



Spartan Fire, LLC

Technical Service Bulletin

TSB20-270-005A

DATE: 01/28/2021

APPLIES TO:

This service bulletin applies to 2017 through 2021 model year, Gladiator and Metro Star model emergency response chassis cabs built between October 13, 2016 and September 30, 2020.

CONDITION:

Coolant Surge Tank Leaks on Units Equipped with High Air Intake System

CORRECTION:

Replace Coolant Surge Tank

LABOR ALLOCATION: 2 hrs

CLASSIFICATION:

T3

PARTS NEEDED:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	S-2741-001	Surge Tank – ISL 9 High Air Intake

Kit # S-2741-001 Contains:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	2865-FF1-001	SURGE TANK, L9 HAI
4	06160100FSCSY	BOLT, 3/8 X 1.00 FLNG SCKT
6	06160075FH8Y	BOLT, 3/8 X .75 FLNG
4	0616FLN8Y	NUT, 3/8 FLNG LOCK
1	04200075FH8Y	BOLT, 1/4 X .75 FLNG
1	0420FLN8Y	NUT, 1/4 FLNG LOCK
1	TSB20-270-005	Instruction Document English
1	TSB20-270-005	Instruction Document French

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<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	S-2741-002	Surge Tank – ISX 12 High Air Intake

Kit # S-2741-002 Contains:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	2871-FF1-001	SURGE TANK, ISX 12 HAI
4	06160100FSCSY	BOLT, 3/8 X 1.00 FLNG SCKT
6	06160075FH8Y	BOLT, 3/8 X .75 FLNG
4	0616FLN8Y	NUT, 3/8 FLNG LOCK
1	04200075FH8Y	BOLT, 1/4 X .75 FLNG
1	0420FLN8Y	NUT, 1/4 FLNG LOCK
1	TSB20-270-005	Instruction Document English
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<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	S-2741-003	Surge Tank – ISX 15 High Air Intake

Kit # S-2741-003 Contains:

<u>QTY</u>	<u>Part Number</u>	<u>Description</u>
1	2870-FF1-001	SURGE TANK, ISX 15 HAI
6	06160075FH8Y	BOLT, 3/8 X .75 FLNG
2	0616FLN8Y	NUT, 3/8 FLNG LOCK
1	TSB20-270-005	Instruction Document English
1	TSB20-270-005	Instruction Document French

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GENERAL INSTRUCTIONS:

Thoroughly review entire service bulletin before starting work. If there are questions or concerns with the steps defined in this service bulletin, contact Spartan Fire, LLC. Customer & Product Support Group.

All applicable industry safety standards must be followed when performing the work identified in this procedure.

STEP-BY-STEP INSTRUCTIONS: Removal

1. Drain coolant from radiator.
2. Remove charge air cooler pipes. (*See FIG 3-1*)

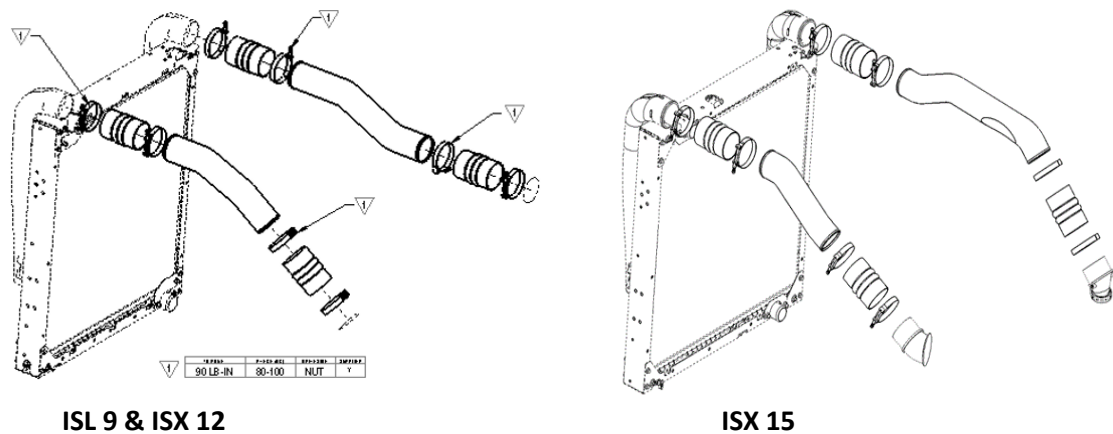


FIG 3-1

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3. Remove top recirculation shields. (See FIG 4-1)

