

TECHNICAL INSIGHTS

UP TO 6-YRS  
WITH ALETEK  
EXHAUST KIT

# CASE STUDY: CAT 793F EXHAUST RELIABILITY TEST



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**THE PROBLEM:**  
**793F EXHAUST FAILURE**  
DOWNTIME AND INCREASED TCO



TECHNICAL INSIGHTS

# PROBLEM: PREMATURE EXHAUST COMPONENT FAILURE

A multi-national client in North Queensland was suffering from reduced exhaust lifecycles. Like many sites, their haul trucks operate in harsh, corrosive environments with rigorous operational stresses. This often leads to downtime and increased TCO (Total Cost of Ownership) due to premature component failure.



**“A review of our work orders for exhaust systems highlighted vibration and corrosion as common problems.”**

Bowen Basin Mine Site  
Asset Management Planner

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**THE SOLUTION:**  
**793F EXHAUST UPGRADE**  
EXTENDED LIFECYCLE

TECHNICAL INSIGHTS

# ONSITE SOLUTION: ALETEK OEM EXHAUST UPGRADE

Aletek direct-fit exhausts are a strategic upgrade that can deliver an estimated 30% reduction in TCO (Total Cost of Ownership). Our exhaust components are fully interchangeable with OEM.



# 793F ALETEK EXHAUST: RELIABILITY TIMELINE

LOCATION: BOWEN BASIN MINE SITE

ASSET: CAT 793F (SSP)

SCOPE: FULL ALETEK EXHAUST KIT

## 01

### 0 HOURS

3 August 2015

Full exhaust system fitted to client's 793F

Machine hours: 18, 322

## 02

### 15,760 HOURS

8 February 2018

Bellow and 3 x engine pipes changed out

Machine hours: 34, 082

**2.5 years in service**

## 03

### 35,160 HOURS

1 June 2021

1 x muffler changed out

Machine hours: 53, 482

**5.8 years in service**

## 04

### 35,311 HOURS

3 August 2021

1 x muffler and 2 x engine pipes still intact

Machine hours: 53, 633

**6 years in service**



**UP TO 6-YRS  
WITH ALETEK  
EXHAUST KIT**



Aletek exhaust components after 6 years. Surface rust, but intact and remain fit for purpose.

# 793F EXHAUST COMPONENT RELIABILITY

Even with highly corrosive site conditions,  
the Aletek OEM Replacement Exhaust  
Upgrade exceeded onsite expectations.

**BELLOW, 3 x E/PIPES**

15,760 HRS (2.5 YRS)

**1 x MUFFLER**

35,160 HRS (5.8 YRS)

**1 x MUFFLER, 2 x E/PIPES**

35,311 HRS (6 YRS)



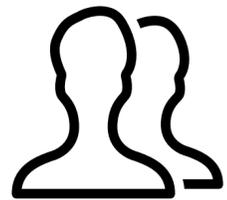
**“Part of Aletek’s exhaust  
kit was intact, without  
cracking or defects,  
after 35,000 hours and  
6-years in service.  
This is awesome!”**

Rowan Bowder  
Technical Product Manager



## PROVEN DURABILITY

Up to 6-years lifecycle verified  
on parts of our 793F exhaust kit



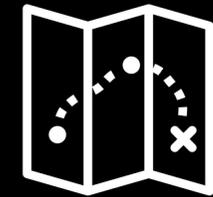
## EASE OF FITMENT

Technical support, user  
guides and training available



## DIRECT-FIT SYSTEM

Aletek exhaust components are  
interchangeable with OEM parts



## EXHAUST UPGRADE

Invest in an Aletek exhaust for  
reduced downtime and TCO



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# **793F DIRECT-FIT EXHAUST: OEM UPGRADE**

## O V E R V I E W

# EXHAUST UPGRADE FOR CAT 793F



- Solid machined flanges prevent cracking on engine pipe ends
- Strategically located vent ports prevent failure of inner pipe wall
- Compatible with Cat engine specifications
- Exhaust pipes and components are 100% interchangeable with OEM parts
- Australian designed and manufactured
- Superior quality materials, fabrication and workmanship
- In stock commitment for less downtime

