REMANUFACTURED TRANSMISSIONS
INTRODUCTION

ALL-MAKES HEAVY-DUTY REMANUFACTURED TRANSMISSIONS

Alliance Truck Parts has more than 50 product lines that serve the commercial transportation industry with reliable new and remanufactured parts and accessories for all makes and all models 1 to keep trucks and buses on the road. All Alliance Truck Parts meet or exceed OES specifications for quality, fit and finish and are backed by a nationwide warranty 2, which means you don’t have to trade quality for price.

PARTS NUMBERING SYSTEM

The Alliance Truck Parts numbering system is set up systematically. All part numbers in this program are based on part and design.

It is not necessary to determine a specific part number to order a remanufactured transmission. Contact your Alliance Truck Parts dealer and provide the required information about your transmission to order.

HOW TO ORDER

• Gather the following information about your existing transmission:
  – Model number (example: FRO16210)
  – Direct vs. overdrive
  – Part number

• Contact your Alliance Truck Parts dealer to order

WARRANTY

Alliance Truck Parts are backed by a 1-year/unlimited-mile standard warranty. Additional warranty coverage may apply where specified.

Illustrations and photographs used in this catalog may vary slightly from the actual product. Prototype samples are sometimes used for photography. The production parts may vary slightly.

Availability of products shown in this catalog is subject to change without notice.

1For nearly all heavy-duty truck makes and models. | 2See warranty for complete details and limitations.
# TABLE OF CONTENTS

1. **REMANUFACTURED TRANSMISSIONS**
   - FEATURES & BENEFITS .................................................................................................................. 5

2. **CLARK**
   - CLARK ORDERING INFORMATION .......................................................................................... 8
     - 5-SPEED .................................................................................................................................... 9

3. **FULLER**
   - FULLER ORDERING INFORMATION ....................................................................................... 11
     - 5-SPEED ............................................................................................................................. 12
     - 6-SPEED ............................................................................................................................. 13
     - HEAVY-DUTY 7-SPEED ....................................................................................................... 14
     - HEAVY-DUTY 8-SPEED ....................................................................................................... 15
     - HEAVY-DUTY 9-SPEED ....................................................................................................... 16
     - HEAVY-DUTY 10-SPEED ..................................................................................................... 17
     - HEAVY-DUTY 13-SPEED ....................................................................................................... 18
     - HEAVY-DUTY 15-SPEED ....................................................................................................... 19
     - HEAVY-DUTY 18-SPEED ....................................................................................................... 20

4. **GMC**
   - GMC ORDERING INFORMATION .......................................................................................... 22
     - 4-SPEED ................................................................................................................................ 23

5. **MACK**
   - MACK ORDERING INFORMATION ....................................................................................... 25
     - MULTI-SPEED .................................................................................................................... 26

6. **NAVISTAR**
   - NAVISTAR ORDERING INFORMATION ............................................................................... 28
     - MULTI-SPEED .................................................................................................................... 29

7. **NEW PROCESS**
   - NEW PROCESS ORDERING INFORMATION ........................................................................ 31
     - MULTI-SPEED .................................................................................................................... 32
### Table of Contents

**8**

**SPICER**

SPICER ORDERING INFORMATION.............................................................................................................. 34  
5-SPEED .......................................................................................................................................................... 35  
HEAVY-DUTY 7-SPEED ................................................................................................................................. 36  
HEAVY-DUTY 9-SPEED .................................................................................................................................. 37  
HEAVY-DUTY 10-SPEED ............................................................................................................................... 38

**9**

**WARRANTY**

WARRANTY ..................................................................................................................................................... 40

**10**

**CORE POLICY**

CORE POLICY .................................................................................................................................................. 43

**11**

**FREIGHT & RETURN POLICIES**

FREIGHT & RETURN POLICIES ................................................................................................................... 45

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**2019 | ALLIANCE TRUCK PARTS REMANUFACTURED TRANSMISSIONS**
FEATURES AND BENEFITS

- Multiple stocking locations throughout the U.S. and Canada for quick delivery. Most orders are shipped within 24 hours to minimize downtime
- Available for nearly all truck makes and all truck models
- ISO 9001-compliant remanufacturing process to ensure OES quality and reliable driveline performance
- Prepaid freight LTL
- Will-call availability
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags:

