

**L3 Land-based Service Engineering - Task Sheet**

NAME:..................................................................................... DATE:................

**Reference: Task:**

 *306/02 MEASURING ENGINE COMPRESSION*

**Requirements:**

 Running engine

 Battery in ‘good heart’

 Diesel compression tester

 Oil can

 Manufacturer’s specifications.

**Instructions:**

 Measure engine compression (dry & wet) and compare results between cylinders

 Record results on P1 & compare against manufacturer's specifications.

**Procedure:**

1. Remove all injectors and prepare compression tester as necessary selecting correct adapters to match injectors.
2. Assemble adapter assembly and install into injector port in cylinder No.1.
3. Connect tester to adapter assembly then spin engine round until needle stabilises. Note reading on proforma over.
4. Disconnect tester from adapter assembly and squirt a few shots of oil down the hole into the engine. Reconnect the tester.
5. Spin engine round again until needle stabilises. Again note reading over.

 6. Repeat both dry & wet tests for the other remaining cylinders.

 7. Re-instate engine after removing tester assembly.

over/

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| --- | --- | --- |
| **CYLINDER PRESSURE****PSI** | **DRY TEST** | **WET TEST** |
| **CYLINDER 1** |  |  |
| **CYLINDER 2** |  |  |
| **CYLINDER 3** |  |  |
| **CYLINDER 4** |  |  |

 **QUESTIONS**

 1. What was the engine tested?

 2. What should a typical compression pressure be for a diesel engine?

 3. If pressure was low in a cylinder and this increased under “wet” conditions, what could this indicate?

 4. If pressure was low under both “dry” & “wet” conditions, what could this indicate?

 5. If pressure was low between the two middle cylinders, what could this indicate?

**TASK COMPLETE**

Signed (Trainee):.......................................................... Date:...............................

Signed (Assessor):....................................................... Date:...............................