# CATCHPOINT DETAILED INSPECTION

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| Location: Track: I.D. No.: | | | | | | | | | | | | | | | | | |
| Kilometrage: Date: | | | | | | | | | | | | | | | | | |
| All measurements in mm.  All Speed in km/h | | | | | | | | | | | | | | | | | |
| Points | | | | | | Measure | | | Response | | | | | | Comments | | | |
| Gauge (Measured at switch tip) | | | | | |  | | | >1455 apply plain track geometry responses  1429 to 1427 speed 60/65 and monitor  1426 to 1425 speed 20/20 and monitor  <1425 speed 10/10 and pilot trains | | | | | |  | | | |
| Open throw dimension (Switch blade open gap) | | | | | |  | | | 85 mm to < 95 mm monitor  80 mm to < 85 mm speed 20/20 and monitor  <80 mm speed 10/10 and pilot trains | | | | | |  | | | |
| Switch blade closed gap | | | | | |  | | | 1 mm to 3 mm record as defect, program adjustment  >3 mm record as defect, urgent attention | | | | | |  | | | |
| Switch Width at Tip  (Closed switch only, as presented to the wheel)  (non-tangential, non-undercut switch only) | | | | | |  | | | 4 to 6 monitor  7 to 8 speed 20/20 and monitor  >8 speed 10/10 and pilot trains | | | | | |  | | | |
| Switch Height at Tip (distance from running surface to top of switch)  (non-tangential, non-undercut switch only) | | | | | |  | | | Conventional switch only:  >12 to <13 monitor  12 or less speed 10/10 and pilot trains  Undercut and asymmetric switches should not sit high of the machined section of stock rail. Report any defect. | | | | | |  | | | |
| Switch Tip Wear Angle  (non-tangential, non-undercut switch only) | | | | | |  | | | Angle from vertical. Report suspect angles:  18 to 26 degrees monitor  >26 degrees speed 10/10 and pilot trains | | | | | |  | | | |
| Stock Rail Wear Angle  (non-tangential, non-undercut switch only) | | | | | |  | | |  | | | |
| Spreader Bar/Drive Rods | | | | | |  | | | Missing/Broken – Notify signalling maintainer. Secure switch and/or impose 10/10 speed and pilot trains as appropriate. | | | | | |  | | | |
| Switch Blade Damage  (deeper than 19mm from running surface of stock rail) | | | | | |  | | | 100 to 199 long – monitor  ≥200 long - speed 10/10 and pilot trains | | | | | |  | | | |
| Back of switch rail to stock rail (Flangeway throat gap) | | | | | |  | | | 35 mm to <40 mm speed 40/40 and monitor  <35 mm speed 10/10 and pilot trains | | | | | |  | | | |
| Rail Brace/Chair | | | | | |  | | | Cracked/Loose – monitor  Broken/Ineffective:  1 only – monitor except for 60/65 speed 25 tonne, 40/40 speed 30 tonne axle load areas.  2 consecutive – speed 60/65 except for 40/40 speed in 25/30 tonne axle load areas.  >2 consecutive - speed 10/10 and pilot trains | | | | | |  | | | |
| Switch Bearing Stops | | | | | |  | | |  | | | |
| Ineffective Bearers/Fasteners  (In critical area) | | | | | |  | | | 1 only – monitor  2 consecutive – speed 40/40 and monitor  >2 consecutive - speed 10/10 and pilot trains | | | | | |  | | | |
| Points | | | | | | Measure | | | Response | | | | | | Comments | | | |
| Heel Blocks  (includes pivot and fixed heel, stress transfer and creep control blocks) | | | | | |  | | | Cracked - 23 tonne axle load speed 80/90, cracked 25 tonne speed 60/65, cracked 30 tonne speed 40/40.  Broken but effective – 40/40 speed and monitor.  Missing/Broken ineffective – speed 10/10 and pilot trains | | | | | |  | | | |
| Bolts | | | | | |  | | | Loose/Broken/Missing – record as defect and prioritise | | | | | |  | | | |
| Lever Effectiveness  (Manual Points) | | | | | |  | | | Insufficient tension to keep switch closed under traffic  Report as defect and prioritise. | | | | | |  | | | |
| Switch/Stock rail contact area (amount of lipping) | | | | | |  | | | Report if switch or stock rail need grinding and prioritise.  Report if switch or stock rail have lipping of 1mm or greater. This lipping should be ground. | | | | | |  | | | |
| Catchpoints | | | | Ok/Not Ok | | | Comments | | | | | | | | | | | |
| Response assessment by competent person | | | | | | | | | | | | | | | | | | |
| Throw Off Rail  Derail Block  Landing Area | | | |  | | |  | | | | | | | | | | | |
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| General | | | | Ok/Not Ok | | | Comments | | | | | | | | | | | |
| Response assessment by competent person | | | | | | | | | | | | | | | | | | |
| Drainage | | | |  | | |  | | | | | | | | | | | |
| Bearers/Fasteners | | | |  | | |  | | | | | | | | | | | |
| Ballast | | | |  | | |  | | | | | | | | | | | |
| Stock Rails (1) | | | |  | | |  | | | | | | | | | | | |
| Track Geometry (2) | | | |  | | |  | | | | | | | | | | | |
| TIMBERS REQUIRED (Optional) | | | | | | | | | | | | | | | | | | |
| 2.8m | | 3.0m | 3.2m | | 3.4m | | | 3.6m | | 3.8m | 4.0m | 4.2m | 4.4m | 4.6m | | 4.8m | 5.0m | 6.0m |
|  | |  |  | |  | | |  | |  |  |  |  |  | |  |  |  |

Notes:

Reporting of rolling contact fatigue (RCF), rail squats, wheel burns and corrugations which will require appropriate repair / renewal action

If the Track Geometry is not ok or the turnout has been determined as high risk, a manual assessment of track geometry parameters using form ETE0301F-04 Manual Recording of Gauge, Play & Superelevation in Points & Crossings is required.

\* “Monitor” means at an appropriate increased frequency compared to the current inspection

\* Responses are default actions pending appropriate repair / renewal action

\* If the cause of a defect is known, and it is known that it will not deteriorate into an unsafe condition an alternate response to that shown is permitted with appropriate documentation

Name of Inspector: Signature: