ASSEMBLY INSTRUCTIONS FOR THE MFC-3039 ROTATING PROBE-ARRAY HOLDER

(The numbers and capital letters refer to components and bolts on the schematic No 20027A)

1) Put the *Rear-Axle* ⑥ on the *Main-Girder* ① and attach it with the *bolt A*.

2) Put the *Coding-Disk* ④ on the *Front-Axle* ⑤ and install both pieces on the *Main-Girder* ①. Maintain in place with the *bolt B*. To allow adjustment, do not tighten.

3) Insert the bolt and *nut C*. Tighten *bolt B*.

4) Attach the MFC3038 Probe-Array on the *Probe-Holder* ⑧ with screws. Mount the *Probe-Holder* ⑧ on the *Main-Girder* ①. Adjust the Z axis position by moving the *Probe-Holder* ⑧ then tighten the *screws D*.

5) Fix the *Rear-Girder* ③ on the rear flange of the magnet.

6) Put the *Rear-Axle* ⑥ into the *Bearing* ⑩ of the *Rear-Girder* ③ and put in place the *Front-Girder* ⑩ on the front flange of the magnet.

7) Fine adjustment of the Probe-Array Z axis position is made by loosening location *Ring 1* and *Ring 2* on the *Front-Axle* ⑤ and moving the complete *Main-Girder* ① and Probe-Array assembly using the *Ruler* as a position reference. After adjustment press *Ring 1* and *Ring 2* firmly against each end of the *Bearing* ⑩ and tighten the lock screws.

8) To select the inner or outer holes in the *Coding-Disk* ④, loosen the *nut E*, insert the *Coding-Pin* ⑩ into a hole of the selected diameter and rescrew the *nut E*. (Refer to 10) below for angle increments.)

9) To adjust the position of the reference angle (angle 0), loosen the two *screws F* and the two *bolts B* and *C*. Put the *Coding-Pin* ⑩ into the reference hole and adjust the angle by rotating the *Main-Girder* ①. The adjustment range is ±10°. Then tighten up the two screws and two bolts.

10) To map the magnet, rotate the Probe-Array using the *Coding-Disk* ④ and put the *Coding-Pin* ⑩ into the hole marked with the appropriate symbol.

Symbols are:

<table>
<thead>
<tr>
<th>Outer diameter</th>
<th>Inner diameter</th>
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<tbody>
<tr>
<td>■ : 12 angles/turn (30°)</td>
<td>( ) : 16 angles/turn (22.5°)</td>
</tr>
<tr>
<td>▼ : 24 angles/turn (15°)</td>
<td>every hole : 32 angles/turn (11.25°)</td>
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<tr>
<td>( ) : 36 angles/turn (10°)</td>
<td></td>
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