



RENEWAL PARTS

GEF-4322

IC9516 THRUSTOR* OPERATED BRAKES

IC9516-463C001AA and AB; 463C002AA and AB; 464S001AA and AB; 465N001AA and AB; 466N001AA and AB; 467E001AA and AB; 468D001AA and AB; 468D002AA and AB

NOTE: -When ordering parts for a form of the brake not covered by this bulletin, give reference number, description of part, complete nameplate reading, and above bulletin (GEF) number. *Do not use catalog number when form for which the parts are needed is not covered by the bulletin.*

NOTE: Suffix letters following the group No. in the IC designation with the exception of AA and AB merely cover accessories such as drip cover, hand release, etc. However, the parts listed in this bulletin will apply regardless of the suffix letters shown on the nameplate.
EXAMPLE: IC9516-463C-001-HA-301.

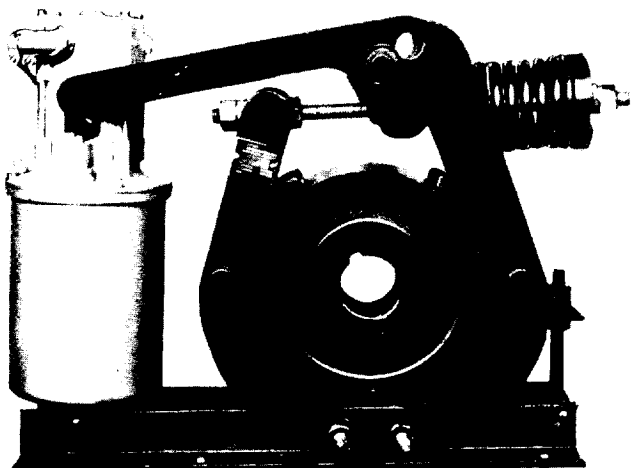


Fig. 1. Representative of IC9516-463-C brake

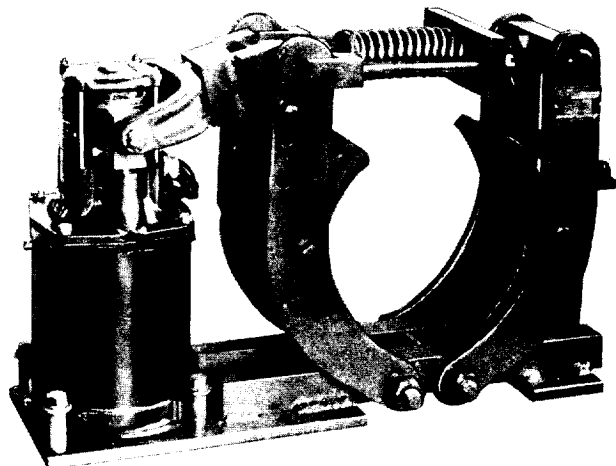


Fig. 2. Representative of IC9516-464-S brake

*Registered Trade-mark of the General Electric Co.

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

GENERAL  ELECTRIC

IC9516 THRUSTOR OPERATED BRAKES**THRUSTER MECHANISMS**

NOTE: The thruster mechanism is identified by the last three digits in the IC designation.

EXAMPLE: IC9516-463C-001-HA-101 requires thruster mechanism Group No. 101, catalog number 4986559G24

FOR IC9516-463C				FOR IC9516-464S (CONT'D)			
Brake Group No.	Thruster Catalog Number	IC9504-	For Parts See GEF-	Brake Group No.	Thruster Catalog Number	IC 9504-	For Parts See GEF-
101	4986558G24	L33	2457	303	5748353D	V72	3051
102	4986558G27	L33	2457	500	6937004D	V56	3051
103	4986558G25	L33	2457	501	6937004D	V56	3051
104	4980620G30	L24	2457	FOR IC9516-465N			
105	4980620G34	L24	2457	100	6937012D	N57	3051
106	4980620G31	L24	2457	101	6937012D	N57	3051
107	5748390G30	L24	2457	102	6937012D	N57	3051
140	3888888G45	L5	2457	103	142L212D	N73	3051
141	3888888G44	L5	2457	104	142L212D	N73	3051
142	3888888G49	L5	2457	140	6937011D	N56	3051
143	3888888G46	L5	2457	141	5368607D	N33	3050
144	3888888G48	L5	2457	142	142L211D	N72	3051
145	3888893G45	L9	2457	143	6937011D	N56	3051
146	3888893G44	L9	2457	144	142L211D	N72	3051
147	3888893G46	L9	2457	500	6937011D	N56	3051
148	3888893G48	L9	2457	501	6937011D	N56	3051
149	4980607G30	L23	2457	502	6937011D	N56	3051
150	4980607G31	L23	2457	FOR IC9516-466N			
151	4980607G32	L23	2457	100	142L204D	M71	3051
152	4980607G33	L23	2457	101	142L204D	M71	3051
153	4980607G34	L23	2457	140	142L203D	M70	3051
154	4986314G30	L30	2457	141	142L203D	M70	3051
155	4986314G31	L30	2457	142	142L203D	M70	3051
156	4986314G32	L30	2457	500	142L203D	M70	3051
240	3888888G44	L5	2457	FOR IC9516-467E			
241	4980607G31	L23	2457	100	142L206D	M73	3051
FOR IC9516-464S				101	142L206D	M73	3051
100	6937005D	V57	3051	140	142L205D	M72	3051
101	6937005D	V57	3051	141	142L205D	M72	3051
102	6937005D	V57	3051	FOR IC9516-468D001 ONLY			
103	6937005D	V57	3051	100	233X746A	M82	3051
104	6937005D	V57	3051	140	233X745A	M81	3051
105	6937005D	V57	3051	141	233X745A	M81	3051
106	6937005D	V57	3051	142	233X745A	M81	3051
107	6937005D	V57	3051	500	233X744A	M80	3051
108	6937005D	V57	3051	FOR IC9516-468D002 ONLY			
140	6937004D	V56	3051	140	233X768A	M83	3051
141	6937004D	V56	3051	141	233X768A	M83	3051
142	6937004D	V56	3051	142	233X768A	M83	3051
143	6937004D	V56	3051				
144	6937004D	V56	3051				
145	6937004D	V56	3051				
146	6937004D	V56	3051				
300	5748353D	V72	3051				
301	5748353D	V72	3051				
302	5748353D	V72	3051				

