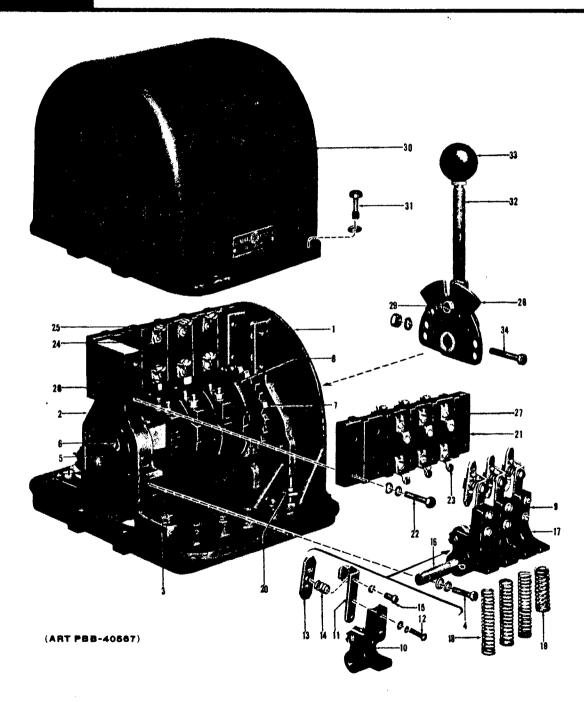


RENEWAL PARTS

IC3012-DD, -DF, -DH, -DK, AND -DM

MASTER SWITCHES

(also CR3012)

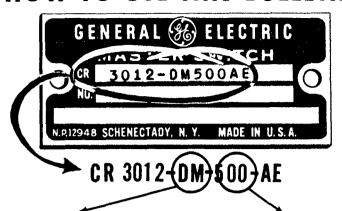


IC3012-DD100 master switch

When ordering renewal parts, give quantity, catalog number, description of each item required, and complete nameplate reading.



HOW TO USE THIS BULLETIN



The two letters following the CR number denote the switch parts (DD, DF, etc.). To find the quantity required for your switch, obtain the type letters from the nameplate then refer to the appropriate column under "Master Switch Parts." Be sure you use the column with the heading matching the type letters in your nameplate.

The last two digits in the type designation are the operating mechanism code (00, 01, etc.). Obtain the code from the nameplate and then refer to the appropriate column under "Operating Mechanisms" (see listings beginning on page 3) for the quantity required for the operating mechanism for your switch.

Master	Switch	Parts

Ref.		No. Cl	Req. R301			Cat, No.	
No.	DD	DF	DH	DK	DM		L
6			1			5741011P1	Camshaft
6				1	1	5741012P1	Camshaft
7	1	1	1	1	1	*5114021P1	Star wheel
7	1	1	1	1	1	*5114021P2	Star why
8		-	-	-	-	ø	Opera/
9	4	6	8	10	12	2832807G1	
10	4	6	8	10	12	283280767	
11	4	6.	8	ىمىـا	alliilli		White.

Operating Mechanisms

I I	R. A. for Oper, Mech, Code														
Cat. No.	36	33	30	07	04	03	02	0	00	Ref. No.					
9781421G3 Ball			1						L	32					
5724555G1 Knot			1			1			1	33					
N22P23024B Scre	! I		1						1	34					
168309 Key	1 1		1		1		İ		1						
2299643G3 Foo	1			1			}	1		35					
2299637G1	1					1	1	1		36					
2299638P1	1							1							
220×97	1	{						1							
Sustillation	الم 3	1	1		1	1	1	3							

PARTS RECOMMENDED FOR NORMAL STOCK

Ref.	1	_	Req. R301			Cat. No.	Description
No.	DD	DF	DH	DK	DM	020, 110,	Donot specio.
13	4	6	8	10	12	3841733G1	Movable contact plate with tips
23	12	12	16	24	24	3803265G1	Stationary contact
14	4	6	8	10	12	2412995	Compression spring for movable contact plate
18	4	6	8	10	12	2281876	Compression spring for operating arm
19	2	2	2	2	2	2288665	Compression spring for pawl

MASTER SWITCH PARTS

					· · · · · · · · · · · · · · · · · · ·	·	
1	1	1			1	5741585P1	Frame
1			1		<u> </u>	5741586P1	Frame
1				1	1	5741587P1	Frame
2	1	1	ļ		ł	3822098P4	Bearing bracket
2			1	1	1	2289172P12	Bearing bracket
2				1		2289167P12	Bearing bracket
3	2	2	2	2	2	N22P23016B	Screw fastening bearing bracket to frame (5/16 in18)
	1	1			ì	2438155	Wire clamp
	2	2				N37P16006B	Screw fastening wire clamp to bearing bracket (10-32)
4	2	2	2	2	2	N39P21016B	Screw fastening shaft for operating arms to bearing bracket (1/4 in20)
5	2	2	2	2	2	8046676	Bushing
6	1	1				5741010P1	Camshaft
	DD	DF	DH	DK	DM		

