1974-79 EXHAUST EMISSION SYSTEMS
Toyota Automatic Choke System

1975-77 Models

DESCRIPTION

On 2T-C and 4M engines, an electric assist choke is used. This system consists of a choke breaker diaphragm, an electrically heated bimetallic choke cap, and a choke control relay. On 20R engine, a coolant heated choke is used. This system consists of a choke breaker diaphragm and a coolant heated bimetallic choke cap. Engine coolant flows through choke cap to assist heating choke.

OPERATION

When 2T-C or 4M engines are started, current from regulator turns choke relay on, allowing current to flow through choke heat coil. This causes choke heater to heat and open choke by means of bimetallic spring. The choke breaker diaphragm holds choke valve slightly open to prevent over choking. A temperature sensitive resistor develops a higher resistance as it is heated, this serves to limit current flowing through choke cap heater.

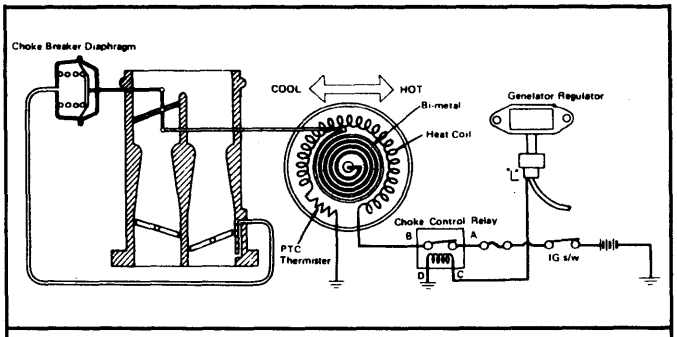

Fig. 1: Automatic Choke System (2T-C & 4M Engines)

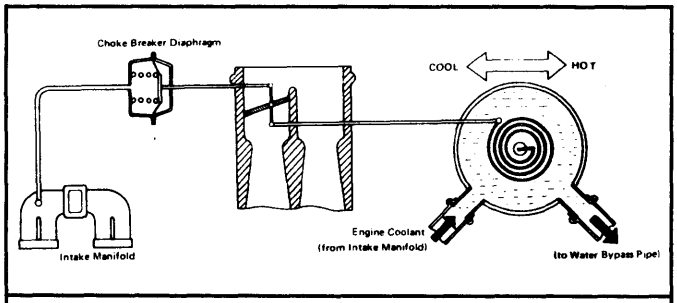

Fig. 2: Automatic Choke System (20R Engine)

TESTING

AUTOMATIC CHOKE SYSTEM

1) Check for proper choke operation. With engine cold, choke should be held slightly open by choke breaker (on 20R engine have choke opener hose disconnected).
2) Check that choke stays closed when engine is accelerated. Make sure choke opens when engine warms up. If choke does not operate as indicated, check linkage and choke breaker diaphragm.

CHOKE CONTROL RELAY

Check that no continuity exists between terminals "A" and "B". Connect relay terminal "C" to battery positive terminal and terminal "D" to battery negative terminal. Continuity should now exist between terminals "A" and "B".