• Model number
• Direct vs. overdrive
5-SPEED MODELS

- 282V
- 285V
- 282VHD
- 285VHD
- 390V
- 397V
- CL450
- CL455
- CL457
- CL551
- CL557
- CL558
- FS4005
- FS5005
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags:
• Model number (i.e., RT011608LL)
• Input shaft number
• Input retainer number
• Internal vs. external oil pump
• Shift knob style (chrome vs. black)
• Shift tower position (standard vs. forward)
• Bell housing design (standard vs. nodal mount)
SPECIFICATIONS AND IDENTIFICATION

• 10-spline output shaft; available in 1.75”, 1.96” and 2” diameter
• FS5005 A/B/C use a roller bearing at countershaft
• See Bill of Material (BM) number for correct application

5-SPEED MODELS

• 6305
• FS5005
• FS6005
• FS6105
• FS6205
SPECIFICATIONS AND IDENTIFICATION

• 10-spline output shaft; available in 1.75”, 1.96” and 2” diameter
• FS5005 A/B/C use a roller bearing at countershaft
• See Bill of Material (BM) number for correct application

6-SPEED MODELS

• 5106
• 5306
• 5406
• 5406N
• 6106
• 6206
• 6306
• 6406
• 6406N
• 8206
• 7206
SPECIFICATIONS AND IDENTIFICATION

• The RT/RTO 6613 and RT7608LL units look identical from the outside. The exceptions are as follows:
  - The slave is on the right-hand side of the transmission
  - On a 7608LL, the gear teeth are wider in comparison to the 6613 (front section)
  - The 7608LL uses a 1.75” or 2” input shaft with the SAE #2 CLT housing
  - 6613 model uses 1.75” input

HEAVY-DUTY 7-SPEED MODELS

• 11607LL • 11707DLL
SPECIFICATIONS AND IDENTIFICATION

• The RT/RTO 6613 and RT7608LL units look identical from the outside. Exceptions are as follows:
  - Slave on right-hand side
  - 7608LL gear teeth are wider than to 6613 (front section)
  - 6613 model uses 1.75” input; 7608LL uses 1.75” or 2” or input with SAE #2 CLT housing
  - Flat type splitter cover (RT/RTO6613)
  - Uses X type shift cover
  - All models use 54-spline, 2.794” output
  - Combination range and splitter
  - Tee at low port uses 4 x 5/32” line hookup
  - Helical gearing in auxiliary section

HEAVY-DUTY 8-SPEED MODELS

• 958LL
• 7608LL
• 8908LL
• 11608LL
• 11708LL
• 13708LL
• 14608LL(P)
• 14708LL(P)
• 14908LL(P)
• 16908LL(P)
SPECIFICATIONS AND IDENTIFICATION

- Can use standard or X-type shift cover
- 2.75” diameter, 10 spline (14609) output; 11-12-13 series use 2.5” diameter, 10 spline output
- Large auxiliary countershaft covers
- Uses roller bearings and straight teeth gearing in auxiliary section

9-SPEED MODELS

- 8609
- 11609
- 12609
- 13709
- 14609
SPECIFICATIONS AND IDENTIFICATION

- Round shift block slot
- 10-spline, 2.75” output; 9 series and FR metric trans use 54-spline, 2.794” output
- Combination range and splitter
- No salve valve used
- Small auxiliary countershaft covers
- Uses tapered roller bearings and straight teeth gearing in auxiliary section
- Tapered roller bearing straight gear teeth in auxiliary (A ratio uses roller bearings)
- Overdrive model uses actuator pinion front of shift lever opening
- May have extension at main housing for internal cooler

10-SPEED MODELS

- 610
- 6610
- 11610
- 12710
- 13210
- 13610
- 13710
- 14210
- 14610
- 14710
- 15210
- 15710
- 16210
- 16710
- 17210
- 18210
SPECIFICATIONS AND IDENTIFICATION

- RTLO (14-16-18-20) 913AP forced lube (upgrade) used in all RTLO – 9 Series
- Uses X type cover
- May have T2 (top 2) valve
- With tee at slave H port 4 x 5/32” line hookup
- Helical gearing in auxiliary section
- May have T2 (top 2) valve
- Tee at slave uses 4 x 5/32” line hookup
- Helical gearing in auxiliary section
- 10-spline, 2.75” output; 9 series and FR metric trans use 54-spline, 2.794” output
- 9 series has longer auxiliary housing
- Has hump at auxiliary countershaft cup and cone; bearings used at auxiliary countershaft

