

REBUILDER NEWS



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from **TransTec**

Season's Greetings

Best wishes
from everyone
at TransTec,
for a wonderful
Holiday and Happiness all
through the coming year.



TransTec Quality Appreciated "Down Under"



The automotive market in Australia is only about 1/20 the size of the U.S. market, despite the fact that the countries are similar in physical size. So it's interesting to note that Australia has an automatic transmission market every bit as sophisticated as that here in the U.S.

Twenty-five years ago, when the automatic transmission business was in its infancy in Australia, rebuilders and suppliers were extremely cost conscious. This was because they were literally half way around the world, and shipping costs were very expensive. In fact, in those days when a transmission was rebuilt, only the parts which were broken or malfunctioning were replaced. TransTec rebuild kits as we know them today were virtually non-existent.

The Australian market has evolved over the last 25 years, largely due to the educational efforts of the ATRA (Australian Transmission Rebuilders Association), the large parts suppliers like Freudenberg-NOK, and various trade publications.

Today it's truly a mature, well-informed, quality-conscious market that understands how warranties and comebacks can adversely affect their profitability. Their emphasis on quality is probably the reason why every major transmission parts supplier in Australia is an Authorized TransTec Distributor.

TransTec has a Big Presence at Australian Transmission Show

In July of this year, the Australian Transmission Rebuilders Association, or ATRA (not to be confused with the ATRA in the U.S.), hosted its second annual South Pacific Powertrain Expo.

The six major importer/distributors of automatic transmission parts in Australia, which are all Authorized TransTec Distributors, made a big impression on rebuilders by prominently displaying TransTec banners.

They also displayed TransTec overhaul kits, giving Australian rebuilders a chance to see the new packaging for the kits they have already come to know as the highest quality kits available in Australia.

The six authorized TransTec distributors in Australia are: A.T.P. Components Pty. Ltd., Approved Transmission Parts Pty. Ltd., BTR Engineering (Australia) Limited, Driveline Auto Parts, Federal Mogul (AATS), and Swan Transmission Parts.

Although TransTec did not have a booth, Bill D'Agostino, Export Sales Manager, attended the show. TransTec gained exposure through the six Australian TransTec Distributors who exhibited.

The Expo was at the Conrad Jupiter's Hotel, on the beautiful Gold Coast of Australia. Peter Cardiff, executive officer of ATRA, is to be congratulated for putting on one of the finest trade shows in the world today.

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"Down Under"...

Technical seminars were conducted at the Expo by Gil Younger of TransGo and Steve Garrett of General Motors, among many other impressive speakers. There were exhibitors from the United States, as well as Australia, and the entire show was a tremendous success.

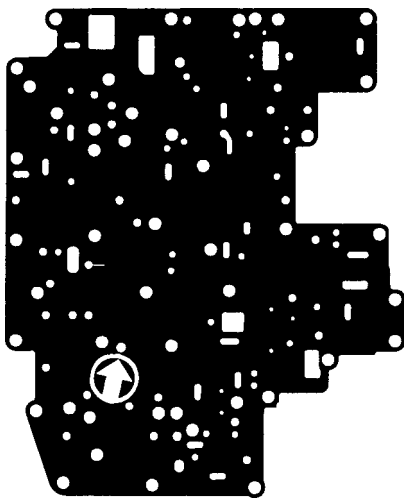
AODE Valve Body Gaskets

Ford has made a running change on the AODE lower valve body gasket. As indicated in the illustration below, one hole has been enlarged. The color of the ink stripe on the gasket was changed at the same time from orange to green.

The part number on the orange striped gasket was #12675 (OEM #F2VY-7DI00-A) and is no longer available. The green striped gasket, TransTec #12783 (OEM #F3LY-7D100-A), replaces the orange striped gasket and will retrofit all AODE transmissions.

All TransTec gasket & seal kits and overhaul kits with a date code of K94 or later will contain the new gasket.

The upper valve body gasket was not affected by this change and will continue to have an orange stripe.



This hole has been enlarged in the AODE lower valve body gasket.

