

# Service Request Detail Report

**SR # 1-1283486734**  
**Ext ID# 1-50552499**

SR Info	SR Classification	SR Ownership
SR Type: Service issues - Incident	Source: Email	SR Owner: CHRISTOPHER JONES
SR Area: Technical	Func. Group: 5611-compressor, complete	SR Group: VTNA - Volvo Transportation Services
App/Service: technical	Severity: 3-Medium	SR Opened: 12/17/2008 4:42:01 PM
Sub Area: Fleet Contact	Status: Closed	SR Closed: 12/19/2008 8:32:25 AM
Sub Area 2:	Sub-Status: Resolved	Created By: SIEBEL ADMINISTRATOR
Argus Company: VTNA Trucks		Created By Group:

Customer / Repairing Dealer Info	Selling Dealer Info
Call Back Name: LUCAS	Selling Dealer ID:
Call Back #: (863) 712-0278	Selling Dealer:
Contact First Name: RICK	Main Phone #:
Contact Last Name: DENOLF	Main FAX #:
Dealer ID: F219	Street Address 1:
Dealer Name: GRANDE MACK SALES & SERVICE INC	Street Address 2:
Main Phone #: 2106466225	City:
Main FAX #:	State / ZIP:
Street Address 1: 11215 N WEIDNER RD	Country:
Street Address 2:	
City: SAN ANTONIO	
State / ZIP: TX / 782336004	
Country: UNITED STATES	

Owner Info	Buyer Info
	Buyer ID: 486754
	Buyer Name:
	Main Phone #:
	Main FAX #:
	Street Address 1:
	Street Address 2:
	City:
	State / ZIP:
	Country: UNITED STATES

Vehicle / Unit	Vehicle / Unit Info
Chassis Series: N	Cab Size: 780
Chassis Number: 481127	Engine Make: VOLVO
Registration #:	Engine Model: D13
VIN / Serial #: 4V4NC9EJ78N	Rear axle installation: RADD-A4L
Model: VNL	Engine: D13F485
	HP Description: 475
	Rear axle: RT1857SM
	Gearshifting system: GSS-FAS
	Transmission: 16910BD3
	Truck Model Year: 2008
	Brake system: BSYS-CON

Other Details
Part #:
Misc Part #: RANDOLPH, NY
Error Code #:

Technical
Km / Hr / Mi: 250982
Unit: Mi
Accuracy:
GCW:
Location:
Campaign #:
Tot. Diag Time Appr:
Unit #: 80212
Tech Rating:
Date of Failure:
Remarks:

## Summary

VTSVAS ██████████ EUTA D13 NO AIR PRESSURE

Desc./Compl.	Response
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LOST ALL AIR PRESSURE. US XPRESS SENT ROAD SERVICE EARLIER AND THEY DETERMINED THAT THE ACTUAL METAL LINE FROM THE COMPRESSOR IS BLOWN. VOLVO PART.	1-1283486734
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REQUEST ROAD SERVICE TONIGHT IF POSSIBLE.

has a hazmat load  
Sender : faxtest@myactionservice.com

ERROR ON ACCOUNT FIELD: 6977U

### Activity Notes

Created	Created By	Activity Type	Description
12/19/2008 8:31:05 AM	CHRISTOPHER JONES	Response	BUFFALO TRUCK—sw patty completed at 13-00, air compressor discharge hose, waranty

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# Service Request Detail Report

**SR # 1-1177185800**  
**Ext ID# 1-36293275**

SR Info	SR Classification	SR Ownership
SR Type: Service issues - Incident SR Area: Technical	Source: Email Func. Group: 2546-exhaust air injection	SR Owner: MIKE RUSSELL SR Group: VTNA - Volvo Transportation Services
App/Service: technical Sub Area: Fleet Contact Sub Area 2: NA	Severity: 3-Medium Status: Closed Sub-Status: Resolved	SR Opened: 1/26/2008 11:22:16 AM SR Closed: 1/28/2008 2:49:14 PM Created By: SIEBEL ADMINISTRATOR
Argus Company: VTNA Trucks		Created By Group:

Customer / Repairing Dealer Info	Selling Dealer Info
Call Back Name: CUMBERLAND TRUCK EQUIPMENT - EPHRATA Call Back #: (717) 738-2444 Contact First Name: WALTER Contact Last Name: ATTMORE Dealer ID: 6977U Dealer Name: VAS Main Phone #: Main FAX #: Street Address 1: 7900 NATIONAL SERVICE RD Street Address 2: City: GREENSBORO State / ZIP: NC / 274099416 Country: UNITED STATES	Selling Dealer ID: Selling Dealer: Main Phone #: Main FAX #: Street Address 1: Street Address 2: City: State / ZIP: Country:

Owner Info	Buyer Info
	Buyer ID: 488823 Buyer Name: <span style="background-color: black; color: black;">[REDACTED]</span> Main Phone #: <span style="background-color: black; color: black;">[REDACTED]</span> Main FAX #: <span style="background-color: black; color: black;">[REDACTED]</span> Street Address 1: <span style="background-color: black; color: black;">[REDACTED]</span> Street Address 2: <span style="background-color: black; color: black;">[REDACTED]</span> City: <span style="background-color: black; color: black;">[REDACTED]</span> State / ZIP: <span style="background-color: black; color: black;">[REDACTED]</span> Country: UNITED STATES

Vehicle / Unit	Vehicle / Unit Info
Chassis Series: N Chassis Number: 492545 Registration #: VIN / Serial #: 4V4NC9EH78N <span style="background-color: black; color: black;">[REDACTED]</span> Model: VNL	Cab Size: 670 Engine Make: VOLVO Engine Model: D13 Rear axle installation: RADD-A4L Engine: D13F435 HP Description: 425 Rear axle: RTS1857A Gearshifting system: GSS-R Transmission: 16909AOC Truck Model Year: 2008 Brake system: BSYS-CON

Other Details
Part #: Misc Part #: Ephrate Error Code #:

Technical	Campaign #:
Km / Hr / Mi: 18352 Unit: Mi Accuracy: Actual GCW: Location:	Tot. Diag Time Appr: Unit #: 304336 Tech Rating: Date of Failure: Remarks:

**Summary**

vtsvas/ 7 D13F exhaust leak

**Desc/Compl**

EXHAUST LEAK IN MANIFOLD AREA  
AIR LEAK COMPRESSOR DISCHARGE LINE  
Sender : do-not-reply@myactionservice.com

**Response**

CUMBERLAND TRUCK EQUIPMENT - EPHRATA SPOKE TO  
CHIP .. STATED THE UNIT IS COMPLETE AND GONE ..

- NO OIL LEAK NO EXHAUST LEAK  
- TIGHTENED FITTING / HOSE AT DISCHARGE LINE ON AIR  
COMPRESSOR

WARRANTY

**Translation**

5229D

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**Service Request Detail Report**

**SR # 1-1255056610**  
**Ext ID# 1-41554892**

SR Info	SR Classification	SR Ownership
SR Type: Service issues - Incident	Source: Email	SR Owner: DAVID FAIRBANKS
SR Area: Technical	Func. Group: 5611-compressor, complete	SR Group: VTNA - Volvo Transportation Services
App/Service: technical	Severity: 3-Medium	SR Opened: 7/16/2008 9:08:19 AM
Sub Area: Fleet Contact	Status: Closed	SR Closed: 7/16/2008 10:40:29 AM
Sub Area 2:	Sub-Status: Resolved	Created By: SIEBEL ADMINISTRATOR
Argus Company: VTNA Trucks		Created By Group:

Customer // Repairing Dealer Info	Selling Dealer Info
Call Back Name: COLUMBUS TRUCK & EQUIPMENT	Selling Dealer ID: 5713D
Call Back #: (614) 252-3111	Selling Dealer: OZARK TRUCK SALES
Contact First Name: WALTER	Main Phone #: 4797561200
Contact Last Name: ATTMORE	Main FAX #: 4797561202
Dealer ID: 6977U	Street Address 1: 4720 W SUNSET AVE
Dealer Name: VAS	Street Address 2:
Main Phone #:	City: SPRINGDALE
Main FAX #:	State / ZIP: AR / 727624816
Street Address 1: 7900 NATIONAL SERVICE RD	Country: UNITED STATES
Street Address 2:	
City: GREENSBORO	
State / ZIP: NC / 274099416	
Country: UNITED STATES	

Owner Info	Buyer Info
	Buyer ID: 108279
	Buyer Name:
	Main Phone #:
	Main FAX #:
	Street Address 1:
	Street Address 2:
	City:
	State / ZIP:
	Country: UNITED STATES

