



# Technical Bulletin

Model(s)	Year(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Routan	2009-2014	All	6 Spd Automatic (LGG)	All	All

## Condition

**37 13 02** July 19, 2013 **2021283** Supersedes T.B. V371001 dated July 8, 2010 to include additional model year applicability.

**Automatic Transmission, Determining Repair versus Replacement**

## Technical Background

This bulletin provides a procedure to determine “**repair**” versus “**replacement**” of an automatic transmission. This procedure is to be used “**After**” the transmission has been removed from the vehicle.



### Note:

**Routan transmission concerns need to have faults diagnosed using the outlined diagnostic procedure in Repair Manual Group 37, located in ElsaWeb. If diagnosis leads to an internal failure, a leak down test must be performed, transmission removed, disassembled and inspected for damage, and a cost analysis performed. The repair/replacement procedure will follow the Volkswagen Group of America (VWGOA) 80% rule. Parts and labor of 81% or more to repair the transmission warrants a replacement.**

**Fill out the provided transmission diagnostic worksheet attachment and fax it to the Volkswagen Technician Helpline at 1-800-403-4710 or scan it and attach to your VTA ticket. Once the form has been sent, contact the Volkswagen Technician Helpline utilizing the VTA system.**

**Metal in transmission oil pan does not constitute replacement of the transmission, proper diagnosis is required.**

## Production Solution

No production change required.

## Service

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## Procedure

 **Note:**

**For detailed information regarding disassembly and repair procedures, see Repair Manual Group 37 in ElsaWeb.**

1. Remove fluid using approved automatic transmission fluid exchanger or equivalent.
2. Remove torque converter (keep with unit).
3. Measure input shaft end play.
4. Remove input speed sensor.
5. Remove pump assembly.
6. Remove input clutch assembly.
7. Remove front sun gear assembly.
8. Remove front carrier/rear annulus assembly.
9. If transmission damage is determined to be higher than 80% of the cost of a replacement transmission, follow steps 10 through 13.
10. Place #2 thrust bearing into transmission pan.
11. Reassemble transmission by reversing steps 4 through 8.
12. Return old torque converter using the same method used to ship to dealer. If service unit was received with the converter in a separate box within the transmission package, return the failed part in this manner. Otherwise, place converter into transmission and install shipping strap and bolts.
13. Return any loose items by placing in plastic bag and attaching to bell housing.

 **Note:**

**All parts must be returned with transmission.**



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## Warranty

<b>To determine if this procedure is covered under Warranty, always refer to the Warranty Policies and Procedures Manual <sup>1)</sup></b>					
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Routan	2009-2014	All	6 Spd Automatic (LGG)	All	All
<b>SAGA Coding</b>					
<b>Claim Type:</b>	Use applicable Claim Type <sup>1)</sup>				
<b>Service Number:</b>	<b>Damage Code</b>	<b>HST</b>	<b>Damage Location (Depends on Service No.)</b>		
3735	0010	2021283	Use applicable when indicated in ElsaWeb (L/R)		
<b>Parts Manufacturer</b>	Routan			USM	
<b>Labor Operation <sup>3)</sup> : Determine Proper Repair Path</b>		37351999 = 80 TU			
<b>Diagnostic Time <sup>4)</sup></b>					
<b>GFF Time expenditure</b>	01500000 = 00 TU max.			NO	
<b>Road Test</b>	01210002 = 00 TU 01210004 = 00 TU			NO	
<b>Technical Diagnosis</b>	01320000 = 00 TU max.			NO	
<b>Claim Comment: Input "As per Technical Bulletin 2021283" in comment section of Warranty Claim.</b>					
<sup>1)</sup> Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only <sup>2)</sup> Code per warranty vendor code policy. <sup>3)</sup> Labor Time Units (TUs) are subject to change with ELSA updates. <sup>4)</sup> Documentation required per Warranty Policies and Procedures Manual.					



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## Required Parts and Tools

No Special Parts required.

For Special Tools see Group 37 Transmission in ElsaWeb.

## Additional Information



### Tip:

Using a non-approved Automatic Transmission Fluid (ATF) may result in shifting concerns, and clutch discs may suffer from premature wear resulting in a non-warrantable failure of the transmission.

**All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check with your Parts Dept. and Repair Manuals for the latest information.**



# Routan Automatic Transmission Diagnostic Checksheet

Dealer Name \_\_\_\_\_ Dealer Code \_\_\_\_\_ Date \_\_\_\_\_

Technician Name \_\_\_\_\_ Phone/Cell \_\_\_\_\_ WRO \_\_\_\_\_

Last 8 Digits of VIN \_\_\_\_\_ Mileage \_\_\_\_\_ Repeat Complaint? Yes \_\_\_\_\_ No \_\_\_\_\_

Customer Complaint \_\_\_\_\_

Technician Verification \_\_\_\_\_

**Check all that apply**

	Does Not Occur	Slips	Late or Delayed	Early	Harsh	Shudder	Search Busy	Stalls
Engagement into Drive								
Engagement into Reverse								
1-2 Upshift								
2-3 Upshift								
3-4 Upshift								
4-5 Upshift								
5-6 Upshift								
6-5 Downshift								
5-4 Downshift								
4-3 Downshift								
3-2 Downshift								
2-1 Downshift								
Kickdown/WOT Acceleration (indicate gears ie 3-2)								
Converter Lockup								

When does this Performance Related Concern occur? Please check all that apply.

Always	At idle	Braking	High altitude	On severe incline/grade
Intermittent	Part throttle	Cornering	Extremely hot (above 90° F)	Gear selector position
Trans cold	Wide open throttle	Unable to duplicate	Extremely cold (below 10° F)	Autostick only?
Trans hot	At _____ mph	With A/C on	While towing	

Leaks: When \_\_\_\_\_ Where \_\_\_\_\_

Noise Concern / Circle      Buzz      Whine      Clunk      Rattle

Which Occurs:                      Moving      Still                      In Gear                      Out of Gear

Fluid Level:    Correct \_\_\_\_\_    Low \_\_\_\_\_    High \_\_\_\_\_    Condition:    Normal \_\_\_\_\_    Burnt \_\_\_\_\_

Clutch Volumes:    L/R \_\_\_\_\_    2C/2-4 \_\_\_\_\_    OD \_\_\_\_\_    4C \_\_\_\_\_    UD \_\_\_\_\_    LC \_\_\_\_\_    DC \_\_\_\_\_    R \_\_\_\_\_

Shift Lever Status Test:    Passed \_\_\_\_\_    Failed \_\_\_\_\_

Fault Codes Before Repair/Replace:    PCM \_\_\_\_\_

TCM \_\_\_\_\_

Line Pressure	Gauge	Scan Tool	Desired
Park			
Reverse			
Drive			

TCM Part Number: \_\_\_\_\_

Cooler Pressure Test Results: \_\_\_\_\_

Cooler Flow Rate: \_\_\_\_\_

Are there any non-factory installed devices or modifications to the vehicle (CB radio, axle ratio changes, tire size changes, heavy electrical draw add on's, etc)    Yes \_\_\_\_\_    No \_\_\_\_\_

If yes, please describe \_\_\_\_\_

Is this a taxi, fleet or delivery vehicle?    Yes \_\_\_\_\_    No \_\_\_\_\_

TECHNICIAN DIAGNOSIS: \_\_\_\_\_