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| **DUAL GAUGE TURNOUT INSPECTION – DETAILED** |
| Location: Track: I.D. No.: |
| Length: Date: Signature: |
| All measurements in mm All speeds in km/h |
| **ALL MESUREMENTS TO BE TAKEN AT POP MARKED LOCATIONS** |
|  | **MEASUREMENT** | **RESPONSES** | **COMMENTS** |
| **POINTS** |
| Gauge (at end of stock rail) | SG |  | **Tight:** <1429/1592 speed 10 and pilot;1429 to 1431/1592 to 1594 speed 20**Wide:** >1455/1620 speed 10 and pilot; 1443 to 1455/1615 to 1620 Speed 30; Note, however, that tolerance on gauge at this location is governed by gauge at the noses of the K assembly measured with the BG and SG crossing gauges |  |
| BG |  |
| Switch Open Throw | CR |  | 85 to <95 monitor; 80 to 84 speed 20/20 and monitor; <80 speed 10/10 and pilot trains. |  |
| SG |  |
| Switch Blade Gap : each blade against its stock rail | CR |  | >3mm speed 20 and prioritise remedial action |  |
| SG |  |
| BG |  |
| Switch Blade Damage: check all three switch blades | CR |  | **Damage deeper than 19mm from running surface**50 to 100 long – profile≥100 long - speed 10/10 and pilot trains |  |
| SG |  |
| BG |  |
| Switch Width at Tip:Check all three switch blades | CR |  | <5 monitor; 5 to 9 speed 20/20 and monitor;>9speed 10/10 and pilot trains |  |
| SG |  |
| BG |  |
| Switch Crippled |  |  Speed 20 |  |
| Metal Flow – Switch blade and running rails |  | **>3 metal flow requires grinding**3 to 4 speed 30> 4 speed 10 |  |
| Spreader Bars |  | Broken/Missing/bent speed 10/10 and pilot trains |  |
| Throat gap | CR |  | <40 – immediate appropriate action |  |
|  |  |
| BG |  |
| Heel block condition | Left |  | Missing bolt – speed 40Cracked block – Speed 40 |  |
| Right |  |
| Rail Brace/Chair | Left |  | Cracked/Loose – monitor; Broken/ineffective:1 only – monitor; 2 consecutive – speed 20 and monitor ;> 2 consecutive speed 10 and pilot trains.  |  |
| Right |  |
| Points Stops | Left |  | Cracked/Loose – monitor; Missing/ineffective:1 only speed 20; 2 consecutive – speed 10 and pilot trains |  |
| Right |  |
| Ineffective Bearers/Fasteners(In critical area) |  | 1 only – monitor; 2 consecutive speed 40; > 2 consecutive speed 10 and pilot trains |  |
| Switch/Wheel contact area |  | Report if switch/stock needs grinding and prioritise |  |
| **Additional checks for type 29 and 30 turnouts to prevent SG turnout move from derailing at the end of the short stock rail** |
| Gauge from common switch blade to short stock rail near the end of the short stock rail switches set for the turnout |  | 1438 to 1440 monitor; >1440 speed 20 |  |
| Gauge from common rail turnout blade to the BG blade opposite just past wheel transfer off the short stock rail; switches set for the turnout |  | >1485 – Plan corrective action |  |
| Gap between the two blades on the dual rail side. |  | >100 - Plan corrective action |  |
| Tie Bar | Between CR turnout blade and opposite BG |  | If tie bar is missing, broken or ineffective – speed 10 and pilot trains |  |
| Short tie bar between the SG and BG |  | If tie bar is missing, broken or ineffective prioritise remedial actions. |
| BG blade against the short stock rail -measure gap |  | >2mm prioritise remedial action |  |
| **K CROSSING** |
| Gauge (Front of Nose SG and at the Knuckle for BG)  | SG |  | **Tight** <1428 to 1426 speed 20; > 1426 speed 10 and pilot trains**Wide** >1430 to 1432 speed 20; >1432 speed 10 and pilot trains | Use both “worn wheel” and “full wheel” sides of crossing gauge and measure the extent of fouling by both SG and BG wheels |  |
| BG |  |
| Check Rail Effectiveness | SG |  | <1382 speed 10 and pilot trains; 1382 to <1386 speed 20; 1386 to <1389 monitor |  |
| Check Rail Flange way Width |  | >48 to 50 monitor;>50 to 53 speed 20; >53 speed 10 and pilot trains |  |
| Crossing Nose Vertical Wear |  | Report if nose needs repair and prioritise |  |
| Crossing Nose Break width(Within transfer length) |  | 15 to 20 – monitor; >20 to 25 – speed 40;>25 – speed 10 and pilot trains |  |
| Spacer Blocks |  | Broken/cracked - Monitor |  |
| Check Rail Bolts |  | Loose – Monitor; 1 missing/ineffective – replace; 2 missing/ineffective – speed 40; 3 missing/ineffective – speed 10 and pilot trains |  |
| Crossing Bolts |  | Loose – Monitor; 1 missing/ineffective – replace; 2 missing/ineffective – speed 40; 3 missing/ineffective – speed 10 and pilot trains |  |
| Midpoint of lead |  |
|  | Straight | SG |  | SG: >1455 apply plain track geometry responses; 1427 to 1429 Speed 60/65 and monitor; 1425 to 1426 Speed 20/20 and monitor; <1425 10/10 and pilot trains.BG: > 1620 Speed 20/20 and monitor; 1592 to 1597 60/65 and monitor ;< 1592 10/10 and pilot trains. |  |
| BG |  |
| Diverge | SG |  |
| BG |  |
| V Crossing |
| Gauge | Straight SG |  | SG: >1455 apply plain track geometry responses; 1427 to 1429 Speed 60/65 and monitor; 1425 to 1426 Speed 20/20 and monitor; <1425 10/10 and pilot trains.BG: > 1620 speed 20/20 and monitor; 1592 to 1597 60/65 and monitor ;< 1592 10/10 and pilot trains. |  |
| Diverge SG |  |
| Straight BG |  |
| Diverge BG |  |
| Check Rail Effectiveness | Straight | SG |  | SG: 1389 to 1395 OKBG: 1556 to 1562 OKIf check rail gauge is outside limits, measure track gauge and check rail flange way to determine corrective action |  |
| BG |  |
| Diverge | SG |  |
| BG |  |
| Check Rail Flange way Width | Straight |  | 40 to 46 OK; If check rail gauge is outside limits, measure track gauge and check rail flange way to determine corrective action. |  |
| Diverge |  |
| Check Rail Bolts | Straight |  | Loose – Monitor; 1 missing/ineffective – replace; 2 missing/ineffective – speed 40; 3 missing/ineffective – speed 10 and pilot trains |  |
| Diverge |  |
| Check for nose wear at impact zones |  | Report crushing or wear within 175mm of the nose |  |
| Wing Rails Vertical Wear |  | **5mm – report for weld build up, limits close to 10mm are hard to rebuild.**5 to <9 – monitor;9 to <11 – speed 20; >11 – speed 10 and pilot trains |  |
| General -Response assessment by competent person |
|  | OK- Y/N | Comments |  | OK – Y/N | Comments |
| Drainage |  |  | Rails |  |  |
| Bearers/Fasteners |  |  | Points Lubrication |  |  |
| Ballast |  |  | Gauge face lubrications |  |  |
| Alignment and Top |  |  | Wear faces of guard rails lubrications |  |  |
| Connecting rods |  |  | Anchors |  |  |
| **TIMBERS REQUIRED (optional)** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
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