Revisions to this ST are noted
by a stripe in the left hand margin.



SUBJECT: Transmission Fluid/Filter Change Recommendations—New Schedule One TES 389 Fluid Specification—DEXRON®-VI, Removal of C4 Fluids, and Release of Fluid and Filter Prognostics - TranSynd® is the only approved fluid for E$^{V}$ 40/50 Drives™

EQUIPMENT AFFECTED: All Commercial On-Highway Products
AT 500 Series, MT 600 Series, HT 700 Series
1000 and 2000 Product Families Transmissions
3000 and 4000 Product Families Transmissions
E$^{V}$ 40/50 Drive™

**Introduction:**

Optimum performance and reliability of heavy-duty automatic transmissions can be noticeably influenced by the type of fluid used and the frequency with which that fluid is changed. Allison Transmission has designed extensive programs including specifications and tests to verify the quality of fluids and consequently have specific fluid and filter change recommendations. Due to field studies, changes in emission requirements, vehicle design, and operating environments, Allison Transmission has realigned recommended fluid and filter change intervals. Heavy-duty Automatic Transmission change intervals have been revised to more closely match today's operating environments. In addition, GM has replaced DEXRON®-III with DEXRON®-VI effective January 1, 2007. Allison has made changes to 1000, 2000, 3000, 4000 Product Families transmissions to be compatible with DEXRON®-VI. Allison has also created a new automatic transmission fluid specification, Schedule One TES 389. The new Allison specification gives OEMs and customers another approved fluid choice. **Allison C4 fluids are no longer approved for Commercial On-Highway products.**

**Model Year 2009 Prognostics:**

Starting with Model Year 2009 production (Serial Numbers 6510822005, 6520099957, 6610257671, 6620007438) Allison Transmission has released fluid and filter Prognostics for the 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** the use of Allison P/N 29539579 control main spin-on filter and the 3000/4000 Product Families transmissions **require** the use of 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. Additional information about Prognostics can be found in the Operator's Manual.

Allison Transmission, Inc.
Indianapolis, IN 46206-0894

JLH

**Fluids and Specifications:**

Fluid types are defined by applicable performance specification. The following transmission fluid types are approved for use in Allison Commercial On-Highway transmission products.

| Fluid Type | Recommended (Intended) Usage |
|---|---|
| **TES 295**<br><br>See www.allisontransmission.com for a list of Allison Approved TES 295 fluids<br><br>TranSynd® is a TES 295 approved fluid | • General or severe duty<br>• **Extended** change interval(4) (required)<br>• Extended Transmission Coverage (ETC) policy (required)<br>• Prognostics (required)<br>• TranSynd® is the only approved fluid for $E^V$ 40/50 products. |
| **Non-TES 295(1)**<br>**Schedule One TES 389 ***<br>DEXRON®-III (if available)<br>DEXRON®-VI(2)<br>Military specification fluids (for use in Military Vehicles Only)(3)<br>* *See www.allisontransmission.com for a list of Allison Approved TES 389 fluids* | • General or severe duty<br>• Standard change interval(4) |

**NOTES:**

(1) **TES 228 (C4 type) fluids are no longer approved for use in Commercial On-Highway transmission products and have been removed from the non-TES 295 list.**

(2) DEXRON®-VI use is restricted to transmissions beginning with serial numbers:

| | |
|---|---|
| 1000/2000 Product Families: | 6310670488 |
| 3000 Product Family: | 6510717281 (Indianapolis), 6520083093 (Hungary) |
| 4000 Product Family: | 6610220990 (Indianapolis), 6620005821 (Hungary) |

**DEXRON®-VI is prohibited from use in AT/MT/HT Series transmissions.**

(3) Military specification fluids are for use in **Military Use Only** and are strictly prohibited from use in 1000 and 2000 Product Families transmission products.

(4) Fluid and filter change intervals are based on transmission model, vocation (duty cycle), and fluid type (see attached charts). NOTE: TES 295 drain intervals are based on 100 percent fill with TES 295 fluid. Fluid change intervals may be adjusted based on fluid analysis and fleet data. Refer to Service Information Letter 17-TR-96 for details.

**Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts to follow must be used.**

**For information concerning models not listed in this publication, please call the Allison Technical Assistance Center at 1-800-252-5283.**

Refer to the latest revision of Allison publication number GN2055EN, “Technicians’ Guide to Automatic Transmission Fluid”, SIL 17-TR-96, and WATCH 360 for additional information on oil analysis and general knowledge about transmission fluids.

**Transmissions Not OEM Factory Filled with TES 295 Fluids:**

New vehicles delivered from the OEM with a mixture of TES 295 fluid and Non-TES 295 fluid must follow fluid/filter change recommendations for Allison approved Non-TES 295 fluids outlined in flow charts. **NOTE: Prognostics must be turned OFF when using Non-TES 295 fluid.** If the customer fills the transmission with Allison approved TES 295 fluid, the change recommendations of Allison approved Non-TES 295 fluids must be followed. Upon the second oil change, if the customer reinstalls TES 295, the fluid/filter change recommendations outlined in 100 percent TES 295 approved fluids must be followed.

**Fluid Exchange:**

Fluid exchanging machines are not recommended or recognized due to variation and inconsistencies that may not guarantee removal of 100 percent of the used fluid.

**3000/4000 Product Families and $E^V$ 40/50 Filters:**

New high-capacity filters were released into production beginning with:

6510670912 6610205144 7110001551 6520067342 6620002521

**3000 and 4000 Product Families Transmissions Elimination of Initial Filter Change Requirement and Kit:**

Transmissions equipped with Allison high-capacity filters do not require an initial main filter change at 5000 miles/8000 km/ 200 hours. However, serial numbers prior to those numbers listed above, Allison Transmission requires the initial filter change interval. An initial main filter kit (2 inch kit P/N 29540495 or 4 inch kit P/N 29540496) contains only one Gold series filter and all necessary seals and gaskets to perform the first 5000 mile/8000 km/200 hour main filter change. These kits have been completely cancelled. Once stock has been depleted, it will be necessary to order the high-capacity filter from the Allison Parts Distribution Center.

**Fluid Loss With Filter Change Only:**

When performing initial main filter change or changing main and lube filters at recommended intervals, approximate fluid loss for each filter 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)

***$E^V$ 40/50***
Control Main Filter= 1 quart (0.94 liters)
Lube Filter = 3 quarts (2.84 liters)

**High-Capacity Filters:**

Allison 3000/4000 Product Families and $E^V$ 40/50 transmissions high-capacity filters were released into production beginning July 2006. High-capacity filters allow extended filter change intervals when used with Allison approved TES 295 fluid (TranSynd® is the only approved fluid for $E^V$ 40/50 products). High-capacity filters can be identified by P/N 29545777 or 29545780 stamped into the filter end cap. Previous Allison 3000/4000 Product Families and $E^V$ 40/50 transmissions filters can be identified by P/N 29538231 or 29538232 stamped into the filter end cap.

| | Former Gold Series Filter Kit | Current High-Capacity Filter Kit |
|---|---|---|
| 3000/4000 Product Families | 2 inch Filter Kit P/N 29540493 | 2 inch Filter Kit P/N 29548987 |
| | 4 inch Filter Kit P/N 29540494 | 4 inch Filter Kit P/N 29548988 |
| $E^V$ 40/50 | Filter Kit P/N 29541508 | Filter Kit P/N 29545785 |

**NOTE: Extended 3000 and 4000 Product Families transmissions Allison approved TES 295 fluid and filter change intervals are only allowed with 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 percent Allison approved TES 295 fluid, it is allowed to follow high-capacity fluid and filter change intervals.**

**Initial Transmission Filter Change Schedule (Production/ReTran®)**

1000 and 2000 Product Families Spin-On Control Main Filter 10,000 miles (16 000 km)/400 hours
*3000 and 4000 Product Families Transmissions—Main Filter 5000 miles (8000 km)/200 hours
*3000 and 4000 Product Families Transmission ReTran®—Main Filter 5000 miles (8000 km)/200 hours
$E^V$ 40/50 Spin-On Control Main Filter 5000 miles (8000 km)/200 hours
AT Auxiliary Filter 5000 miles (8000 km)/200 hours
MT Auxiliary Filter 5000 miles (8000 km)/200 hours
HT Main External Filter5000 miles (8000 km)/200 hours

* Not required beginning with S/N 6510670912, 6610205144, 6520067342, 6620002521, and 9320005689, 9370006284, 9420006679, 9470005459

**1000, 2000, 3000, 4000 Product Families Hours vs. Miles Chart**

Table 1 on page 4 lists the equivalent mileage based on the Allison recommended change intervals for Allison approved TES 295 approved fluids. For example, vocations or vehicles that operate with a high density shift cycle typically reach the 6000/3000 hour change limit **before** the recommended mileage limit.

An example could be a transit bus equipped with a B 500R that operates an average of 7 mph (11 km/h). Recommended fluid/filter change interval for a B 500R equipped with 2 inch control module in a transit vocation using a TES 295 fluid is 150,000 miles/240 000 km/6000 hours or 48 months whichever occurs first. Using Table 1. Hours vs. Miles, a vehicle operating at 7 mph (11 km/h) will travel approximately 42,000 miles (66 000 km) in 6000 hours. If an odometer is used to determine when to change the transmission fluid and filters, this specific vehicle would change the fluid every 42,000 miles (66 000 km) and filters every 21,000 miles (33 000 km).

