

Service Bulletin

General

To fit the Perkins LC governor

161 Supplement 1

March 2002

Warning! Ensure that the engine cannot be started.

1 Clean the upper surface of the pump to remove all dirt and other debris.

Caution: Ensure that the fuel is turned off.

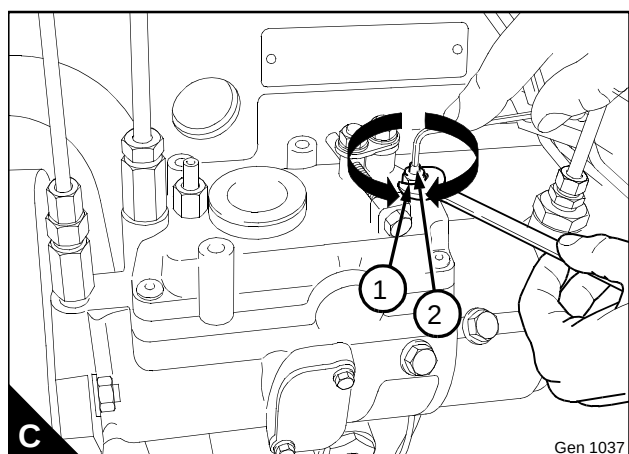
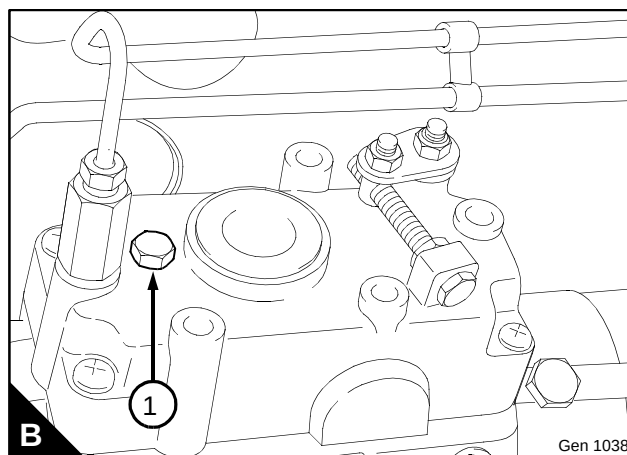
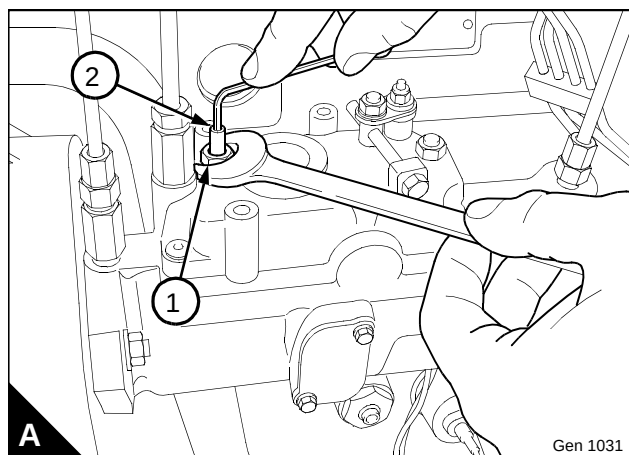
2 Release the locknut (A1) and remove the allen screw (A2) together with the locknut. Fit the setscrew (B1) together with the sealing washer supplied with the governor. Tighten the setscrew to 5,1 Nm (45 lbf in) 0,52 kgf m.

3 Release the locknut (C1) and adjust the governor droop allen screw (C2) clockwise until it can be turned no further.

4 Adjust the screw (C2) in a counter-clockwise direction the number of turns specified, see table 1 on page 3. Tighten the locknut (C1) to 4,5 Nm (40 lbf in) 0,46 kgf m.

Note: If an electronic overspeed device is fitted to the generator adjust it to operate at 65 Hz or above. Please refer to the generator set instruction manual.

Continued



5 Start the engine and, while the engine runs, release the throttle lever locknut (A1) and the pivot locknut (B1). Finger tighten only the pivot locknut and slowly adjust the throttle lever screw (C1) until the engine speed is 1950 rev/min to 2000 rev/min (65 Hz to 67 Hz) with no load. Tighten the adjustment screw locknut (A1) and the pivot locknut (B1) to 5,7 Nm (50 lbf in) 0,58 kgf m. Stop the engine.

