

**Sequence VIE/F Engine Rebuild Task Force**  
**Call Agenda**  
**September 8<sup>nd</sup> @ 8:00 AM CST**

Call-in number: (800)391-9177

Conference Code: 4875645502

**Scope:**

The ASTM Sequence VI Surveillance Panel requested a Task Force be formed to explore the possibility of extending the life of the Sequence VIE specially built General Motors (GM) 3.6 L (LY7) engine. New engines will be built from new GM assembled short blocks and other new and used individual components.

**Objective:**

The Task Force will:

- Review GM's proposal of building new VIE engines from new GM assembled short blocks and new GM individual components.
- Determine total quantity of engines needed.
- Determine parts availability and acquisition for new engine build. Coordinate with OHT and GM.
- Determine which used parts from used VIE engines will be needed for new engine builds.
- Determine availability of these used parts and develop inspection and selection criteria.
- Inspect and select used parts for use in new engine builds (each lab will be responsible for this task).
- Develop and implement a standardized build procedure (engine assembly manual).
- Determine stand availability for testing lab built engines.
- Develop a test plan to prove out lab built engines.
- Report results, conclusions and recommendations to Sequence VI SP.

The agenda for this meeting is shown below, if you have any additions please send them to me and Cc this distribution.

**1.0 Roll Call**

Do we have any membership changes or additions?

**2.0 Approval of Minutes from meeting 8/4/2016.**

[ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/minutes/VIE\\_FEngine%20RebuildTaskForce20160901.pdf](ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/minutes/VIE_FEngine%20RebuildTaskForce20160901.pdf)

**3.0 Action Item Review**

- 3.1 ~~Engine KITS completion and shipping~~ – **Expected this week and next week.** Shipment will commence this week. GM expects to ship between 100 and 200 this week
- 3.2 ~~Scott will contact GM to attempt to acquire more sort blocks~~ – **Completed.** There are enough short blocks to cover the required amount. ~390 will have both heads.
- 3.3 Adrian will develop a timeline for completing the scope of this TF – **Completed/can change based on Stats input on prove out recommendation.**
- 3.4 Adrian to contact stats group about prove out test design – **After consulting with our Statistician Martin Chadwick I propose to table the request to the stats group until we have an LTMS (~the week of 25 July)**

for the VIE. There are two main reasons for this, one to have a better idea what oils and order to use for the short blocks and second to not overload the stats group even more than what they are now.

3.5 Parts list for the right head rebuild will be developed by Scott and will research possibility of creating a kit for the right head rebuild. **In progress.** Scott created a list that needs to be verified. Adrian will verify the list.

3.6 Scott will send quotes for more kits/pricing (he will have a meeting this morning to receive approvals)

3.6.1 Was the approval granted? **In progress**

Quotes for kits with both heads should be separate from POs for the kits with no right heads. If possible include the cost of the head build kit in the PO for the engines without right head.

Dimensions of the containers:

Engine: 28" x 30.5" x 27" @ 203 lb. ea.

Kit: 27" x 27" x 27" @ 134 lb. ea.

Scott needs PNs for the parts missing from the OHT -2 engines to include these in the kits for the second batch of short blocks. Adrian will provide the list to Scott.

3.7 Adrian to send latest draft of build manual. **Completed**

3.8 Rich to send an email requesting the labs to provide injectors flow data and whether injectors are reused or new ones. **Completed**

#### 4.0 Old Business

4.1 Need to write up storage procedure for labs to follow.

4.2 Coordination of engine build workshop early 2016.

4.3 Review fixed phasors reuse, inspection procedure.

4.4 Should rework/repairs be allowed, follow up after rebuild workshop.

#### 5.0 New Business

5.1 Injectors PN Issue

5.1.1 Service documents call out 12609418 injector for both 2008 SRX and 2012 Malibu. The part number history shows a change in 2006, before the test release. Based on this it appears the injector is the same.

Is there injector's flow data from labs from injectors used in the VIE PM and from previous engines (VID)?

4 labs responded to the questions of whether they used the injectors that came with the engine or reused injectors. 3 of the labs use the new injectors that come with the new engines. The injectors a removed and flow tested before use.

Should the procedure be changed to eliminate the OHT PN requirement?

Labs provided flow data for VID and VIE injectors. The flow data indicates not major differences in flow. There was a request to check the PN on the injectors in the VID used engines.

Tim found that PN 12597871 (provided by OHT as the part number for OHT6D-042-1) is for a 4.6 L engine. OHT will research the part number for OHT6D-042-1.

Once all information is available the TF will decide on making a motion to allow the use of the injectors that come with the engines.

#### 6.0 Review of action items.

- Adrian will verify the head rebuild parts list by disassembling and checking head components.
- Check the PN on the injectors in the VID used engines. Adrian.
- OHT will research the part number for OHT6D-042-1.
- Provide PNs for the parts missing from the OHT -2 engines to include these in the kits for the second batch of short blocks. Adrian.

#### **7.0 Schedule for next conference call.**

TBD