

Parts Manual
PL70-1032EN
10/02/2014

Cleco®

A8R-2226
Reversible Axial Piston Power Motor



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Language Version:

This Parts Manual is the **“Original Instructions”** intended for all persons who will use or repair these tools.

Product Identification:

Refer to the “Specifications” page in this document.

Noise and Vibration:

Refer to documents CE-1005DC and CE-1005TD.

General Description:

Air powered reversible axial piston motors.

Intended Use:

These pneumatic motors are intended to be a power source for other equipment. Use only for their designated purpose. Do not use in an improper manner that can cause motor damage and operator injury.

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Cleco® Specifications

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Model	Maximum Allowable RPM		Stall Torque		Starting Torque		Weight		Gear Ratio	Max. Overhung Load @ Stall*	
	@ Max. hp	Free Speed	ft. lbs.	Nm	ft. lbs.	Nm	lbs.	kg		lbs.	kg
A8R-2226	109	215	226.0	306.0	167.0	226.0	51	23.1	11.9:1	1000	454

* Note: All models assume overhung load located at 2.25" (57.15mm) from face of motor.

Air Supply:

Minimum Hose I.D.: 3/8"
Air Inlet Thread: 3/8" NPTF

Lubrication:

Recommended Grease: A123771

Motor Housing:

Grease Capacity: 6 ounces
10 Hours of operation: add 2 ounces

CAUTION: Excessive grease will cause a loss in motor performance. Inadequate grease can cause premature motor failure.

Gear Case:

Grease Capacity: 2 ounces
200 Hours of operation: add 0.5 ounce

CAUTION: Excessive grease will force the seal out of the front housing.

