

Vol. 4, Issue 8  
May 2006

## Missed the show? Read on to see what the weekend entailed

The 2006 TCRA Seminar was a huge success thanks to all of the participants, sponsors and vendors. On Thursday there was a bus waiting to pick up over 80 attendees for the Raybestos Powertrain Facility tour. Raybestos Powertrain opened its doors to the manufacturing plant and Tech Center. The group was so large that it had to be split up into numerous groups of ten. The facility was more than impressive. The common theme heard among visitors was, "WOW I never realized how much went into a clutch." The Tech center's equipment was so impressive that many of the people couldn't believe the amount of time and energy that goes into developing and testing the clutches that they use every day.

Raybestos Powertrain over-indulged seminar guests with a well-catered lunch held in a large tent outside on the company's property. The folks at Raybestos Powertrain even surprised Dave Perry with an unexpected birthday dessert. There were some big laughs when eyes caught sight of Don Randolph's birthday kiss landing on the top of Perry's head.

Friday, the technical seminar was jam-packed with the finest talent this industry had to offer. The highlight was the support of the "Big Three." For the first time in several years we had speakers from Ford, GM and Daimler Chrysler. Lou Darling discussed what is coming down the pike with Chrysler and the possibility for problems of interchangeability with the pilot sizes for different applications. He even brought down some sample torque converters to be viewed by all. Victor Ros

es discussed all the new items and how GM has set up a new

"family" approach to its transmission lines. Fred Gerometta discussed many of the good, important basics that need to be followed as well as confirming much of the information about the importance of cleanliness and clearances on the Ford line of converters.

The really big news, however, was provided by John Lobsiger of GM. He described in detail GM's commitment to sell components to the aftermarket, specifically clutches with the carbon fiber lining. He mentioned that this decision came as a direct response to the requests from members at previous TCRA Seminars. I guess the TCRA is making its way to the big boys, and they are listening. TCRA is proud to be the venue that is viewed as the place to release this groundbreaking news.

As always, the research work done by the folks at Sonnax was outstanding. Bob Warnke provided information on current problems with the 4R100, and Ed Lee described some of the proper building procedures for the Multi-clutch Ford converters. Many people agreed that this information alone would have paid for the trip out to Indy.

Fran Slocum, VP of sales with Raybestos Powertrain, had an invaluable presentation about the way the lockup systems operate in torque converters. He gave it an interesting and funny approach with his "KISS" analogy. Angela Petroski's presentation basically backed up what everyone was feeling about Raybestos after they went on the tour, it takes a lot of time, energy and resources to make these clutches. She gave a description of the company's capabilities and resources to get the job done.

This year the door prizes were far and away the best yet with thousands of dollars given away to the attendees. The list includes gift certificates for equipment, cutting tools, clutches, race kits, t-shirts, hats, CD roms, cups and the ever loved cash. The vendors had all of the wares for sale at tables surrounding the seminar room. ATI, NTZ, Precision International, Sonnax, The Shop Doc, Tri Component, Superflow and race kits by Trans Specialties, John Parmenter from Precision International, who is no stranger to the technical seminar circuit, was on hand to discuss some real world transmission problems. John also backed up the fact that this industry needs to have better communication with the transmission builders. He has been singing that song at every trade shows he attends.

After the show, Parmenter mentioned he couldn't believe that there was this much information available and the level of expertise of the people in the room.

Don Randolph had the room bright eyed with some really excellent technical information about definitions and standards. Starting with some of the proper ways to measure torque converter dimensions. Because of some tech-

nical difficulties with the audio visual equipment that Joe Rivera was having, Don stepped up and presented in the earlier time slot and really rounded home with his presentation.

The final wrap up came from the new president of TCRA, Joe Rivera, who demonstrated the look and feel of the new website that will be live in the next coming week. Joe also discussed the importance of membership participation and how much the organization has grown in the last year.

It was said more than once that there was so much technical information provided that it almost seemed overwhelming. For that reason, all the information provided will be available to the members of TCRA on the website as soon as possible.

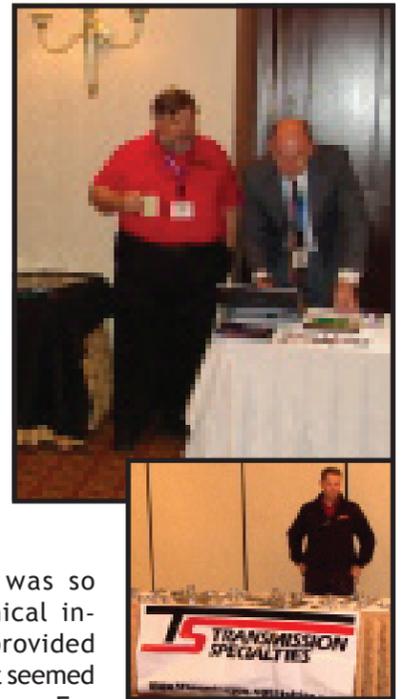
Don Randolph presented flowers to Kimberly Stevens to demonstrate our appreciation for all of her help getting the show off the ground. She was instrumental in making all of these administrative duties happen. Joe Rivera presented a plaque to Dave Perry to add to their collection of awards on their wall.

