

Boston Gear®

Precision Gearhead Motor Mounting

P-3048-BG

Installation Instructions

Motor Mounting
Instructions

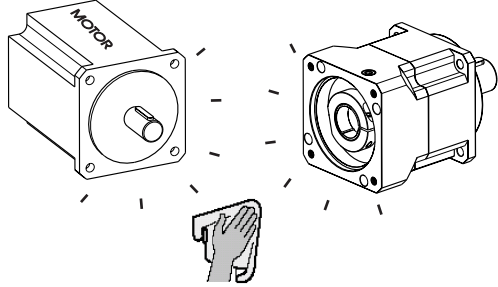


 **Boston**
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a division of **Altra Industrial Motion**

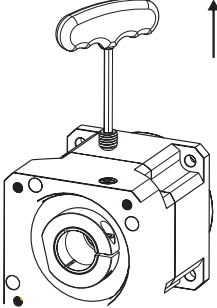
Motor Mounting Instructions

1



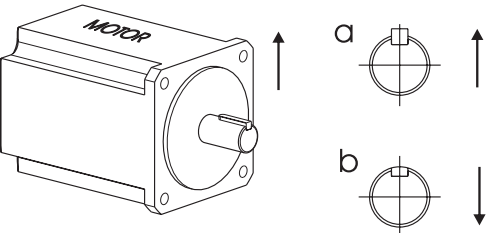
Double-check the motor and gearbox size.
Clean the mounting surface.

2



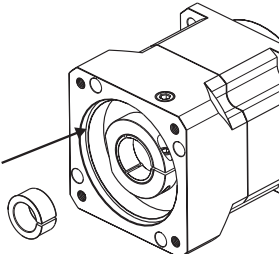
Remove the plug on the adapter plate.
Rotate the set collar till the bolt is lined up.

3



a. Remove motor key.
b. Insert balance key.

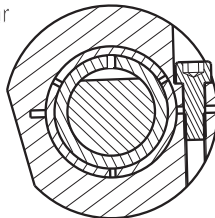
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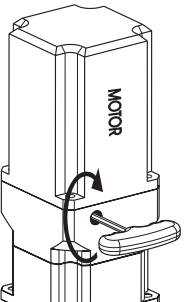
Check motor shaft size and
insert bushing if necessary.

✓ Correct Installation.

When installing on flatted shafts,
be sure to align the collet gap over
the flat and the set collar bolt
perpendicular
to the flat.

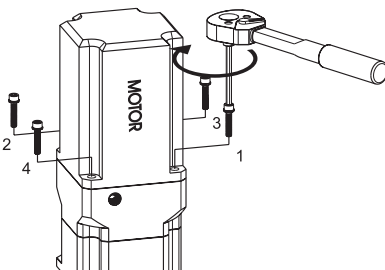


5



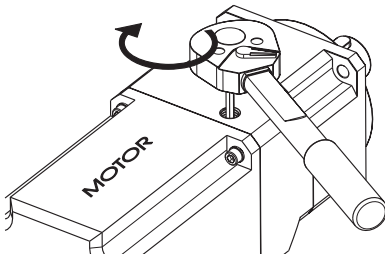
Attach the motor. Tighten to 5%
torque according to recommended list.

6



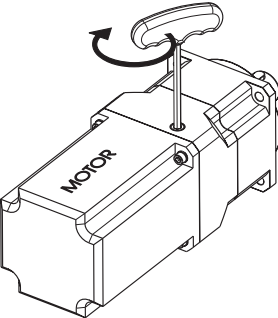
Tighten the mounting bolt (including washer)
in 1~4 order with torque wrench to specified
torque. (See Table 1)

7



Tighten the set collar bolt with torque
wrench to specified torque. (See Table 2)

8



Tighten back the screw plug.

Table 1 - Tightening Torque Recommended for Motor Mounting Bolt

Bolt Size	Width Across Flats (mm)	Strength 8.8 Tightening Torque		Strength 10.9 Tightening Torque		Strength 12.9 Tightening Torque	
		(Nm)	(In-lbs)	(Nm)	(In-lbs)	(Nm)	(In-lbs)
M3 x 0.5P	2.5	1.3	12	1.8	16	2.1	19
M4 x 0.7P	3	3	27	4.1	37	4.9	44
M5 x 0.8P	4	6.1	55	8.2	73	9.8	87
M6 x 1P	5	11	98	14	124	17	151
M8 x 1.25P	6	25	222	34	302	41	364
M10 x 1.5P	8	49	434	67	594	80	709
M12 x 1.75P	10	85	753	116	1028	139	1232
M14 x 2P	12	137	1214	186	1648	223	1976
M16 x 2P	14	210	1860	286	2534	343	3038

Table 2 - Tightening Torque Recommended for Set Collar Bolt

Gearbox Size		Motor Shaft Dia.	Bolt Size (mm)	Width Across Flats (mm)	Tightening Torque	
		(mm)			(Nm)	(In-lbs)
PL2042 / PR2042	1 stage	≤ 1 1	M3 x 0.5P x 8L	2.5	2.1	19
PL6042 / PR6042	2 stage	≤ 1 1	M3 x 0.5P x 8L	2.5	2.1	19
PL2060 / PR2060	1 stage	≤ 1 4	M4 x 0.7P x 12L	3	4.9	44
PL6060 / PR6060	2 stage	≤ 1 1	M3 x 0.5P x 8L	2.5	2.1	19
PL2090 / PR2090	1 stage	≤ 1 9	M5 x 0.8P x 14L	4	9.8	87
PL6075 / PR6075	2 stage	≤ 1 4	M4 x 0.7P x 12L	3	4.9	44
PL2115 / PR2115	1 stage	≤ 3 2	M6 x 1P x 16L	5	17	151
PL6100 / PR6100	2 stage	≤ 1 9	M5 x 0.8P x 14L	4	9.8	87
PL2142 / PR2142	1 stage	≤ 3 8	M8 x 1.25P x 20L	6	41	364
PL6140 / PR6140	2 stage	≤ 3 2	M6 x 1P x 16L	5	17	151
PL2180 / PR2180	1 stage	≤ 4 8	M10 x 1.5P x 25L	8	80	709
PL6180 / PR6180	2 stage	≤ 3 8	M8 x 1.25P x 20L	6	41	364
PL2220 / PR2220	1 stage	≤ 5 5	M12 x 1.75P x 30L	10	139	1232
PL6220 / PR6220	2 stage	≤ 4 8	M10 x 1.5P 25L	8	80	709

Note: Holding torques must be bigger than values shown above. Bolts can be tightened up to 20% higher for increased holding torques.

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