




 DGS DIESEL + GETRIEBE + SERVICE DISTRIBUTOR IN DEUTSCHLAND					<h1>Service Report</h1>					
    					Repair Order (RO) Nr.		Tbd by Global Industrial Solutions			
					Date of failure		02.06.2023			
					Repair Order Open Date		02.06.2023			
<<Global Industrial Solutions>> LLC, 100097 Tashkent, Uzbekistan, Tel: +998712319238										
Report to: Rolf Oerter, Customer Support, Training Tel: +49 6131-5807-737, cell: +49 1761-5807-737 email: roerter@dgs-mainz.com										
		Customer, Orderer:			Enduser, Owner of vehicle:			Location of repair:		
Name:		Yutong, Allison Transmission			TOSHAHARTRANSXIZMAT			TOSHAHARTRANSXIZMAT		
Street:		1320,Marketing Center, No.66 Yuxing Road			Amir Temur Street, 6			Amir Temur Street, 6		
Town:		Economic Development Zone Zhengzhou, China			Tashkent, Uzbekistan			Tashkent, Uzbekistan		
ZIP Code										
Province:										
Contact:		Yang Wei, Yutong/ Jason Ding, ATI			Azizov, Abdujamil Abdugafarovich					
Tel.:					+998981772552			+998981772552		
Fax:										
email:		yangwei@yutong.com, Jason Ding			info@tashbus.uz			info@tashbus.uz		
Customer Purchase order #:		Per email of 02.06.2023						Customer PO Date:		02.06.2023
Repairing Outlet (Allison Dealer)					Global Industrial Solutions					
Transm. Model:		T375			PN:		E027061		SN: 6511879677	
Replacement Transmission:					PN:				SN: 6520238396	
TCM, ECU, or Shift Sel.					PN 2:		63CR0YQ8		SN 2:	
Replacement TCM, ECU, or Shift Sel.					Replacement PN 2:				Replacement SN 2:	
Non-Allison Part					PN 3:				SN 3:	
Application:		City Bus			OEM:		Yutong		Model: ZK6126HG	
Application Code:		BU02								
vehicle ID #:		LZYTGMGEF8P1003793			Registr.plate:				Engine:	
In Service Date:		23.05.2023			Veh. hours:				Veh.km: 14834	
Pre Delivery		YES		NO	X	Claim Type:				Field Action # or Activity Indicator
Date in Service after last repair, or Date in Service of exchange unit if failed unit was repaired once before, or if failed unit is already a replacement (SWING) Transmission :										
Travel Time:					Travel km if company car used:				PFPN: tbd	
Labor Last Applied date:		Reassembly Not yet finished			Technician's Name:		Gayratbek Niyazov, Tokhir Abbasov, Rolf Oerter			
AWAARE Complaint Code:		EL02			AWAARE Failure Code		AD05			
Diagnostic Codes:		P0732			P2714					

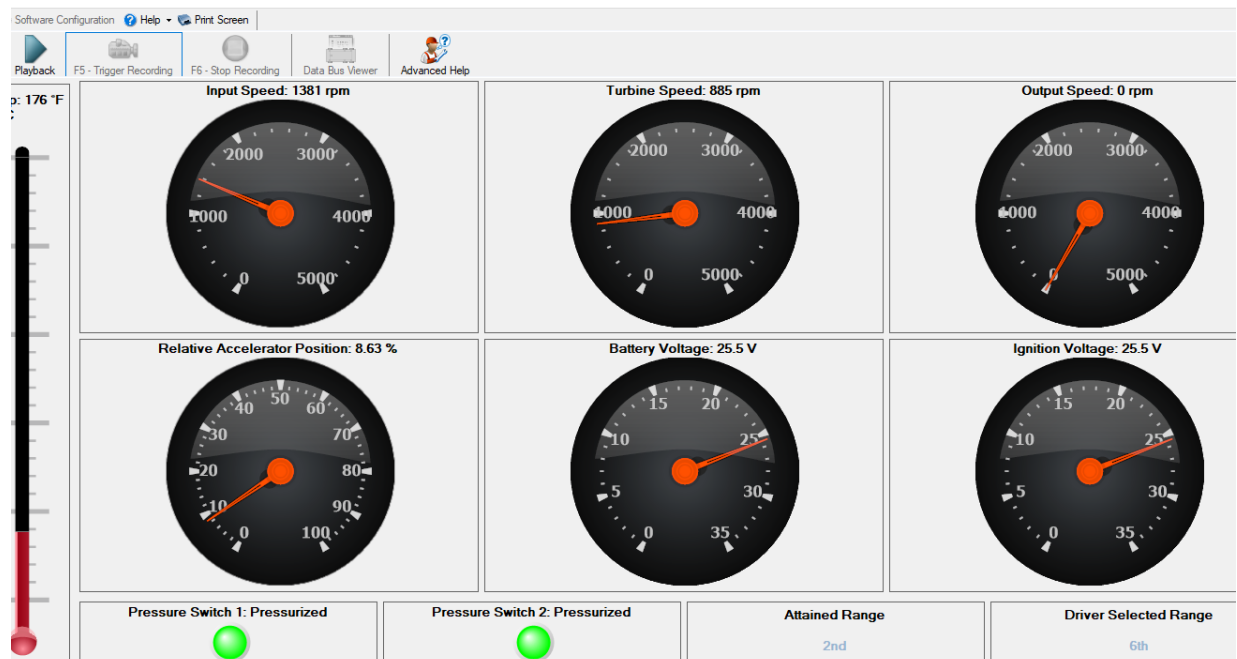
Complaint: Friday, 02.06.2023: DTC P0732 and DTC P2714. Transmission locks in 3rd range. According to the driver, the Transmission TCM had already been swapped from another bus for diagnostic purposes, but the malfunction stood the same.