Nissan RE4R01A Pump Gaskets

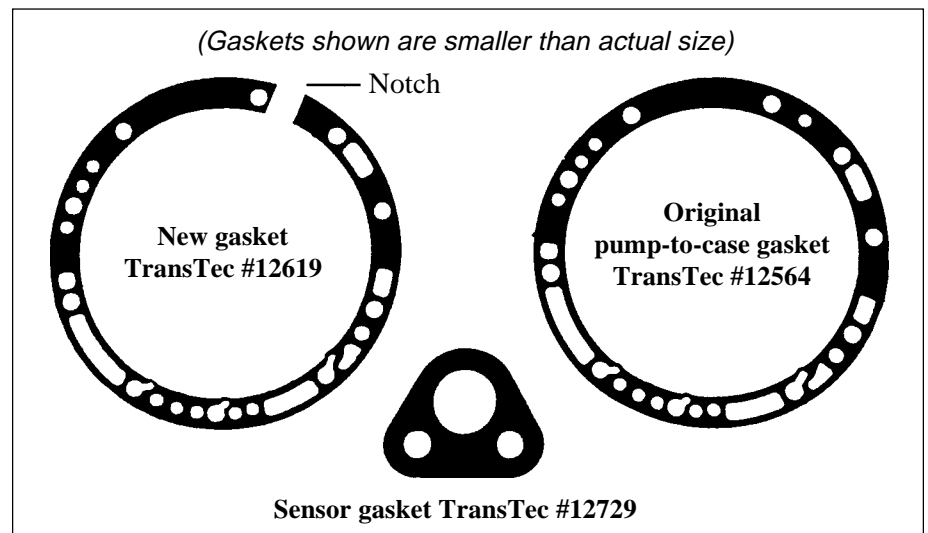
Starting in mid-1992, an input speed sensor was added to the transmissions in the Infinity J30 and Mazda 929 and RX7. This sensor is mounted just behind the pump, and goes through the top of the case and pump stator. To accommodate this sensor, a notch was machined in the gasket flange of the pump. This made it necessary to remove a small section of the pump gasket, creating a new gasket and part number.

The original pump-to-case gasket used in the RE4R01A transmission found in Nissans and Mazdas is TransTec #12564

(Nissan #31366-41X01; Mazda #BV12-19-221). The new gasket is TransTec #12619 (Nissan #31366-51X00; Mazda #BV56-19-221).

In addition to the new pump gasket, there is a gasket between the sensor and transmission case. This gasket is TransTec #12729 (Nissan #31388-51X00).

All TransTec RE4R01A overhaul kits with a date code of G94 or later will include the sensor gasket and new pump gasket in addition to the original pump gasket.



FN is Freudenberg-NOK RMA Code

The FN symbol stamped into molded seals (metal clad seals, lip seals, etc.) is the RMA (Rubber Manufacturer's Association) code for Freudenberg-NOK.

The Rubber Manufacturer's Association assigns these RMA codes so that the manufacturers of molded seals can be universally identified. Seals made without an RMA code could be suspect. The FN is used in addition to the familiar IPC, BAX, and BAZ codes stamped into parts manufactured by Freudenberg-NOK.

Since the Freudenberg-NOK partnership was formed in North America in July, 1989, the new symbol replaced all the older codes. But this only affects newly-tooled parts - the IPC, BAX and BAZ codes still appear on parts tooled prior to the merger.

The new symbol is stamped into parts made from new tools. Some of the reasons a part will be made from a new tool are; the part itself is new; the current tool is too old and has to be replaced; or production levels require new tooling.

A4LD Throttle Shaft O-Ring

In March of 1993 TransTec introduced a quad ring to replace the throttle shaft O-ring on the Ford C3, C4, C5, C6, FMX, and A4LD transmissions. This was done to end the problem of leaking throttle shaft O-rings. About the same time, Ford changed the manual shift lever and throttle shaft on the A4LD transmission.

Beginning in 1993, the diameter of the throttle shaft was reduced from .370" to .354". The inside diameter of the shift lever shaft was also reduced to match the throttle shaft. The throttle shaft O-ring, however, remained the same size. The smaller inner diameter of the manual lever compresses the O-ring tighter around the throttle shaft, creating a better seal.

The same does not hold true for the quad ring. The smaller I.D. of the manual lever tends to force the lobes of the quad ring down too far to seal properly. To correct this situation, TransTec is putting the throttle shaft O-ring back into the A4LD gasket & seal kits and overhaul kits.

We recommend using the quad ring on the .370" diameter throttle shaft and the O-ring on the .354" diameter throttle shaft. This shaft diameter was changed only on the A4LD transmission, therefore, only the A4LD kits are affected. Kits with a date code of K94 or later will contain both the O-ring and the quad ring.

New Toyota A246E Transaxle

In 1994, Toyota introduced a brand new Celica. With the new models came a new transmission line-up. All GT models now use an A140E transaxle, just like the one found in the Camry. However, the ST received a brand new transaxle, the A246E.

The A246E is very similar to the A245E transaxle first found in the 1993

Corolla and Geo Prizm. Due to these similarities, TransTec has updated the A245E kits (gasket & seal kit #1275, overhaul kit #2275) to include coverage for the A246E.

All kits with a date code of H94 and later will include the A246E coverage.

