

**Sequence VIE/F Engine Rebuild Task Force  
Call Agenda  
September 17 @ 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 rebuilding the Sequence VIE specially built General Motors (GM) 3.6 L (LY7) engine or building new Sequence VIE engine from new GM supplied components/kits to support future VIE/F Testing.

**Objective:**

The Task Force will:

- Review current availability of used VIE engines.
- Review GM's proposal of building new VIE engines from new GM assembled short blocks and new GM individual components.
- Compare the following two options:
  1. Refresh/Rebuild used VIE engines.  
**LZ and Afton have cleaned and rebuild VIE engines with limited success**
  2. Build new VIE engines from new GM supplied components/kits.  
**2200 new short blocks and heads are available. Reused/additional parts needed: intake, oil pan, fixed cam phasers, fuel injectors, timing chain ect.**
- If Task Force selects Option 1:
  - Develop used engine inspection and selection criteria.
  - Select best used engine candidates for inspection (each lab will be responsible for this task).
    - Preferably select an engine that ran 0W-16 oils
  - Inspect selected engines (each lab will be responsible for this task).
    - Disassemble and visually inspect engine components that might influence engine response to FM and engine OC.
  - Determine parts availability and acquisition for engine rebuild. Coordinate with OHT and GM.
- If Task Force selects Option 2:
- **Motion: Move forward with option 2. –Bill Buscher, Nathan Moles 2<sup>nd</sup> (9 Approve, 0 Wave, 0 Negative)**
  - Determine parts availability and acquisition for new engine build. Coordinate with OHT and GM.

- GM to arrange internally for acquisition of new hardware
    - **Action Item:** OHT to send out survey to labs for updated quantities of new hardware needed (1 week for response)
  - Determine which used parts from used VIE engines will be needed for new engine builds.
    - Need to create build manual. IAR will host rebuild work shop to develop build manual and identify all reused and new parts needed. OHT will donate parts for build work shop.
  - Determine availability of these used parts and develop inspection and selection criteria.
    - Labs to determine numbers of used parts available that can be reused. There are enough phasors for current 144 service engines, but labs should start removing them from used engines for later use.
  - Inspect and select used parts for use in new engine builds (each lab will be responsible for this task).
- Develop and implement a standardized rebuild/build procedure.
  - Need to create build manual
- Determine stand availability for testing rebuilt/built engines.
- Develop a test plan to prove out rebuilt/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 membership changes

2.0 Chairman's opening comments – **Need volunteer to take minutes and actions.** Nathan Moles

3.0 Open Discussion on Scope and Objective.

4.0 Discussion of the objectives

5.0 Select option to proceed with – **Refresh/Rebuild used VIE engines or build new VIE engines from new GM supplied components/kits.**

6.0 Meetings Time and frequency

7.0 Review of action items

8.0 Schedule for next conference call.

**Next call scheduled for next Thursday at 8am EST**

**Attendance:**

Adrian Alfonso, IAR

Bill Buscher, IAR

Andy Ritchie, Infinium

Matt Bowden, OHT

Jason Bowden, OHT

Tim Cushing, GM

Dan Worcester, SWRI

Nathan Moles, LZ

Jerry Brys, LZ

Satoshi Hirano, Toyota

Todd Dvorak, Afton

Terry Hoffman, Afton

Rich Grundza, TMC