



# Technical Document

**SERVICE REQUIREMENTS –  
REMOVAL AND REPLACEMENT TIMES  
FOR ALLISON ON-HIGHWAY  
TRANSMISSIONS**

**TECHNICAL DOCUMENT NO. 176-B**

**AUGUST 14, 2014**

**Allison  
Transmission®**

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# **SERVICE REQUIREMENTS – REMOVAL AND REPLACEMENT TIMES** **FOR ALLISON ON-HIGHWAY TRANSMISSIONS**

## **1.0 INTRODUCTION**

Access to the transmission, control system, and associated components is necessary throughout the life of the vehicle. The access is needed for maintenance items such as:

- Oil and filter change
- Troubleshooting
- Repair
- Removal and replacement

The vehicle designer must consider service access to all transmission-related components when designing the transmission and controls installation. The time required to access the transmission and components includes the removal of any covers, body parts or chassis members which restrict access to the transmission or components.

The Allison Transmission Service Department has established maximum removal and replacement (R&R) requirements for Allison transmissions and related components. The end-user benefits when the actual R&R times are lower than the maximum times. Refer to the Appendix for the maximum R&R times for the transmission and related components.

This document applies to transmissions in the following product families:

- 1000/2000 Product Family
- 3000 Product Family
- 4000 Product Family

## Appendix

### Service Requirements - Removal and Replacement Times for Allison On-Highway Transmissions

Component or Part	Maximum R&R Time - Hours		Comments
	3000 & 4000 Product Families	1000 & 2000 Product Families	
Transmission			
All models except 3700	6.0	3.8	
3700 (formerly MD3070PT)	7.2		
PTO, Hydraulic Pump, Driveshaft	0.8	0.6	
Retarder Valve Body	0.5		
Transmission Rear Support	0.8		
Cross Member	1.0	1.0	
Rear Axle	0.7	0.7	Not to be added to R&R except when vehicle is towed.
Driveline	0.8	0.8	
Throttle Sensor	0.2	0.2	
Control Valve Body			
1000 & 2000 Product Families		0.4	
3000 Product Family	1.0		
4000 Product Family	1.2		
3700	2.0		
ECU /TCM	0.4	0.4	
VIM	0.3		
Shifter	0.3		
Turbine Speed Sensor			
1000 & 2000 Product Families		0.3	
3000 Product Family	1.3		includes valve body R&R
4000 Product Family	0.3		
3700	2.3		includes valve body R&R
Output Speed Sensor	0.2	0.2	
Engine/Input Speed Sensor	0.2	0.2	
Output Seal			
Without Park Brake	1.5	1.5	
With Park Brake	2.1	2.1	
Retarder Temperature Sensor	0.6		
Integral Filters (Both Filters)	0.4		
Neutral Start/Backup Switch		0.3	
Cooler Manifold		0.3	
Oil Pan		0.4	
External Oil Filter Element		0.2	per filter

## REVISION HISTORY

### **REVISION B – AUGUST 14, 2014**

- Updated title page logo and published document to the Extranet.

### **REVISION A – MAY 15, 2008**

- Added On-Highway to the document title.

### **NEW DOCUMENT – JANUARY 26, 2004**

- Created new document.