

# KNEE Routine w/DL NEW SIGNA Artist

## Technical Instructions

Rt 3pl Loc

Lt 3pl Loc

Sag PD DL

Sag T2 CI Fat DL

Ax T2 CI Fat DL

Cor PD CI Fat DL

Sag PD Cube Fat DL

MultiPlanar Reconstruction (MPR)

---Pain/Menisci/Ligaments---

Cor PD DL

---AVN/OCD/FX---

Cor T1 DL

---opt---

Obl Ax PD CI Fat meniscus

---For METAL---

SAG STIR DL

---synovitis---

Pre Ax T1 Fat DL

+C Ax T1 Fat DL

+C Sag T1 Fat DL

---for motion---

**Sag PD PROPELLER**

**Sag T2 FS PROPELLER**

**Ax T2 FS PROPELLER**

**Cor PD FS PROPELLER**

**Cor PD PROPELLER**

**Cor T1 PROPELLER**

# Rt 3pl Loc

Details tab

Protocol notes

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## Rt 3pl Loc

### PATIENT POSITION

Coil Configuration: QED16chKnee

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: 28.0

Slice Thickness: 5.00

Slice Spacing: 8.0

Overlap Locations: 0

No Phase Wrap: 2.00

## **ACQ TIMING**

Acq Voxel Size:	1.1 X 1.3 X 5.0
Freq:	256
Phase:	224
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

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## **SCAN TIMING**

TE:	Minimum
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	83.33

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## **CONTRAST**

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

Anatomical Region:	Knee
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## **USER CVS**

User CV1:	1.00
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# Lt 3pl Loc

Details tab

Protocol notes

## Lt 3pl Loc

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	3-PLANE

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

FOV:	28.0
Slice Thickness:	5.0
Slice Spacing:	8.0
No Phase Wrap:	2.00

### ACQ TIMING

<b>Acq Voxel Size:</b>	<b>1.1 X 1.3 X 5.0</b>
Freq:	256
Phase:	224
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

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### **SCAN TIMING**

TE:	Minimum
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	83.33

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### **CONTRAST**

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

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

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

<b>User CV1:</b>	<b>1.00</b>
User CV16:	None
User CV39:	1.00

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**Non-Viewable Parameters**

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# Sag PD DL

Details tab

Protocol notes

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## Sag PD DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

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### IMAGING PARAMETERS

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

---

### Image Recon

Recon DL Strength:	High
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	27

**No Phase Wrap:** 2.00

---

### **ACQ TIMING**

Acq Voxel Size: 0.4 X 0.4 X 3.0  
Freq: 384  
Phase: 312  
Freq DIR: Swap  
NEX: 1.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: On  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal

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### **SCAN TIMING**

Flip Angle: 160.0  
TE: 20.0  
Number of Echoes: 1  
TR: 1800.0  
Echo Train Length: 3  
Receiver Bandwidth: 62.50

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### **AIRx**

Anatomical Reference: None  
Anatomical Plane: None

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### **CONTRAST**

**Contrast Yes/No:** **No**

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**OTHERS**

Anatomical Region: Knee

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**USER CVS**

User CV6:	None
User CV9:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	1.00
User CV26:	1.00
TR Min:	1800.0
TR Max:	10000.0

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**Non-Viewable Parameters**

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# Sag T2 CI Fat DL

Details tab

Protocol notes

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## Sag T2 CI Fat DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
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:	High
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	30

**No Phase Wrap:** 2.00

---

### **ACQ TIMING**

Acq Voxel Size: 0.4 X 0.5 X 3.0  
Freq: 320  
Phase: 256  
Freq DIR: Swap  
NEX: 1.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: On  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal

---

### **SCAN TIMING**

Flip Angle: 160.0  
TE: 80.0  
Number of Echoes: 1  
TR: 4334.0  
Echo Train Length: 10  
Receiver Bandwidth: 62.50

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### **AIRx**

Anatomical Reference: None  
Anatomical Plane: None

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### **CONTRAST**

**Contrast Yes/No:** **No**

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**OTHERS**

Anatomical Region: Knee

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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: 0.80

