

Moorfeed

A Division of EAS

**12 IN FLAT DISC CENTRIFUGAL
MOORFEED P\N 9960120**



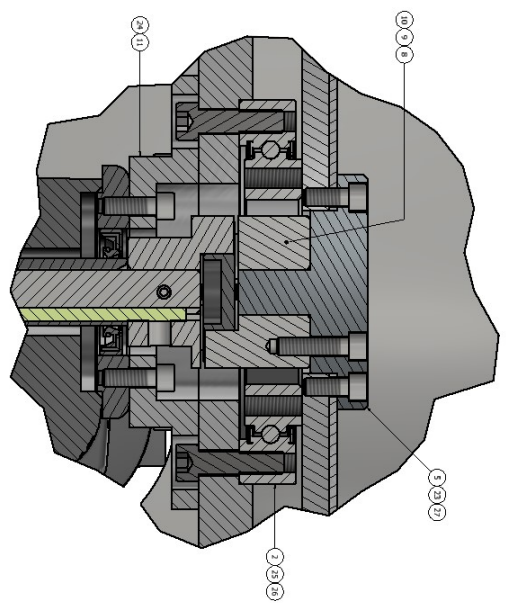
**4162 EMS BLVD.
GREENFIELD, IN 46250
PH 317-545-7171
FX 317-542-7317**

With over 30,000 sq. ft. of manufacturing facilities in Indianapolis over 60 years of experience in the development of special parts feeding equipment, Moorfeed is a major leader in parts feeding and automated assembly systems of the North American and worldwide markets. Our clients include many Fortune 500 manufacturers providing systems for electronic computer, pharmaceutical, automotive, packaging, appliance, food and cosmetic industries to name but a few. We have a thorough understanding of the technology required to design and build even the most complex feed systems. Each Moorfeed component is carefully designed for durability, dependability, ease of fabrication and compliance to industry standards. We offer a variety of equipment, quality constructed and inspected. Moorfeed quality means the feed system we build for you today will be on less concern for you tomorrow.

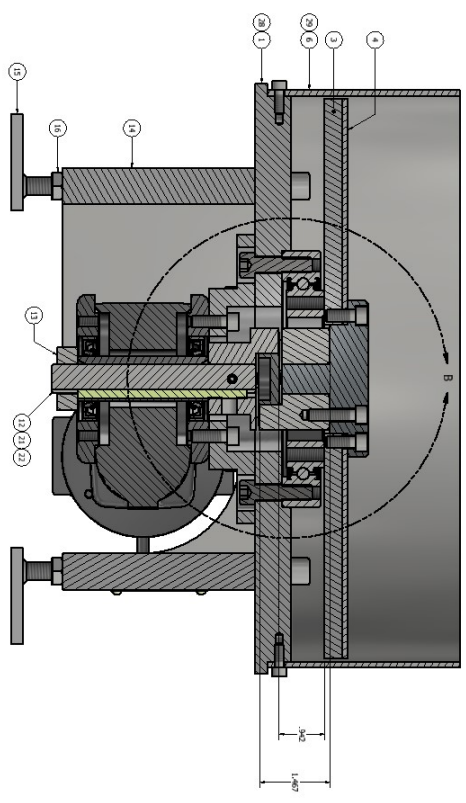
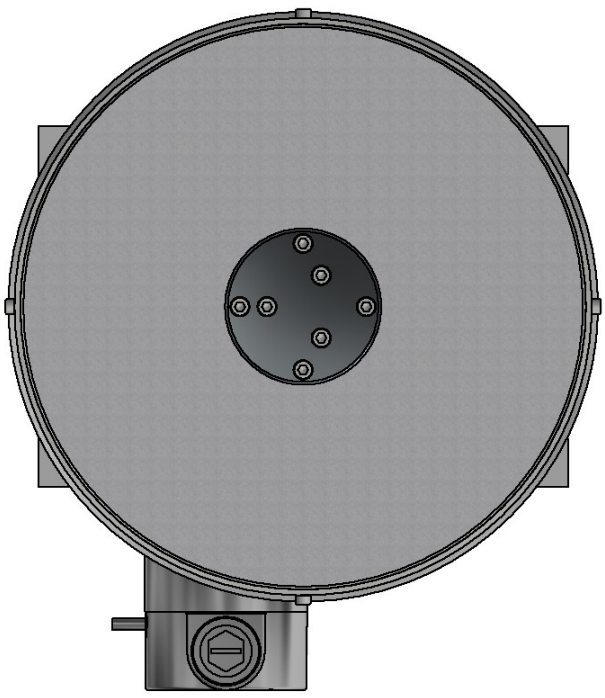
**When you want to feed more
parts through your line, think Moorfeed.....
Our name says it all.**