The following chart shows kit and vehicle information for the entire A240 series line-up.

TOYOTA A240 SERIES

Transmission	PRC Kit	O/H Kit	Vehicles
A240L	1175	2175	Corolla 1985-92
A240E	1175	2175	Corolla FX 1987-89, MR2 1987-88, Geo Prizm (Nova) 1985-92
A241L	1175	2175	Celica ST 1990-93
A241E	1175	2175	MR2 1989-Up, Celica GTS 1990-93
A243L	1175	2175	Celica GT 1990-93
A244E	1175	2175	Paseo 1993-Up
A245E	1275	2275	Corolla 1993-Up, Geo Prizm 1993-Up
A246E	1275	2275	Celica ST 1994-Up

“DuraTec” Name Relinquished to Ford

Earlier this year, we introduced DuraTec paper gaskets. Recent events have necessitated a name change.

About the same time we were developing DuraTec with Farnam Sealing Systems, Ford was developing its “World Car” known in the U.S. as Ford Contour and Mercury Mystique (The Mondeo in Europe).

An engine option is a 6-cylinder that’s guaranteed for 100,000 miles between tuneups. Coincidentally, Ford is calling it the “Duratec” engine. Ford filed for trademark protection on February 1, 1994. We filed for the name on February 22, 1994, just three weeks later.

We have not yet, nor has Ford, been granted trademark rights to the name; but we both filed for it. At this stage, we are not being forced to quit using the name. Ford has not issued any type of cease and desist order to us concerning the name.

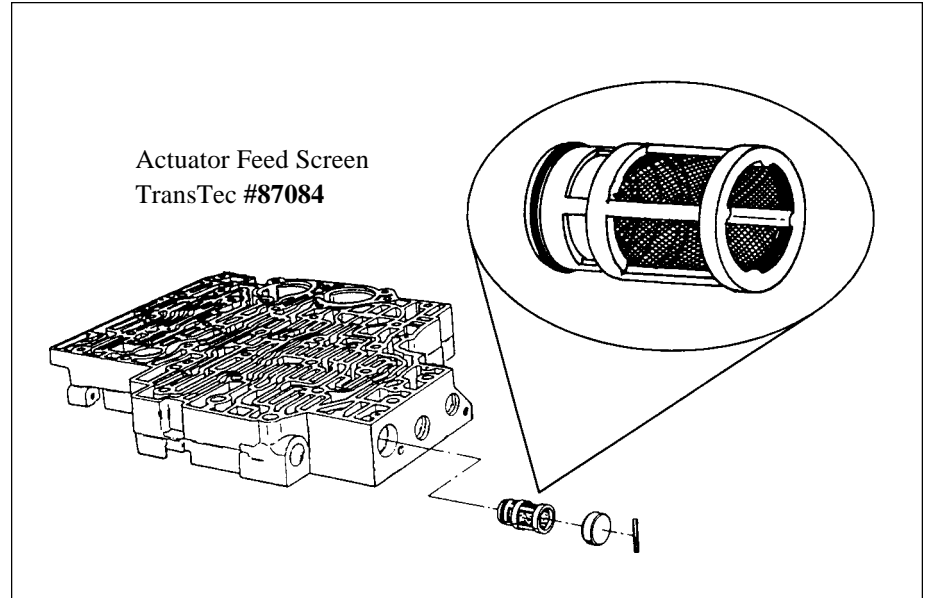
However, we are voluntarily relinquishing the DuraTec name. Even if we had applied before Ford and received the trademark, we would have relinquished it for Ford, a very big and important customer of ours. Consequently, after existing stock is depleted, you will no longer see the DuraTec name on gaskets.

4L80-E Actuator Feed Screen

The 4L80-E transmission has a thimble shaped screen located in the valve body at the rear of the manual valve bore. It is called the actuator feed screen, or the shift solenoid feed screen. The function of this screen is to filter actuator feed oil routed to the shift solenoids.

It is not uncommon to find this screen broken. When this happens, it is possible for part of the screen to block the exhaust passage at the rear of the manual valve bore. This can cause symptoms such as 2nd gear starts with no upshift, or a really strange symptom of the shifter moving from overdrive to reverse all by itself.

When rebuilding this transmission,



this screen should be replaced as a preventative measure, even if the old one is not broken. As a convenience to rebuilders, TransTec will include this

screen in all 4L80-E gasket & seal kits and overhaul kits with a date code of G94 and later. The part number is TransTec **#87084** (OEM #8661709).

New MPOA Honda Accord Transmission

Honda has yet again redesigned the Accord for the 1994 model year. With the redesign came one more Honda 4-speed transaxle. This one has been given the code MPOA.