**100%**  
COMPATIBLE

Interchange  
with OEM parts



Direct-fit  
system



Extended  
product lifecycle



Australian  
made



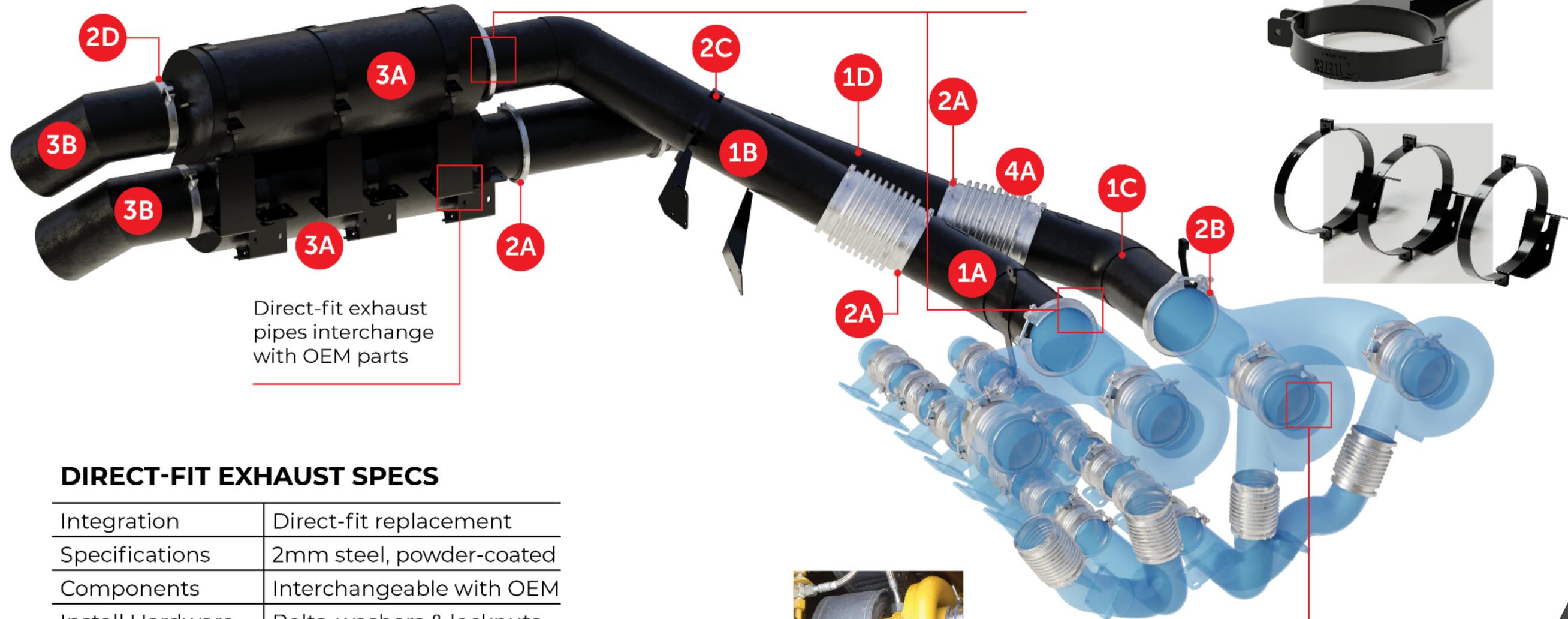
Fatigue zones  
improved



Mitigate fire  
with blankets

# 793F DIRECT-FIT EXHAUST

## EXHAUST SYSTEM COMPONENTS

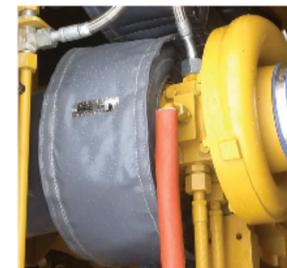


Solid machined flanges prevent cracking on engine pipe ends

Direct-fit exhaust pipes interchange with OEM parts

## DIRECT-FIT EXHAUST SPECS

Integration	Direct-fit replacement
Specifications	2mm steel, powder-coated
Components	Interchangeable with OEM
Install Hardware	Bolts, washers & locknuts (Refer to Aletek Drawing)
Warranty	12-months*
<b>Aletek Drawing</b>	<b>ALE-076 (SSP)</b>



Add blankets to turbos, manifolds and junctions for fire mitigation

# 793F DIRECT-FIT EXHAUST



## 1 ENGINE PIPES & BELLOWS

Part Name	Aletek Part #	OEM Part #
1A Engine Pipe	286-227	592-7650
1B Engine Pipe	240-487	592-7651
1C Engine Pipe	251-170	592-7649
1D Engine Pipe	213-396	592-7648
4A Bellow	209-195	242-0799