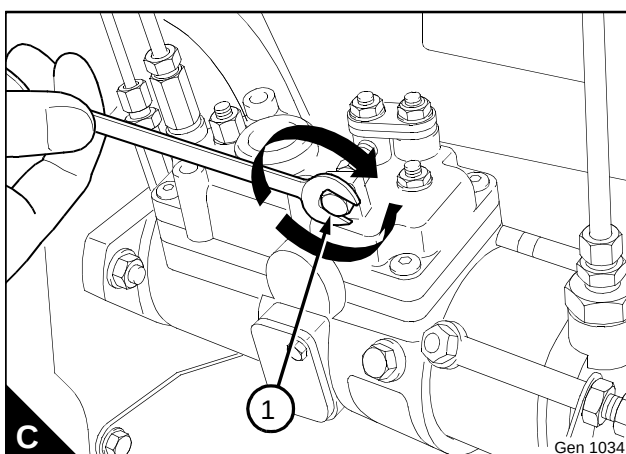
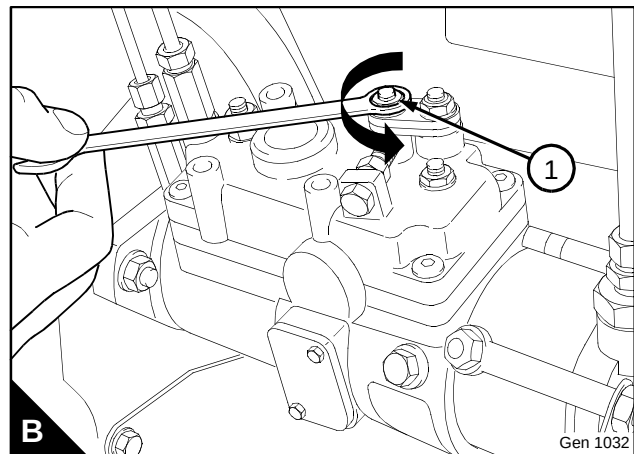
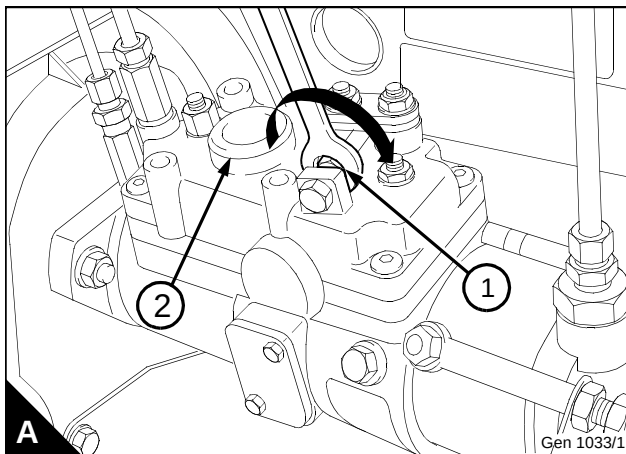
Note: To raise the engine speed from 1500 rev/min to 1950 rev/min (65 Hz to 67 Hz) will be approximately nine turns clockwise on the throttle lever screw (C1).

6 Ensure that the engine is stopped and cannot be started. Remove the protector unit (if fitted) from the governor mounting holes and ensure the threaded holes are free from dirt, oil and any other debris.

7 Ensure that the area around the governor blanking plug (A2) is clean and free from dirt and other debris. Use a suitable tool to remove the threaded governor blanking plug, ensure that the plug seal remains attached to the plug and retain the plug and seal. Ensure that the threads in the pump body are not damaged.

Caution: Ensure that no dirt or debris enters the pump.

Continued



8 Lubricate the LC governor 'O' ring (A3) with clean diesel fuel, rotate the actuator lever (A2) fully clockwise, and insert the governor (A4) into the pump top cover. Ensure that the actuator lever (A2) is to the right of the fuel control linkage (A1) see inset.

Warning! Diesel fuel and lubricating oil (especially used lubricating oil) can damage the skin of certain persons. Protect your hands with gloves or a special solution to protect the skin.

Caution: Ensure that the governor is aligned correctly into the pump body. Incorrect alignment may cause serious damage to the generator if there is no over-speed protection.

9 Press the governor (B1) fully into position and secure it with the four setscrews (B3). Tighten the setscrews to 4,0 Nm (35.4 lbf in) 0,41 kgf m.

Note: The governor should fit easily into the pump. If it does not fit easily, do not use force, remove the governor and check that the actuator lever (A2) is correctly aligned to the fuel control linkage.

