

# msk Hip Labrum Scope/ Hip Preservation SIGNA Architect

## Technical Instructions

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**--Hip Preservation--**

**AX T1 LAVA FLEX**

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**3-Plane Loc Knees GE Body**

**Ax T1 Knees GE BODY**

# 3-Plane Loc

Details tab

Protocol notes

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## 3-Plane Loc

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	3-PLANE

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, EDR, TRF, Fast, SS, ARC
Pulse Sequence:	Spin Echo
ARC Phase:	2.00

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### Image Recon

Recon DL Strength:	Off
Intensity Correction:	NONE
Intensity Filter:	None
Save Original:	Off

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### SCAN RANGE

FOV:	40.0
Slice Thickness:	5.00
Slice Spacing:	10.0
Overlap Locations:	0
No Phase Wrap:	1.00

## **ACQ TIMING**

Acq Voxel Size:	1.6 X 3.1 X 5.0
Freq:	256
Phase:	128
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature (CP)
Excitation Mode:	Selective

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## **SCAN TIMING**

TE:	80.0
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	62.50

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Hip joint
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## **USER CVS**

User CV1:	1.00
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# Cor T1 DL

Details tab

Protocol notes

## Cor T1 DL

### PATIENT POSITION

Coil Configuration: GE40chGEMPA, Inv16chCardiacAA  
Plane: OBLIQUE

### IMAGING PARAMETERS

Imaging Mode: 2D  
Imaging Options: EDR, TRF, Fast, ARC  
Pulse Sequence: FSE-XL  
ARC Phase: 1.50

### Image Recon

Recon DL Strength: Medium  
Intensity Correction: SCENIC  
Intensity Filter: None  
Save Original: On

### SCAN RANGE

FOV: 20.0  
Slice Thickness: 3.00  
Slice Spacing: 0.3  
Overlap Locations: 0  
Number of Slices: 36

**No Phase Wrap:** 2.00

---

**ACQ TIMING**

Acq Voxel Size: 0.6 X 0.7 X 3.0  
Freq: 320  
Phase: 288  
Freq DIR: S/I  
NEX: 1.00  
# of Acq. Before Pause: 0  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Preset  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

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**SCAN TIMING**

Flip Angle: 111.0  
TE: 18.0  
Number of Echoes: 1  
TR: 800.0  
Echo Train Length: 4  
Receiver Bandwidth: 62.50

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**CONTRAST**

Contrast Yes/No: No

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**OTHERS**

***Anatomical Region:***

***Hip joint***

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**USER CVS**

User CV6:	None
User CV9:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	None
User CV26:	1.00
User CV41:	None

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**Non-Viewable Parameters**

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# Cor T2 Fat DL

Details tab

Protocol notes

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## Cor T2 Fat DL

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	CORONAL

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, FR, ARC
Pulse Sequence:	FSE-XL
ARC Phase:	1.50

---

### Image Recon

Recon DL Strength:	Medium
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	On

---

### SCAN RANGE

FOV:	20.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
No Phase Wrap:	2.00

## **ACQ TIMING**

Acq Voxel Size:	0.6 X 0.8 X 3.0
Freq:	320
Phase:	256
Freq DIR:	S/I
NEX:	2.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Preset
Excitation Mode:	Selective
Fat Shift DIR:	Normal (I)

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## **SCAN TIMING**

Flip Angle:	111.0
TE:	60.0
Number of Echoes:	1
TR:	2500.0
Echo Train Length:	16
Receiver Bandwidth:	41.67

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Hip joint
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***Fat/Water Saturation:***

***Fat***

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**USER CVS**

User CV6:	None
User CV7:	None
User CV9:	None
User CV15:	None
User CV18:	None
User CV19:	1.00
User CV21:	None
User CV26:	1.00
User CV41:	None
TR Min:	2500.0
TR Max:	11000.0

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**Non-Viewable Parameters**

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# SAG 3D MERGE

Details tab

Protocol notes

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## SAG 3D MERGE

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	SAGITTAL

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### IMAGING PARAMETERS

Imaging Mode:	3D
Imaging Options:	FC, EDR, Fast, ARC
Pulse Sequence:	MERGE
ARC Phase:	2.00
ARC Slice:	1.00

---

### Image Recon

Recon DL Strength:	Off
Intensity Correction:	PURE
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	18.0
Slice Thickness:	1.00
Slices per Slab:	60
Overlap Locations:	0
Number of Slices:	1

