. Reference number of the part as shown in this listing and publication number GEF-3962.
5. Quantity of part required.

If your service facilities warrant stocking parts, those suggested for such a stock are marked with a dagger (+) before the description for such a part.

NOTE: When an order is placed for renewal parts, please give: quantity, reference numbers, name of parts, rating, model number, and serial number of instrument and refer to above bulletin (GEF) number.



(NEG 1136751)

Fig. 1

Fig. No.	Ref. No.	8DB14A	8DB14T	8DB14V	8DB14Tach	8DB15A	8DB15T	8DB15V	8DB15Tach	8DB16A	8DB16T	8DB16V	8DB16Tach	8DB18A	8DB18T	8DB18V	8DB18Tach	8DB19A	8DB19T	8DB19V	8DB19Tach	Description
1	1	1	1	1	1																	+Square metal cover assembly with 3/4 window opening and anti-static treated lucite window
1	2					1	1	1	1													+Square *Textolite cover assembly with 3/4 window opening (Specify clear or anti-glare glass)
1	3									1	1	1	1									+8 3/4 in. square metal cover assembly with clear dome shaped window
2	4													1	1	1	1					+Square metal cover assembly with dome shaped window (Specify clear or anti-glare glass)
1	5																	1	1	1	1	+Square metal cover assembly with crescent shaped window opening and shatter-proof glass
1	6	1	1	1	1													1	1	1	1	Cover nameplate (specify marking desired)
2	7	4	4	4	4	4	4	4	4					4	4	4	4	4	4	4	4	+Screw for cover
1	8									4	4	4	4									+Screw for cover
2	9									1	1	1	1	1	1	1	1					+Gasket for cover

+Suggested if parts are stocked

*Reg. trade-mark of General Electric Co.