Ref.			R301	2-		Cat. No.	Description
110,	DD	DF	DH	DK	DM		
6			1			5741011P1	Camshaft
6			•	1	1	5741012P1	Camshaft
7	1	1	1	1	1	*5114021P1	Star wheel for camshaft (5 points each side of center)
7	1	1	1	1	1	*5114021P2	Star wheel for camshaft (6 points each side of center)
8	_	-	_	1	_	ø	Operating cam
9	4	6	8	10	12	2832807G1	Operating carm with roller and contact plate
10	4	6	8	10		2832807G2	Operating arm with roller and pin
11	4	6	8	10		2435621	Support for contact plate
12	8	12	16	20	24	N37P16010B	Screw fastening contact plate support to operating
			10	}] _	10011100101	arm (10-32)
13	4	6	8	10		3841733G1	Movable contact plate with tips
14	4	6	8	10		2412995	Compression spring for contact plate
15	4	6	8	10	12	N37P21008B	Retaining screw for compression spring $(1/4 \text{ in}20)$
16	2	2		1	İ	5742188	Shaft for operating arms
16			2		1	5742189	Shaft for operating arms
16				2		5742190	Shaft for operating arms
17	2	2	2	2	2	5747474G1	Pawl with bearing pin, and sleeve
18	4	6	8	10	12	2281876	Compression spring for operating arm
19	2 2	2	2	2	2	2288665	Compression spring for pawl
20		2	2	2	2	2289965	Spring seat for pawl
21	2	2				3822088	Molded support for stationary contacts
21			2	_	_	2446624	Molded support for stationary contacts
21				2	2	2446625	Molded support for stationary contacts
22	8	8	8	8	8	N26P21016B	Screw fastening molded support to frame (1/4 in,-20)
23	12	12	16	24	24	3803265G1	Stationary contact
24	12	12		۱.,		2235141	Connection plate for stationary contact
24	ا م		16	24	1	2435614	Connection plate for stationary contact
25	12	12	16	24		2492953	Binding screw for connection plate
26	6	6	8	12		2435616	Stud fastening connection plate to insulation block
27	6	6		12	1	N37P16006B	Screw fastening stationary contact to stud (10-32)
28	2	2 1	2	2	2	9756535P1	Stop plate for operating handle
29	1	1	1	1	1	N22P25016B	Screw fastening stop plate to operating handle (3/8 in16)
30	1	1				5741584P1	Cover for switch
30			1			5741584P2	Cover for switch
30 31]	4		1	1	5741584P3	Cover for switch
31	4	4	4	4	4	5742201	Screw fastening cover to frame
	DD	DF	DH	DK	DM	<u> </u>	

OPERATING MECHANISMS

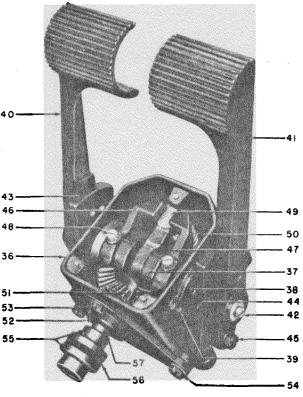
The last two digits in the type designation are the operating mechanism code (00, 01, etc.). Obtain the code from the nameplate and then refer to the appropriate column below for the quantity required for the operating mechanism for your switch.

Ref.	No.	Re	q. f	or	Ope	r. l	Иес	h. (Code		
No.	00	01	02	03	04	07	30	33	36	Cat. No.	Description
32 33 34	1 1 1						1 1 1 1			9781421G3 5724555G1 N22P23024B 168039	Ball and rod operating mechanism Knob for handle Screw fastening handle to shaft (5/16 in18) Key locking handle to shaft
35 36	•	1 1 1 3							1 1 1 3	2299643G3 2299637G1 2299638P1 220X95 N26P21020B	Foot mechanism, complete Box with pivot Cover for box Packing between cover and box Screw fastening cover to box (1/4 in20)
	00	01	02	03	04	07	30	33	36		

^{*} Inspect the star wheel in your switch to determine number of points each side of center before selecting catalog number.

⁶ Operating cams may be ordered by number shown on contact sequence point shipped with switch.