User CV21: 1.00

User CV26: 1.00

TR Min: 2800.0

TR Max: 5000.0

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**Non-Viewable Parameters**

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# Ax T2 CI Fat DL

Details tab

Protocol notes

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## Ax T2 CI Fat DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

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### IMAGING PARAMETERS

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

---

### Image Recon

Recon DL Strength:	High
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	18.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
No Phase Wrap:	1.00

## **ACQ TIMING**

Acq Voxel Size:	0.6 X 0.7 X 3.0
Freq:	320
Phase:	256
Freq DIR:	Swap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	On
Flow Comp Direction:	Slice
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal

---

## **SCAN TIMING**

Flip Angle:	160.0
TE:	88.0
Number of Echoes:	1
TR:	5800.0
Echo Train Length:	15
Receiver Bandwidth:	62.50

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## **AIRx**

Anatomical Reference:	None
Anatomical Plane:	None

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## **CONTRAST**

Contrast Yes/No:	No
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**OTHERS**

Anatomical Region: Knee

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**SAT**

Fat/Water Saturation: Fat Classic

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**USER CVS**

User CV6: None  
User CV15: None  
User CV18: None  
User CV19: 1.00  
User CV21: 1.00  
User CV26: 1.00  
TR Min: 2800.0  
TR Max: 5000.0

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**Non-Viewable Parameters**

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# Cor PD CI Fat DL

Details tab

Protocol notes

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## Cor PD CI Fat DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
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:	High
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.0
Overlap Locations:	0
Number of Slices:	32

**No Phase Wrap:** 1.00

---

### **ACQ TIMING**

Acq Voxel Size: 0.4 X 0.5 X 3.0  
Freq: 320  
Phase: 288  
Freq DIR: S/I  
NEX: 2.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: On  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

### **SCAN TIMING**

Flip Angle: 160.0  
TE: 42.0  
Number of Echoes: 1  
TR: 2818.0  
Echo Train Length: 6  
Receiver Bandwidth: 62.50

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### **AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

### **CONTRAST**

**Contrast Yes/No:** **No**

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**OTHERS**

Anatomical Region: Knee

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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

TR Min: 1800.0

TR Max: 3000.0

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**Non-Viewable Parameters**

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# Sag PD Cube Fat DL

Details tab

Protocol notes

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## Sag PD Cube Fat DL

### PATIENT POSITION

Coil Configuration:	Neo16chFlexM
Plane:	OBLIQUE

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### IMAGING PARAMETERS

Imaging Mode:	3D
Imaging Options:	EDR, Fast, ZIP512, FR, ARC
Pulse Sequence:	Cube
ARC Phase:	2.00
ARC Slice:	2.00

---

### Image Recon

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

---

### SCAN RANGE

FOV:	16.0
Slice Thickness:	0.80
Slices per Slab:	160
Overlap Locations:	0
Number of Slices:	1

<b>No Slab Wrap:</b>	<b>1.03</b>
No Phase Wrap:	1.00
Slice Resolution(%):	100.00

---

### **ACQ TIMING**

Acq Voxel Size:	0.8 X 0.8 X 0.8
Freq:	192
Phase:	192
Freq DIR:	S/I
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Non-Selective
Fat Shift DIR:	Normal (S)

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### **SCAN TIMING**

TE:	Minimum
Number of Echoes:	1
TR:	1050.0
Echo Train Length:	30
Receiver Bandwidth:	35.71

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### **TRACKER**

Tracker Length:	200.0
Tracker Thickness:	20.0

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## **AIRx**

Anatomical Reference:	Routine Knee
Anatomical Plane:	Sagittal

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## **CONTRAST**

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

3D Geometry Correction:	Off
Anatomical Region:	Knee

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## **SAT**

Fat/Water Saturation:	Fat
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## **USER CVS**

User CV5:	0.90
User CV22:	None
User CV32:	1.00
User CV34:	100.00

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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 PD Cube Fat DL

#### Axial

Field of View:	16.0
Spacing:	0.83
Thickness:	0.83
Save Direction:	S -> I
Render Mode:	Average
Series Description:	Ax Reformat

