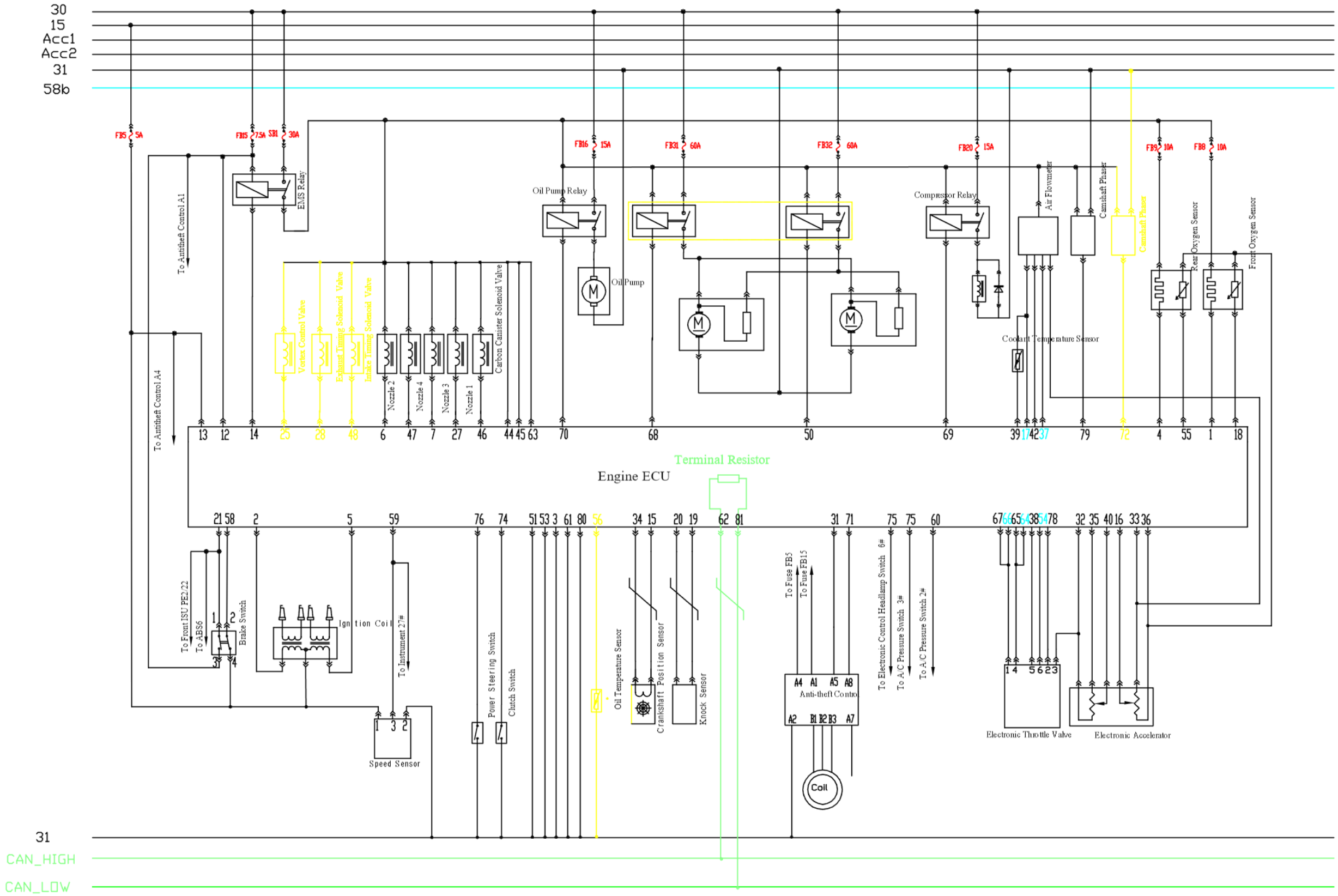ENGINE SYSTEM