**Moorfeed
A Division of EAS**

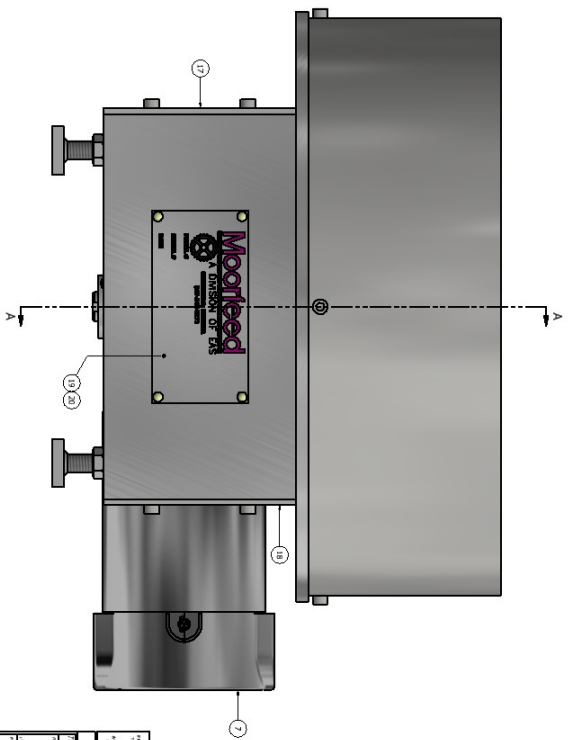
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9980102	BEARING FLUTE
2	1	9980103	MOORE BEARING FLUTE
3	1	9980111	ROSC SHAFT
4	1	9980110	COU
5	1	9980110	COU
6	1	9980110	COU
7	1	9980110	COU
8	1	9980110	COU
9	1	9980110	COU
10	1	9980110	COU
11	1	9980110	COU
12	1	9980110	COU
13	1	9980110	COU
14	1	9980110	COU
15	1	9980110	COU
16	1	9980110	COU
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21	1	9980110	COU
22	1	9980110	COU
23	1	9980110	COU
24	1	9980110	COU
25	1	9980110	COU
26	1	9980110	COU
27	1	9980110	COU
28	1	9980110	COU
29	1	9980110	COU



DETAIL B
SCALE 1.5 : 1



SECTION AA
SCALE 1 : 1



Moortfeed
A Division of FAS

12" FLAT DISC ROTARY

Part No: 9980120

Rev: E

DATE: 1/16

APPROVED: [Signature]

1 OF 1

12 IN FLAT DISC MAINTENANCE INSTRUCTION

TOOLS REQUIRED:

- Allen Wrench set range from 1/16" to 5/8"
- 5mm Allen Wrench
- Torque Wrench
- Flat bladed screwdriver
- Rubber mallet
- Adjustable wrench

BOLT TORQUE REQUIREMENTS:

BOLT SIZE

10-24 SHCS
10-32 SHCS
1/4-20 SHCS
5/16-18 SHCS
3/8-16 SHCS
1/2-13 SHCS

TORQUE REQUIREMENTS

INCH·POUNDS	FOOT·POUNDS
79 IN·LBS	6.5 FT·LBS
90 IN·LBS	7.5 FT·LBS
200 IN·LBS	16.5 FT·LBS
415 IN·LBS	34.5 FT·LBS
740 IN·LBS	61.5 FT·LBS
1800 IN·LBS	150 FT·LBS

NEWTON·METERS

M8X1.25 SHCS
M8X1.25 FHCS
M10X1.50 SHCS
M10X1.50 FHCS

65 Nm
28 Nm
130 Nm
56 Nm

I. TOOLING BAND REMOVAL (Detail 6)

1. Remove four 10-24 S.H.C.S. (Detail 29) located 90 degrees apart on outside lower portion of band.
2. It may be necessary to remove some tooling and disconnect electrical and/or air line connections before removing tooling band.