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#### Sagittal

Field of View:	16.0
Spacing:	0.83
Thickness:	0.83
Save Direction:	L -> R
Render Mode:	Average
Series Description:	Sag Reformat

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#### Coronal

Field of View:	16.0
Spacing:	0.83
Thickness:	0.83
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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# ---Pain/Menisci/Ligaments---

Details tab

Protocol notes

## ---Pain/Menisci/Ligaments---

### PATIENT POSITION

Coil Configuration: QED16chKnee

Plane: 3-PLANE

### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: Seq, Fast

Pulse Sequence: Gradient Echo

### Image Recon

Intensity Correction: NONE

Intensity Filter: None

### SCAN RANGE

FOV: 20.0

Slice Thickness: 5.0

Slice Spacing: 5.0

No Phase Wrap: 1.00

### ACQ TIMING

Acq Voxel Size: 0.8 X 1.6 X 5.0

Freq: 256

<b>Phase:</b>	<b>128</b>
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off

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### **CONTRAST**

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

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

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

TR Min:	-
TR Max:	-

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**Non-Viewable Parameters**

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# Cor PD DL

Details tab

Protocol notes

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## Cor PD DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
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:	High
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.0
Overlap Locations:	0
Number of Slices:	32

**No Phase Wrap:** 1.00

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### **ACQ TIMING**

Acq Voxel Size: 0.4 X 0.5 X 3.0  
Freq: 320  
Phase: 288  
Freq DIR: S/I  
NEX: 1.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: On  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

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### **SCAN TIMING**

Flip Angle: 160.0  
TE: 20.0  
Number of Echoes: 1  
TR: 1800.0  
Echo Train Length: 4  
Receiver Bandwidth: 31.25

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### **AIRx**

Anatomical Reference: None  
Anatomical Plane: None

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### **CONTRAST**

**Contrast Yes/No:** **No**

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**OTHERS**

Anatomical Region: Knee

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**USER CVS**

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

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**Non-Viewable Parameters**

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# ---AVN/OCD/FX---

Details tab

Protocol notes

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## ---AVN/OCD/FX---

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	3-PLANE

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, Fast
Pulse Sequence:	Gradient Echo

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### Image Recon

Intensity Correction:	NONE
Intensity Filter:	None

---

### SCAN RANGE

FOV:	20.0
Slice Thickness:	5.0
Slice Spacing:	5.0
No Phase Wrap:	1.00

---

### ACQ TIMING

Acq Voxel Size:	0.8 X 1.6 X 5.0
Freq:	256

<b>Phase:</b>	<b>128</b>
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off

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### **CONTRAST**

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

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

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

TR Min:	-
TR Max:	-

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**Non-Viewable Parameters**

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# Cor T1 DL

Details tab

Protocol notes

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## Cor T1 DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

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### IMAGING PARAMETERS

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

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.0
Overlap Locations:	0
Number of Slices:	32

**No Phase Wrap:** 1.00

---

**ACQ TIMING**

Acq Voxel Size: 0.4 X 0.5 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: On  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

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**SCAN TIMING**

Flip Angle: 160.0  
TE: 20.0  
Number of Echoes: 1  
TR: 700.0  
Echo Train Length: 3  
Receiver Bandwidth: 62.50

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**AIRx**

Anatomical Reference: None  
Anatomical Plane: None

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**CONTRAST**

**Contrast Yes/No:** **No**

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**OTHERS**

Anatomical Region: Knee

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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

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**Non-Viewable Parameters**

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Details tab

Protocol notes

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## ---Eastpark Ax PD no CUBE---

### PATIENT POSITION

Coil Configuration: QED16chKnee

Plane: 3-PLANE

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### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: Seq, Fast

Pulse Sequence: Gradient Echo

---

### Image Recon

Intensity Correction: NONE

Intensity Filter: None

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### SCAN RANGE

FOV: 20.0

Slice Thickness: 5.0

Slice Spacing: 5.0

No Phase Wrap: 1.00

---

### ACQ TIMING

Acq Voxel Size: 0.8 X 1.6 X 5.0

Freq: 256

<b>Phase:</b>	<b>128</b>
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off

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### **CONTRAST**

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

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

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

TR Min:	-
TR Max:	-

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**Non-Viewable Parameters**

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# Obl Ax PD CI Fat meniscus

Details tab

Protocol notes

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## Obl Ax PD CI Fat meniscus

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

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### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	TRF, Fast, ZIP512
Pulse Sequence:	FSE-XL

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### Image Recon

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

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### SCAN RANGE

FOV:	18.0
Slice Thickness:	1.10
Slice Spacing:	0.0
Overlap Locations:	0
Number of Slices:	15
No Phase Wrap:	1.00

## **ACQ TIMING**

Acq Voxel Size:	0.7 X 0.8 X 1.1
Freq:	256
Phase:	224
Freq DIR:	Unswap
NEX:	2.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	On
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal

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## **SCAN TIMING**

Flip Angle:	160.0
TE:	42.0
Number of Echoes:	1
TR:	1800.0
Echo Train Length:	6
Receiver Bandwidth:	41.67

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## **AIRx**

Anatomical Reference:	None
Anatomical Plane:	None

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## **CONTRAST**

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

Anatomical Region: Knee

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## **SAT**

Fat/Water Saturation: Fat Classic

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## **USER CVS**

User CV6:	None
User CV7:	1.00
User CV9:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	None
User CV26:	1.00
TR Min:	1800.0
TR Max:	10000.0

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**Non-Viewable Parameters**

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# ---For METAL---

Details tab

Protocol notes

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## ---For METAL---

### PATIENT POSITION

Coil Configuration: QED16chKnee

Plane: 3-PLANE

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### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: Seq, Fast

Pulse Sequence: Gradient Echo

---

### Image Recon

Intensity Correction: NONE

Intensity Filter: None

---

### SCAN RANGE

FOV: 20.0

Slice Thickness: 5.0

Slice Spacing: 5.0

No Phase Wrap: 1.00

---

### ACQ TIMING

Acq Voxel Size: 0.8 X 1.6 X 5.0

Freq: 256

<b>Phase:</b>	<b>128</b>
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off

---

### **CONTRAST**

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

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

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

TR Min:	-
TR Max:	-

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**Non-Viewable Parameters**

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# SAG STIR DL

Details tab

Protocol notes

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## SAG STIR DL

### PATIENT POSITION

Coil Configuration: QED16chKnee  
Plane: OBLIQUE

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### IMAGING PARAMETERS

Imaging Mode: 2D  
Imaging Options: FC, Seq, EDR, TRF, Fast, ARC, IrP  
Pulse Sequence: FSE-XL  
PSD Name: fse-xl  
ARC Phase: 2.00

---

### Image Recon

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

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### SCAN RANGE

FOV: 14.0  
Slice Thickness: 3.00  
Slice Spacing: 0.5  
Overlap Locations: 0  
Number of Slices: 33

**No Phase Wrap:** 1.80

---

### **ACQ TIMING**

Acq Voxel Size: 0.4 X 0.5 X 3.0  
Freq: 320  
Phase: 256  
Freq DIR: S/I  
NEX: 1.00  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: On  
Flow Comp Direction: Freq  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (S)

---

### **SCAN TIMING**

Flip Angle: 160  
TE: 42.0  
Number of Echoes: 1  
TR: 4799.0  
TI: 150  
Echo Train Length: 16  
Receiver Bandwidth: 62.50

---

### **AIRx**

Anatomical Reference: None  
Anatomical Plane: None

## **CONTRAST**

Contrast Yes/No: No

---

## **OTHERS**

Anatomical Region: Knee

---

## **SAT**

SAT Location S: Default

SAT Location I: Default

---

## **USER CVS**

User CV8: None

User CV12: 1.00

User CV15: None

User CV18: None

User CV21: None

User CV30: 1.00

User CV39: 1.00

TR Min: 2000.0

TR Max: 6000.0

---

**Non-Viewable Parameters**

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# ---synovitis---

Details tab

Protocol notes

---

## ---synovitis---

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	3-PLANE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, Fast
Pulse Sequence:	Gradient Echo

---

### Image Recon

Intensity Correction:	NONE
Intensity Filter:	None

---

### SCAN RANGE

FOV:	20.0
Slice Thickness:	5.0
Slice Spacing:	5.0
No Phase Wrap:	1.00

---

### ACQ TIMING

Acq Voxel Size:	0.8 X 1.6 X 5.0
Freq:	256

<b>Phase:</b>	<b>128</b>
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off

---

### **CONTRAST**

Contrast Yes/No:	No
------------------	----

---

### **OTHERS**

Anatomical Region:	Knee
--------------------	------

---

### **GATING/TRIGGER**

Auto Trigger Type:	Off
--------------------	-----

---

### **USER CVS**

TR Min:	-
TR Max:	-

---

**Non-Viewable Parameters**

ñ

# Pre Ax T1 Fat DL

Details tab

Protocol notes

---

## Pre Ax T1 Fat DL

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	TRF, Fast, ZIP512
Pulse Sequence:	FSE-XL

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	4.00
Slice Spacing:	1.0
Overlap Locations:	0
No Phase Wrap:	1.00

## **ACQ TIMING**

Acq Voxel Size:	0.5 X 0.6 X 4.0
Freq:	256
Phase:	224
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	On
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal

---

## **SCAN TIMING**

Flip Angle:	160.0
TE:	20.0
Number of Echoes:	1
TR:	600.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

---

## **AIRx**

Anatomical Reference:	None
Anatomical Plane:	None

---

## **CONTRAST**

Contrast Yes/No:	No
------------------	----

---

## ***OTHERS***

Anatomical Region: Knee

---

## **SAT**

Fat/Water Saturation: Fat

---

## **USER CVS**

User CV6: None

User CV9: None

User CV13: None

User CV15: None

User CV16: None

User CV18: None

User CV19: 1.00

User CV21: None

---

**Non-Viewable Parameters**

ñ

# +C Ax T1 Fat DL

Details tab

Protocol notes

---

## +C Ax T1 Fat DL

### PATIENT POSITION

Coil Configuration: QED16chKnee

Plane: OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: TRF, Fast, ZIP512

Pulse Sequence: FSE-XL

---

### Image Recon

Recon DL Strength: Medium

Intensity Correction: SCENIC

Intensity Filter: None

Save Original: Off

---

### SCAN RANGE

FOV: 14.0

Slice Thickness: 4.00

Slice Spacing: 1.0

Overlap Locations: 0

No Phase Wrap: 1.00

## **ACQ TIMING**

Acq Voxel Size:	0.5 X 0.6 X 4.0
Freq:	256
Phase:	224
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	On
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal

---

## **SCAN TIMING**

Flip Angle:	160.0
TE:	20.0
Number of Echoes:	1
TR:	600.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

---

## **AIRx**

Anatomical Reference:	None
Anatomical Plane:	None

---

## **CONTRAST**

Contrast Yes/No:	Yes
------------------	-----

---

**OTHERS**

Anatomical Region: Knee

---

**SAT**

Fat/Water Saturation: Fat

---

**USER CVS**

User CV6: None  
User CV9: None  
User CV13: None  
User CV15: None  
User CV16: None  
User CV18: None  
User CV19: 1.00  
User CV21: None

---

**Non-Viewable Parameters**

ñ

# +C Sag T1 Fat DL

Details tab

Protocol notes

---

## +C Sag T1 Fat DL

### PATIENT POSITION

Coil Configuration: QED16chKnee

Plane: OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: TRF, Fast, ZIP512

Pulse Sequence: FSE-XL

---

### Image Recon

Recon DL Strength: Medium

Intensity Correction: SCENIC

Intensity Filter: None

Save Original: Off

---

### SCAN RANGE

FOV: 14.0

Slice Thickness: 3.00

Slice Spacing: 0.5

Overlap Locations: 0

No Phase Wrap: 1.00

## **ACQ TIMING**

Acq Voxel Size:	0.5 X 0.6 X 3.0
Freq:	256
Phase:	224
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	On
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal

---

## **SCAN TIMING**

Flip Angle:	160.0
TE:	20.0
Number of Echoes:	1
TR:	700.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

---

## **AIRx**

Anatomical Reference:	None
Anatomical Plane:	None

---

## **CONTRAST**

Contrast Yes/No:	Yes
------------------	-----

---

## **OTHERS**

Anatomical Region: Knee

---

## **SAT**

Fat/Water Saturation: Fat

---

## **USER CVS**

User CV6:	None
User CV7:	None
User CV9:	None
User CV13:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	None

---

**Non-Viewable Parameters**

ñ

# ---for motion---

Details tab

Protocol notes

---

## ---for motion---

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	3-PLANE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, Fast
Pulse Sequence:	Gradient Echo

---

### Image Recon

Intensity Correction:	NONE
Intensity Filter:	None

---

### SCAN RANGE

FOV:	20.0
Slice Thickness:	5.0
Slice Spacing:	5.0
No Phase Wrap:	1.00

---

### ACQ TIMING

Acq Voxel Size:	0.8 X 1.6 X 5.0
Freq:	256

<b>Phase:</b>	<b>128</b>
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off

---

### **CONTRAST**

Contrast Yes/No:	No
------------------	----

---

### **OTHERS**

Anatomical Region:	Knee
--------------------	------

---

### **GATING/TRIGGER**

Auto Trigger Type:	Off
--------------------	-----

---

### **USER CVS**

TR Min:	-
TR Max:	-

---

**Non-Viewable Parameters**

ñ

# Sag PD PROPELLER

Details tab

Protocol notes

---

## Sag PD PROPELLER

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, FR, ARC
Pulse Sequence:	PROPELLER
ARC Phase:	3.00

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	25

**No Phase Wrap:** 1.50

---

**ACQ TIMING**

Acq Voxel Size: 0.5 X 0.5 X 3.0  
Freq: 288  
Freq DIR: S/I  
NEX: 1.50  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

**SCAN TIMING**

Flip Angle: 110.0  
TE: 20.0  
Number of Echoes: 1  
TR: 2882.0  
Echo Train Length: 10  
Receiver Bandwidth: 62.50

---

**AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

**CONTRAST**

Contrast Yes/No: No

---

## ***OTHERS***

Anatomical Region: Knee

---

## **USER CVS**

User CV6: None

User CV15: None

User CV26: 1.00

TR Min: 1800.0

TR Max: 6000.0

---

**Non-Viewable Parameters**

ñ

# Sag T2 FS PROPELLER

Details tab

Protocol notes

---

## Sag T2 FS PROPELLER

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, ARC
Pulse Sequence:	PROPELLER
ARC Phase:	3.00

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	25

**No Phase Wrap:** 1.50

---

### **ACQ TIMING**

Acq Voxel Size: 0.5 X 0.5 X 3.0  
Freq: 288  
Freq DIR: S/I  
NEX: 1.50  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

### **SCAN TIMING**

Flip Angle: 90.0  
TE: 80.0  
Number of Echoes: 1  
TR: 6325.0  
Echo Train Length: 24  
Receiver Bandwidth: 62.50

---

### **AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

### **CONTRAST**

Contrast Yes/No: No

---

**OTHERS**

Anatomical Region: Knee

---

**SAT**

Fat/Water Saturation: Fat Classic

---

**USER CVS**

User CV6: None  
User CV15: None  
User CV16: None  
User CV19: 0.80  
User CV26: 1.00  
TR Min: 2500.0  
TR Max: 8000.0

---

**Non-Viewable Parameters**

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# Ax T2 FS PROPELLER

Details tab

Protocol notes

---

## Ax T2 FS PROPELLER

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, ARC
Pulse Sequence:	PROPELLER
ARC Phase:	3.00

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	25

**No Phase Wrap:** 1.50

---

**ACQ TIMING**

Acq Voxel Size: 0.5 X 0.5 X 3.0  
Freq: 288  
Freq DIR: S/I  
NEX: 1.50  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

**SCAN TIMING**

Flip Angle: 90.0  
TE: 88.0  
Number of Echoes: 1  
TR: 6325.0  
Echo Train Length: 24  
Receiver Bandwidth: 62.50

---

**AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

**CONTRAST**

Contrast Yes/No: No

---

**OTHERS**

Anatomical Region: Knee

---

**SAT**

Fat/Water Saturation: Fat Classic

---

**USER CVS**

User CV6: None  
User CV15: None  
User CV16: None  
User CV19: 0.80  
User CV26: 1.00  
TR Min: 2500.0  
TR Max: 8000.0

---

**Non-Viewable Parameters**

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# Cor PD FS PROPELLER

Details tab

Protocol notes

---

## Cor PD FS PROPELLER

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, FR, ARC
Pulse Sequence:	PROPELLER
ARC Phase:	3.00

---

### Image Recon

Recon DL Strength:	High
Intensity Correction:	SCENIC
Intensity Filter:	None
Save Original:	Off

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	25

**No Phase Wrap:** 1.50

---

**ACQ TIMING**

Acq Voxel Size: 0.5 X 0.5 X 3.0  
Freq: 288  
Freq DIR: S/I  
NEX: 1.50  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

**SCAN TIMING**

Flip Angle: 110.0  
TE: 40.0  
Number of Echoes: 1  
TR: 2951.0  
Echo Train Length: 10  
Receiver Bandwidth: 62.50

---

**AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

**CONTRAST**

Contrast Yes/No: No

---

**OTHERS**

Anatomical Region: Knee

---

**SAT**

Fat/Water Saturation: Fat Classic

---

**USER CVS**

User CV6: None  
User CV15: None  
User CV19: 0.80  
User CV26: 1.00  
TR Min: 1800.0  
TR Max: 6000.0

---

**Non-Viewable Parameters**

ñ

# Cor PD PROPELLER

Details tab

Protocol notes

---

## Cor PD PROPELLER

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, FR, ARC
Pulse Sequence:	PROPELLER
ARC Phase:	3.00

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	25

**No Phase Wrap:** 1.50

---

**ACQ TIMING**

Acq Voxel Size: 0.5 X 0.5 X 3.0  
Freq: 288  
Freq DIR: S/I  
NEX: 1.50  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

**SCAN TIMING**

Flip Angle: 110.0  
TE: 20.0  
Number of Echoes: 1  
TR: 2882.0  
Echo Train Length: 10  
Receiver Bandwidth: 62.50

---

**AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

**CONTRAST**

Contrast Yes/No: No

---

**OTHERS**

Anatomical Region: Knee

---

**USER CVS**

User CV6: None  
User CV15: None  
User CV26: 1.00  
TR Min: 1800.0  
TR Max: 6000.0

---

**Non-Viewable Parameters**

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# Cor T1 PROPELLER

Details tab

Protocol notes

---

## Cor T1 PROPELLER

### PATIENT POSITION

Coil Configuration:	QED16chKnee
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Imaging Options:	EDR, TRF, Fast, ARC
Pulse Sequence:	PROPELLER
ARC Phase:	3.00

---

### Image Recon

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

---

### SCAN RANGE

FOV:	14.0
Slice Thickness:	3.00
Slice Spacing:	0.3
Overlap Locations:	0
Number of Slices:	25

**No Phase Wrap:** 1.50

---

**ACQ TIMING**

Acq Voxel Size: 0.5 X 0.5 X 3.0  
Freq: 288  
Freq DIR: S/I  
NEX: 1.50  
# of Acq. Before Pause: 0  
Auto Shim: Auto  
Phase Correct: Off  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

---

**SCAN TIMING**

Flip Angle: 90.0  
TE: Min Full  
Number of Echoes: 1  
TR: 849.0  
Echo Train Length: 5  
Receiver Bandwidth: 62.50

---

**AIRx**

Anatomical Reference: None  
Anatomical Plane: None

---

**CONTRAST**

Contrast Yes/No: No

---

## ***OTHERS***

Anatomical Region: Knee

---

## **USER CVS**

User CV6: None  
User CV15: None  
User CV16: 1.00  
User CV26: 1.00  
TR Min: 400.0  
TR Max: 850.0

---

**Non-Viewable Parameters**

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