## **Mounting Instruction**

## How to mount a gear or a brake on a JVL motor

When a gear or a brake is to be mounted to the front of a motor it is very important that this is done in the right way since a wrong way of mounting may have fatal influence at lifetime of the motor or gear/brake and performance. Always: First: flange bolts, and then second: collar screw. The purpose is to make sure that there are no axial pressure on the motor bearings. Please follow this instruction step by step to make sure that the mounting is done with a good result.



Make sure that the **shaft collar** is oriented correctly in order to assure that the right tension around the motor shaft is possible. (On MAB17x brake, the shaft should pulled out a bit before mounting.) Hint: Tighten the shaft collar gently just to keep it in the right position.

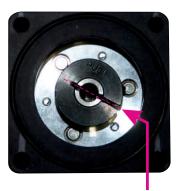






The inner and outer slit is NOT aligned. Make sure they are aligned as shown at right illustration





The inner and outer slit is aligned as they should.

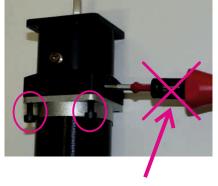
2

Mount the gear or brake to the motor and **fasten the 4 flange bolts first**, before fastening the shaft collar.

Its recommended to use Loctite 278 in the threats to make sure that the bolts stay in place.







Do **NOT** tighten the shaft collar before the flange bolts are tightend



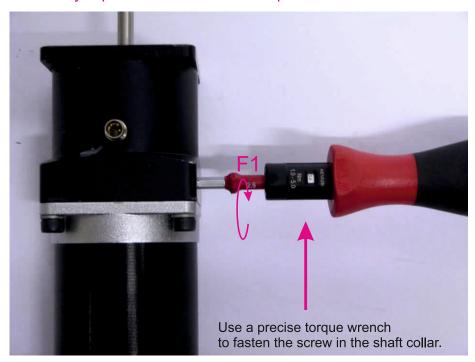
Flange bolts properly mounted and tightend.

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After the flange bolts are tightened, fasten the shaft collar with a torque of according to the scheme below.

Please notice that it can be fatal not to use the specified torque since the shaft may slip over time and cause a position offset.



**Gears Recommended Torque for Shaft Collar Screw:** 

Series	Used with motor type	Shaft	Hex	Bolt	Torque (F1)	
		Metric			Oz•in	N•m
HTRG05	MAC050 to MAC141	6.35	3.0	M4	550	4 Nm
HTRG05	MIS23x	6.35	3.0	M4	550	4 Nm
HTRG06 <sup>#</sup>	MAC050 to MAC141	6.35	3.0	M4	550	4 Nm
HTRG06	MAC400-402	14.0	3.0	M6	1400	10 Nm
HTRG08	MIS340-341	9.53	4.0	M4	550	4 Nm
HTRG08	MIS342	14.0	5.0	M6	1400	10 Nm
HTRG08	MAC800	19.0	5.0	M6	1400	10 Nm
HTRG10	MAC800	19.0	5.0	M6	1400	10 Nm
HLMTNE17	MIS17x	8.0	2.5	M3	280	2 Nm
HSHG05	MIS17x	5-9	2.5	М3	280	2 Nm
HSHG17	MIS17x	5-8	2.5	M3	280	2 Nm
HSHG23	MIS23x	6.35	3.0	M4	550	4 Nm
HLMTNE23	MIS23x	6.35	3.0	M4	550	4 Nm
HLMTNE34	MIS34x	9.53	4.0	M4	550	4 Nm
HLMT0400	MAC400-402	14.0	3.0	M6	1400	10 Nm

## **Brakes Recommended Torque for Shaft Collar Screw:**

Series	Used with motor type	Shaft	Hex	Bolt	Torque (F1)	
		Metric			Oz•in	N•m
MAB17x	MIS17x	8.0	3.0	M4	420	* 3 Nm
MAB23x <sup>#</sup>	MAC050-141/MIS23x	6.35	2.5	М3	280	2 Nm
MAB23x	MIS23x	6.53	2.5	М3	280	2 Nm
MAB23x	MIS23x <sup>†</sup>	6.35	3.0	M4	420	3 Nm
MAB34x	MIS34x	9.53	T25	M5	700	5 Nm
MAB34x	MIS34x	14.0	T25	M5	700	5 Nm
MAB34Mx	MIS34x	14.0	3.0	M4	550	4 Nm

<sup>\*</sup> MAB17x brake - pull the shaft out on the brake before mounting, and observe that it is not pushed in when mounting it the flange.

## Special for MAB17 brake, and for all in case of vibration:

The cable must be strapped in place, without any tension to the cable. Make sure that the cable is not bended more that the minimum bending radius is allowing.



Make sure to only tighten the connecter with finger strength:















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<sup>\*</sup> External Brakes and Gears on MAC100 series (Stainless Steel) must be mounted with silicone to ensure water tightness.

<sup>&</sup>lt;sup>†</sup> Some versions of MAB23x will begin being delivered with an improved shaft collar with a M4 bolt. Please check.