Vehicle / Unit	Vehicle // Unit Info
Chassis Series: N	Cab Size: 630
Chassis Number: 491170	Engine Make: VOLVO
Registration #:	Engine Model: D13
VIN / Serial #: 4V4NC9EH78N	Rear axle installation: RADD-A4L
Model: VNL64T	Engine: D13F435
	HP Description: 425
	Rear axle: RT1857SM
	Gearshifting system: GSS-R
	Transmission: F16210CO
	Truck Model Year: 2008
	Brake system: BSYS-CON

Other Details
Part #:
Misc Part #: Columbus
Error Code #:

Technical
Km / Hr / Mi: 159400
Unit: Mi
Accuracy:
GCW:
Location:
Campaign #:
Tot. Diag Time Appr:
Unit #: 815
Tech Rating:
Date of Failure:
Remarks:

**Summary**

vtsvas/ [REDACTED] 07 D13F compressor air line leaking

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Desc./Compl.	Response
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BROKEN AIR DISCHARGE LINE

vas vts don't need to be involved in this case

PART # 21206841

PART # 21206950

Sender : do-not-reply@myactionservice.com

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# Service Request Detail Report

## SR # 1-1202769256 Ext ID# 1-38362048

SR Info	SR Classification	SR Ownership
SR Type: Service issues - Incident SR Area: Technical	Source: Email Func. Group: 5619-miscellaneous	SR Owner: MIKE RUSSELL SR Group: VTNA - Volvo Transportation Services
App/Service: technical Sub Area: Fleet Contact Sub Area 2: NA	Severity: 3-Medium Status: Closed Sub-Status: Resolved	SR Opened: 4/3/2008 4:32:25 PM SR Closed: 4/4/2008 12:55:39 AM Created By: SIEBEL ADMINISTRATOR
Argus Company: VTNA Trucks		Created By Group:

Customer / Repairing Dealer Info	Selling Dealer Info
Call Back Name: MAT WICHELNS Call Back #: (111) 222-3333 Contact First Name: WALTER Contact Last Name: ATTMORE Dealer ID: 6977U Dealer Name: VAS Main Phone #: Main FAX #: Street Address 1: 7900 NATIONAL SERVICE RD Street Address 2: City: GREENSBORO State / ZIP: NC / 274099416 Country: UNITED STATES	Selling Dealer ID: Selling Dealer: Main Phone #: Main FAX #: Street Address 1: Street Address 2: City: State / ZIP: Country:

Owner Info	Buyer Info
	Buyer ID: Buyer Name: Main Phone #: Main FAX #: Street Address 1: Street Address 2: City: State / ZIP: Country:

Vehicle / Unit	Vehicle / Unit Info
Chassis Series: N Chassis Number: 498937 Registration #: VIN / Serial #: 4V4NC9EJ49N Model: VNL64T	Cab Size: 630 Engine Make: VOLVO Engine Model: D13 Rear axle installation: RADD-A4L Engine: D13F485 HP Description: 475 Rear axle: RT1857SM Gearshifting system: GSS-AGS Transmission: ATO2512C Truck Model Year: 2009 Brake system: BSYS-CON

Other Details
Part #: Misc Part #: Auto Truck Error Code #:

Technical	
Km / Hr / Mi: 260 Unit: Mi Accuracy: Actual GCW: Location:	Campaign #: Tot. Diag Time Appr: Unit #: Tech Rating: Date of Failure: Remarks:

### Summary

VTSVAS / [REDACTED] ATT / Brakes Not Releasing

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Desc./Compl.	Response
UNIT WILL RELEASE BRAKES CANT BILL UP AIR . THIS MAY BE A MAIN AIR LINE COMING FROM THE COMPRESSOR ON LEFT SIDE OF THE ENGINE.	WORLDWIDE EQUIPMENT - HUNTINGTON DIVISION- spoke with Tracy, truck is gone, some airlines were not tightened and they just retightened... tow and repair bill were covered by warranty.

LOAD# 5508040009

2 PIGGY BACK

VIN # 266709

VIN #269443

DRIVER HAS NO CELL SERVICE

Sender : do-not-reply@myactionservice.com

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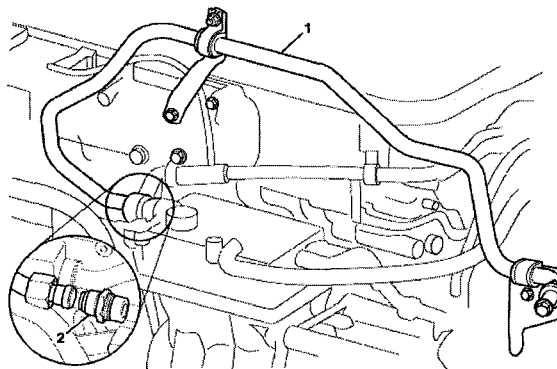
**SB531014****Date: 05/21/08****Model: MP8****(Also applies to Mack Trucks Australia)****Revised Air Compressor Discharge Line — MP8 Engines**

Effective on the dates listed below, a revised air compressor discharge line and fitting was implemented into production on CXU, CHU and GU models equipped with a MACK MP8 engine.

- **GU Models** — May 1, 2008
- **CXU and CHU Models** — May 5, 2008

The end of the line where it connects to the air compressor was changed from a ferrule-type fitting to a 37-degree flare compression-type fitting to address issues of air leakage at the discharge line, and also to prevent the line from "blowing-off" the compressor cylinder head. Should discharge line "blow-off" or air leakage from the discharge line fitting be encountered, the existing discharge line and fitting must be replaced with the revised line.

Revised Air Compressor Discharge Line and Fitting



Key	Qty.	Part No.	Description	Replaces
1	1	21206841	Tube, air compressor discharge, MP8 engines	17QE371M

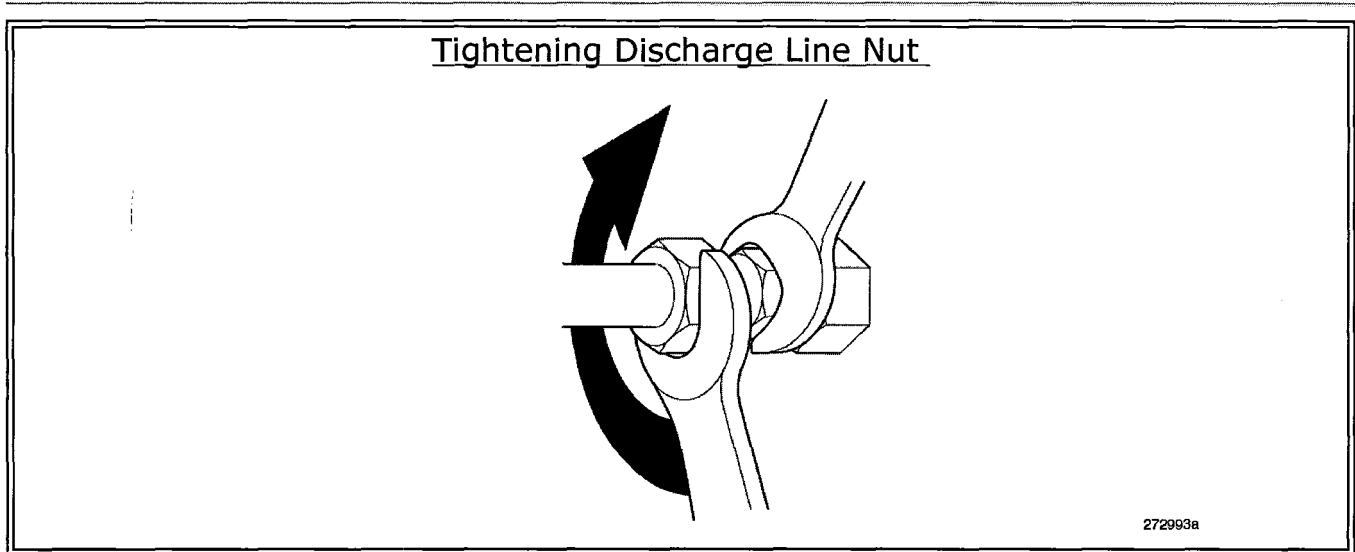
2	1	21206950	Fitting, 37-degree flare, compression-type	63AM88
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After removing the existing discharge line and fitting, install the replacement fitting (part No. 21206950) into the compressor cylinder head. Tighten the fitting to 130 N•Nm (96 lb-ft).

Install the replacement discharge line (part No. 21206841). Tighten the line end nut at the compressor cylinder head to 109 N•m (80 lb-ft).

**NOTE**

When tightening the line nut, the fitting in the compressor cylinder head must be held with a wrench as shown in the following illustration.



For warrantable repairs, the labor code and maximum labor allowance are as follows:

531 9C 00 80	1.5 hrs. —	Time allowed to remove and replace existing air compressor discharge line on CXU, CHU and GU models equipped with MP8 engine. Does not include "take-charge" time.
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Mack Trucks, Inc. engages in a continuous program of testing and evaluating to provide the best possible product. Mack Trucks, Inc., however, is not committed

to, or liable for updating existing chassis.