## 2 V-BANDS & CLAMPS

Part Name	Aletek Part #	OEM Part #
2A V-Band Clamp	373-198	302-8136
2B V-Band Clamp	327-127	337-1809
2C Strap	205-414	242-9806
2D HDC Clamp	377-494	6N-9298



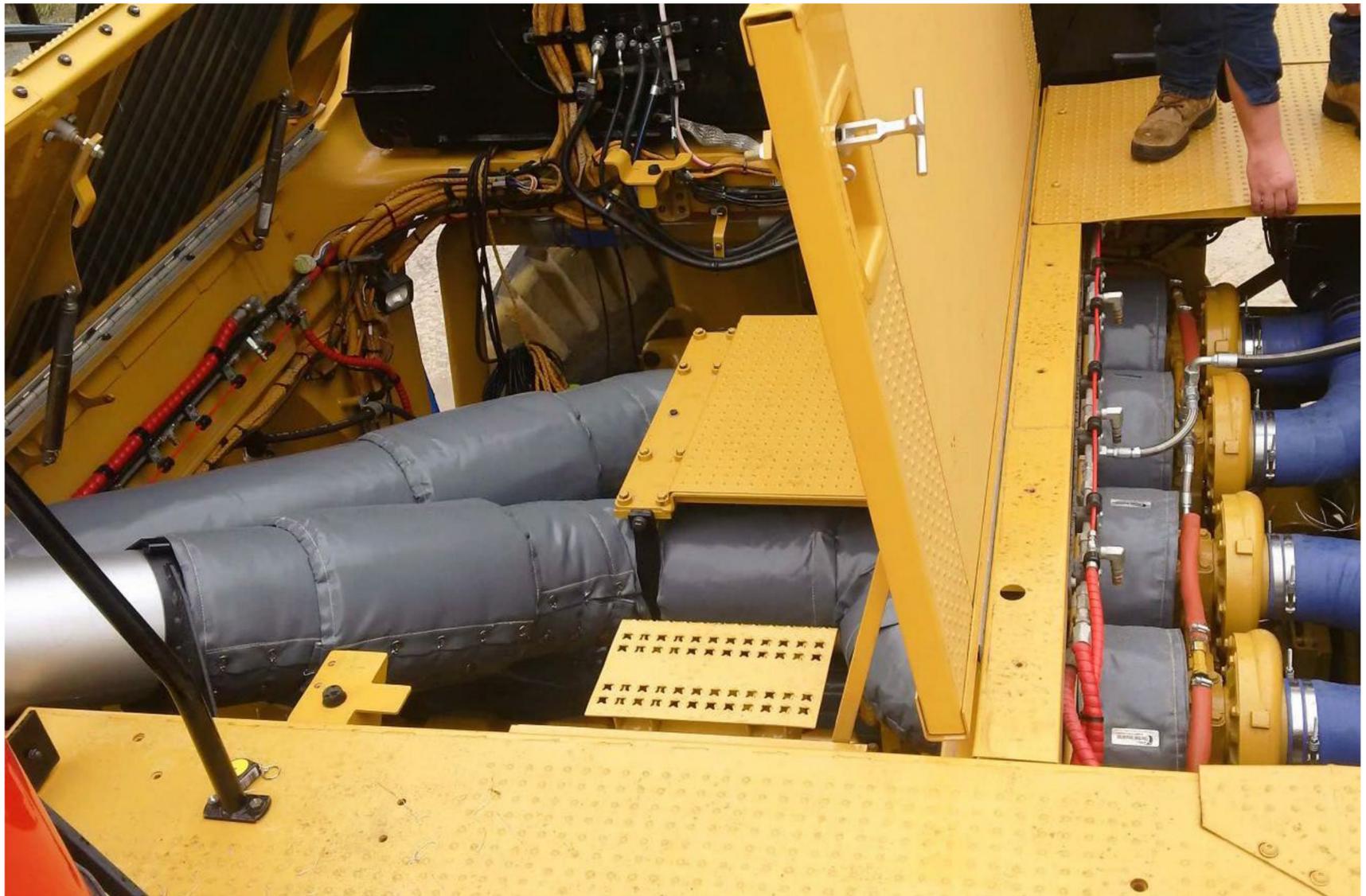
## 3 MUFFLERS

Part Name	Aletek Part #	OEM Part #
3A Muffler	209-381	499-2193
3B Tail Pipe	256-531	291-9649

