

Parts Manual
PL70EN-A6-2216
06/21/2012

Cleco®

A6R-2216
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

PL70EN-A6-2216

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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
A6R-2216	54	100	370.0	502.0	269.0	365.0	43	19.5	33.6:1	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:

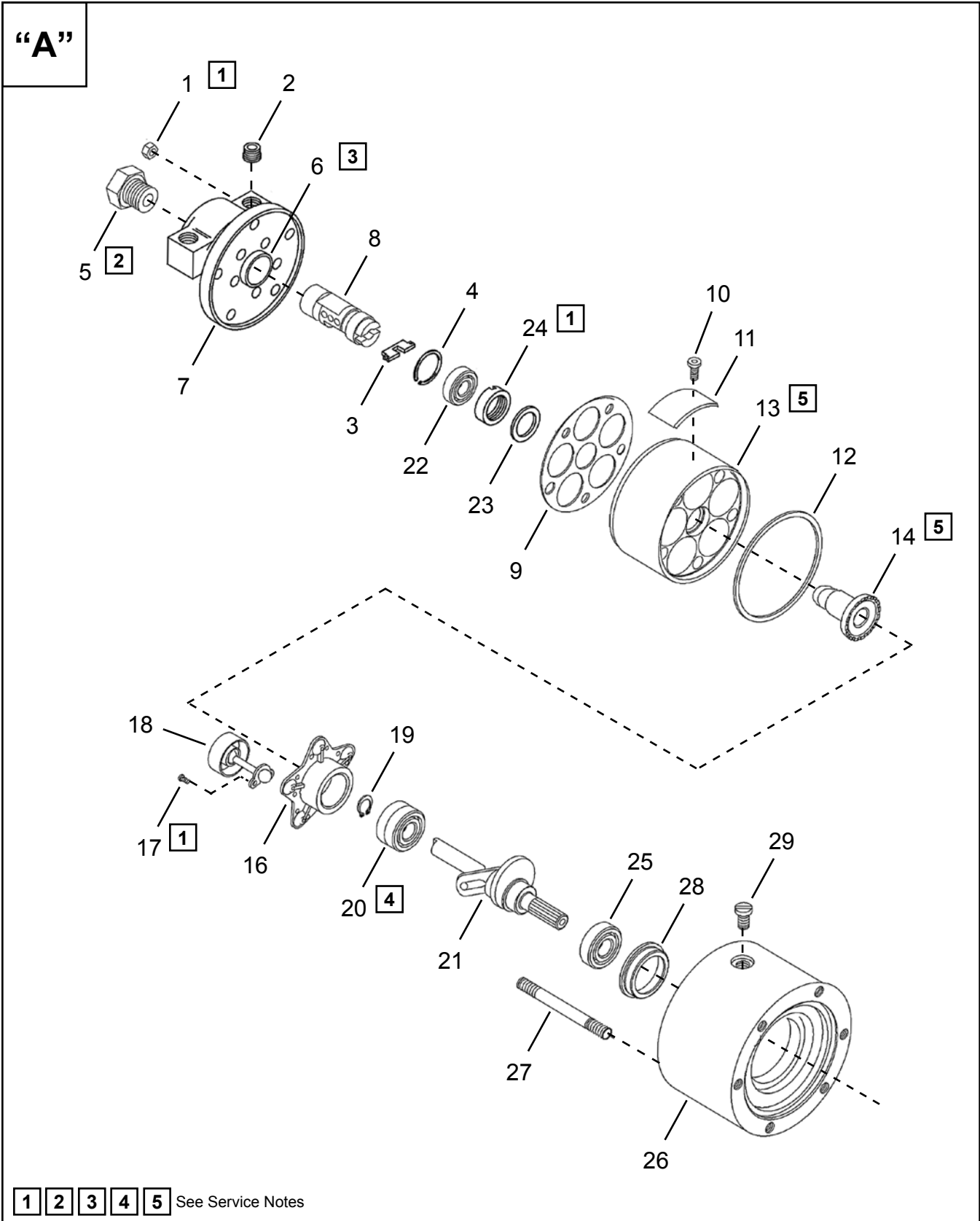
Grease Capacity: 6 ounces
50 Hours of operation: add 2 ounces

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.