IC3012 MASTER SWITCHES



(PHOTO 869881)

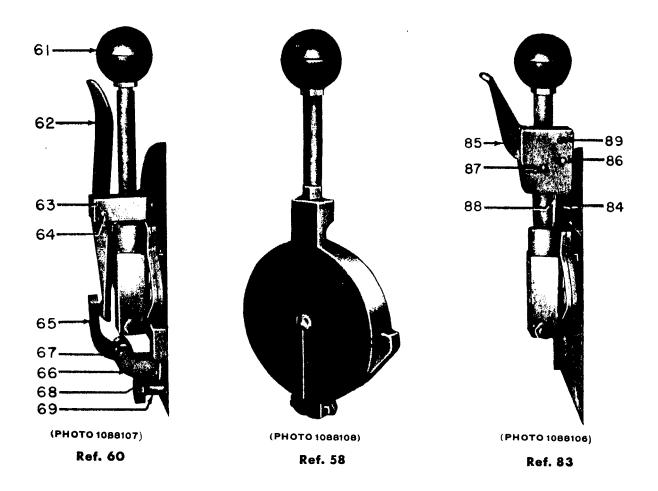
Ref. 35

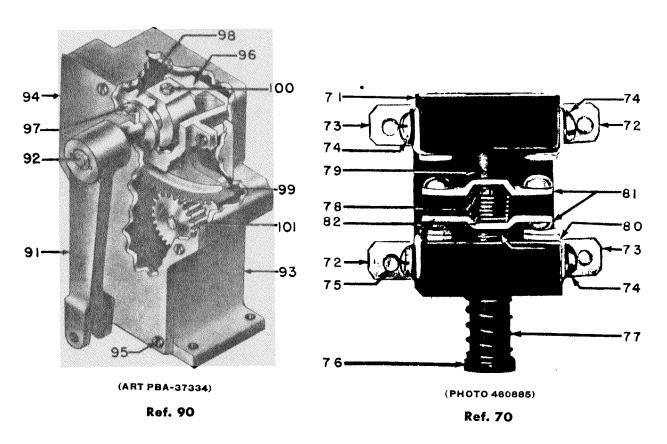
Ref.	No.	Re	q. f	or (Ope	r. I	Иес	h. C	ode	_	
No.	00	01	02	03	04	07	30	33	36	Cat. No.	Description
		2							2	10805	Pipe plug for box
		2	1				1		2	N26P21016B	Screw fastening box to master switch (1/4 in20
		1					١.		1	N26P21010B	Screw fastening box to master switch (1/4 in20
		1			١.	Ì			1	2298068	Gasket between box and master switch
	1	2		[l			2	4921052P3	* Shaft for foot lever
37	į	1					-		1	2210704G1	Supporting bracket for shafts and pinion
		2							2	N26P25016B	Screw fastening supporting bracket to box (3/8 in16)
38		2	i	1			l		2	2208082P11	Bearing for shaft
	1	4	ļ	.			ļ	1	4	2298067	Gasket between bearing and box
39		6		1					6	N26P21010B	Screw fastening bearing to box (1/4 in20)
	1	2		1			İ	1	2	220X96	Grease seal for shaft
	1	4		1					4	80X212	Ball bearing for shaft
		2							2	2291290P8	Spacer on shaft between ball bearing and operating lever
40	1.	1						l	1	2299639P2	Foot lever, right-hand
41		1							1	2299639P1	Foot lever, left-hand
12	1	2	1	ì	1		1	1	2	N26P23006B	Screw fastening foot lever to shaft (5/16 in18)
13		2				ļ ·			2	2299639P3	Operating arm
14		2							2	N500P2532	Taper pin fastening arm to shaft
45		2						ł	2	N26P29020B	Screw fastening foot lever to operating arm (1/2 in13)
46		1							1	2299641P2	Segment gear, right-hand
17	1	1	l .	ļ					1	2299641P1	Segment gear, left-hand
48		2							2	N26P23032B	Screw fastening segment gear to shaft (5/16 in18)
19		1							1	2299552G2	Operating lever
50		1			L				1	5745061	Compression spring for operating lever
	00	01	02	03	04	07	30	33	36		