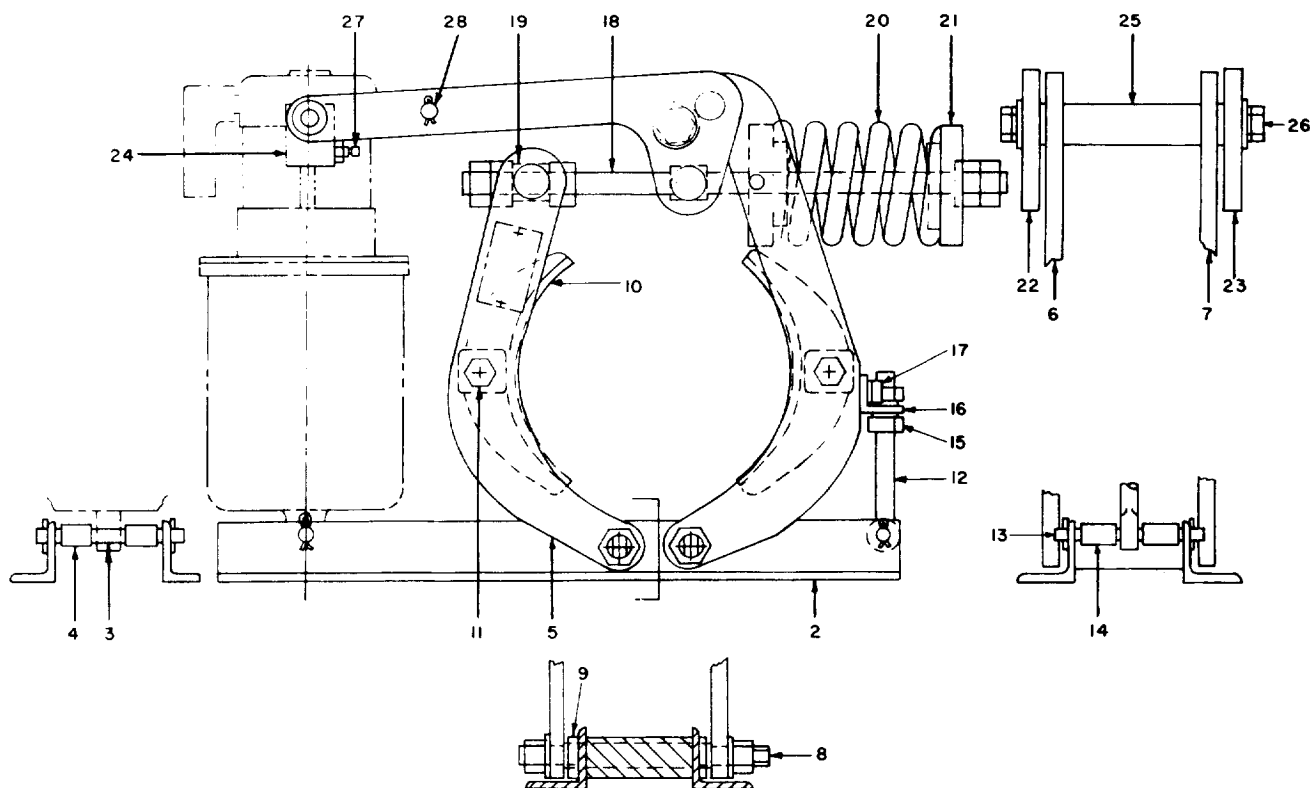


Fig. 3. IC9516-463C

Ref. No.	Catalog Number	No. Req.	Description
2	4921932G14	1	Base for forms 001AA and 001AB
2	9781089G1	1	Base for forms 002AA and 002AB
3	8058141	1	Bearing pin for thruster and base
4	2291227P6	2	Spacer for bearing pin
5	4921933P1	1	Yoke, left front
6	4921933G1	1	Yoke, right front
	4921933P2	1	Yoke, left rear
7	4921933G2	1	Yoke, right rear
8	2486591	2	Bearing pin for yoke and base
9	2235750P35	4	Spacer for bearing pin
10	2841048G6	2	Brake shoe assembly
	21X465		Lining with rivets for brake shoe
11	N22P29096B6	2	Bolt for brake shoe and yoke (1/2 in.-13, 6 in. hex. hd., pro. fin.)
12	282A867P2	1	Back stop
13	8058141	1	Bearing pin for back stop and base
14	2010303	2	Spacer for bearing pin
15	3897181P6	2	Adjusting nut for back stop
16	3897182P12	1	Angle for back stop
17	N22P25012B6	2	Screw fastening angle to yoke (3/8 in.-16, 3/4 in. hex. hd., pro. fin.)
18	3897181G1	1	Connection rod with cross head
19	3897181P4	1	Guide block for connection rod
20	2413980	1	Torque adjusting spring
21	3897183P2	2	Spring seat, adjustable or fixed
22	4921934G15	1	Front operating lever
23	4921934G16	1	Rear operating lever
24	3897182P5	2	Clevis for operating lever and thruster
25	3897182P5	1	Bearing pin for operating levers and right-hand yokes
26	N22P29012B3	2	Screw fastening main bearing pin to front and rear operating lever (1/2 in.-13, 3/4 in. hex. hd., pro. fin.)
27	N72P2316B6	2	Set screw fastening clevis to thruster (5/16 in.-18, 1 in. square hd., cup point)
28	3897182P4	1	Tie rod for front and rear operating levers