II. TOOLING BAND INSTALLATION

1. Reverse above procedure.

III. DISC REMOVAL (Detail 4)

1. Remove the four 1/4-20 S.H.C.S. (Detail 27) located nearest the edge of the Cap (Detail 5). Lift off the Cap. As Cap is removed, Coupling (Detail 8) will come off also.

NOTE: Do not lose rubber spider (Detail 9)

2. Remove disc (Detail 4)
3. Remove four M8X1.25 F.H.C.S. (Detail 26)
4. Remove Disc Support (Detail 3)

IV. DISC INSTALLATION

1. Reverse above procedure

V. MOTOR AND GEAR REDUCER REMOVAL (Detail 7)

1. Disconnect electrical connections.

NOTE: Make sure power is disconnected

2. Remove four 10-24 S.H.C.S. (Detail 29) to remove Guard (Detail 17)
3. Remove Clamping Shaft Collar (Detail 13) by loosening and removing screw. Insert flat-bladed screwdriver in slot of (Detail 13) and remove Clamping Shaft Collar.
4. Remove four 1/4-20 S.H.C.S. (Detail 24)
5. Motor can now be removed from Shaft. As Motor is removed, the Flange Mount (Detail 11) will come off also.

NOTE: Do not lose Keystock

VI. MOTOR AND GEAR REDUCER INSTALLATION

1. Reverse above procedure.

VII. BEARING REMOVAL (Detail 2)

1. Proceed by going through steps I and III preceding this section.
2. Remove four M8X1.25 S.H.C.S. (Detail 25)
3. Remove Bearing (Detail 2)

VIII. BEARING INSTALLATION

1. Reverse above procedure.

PART	LUBRICANT RECOMMENDED
KADON BEARING MTO-065T (DETAIL 2)	LUBRIPLATE #630-AA OR COMPARABLE SUBSTITUTE
GEAR REDUCERS (DETAIL 7)	90 WEIGHT GEAR OIL

IT IS RECOMMENDED THAT ALL PARTS LISTED IN THE ABOVE LUBRICATION DATA CHART
HAVE LUBRICATION CHANGED ONCE EVERY SIX MONTHS.

RECOMMENDED LUBRICANTS

The table indicates the type and viscosity of suitable lubricants and applicable AGMA numbers for speed reducers operating at various temperatures. It is important to use the proper type of oil since many oils are not suitable for the lubrication of worm gears. Different types of gears require different lubricants.

The lubricant must remain free from oxidation and contamination by water or debris since only a very thin film of oil stands between efficient operation and failure. To ensure long service life, the speed reducer should be periodically drained (preferably while warm) and refilled to the proper level with a recommended gear oil.

Recommended oil change intervals for Boston Gear speed reducers:

Under normal environment conditions, oil changes are suggested after the first 250 hours of operation, and thereafter at regular intervals of 2500 hours or every six months. Synthetic lubricants will allow extended lubrication intervals because of their increased resistance to thermal and oxidation degradation. If a synthetic lubricant is used, it should be changed after the first 1500 hours of operation, and thereafter at 5000 hour intervals.

CAUTION: Speed reducers must be lubrication more frequently when operated at high ambient or operation temperatures, in unusually contaminated environments, or with high loads.

LUBRICANTS FOR BOSTON GEAR 700 SERIES WORM GEAR SPEED REDUCERS

Ambient (Room) Temperature	Recommended Lubricant (or equivalent)	Viscosity Range SUS at 100° F.	Lubricant AGMA No. +	ISO Viscosity Grade	Boston Gear Catalog Nos. Of Standard Lubricant Container Sizes ++
					1 qt. 1 gal.
-30° to +156°F.** (-34° to +52° C.)	Mobil SHC 634* Synthetic	1950/2150	-	320/460	51493 41494
40° to 90°F. (4.4° to 32.2°C.)	Mobil 600W Cylinder Oil	1920/3200	7 or 7C	460	27300 51492
80° to 125°F. (26.7° to 51.7°C.)	Mobil Extra Hecla Super Cylinder Oil	2850/3600	8 or 8C	680	- -

*Synthetic recommendation is exclusively for Mobil SHC 634.

**Mobil SHC 634 lubricant will perform at oil temperatures exceeding 225°F. However, factory should always be consulted before operating at higher temperatures since damage may occur to oil seals and other components.

+Other lubricants corresponding to AGMA numbers are available from most major oil companies.

