

# **WOLF Motorsport PIK V500 Mazda RX7 S8 Rev004 spec sheet**

This vehicle uses 24 + 2 pulses from the Crankshaft, this is used as 12 + 1 by the Wolf.

The injectors are wired as sequential and secondary's wired as sequential as well.

The ignition system consist of four coils two leading and two trailing. The two leading coils are connected together from factory.

Maximum coil charge time 3.6ms, minimum charge time 0.4ms

The injectors are wired = injector one = front Primary, injector two = Front secondary, injector three = Rear primary, injector four = Rear secondary.

Both Secondary injectors have been set up as staged injectors, 3D graph allowing full tune of them.

The ignition are wired as = Ignition one = both leading, Ignition two = trailing rear, Ignition three = trailing front

This controls the oil metering pump and can be controlled.

MCO1 Oil Metering, controlled output is internal value, this means we are controlling something with in the program with this MCO, we are controlling H/L 1-4 to drive the oil pump, you can see this under General Function-Stepper Motor, this is controlled by MCO1.

MCO1 3d graph is controlled by RPM / Load, this graph has a varying number range from 1.2 -24, 24 is fully open on the oil pump.

This graph can be changed to suit individual motor requirements, but stay with in the guide lines of these numbers.

Aux LS7 is the feed back for the oil metering it is not used for control but can be monitored from the runtime data.

GPO1 Turbo pre solenoid, controlled pin Injector 7, there is a selection of solenoids that effect when waste gates are open and how fast they open, these can be adjusted to suit different engine setups, this have been set up to switch at 2700rpm / 33% load.

GPO2 Charge control solenoid, controlled pin Injector 6, there is a selection of solenoids that effect when waste gates are open and how fast they open, these can be adjusted to suit different engine setups, this have been set up to switch at 4100rpm / 33% load.

GPO3 Double throttle solenoid, controlled pin LS7

GPO4 PRC, Controlled pin LS6,

GPO6 Charge Relief Solenoid, controlled pin Ignition 6. there is a selection of solenoids that effect when waste gates are open and how fast they open, these can be adjusted to suit different engine setups, this have been set up to switch at 3000rpm / 35% load

GPO7 Turbo control solenoid, Controlled pin Injector 8, there is a selection of solenoids that effect when waste gates are open and how fast they open, these can be adjusted to suit different engine setups, this have been set up to switch at 4200rpm / 33% load.

GPO8 Port air bypass, Controlled pin Injector 5.

GPO9 Relief Solenoid 2, controlled pin Ignition 4, there is a selection of solenoids that effect when waste gates are open and how fast they open, these can be adjusted to suit different engine setups, this have been set up to switch at 3000rpm / 33% load.

GPO10 Cooling fan No2, Controlled pin Ignition 7, controlled by temperature to turn on at 92deg.

GPO11 cooling fan No3, controlled pin ignition 8, controlled by temperature to turn on at 95deg

GPO12 A/C request, controlled pin HL6, this is controlled by LS5 (a/c input), and allows a high signal to be given to the V500 for A/C request.

GPO13 A/C relay, controlled pin LS3, controlled by LS5 (a/c input) and will turn the a/c relay on.

GPO14 Purge solenoid, Controlled pin Ignition 5, this should be set to work just off idle and off over a med load.

The boost control solenoid is used in conjunction with the other turbo control solenoids, this controls the wastegate solenoid.

GPO15 this is S1 solenoid, its controlled pin is Ignition 2 and is being controlled by MCO 2, Switch point A has a threshold of 70 and there is room to put a hysteresis if required.

GPO16 this is S2 Solenoid , it has a controlled pin of Ignition 3 and is being controlled by MCO3, switch point A also has a threshold of 70 and no hysteresis.

You will know see that as you drive the vehicle you can watch the gear changes happen by watching Ignition 2 & 3 light up and turn off as the change happens, you can also see when the TCC turns on as ignition 5 will light up.