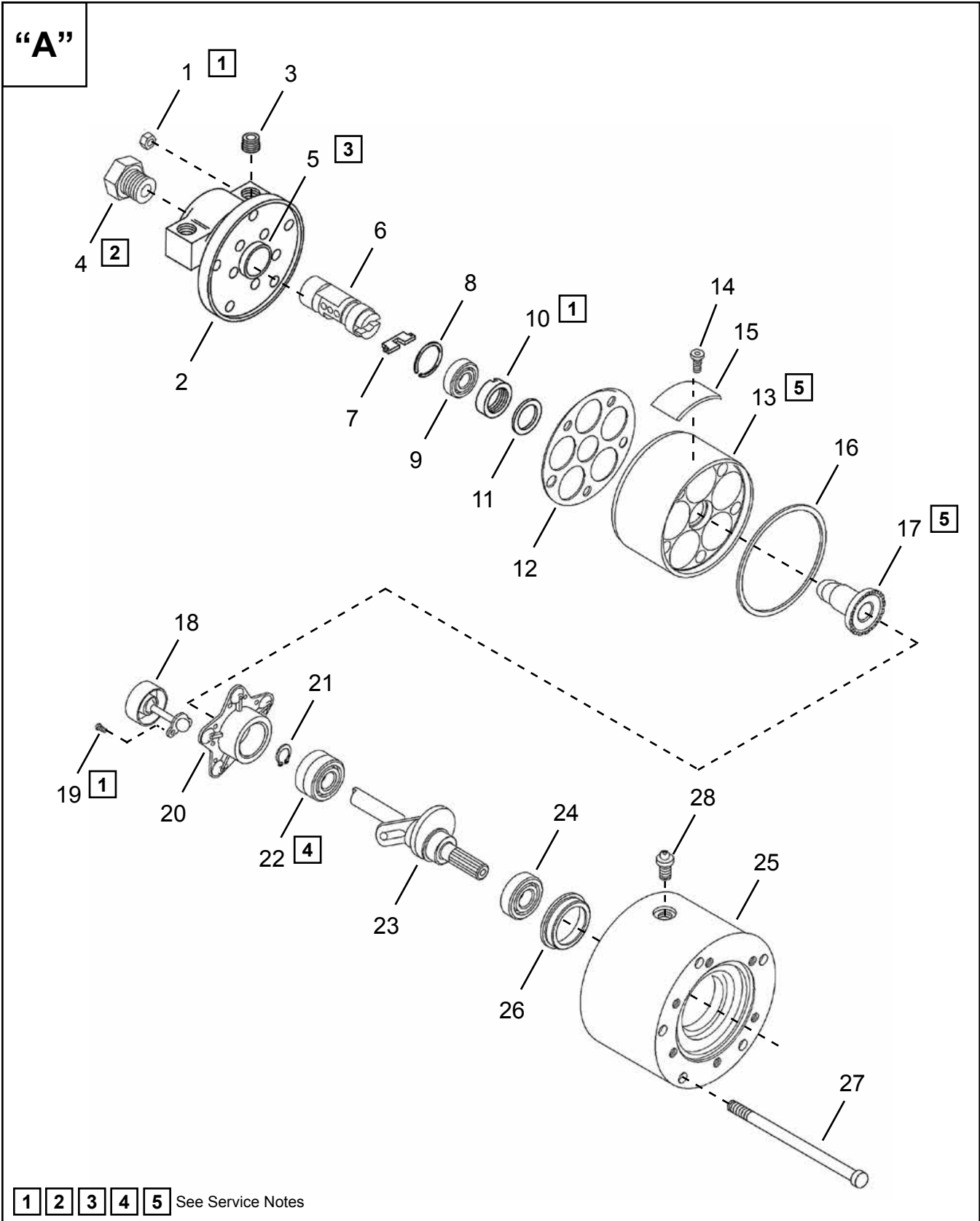


Illustration "A"

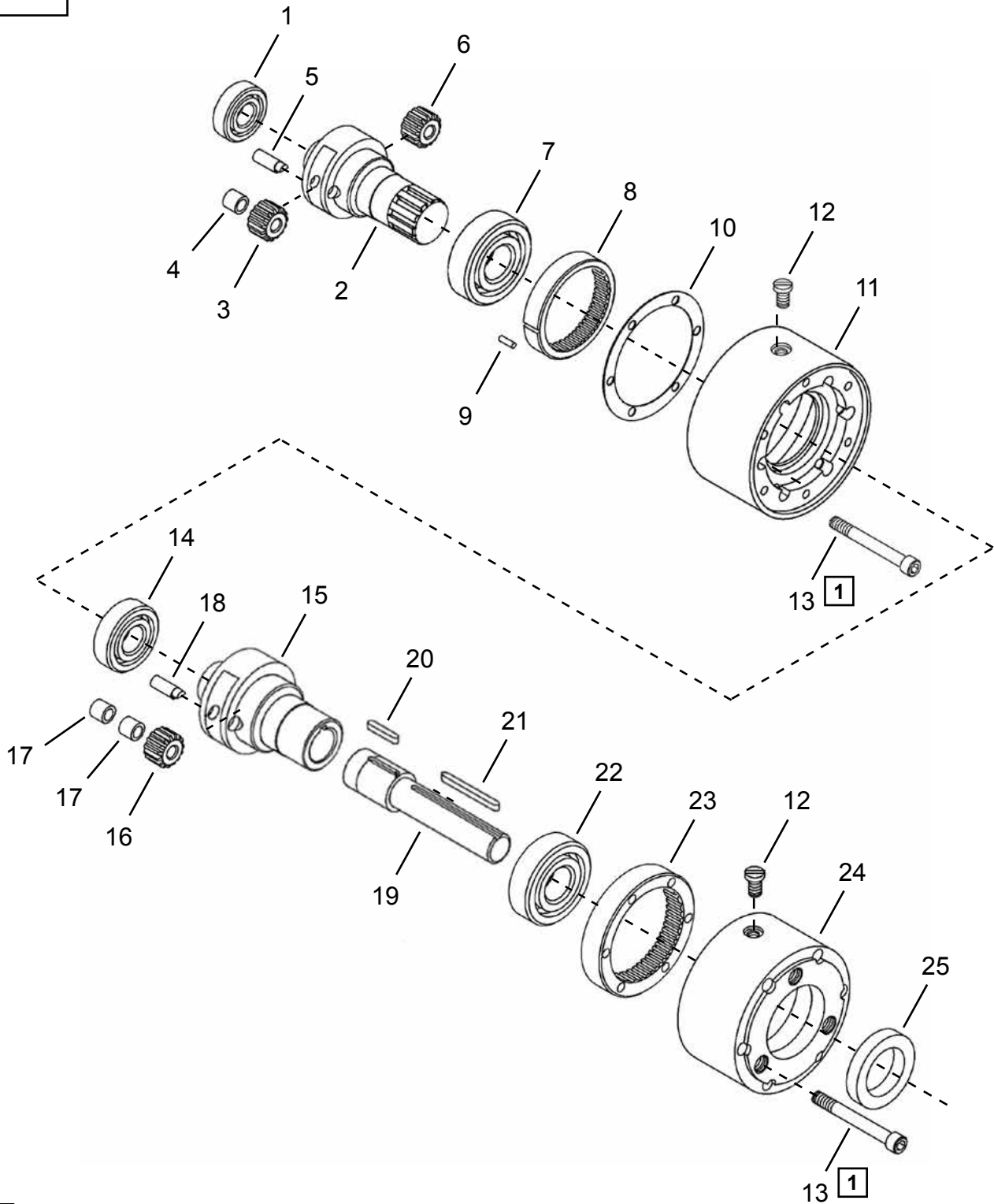
Ref	Number	#	X	EN
				Description
1	C108S	5	10	Nut
2	A17738	1		Head Assembly (includes Ref. 3-5)
3	B110E	2	2	Pipe Plug
4	17749	1	2	Reducer Bushing
5	3VR77	1	2	Bushing
6	508321	1		Distributor (includes Ref. 7-8)
7	3V43	1	2	Key
8	3V235	1	2	Retaining Ring
9	OG196	1	2	Bearing
10	3V169	1	2	Lock Nut
11	3V272	1	2	Washer
12	10012PT	1	3	Gasket
13	A3V1	1		Cylinder
14	534820	2	2	Drive Screw
15	530322	1	1	Nameplate
16	10011	1	3	Gasket
17	A3V180	1	1	Bevel Gear
--	542241	1		Socket Plate Assembly (includes Ref. 18-20)
18	542240	5	5	Piston Assembly
19	3V188	10	20	Screw (Piston Assembly)
20	507742	1		Socket Plate
21	500741	1	3	Retaining Ring
22	507897	1	2	Bearing
23	508056	1		Driveshaft
24	22G155	1	2	Bearing
25	526546	1		Rear Housing (includes Ref. 26-27)
26	18364PT	1	1	Bearing Liner
27	526543	5	5	Stud
28	RG78	1	1	Grease Fitting

(#) Quantity

(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)

Cleco® Double Stage Gearing

“B”



1 See Service Notes

Cleco®
Double Stage Gearing

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Illustration "B"

Ref	Number	#	X	EN
				Description
1	525424	1	2	Bearing
2	30052PT	1		Gear Cage
3	A18322	2	4	Idler Gear (includes Ref. 4)
4	21155	2	4	Bearing
5	10032	2	4	Pin
6	18323	1	2	Pinion Gear
7	30075	1	2	Bearing
8	10019	1		Ring Gear
9	DP120PT	1	2	Pin
10	10010	1	3	Gasket
11	30050	1		Center Housing
12	RG78	2	2	Grease Fitting
13	B127D	12	12	Bolt
14	30076PT	1	2	Bearing
15	30051	1		Lower Gear Cage
16	A30055	2	4	Idler Gear (includes Ref. 17)
17	11700	4	8	Bearing
18	30058PT	2	4	Pin
19	30053PT	1		Output Spindle
20	30071PT	1	3	Key
21	30072PT	1	3	Key
22	30063PT	1	2	Bearing
23	30056PT	1		Ring Gear
24	30049	1		Front Housing
25	30057PT	1	3	Oil Seal

(#) Quantity

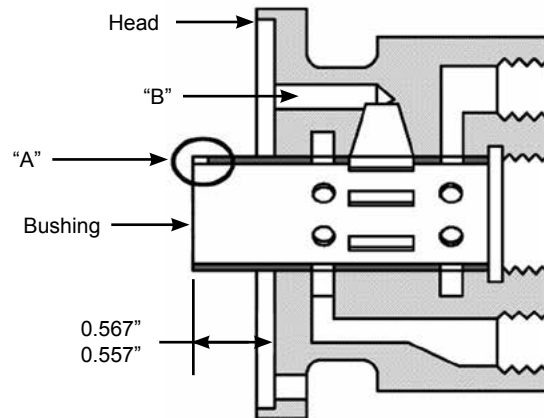
(X) Recommended Spare Parts (quantity shown based on 1-5 tools in operation)



1 Tightening Torque

Illustration	Reference	Tightening torque	
		Ft-Lbs (in-lbs)	Nm
A	1	10-11	13-15
	10	65-70	88-95
	19	9-10	12-13
B	13	18-20	24-27

3 Bushing Assembly



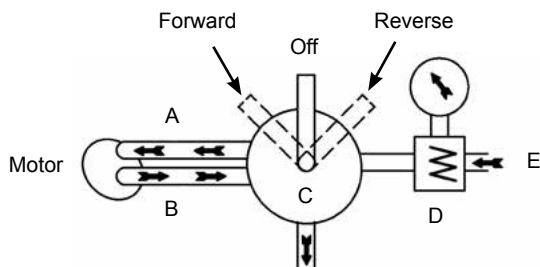
IMPORTANT: Press the new bushing into the head as shown. Notch "A" in the bushing must line up with hole "B" in the head.

2 Motor Valve

If a valve is used, it should have a full flow air passage to utilize full power of the motor.
For quick motor stops, an all-ports closed-in-neutral type valve with a spring return should be used.

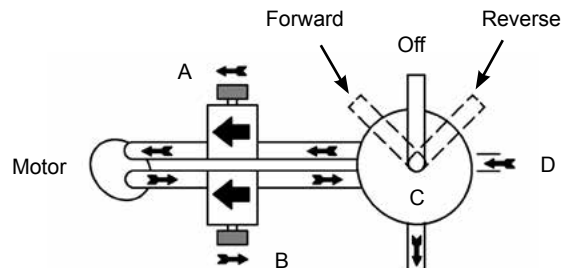
Torque Output Control

- A) When air enters from this side,
- B) it must exhaust without restrictions.
- C) Four-Way Valve
- D) Pressure Regulator
- E) Air Supply

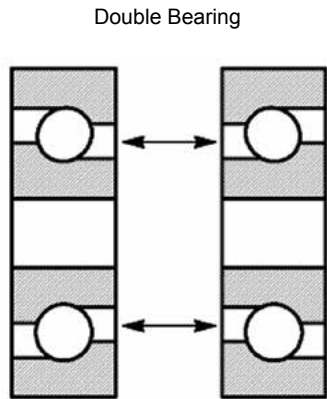


Control Forward and Reverse Speeds

- A) Metered flow control (inlet)
- B) Free (open) flow control (exhaust)
- C) Four-Way Valve
- D) Air Supply

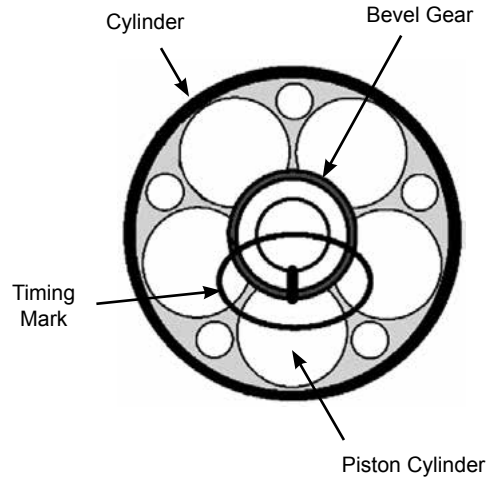


4 Bearing Assembly



IMPORTANT: The small diameters of the bearings must face each other when assembled.

5 Timing Mark



IMPORTANT: Make sure the timing mark on the bevel gear is pointing at the center of a piston cylinder before assembling the driveshaft assembly into the cylinder.



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