

April 17, 1996

MEMO TO: All Livonia Personnel

On Tuesday, April 16, 1996, I am sorry to report that the Livonia Engine Plant was responsible for a major quality disruption to one of our customers, Detroit-Hamtramck Assembly. This marks the first time this year that we have negatively impacted the quality of Cadillacs being built at that site.

Due to defective cylinder heads, the vehicle assembly plant has identified 206 cars with engines that burn oil. In addition to these potential engine pulls, they have also quarantined their entire shipping yard and have contained all vehicles in their staging area. All of these vehicles will go through 100% inspection for this defect.

At our plant, we have contained approximately 600 finished engines and 500 cylinder heads to assure that no more potentially defective engines reach our customers. This has now served to constrain our assembly line, which is now struggling to maintain our customer's requirements.

This spill is one of the most significant in the recent history of this plant. While we believe that our quality standards here at Livonia are high, we must always continue to prove ourselves to our customers. All of us want very much to maintain the high quality record which we have worked so hard to achieve.

The best way for us to protect the quality of our product is to properly follow the process control plans. These give clear guidelines for part specifications, the method of gauging and the frequency of part checks. I want to remind everyone that next to personal safety, adherence to the process control plan is critical. The majority of our past quality problems could have been avoided if we had followed the process control plan.

In order for us to become world-class, we must use incidents such as yesterday as learning experiences. I encourage everyone to use yesterday's disaster as a reminder that quality is not automatic. We must all do our part.



Robert Maley

DATE: April 20, 1996

SUBJECT: Following Production Action Authorization Procedure

TO: Robert Maley

The purpose of this letter is to remind all Livonia Engine Plant Personnel that out-of-specification parts can **not** be used without prior written authorization from our customers. Parts not meeting specification require a completed Production Action Authorization (PAA) from Product Engineering.

Spring time is a time for house keeping, let's get with it. If you know of situations where out-of-specification parts are being used, please identify these areas. Until a concern area is identified, that area will continue having problems because the resources will not be focusing on that area. We can not afford to lose credibility with our customers at time when quality expectations are rising. The why's for requiring a PAA:

- Jack Armstrong, Livonia Engine Plant's manager, has signed a Production Part Approval Process (PPAP) agreement with our customer that states we will meet product specification.
- Part specification are designed and developed to assure engines meet targeted customer warranty requirements.
- Countless engine dynamometer hours and durability vehicle test miles are logged for each model year to verify that the correct engine tolerances are specified for production engines. **Test engine results determine when engine specifications require change not when equipment or employees have problems!**
- PAA's are part of a check and balance system. In order for a Release Engineer to agree to deviation in specification, they are required to provide a business case to their respective manager.

Ask ourselves, "Do we expect our suppliers to meet Livonia's specifications? Should they be able to go out-of-specification when they have equipment or employee problems?"

If the writer or anybody else in the Quality Systems Group can be of any assistance, please ask. And if you have any suggestions for the Quality Systems Group, please forward them as well.

Please remember quality is like respect; it is not owed, it is earned.

Richard J. Lisabeth
Quality Systems Group

xc: All Livonia Employees