

FUEL SYSTEM P.I

THROTTLE LINKAGE – P.I.

** (Up to Engine No. CP 77609E) **

– Remove and refit

19.20.07

Removing

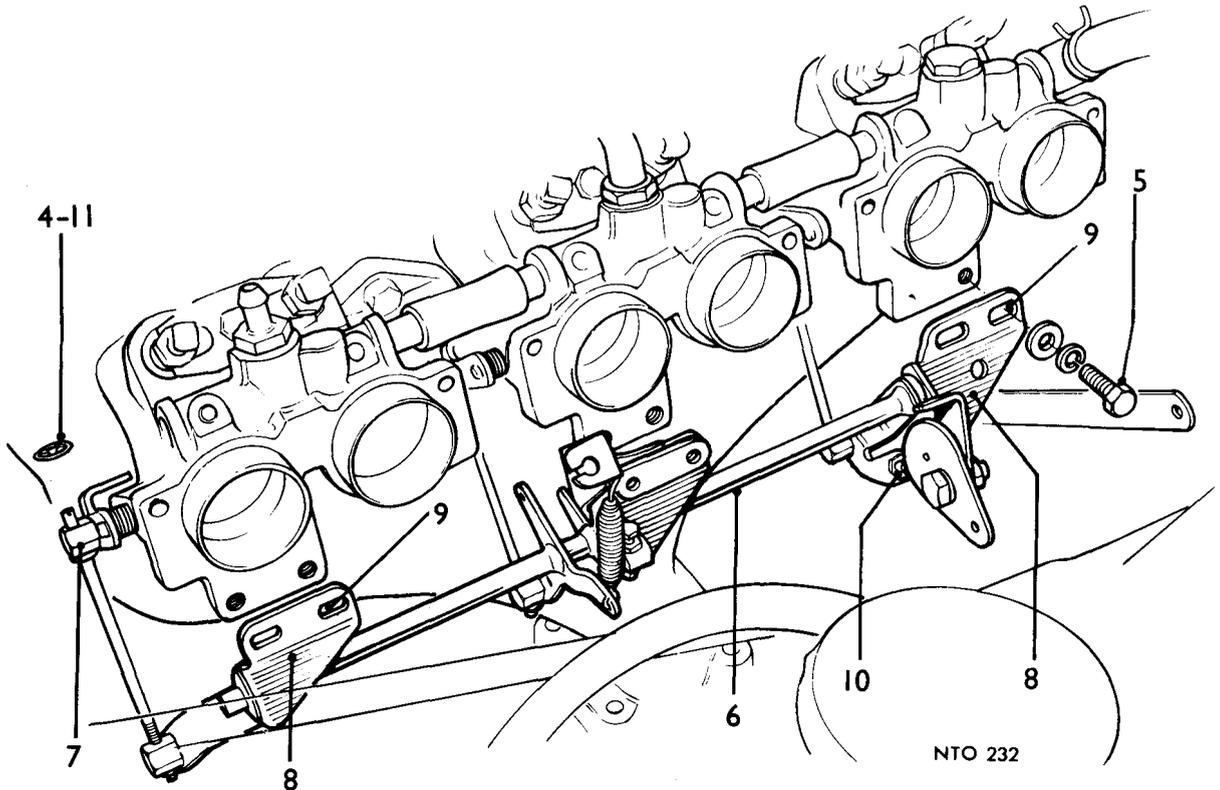
1. Remove the air intake manifold 19.70.01
2. Disconnect the throttle cable and the return spring from the linkage 19.20.06.
3. Disconnect the cold start control cable and return spring 19.20.26.
4. Remove the spring clips from three vertical links.*
5. Remove the six bolts complete with washers securing the linkage to the induction manifold.
6. Remove the linkage complete from the engine.

Refitting

7. Offer-up the linkage to the manifold passing each of the three vertical links through the throttle spindle trunnions. Secure the linkage by the centre throttle bracket only using two bolts, plain and spring washers.

