

**Development of Gap Adjustment Device between Switch Rail and Stock Rail,
and Proposal of a Turnout Point to Reduce Maintenance Labor**

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The aim of this study is twofold: to develop a gap adjustment device for use between the switch rail and the stock rail, and to propose a new turnout structure that contributes to reduced maintenance efforts. The authors designed and produced adjustment devices that adjust the gaps between the switch rail and the stock rail expanding and contracting after switching. The developed devices were installed on a turnout, and a series of performance tests were conducted. As a result, we confirmed that the devices enable automate the inspection and adjustment of gaps. A running test involving a vehicle passing over the turnout also confirmed that the devices functioned normally during and after the vehicle's passage.