



# Technical Service Bulletin

**Technical Service Bulletin:**  
TSB220227

**Released Date:** 24-Apr-2023

**New Installation Procedure for Tappet Guide Screws to Reduce Lubricating Oil Leaks**

## New Installation Procedure for Tappet Guide Screws to Reduce Lubricating Oil Leaks

### Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

### Contents

#### Product Affected

- ISC CM850
- ISC8.3 CM2250
- ISL CM2150
- ISL CM850
- ISL8.9 CM2150 L110
- ISL9 CM2150 SN
- ISL9 CM2250
- ISL9 CM2350 L101
- ISL9 CM2350 L111
- ISLE4 CM850
- L8.9 L121
- L9 CM2350 L116B
- L9 CM2350 L119B
- L9 CM2350 L120C
- L9 CM2450 L126B
- L9 CM2670 L128B
- QSC8.3 CM850
- QSC8.3 CM850(CM2850)

- QSL9 CM2250
- QSL9 CM2350 L102
- QSL9 CM2350 L118
- QSL9 CM850
- QSL9 CM850(CM2850)
- QSL9 M CM2250 L106

### Issue

#### Symptom:

- External lubricating oil leaks can occur at the tappet guide screw. Lubricating oil will be visibly leaking from the tappet guide screw down the exterior of the cylinder block.

#### Root Cause:

- The service manual literature contained incorrect tappet guide screw installation instructions.

### Verification

To confirm the lubricating oil leak location, see the corresponding Service Manual. Reference Procedure 014-024 in Section 14.

### Resolution

The tappet guide screw installation procedure has been updated. See corresponding Service Manual. Reference the Clean and Inspect for Reuse step of Procedure 004-015 in Section 4. See Table 2 below. The tappet guide screw can be removed and reused without removal of the tappet.

### Reason for Change

The thread locker amount and torque specification in Procedure 004-015 in Section 4 were found insufficient, which can result in external lubricating oil leaks.

### Production Status

Implemented for production. See Table 1.

**Table 1, Production Information**

ESN First	Build Date <sup>1</sup>	Plant
9947759	24 August 2022	Rocky Mount Engine Plant

<sup>1</sup>Engine build date can be found on engine dataplate.

### Publications Affected

<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	ISC CM850	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	ISC8.3 CM2250	4022257	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-iscl10.html)	4
Service Manual	ISL CM850	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	ISL CM2150	4021569	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-iscl07.html)	4

<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	ISL/NS6 2670	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	ISL8.9 CM2150 L110	4358475	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/323/323-004-015-tr.html)	4
Service Manual	ISL9 CM2150 SN	4022190	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-isle5.html)	4
Service Manual	ISL9 CM2250	4022257	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-iscl10.html)	4

<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	ISL9 CM2350 L101	4310787	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/185/185-004-015-tr.html)	4
Service Manual	ISL9 CM2350 L111	4367223	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/341/341-004-015-tr.html)	4
Service Manual	ISLE4 CM850	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	L8.9 L121	5411055	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/447/447-004-015.html)	4

<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	L9 CM2350 L116B	5411330	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/459/459-004-015.html)	4
Service Manual	L9 CM2350 L119B	5411456	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/459/459-004-015.html)	4
Service Manual	L9 CM2350 L120C	5504199	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/560/560-004-015.html)	4

<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	L9 CM2450 L126B	5613077	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/583/583-004-015.html)	4
Service Manual	QSC8.3 CM850	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	QSC8.3 CM850 (CM2850)	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	QSL	4022256	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-qslt4i.html)	4

<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	QSL9 CM850	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	QSL9 CM850 (CM2850)	4021418	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr.html)	4
Service Manual	QSL9 CM2250	4022256	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-qs14i.html)	4
Service Manual	QSL9 CM2350 L102	4332796	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/261/261-004-015-tr.html)	4



<b>Table 2, Publications Affected</b>					
<b>Manual Type</b>	<b>Engine</b>	<b>Bulletin Number</b>	<b>Procedure Title</b>	<b>Procedure</b>	<b>Section</b>
Service Manual	QSL9 CM2350 L118	4388673	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/421/421-004-015.html)	4
Service Manual	QSL9 M CM2250 L106	4022256	Tappet	Refer to Procedure 004-015 (/qs3/pubsys2/xml/en/procedures/45/45-004-015-tr-qs1t4i.html)	4

## Document History

<b>Date</b>	<b>Details</b>
2022-11-8	Module Created
2023-4-20	Updated Resolution section.

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**Last Modified: 24-Apr-2023**

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