



Instructions for installation of Power Plus Kit for Land Rover 4 cylinder engines

Series 11A and 111

Contents

1. Inlet Manifold
2. H S 6 Carb Assembly
3. K & N Filter, Gasket and 3/4' long screw x 2.
4. Insulating Plate
5. Gasket for Carb Face
6. Exhaust Blanking Plate
7. Fixing Screws for Plate and 2 Hexagon Head, 2 x Counter Sunk
8. Gasket for Manifold
9. Inlet Manifold Gasket
10. Shortened Linkage
11. Silencer 88/109



FIG. 1

Prior to fitting, take normal precautions and remove / prop bonnet to provide clear access. (see workshop manual)

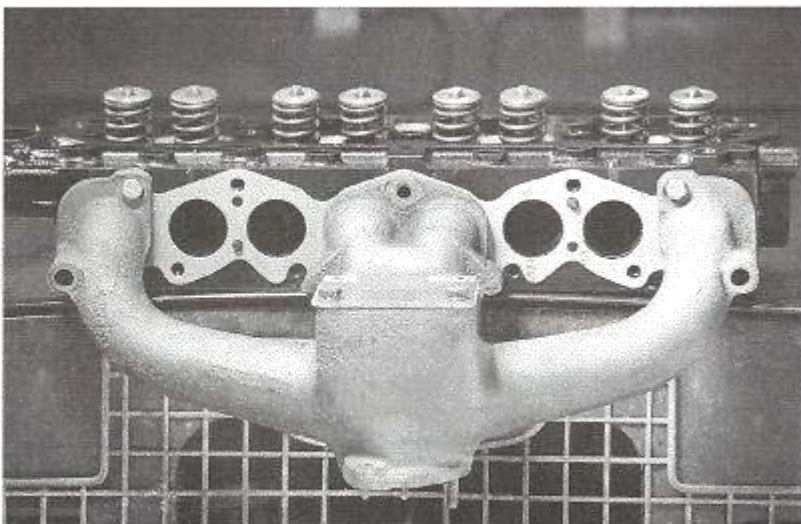


FIG. 2

1. Remove inlet and exhaust manifolds from engine.
2. Separate inlet from exhaust and remove long studs from the exhaust manifold.
3. Fit new gasket and secure new inlet manifold to cylinder head. **DO NOT** tighten fittings fully at this stage.
4. Fit the blanking plate to exhaust manifold, using gasket. Note that the counter sunk screws are positioned closest to the cylinder head face.

5. Offer exhaust manifold up to the cylinder head. Note that old and warped manifolds should be replaced or filed to provide clearance if necessary.
6. Fix the inlet manifold to the cylinder head loosely and ensure that the clearance exists between the bottom of the inlet and the top of the exhaust. Relieve by filing if necessary.