Fortunately, this one was not a com-

plete redesign when compared to the 1990-93 units. Most of the changes are confined to the accumulator and valve body area. Frictions and steels remain the same.

TransTec has updated the 1990-93 kits

(gasket set #1213 & overhaul kit #2213) to include coverage for this new transaxle.

All TransTec kits with a date code of K94 and later will include 1994 coverage.

The following chart shows code and kit information for all Accord 4-speeds.

HONDA ACCORD 4-SPEED TRANSAXLES

Code	Model	Year	Clutch Size	Kits			Axle Seals	
				PRC	O/H	Ring	Left	Right
AK	Accord	1983	106mm	1115	2115	3307	29435	29264
AS	Accord*	1984-85	110mm					
F4	Accord	1986-89	116mm	1182	2182	3306	29436	29304
PX4B	Accord	1990	120mm	1213	2213	3345	29308	28413
APXA	Accord Wagon	1991	120mm					
APX4	Accord (MPXA, MPWA)#	1991-92	120mm					
MPXA	Accord	1993	120mm					
MPOA	Accord	1994-On	120mm					

* Axle seals for the 1985 Accord SEI (FI) not included in overhaul kit. Order #29436 (1) and #29304 (1) separately.

1991 Accords built in Japan use code MPXA, and 1992 Accords built in Japan use code MPWA.

TransTec NEW PRODUCT ANNOUNCEMENTS

For additional product announcement information, contact your local distributor

MP7A Acura Integra 1994-Up
Overhaul Kit TransTec #2288

RL4F03A Nissan Sentra 1991-Up
and **Infinity G20 1991-Up**
Overhaul Kit TransTec #2279

The RL4F03A is a 4-speed, overdrive, FWD transmission. It is a hydraulic transmission which later went to electronic control, and this TransTec kit covers both versions.

Jatco JF403E Geo Storm 1990 -Up
and **Isuzu Impulse 1990-Up**
Overhaul Kit TransTec #2283

This is a 4-speed, overdrive, FWD transmission, similar to the Nissan RE4F04A.

4T80-E 1993-On
TransTec #2289 Overhaul Kit

This transmission is used in all 1993-On Cadillacs equipped with the Northstar engine, and the 1995 Oldsmobile Aurora. Many of the components in this overhaul kit have important features:

- molded rubber pan gasket
- 3 internal metal clad seals
- 2 separator plates with bonded gaskets
- 1 case to case cover plate with bonded gaskets
- plastic sealing rings with quad expander rings for input/coast clutch & 2nd clutch.

Note: This overhaul kit is packaged in a box due to the size & weight of the components.

Nissan RE4F04A-V (Ford Designation 4F20E)
TransTec Overhaul Kit #2282

Applications include:

- Nissan Maxima w/DOHC engine 1992-On,
- Nissan Quest 1993-On
- Mercury Villager 1993-On

Chrysler A-604 (41TE) Seal Upgrade Kit -
TransTec #4839

This upgrade kit contains:

- Teflon[®] rings to replace the metal rings on the stator support
- O-rings to replace Teflon rings on the accumulator pistons
- Complete instructions

F4A33 Mitsubishi/Chrysler 1991-On
TransTec Overhaul Kit #2284

Applications:

F4A33:

- Dodge Stealth 1991-On
- Mitsubishi 3000GT 1991-On
- Mitsubishi Diamante (all) 1992-On
- Mitsubishi Eclipse w/turbo 1991-On
- Mitsubishi Galant with DOHC engine 1994
- Plymouth Laser & Eagle Talon with turbo 1992-On

AWD Versions:

- Mitsubishi Expo 1992-On (W4A32)
- Mitsubishi Galant 1991-92 (W4A32)
- Mitsubishi Eclipse 1991-On (W4A33)

Note: In addition to FWD F4A33, this kit also covers the AWD versions, the W4A32 & W4A33. We also offer the transfer case kit, TransTec #4823.

Ford Taurus SHO 1993-On D-ring Kit
TransTec #4840

This kit contains the two identical D-rings required for the SHO only. The D-rings are the intermediate & direct clutch inner seals. These additional D-rings will only be offered as a separate sub-kit and are not added to the TransTec gasket & seal and overhaul kits. Actual production of the SHO for 1993 was only 5.1% of all Taurus models built. In addition, the version of the AX4S* in the SHO is reported to have a low failure rate. Therefore, the need for these additional D-rings will be well under 5% of Taurus rebuilds, so it is more cost efficient to offer them as a separate sub-kit.

**Note:* Ford's new designation for the AXOD-E is the AX4S, and the SHO version is also known as the AX4SH, "H" for heavy duty.