



# SERVICE BULLETIN No.1108

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<b>COACH MODEL</b>	: T2145, S2145 and C2045 w/ Allison WT B500 transmission
<b>BULLETIN TYPE</b>	: Service Information
<b>MANUAL &amp; SECTION</b>	: Maintenance Manual: Chapter 3 - Drive train Chapter 12 – Maintenance Schedule
<b>PARTS BOOK REVISION</b>	: No
<b>DATE</b>	: September 4th, 2002
<b>SUBJECT</b>	: <b>Allison transmission fluid and filters</b>
<b>TERMS &amp; CONDITIONS</b>	: No claims will be accepted with reference to this Bulletin.

## APPLICATION:

The service information subject of this Bulletin is applicable to following units:

Model	Engine	VIN
T2145	Cummins	44291 →
	Detroit Diesel	44606 →
C2045	Cummins	45408 → except 45409, 45410 and 45441
	Detroit Diesel	45881 → except 45888 and 45954
S2145	N/A	42236 →

## DESCRIPTION:

Reference: Allison Transmission Service Information Letters 10-TR-99 Rev B, 13-TR-90 Rev E and Worldwide Allison Transmission Communication Hotline Watch #275 Rev. A.

### 1. Introduction of a new automatic transmission fluid:

As from unit # 6610092269, Allison is delivering transmissions to Van Hool which are factory filled at Van Hool with Castrol TranSynd™ fluid in lieu of DEXRON-III. This means that that the above transmissions are installed with 100% TranSynd™ fluid with no DEXRON-III dilution. Allison Transmission has advised Van Hool of new extended fluid drain and filter change intervals for WT B500 transmissions with 100% TranSynd™.

*Description continued on next page.*

*Service personnel: please read, initial and circulate.*

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician

Description continued from page 1.

**2. Introduction of new automatic transmission filters:**

**Product Line Gold series filters**

New increased capacity Allison MD/HD Product Line Gold series filters were released into production beginning January 1, 2002 to replace the current filters in WT series transmissions as from transmission unit # 6610092269. MD/HD Product Line Gold series filters allow increased fluid and filter change intervals when used with TranSynd™ fluid or Transmission Engineering Specification 295 (TES 295) equivalent. MD/HD Product Line Gold series filters can be identified by P/N 29538231 or 29538232 stamped into the filter end cap. Previous Allison MD/HD Product Line filters can be identified by P/N 29501202 or 29509723 stamped into the filter end cap.

**Initial change main filter kit**

A new initial change main filter kit has been released for MD/HD Product Line transmissions. Initial main filter kit (2 inch kit P/N 29540495) contains only one Gold series filter and all necessary seals and gaskets to perform the first 5,000 mile/200 hour main filter change. When performing initial main filter change or changing main and lube filters at recommended intervals, approximate fluid lost for each filter is as follows:

- Main Filter = 2 quarts (1.9 liters)
- Lube Filter = 8 quarts (7.6 liters)

**Service filter kit**

Referenced dimension (→ Fig. 2)	Prior filter kit #	Current Gold Series filter kit #
2 inch	29526899	29540493

**3. New Recommended Fluid and Filter Change Intervals:**

The new Recommended Fluid and Filter Change Intervals (see enclosed Schedules 2 and 3) show that the properties of the new fluid optimize the performance of the Allison Automatic, reduce operating expenses, and improve life cycle costs of the vehicle.

**4. New transmission Extended Transmission Coverage (ETC) program:**

The use of TranSynd™ or TES 295 equivalent transmission fluid is a requirement for the full term of the ETC. TranSynd™ or TES 295 equivalent transmission fluid must be installed during the first initial transmission fluid change or 1 month following the ETC registration, whichever occurs later. Contact your local Allison distributor for more information on this program.

**5. Fluid and filter change intervals for transmissions already in operation:**

Customers can use TranSynd™ oil in their transmissions already in operation. Initially when the OEM or customer fills the transmission with TranSynd™ or TES 295 equivalent, the modified schedule of Schedule 4 must be used due to the mixture of DEXRON®-III and TranSynd™. After the recommended mileage, time or hours of Schedule 4 have elapsed, the

transmission fluid should be changed to 100% TranSynd™ and the customer may follow the recommended fluid and filter change intervals of Schedules 2 and 3.