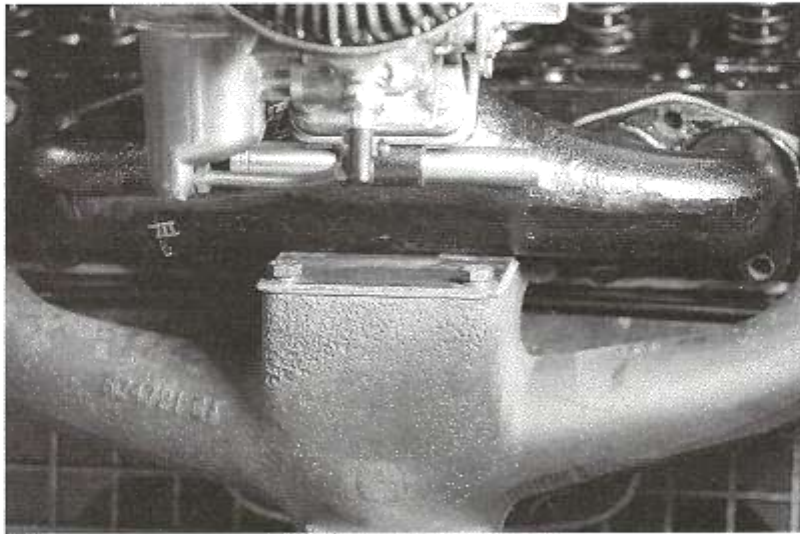


FIG. 3

7. Tighten down all fixings evenly, to specified torque, ensuring that definite clearance exists between both manifolds
8. Fit the carb and K & N air filter as shown. (Fig. 4A)
9. Remove throttle linkage and bracket, from the bulkhead support.
10. Separate link from bracket.
11. Fit shortened arm to pivot and attach to bulkhead support. (Fig. 4B)



FIG. 4A

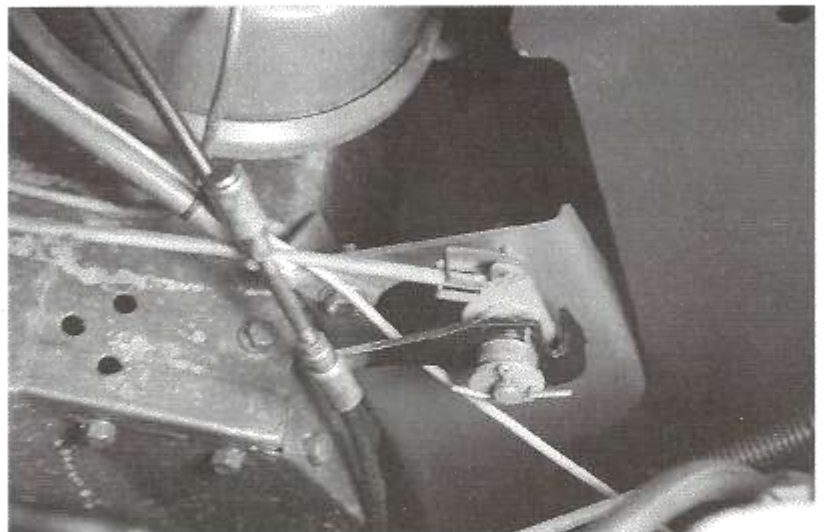


FIG. 4B

12. Fit throttle link arm and adjust pedal across shaft, ensuring that throttle shuts fully and tension spring pressure is sufficient.
13. Fit fuel pipes. Fit in-line fuel filter if one is not already present. Fit choke cable using cable clamp supplied to choke link arm. See figure 4A.

14. Ensure that all connections are tight and that there are no fuel leaks. (Use fuel pump, hand prime lever to pressurise the system.
15. Connect water passage in return from heater. i.e. In line to fitting on thermostat housing. This is required to provide heat to prevent icing in cold damp weather. (See fig. 6B).
16. Fit silencer.
17. Crank case breathers should be left open on competition or on pre-emission vehicles. The carb tapping can be blanked if not already plugged.
On post suffix E, 3 MB engines. (See engine number) the system can be retained using the carb breather and tee piece.
Fill oil damper in dash pot, with engine oil. Level to be 1/4" below top of inner tube.
18. Set mixture and idle speed.
Idle speed should be as low as possible i.e. 650 RPM. High idle speed affects fuel economy and can cause running on.

Series 90 and 110

Contents

Additional parts are required for Weber 32/34 DMTL models.

1. Modified exhaust manifold
2. Cable support bracket (in place of rod linkage)
3. 2 Return springs
4. Cable Clamp for throttle cable
(No silencer is required for 90 and 110)

Fit kit as per SIIA/III but with the following modifications

1. Fit cable support to head using head bolt.
2. Pass cable through support with lock nut on each side.
3. Fit cable to lower link arm using cable clamp.
4. Fit return springs and ensure that cable has minimum slack and that throttle is closed fully when pedal is released. (See Fig 5).
5. Set mixture and idle speed as instructed.