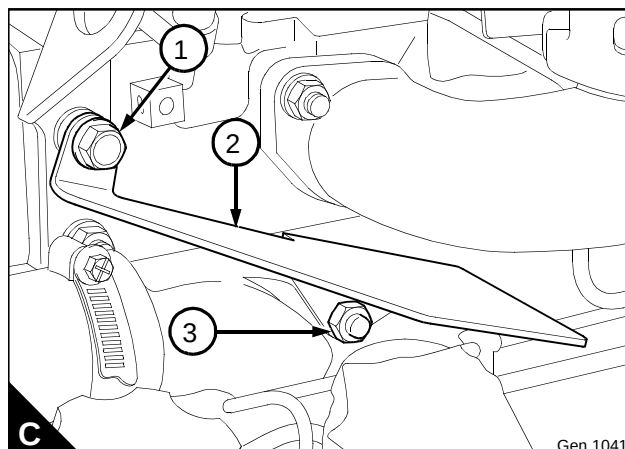
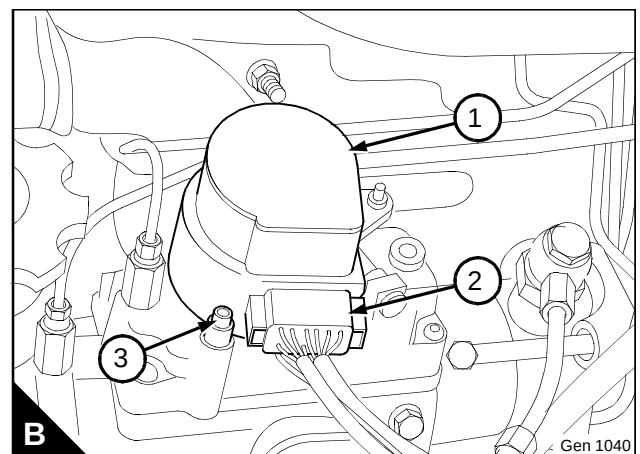
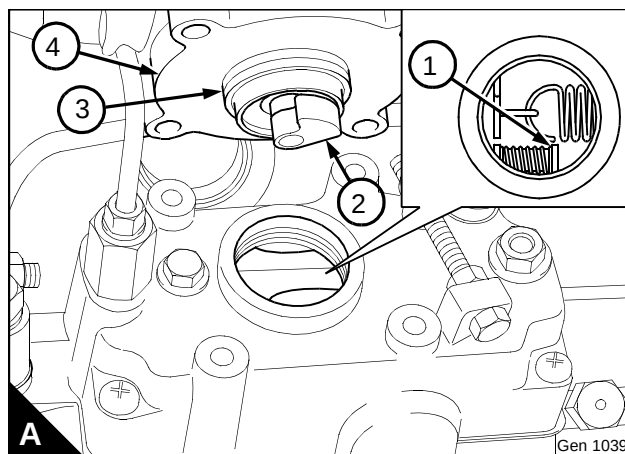
10 Connect the electrical connector (B2).

11 The LC governor may now be programmed, please refer to the Installation Manual TPD 1470.

12 For 3.1524 series engines only, fit the heat shield (C2) over the nuts and washers to the lift bracket stud (C1) and to the coolant elbow stud (C3). Secure with the nuts and washers supplied. Tighten the lift bracket nut (C1) to 37 Nm (29 lbf ft) 3,7 kgf m, and the coolant elbow nut (C3) to 27 Nm (20 lbf ft) 2,8 kgf m.

Table 1:

Engine governor droop screw adjustment (counter clockwise)						
3.1524 CM	1004G AA and AG	1004TG1 AH	1004TG2 AB and AH	1006TG2A YB	1006 TAG YD	1006TAG1 YD
1 turn	2 turns	TBA	TBA	0.75 turn	TBA	TBA



Caution: *If the pump has to be removed from the engine for test purposes or warranty reasons, the LC governor should not be removed from the pump. This will prevent the ingress of dirt or any other debris into the pump.*

Notes:

- The Installation Manual TPD 1470 describes installation, programming and diagnostics for the LC governor.
- Parts are available in various kits for the installation of the LC governor and associate components.

Table 2:

Kit number	1	2	3	4	5	6	7
Part number	U5MK0650	U5MK0651	U5MK0652	U5MK0653	2880A016	U5MK0654	29990004
Contents	LC governor, 'O' ring, Allen screws, Setscrew, Sealing washer	Heatshield, Nuts, Washers	Magnetic pickup, and adaptor	12-pin plug, Socket, Wedge, Connector pins, Blanking plugs	Programming harness	Plug, 'O' ring, Screw, Nut, Washer	CD for programming

End

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