## 6. Oil analysis:

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.

Transmission protection and fluid change intervals can be optimized by the use of fluid analysis.

Oil analysis requires that periodic samples be taken from the operating transmissions and sent to a reputable oil analysis laboratory for testing.

Oil analysis may be used to set oil change intervals; however it is important to remember that oil analysis must be monitored regularly and results must be analyzed consistently to determine trends for best results.

## 7. Modified Van Hool Maintenance Schedule:

***NOTE:** Extended MD/HD Product Line TranSynd™ filter change intervals are only allowed with Allison Gold Series filters.*

*Filters must be changed at or before recommended intervals.*

Based on the New Recommended Fluid and Filter Change Intervals, the Van Hool Maintenance Schedule has been amended as follows:

- Break-in period, after the first 5,000 miles: change main filter.
- Daily: check transmission fluid level manually or using the push-button selector (see Maintenance Manual Chapter 3 and Operator's Guide Book Section 4).
- D+ maintenance interval: change transmission fluid and filters referring to schedules 1 through 5 at the end of this Bulletin.

**CAUTION:** Customers who continue to use DEXRON-III and C-4 fluids, recommended by the current Van Hool Maintenance Manual, should remain with the Van Hool maintenance intervals based on these fluids.

## PARTS AND PRODUCTS:

For initial change main filter kit numbers and service filter kit numbers, refer to item 2 "Introduction of new automatic transmission filters".

**Old (Allison WT units → #6610092268)**

Part No.	Description	Qty.
VH 660861003	Automatic transmission fluid Shell Donax TA (meets GM Dexron III and Allison C4 specifications)	Initial fill: 47 US Qts Refill: 37 US Qts
Allison 29501202	Main filter	1
Allison 29509723	Lube filter	1

**New (Allison WT units #6610092269 →)**

<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
VH 10786691	Automatic transmission fluid Castrol Transynd™ (meets Allison specifications for severe duty and extended drain intervals (TES – 295) and GM Dexron III and Allison C4 specifications)	Initial fill: 47 US Qts Refill: 37 US Qts
Allison 295387231	Main filter Product Line Gold Series	1
Allison 295387232	Lube filter Product Line Gold Series	1
VH 10801799	Tag, “This transmission uses TranSynd™...”	1

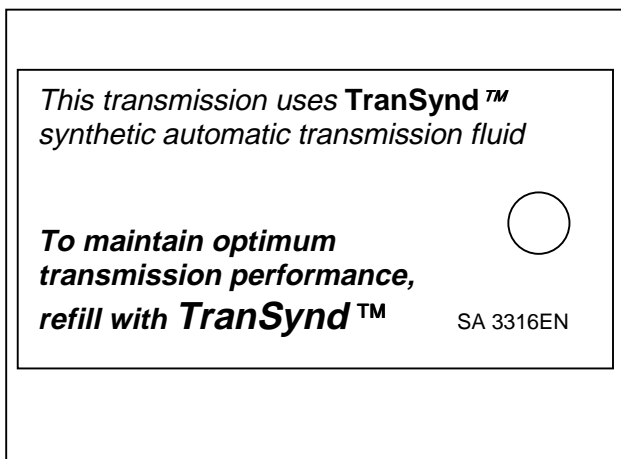
- Both old and new automatic transmission fluids will be available as service replacements.
- Old and new filters are interchangeable, but only Product Line Gold Series filters will be offered for service replacements.
- Lubricants may be purchased from your nearest ABC Companies Parts Source dealer.
- Always use genuine maintenance products and parts. Do not accept imitations.
- Parts and products disposition: discard according to applicable environmental regulations.

**PROCEDURE:**

- The procedure to change the transmission fluid and filters remains unaltered.

**SERVICE INFORMATION:**

- Van Hool coaches equipped with transmission units, which have been filled with the new TranSynd™ transmission fluid can be identified by a TranSynd™ transmission fluid warning label VH 10801799 (see Figure 1).



**Figure 1: TranSynd™ transmission fluid warning label VH 10801799**

- Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.