FIG. 5

S.U. H S 6 Carburettor: Setting up and adjustments

After fitting kit and having pressurised the fuel system the following setting up procedure can be followed;

1. Ensure that the throttle is shut fully and that the idle speed screw is clear of throttle stop. Adjust the idle speed screw until it just touches the stop and then turn it down by two complete turns.

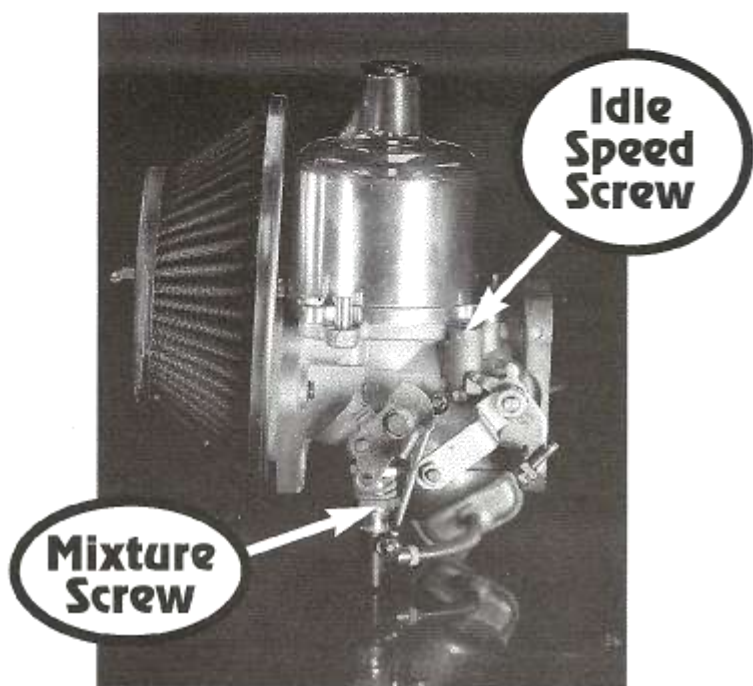


FIG. 6A

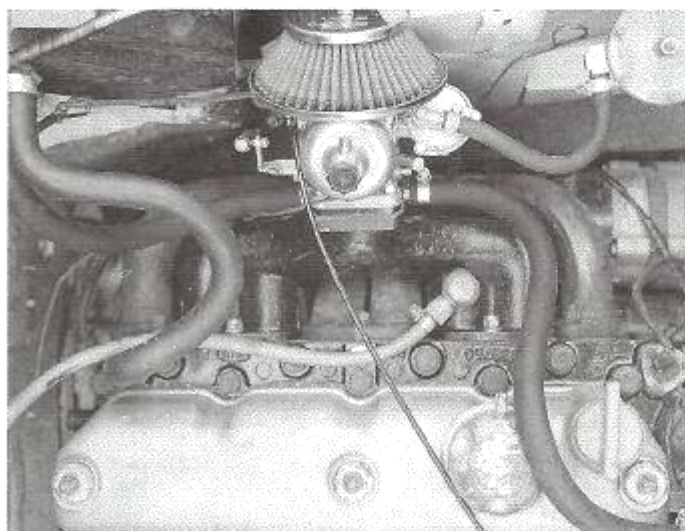


FIG. 6B

2. Turn mixture screw upwards until tight and then down by three complete turns.
3. Start the engine and run until it is warm.
4. Adjust the idle screw to its lowest possible smooth tick over (650RPM) and adjust the mixture screw to obtain a C O reading of 3.5%. Note that turning screw clockwise richens and anti-clockwise weakens.
5. If setting up without test equipment, remove the air filter element and with a thin screwdriver or similar, lift the piston approximately 1/16". If the revs rise the the mixture is too rich, if they drop the mixture is too weak. Lifting the piston should cause little change in the revs when the mixture is correct.
6. Road test. If any hesitation exists richen the mixture slightly.
(Two flats of the mixture screw.)

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