

26 IN DUAL MOTION CENTRIFUGAL MOORFEED P\N 62660

P\N 62660-WR HAS THE OPTIONAL STAINLESS STEEL WEAR RING ON THE TUB FLANGE

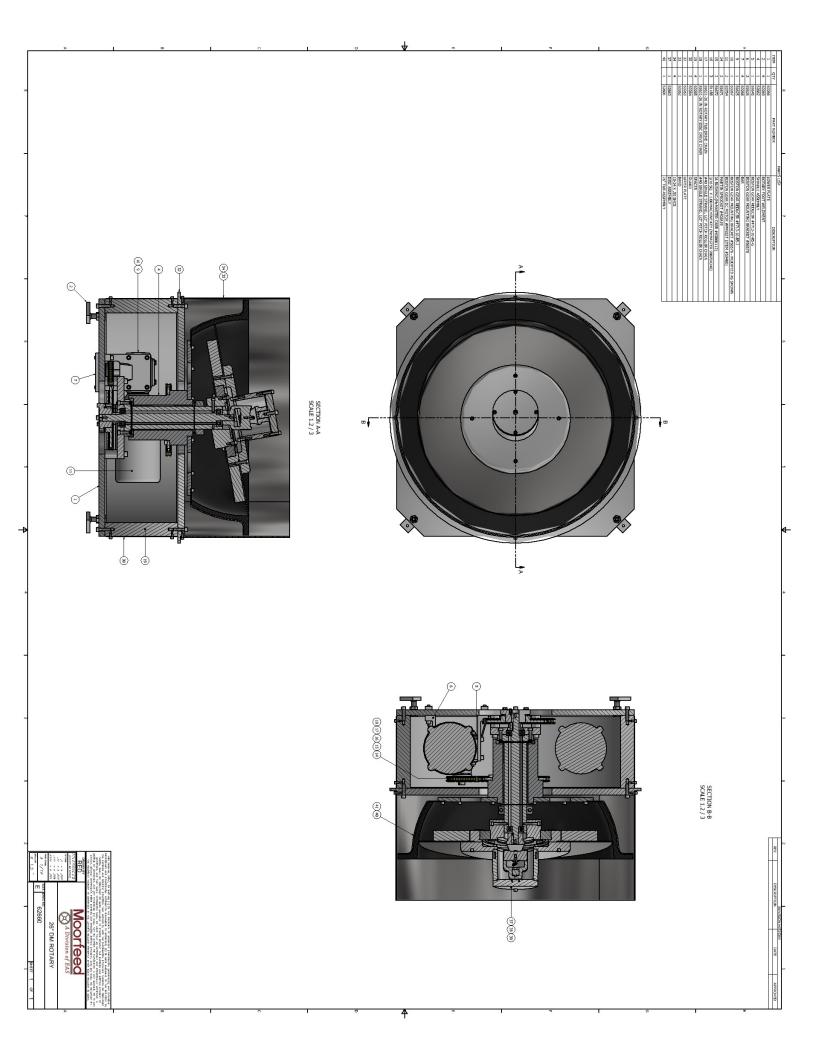


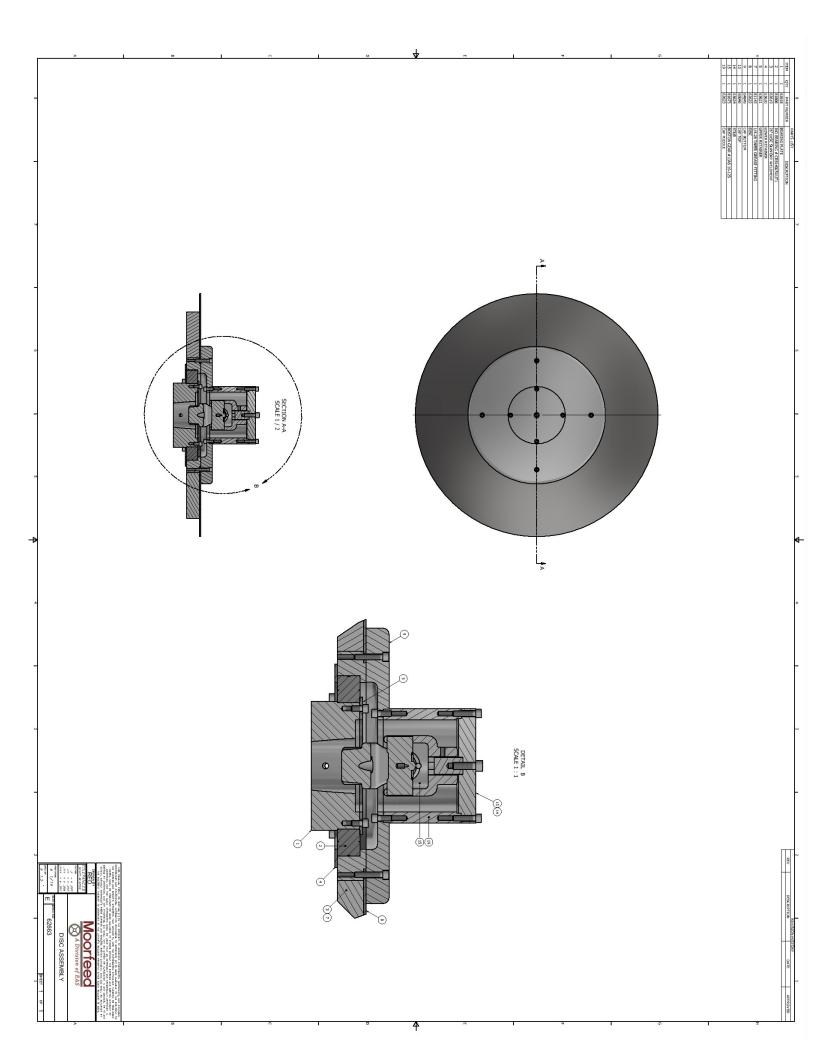


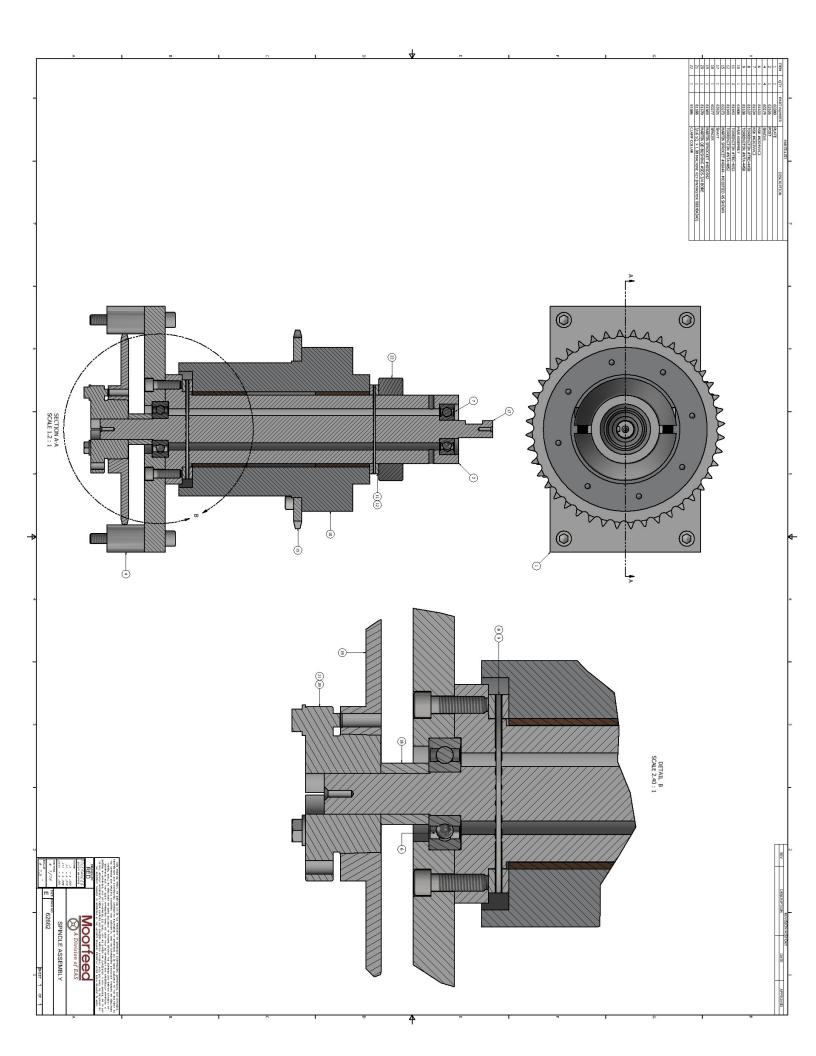
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With over 30,000 sq. ft. of manufacturing facilities in Indianapolis over 60 years of experience in the development of special parts feeding equipment, Moorfeed is a major leader in parts feeding and automated assembly systems of the North American 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.