8. Loosely secure the two endbrackets to the manifold so that the brackets may be moved laterally within the limits of the elongated holes.
9. Adjust the countershaft by means of the elongated holes in the two end brackets so that no end-float exists in the shaft. Ensure, however that the vertical links are at right angles to the countershaft. Tighten the four securing bolts.
10. Check and if necessary adjust the position of the cold start cam in relation to its adjusting screw, ensuring that the cam is central on the screw head.
11. Fit the spring clips to the trunnion end of the vertical links.*
12. Reconnect the throttle cable and spring.
13. Reconnect the cold start cable and spring.
14. Adjust the linkage 19.20.05.
15. Refit the air intake manifold 19.70.01.

*Note - top swivel posts should be unbolted, do not remove spring clips



THROTTLE BUTTERFLIES

**** (Up to Engine No. CP 77609E) ****

– Check and adjust

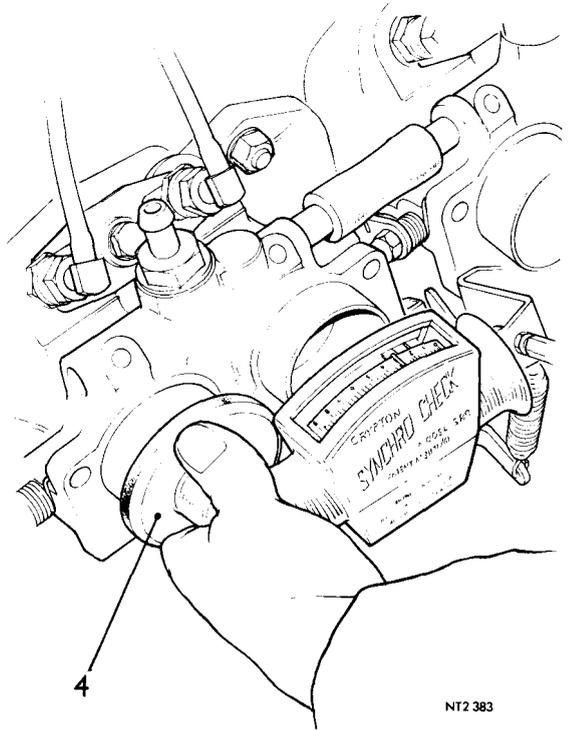
19.20.05

Check

1. Start the engine and warm to normal operating temperature.
2. Remove the air intake manifold 19.70.01.
3. Ensure that the cold start lever on the metering unit is back against its stop and that there is clearance between the cam and adjusting screw on the manifold linkage.

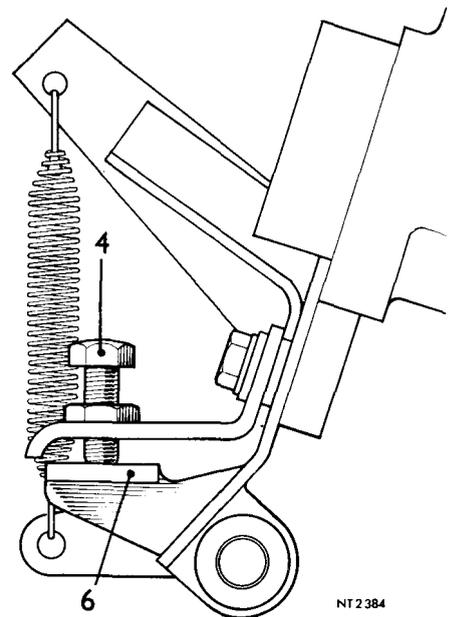
4. Hold a Crypton synchro check meter against number six intake and open the butterflies by turning the throttle adjusting screw clockwise sufficiently for a reading to register on the meter scale (eg 3).**

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5. With the engine revolutions maintained compare the readings from number three and one intakes with that of number six.
6. If the readings are all the same no adjustment is required and the throttle adjusting screw should be reset and locked so that it just touches the countershaft operating lever.