Estimating average mph can be approximated by dividing total distance traveled in a typical day by the hours elapsed during that total distance. An example would be a vehicle that operates on average 96 miles (155 km) a day over an 8 hour period would average 12 mph (19 km/h).

## Table 1. Hours vs. Miles

| 2000 Hour Based Maintenance | | | |
|---|---|---|---|
| km/h Average | km Equivalent | MPH Average | miles Equivalent |
| 5 | 10000 | 3 | 6000 |
| 6 | 12000 | 4 | 8000 |
| 8 | 16000 | 5 | 10000 |
| 10 | 20000 | 6 | 12000 |
| 11 | 22000 | 7 | 14000 |
| 13 | 26000 | 8 | 16000 |
| 14 | 28000 | 9 | 18000 |
| 16 | 32000 | 10 | 20000 |
| 18 | 36000 | 11 | 22000 |
| 19 | 38000 | 12 | 24000 |
| 21 | 42000 | 13 | 26000 |
| 23 | 46000 | 14 | 28000 |
| 24 | 48000 | 15 | 30000 |
| 26 | 52000 | 16 | 32000 |
| 27 | 54000 | 17 | 34000 |
| 29 | 58000 | 18 | 36000 |
| 31 | 62000 | 19 | 38000 |
| 32 | 64000 | 20 | 40000 |
| 34 | 68000 | 21 | 42000 |
| 35 | 70000 | 22 | 44000 |
| 37 | 74000 | 23 | 46000 |
| 39 | 78000 | 24 | 48000 |
| 40 | 80000 | 25 | 50000 |

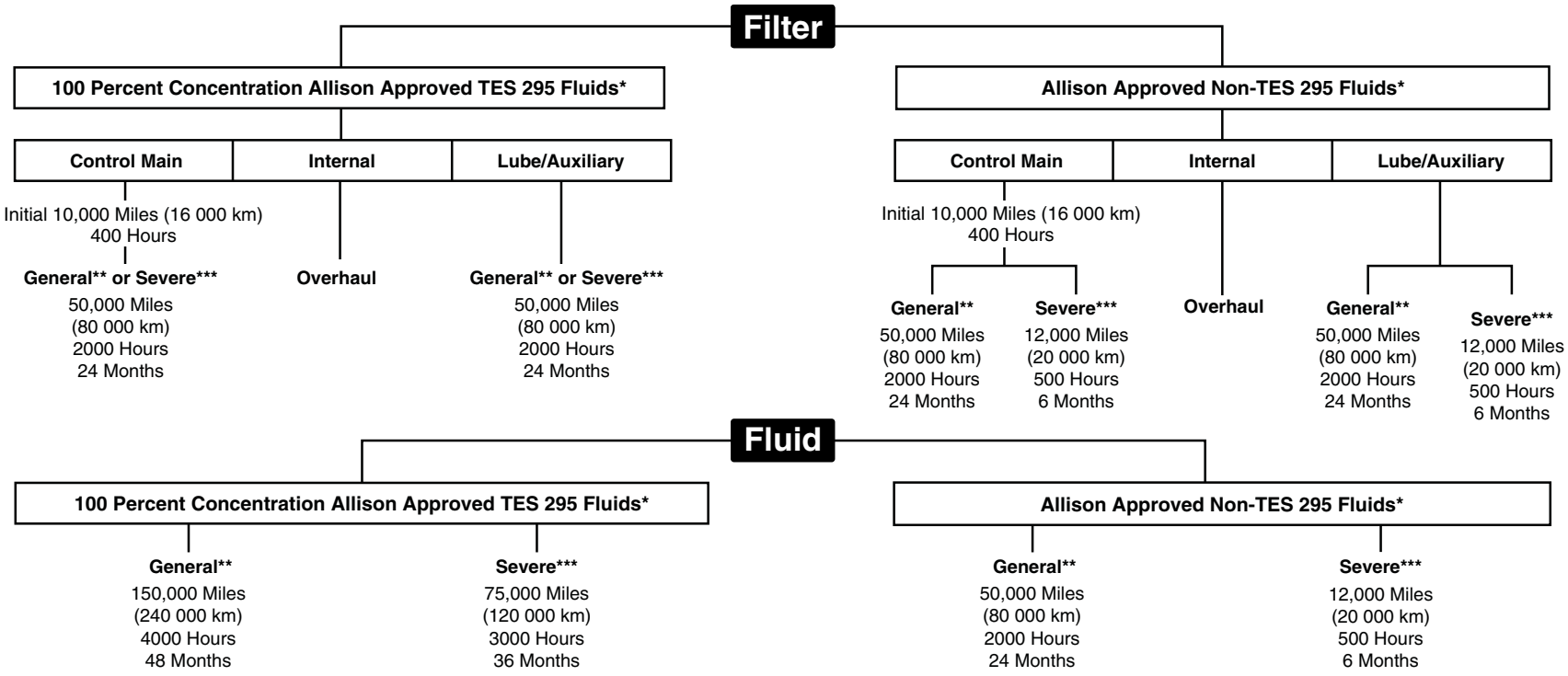
| 3000 Hour Based Maintenance | | | |
|---|---|---|---|
| km/h Average | km Equivalent | MPH Average | miles Equivalent |
| 5 | 15000 | 3 | 9000 |
| 6 | 18000 | 4 | 12000 |
| 8 | 24000 | 5 | 15000 |
| 10 | 30000 | 6 | 18000 |
| 11 | 33000 | 7 | 21000 |
| 13 | 39000 | 8 | 24000 |
| 14 | 42000 | 9 | 27000 |
| 16 | 48000 | 10 | 30000 |
| 18 | 54000 | 11 | 33000 |
| 19 | 57000 | 12 | 36000 |
| 21 | 63000 | 13 | 39000 |
| 23 | 69000 | 14 | 42000 |
| 24 | 72000 | 15 | 45000 |
| 26 | 78000 | 16 | 48000 |
| 27 | 81000 | 17 | 51000 |
| 29 | 87000 | 18 | 54000 |
| 31 | 93000 | 19 | 57000 |
| 32 | 96000 | 20 | 60000 |
| 34 | 102000 | 21 | 63000 |
| 35 | 105000 | 22 | 66000 |
| 37 | 111000 | 23 | 69000 |
| 39 | 117000 | 24 | 72000 |
| 40 | 120000 | 25 | 75000 |

| 4000 Hour Based Maintenance | | | |
|---|---|---|---|
| km/h Average | km Equivalent | MPH Average | miles Equivalent |
| 5 | 20000 | 3 | 12000 |
| 6 | 24000 | 4 | 16000 |
| 8 | 32000 | 5 | 20000 |
| 10 | 40000 | 6 | 24000 |
| 11 | 44000 | 7 | 28000 |
| 13 | 52000 | 8 | 32000 |
| 14 | 56000 | 9 | 36000 |
| 16 | 64000 | 10 | 40000 |
| 18 | 72000 | 11 | 44000 |
| 19 | 76000 | 12 | 48000 |
| 21 | 84000 | 13 | 52000 |
| 23 | 92000 | 14 | 56000 |
| 24 | 96000 | 15 | 60000 |
| 26 | 104000 | 16 | 64000 |
| 27 | 108000 | 17 | 68000 |
| 29 | 116000 | 18 | 72000 |
| 31 | 124000 | 19 | 76000 |
| 32 | 128000 | 20 | 80000 |
| 34 | 136000 | 21 | 84000 |
| 35 | 140000 | 22 | 88000 |
| 37 | 148000 | 23 | 92000 |
| 39 | 156000 | 24 | 96000 |
| 40 | 160000 | 25 | 100000 |

| 6000 Hour Based Maintenance | | | |
|---|---|---|---|
| km/h Average | km Equivalent | MPH Average | miles Equivalent |
| 5 | 30000 | 3 | 18000 |
| 6 | 36000 | 4 | 24000 |
| 8 | 48000 | 5 | 30000 |
| 10 | 60000 | 6 | 36000 |
| 11 | 66000 | 7 | 42000 |
| 13 | 78000 | 8 | 48000 |
| 14 | 84000 | 9 | 54000 |
| 16 | 96000 | 10 | 60000 |
| 18 | 108000 | 11 | 66000 |
| 19 | 114000 | 12 | 72000 |
| 21 | 126000 | 13 | 78000 |
| 23 | 138000 | 14 | 84000 |
| 24 | 144000 | 15 | 90000 |
| 26 | 156000 | 16 | 96000 |
| 27 | 162000 | 17 | 102000 |
| 29 | 174000 | 18 | 108000 |
| 31 | 186000 | 19 | 114000 |
| 32 | 192000 | 20 | 120000 |
| 34 | 204000 | 21 | 126000 |
| 35 | 210000 | 22 | 132000 |
| 37 | 222000 | 23 | 138000 |
| 39 | 234000 | 24 | 144000 |
| 40 | 240000 | 25 | 150000 |

# 1000 and 2000 Product Families Transmissions

Recommended Fluid and Filter Change Intervals




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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

* Anything other than 100 percent concentration of Allison Approved TES 295 fluid is considered a mixture and should utilize non-TES 295 change intervals.