IC9516 THRUSTOR OPERATED BRAKES

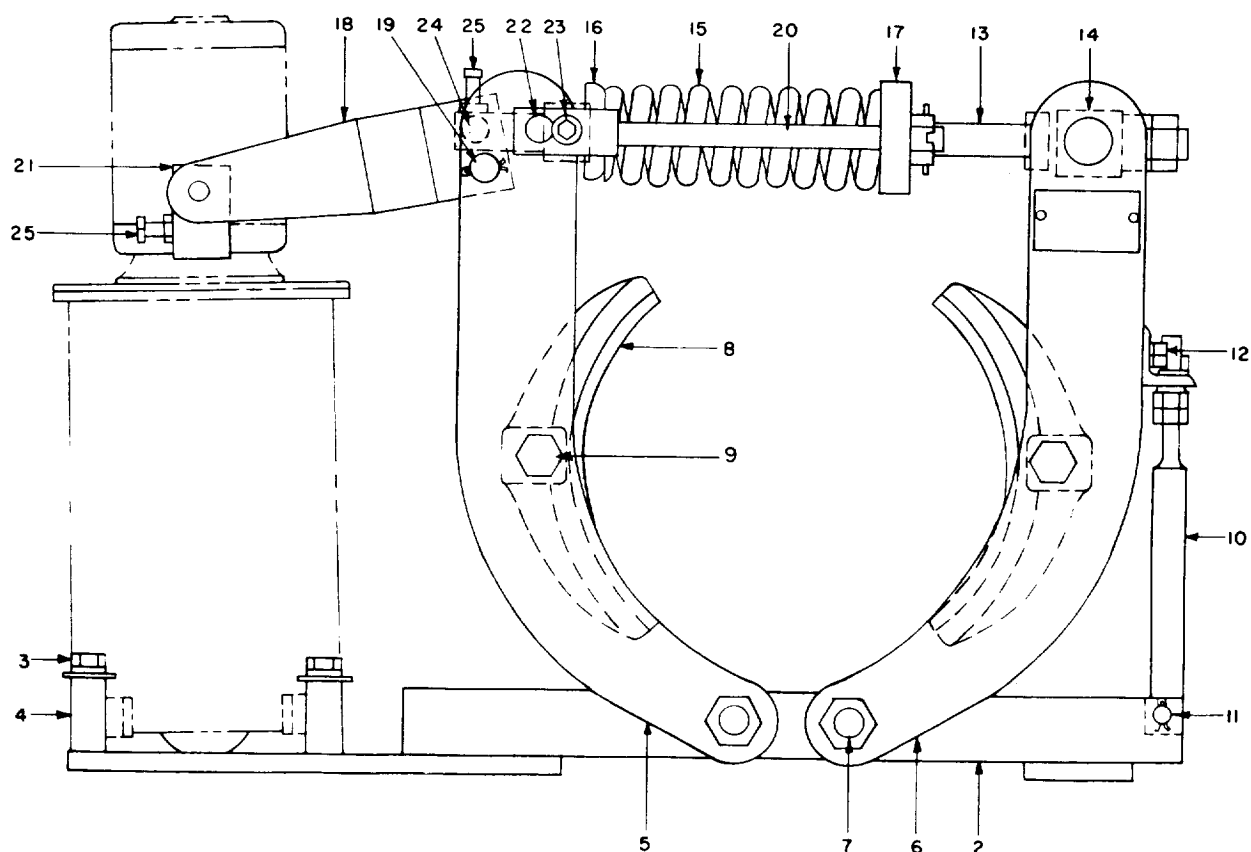


Fig. 4. IC9516-464S

Ref. No.	Catalog Number	No. Req'd	Description
2	9714874P2	1	Base
3	N22P23036B6	4	Screw fastening thrustor to base (1/2 in.-13, 2 1/4 in. hex. hd., pro. fin.)
4	2010303	4	Spacer
5	5316910G9	1	Yoke, left front
6	3858486P4	1	Yoke, right front
	5316910G10	1	Yoke, left rear
	3858486P5	1	Yoke, right rear
7	1434517P1	2	Bearing pin for yoke and base
8	2841048G3	2	Brake shoe assembly
	21X466	2	Lining with rivets for brake shoe
9	N22P33128B6	2	Bolt for brake shoe and yoke (5/8 in.-11, 8 in. hex. hd., pro. fin.)
10	3860814G1	1	Back stop with angle and spacer
11	5354060P1	1	Bearing pin for back stop and base
12	N22P29016B6	2	Screw fastening back stop angle to yoke (1/2 in.-13, 1 in. hex. hd., pro. fin.)
13	2860813G7	1	Connection rod with hinge block
14	2443049	1	Guide block for connection rod, right-hand
15	2412653	1	Torque adjusting spring
16	3641928P3	1	Adjustable spring seat
17	2472671	1	Fixed spring seat
18	8290060G2	1	Operating lever complete, with "U" lever, pins and block
19	2472644P1	1	Bearing pin for operating lever and left-hand yokes
20	3860815G1	2	Rod with clevis for fixed spring seat
21	5386598	2	Clevis for operating lever and thrustor
22	2472679P1	2	Bearing pin for rod and yoke
23	N22P23008B6	2	Screw fastening pin to rod (5/16 in.-18, 1/2 in. hex. hd., pro. fin.)
24	8057567P1	1	Bearing pin for connection rod, hinge block, and lever
25	N70P2516B6	3	Set screw fastening clevis to thrustor and operating lever to yoke (5/16 in.-18, 1 in. square hd., cup point)