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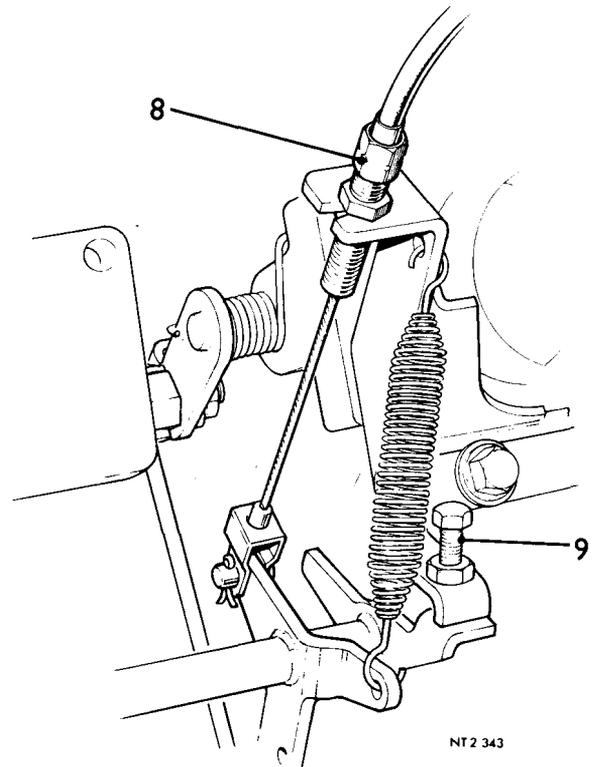


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Adjustment

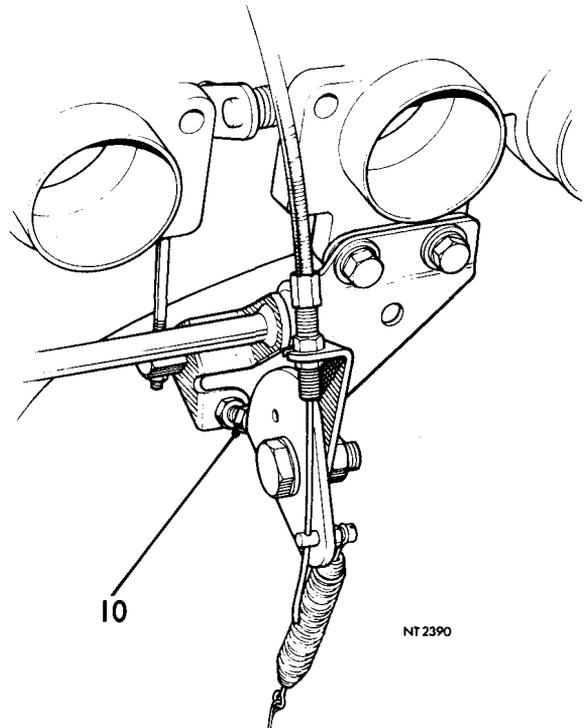
7. Should adjustment of the butterflies be necessary, maintain the engine at normal operating temperature, check as in instruction 3 and with the air intake manifold removed proceed as follows:-

8. Slacken the throttle cable adjuster so that there is no tension in the cable.



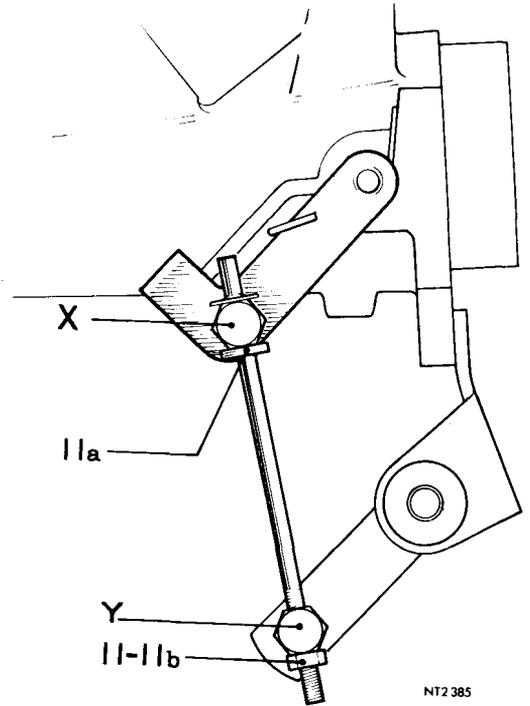
9. Turn the throttle adjusting screw anti-clockwise so that it is well clear of the countershaft operating lever.