** General Vocation: All other vocations.

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

†† Fluid fill capacity is dependent on vehicle configuration. Final fluid capacity must be determined by dipstick level (see Mechanic's Tips MT3190EN Section 1 or your Operator's Manual under "Care and Maintenance").

## Capacities†† (Approximate)

Transmissions Fluid Loss—Filter Change Only:
Control Main (spin-on) = 1 pint (0.47 liters)

| | Initial Fill††† | | Refill††† | |
|---|---|---|---|---|
| Sump | Liters | Quarts | Liters | Quarts |
| Standard | 14 | 14.8 | 10 | 10.6 |
| Shallow | 12 | 12.7 | 7 | 7.4 |

††† Approximate quantities, do not include external lines, cooler, and hoses.

## Filters

| | |
|---|---|
| **Control Main** | **P/N 29539579** |
| Shallow Pan Suction (Overhaul Only) | P/N 29537965 |
| Deep Pan Suction (Overhaul Only) | P/N 29537966 |

This schedule to be used with Prognostics “ON” in MY09 TCM calibrations and later with OEM equipped vehicles only.

# 1000 and 2000 Product Families Transmissions

**Recommended Fluid and Filter Change Intervals**

## Fluids

*** PROGNOSTICS ON ***

**REQUIRED **100 Percent Concentration Allison Approved TES 295 Fluids and Allison P/N 29539579 Control Main Filter ** REQUIRED**

**General or Severe**

**Change fluid when indicated by controller or 48 months whichever occurs first.**

## Filters

*** PROGNOSTICS ON ***

**REQUIRED **100 Percent Concentration Allison Approved TES 295 Fluids and Allison P/N 29539579 Control Main Filter ** REQUIRED**

**General or Severe**

| Control Main | Internal | Lube/Auxiliary |
|---|---|---|
| Initial 10,000 miles (16,000 km)/400 hours | Overhaul | |

**Change filters when indicated by controller or 48 months whichever occurs first.**

* **NOTE: If prognostics is turned “OFF” or Not Calibrated in TCM, utilization of fluid change intervals found on previous page of this document is required.**

** Less than 100 percent concentration of TES 295 Allison Approved fluids is considered a mixture and shall not be used with Prognostics or this change schedule. Utilization of non-TES 295 fluid change intervals found on previous pages of this document is required.

†† 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”).

**Capacities†† (Approximate)**

Transmissions Fluid Loss—Filter Change Only:
Control Main (spin-on) = 1 pint (0.47 liters)

| | Initial Fill††† | | Refill††† | |
|---|---|---|---|---|
| Sump | Liters | Quarts | Liters | Quarts |
| Standard | 14 | 14.8 | 10 | 10.6 |
| Shallow | 12 | 12.7 | 7 | 7.4 |

††† Approximate quantities, do not include external lines, cooler, and hoses.

**Filters**

| | |
|---|---|
| **Control Main** | **P/N 29539579** |
| Shallow Pan Suction (Overhaul Only) | P/N 29537965 |
| Deep Pan Suction (Overhaul Only) | P/N 29537966 |

Use This Chart for Transmission Serial Numbers Prior to 6510670912, 6610205144, 6520067342, and 6620002521

# 3000 and 4000 Product Families Transmissions

Recommended Fluid and Filter Change Intervals

## Gold Series Filter

### 100 Percent Concentration Allison Approved TES 295 Fluids*

**4 in. Control Module—4000**

**2 inch or 4 inch control module—3000**

| Main | Internal | Lube/Auxiliary |
|---|---|---|

Initial 5000 miles (8000 km)/200 hours

**General** or Severe*** Overhaul General** or Severe***

75,000 Miles (120 000 km)
3000 Hours
36 Months

**2 in. Control Module—4000**

| Main | Internal | Lube/Auxiliary |
|---|---|---|

Initial 5000 miles (8000 km)/200 hours

**General** or Severe*** Overhaul General** or Severe***

50,000 Miles (80 000 km)
2000 Hours
24 Months

See Figure 1 on page 11 for filter and control module dimensions

### Allison Approved Non-TES 295 Fluids*

| Main | Internal | Lube/Auxiliary |
|---|---|---|

Initial 5000 miles (8000 km)/200 hours

| General** | Severe*** | Overhaul | General** | Severe*** |
|---|---|---|---|---|
| 25,000 Miles (40 000 km) 1000 Hours 12 Months | 12,000 Miles (20 000 km) 500 Hours 6 Months | | 25,000 Miles (40 000 km) 1000 Hours 12 Months | 12,000 Miles (20 000 km) 500 Hours 6 Months |

## Fluid

### 100 Percent Concentration Allison Approved TES 295 Fluids*

**General****

150,000 Miles (240 000 km)
4000 Hours
48 Months

**Severe*****

| 2 inch or 4 inch 3000 4 inch 4000 Control Module | 2 inch 4000 Control Module |
|---|---|
| 75,000 Miles (120 000 km) 3000 Hours 36 Months | 50,000 Miles (80 000 km) 2000 Hours 24 Months |

### Allison Approved Non-TES 295 Fluids*

| General** | Severe*** |
|---|---|
| 25,000 Miles (40 000 km) 1000 Hours 12 Months | 12,000 Miles (20 000 km) 500 Hours 6 Months |

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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

* Less than 100 percent concentration Allison Approved TES 295 fluid is considered a mixture and should utilize non-TES 295 change intervals.

** General Vocation: Intercity Coach with duty cycle less than or equal to one (1) stop per mile and all other vocations not listed in severe vocation.

*** Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit, and Intercity Coach with duty cycle greater than one (1) stop per mile.

†† 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").

**Filter and Gasket Kits**

| Initial 5000 mile (8000 km) Gold Series Kit | Gold Series Filter Kit |
|---|---|
| 2 inch kit P/N 29540495<br>4 inch kit P/N 29540496 | 2 inch Filter Kit P/N 29540493<br>4 inch Filter Kit P/N 29540494 |

**Additional Fill for Allison Coolers/Accumulators**

| Model | Cooler Type | Liters | Quarts |
|---|---|---|---|
| 3000/4000 | Non-Retarder Direct Mount | 1.0 | 1.1 |
| 3000/4000 | Remote/Retarder/Sump | 2.5 | 2.6 |
| 3000 | Retarder Accumulator | 1.2 | 1.3 |
| 4000 | Direct Mount/ Retarder | 2.1 | 2.2 |
| 4000 | Retarder Accumulator | 0.6 | 0.6 |

**3000 and 4000 Capacities†† (Approximate)**

Transmissions Fluid Loss —Filter Change Only:
Main Filter = 2 quarts (1.9 liters)
Lube Filter = 8 quarts (7.6 liters)

| | | Initial Fill††† | | Refill††† | |
|---|---|---|---|---|---|
| Model | Sump | Liters | Quarts | Liters | Quarts |
| 3000 | 4 inch | 27 | 29 | 18 | 19 |
| 3000 | 2 inch | 25 | 26 | 16 | 17 |
| 4000 | 4 inch++ | 45 | 48 | 37 | 39 |
| 4000 | 2 inch++ | 38 | 40 | 30 | 31 |

++ Add 2.8 Liters (3 Quarts) for Transmissions with PTO

††† Approximate quantities, do not include external lines, cooler, and hoses.

Use This Chart for Transmission Serial Numbers Starting with 6510670912, 6610205144, 6520067342, and 6620002521

# 3000 and 4000 Product Families Transmissions

Recommended Fluid and Filter Change Intervals

## High Capacity Filter

See Figure 1 on page 11 for filter and control module dimensions

### 100 Percent Concentration Allison Approved TES 295 Fluids*

| Main | Internal | Lube/Auxiliary |
|---|---|---|
| **General** or Severe*** | **Overhaul** | **General** or Severe*** |
| 75,000 Miles<br>(120 000 km)<br>3000 Hours<br>36 Months | | 75,000 Miles<br>(120 000 km)<br>3000 Hours<br>36 Months |

### Allison Approved Non-TES 295 Fluids*

| Main | | Internal | Lube/Auxiliary | |
|---|---|---|---|---|
| **General**** | **Severe***** | **Overhaul** | **General**** | **Severe***** |
| 25,000 Miles<br>(40 000 km)<br>1000 Hours<br>12 Months | 12,000 Miles<br>(20 000 km)<br>500 Hours<br>6 Months | | 25,000 Miles<br>(40 000 km)<br>1000 Hours<br>12 Months | 12,000 Miles<br>(20 000 km)<br>500 Hours<br>6 Months |

## Fluid

### 100 Percent Concentration Allison Approved TES 295 Fluids*

| General** | Severe*** |
|---|---|
| 300,000 Miles<br>(480 000 km)<br>6000 Hours<br>48 Months | 150,000 Miles<br>(240 000 km)<br>6000 Hours<br>48 Months |

### Allison Approved Non-TES 295 Fluids*

| General** | Severe*** |
|---|---|
| 25,000 Miles<br>(40 000 km)<br>1000 Hours<br>12 Months | 12,000 Miles<br>(20 000 km)<br>500 Hours<br>6 Months |

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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

* Less than 100 percent concentration Allison Approved TES 295 fluid is considered a mixture and should utilize non-TES 295 change intervals.