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## CORPORATE AUTOMOTIVE CAMPAIGN BULLETIN

**Date:** July 24, 2008  
**To:** Corporate Automotive, Transportation and Transportation I.E. Department,  
Region Automotive Managers, Area Automotive Managers,  
Region Automotive Training Managers, and MDC Manager  
**From:** Corporate Automotive Engineering - Transportation Equipment Team  
**Contact:** [REDACTED] **ATLAS:** 490-8210 **E-mail:** [REDACTED]  
**Subject:** Campaign Bulletin # 46-9040  
**Mack 2008 Model Year Tractor Engine Upgrades**

**Action Required:** Return the tractor to an authorized Mack dealer for engine service upgrades.

**Concern Reported:** Various engine performance and reliability concerns.

**Units Involved:**

**Equipment Type:** Tractor  
**Car Group:** HTDA  
**Model Year:** 2008  
**Chassis Mfr.:** Mack  
**Body Mfr.:** Mack  
**Quantity:** 193  
**Unit Number Range(s):** 270452 - 270644

**Campaign Detail:** Return the tractor to an authorized Mack dealer for the completion of the following campaigns. Upon completion of the campaigns properly record the information in AIS.

- PI #654 Incorrect Engine Oil Level Dipstick
- PI #663 Engine Management System Software Upgrade
- FI047 UPS MP8 Compressor discharge tube / documented in Mack SB 531014
- Fuel Injector retaining yoke upgrade
- Upper cooling system hose upgrade to silicone hose (11MF4457M) and clamps
  - ↳ *Please be advised, there are currently no hoses available through the Mack Parts System. There is a lead time until they arrive. UPS shops should inspect first as shown in the attachment, and then check with their local Mack dealer to preorder parts. If there are any concerns contact Phil Cary at Mack Trucks 610-709-2696.*

**General Information:**

**Campaign Control #:** 46-9040  
**Labor Hours:** 0.1 For AIS Documentation  
**Work Accomplish Code:** 32  
**Planned Completion Date:** September 1, 2008

**Parts Information:**

**Centers Order Parts From:** N/A  
**UPS Part Number(s):** N/A  
**Mfr. Part Number(s):** N/A  
**Part(s) Cost:** N/A

**Warranty Information:**

This Campaign is covered 100% by Mack Truck and needs to be completed by an authorized dealer.  
No warranty money will be credited to UPS for AIS documentation.

Warranty:    Yes             No



Number: SB531014

Date: 05/21/08

Model: MP8

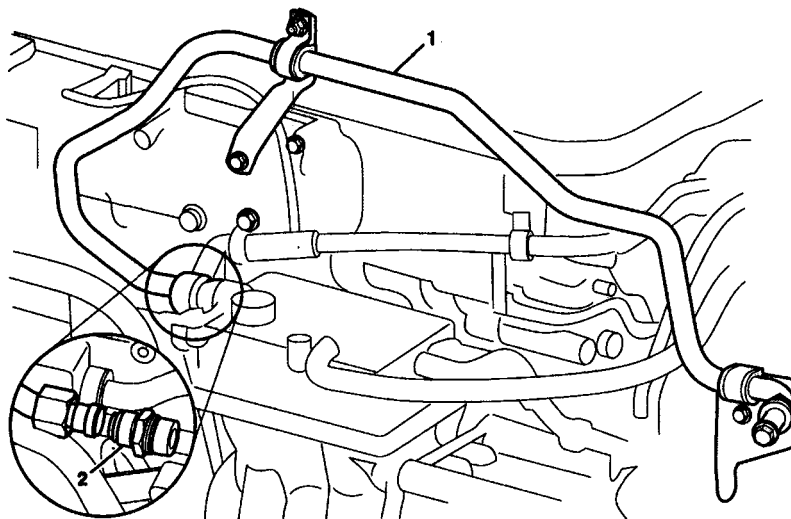
(Also applies to Mack Trucks Australia)

## Revised Air Compressor Discharge Line — MP8 Engines

Effective on the dates listed below, a revised air compressor discharge line and fitting was implemented into production on CXU, CHU and GU models equipped with a MACK MP8 engine.

- **GU Models** — May 1, 2008
- **CXU and CHU Models** — May 5, 2008

The end of the line where it connects to the air compressor was changed from a ferrule-type fitting to a 37-degree flare compression-type fitting to address issues of air leakage at the discharge line, and also to prevent the line from "blowing-off" the compressor cylinder head. Should discharge line "blow-off" or air leakage from the discharge line fitting be encountered, the existing discharge line and fitting must be replaced with the revised line.



272992a

Figure 1 — Revised Air Compressor Discharge Line and Fitting

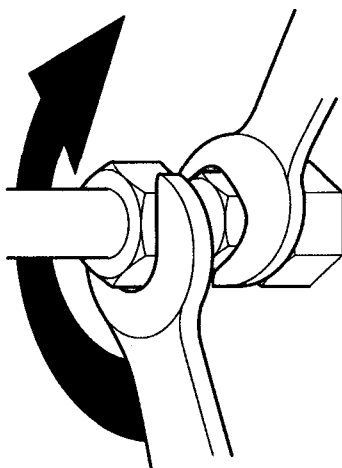
Key	Qty.	Part No.	Description	Replaces
1	1	21206841	Tube, air compressor discharge, MP8 engines	17QE371M
2	1	21206950	Fitting, 37-degree flare, compression-type	63AM88

After removing the existing discharge line and fitting, install the replacement fitting (part No. 21206950) into the compressor cylinder head. Tighten the fitting to 130 N•m (96 lb-ft).

Install the replacement discharge line (part No. 21206841). Tighten the line end nut at the compressor cylinder head to 109 N•m (80 lb-ft).

**NOTE**

When tightening the line nut, the fitting in the compressor cylinder head must be held with a wrench as shown in the following illustration.



272993a

**Figure 2 — Tightening Discharge Line Nut**

For warrantable repairs, the labor code and maximum labor allowance are as follows:

531 9C 00 80 .....	1.5 hrs. —	Time allowed to remove and replace existing air compressor discharge line on CXU, CHU and GU models equipped with MP8 engine. Does not include "take-charge" time.
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# EDIT MARKET QUALITY REPORT

Market Quality Report Created Date: 2008-01-04 Item: 7582-330 Status: Connected (2008-01-22)  
Report

<b>Subject</b> CXU	<b>Short Problem Description</b> Air Compressor Discharge Line Leaks/Disconnects at Air Compressor	<b>Breakdown</b> Yes	<b>Function Group</b> 5617	<b>QJ Item</b> 561:104
<b>Reporting Market</b> USA: Mack Product, 7582	<b>Issuer Name</b> Timothy Lengel	<b>Issuer Mail Id</b> tim.lengel@volvo.com		

## Problem Description

Complaint	Cause	Correction										
<p>Reliability Engineering has received 7 complaints of the air compressor discharge line leaking and or disconnecting from the air compressor fitting. This joint utilizes a steel 20mm tube with a ferrule and nut. Reports from the dealers indicate this connection leaks air and eventually will disconnect from the air compressor fitting. In reviewing the returned parts it appears the discharge line crushes in the area where the ferrule seals on the tube. Memos received from SPP indicate there process is under control as they use a torque wrench calibrated to 103 lb. ft. to torque the discharge line nut. However the process at Macungie is not under control as they don't use a torque wrench to tighten the discharge line nut.</p> <p>Note: The torque specification for the nut is 103+/- 7 lb.ft. As the complaints are with GU as well as CHU/CXU the root cause of the failure does not appear to be torque related.</p> <p>There are numerous E-Service Cases written relative to this matter, as follows: 1-1142679111, 1-1150060071, 1-1145357261, 1-1156292667 and 1-1168069651</p> <p>The following should be noted: **** 45 discharge tubes have been sold in the after market, beginning 7/07.</p> <p>**** There are 7 warranty claims in the system.</p> <p>**** Typical warranty claim # 073460964 Cost for this repair was \$493.36</p> <p>**** Chassis population 5,151</p> <p>**** Fault frequency .00136</p>												
<table border="1"> <tr> <td><b>Causing Part No</b></td> <td><b>Causing Part Name</b></td> <td><b>Defect Code Group</b></td> <td><b>Defect Code</b></td> <td><b>No of Complaints</b></td> </tr> <tr> <td></td> <td></td> <td>2 Leakage/Consumption</td> <td>21 Gas, air</td> <td>7</td> </tr> </table>	<b>Causing Part No</b>	<b>Causing Part Name</b>	<b>Defect Code Group</b>	<b>Defect Code</b>	<b>No of Complaints</b>			2 Leakage/Consumption	21 Gas, air	7		
<b>Causing Part No</b>	<b>Causing Part Name</b>	<b>Defect Code Group</b>	<b>Defect Code</b>	<b>No of Complaints</b>								
		2 Leakage/Consumption	21 Gas, air	7								

17qe371m	Air Compressor Discharge Tube	Responsible Area	Vehicle Module
		Classification <input type="checkbox"/>	Team <input type="checkbox"/>
		Mack <input type="checkbox"/>	048 <input type="checkbox"/>

**Attachment**

Select File

**Vehicles Concerned**

Chassis Id <input type="checkbox"/>	Vehicle Info <input type="checkbox"/>	GTA <input type="checkbox"/>	Repair Date <input type="checkbox"/>	Mileage <input type="checkbox"/>	Mileage Unit <input type="checkbox"/>	Mat. Avail. <input type="checkbox"/>
CXU613 1262	<input type="checkbox"/>	Rough	2007-10-24	15023	Miles	N
CXU613 1638	<input type="checkbox"/>	Rough	2007-11-07	18000	Miles	Y
GU713 1333	<input type="checkbox"/>	Very Rough	2007-07-09	30000	Miles	Y

Km  Miles  Y  N

**Comments**

**Mail List**

Mail Address

**Material Handling**

Chassis Id	Available	Requested	Arrived	N/A	Importer	Dealer No	Dealer Info
CXU613 1262	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
CXU613 1638	Y	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
GU713 1333	Y	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>

<b>Material Responsible Name</b>	<b>Telephone</b>	<b>Material Receiver Attention</b>	<b>Telephone</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<b>Material Information Length (cm)</b>	<b>Width (cm)</b>	<b>Height (cm)</b>	<b>Weight (kg)</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**What to do on arrival**

Analyze TMA + analyze report

Analyze TMA together with supplier + analyze report

Forward material on arrival to

**Material Comment**

[Redacted]

VOLVO

## QJ-REPORT INTERNAL

**QJ Id:** 561-104  
**Description:** GU/CHU/CXU MP8 Air Compressor Discharge Line Leaks  
**Case Manager:** Brad Keller  
**Solving Responsible:** Tim Lancaster  
**VMT:** VMT048 : Powertrain Installation  
  
**Classification:** ATN\_CHASSIS  
**Root Cause:** Design  
**Previous QJ ID:** -

**C-Value:** N: 53    Ntot: 400    F: 6000    S: 4    M: 2    Warranty Rep Cost: 1    **Unplanned Stop:** Yes

**N/Ntot:**  
 0,067

## QJ-Team

Name:	E-mail:	CM/VMT QM:	Solv Resp:	Design Resp:	Prod Prep:	Purchaser:	Tech. Service:	Parts:	Brand CM:	Si
Bruce Mochrie	<a href="mailto:bruce.mochrie@volvo.com">bruce.mochrie@volvo.com</a>							✓		
Michael Billetdeaux	<a href="mailto:michael.billetdeaux@volvo.com">michael.billetdeaux@volvo.com</a>									
Tae-gyu Min	<a href="mailto:andrew.min@volvo.com">andrew.min@volvo.com</a>					✓				
Timothy Lengel	<a href="mailto:tim.lengel@volvo.com">tim.lengel@volvo.com</a>						✓			

**Total Weeks (until today) = 17**

Status	Planned	Actual (YYWW)	Weeks	Total
=====	=====	=====	=====	=====
NEW		0804		
INV	0804	0804	0	0
DES	0806	0805	1	1
DCN	0810	0809	4	5
OK	0818	0819	10	15
MR	0822	0821	2	17

**QJ Problem Description:**

2008-01-22 Reliability Engineering is reporting air compressor discharge lines leaking or disconnecting on GU, CHU & CXU chassis with MP8 engines. Original C-value=33 N = 10 Ntotal=5300 F=4 S=100-300 As of March25th: C=59 Ntotal = 6048 N=140 S=100-300 UPS

**Affected Plant:**

MMD - Macungie, N - New River Valley

**Chassis Types...:**

CHU, CXU, GU7, GU8

**Variant...:**

503-7001

**Causing Part Number:**

17QE371M, 21065580

**Related Part Number:****QJ Investigation:**

2008-01-22 17QE371M failed parts were returned. 2008-01-29 A review of the part designs with the supplier found tube thickness to be too thin. Standard U.S. tube thickness was used. Two options were investigated - modifying the existing design & changing the design to the 37 deg flare. The flare design is used with MP7.

**Connected MQR/QAGR:**

Importer Nr: 7582 SEQ: 330 CON: 2008-01-22

**Action By:**  
Greensboro**Initiated by Dept:**  
2155**Name:**  
Tim Lengel**New Part No:**

21206841, 21206950

**DCN:**

D-13713-06, K-10816-72

**Break Point****Plant - Chassis Id/Serial No - Week:**

MACUNGIE - GU713-4792 - 0818, MACUNGIE - GU813-4748 - 0818, N NRV - CXU613-6296 - 0819

**QJ Solution:**

2008-02-01 D-13713-06 was issued to release the 37 deg flare design for GU/CHU/CXU MP8. 2008-02-22 D-13713-06 & K-10816-72 were approved. 21206950 compressor fitting (includes o-ring) replaced 990698 (63AM88) fitting and 947628 (593AM10) gasket. Air compressor discharge lines: 21206841 replaced 21065580 (17QE371M) for MP8 US'07, 21206845 replaced 21077615 (17QE376M) for MP8 Euro 3 & 21206849 replaced 21101708 (17QE437M) for MP10 US'07. 2008-02-27 K1081672 was released in PDM. Parts request# 1508-TL was issued to stock the PDC. 2008-04-02 K1081672 production effectivity was set for April 28th. Service Bulletin Temp# 14044 first draft was distributed Mar 27th. 2008-05-01 Macungie provided cut-in linesets of G 05-01-08, GU813-4748 & H 05-01-04, GU713-4792, both placed today. 2008-05-05 SPP provided a cut-in lineset of Z 04-28-06, CXU613-6296, placed today. 2008-05-21 The PDC is stocked. Service Bulletin# 531-014 was released today. This QJ is Market Ready.

**QJ Internal:**

ru0981v, Bruce Mochrie

2008-02-28 13:43:08

21206841 replaced 21065580 cooling coil  
21065580 = 0 pcs IS

21206950 compressor fitting (includes o-ring) replaced  
990698 (63AM88) fitting = 1 pcs IS  
947628 (593AM10) gasket = 72 pcs IS

**QJ External (QJ Journal):**

# PRINT PREVIEW MARKET QUALITY REPORT

Short Problem Description	Breakdown	Function Group	Item
Air Compressor Discharge Line Leaking (Air) (Fitting)	Yes	5617	23
Issuer Name	Issuer Mail		
Warren Spradlin	warrenspradlin@volvo.com		

Complaint	Cause	Correction
<p>Truck 429983627. Truck with air compressor discharge line out of position. Air compressor. Vehicle with air compressor. Also, 2007-08-16 (SN 489288) SN 489290. Air compressor 0706505X leaking air. Air compressor compression. Air compressor pipe before sealing. Air compressor pipe assembly. Air compressor pipe received with. Air compressor pipe. However, no documentation. Air compressor section. Air compressor. Vehicles for repair.</p>	<p>Cooling coil (therm 21063580) loose. Air compressor due to incorrect position of air pipe fitting and inadequate installation requirements for installation (contractor) SPP.</p>	<p>Internal investigation reference. Material deviation issued by Spirax (Industrial) allowing supplier to use crimp fitting to pipe, however, engineering documentation lacking. For example, needs standards change drawing # 21063579 to permit correct installation. Also, installation requirement 20798291 requires revision reference. Item B Request review of quality. Requirement reference 1561002004 dated 10/05/07. Also, QIR 561002003 dated 10/05/07. Request complete review to include corrected information be provided to contract installation company SPP. Total of vehicles potentially involved is 4332 built from Apr. 2007 to Jan 2008. Best estimate relative to actual claims received are vehicles built from Apr to Aug 2007 on about 105 total vehicles needing service strategy.</p>

Causing Part Name	Defect Code	No. of Complaints
Compressor discharge line (01)	214 Gas/air	15
Ripple 20MM (M26 X 1.5 S)	Responsible Area	
	Classification	Vehicle/Module/Team
	GSO/Chassis	048

File Name	Size (KB)
214 Gas/air	58
Air comp discharge deviation.pdf	216
Air compressor line 2142126	