10. Slacken the cold start adjusting screw clockwise so that the screw head is well clear of the cam.



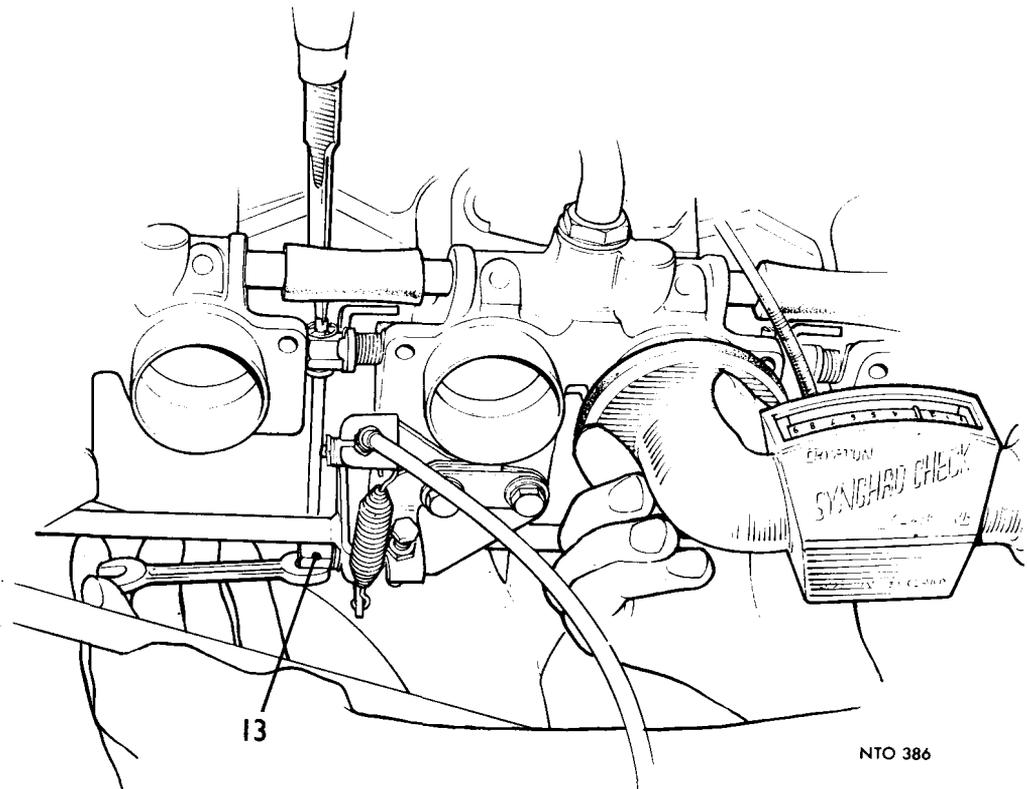
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11. Release the lock nut of the rear vertical link and
 - a. adjust the link so that the brazed-on washer just touches the butterfly shaft trunnion.
 - b. Lock the nut against the lower trunnion.



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12. Start the engine and again hold the crypton synchro check meter against number six intake and by means of the throttle adjusting screw (turning clockwise) open the intake butterflies thereby increasing the engine revolutions until a convenient reading (say 3), registers on the meter scale.
13. Slacken the centre vertical link lock-nut and hold the meter against number three intake and by means of the centre vertical link adjust the butterflies of numbers three and four intakes so that the same reading as in instruction 12 is recorded. Lock the nut against the lower trunnion.