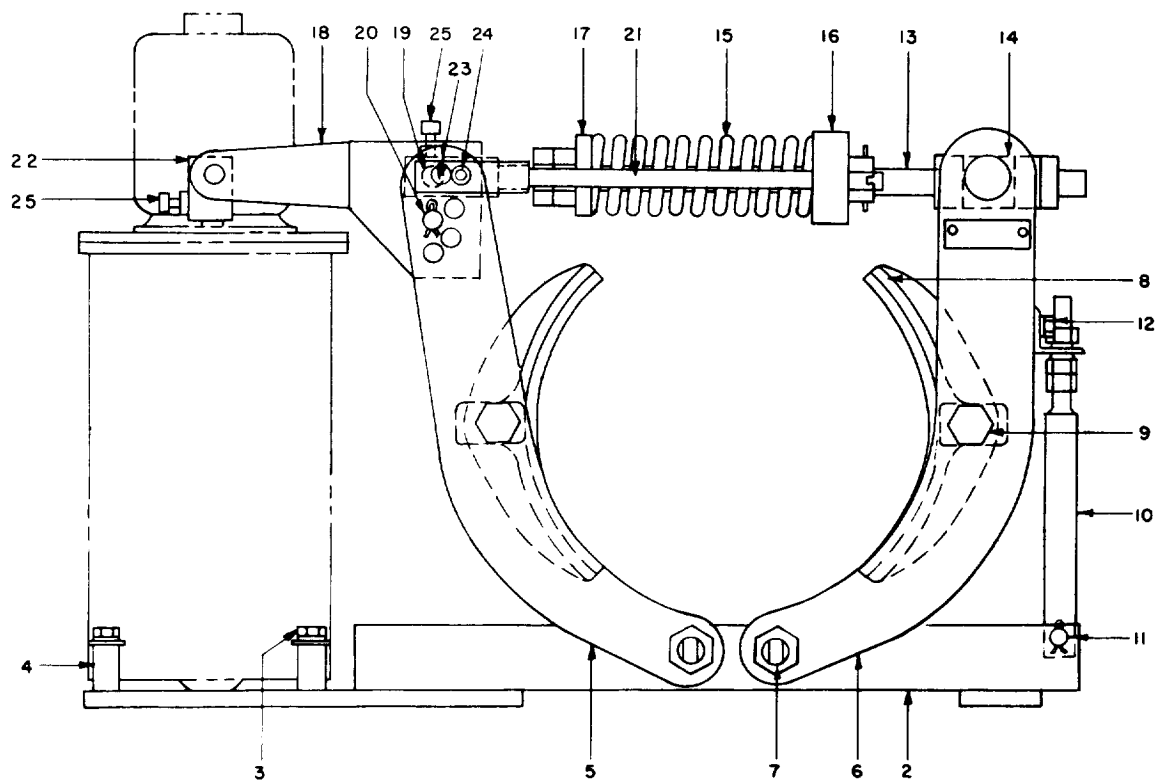


Fig. 5. IC9516-465N

Ref. No.	Catalog Number	No. Req'd	Description
2	9714874P3	1	Base
3	N22P29040B6	4	Screw fastening thruster to base (1/4 in.-13, 2 1/2 in. hex. hd., pro. fin.)
4	2291227P8	4	Spacer for screw
5	8290102G5	1	Yoke, left front
6	3814041P4	1	Yoke, right front
	8290102G6	1	Yoke, left rear
	3814041P5	1	Yoke, right rear
7	1434511P1	2	Bearing pin for yoke and base
8	2841066G2	2	Brake shoe assembly
	21X467	2	Lining with rivets for brake shoe
9	N22P35160B6	2	Bolt for brake shoe and yoke (3/4 in.-10, 10 in. hex. hd., pro. fin.)
10	3860804G4	1	Back stop with angle and spacer
11	2472644	1	Bearing pin for back stop and base
12	N22P29016B6	2	Screw fastening back stop angle to base (1/2 in.-13, 1 in. hex. hd., pro. fin.)
13	4374041G1	1	Correction rod with hinge block
14	1434508P1	1	Guide block for connection rod, right-hand
15	2412654	1	Torque adjusting spring
16	3647928P1	1	Adjustable spring seat
17	2486530P2	1	Fixed spring seat
18	8290112G2	1	Operating lever complete "U" lever pins and block
19	8057583P1	1	Bearing pin for connection rod, hinge block and block lever
20	2472645P1	1	Main bearing pin for operating lever
21	4374042G1	2	Rod with clevis for fixed spring seat
22	2491215	2	Clevis for operating lever and thruster mechanism
23	2486531P1	2	Bearing pin for rod and yoke
24	N22P23008B6	2	Screw fastening pin to rod (5/16 in.-18, 1/2 in. hex. hd., pro. fin.)
25	N72P2516B6	3	Set screw for clevis and lever

