

## Step 1: Select the VIBRANT Protocol from the GE Protocol Library

- Protocol listed under Chest/Thoracic

## Step 2: Prepare and Position the Patient

- Prepare IV catheter if physician orders contrast
- Prepare injector (power or manual).
- Patient entry is Prone/ Feet First
- Choose the appropriate coil configuration (MRI Devices 2\_BREAST)
- Landmark to the center of the breast
- Advance patient into scanner

## Step 3: Perform Localizer and ASSET Calibration Scans

- Select a 3-plane localizer series from the GE protocol library – ( 7 Slices in Axial, Coronal and Sagittal planes)
- **[Save], [Prepare],[ AutoPrescan], [Scan]**
- Select the ASSET calibration series from the GE protocol
- Prescribe the axial calibration scanning range to extend past the anatomy by 50%. [Fig. A.]



[Fig. A.] ASSET Calibration scanning range

## Step 4: Prescribe the VIBRANT Mask Acquisition (Pre-Contrast)

- Select the Fast 3DSPGR single-phase series (VIBRANT) from the Prescription Manager
- Prescribe the Graphic Rx for the Sagittal 3D Volume. Prescribe the volume larger than the right to left dimensions of the breasts [Fig. B]



[Fig. B] 3D Sagittal Graphic Rx.

**FYI-** When utilizing ASSET the locs per slab must be a multiple of 4 and create a volume that is greater than 50% of the coil volume.

## Step 5: Prescribe the Bilateral Prescan Volumes

- Select the “Pre-scan Rx” button on the Graphic Rx screen
- Shift and click the left mouse key to prescribe a volume on each breast. [Fig. C].
- Accept Graphic Rx



[Fig. C] Prescan Volume RX

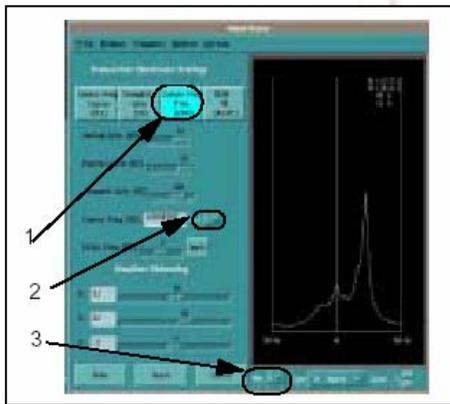
**FYI-**

- It is not necessary to include all breast tissue in each volume
- To help ensure precise prescan values take care not to include the heart or lungs.

**•[Save], [Prepare to Scan], [Auto Prescan]**

## Step 6: Optimize Prescan Values For Each Breast Volume

- Select **[Manual Prescan]**
- Select CF Fine (1)
- Select Volume 1 from the pull down menu (2)
- Select the Receiver which provides the highest signal for Volume 1 (3)
- Adjust center frequency for Volume 1 to center on the water peak



- 1-Center Freq. Fine
- 2-Volume Selection Menu
- 3-Receiver Selection Menu

- Select Volume 2 from the pull down menu (2)
- Select the Receiver which provides the highest signal for Volume 2 (3)
- Adjust center frequency for Volume 2 to center on the water peak
- **[Scan]**

**Important!** Do not adjust values for Vol. O. This is a calculated average between volumes 1 and 2.

## Step 7: Prescribe and Perform Dynamic VIBRANT

- Copy Paste the Vibrant Mask Acquisition (Single-Phase Acq.)
- Enter Contrast Amount
- Turn on Multi-phase on the imaging options menu
- On the Multiphase Screen:
  - ☑ Auto Subtraction: ON
  - ☑ Phases per Loc. (4-7)
  - ☑ Previous Series: ON
  - ☑ Delay After Acq.- MIN



- **[Save], [Prepare to Scan], [Manual Prescan]**

**Important!** After selecting Manual Prescan back out immediately. Do not change Prescan values!

- Begin contrast injection and **[Scan]** simultaneously