

### **Excerpt from: So you have Bought a Traction by Rob Little**

**Engine:** A simple 1911cc pushrod overhead valve engine with a cast iron cylinder head, fairly basic except you must remember it rotates clockwise from the flywheel end, this is important. Some engines can have split skirt pistons, if they have, the solid side of the piston is what is known as the thrust side and must face away from the camshaft, similarly some pistons supplied by the club spares have offset gudgeon pins, i.e. the gudgeon pin is not in the centre of the piston but is offset slightly to one side, these are usually marked with an arrow on the crown or top of the piston, this arrow does not point to the front or rear of the engine but is an indicator to the direction of rotation and should face the camshaft in a traction engine. The timing chain is another part that is influenced by rotation. The joining link clip should be fitted with the closed end toward the direction of rotation, so when you are looking at the timing chain end the crankshaft and camshaft turn in an anti-clockwise direction. Another popular adaption is to use con-rods from a later ID engine, these allow you to use more modern thin wall bearings as opposed to the poured white metal bearings. The bearing caps on these are offset, so when fitting these types of con-rods the high side of the rod must face the camshaft. Another often overlooked item is in the cylinder head. It is fitted with a water distribution tube that sends water to cool the exhaust valve seats and it is only visible once the water pump adaptor plate has been removed from the cylinder head. Club spares can supply new stainless steel tubes if they need to be replaced