

## Fluid and Filter Change Recommendations

Use of the proper fluid and filters is the simplest thing that an owner can do to ensure the ongoing performance and reliability of Allison automatic transmissions. Allison Transmission has designed extensive specification and testing programs to verify the quality of fluids. As a result, the specific fluid and filter change interval recommendations closely match today's operating environments.

Local conditions, severity of operation or duty-cycle may require more or less frequent fluid change intervals that differ from the information contained in the following charts. Allison Transmission recommends that customers use fluid analysis as the primary method for determining fluid change intervals for those vehicles not equipped with prognostic software. In the absence of a fluid analysis program, the fluid change intervals listed in the following charts should be used.

If you have questions regarding fluid or filter change intervals, or models not listed in this brochure, a complete list of approved fluids can be found at allisontransmission.com. You can also contact the Allison Technical Assistance Center at 1-800-252-5283.

### **Fluids**

Allison Transmission recommends that customers use an Allison Approved TES 668™ or TES 295® automatic transmission fluid to extend drain intervals and to enhance transmission performance and durability in all operating environments with on-highway products.

TES-389® fluids may be used in traditional on-highway products but do not provide the same drain intervals or filter change intervals as Allison Approved TES 295®.

TES 468® fluids can be used anywhere a TES 295® product is specified, H 40/50 EP™ products require use of a TES 468® approved fluid.

A complete list of approved fluids can be found at allisontransmission.com. C4 fluids and DEXRON®-VI are no longer recommended in any commercial on-highway transmission.

# Fluid Loss With Filter Change Only

When changing the Control Main Filter (1000/2000 Series) and Main or Lube Filters (3000/4000 Series or TC10®), approximate fluid loss for each filter is as follows:

- 1000 and 2000 Product Families Transmissions Control Main Filter = 1 pint (0.47 liters)
- 3000 and 4000 Product Families Transmissions Main Filter = 2 quarts (1.9 liters)
   Lube Filter = 8 quarts (7.6 liters)
- TC10 Product Transmission
   Lube Filter = 8.1 quarts (7.75 liters)

# **Prognostics**

#### Model Year 2009 and 2010 Prognostics:

Prognostics that monitor and maximize fluid and filter life were offered in model Year 2009 for 1000/2000/3000/4000 Product Families. 3000/4000 Product Families Transmissions began using Prognostics with serial numbers 6510822005, 6520099957, 6610257671, 6620007438. 1000/2000 Product Families Transmission Prognostics were first available in July of 2008 (MY2009). MY2009 Allison Prognostics must only be used with Allison Approved TES 668™, TES 295® and TES 468® fluids.

January 2010 Allison Prognostics are compatible with TES 668<sup>™</sup>, TES 295<sup>®</sup> and TES 389<sup>®</sup>-approved fluids in 3000/4000 Product Families Transmissions starting with TCM calibration CIN 4C or later (4C-xxxx-yyy-z) and all January 2010 1000/2000 Product Families Transmissions.

All 3000/4000 Product Families Transmissions utilizing Prognostics require the use of Allison High Capacity filters. All 1000/2000 Product Families Transmissions utilizing Prognostics require the use of Allison control main spin-on filter, P/N 29539579. 1000/2000/3000/4000 Product Families Transmissions may or may not have this feature "enabled" or turned ON. This option requires that the OEM provide the wiring necessary and the feature enabled in the TCM. Refer to the appropriate operator's manual for the methods of identifying if Prognostics is enabled.

High Capacity Filters allow extended filter change intervals when used with an Allison Approved TES 668™, TES 295® or TES 468® automatic transmission fluid.

High Capacity "Service" Filters can be identified by P/N 29558294 or P/N 29558295 stamped into the filter end cap. Prior filters (non-high capacity) for Allison 3000/4000 Product Families transmissions can be identified by P/N 29538231 or P/N 29538232 stamped into the filter end cap.

New Allison 3000/4000 Product Family of transmissions are shipped to OEMs with High Capacity "Factory" Filters that contain different part numbers on the end caps.

3000/4000	2 Inch Filter Kit P/N 29558328
Product Families	4 Inch Filter Kit P/N 29558329
TC10 <sup>®</sup>	Oil Filter Kit P/N 29554653

Extended fluid and filter change intervals are only allowed with an Allison Approved TES 668<sup>TM</sup>, TES 295<sup>®</sup> or TES 468<sup>®</sup> automatic transmission fluid and Allison High Capacity Filters. Filters must be changed at or before recommended intervals.

For a list of current Allison Approved TES 668™ and TES 295® automatic transmission fluids, go to allisontransmission.com.

1000/2000 SERIES™ Fluid And Filter Change Interval Recommendations						ns
			Prognostics Turned Off or Not Calibrated in TCM		Prognostics Turned On	
		Duty Cycle	Allison Approved TES 668™/295® Fluid	Allison Approved TES 389 <sup>®</sup> Fluid	Allison Approved TES 668™/295® Fluid	Allison Approved TES 389® Fluid
Fluid		General*	150,000 Miles (240,000 km) or 4,000 Hours or 48 Months	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	When indicated by controller or 24 months, whichever occurs first When indic by control or 24 mont whichever occurs first (MY201	
		Severe**	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months		
Filters	Spin-On Control Main Filter	Genera!*	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	When indicated by controller or	When indicated by controller or
		Severe**	50,000 Miles (80,000 km) or 2,000 Hours or 24 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months	48 rnonths, whichever occurs first	24 months, whichever occurs first (MY2010)
	Internal Filter	Ali	Overhaul	Overhaul	Overhaul	Overhaul

<sup>\*</sup>General Vocation: All vocations not classified as Severe

NOTE: Change fluid and filters at or before the recommended mileage, months or hours have elapsed, whichever occurs first.

<sup>\*\*</sup>Severe Vocation: On/Off Highway, Refuse, City Transit, Shuttle Transit

	Fluid A	And Filte	3000/4000 r Change In		mmendatio	ns
			Prognostics Turned Off or Not Calibrated in TCM		Prognostics Turned On	
		Duty Cycle	Allison Approved TES 668™/295® Fluid	Allison Approved TES 389 <sup>®</sup> Fluid	Allison Approved TES 668™/295® Fluid	Allison Approved TES 389 <sup>®</sup> Fluid
×		General*	300,000 Miles (480,000 km) or 6,000 Hours or 48 Months	25,000 Miles (40,000 km) or 1,000 Hours or 12 Months	When indicated by controller or	When indicated by controller or
F	luid	Severe**	150,000 Miles (240,000 km) or 6,000 Hours or 48 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months	60 months, whichever occurs first	24 months, whichever occurs first
	Main Filter	General*	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	25,000 Miles (40,000 km) or 1,000 Hours or 12 Months	When indicated by controller	When indicated by controller or 24 months, whichever occurs first
		Severe**	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months	60 months, whichever occurs first	
Filters	Internal Filter	All	Overhaul	Overhaul	Overhaul	Overhaul
	Lube/ Auxiliary Filter	General*	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	25,000 Miles (40,000 km) or 1,000 Hours or 12 Months	When indicated by controller or	When indicated by controller or
		Severe**	75,000 Miles (120,000 km) or 3,000 Hours or 36 Months	12,000 Miles (20,000 km) or 500 Hours or 6 Months	60 months, whichever occurs first	24 months, whichever occurs first

<sup>\*</sup>General Vocation: All vocations not classified as Severe

NOTE: Change fluid and filters at or before the recommended mileage, months or hours have elapsed, whichever occurs first.

<sup>\*\*</sup>Severe Vocation: On/Off Highway, Refuse, City Transit, Shuttle Transit

TC10® TRACTOR SERIES Fluid And Filter Change Interval Recommendations					
		Prognostics Turned Off or Not Calibrated in TCM		Prognostics Turned On	
		Duty Cycle	Allison Approved TES 668™/295®* Fluid	Allison Approved TES 668'*/295®* Fluid	
F	luid	General	500,000 Miles (804,700 km) When indic or by contro 20,000 Hours or 0r 60 Months Whichever occ		
Filters	Internal Filter	General	Overhaul	Overhaui	
	Lube/ Auxiliary Filter	ary General or		When indicated by controller or 60 Months, whichever occurs first	

<sup>\*100</sup> Percent Concentration Allison Approved TES 668™ or TES 295® Fluid and Allison Filters - Required

NOTE: Change fluid and filters at or before the recommended mileage, months or hours have elapsed, whichever occurs first.

