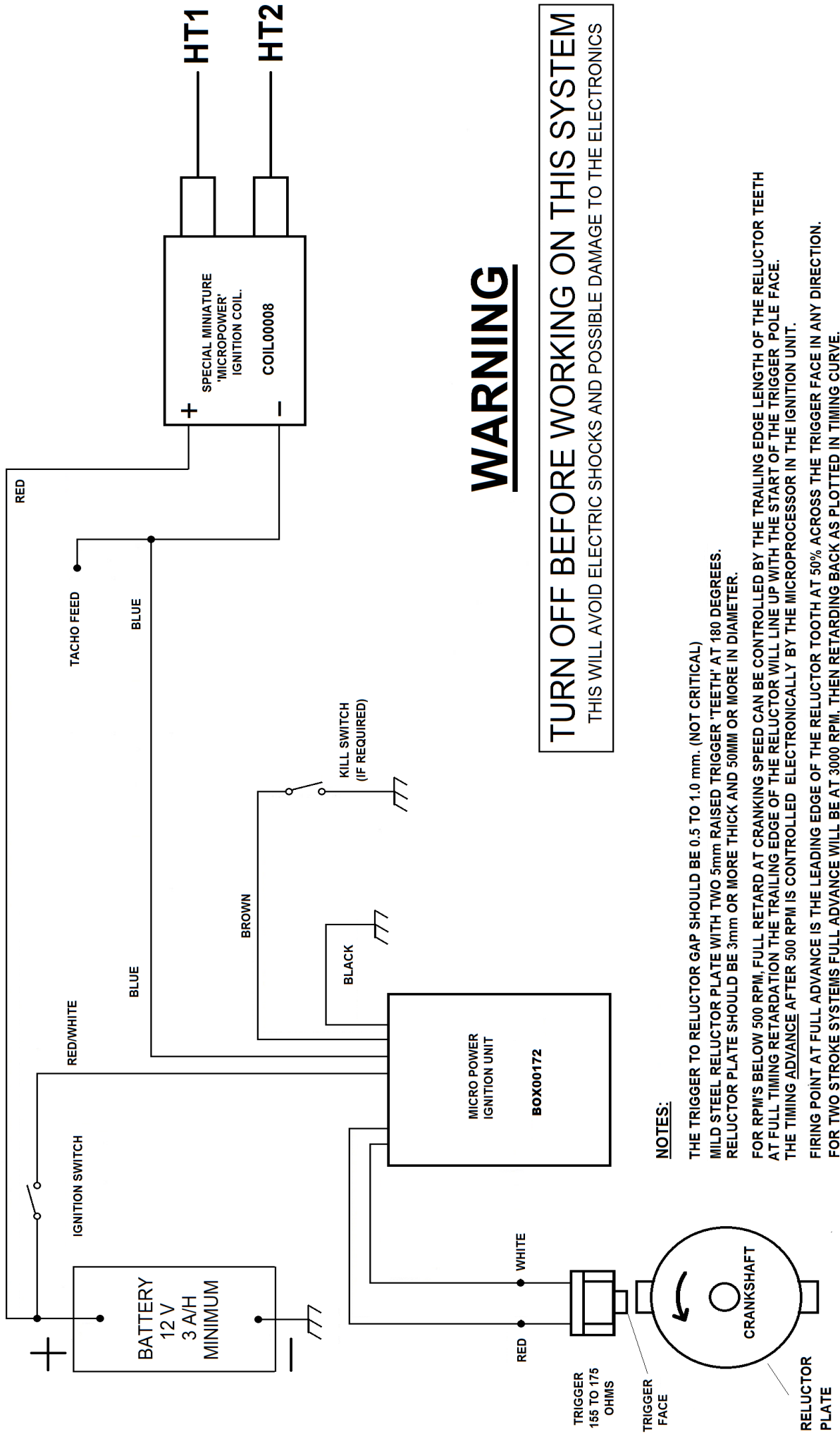


4-STROKE 180 DEGREE TWIN CYLINDER

KIT00172



WARNING

TURN OFF BEFORE WORKING ON THIS SYSTEM
THIS WILL AVOID ELECTRIC SHOCKS AND POSSIBLE DAMAGE TO THE ELECTRONICS

NOTES:

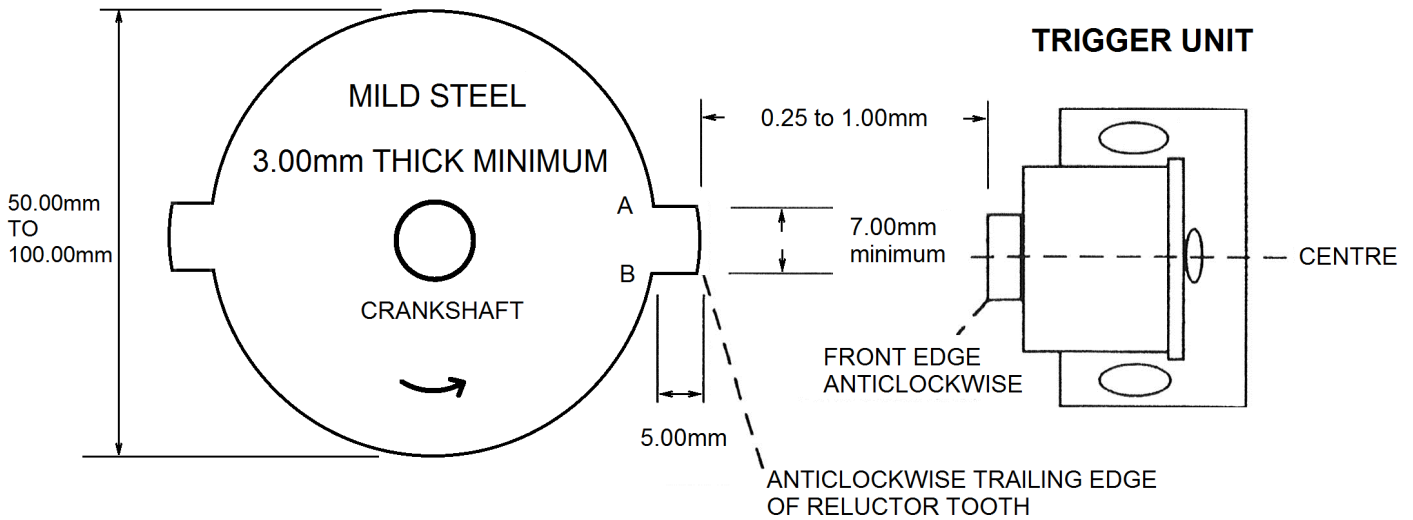
- THE TRIGGER TO RELUCTOR GAP SHOULD BE 0.5 TO 1.0 mm. (NOT CRITICAL)
- MILD STEEL RELUCTOR PLATE WITH TWO 5mm RAISED TRIGGER 'TEETH' AT 180 DEGREES.
- RELUCTOR PLATE SHOULD BE 3mm OR MORE THICK AND 50MM OR MORE IN DIAMETER.
- FOR RPM'S BELOW 500 RPM, FULL RETARD AT CRANKING SPEED CAN BE CONTROLLED BY THE TRAILING EDGE LENGTH OF THE RELUCTOR TEETH
- AT FULL TIMING RETARDATION THE TRAILING EDGE OF THE RELUCTOR WILL LINE UP WITH THE START OF THE TRIGGER POLE FACE.
- THE TIMING ADVANCE AFTER 500 RPM IS CONTROLLED ELECTRONICALLY BY THE MICROPROCESSOR IN THE IGNITION UNIT.
- FIRING POINT AT FULL ADVANCE IS THE LEADING EDGE OF THE RELUCTOR TOOTH AT 50% ACROSS THE TRIGGER FACE IN ANY DIRECTION.
- FOR TWO STROKE SYSTEMS FULL ADVANCE WILL BE AT 3000 RPM, THEN RETARDING BACK AS PLOTTED IN TIMING CURVE.