13-SPEED MODELS

- 613
- 6613
- 9513
- 11613
- 12513
- 14613
- 14713
- 15613
- 15713
- 15813
- 16713
- 16913
- 18913
- 20913
SPECIFICATIONS AND IDENTIFICATION

- Uses X type shift cover
- All models use 54 spline, 2.794” output
- Combination range and splitter
- Tee at low port uses 4 x 5/32” line hookup
- Seal is in front of speedometer gear/rotor
- Helical gearing in auxiliary section
- Does not use force lube

15-SPEED MODELS

- 915
- 11615
- 12515
- 14615
- 14715
- 15615
- 15715
- 16915
SPECIFICATIONS AND IDENTIFICATION

- RTLO (14-16-18-20-22) 918BP forced lube (upgrade) used in all RTLO - 9 Series
- May have T2 (top 2) valve
- Helical gearing in auxiliary section
- All 9 series and FR metric trans use 54-spline, 2.794” output
- Seal is behind speedo gear/rotor
- 2.75” - 10-spline output

18-SPEED MODELS

- 15618
- 14618
- 14718
- 16618
- 16718
- 16918
- 18718
- 18918
- 20918
- 22918
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags

• Model number
• Input size (1-1/8” or 1-1/2”)
• Casting number on case
4-SPEED MODELS

• CH465
• SM465
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags
• Model number
• Assembly number (11KBA51231AP14)
• Shift stick position
• Output shaft spline count
• Length of rear seal retainer (2” or 7”)
• Air or manual shift
MULTI-SPEED MODELS

- TRXL107 – 6-speed
- TRXL107A – 6-speed
- TRXL1070 – 6-speed
- T2060 – 6-speed
- T2070 – 7-speed
- T2080 – 8-speed
- T2090 – 9-speed
- T2130 – 13-speed
- T2180 – 18-speed
- T310M – 10-speed
- T313L – 13-speed
- T318L – 18-speed
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags

• Model number
• Input shaft number
• Casting number on case
• Rear retainer style (air brakes, hydraulic brakes, hand brakes)
MULTI-SPEED MODELS

- T36 - 5-speed
- T495 - 5-speed
- T496 - 5-speed
- T689 - 5-speed
- T699 - 5-speed
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags

• Model number
• Input shaft number or spline diameter
• Output shaft spline count
• Casting number on case
• Casting number on tower
MULTI-SPEED MODELS

• NP435 – 4-speed
• NP542 – 5-speed
• NP540 – 5-speed
INFORMATION REQUIRED TO ORDER

Obtain the following information from the manufacturer’s ID tags:

• Model number
• Bill of material number (301251-35)
• Input shaft number
• Input retainer number
• Casting number on case
• Rear retainer style (air brakes, hydraulic brakes, hand brakes) or casting number

SPICER OPTI-RAIL SHIFT SYSTEM

• ES46/56 models with opti-rail shift system use three springs and two poppets. Front retainer uses four fasteners
• ES56-7B models with opti-rail shift system use two springs and two poppets. Adapter plate features two raised profiles

Note: ES42-5A/D and ES52-5A/D are not available in opti-rail or back tapered gearing.
SPECIFICATIONS AND IDENTIFICATION

• ES42-5A through ES42-5D are all aluminum
• ES42 and ES52 appear similar and have same clutch housing, but main housing is not interchangeable; see Bill of Material (BM) number for correct clutch housing and main case
• ES46 and ES56-5A, with Opti-Rail, are the same
• ES43, ES53-5A and ES53-5D are not available with Opti-Rail
• ES43 and ES53 use standard shift rails and forks
• ES43 and ES53 use springs and three poppets
• ES43 and ES53 have a front retainer that uses eight fasteners
• ES43, ES53-5A and ES53-5D have back tapered or straight-cut gearing
• ES46 and ES56-5A have back tapered gearing with Opti-Rail
• ES52-5A and ES52-5D are all aluminum and not available in Opti-Rail or back tapered gearing
• ES52-5A and ES52-5D models appear similar but are completely different part numbers. The main housing is not interchangeable but clutch housing is the same. See the Bill of Material (BM) number for the correct clutch housing and main case