Global Truck Application	Repair Date	Mileage	Mileage Unit	Mtc Avail	Rep. Imp. No.	Rep. Dealer No.	Dealer Info	Date
Smooth	2007-10-04	000	0000	N	7500	58200	Get Info	2007-10-04
Smooth	2007-08-16	225	Miles	N		51250	Get Info	2007-08-16
Smooth	2007-10-17	000-9	0000	N	7500	58200	Get Info	2007-10-17

Material ID	Available	Requested	Arrived	N/A	Importer	Dealer No.	Dealer Info
	N				7881	58270	Get Info
	N					51250	Get Info
	N				7881	52530	Get Info

Material responsible:  
Name: Telephone: Material Receiver:  
Attention: Telephone:

Material information:  
Length (cm): Width (cm): Height (cm): Weight (kg):

What to do on arrival:

Material comment:

VOLVO

## QJ-REPORT INTERNAL

**QJ Id:** 561-106  
**Description:** VE13 Compressor Discharge Fitting Leaking  
**Case Manager:** Jim Doyal  
**Solving Responsible:** Tim Lancaster  
**VMT:** VMT048 : Powertrain Installation

**Classification:** GSO\_CHASSIS  
**Root Cause:** Design  
**Previous QJ ID:** -

**C-Value:** 17    **N:** 20    **Ntot:** 31800    **F:** 4    **S:** 1    **M:** 1    **Warranty Rep Cost:**    **Unplanned Stop:** No

**N/Ntot:**  
 0,001

**Total Weeks (until today) = 11**

Status	Planned	Actual (YYWW)	Weeks	Total
=====	=====	=====	=====	=====
NEW		0807		
INV		0807	0	0
DES		0807	0	0
DCN	0808	0808	1	1
OK	0820		0	1
MR	0820		0	1

**QJ Problem Description:**

2008-02-13 Cooling coil leaking at ferrule fitting connection to air compressor.

**Affected Plant:**

**Chassis Types....:**  
 VHD, VN, VT

**Variant...:**

**Causing Part Number:**  
 21065580, 990698, 990700

**Related Part Number:****QJ Investigation:**

2008-02-13 Leaking at compression fitting due to ferrule locking on pipe before sealing. 2008-02-22 Applies to US07 VE13 and VE16 engines.

**Connected MQR/QAGR:**

**Importer Nr:** 7581 **SEQ:** 770 **CON:** 2008-02-13

**Action By:**  
 VTNA

**Initiated by Dept:**  
 11729

**Name:**  
 Warren Spradlin

**New Part No:**  
 21206841, 21206849, 21206950

**DCN:**  
 D-13713-06, K-10816-70

**Break Point**  
**Plant - Chassis Id/Serial No - Week:**

**QJ Solution:**

2008-02-13 The ferrule connection will be changed to a 37 degree flare.

**QJ External (QJ Journal):**

DCN's D-13713-06 and K-10816-70 have been released. 21206950 Nipple replaces 947628 Gasket and 990698 Nipple on both VE13 and US07 VE16. Cooling coils: 21206841 replaces 21065580 for VE13; 21206849 replaces 21101708 for US07 VE16.



# Warranty Manual Warranty Certificates

The Manufacturer neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of the Vehicle. This warranty may be transferred by the original retail purchaser to subsequent retail purchasers (purchasing the Vehicle directly from the original retail purchaser) with the prior approval of the Manufacturer and otherwise, in accord with the Manufacturer's Warranty Administration Instructions. The Manufacturer offers various customer purchasable extended warranty plans. Contact the Manufacturer's authorized new truck sales facility for details. This warranty shall not apply to used motor vehicles, the same being sold "as is - where is."

## WARRANTY COVERAGES AND LIMITATIONS: All Coverage is 100% Parts and Labor

VEHICLE APPLICATION: NORMAL DUTY (A) (STARTING MODEL YEAR 2008) MP '07 EMISSIONS -- HIGHWAY / NORMAL DUTY (A)	Hours	Months	Miles	Kilometers
<b>SCHEDULE 1. BASIC VEHICLE*</b> (Includes Roadside Assistance and Towing for warrantable failures**) Brake Drums are covered for 12 months or 25,000 miles/40 000 kilometers only.	---	12	100,000	161 000
<b>SCHEDULE 2. MACK DIESEL ENGINE</b>				
Standard Warranty:	10,800	36	300,000	483 000
Optional Standard Warranty:	6,250	24	250,000	402 500
**Standard & Optional Standard Warranty Includes: Roadside Assistance and Towing on warrantable engine failures	6,250	24	250,000	402 500
Major Components: Block Stiffener (Ladder Frame)      Engine Gears (Rear Mounted) Camshaft Forging      Exhaust Manifold Casting Camshaft Caps & Bolts      Flywheel Housing Connecting Rod & Cap Forging      Intake Manifold Casting Coolant Pump Housing      Main Bearing Bolts & Caps Crankshaft Forging      Oil Pump Drive & Driven Gears Cylinder Block Casting      Thermostat Housing Cylinder Head Casting & Bolts      Timing Gear Cover & Mounting Plate	12,500	60	500,000	805 000
Coverage also applies to consumables such as lubricant, antifreeze, filter elements, belts, hoses and similar maintenance items not reusable and replaced directly as a result of warrantable engine, carrier or transmission failure. Components not manufactured by Mack Trucks, Inc., but used on MACK diesel engine assemblies are excluded from the coverage in Schedule 2. These components are covered by the component manufacturer's warranty in effect at the time of delivery. Consult your local MACK service facility for details.				
**Roadside Assistance and Towing on warrantable Mack engine failures	6,250	24	250,000	402 500
<b>SCHEDULE 3. MACK T300 and TM300 TRANSMISSIONS</b>				
Extended Warranty for Long Haul Highway Service - (over 60,000 miles per year)	---	60	500,000	805 000
**Roadside Assistance and Towing on warrantable Mack transmission failures	---	60	750,000	1 207 500
		12	100,000	161 000
<b>SCHEDULE 4. MACK AXLES</b>				
Rear Carriers and Housings	---	60	500,000	805 000
Rear Carrier Seals, Gaskets and Front I-Beam	---	36	300,000	483 000
S65 Bogie and Carrier, Regardless of Carrier Model	---	12	100,000	161 000
**Roadside Assistance and Towing on warrantable Mack carrier failures		12	100,000	161 000
<b>SCHEDULE 5. Trunnion Bracket and Spindle, Suspension Trunnion (except Bushings).</b>				
**Roadside Assistance and Towing on warrantable failures	---	36	300,000	483 000
		12	100,000	161 000
<b>SCHEDULE 6. FRAMES: SIDE RAILS AND CROSSMEMBERS</b>				
**Roadside Assistance and Towing on warrantable failures	---	60	500,000	805 000
		12	100,000	161 000
<b>SCHEDULE 7. CAB STRUCTURE</b>				
	---	60	500,000	805 000
<b>SCHEDULE 8. CAB CORROSION</b>				
Coverage applies to perforation (an actual hole in the cab panel) due to corrosion. Coverage does not apply to corrosion caused by damage to paint finish.	---	60	500,000	805 000
<b>SCHEDULE 9. Components not manufactured by Mack Trucks, Inc. may have warranty coverage different from the above as they are covered by the manufacturer's warranty. Consult your local MACK sales facility for details.</b>				

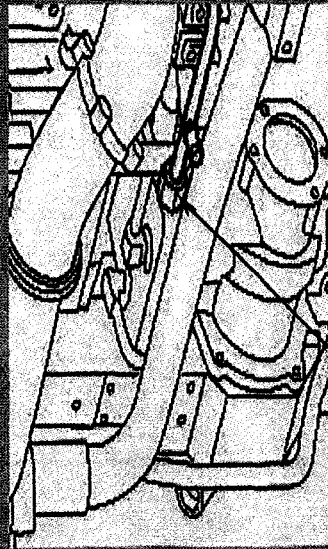
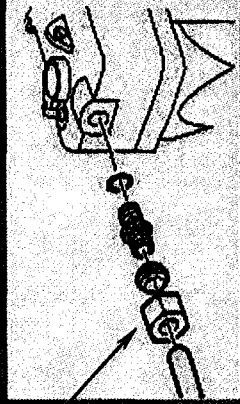
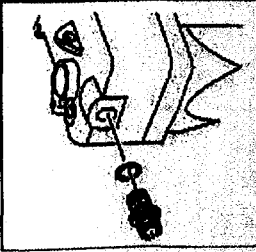
\*\* maximum \$600 per occurrence

\*\*Roadside Assistance and Towing coverage does not apply to vendor engines, transmissions and axles.

