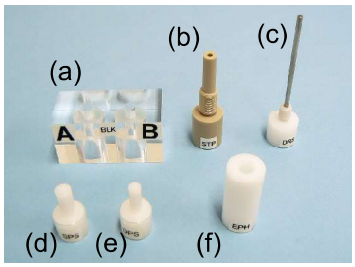
013340 DRE-DCP Disk electrode polishing and exchanging tool kit



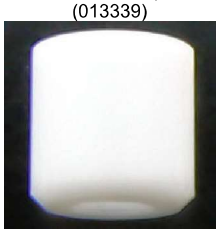
Contents
(a)DRE-BLK Base block
(b)DRE-STP Stopper
(c)DRE-DRS Disk remove tool
(d)DRE-SPS Spacer push tool
(e)DRE-DPS Disk push tool
(f)DRE-EPH Electrode polishing holder

This tool kit is used for disk replaceable electrode(DRE) assembly and disassembly. This kit doesn't contain DRE-PTR Pt ring assembly (013337), DRE-GCD GC disk (013338) and DRE-SPC Teflon spacer (013339).

ATTENTION:
DRE-PGK parts have distinguished "electrode side" and "contact side". Pt ring electrode is "electrode side" and brass parts is "contact side" in DRE-PTR.
“Contact side"of DRE-GCD and DRE-SPC are the chamfered surface.
CAUTION: If you assembled the DRE kit with DRE-GCD electrode working surface upside down, the measured data would be abnormal.

DRE-PTR Pt ring assembly (013337) | DRE-GCD GC Disk (013338) | DRE-SPC Teflon spacer (013339)

electrode side



contact side

There are two assembly methods for DRE: front assembly & rear assembly. Front assembly is disk rod inserted from the electrode side which is mainly used for the measurement with no pretreatment for disk rod. Rear assembly is disk rod inserted from the contact side which can be used for the measurement required for disk surface pretreatment (such as catalyst modification etc.).

1.DRE Front assembly

1-1. Insert the DRE-PTR Pt ring assembly (013337) electrode side into A big-hole of the DRE-BLK Base block tightly.

1-2. Insert DRE-SPC Teflon spacer (013339) contact side to A small-hole of the BLK. Notice the orientation of the SPC. Press the SPC into the PTR by the DRE-SPS Spacer push tool. Remove the PTR from A and check the SPC position inside the PTR.

1-3. Screw the DRE-STP Stopper until the edge of the SPC is flat to Pt ring surface, then insert the electrode side of PTR to B big-hole of the BLK tightly.

1-4. Insert the DRE-GCD GC disk (013338) contact side to B small-hole of the BLK. Care about the orientation of the GCD. Press the GCD into the SPC with the DRE-DPS Disk push tool.

1-5. Adjust the height of the GC electrode surface by revolving the DRE-DRS Disk remove tool.
Polish the assembling electrode before using.
(http://www.als-japan.com/pk-3.html)

2.DRE Rear assembly

2-1. Screw lightly the STP into the DRE-EPH electrode polishing holder. Set the EPH to A big-hole of BLK. Insert the SPC contact side to A small-hole of the BLK. Press the SPC into the EPH by the SPS. Then screw the STP to keep the SPC and the EPH surface in same plane.

2-2. Set the EPH to B big-hole of the BLK. Insert the GCD contact side to B small-hole of the BLK. Press the GCD into the SPC with the DPS. Then screw the DRS until the SPC and GCD surface are in same plane.

2-3. Polish the GCD together with the EPH linked to the STP and DRS. Follow the polishing method manual packed in 013336 DRE-PGK or 013337 DRE-PTR.

2-4. After polish, remove the DRS firstly, then remove the GCD&SPC set from EPH by screwing the STP. Pretreat the GCD in this state. After GCD pretreatment, insert from the electrode side of the GCD-SPC to the contact side of the PTR (rear assembly).

2-5. Screw the STP slowly to match same height of GCD&SPC set to PTR surface. If the GCD&SPC set position is higher than the PTR, you have to screw in the STP completely to remove the GCD&SPC set from the PTR, and do assembling 2-4 again.

3.DRE disassembly

3-1. Screw in the STP until touching the SPC lightly and insert the DRS to the PTR.

3-2. Remove the GCD by screwing the DRS.

3-3. Screw the DRS till the last to remove the SPC.

CAUTION
In order to get the excellent RRDE measurement data, the front assembled DRE should be used for rotation speed lower than 3000 rpm, while rear assembled DRE should be used for rotation speed lower than 2000 rpm. Any applications with rotation speed exceeding above rpm range may possibly cause the unsatisfied RRDE measurement data.
DRE-SPC Teflon spacer is consumptive material. Please replace SPC if it was distorted.
If the surface of DRE-GCD, DRE-PTR and DRE-SPC were not in same plane after assembling process, the RRDE measurement data would be poor.

You can get more detailed manual from following URL.
http://usr.bas.jp/dl_sub/?id=518c47a52982c

Manufactured by: ALS Co., Ltd
Exclusive distributor: BAS Inc.
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