

## DETAILED INSPECTION – Catch Point

<b>Location:</b>	<b>Turnout Number:</b>	<b>Equipment No.:</b>	<b>Kilometrage:</b>
<b>Inspector Name:</b>	<b>Date:</b>	<b>Work Order:</b>	<b>Track:</b>

OVERVIEW INSPECTION These tasks apply generically to all points and crossings assemblies				
ELEMENT	MEASURE	COMMENT	CONDITION	RESPONSE
Component Damage			Any component loose, missing or broken.	A6 Increase monitoring, prioritise repair
Track geometry, Pumping in Critical Areas			5 – 20 mm	A6 Increase monitoring, prioritise repair
			20 mm or more	A6 Increase monitoring, prioritise repair
Track Geometry, Overall Condition			Visible deterioration	A6 Increase monitoring, prioritise repair
			Single Measured defect	- ETS-05-00 5.4 table 5-15
			Multiple measured defects	- ETS-05-00 5.4 table 5-15
Bearers and Fasteners, Ineffective in Critical Areas			1	A6 Increase monitoring, prioritise repair
			2 consecutive	A3 40 km/h TSR until repaired
			> 2 consecutive	A1 10 km/h TSR until repaired
Bearers and Fasteners, Overall Condition			< 20% loose clips, screws or spikes, timbers degraded	A6 Increase monitoring, prioritise repair
			Pads and insulators skewed some fasteners missing 1 in 4 timbers deteriorating	A6 Increase monitoring, prioritise repair
			> 50% loose clips, screws or spikes, 1 in 3 timbers degraded missing fasteners	A6 Increase monitoring, prioritise repair
Ballast, condition and profile			Fines on surface. Ballast shoulder reduced.	A6 Increase monitoring, prioritise repair
			Trapped moisture, mud and track pumping. Ballast low, ends of multiple bearers visible.	A6 Increase monitoring, prioritise repair
Ballast, Excess			Ballast < 25 mm from moving parts. Ballast loose on sleepers.	A6 Increase monitoring, prioritise repair
			Ballast touching moving parts or ballast obstructing inspection of fasteners. Ballast fallen into trough.	A6 Increase monitoring, prioritise repair

OVERVIEW INSPECTION These tasks apply generically to all points and crossings assemblies				
ELEMENT	MEASURE	COMMENT	CONDITION	RESPONSE
Rail, Creep			Any of below Misalignment at heel Signs of rail movement Blade up out of square. Greater than 15 mm clearance of moving drive locking and detection equipment from fixed parts. Anti creep device not correctly positioned for current rail temp	A6 Increase monitoring, prioritise repair
Rail, Condition			Irregular contact band. Minor RCF, wheel burns or top / side wear. Evidence of bent rail. Severe RCF likely to interfere with Ultrasonic testing. Advanced wear. Corrugations. Other rail defects requiring a response.	A6 Increase monitoring, prioritise repair A6 Increase monitoring, prioritise repair A6 Increase monitoring, prioritise repair
Rail, Remaining Head Height			35mm to 26 mm 24 to 26 mm and without defect per Section 1 Rail Head height defect	A7 Routine scheduled inspection A6 Increase monitoring, prioritise repair - Section 1 Rail

POINTS INSPECTION					
ELEMENT	MEASURE	COMMENT	CONDITION		RESPONSE ACTION
Switch Opening, actual			85 mm to < 95 mm	A6	Increase monitoring, prioritise repair
			80 mm to < 85 mm	A2	20 km/h TSR until repaired
			< 80 mm	A1	10 km/h TSR until repaired
Track gauge (at the switch tip)			≥ 1456 mm	-	Assess as per ETS-05-00 Table 5-15
			1445 mm to < 1456 mm	A6	Increase monitoring. Prioritise repair
			1430 mm to < 1445 mm	A7	Routine scheduled inspection
			1427 mm to < 1430 mm	A4	60/65 km/h TSR until repaired
			1425 mm to < 1427 mm	A2	20 km/h TSR until repaired
< 1425 mm				A1	10 km/h TSR until repaired
Back of switch blade to opposite switch gauge face at tip			1360 mm to < 1365 mm	A6	Increase monitoring. Prioritise repair
			1365 mm to < 1370 mm	A2	20 km/h TSR until repaired
			≥ 1370 mm	A1	10 km/h TSR until repaired
Back of switch blade to opposite switch blade at supplementary drive or stretcher, measurement			1370 mm to < 1380 mm	A6	Increase monitoring. Prioritise repair
			1380 mm to < 1390 mm	A3	40 km/h TSR until repaired
			1390 mm to < 1400 mm	A2	20 km/h TSR until repaired
			> 1400 mm	A1	10 km/h TSR until repaired
Throat Opening (Back of switch blade to stock rail at the junction of heads)			≥ 40 mm	A7	Routine scheduled inspection
			35 mm to < 40 mm	A3	40 km/h TSR until repaired
			< 35 mm	A1	10 km/h TSR until repaired
Switch blade and stock rail condition, metal flow			1 mm or more flow	A6	Increase monitoring. Prioritise repair
Switch blade and stock rail condition, surface condition			Visible damage, breakout of cracks, moderate to severe RCF and head checking	A6	Increase monitoring. Prioritise repair