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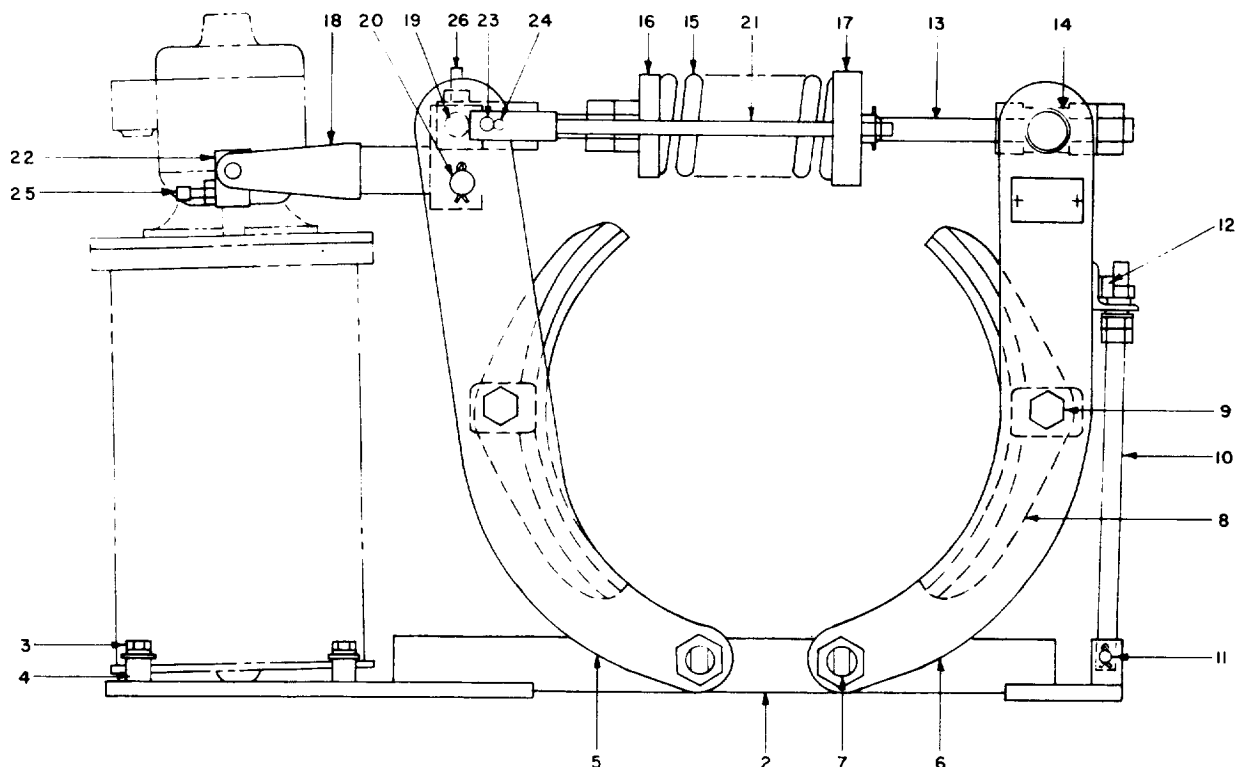


Fig. 6. IC9516-466N

Ref. No.	Catalog Number	No. Req'd	Description
2	9714874P4	1	Base
3	N22P29044B6	4	Screw fastening thrustor to base (1/2 in.-13, 2 3/4 in. hex. hd., pro. fin.)
4	576A299P1	4	Spacer for screw
5	8290218G1	1	Yoke, left front
6	4921974P7	1	Yoke, right front
	8290218G2	1	Yoke, left rear
	4921974P8	1	Yoke, right rear
7	1434527	2	Bearing pin for yoke and base
8	2841066G1	2	Brake shoe with lining
	21X468	2	Lining for brake shoe with rivets
9	N22P37192B6	2	Bolt for brake shoe and yoke (7/8 in.-8, 12 in. hex. hd., pro. fin.)
10	3860804G2	1	Back stop with angle and spacer
11	8058327P1	1	Bearing pin for back stop and base
12	N22P33016B6	2	Screw fastening back stop angle to yoke (1 in.-8, 1 1/4 in. hex. hd., pro. fin.)
13	4374073G1	1	Connection rod with hinge block
14	2443064	1	Guide block for connection rod, right-hand
15	2415951	1	Torque adjusting spring
16	3647928P2	1	Adjustable spring seat
17	2491218	1	Fixed spring seat
18	8290219G2	1	Operating lever complete with "U" lever, pins and block
19	8085328P1	1	Bearing pin for connection rod, hinge block and block lever
20	2439448P1	1	Main bearing pin for operating lever and left-hand yokes
21	4374074G1	2	Rod with clevis for fixed spring seat
22	5349217P4	2	Clevis for operating lever and thrustor mechanism
23	2491216P1	2	Bearing pin for rod and yoke
24	N22P23008B6	2	Screw fastening pin to rod (5/16 in.-18, 1/2 in. hex. hd., pro. fin.)
25	N72P2916B6	2	Set screw fastening clevis to thrustor (1/2 in.-13, 1 in. square hd., cup point)
26	N72P2516B6	1	Set screw fastening operating lever to yoke 5/16 in.-18, 1 in. square hd., cup point)