## WT SERIES MD/HD B300/B500

Schedule 1. Recommended Fluid and Filter Change Intervals (Non-Transynd™/Non-TES 295 Fluid)							
SEVERE VOCATION				GENERAL VOCATION			
Fluid	Filters			Fluid	Filters		
	Main	Internal	Lube/auxiliary		Main	Internal	Lube/auxiliary
12, 000 miles 6 months 500 hours	12, 000 miles 6 months 500 hours	Overhaul	12, 000 miles 6 months 500 hours	25, 000 miles 12 months 1,000 hours	25, 000 miles 12 months 1,000 hours	Overhaul	25, 000 miles 12 months 1,000 hours

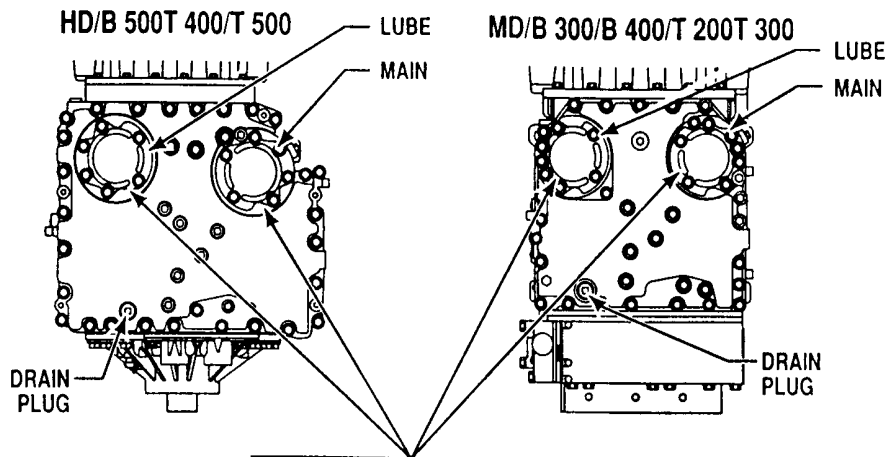
*NOTE: The following recommendations in Schedule 2 and 3 are based upon the transmission containing 100% of TranSynd™ Fluid. For transmissions that contain a mixture of TranSynd™ and non-TranSynd™ fluids, refer to Schedule 4.  
WT Filter change intervals in Schedule 2 are only valid with the use of Allison Transmission supplied filters.  
Flushing machines are not recommended or recognized due to variation and inconsistencies with ensuring removal of 100% of the used fluid.  
Recommendations in Schedules 1 through 4 are based upon standard Allison fluid change procedures*

Schedule 2. Recommended Fluid and Filter Change Intervals (TranSynd™/TES 295 Fluid) with Allison filter kits P/N 29526899 (2 inch – see Figure 2)							
50, 000 miles 24 months 2,000 hours	50, 000 miles 24 months 2,000 hours	Overhaul	50, 000 miles 24 months 2,000 hours	100, 000 miles 48 months 4,000 hours	50, 000 miles 24 months 2,000 hours	Overhaul	50, 000 miles 24 months 2,000 hours

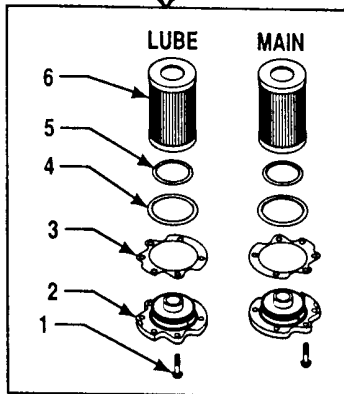
Schedule 3. Recommended Fluid and Filter Change Intervals (TranSynd™/TES 295 Fluid) 2 inch Control Module (see Figure 2) – requires filter kit P/N 29540493 – Allison MD/HD Product Line Gold series filters							
50, 000 miles 24 months 2,000 hours	50, 000 miles 24 months 2,000 hours	Overhaul	50, 000 miles 24 months 2,000 hours	150, 000 miles 48 months 4,000 hours	50, 000 miles 24 months 2,000 hours	Overhaul	50, 000 miles 24 months 2,000 hours