TYPE DB ELECTRIC INSTRUMENTS

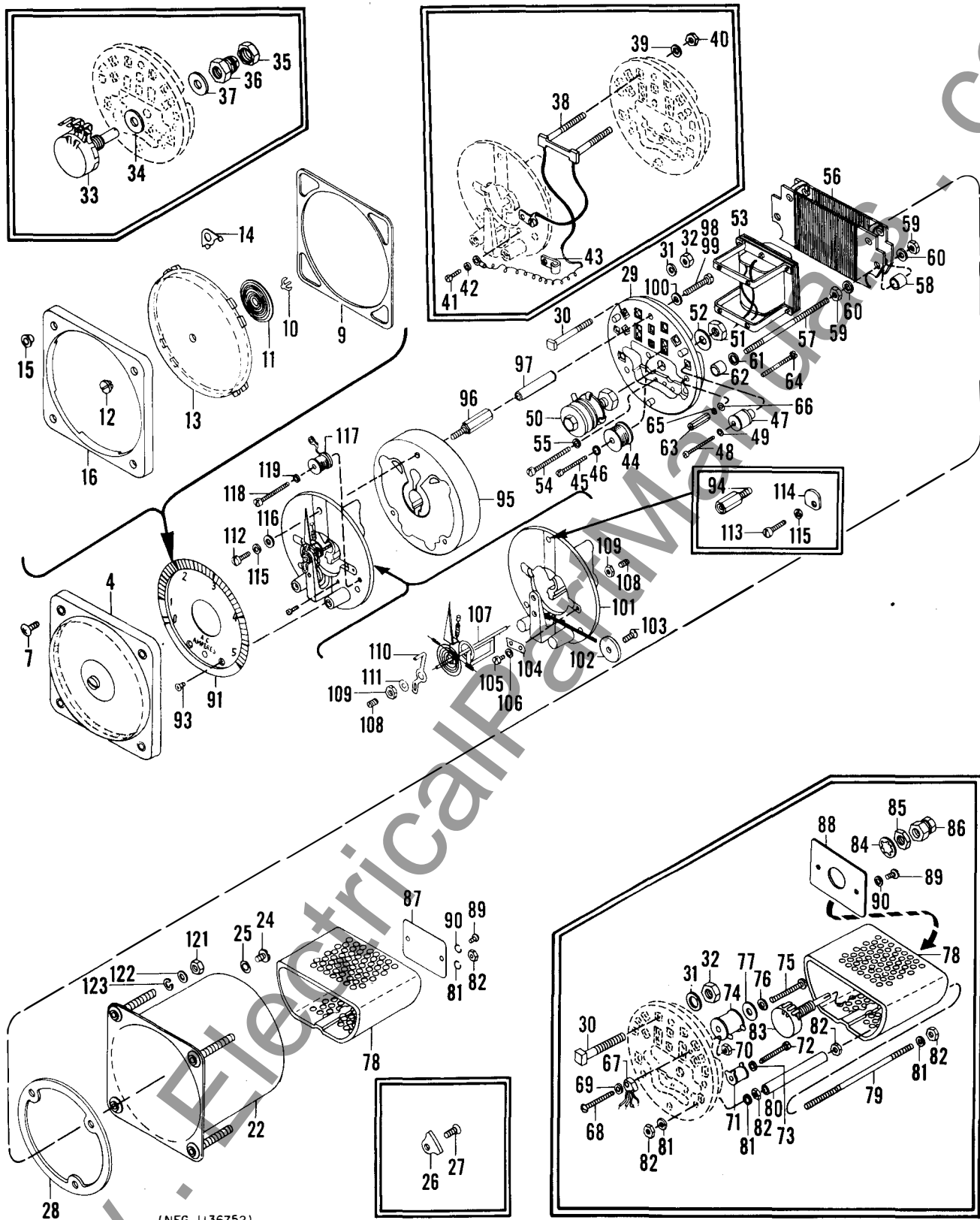


Fig. 2

NOTE: When an order is placed for renewal parts, please give: quantity, reference numbers, name of parts, rating, model number, and serial number of instrument and refer to above bulletin (GEF) number.

TYPE DB ELECTRIC INSTRUMENTS

GEF-3962

Fig. No.	Ref. No.	8DB14A	8DB14T	8DB14V	8DB14Tach	8DB15A	8DB15T	8DB15V	8DB15Tach	8DB16A	8DB16T	8DB16V	8DB16Tach	8DB18A	8DB18T	8DB18V	8DB18Tach	8DB19A	8DB19T	8DB19V	8DB19Tach	Description
2	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Crank for zero set
2	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Center disk (specify black or white)
2	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Shaft for zero set (specify black or white)
		1	1	1	1																	Washer for zero set shaft
2	13									1	1	1	1	1	1	1	1					+Dome shaped window
2	14									4	4	4	4	4	4	4	4					Clip for dome shaped window
2	15									4	4	4	4	4	4	4	4					Eyelet for window clip
2	16									1	1	1	1									Cover bezel, 8 3/4 in. square
2	16													1	1	1	1					Cover bezel, 4 1/4 in. square
1	17	1	1	1	1	1	1	1	1										1	1	1	+Fiber gasket for cover
1	18					4	4	4	4													Clip holding window in cover
1	19					4	4	4	4													Screw fastening clip to cover (2-64, 7/32 in.)
1	20	1	1	1	1	1	1	1	1										1	1	1	+Window (specify clear or anti-glare glass)
1	21					1	1	1	1													Cover and window clip assembly
2	22	1	1	1	1	1	1	1	1					1	1	1	1	1	1	1	1	Case assembly
1	23									1	1	1	1									Case assembly
2	24	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Case screw
2	25					3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Lockwasher for case screw
2	26	3	3	3	3																	Mounting lug
2	27	3	3	3	3																	Screw for mounting lug
2	28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	+Gasket for case
2	29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$Base assembly, complete
2	30	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	Terminal stud
2	31	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	Lockwasher for stud
2	32	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†	+Nut for stud
2	33	1				1				1				1								Rheostat
2	34	1				1				1				1								Dust guard
2	35	1				1				1				1								Locknut
2	36	1				1				1				1								Mounting nut for rheostat
2	37	1				1				1				1								Spacer
2	38	1				1				1				1								Shunt and terminal assembly
2	39	2				2				2				2								Lockwasher for assembly Ref. 38
2	40	2				2				2				2								Nut for assembly Ref. 38
2	41	1				1				1				1								Screw for spiral connector
2	42	1				1				1				1								Washer for screw
2	43	1				1				1				1								Wire clip
2	44	1				1				1				1								Double resistor spool and winding, right-hand
		1				1				1				1								Double resistor spool and winding, left-hand
2	45	2				2				2				2							2	Screw fastening double resistor spool to base plate (3-56, 7/8 in.)
2	46	2				2				2				2								Lockwasher for screw
2	47	1				1				1				1								Single resistor spool and winding
2	48	1				1				1				1								Screw for single resistor spool (3-56, 1 in.)
2	49	1				1				1				1								Lockwasher for screw
2	50	1				1				1				1								Rectifier, copper-oxide
2	51	1				1				1				1								Hex nut fastening rectifier to base
2	52	1				1				1				1								Lockwasher for nut
2	53	1				1				1				1								Transformer
2	54	4				4				4				4								Screw fastening transformer to base (3-56, 5/8 in.)
2	55	4				4				4				4								Lockwasher for screw
2	56	1				1				1				1								Resistance card assembly
2	57	2				2				2				2								Stud holding resistor cards and cage
2	58	2				2				2				2								Spacer between cards
2	59	8				8				8				8								Nut for stud
2	60	4				4				4				4								Washer for stud