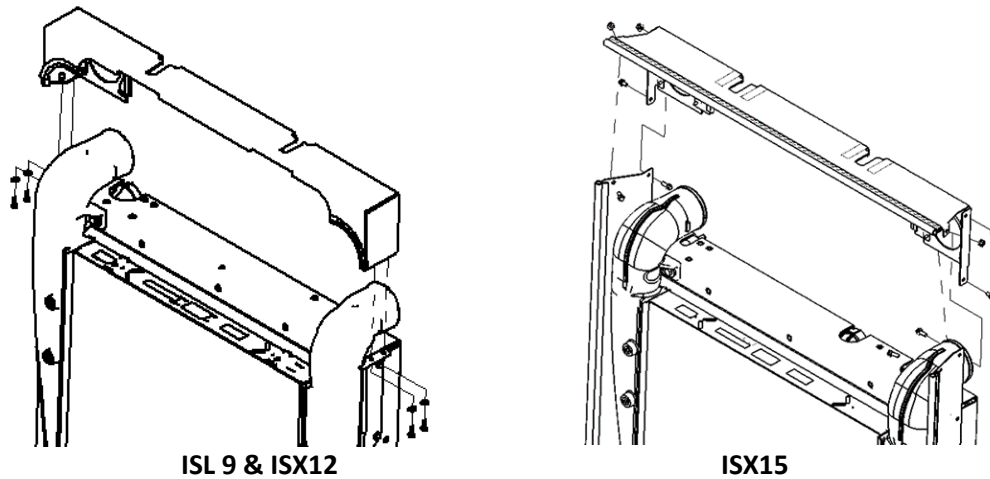


FIG 4-1

4. Remove air cleaner and air cleaner plumbing. (See FIG 4-2)

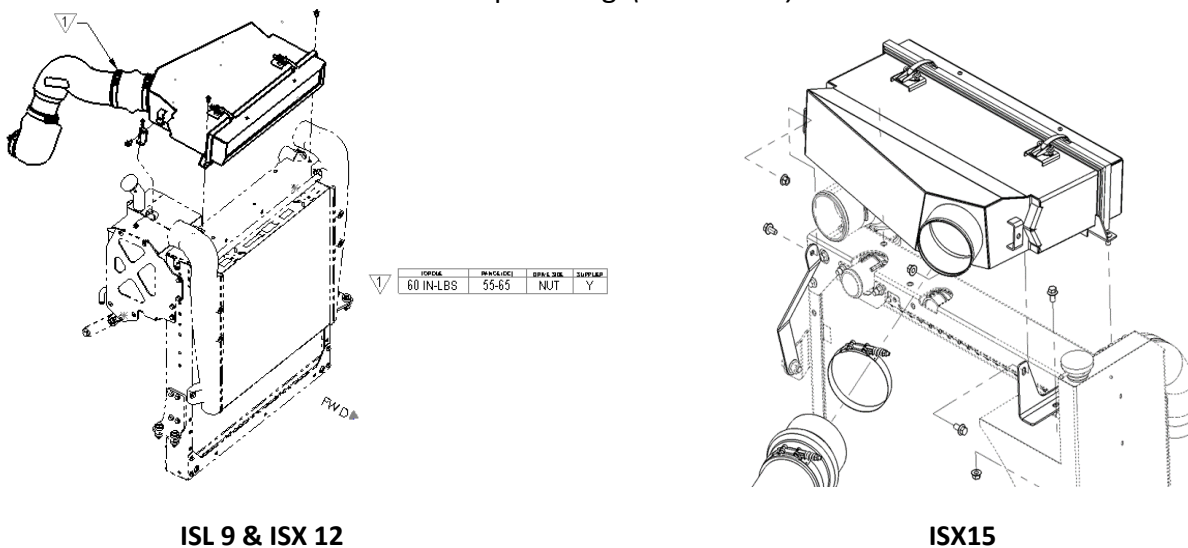
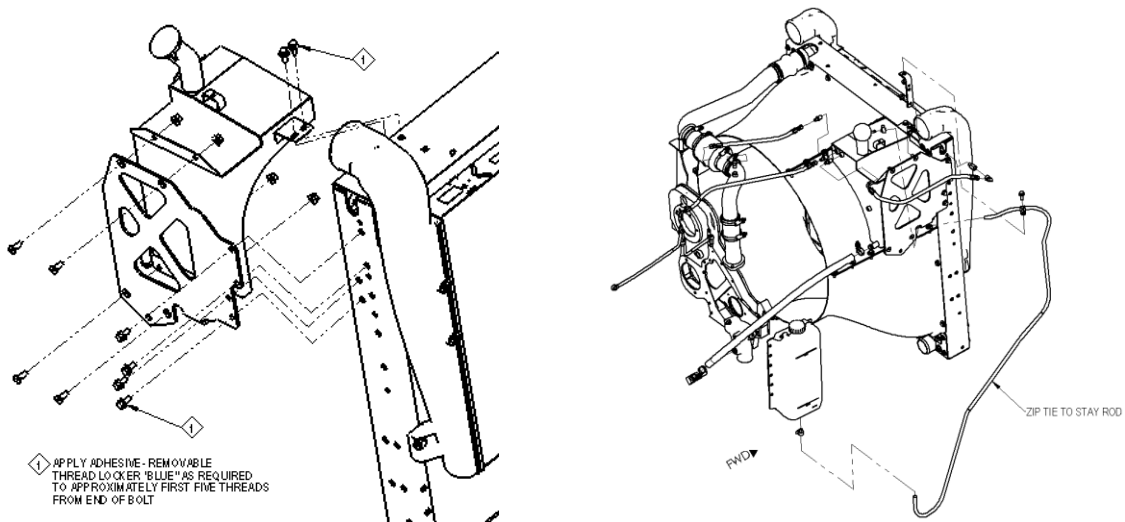