5-SPEED MODELS

• 4054
• 4954
• 5052
• 5552
• 5852
• 5952
• 6052
• ES42-5
• ES43-5
• ES46-5
• ES52-5
• ES53-5
• ES56-5
• ES60-5
• ES62-5
• ES65-5
SPECIFICATIONS AND IDENTIFICATION

- May use boss studs at rear housing
- Standard shift rails and forks
- Adapter plated with three raised profiles
- ES065-7A (Navistar application) has back tapered or straight cut gearing
- ES066-7B has back tapered gearing
- ES56-7B has back tapered gearing with Opti-Rail

HEAVY-DUTY 7-SPEED MODELS

- ES56-7
- PS0140-7 / 1372
- ES52-7 (straight teeth)*
- ES065-7 (straight teeth)*
- ES52-7B (back tapered)*
- ES066-7B (back tapered)*

* See the Bill of Material (BM) number for model.
SPECIFICATIONS AND IDENTIFICATION

• Unit is an end load type (disassembled and assembled vertically)
• Shift forks are all internal
• 10-spline, 2.5” output
• Tee at low port uses 4 x 5/32” line hookup
• May have rear mounted pump at auxiliary countershaft: Do not reuse

HEAVY-DUTY 9-SPEED MODELS

• 125-9A
• 140-9A
• 150-9A
SPECIFICATIONS AND IDENTIFICATION

• Unit is an end load type (disassembled and assembled vertically)
• Shift forks are all internal
• 10-spline, 2.5” output
• Tee at low port uses 4 x 5/32” line hookup
• May have rear mounted pump at auxiliary countershaft: Do not reuse

HEAVY-DUTY 10-SPEED MODELS

• 100-10S
• 125-10S(P)
• 140-10S(P)
• 150-10S(P)
• 165-10S(P)


**WARRANTY**

<table>
<thead>
<tr>
<th>TRANSMISSION TYPE</th>
<th>WARRANTY PERIOD</th>
<th>DEALER INSTALL YEAR ONE</th>
<th>DEALER INSTALL YEAR TWO</th>
<th>OVER THE COUNTER YEAR ONE</th>
<th>OVER THE COUNTER YEAR TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-duty manual transmission*</td>
<td>2 years</td>
<td>Parts and labor (shop rate at SRT)</td>
<td>Flat rate</td>
<td>Flat rate</td>
<td>Parts only</td>
</tr>
<tr>
<td>Mid-range manual transmission</td>
<td>1 year</td>
<td>Parts and labor (shop rate at SRT)</td>
<td>–</td>
<td>Flat rate</td>
<td>–</td>
</tr>
<tr>
<td>Allison AT/MT/HT</td>
<td>1 year</td>
<td>2 years on school buses</td>
<td>Flat rate</td>
<td>Flat rate</td>
<td>Flat rate</td>
</tr>
<tr>
<td>Allison HB/B</td>
<td>1 year</td>
<td>Flat rate</td>
<td>–</td>
<td>Flat rate</td>
<td>–</td>
</tr>
<tr>
<td>Allison 1000/2000/3000</td>
<td>2 year</td>
<td>3 years on school buses</td>
<td>Flat rate</td>
<td>Flat rate</td>
<td>Flat rate</td>
</tr>
</tbody>
</table>

* Two-year warranty on Fuller on-road vocational only.

**FLAT RATE SCHEDULE**

<table>
<thead>
<tr>
<th>Transmission Type</th>
<th>Flat Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-duty manual transmission</td>
<td>$725.00</td>
</tr>
<tr>
<td>Mid-range manual transmission</td>
<td>$450.00</td>
</tr>
<tr>
<td>Allison mid-range AT/MT, 1000/2000/3000</td>
<td>$500.00</td>
</tr>
<tr>
<td>Allison heavy-duty HD/HT/B</td>
<td>$700.00</td>
</tr>
</tbody>
</table>

Mascot Truck Parts, Alliance’s remanufacturing partner, warrants to all customers that Mascot rebuilt heavy duty transmissions will be free of defects in material and workmanship for a period of 24 full months, unlimited mileage, with the following conditions and exclusions.

- 24-month unlimited mileage warranty against defects in material and workmanship
- Warranty covers complete units only, not partial components (e.g., auxiliary section of complete transmission or power divider assemblies)
- Warranty does not extend beyond the original expiration date and is not transferable from the intended first user
- This is the only warranty granted by Alliance/Mascot Truck Parts, any further allowances made or given are not binding on Alliance/Mascot Truck Parts
- This warranty is in lieu of and excludes all other warranties, expressed or implied

**WARRANTY EXCLUSIONS**

- Warranty does not cover off-road applications (dump trucks, tractors with dump trailer, “Pit Trucks,” etc.); off-road applications are warranted against defects in material and workmanship for 3 months
- Warranty does not cover medium-duty/mid-range transmissions; medium-duty applications are warranted against defects in material and workmanship for 12 months, unlimited mileage
- Warranty does not cover lack of lubrication, excessive heat, improper installation, shocks and spin-out, driver error, towing, P.T.O. improperly installed or oil seal failures
- Warranty does not cover installation errors, downtime, towing or unauthorized repairs
- Action to dismantle or alter a unit that is suspect of a warranty adjustment, without written approval, voids all warranties
**WARRANTY**

**DURING INSTALLATION**

- Speedometer drive, driven gears and all spacers must be installed before yokes are fitted and nuts are torqued. Failure to install these items causes extensive damage and voids all warranties.

- All transmissions are supplied with new oil seals. Defective seals must be reported before yoke is installed. Damage to oil seals can be caused by improper yoke installation as well as speedy or “redi” sleeves.

- Air lines, valves, shift covers, two speed motors, lockout assemblies, front and rear retainers etc., vary and may be supplied when available. Cosmetically-correct components are not guaranteed.

- Units are supplied dry. Fill with lubricant as specified by vehicle manufacturer.

**WARRANTY PROCESS**

At time of concern, customer must call Mascot Customer Care for technical assistance and real-time review. An attempt to diagnose and determine responsibility will occur immediately. If determination is warrantable, customer will be issued a Warranty Return Authorization Identification (WRAID) and assist in replacement. Any return without a WRAID will void the warranty. Replacement of any failed product with a competitor product will void any warranty.
**VISUAL CORE INSPECTION POLICY**

The remanufactured transmission visual core inspection policy is designed to allow determinations about the value of the core credit to be expected.

All core returns are prepaid and require return paperwork. Return paperwork is emailed at the time of order to the designated person and must be included with the core shipment. This paperwork includes the pre-paid freight information needed to schedule the shipment. Freight is prepaid to Mascot Reman Center, Plainfield, IN.

All Alliance dealers are asked to consolidate core return shipments in the most efficient and cost-effective manner possible. Consolidating into shipments of 800 lbs. or more can reduce costs substantially and allow more competitive prices.

Core eligibility is 12 months from the date of purchase. Call Customer Care at 1-800-668-5560 with questions.

A basic overview of the core policy is provided below. Read the entire price list for core policy and warranty details.

**VISUAL INSPECTION GUIDELINES**

<table>
<thead>
<tr>
<th>DAMAGE INSPECTION</th>
<th>EXPECTED CORE VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil not completely drained?</td>
<td>Less $100</td>
</tr>
<tr>
<td>Has the unit run out of oil?</td>
<td>0%</td>
</tr>
<tr>
<td>Visible crack in housing</td>
<td>50%</td>
</tr>
<tr>
<td>Visible bulge in housing</td>
<td>50%</td>
</tr>
<tr>
<td>Unit missing parts due to physical removal</td>
<td>50%</td>
</tr>
<tr>
<td>Unit disassembled but complete?</td>
<td>25%</td>
</tr>
</tbody>
</table>
**FREIGHT & RETURN POLICIES**

**FREIGHT POLICY**

**United States**
Freight is prepaid for all transmissions with no minimum order quantity.

**Canada**
Freight is prepaid and added for all differentials on all orders filled from the facing stocking locations. Customer may request shipping via a selected carrier - account number must be provided at time of order.

Freight is prepaid on all orders filled from any other location other than the customer’s nearest stocking location.

**RETURN POLICY**

**United States**
Returns are allowed with off-setting order and approval of Customer Care with issuance of Mascot RGA. Customer is responsible for freight to Plainfield, IN. Returns are subject to a restocking charge.

**Canada**
Returns are allowed with off-setting orders and approval of Customer Care with issuance of Mascot RGA. Customer is responsible for freight to Mississauga, ON. Returns are subject to a restocking charge.