THE CHASSIS AND ENGINE MUST BE CONNECTED TO THE BATTERY NEGATIVE (EARTH) AT ALL TIMES. 5000 OHM RESISTANCE SUPPRESSED SPARK PLUG CAPS MUST BE USED.

CRANK TRIGGERED IGNITION RELUCTOR DATA

180 DEGREE FIRING

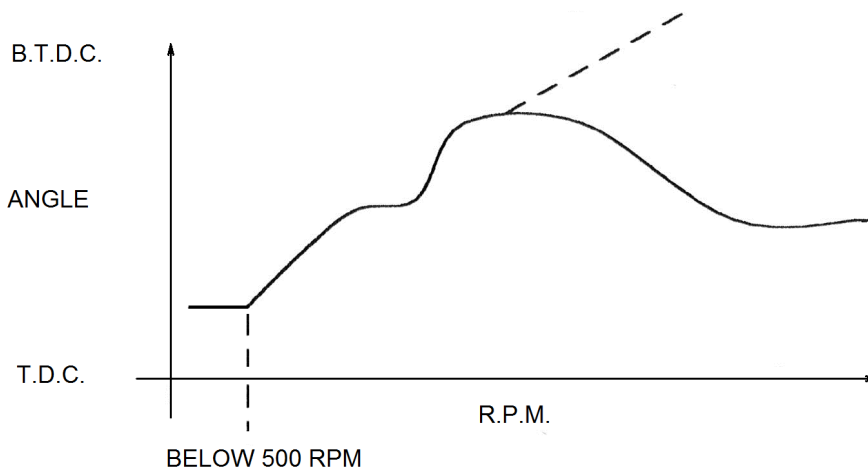
RELUCTOR DISC (Not Supplied)



- 1) THE RELUCTOR PASSING THE CENTRE OF THE TRIGGER COIL MUST BE MADE FROM MILD STEEL OR SOFT IRON, 3mm OR MORE THICK, AND THE TOOTH STEP MUST BE AT LEAST 5mm HIGH.
- 2) THE ROTATING MASS BETWEEN THE TRIGGER AND CRANKSHAFT MUST NOT HAVE ANY LARGE LUMPS OR IDENTITIES OF A MAGNETIC MATERIAL, AS THESE COULD GIVE FALSE IGNITION PULSES AT HIGH RPM'S.
- 3) THE RELUCTOR CAN FORM PART OF A DRIVE PULLEY OR SPROCKET, BUT CHECK THAT NO BOLT HEADS ROTATE CLOSE TO THE TRIGGER UNIT.

TIMING INFORMATION

THE LEADING EDGE OF THE RELUCTOR WILL LINE UP WITH THE CENTRE OF THE TRIGGER AT THE MOST ADVANCED IGNITION TIMING REQUIRED.



BELOW 500 R.P.M. THE IGNITION TIMING IS CONTROLLED BY THE TRAILING EDGE OF THE RELUCTOR TOOTH ALIGNING WITH THE FRONT EDGE OF THE TRIGGER, i.e. THE LONGER THE RELUCTOR TOOTH THE MORE RETARDED THE TIMING IS AT STARTING SPEEDS.

EXAMPLE: IF THE RELUCTOR TOOTH WAS MADE TO A 30 DEGREE LENGTH (A to B) WITH THE LEADING EDGE AT THE CENTRE OF THE TRIGGER AND THE ENGINE AT 35 D.B.T.D.C., THE MOST ADVANCED IGNITION TIMING WOULD BE 35 DEG B.T.D.C., INITIAL SPARKS AT CRANKING SPEED WOULD OCCUR APPROXIMATELY AT TDC.