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Note

An alternate proprietary procedure is available for GE use, and to sites with a valid Advanced Service Package Limited License. Refer to the *System Cabinets: Troubleshooting: Bandpass Asymmetry Correction Test.*

OVERVIEW

This procedure must be performed after installation of a standard receiver, multicoil receiver, receiver 0 for Fast Receiver, or a Fast Receiver module.

Due to manufacturing and component tolerance variations, the phase and magnitude bandwidth response of the analog circuits in the receiver vary from receiver to receiver. These variances can cause ghosting in some EPI prescriptions. The BACC procedure measures the frequency response of each receiver and creates a characterization that will be used to correct for these nonlinearities. The BACC is a loopback characterization to measure the frequency response. The BACC procedure must be run on all receivers prior to clinical EPI scanning.

1- SCAN PREPARATION

1. At the Operator Workspace, select the scan icon in the desktop control panel.

2. If necessary, exit out of any previous exams by selecting **[End Exam].**

3. Click on **[New Pt]** and enter the following:
   Id: **geservice**
   Name: **bacc**
   Weight (Lb.): **111**

4. Landmark on some point on the cradle (the scan uses TPS/ISE loopback so no RF is actually transmitted to the coil).

5. Click on **[Autoview]**, just below the Autoview image display screen; your images will display automatically.

*The following three steps are **proprietary** and only available for GE use, and to sites with a valid Advanced Service Package Limited License. The non-proprietary procedure is listed after these steps.*

6. Set Patient Protocols to **Service**.

7. In the Protocol field, Type **o.42.1** (o=Other, 42=protocol number, 1=series number).
   OR
   Click on "Other" and select protocol **42** and series **1** from the menu.

8. Click on **[Accept]** to load the Bandpass Asym (Body Axial) protocol.

***Non-proprietary** procedure:*
At the Operator Workspace, prepare the system for a “Bandpass Asym (Body Axial)” scan using the scan protocol (**o.42.1**) shown in the "Service Protocols" procedure located on the service methods CD-ROM.

9. Click on **[Save Series],** then **[Prepare to Scan]**.

10. Right click on **[Research Operations]** and select **[Display CVs]** to change the following CV values:
    rhtype1 = **8** (default)
    cfrecvend = **0** (Non-multicoil) or **3** (Multicoil)
    fast_rec = **0** (Normal Receiver(s) or for first pass if system has a Fast Receiver)
    1 (for second pass scan if system has a Fast Receiver)

    Note

    Running BACC twice: This characterization must be run twice if the Fast Receiver option is available: Always set fast_rec= **0** on the first pass for standard receiver[s]; on the second set “fast_rec=**1**” for the Fast Receiver. Remember to press **<Enter>** for each parameter.

11. Click on **[Accept]**.

2- CORRECT CHARACTERIZATION

1. Right click on **[Research Operations]** and select **[Download]**.

2. Right click on **[Research Operations]** and select **[Setup Params]** and set R1=**11**, R2=**15** and TG=**200**; then **[Done]**.

3. Click on **[Manual Prescan]**; then **[Done]**.

4. Click on **[Scan]**. The scan takes about two seconds.

5. Wait for analysis screen to display the complete analysis. Once up, press the **<Enter>** key on the keyboard to close the window.

6. If the Fast Receiver option is installed, scan again with the CV fast_rec=**1**. Right click on **[Research Operations]** and select **[Display CVs]**. Change the CV **fast_rec** value to **1**. Press **<Enter>** on the keyboard and then click on **[Accept]**.

7. Right click on **[Research Operations]** and select **[Download]**; then click on **[Scan**].

8. Wait for analysis screen to display the complete analysis. Once up, press the <Enter> key on the keyboard to close the window.

REVISION HISTORY

REV	DATE	AUTHOR	PRIMARY REASONS FOR CHANGE
0	Jun 24, 1998	L. Loehrer	Converted Toolbook document to Word 7.0
1	Nov 2, 1998	M. Keber	Removed obsolete 8.1 information; misc. style guide cleanup.
2	May 20, 1999	SM Atladottir	Updated Procedure References for New GUI
3	Sept 27, 1999	G. Boerner	Updates per 8.3 bay validations.
4	Jan 13, 2000	G. Boerner	Landmarking changes per SPR MRIge56065.