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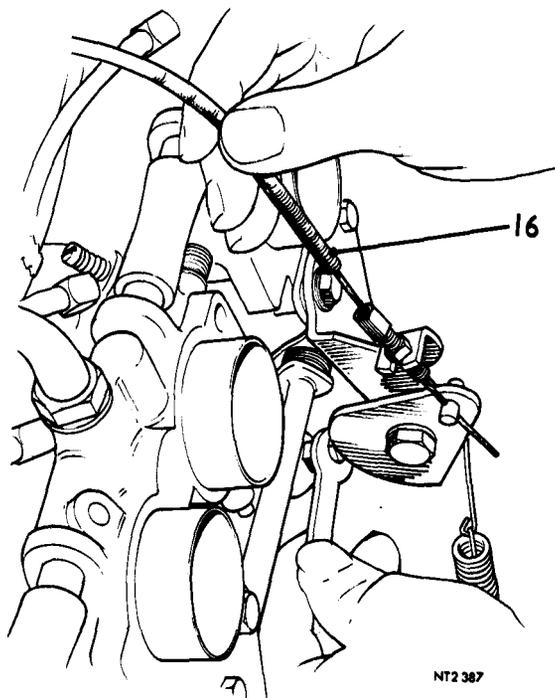
14. Release the locknut on the front vertical link and hold the meter against number one intake and adjust the link until the meter reading registers the same as in instructions 12 and 13. Lock the nut against the lower trunnion.

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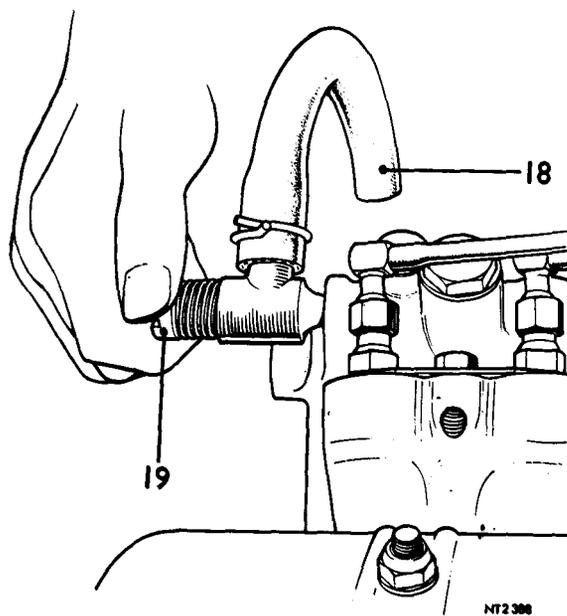
15. Re-check the metering readings on numbers three and six intakes and re-adjust if necessary.
16. Adjust the fast idle speed by pulling the cold start cable out of the adjuster with the cam turned to its maximum lift position. Turn the adjusting screw against the cam until the engine revolutions maintain a steady 1500 to 1800 r.p.m.

NOTE: Do not pull the cold start cable with the control knob on the control panel since it will also operate the excess fuel lever on the metering unit thereby increasing the quantity of fuel delivered to the injectors.



17. Turn the throttle adjusting screw so that it just touches the countershaft operating lever and secure with the lock nut. See instruction 6.

18. As a check to ensure that all the butterflies are fully closed hold a finger over the end of the air valve pipe so that the engine stalls.
19. Start the engine and by means of the air valve adjusting screw regulate the air bleed to give an idling speed of 750 to 800 r.p.m.



20. Adjust the throttle and cold start cables to remove excessive slack and secure with the locknuts.
21. Stop the engine and refit the air intake manifold. 19.70.01.

Data

Idling speed	750 to 800 r.p.m.
Fast idling speed	1500 to 1800 r.p.m.



FUEL SYSTEM PI

COLD START CABLE

– Remove and refit

19.20.26

Removing

1. Disconnect the inner cable from the metering distributor excess fuel lever.
2. Disconnect the inner cable from the cold start cam on the throttle linkage and release the spring.
3. Unscrew the locknut behind the control panel and withdraw the cable complete through the control panel, locknut and bulkhead.

Refitting

4. Feed the cable complete through the control panel hole and pass the locknut over the cables.
5. Secure the outer cable to the control panel with the locknut so that the end of the threaded part of the outer cable is flush with the plated ferrule on the control panel.
6. Feed the engine end of the cable through the bulkhead.
7. Connect the inner cable to the metering distributor excess fuel lever and ensure that there is sufficient slack in the cable to allow the lever to rest against its stop when the control knob is pushed fully home.
8. Connect the inner cable to the cam on the throttle linkage and adjust the cable by means of the adjuster. Ensure that there is clearance between the cam and adjusting screw.