++Boston Gear Distributors stock Mobil SHC 634 (synthetic) and Mobil 600W (cylinder oil) in both 1 quart and 1 gallon containers.

OIL ORDER QUANTITY FOR ENCLOSED GEAR DRIVES

Oil capacity is determined by oil level plug or dip stick measurement as indicated in installation and lubrication instructions furnished with each drive. This chart indicates suggested quantity of oil to purchase for each drive to be serviced.

Model No.	Order Quantity Per Unit	Model No.	Order Quantity Per Unit	Model No.	Order Quantity Per Unit
221	1 Pint	710	1/2 Pint	H1270	1 Pint
226	2 Pints	713	1/2 Pint	H1350	1 Quart
231	3 Pints	715	1 Pint	H1530	2 Quarts
239	3 Quarts	718	1 1/2 Pints	R131/R231	1/2 Pint
247	4 Quarts	721	1 1/2 Pints	R137/R237	1/2 Pint
252	6 Quarts	724	1 1/2 Pints	R146/R246	1 1/2 Pints
259	11 Quarts	726	2 1/2 Pints	R158/R258	2 1/2 Pints
621	1 Quart	732	2 1/2 Quarts	VR131VR231	1/2 Pint
631	1 Quart	738	3 1/2 Quarts	VR137VR237	1/2 Pint
641	1 Quart	752	8 Quarts	VR146VR246	1 1/2 Pints
651	1 1/2 Quarts	760	12 Quarts	VR158VR258	2 1/2 Pints
661	3 Quarts	FW & W713	1 Pint	R1211	1 Pint
622/623	1 Pint	FW & W718	2 Pints	R1214	1 Pint
632/633	1 1/2 Quarts	FW & W721	2 Pints	R1215	1 Pint
642,643 (R)	2 Quarts	FW & W726	3 Pints	R1216	1 Pint
652,653 (R)	2 1/2 Quarts	FW & W732	3 Quarts	R1412	1 1/2 Pints
662,663 (R)	4 1/2 Quarts	FW & W738	4 Quarts	R1413	2 Pints
		FW & W762	9 Quarts	R1414	2 Pints
		FW & W760	14 1/2 Quarts	R1416	1 1/2 Pints
		TW 113	1/2 Pint	R1511	4 Pints
				R1514	5 1/2 Pints
				R1515	4 1/2 Pints
				R1516	4 1/2 Pints

TROUBLE SHOOTING

SYMPTOM	POSSIBLE CAUSES	REMEDY
I. DISC WILL NOT SPIN	1. FOREIGN OBJECT LODGED BETWEEN DISC AND UPPER PLATE 2. WORN SPIDER COUPLING 3. WORN KADON BEARING 4. BAD MOTOR OR GEAR REDUCER	REMOVE DISC AND REMOVE ANY FOREIGN OBJECTS REMOVE DISC AND CHECK COUPLING FOR WEAR. IF WORN, REPLACE. REMOVE DISC AND CHECK BEARING FOR WEAR. IF WORN, REPLACE. CHECK GEAR REDUCER FOR PROPER OIL LEVEL. IF MOTOR OR REDUCER IS BAD, REPLACE.

RECOMMENDED SPARE PARTS LIST

1. MOTOR – MOORFEED #983752
2. KADON BEARING MTO-068T – MOORFEED #9981623
3. RUBBER SPIDER COUPLING – MOORFEED #9960121

WARRANTY INFORMATION

WARRANTY: Moorfeed warrants the equipment to be free from defects in material and workmanship under normal use and service for a period of two (2) years after delivery. The warranties shall not apply to and Moorfeed will not be responsible for any equipment or part which has been repaired or altered in any way that, in our judgement, affects its stability or its reliability or which has been subjected to misuse, negligence or accident.

SERVICE WARRANTY: Moorfeed warrants that it will cover all labor, travel expense and materials for a service call as a result of faulty workmanship and materials or as a result of not meeting performance specifications that were mutually agreed to in writing. The service warranty period begins 30 days after shipment of equipment from Moorfeed. Service warranty does not cover installation or interface with equipment supplied by another manufacturer. Service warranty work covers only products shipped and installed in the continental United States. Moorfeed will not be responsible for any equipment or part which has been repaired or altered by customer or outside service or which has been subjected to misuse, negligence or accident.