** General Vocation: Intercity Coach with duty cycle less than or equal to one (1) stop per mile and all other vocations not listed in severe vocation.

*** Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit, and Intercity Coach with duty cycle greater than one (1) stop per mile.

†† 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").

| Filter and Gasket Kits |
|---|
| **High-Capacity Filter Kit** |
| 2 inch Filter Kit P/N 29548987<br>4 inch Filter Kit P/N 29548988 |

**Additional Fill for Allison Coolers/Accumulators**

| Model | Cooler Type | Liters | Quarts |
|---|---|---|---|
| 3000/4000 | Non-Retarder Direct Mount | 1.0 | 1.1 |
| 3000/4000 | Remote/Retarder/Sump | 2.5 | 2.6 |
| 3000 | Retarder Accumulator | 1.2 | 1.3 |
| 4000 | Direct Mount/ Retarder | 2.1 | 2.2 |
| 4000 | Retarder Accumulator | 0.6 | 0.6 |

**3000 and 4000 Capacities†† (Approximate)**

Transmissions Fluid Loss —Filter Change Only:
Main Filter = 2 quarts (1.9 liters)
Lube Filter = 8 quarts (7.6 liters)

| | | Initial Fill††† | | Refill††† | |
|---|---|---|---|---|---|
| Model | Sump | Liters | Quarts | Liters | Quarts |
| 3000 | 4 inch | 27 | 29 | 18 | 19 |
| 3000 | 2 inch | 25 | 26 | 16 | 17 |
| 4000 | 4 inch++ | 45 | 48 | 37 | 39 |
| 4000 | 2 inch++ | 38 | 40 | 30 | 31 |

++ Add 2.8 Liters (3 Quarts) for Transmissions with PTO

††† Approximate quantities, do not include external lines, cooler, and hoses.

This schedule to be used with Prognostics "ON" beginning with eligible S/Ns 6510822005, 6520099957, 6610257671, 6620007438

# 3000 and 4000 Product Families Transmissions

**Recommended Fluid and Filter Change Intervals**

## Fluids

*** PROGNOSTICS ON ***

**REQUIRED ** 100 Percent Concentration TES 295 Allison Approved Fluids and Allison High Capacity Filters ** REQUIRED**

**General or Severe**

**Change fluid when indicated by controller or 60 months whichever occurs first. Also change filters with fluid.**

## Filters

*** PROGNOSTICS ON ***

**REQUIRED ** 100 Percent Concentration TES 295 Allison Approved Fluids and Allison High Capacity Filters ** REQUIRED**

**General or Severe**

**Main** | **Internal** | **Lube**

Overhaul

**Change filters when indicated by controller between fluid changes or 60 months whichever occurs first.**

* **NOTE: If prognostics is turned "OFF" or Not Calibrated in TCM after serial numbers listed above, utilization of fluid and filter change intervals found on previous page (page 9) of this document is required.**

** Less than 100 percent concentration of TES 295 Allison Approved fluids is considered a mixture and shall not be used with Prognostics or this change schedule. Utilization of non-TES 295 fluid change intervals found on previous pages of this document is required.

†† 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").

| Filter and Gasket Kits |
|---|
| **High-Capacity Filter Kit** |
| 2 inch Filter Kit P/N 29548987<br>4 inch Filter Kit P/N 29548988 |

**Additional Fill for Allison Coolers/Accumulators**

| Model | Cooler Type | Liters | Quarts |
|---|---|---|---|
| 3000/4000 | Non-Retarder Direct Mount | 1.0 | 1.1 |
| 3000/4000 | Remote/Retarder/Sump | 2.5 | 2.6 |
| 3000 | Retarder Accumulator | 1.2 | 1.3 |
| 4000 | Direct Mount/ Retarder | 2.1 | 2.2 |
| 4000 | Retarder Accumulator | 0.6 | 0.6 |

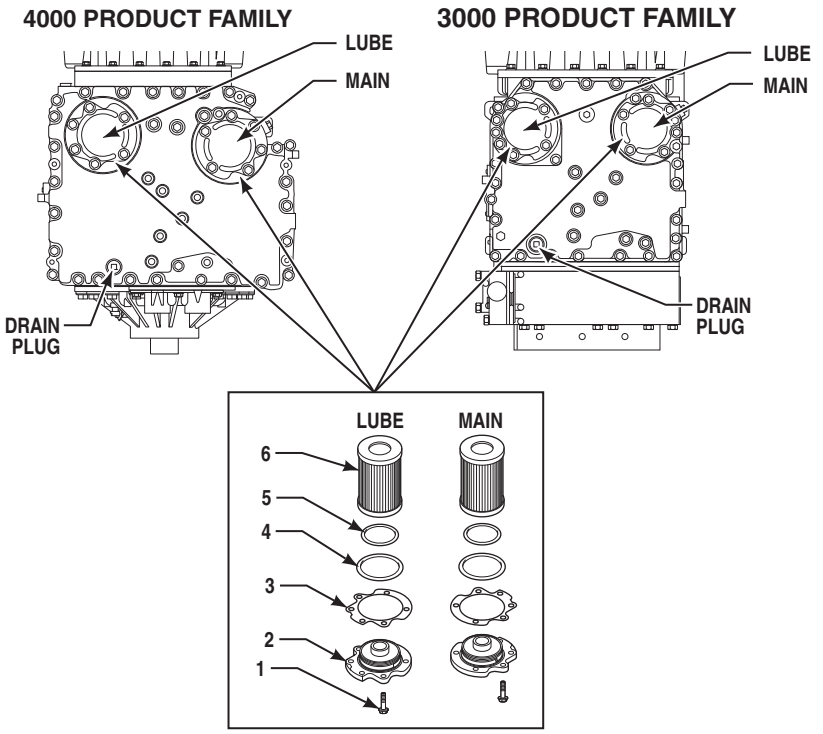
**3000 and 4000 Capacities†† (Approximate)**

Transmissions Fluid Loss —Filter Change Only:
Main Filter = 2 quarts (1.9 liters)
Lube Filter = 8 quarts (7.6 liters)

| | | Initial Fill††† | | Refill††† | |
|---|---|---|---|---|---|
| Model | Sump | Liters | Quarts | Liters | Quarts |
| 3000 | 4 inch | 27 | 29 | 18 | 19 |
| 3000 | 2 inch | 25 | 26 | 16 | 17 |
| 4000 | 4 inch++ | 45 | 48 | 37 | 39 |
| 4000 | 2 inch++ | 38 | 40 | 30 | 31 |

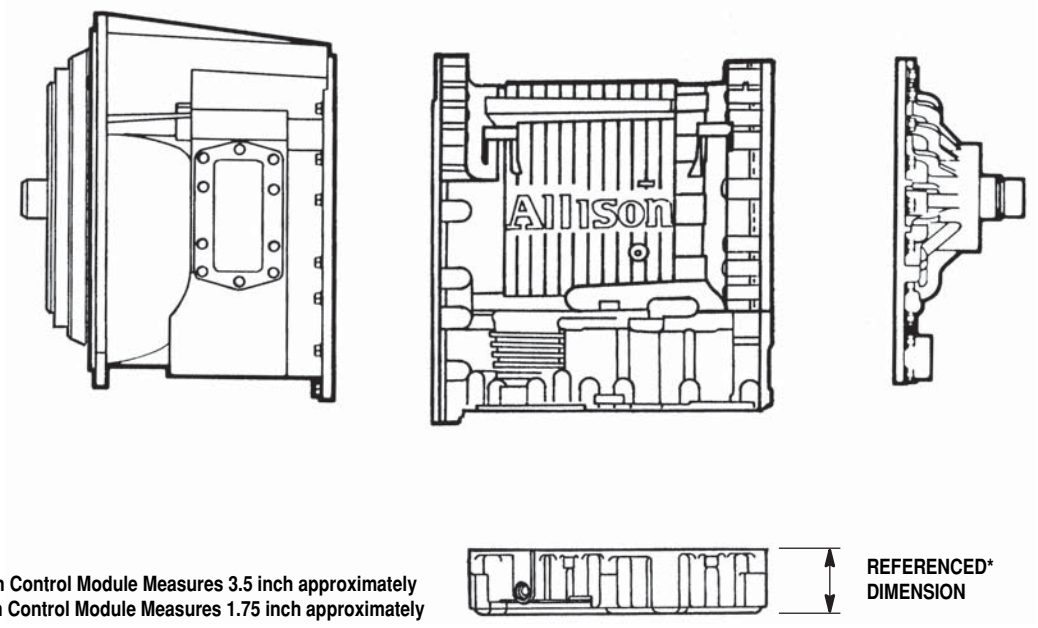
++ Add 2.8 Liters (3 Quarts) for Transmissions with PTO
††† Approximate quantities, do not include external lines, cooler, and hoses.