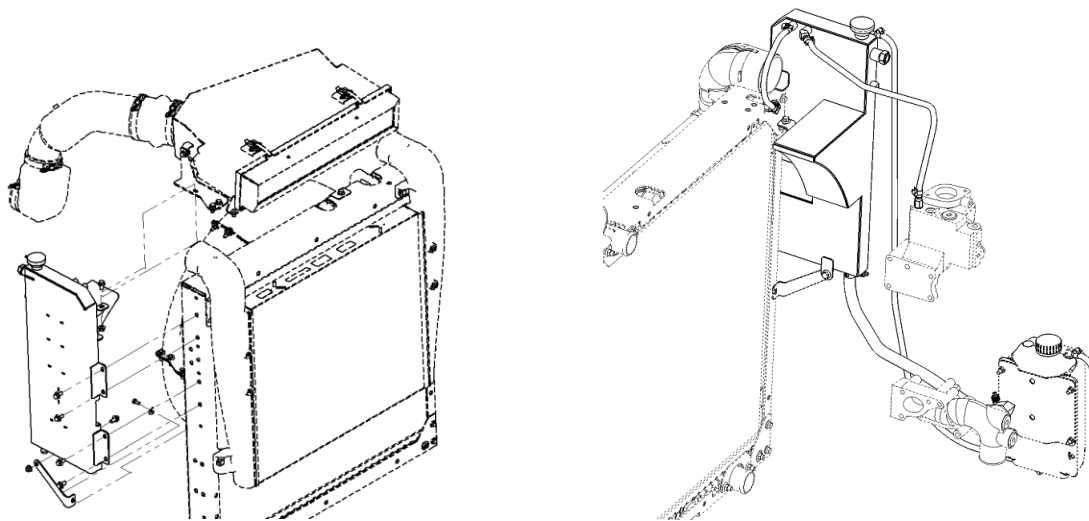
FIG 4-2

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5. Remove surge tank from bracket and surge tank plumbing. (See FIG 5-1)



ISL 9 & ISX 12



ISX15

- *Note: On ISX 15 engines, removing side recirculation shield may be necessary and ease removal and re-installation.*

FIG 5-1

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FIG 5-1

STEP-BY-STEP INSTRUCTIONS: Installation

6. Install new surge tank in the same manner the original was removed using the hardware supplied with kit. Apply removable (blue) Loctite thread-locker to bolts used to secure the cooling package.

7. Install surge tank plumbing in the same manner it was removed. Torque hose clamp for engine fill hose to 55 (50-60) lb-in.

8. Install air cleaner and air cleaner plumbing in the same manner it was removed. Apply removable (blue) Loctite thread-locker to the bolts securing the air cleaner assembly. Torque air intake hose clamp to 60 (55-65) lb-in.

Note: There is bulb seal along the bottom of the air cleaner, make sure this is in place before installing.

9. Install top recirculation shield in the same manner it was removed.

Note: Make sure all bulb seal is in place before attaching the shield.

10. Install charge air cooler plumbing in the same manner it was removed. Torque charge air tube hose clamps to 90 (80-100) lb-in and air compressor inlet hose clamps to 55 (50-60) lb-in.

11. Refill surge tank with coolant and verify no leaks are present.

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