

**RIH – PEDI SHOULDER CT  
SIEMENS DEFINITION AS20 PROTOCOL**

**Indication: fracture, dislocation, osteomyelitis, bone injury, bone tumor.**

<b>Position/Landmark</b>	Supine , feet first Zero Appropriately																														
<b>Topogram Direction</b>	Craniocaudal																														
<b>Respiratory Phase</b>	Suspension																														
<b>Scan Type</b>	Helical																														
<b>Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization</b>	Care kV 100 / Care Dose4D 65 / 1 sec .8:1 , 10.00mm 3 / 5																														
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 20 = 12.5mm																														
<b>Average Tube Output</b>	ctdi – 5.0mGy dlp – 140mGy.cm																														
<b>Helical Set</b> Slice Thickness/ Spacing Algorithm Recon Destination	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>recon</th> <th>body part</th> <th>thickness/ spacing</th> <th>algorithm</th> <th>recon destination .</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><b>axial soft shoulder</b></td> <td>3mm x 3mm</td> <td>I40s medium</td> <td>pac</td> </tr> <tr> <td>2</td> <td><b>axial bony shoulder</b></td> <td>3mm x 3mm</td> <td>I70h very sharp</td> <td>pac</td> </tr> <tr> <td>3</td> <td><b>coronal shoulder</b></td> <td>3mm x 3mm</td> <td>I70h very sharp</td> <td>pac</td> </tr> <tr> <td>4</td> <td><b>sagittal shoulder</b></td> <td>3mm x 3mm</td> <td>I70h very sharp</td> <td>pac</td> </tr> <tr> <td>5</td> <td>thin shoulder</td> <td>.75mm x .7mm</td> <td>I70h very sharp</td> <td>terarecon</td> </tr> </tbody> </table>	recon	body part	thickness/ spacing	algorithm	recon destination .	1	<b>axial soft shoulder</b>	3mm x 3mm	I40s medium	pac	2	<b>axial bony shoulder</b>	3mm x 3mm	I70h very sharp	pac	3	<b>coronal shoulder</b>	3mm x 3mm	I70h very sharp	pac	4	<b>sagittal shoulder</b>	3mm x 3mm	I70h very sharp	pac	5	thin shoulder	.75mm x .7mm	I70h very sharp	terarecon
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<b>Scan Start / End Locations</b>	determined by technologist or radiologist to include the anatomy of interest																														
<b>DFOV</b>	18cm decrease appropriately																														
<b>IV Contrast Volume / Type / Rate</b>	75mL Iohexol (Omnipaque 350) / 2mL per second if needed																														
<b>Scan Delay</b>	65 seconds																														
<b>2D/3D Technique Used</b>	Workstream 4D mpr of 3mm x 3mm <b>coronal and sagittal shoulder</b> series (auto-batch off), average mode, auto-transferred to PACS																														
<b>Comments:</b> Recon 5 is a thin helical volume of the shoulder that is archived to the TeraRecon server.																															
<b>Images required in PACS</b>	Topograms, 3mm x 3mm axial shoulder bone, 3mm x 3mm axial shoulder standard, 3mm x 3mm sagittal shoulder, 3mm x 3mm coronal shoulder, Patient Protocol																														