ef.						-			Code	Cot Mo	D-21-41
0.	00	01	02	03	04	07	30	33	36	Cat. No.	Description
		1		i					1	5745059P2	Spring seat, upper, for compression spring
		1							1	5745059P1	Spring seat, lower, for compression spring
1		1							1	2298142	Pinion
Ì											Lubricant Essolube #70 or similar (2 quarts
2		1							1	5749003G1	required) Cover
-		2							2	9658607P3	Gasket for cover
3		1							1	N26P21022B	
4		2		1					2	N26P21022B	Screw fastening cover to box (1/4 in, -20) Screw fastening cover to box (1/4 in, -20)
5		2							2	1650982P29	Coupling flange
6		1							1	1650982P30	Coupling hange
7		1				ļ			ī	2287848P54	Shaft
		1							1	2245900	Bushing for shaft
		1							1	87X562	Oil seal for shaft
		1							1	9779718P3	Bedplate for CR3012-DD and -DF switches only
		1							1	9779718P1	Bedplate for CR3012-DH switches only
		1							1	9779718P2	Bedplate for CR3012-DK and -DM switches only
8			1							9789084G1	†Spring return operating assembly
9			1							5724555G1	Knob for handle
0				1				1		9781421G2	Operating handle mechanism with auxiliary
1				1				1		5724555G1	switch Knob for handle
2			İ	1				1		2289242P7	Operating lever
3				1				1		2289943P1	Support block for operating lever
- 1			l	2				2		9653048P19	Pin fastening support to handle
4				1				1		9653048P18	Hinge pin for operating lever
5			ŀ	1		}		1	l	9781420P1	Operating lever for auxiliary switch
6				1				1		9781420P3	Support for lever
7				1				1		5742163	Hinge pin for lever
8				1				1		N37P15010B	Screw fastening support to box (8-32)
9			ł	1				1		N37P15018B	Screw fastening support to box (8-32)
			l	1	İ			1		5742167 3845750G1	Operating pin for auxiliary switch
i	•			1				1		2436833	Auxiliary switch, complete Base
2			ŀ	2				2		3845725G1	Stationary contact with connection block,
_			l	-				 		001012001	upper right-hand or lower left-hand
3				2			Ì	2		3845725G2	Stationary contact with connection block,
				_				-			upper left-hand or lower right-hand
4				4				4		N37P16006B	Screw fastening stationary contact to base
5				4				4	ŀ	1407010	(10-32)
8				1		ł	ļ	1		1487612 2480065	Binding screw for connection block
7				1				1		2238080	Operating plunger for contact plate Compression spring for plunger
8				î				i		2480067	Insulation washer between spring and upport
				_	ł			1		2.000 00.	contact plate
9				1				1		2480066P1	Guide for plunger
0				1				1		2236477	Washer between guide and plunger
				1		l		1		N37P9022B	Screw fastening guide to plunger (4-40)
1				2				2		3805658G8	Movable contact plate with tips, upper or
2				1				1		2411917	lower Compression spring for movable contact
l					l						plate
.]		'		1				1		9644734 N37D15012D	Support for auxiliary switch
.				2	1			2		N37P15012B N51P15012B	Screw fastening switch to support (8-32)
.				1			1	1		5742164	Screw fastening support in position (8-32)
1				4				4		262X82	Insulation between auxiliary switch and box Screw fastening insulation to box
1		-		1				1		5908303G2	Terminal board
				2				2		N37P15016B	Screw fastening terminal board in position
3					1	1				9781422G2	(8-32) Ball and rod mechanism with off-position latch
* 1			ŀ	1	1 4	ł	1	1		0101422U2	e pair and rou mechanism with off-position latch

[†] Parts except knob, are not furnished for this mechanism because special fixtures are required for its assembly.

IC3012 MASTER SWITCHES





IC3012 MASTER SWITCHES

Ref.	No.	Re	q. fo	or C	pe	r. N	/lec	n. C	ode		
No.	00	01	02	03	04	07	30	33	36	Cat. No.	Description
84 85 86 87 88 89 90 91 92					1 1 1 1 1	1 1 1 1 1				9723500P1 9781420P2 5721955P7 5721955P7 2416834 9653048P17 5129064G1 2299996P10 5149285P1 2292483P35 N70P2110B 5129067P1	Latch Lever for latch Pivot pin fastening latch to lever Pivot pin fastening lever to handle Compression spring for latch Groove pin for operating lever Under lever operating mechanism Operating lever Operating shaft Key fastening lever to shaft Screw locking shaft to lever Gear case
94 95 96 97 98 99 100						1 6 1 2 1 1				5119697P1 N26P21012B 5119698P1 9645283 371X86 5119699P1 9645293 5149284P1	Cover plate for gear case Screw fastening cover to gear box (1/4 in20) Bearing bracket for shaft Washer for shaft Bushing for shaft Gear, upper Screw fastening upper gear to shaft Gear, lower
	00	01	02	03	04	07	30	33	36		

LOCK WASHERS

Cat. No.	Description
N405P39C3	For No. 10 screw
N405P41C3	For 1/4 in, screw
N405P42C3	For 5/16 in screw
N405P43C3	For 3/8 in, screw
N405P45C3	For 1/2 in, screw
N405P65C3	For No. 4 screw
N405P68C3	For No. 8 screw
	NUTS
N210P16B	10-32, hex. std
N203P21B	1/4 in, -20, hex, std
N203P23B	5/16 in18, hex. std
N203P25B	3/8 in16, hex. std
	•

PLAIN WASHERS

Cat. No.	Description
N402P5B	For No. 4 screw
N402P8B	For No. 8 screw
N402P9B	For No. 10 screw
N402P11B	For 1/4 in. screw
N402P12B	For 5/16 in. screw
N402P13B	For 3/8 in. screw
N402P15B	For 1/2 in. screw

COTTER PIN

N503P1212B 1/8 in. by 3/4 in.