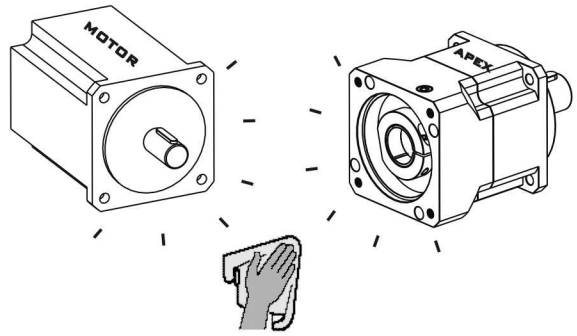
APEX DYNAMICS, INC.

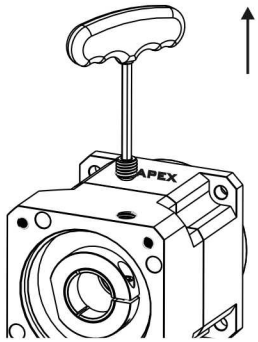
Motor Mounting Instructions

1



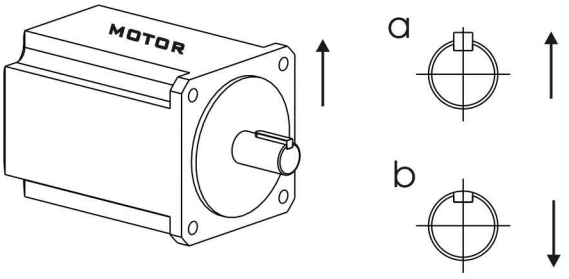
Double-check the motor and gearbox size.
Clean the mounting surface.

2



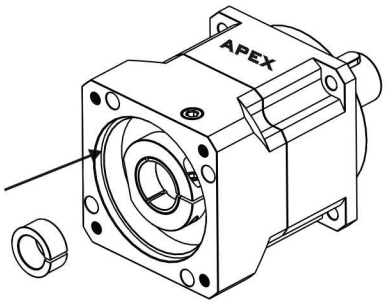
Remove the plug on the adapter plate.
Rotate the set collar till the bolt is line up.

3



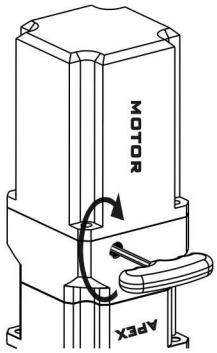
a. Remove motor key.
b. Insert balance key.

4



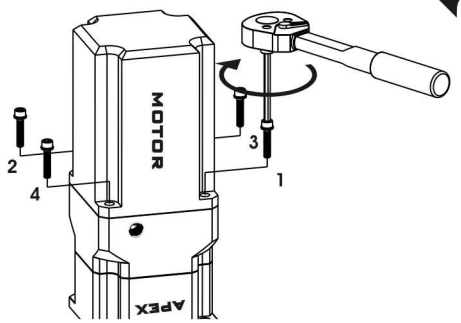
Check motor shaft size and insert bushing if necessary.

5



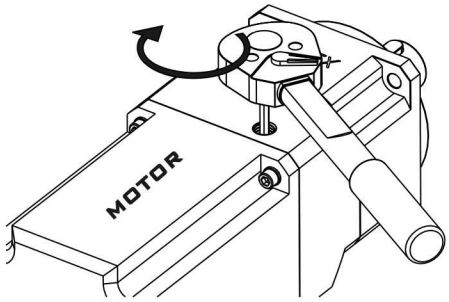
Adapted the motor. Tighten with 5% torque according recommend list.

6



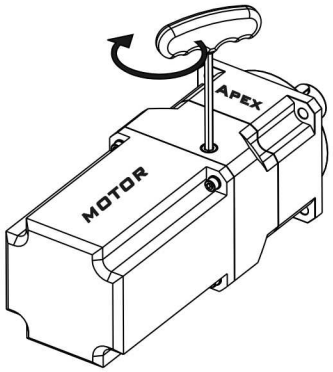
Tighten the mounting bolt (including washer) in 1~4 order with torque wrench to specified torque. (See Table 1)

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	Strength 8.8 Tightening Torque		Strength 10.9 Tightening Torque		Strength 12.9 Tightening Torque	
	[mm]	[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	Width Across Flats	Tightening Torque	
	[mm]	[mm]	[mm]	[Nm]	[In-lbs]
AB042 1 stage	≤11	M3 x 0.5P x 8L	2.5	2.1	19
AB042 2 stages	≤11	M3 x 0.5P x 8L	2.5	2.1	19
AB060 1 stage	≤14	M4 x 0.7P x 12L	3	4.9	44
AB060 2 stages	≤11	M3 x 0.5P x 8L	2.5	2.1	19
AB090 1 stage	≤19	M5 x 0.8P x 14L	4	9.8	87
AB090 2 stages	≤14	M4 x 0.7P x 12L	3	4.9	44
AB115 1 stage	≤32	M6 x 1P x 16L	5	17	151
AB115 2 stages	≤19	M5 x 0.8P x 14L	4	9.8	87
AB142 1 stage	≤38	M8 x 1.25P x 20L	6	41	364
AB142 2 stages	≤32	M6 x 1P x 16L	5	17	151
AB180 1 stage	≤48	M10 x 1.5P x 25L	8	80	709
AB180 2 stages	≤38	M8 x 1.25P x 20L	6	41	364
AB220 1 stage	≤55	M12 x 1.75P x 30L	10	139	1232
AB220 2 stages	≤48	M10 x 1.5P x 25L	8	80	709

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