



**18 IN FLAT DISC CENTRIFUGAL  
MOORFEED P\N 9961800**



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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.**

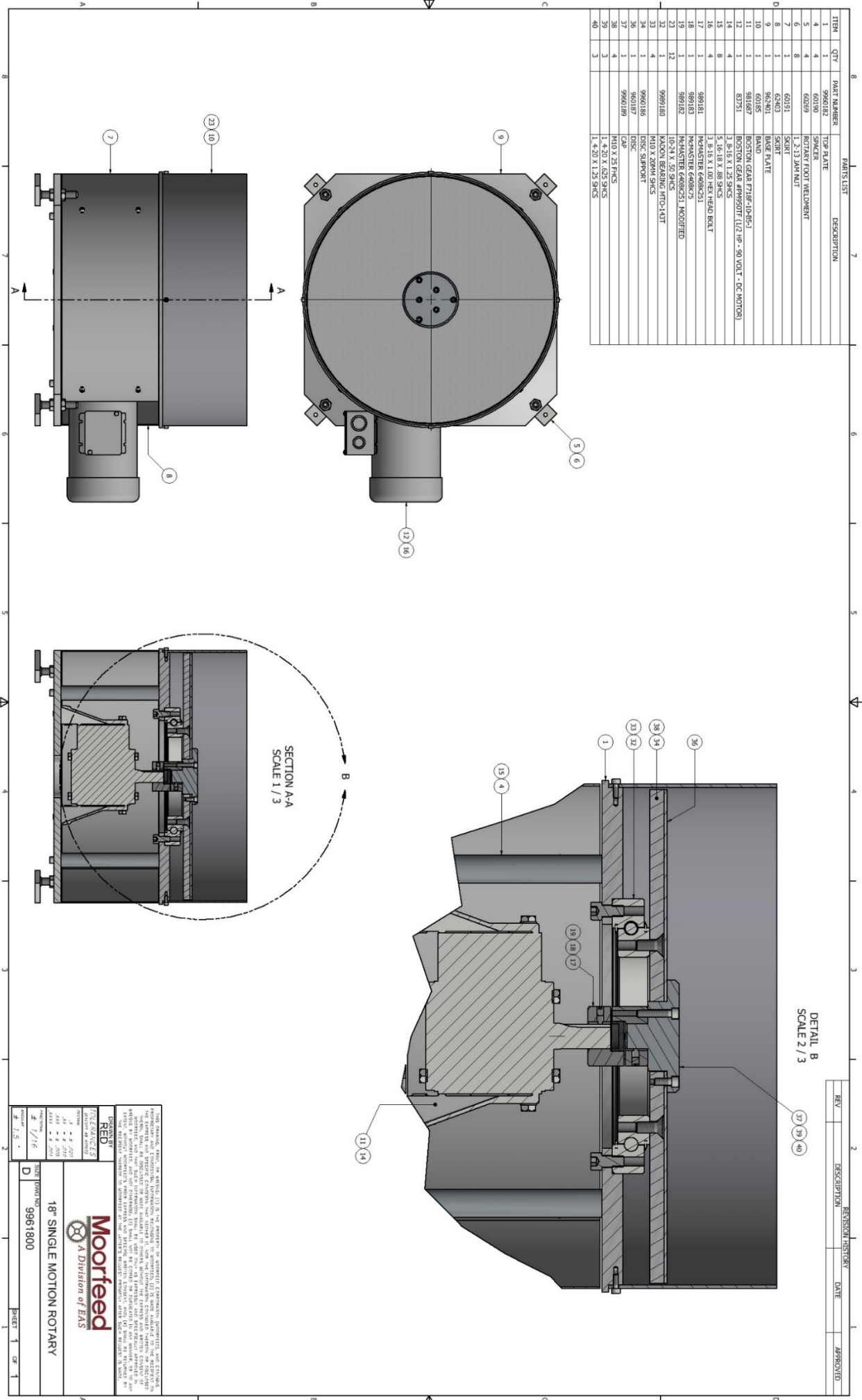
**Moorfeed  
A Division of EAS**

REV	DESCRIPTION	DATE	APPROVED

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9960182	TOP PLATE
4	4	60190	SPACERS
4	4	60069	ROTARY FOOT WELDMENT
5	5	2.213	DIAM NUT
6	6	60361	SCREW
8	1	60203	SCREW
9	1	962401	BASE PLATE
10	1	60185	BAND
11	1	981897	BOSTON GEAR #F718F-10-85-3
12	1	83751	BOSTON GEAR #F9950TF (1/2 HP - 90 VOLT - DC MOTOR)
14	4		3 8-16 X 1.25 SCS
15	8		3 16-18 X .88 SCS
16	1		3 16-18 X .88 SCS
17	1	989181	MANMASTER 64080251
18	1	989183	MANMASTER 64080251
19	1	989182	MANMASTER 64080251 MODIFIED
23	12		10-24 X .50 SCS
24	1	9999180	VALON BEARING MTO-140T
25	4		M10 X 2.00 SCS
26	1	9960184	DISC
34	1	960187	CDP
37	1		M10 X 25 SCS
38	4		1 4-20 X .825 SCS
39	3		1 4-20 X 1.25 SCS
40	3		1 4-20 X 1.25 SCS

SECTION A-A  
SCALE 1 / 3

DETAIL B  
SCALE 2 / 3



18" SINGLE MOTION ROTARY

9961800

**Moorteed**  
A Division of EAS

18" SINGLE MOTION ROTARY

9961800

SIZE: 18" X 18" X 18"

DATE: 10/16

REV: 1

SHEET: 1 OF 1

## 18 IN FLAT DISC MAINTENANCE INSTRUCTION

**TOOLS REQUIRED:**

Allen Wrench set range from 1/16" to 5/8"  
Torque Wrench  
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 10)

1. Remove four 10-24 S.H.C.S. (Detail 23) 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 2 and 3)

1. Remove the three 1/4-20 S.H.C.S. (Detail 39) located nearest the edge of the Cap (Detail 20). Lift off the Cap. As Cap is removed, Coupling (Detail 19) will come off also.