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# 793F OPTIONS: THERMAL BLANKETS





OVERVIEW

# BLANKET UPGRADE FOR CAT 793F

- Essential for fire mitigation
- Worker safety and protection of your investment in people
- Less engine fires, site shutdowns and insurance premium hikes
- Quick-fit springs are pre-fitted for faster installs and perfect tension
- Lobster-back design for superior fitment on pipe bend sections
- Designed from 3D scans



Tailor-made for a snug fit



Non-itch silica insulation



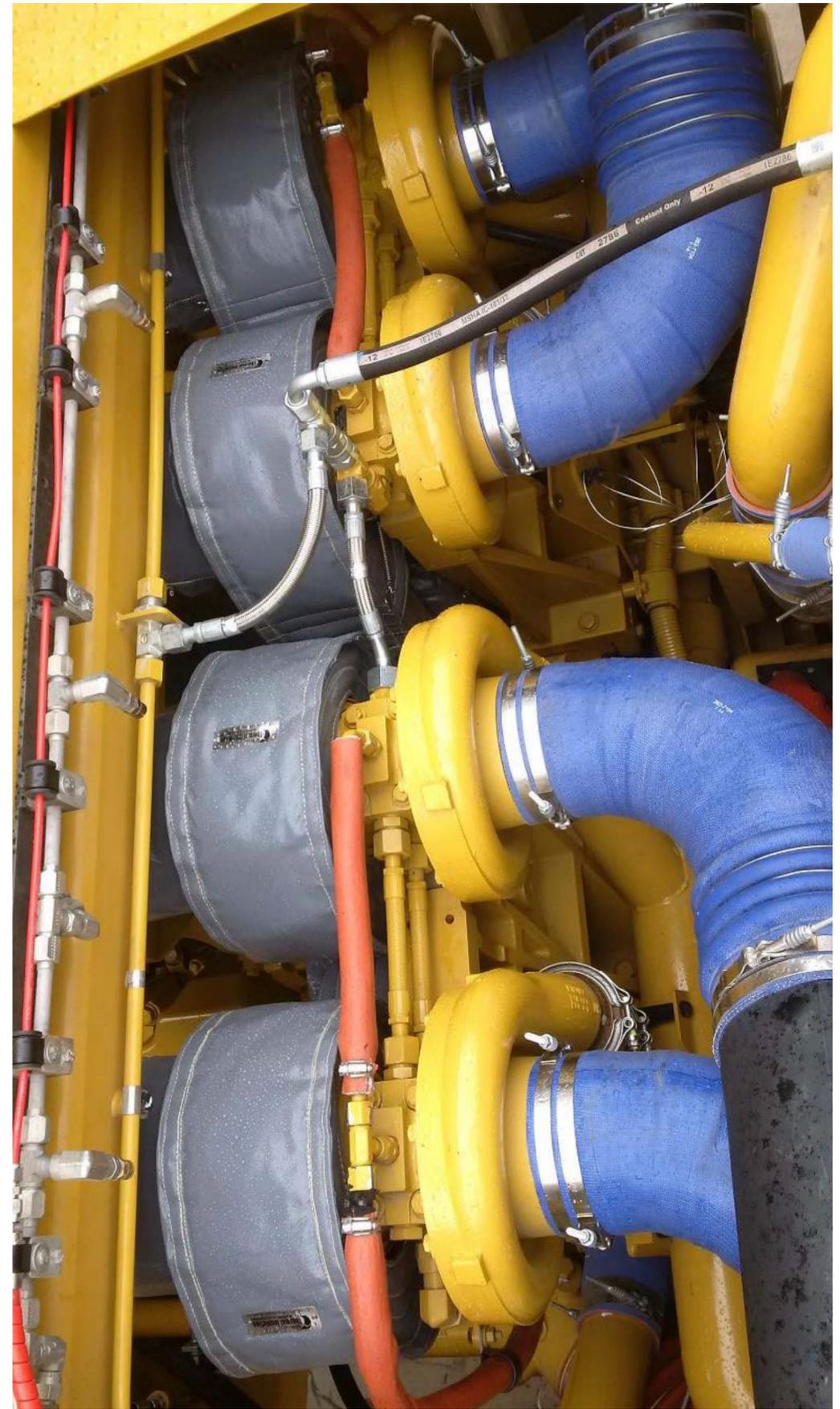
Quick-fit springs



Essential for fire mitigation



Australian made





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GIVE YOUR  
FLEET THE EDGE

