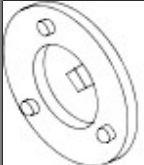# Fuel Charging and Controls - 2.4L Duratorq-TDCi HPCR (103kW/140PS) - Puma - Fuel Injection Pump
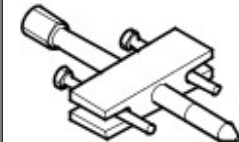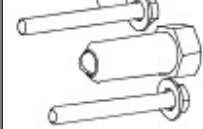
Removal and Installation

Special Tool(s)	
303679	Remover/Installer, Crankshaft Oil Seal 303-679
E61755	Locking Tool, Fuel Pump Sprocket 303-1151
303-114 E54428	Remover Crankshaft Damper Pulley 303-1149
303-1333 E91082	Remover Fuel Pump 303-1333

Removal

- WARNINGS:

⚠️ The spilling of fuel is unavoidable during this operation. Make sure that all necessary precautions are taken to prevent fire and explosion.

⚠️ Do not carry or operate cellular phones when working on or near any fuel related components. Highly flammable vapors are always present and may ignite. Failure to follow these instructions may result in personal injury.

⚠️ Do not smoke or carry lighted tobacco or open flame of any type when working on or near any fuel related components. Highly flammable vapors are always present and may ignite. Failure to follow these instructions may result in personal injury.

⚠️ If fuel contacts the eyes, flush the eyes with cold water or eyewash solution and seek immediate medical attention.

⚠️ Wash hands thoroughly after fuel handling, as prolonged contact may cause irritation. Should irritation develop, seek medical attention.

⚠️ Do not carry out any repairs to the fuel system with the engine running. The fuel pressure within the system can be as high as 2000 bar (29,008 lb-sq-in). Failure to follow this instruction may result in personal injury.

⚠️ CAUTION: Diesel fuel injection equipment is manufactured to very precise tolerances and fine clearances. It is therefore essential that absolute cleanliness is observed when working with these components. Always install new blanking plugs to any open orifices or lines. Failure to follow this instruction may result in foreign matter ingress to the fuel injection system.

1. Disconnect the battery ground cable.
   For additional information, refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).

2. Remove the accessory drive component bracket.