

Volvo/Mack CPD Report T8/T11/T12/T13

Volvo/Mack CPD Report Contents

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Volvo/Mack T11/T12 Piston Crowns

- Batch "C" piston crowns going into kits after Kit #181987
- Batch "D" piston crowns on order
 - Delay in forgings



Volvo/Mack T11/T12 Main Bearings

- Batch "P" going into kits after Kit #182107
- Reject Rate of ~75%
 - Damaged backs
 - Scratches, nicks





Volvo/Mack T11/T12 Injector Lines

- We have hit a dead end on the manufacture of the "heavy" end injector lines
 - Contacted several suppliers and the current one
 - No one wants to mess with them



Volvo/Mack T11/T12 E7 Blocks

- Reman is down to 53 E7 blocks
 - Want to only sell 7/8 "basic" engines not blocks



Volvo/Mack T11/T12 Piston Skirts

- Received 1000 piston skirts in March 2015
 - Apparently these were made in one batch
- Reject about 50% for small pits, nicks or scratches
- Need to know what the panel wants TEI to measure on the skirts



Volvo/Mack T12/T13 Stained Rings

- Receiving stained rings in both T12 and T13
- Oronite studied the rings
- Volvo/Mack says rings are "OK to use"





Volvo/Mack T13 Rod Bearing Update

- Still seeing a wide range of rod bearing surface finishes (roughness)
- We are currently screening out the rough ones (~50% rejection rate)
- TEI has 991 "bad" sets and ~900 sets left to inspect out of original order of 3000
- Probably going to have to order another batch soon!



Volvo/Mack T13 Thrust Washers

 Rejecting approximately 50% for nicks, dings or scratches





Volvo/Mack T13 Oil Ring Update

- TEI got some oil rings with a red dot on them instead of a green dot.
- The red dot oil rings are the wrong year model ring and are not to be used.
- We believe we caught all the red dot rings but.....



Volvo/Mack T13 Piston Oil Hole Chamfer

• 2 different piston oil holes





Volvo/Mack Kit Parts Inventory

| Volvo/Mack Critcal Parts Inventory | | | | | | |
|------------------------------------|--------------|-------------|------------|----------|-----------|--|
| | | | | | | |
| Part Description | Test Type | Part Number | Batch/Date | In Stock | ~Reject % | |
| Cylinder Liner | T8, T11, T12 | 509GC471 | V | 1703 | 10% | |
| Piston Crown | T11, T12 | 240GC5125M | С | 240 | 1% | |
| | | | D | ordered | n/a | |
| Piston Skirt | T8,T11, T12 | 240GC5119M | March 2015 | 275 | 50% | |
| Piston Assembly | T8 | 215SB232A | n/a | 22 | 50% | |
| Top Ring | T8, T11, T12 | 349GC3107 | U | 946 | 30% | |
| 2nd Ring | T8, T11, T12 | 349GC3108 | S | 630 | 50% | |
| Oil Ring | T8, T11, T12 | 350GC343 | S | 960 | 15% | |
| Connecting Rod Bearing (sets) | T8, T11, T12 | *20705743 | Υ | 2904 | 40% | |
| Main Bearing (sets) | T8, T11, T12 | *25503508 | Р | 532 | 75% | |
| | | | | | | |
| Cylinder Liner | T13 | 21334768 | Α | 1213 | 1% | |
| Piston | T13 | **21330684 | n/a | 111 | 1% | |
| Top Ring | T13 | **21330684 | n/a | 110 | 40% | |
| 2nd Ring | T13 | **21330684 | n/a | 110 | 50% | |
| Oil Ring | T13 | **21330684 | n/a | 110 | 20% | |
| Connecting Rod Bearing (sets) | T13 | **20580558 | April 2015 | 1255 | 50% | |
| Main Bearing (sets) | T13 | **20530916 | n/a | 206 | 15% | |
| | | | | | | |
| * New Volvo part number | | | | | | |
| ** Comes as a set | | | | | | |



Volvo/Mack Miscellaneous Parts Inventory

| | TEI Mack Miscellaneous Parts Inventory | | | | | |
|-------------|---|--------------------|----------|--|--|--|
| Test Type | Part Description | Part Number | In Stock | | | |
| T8 | Injection Pump "calibrated" | 313GC5212P16X | 2 | | | |
| | Injector Nozzle | 736GB343P2X | 18 | | | |
| T11 | EGR Cooler | 19GBX52 | 18 | | | |
| | Injection Nozzle | 736GB411M2 | 34 | | | |
| | Modine Intercooler | 5424-03928031 | 2 | | | |
| | Turbo Small | 631GC5145M3 | 12 | | | |
| T12 | EGR Cooler | 28GB519 | 0 | | | |
| | Injection Nozzle | 736GB419M3 | 108 | | | |
| | Modine Intercooler | 5424-1A166566D | 4 | | | |
| | Turbo Small | 631GC5176CM7 | 0 | | | |
| T11 and T12 | Camshaft Kit | 57GC2209A | 0 | | | |
| | Cylinder Head - Low Swirl | 732GB3499M | 0 | | | |
| | Electronic Actuator | 9MS42 | 1 | | | |
| | Engine - Bare Block | 239GB5551M | 0 | | | |
| | Engine - Basic Engine | 86SB3536N | 1/1 | | | |
| | Exhaust Manifold Assembly (front and rear) | M10104GC5164M | 6 | | | |
| | Fuel Injector Line | HL69-151 | 93 | | | |
| | Fuel Injector Line | HL69-152 | 92 | | | |
| | Full Flow Oil Filter | 485GB3236 | 4 | | | |
| | High Temperature Hose | 3101632M | 589 | | | |
| | Intake Manifold Assembly | M10105GCX4332/5212 | 0 | | | |
| | Lifter Assembly | 72GC373A | 0 | | | |
| | Machine Elbow | 454GC5236 | 16 | | | |
| | Oil Cooler End Caps | TEI-T12OCEC | 0 | | | |
| | Oil Filter Housing | 27GB528M2 | 4 | | | |
| | Oil Pump Assembly - Low Flow - 9-tooth internal gears | 315GC465BM | 15 | | | |
| | Piston Connecting Rod | 367GC4243M2 | 151 | | | |
| | Short EGR Exhaust Probe | TEGR0005 | 29 | | | |
| | Turbo Gasket | TEIEX201064AM | 80 | | | |
| | Turbo Large | 3801847R | 0 | | | |
| | Venturi | 762GBX433SS | 1 | | | |



Questions?