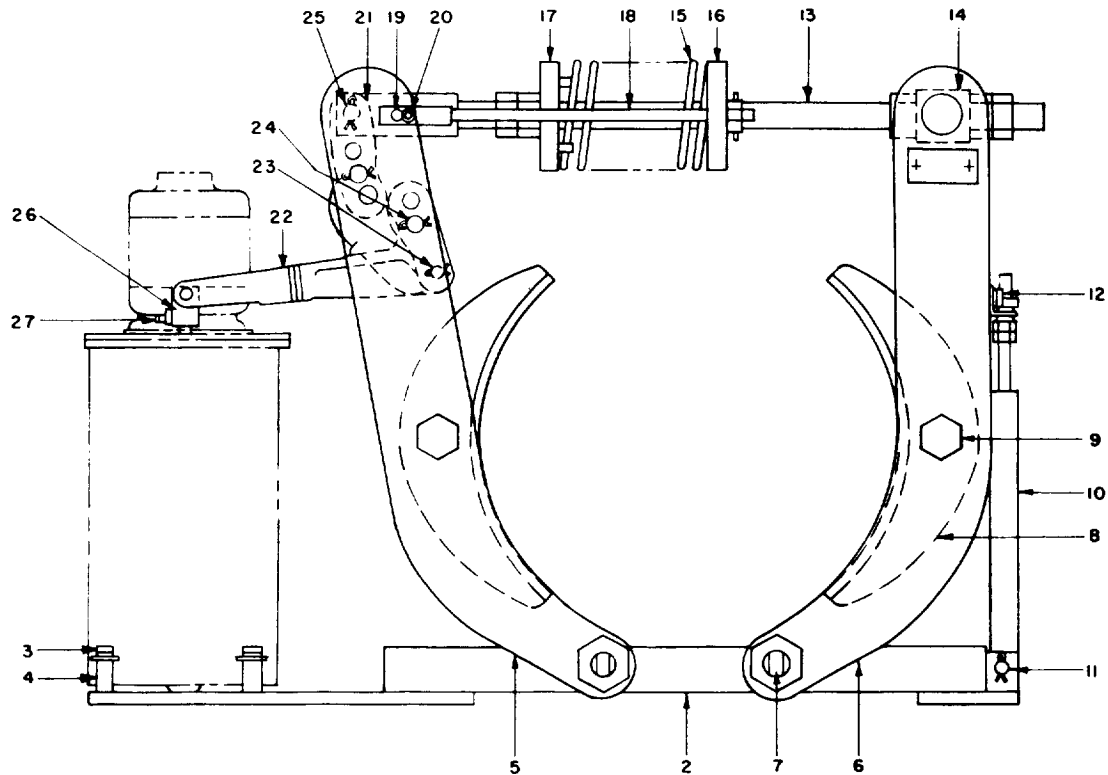


Fig. 7. IC9516-467E

Ref. No.	Catalog Number	No. Req'd	Description
2	4929104G1	1	Base
3	N29P29044B6	4	Screw fastening thrustor to base (1/2 in.-13, 2 3/4 in. hex. hd. pro. fin.)
4	488128	4	Spacer for screw
5	4929103G1	1	Yoke, left front
6	4929103P3	1	Yoke, right front
	4929103G2	1	Yoke, left rear
	4929103P4	1	Yoke, right rear
7	2437910	2	Bearing pin for yoke and base
8	2841066G3	2	Brake shoe with lining
	21X469	2	Lining for brake shoe with rivets
9	2437938	2	Bolt for brake shoe and yoke
10	3860804G1	1	Back stop with angle and spacer
11	287A963P14	1	Bearing pin for back stop and base
12	N22P33020B6	2	Screw fastening back stop angle to yoke (1 in.-8, 1 1/4 in. hex. hd., pro. fin.)
13	3860852G1	1	Connection rod with hinge block
14	2437911	1	Guide block for connection rod, right-hand
15	2418389	1	Torque adjusting spring
16	2491298	1	Adjustable spring seat
17	2841089G3	1	Fixed spring seat
18	3860851G1	2	Spring rod
19	2491297	2	Bearing pin for rod and yoke
20	N22P23008B6	2	Screw fastening pin to rod (5/16 in.-18, 1/2 in. hex. hd., pro. fin.)
21	3858410P3	1	Upper operating lever
22	104B9031G1	1	Lower operating lever
23	2472664	1	Bearing pin for operating levers
	2437937	1	Roller for pin
24	2439440	2	Bearing pin for upper or lower operating lever and left-hand yokes
25	2439441	1	Bearing pin for connection rod hinge block and upper operating lever
26	5389533	2	Clevis for operating lever and thrustor mechanism
27	N72P2924B6	2	Set screw fastening clevis to thrustor mechanism (1/2 in.-13, 1 in. square hd., cup point)