<b>No Slab Wrap:</b>	<b>1.07</b>
No Phase Wrap:	2.00
Slice Resolution(%):	50.00

---

### **ACQ TIMING**

Acq Voxel Size:	0.4 X 0.5 X 2.0
Freq:	488
Phase:	384
Freq DIR:	S/I
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Preset
Excitation Mode:	Selective

---

### **SCAN TIMING**

Flip Angle:	5.0
TE:	Min Full
Number of Echoes:	3
TR:	Minimum
Receiver Bandwidth:	41.67

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### **CONTRAST**

Contrast Yes/No:	No
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### **OTHERS**

Anatomical Region:	Pelvis
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***USER CVS***

User CV30:	1.00
User CV34:	70.00
User CV40:	None

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**Non-Viewable Parameters**

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# MultiPlanar Reconstruction (MPR)

Details tab

Protocol notes

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## MultiPlanar Reconstruction (MPR)

### SAG 3D MERGE

#### Axial

Field of View:	18.0
Spacing:	1.0
Thickness:	1.0
Save Direction:	S -> I
Render Mode:	Average
Series Description:	Ax Reformat

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#### Sagittal

Field of View:	18.0
Spacing:	1.0
Thickness:	1.0
Save Direction:	L -> R
Render Mode:	Average
Series Description:	Sag Reformat

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#### Coronal

Field of View:	18.0
Spacing:	1.0
Thickness:	1.0
Save Direction:	P -> A

**Render Mode:**

**Average**

Series Description:

Cor Reformat

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Use Scan Fov:

Off

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**Non-Viewable Parameters**

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# Sag PD Fat DL

Details tab

Protocol notes

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## Sag PD Fat DL

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	OBLIQUE

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, FR, ARC
Pulse Sequence:	FSE-XL
ARC Phase:	2.00

---

### Image Recon

Recon DL Strength:	Medium
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	On

---

### SCAN RANGE

FOV:	18.0
Slice Thickness:	3.00
Slice Spacing:	0.2
Overlap Locations:	0
Number of Slices:	1

**No Phase Wrap:** 2.00

---

### **ACQ TIMING**

Acq Voxel Size: 0.5 X 0.6 X 3.0  
Freq: 384  
Phase: 320  
Freq DIR: Unswap  
NEX: 1.50  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Preset  
Excitation Mode: Selective  
Fat Shift DIR: Normal

---

### **SCAN TIMING**

Flip Angle: 111.0  
TE: 25.0  
Number of Echoes: 1  
TR: 1800.0  
Echo Train Length: 6  
Receiver Bandwidth: 62.50

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### **CONTRAST**

Contrast Yes/No: No

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### **OTHERS**

Anatomical Region: Pelvis

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## **SAT**

Fat/Water Saturation: Fat Classic

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### **USER CVS**

User CV6:	None
User CV7:	None
User CV9:	None
User CV15:	None
User CV18:	None
User CV19:	1.00
User CV21:	None
User CV26:	1.00
User CV29:	None
User CV41:	None
TR Min:	1800.0
TR Max:	3000.0

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**Non-Viewable Parameters**

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# AX T1 DL

Details tab

Protocol notes

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## AX T1 DL

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	OBLIQUE

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	FC, EDR, TRF, Fast, ARC
Pulse Sequence:	FSE-XL
ARC Phase:	1.50

---

### Image Recon

Recon DL Strength:	Medium
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	On

---

### SCAN RANGE

FOV:	22.0
Slice Thickness:	4.00
Slice Spacing:	1.0
Overlap Locations:	0
Number of Slices:	14

**No Phase Wrap:** 1.50

---

### ACQ TIMING

Acq Voxel Size: 0.7 X 0.9 X 4.0  
Freq: 320  
Phase: 256  
Freq DIR: S/I  
NEX: 1.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: Off  
Flow Comp Direction: Slice  
RF Drive Mode: Preset  
Excitation Mode: Selective  
Fat Shift DIR: Normal (S)

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### SCAN TIMING

Flip Angle: 111.0  
TE: 18.0  
Number of Echoes: 1  
TR: 800.0  
Echo Train Length: 4  
Receiver Bandwidth: 62.50

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### CONTRAST

Contrast Yes/No: No

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### OTHERS

**Anatomical Region:**

**Hip joint**

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**USER CVS**

User CV6:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	None
User CV26:	1.00
User CV41:	None

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**Non-Viewable Parameters**

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# AX T2 Fat DL

Details tab

Protocol notes

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## AX T2 Fat DL

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	AXIAL

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	FC, EDR, TRF, Fast, FR, ARC
Pulse Sequence:	FSE-XL
ARC Phase:	1.50

