



SM3 & SM4 ECU SETUP	
IGNITION O/P PATTERN	2cyl TPMC+WS
IGNITION O/P TYPE	-ve edge (PULSE)
Dwell/pulse times (TABLE)	0.4 mSEC (for Single Spark) 2.0 mSEC (for Twin Spark)
Ign delay time	17 uSEC

- NOTES:-
1. OUTPUTS OF SAME GROUPING CANNOT FIRE SIMULTANEOUSLY OR WITHIN 1.2mSEC OF EACH OTHER.
IE:- FOR TWIN PLUG APPLICATIONS USE 1 O/P FROM EACH GROUP. FOR SPLIT TIMING APPLICATIONS USE 1 GROUP FOR LEADING PLUGS & THE OTHER GROUP FOR TRAILING PLUGS.
OUTPUTS 1 & 2 COMPRISE A GROUP. OUTPUTS 3 & 4 ARE THE OTHER GROUP.
 2. CONNECT "POWER SEL" I/P TO GND FOR HIGH POWER O/P, OR USE AN ECU O/P TO CONTROL IGNITION O/P POWER.
 3. +ve & -ve WIRING FOR EACH COIL SHOULD USE TWIN CONDUCTOR WIRE, SLEEVED OR CABLE TIED WIRE PAIRS. TWISTING IS NOT REQUIRED. AVOID PARALLEL RUNS NEAR OTHER VEHICLE WIRING. SPACE MIN 50mm AWAY.
 4. MAIN GROUND/S SHOULD CONNECT TO CHASSIS, OR ENGINE BLOCK IF NO CHASSIS EXISTS. KEEP CONNECTION SHORT (< 200mm). DO NOT CONNECT OTHER SYSTEM GROUNDS TO SAME POINT. DFCDI CASE MAY CONNECT TO SAME POINT AS EARTH CONNECTION. DFCDI CASE MUST NOT CONNECT TO ANY OTHER ELECTRICAL SYSTEM COMPONENTS OR THEIR CASES.
 5. DFCDI MUST NOT BE SUBJECTED TO EXCESSIVE VIBRATION. ALWAYS MOUNT USING SOFT ANTI-VIBRATION MOUNTS. DFCD MUST NOT BE SUBJECTED TO EXCESSIVE HEAT. ENSURE AMBIENT TEMPERATURE DOES NOT EXCEED 125 degC WHEN USED INTERMITTENTLY (EG:- DRAG RACING OR EVENTS LASTING < 10 MINUTES). FOR SUSTAINED OPERATION DO NOT EXCEED 85 degC AMBIENT.
 6. COIL FRAME SHOULD BE CONNECTED TO CHASSIS OR PREFERABLY ENGINE BLOCK. COIL SECONDARY WINDING EARTH CONNECTION IF PRESENT SHOULD GO TO SAME GROUND POINT AS COIL FRAME. IF COIL MOUNTED TO CHASSIS FIT SHORT BRAIDED GROUND STRAP BETWEEN CHASSIS & ENGINE BLOCK. COILS WITH ONE END OF PRIMARY WINDING CONNECTED TO COIL FRAME MUST HAVE THAT END OF THE WINDING CONNECTED TO A DFCDI "COIL -ve" CONNECTION & THE COILS FRAME MUST BE ISOLATED FROM GROUND & ALL OTHER COMPONENTS. IN ALL APPLICATIONS DFCDI "COIL -ve" CONNECTIONS MUST NEVER BE CONNECTED TO GROUND.
 7. COILS WITH INTEGRAL IGNITERS CANNOT BE USED.
 8. TRIGGERING OF ANY UNLOADED CHANNEL (IE:- NOT CONNECTED TO A COIL) IS NOT DAMAGING BUT WILL CAUSE MOMENTARY INTERRUPTION TO ALL OTHER IGNITION CHANNELS.

WIRE SIZE
<u>0.5mm² (min)</u>
<u>0.75mm² (min)</u>
<u>1mm² (min)</u>

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Title: 500R DFCDI - 2 ROTOR 3 COIL (wasted leading spark)

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