## Descriptions of Purchased Coverages in Table on Page 6

- PURCH-01787 – Basic 3 yr/300,000 miles
- PURCH-02257 – Basic/EMI 3 yr/465,886 miles (Canada)
- PURCH-02263 – Basic 3 yr/300,000 miles (Mack Leasing System)
- PURCH-02374 – Basic 2 yr/150,000 miles (Canada)
- PURCH-02375 – Basic 3 yr/300,000 miles (Canada)
- PURCH-02378 – Basic 3 yr/150,000 miles (Canada)
- PURCH-02407 – Basic 2 yr/200,000 miles (Canada)
- PURCH-02413 – Basic 2 yr/465,886 miles (Canada)
- PURCH-02463 – Basic 4 yr/500,000 miles (Canada)
- PURCH-02464 – Basic 3 yr/200,000 miles (Canada)
- PURCH-02492 – Basic 2 yr/200,000 miles (US) (Towing included)
- PURCH-02495 – Basic 2 yr/300,000 miles (US)
- PURCH-02503 – Basic 3 yr/250,000 miles (Canada)
- PURCH-02504 – Basic 5 yr/350,000 miles (Canada)
- PURCH-02508 – Basic 2 yr/300,000 miles (Canada)
- PURCH-02515 – Basic 4 yr/350,000 miles (Canada)
- PURCH-02517 – Basic 2 yr/200,000 miles (US)
- PURCH-02518 – Major components only 7 yr/600,000 miles

# Air Compressor Discharge Line



DISCHARGE LINE TO FITTING ON AIR COMPRESSOR (D12D18)

87° FLARE FITTING TIGHTENING PROCEDURE

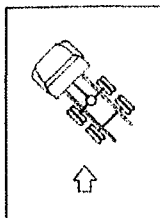
1. HAND TIGHTEN SO THAT THERE IS NO PLAY BETWEEN THE TUBE END AND THE NIPPLE
  2. TORQUE 1 1/16"-12 FITTING TO 80 ± 8.0 FT LBS (109 ± 11.0 Nm)
- AFTER INITIAL INSTALLATION, IF THE FLARE FITTING MUST BE LOOSENED, MARK THE FITTING BEFORE LOOSENING, THEN RETIGHTEN TO THIS MARK. DO NOT TIGHTEN FURTHER.

Volvo Trucks  
Product Reliability  
18 April 2008



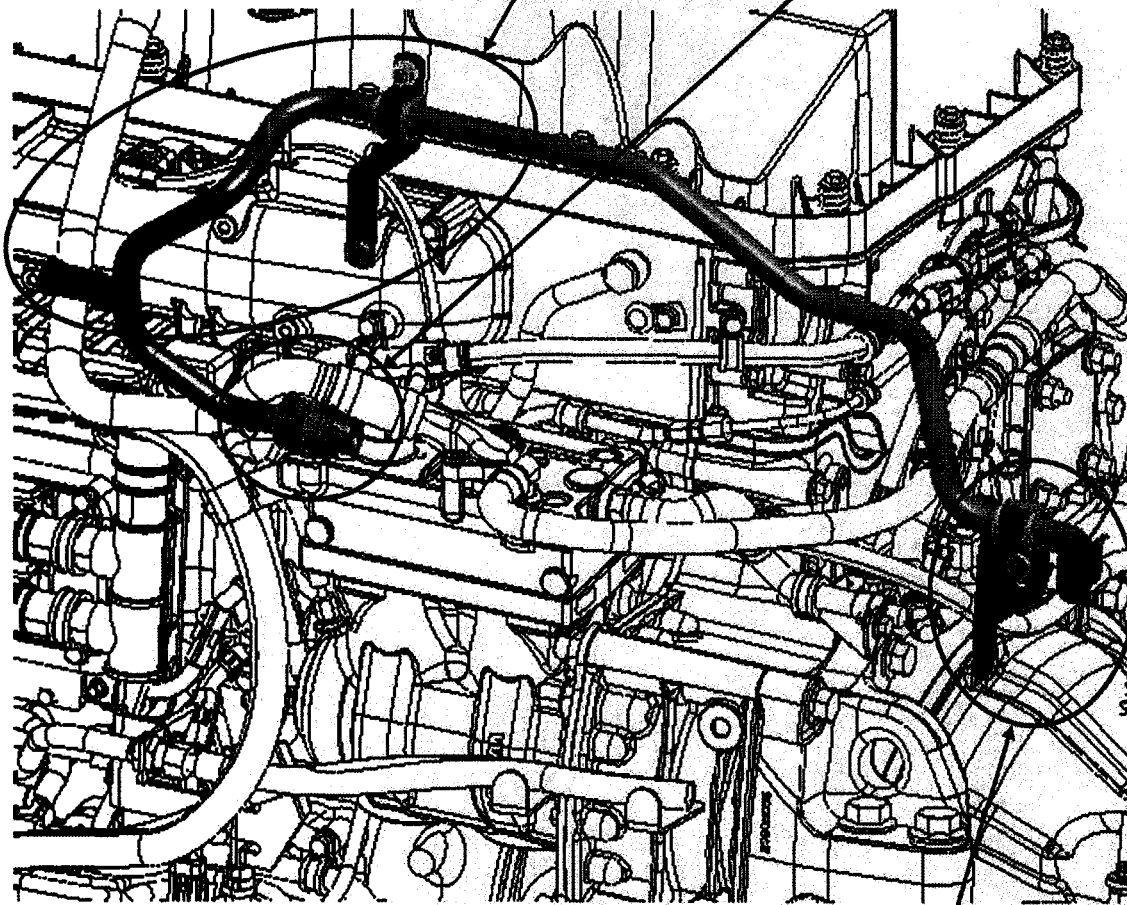
Engineering Release Notice (ERN)	Location	Change Description	A = Added D = Deleted	W = Was	Document Release Status <b>RELEASED</b>
D-13451-56					Date 2007-02-09 Modification Count

**SYMBOLS, DESIGNATIONS AND GENERAL AND DRAWING METHODS  
STD 101-0005 AND 5023,503**



SEE SHEET 3

SEE SHEET 2



MODULE REF: 20925829

SEE SHEET 4

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Document Title  
**AIR COMPRESSOR DISCHARGE  
INSTALLATION REQUIREMENT  
ENG-VE13**

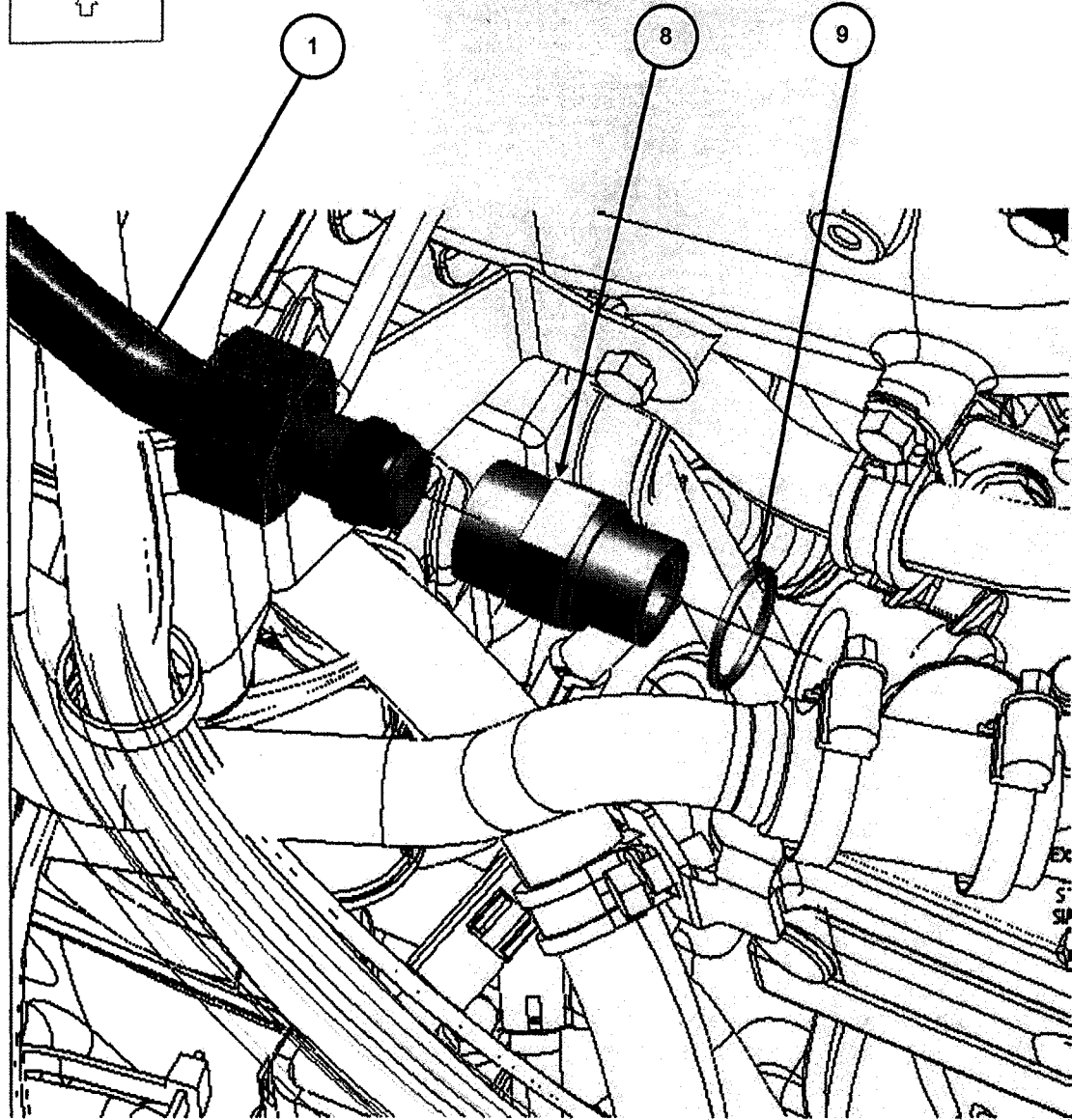
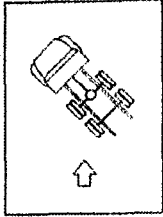
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**INSTALLATION REQUIREMENT**

