T5 Checklist, Version 24, May 29, 2015

Operators: ______________________ Date: ______ Time: ______ Shot #: ______
Notes: ________________________

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**Piston Mass:** __________ kg

**Diaphragm**  
**Thickness:** ______________

**Expected burst pressure:** ______ MPa  **Value:** ______ MPa

<table>
<thead>
<tr>
<th>Position</th>
<th>Tunnel correctly</th>
<th>LVDT1: setting: ______ value: ______</th>
<th>LVDT2: setting: ______ value: ______</th>
</tr>
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</table>

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**Turn off blower**  
**Open SV-24 (DT pressure gage)**  
**SV-23 (DT vacuum gage)**  
**HS-20 (DT vacuum pump isolation valve)**  
**Close HS-19 (DT vacuum pump vent)**  
**HS-21 (DT vent)**  
**Turn on cooling water for DT pump**  
**Turn on PO/3 (DT vacuum pump)**

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**Open V-17 (ST vacuum valve)**  
**Close V-18 (ST vacuum pump vent valve)**  
**Turn on PO/2 (ST vacuum pump)**  
**Open SV-25A (ST pressure gage)**  
**SV-25B (ST pressure gage)**  
**SV-26 (ST vacuum gage)**  
**V-14a, V-14b, V-14c (ST Isolation Valves)**

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**Close 2R pressure isolation valve (near P1)**  
**Open V-11 (High pressure CT isolation)**  
**V-8 (CT vacuum)**  
**V-7 (CT/2R vacuum valve)**  
**V-12 (CT/2R/PS vacuum valve)**  
**Close ZS-4 manual and remote (emergency 2R vent)**  
**ZS-13 (CT vacuum pump vent valve)**  
**Turn on PO/1 (2R, Piston Space and CT vacuum pump)**  
**Open SV-29 (CT vacuum gage)**  
**SV-27 (2R vacuum gage)**  
**SV-31 (PS vacuum gage)**

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**Open CT gauge(s)**  
**Flex Hose: (Top valve closed)(Bot valve Open)**  
**Wait 30 - 60 minutes for vacuum**

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**WARNING LIGHTS ON (P1). Verify door is closed**

**Check vacuum levels**

<table>
<thead>
<tr>
<th></th>
<th>DT: ______ mmHg</th>
<th>ST: ______ mmHg</th>
<th>CT: ______ mmHg</th>
<th>2R: ______ mmHg</th>
<th>PS: ______ mmHg</th>
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</table>

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**Disconnect nozzle support trolley**

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**Isolate ST vacuum valve (V-17)**

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**Turn off ST vacuum pump (PO/2)**

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**Open ST vacuum pump vent valve (V18)**

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**Isolate ST vacuum gauge (SV-26)**

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**Close V-14a (ST vac pump isolation)**

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**Close V-14b (ST vac gauge isolation)**
<table>
<thead>
<tr>
<th>Action</th>
<th>Check</th>
<th>Signal</th>
</tr>
</thead>
</table>
| Fill ST gas: 
(multiply setting by 20) thumbwheel: 
value: | | |
| Press hand switch HS-C3 to confirm ST pressure | | |
| Close V-14c (Fill line isolation) | | E |
| Isolate DT pressure gauge, HS-24 | | |
| Close ZS-20 (DT vacuum isolation) | | |
| Turn off HS-3 (dump tank vacuum pump) | | |
| Open vent HS-19 (DT vacuum pump vent) | | |
| Close V-8 (CT isolation) | | F |
| Close SV-29 (CT vacuum gage) | | G |
| Fill CT gas: vacuum: 
setting: 
thumbwheel: 
value: | | |
| Absolute pressure desired: | | |
| Close V-11 (CT high pressure isolation valve) | | H |
| Close V-7 (CT/2R vacuum) | | |
| Close SV-23 (DT vacuum gage) | | I,J |
| Close SV-27 (2R vacuum gage) | | |
| 2R Temperature before 
| | |
| Fill 2R: setting: 
thumbwheel: 
value: | | |
| Check for changes in tunnel position CT: 
Desired tunnel position 
Toggle Dry Run Relay box to “Experiment” 
Arm “T5 das” 
Isolate flex hose (bottom valve) 
Confirm 2R pressure, Hand switch HS-C1 
Isolate 2R gage 
Confirm isolation, Hand switch HS-28 
Close SV-31 (PS vacuum gage) 
Confirm CT pressure, Hand switch HS-C2 
Isolate CT gage 
Confirm isolation, Hand Switch HS-30 
2R Temperature after 
Close V-12 (2R vacuum) 
Open V-13 to vent CT vacuum pump 
Turn off CT vacuum pump (PO/1) 
READY TO FIRE 
Press and hold down firing buttons 
Make the Tunnel Safe 
Open V-4 
Open Flex Hose Isolation Valves 
Reconnect nozzle support trolley | | |
| READY TO FIRE Time: | | |
| Press and hold down firing buttons | | |
| Make the Tunnel Safe | | |
| Open V-4 | | |
| Open Flex Hose Isolation Valves | | |
| Reconnect nozzle support trolley | | |