

# Fluid and Filter

## Change Recommendations



## FLUID AND FILTER CHANGE RECOMMENDATIONS

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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. 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, additional information can be found at [www.allisontransmission.com](http://www.allisontransmission.com); click Service, then Fluids or Fluid/Filter Change Intervals. Or, contact the Allison Technical Assistance Center at 1-800-252-5283.

## FLUIDS

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Allison Transmission recommends that customers use an Allison Approved TES 295 automatic transmission fluid to extend drain intervals and to enhance transmission performance and durability in all operating environments. Customers may continue to choose from a wide variety of Allison Approved fluids.

Effective January 1, 2007, General Motors no longer licenses DEXRON®-III fluids. DEXRON®-VI fluids may be used in the 1000 and 2000 Product Families transmissions beginning with S/N 6310670488 and 6320784373; and in the 3000 and 4000 Product Families transmissions beginning with S/N 6510717281 and 6610220990. DEXRON®-VI shall not be used in Allison 500, 600 or 700 Series transmissions (AT, MT, HT, HT/V/CLT products).

Schedule One TES 389 and DEXRON®-VI fluids will have the same fluid change intervals as the current Allison Approved non-TES 295 fluid intervals.

C4 fluids are no longer recommended in any commercial on-highway transmissions. A complete list of approved fluids can be found at [www.allisontransmission.com](http://www.allisontransmission.com); click Service, then Fluids.

## FLUID LOSS WITH FILTER CHANGE ONLY

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When performing initial Main Filter change or changing Main and Lube Filters at recommended intervals, 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)



## MODEL YEAR '09 PROGNOSTICS

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Prognostics make it even easier to control your maintenance costs while ensuring maximum performance of your Allison transmission. Starting with Model Year '09 production (Serial Numbers 6510822005, 6520099957, 6610257671, 6620007438), Allison Transmission has released fluid and filter Prognostics for 1000/2000/3000/4000 Product Families transmissions using Allison Approved TES 295 fluids. This new feature allows customers to maximize the life of the transmission fluid and filters. Allison Prognostics must only be used with Allison Approved TES 295 fluids.

The 1000/2000 Product Families transmissions require Allison P/N 29539579 Spin-On Control Main Filter, and the 3000/4000 Product Families transmissions require Allison High Capacity Filters to be used with Prognostics. 1000/2000/3000/4000 Product Families Prognostics may or may not be turned ON in vehicles (OEM/Customer option). This option requires the OEM to wire/install the system and the customer to request this option to be turned ON in their vehicle. Refer to the appropriate Operator's Manual for methods of identifying if Prognostics are turned ON.

## HIGH CAPACITY FILTERS

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High Capacity Filters for Allison 3000/4000 Product Families transmissions were released into Allison production July 2006, beginning with the following Transmission Serial Numbers:

6510670912 (3000 Series) 6610205144 (4000 Series)

High Capacity Filters allow extended filter change intervals when used with an Allison Approved TES 295 automatic transmission fluid.

High Capacity Filters can be identified by P/N 29545777 or P/N 29545780 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.

3000/4000 Product Families	High Capacity Filter Kit
	2 Inch Filter Kit P/N 29548987
	4 Inch Filter Kit P/N 29548988

Beginning with S/N 6510670912 and S/N 6610205144, transmissions equipped with Allison High Capacity Filters do not require an initial Main Filter change at 5000 miles/8000 km/200 hours.

Extended fluid and filter change intervals are only allowed with an Allison Approved TES 295 automatic transmission fluid and Allison High Capacity Filters. Filters must be changed at or before recommended intervals.

When replacing Gold Series Filters with High Capacity Filters in transmissions containing 100% Allison Approved TES 295 automatic transmission fluid, High Capacity fluid and filter change intervals may be followed.

For a list of current Allison Approved TES 295 automatic transmission fluids, go to [www.allisontransmission.com](http://www.allisontransmission.com); click on Service, then Fluids.