Owner Domain: Document Prefix

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EDM-W 2008-04-01

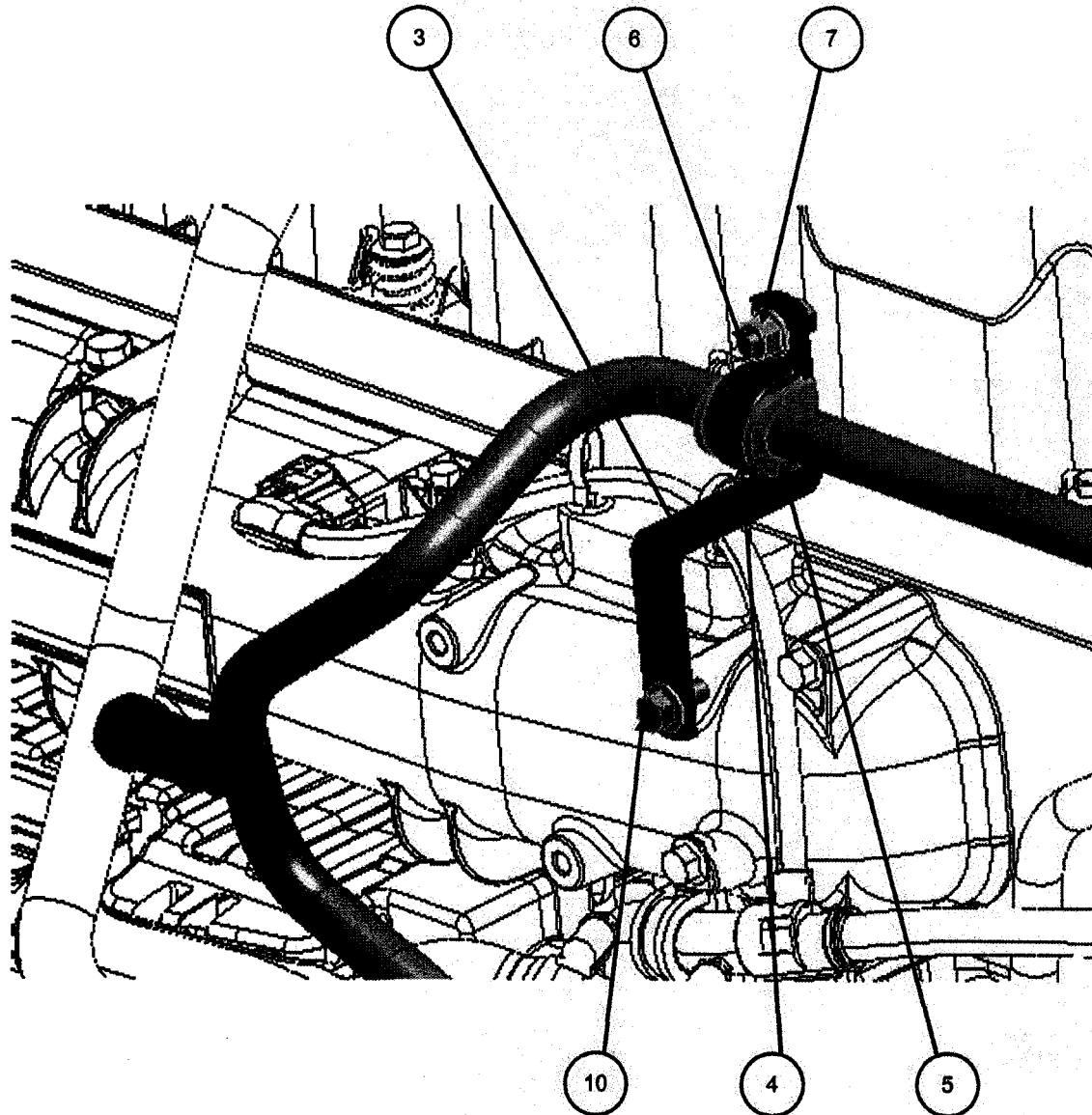
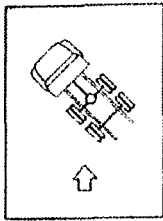


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Document No	Issue Index	Volume No	Page No
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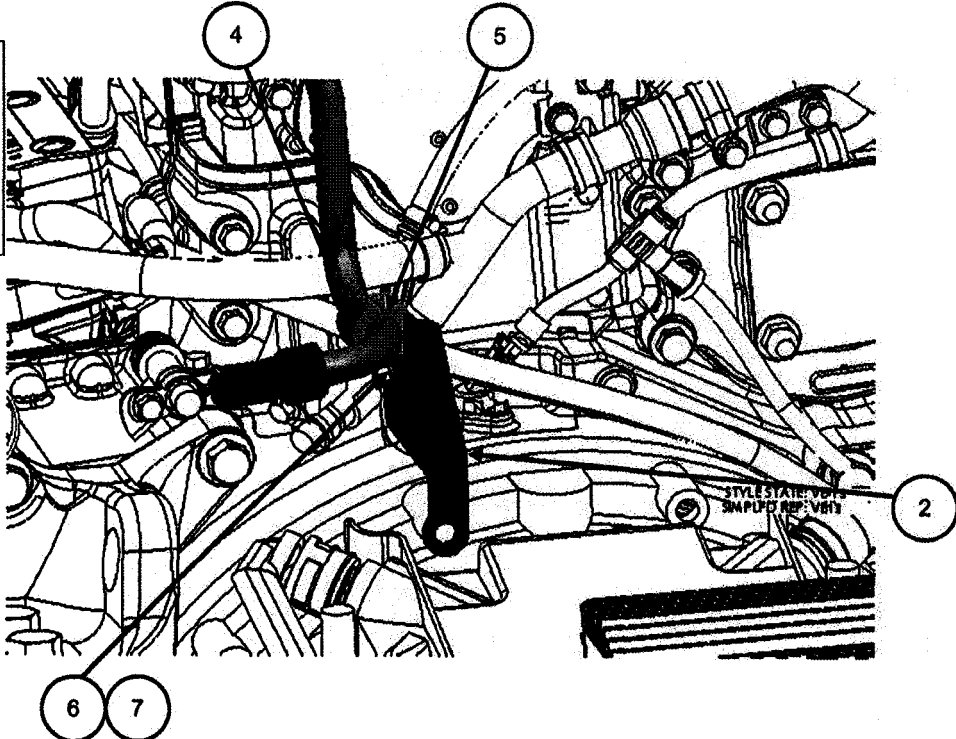
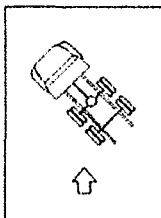
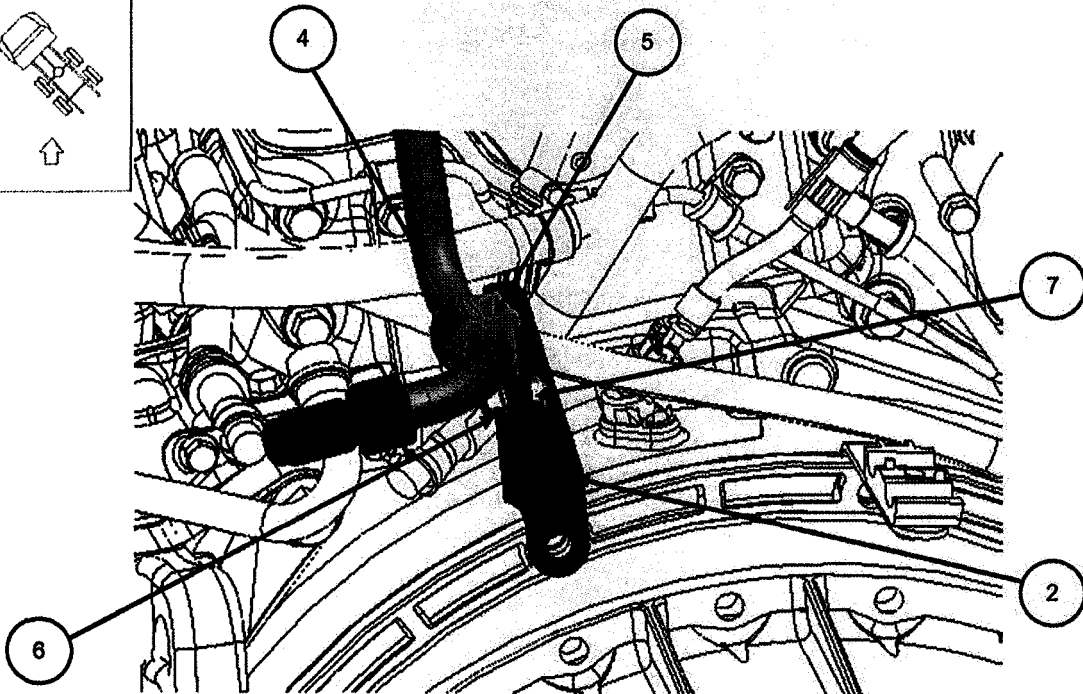
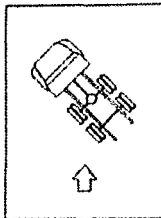