# 3000/4000 Product Families Filter Location




***NOTE:*** *Torque all filter cover retaining bolts to 51-61 N•m (38-45 lb ft)*
***NOTE:*** *Main and Lube Filter designations cast into bottom of Control Module*

V07268.00.02



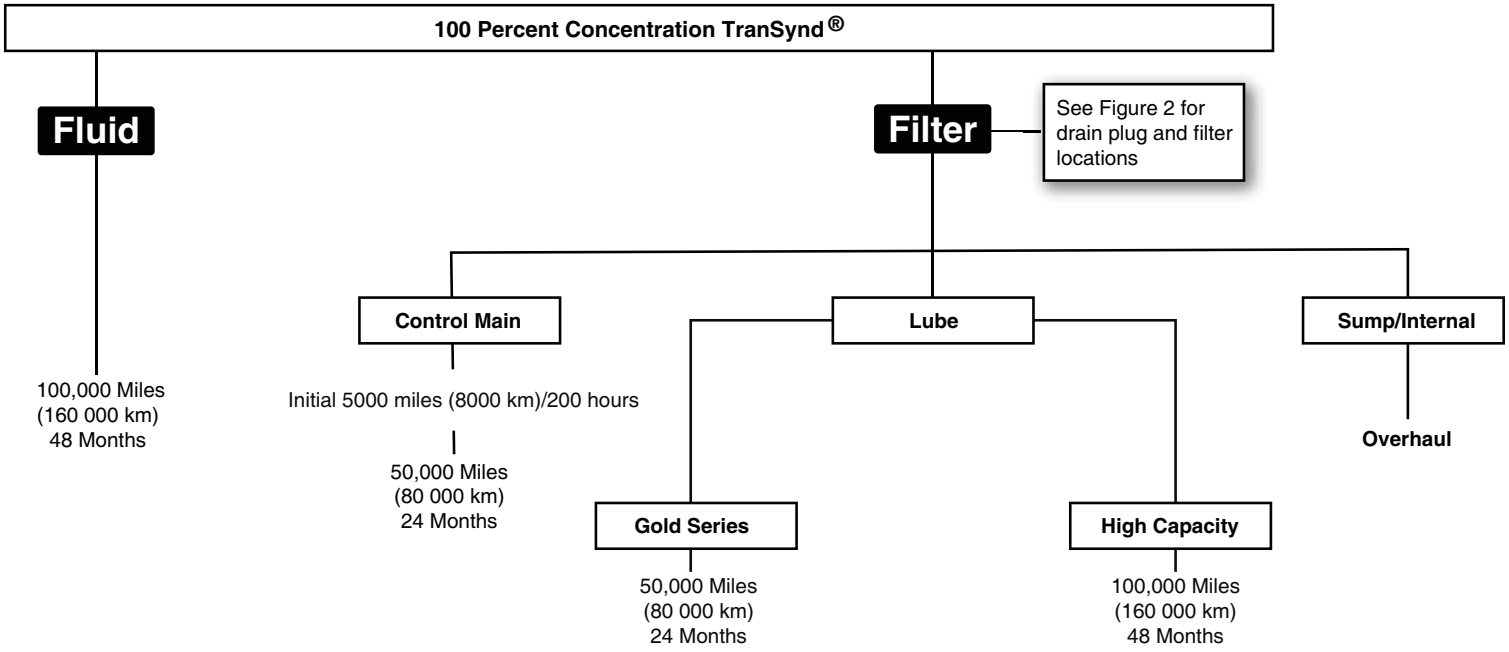

*** 4 inch Control Module Measures 3.5 inch approximately**
**2 inch Control Module Measures 1.75 inch approximately**

VL07148.00.01

***Figure 1.***

# E$^{V}$ 40/50

Recommended Fluid and Filter Change Intervals




**NOTES:**

- **Change fluid/filters at or before recommended mileage or months have elapsed, whichever occurs first.**
- **Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used**.
- The following recommendations are based upon the transmission containing 100 percent concentration TranSynd®.
- E$^{V}$40/50 Lube Filter extended time change intervals are only valid with the use of Allison Transmission High-Capacity Filters. High-capacity filters implemented into production starting with S/N 7110001551.
- **Fluid Exchange:** Fluid exchanging machines are not recommended or recognized due to variation and inconsistencies that may not guarantee removal of 100 percent of the used fluid.

## Capacities††(Approximate)

Transmissions Fluid Loss—Filter Change Only:
Control Main Filter = 1 quart (0.94 liters)
Lube Filter = 3 quarts (2.84 liters

| | Refill††† | |
|---|---|---|
| Model | Liters | Quarts |
| E$^{V}$40/50 | 15.1 | 16 |

†† Fluid fill capacity is dependent on vehicle configuration.
††† Approximate quantities, do not include external lines, cooler, and hoses.

## Filter and Gasket Kits

| | |
|---|---|
| Lube Filter and Gasket Kit | P/N 29545785 |
| Control Main Filter | P/N 29539579 |

# $E^V$ 40/50 System Filter Location

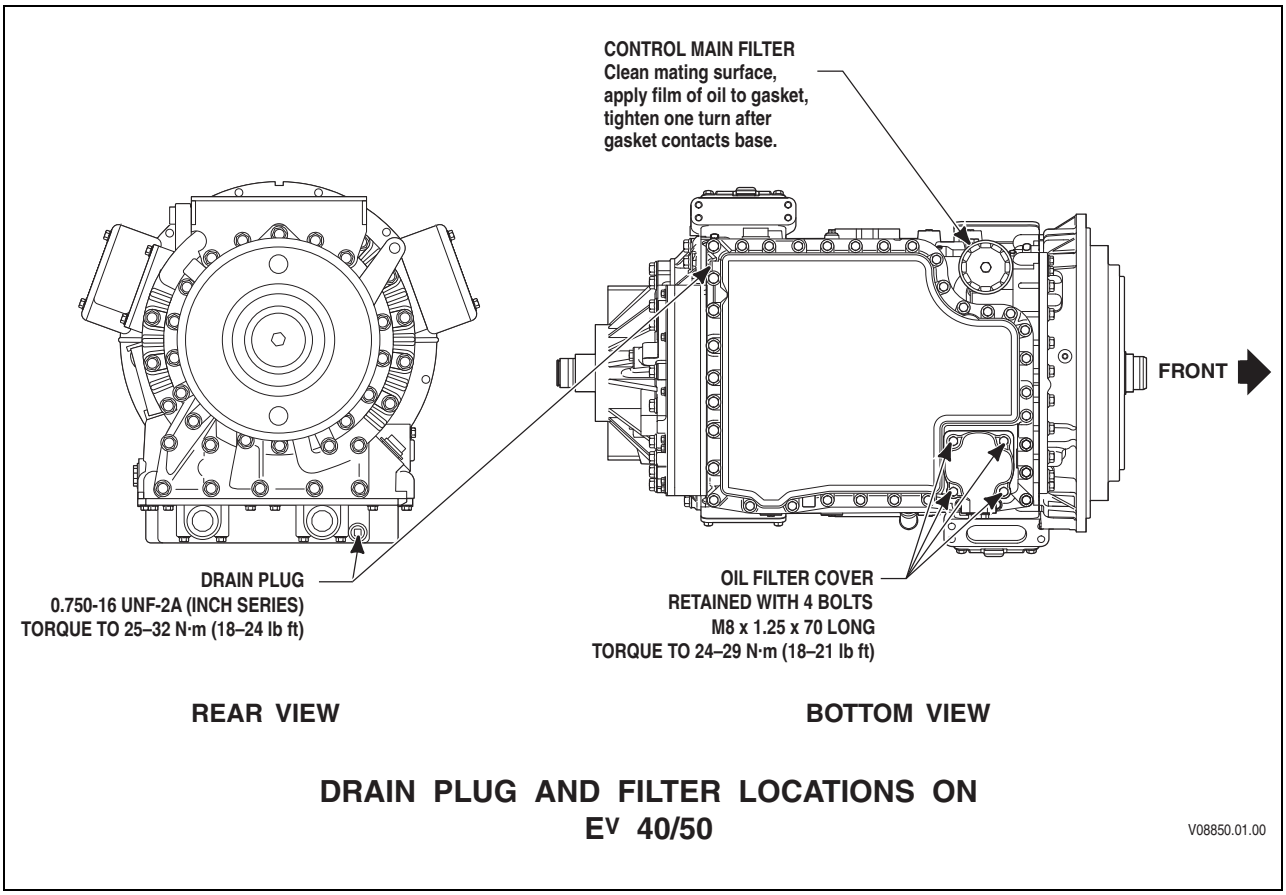
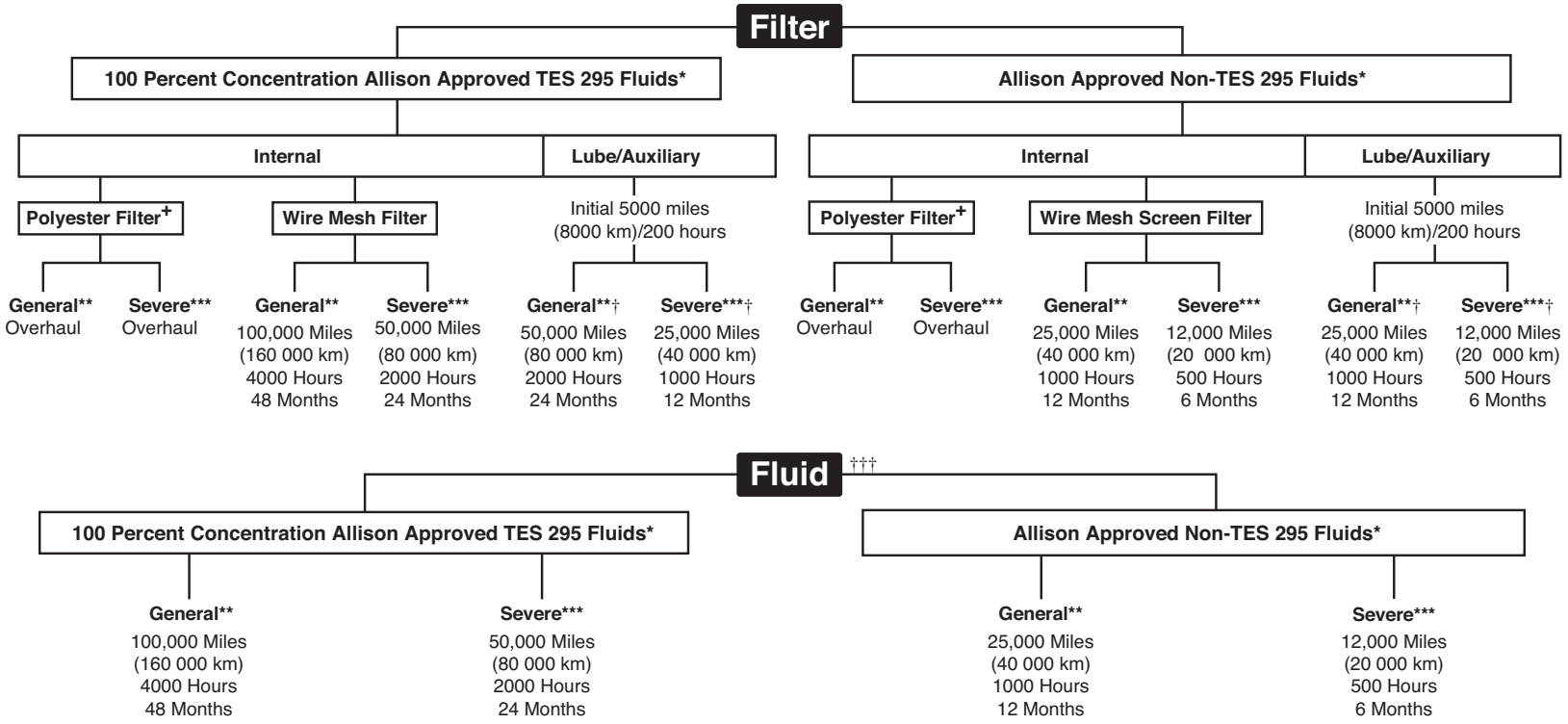



***Figure 2.***

# AT 500 Series Transmissions

Recommended Fluid and Filter Change Intervals




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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

* Anything other than 100 percent concentration of Allison Approved TES 295 fluid is considered a mixture and should utilize non-TES 295 change intervals.

** General Vocation: less than one stop per mile.

*** Severe Vocation: more than one stop per mile.

† When an Allison recommended high-efficiency filter is used, the change interval is not until the Change Filter light indicates the filter is contaminated or until it has been in use for 3 years, which ever occurs first. No mileage restrictions apply. High efficiency filters are only approved for use with AT/MT/HT Series.

†† Fluid fill capacity is dependent on vehicle configuration. Final fluid capacity must be determined by dipstick level (see Mechanic's Tips MT1321EN Section 1 or your Operator's Manual under "Care and Maintenance").

+ For additional information regarding the polyester internal filter see the latest revision of SIL 9-TR-01.

††† DEXRON®-VI shall not be used in Allison 500, 600, or 700 Series transmissions (AT, MT, HT/V/CLT products)

## Capacities††(Approximate)

| Pan Depth | Initial Fill††† Quarts | Liters |
|---|---|---|
| 3.8 inch (97 mm) oil pan | 9 | 8.5 |
| 5.3 inch (135 mm) oil pan | 16 | 15 |

††† Approximate quantities, do not include external lines and cooler hose.

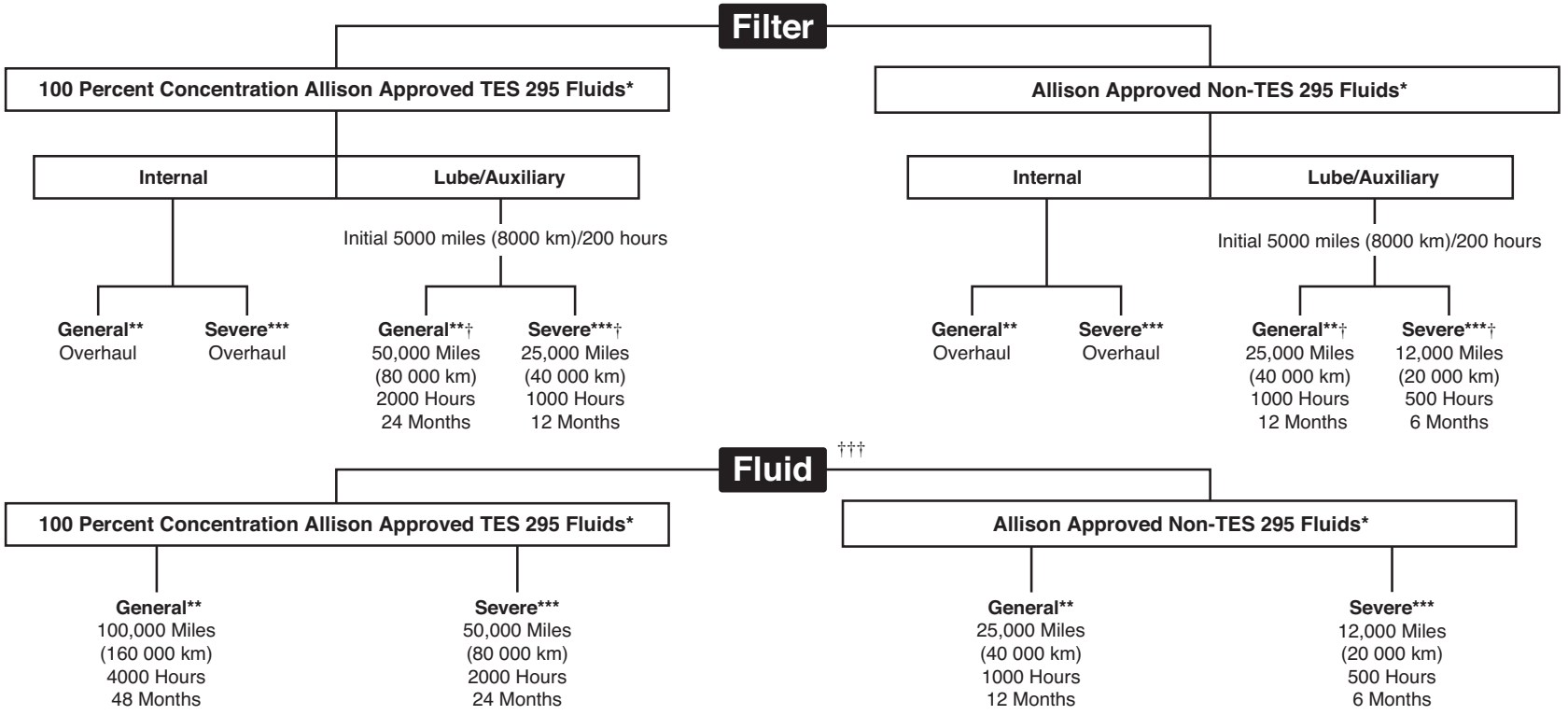
## Filter and Gasket Kits

Oil Filter and Gasket Kit – 3.8 in. Pan 29540976
– 5.3 in. Pan 29538489

See the latest revision of SIL 9-TR-01 for additional information.

# MT 600 Series Transmissions

Recommended Fluid and Filter Change Intervals




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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

* Anything other than 100 percent concentration of Allison Approved TES 295 fluids is considered a mixture and should utilize non-TES 295 change intervals.

** General Vocation: less than one stop per mile.

*** Severe Vocation: more than one stop per mile.

† When an Allison recommended high-efficiency filter is used, the change interval is not until the Change Filter light indicates the filter is contaminated or until it has been in use for 3 years, which ever occurs first. No mileage restrictions apply. High efficiency filters are only approved for use with AT/MT/HT Series.

†† Fluid fill capacity is dependent on vehicle configuration. Final fluid capacity must be determined by dipstick level (see Mechanic's Tips MT1357EN Section 1 or your Operator's Manual under "Care and Maintenance").

††† DEXRON®-VI shall not be used in Allison 500, 600, or 700 Series transmissions (AT, MT, HT/V/CLT products)

## Capacities†† (Approximate)

| Pan Depth | Initial Fill††† Quarts | Liters |
|---|---|---|
| 4.3 inch (110 mm) oil pan | 12 | 11 |
| 5.1 inch (130 mm) oil pan | 15 | 14 |

††† Approximate quantities, do not include external lines and cooler hose.