POINTS INSPECTION					
ELEMENT	MEASURE	COMMENT	CONDITION		RESPONSE ACTION
Switch Alignment			Bends evident, possible previous repair. Gap to switch stops and/or gap switch blade to stock rail through (excepting toe) 5 -10 mm.	A3	40 km/h TSR until repaired
			Bent, gaps greater 10 mm	A1	10 km/h TSR until repaired
Switch blade closed gap			1 mm to 3 mm	A6	Increase monitoring. Prioritise repair
			>3 mm	A1	10 km/h TSR until repaired
Switch width at the tip, conventional only			3 mm to < 4 mm	A6	Increase monitoring. Prioritise repair
			> 4 mm to < 5 mm	A3	40 km/h TSR until repaired
			5 mm or more	A1	10 km/h TSR until repaired
Switch height at the tip, measured using ARTC switch tip gauge, conventional only			> 10 mm to < 12 mm	A6	Increase monitoring. Prioritise repair
			> 8 mm to < 10 mm	A3	40 km/h TSR until repaired
			8 mm or less	A1	10 km/h TSR until repaired
Switch height at the tip, measured with ruler, conventional only			> 12 mm to < 13 mm	A6	Increase monitoring. Prioritise repair
			12 mm or less	A1	10 km/h TSR until repaired
Switch Tip Wheel Clearance, undercut only			2 mm to > 1 mm	A6	Increase monitoring. Prioritise repair
			1 mm to > 0 mm	A3	40 km/h TSR until repaired
			0 mm or less	A1	10 km/h TSR until repaired
Switch blade damage			100 mm to < 200 mm	A6	Increase monitoring. Prioritise repair
			> 200 mm	A1	10 km/h TSR until repaired
Stock rail or switch blade gauge wear face angle			≤ 22	A7	Routine scheduled inspection
			>22 to < 26	A6	Increase monitoring. Prioritise repair
			26 or greater	A1	10 km/h TSR until repaired

POINTS INSPECTION				
ELEMENT	MEASURE	COMMENT	CONDITION	RESPONSE ACTION
Fixed and pivot heel blocks			Cracked	A4/A3 80/90 km/h TSR until repaired Heavy Haul 40 km/h TSR until repaired
			Broken but still effective	A3 40 km/h TSR until repaired
			Missing/Broken and ineffective	A1 10 km/h TSR until repaired
Fixed and pivot heel blocks, bolts			Missing/ineffective ≤ 2	A4/A3 60/65 km/h TSR until repaired Heavy Haul 40 km/h TSR until repaired
			Missing/ineffective 3	A3 40 km/h TSR until repaired
			Missing/ineffective >3	A1 10 km/h TSR until repaired
Anti creep device including bolts			Loose cracked but effective.	A6 Increase monitoring. Prioritise repair
			Missing/Broken and ineffective	A6 Increase monitoring. Prioritise repair
Rail brace/chair, slide plates and rollers.			1 only - Cracked/loose	A6 Increase monitoring. Prioritise repair
			1 only - Broken/Ineffective	A4/A3 60/65 km/h TSR until repaired Heavy Haul 40 km/h TSR until repaired
			2 consecutive - cracked / loose / broken / ineffective	A3 40 km/h TSR until repaired
			> 2 consecutive - cracked / loose / broken / ineffective	A1 10 km/h TSR until repaired
Switch Stops			1 only - Cracked/loose	A6 Increase monitoring. Prioritise repair
			1 only - Broken/Ineffective	A4/A3 60/65 km/h TSR until repaired Heavy Haul 40 km/h TSR until repaired
			2 consecutive - cracked / loose / broken / ineffective	A3 40 km/h TSR until repaired
			> 2 consecutive - cracked / loose / broken / ineffective	A1 10 km/h TSR until repaired

POINTS INSPECTION					
ELEMENT	MEASURE	COMMENT	CONDITION		RESPONSE ACTION
Spreader bar			Loose fastenings or worn insulators	A6	Increase monitoring. Prioritise repair
			Missing/broken	A1	10 km/h TSR until repaired
Switch Blade Support			Gaps up to >2mm through blade or >1mm at drive points	A6	Increase monitoring. Prioritise repair

POINTS INSPECTION					
ELEMENT	MEASURE	COMMENT	CONDITION		RESPONSE ACTION
Condition of through off rail (if applicable)					
Condition of ramp					
Condition of landing area					