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Document Type  
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Document No	Issue Index	Volume No	Page No
<b>21065578</b>	<b>01</b>	<b>01</b>	<b>3(5)</b>



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Document Type

**INSTALLATION REQUIREMENT**

Document No

**21065578**

Issue Index

**01**

Volume No

**01**

Page No

**4(5)**

**CHART FOR VOLVO PRODUCT ONLY**

ITEM	PART NUMBER	QTY	PART DESCRIPTION	REMARKS
1	21065580	1	COOLING COIL, COMPRESSOR DISCHARGE	
2	20994465	1	BRACKET, ZAS TRANSMISSION	TRAN-ZAS
2	20925825	1	BRACKET	TRAN-FF, TRAN-FC, TRAN-FUS, TRAN-FAS, TRAN-M
3	21065583	1	BRACKET	
4	1075753	2	CLAMP, 28	
5	1075752	2	BUSHING	
6	946173	2	FLANGE SCREW, M8*20	
7	948645	2	FLANGE LOCK NUT, M8*9.4	
8	990698	1	NIPPLE, 20mm M26x1.5 S	
9	947628	1	GASKET, 26*31	
10	946440	1	FLANGE SCREW, M8*16	

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Document No	Issue Index	Volume No	Page No
<b>21065578</b>	<b>01</b>	<b>01</b>	<b>5(5)</b>

Tab# 6:

Description	PN	Superseded?	Total Aftermarket Sales <sup>1</sup>	Supplier	Address	Contact Info.
Discharge Pipe	17QE371M	Original Component	547	Spiral	Spiral Industries Inc. 1572 N. Old US Hwy 23, Howell, Mi 48843	Don Schellenberg dschellenberg@spiralindustries Phone: (810)632 6300
Discharge Pipe	21206841	17QE371M	1450	Spiral	See above	See above
Ferrule-type fitting	63AM88	Original Component	228	Parker	Parker Tube Fitting Division, 3885 Gateway Blvd. Columbus, OH 43228	Jamie Hazlette, Transportation Account Manager, Parker, Jhazlett@parker.com, Phone: (234) 380 3346
37-degree compression fitting	21206950	63AM88	1736	Parker	See above	See above

<sup>1</sup> Sales provide since Jan. 1 2007 when US07 Emission Engines required.

AMERICAN SOFTWARE, INC.

FORECAST MASTER MAINT.

AS OF 12/2008 12/31/2008

QUANTITIES IN NATIVE UNITS

CURRENCY: U.S. DOLLARS

AFB6371

RECORD-KEY: 21065580 (17QE371M)

LEVEL: 2

ACTION: INQUIRY

DESCRIPTION: COOLING COIL

DATA: HIST DMD + FUTURE F/C

PERM COMP:

44.55 TREND COMP:

0.91

PER	ACT DMD 3 YEARS	ACT DMD 2 YEARS	ACT DMD LAST YEAR	UNFORCED SYS-FC	MANAGEMENT OVERRIDE IND	RESULTANT FORECAST
01	0	0	44	45	0 H	43
02	0	0	47	47	0 H	45
03	0	0	101	47	0 H	44
04	0	0	104	47	0 H	43
05	0	0	64	48	0 H	43
06	0	0	12	49	0 H	42
07	0	2	14	49	0 H	42
08	0	1	21	49	0 H	39
09	0	3	22	49	0 H	41
10	0	14	29	49	0 H	40
11	0	25	12	49	0 H	40
12	0	20	12	49	0 H	39
TOT	0	65	482	577		501

CMD:

AMERICAN SOFTWARE, INC.

FORECAST MASTER MAINT.

AS OF 12/2008 12/31/2008

QUANTITIES IN NATIVE UNITS

CURRENCY: U.S. DOLLARS

AFB6371

RECORD-KEY: 21206841

LEVEL: 2

ACTION: INQUIRY

DESCRIPTION: COOLING COIL

DATA: HIST DMD + FUTURE F/C

PERM COMP:

182.58

TREND COMP:

8.35

PER	ACT DMD 3 YEARS	ACT DMD 2 YEARS	ACT DMD LAST YEAR	UNFORCED SYS-FC	MANAGEMENT OVERRIDE	IND	RESULTANT FORECAST
01	0	0	0	191	0	H	185
02	0	0	0	198	0	H	188
03	0	0	3	205	0	H	192
04	0	0	0	211	0	H	192
05	0	0	176	215	0	H	192
06	0	0	305	218	0	H	188
07	0	0	218	222	0	H	189
08	0	0	181	223	0	H	177
09	0	0	127	225	0	H	188
10	0	0	205	224	0	H	185
11	0	0	125	224	0	H	182
12	0	0	110	225	0	H	180
TOT	0	0	1450	2581			2238

CMD:

AMERICAN SOFTWARE, INC.

FORECAST MASTER MAINT.

AS OF 12/2008 12/31/2008

QUANTITIES IN NATIVE UNITS

CURRENCY: U.S. DOLLARS

AFB6371

RECORD-KEY: 990698 (63 AM 88)

LEVEL: 2 ACTION: INQUIRY

DESCRIPTION: NIPPLE

DATA: HIST DMD + FUTURE F/C

PERM COMP:

15.33 TREND COMP:

0.00

PER	ACT DMD 3 YEARS	ACT DMD 2 YEARS	ACT DMD LAST YEAR	UNFORCED SYS-FC	MANAGEMENT OVERRIDE IND	RESULTANT FORECAST
01	0	0	12	15	0 D	0
02	0	0	17	15	0 D	0
03	0	1	11	15	0 D	0
04	0	0	31	15	0 D	0
05	0	0	39	15	0 D	0
06	0	0	26	15	0 D	0
07	0	2	10	15	0 D	0
08	0	3	16	15	0 D	0
09	0	1	8	15	0 D	0
10	0	6	15	15	0 D	0
11	0	8	6	15	0 D	0
12	0	13	3	15	0 D	0
TOT	0	34	194	180		0

CMD:

AMERICAN SOFTWARE, INC.

FORECAST MASTER MAINT.

AS OF 12/2008 12/31/2008

QUANTITIES IN NATIVE UNITS

CURRENCY: U.S. DOLLARS

AFB6371

RECORD-KEY: 21206950

LEVEL: 2

ACTION: INQUIRY

DESCRIPTION: NIPPLE

DATA: HIST DMD + FUTURE F/C

PERM COMP:

237.98

TREND COMP:

10.26

PER	ACT DMD 3 YEARS	ACT DMD 2 YEARS	ACT DMD LAST YEAR	UNFORCED SYS-FC	MANAGEMENT OVERRIDE IND	RESULTANT FORECAST
01	0	0	0	248	0 H	240
02	0	0	0	258	0 H	245
03	0	0	5	265	0 H	248
04	0	0	0	272	0 H	248
05	0	0	193	278	0 H	248
06	0	0	369	282	0 H	243
07	0	0	230	286	0 H	244
08	0	0	235	288	0 H	229
09	0	0	191	290	0 H	242
10	0	0	218	289	0 H	238
11	0	0	146	289	0 H	235
12	0	0	149	290	0 H	231
TOT	0	0	1736	3335		2891

CMD: