Installation Guide

⚠ Warning

Forward this manual to the person responsible for Installation, Operation and Maintenance of the product described herein. Without access to this information, faulty Installation, Operation or Maintenance may result in personal injury or equipment damage.

Installation and Adjustment of the Disc Centering Option used in Airflex By Danfoss DBA Brake Assemblies

Vertical Swing Motor Applications

⚠ Caution:

Use Only Genuine Danfoss Replacement Parts

Danfoss recommends the use of genuine Danfoss replacement parts. The use of non-genuine Danfoss replacement parts could result in substandard product performance, and may void your Danfoss warranty. For optimum performance, contact Danfoss at Danfoss.com

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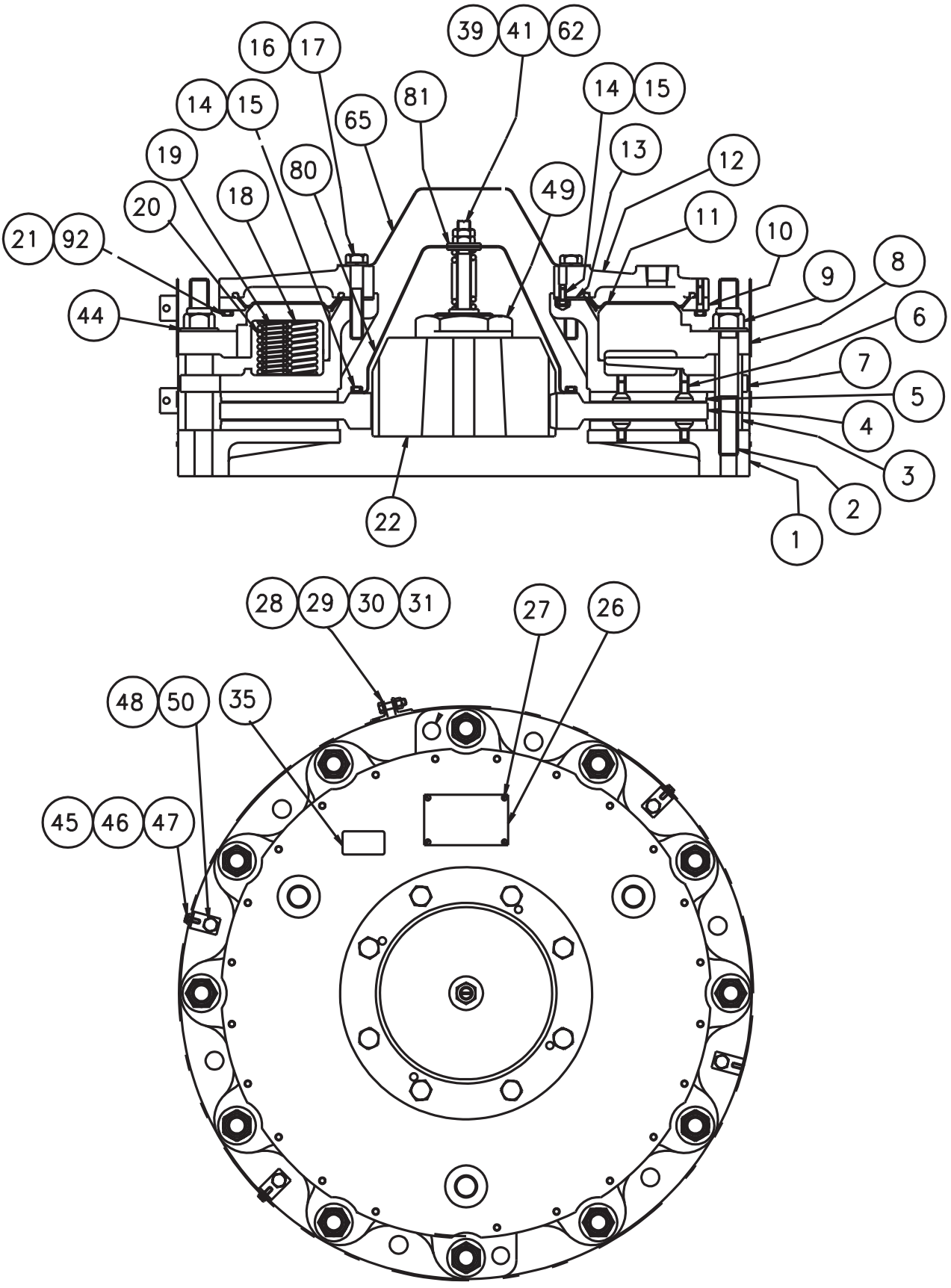

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Figure1

Table 1

Item	Description	117 DBA (146148CF)		117 DBA (146148CG)	
		Part Number	Qty.	Part Number	Qty.
1	Mounting Flange	510282	1	510282	1
2	Stud	307261-01	6	307261-01	6
3	Clamp Tube	306542--03	6	306542--03	6
4	Disc	413295	1	413295	1
5	Friction Disc	414686	2	414686	2
6	Flat Head Screw	000294x0405	18	000294x0405	18
7	Pressure Plate	510284	1	510284	1
8	Spring Housing	510286	1	510286	1
9	Lock Nut	000110x0073	6	000110x0073	6
10	Outer Clamp Ring	413647	1	413647	1
11	Diaphragm	413648-02	1	413648-02	1
12	End Plate	510712	1	510712	1
13	Inner Clamp Ring	306944-02	1	306944-02	1
14	Hex Head Screw	000001x0205	7	000001x0205	7
15	Inner Clamp Ring	000068x0007	25	000068x0007	25
16	Hex Head Screw	000001x0615	6	000001x0615	6
17	Lockwasher	000068x0019	6	000068x0019	6
18	Spring Retainer Plate	306624	18	306624	18
19	Inner Spring	306625	27	306625	27
20	Outer Spring	------	-	------	-
21	Hex Head Screw	000001x0208	18	000001x0208	18
22	Gear	413054	1	413054	1
26	Name Plate	307007-01	1	307007-01	1
27	Self Tapping Screw	000153x0644	4	000153x0644	4
28	Shield	510296	1	510296	1
29	Hex Head Screw	000001x0209	2	000001x0209	2
30	Lockwasher	000068x0007	2	000068x0007	2
31	Hex Nut	000045x0008	2	000045x0008	2
35	Warning Decal	203627	1	203627	1
39	Spring	000071x0106	1	000071x0106	1
41	Hex Jam Nut	000061x0009	2	000061x0009	2
44	Flat Washer	000153x0641	6	000153x0641	6
45	Bracket	203700	2	203700	2
46	Hex Head Screw	000001x0005	2	000001x0005	2
47	Flat Washer	000067x0002	2	000067x0002	2
48	Lockwasher	000068x0014	2	000068x0014	2
49	Hex Nut	306993-01	1	306993-02	1
50	Hex Head Screw	000001x0405	2	000001x0405	2
62	Centering Plug	307171-02	1	307171-01	1
65	Guard	414168	1	414168	1
80	Disc Centering Cone	414407	1	414407	1
81	Flat Washer	000067x0033	2	000067x0033	2
92	Flat Washer	------	-	------	-

Table 1 (continued)					
Item	Description	129 DBA (146162CT)		129 DBA (146162DR)	
		Part Number	Qty	Part Number	Qty
1	MountingFlange	414624	1	414245	1
2	Stud	307261-02	12	307261-02	12
3	Clamp Tube	306542-05	12	306542-05	12
4	Disc	413579	1	413579	1
5	FrictionDisc	414665	2	414665	2
6	Flat Head Screw	000294x0407	72	000294x0407	72
7	Pressure Plate	510619	1	510619	1
8	Spring Housing	510616	1	510616	1
9	Lock Nut	000110x0073	12	000110x0073	12
10	Outer Clamp Ring	414922	8	414922	8
11	Diaphragm	407517-02	1	407517-02	1
12	End Plate	413581	1	413581	1
13	Inner Clamp Ring	407684-02	1	407684-02	1
14	Hex Head Screw	000001x0205	4	000001x0205	10
15	Inner Clamp Ring	000068x0007	4	000068x0007	10
16	Hex Head Screw	203806	8	203806	8
17	Lockwasher	000068x0025	8	000068x0025	8
18	Spring Retainer Plate	413583	24	413583	24
19	Inner Spring	307044	30	307044	24
20	Outer Spring	307045	30	307045	24
21	Hex Head Screw	000001x0209	24	000001x0209	24
22	Gear	413801	1	413801	1
26	Name Plate	307052-01	1	306626-10	1
27	Self TappingScrew	000153x0644	4	000153x0644	4
28	Shield	413827	1	413827	1
29	Hex Head Screw	000001x0209	2	000001x0209	2
30	Lockwasher	000068x0007	2	000068x0007	2
31	Hex Nut	000045x0008	2	000045x0008	2
35	Warning Decal	203627	1	203627	1
39	Spring	000071x0106	1	000071x0106	1
41	Hex Jam Nut	000061x0009	2	000061x0009	2
44	Flat Washer	000153x0641	12	000153x0641	12
45	Bracket	203700	4	203700	4
46	Hex Head Screw	000001x0005	4	000001x0005	4
47	Flat Washer	000067x0002	4	000067x0002	4
48	Lockwasher	000068x0014	4	000068x0014	4
49	Hex Nut	-----	--	-----	--
50	Hex Head Screw	000001x0405	4	000001x0405	4
62	Centering Plug	307171-02	1	307171-02	1
65	Guard	414177	1	414177	1
80	Disc Centering Cone	414176	1	414176	1
81	Flat Washer	000067x0033	2	000067x0033	2
92	Flat Washer	000067x0003	24	000067x0003	24

1.0 INTRODUCTION

Throughout this manual there are a number of **HAZARD WARNINGS** that must be read and adhered to in order to prevent possible personal injury and/or damage to the equipment. Three signal words "**DANGER**", "**WARNING**", and "**CAUTION**" are used to indicate the severity of the hazard, and are preceded by the safety alert symbol ⚠.

