

**New Jersey Transit: Interior Coolant Line P-Clamp
Replacement**



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Property and Top Bus Number: New Jersey Transit – 31 LFW – 2012 - 305000



Issue: Coolant Line P-Clamps Breaking / Loose

Reason/ cause: Aluminum P-Clamps for Interior Coolant Lines Weak & Do Not Provide Enough Support

Solution: Replace Existing Aluminum P-Clamps with Stainless Steel P-Clamps

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Number of affected buses: 39

Estimate repair hours/bus: 2

Engineering Documentation:

Necessary parts:

P-Clamp - NABI PN: – Qty: 10

¼-20 x 1 ¼” Bolt – McMaster Carr PN: 92865A540 – Qty: 7

¼” Flat Washer – McMaster Carr PN: 90108A413 – Qty: 7

¼” Lock Washer – McMaster Carr PN: 91102A750 – Qty: 7

¼-20 Nut – McMaster Carr PN: 95462A029 – Qty: 7

Necessary tools:

17/64 Drill Bit

Basic hand tools

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SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS.

1. Park the bus and apply the parking brake.
2. Locate the street side light panels & open to access the interior coolant lines (see below)



3. Starting from the rear of the bus remove the p-clamps shown (see below).



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4. Upon installing the the new p-clamps separate the coolant lines on the mounting bracket using the slotted holes in the bracket (see below). When installing the new clamps raise the hardware all the way to the top of the slotted holes.



5. Using the existing bracket, add two new p-clamps as shown below (see below).



NOTE: If mounting bracket is not positioned as shown above, it needs to be relocated to this position.

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6. Using the same method as used in step 4, replace the two p-clamps as shown below (see below).



7. Using the existing bracket, add two p-clamps as shown below (see below).



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8. Replace the p-clamps as shown below using the same method as step 4 & 6 (see below).



9. Clean up any debris caused by performing this retrofit.
10. Close the interior light panels.

See below pictures for final installation:



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