---

### Image Recon

Recon DL Strength:	Medium
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	On

---

### SCAN RANGE

FOV:	22.0
Slice Thickness:	4.00
Slice Spacing:	1.0
Overlap Locations:	0
Number of Slices:	22

**No Phase Wrap:** 1.50

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**ACQ TIMING**

Acq Voxel Size: 0.7 X 0.9 X 4.0  
Freq: 320  
Phase: 256  
Freq DIR: R/L  
NEX: 1.00  
# of Acq. Before Pause: 0  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: Off  
Flow Comp Direction: Slice  
RF Drive Mode: Preset  
Excitation Mode: Selective  
Fat Shift DIR: Normal (L)

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**SCAN TIMING**

Flip Angle: 111.0  
TE: 80.0  
Number of Echoes: 1  
TR: 2800.0  
Echo Train Length: 20  
Receiver Bandwidth: 41.67

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**CONTRAST**

Contrast Yes/No: No

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## **OTHERS**

Anatomical Region: Hip joint

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## **SAT**

Fat/Water Saturation: Fat

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## **USER CVS**

User CV6: None  
User CV15: None  
User CV18: None  
User CV19: 1.00  
User CV21: None  
User CV26: 1.00  
User CV41: None

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**Non-Viewable Parameters**

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# Obl AX PD Fat DL

Details tab

Protocol notes

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## Obl AX PD Fat DL

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, FR
Pulse Sequence:	FSE-XL

---

### Image Recon

Recon DL Strength:	Medium
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	On

---

### SCAN RANGE

FOV:	22.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
No Phase Wrap:	1.50

## **ACQ TIMING**

Acq Voxel Size:	0.6 X 0.9 X 3.0
Freq:	384
Phase:	256
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature (CP)
Excitation Mode:	Selective
Fat Shift DIR:	Normal

---

## **SCAN TIMING**

Flip Angle:	111.0
TE:	42.0
Number of Echoes:	1
TR:	2500.0
Echo Train Length:	6
Receiver Bandwidth:	62.50

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Hip joint
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## **SAT**

***Fat/Water Saturation:***

***Fat Classic***

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**USER CVS**

User CV6:	None
User CV9:	None
User CV15:	None
User CV18:	None
User CV19:	1.00
User CV21:	None
User CV26:	1.00
User CV41:	None
TR Min:	1800.0
TR Max:	11000.0

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**Non-Viewable Parameters**

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# --Hip Preservation--

Details tab

Protocol notes

## --Hip Preservation--

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	3-PLANE

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, EDR, Fast, SS
Pulse Sequence:	Spin Echo

### Image Recon

Intensity Correction:	NONE
Intensity Filter:	None
Save Original:	Off

### SCAN RANGE

FOV:	40.0
Slice Thickness:	5.0
Slice Spacing:	5.0
No Phase Wrap:	1.00

### ACQ TIMING

Acq Voxel Size:	1.6 X 3.1 X 5.0
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<b>Freq:</b>	<b>256</b>
Phase:	128
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCAN TIMING**

TE:	80.0
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	62.50

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### **CONTRAST**

Contrast Yes/No:	No
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### **OTHERS**

Anatomical Region:	Hip joint
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### **GATING/TRIGGER**

Auto Trigger Type:	Off
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### **USER CVS**

User CV1:	1.00
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<b>User CV2:</b>	<b>240.00</b>
User CV13:	1.00
User CV16:	None
User CV39:	1.00

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## Non-Viewable Parameters

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# AX T1 LAVA FLEX

Details tab

Protocol notes

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## AX T1 LAVAFLEX

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	AXIAL

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### IMAGING PARAMETERS

Imaging Mode:	3D
Imaging Options:	EDR, Fast, ZIP512, ARC, Flex
Pulse Sequence:	LAVA
IDEAL:	7
ARC Phase:	2.00
ARC Slice:	2.00

---

### Image Recon

Recon DL Strength:	Off
Intensity Correction:	NONE
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	36.0
Slice Thickness:	0.50
Slices per Slab:	340
Overlap Locations:	0

**Number of Slices:** 1  
No Slab Wrap: 1.03  
No Phase Wrap: 1.00  
Slice Resolution(%): 50.00

---

### ACQ TIMING

Acq Voxel Size: 1.1 X 1.1 X 1.0  
Freq: 340  
Phase: 340  
Freq DIR: A/P  
NEX: 5.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Preset  
Excitation Mode: Selective