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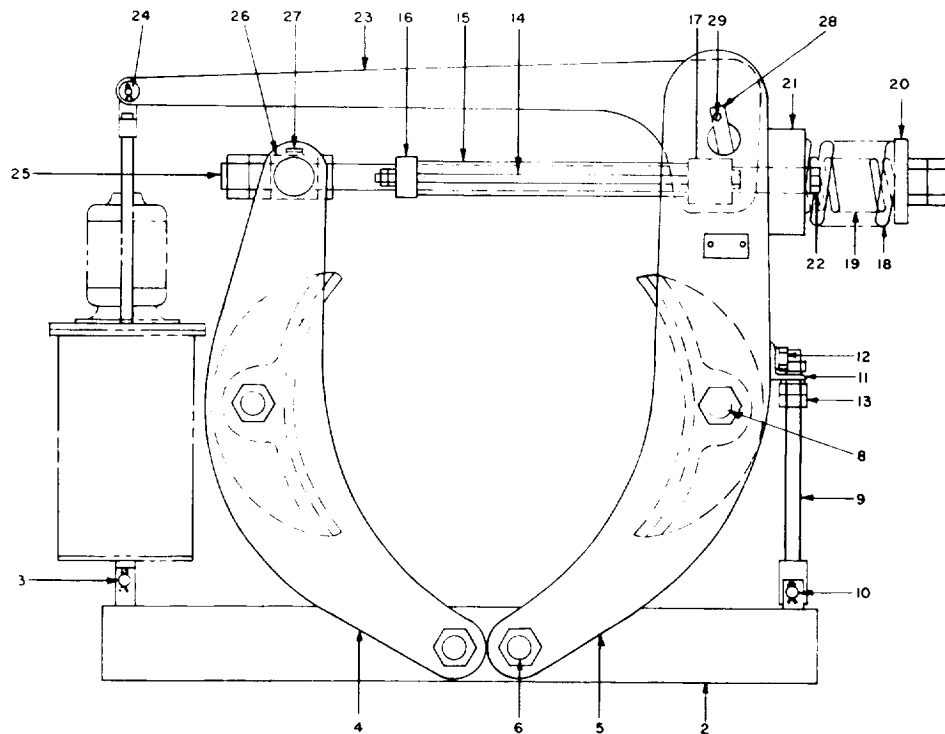


Fig. 8. IC9516-468D

Ref. No.	Catalog Number	No. Req'd	Description
2	5166584G6	1	Base
3	5166583P30	1	Pin for thrustor and base
4	9141090G2	1	Yoke, left front
5	9141090P9	1	Yoke, right front
	9141090G1	1	Yoke, left rear
	9141090P10	1	Yoke, right rear
6	181A1159P1	2	Stud for yoke and base
	5166583P50	4	Spacer for stud
7	5166587G1	2	Brake shoe with lining
	6960053G38	2	Lining with rivets for brake shoe
8	5166583P32	2	Pin for brake shoe and yoke
9	5166583G2	1	Back stop
10	5166583P29	1	Pin for back stop and base
11	5166583P16	1	Angle for back stop
12	N22P33020B6	2	Screw fastening angle to yoke (1 in.-8, 1 1/4 in. hex. hd., pro. fin.)
13	287A874P3	1	Spacer for back stop
14	5166583G4	1	Connection pin with nut
15	5166583P42	1	Spacer for connection pin
16	5166583P36	1	Support for connection pin, left-hand
17	9029714	1	Support for connection pin, right-hand
18	2418390	1	Torque adjusting spring
19	2418389	1	Torque adjusting spring
20	5166583P21	1	Spring seat
21	5166583P22	1	Spring seat
22	N22P29048B6	2	Mounting screw for spring support (1/2 in.-13, 3 in. hex. hd., pro. fin.)
23	5166586G7	1	Front operating lever
	5166586G8	1	Rear operating lever
24	5166583P24	1	Pin fastening operating lever to thrustor mechanism
	6900125	2	Spacer for pin
25	5166583P43	1	Adjusting pin
26	9092713	1	Support for adjusting pin
27	N22P29020B6	1	Screw fastening support to yoke (1/2 in.-13, 1 1/4 in. hex. hd. pro. fin.)
28	9117171G1	1	Pin for operating lever
29	N22P25024B6	1	Screw for pin (3/8 in.-16, 1 1/2 in. hex. hd. pro. fin-)