## Filter and Gasket Kits

Oil Filter and Gasket Kit 29538489

See the latest revision of SIL 4-TR-01 for additional information.

# HT 700 Series Transmissions

Recommended Fluid and Filter Change Intervals

## Filter

### 100 Percent Concentration Allison Approved TES 295 Fluids*

| Main | | Internal | Lube/Auxiliary | |
|---|---|---|---|---|
| | | | Initial 5000 miles (8000 km)/200 hours | |
| **General**** | **Severe***** | **Overhaul** | **General****† | **Severe*****† |
| 50,000 Miles | 25,000 Miles | | 50,000 Miles | 25,000 Miles |
| (80 000 km) | (40 000 km) | | (80 000 km) | (40 000 km) |
| 2000 Hours | 1000 Hours | | 2000 Hours | 1000 Hours |
| 24 Months | 12 Months | | 24 Months | 12 Months |

### Allison Approved Non-TES 295 Fluids*

| Main | | Internal | Lube/Auxiliary | |
|---|---|---|---|---|
| | | | Initial 5000 miles (8000 km)/200 hours | |
| **General**** | **Severe***** | **Overhaul** | **General****† | **Severe*****† |
| 25,000 Miles | 12,000 Miles | | 25,000 Miles | 12,000 Miles |
| (40 000 km) | (20 000 km) | | (40 000 km) | (20 000 km) |
| 1000 Hours | 500 Hours | | 1000 Hours | 500 Hours |
| 12 Months | 6 Months | | 12 Months | 6 Months |

## Fluid †††

### 100 Percent Concentration Allison Approved TES 295 Fluids*

| **General**** | **Severe***** |
|---|---|
| 100,000 Miles | 50,000 Miles |
| (160 000 km) | (80 000 km) |
| 4000 Hours | 2000 Hours |
| 48 Months | 24 Months |

### Allison Approved Non-TES 295 Fluids*

| **General**** | **Severe***** |
|---|---|
| 25,000 Miles | 12,000 Miles |
| (40 000 km) | (20 000 km) |
| 1000 Hours | 500 Hours |
| 12 Months | 6 Months |

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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

* Anything other than 100 percent concentration of Allison Approved TES 295 fluids is considered a mixture and should utilize non-TES 295 change intervals.

** General Vocation: less than one stop per mile.

*** Severe Vocation: more than one stop per mile.

† When an Allison recommended high-efficiency filter is used, the change interval is not until the Change Filter light indicates the filter is contaminated or until it has been in use for 3 years, which ever occurs first. No mileage restrictions apply. High efficiency filters are only approved for use with AT/MT/HT Series.

†† Fluid fill capacity is dependent on vehicle configuration. Final fluid capacity must be determined by dipstick level (see Mechanic's Tips MT1366EN (Hydraulic Controls) or MT1958EN (Electronic Controls) Section 1 or your Operator's Manual under "Care and maintenance").

††† DEXRON®-VI shall not be used in Allison 500, 600, or 700 Series transmissions (AT, MT, HT/V/CLT products)

## Capacities†† (Approximate)

| Pan Depth | Refill††† Quarts | Refill††† Liters |
|---|---|---|
| 4.5 inch (114 mm) oil pan | 34 | 32 |
| 6 inch (152 mm) oil pan | 30 | 28.5 |
| 7 inch (178 mm) oil pan | 33 | 31 |
| 8.5 inch (216 mm) oil pan | 42.8 | 40.5 |

††† Approximate quantities, do not include external lines and cooler hose.

## Filter and Gasket Kits

| | |
|---|---|
| 4.5 inch (114 mm) Oil Pan Filter Kit | 29530562 |
| 4.5 inch (114 mm) Oil Pan Filter Kit with adapter 23016883 and pan 23016884 uses filter kit | 29530563 |
| 6 inch (152 mm) Oil Pan Filter Kit | 6839945 |
| 7 inch (178 mm) Oil Pan Filter Kit | 29530564 |
| 8.5 inch (216) Hyd Oil Pan Filter Kit | 23012407 |
| 8.5 inch (216) Elec Oil Pan Filter Kit | 29530565 |

# Fluid Change Intervals

| Transmission Family | Allison-Approved Non-TES 295 Fluids | | MIL-PRF-2104<br>MIL-PRF-21260<br>MIL-PRF-46167 | | Allison-Approved TES 295 | |
|---|---|---|---|---|---|---|
| | **General** | **Severe** | **General** | **Severe** | **General** | **Severe** |
| **1000/2000** | 50,000 miles<br>(80 000 km)<br>2000 hours<br>24 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | N.A. | N.A. | 150,000 miles<br>(240 000 km)<br>4000 hours<br>48 months | 75,000 miles<br>(120 000 km)<br>3000 hours<br>36 months |
| 1000/2000 Product Families Scheduled Below for MY09 Prognostics Turned ON | | | | | | |
| **1000/2000** | N.A. | N.A. | N.A. | N.A. | Change fluid when indicated by controller<br>or 48 months, whichever occurs first. | |
| **3000/4000 Product Families<br>PRIOR TO HIGH CAPACITY FILTERS** | | | | | | |
| **4000<br>(with 4 inch Sump)<br>and 3000** | 25,000 miles<br>(40 000 km)<br>1000 hours<br>12 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | 25,000 miles<br>(40 000 km)<br>1000 hours<br>12 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | 150,000 miles<br>(240 000 km)<br>4000 hours<br>48 months | 75,000 miles<br>(120 000 km)<br>3000 hours<br>36 months |
| **4000<br>(with 2 inch Sump)** | 25,000 miles<br>(40 000 km)<br>1000 hours<br>12 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | 25,000 miles<br>(40 000 km)<br>1000 hours<br>12 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | 150,000 miles<br>(240 000 km)<br>4000 hours<br>48 months | 50,000 miles<br>(80 000 km)<br>2000 hours<br>24 months |
| **3000/4000 Product Families *<br>HIGH CAPACITY FILTERS, AND WHEN PROGNOSTICS IS TURNED "OFF" OR NOT CALIBRATED IN TCM** | | | | | | |
| **3000/4000** | 25,000 miles<br>(40 000 km)<br>1000 hours<br>12 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | 25,000 miles<br>(40 000 km)<br>1000 hours<br>12 months | 12,000 miles<br>(20 000 km)<br>500 hours<br>6 months | 300,000 miles<br>(480 000 km)<br>6000 hours<br>48 months | 150,000 miles<br>(240 000 km)<br>6000 hours<br>48 months |
| **3000/4000 Product Families ** — PROGNOSTICS "ON"<br>NOTE: IF PROGNOSTICS IS TURNED "OFF" OR NOT CALIBRATED IN TCM, UTILIZATION OF HIGH CAPACITY FILTER AND FLUID CHANGE INTERVALS MUST BE FOLLOWED.** | | | | | | |
| **3000/4000** | N.A. | N.A. | N.A. | N.A. | Change fluid when indicated by Prognostics<br>or 60 months, whichever comes first.<br>Also change filters with fluid.<br>(High-capacity filters and Prognostics turned ON) | |
| **$E^P$ 40/50 SERIES — USE FOR ALL TRANSMISSION SERIAL NUMBERS*** ** | | | | | **TranSynd® required for $E^V$ 40/50** | |
| **$E^P$ 40/50*** ** (Fluid change interval not affected by high-capacity filters) | N.A. | N.A. | N.A. | N.A. | 100,000 miles<br>(160 000 km)<br>48 months | 100,000 miles<br>(160 000 km)<br>48 months |

*** High-capacity filters released in models starting with S/N 6510670912, 6520067342 (3000 Product Family) and 6610205144, 66200002521 (4000 Product Family)**

**** Prognostics released on models starting with S/N 6510822005, 6520099957, (3000 Product Family) and 6610257671, 6620007438 (4000 Product Family)**

***** TranSynd® is the only approved fluid for $E^P$ 40/50 products.**

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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. Allison Transmission recommends that customers use fluid analysis as their primary method for determining fluid change intervals. In the absence of a fluid analysis program, the fluid change intervals listed in the charts above should be used.**

**NOTE: General Vocation: Intercity Coach with duty cycle less than or equal to one (1) stop per mile and all other vocations not listed in severe vocation.**

**NOTE: Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit, Shuttle Transit, 2000 MH, and Intercity Coach with duty cycle greater an one (1) stop per mile.**

