Sequence VIE/F Engine Rebuild Task Force Call Agenda October 6 @ 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 9/29/2016.

ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/minutes/VIE_FEngine%20RebuildTaskForce20160929.pdf

Jason, Jerry, Unanimous.

3.0 Action Item Review

- 3.1 Adrian will develop a timeline for completing the scope of this TF Completed/can change based on Stats input on prove out recommendation.
- 3.2 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.

- 3.3 Scott will send quotes for more kits/pricing (he will have a meeting this morning to receive approvals). In progress
- 3.5 Adrian will verify the head rebuild parts list by disassembling and checking head components. In progress
- 3.6 Rich will survey labs to confirm whether labs are using the coil packs that come with the engine or reusing VID engine coils. Also, to confirm what coils where used for the VIE matrix. Completed, labs are using the correct coils. TMC will verify part numbers during lab visits.
- 3.7 Adrian will research storage temperature range for short block engine kits. In progress, Refer to 5.3
- 3.8 Dan will contact dealer to research what would it take to generate paperwork to return the used heads as cores, what Scott would need to provide, etc. Completed, Refer to 5.2.

4.0 Old Business

- 4.1 Review fixed phasors reuse, inspection procedure.
- 4.2 Should rework/repairs be allowed, follow up after rebuild workshop.

5.0 New Business

5.1 What level of teardown and rebuild will the heads undergo?

Will table this conversation until next meeting. There is a possibility new heads could be made. In progress and awaiting response from manufacturer overseas.

5.2 CCA is requesting used heads be returned to the dealership under the core program. Any HFV6 heads around now should be banked. CCA purchased these heads to fill the reman program and if we throw them away that does not help us for future purchases or CCA customers drive their cars. Dan volunteered to contact dealership (Ancira) and research what would it take to generate paperwork to return the used heads as cores, what Scott would need to provide, etc. The Parts Manager says he cannot do the core unless the engines were bought there. Scott's number was offered but he said they should be returned to Flint.

Dan will approach Freedom Chevrolet. Also, Scott is working on creating the paperwork for dealers to be able to accept cores.

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

On March 3rd 2016 during the review of the cleaning procedure we discussed to include the following:

"The parts listed above will be received with a CPC applied by the OEM to prevent corrosion of the parts. The CPC shall be removed from the parts prior to assembly of the engine. Once the parts have been cleaned it is recommended to assemble the engine and store in humidity and temperature controlled environment until is needed for installation on a stand. The engine shall not be assembled if rust is present."

Do we need to specify how labs store parts before going through the cleaning process other than keeping the parts in a temperature stable environment? During the engine build workshop we confirmed that the short blocks and the heads have corrosion prevention inhibitor applied.

The group agreed to follow the instructions about how to handle parts after cleaning which were included in the build manual. For long term storage it is recommended to keep kits in a temperature stable environment.

5.4 VIE engines have spark plugs PN 12622561 but the procedure requires OHT6D-043-1 (PN 12597464). Some labs have been using the sparkplugs that come installed in the engine and some labs are replacing the spark plugs to use OHT6D-043-1. The VIE draft procedure lists OHT6D-043-1 as the spark plugs to use.

The group agreed to continue to utilize the OHT6D-043-1 (PN 12597464) spark plug. Change the procedure to include GM PN; display as OHT6D-043-1 (PN 12597464) It was recommended all lab should implement a build sheet where the spark plugs, coil packs fuel injectors part number are recorded during engine build.

6.0 Review of action items.

- Dan to contact Freedom Chevrolet about returning cores
- Scott will create documentation necessary for dealers to be able to accept cores

7.0 Schedule for next conference call.

TBD