26 IN DUAL MOTION MAINTENANCE INSTRUCTION

TOOLS REQUIRED:

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

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 33)

- 1. Remove four 10-24 S.H.C.S. (Detail 34) located 90 degrees apart on outside lover portion of band
- 2. It may be necessary to remove some tooling and disconnect electrical and/or air line connections before removing tooling band
- 3. Two people required to lift off band.

II. TOOLING BAND INSTALLATION

1. Reverse above procedure.

III. DISC REMOVAL (Refer to DISC ASSEMBLY drawing)

- 1. Remove the four 1/4-20 S.H.C.S. located on top of the disc assembly (Detail 37). Lift off the cap top (Detail 13).
- 2. Remove the four 1/4-20 S.H.C.S. located on the cap bottom (Detail 9). Lift off the cap.
- 3. Remove disc (Detail 8).

IV. DISC INSTALLATION

- 1. Install disc (Detail 8).
- 2. Install cap and the four 1/4-20 S.H.C.S. (removed in step III.2).

Note: Use Boston Gear Anti-Seize on both ends of U-Joint. (Detail 15)

- 3. Set universal joint so that it is centered and sitting up.
- 4. Slowly install cap top (Detail 13) making sure it sets securely down and U-joint is inserted. Install the four 1/4-20 S.H.C.S. (removed in step III-1).

V. TUB REMOVAL (Detail 40)

- 1. Proceed by going through steps I and III preceding this section.
- 2. Remove four 1/4-20 S.H.C.S. Remove upper retainer.
- 3. Remove Disc Support Weldment, two people required. As Disc Support Weldment is removed, IKO Bearing #CRB14025UUT1 will come off also.
- 4. Remove the three S.H.C.S holding the Bearing Plate to the shaft. Remove bearing plate.
- 5. Remove the eight 1/4-20 S.H.C.S. located near the spindle. Tub assembly can now be lifted from spindle.

VI. TUB INSTALLATION

1. Reverse above procedure.

VII. HUB REMOVAL (Detail 4)

- 1. Remove the upper plate (Detail 32)
- 2. Remove upper chain by removing master link from chain.
- 3. Remove spindle clamp by loosening and removing screw. Insert flat bladed screwdriver in slot and remove clamp.
- 4. Remove upper thrust bearing and washers.
- 5. Remove hub.
- 6. Remove lower thrust bearing and washers.

VIII. HUB INSTALLATION

1. Reverse above procedure.

IX. POST REMOVAL (Detail 33, Refer to SPINDLE ASSEMBLY Drawing)

- 1. Remove upper and lower chain by removing master link from chain.
- 2. Remove the four 1/4-20 SHCS that connect the plate small 3/4" plate to the lower plate (Detail 1)
- 3. Lift post out.
- 4. Shaft runs in two sealed bearings, upper and lower. Access to shaft bearing requires removal of hub (Detail 4) and post.
- 5. To access shaft bearings, remove sprocket.

NOTE: Do not lose keystock

- 6. Remove spacer.
- 7. Using a rubber mallet or soft faced hammer, tap shaft out. Tap on sprocket end of shaft, tap shaft out of top upper bearing and shaft will be removed.
- 8. Separate the small 3/4" plate from post by removing four 5/16-18 S.H.C.S. at the bottom of plate.
- 9. To access lower bearing, take four 5/16-18 S.H.C.S. out to remove plate from post. Lower bearing will remain in plate. To remove lower bearing, take post, set back inside bearing and lightly tap out with rubber mallet.

