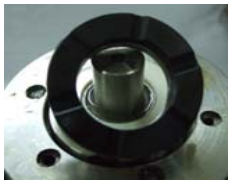
Instruction for ECDRIVE

LORENTZ

Pos.	Description of Processing	Picture		Place	Tool	Note
A	**To Disassemble ECDRIVE**					**REV.01**
1	Take Protection Cap (No. 18) away, unscrew 3 pcs of M5x12 Screws (No. 9)			Handwork	Screw Driver	
2	Take Rear Cover (No. 8) away, remove Diaphragm (No. 10)			Handwork		
3	Unscrew 3 pcs of M5x12 Screws from Rear Bearing Assembly (No. 7)			Handwork	Screw Driver	
4	Take Rear Bearing Assembly (No. 7) away. Take Coal Ring (No. 12) and Ceramic Ring (No. 5) away, clean them with alcohol / acetone, check if there is any damage on them			Handwork		
5	Take 2pcs of Support Sheets (No. 13) out			Handwork	Clean cloth	
6	Take Rotor Assembly (No. 3) out, clean Rotor Assembly and check it			Handwork	Alcohol / acetone, Clean cloth, small brush	

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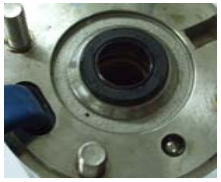
Pos.	Description of Processing	Picture	Place	Tool	Note
7	Check inside of Motor Housing Assembly (No. 1) and clean, take Circlip (No. 20) out	 	Handwork	Pincers	
8	Take Sealing (No. 16) out	 	Handwork		
B	**To Replace Front Bushing and Rear Bushing (if need)**				
1	Please ask your supplier / manufacturer for one set of Stop Dog (Part Number P-001 & P-002) to assemble Rear Bushing (No. 11) and Front Bushing (No. 15). Bushings can be pressed into chamber to right position by means of Stop Dog.	 	Handwork	drilling machine / Pressing Machine, Stop Dog	
2	Pressing Rear Bearing (No. 11) needs P-001 and P-002, Front Bearing (No. 15) needs P-001 only.		Handwork		
C	**To Assemble ECDRIVE**				
1	Clean all parts by alcohol / acetone before assembly		Handwork	Alcohol / acetone, Clean cloth, small brush	

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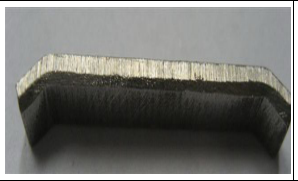
LORENTZ

Pos.	Description of Processing	Picture	Place	Tool	Note
2	Put Motor Shaft (No. 3) into motor Housing (No.1). Turn Motor Housing upside down on a wood plate, see picture 01. **VERY IMPORTANT:** Wood plate will be against the motor shaft going into Housing quickly and fully to prevent from your fingers jammed	 01  02	Handwork	Wood plate	
	You must hold the Motor Housing by one hand as the magnetic force of shaft can absorb the housing up, see picture 02, after Motor Shaft settled down, two hands hold Motor Housing and move it up, then let motor shaft go to its position slowly		Handwork		
3	Put Support Sheets (No. 13) in Support Pipe (No. 4), make sure the bevel side of Support Sheet must be placed on the ceramic side.	 	Handwork		
4	Lay Ceramic Ring (No. 5) upon Support Pipe (N0. 4); Coal Ring (No. 12) on Ceramic Ring. Assemble Rear Bearing and put on Diaphragm, close Rear Cover. For all screws, put one drop of Loctite glue 222 on thread for good connection	 	Handwork		
D	**To Fill Water into Motor**				
1	Unscrew M4x6 Screw (No. 21), put Motor under water with 10°tilted angle, use a 1.5mm round head pin to push Diaphgram let water suction in motor untill no air bubble coming out, then close Screw M4x6 with O-ring (No. 19) under water	 	Handwork	Clean clothe	
2	Assemble Sealing (No. 16) and Protection Cap (No. 18). Motor is ready to be tested		Handwork		
E	**Manual Quality Check**				
1	Turn the rotor four times by hand. It must turn regularly.		Handwork		
2	Pull and Press Motor Shaft, it should be movable within min. 0.2 to max. 0.5mm in axial direction		Handwork		

Instruction for ECDRIVE

Pos.	Description of Processing	Picture		Place	Tool	Note
E	**Electronic Quality Check**					
1	For 24V motor, connect to PS150/PS200 controller, input voltage 24V, current drawn should be less than 1.5A				PS150 /PS200 Controller	
2	For 55V motor, connect to PS600 controller, input voltage 50V, current drawn should be less than 0.8A				PS600 Controller	
3	For 100V motor, connect to PS1200/PS1800 controller, input voltage 100V, current drawn should be less than 0.4A				PS1200 Controller	
	DRAWING					
No.	Part Number & Description for LORENTZ Motor					
1	Housing Assembly					
2	Washer					
3	Rotor Assembly					
4	Support Pipe					
5	Ceramic Ring					
6	Balance Plate					
7	Rear Bearing Assembly					
8	Rear Cover					
9	Hex. Socket Head Cap Screw M5x12					
10	Diaphragm					
11	Rear Bushing					
12	Coal Ring					
13	Support Sheet					
14	Rotor Axle					
15	Front Bushing					
16	Sealing					
17	Motor Cable					
18	Protection Cap					
19	O-ring					
20	Circlip					
21	Hex. Socket Head Cap Screw M4x6					