⚠ Danger:

Denotes the most serious injury hazard, and is used when serious injury or death WILL result from misuse or failure to follow specific instructions.

⚠ Warning:

Used when serious injury or death MAY result from misuse or failure to follow specific instructions.

⚠ Caution:

Used when injury or product/ equipment damage may result misuse or failure to follow specific instructions.

It is the responsibility and the duty of all personnel involved in the installation, operation and maintenance of the equipment on which this device is used to fully understand the ⚠ Danger: , ⚠ Warning: and ⚠ Caution: procedures by which hazards are to be avoided.

1.1 Description

1.1.1 The Cone Style Disc Centering option, used on vertically mounted DBA brakes, was designed to prevent the disc from dragging while rotating in the released position.

1.2 How It Works

1.2.1 The disc centering cone (80) is mounted to the top face of the disc (4). When the brake is released, the spring (39) raises the cone and disc off of the mounting flange (1) friction surface and centers the disc between the mounting flange and pressure plate (7) friction discs (5).

1.2.2 The brake disc position can be easily adjusted by removing the guard (65) and adjusting the jam nuts (41).

2.0 INSTALLATION

⚠ Warning:

Only qualified personnel should install, adjust or repair these units. Faulty workmanship will result in unreasonable exposure to hazardous conditions or personal injury.

⚠ Caution:

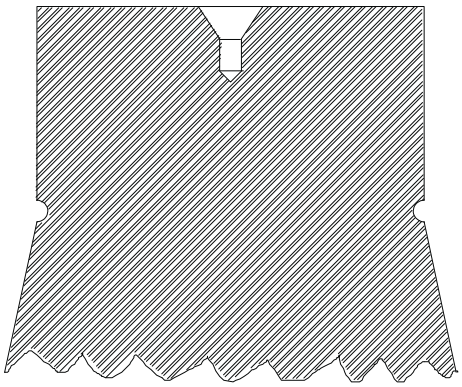
Read these instructions and the instructions in DBA 8080 thoroughly and review until you fully understand the installation sequence before proceeding with the work described in this section. Failure to follow these instructions will result in unreasonable exposure to hazardous conditions or personal injury.

2.1.1 Install the gear in accordance with DBA 8080.

2.1.2 Clean any dirt, debris, paint, ect. from the countersink hole in the end of the motor shaft (See Figure 2). The centering plug (62) must fit securely into the countersink during installation.

2.1.3 Lubricate the gear and disc spline with a light coat of Molub-Alloy® O.G. Heavy grease.

2.1.4 Remove only the two screws (16) and lockwashers (17) that fasten the guard (65) to the end plate (12).



Figure

Caution:

Removal of all screws will result in releasing the end plate exposing the diaphragm.

2.1.5 Remove the guard and re-install the screws and lockwashers. Torque the screws to 50 ft. lb.. on the 117 DBA and to 150 ft. lb.. on the 129 DBA (lubed).

2.1.6 Lower the brake into position over the gear, making sure the centering plug (62) engages into the countersink in the end of the motorshaft. and the center stud.

2.1.7 S ecure the brake to the motor with appropriate fasteners. Torque to values in table 2.

2.1.8 Adjust disc centering device by adjusting jam nut (41) to obtain 0.060" gap between nut and flat washer (81).

2.1.9 Install the air piping and apply air pressure to verify that the gaps on each side of the discard equal (above and below). Adjust the jam nuts, if required to center the disc between the friction discs.

Caution:

Maximum applied air pressure is 120 psi.

2.1.10 Operate the brake to insure the disc is not dragging. Adjust as required.

Note: When performing maintenance specified in DBA 8080 you must install the cone (80) using screws (14) and washers (15) and torque to 20 ft. lb. before installing disc (5).

Table 2

Model	Screw Size	Torque
17 DBA	3/4"-10 gr.8	150 ft. lbs.
29 DBA	1"-8 gr. 8	660 ft.lbs.

3.0 ORDERING INFORMATION/ TECHNICAL ASSISTANCE

3.1 Equipment Reference

3.1.1 In any correspondence regarding Danfoss Equipment, refer to the information on the product nameplate or visit Danfoss.com

4.0 REVISIONS

Original Publication Date February 1998	
Revision Date	**Change**

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