# Filter Change Intervals

| Transmission Family | Allison-Approved Non-TES 295 Fluids | | | | | | Allison-Approved TES 295 Fluids | | | | | | MIL-PRF-2104, 21260, 46167 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Internal | | Lube/Auxiliary | | Main | | Internal | | Lube/Auxiliary | | Main | | Internal | | Lube/Auxiliary | | Main | |
| | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe |
| 1000 and 2000 | Overhaul | Overhaul | 50,000 miles (80 000 km) 2000 hours 24 months | 12,000 miles (20 000 km) 500 hours 6 months | Control Main Spin-on Filter Only/Initial 10,000 miles (16 000 km) 50,000 miles (80 000 km) 2000 hours 24 months | 12,000 miles (20 000 km) 500 hours 6 months | Overhaul | Overhaul | 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles (80 000 km) 2000 hours 24 months | Control Main Spin-on Filter Only/Initial 10,000 miles (16 000 km) 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles (80 000 km) 2000 hours 24 months | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| 1000/2000 Product family schedule below for MY09 - Prognostics turned ON. ** Note: If Prognostics is turned OFF or not calibrated in TCM, utilization of filter change intervals above must be followed.* | | | | | | | | | | | | | | | | | | |
| 1000 and 2000 | N.A. | N.A. | N.A. | N.A. | Control Main Spin-on Filter Only/Initial 10,000 miles (16 000 km) | | Overhaul | Overhaul | Change filters when indicated by controller or 48 months, whichever occurs first. | | Control Main Spin-on Filter Only/Initial 10,000 miles (16 000 km) Change filters when indicated by controller or 48 months, whichever occurs first. | | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| 3000/4000 Product Families — Prior to high capacity filters ✞ | | | | | | | | | | | | | | | | | | |
| 4000 (with 4 in. Sump) and 3000 | Overhaul | Overhaul | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Main Filter Only Initial 5000 miles 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Overhaul | Overhaul | 75,000 miles (120 000 km) 3000 hours 36 months | 75,000 miles (120 000 km) 3000 hours 36 months | Main Filter Only Initial 5000 miles 75,000 miles (120 000 km) 3000 hours 36 months | 75,000 miles (120 000 km) 3000 hours 36 months | Overhaul | Overhaul | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Main Filter Only Initial 5000 miles 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months |
| 4000 (with 2 in. Sump) | Overhaul | Overhaul | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Main Filter Only Initial 5000 miles 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Overhaul | Overhaul | 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles (80 000 km) 2000 hours 24 months | Main Filter Only Initial 5000 miles 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles (80 000 km) 2000 hours 24 months | Overhaul | Overhaul | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Main Filter Only Initial 5000 miles 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months |
| 3000/4000 Product Families * — High-capacity filters, and when prognostics is turned OFF or not calibrated in TCM. | | | | | | | | | | | | | | | | | | |
| 3000 and 4000 | Overhaul | Overhaul | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Overhaul | Overhaul | 75,000 miles (120 000 km) 3000 hours 36 months | 75,000 miles (120 000 km) 3000 hours 36 months | 75,000 miles (120 000 km) 3000 hours 36 months | 75,000 miles (120 000 km) 3000 hours 36 months | Overhaul | Overhaul | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months |
| 3000/4000 Product Families ** - Prognostics ON — *Note: If Prognostics is turned OFF or not calibrated in TCM, utilization of high-capacity filter and fluid change intervals must be followed.* | | | | | | | | | | | | | | | | | | |
| 3000 and 4000 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | Overhaul | Overhaul | Change filters when indicated by controller between fluid change or 60 months, whichever occurs first. | | | | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| * Use for transmission serial numbers prior to 7110001551 - $E^P$ 40/50 Series - (Prior to High-capacity filters) | | | | | | | | | | | | | | | | | | |
| $E^P$ 40/50*** | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | Overhaul | Overhaul | 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles (80 000 km) 2000 hours 24 months | Control Main Spin-on Filter/ Initial 5,000 miles 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles (80 000 km) 2000 hours 24 months | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |
| * Use for transmission serial numbers starting with 7110001551 - $E^P$ 40/50 Series - (High-capacity filters) | | | | | | | | | | | | | | | | | | |
| $E^P$ 40/50*** | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | Overhaul | Overhaul | 100,000 miles (160 000 km) 48 months | 100,000 miles (160 000 km) 48 months | Control Main Spin-on Filter/ Initial 5,000 miles 50,000 miles (80 000 km) 24 months | 50,000 miles (80 000 km) 24 months | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. |

* High Capacity Filters released in models starting with S/N 6510670912, 6520067342 (3000 Product Family) and 6610205144, 66200002521 (4000 Product Family)
** Prognostics released on models starting with S/N 6510822005, 6520099957, (3000 Product Family) and 6610257671, 6620007438 (4000 Product Family)
*** TranSynd® is the only approved fluid for $E^P$ 40/50 products.
NOTE: Change fluid/filters at or before recommended mileage, months, or hours have elapsed, whichever occurs first.
NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. Allison Transmission recommends that customers use fluid analysis as their primary method for determining fluid change intervals. In the absence of a fluid analysis program, the fluid change intervals listed in the charts above should be used.
NOTE: General Vocation: Intercity Coach with duty cycle less than or equal to one (1) stop per mile and all other vocations not listed in severe vocation.
NOTE: Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit, Shuttle Transit, 2000 MH, and Intercity Coach with duty cycle greater an one (1) stop per mile.
✞ When replacing gold series filters with high-capacity filters in transmissions containing 100 percent Allison-Approved TES 295 fluid, it is allowed to follow high-capacity fluid and filter change intervals.

# Fluid Change Intervals for Allison Legacy Products

| Transmission Family | Allison Approved Non-TES 295 Fluids* | | MIL-PRF-2104 MIL-PRF-21260 MIL-PRF-46167 | | Allison Approved TES 295 | |
|---|---|---|---|---|---|---|
| | General | Severe | General | Severe | General | Severe |
| AT 500 / MT 600 | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | 100,000 miles (160 000 km) 4000 hours 48 months | 50,000 miles (80 000 km) 2000 hours 24 months |
| HT / CLT 700 / V 700 | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | 100,000 miles (160 000 km) 4000 hours 48 months | 50,000 miles (80 000 km) 2000 hours 24 months |

# Filter Change Intervals for Allison Legacy Products

| Transmission Family | Allison Approved Non-TES 295 Fluids* | | | | | | Allison Approved TES 295 Fluids* | | | | | | MIL- PRF- 2104,21260,46167 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Internal | | Lube / Auxiliary | | Main | | Internal | | Lube / Auxiliary | | Main | | Internal | | Lube / Auxiliary | | Main | |
| | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe | General | Severe |
| AT ††† | Polyester* Overhaul Wire Mesh 25,000 miles (40 000 km) 1000 hours 12 months | Overhaul 12,000 miles (20 000 km) 500 hours 6 months | 25,000 miles** (40 000 km) 1000 hours 12 months | 12,000 miles** (20 000 km) 500 hours 6 months | N.A. | N.A. | Polyester* Overhaul Wire Mesh 100,000 miles (160 000 km) 4000 hours 48 months | Overhaul 50,000 miles (80 000 km) 2000 hours 24 months | 50,000 miles** (80 000 km) 2000 hours 24 months | 25,000 miles** (40 000 km) 1000 hours 12 months | N.A. | N.A. | Polyester* Overhaul Wire Mesh 25,000 miles (40 000 km) 1000 hours 12 months | Overhaul 12,000 miles (20 000 km) 500 hours 6 months | 25,000 miles** (40 000 km) 1000 hours 12 months | 12,000 miles** (20 000 km) 500 hours 6 months | N.A. | N.A. |
| MT ††† | Overhaul | Overhaul | 25,000 miles** (40 000 km) 1000 hours 12 months | 12,000 miles** (20 000 km) 500 hours 6 months | N.A. | N.A. | Overhaul | Overhaul | 50,000 miles** (80 000 km) 2000 hours 24 months | 25,000 miles** (40 000 km) 1000 hours 12 months | N.A. | N.A. | Overhaul | Overhaul | 25,000 miles** (40 000 km) 1000 hours 12 months | 12,000 miles** (20 000 km) 500 hours 6 months | N.A. | N.A. |
| HT/CLT 700/ V700††† | Overhaul | Overhaul | 25,000 miles** (40 000 km) 1000 hours 12 months | 12,000 miles** (20 000 km) 500 hours 6 months | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months | Overhaul | Overhaul | 50,000 miles** (80 000 km) 1000 hours 12 months | 25,000 miles** (40 000 km) 500 hours 6 months | 50,000 miles (80 000 km) 1000 hours 12 months | 25,000 miles (40 000 km) 500 hours 6 months | Overhaul | Overhaul | 25,000 miles** (40 000 km) 1000 hours 12 months | 12,000 miles** (20 000 km) 500 hours 6 months | 25,000 miles (40 000 km) 1000 hours 12 months | 12,000 miles (20 000 km) 500 hours 6 months |

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

**NOTE: Local conditions, severity of operation or duty cycle may require more or less frequent fluid change intervals that differ from the published recommended fluid change intervals of Allison Transmission. 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 charts above should be used.**

**NOTE: General Vocation: Intercity Coach with duty cycle less than or equal to one (1) stop per mile and all other vocations not listed in severe vocation.**

**NOTE: Severe Vocation: All Retarders, On/Off Highway, Refuse, Transit, Shuttle Transit, 2000 MH, and Intercity Coach with duty cycle greater than one (1) stop per mile.**

** When an Allison recommended high-efficiency filter is used, the change interval is not until the Change Filter light indicates the filter is contaminated or until it has been in use for 3 years, which ever occurs first. No mileage restrictions apply. High efficiency filters are only approved for use with AT/MT/HT Series.

* For additional information regarding the polyester internal filter see the latest revision of SIL 9-TR-01.

††† DEXRON®-VI shall not be used in Allison 500, 600, or 700 Series transmissions (AT, MT, HT/V/CLT products).