Schedule 4. Modified Fluid and Filter Change Intervals with a mixture* of TranSynd™ and Non-TranSynd™ Fluids							
<i>*Mixture is defined as the quantity of oil remaining in the transmission after a standard fluid change combined with the quantity of TranSynd™ that is required to fill the transmission to the proper level. A mixture of TranSynd™ or TES 295 equivalent vs. Non-TranSynd™ other than as defined in this paragraph does not meet the requirements that permit eligibility for the recommendations given in Schedules 3 and 4.</i>							
25, 000 miles 12 months 1,000 hours	25, 000 miles 12 months 1,000 hours	Overhaul	25, 000 miles 12 months 1,000 hours	50, 000 miles 24 months 2,000 hours	25, 000 miles 12 months 1,000 hours	Overhaul	50, 000 miles 24 months 2,000 hours

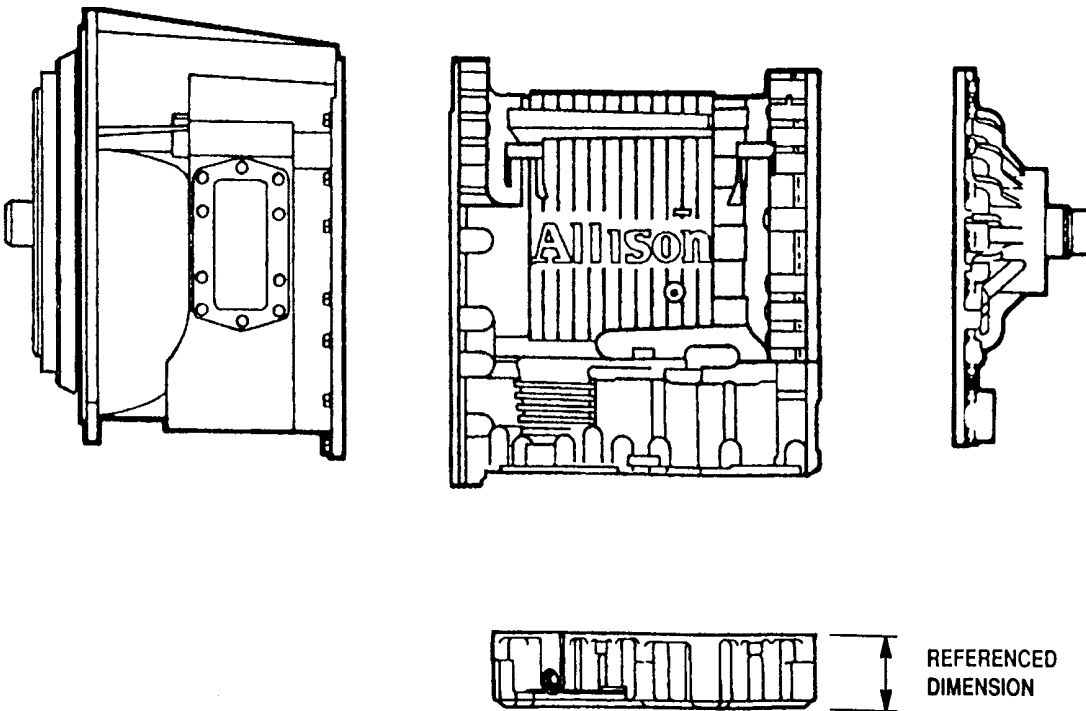
*NOTE: 1. WT Filter change intervals in Schedule 4 are only valid with the use of Allison Transmission supplied filters.  
2. Change fluid/filters after the recommended mileage, months, or hours have elapsed, whichever occurs first.  
3. Severe vocation: All retarders, On/Off Highway, Refuse, Transit, and Intercity Coach with duty cycle greater than one stop/mile.  
4. General vocation: Intercity Coach with duty cycle less than or equal to one stop per mile and all other vocations  
5. 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. Transmission protection and fluid change intervals can be optimized by the use of fluid analysis. Filters must be changed at or before recommended intervals.*



**Figure 2:**  
**MD/HD**  
**Product line**  
**filter location**  
**and referenced**  
**dimension**



**Main and Lube Filter designations cast into bottom of Control Module**



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