†Quantity variable.

+Suggested if parts are stocked.

\$The base assembly shown is representative of those used. By following the ordering instructions on page 2, the correct base will be furnished.

TYPE DB ELECTRIC INSTRUMENTS

Fig. No.	Ref. No.	8DB14A	8DB14T	8DB14V	8DB14Tach	8DB15A	8DB15T	8DB15V	8DB15Tach	8DB16A	8DB16T	8DB16V	8DB16Tach	8DB18A	8DB18T	8DB18V	8DB18Tach	8DB19A	8DB19T	8DB19V	8DB19Tach	Description
2	61	2					2															Lockwasher for stud
2	62		2																			Spacer for stud
2	63		2																			Connector
2	64		2																			Screw for connector
2	65		2																			Lockwasher for connector
2	66		2																			Washer for connector
2	67			1					1				1				1					Rectifier, copper-oxide
2	68			1					1				1				1					Screw fastening rectifier to base (1-72, 5/8 in.)
2	69			1					1				1				1					Lockwasher for screw
2	70			1					1				1				1					Nut for screw (1-72 hex. std. brass)
2	71			1					1				1				1					Resistor, adjustable
2	72			1					1				1				1					Screw fastening resistor to base (3-56, 3/4 in.)
2	73			1					1				1				1					Washer for screw
2	74			1					1				1				1					Resistor
2	75			1					1				1				1					Screw fastening resistor to base (6-40, 1 1/4 in.)
2	76			1					1				1				1					Lockwasher for screw
2	77			1					1				1				1					Shoulder bushing
2	78	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Resistance cage
2	79			2					2				2				2					Stud holding cage in position
2	80			2					2				2				2					Insulation bushing for stud
2	81	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	Lockwasher for stud Ref. 79
2	82	2	8	2	8	2	8	2	8	2	8	2	8	2	8	2	8	2	8	2	8	Nut for stud (4-48, hex. std)
2	83			1					1				1				1					Potentiometer
2	84			1					1				1				1					Lockwasher for potentiometer shaft
2	85			1					1				1				1					Nut holding potentiometer to cage
2	86			1					1				1				1					Locknut for potentiometer
2	87	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Nameplate (give complete nameplate data for stamping)
2	88			1					1				1				1					Nameplate (give complete nameplate data for stamping)
2	89	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Screw fastening nameplate in position (4-48, 3/16 in.)
2	90	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Lockwasher for screw
2	91	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Scale plate (specify black or white and marking)
1	92																					Scale plate (specify black or white and marking)
2	93	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	+Screw fastening scale plate into position
2	94																					Scale plate support
2	95	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Magnet and core assembly
2	96	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Hexagonal supporting stud for element
2	97	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Supporting sleeve for element
2	98	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Screw fastening stud to base (8-36, 3/8 in.)
2	99	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Screw holding element and sleeve to base (8-36)
2	100	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Lockwasher for screw
2	101	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Element frame assembly
2	102	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Washer used as pointer stop
2	103	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Screw fastening washer to frame (4-48, 3/16 in.)
2	104	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Connector plate assembly
2	105	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Screw fastening connector to element frame (3-56, 5/32 in.)
2	106	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Lockwasher for screw
2	107	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	+Armature and pointer assembly (specify black or white pointer)
2	108	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	+Jewel screw assembly
2	109	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Stop nut for jewel screw
2	110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Regulator lever
2	111	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Washer for lever
2	112					3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Screw fastening element frame to magnet core
2	113	3	3	3	3																	Screw fastening spacer to element frame and element frame to magnet core (6-40, 9/16 in.)