NOTE: Do not lose rubber spider (Detail 18)

2. Remove disc (Detail 3)
3. Remove four 3/8-16 B.H.C.S. (Detail 25)
4. Remove Disc Support (Detail 2). As Disc Support is removed, Bearing (Detail 13) will come off also.

IV. DISC INSTALLATION

1. Reverse above procedure

V. MOTOR AND GEAR REDUCER REMOVAL (Detail 12 and 11)

1. Proceed by going through steps I and III preceding this section.
2. Disconnect electrical connections.

NOTE: Make sure power is disconnected

3. Remove eight 10-24 S.H.C.S. (Detail 23) to remove Skirts (Detail 7 & 8).
4. Remove four 3/8-16 S.H.C.S. (Detail 14)
5. Motor and reducer can now be removed.

NOTE: Do not lose Keystock

VI. MOTOR AND GEAR REDUCER INSTALLATION

1. Reverse above procedure.

VII. BEARING REMOVAL (Detail 13)

1. Proceed by going through steps I and III preceding this section.
2. Remove four 3/8-16 F.H.C.S. (Detail 26)
3. Remove Bearing (Detail 13)

VIII. BEARING INSTALLATION

1. Reverse above procedure.

<b>PART</b>	<b>LUBRICANT RECOMMENDED</b>
KADON BEARING MTO-065T (DETAIL 13)	LUBRIPLATE #630-AA OR COMPARABLE SUBSTITUTE
GEAR REDUCER (DETAIL 11)	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.

<b>Model No.</b>	<b>Order Quantity Per Unit</b>	<b>Model No.</b>	<b>Order Quantity Per Unit</b>	<b>Model No.</b>	<b>Order Quantity Per Unit</b>
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**

<b>SYMPTOM</b>	<b>POSSIBLE CAUSES</b>	<b>REMEDY</b>
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 #83751
2. GEAR REDUCER – MOORFEED #981687
3. KADON BEARING MTO-068T – MOORFEED #989180
4. RUBBER SPIDER COUPLING – MOORFEED #989183

## **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.