X. POST INSTALLATION

1. Reverse above procedure.

XI. MOTOR AND GEAR REDUCER REMOVAL

1. Disconnect electrical connections.

NOTE: Make sure power is disconnected

- 2. Remove the four 5/16-18 S.H.C.S. from the base of the reducer.
- 3. Remove the chain from the reducer.
- 4. Remove the four 3/8-16 S.H.C.S. attaching motor to reducer.
- 5. The motor can now be removed from reducer.

NOTE: Do not lose 3/16 keystock.

XII. MOTOR AND GEAR REDUCER INSTALLATION

1. Reverse above procedure.

PART	LUBRICANT RECOMMENDED
UPPER THRUST BEARING	LUBRIPLATE #1200-2 OR COMPARABLE QHEEL BEARING GREASE
LOWER THRUST BEARING	LUBRIPLATE #1200-2 OR COMPARABLE WHEEL BEARING GREASE
THK BEARING	LUBRIPLATE #630-AA OR COMPARABLE SUBSTITUTE
UNIVERSAL JOINT	LUBRIPLATE #630-AA OR COMPARABLE SUBSTITUTE
CHAINS	LIGHTWEIGHT OIL
GEAR REDUCERS	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	Model No.	Order	Model No.	Order
	Quantity		Quantity		Quantity
	Per Unit		Per Unit		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	R1416	1 1/2 Pints
			Quarts		
		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	REMOVE DISC AND REMOVE
	BETWEEN DISC AND TUB	ANY FOREIGN OBJECTS
	2. WORN BEARING DISC	REMOVE DISC AND CHECK
		DISC BEARING FOR WEAR.
		IF WORN, REPLACE.
	3. WORN UNIVERSAL JOINT	REMOVE DISC AND CHECK
		UNIVERSAL JOINT. CHECK
		FOR STIFFNESS AND PROPER LUBRICATION. IF
		UNIVERSAL JOINT IS BAD,
		REPLACE.
	4. SHAFT BEARING WORN	FOLLOW MATNET NAMES
		FOLLOW MAINTENANCE MANUAL THROUGH NUMBER
		IX POST REMOVAL. CHECK
		UPPER AND LOWER SHAFT
		BEARINGS. IF WORN,
	5. BAD MOTOR OR GEAR REDUCER	REPLACE.
		CHECK GEAR REDUCER FOR
		PROPER OIL LEVEL. IF MOTOR OR REDUCER IS
		BAD, REPLACE.
II. TUB IS HARD TO SPIN	1. WORN UPPER AND LOWER	FOLLOW MAINTENANCE
	THRUST BEARINGS	MANUAL THOUGH NUMBER
		VII HUB REMOVAL. CHECK
		UPPER AND LOWER THRUST BEARINGS FOR WEAR AND
		PROPER LUBRICATION. IF
		BAD, REPLACE.
	2. BAD MOTOR OR GEAR	
	REDUCER	CHECK GEAR REDUCER FOR PROPER OIL LEVEL. IF
		MOTOR OR REDUCER IS
		BAD, REPLACE.
III. TUB APPEARS TO	1 WORN HUB BEARINGS	FOLLOW MAINTENANCE
WOBBLE OR HAVE RUNOUT		MANUAL THOUGH NUMBER
		VII HUB REMOVAL. INSPECT HUB BEARING FOR WEAR. IF
		BAD, REPLACE.
	2. BENT TUB	,

REMOVE TUB AND INSPECT
FOR IMPERFECTIONS. IF
TUB IS BEND, REPLACE.

RECOMMENDED SPARE PARTS LIST

- 1. BOSTON GEAR DC MOTOR MOORFEED #83754
- 2. TORRINGTON THRUST BEARING (TOP) MOORFEED #81644
- 3. TORRINGTON THRUST BEARING (BOTTOM) -MOORFEED #81638
- 4. BEARING, SKF 6303-2RS (TOP) MOORFEED #81634
- 5. SLEEVE BEARING (HUB) MOORFEED #81250
- 6. BEARING, NSK 6304VVC3 (BOTTOM) MOORFEED #81633
- 7. U-JOINT MOORFEED #81673
- 8. DISC BEARING MOORFEED #81806

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.