†Quantity variable.

+Suggested if parts are stocked.

TYPE DB ELECTRIC INSTRUMENTS

GEF-3962

Fig. No.	Ref. No.	8DB14A	8DB14T	8DB14V	8DB14Tach	8DB15A	8DB15T	8DB15V	8DB15Tach	8DB16A	8DB16T	8DB16V	8DB16Tach	8DB18A	8DB18T	8DB18V	8DB18Tach	8DB19A	8DB19T	8DB19V	8DB19Tach	Description
2	114	3	3	3	3																	Spacing washer for element
2	115	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Lockwasher for screw Ref. 112 and 113
2	116					3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Washer for screw Ref. 112
2	117			1									1				1					Resistance spool and winding
2	118			1				1					1				1					Screw fastening spool to element frame (3-56, 5/8 in.)
2	119			1				1					1				1					Lockwasher for screw
1	120		1	1			1	1			1	1			1	1			1	1		Resistor complete, external, Form 3
2	121	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Nut for mounting screw (1/4 in. hex. std.)
2	122	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Lockwasher for mounting screw
2	123	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Washer for mounting screw

NOTE: When an order is placed for renewal parts, please give: quantity, reference numbers, name of parts, rating, model number, and serial number of instrument and refer to above bulletin (GEF) number.

WHEN repairs to your G-E equipment are necessary, the use of genuine G-E renewal parts offers best assurance of continued dependable operation.

All G-E renewal parts are manufactured by the same methods as the parts in complete devices. They are identical with the original parts, except where, through research, improvements in design, materials, or manufacturing techniques have made possible even better quality. They are factory-inspected for precision of dimensions and adjustments. Whenever necessary, they are also given mechanical and electrical tests.

These refinements in manufacture mean ease of installation, low maintenance expense, and minimum investment in renewal-parts stocks.

Experience has shown that selection of renewal parts without investigating the quality of their design and materials may result in poor operation, high "out-of-service" losses, and increased expense of maintaining equipment.

To expedite shipments, the General Electric Company maintains factory and warehouse stocks of renewal parts. Also, to expedite repairs, the Company operates a nationwide chain of modern, well-equipped Apparatus Service Shops, on call night and day.

General Electric publishes renewal-parts bulletins and other helpful maintenance information, obtainable on request. For prompt renewal-parts service, consult your nearest G-E Apparatus Sales Office.

METER AND INSTRUMENT DEPARTMENT

GENERAL  ELECTRIC

WEST LYNN, MASS.