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### SCAN TIMING

Flip Angle: 12  
TE: Minimum  
Number of Echoes: 2  
Receiver Bandwidth: 166.67

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### CONTRAST

Contrast Yes/No: No

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### OTHERS

3D Geometry Correction: Off

***Anatomical Region:***

***Pelvis***

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**USER CVS**

User CV1:	1.00
User CV4:	None
User CV6:	1.00
User CV13:	None
User CV16:	None
User CV30:	1.00
User CV34:	70.00

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**Non-Viewable Parameters**

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# Ax T1 Hips

Details tab

Protocol notes

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## Ax T1 Hips

### PATIENT POSITION

Coil Configuration:	GE40chGEMPA, Inv16chCardiacAA
Plane:	AXIAL

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	FC, EDR, TRF, Fast, ARC
Pulse Sequence:	FSE-XL
ARC Phase:	1.50

---

### Image Recon

Recon DL Strength:	Medium
Intensity Correction:	PURE
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	38.0
Slice Thickness:	4.00
Slice Spacing:	1.0
Overlap Locations:	0
Number of Slices:	22

**No Phase Wrap:** 1.00

---

### **ACQ TIMING**

Acq Voxel Size: 1.3 X 1.7 X 4.0  
Freq: 288  
Phase: 224  
Freq DIR: R/L  
NEX: 1.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: Off  
Flow Comp Direction: Slice  
RF Drive Mode: Preset  
Excitation Mode: Selective  
Fat Shift DIR: Normal (L)

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### **SCAN TIMING**

Flip Angle: 111.0  
TE: 18.0  
Number of Echoes: 1  
TR: 830.0  
Echo Train Length: 4  
Receiver Bandwidth: 62.50

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### **CONTRAST**

Contrast Yes/No: No

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### **OTHERS**

**Anatomical Region:**

**Pelvis**

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**USER CVS**

User CV6:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	None
User CV26:	1.00
User CV29:	None
User CV40:	None
TR Min:	400.0
TR Max:	850.0

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**Non-Viewable Parameters**

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# 3-Plane Loc Knees GE Body

Details tab

Protocol notes

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## 3-Plane Loc Knees GE Body

### PATIENT POSITION

Coil Configuration: GE\_BODY

Plane: 3-PLANE

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### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: Seq, EDR, TRF, Fast, SS

Pulse Sequence: Spin Echo

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### Image Recon

Intensity Correction: NONE

Intensity Filter: None

Save Original: Off

---

### SCAN RANGE

FOV: 40.0

Slice Thickness: 5.0

Slice Spacing: 5.0

No Phase Wrap: 1.00

---

### ACQ TIMING

Acq Voxel Size: 1.6 X 3.1 X 5.0

<b>Freq:</b>	<b>256</b>
Phase:	128
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCAN TIMING**

TE:	80.0
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	62.50

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### **CONTRAST**

Contrast Yes/No:	No
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### **OTHERS**

Anatomical Region:	Hip joint
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### **GATING/TRIGGER**

Auto Trigger Type:	Off
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### **USER CVS**

User CV1:	1.00
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**User CV16:**

**None**

User CV39:

1.00

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**Non-Viewable Parameters**

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# Ax T1 Knees GE BODY

Details tab

Protocol notes

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## Ax T1 Knees GE BODY

### PATIENT POSITION

Coil Configuration: GE\_BODY

Plane: AXIAL

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### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: FC, EDR, TRF, Fast

Pulse Sequence: FSE-XL

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### Image Recon

Intensity Correction: NONE

Intensity Filter: None

Save Original: Off

---

### SCAN RANGE

FOV: 38.0

Slice Thickness: 4.0

Slice Spacing: 1.0

Number of Slices: 17

No Phase Wrap: 1.00

---

### ACQ TIMING

<b>Acq Voxel Size:</b>	<b>1.3 X 1.7 X 4.0</b>
Freq:	288
Phase:	224
Freq DIR:	R/L
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
Flow Comp Direction:	Slice
RF Drive Mode:	Preset
Excitation Mode:	Selective
Fat Shift DIR:	Normal (L)

---

### **SCAN TIMING**

Flip Angle:	111
TE:	18.0
Number of Echoes:	1
TR:	747.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

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### **CONTRAST**

Contrast Yes/No:	No
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### **OTHERS**

Anatomical Region:	Pelvis
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### **GATING/TRIGGER**

**Auto Trigger Type:** *Off*

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**USER CVS**

User CV6:	None
User CV7:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	None
User CV22:	1.00
User CV30:	1.00
User CV39:	1.00
TR Min:	400.0
TR Max:	850.0

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**Non-Viewable Parameters**

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