Cause: Slipping C4 clutch, as found by clutch test and t/shooting and as found later during disassembly of transmission. C4 clutch piston seal ruptured causing pressure loss.

Correction: Monday, 05.06.2023. Our Dealer Global Industrial Solutions LLC checked vehicle on job site:

- Checked oil level and found ok. But the Oil level had recently been corrected by either OEM Service or by customer fleet technician by having added 1 to 2 liters. Since required fluid spec was not on hand, any available oil was added. Unknown, which oil was added.
- Performed test drive to evaluate complaint. Found DTC P0732 occurring during a 1-2 upshift. The transmission consequently locked in 3rd range for fail safe operation.
- Checked all connectors and wiring. Visually ok.
- Performed clutch test with Allison DOC Diagnostic tool, supported by a pressure test. **Found slip in 2nd range and in 6th range**, and found C4 clutch pressure slightly lower than Main and than C1 and C2 respectively. All other ranges are ok. This indicates C4 clutch is slipping under load, caused by reduced C4 clutch pressure . See DOV Snapshot file 6511879677-ClutchTest_slip.ad4 , file time 00:01:26 and 00:02:35 (Bookmark #1 and #2) and file time 00:03:17 (Bookmark #3)

CLUTCHES		C1	C2	C3	C4	C5
RANGES	REVERSE			X		X
	NEUTRAL					X
	FIRST	X				X
	SECOND	X			X	
	THIRD	X		X		
	FOURTH	X	X			
	FIFTH		X	X		
	SIXTH		X		X	



Comment:

Transmission needs to be replaced and needs to be disassembled for further diagnosis and failure analysis.



The transmission is wet of oil on the upper front part. Likely from breather blow-out or from another source of oil from above.

Distributor DGS Mainz, Germany (9307300000) prepared a **new** replacement transmission for airfreight-transportation and customs clearance and sent to Tashkent.

Correction: Cont.

Tuesday, 27.06.2023: Transmission replacement. Removed failed unit SN 6511879677 and installed new replacement unit SN 6520238396, as advised by Distributor Customer Support Manager, Rolf Oerter.

- The replacement unit had been modified into required spec of original unit prior to installation.
- Recorded some DOC snapshots, reset Adaptives, Transhealth and Prognostics information.
- Final Test Drive. Ok.

Labor Code	Description	Time allowed	Time needed
11111111	05.06.2023: Dealer travelled to jobsite and back home.		1,0
00096900	Initial road test drive with fleet's driver. Initial conversation with fleet shop foreman. Place bus on pit for investigation.	0,1	1,0
00096901	Troubleshooting with DOC under guidance of Rolf Oerter via phone	1,0	1,0
00094006	27.06.2023: Steam clean transmission and installed area	0,5	0,5
00094011	R&R underfloor protection plate and cross member panels	1,0	1,0
00094000	R&R transmission, transmission replacement.	6,0	8,5
00096401	Final Test drive with adaptives	1,0	1,0
00096901	Diagnostics with DOC. Recorded snapshots by advice of Rolf Oerter, Distributor customer support manager. Reset Adaptives, Transhealth and Prognostics information.	1,0	1,0

Labor Code	Description	Time allowed	Time needed
00095200	25.07.2023: Disassembly, Overhaul	9,6	9,6
00095206	Overhaul Model with Retarder	1,6	1,6

Correction: Cont.

Tuesday, 25.07.2023: After arrival and customs clearance of new replacement transmission from Uzbekistan customs boarder, Distributor Customer Support- & Training Mgr. Rolf Oerter flew to Tashkent in order to support our new dealer Global Industrial Solutions in their very first overhaul. Just assuming from the previous clutch test result that the the C4 clutch piston was eventually leaking, he took the most basic seals, gaskets and C4 piston in the luggage.

Disassembled unit, found C4 piston lip ruptured. But C4 clutch friction- and reaction plates had already severely suffered and needs to being replaced too.



- The ruptured segment of the C4 piston lip was found in the suction screen.
- No evidence of coolant or water. No corrosion.

Ordered new parts.

Overhaul to being continued when new clutch plates will be on stock at new dealer at Tashkent.

Rolf Oerter,
Customer Support Manager,
DGS Diesel- und Getriebeservice GmbH
Allison Transmission Distributor Germany and CIS countries,

29.08.2023