Cleco®
507490 Power Unit

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Illustration "A"

Ref	Number	#	X	EN
				Description
1	C108S	5	10	Nut
2	B112E	2	2	Pipe Plug
3	2VR43	1	1	Key
4	800090	1	2	Retaining Ring
5	17748	1	2	Reducer
6	10237	1	1	Bushing
7	A17739	1		Head Assembly (includes Ref. 2-5-6)
8	A10226	1		Distributor (includes Ref. 3-4)
9	2V1891	1	3	Gasket
10	534820	2	2	Drive Screw (not included in 507490 Power Unit)
11	530322	1	1	Nameplate (not included in 507490 Power Unit)
12	10027	1	3	Gasket
13	A2V1	1		Cylinder
14	A17605	1	1	Bevel Gear
--	507810	1		Driveshaft Assembly (includes Ref. 15-19-20-21)
15	533944	1		Socket Plate Assembly (includes Ref. 16-17-18)
16	507692	1		Socket Plate
17	B135Z	10	20	Screw (Piston Assembly)
18	A2V2	5	5	Piston Assembly
19	800251	1	3	Retaining Ring
20	507806	1	2	Bearing
21	507808	1		Driveshaft
22	2V85	1	2	Bearing
23	2V272	1	1	Washer
24	2V169	1	1	Lock Nut
25	22G155	1	2	Bearing
26	A18317	1		Rear Housing (includes Ref. 27-28)
27	27401PT	5	5	Stud
28	18364PT	1	1	Bearing Liner
29	30775PT	1	1	Grease Fitting

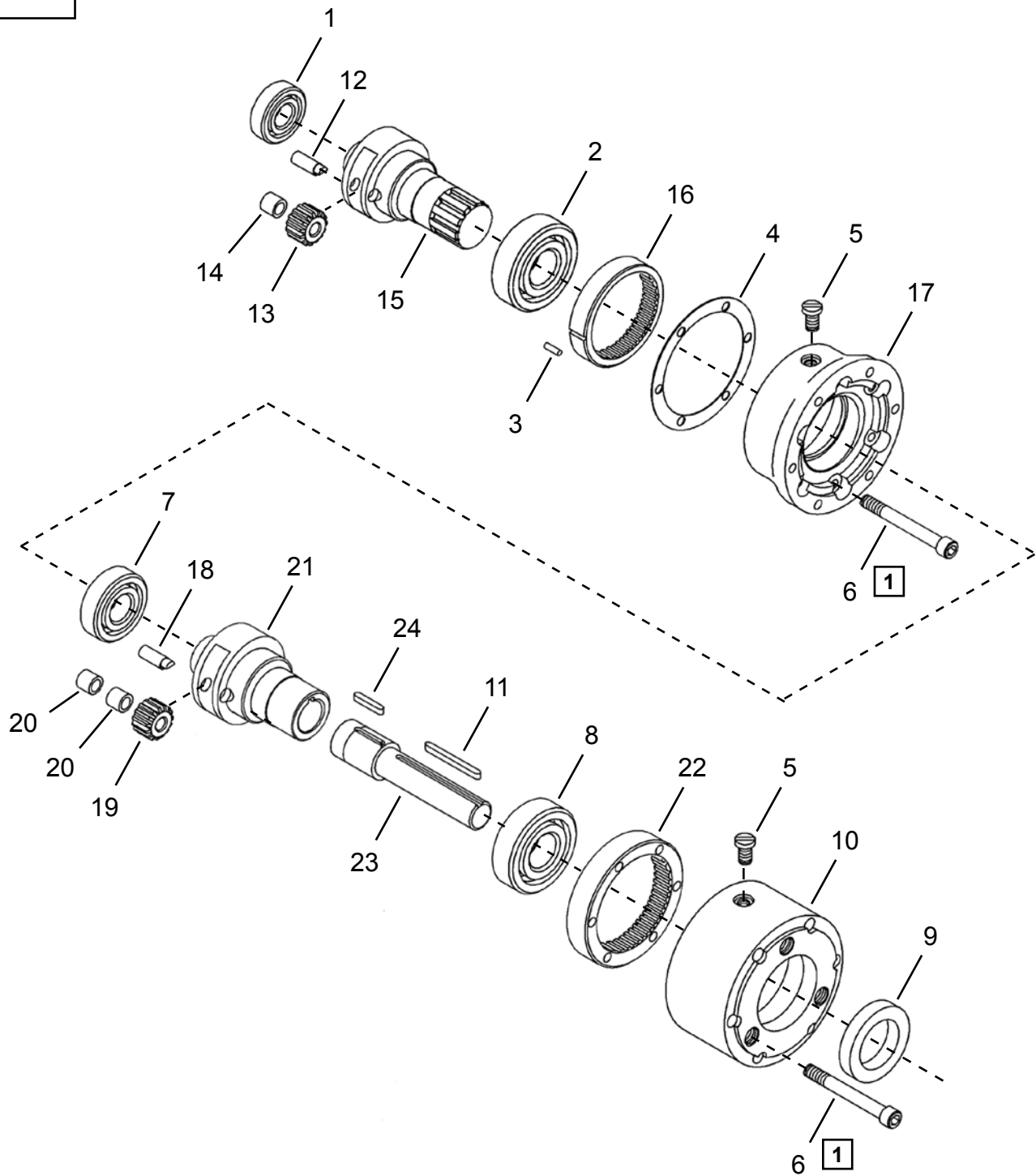
(#) Quantity

(X) Recommended Spare Parts



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	30075	1	2	Bearing
3	DP120PT	1	2	Pin
4	10026	1	3	Gasket
5	30775PT	2	2	Grease Fitting
6	B127D	12	12	Bolt
7	30076PT	1	2	Bearing
8	30063PT	1	2	Bearing
9	30057PT	1	3	Oil Seal
10	30049	1		Front Housing
11	30072PT	1	3	Key
12	10032	2	4	Pin
13	540766	2	4	Idler Gear (includes Ref. 14)
14	800160	2	4	Bearing
15	30060	1		Gear Cage
16	10019	1		Ring Gear
17	30062PT	1		Center Housing
18	30058PT	2	4	Pin
19	A30061	2	4	Idler Gear (includes Ref. 20)
20	11700	4	8	Bearing
21	30059	1		Output Gear Cage
22	30056PT	1		Ring Gear
23	510279	1		Output Spindle
24	30071PT	1	3	Key

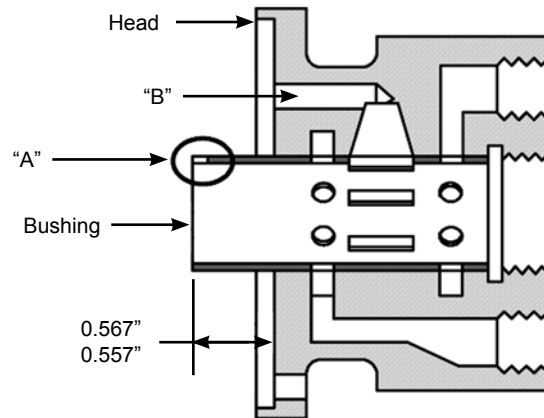
(#) Quantity
(X) Recommended Spare Parts



1 Tightening Torque

Illustration	Reference	Tightening torque	
		Ft-Lbs (in-lbs)	Nm
A	1	10-11	13-15
	17	8-9	11-12
	24	50-55	68-75
B	6	18-20	24-27

3 Bushing Assembly



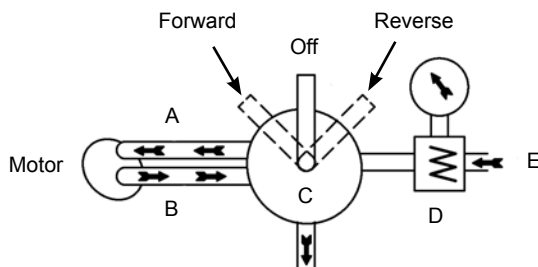
IMPORTANT: Press the new bushing into the head as shown. Notch "A" in the bushing must line up with hole "B" in the head.

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.

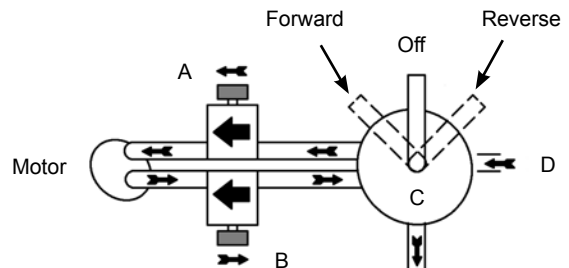
Torque Output Control

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

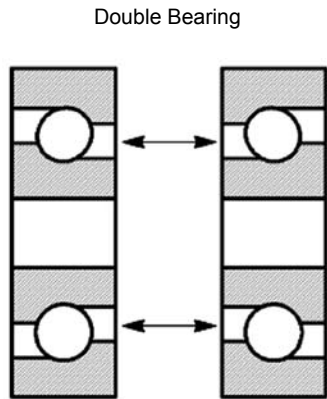


Control Forward and Reverse Speeds

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

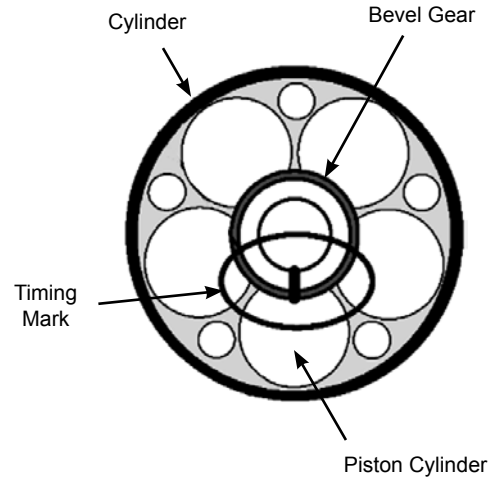


4 Bearing Assembly



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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