As always the attendees had ample time to meet and greet with their peers, especially at the hotel bar and grill. On Saturday it looked like a college coffee house with the laptops out and the beverages flowing. This was also a great place to meet TCRA members from all over the world including New Zealand, Holland, and Barbados. Many of the members were comparing notes and showing pictures of how they rebuild torque converters.

The night life in downtown Indianapolis was second to none. With a few hundred thousand people traveling in for the races there was no shortage of fun places to go to and new people to meet. The dining in Indy was equally spectacular with some of the finest restaurant lined up down the street of downtown.

Unfortunately, on Saturday the qualifications were cancelled due to weather; however, that didn't seem to bother many of the attendees. Most of the people braved the rain just to go out and see the facility and the museum. There was a bus tour that took everyone on the track and explained the history of the facility.

If you missed the seminar ...you missed a lot. But don't worry, the technical information will be listed on the website as well as the pictures from all of the events. BUT don't miss next year's event and stay tuned for when and where it will be. With the way the last couple of seminars have gone...it is bound to be great.



# TCRA

## Upcoming Events

### What?

ATRA Powertrain Expo

### When?

October 5th-October 8th, 2006

### Where?

Orlando, FL

### Contact?

Disney's Coronado Springs Resort, 407-939-1020 for reservations

## Items For Sale

Various TCRS Equipment  
for SALE - Like New!!

Contact Dennis at  
(800)554-2668

Let us know how we're doing. E-mail the TCRA with your ideas at TCRA2002@aol.com. We want to make this a publication you enjoy reading, so send us your comments about repairs, special parts, employees or whatever else you'd like to share. We want to hear from you!

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## VW converter puzzles technicians

Repeated pump drive failures can occur on the Volkswagen 01P transmission, usually found in '97 and later VW models, using the Dacco part number RE10 converter. If you are unsure on whether or not you are working on the RE10, the code OCDV or sometimes just DV, appears on the side of the unit. This is a lockup clutch-type unit.

Several theories have been given on the cause of repeated pump drive failure. First, T.I.R., or total indicated runout, has never been so critical in any application as it is with this converter. Premature pump failures can be caused by incorrect alignment of the torque converter. Starter noise and ring gear failure may also occur due to poor alignment.

Many repair shops inadvertently use a Dexron-type fluid in this Volkswagen transmission with fairly large success; however, if your shop is located in the northern section of the country Dexron fluid is not recommended. Instead it is recommended to use a full synthetic fluid that maintains its viscosity in cooler temperatures and climates. Dexron seems to work better in warmer climates and consistent temperatures. The extra drag on the pump produces resistance due to the heavier oil and can shear the pump drives on start-up.

Another area to be concerned with is the type of clutch material use on this converter. Many rebuilders prefer Kevlar for a smoother, durable clutch liner. This is no surprise since the original liner does contain a fibrous material suspiciously similar to Kevlar.

In addition, no thinning of the clutch piston is allowed during the rebonding process. The old liner should be chemically removed or media blasted for bonding preparation. Also, the radial lip seal is always worn and must be replaced at each rebuild. Do not reuse the old seal. Part number VWO2V may be found in the Sonnax catalog as its OEM replacement. Careful disassembly of the stator and 18-element sprag is necessary. It is known for being a hiding place for worn clutch material and metal debris. The bi-metal three-tang thrust washer is replaced at the same time. This is the perfect time to prevent comebacks and/or failures due to thrust washer failure.

On a final note, it is important to provide a good ground to the impeller before tack welding this converter together. By doing so, arcing is prevented which may cause roller bearing damage. Two minutes extra time spent here will prevent the converter from failing.

## Dacco part # DA-48



*Most commonly used in...*

...Nissan Pathfinders with RE4-R01A transmissions

*Common failures include...*

...20-spline turbine hub and impeller hub

*Critical replacement parts...*

...front bearing and clutch liner



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Tell us what you enjoyed about the last TCRA seminar!

*Were accommodations accommodating? Were the scheduled speakers intriguing? Was the tour day at Raybestos fascinating? Let us know what you enjoyed and areas we could improve so the next seminar is even better!*  
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Monthly publication of TCRA newsletter provided by Melissa Sneath of Melyns Print & Pro.

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