## 1000/2000 SERIES Fluid and Filter Change Interval Recommendations

		DUTY CYCLE	ALLISON APPROVED TES 295 FLUID	TES 389 OR DEXRON®-VI* OR MIXTURE**	MY '09 PROGNOSTICS TURNED ON
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 48 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	
FILTERS	Spin-On Control Main Filter  Initial change at 10,000 Miles (16,000 km) or 400 Hours	General***	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 48 months, whichever occurs first
		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	
	Internal Filter	All	Overhaul	Overhaul	Overhaul
	Lube/Auxiliary Filter	General***	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 48 months, whichever occurs first
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		

\*DEXRON®-VI may only be used in units beginning with S/N 6310670488 and 6320784373.

\*\*Less than 100% concentration of an Allison Approved TES 295 automatic transmission fluid is considered a mixture and should utilize non-TES 295 filter change intervals.

\*\*\*General Vocation: All vocations not classified as Severe.

\*\*\*\*Severe Vocation: 2000 MH, On/Off Highway, Refuse, City Transit, Shuttle Transit.

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

## 3000 SERIES High Capacity Filters Fluid and Filter Change Interval Recommendations

		DUTY CYCLE	ALLISON APPROVED TES 295 FLUID	TES 389 OR DEXRON®-VI* OR MIXTURE**	MY '09 PROGNOSTICS TURNED ON
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 60 months, whichever occurs first
		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	
FILTERS	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 or 60 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	
	Internal Filter	All	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 60 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		

\*DEXRON®-VI may only be used in units beginning with S/N 6510717281.

\*\*Less than 100% concentration of an Allison Approved TES 295 automatic transmission fluid is considered a mixture and should utilize non-TES 295 filter change intervals.

\*\*\*General Vocation: All vocations not classified as Severe and Intercity Coach with duty cycle of less than or equal to one stop per mile.

\*\*\*\*Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit and Intercity Coach with duty cycle greater than one stop per mile.

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

**4000 SERIES**  
**High Capacity Filters**  
**Fluid and Filter Change Interval Recommendations**

		TRANSMISSION MODEL	DUTY CYCLE	ALLISON APPROVED TES 295 FLUID	TES 389 OR DEXRON®-VI* OR MIXTURE**	MY '09 PROGNOSTICS TURNED ON	
FLUID		4000 w/ 2" and 4" Sump	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 60 months, whichever occurs first	
			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		
FILTERS		Main Filter 4000 w/ 2" and 4" Sump	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 60 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		
		Internal Filter	4000 w/ 2" and 4" Sump	All	Overhaul	Overhaul	Overhaul
		Lube/ Auxiliary Filter 4000 w/ 2" and 4" Sump	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 60 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				

\*DEXRON®-VI may only be used in units beginning with S/N 6610220990.

\*\*Less than 100% concentration of an Allison Approved TES 295 automatic transmission fluid is considered a mixture and should utilize non-TES 295 filter change intervals.

\*\*\*General Vocation: All vocations not classified as Severe and Intercity Coach with duty cycle of less than or equal to one stop per mile.

\*\*\*\*Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit and Intercity Coach with duty cycle greater than one stop per mile.

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

## FILTERS AND GASKET KITS WITH PARTS NUMBERS

1000/2000 Series	
Filter/Filter Kit	Part Number
Control Main	P/N 29539579
Shallow Pan Suction (Overhaul Only)	P/N 29537965
Deep Pan Suction (Overhaul Only)	P/N 29537966
3000 Series	
2 Inch Filter Kit	P/N 29548987
4 Inch Filter Kit	P/N 29548988
4000 Series	
2 Inch Filter Kit	P/N 29548987
4 Inch Filter Kit	P/N 29548988

## FLUID CAPACITY (APPROXIMATE)

1000/2000 Series				
Sump	Initial Fill		Refill	
	Liters	Quarts	Liters	Quarts
Standard	14	14.8	10	10.6
Shallow	12	12.7	7	7.4
3000 Series				
Sump	Initial Fill		Refill	
	Liters	Quarts	Liters	Quarts
4 Inch	27	29	18	19
2 Inch	25	26	16	17
4000 Series				
Sump	Initial Fill		Refill	
	Liters	Quarts	Liters	Quarts
4 Inch*	45	48	37	39
2 Inch*	38	40	30	31

\*Add 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").



*DRIVING TRANSMISSION TECHNOLOGY®*

Information or specifications subject to change without notice or obligation.

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