HD Hardware Status - Summary

- T-12: Proposal for final liner batch through 2013 at ~\$1.2 million cost to CPD and Test Labs
- T-11: New S-batch rings \rightarrow mild cals
- T-8: New supplier of liners coming
- ISM: New batch of filters → severe OFDP; new batch of crossheads 1st Q 2010
- ISB: New batch of camshafts 1st Q 2010
- Others: OK, for now

CJ-4 Test Life?

 Best guess → 2013, *but* with many "running" hardware changes with probable severity changes

Mack Long Term Hardware Supply

► Mack T11/T12

- In process of ordering next batch of kit hardware
- Mack Surveillance Panel currently working on a plan to provide test kit hardware through 2013
- All other hardware (i.e. turbos, cylinder heads, blocks, etc...) should be available through that same time period

Mack Long Term Hardware Supply

Mack T11/T12 (cont)

Early indications are that new batch of top rings for T11 may be causing mild shift in calibration testing. This is very recent so no action has been taken yet by the SP

Mack Long Term Hardware Supply

≻Mack T8

- There are no known parts shortages
- There is a new supplier for cylinder sleeves but none have been distributed yet

Cummins Long Term Hardware Supply

➤Cummins ISM

- Approximate 3 6 month supply of current crosshead batch. New batch on order and should arrive 1st qtr 2010. Will be ~ 2 – 3 year supply.
- Recently switched to new batch of test oil filters. SP investigating possible increase in severity for oil filter DP with this filter. Calibration tests will be run on the new filter batch and new crosshead batch when the crossheads are available. This filter batch will last ~ 5 years
- Other kit hardware readily available
- Cylinder blocks, cylinder heads, turbos, etc.. available

Cummins Long Term Hardware Supply

➤Cummins ISB

- Expecting new cam batch in early 2010 which will be ~ 2 year supply.
- Tappets, crossheads, other kit hardware readily available
- Eleven ISB engines in inventory at TEI which is ~ 5 year supply