#### Service Filter Kit Part Numbers

1000/2000 5	SERIES™	
Filter/Filter Kit	Part Number	
Control Main, Spin-On	P/N 29539579	
Shallow Pan Suction (Overhaul Only)	P/N 29542833*	
Deep Pan Suction (Overhaul Only)	P/N 29542834	
3000 SER	IES™	
2 Inch Filter Kit (4" Service Filter for 2"/7" Sump)	P/N 29558328	
4 Inch Filter Kit (6" Service Filter for 4" Sump)	P/N 29558329	
4000 SER	lIES™	
2 Inch Filter Kit (4" Service Filter for 2" Sump)	P/N 29558328	
4 Inch Filter Kit (6" Service Filter for 4" Sump)	P/N 29558329	
TC10 <sup>®</sup> TRACTO	OR SERIES	
Oil Filter Kit	P/N 29554653	

<sup>\*</sup>Reference SIL 12-1K2K-10, for interchangeability of the Shallow Sump Filters

NOTE: Approximate quantities do not include external lines and cooler hose. Fluid fill capacity is dependent on vehicle configuration. Final fluid capacity must be determined by dipstick level (see Mechanic's Tips MT3004EN Section 1 or your Operator's Manual under "Care and Maintenance").

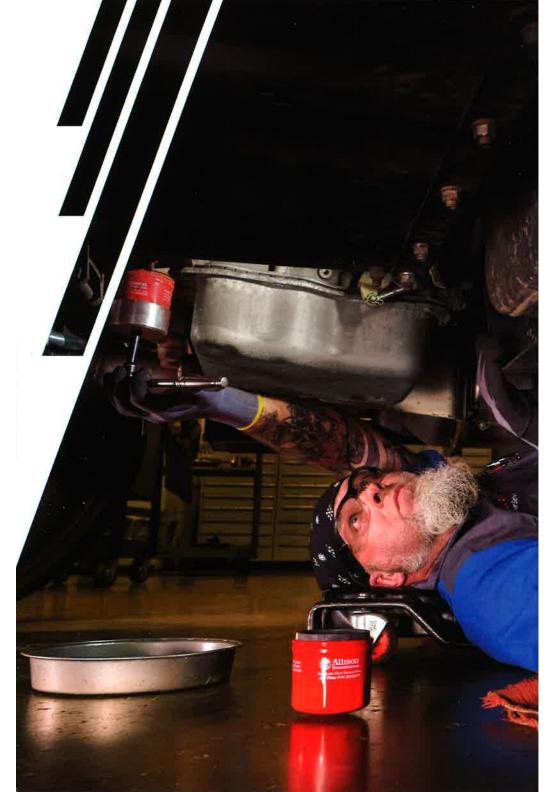
#### Fluid Capacity (Approximate)

	1000/2	000 SERIES™	А		
Sump	Initi	al Fill	Refill		
	Liters	Quarts	Liters	Quarts	
Standard	14	14.8	10	10.6	
Shallow	12	12.7	7	7.4	
	300	0 SERIES™			
Sump	Initi	al Fill	Refill		
	Liters	Quarts	Liters	Quarts	
4 Inch	27	29	18	19	
2 Inch	25	26	16	17	
	400	0 SERIES™			
Sump	Initial Fill		Refill		
	Liters	Quarts	Liters	Quarts	
4 Inch*	45	48	37	39	
2 Inch*	38	40	30	31	
	TC10® TF	RACTOR SERI	ES		
Sump	Initia	l Fill**	Ref	ill**	
	Liters	Quarts	Liters	Quarts	
Standard	49	52	38	40	

<sup>\*</sup>Add additional 2.8 liters (3 quarts) for transmissions with PTO

NOTE: Approximate quantities do not include external lines and cooler hose. Fluid fill capacity is dependent on vehicle configuration. Final fluid capacity must be determined by dipstick level (see Mechanic's Tips MT3004EN Section 1 or your Operator's Manual under "Care and Maintenance").

<sup>\*\*</sup>Approximate quantities do not include external circuits



### A World of Support

From our headquarters in Indianapolis, Indiana, USA, to our manufacturing plants in Hungary and India, to approximately 1,500 Allison Authorized Distributors and Dealers around the globe, you are never far from the products, training, service and support you demand.

Our support starts from the moment an Allison transmission is specified. We work with you to ensure that the model and ratings fit your engine to create a tailored package of powerful performance and reliable efficiency. When you need parts or service, you can count on global access to factory-trained specialists and Allison Genuine Parts<sup>TM</sup>.



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Information or specifications subject to change without notice or obligation.

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